

#### 9.22.4.29 Maintenance and Operations Invoicing Reports

3545	Provide reports that shall be used by the Contractor to invoice NJTA and the Toll Agencies including all back-up reports that reconcile to other System reports as described in the Agreement. All invoicing reports shall provide a breakdown by NJTA and the Toll Agencies for the specific Maintenance and Operations pay item including Monthly Adjustments.
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## 10 SYSTEM MAINTENANCE, ADMINISTRATION AND SOFTWARE SUPPORT REQUIREMENTS

The Requirements described in this section detail the Contractor's responsibility for providing System Maintenance, Administration, and Software Support Services for the System including continuous improvements at no additional cost to the Toll Agencies, including but not limited to:

- System hardware and network maintenance;
- System monitoring and administration;
- System adherence to cybersecurity, PCI and PII best practices, standards, and certifications;
- DevOps and development environments administration;
- Software Support Services, including Continuous Improvements;
- Maintenance and administration of CSC Facilities, and
- Administration of CSC Facilities physical security systems, and surveillance video monitoring systems.

In delivering the Maintenance, Administration, and Software Support Services, the Contractor is expected to provide the following services at no additional cost to the Toll Agencies, including but not limited to:

- well documented and adherence to maintenance schedules, updates, upgrades, equipment refreshes, redesigns of the Self-Service Website and Mobile Application, and processes;
- well documented and adherence to cybersecurity, PCI, and PII best practices and processes;
- well documented and adherence to DevOps and quality processes;
- Continuous Improvements to applications and interfaces;
- change management;
- Configuration management and Software Release management;
- helpdesk support for all Authorized Users and Customers;
- onsite support as requested for all Toll Agencies' staff;
- complete around-the-clock maintenance and administration of the System;
- keeping System documentation current and complete;
- significant participation with NJTA's staff in meetings and processes, and
- ample spare parts inventory and support agreements.

3546	Provide System Maintenance, Administration and Software Support Services for all equipment, services, Software, communications, and Systems provided for the New Jersey E-ZPass System per the Requirements, including maintenance associated with compliance to the terms of the Software and Hardware warranty.
3547	Provide System Maintenance, Administration and Software Support Services that is in compliance with all legislation, codes and statutes.
3548	Perform all System Maintenance, Administration and Software Support Services activities from Go-Live throughout the Operations and Maintenance Phase.
3549	Any System Maintenance, Administration and Software Support Services and/or replacement costs shall be included in the Contractor's Price Proposal and will not be separately paid for by NJTA unless explicitly noted.
3550	Provide System Maintenance, Administration and Software Support Services, including but not limited to:  a. monitoring;  b. preventive;  c. predictive;  d. corrective;  e. emergency System Maintenance, Administration and Software Support Services, and  f. any required and planned upgrades, replacements and Continuous Improvements to be performed on any and all System elements.
3551	Maintain and provide to NJTA, on a quarterly basis, a current list of all agreements for software, hardware, services, tools, access, and any other components necessary for operation and maintenance of the System.
3552	Maintain accurate equipment inventory status and update as needed to reflect all changes.
3553	Maintain and provide to NJTA upon request a schedule detailing the timeframe and expected duration of all routine System Maintenance, Administration and Software Support Services.
3554	Provide a schedule for all System Maintenance, Administration and Software Support Services detailing the activities performed, and obtain Approval from NJTA prior to performing any such activity.
3555	Keep System documentation current and complete and maintain a repository of such documentation with version control that maintains an effective date for each version the document version that was in effect at any point in time can be determined.

## 10.1 Maintenance Personnel

3556	Develop and put in place the organizational structure and headcount required to meet the System Maintenance, Administration and Software Support Services Requirements.
3557	Provide all required management, supervisory, technical, and clerical personnel, to professionally maintain the System in a manner that meets all Requirements, including the System Performance Requirements.
3558	Only persons/organizations located in the United States shall perform all System Maintenance, Administration and Software Support Services on any part of the System, unless otherwise Approved by NJTA. Such Approval is not guaranteed and is subject to demonstration of controls satisfactory to NJTA.
3559	All access to the System Software, hardware and network shall require Multi-Factor Authentication.

## 10.2 System Hardware Maintenance

During the Operations and Maintenance Phase upgrades to System environments, desktop environments and office equipment, and regular hardware maintenance are necessary to maintain System performance. All such services shall be accounted for in the Contractor's Price Proposal and will not be separately paid for by NJTA.

3560	Regularly upgrade all System environments to maintain a high-level of performance, reliability and provide for the implementation of the manufacturer's current system and security firmware/software.
3561	Completely upgrade the desktop environments and office equipment to maintain a high-level of performance and reliability.
3562	<p>System hardware maintenance shall include maintenance and periodic hardware refresh of all New Jersey E-ZPass CSC hardware, and if a hosted solution is implemented, shall include maintenance and periodic refresh of hosted equipment, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. System servers, storage devices, backup devices and network equipment at the primary System site, including all production and non-production System environments as required;</li> <li>b. System servers, storage devices, backup devices and network equipment at the secondary System site including all production and non-production System environments as required;</li> <li>c. all required changes to hardware and cloud services required to meet the growth of data, System performance and all other Requirements of the System;</li> <li>d. all CSC hardware and peripherals at all CSC facilities and WICs;</li> </ul>

	e. all hardware and peripherals that interact with the System to the extent that the Contractor-installed software or applications are negatively affecting the operation of the peripheral, and
	f. all CSC office equipment, for example, phones, pcs, laptops, copiers, and printers.

### 10.3 System Network Maintenance

During the Operations and Maintenance Phase, upgrades to network hardware are necessary to maintain System performance and compliance to security. All such upgrades and replacements shall be accounted for in the Contractor's Price Proposal and will not be separately paid for by NJTA.

3563	Upgrade (at a minimum every 3 years) the network hardware to maintain a high-level of System reliability and provide for the implementation of the manufacturer's current system and security firmware/software. Any equipment that is not capable of operating within the manufacturer's latest security or other manufacturer suggested software patches or firmware upgrades shall be upgraded or replaced no less than six (6) months before obsolescence.
3564	Maintain and monitor the System network, including connection to all environments, interfaces, and all user locations.
3565	Perform the necessary network support services required by the Third-party Service Providers, IAG/Interoperable Agencies, Third-party Entities and Toll Agencies in order to keep day to day operations and data transfers current.
3566	Upgrade and update the network security and provide the required software and monitoring tools to ensure the System is always in compliance with the security standards defined in the Requirements.

### 10.4 System Administration Services

During the Operations and Maintenance Phase, routine monitoring and administrative Services are required to ensure System and operations are fully functional. All such services including continuous improvements shall be accounted for in the Contractor's Price Proposal and will not be separately paid for by NJTA.

3567	Provide System administrative Services for all elements of the New Jersey E-ZPass System in all environments provided in accordance with the Requirements.
3568	Provide report on all versions of the System hardware, firmware, and software, including networks on a monthly basis.
3569	Provide continuous (24/7/365) system administration and monitoring services on the New Jersey E-ZPass System to ensure that it is performing and will continue to perform at a satisfactory level in compliance with System Performance Requirements.

3570	Provide helpdesk support via phone and email to all Authorized Users and Third-party Service Providers at all locations during Business Hours.
3571	Provide onsite support to all Authorized Users and Third-party Service Providers at all locations in accordance with the System Maintenance, Administration and Software Support Plan.
3572	Log all reported helpdesk contacts within the PMMS, assign a ticket number, provide it to the Authorized User, follow up with details about the resolution of the issue, and once resolved, provide automated notification of ticket closure.
3573	<p>Manage the defect and change tracking and resolution process including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Record into PMMS all defects and changes that are identified during the Operations and Maintenance Phase and create tickets;</li> <li>b. Record into PMMS all issues, defects and changes reported by Authorized Users during the Operations and Maintenance Phase and create tickets;</li> <li>c. Record into PMMS all issues, defects and changes reported by Customers through social media during the Operations and Maintenance Phase and create tickets;</li> <li>d. Record into PMMS all defects, changes and non-compliance items identified during Performance certifications and annual operations compliance certification.</li> </ul>
3574	Support on-demand and batch/scheduled report generation, record review, analysis, and reporting requirements and after-the-fact investigations of incidents.
3575	Provide system administration support to the access control system and video monitoring system installed at the CSC physical locations.
3576	Provide support for work from home CSRs and operations and in accordance with the Operations Business Continuity Plan. For example, during an event similar to the COVID-19 outbreak.
3577	Continuously confirm that Self-Service channels are fully operational with no degradation in performance or access issues.
3578	Provide technical support for Customers accessing the Self-Service Website/Mobile Application via phone, email, text, chat, and Cases.
3579	Provide the capability to automatically create a PMMS ticket for all requests for technical support received from Customers, through all channels, that cannot be resolved upon initial contact.
3580	Adhere to the latest standards for RBAC. RBAC shall adhere to the latest version of the INCITS 359-2012.
3581	Provide a hardware, firmware and software patch schedule, record such schedule in PMMS, and implement patches and updates to ensure System is in compliance with Requirements.

3582	Implement updates, upgrades and equipment refreshes that are scheduled and Approved by NJTA to ensure System is in compliance with PCI, PII and Security Requirements. If there is a conflict between various standards, laws, PCI/PII standards, ordinances, and codes, the most restrictive standard shall apply.
3583	Provide a hardware refresh schedule that includes CSC hardware refreshes and, if hosted solution, also includes System hardware refreshes, and record such schedule in the PMMS.
3584	Ensure the System and all Services by the Contractor adopts and complies with the New Jersey Statewide Information Security Manual that will be the basis for NJTA security plan, and all updates to this manual throughout the life of the Agreement. The manual is provided as Attachment 5 to the RFP. The most recent copy of which can be found at <a href="https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf">https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf</a> Complete, at a minimum of once every twelve (12) months, a comprehensive review of the System compliance to the security standards required in the New Jersey Statewide Information Security Manual published during the Contract Term. Submit a report to NJTA detailing the findings of this review within 30 days of the Go-Live anniversary.
3585	Perform, in coordination with NJTA, monthly security tests, including penetration tests and vulnerability scans, that are scheduled in the PMMS, as well as every time a new Software Release is deployed, or new network Equipment is added or replaced to evaluate the security risk to the System and identifying potential vulnerabilities. NJTA Information Technology (IT) security shall be a party to these security tests and shall be notified in advance of any scheduled tests. Test results shall be submitted no later than ten (10) days after the test.
3586	Restrict access to Confidential Personal Information to any individuals or entities outside of the U.S.
3587	Provide notice of access failures, attempted unauthorized access, access violations and attempted security breaches and incidents (Security Incidents) to NJTA in accordance with the terms of the Agreement, including Section 22.0 Security Incident. Take all actions to mitigate and address a Security Incident as identified in the Agreement.
3588	Implement a procedure to assure that when a technical person leaves who has knowledge of access procedures/credentials to critical System components, for example access to a network switch, that passwords or other access credentials to such components are immediately changed.
3589	Immediately notify NJTA when a technical person with knowledge of access procedures/credentials to critical System components leaves.
3590	Ensure System performance is optimized, and that all System administration functions, if not otherwise automated, are performed at regular, scheduled intervals in accordance with the System Maintenance, Administration and Software Support Plan.

3591	Actively monitor COTS and non-COTS System performance and response via the third-party COTS application performance and response monitoring tool and baseline all System components every year.
3592	<p>Continuously monitor System operations to verify its responsiveness, that functional processes are being performed and executed as scheduled, and that the System is operating per design and System Performance Requirements, including but not be limited to:</p> <ul style="list-style-type: none"> <li>a. all data is successfully exchanged via all interfaces in compliance with the interface specifications and the System design;</li> <li>b. all network and communications hardware and software (including all logs);</li> <li>c. all security hardware and software (including all logs);</li> <li>d. all Customer facing Systems are functioning/responding properly and are available to Customers;</li> <li>e. System is functioning/responding properly and available to all Authorized Users and Third-party Service Providers;</li> <li>f. all reports are accurate and successfully generated and available to Authorized Users;</li> <li>g. all processes are functioning, jobs are being executed, and data and images are moving successfully though the queues;</li> <li>h. evaluating sample transactions data and aggregate data trends for exceptions;</li> <li>i. reviewing comparative data/reports to identify system performance degradation;</li> <li>j. confirming secondary systems are synchronized;</li> <li>k. confirming the interface to NJTA's Data Warehouse is functioning and data transfer is up-to-date;</li> <li>l. monitoring backups and confirming PMMS ticket was created for backup failure;</li> <li>m. database performance;</li> <li>n. storage and predictive storage metrics, and</li> <li>o. reviewing all error logs and PMMS Alerts.</li> </ul>
3593	<p>Perform corrective and administrative actions to ensure System performance is in accordance with the Requirements, including but is not limited to:</p> <ul style="list-style-type: none"> <li>a. any daily, weekly, or periodic administration required to maintain the System at required performance levels (for example: indexing and tuning databases and archiving and purging in accordance with NJTA's retention policy);</li> </ul>

	<ul style="list-style-type: none"> <li>b. third-party software or firmware updates and upgrades, as required and to be compliant to security Requirements, including but not limited to performing security software upgrades, database upgrades and operating system upgrades;</li> <li>c. Approved manual actions, adjustments and updates to the System data based on predefined criteria to correct issues and as Authorized by NJTA;</li> <li>d. performing routine diagnostics;</li> <li>e. proposing responses to comments received via Self-Service channels;</li> <li>f. correcting all performance issues, and</li> <li>g. verify time synchronization is occurring as Configured and System clocks are not drifting beyond acceptable threshold.</li> </ul>
3594	Apply, in coordination with NJTA, all security patches, updates, and other fixes for COTS and non-COTS Software issued by the Software's original manufacturer and for firmware issued by its original manufacturer.
3595	Categorize the severity of vulnerabilities identified based on latest version of the Common Vulnerability Scoring System (CVSS) specifications and mitigation steps shall be taken as described in the System Performance Requirements.
3596	When a System service becomes unavailable to the Customer due to an unplanned outage or emergency, a notice shall be posted on the Self-Service Website, Mobile Application and IVR as soon as possible so Customers are aware of the outage.
3597	Ensure maintenance activities do not conflict with or cause interruption in service or cause substandard service to Customers or the Toll Agencies.
3598	Maintain all secure website certificates for all websites provided as part of the New Jersey E-ZPass System, if required.
3599	Maintain all static documents posted to the Self-Service Website and the Mobile Application and update as required, for example Terms and Conditions documents, Privacy Policies, Terms of Use documents, Third-party Licenses & Notices document, Frequently Asked Questions, etc.
3600	Using advanced tools provide continuous analysis and recommendations for improvement of Customer Self-Service efficiency via Website, Mobile Application and IVR.
3601	Support the processing of corrections generated by the Toll Agencies, including reversals of posted data and notifications to Customers if applicable.
3602	Provide continuous administration and maintenance of the training environment and refresh the training environment every six (6) months.
3603	Formulate, test, execute, and analyze the results of data queries requested by the Toll Agencies.

3604	Support the development, testing, and placement into production for use by others (if applicable) of Toll Agencies' requested ad-hoc reports.
3605	Support the creation and generation of Toll Agencies' developed queries.
3606	Provide continuous administration and maintenance of the dedicated Toll Agency test environment for the Toll Agencies to use for ad-hoc testing, Software Release testing, and QA purposes during both the Implementation Phase and the Operations and Maintenance Phase. The dedicated Toll Agency test environment shall be maintained and administered in the same manner as the Contractor's primary test environment. The dedicated Toll Agency test environment will be refreshed after every major Release or upon NJTA request. Contractor will support all requests by the Toll Agencies for setup and Configuration of the dedicated Toll Agency test environment to support pre and postproduction testing of all and/or specific functionality. Cleanse and refresh a specified set of data, for example a single Account, upon request. Provide the capability to test all reports and Dashboards associated with functional testing.
3607	Modify existing System documentation as necessary and draft documentation to support new initiatives, for example specifications for a new interface.

## 10.5 Software Support Services

During the Operations and Maintenance Phase, analysis of defects, corrections and changes are necessary to ensure accuracy of the System, ensure operational efficiencies and provide enhanced Customer service. In addition, although updates and improvements to the IVR, Self-Service Website and the Mobile Application will be implemented as needed on an ongoing basis, it is anticipated that they will require redesigns twice during the Contract Term. All such services, changes, updates, and upgrades required to maintain and support the System as a part of the normal course of business shall be accounted for in the Contractor's Price Proposal and will not be separately paid for by NJTA.

As part of the enterprise-wide Continuous Improvement program, NJTA will rely on the Contractor to continuously monitor relevant industries for advancements that could potentially benefit the New Jersey E-ZPass Program. The Contractor shall present such innovative improvements to NJTA for consideration.

3608	Software Support Services shall include monitoring and corrective action to ensure System performance is in accordance with the Requirements. This shall include but is not limited to:
	a. investigation and analysis of errors and exceptions and taking corrective action including correcting the problem and reprocessing the data;
	b. monitoring of Correspondence Items, and initiating corrective actions to meet Requirements;
	c. evaluating potential issues detected by the automated data hygiene monitoring process, creating Severity 1 PMMS tickets when evaluation determines issues are due to a defect, and initiating corrective actions;

d. updates to System to support upgrades to hardware or third-party software;
e. updates to System to support upgrades and changes to Third-party Service Providers' interfaces;
f. updates and upgrades to System to support all changes to Business Rules and New Jersey E-ZPass System Configurable parameters, and deploy changes in production;
g. modifications to deployed reports and addition of ten (10) new reports as requested by NJTA;
h. updates and upgrades to System to support changes to IAG/Interoperable interface specifications (major/sub whole number revisions) including the addition of new IAG/Interoperable Agencies or new toll plaza(s) at existing IAG/Interoperable Agencies;
i. updates and upgrades to System to support changes to Regional Hub interface specifications (major/sub whole number revisions) including the addition of new Regional Hub agencies;
j. updates and upgrades to System to support the addition of new Toll Agencies under the System;
k. updates and upgrades to System to support addition of an existing functionality to a Toll Agency;
l. updates and upgrades to System to support modifications and addition of Account Plans;
m. updates and upgrades to Toll Agencies toll rates and schedules and confirming effective toll rates;
n. updates and upgrades to System to support changes to Toll Agencies interface specifications;
o. support testing Toll Agencies interface when Toll Agency contractors are replaced;
p. updates and upgrades to System to support changes to the MVC/DMV interface to accommodate changes to license plate data including the addition of new states and interoperability;
q. Updates and upgrades to System to support the addition of any existing third-party interfaces as Approved by NJTA;
r. updates and upgrades to System to support the addition of new Payment Methods like new Digital Wallets as Approved by NJTA;
s. updates and upgrades to the System to support new mobile devices, new mobile browsers, and operating systems, self-service Customer experience trends, self-service payment trends, and trends in mobile devices;

	<ul style="list-style-type: none"> <li>t. creation of APIs to support future interactions with Toll Agencies and/or Third-party Service Providers;</li> <li>u. updates and upgrades to the System to support new web browsers and operating systems, desktop user experience trends, and new desktop navigation techniques;</li> <li>v. changes to software or code to improve operations and incorporate efficiencies that do not significantly alter the base functionality;</li> <li>w. changes for the Contractor's benefit that improve the Contractor's ability to maintain, operate and support the System and to meet the System Performance Requirements;</li> <li>x. Updates and upgrades to System and application to support changes to the New Jersey E-ZPass System to ensure continued compliance to updated PCI and PII Requirements and other privacy regulations;</li> <li>y. updates to improve the automated data hygiene monitoring process;</li> <li>z. updates to improve the real-time activity monitoring process;</li> <li>aa. all changes to implement new software to replace obsolete or discontinued software;</li> <li>bb. Update and upgrade all software no less than six (6) months before software provider-declared end of support;</li> <li>cc. changes required to adhere to the latest version of the WCAG, developed through the W3C's WAI, for design, development and Maintenance of the Self-Service Website and Mobile Application, and</li> <li>dd. support changes to the Self-Service Website, Mobile Application, virtual assistant, chat, and IVR application to improve Customer service and address Customer feedback.</li> </ul>
3609	Throughout the Operations and Maintenance Phase use a Subcontractor/Contractor's innovation team that specializes in the design of UI/UX/CX for the design, navigation, and look & feel of all screens and processes for Customers. All self-service applications shall comply with applicable Americans with Disabilities Act (ADA).
3610	Provide modifications to Customer Self-Service Website, Mobile Application and IVR to support changes relating to the New Jersey E-ZPass and Toll Agencies' policies.
3611	Contractor is expected to perform two redesigns of the Self-Service Website and the Mobile Application during the Contract Term.
3612	<p>Self-Service Website and Mobile Application redesigns shall be major revisions to accomplish improvements to including, but not limited to:</p> <ul style="list-style-type: none"> <li>a. adopt beneficial technological innovations;</li> <li>b. incorporate beneficial technological trends;</li> <li>c. improve performance;</li> </ul>

	<ul style="list-style-type: none"> <li>d. improve Customer experience;</li> <li>e. refresh the look and feel so that it continues to be current and modern, and</li> <li>f. update content to assure it remains optimized for search engines.</li> </ul>
3613	Modify the IVR to incorporate any updates required to keep IVR functionality in line with changing the Self-Service Website and Mobile Application that will be made during Self-Service Website and Mobile Application redesigns.
3614	<p>As part of the enterprise-wide Continuous Improvement program, the Contractor shall constantly monitor advancements made by others and consider whether adopting such advancements could potentially benefit the New Jersey E-ZPass System and operations, improve revenue collection, reduce Operations and Maintenance costs, enhance Customer service, strengthen security, or be beneficial in some other way. Examples of this monitoring includes but is not limited to:</p> <ul style="list-style-type: none"> <li>a. monitoring advancements and trends in other relevant industries;</li> <li>b. monitoring technological advancements;</li> <li>c. monitoring innovations and trends in toll collection;</li> <li>d. monitoring innovations, process improvements, system improvements, and other improvements implemented by other tolling agencies, and</li> <li>e. monitoring innovations, process improvements, system improvements, and other improvements implemented by the Contractor's other clients.</li> </ul>
3615	Contractor shall bring potentially beneficial advancements to the attention of NJTA for consideration. NJTA will review recommendations and determine the next step for those that are of interest to the Program. Depending on the nature and scope of the advancement, the next step may be implementation, inclusion on the agenda of the quarterly Innovations and Program Improvement Meeting for further evaluation or holding for future consideration.

## 10.6 Interoperability Support Services

NJTA currently has agreements with IAG/Interoperable Agencies, and, in the future, it is anticipated that regional and national Interoperable agreements will be established. Additionally, the IAG/Interoperable Agencies have implemented a Regional Hub for the exchange of data. The Contractor shall support activities related to existing and future Interoperability.

3616	Support all IAG/Interoperable activities as required by NJTA, including but not limited to: <ul style="list-style-type: none"> <li>a. attend technical meetings;</li> <li>b. review and provide comments on IAG/Interoperable documents;</li> <li>c. support IAG/Interoperable Agency testing as requested;</li> </ul>
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	<ul style="list-style-type: none"> <li>d. support modifications to IAG/Interoperable specifications, and</li> <li>e. make System Configuration and modifications required to maintain compliance with updated versions of the published IAG/Interoperable specifications, as specified in Section 10.5 Software Support Services.</li> </ul>
3617	<p>Support all Regional Hub activities as required by NJTA, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. attend technical meetings;</li> <li>b. review and provide comments on Regional Hub documents;</li> <li>c. support Regional Hub testing as requested;</li> <li>d. support modifications to Regional Hub specifications, and</li> <li>e. make System Configurations and modifications required to maintain compliance with updated versions of the published Regional Hub specifications, as specified in the Section 10.5 Software Support Services.</li> </ul>
3618	Support the addition of national Interoperability either directly or through the Regional Hub.
3619	Manage data exchange between IAG/Interoperable Agencies. If manual intervention is required, the Contractor is responsible for providing it.

## 10.7 System Configuration and Release Management

Recording, tracking, and managing the changes to the System after Cutover resulting from improvements, defects, deficiencies, updates, and upgrades is critical and shall be part of the Contractor's QA and change control process. Regardless of the source of the change, each change shall be categorized, prioritized, and implemented in accordance with the QA Plan.

3620	<p>Contractor shall use the PMMS and DevOps tools to document all categories of changes submitted from various sources, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Authorized Users;</li> <li>b. Customers;</li> <li>c. Toll Agencies and their contractors and representatives;</li> <li>d. Third-party Service Providers;</li> <li>e. Interoperable Agencies;</li> <li>f. legislative mandates;</li> <li>g. Requirements not deployed;</li> <li>h. Business Rules;</li> </ul>
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	<ul style="list-style-type: none"> <li>i. updates and upgrades;</li> <li>j. maintenance activities;</li> <li>k. monitoring activities;</li> <li>l. PMMS, and</li> <li>m. Contractor's operations and support teams.</li> </ul>
3621	All changes shall be categorized, prioritized, and Approved by NJTA as specified in the Requirements and included in the Software delivery and deployment schedule. The schedule shall include the submission and Approval of all required documentation and testing, including testing in the Agency test environment. The delivery and deployment schedule shall comply with Performance Requirements, and Contractor shall be assessed liquidated damages for failing to meet the Approved schedule.
3622	The change tracking list shall be submitted to NJTA weekly and shall be part of the weekly status meetings during the Operations and Maintenance Phase of the Project.
3623	A detailed description of the change, corrective action, design and test results shall be submitted to NJTA for Approval for all aspects of the System impacted by corrective action.
3624	At NJTA's discretion Toll Agencies may participate directly and/or witness testing of all Software Releases depending on the complexity of the change per the Software Development Plan.
3625	The Toll Agencies shall have full access to the DevOps environments and status/tracking of all Software development schedules and activities.
3626	Perform security tests, including penetration tests and vulnerability scans, immediately after each Software Release is deployed and submit test results.
3627	The Toll Agencies may choose to perform some limited review/testing of software changes. To support this activity, Software Releases shall be deployed to the Toll Agency test environment well in advance of the Release to production, at a date and time Approved by NJTA.
3628	The System shall support the Release of certain Customer-facing functionality, for example changes to the Mobile Application, to the production environment in a limited 'friends and family' mode once the Contractor has performed full pre-Release testing in Contractor's test environment. This mode will restrict access to the new or updated functionality to a small group of internal users for the purpose of performing final confirmation that the functionality is ready for full Release.
3629	<p>A checklist and documentation shall be prepared by the Contractor prior to each Release and submitted to NJTA for Approval. The checklist and the documentation shall be used to assure readiness for the Release and shall include but not be limited to the following items:</p> <ul style="list-style-type: none"> <li>a. the updated software version/revision number;</li> </ul>

b. Release notes;
c. the final design document;
d. any new or updated drawings;
e. new or updated manuals;
f. new or updated SOPs;
g. new or updated plans;
h. results of security tests, assessments, and certifications (penetration tests and vulnerability scans) and the plan for conducting such tests immediately after the Release;
i. training documentation;
j. confirmation of Escrow deposit;
k. details of any outages required for the Release;
l. documentation of the rollback procedures that would be followed if issues are encountered during installation or immediately after;
m. information on how Customers will be informed if Customer-facing systems will be impacted by outage or changes to functionality;
n. description of testing performed, dates performed and results, including but not limited to: functional testing, regression testing, installation dry run testing, rollback procedures testing;
o. changes to Business Rules;
p. changes to Customer-facing UIs;
q. new or updated Customer notifications and updated Communications Matrix;
r. changes to Customer-facing static documents, for example FAQ, Terms and Conditions, Privacy Policy, etc.
s. Customer and/or public outreach required;
t. new or updated Cases;
u. PMMS impacts such as new PMMS Alerts;
v. impacts to existing reports;
w. Toll Agency impacts;
x. impact to interface specifications, interfaces and/or data exchanges, and
y. impact on third-parties.

3630	Upon completion of the Software Release, conduct the necessary controlled runs to confirm accurate operations of the System and to confirm all elements included in the Release are functioning per design.
3631	One (1) week after the Software Release, conduct a Software post Release validation meeting with the Agencies. Post Release validation documentation shall be submitted two (2) Business Days before the meeting.

## 10.8 Certification of PCI DSS Compliance

The Contractor is responsible for providing certification of PCI DSS Compliance at no cost to NJTA.

3632	Complete a PCI DSS assessment by a certified independent QSA, or as required by PCI DSS, at the interval required for PCI DSS compliance, but at least once a year, throughout the Implementation Phase and Operations and Maintenance Phase.
3633	Complete full internal/external penetration vulnerability and exploitation testing for all applications and portals, the results of which shall be provided to NJTA once a month and upon Software Release throughout the Implementation and Operations and Maintenance Phases.
3634	Provide all documentation required under PCI, including but not limited to network diagrams and detailed policies and procedures.
3635	Document and immediately report to NJTA any PCI DSS issues/vulnerabilities found during the penetration and vulnerability and exploitation tests.
3636	Correct all deficiencies at the Contractor's cost within thirty (30) Calendar Days of discovery and ensuring the System is PCI DSS compliant and ensuring security risks are handled appropriately.
3637	Furnish copies of all PCI assessments, testing, scanning, issues identified, remediation plan, and compliance documentation including each AOC and ROC to NJTA, upon completion of the PCI DSS assessment activities throughout the Operations and Maintenance Phases.
3638	Fully cooperate with NJTA in responding to the PCI assessor's requests and implementing remedies if any issues are identified.

## 10.9 Disaster Recovery and Operations Business Continuity

For the purpose of validating sustained operations of both the primary and secondary New Jersey E-ZPass System environments throughout the Implementation and Operations and Maintenance Phases, the primary and secondary sites will be tested and may, at NJTA's direction, alternate as the production site on a six-month basis every year.

3639	Provide the process for defining a System failure, disaster or business continuity event within the Disaster Recovery Plan and Operations Business Continuity Plan.
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3640	Perform Disaster Recovery Procedures in accordance with the Disaster Recovery Plan in the event of a System failure, disaster or business continuity event and return the System to a fully operational condition.
3641	Test the Disaster Recovery and Operations Business Continuity Procedures every six (6) months to validate that they are functioning per the design. NJTA will participate in the planning and witness the test, and the Contractor shall provide a report outlining the test, test results and any anomalies encountered for NJTA's review and Approval.
3642	Provide the capability, at NJTA's direction, for the secondary System environment to become the production site for a six (6) month period for the purpose of Disaster Recovery and Business Continuity Testing.
3643	Meet the RPO, RTO and levels of service levels specified in Section 9.1.3 Secondary System Environments.
3644	Address any issues encountered from the Disaster Recovery and Business Continuity Testing which occurs every six (6) months.
3645	Support the Toll Agencies Host System/Host and Image Capture Systems contractors' Disaster Recovery and Business Continuity Testing.
3646	Support the License Plate Review Services, Collections Services, and Merchant Services Contractors Disaster Recovery and Business Continuity testing.

## 10.10 Maintenance Severities, Response and Repair Times

3647	<p>Response and repair time is defined as the time from failure or report of failure or problem to repair/correction of the reported failure or problem with the System being returned to normal operations. Response and repair times shall also be applied to all Software Support Services changes, changes and improvements identified through the enterprise-wide Continuous Improvement program, and change orders. Severity levels are assigned to each type of failure, problem, or change to indicate its relative priority. The highest priority issues and changes need to be resolved/implemented as quickly as possible since they have the greatest potential of negative impacts, therefore they are assigned Severity 1. Response and repair times are noted in the System Performance Requirements according to the following severity levels:</p> <p>a. Severity 1: Defined as any change/improvement or defect, malfunction, or fault that will result in the immediate loss of revenue; negative financial impact to Customers; security breach; hazard to personnel; loss of audit data; loss of redundancy in any redundant System component; has potential legal impacts for the Toll Agencies; loss of functionality that impacts IAG/Interoperable Agencies or New Jersey E-ZPass System operations. Severity 1 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</p>
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	<p>b. Severity 2: Defined as any change/improvement or defect, malfunction, or fault, for which no workaround is available that is acceptable to NJTA, that will degrade the System performance; degrade Customer service ; result in presentation of inaccurate data or inaccurate information to Customers, including inaccurate Customer-facing verbiage; result in inaccurate audit data; inaccurate reporting; inability to reconcile revenue; or result in loss of System functionality that impacts Customer, Authorized User or Third-party Service Provider access to data. Severity 2 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</p> <p>c. Severity 3: Defined as any change/improvement or defect, malfunction, fault, action or event that has the potential to result in a malfunction or degrading of the System performance but has not impacted performance and is not anticipated to immediately impact performance; will not significantly affect operations, Authorized User, the Third-party Service Provider and/or Customers; and that has a workaround approved by NJTA. Severity 3 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring and to preventive maintenance activities.</p> <p>d. Severity 4: Assigned to preventive maintenance activities and PMMS Alerts created when implementing Approved activities that impact System operations.</p>
3648	Any downtime that is a part of scheduled and approved preventive maintenance, including scheduled new Software Releases not associated with a maintenance event shall not affect the System Performance Requirements calculation. However, in this event the Contractor does not make the System available and/or fully restore CSC Operations within the approved schedule window, the resulting downtime shall be included in the System Performance Requirements calculations.
3649	Response and repair times for every System maintenance event shall be recorded and reported by the Contractor, and such reports shall be provided to NJTA.
3650	No incident shall be closed by a technical staff before the equipment or software service has logged a recovery, for example if a service is degraded because of a loss of a redundant component, the incident cannot be closed until the redundant component has been replaced and service has returned to normal. Closure of all tickets shall be Approved by NJTA.

## 10.11 Incident and Revenue Loss Reporting

NJTA expects to promptly be informed, by the Contractor, of major incidents or events that could negatively impact revenue, disrupt operations, and effect Customer service. The Contractor is responsible for all corrective actions, Customer credits and lost revenue resulting from Contractor's failure to comply with Requirements, System inaccuracies and Contractor's negligence.

3651	Work with NJTA to develop a communications protocol for incident and revenue loss reporting (e.g., communications procedures based on incident and priority level).
3652	Notify NJTA within an hour of incidents and events, including but not limited to:

	<ul style="list-style-type: none"> <li>a. any suspected security breach;</li> <li>b. confirmed security breach;</li> <li>c. confirmed fraudulent activity;</li> <li>d. incident or event resulting in loss of revenue;</li> <li>e. incident or event resulting in disruption to operations;</li> <li>f. incident or event resulting in disruption to Customer self-service;</li> <li>g. incident or event resulting in loss of data;</li> <li>h. incident or event resulting in corruption of data;</li> <li>i. inaccurate processing and posting of data;</li> <li>j. malicious actions by Contractor staff or sub-contractors;</li> <li>k. incident or event that negatively impacts third-party interfaces, and</li> <li>l. incident or event that negatively impacts NJTA procured contractors.</li> </ul>
3653	Perform immediate actions to rectify any System incident resulting in revenue loss or inaccuracies and return the System to normal operations.
3654	In the event of a loss or potential loss of revenue or data, glitches impacting Customers, operations, third-party entities, NJTA-selected Third-party Service Providers or security breach, an RCA Report shall be provided to NJTA within five (5) Business Days of the incident. Liquidated damages shall be assessed in accordance with Performance Requirements.
3655	<p>The RCA Report shall provide details, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. identification of the issue and a detailed account of the incident;</li> <li>b. cause of the issue;</li> <li>c. duration;</li> <li>d. resolution or planned resolution, and</li> <li>e. a quantification of actual or potential lost revenue, Customer impact or data or security breach.</li> </ul>
3656	Implement planned resolution upon Approval of the long-term correction action.
3657	Regular updates shall be provided until the issue has been fully resolved and closed including implementation of the corrective action plan (CAP).
3658	The incident and its impacts shall also be further detailed in the subsequent monthly report.

3659	The Contractor shall be held responsible for all lost revenue and data and Customer impacts and credits, including remediation, in accordance with the Agreement.
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## 10.12 Coordination and Meetings

The Contractor shall work closely with NJTA in the management of the System Maintenance, Administration and Software Support Services. The Contractor will also be responsible for coordinating with other relevant entities in order to meet the Requirements of the Project.

3660	<p>Coordinate and hold regularly scheduled meetings with entities for the purpose of promoting proper functioning, maintenance, and support of the System, including but not be limited to:</p> <ul style="list-style-type: none"><li>a. Toll Agencies;</li><li>b. Toll Agency Host System/Host and Image Capture Systems contractors;</li><li>c. Contractor Subcontractors;</li><li>d. Interoperable Agencies, and</li><li>e. Third-party Service Providers.</li></ul>
3661	Customized agendas, for each meeting, provided in advance and identifying both recurring and non-recurring agenda items that will be included.
3662	Coordinate and hold meetings with License Plate Review Services Contractors, Collections Services Contractors, and Merchant Services Contractor on an as needed basis to support the Requirements.
3663	In the event the Toll Agencies' staff notifies the Contractor of scheduled equipment maintenance or problems with lane equipment that could affect the general public, Customer travel experience, or System revenue, handle all lane exception processing requests and make sure incorrect transactions are filtered and processed properly with no impact to Customers.

### 10.12.1 Contractor and System Active Management Meetings and Reporting

The Contractor shall conduct monthly Contractor and System Active Management Meetings with NJTA. All Subcontractors used in the delivery of System-related Services shall be included. These meetings shall provide NJTA with a detailed understanding and review of the Contractor's and the System's performance for purposes of NJTA oversight, work planning and invoicing.

#### 10.12.1.1 Contractor and System Active Management Meetings

3664	Manage, facilitate, and conduct monthly Contractor and System Active Management Meetings with NJTA beginning at Cut-Over and continuing over the Contract Term. During these meetings the Contractor shall demonstrate Contractor and System compliance to all System Performance Requirements. At a minimum, the Program Manager, the Project Manager, Software Development Manager, Technology Manager, On-Site Technology and Support Manager, Change Management Manager, and Subcontractors performing System-related functions shall attend these meetings.
3665	Performance metrics will also be measured by NJTA, and all performance reports and data shall be accessible to NJTA. NJTA measured performance and Contractor measured performance will be compared during the monthly Contractor and System Active Management Meeting. If there are discrepancies, the Contractor shall work with NJTA to resolve them. NJTA measured performance will be used for the Monthly Fee Adjustments to the invoice.
3666	The first month's Contractor and System performance shall be reviewed in month two of the System Maintenance, Administration and Software Support Services.
3667	During the monthly Contractor and System Active Management Meetings, the Contractor shall review the contents of the Monthly Contractor and System Performance Report Package, communicate information about Phase 2 Project milestones and status, and coordinate planned Services.

#### 10.12.1.2 Monthly Contractor and System Performance Report Package

3668	Submit the monthly Contractor and System Performance Report Package within ten (10) Business Days of the end of the reporting month. If reports are not available or reports are not accurate, the Contractor shall be assessed the full liquidated damages for that item.
3669	<p>At a minimum, the Contractor and System Performance Report Package shall include the reports listed below, but the final list of documents to be included shall be developed and Approved during the Implementation Phase:</p> <ul style="list-style-type: none"> <li>a. action items, including assignee, due date, and status;</li> <li>b. all System performance results with calculated adjustments, System performance reports, and any back-up documentation demonstrating compliance to Requirements;</li> <li>c. all required information for Approved exceptions that impacted compliance to System Performance Requirements;</li> <li>d. liquidated damages for non-compliance;</li> <li>e. monthly trends in performance;</li> <li>f. comprehensive System volumes and statistics;</li> <li>g. notification of Customer complaints;</li> </ul>

	<ul style="list-style-type: none"> <li>h. details on any Security Incidents;</li> <li>i. defect, change/improvement, malfunction or fault reporting and tracking;</li> <li>j. data issues detected by the data hygiene monitoring process and proposed corrective/preventative actions;</li> <li>k. recommended improvements to the data hygiene monitoring process;</li> <li>l. System changes needed to address issues detected through real-time activity monitoring;</li> <li>m. Recommended improvements to real-time activity monitoring;</li> <li>n. look ahead for work planning purposes, and</li> <li>o. defect, change/improvement, malfunction or fault tickets created for the month, deployed for the month, and planned for the next two months.</li> </ul>
3670	Performance results and calculated invoice adjustments included in the Contractor and System Performance Report Package shall utilize an Approved combination of System reports and reports generated by the PMMS.
3671	In addition to other invoicing and payment Requirements, the Contractor shall provide a final version (updated based on the monthly Contractor and System Active Management meeting and Reporting Package) of the Contractor and System Performance Report Package and all other required monthly reports to NJTA prior to invoice submittal.

#### 10.12.2 Reports Review Meeting

3672	<p>No less than every two months NJTA and the Contractor will conduct meetings to review the status of the current reports provided by the System. During that meeting the following items shall be reviewed:</p> <ul style="list-style-type: none"> <li>a. accuracy of the data provided on existing reports;</li> <li>b. any noted changes to the data presented on existing reports;</li> <li>c. problems with current report generation process;</li> <li>d. requested modifications to existing reports, and</li> <li>e. requests for new reports.</li> </ul>
3673	At a minimum, the appropriate Product Lead, the Testing and QA/QC Manager, and the Operations Quality Assurance Manager shall attend these meetings.

#### 10.12.3 Change Control Board Meetings

During the Operations and Maintenance Phase, the Contractor shall hold Change Control Board meetings. The Contractor shall be responsible for conducting and scheduling these meetings in accordance with Approved change control process.

3674	Work with NJTA in developing the Change Control Board Meeting cadence and submit the final meeting schedule for Approval.
3675	Manage, facilitate, and conduct Change Control Board meetings with NJTA on at least a monthly basis. These meetings shall be for the purpose of providing status, reviewing, Approving, and prioritizing submitted System changes (such as, software changes, upgrades, and updates; hardware upgrades; defect corrections) and submitted operations changes (such as, policies, Business Rules, operational procedures, phone scripts, Correspondence Items, other Customer communications, and staffing).
3676	Submitted changes shall be reviewed during Change Control Board meetings and the Change Control Board may make recommendations, but final Approval to proceed with a submitted change and its severity shall only be granted by NJTA.
3677	Updates and upgrades to New Jersey E-ZPass System and applications to support legislative and statutory changes shall be processed through the Change Order process. Contractor shall implement the change within the Approved timeline or liquidated damages shall be assessed in accordance with Performance Requirements.
3678	At a minimum, the Program Manager, the Software Development Manager, the Technology Manager, the Change Management Manager, and the Product Leads shall attend these meetings.

#### 10.12.4 Defects/Change/Issues/Ticket Tracking and Review Meetings

During the Operations and Maintenance Phase, the Contractor shall conduct weekly meetings to review defects identified, upcoming changes, issues reported, and ticket tracking. The Contractor shall be responsible for conducting and scheduling these meetings.

3679	Manage, facilitate, and conduct defects/change/issues/ticket tracking and review meetings with NJTA on a weekly basis. These meetings shall be for the purpose of providing NJTA with information regarding new and existing defects, prioritization of tickets, upcoming changes, new issues reported, previously reported issues, and ticket tracking.
3680	Contractor shall provide detailed information about open defects, upcoming changes, issues and ticket tracking to NJTA at least two Business Days prior to the meeting.
3681	At a minimum, the Program Manager, the Software Development Manager, and the Technology Manager, shall attend these meetings.

#### 10.12.5 Innovations and Program Improvement Meetings

On a quarterly basis, the Contractor shall present detailed information, such as feature overviews, cost/benefit analyses, and draft implementation schedules, about recommended improvements for New Jersey E-ZPass Systems, processes, and operations. NJTA will review information about the recommendations and the Contractor and NJTA will work together to develop a plan to prioritize and implement those that are selected for implementation.

3682	Manage, facilitate, and conduct quarterly Innovations and Program Improvement Meetings with NJTA beginning at Cut-Over and continuing through the Contract Term.
3683	Ensure all appropriate Contractor staff are in attendance at all quarterly Innovations and Program Improvement Meetings including, but not limited to the Project Principle, Project Manager, the Technology Manager, the Software Development Manager, the Security Analyst, CSC Operations Manager, Finance Manager, Internal Fraud Auditor, Reporting/Data Analytics Manager and Executive Leadership of the firm.
3684	Submit recommendations for System, process, and operational enhancements, including feature overview, associated cost/benefit analysis and implementation schedule, at least two weeks in advance of the quarterly meeting.
3685	Obtain feedback regarding any recommendations and revise and resubmit proposals and design for enhancements based on NJTA input.

### 10.13 Maintenance Documentation

It shall be the Contractor's responsibility to ensure that all System maintenance documents are updated on a regular basis and remain current.

3686	Submit all System maintenance documentation to NJTA for Approval once every year after the first year of operation. These documents include but are not limited to:
	a. RTM;
	b. System Detailed Design Document;
	c. System Security Plan;
	d. Cybersecurity Incident Response Plan;
	e. System Maintenance, Administration and Software Support Plan;
	f. Disaster Recovery Plan and Procedures;
	g. Operations Business Continuity Plan and Procedures;
	h. communications and correspondence templates;
	i. User and Training Manuals, and
	j. as-built documentation.

## 10.14 System and Maintenance Performance Requirements

The Contractor shall meet the Performance Requirements documented in Appendix T-1 Category A CSC Services Performance Requirements. The testing logistics required to prove the System's adherence to the System and Maintenance Performance Requirements shall be detailed in the Master Test Plan.

For the purposes of determining adherence to System and Maintenance Performance Requirements, Severity 1, 2 and 3 events are defined in Section 10.10 Maintenance Severities, Response and Repair Times. Severity 4 is used for events that serve as informational alerts which are not subject to a fee adjustment. As the System operates and Contractor performs System Maintenance, Administration and Software Support Services, the performance metrics for System and Maintenance Performance Requirements shall be captured that are included on the System and Maintenance Performance Requirement Scorecard as well as metrics for System and Maintenance Performance Requirements that are measured per incident. These metrics will be presented in a System KPI Dashboards that will provide real-time information on the System and Maintenance Performance. It will serve as a monitoring mechanism for the Contractor and shall be available to the Toll Agencies at all times.

### 10.14.1 Chargeable Failures

3687	<p>Chargeable failures are subject to monthly fee adjustment and include any performance at levels below the standards specified in Appendix T-1 Category A CSC Services Performance Requirements that are not specifically identified as non-chargeable per the Agreement. Chargeable failures include but are not limited to the following:</p> <ul style="list-style-type: none"><li>a. a malfunction or defect which prevents the System component (hardware or software) from performing its designated function;</li><li>b. a malfunction that poses a threat to the safety of the System components, Customers, employees, or others;</li><li>c. an occurrence where data is not successfully transmitted between the Toll Agency Host System/Host and Image Capture Systems and the System, the System and IAG/Interoperable Agencies, the System and external interfaces, or within the System Modules, unless such failure occurred on a device for which the Contractor is not responsible;</li><li>d. a failure of equipment or software that allows revenue loss to occur or causes loss of auditability that is not already Accounted for as a separate performance failure;</li><li>e. software anomalies and defects that affect the performance, accuracy, and operation of the System;</li><li>f. shutdown or unavailability of any element of the System that impacts Customers, Authorized Users and Third-party Service Providers unless specifically directed by NJTA;</li><li>g. failure to properly register or report a transaction or System-related event;</li><li>h. failure to properly reconcile the System;</li></ul>
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i.	failure to electronically send or receive transaction and payment information;
j.	failure to send and receive Correspondence;
k.	failure to generate the reports required to reconcile and audit the System, and
l.	failure due to Contractor negligence.

#### 10.14.2 System and Maintenance KPI Dashboard

3688	The Contractor shall monitor the System and Maintenance KPI Dashboard.
3689	Investigate metrics that display as non-compliant on the System and Maintenance KPI Dashboard to identify and resolve issues as quickly as possible.
3690	Work with the Toll Agencies in developing and implementing a CAP.
3691	Enter comments pertaining to incidents of non-compliant KPIs appearing on the System and Maintenance KPI Dashboard.

#### 10.14.3 Corrective Actions

Failure to meet a Performance Requirement does not relieve the Contractor of the Requirement to complete the activity associated with the Performance Requirement. The Contractor shall identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures in the future. This will be documented in a CAP. NJTA will use the details provided in the CAP to determine if liquidated damages will be waived or paused for the specific impacted performance measure.

3692	Identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures.
3693	Develop a CAP for each failure to meet a Performance Requirement identifying the root cause(s), the extent of the problem and providing a plan to rectify the current situation and prevent future occurrences.
3694	Submit the CAP to NJTA for review and Approval.
3695	The CAP provided by the Contractor shall be in a format Approved by NJTA.

## 11 OPERATIONS REQUIREMENTS

The New Jersey E-ZPass CSC operations responsibilities include Account management and Account maintenance, transponder issuance and management, Customer contact interface (including Customer Contact Center System support) and Case management, all unpaid transaction processing activities, including obtaining vehicle registration, processing Toll Bills, Post-paid Statements and Violation Notices, processing of payments, and managing and supporting all enforcement activities through collections,

Vehicle Registration Suspension/Hold and court until closure along with associated audit and reconciliation. Additional New Jersey E-ZPass CSC operations include financial management, reconciliation, reporting, QC and QA activities, interaction with IAG/Interoperable Agencies, interaction with other third-parties and the provision, training and management of the personnel required to run the operations.

The New Jersey E-ZPass CSC operations shall cover all Services for the functional areas as summarized below. While some of the activities, triggers and thresholds are automated, it should be understood that there are monitoring, manual inputs and interactions required of the New Jersey E-ZPass CSC staff to service the Customers and collect revenue. The Contractor shall use the New Jersey E-ZPass System and other systems as designated by NJTA to perform all New Jersey E-ZPass CSC Services.

3696	It is expected that, in the course of providing New Jersey E-ZPass CSC Services, the Contractor will fully utilize the capabilities and tools the Contractor is providing for operations per the System Requirements, even those not specifically identified within these Operations Requirements.
3697	Perform all Services in accordance with all applicable laws, rules, regulations, ordinances, and in compliance with all NJTA policies and guidelines for such contracted labor.
3698	Perform all operations functions described throughout Section 11 Operations Requirements.
3699	Perform all operations functions described throughout Section 11 Operations Requirements in accordance with the Business Rules and SOPs.
3700	Should an unplanned event require the full or partial closure of the CSC facility, support business continuity through a mix of secondary site and at-home agents, in accordance with the Operations Business Continuity Plan.

## 11.1 Security and Confidentiality

The Contractor shall comply with all federal, state and NJTA security standards. The Contractor shall maintain compliance with these standards as they evolve over the Contract Term. In any circumstance of conflict between Requirements, standards or statutes, the Contractor shall adhere to the most stringent standard or Requirement.

3701	The Services performed under the Agreement are considered highly confidential. All employees of the Contractor and of the Contractor's Subcontractors shall not discuss their Services with unauthorized personnel, or any individual not directly associated with NJTA.
3702	Customer data must be secure at all times, this includes data stored in the System and data the Contractor's personnel encounters while providing the Services under the Agreement.
3703	Contractor's personnel shall at all times adhere to and comply with PCI and Sensitive Material Policy as documented in the SOPs.

3704	Comply with the most current version of all state and federal security standards and guidelines including data privacy laws such as the California Consumer Privacy Act, where applicable.
3705	Comply with the security standards required in the New Jersey Statewide Information Security Manual.
3706	The Contractor's personnel shall not bring or possess the following personal devices on the operations center floor: <ul style="list-style-type: none"> <li>a. cell phones/smart watches;</li> <li>b. devices that take photographs or digital images;</li> <li>c. audio/video recording devices;</li> <li>d. USB jump drives or other digital recording media;</li> <li>e. Bluetooth phone ear-pieces, etc, and</li> <li>f. laptops or other devices that have internet access.</li> </ul>
3707	The Contractor's personnel may bring any of the above-noted devices to the facility, but such devices must be turned off and placed in the employee's assigned locker before entering the operations center.
3708	Contractor's personnel may use any of the above-stated devices in other areas of the facility (i.e. any break room, workout room, kiosk room or outside).
3709	Obtain Approval prior to any discussion of Services, including with the media, in any oral presentation, in any written publication, online, or in any other form not specified in the Agreement.
3710	All information regarding the Contractor's activities pursuant to this Agreement is confidential and communication pertaining to such information shall be strictly limited to communication with authorized Toll Agency personnel or their designated representatives.

## 11.2 Customer Privacy

The Contractor shall not release Customer information to anyone other than the Approved Toll Agency staff or their designees, as may be appropriate, Customers seeking information concerning their own Accounts, and to the Collections Service Contractors (in compliance with the Business Rules) and shall refer any and all other requests, inquiries, subpoenas, and official information requests to NJTA.

3711	Only release Customer information to the following: <ul style="list-style-type: none"> <li>a. Toll Agency authorized staff;</li> <li>b. properly identified presenters of subpoenas and search warrants;</li> <li>c. verified Customers seeking information concerning their own Accounts;</li> </ul>
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	<p>d. verified secondary users of Accounts concerning the Accounts to which they have been added;</p> <p>e. NJTA-provided Collections Service Contractors, and</p> <p>f. other entities only as directed by NJTA.</p>
3712	Refer all requests, inquiries, subpoenas, and official information requests regarding Customer information to NJTA.
3713	Establish reasonable and secure methods to verify the identity of Customers and secondary users prior to the release of any Customer Account information, and such methods shall be Approved by NJTA and documented in the SOPs.
3714	With the exception of Customer requests regarding their own Accounts, only answer general inquiries as they relate to general information about the Toll Facilities and services provided by the New Jersey E-ZPass CSC. All other inquiries and communications shall be escalated to NJTA unless the Contractor is otherwise directed in writing by NJTA. This includes inquiries from, or communications with, the media, the public (via social media), government agents, Public Records Act requests, and individuals representing organizations for purposes other than directly related to their own Customer Account.
3715	Maintain a record of all information requests, inform NJTA immediately of inquiries from these entities, and direct such inquiries to NJTA, according to the SOPs.
3716	Immediately notify NJTA of any search warrants, subpoenas, and requests for expert testimony received.
3717	Upon receipt of a request to provide information required by a search warrant or subpoena, an Authorized User shall initiate a Case. Once the Case is Approved by NJTA the requested information shall be gathered and provided in the manner defined in the Case.
3718	Provide qualified personnel to provide testimony as an expert witness upon request from NJTA.
3719	Requests for data required by a subpoena or search warrant shall be considered a Priority 1 request.

### 11.3 Record Keeping

3720	Ensure all Account documentation that requires a paper application, form or document of any sort, including payment forms and signed Payment Plan agreements, are archived by scanning the original documents and storing the scanned files on electronic media using the Contractor-provided document imaging/management solution.
3721	Maintain complete business records regarding Accounts, transaction records, and unpaid transaction data.

3722	Maintain the document imaging/management solution's filing system in an organized and easily accessible manner that provides for efficient access when needed. Authorized Users shall have access to the electronic filing system at all times.
3723	Scan and associate all Correspondence Items with the correct Customer Account. After confirmation of the scanned image, the Correspondence Item shall be catalogued and destroyed. Contractor shall comply with NJTA's policies/procedures concerning document destruction activities.
3724	Associate (by scanning or otherwise) all incoming and outgoing Customer related documentation and Correspondence Items to the applicable Customer Account and make available to Authorized Users for review when the Account is accessed.
3725	Meet all requirements of Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific policies, which shall supersede the use of the State of New Jersey General Records Schedule upon completion. This Appendix provides the version of this document available at the time of publishing of the RFP for informational purposes. The Contractor is responsible for meeting all of the requirements of the most recent version of the document for the Contract Term.
3726	Retain and purge data for all electronic and physical documents handled by the Contractor in accordance with NJTA's retention policy described in the Business Rules.
3727	Ensure the confidentiality of stored Customer information, including Account information, and that such information is processed and stored in compliance with PCI and PII policies and regulations.
3728	Ensure compliance with the data retention and record keeping requirements set forth in applicable standards including, but not limited to: <ul style="list-style-type: none"> <li>a. GAAP;</li> <li>b. record retention policies for the Toll Agencies;</li> <li>c. IRS requirements;</li> <li>d. all applicable federal, state, local and other laws and regulatory matters, and</li> <li>e. Merchant Services requirements.</li> </ul>
3729	Standards for records management and retention may change during the Contract Term. The Toll Agencies will provide any updates to their internal policies and procedures that may impact the New Jersey E-ZPass CSC as appropriate; however, it is the Contractor's responsibility to ensure it is aware of any changes to all non-Toll Agency's standards, as described in these Requirements, and to incorporate those changes, as appropriate.

## 11.4 Contractor Employee Requirements

3730	Develop and put in place the organizational structure and headcount required to meet the operations Requirements.
3731	Provide all required management, supervisory, financial and operations staff, including qualified management, professional and clerical personnel, to professionally operate and administer the CSC operations in a manner that meets all required performance criteria. Staffing levels may fluctuate based on operational efficiencies as long as the Contractor continues to meet the Requirements, including Operations Performance Requirements.
3732	All staff members shall understand and speak the English language, and be a U.S. citizen or possess an Alien Registration Card.
3733	Provide for bilingual (Spanish) Customer service staff to support Spanish-speaking Customers who call or visit the New Jersey E-ZPass CSC during all Business Hours and to support inbound Customer communications.
3734	Provide a language line or similar translation service as a back-up when a Customer calls who only speaks a language other than English or Spanish.
3735	Screen all candidates for potential employment at the CSC. Screening and the subsequent decision to hire shall be based upon fair, equitable, and job-related criteria.
3736	Perform background investigations on all the Contractor's employees and Subcontractor employees. The level of background investigation required shall be dependent upon job function (for example, a receptionist who has limited access to Customer and financial information shall require a lower level of investigation than a CSR in the finance department who may have access to Customer, credit card and financial information). Additional screening may be required for the Contractor's operation's staff prior to promotion or transfer to job roles with increased access to sensitive or critical information. Investigations shall include, but not be limited to:  a. business/personal references;  b. illegal substance screening;  c. past employment history;  d. education verification;  e. financial credit history;  f. professional license and certification verification;  g. military service verification;  h. criminal records including misdemeanor and felony convictions, and  i. I-9 immigration status.

3737	<p>Comply with all applicable laws and regulations related to operating and staffing the New Jersey E-ZPass CSC, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Americans with Disabilities Act (ADA);</li> <li>b. Occupational Safety and Health Act (OSHA);</li> <li>c. Equal Employment Opportunity Commission (EEOC);</li> <li>d. Federal Fair Credit Reporting Act (FCRA)- FCRA only applies to those investigations conducted by an outsourced company;</li> <li>e. Driver Protection Policy Act (DPPA);</li> <li>f. New Jersey State statute regarding protection of PII, and</li> <li>g. PCI DSS.</li> </ul>
3738	<p>When conducting investigations, consider and take into account the following:</p> <ul style="list-style-type: none"> <li>a. name search - married name, previous names, aliases;</li> <li>b. investigations must be completed and reviewed by the Contractor prior to the employee beginning work for the New Jersey E-ZPass CSC Program, and</li> <li>c. confirmation of a current, but inactive government secret clearance, or above, can be used in lieu of other investigations.</li> </ul>
3739	<p>Maintain backup documentation on-site for all background checks and make available to NJTA upon request.</p>
3740	<p>Maintain records of adjudication and hiring decisions on each candidate interviewed or considered for a position.</p>
3741	<p>All staff who access the System shall sign the non-disclosure form provided by NJTA prior to being issued access credentials.</p>
3742	<p>Maintain a daily staffing list by position, including vacancies and call-outs, and submit such list to the Toll Agencies by 10:00AM Eastern Time each day.</p>
3743	<p>Ensure that all personnel providing Services in the Agreement conduct themselves in a manner that by all appearances can only be construed as polite, humble, friendly, helpful, courteous, and kind based upon the best practices of Customer service. Employee communications shall be professional and courteous on all channels when communicating to the Customers. This shall include asking follow-up questions to make sure the Customer's inquiries are answered and that there are not any additional Customer needs.</p>

## 11.5 Operations Documentation

Numerous documents related to operations will be developed during the Implementation Phase. These documents shall be updated on a regular basis throughout the Contract Term to reflect any updates or changes to the System or operational procedures.

3744	<p>Ensure that all New Jersey E-ZPass CSC documents, including but not limited to those listed below, provided under this Scope of Services remain current. Submit changes to relevant sections with each Software Release and submit full versions of all CSC documentation to NJTA for Approval twice every year, or at NJTA's request, after the first year of operation.</p> <ul style="list-style-type: none"><li>a. Training Plan, manual and materials;</li><li>b. Operations Business Continuity Plan;</li><li>c. Business Rules document;</li><li>d. Standard Operating Procedures;</li><li>e. Staffing and Human Resources Management Plan;</li><li>f. Operations Quality Assurance Plan;</li><li>g. User Manuals;</li><li>h. CSC Finance and Audit Manual, and</li><li>i. End of Agreement Succession Plan.</li></ul>
3745	Control and keep current all manuals and documents related to New Jersey E-ZPass CSC operations. Track all revisions and send to NJTA for Approval. All documentation, electronic and otherwise, developed by the Contractor, including that developed to support training shall be the property of NJTA.
3746	Update the Business Rules with any changes requested by NJTA within 30 calendar days of the request.
3747	Update the Operations Business Continuity Plan within 30 calendar days of the Business Continuity Testing which occurs every six (6) months.

## 11.6 Customer Service Facilities and Equipment

NJTA requires front-office, call center and back-office operational services for the staffing and performance of New Jersey E-ZPass CSC operations.

### 11.6.1 CSC and WIC Facilities

The Contractor will be responsible for identifying, securing, and maintaining the facilities required to operate the New Jersey E-ZPass Program. These include facilities to operate the CSC call center, operate WICs, and to perform back-office functions. There will be two (2) CSC facilities, one located in South New

Jersey and one in North New Jersey, each serving as a business continuity location for the other. Each CSC facility should be large enough and equipped to sustain the full New Jersey E-ZPass CSC operations, if required. WICs should be provided in South and North New Jersey. These WICs may be co-located with the CSC facilities or located elsewhere. Additionally, the Contractor will be responsible for connecting to and equipping the current WIC at DRBA in New Castle, DE that is operated by DRBA staff and the WICs that are operated by DRJTBC and SJTA staff.

3748	Identify, lease and outfit two (2) CSC facilities, one located in South New Jersey, and one located in North New Jersey. The current northern CSC facility is located in Newark.
3749	Both CSC facilities shall be of appropriate size to contain all the staff, furniture, equipment and supplies necessary to conduct all of the operations Requirements.
3750	Identify, lease and outfit an appropriate WIC in North New Jersey. The current northern New Jersey WIC is located in Newark and is co-located with the CSC facility.
3751	Identify, lease and outfit an appropriate WIC in South New Jersey. The current southern New Jersey WIC is located in Camden.
3752	The WICs shall have sufficient parking spaces for Customers and shall be close to a major roadway.
3753	NJTA will tour the facilities and Approve the proposed locations and facilities.
3754	Interface with and equip the WIC owned and operated by the DRBA staff in New Castle, DE.
3755	Interface with and equip the WICs owned and operated by the DRJTBC staff in Pennsylvania and SJTA staff at the Farley Service Plaza.
3756	Perform any build-out required in the CSC facilities and WICs.
3757	Equip the CSC facilities as well as the WIC with large display devices for displaying a live operations Dashboard presenting critical CSC metrics in real-time, for example wait times, number of Customer calls waiting, type of calls, and abandoned calls.
3758	Equip each CSC and WIC facility with a generator or other back up source to fully power each facility in the event of a power outage.
3759	Provide adequate, dedicated space, with adequate workstations, at the two CSC facilities for training of Operations Staff and Toll Agency Staff during both the Implementation and Operations and Maintenance Phases. The Contractor shall also provide additional overflow rooms or facilities for the Implementation Phase training as necessary.
3760	Provide conference room space adequate to host a conference with 25 to 30 in-person attendees.
3761	Provide video conference and teleconference capabilities for the conference room.
3762	Design and equip the CSC facilities and WIC such that Customers shall not hear cross talk or background noise when talking to a CSR by phone.

3763	Develop a strategy to help at-home CSRs, who assist Customers by phone, prevent background noise from being heard by Customers during calls, for example utilize a “Press-to-Talk” function, provide headsets with directional noise canceling microphones, provide noise reduction training, etc.
3764	Include, at each CSC facility, one separate, dedicated (enclosed) private office and two (2) cubicles for Toll Agency staff members. The office shall be sized and furnished similarly to offices for the CSC Operations Manager and comfortably accommodate four (4) people. These office and cubicles shall be equipped with the infrastructure such that Toll Agency personnel shall have the ability to listen to live and recorded calls.
3765	Be responsible for provision and payment of all operational and occupancy related services, including but not limited to rent, taxes, security, maintenance, utilities and janitorial services.
3766	Maintain appropriate premise/property and liability insurance and bonding in accordance with the Agreement Section 41.0 Contract Bonds and Letter of Credit.

#### 11.6.2 Compliance to Facility and Operations Standards

3767	Adhere to all applicable local, state, and federal standards, laws, ordinances, and codes in its installation, fit-out, furnishing, and operations, including but not limited to those for:  a. building;  b. electrical;  c. safety;  d. environmental, and  e. installation.
3768	Be responsible for acquiring and maintaining all required permits, plan reviews, and inspections.
3769	Be responsible for producing all documentation and drawings required to install and adhere to the required installation standards, laws, ordinances and/or codes.

#### 11.6.3 Equipment, Furniture and Supplies

3770	Provide and equip all CSC facilities and WICs, including the DRBA WIC, the DRJTBC WICs and SJTA WIC, all equipment, furniture and consumables required for the operations of the New Jersey E-ZPass CSC and replace such equipment, furniture, supplies and consumables should the need arise.
3771	Monitor the usage of the supplies and consumables and replenish them as needed to meet the Requirements.

3772	NJTA shall take possession of the New Jersey E-ZPass CSC equipment upon the termination, for whatever reason, of the Agreement. The Contractor is responsible for proper use and care of the New Jersey E-ZPass CSC equipment and shall have full liability for all New Jersey E-ZPass CSC equipment.
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#### 11.6.4 Data Security and Facility Access Control

3773	Ensure that the New Jersey E-ZPass CSC is accessed only by authorized personnel with the appropriate privileges and the Contractor shall ensure that this security is not breached.
3774	Provide and maintain an access matrix that lists all New Jersey E-ZPass CSC personnel that have access privileges to the New Jersey E-ZPass CSC premises and the New Jersey E-ZPass System, their position, and the functionality or activities and associated information to which they have access.
3775	All such access shall be in compliance with applicable GAAP standards.
3776	Ensure that the facility and any other remote location used by the Contractor to perform the Services required by the Agreement shall be PCI DSS compliant.
3777	Ensure compliance to the most recently published PCI DSS and validate the operations to be compliant with the certification level required.
3778	Establish and carry out Approved security procedures and policies for all visitors accessing facilities where Services are performed.
3779	Ensure all facilities where Services are performed are established, operated, and maintained in compliance with all applicable cybersecurity Requirements.
3780	Provide and install an access control system and video monitoring system and institute internal controls at the facilities to safeguard the New Jersey E-ZPass CSC operation and staff.
3781	Install cameras for the monitoring of the mailroom, transponder storage areas and any other areas where cash, checks or Confidential Personal Information might be handled. Video shall be saved and easily accessible for a minimum period of three (3) months, or longer as necessary to support the investigation of any anomalies discovered, including those found during audit, quality assurance, and reconciliation.

#### 11.6.5 Accessibility

3782	Provide CSC facilities and WICs that meet the Americans with Disabilities Act of 1990 (ADA) standards for accessibility for both staff and Customers and comply with most current version of the Americans with Disabilities Act of 1990 (ADA amended in 2008) and any relevant New Jersey laws.
3783	Provide and utilize equipment to serve hearing impaired Customers in accordance with Customer service best practices and applicable federal and state statutes and requirements.

### 11.6.6 Hours of Operation and Holidays

3784	At a minimum, the CSC back-office functions shall be provided from 7 a.m. to 7 p.m. Monday – Friday and 8 a.m. to 2 p.m. Saturday Eastern Time.
3785	The New Jersey E-ZPass call center shall be open, calls answered, and chat/SMS responded to from 7 a.m. to 9 p.m. Monday –Saturday Eastern Time.
3786	The northern New Jersey WIC shall be open from 7 a.m.- 7p.m. Monday –Saturday Eastern Time.
3787	The southern New Jersey WIC shall be open from 8 a.m.- 6p.m. Monday – Friday Eastern Time.
3788	<p>The CSC shall observe the following Holidays:</p> <ul style="list-style-type: none"> <li>a. New Year's Day;</li> <li>b. Memorial Day;</li> <li>c. Independence Day;</li> <li>d. Labor Day;</li> <li>e. Thanksgiving Day, and</li> <li>f. Christmas Day.</li> </ul>
3789	For any listed Holiday occurring on Saturday or Sunday, the CSC shall observe the Holiday on the same day as NJTA staff.
3790	Close the CSC upon Approval from NJTA (for example, for emergency or weather conditions).

### 11.6.7 Business Continuity Testing

The Contractor must support business continuity and the resumption of the New Jersey E-ZPass Customer service and operational processes after unplanned disruptions. To ensure effectiveness of the business continuity processes, the Contractor shall conduct Business Continuity Testing every six months.

3791	Conduct Business Continuity Testing every six months.
3792	During Business Continuity Testing, conduct all operations under the business continuity mode for a period of one (1) week.
3793	Business Continuity Testing shall include relocation of all operations staff to one of the CSC facilities. The location shall be alternated for each Business Continuity test such that both sites are tested annually. WICs and other sites shall remain in operation and open.

3794	Provide a minimum of fifteen (15) Business Days' notice to NJTA prior to conducting Business Continuity Testing.
3795	Facilitate and support NJTA's witnessing of and participation in the Business Continuity Testing.
3796	After the completion of each the Business Continuity Test, submit to NJTA for review and Approval a test report that documents the results of the test, comments provided by NJTA, any anomalies and issues identified, the corrective action/resolution of each item, and any re-tests required.
3797	Continue the corrective action and re-testing process until all anomalies and defects are closed-out and the final test report is Approved by NJTA.

## 11.7 Coordination and Meetings

### 11.7.1 Cooperation and Coordination

The Contractor shall work closely with the Toll Agencies in the management and operation of the CSC and associated facilities. The Contractor will also be responsible for coordinating with other relevant entities in order to meet the Requirements of the New Jersey E-ZPass Program.

3798	Cooperate with external parties as Approved by NJTA to support any activity related to the New Jersey E-ZPass CSC Services, including but not limited to:
a.	Contractor-selected Third-party Service Providers;
b.	Toll Agency staff and representatives;
c.	Toll Agencies Host System/Host and Image Capture Systems contractors;
d.	law enforcement, including New Jersey State or County Police;
e.	airport and other parking facility operators;
f.	rental car/fleet agencies;
g.	credit card issuers;
h.	e-commerce payment services such as Apple Pay;
i.	NJTA-provided banks;
j.	Print/Mail Service Providers;
k.	License Plate Review Services Contractor;
l.	Merchant Services Contractor;
m.	Collections Service Contractor(s);

n. MVC/DMV/ ROV Lookup Service Provider;
o. Escheatment Service Provider;
p. Retail Distributors of Inventory;
q. court;
r. other IAG/Interoperable Agencies and their representatives, and
s. states, and other entities, as directed by NJTA.

### 11.7.2 Operational Management Reporting and Meetings

The Contractor is responsible for the management of and regular reporting on operations of the New Jersey E-ZPass CSC. The Contractor's management personnel shall maintain a close liaison with and provide rapid response to NJTA for all day-to-day Program operational matters including administration, accounting, QC, escalation, and Customer service. The Contractor will conduct monthly Operations Active Management Meetings to present and discuss operational performance for all CSC departments.

### 11.7.3 Monthly Operations Active Management Meeting

3799	Conduct monthly, in person, Operations Active Management Meetings with the Toll Agencies at a location Approved by NJTA.
3800	At a minimum, the Operations Program Manager, CSC Operations Manager, Call Center Managers, Operations QA Manager, Image-Based Transaction Processing Manager, Violations Manager, Social Media Coordinator, Correspondence Manager, Transponder Inventory Manager, Case Management Manager, Internal Fraud Auditor, Law Enforcement Manager, Finance Manager, and Training Manager shall attend these meetings.
3801	<p>During the monthly Operations Active Management Meeting, the Contractor shall review the contents of the monthly Operations Performance Report Package, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. operational statistics for the previous reporting period compared to historical trends;</li> <li>b. staffing statistics for the previous period compared to historical trends, including headcount information.</li> <li>c. detailed comparison of the Contractor's performance, based on results from System generated reports, against the Operations Performance Requirements in a tabular and graphical form;</li> <li>d. trend analysis and summary of the System generated reports and data for the past twelve (12) months and previous calendar year;</li> <li>e. details regarding any failure to meet the performance criteria within the monthly Operations Performance Report Package, including the Contractor's CAP to correct such occurrences;</li> </ul>

f. details of any exception that is to be excluded from the calculations with supporting documentation;
g. a summary of any liquidated damages or monthly fee adjustments for such failure to meet the Operations Performance Requirements;
h. any issues encountered with the System or operations during the reporting period and report on resolution status;
i. status of any new or ongoing projects or initiatives, and
j. status of action items, including item description, responsible party, due date, and status.

#### 11.7.4 Operations Assessment Meetings

3802	Conduct monthly, in person, Operations Assessment Meetings with the Toll Agencies at a location Approved by NJTA.
3803	At a minimum, the Program Manager, the On-site Technology and Support Manager, the Technology Manager, the CSC Operations Manager, the Call center Managers, the Image-Based Transaction Processing Manager, the Violations Manager, the Case Management Manager, the Internal Fraud Auditor, and the Operations Quality Assurance Manager shall attend these meetings.
3804	<p>During the monthly Operations Assessment Meeting, operations staff, technical staff, and Toll Agencies shall review business/use cases with the goal of identifying potential improvements, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Customer service improvements;</li> <li>b. areas of concern identified during QA reviews;</li> <li>c. operational efficiencies, and</li> <li>d. increased revenue collection.</li> </ul>

#### 11.7.5 Toll Enforcement Coordination Meeting

3805	Conduct a Toll Enforcement Coordination Meeting with the Toll Agencies and the Collections Service Contractor(s) on a monthly basis. NJTA shall have the right to request anyone to attend the meeting.
3806	At a minimum, the Operations Program Manager, Image-Based Transaction Processing Manager and Violations Manager shall attend these meetings.
3807	During the Toll Enforcement Coordination Meeting, review any identified issues with coordination, processes, communication, or systems related to toll enforcement and the collection of revenue.

3808	During the Toll Enforcement Coordination Meeting, report on the status of return on investment for toll enforcement efforts and success rate over time.
3809	Discuss proposed changes and recommendations that will improve collection rates.
3810	Discuss Approved improvements and plan for coordinated development, testing and Release.

#### 11.7.6 Weekly Operations Update Meeting

3811	Conduct a weekly Operations Update Meeting with the Toll Agencies.
3812	At a minimum, the CSC Operations Manager, Call Center Managers, Operations Quality Assurance Manager, Internal Fraud Auditor, Image-Based Transaction Processing Manager, Violations Manager, Social Media Coordinator, Correspondence Manager, Transponder Inventory Manager, Case Management Manager, Correspondence Manager, Finance Manager and Training Manager shall attend the Weekly Operations Update Meetings.
3813	<p>During the weekly Operations Update Meetings, report on all aspects of operations, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. staffing/hiring;</li> <li>b. training;</li> <li>c. call center statistics;</li> <li>d. WIC statistics;</li> <li>e. Case management;</li> <li>f. Customer satisfaction;</li> <li>g. transponder management;</li> <li>h. court;</li> <li>i. administrative hearings;</li> <li>j. finance;</li> <li>k. quality programs;</li> <li>l. audits;</li> <li>m. documentation;</li> <li>n. IAG/Interoperable Agency coordination;</li> <li>o. System or procedural issues;</li> <li>p. recent System Releases, and</li> </ul>

	q. impact of upcoming Releases on operations.
3814	Maintain an action item list, which includes item description, responsible party, due date and status. Report on the status of each item during the weekly Operations Update Meeting.

#### 11.7.7 Finance Meeting

3815	Conduct a bi-weekly Finance Meeting with Toll Agencies in person.
3816	At a minimum, the Finance Manager and Operations Project Manager shall attend these meetings. At the discretion of NJTA, the Merchant Services Contractor may be requested to attend these meetings.
3817	Review any material finance and reconciliation-related discrepancies, discuss proposed process or reporting changes, as well as any other applicable finance-related topic that will improve revenue collection.
3818	Discuss ongoing System projects with potential impact on finance and associated mitigation plan.
3819	Maintain an action item list, which includes item description, responsible party, due date and status. Report on the status of each item during the bi-weekly Finance Meeting.

#### 11.7.8 Ad-Hoc Operations Meetings

3820	On an as needed basis, schedule and facilitate operations meetings as needed to meet the Requirements.
3821	Ensure appropriate staff is available to participate in ad-hoc operations meetings.
3822	Document action items resulting from ad-hoc meetings, including action item description, responsible party, due date and status. Follow up on action items identified in ad-hoc operations meeting until resolved.

#### 11.7.9 Collaborative Operations Planning and Efficiency Benchmarks

NJTA expects the Contractor to provide high quality service as efficiently as possible in keeping with the System and Operations Performance Requirements developed for operations of the New Jersey E-ZPass.

NJTA and the Contractor shall work collaboratively to establish the efficiency benchmarks for use in determining the necessary headcount of Contractor provided staff required to operate the New Jersey E-ZPass CSC. On a daily basis the Contractor shall submit the staffing list for each functional area showing occupancy during peak and non-peak hours. This process is intended to be collaborative with the mutual goal of Continuous Improvement and reasonableness and is an important part of NJTA's management of the CSC. It is expected that there will be variations between the planned number of hours and the actual number of hours. The budgets and any variations shall be discussed with NJTA during the monthly project meeting and any necessary, ad-hoc meetings during the month.

3823	Develop a monthly staffing plan based on Performance Requirements and benchmarks.
3824	Prepare and submit a daily staffing list for each functional area of the New Jersey E-ZPass CSC. This list shall include occupancy during peak and non-peak hours.
3825	Prepare and present headcount statistics, estimates and trends during the monthly Operations Active Management meeting.

## 11.8 Oversight and Access to Contractor Staff

In addition to the monthly management and reporting meetings, the Toll Agencies will be actively engaged in the operations of the CSC. Each functional area of operations (e.g., finance, Account management, Customer contact center, Correspondence, Toll Enforcement, transponder inventory, QA, fraud detection) will be assigned one or more designated Toll Agency representatives for that particular functional area or element of the functional area. The Contractor team member responsible for that area will work directly with their Toll Agency counterpart to achieve the goals of the New Jersey E-ZPass Program. This approach provides benefits both to the Toll Agency and the Contractor increasing transparency and agility in decision-making and allowing NJTA decision-makers to be familiar with the applicable functional area, its staff, performance, challenges, and opportunities. This proactive communication approach also helps identify operational changes that will improve Customer service, increase efficiency, improve revenue collections, and allow the Contractor to support the Toll Agencies' priorities.

3826	<p>Designate a responsible party for each functional area in the CSC. The Contractor responsible team member activities shall include but are not limited to:</p> <ul style="list-style-type: none"> <li>a. managing the operation of the functional area, including its performance against the Operations Performance Requirements, adherence to the SOPs and quality of all deliverables and Services;</li> <li>b. developing SOPs and other materials in collaboration with the functional area staff and the applicable Toll Agency responsible party;</li> <li>c. identifying and providing timely notification of issues about the functional area and its performance against to the Operations Performance Requirements to NJTA's responsible party and seeking feedback and joint issue resolution as applicable;</li> <li>d. conducting weekly review of the performance against the Performance Requirements with the Toll Agency responsible party;</li> <li>e. conducting Customer outreach and addressing Customer feedback;</li> <li>f. proposing changes to improve performance, Customer service and revenue collections;</li> <li>g. proactively providing useful information to the Toll Agency responsible party upon realizing that it would be beneficial and jointly making recommendations for Continuous Improvement, and</li> <li>h. planning scheduled and ad-hoc meeting(s) as necessary.</li> </ul>
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3827	Ensure Key Personnel and functional leads are readily accessible to the Toll Agencies and working during business hours, 9:00 am to 5:00 pm Eastern time, regardless of their physical location and time zone.
3828	Provide and maintain a current emergency contact list to Toll Agencies at all times for the purpose of handling emergencies and escalations. The emergency contact list shall name Contractor's preferred points of contact, in order of precedence, and shall include, at minimum, Contractor's operations Project Manager, CSC Operations Manager, Call Center Manager, Operations QA Manager, Image-Based Transactions Manager, Violations Manager, Social Media Coordinator, Finance Manager, Internal Fraud Auditor, Inventory Manager, Correspondence Manager, Training Manager and other New Jersey E-ZPass CSC support staff. The purpose of the emergency contact list is to ensure Contractor can be reached outside of normal New Jersey E-ZPass CSC hours and to address urgent matters.

## 11.9 Training

The Contractor shall provide comprehensive training for all aspects of the New Jersey E-ZPass CSC operation including training in the use of the System, operational procedures, policies and guidelines, and rules of conduct, including Customer interface. Training shall be ongoing throughout the entire Contract Term.

### 11.9.1 Training Program

3829	Provide comprehensive New Jersey E-ZPass CSC training which includes a review and description of each of the appropriate processes and procedures with actual System software and equipment.
3830	Ensure all students have their own workstations and telephone equipment and are able to interact directly with the training environment.
3831	<p>Identify the training needs, plan, design, and develop all the training curriculum and materials for the implementation and management of the New Jersey E-ZPass CSC's on-going training program. The types of training include, but are not limited to:</p> <ul style="list-style-type: none"> <li>a. Customer service and integrity skills ("soft skills") training;</li> <li>b. Toll Agencies background information including, E-ZPass, AET, and violation processing business rules and Toll Facility specific information ("content training");</li> <li>c. use of the System, the Customer Contact Center System and any other applicable systems and equipment ("System training");</li> <li>d. use of any other Contractor-provided system (e.g., time management, scheduling), if applicable;</li> <li>e. work from home training, if applicable;</li> <li>f. SOPs and policies;</li> </ul>

	<p>g. Security topics as required by the New Jersey Statewide Information Security Manual published by the New Jersey Office of Homeland Security and Preparedness. Topics shall include but not be limited to PII, PCI, data, physical security, information security and privacy awareness, and role-based security, and</p> <p>h. Contractor employment related requirements.</p>
3832	<p>Include, within the training program, training at different times and for different reasons during the Contract Term, including but not limited to:</p> <p>a. new hire – this training, conducted prior to Go-Live and throughout the Operations and Maintenance Phase as new employee classes are hired, provides the new employee thorough, in-depth training covering all of the skills and information required to fully understand and fulfill their role with New Jersey E-ZPass;</p> <p>b. refresher – this training, conducted throughout the Operations and Maintenance Phase, provides additional training focused on topics on which the attendees have been previously trained but which the Training Manager, Contractor's operations management, or other Toll Agency management staff identify as requiring additional training for a group of employees;</p> <p>c. remedial – this training, conducted throughout the Operations and Maintenance Phase, is individually focused on the needs of a particular employee(s) based on Customer satisfaction feedback, management or QA observation, or employee request;</p> <p>d. new job/promotion – this training, conducted throughout the Operations and Maintenance Phase, is required when an employee changes jobs or gains additional responsibilities;</p> <p>e. new functionality - this training, conducted throughout the Operations and Maintenance Phase, is required when Software Releases are implemented that introduce new functionality or changes to existing functionality;</p> <p>f. new content/program – this training, conducted throughout the Operations and Maintenance Phase, is required when the Toll Agencies introduce a new project or program or makes a significant change to the SOPs or the System, and</p> <p>g. leadership/management training – this training, conducted prior to Go-Live and throughout the Operations and Maintenance Phase, is required for all management personnel (managers, supervisors, leads), to teach the skills required to coach and effectively manage people.</p>
3833	Gather trainee feedback and trainer evaluations at the conclusion of each training course and fine tune and revise the training based on the results.

3834	Keep accurate training records on all staff training. Contractor shall provide NJTA access to or provide copies of the training records and evaluations at any time. The retention of training records shall be in compliance with Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion.
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### 11.9.2 Training Materials

3835	For each course, develop and provide the following items to NJTA for Approval, including but not limited to:  a. detailed daily course agenda;  b. course presentation materials (e.g., PowerPoint slides);  c. required handouts, and  d. schedule of sessions.
3836	Record all training sessions conducted during the Operations and Maintenance Phase for use by the Toll Agency staff and for refresher training of operational staff. Videos shall not be used in place of live training for new hires.
3837	Update training videos with any changes to System functionality, operational procedures, or New Jersey E-ZPass Program updates.
3838	Submit draft copies of all training materials and updates to training materials to NJTA for review a minimum of 20 Business Days in advance of each associated training course.
3839	NJTA, in its sole discretion, may require the Contractor to provide additional interim drafts should draft training materials submitted not be of adequate quality or have missing or incorrect information.

## 11.10 Account Management

The Contractor shall provide the following services to allow Customers to open, maintain and monitor their Accounts. Account attributes are described in more detail in Section 9.11.1 Account Attributes as well as in the Business Rules.

### 11.10.1 Account Establishment and Maintenance

3840	Support the opening of all types of Registered Accounts (Private and Business Accounts) via telephone, mail, walk-in, Mobile App, and Self-Service Website.
3841	Perform all Account opening activities including processing of Customer application, verified and recorded Customer acceptance of Terms and Conditions, Account Plan qualification and enrollment, payment processing and transponder fulfillment.

3842	In case of an incorrect or incomplete application, contact the Customer to facilitate successful Account creation.
3843	Perform all activities related to Account maintenance.
3844	Support conversion of Unregistered Accounts to Registered Accounts.
3845	Support the set-up of recurring automated Payment Plans.
3846	Contact Customers who are identified as candidates for a recurring automated Payment Plan to offer that as option for paying debt.
3847	When possible duplicate Accounts are identified, contact Customer to confirm duplication and to obtain Customer consent to merge.
3848	Perform all activities related to Customer Account merging including obtaining Approval for Account merging and handling customer requests to merge that are initiated by System-generated Cases that automatically send 'request to consolidate Accounts' Correspondence Item to customers.
3849	Ensure that during each interaction with the Customer, the Customer is prompted to update their Account information, including but not limited to:  a. address(es) (includes designation of mailing, billing and shipping);  b. Payment Methods;  c. vehicles;  d. license plates;  e. phone numbers;  f. email address, and  g. contact preferences.
3850	Notify the Customer of missing Account contact or demographic information when the required field is blank or when information has been reported as not valid (for example, mobile number provided but SMS opted in was not completed or email address provided but the verification step was not completed).
3851	Notify the Customers of any issues with their Accounts (for example, negative balance, auto-replenishment failure, Payment Method locks, excessive Image-Based Transactions on a Transponder-Based Account, excessive automatic replenishments) and update their Accounts, including the charging of applicable fees in accordance with the Business Rules.
3852	Manage the inactive Account program including verifying Accounts identified the System as inactive or dormant.

3853	Manage the inactive dormant Account program including verifying Account balances and account eligibility for escheatment of funds to the states' treasury departments.
3854	<p>Update Customer Account information based on notifications from entities, including but not limited to:</p> <ul style="list-style-type: none"><li>a. Customer;</li><li>b. MVC;</li><li>c. out-of-state DMV;</li><li>d. ROV Lookup Service Provider;</li><li>e. USPS;</li><li>f. Collections Services Contractor(s);</li><li>g. Skip Tracing;</li><li>h. banks (for replenishment);</li><li>i. Rental Car/Fleet Agencies/Vendors;</li><li>j. PACER;</li><li>k. Retail Distributors of Inventory;</li><li>l. IAG/Interoperable Agencies;</li><li>m. Retail Cash Payment Processors;</li><li>n. Merchant Services Contractor, and</li><li>o. courts (for bankruptcy, court-ordered Payment Plans).</li></ul>
3855	Process Cases that are automatically created when new license plate types are identified in records returned by the MVC/DMV/ROV Lookup Service Provider. Determine whether the new plate type needs to be added to the System's database and/or to the License Plate Review Services Contractor's database and whether it is required for ROV lookups. Immediately take any action required to accommodate the new plate type, including coordination with the License Plate Review Services Contractor.
3856	Process Cases that are automatically created when the License Plate Review Services Contractor rejects images as unknown plate type. Determine whether the plate type needs to be corrected in the System's database and/or in the License Plate Review Services Contractor's database and immediately take any action required to correct the problem, including coordination with the License Plate Review Services Contractor.

3857	Process Cases that are automatically created when the MVC/DMV/ROV Lookup Service Provider indicates the plate type submitted in a request for lookup is unknown. Determine whether the plate type needs to be corrected in the System's database and/or in the License Plate Review Services Contractor's database and immediately take any action required to correct the problem, including coordination with the License Plate Review Services Contractor.
3858	On a monthly basis check with each US state's MVC/DMV to determine whether new license plate types are available and when new types are found, determine whether the plate type must be specified for ROV lookup requests.
3859	When Contractor finds new license plate types that must be specified for ROV lookup requests, take immediate action, including but not limited to:  a. add plate type to the System so it is available for selection and for use in ROV lookup requests;  b. coordinate with the License Plate Review Services Contractor to assure the new plate type is added to their system so it is available for selection during image review, and  c. notify all Toll Agencies of the new license plate type.
3860	When Contractor is informed by the License Plate Review Services Contractor of new license plate types that must be specified for ROV lookup requests, add the plate type to the System immediately and notify all Toll Agencies of the new plate type.
3861	Perform all activities related to Account closing.
3862	Notify the Customer of the reasons prior to any automated Account closing.
3863	Ensure the Customer's transponder(s) is deactivated in the System and all outstanding balances are resolved (paid, refunded, transferred, or escheated) before closing an Account.
3864	Process transponder returns in accordance with the Business Rules when the return happens after an unreturned transponder fee has been assessed and the Account is closed.

#### 11.10.2 Business Accounts with Commercial Post-paid Plan

3865	Establish a separate department within the CSC to handle Business Accounts with E-ZPass Commercial Post-paid Plans and Companion Commercial Post-paid Plans.
3866	Perform all activities necessary to manage the Business Accounts that have Commercial Post-paid Plans including Account and plan establishment, communication with Customers, automated outbound calling, transponder fulfillment, license plate and transponder management, Commercial Post-paid Invoice mailing, payments, disputes, and credit, collateral, and accounts receivable management.
3867	The Contractor's Commercial Post-paid Plan staff shall interface directly with NJTA on matters related to plan establishment, plan suspension, and collateral requirements.

3868	Provide periodic reports including invoicing, accounts receivable and aging reports, used to validate compliance with collateral requirements.
3869	Request and receive Approval from NJTA to increase the collateral threshold for the Account.
3870	Perform all activities to advise the Customer a collateral increase is required.
3871	Monitor the Cases and reports to identify Accounts with a Commercial Post-paid Plan that is past due.
3872	Interface directly with the Customer to communicate the status of a past due Commercial Post-paid Plan.
3873	Perform proactive outreach to assist the Customer with Account management activities related to a Commercial Post-paid Plan, including processing payments on any Plan that is past due or approaching past due status, setting up recurring payments, updating vehicle lists and transponders and supporting transmission of transactions as requested.
3874	Contact Customers with a Commercial Post-paid Plan in past due status or approaching this status, to explain the impact it will have on their Plan benefits and to encourage immediate payment.
3875	Request and receive Approval from NJTA before initiating any suspension action on a Commercial Post-paid Plan when the Customer has delinquent Commercial Post-paid Invoices or has not provided the required collateral.

### 11.10.3 Account Programs

The Toll Agencies have a large number of Account Plans, as described in Section 9.11.12 Account Plans, and allow for non-revenue passage for qualified travelers on specific facilities. Account Plans and non-revenue passage may be assigned at the individual transponder level or at the Account level and may be eligible for some or all Toll Facilities and Toll Agencies.

Some Account Plans require Customers to submit documentation and obtain Toll Agency Approval. The System shall route such Cases to the Toll Agency for Approval, if required, prior to Customer obtaining the Account Plan. Non-revenue plans must always be Approved by the Toll Agencies. The Contractor shall be responsible for the operational aspects of the Account and non-revenue program such as managing enrollment, verifying eligibility, membership renewal, answering questions from Customers about how the program works and questions about specific transactions under the program.

3876	In accordance with the Business Rules, provide support for all of the Toll Agencies' Account Plans in place during the Operations and Maintenance Phase, including new and modified plans.
3877	Assist the Customers by explaining the different Account Plans, recommending appropriate plans, addressing issues related to Account Plans, and explaining how toll rate adjustments are applied.

3878	For the Account Plans that require qualification, verify qualification, scan, and attach the qualification documentation, if applicable, prior to adding the plan(s) to the Customer Account.
3879	For Accounts where Account Plan data is received from the Toll Agencies, confirm that the correct Account Plan was applied to the Account.
3880	Allow the Customer to enroll in only one plan based on residency in accordance with the Business Rules.
3881	For Account Plans that expire and require renewal, notify Customers, and verify qualification prior to renewing the plan on the Customer Account.
3882	In accordance with the Business Rules, provide support for the Toll Agencies' non-revenue programs.
3883	Prior to applying a non-revenue plan to a transponder or an Account, obtain Approval from the applicable Toll Agency.
3884	Maintain documentation of Approval for each non-revenue plan that has been assigned to a transponder or an Account, and this documentation shall be available for review by the Toll Agency at all times.

#### 11.10.4 Payments, Fees and Refunds

3885	Process payments at the New Jersey E-ZPass CSC WICs and through the call center.
3886	Post any check or money order payment which is received in the WIC and the CSC to the Customer Account, scan and associate the payment instrument to the Customer's Account, and electronically transfer the payment instrument to the bank no later than the close of Business Day.
3887	Support processing of payments by Toll Agency staff, MVC/DMVs, courts, Customers, and Collections Services Contractor staff and reconcile all payments to Customer Accounts and money deposited in the bank.
3888	Research overpayments the System could not apply and identify additional Accounts with outstanding debt associated with the Customer to which payments can be applied. Apply the overpayment to the outstanding debt, taking steps to merge such Accounts when appropriate.
3889	Manually apply in the System any fees which are not automatically applied.
3890	Support reconciliation and exception handling for payments posted by the Merchant Services Contractor and fully process payments which are not processed by the Merchant Services Contractor, or automatically processed within the System.
3891	Support reconciliation and exception handling for payments posted by the third-party Lockbox Service Provider, and fully process payments which are not processed by the third-party Lockbox Service Provider.

3892	Certain payments received by the third-party Lockbox Service Provider will not be able to be posted to Customer Accounts within the required business processing time. These include payments which cannot be readily associated with a Customer Account. Conduct timely research on these payments so that they can be posted to a Customer Account as quickly as possible and all exceptions correctly disposed. If all research avenues have been exhausted and documented and the payment remains unassociated to a Customer Account, the payment shall be tracked within the System for future resolution in case of Customer contact and made eligible for escheatment per the Business Rules.
3893	Manage the refund process including research and approval of refunds and preparing and mailing checks to Customers who request a refund by check.
3894	Use services such as Positive Pay and Payee Positive Pay to deter check fraud for refunds made by check.
3895	Ensure that credit card refunds are authorized and successfully processed.
3896	Ensure that funds remain on the Customer Account as uncashed until the refund check is cashed (verified by the bank). Verify all check cashed information obtained from the bank.
3897	Ensure that uncashed checks are Flagged as eligible for escheatment and are processed in accordance with the applicable state's legislation for escheatment.

## 11.11 Outgoing Customer Communication and Returned Mail

### 11.11.1 Customer Communication Materials

3898	Draft, update and maintain in the System, Approved promotional/informational material in English and Spanish and, with NJTA's Approval, print and distribute the material, including but not limited to:
	a. Welcome letter and Account applications;
	b. FAQs;
	c. proactive instructions to register the Account, set up Mobile Application;
	d. transponder mounting instructions;
	e. forms and agreements;
	f. E-ZPass program user guides;
	g. required documents such as Terms and Conditions documents, Privacy Policies, Terms of Use, Third-party Licenses & Notices document;
	h. Account Plan descriptions;
	i. materials for public and Customer outreach campaigns, and

	j. other informational material, as directed by NJTA.
3899	Manage the distribution of all Customer communications via all communication channels, as directed by NJTA, including, but not limited to: <ul style="list-style-type: none"> <li>a. print and make available to Customers at all WICs;</li> <li>b. print and mail to Customers;</li> <li>c. post to social media;</li> <li>d. make available via the Self-Service Website and Mobile Application, and</li> <li>e. send electronically to the Customer, via SMS and email.</li> </ul>
3900	Develop all content for the knowledge base and response library to be Approved by NJTA.
3901	All forms where Customer input is needed shall be fillable and secured.
3902	Modify/update as directed by NJTA when changes to the information contained in the material necessitate a revision.

### 11.11.2 Outgoing Customer Communication

The majority of the Customer communication is generated by the System including ad-hoc Correspondence Items transmitted to Customers for unexpected events and incidents. The Contractor shall manage the Contractor-provided Print/Mail Service Provider, SMS Distribution Service Provider, and Email Distribution Service Provider in providing outgoing mail, SMS and email services for the System-generated mail, SMS and email Correspondence Items. The Contractor is responsible for monitoring Correspondence Item activity and performing quality reviews on outgoing Correspondence Items.

There are several items that require manual generation and preparation including transponders, read prevention bags and mounting strips, as well as refund checks, ad-hoc Correspondence Items. The Contractor shall be responsible for mailing these and any other Correspondence Items not generated by the System.

The New Jersey E-ZPass CSC currently sends approximately 130 variations of outgoing Correspondence Items, as described in Section 9.14 Customer Correspondence Items - Outgoing. These are in addition to the Account Statements, Toll Bills, Post-paid Statements, Commercial Post-paid Invoices, Violation Notices and ad-hoc Correspondence Items.

3903	Mail transponders, read prevention bags and mounting strips, as well as refund checks, ad-hoc Correspondence Items and any Correspondence Items not generated by the System that cannot be provided any other way due to Customer preference settings or Business Rules.
3904	Ensure that Correspondence Items are being issued for all Accounts in accordance with the New Jersey E-ZPass Business Rules and the Toll Agency Business Rules.

3905	Ensure that the unpaid transaction processing and noticing timelines and procedures meet the requirements of the applicable laws, legislation and statutes, and the Business Rules.
3906	Institute quality checks so that a Configurable percentage of all Correspondence Items in a batch are reviewed and approved before they are transmitted to the Customers. Failed and rejected batches and Correspondence Items shall be corrected, re-reviewed and transmitted to the Customers. Review shall include use of correct version and template of the Correspondence Item in addition to quality.
3907	Implement a quality review process that includes a sampling of all outgoing Correspondence and inventory to ensure timeliness, data accuracy, proper placement of data on page and use of correct template. Data accuracy includes reconciling data back to the Account management system from some of the sampled items.
3908	As part of the quality review process, implement processes to reconcile the count of items the System identifies for generation with the output (counts) completed by the System or Print/Mail Service Provider.
3909	Each Correspondence Item will have a sample size, specified by NJTA, which must be reviewed and approved by the Contractor prior to printing and mailing. The samples shall be provided electronically by the System and activity on each Correspondence Item shall be recorded. The QA sample size will be dictated by the number of that type of Correspondence Item produced on that day that fall within the tiers shown below. This is a cumulative, additive calculation that includes the number of Correspondence Items that falls within each tier for that Correspondence Item on the day, as follows: <ul style="list-style-type: none"> <li>• Tier 1- up to 1,000 Correspondence Items: 5% review</li> <li>• Tier 2- up to 10,000 Correspondence Items: 2.5% review</li> <li>• Tier 3- Greater than 10,000 Correspondence Item: 1.25% review</li> </ul> As an example, if there are 15,000 Toll Bills on a day: 5% of 1,000 (or 50) will be sampled from Tier 1; 2.5% of 10,000 (or 250) will be sampled from Tier 2, and 1.25% of 15,000 (or 188) will be sampled from Tier 3, resulting in a cumulative total sample size of 488 (50 plus 250 plus 188).
3910	In addition, ten (10) Correspondence Items per Correspondence Item type for each day will be reconciled back to the Account data in the System.
3911	If more than five (5) percent of the sample contains errors, then the Contractor shall review a larger sample, up to a full review of the entire batch.
3912	Perform a controlled run of no less than 500 pieces of the first batch of Correspondence Item each time a new version of the Correspondence Item is released.
3913	Contractor shall provide the quality review results to NJTA upon completion and summarize the results monthly.

3914	Establish and implement procedures to manage reprint and mail of Correspondence Items identified as not sent from the original batch process.
3915	Establish and implement procedures to correct, re-generate and transmit inaccurate Correspondence Items to Customers.
3916	Monitor System reports and PMMS Alerts for all Customer facing communications and Correspondence Items to ensure communications are sent as applicable, in accordance with the Business Rules and System Performance Requirements.
3917	Ensure that all Customer Correspondence Items are generated and issued via the applicable channel in accordance with the timeline stipulated in the System and Operations Performance Requirements.
3918	Make contact with a Customer, based on NJTA's direction and Customer's preference (call, mail, email, SMS, push notification or social media direct message or combination thereof), using the most efficient, System-generated if possible, method to communicate about various Account related issues, Customer approvals, policies and NJTA-directed marketing efforts.
3919	Develop a program to move Customers away from mail to an electronic channel as the preferred method of communication, where feasible.
3920	Develop a program of proactive Customer outreach. Staff will make contact with the Customer directly by live chat if the Customer is active on their Account, phone via a non-System generated call, via a non-System generated email or letter, or SMS or social media direct message under certain circumstances, including but not limited to, instances when the Customer's email and or USPS mail addresses are invalid or not available; or a circumstance has occurred related to individual Account(s) which is not addressed by the System-generated Correspondence Items.
3921	Establish procedures to provide timely, careful, and efficient handling of the outgoing mail which is sent from the CSC as opposed to the Print/Mail Service Provider (for example, notification of bankruptcy, acknowledgment letters sent to the Account owner).
3922	Regenerate and mail individual Toll Bills, Post-paid Statements, Violation Notices, Commercial Post-paid Invoices, letters, statements, Summary Statements, and other Correspondence Items as needed.
3923	Create custom emails, SMS, or social media direct messages to individual and/or groups as directed by NJTA.
3924	At the direction of NJTA, communicate, at the Contractor's own expense, to Customers or the general public any information related to issues or problems caused by the Contractor that affect Customers. The content of such communications shall be Approved by NJTA.

### 11.11.3 Returned Mail Processing

Mail identified as returned mail by USPS shall be acknowledged and noted in the individual Account. Each returned mail and Correspondence Item shall be communicated via electronic file format then retained for

proper disposal by USPS. The Contractor is responsible for noting this in the System and attempting to obtain a valid address.

3925	<p>Update or not update addresses on returned mail based on SOPs, which include:</p> <ul style="list-style-type: none"> <li>a. the Contractor shall enter a forwarding address, if provided;</li> <li>b. for addresses without a forwarding address, the Contractor shall mark the address as bad/Nixie;</li> <li>c. for bad/Nixie addresses, the Contractor shall open a Case for the address to be researched using the USPS/NCOA database;</li> <li>d. confirm that System obtained and updated the new address through Skip Trace services provided by Collections Services Contractor(s);</li> <li>e. confirm that System re-generated the Correspondence Item using the new address and or issued the Correspondence Item through other channels as identified in Appendix Q New Jersey E-Z Pass Customer Communications Matrix - Draft;</li> <li>f. the Contractor shall utilize the Contractor-provided USPS/NCOA database and other certified sources (for example address obtained from enforcement officer or courts) to find a Customer address, and</li> <li>g. if a current address is provided, the Contractor shall update the address in the System and take the necessary steps for the System to Reissue the Correspondence.</li> </ul>
3926	Scan all returned mail and attach it to the Customer Account.

## 11.12 Customer Contact, Cases and Disputes

### 11.12.1 Incoming Customer Communication

Responding to Customer inquiries, complaints, and dissatisfaction, and handling disputes expeditiously is a critical component of Customer service. All incoming correspondence must be tracked in the System, responded to, escalated to the Toll Agencies when appropriate, and resolved.

3927	Establish and maintain multiple post office boxes for incoming New Jersey E-ZPass mail. The New Jersey E-ZPass currently maintains five (5) post office boxes. The number of post office boxes required over the Contract Term may vary.
3928	<p>All incoming mail shall be processed and destroyed in accordance with applicable standards, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. GAAP;</li> <li>b. record retention policies for the Toll Agencies;</li> <li>c. PCI and PII standards, and</li> </ul>

	d. all applicable federal, state, local and other laws and regulatory matters.
3929	All incoming mail shall be handled under dual control, date stamped with received date, recorded into the New Jersey E-ZPass System as Cases, categorized, and assigned to the appropriate New Jersey E-ZPass CSC staff for processing.
3930	Ensure all incoming paper Correspondence is appropriately redacted, scanned and indexed, and catalogued regardless of whether it can be associated with an Account or not.
3931	Receive, redact, record, track, escalate, resolve and provide a response for all Correspondence received from the Customer regardless of which channel the Customer uses to communicate, including but not limited to, Correspondence received by:  a. fax;  b. SMS;  c. IVR/phone call;  d. chat;  e. communication from the “Contact Us” feature;  f. social media, and  g. delivered (USPS or by other means) Correspondence.
3932	Incoming emails from Customers are not expected, however should one be received, immediately create a Case to track the interaction and resolution of the email. The email shall be attached to the Case created.
3933	Incoming emails from Toll Agency representatives shall be converted to a Case to track the interaction and resolution of the email. The email shall be attached to the Case created.
3934	Develop workflows and SOPs that clearly document the handling process for each type of incoming Customer communication ensuring that checks and balances are instituted, ensuring they comply with internal control standards, and that they ensure all incoming Correspondence is recorded, reviewed and properly routed through the use of Cases (i.e., operational Correspondence, financial, management, Toll Agency, etc.) and that all incoming Correspondences are successfully addressed and responded to.
3935	Include in the communication handling workflows the requirement that the CSR validate and update pertinent Account information.
3936	Ensure that all Approved handling processes are instituted and adhered to. Contractor shall submit the processes and any subsequent changes to the processes to NJTA for Approval.
3937	Process and respond to all incoming Customer communication based on established policies, SOPs and Business Rules.

3938	Develop and use canned responses for standard Correspondences received from Customers. Canned responses shall be Approved by NJTA.
3939	Monitor and respond in real time to Customer requests received by phone, "Contact Us" form, chat, social media, and SMS when received during Business Hours.
3940	Obtain and document the reason(s) for each Customer contact. For example, all phone and chat contacts shall have a reason(s) code selected by the CSR identifying the reason(s) for the call.
3941	Develop a process that allows the CSR to identify incoming Customer communications that need immediate attention and to designate a sense of urgency by setting the Case associated with such communications to high priority.
3942	Establish an escalation policy for routing high priority Cases associated with incoming Customer communications.
3943	Ensure that all Customer contacts, regardless of channel, including along multiple channels within the omnichannel solution, along with CSR activities are properly documented within the System and associated with an Account, when Account is identifiable.
3944	Develop a process for Authorized Users to monitor live call/chat/SMS/direct message CSR interactions including those alerts identified by real-time sentiment monitoring as requiring support.
3945	Associate incoming Correspondence with an existing Case or create a new Case as appropriate.
3946	Ensure that all incoming Customer communications are resolved and that any activities required to bring them to resolution are completed per the Business Rules and can be tracked back to the communication.
3947	Monitor the communications channels used and frequency of all Customer Correspondence and recommend for consideration System or Business Rules changes that improve the use of Customer-friendly, efficient, timely and cost-effective Customer communication methods.
3948	Utilize supervisory management tools to perform real-time monitoring and coaching of phone, chat, social media direct message and SMS conversations between the CSR and the Customer and also view CSR screen navigations.
3949	When necessary, utilize supervisory management tools to initiate a three-way call/chat/SMS/direct message conversation.
3950	Utilize supervisory management tools to remove the Authorized User from the call/chat/SMS/direct message conversation when situations are detected through monitoring that warrant removal.
3951	Utilize supervisory management tools to change Authorized Users' status in the System, for example, availability for calls, log them out or change skills profile.

3952	Utilize supervisory management tools to access and monitor real-time CSR performance statistics.
3953	Utilize supervisory management tools to access and monitor real-time group performance statistics.

#### 11.12.2 Translation Services

3954	The Contractor shall identify and contract with a real-time translation service to serve Customers whose language is other than English and Spanish, and whose language is not spoken by an available Contractor staff person. The service is to be provided on an as-needed basis.
3955	The Contractor shall track the use of the real-time translation service and shall provide tracking and accountability that identifies which account or document is related to each use of the service. Such calls and documents shall be made available to NJTA.
3956	<p>Utilize the services of a professional language translation service to perform all translations of text to Spanish, including but not limited to:</p> <ul style="list-style-type: none"><li>a. each Correspondence Item;</li><li>b. Customer communications;</li><li>c. IVR content;</li><li>d. Self-Service Website content;</li><li>e. Mobile Application content;</li><li>f. virtual assistant content;</li><li>g. SMS templates;</li><li>h. push notification text;</li><li>i. canned responses in the Knowledge Base;</li><li>j. static documents, and</li><li>k. promotional/informational material.</li></ul>
3957	Utilize the services of a professional language translation service to make all edits and additions to Spanish text and content as needed throughout the Contract Term.

#### 11.12.3 Social Media Monitoring and Response

Assessing Customer sentiments and being proactive improves Customer satisfaction with the New Jersey E-ZPass Program. The Contractor shall have a social media monitoring and response process that is effective and addresses negative feedback from Customers.

3958	Develop a social media program, which engages the social media platforms such as Facebook, Instagram, WhatsApp, Twitter, and LinkedIn, to monitor Customer sentiment and engage with Customers on a daily basis.
3959	Monitor social media channels through the Customer Contact Center System.
3960	Monitor through the Customer Contact Center System for direct messages received via social media platforms.
3961	Evaluate, draft recommended responses, obtain Approval, and respond to direct messages received on social media platforms.
3962	Evaluate Operational Alerts for potential issues that are generated through automated Customer sentiment monitoring and create a Case when the potential issue needs to be investigated further.
3963	Evaluate results of automated Customer sentiment monitoring on social media platforms to identify System, operational, or Toll Facility issues, understand Customer questions, and be informed of general Customer concerns.
3964	Create Cases and/or notify responsible parties, including Toll Agencies, when Customer sentiment monitoring reveals potential System, operational, and Toll Facility issues. If System issues are identified, record the issue in PMMS with the appropriate Severity.
3965	Utilize social media to distribute informational content and for Customer education campaigns, with the Approval from NJTA.
3966	Develop Customer facing messages and announcements and engage the Communications Manager for NJTA to coordinate messaging and announcements across social media accounts and websites.
3967	Proactively utilize social media outlets to advise and communicate with Customers about construction, traffic incidents, policy changes and any Customer perceptible issue.
3968	Monitor web activity to detect conversations across multiple social media platforms for conversations about New Jersey E-ZPass that are happening outside of designated social media accounts. Findings will be reported to the Toll Agencies for proactive management and responsible monitoring of the conversations.
3969	When sensitive information is identified in social media conversation transcripts, redact the sensitive information and create a Case to report the incident so the automatic redaction process can be improved.
3970	Create a method of quantifying and categorizing communications by social media platform or unique website URL.

#### 11.12.4 Case Management

Case management is the automated and manual creation, tracking and resolution of Cases where a Case represents an activity or action(s) required to satisfy a Toll Agency, Customer or general public need or

inquiry that cannot be addressed in real-time. Sometimes, as stated in the Requirements, Cases are created when certain conditions occur that require Authorized User review and follow-up. Once a Case has been created it is assigned to the appropriate department or staff member, and its progress is tracked and reported through completion by the System. The initial set of Case types will be defined during the Implementation Phase.

3971	Develop Case management process to support a Case workflow through various stages of resolution including traversing more than one department and/or Toll Agency.
3972	Many Customer issues or requests (such as, changing a Customer's contact information), can be completely resolved at the time of the Customer request. For these encounters, the Contractor shall note the issue or request and how it was handled in the Customer's Account at the time of request.
3973	Enter any Customer/Toll Agency issue or request that cannot be completely addressed at the time of request into the System as a Case for management, tracking and reporting.
3974	Route Cases to appropriate Authorized Users if actions and approvals are required.
3975	Monitor Case backlog and take corrective action if backlog is outside acceptable limits.
3976	Work on open Cases through to final resolution in a timely manner as required in the SOPs and in accordance with the Operations Performance Requirements. Description of the resolution shall be entered for all resolved Cases.
3977	Escalate the Case to the Toll Agency immediately if a Case contains any critical comments or issues that need the Toll Agency's immediate attention.
3978	Confirm that the Customer/Toll Agency is notified of the Case resolution and respond to all Customer/Toll Agency inquiries about the Case.

#### 11.12.5 Disputes

Disputes may be related to transactions posted to both Registered and Unregistered Accounts, and to the Correspondence Items issued to the Customer. Customers also contact the CSC related to incorrect posting of adjusted toll rates.

3979	Investigate and resolve Customer disputes in accordance with the Approved Business Rules and SOPs.
3980	Establish roles for handling disputes and dismissing/adjusting tolls and fees based on dispute types and Approved thresholds.
3981	Obtain Toll Agency Approval for high volume dismissals and adjustments.

3982	Ensure all supporting documentation is obtained from the Customer to resolve a dispute based on the type of dispute. If required supporting documentation is not received, place the Case on hold and contact the Customer by proactive outbound call or other communications within the stipulated timeline.
3983	Obtain Toll Agency Approval on disputes, as required in accordance with Approved Business Rules.
3984	<p>Resolve unpaid transaction disputes that appear on Toll Bills, Post-paid Statements and Violation notices by providing the capability to perform the following actions, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. dismiss tolls;</li> <li>b. adjust fees;</li> <li>c. adjust fees and collect payment of tolls;</li> <li>d. transfer responsibility of payment to new Customer based on documentation submitted;</li> <li>e. correct the license plate information on the transaction;</li> <li>f. add plate to the registered Account;</li> <li>g. post the toll and fees to the registered Account (New Jersey E-ZPass, IAG/Interoperable and Third-party Entities) that may result in adjustment of fees in accordance with Business Rules, and</li> <li>h. merge accounts.</li> </ul>
3985	Investigate and resolve disputes related to adjusted toll rates in accordance with Toll Agency Business Rules.
3986	Research and process adjustments to vehicle class and location of toll based on Toll Agency policies.
3987	Obtain supervisor/manager review and Approval for applicable disputes per the SOPs.
3988	Resolve and respond by letter, via email or USPS, to each dispute within stipulated timeline.
3989	Some Customer disputes may involve questions about Image-Based Transactions. Utilize the System to view images and make appropriate changes to (correcting) keyed license plate information to support Customer inquiry or enforcement activities.
3990	Work with the Toll Agencies as applicable to resolve disputes which are not addressed in the SOPs or which the Contractor deems worthy of additional consideration.
3991	Follow the escalation procedures for Customer disputes, both internal to the New Jersey E-ZPass CSC and when escalated to the Toll Agencies, as defined in the Business Rules.

3992	Receive, research, document, and resolve all disputes and attempt to settle disputes prior to the escalation of the Case beyond the internal dispute process.
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### 11.13 Vehicle Registration Suspension/Hold

When a Toll Bill, Post-paid Statement or Violation Notice is past due, a Vehicle Registration Suspension/Hold can be placed on the license plate if it meets the conditions for Registration Suspension/Hold. When the past due amount is brought to a Configurable threshold or amount (for example, when the balance is paid or the delinquent unpaid transactions are reversed), the Vehicle Registration Suspension/Hold may be released. Initially New Jersey E-ZPass will only suspend registration for vehicles registered in New Jersey but it is anticipated that other jurisdictions will be added during the Contract Term. Currently the Vehicle Registration Suspension/Hold process is manual, however, automation is required. If DMV/MVC cannot accept automation, a manual process will be required until automation is possible.

The Contractor shall support all Services associated with the Vehicle Registration Suspension/Hold process.

3993	Identify Customer Accounts based on Toll Agency policies that are eligible for Vehicle Registration Suspension/Hold and obtain the list of license plates by state that can be placed on Vehicle Registration Suspension/Hold.
3994	Conduct due diligence, identify other Accounts that belong to Customer identified for Vehicle Registration Suspension/Hold and merge any existing Accounts for the same Customer.
3995	Validate the license plates eligible for Vehicle Registration Suspension/Hold in accordance with MVC/DMV requirements, for example license plate must be active.
3996	Create Vehicle Registration Suspension/Hold batches by Account Category and Configurable batch size.
3997	Approve the Vehicle Registration Suspension/Hold batches for submission to the MVC/DMV.
3998	<p>Coordinate with the MVC or applicable DMV in support of the pursuit of Vehicle Registration Suspension/Holds placed by the System, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. provide requested information to the MVC/DMV;</li> <li>b. schedule, attend and support the administrative hearing process;</li> <li>c. create requested Evidence Package;</li> <li>d. attend court hearing if pursued by the Customer;</li> <li>e. re-submit corrected Vehicle Registration Suspension/Hold batches;</li> </ul>

	f. establish Payment Plans based on agreement with the Customer and release the Vehicle Registration Suspension/Hold;
	g. place back on Vehicle Registration Suspension/Hold if Customer fails to honor Payment Plan agreement;
	h. process any payments made by the Customer, and
	i. associate all Correspondences issued by the MVC/DMV to the Customer Account.
3999	Coordinate with the applicable entity (MVC/DMV or Third-party Service Provider) responsible for placing Vehicle Registration Suspension/Holds and respond to any requests that the entity may have.
4000	Respond to requests from Customers related to Registration Suspension/Holds.
4001	Initiate a release of the Vehicle Registration Hold(s) in real-time for Customers who have satisfactorily resolved the condition(s) which caused the Vehicle Registration Hold(s).
4002	Create Vehicle Registration Suspension/Hold release batches if Customer Account has met the conditions for release.
4003	Enter into the System, reconcile and account for all payments to the applicable MVC/DMV for Vehicle Registration Suspension/Hold placement and for any payments collected by the applicable MVC/DMV from Customers.
4004	Support all Vehicle Registration Suspension/Holds or other enforcement methods allowed by interoperability enforcement agreements with other states.

## 11.14 Driver's License Suspension

When a Toll Bill, Post-paid Statement or Violation Notice is past due, a Driver's License Suspension can be placed on the license plate if it meets the conditions for Driver's License Suspension. When the past due amount is brought to a Configurable threshold or amount (for example, when the balance is paid or the delinquent unpaid transactions are reversed), the Driver's License Suspension may be released. Initially New Jersey E-ZPass may choose to only suspend driver's licenses issued by New Jersey but it is anticipated that other jurisdictions will be added during the Contract Term. The Driver's License Suspension process must be automated, however if DMV/MVC cannot accept automation, a manual process will be required until automation is possible.

The Contractor shall support all Services associated with the Driver's License Suspension process.

4005	Identify Customer Accounts based on Toll Agency policies that are eligible for Driver's License Suspension and obtain the list of registered owners by state that can be placed on Driver's License Suspension.
4006	Conduct due diligence, identify other Accounts that belong to Customer identified for Driver's License Suspension and merge any existing Accounts for the same Customer.

4007	Validate the Driver's Licenses eligible for Driver's License Suspension in accordance with MVC/DMV requirements, for example driver's license must be valid.
4008	Create Driver's License Suspension batches by Account Category and Configurable batch size.
4009	Approve the Driver's License Suspension batches for submission to the MVC/DMV.
4010	<p>Coordinate with the MVC or applicable DMV in support of the pursuit of Driver's License Suspension placed by the System, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. provide requested information to the MVC/DMV;</li> <li>b. schedule, attend and support the administrative hearing process;</li> <li>c. create requested Evidence Package;</li> <li>d. attend administrative and court hearing if pursued by the Customer;</li> <li>e. re-submit corrected Driver's License Suspension batches;</li> <li>f. establish Payment Plans based on agreement with the Customer and release the Driver's License Suspension;</li> <li>g. place back on Driver's License Suspension if Customer fails to honor Payment Plan agreement;</li> <li>h. process any payments made by the Customer, and</li> <li>i. associate all Correspondences issued by the MVC/DMV to the Customer Account.</li> </ul>
4011	Coordinate with the applicable entity (MVC/DMV or Third-party Service Provider) responsible for placing Driver's License Suspension and respond to any requests that the entity may have.
4012	Respond to requests from Customers related to Driver's License Suspension.
4013	Initiate a release of the Driver's License Suspensions in real-time for Customers who have satisfactorily resolved the condition(s) which caused the Driver's License Suspensions.
4014	Create Driver's License Suspension release batches if Customer Account has met the conditions for release.
4015	Enter into the System, reconcile and account for all payments to the applicable DMV for Driver's License Suspension placement and for any payments collected by the applicable DMV from Customers.
4016	Attach all communications transmitted to the Customer and received from the Customer by the DMV/MVC related to Driver's License Suspension to the applicable Account.
4017	Support all Driver's License Suspension or other enforcement methods allowed by interoperability enforcement agreements with other states.

## 11.15 Court

4018	Track all requests for court hearings as Cases in the System.
4019	View System-selected court candidates and perform research as needed to determine whether candidate's debt should escalate to court based on Business Rules and suitability of evidence.
4020	Select specific debt that will be escalated to court for the Account.
4021	Create the court case in the System, recording all relevant information about the case.
4022	Keep information about the court case up-to-date in the System by associating related documents and updating case information frequently as the case progresses through the court process.
4023	Enter the court hearing schedule into the System and attend all court hearings as requested by the Toll Agencies.
4024	Implement all required actions resulting from the court hearing process including establishment of Payment Plans.

## 11.16 Evidence Package

The Contractor will be responsible for preparing Evidence Packages to support the Toll Agencies in administrative hearings related to Vehicle Registration Suspension/Holds, Driver's License Suspensions as well as court proceedings.

4025	Prepare the appropriate Evidence Package to include all relevant documentation regarding the Customer's Account and contact with the CSC, including copies of Correspondence Items issued and information regarding the Customer requests, and if and how they were resolved.
4026	Submit the Evidence Package to the requesting Toll Agency at least five Business Days before the scheduled court proceeding or administrative hearing.
4027	Regenerate Violations Notices if the Correspondence Item is not associated with the Customer Account and is required for the Evidence Package.

## 11.17 Collections

The Contractor shall take a proactive approach to collecting on unpaid debt while the Account is in the noticing stage after which it will be turned over to the Collections Services Contractor(s). NJTA uses multiple Collections Services Contractor(s) selected by NJTA to collect on unpaid debts on Registered and Unregistered Accounts. Unpaid debts that meet the criteria for assignment to collections will automatically be placed (referred) by the System with the applicable Collections Services Contractor. Authorized Users can also select an Account for escalation to collections. The Collections Services Contractor(s) provide regular collection activity updates to the System by electronic interface. Similarly, the System updates the Collections Services Contractor(s) when there is activity on the Account that impacts the Collections Placement. Collections Services Contractor(s) will be authorized to establish Payment Plans which need to

be tracked in the System. The CSC will also accept payments for amounts in collections, but some dispute requests are not accepted on unpaid transactions in collections. The Contractor shall work closely with the Collections Services Contractor(s) to establish the SOPs for the placement of debt in collections, handling Customer inquiries and disputes, and reconciling payments in collection.

4028	Ensure that all legally allowable tools for collection are being utilized in the internal collections.
4029	Develop an internal Collections Program to monitor activities on a daily basis. Contractor's staff will be responsible for proactive Customer outreach to collect payment prior to escalation to a Collections Services Contractor.
4030	Verify that the System is performing Collections Placements in accordance with SOPs and Toll Agency Business Rules.
4031	Coordinate with and provide support for the Collections Services Contractor(s) in support of the pursuit of debt placed with the Collections Services Contractor(s).
4032	Provide assistance to the Collections Services Contractor(s) regarding the research of disputes when Customers contact the Collections Services Contractor and coordinate the resolution with the Collections Services Contractor(s).
4033	Respond to disputes filed by Customers in collections including submission of evidentiary data.
4034	Payments for transactions in collections will be made to the Collections Services Contractor or to the CSC using the System. It is expected that the Collections Services Contractor(s) will be the primary payment processors for debts in collections. CSC will accept payments for amounts in collections and also handle disputes.
4035	Verify that Collections Placements are recalled for those unpaid transactions that are in an active Payment Plan.
4036	Verify that Collections Placements are recalled for those unpaid transactions that are in Vehicle Registration Suspension/Hold process.
4037	Verify that Collections Placements are in hold/freeze state based on Business Rules when there is a bankruptcy filing on the Account.
4038	Perform necessary actions when a Collections Placement at the Collections Services Contractor(s) needs to be recalled or placed on hold/Frozen.
4039	Update the System when notified by the Collections Services Contractor that a Customer has been allowed to establish a settlement arrangement (Payment Plan) to pay a lesser amount or to make periodic payments.

4040	Verify daily that the Collections Services Contractor(s) are accurately updating the System and work directly with the Collections Services Contractor(s) to completely and accurately resolve any issues in a timely manner, including identification and resolution of any discrepancies between what the System identifies as in collections and what Collections Services Contractor(s) say are in collections.
4041	<p>Using the System reports and other data sources as necessary, the Contractor shall perform reconciliations, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. reconcile files submitted to each Collections Services Contractor to those received by the Collections Services Contractor and validate the placement amounts;</li> <li>b. reconcile files received from each Collections Services Contractor to the System to ensure the files received from the Collections Services Contractor are correctly posted to the System;</li> <li>c. reconcile outstanding collections balances per the System to outstanding collections balances per each Collections Services Contractor on a daily basis, and research and resolve discrepancies;</li> <li>d. reconcile the payments received from each Collections Services Contractor to the amounts posted in the system and research and resolve discrepancies, and</li> <li>e. reconcile amounts collected by the CSC in relation to Collections Placements sent to each Collections Services Contractor. There shall be no duplicated revenue collections on the same Collections Placement.</li> </ul>
4042	Provide a financial reconciliation between the System and the Collections Services Contractor for a specific Customer Account at NJTA's request.
4043	Reconcile System reports to Collections Services Contractor(s) reports on a daily basis and provide summaries of the daily reconciliations.

## 11.18 Payment Plans

The Contractor will be responsible for negotiating Payment Plans on behalf of the Toll Agencies, per the SOPs. Payment Plans can be established on Registered and Unregistered Accounts and Customers can make manual payments at scheduled frequency or recurring automated payments.

4044	Coordinate with the Toll Agencies to create and maintain SOPs for Payment Plan process based on the type of Payment Plan.
4045	Support establishment of Payment Plans as part of Account conversions and merging of Accounts.
4046	Support establishment of Payment Plans as part of MVC hearing, internal collections, and court directed.

4047	<p>Negotiate payment agreements, as established in the SOPs, pursuant to which the Customer will agree to repay past due amounts and avoid Vehicle Registration Suspension/Hold or reinstate a vehicle registration. As part of this process, perform the following:</p> <ul style="list-style-type: none"> <li>a. establish the Payment Plan;</li> <li>b. obtain Customer signature or electronic signature equivalent of the agreement and verify that payments are made per the agreed to payment schedule;</li> <li>c. contact the Customer via outbound calls as needed to ensure timely payments are made;</li> <li>d. cancel and reestablish Payment Plans if required, and</li> <li>e. re-initiate Vehicle Registration Suspension/Hold and collections if payments are not made as required.</li> </ul>
4048	<p>Negotiate payment agreements, as established in the SOPs, pursuant to which the Customer will agree to repay past due amounts and avoid Driver's License Suspension or reinstate a driver's license. As part of this process, perform the following:</p> <ul style="list-style-type: none"> <li>a. establish the Payment Plan;</li> <li>b. obtain Customer signature or electronic signature equivalent of the agreement and verify that payments are made per the agreed to payment schedule;</li> <li>c. contact the Customer via outbound calls as needed to ensure timely payments are made;</li> <li>d. cancel and reestablish Payment Plans if required, and</li> <li>e. re-initiate Driver's License Suspension and collections if payments are not made as required.</li> </ul>

## 11.19 Revenue Management

4049	<p>Account for, credit to the Customers' Accounts and deposit into the appropriate bank account(s) all payments in accordance with the Requirements, to include the following types:</p> <ul style="list-style-type: none"> <li>a. checks (including personal, business, e-check, certified and cashier's checks);</li> <li>b. money orders;</li> <li>c. cash (United States currency);</li> <li>d. credit card, including mobile payments and EMV chip integrated circuit card (at WICs only);</li> <li>e. pre-paid credit cards such as Visa ReadyLink;</li> <li>f. PIN-based debit (not available by mail);</li> <li>g. PIN-less debit (processed as a debit transaction);</li> </ul>
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	<p>h. ACH;</p> <p>i. E-Commerce Payment System payments (such as PayPal, Venmo, Zelle, Amazon Pay), and</p> <p>j. Digital Wallets.</p>
4050	Deposit any checks and money orders received by the CSC electronically using Check 21 Act compliant check scanners, which shall interface with the bank software.
4051	Manually key in check or money order information in the event of a check or money order scan failure.
4052	Post all Customer payments received by operations into the System.
4053	<p>Develop and implement money handling, counting and storage procedures that cover items, including but not limited to:</p> <p>a. responsibility for all funds until custody of the funds has passed to a bank;</p> <p>b. association of the scanned payment instrument to the Customer Account;</p> <p>c. electronic transfer of the scanned payment instrument to the bank.</p> <p>d. all monies (checks, money orders, and cash) collected shall be stored in a safe in a secure area until collected or deposited by the bank;</p> <p>e. all money handling, counting and storage shall be performed in a secure area and under dual control at all times (or meet applicable control standard), and</p> <p>f. cash shall not be transported through public areas without appropriate security.</p>
4054	Provide courier services for the transfer of monies from the CSC to the bank. NJTA will be responsible for establishing the bank account and paying all bank related fees.
4055	On a daily basis, reconcile, balance and report to NJTA all bank deposits of funds received.
4056	Reconcile the payments due to the Toll Agencies pursuant to the Business Rules and other Requirements on a daily basis, for all transaction and fee payments. Payments shall be based on the transactions furnished to the New Jersey E-ZPass CSC by each Toll Agency.
4057	Reconcile the payments due to and from IAG/Interoperable Agencies and Third-party Entities pursuant to the agreements on a weekly and/or monthly basis for all E-ZPass transactions. Payments shall be based on transactions sent and received by each of the IAG/Interoperable Agencies and Third-party Entities, less any applicable adjustments.
4058	Provide Toll Agencies with revenue accounting and auditing reports on a pre-established report schedule and otherwise upon demand.
4059	Prepare and submit a daily revenue reconciliation (receipts and disbursements) statement related to toll collection and Violation Notice activities using System generated reports.

4060	Investigate and resolve all discrepancies and meet with Toll Agencies and any IAG/Interoperable Agency to resolve any discrepancies in payments due.
4061	Ensure the accuracy and reconciliation of all money drawers on a daily basis.
4062	Develop and implement Customer refund procedures in accordance with the Business Rules.
4063	Remit monies to and collect monies from various parties in accordance with the Operations Requirements and SOPs. Such remittances may be made by check, wire transfer, or book transfer, in accordance with the SOPs and shall include but are not limited to payments to and from:  a. the Toll Agencies;  b. third-party Lockbox Service Provider;  c. IAG/Interoperable Agencies;  d. Collections Services Contractor(s);  e. Cash Payment and Distributor of Inventory retailers, and  f. Third-party Service Providers.

## 11.20 Financial Management

The Contractor is responsible for all financial operations, reconciliation and reporting necessary to successfully manage New Jersey E-ZPass operations.

4064	Develop and implement Approved financial reconciliation procedures to be instituted in the operation of the CSC.
4065	Develop and implement Approved financial reporting procedures to be instituted in the operation of the CSC using System generated reports.
4066	Ensure that checks and balances are instituted to minimize errors and omissions.
4067	On a daily basis, generate the trial balance and ensure that the accounts balance.
4068	Perform monthly reconciliations of all Accounts.
4069	Provide an annual written confirmation of the accuracy of financial reports signed by the Contractor's Chief Financial Officer (CFO).
4070	Develop and implement Approved internal control policies and procedures, which shall meet or exceed SSAE-18 compliance requirements, to be instituted in the operation of the CSC.
4071	Ensure the SOPs, internal controls and money handling, are GAAP-compliant.

4072	<p>Comply with GAAP, in terms of segregating Contractor staff duties, including but not limited to:</p>
	a. employees opening the mail shall not be the same employees who post payments to the System;
	b. employees who post payments to the System shall not be the same employees who prepare the deposits or reconcile the bank or merchant accounts;
	c. employees requesting credits, adjustments or refunds shall not be the same employees who approve credits, adjustments or refunds;
	d. employees issuing refunds shall not be the same employees who disposition Positive Pay exceptions with the bank or reconcile bank accounts;
	e. employees that handle cash/checks (in person clerks) shall prove-out their cash drawer at the close of their tour at the Customer window;
	f. all cash, change funds and checks shall be securely locked;
	g. employees issuing disbursements (such as, issuing refund checks) shall not be the same employees who sign checks, and
	h. employees having physical access to Inventory Items shall not be the same employees who perform physical inventory counts.
4073	Provide necessary information for check issuance, redemptions/cancellations, stop payments, voids, reissues, and stale date of checks.
4074	Manage, track and report on adjustments, dismissals and write-offs as defined in the established NJTA internal control policies and procedures provided in the SOPs.
4075	Provide financial information to Toll Agencies or their designee(s), including their consultants and auditors, on an ad-hoc basis upon request.
4076	Respond to Toll Agency's requests to run additional existing reports on an ad-hoc basis upon request.
4077	Provide information to auditors on a timely basis, in accordance with the audit schedules.
4078	Immediately notify Toll Agencies of any incident, discrepancy, or unusual circumstance involving loss of revenue or System performance within the Contractor's area of responsibility and record the incident, discrepancy, or unusual circumstance as a Priority 1 event.
4079	For any incident, discrepancy, or unusual circumstance involving loss of revenue or System performance a report that describes the situation and actions taken or planned to minimize any negative effect. The reports shall include estimates of revenue lost due to such occurrences as well as a mitigation plan for possible future occurrences.

### 11.20.1 Banking and Lockbox Services

The banking and merchant services for the CSC are comprised of the following:

- Banking Services – Banking services are comprised of the depository accounts into which deposits are made and payments are disbursed. NJTA has multiple depository accounts depending on the Payment Method (e.g., credit card payments, checks and cash) and what the payment is for (e.g., pre-paid tolls or Violation Notice payments). NJTA has selected and contracted with a Banking Services Provider. The Contractor may be required to deposit funds with more than one financial institution and may be required to prepare separate deposits by Toll Agency.
- Merchant Services – Merchant Services are comprised of the payment gateway, payment processor and acquiring bank. NJTA will select and contract with a Merchant Services Contractor.
- Lockbox Services – The Contractor is responsible for providing a third-party Lockbox Service Provider to receive and process all mailed payments related to Customer Accounts, Toll Bills, Post-paid Statements and Violation Notices.

4080	Reconcile the System reports to the bank, lockbox and merchant accounts on a daily basis and provide monthly summaries of daily reconciliations.
4081	NJTA shall retain ownership of the bank accounts and merchant IDs but will provide the Contractor with the necessary access to act and transact on behalf of NJTA.
4082	Utilize NJTA's existing contracts with bank(s) to fulfill the requirement(s) of the Banking Services.
4083	Utilize the Merchant Services Contractor to fulfill the requirement(s) that utilize Merchant Services.
4084	Utilize and manage all bank accounts provided by NJTA to receive deposits and disburse funds.
4085	Reconcile and report on the zero-balance account (ZBA) and refund activities.
4086	Issue all refunds to Customers in accordance with the SOPs.
4087	Ensure that credit card refunds are authorized and successfully processed.
4088	Reconcile all payments to the Customer Accounts and transfer funds to NJTA's Account.

### 11.20.2 Bankruptcy

The Contractor shall receive, and process notification of bankruptcies related to amounts owed to NJTA and to Toll Agencies by Customers. The laws and Business Rules related to bankruptcy are very specific and must be followed closely from initial notification through final resolution and potentially transaction write off.

4089	Comply with current bankruptcy laws and Business Rules.
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4090	Document the receipt of notification of bankruptcy and bankruptcy filing information within the System and process unpaid transactions in accordance with Business Rules pending the outcome of the bankruptcy process.
4091	Send Correspondence Item acknowledging the notification of bankruptcy received, in accordance with the Business Rules and SOPs.
4092	Identify all Account associated with the bankruptcy filed in the System. If no associated Account is identified, the notification of bankruptcy will be tracked in the System with a notation that no associated Account was identified.
4093	Communicate with the Collections Services Contractor(s) as necessary related to a notification of bankruptcy and resolution.
4094	Confirm the bankruptcy status is updated on the Collections Services Contractor(s) files and response files from the Collections Services Contractor(s) have the records as Frozen or other status indicating the records may not be pursued.
4095	Confirm that applicable Vehicle Registration Suspensions/Holds are removed for license plates and transactions which are included in the bankruptcy.
4096	Update the status of the bankruptcy in the System upon notification of changes or the resolution and perform the necessary steps to ensure that the System accurately reflects the outcome.
4097	Confirm unpaid transactions and debt owed are written off if the bankruptcy ruling is in favor of the Customer.
4098	Confirm unpaid transactions and debt owed continues to escalate if the bankruptcy ruling is not in favor of the Customer.
4099	Send electronic copies of new bankruptcy notices to NJTA and record the activity.
4100	Provide information and respond to requests related to a Customer bankruptcy proceeding.
4101	Establish an account in PACER and interface to PACER to obtain bankruptcy filing information.
4102	Use PACER to search and access records filed in bankruptcy courts and enter case information into the System for tracking and monitoring.
4103	Respond to all requests from the Toll Agencies to handle bankruptcies or compile data for subpoenas or other reasons in a timely manner and in accordance with the SOPs and Business Rules. The response time should be appropriate to the data requested.

#### 11.20.3 Period Closing Procedures

4104	Perform closing procedures in an accurate and timely manner in accordance with the Operations Performance Requirements, including but not limited to:
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	a. perform posting day close to finalize counts and revenue for the Revenue Day;
	b. perform month-end close on the last posting day of the calendar month, and
	c. perform year-end close on the last posting day of NJTA Fiscal Year.

#### 11.20.4 Escheatment (unclaimed property)

Customers can become eligible for escheatment if funds are left on Inactive (Dormant) Accounts, unidentified payments are made, addresses are bad/Nixie, and/or if refund checks remain uncashed.

4105	Subject to Agency approval, contract with certified third-party providing escheatment services for all States and in compliance with each state's law. Agency must have direct access to escheatment contractor for coordination and funds management.
4106	Provide information and conduct research as requested by the Authority related to uncashed checks, unidentified payments, and unclaimed funds.
4107	Develop an escheatment process flow to identify all events and conditions that trigger escheatment including distribution of money owed to Customers, Customer Correspondence Items and integration to the third-party services.
4108	Verify and monitor candidate Accounts or records for possible escheatment, including but not limited to: <ul style="list-style-type: none"> <li>a. uncashed checks;</li> <li>b. unidentified payments;</li> <li>c. funds in inactive accounts, and</li> <li>d. refunds in Accounts with bad/Nixie address.</li> </ul>
4109	Contact the Customer to re-activate the Account or return the money prior to sending the money to the applicable state's treasury department.
4110	Issue escheatment checks to the Treasury Department as filed by the third-party Escheatment Service Provider.
4111	Reconcile all escheated funds in the financial system and Customer Accounts.
4112	Identify the funds as escheated in the System when escheatment check to the Treasury Department as directed by NJTA.
4113	Perform a quality check on every escheatment for accuracy and Approve each escheatment.
4114	Confirm escheatment filings and transfer of funds are in compliance with each state's Legislation for escheatment.

4115	Monitor the escheatment filing status for each state. Notify NJTA and request extension, including payment of fines and fees by the Contractor, if filing deadlines are missed.
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#### 11.20.5 Write-Offs

The System will provide the capability for the Contractor to monitor, conduct, and report on financial write-offs of unpaid balances and processing of unresolved debt. Contractor shall perform write-off services in accordance with each Toll Agencies' Business Rules. Bankruptcy write-offs are performed when bankruptcy is adjudicated.

4116	Monitor unpaid balances and unresolved debt, and report to NJTA on a monthly basis the status of unpaid balances. Such report shall include Contractor's recommendations for financial write-off of unpaid balances in accordance with the Approved Business Rules.
4117	For debt is deemed uncollectible after all reasonable efforts are expended to receive payment, provide NJTA with the information needed as to the amount of the unresolved debt, in accordance with the Approved Business Rules and SOPs.
4118	Obtain Approval to perform the recommended processing and handling of unresolved debt and then perform the write-offs in accordance with the Business Rules and SOPs.
4119	If directed by NJTA, Configure the System to perform automatic financial write-offs and processing based on the Approved Business Rules for unpaid balances which meet the Approved criteria (e.g., bankruptcy).
4120	Monitor the automatic write-offs performed by the System and report on these to the Toll Agencies on a monthly basis.

#### 11.20.6 Reconciliations

Detailed reconciliation of transponder usage, Pre-paid Account balances; aged accounts receivable; transponder deposits; Violation Notice revenues; payment transactions, and other revenues shall be conducted. All payments made and received shall be entered into the New Jersey E-ZPass System by the Contractor. All bank accounts shall be reconciled against receipts from third-parties and against the New Jersey E-ZPass System so that it can be proven that all monies have been received from third-parties, entered into the New Jersey E-ZPass System, and deposited in the bank in accordance with the Operations Performance Requirements and SOPs.

4121	Document balancing and reconciliation activities for each Toll Agency, including but not limited to:
	a. perform daily balancing and close-out of all shifts;
	b. perform daily balancing of all payments;
	c. perform daily and monthly reconciliation of all bank accounts;
	d. perform daily and monthly reconciliation of all merchant account activity and fees, and

	e. perform daily and monthly reconciliation of all lockbox activity.
4122	Perform other financial and transactional reconciliations in an accurate and timely manner, to be provided to NJTA for review, in accordance with the Operations Performance Requirements, including but not limited to: <ul style="list-style-type: none"> <li>a. perform daily, monthly, and annual reconciliation of all New Jersey E-ZPass transactions;</li> <li>b. perform daily, monthly, and annual reconciliation of all IAG/Interoperable Agency transactions;</li> <li>c. perform daily, monthly, and annual reconciliation of all transactions placed at a Collections Services Contractor;</li> <li>d. perform daily, monthly, and annual reconciliation of all retailer payments, and</li> <li>e. perform daily, monthly, and annual reconciliation of all Third-party Service Provider payments.</li> </ul>
4123	Perform monthly reconciliations of all financial accounts, including roll-forward schedules from prior periods, which will be provided to NJTA for review.
4124	Perform reconciliations, including but not limited to: <ul style="list-style-type: none"> <li>a. detailed reconciliation of transactions and revenue, by facility and transaction type;</li> <li>b. refunds by refund type;</li> <li>c. Pre-paid Account balances;</li> <li>d. transponder deposits;</li> <li>e. aged accounts receivable;</li> <li>f. fees revenue;</li> <li>g. write-offs;</li> <li>h. payment transactions, and</li> <li>i. other revenues.</li> </ul>
4125	Meet with NJTA as required to review the financial reconciliation of revenue and funds.

#### 11.20.7 Financial Reporting

NJTA reports on a Fiscal Year beginning January 1 and ending December 31. As a public sector entity, NJTA's basic financial statements are presented in compliance with pronouncements in accordance with the GASB and in conformity with GAAP.

While most financial transactions are captured automatically through the System, some level of manual entry may be required. Reports, including electronic reports and data exports from the System, are the

primary means by which Toll Agencies will capture financial information related to the operation of the CSC.

4126	Maintain responsibility for all financial operations, audits and reporting Requirements as defined in the SDDD.
4127	Coordinate development of and changes to reports with the Toll Agencies.
4128	Provide Approved reports on CSC activity to the Toll Agencies on a daily, weekly, monthly, and/or annual basis and as otherwise scheduled and upon request.
4129	Make all reports available to the Toll Agencies in a timely manner but no later than the tenth day of each month for Services performed the previous month.
4130	Provide reports in the format requested by the Toll Agencies and in accordance with the CSC Finance and Audit Manual.
4131	Provide periodic and upon request reports on Account activity for the Toll Agencies, in a downloadable format compatible with each Toll Agency's financial system.
4132	Provide all data to the Toll Agencies in compliance with pronouncements issued by GASB and in conformance with GAAP.
4133	Perform ongoing review of reports at a frequency sufficient to validate all reports balance and reconcile to related reports.
4134	<p>Balance, reconcile and verify the content of the reports, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Financial report package (trial balance, balance sheet and income statement);</li> <li>b. daily receipts report (by Payment Method, payment source and transaction type, including disbursements);</li> <li>c. monthly receipts report (by Payment Method, payment source and transaction type, including disbursements);</li> <li>d. bank reconciliations;</li> <li>e. pre-paid Account balance;</li> <li>f. refunds;</li> <li>g. payments to DMVs and other ROV Lookup Service Providers for lookup and Vehicle Registration Hold fees;</li> <li>h. negative E-ZPass Account balance report;</li> <li>i. transaction aging report;</li> <li>j. Customer aging report for Violation Notices, fees, etc.;</li> </ul>

	<ul style="list-style-type: none"> <li>k. monthly adjustment report as required by the Toll Agencies;</li> <li>l. Retail Distributor of Inventory reconciliation (transponders received and returned and payments, credits and amounts receivable);</li> <li>m. transponder inventory reconciliation, and</li> <li>n. Interoperability agreements.</li> </ul>
4135	Resolve any discrepancies identified in the validation of reports.

## 11.21 Fraud Monitoring

The Contractor shall be responsible for continuously monitoring actions taken by Customers, employees and the general public for potentially fraudulent activities.

4136	Evaluate findings of real-time activity monitoring performed by the System.
4137	In cases where the System's real-time activity monitoring indicates a potential issue, immediately conduct an investigation to determine whether an issue is present.
4138	<p>When fraudulent activity is identified take corrective action, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. immediately notify the Toll Agencies;</li> <li>b. determine immediate corrective action needed and initiate such action;</li> <li>c. formulate a plan to take any additional corrective action;</li> <li>d. determine how System, operations, and/or processes can be improved to prevent the issue from occurring in the future and implement such improvements;</li> <li>e. determine how System, operations, and/or processes can be improved to better detect the issue should it occur again in the future and implement such improvements, and</li> <li>f. submit an RCA.</li> </ul>
4139	<p>Continuously monitor processes and activity to detect potentially fraudulent behavior. A detailed listing of areas to be monitored will be developed during System design. Some of the areas expected to be included are:</p> <ul style="list-style-type: none"> <li>a. monitor findings of the quality review program;</li> <li>b. monitor activity associated with the Unidentified License Plate Database;</li> <li>c. monitor chargeback activity;</li> <li>d. monitor non-revenue activity;</li> <li>e. monitor Cases created for investigation of potentially fraudulent behavior;</li> </ul>

	<p>f. monitor and investigate Customer complaints;</p> <p>g. monitor social media where fraudulent behavior related to New Jersey E-ZPass might be discussed, and</p> <p>h. monitor for unauthorized New Jersey E-ZPass content online, for example the presence of potentially malicious sites impersonating official New Jersey E-ZPass sites, apps impersonating official New Jersey E-ZPass apps, or unauthorized sales of transponders on social media.</p>
4140	Document all monitoring activities in the SOP.
4141	Participate in discussions of any new initiative and identify potential risks the initiative might present which could potentially be exploited by fraudulent behavior.
4142	Constantly monitor cases of fraudulent behavior experienced by other toll agencies, the Contractor's other clients, and by other industries and determine whether the New Jersey E-ZPass Program is vulnerable to the same situation. Take immediate action if such risk is present.

## 11.22 Inventory Management, Monitoring and Audit

NJTA purchases transponders, under a separate contract from various manufacturers, and then it is the responsibility of the Contractor, using the System, to record the purchase and to manage these Inventory Items throughout their lifecycle including management of the transponder replacement (tag swap) program. Currently the New Jersey E-ZPass Program purchases and issues hard-case time division multiplexing (TDM) protocol transponders. In the near future, the New Jersey E-ZPass Group plans to switch to 6C protocol which are mostly sticker transponders. In addition, Customers can add to their Account a transponder that belongs to another IAG/Interoperable Agency or a Third-party Entity, or is a vehicle OEM transponder. These transponders, supplied by others, may be TDM, SeGo, 6C, or multi-protocol.

4143	Manage all aspects of the transponder lifecycle in accordance with manufacturers' standards, SOPs, and Approved Business Rules. This includes but is not limited to:
	a. recording the purchase of the inventory;
	b. receiving into inventory;
	c. testing transponder upon receipt and prior to issuing;
	d. distribution of transponder to Retail Distributors of Inventory;
	e. distribution of transponder to the WICs;
	f. assigning and issuing to Customers;
	g. tracking transponders and monitoring inventory levels;

h. recycling (evaluating, cleaning and testing) for reissue;
i. managing trade-out of defective transponders;
j. managing the transponder replacement program;
k. warranty return and replacement;
l. managing return merchandise authorization, and
m. disposal of transponders.

### 11.22.1 Inventory Management

Inventory levels shall be monitored regularly by the Contractor and communicated to NJTA to ensure no disruption in transponder availability. Reorder levels will change based on the variables of utilization rate and manufacturing turn-around time. Purchase orders will be created by NJTA and NJTA will be responsible for ordering based on the Contractor request and for paying for the transponders.

4144	CSC issues multiple types of transponders from multiple manufacturers as described in Section 9.9 Inventory Management, and as such the Contractor shall manage multiple types of transponders, from multiple manufacturers/providers.
4145	Track the physical inventory of transponders at all CSC locations and Retail Distributors of Inventory.
4146	Ensure that an adequate supply of transponder mounting strips, user guides and mounting instructions, read-prevention bags, and shielded envelopes for transponders (all purchased by the Contractor) are available at all times to accommodate the transponders issued by the CSC and requested by Customers.
4147	On a daily, weekly, and monthly basis, report to NJTA the inventory level and the number of transponders issued during the day, week, and month.
4148	Provide NJTA an annual projection of the quantity of Inventory Items that will be required for the operation by Inventory Type. This information will be utilized by NJTA to create the budget for the year.
4149	Generate Inventory forecast on the established date for next year's monthly Inventory needs by Inventory Type, and initiate order requests with NJTA, based upon existing inventory and forecasted requirements.
4150	Record the purchase order details of the transponders purchased by NJTA from each manufacturer.
4151	Receive shipments of transponders, record the receipt of the transponders, and reconcile shipment contents with electronic manifests provided by the transponder manufacturer, prior to accepting shipment.

4152	Reconcile the waybill against the original purchase order and scan it into the System for tracking and reconciliation purposes.
4153	Securely store the transponders until they are issued.
4154	Store and be responsible for the overall security of transponder inventory.
4155	Provide and maintain accurate inventory controls and current records of the transponders.
4156	Conduct a monthly physical audit of the transponders that are under its physical control, including for the various transponder types, statuses, locations, and quantities. The audit shall compare the physical counts with the System counts by transponder type, location, and status. The resultant transponder audit reports shall be provided to NJTA within one ten (10) days of the end of the month.
4157	Conduct a monthly physical audit of the transponders that are under the physical control of a Retail Distributor of Inventory, including for the various transponder types, statuses, locations, and quantities. The audit shall compare the physical counts with the System counts by transponder type, location, and status. The resultant transponder audit reports shall be provided to NJTA within one ten (10) days of the end of the month.
4158	Contractor shall secure the services of an NJTA-Approved auditor and conduct an annual audit of physical Inventory at all CSC locations and those under control of the Retail Distributor of Inventory and reconcile them to System reports.
4159	Support NJTA in their periodic transponder audits that will be no more frequent than quarterly unless discrepancies are found.

### 11.22.2 Transponder Retail Program

Retail Distributors of Inventory obtain transponders directly from the Contractor. The transponder price at a Retail Distributor of Inventory is made up of the cost of the transponder, a certain amount of pre-paid tolls and, perhaps, an incentive. A transponder obtained at a retail location must be associated with an existing or a new Registered Account. If more than one retail transponder is purchased, they can be added to a single existing or a new Registered Account in accordance with the Business Rules.

4160	Manage and support the Retail Distributor of Inventory sales /distribution program activities which include but are not limited to:
	a. Retail Distributor of Inventory account maintenance;
	b. fulfillment of Retail Distributor of Inventory orders;
	c. supporting retail transponder status for transponders conveyed to a Retail Distributor of Inventory;
	d. financial settlement;
	e. returns processing;

	f. invoicing and receivables tracking, and g. Retail Distributor of Inventory Customer service and general support.
4161	Provide a dedicated phone number for use by the Retail Distributors of Inventory and the Toll Agencies for contacts related to the retail program.
4162	Designate a staff member to be the single point of contact for the retail program.
4163	Receive retail transponder orders from Retail Distributors of Inventory, package the transponders for retail sales (including, but not limited to, mounting strip, read-prevention bag, welcome booklet, and shielded envelope), fulfill the orders and ship them to the Retail Distributor of Inventory's designated location for that particular order.
4164	Monitor retail transponder demand and maintain sufficient quantities of transponders packaged for retail on hand.
4165	Review retail transponder sales trends and activity and notify NJTA of any significant changes or trends.
4166	Maintain responsibility for the shipped transponders until the Retail Distributor of Inventory receives them.
4167	Manage lost shipments and process returned transponders from Retail Distributors of Inventory.
4168	Process payments from the Retail Distributors of Inventory against invoices generated by the System.
4169	Manage the accounts receivable related to the Retail Distributors of Inventory and the retail program, including contacting Retail Distributors of Inventory when a Retail Distributor of Inventory's amount due reaches a level or age identified in SOPs as appropriate for additional action.
4170	Track transponders provided to the Retail Distributors of Inventory and reconcile the transponders provided to Retailers with the payments and returns from Retailers and report to NJTA.

### 11.22.3 Transponder Testing

Transponders are tested at multiple times in the lifecycle because transponders that are defective or not functioning reliably cause problems for the Customers and increase costs.

4171	Test a Configured percentage, for example five (5) percent, of the transponders in each individual box within each shipment when the transponders are received from the manufacturer and record the results in the System if automated processes fail. This testing shall verify that the transponders function properly, and that they are correctly encoded. Read the transponder serial number and verify that the transponder label, barcode and internal coding are consistent. Failure of one transponder from the sample shall cause the entire box to be tested.
4172	Test all transponders which are returned by Customers that are within the manufacturer warranty period.
4173	Return the transponders which fail the testing to the manufacturer in accordance with the transponder manufacturer's agreement and SOPs.
4174	Transponders that have passed their useful life and those that are defective but out of manufacturer warranty shall be flagged for disposal.
4175	Transponders that have to be disposed shall be batched by transponder manufacturer, shipped to the appropriate transponder manufacturer, and NJTA shall be invoiced for the shipping costs.

#### 11.22.4 Transponder Issuance and Distribution

4176	Upon Customer request, the Contractor shall assign and mail activated transponder(s) to Customers.
4177	Prior to mailing verify the account information and packing slip/Customer transponder receipt against the Correspondence Item, including Account Plans.
4178	Assign, verify and provide transponder(s) to Customers directly in the WICs.
4179	Assign and mail activated transponder(s) to Customers when transponder is deemed to be defective.
4180	Track and monitor the transponder delivery status and resolve issues related to delivery.
4181	Distribute new and recycled transponders using the FIFO inventory method.
4182	Include mounting instructions and other materials as may be determined by NJTA with each transponder distributed.
4183	Transponders issued by the Contractor to all of the distribution sources shall be recorded in the System and shown as part of the transponder inventory.

#### 11.22.5 Transponder Recycling

The New Jersey E-ZPass CSC receives transponders back from Customers when the Account is closed, the transponder is no longer needed or no longer functions reliably. Returned transponders can be reissued to other Customers if the transponder(s) meet the reissuance criteria, including age and condition of the

transponder. Returned transponders, which are within a Configurable time of reaching their replacement age, are not to be reissued. In order to be certain that any transactions by the prior owner have Posted, returned transponders are “aged” for a Configurable period of time after which they are ready for reissue. Transponders which are not deemed to be in good enough condition to be reissued may incur a damaged transponder fee which will be charged to the Customer’s Account.

4184	Receive, track and evaluate the condition of returned transponders.
4185	Determine if the transponder meets the criteria for reissuance based on criteria, including but not limited to transponder type, age and condition.
4186	Clean and ready transponders for reissue and store them until the aging period has passed.
4187	For each returned transponder, the Contractor shall record in the System whether the transponder will be prepared for reissue, disposed of or returned to the manufacturer under the warranty provisions.
4188	The System will track the transponder aging and the Contractor shall reissue the transponder only after the aging period concludes.

#### **11.22.6 Transponder Replacement Program**

The Contractor is responsible for swapping out of transponders that have reached end of useful life as part of normal CSC operations. The Contractor will develop an effective transponder replacement program that shall be described in the SOPs and shall proactively manage the transponder replacement process. The replacement program applies to all types of Accounts and includes all activities and tasks needed to complete the program including Customer notifications tracking and processing returned transponders, the disposal of returned transponders and reconciliation of the transponder replacement inventory. The transponder inventory for the transponder replacement program is kept separate from transponders purchased and received for normal operations both physically and in the System.

4189	Develop and implement a transponder replacement program in accordance with the SOPs, including but not limited to:
	a. recording purchase of transponders;
	b. receipt and testing of transponders;
	c. identifying transponders that need to be replaced;
	d. notify the Customers in accordance with established communications;
	e. pulling transponders from transponder replacement inventory;
	f. handling of transponders pulled from transponder replacement inventory;
	g. programming the IAG class code into the transponder, if necessary;

	<ul style="list-style-type: none"><li>h. conducting QC activities to ensure that transponders are assigned and mailed to the correct Account;</li><li>i. reconciling of transponders pulled from transponder replacement inventory - both System and physical transponders;</li><li>j. returning transponders that have been returned by Customer and placing those transponders back into transponder replacement inventory;</li><li>k. reminder to Customers who have not returned the transponders;</li><li>l. handling Accounts where Customer has not returned the transponder or has returned the transponder after fee was assessed;</li><li>m. confirming that status of unreturned transponders is updated in accordance with Business Rules;</li><li>n. Running System reports and confirming transponders and their associated status match other operational reports;</li><li>o. notification to Customer if Customer continues to use transponder that was part of the replacement program, and</li><li>p. formal process to document the inventory controls.</li></ul>
4190	The transponder replacement program transponders shall be stored such that they are secured and separated from all other transponders and operations in the storage area.
4191	The transponder replacement program shall include the procedure to swap out transponders on both individual and Business Accounts.
4192	The transponder replacement program shall include the process for transponders associated with transponder-specific Account Plans to be marked in a way that a Customer knows to use this transponder in order to get the adjusted toll rate.
4193	The transponder replacement program shall include a process to handle Account Plans that is transparent to Customers and shall not negatively affect the toll rate adjustment the Customer is entitled to.
4194	<p>The transponder replacement program shall include the Customer transponder return process up to and including:</p> <ul style="list-style-type: none"><li>a. deactivating the transponder and placing into proper category (disposal);</li><li>b. handling returned transponders from walk-in Customers (that do not follow the pre-paid return mail process);</li><li>c. tracking and reporting on returned transponder totals;</li><li>d. transponder disposal, and</li></ul>

	e. reporting of serial numbers destroyed.
4195	The transponder replacement program shall include QA procedures, including but not limited to:  a. Account assignment;  b. correct transponder type assignment;  c. IAG class programming and assignment;  d. Account Plan assignment;  e. correct mailing address;  f. transponder receipt verification;  g. fulfillment packaging, and  h. Customer transponder return processing and handling.
4196	The transponder replacement program shall include the procedures, frequency, and volume for all QA activities within the transponder replacement program.
4197	The transponder replacement program shall include system generated reports and back-up spreadsheets to provide transponder reconciliation.
4198	The transponder replacement program shall include a bi-weekly (every 2 weeks) meeting with NJTA to provide transponder swap progress and outstanding issues.
4199	The transponder replacement program shall include a process to close out and transfer of remaining inventory at program end to operating inventory.

### 11.22.7 Transponder Disposal

When transponders are determined to be defective and have exceeded their useful life, they must be disposed of using an environmentally safe method.

4200	Subcontract with a Certified Inventory Disposal Service Provider.
4201	Manage, coordinate, and perform the transponder disposal process and provide NJTA with evidence of disposal.
4202	Securely store transponders scheduled for disposal and prepare and ship the transponders as required for disposal.
4203	Coordinate with the Certified Inventory Disposal Service Provider for the shipment of the transponders identified for disposal.

### 11.22.8 Transponder Warranty Returns

When transponders are determined to be defective and are still within the manufacturer's warranty, they are returned to the manufacturer for replacement with prorated warranty.

4204	Manage, coordinate and perform the warranty return process in accordance with the SOPs.
4205	Comply with the manufacturer's RMA process, including but not limited to, submitting list of defective transponders and test results.
4206	Securely store transponders scheduled for warranty return and prepare and ship the transponders as required.
4207	Coordinate with the applicable manufacturer for the shipment of the transponders identified for RMA.
4208	Manage the receipt and testing of RMA transponders and confirm application of prorated warranty.

### 11.23 IAG/Interoperable Agencies, Regional Hub, and Airport/Parking Facility Operators

The Toll Agencies are members of the E-ZPass IAG providing Interoperability between all member agencies and national Interoperability continues to expand. The New Jersey E-ZPass System interfaces with the IAG/Interoperable Agencies through a Regional Hub for data exchange. The Contractor will manage and support all activities related to Interoperability.

4209	Manage financial exchange and reconciliation between IAG/Interoperable Agencies. If issues occur, the Contractor shall work with appropriate parties to resolve the issue.
4210	Participate in periodic teleconferences or meetings related to Interoperability or the Toll Agencies membership in the E-ZPass IAG or other Interoperability organization.
4211	Support investigation and correction of IAG/Interoperable Agency Customer disputes.
4212	Provide a point of contact for resolution of issues arising with IAG/Interoperable transactions or Customer service.
4213	<p>Perform additional services as necessary, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. temporary lifting of filters (IAG/Interoperable Agencies or other);</li> <li>b. reversal and correction of IAG/Interoperable Agencies transactions;</li> <li>c. global dismissals of Toll Bills, Post-paid Statements and Violation Notices;</li> <li>d. fulfillment of authorized subpoenas (in cases);</li> <li>e. other ad-hoc requests from the Toll Agencies that impact operations, and</li> </ul>

	f. maintain a familiarity with the discount programs offered by IAG/Interoperable Agencies and which ones are supported by New Jersey E-ZPass and which ones are not.
4214	Support the investigation and correction related to disputes on E-ZPass Plus transactions.
4215	Support the handling of and corrective actions related to declined charges on E-ZPass Plus transactions.

## 11.24 Ongoing Customer Satisfaction Analysis

The Contractor shall establish a program that provides Customer feedback regarding the services the Contractor provides.

4216	Create a Customer satisfaction program to measure the quality of the services across all communication channels.
4217	Modify the program as needed or as directed by NJTA.
4218	Assess Customer satisfaction for a minimum of ninety (90) percent of all calls, chats, social media messages, Mobile Application messages and SMS messages.
4219	Assess Customer satisfaction for a minimum of five (5) percent of IVR, "Contact Us" and WIC interactions.
4220	Make contact with each Customer who requests a follow up or is rated below an agreed upon threshold for Customer satisfaction, as noted in the SOPs, within five (5) Business Days of the Customer interaction.
4221	Perform daily, weekly and monthly analysis on Customer satisfaction results at an agent and contact center level.
4222	Provide targeted coaching to agents based on Customer satisfaction results.
4223	Review Customer satisfaction results with CSRs and other applicable personnel during periodic meetings regarding individual's performance.
4224	Include the Customer satisfaction results, including trending, as part of the monthly Operations Performance Report Package.

## 11.25 Quality Review Programs

The operational quality program ensures that all departments supporting the New Jersey E-ZPass program adhere to their SOPs and provide high quality service to New Jersey E-ZPass Customers through QA reviews of all department's work.

### 11.25.1 Operations Quality Audits

The Contractor shall conduct daily and monthly quality audits of all functional areas of the New Jersey E-ZPass operations. These audits shall encompass all aspects of the CSC operation including operations of the Third-party service providers secured by the Contractor and the License Plate Review Services Contractor as described in the Operations Quality Assurance Plan. The intent of the quality audits is to assure compliance with System Requirements, Performance Requirements, Business Rules and SOPs. The Contractor shall develop an audit report and provide it to NJTA.

4225	Establish audit samples and parameters as Approved by NJTA including acceptable error rates for each area of audit.
4226	Conduct daily and monthly quality audits in accordance with the Operations Quality Assurance Plan.
4227	Perform annual validation and certification of the full cycle of CSC operations processes, adherence to Approved operational plans and all Customer-facing text in accordance with the Operations End-to-End Validation Plan.
4228	Submit the quality audit reports detailing each audit, including but not limited to, sample size, errors, accuracy and deficiencies identified.
4229	Institute any corrective measures and procedural or operational changes as requested and Approved by NJTA as a result of audits and process validation. Items identified by NJTA as critical shall be prioritized as Severity 1 and corrected in accordance with the Performance Requirements. Other items identified by NJTA as non-critical shall be prioritized and shall be corrected in accordance with the System and Operations Performance Requirements.

### 11.25.2 Operational Quality Program

The Contractor shall establish and maintain an effective quality program to ensure compliance with the Contract in accordance with the Operations Quality Assurance Plan. This program identifies and provides suggestions on process improvement as a part the enterprise-wide Continuous Improvement program.

4230	Establish and maintain an effective quality program that ensures quality throughout all areas of the Services.
4231	The quality program shall provide for the prevention and ready detection of discrepancies and for timely and positive corrective action.
4232	The quality program shall include effective QC of subcontracted Services.
4233	The Contractor's Operations Quality Assurance Manager shall lead the team of Contractor's staff to meet all the Requirements related to quality and to assure NJTA that the Services of the Contractor is in accordance with the Operations Quality Assurance Plan.

4234	Make objective evidence of quality conformance readily available to NJTA, and NJTA shall have the right to review and verify the Contractor's compliance to the Operations Quality Assurance Plan.
4235	Assess the recording of the reason(s) for each contact (via all contact channels) by using Approved call wrap-up codes, entering Account notes or other tracking approach to document the reason for the contact and memorialize the resolution or required next steps.
4236	Monitor and score a minimum of ninety (90) percent of CSR calls for accuracy, efficiency, professionalism, and courteousness.
4237	Monitor and score a minimum of ninety (90) percent of chat, social media messages, and SMS messages for accuracy, efficiency, professionalism, and courteousness.
4238	Monitor and score CSR interaction with Customers at the WICs for accuracy, efficiency, professionalism, and courteousness.
4239	Review and score Case resolution activities and outcomes for accuracy, efficiency, professionalism, and courteousness.
4240	Periodically monitor CSR screen navigations by remotely viewing the CSR's screen.
4241	Analyze trends in contact reasons and perform root cause analysis to identify potential mitigation measures, such as coaching or training on a topic or improvement to Customer self-service tools.
4242	Analyze trends in quality and performance at an agent and contact center level.
4243	Track CSR monitoring results and trend analyses and submit a monthly summary to NJTA as part of the monthly Operations Performance Report Package.
4244	Track all escalated issues and resolutions and provide a monthly report to NJTA as part of the monthly Operations Performance Report Package.
4245	Provide for review by NJTA all documentation related to the Contractor's quality program.
4246	Provide regular, on a weekly basis at a minimum, scheduled reporting on quality statistics.
4247	Provide ad-hoc reporting on quality scores at NJTA's request.
4248	Provide recommendations to NJTA for potential enhancements to the Contractor's Continuous Improvement program.
4249	Conduct monthly quality monitoring calibration meetings for all Contractor staff who monitor Customer interaction. NJTA shall be invited to attend these meetings.

### 11.25.3 Transponder Issuance Quality Review

The intent of the transponder issuance quality review is to make certain that correct transponders are sent to the correct address and are associated with the correct Account. The Contractor's quality team will conduct these reviews in accordance with the Operations Quality Assurance Plan.

4250	Implement a quality review process that includes a sampling of a Configurable percentage, for example, no less than five (5) percent, of all issued transponders to ensure timeliness of mailing, transponder data, correct transponder, associated plans, accuracy of Customer address, and inclusion of appropriate materials in the package.
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#### 11.25.4 Image Review Quality Review

The accuracy of the image review process is critical to the successful identification of the ROV. As part of the QA process, the Contractor will conduct an accuracy review and audit process of the manual and automated image review results. This QC on the License Plate Review Services Contractor's results is performed to ensure that the License Plate Review Services Contractor is accurately identifying a high percentage of license plates. QA reviews of the license plate review activities shall also be required to verify Customer-disputed transactions and ROV discrepancies.

4251	Conduct a quality review of license plate review activities using a System-generated sample of the image review results (both manual and auto) to verify that the license plate information results are accurate. Both images for which plate information was identified ("not rejected") and rejected images will be sampled and reviewed monthly.
4252	The initial quality review sample size for images rejected during image review shall be ten percent (10%) per image reject category. This sample size may be reduced or increased during design or upon a review by NJTA of actual performance.
4253	The initial quality review sample size for images that were not rejected during image review shall be one-quarter of one percent (.25%). This sample size may be reduced or increased dependent upon actual performance.
4254	Correct any errors in license plate data identified during the quality review process.
4255	Report the results and findings of the quality reviews to NJTA and to the License Plate Review Services Contractor.
4256	Work with the License Plate Review Services Contractor to take the necessary steps to correct identified errors from the automated review processes so that they do not continue to occur. For example, the License Plate Review Services Contractor's system may be mistaking the number "1" for a letter "I" for the state of Delaware so the Contractor would communicate the problem to the License Plate Review Services Contractor and provide examples of the issue.

#### 11.25.5 MVC/DMV No Registered Owner Information Return Review

The System will enable the Toll Agencies to pursue Customers with license plates issued by all U.S. states, Jurisdictions, and territories as well as Mexico and Canada. The System interfaces with the various registered owner lookup providers, including the MVC/DMV and third-party ROV Lookup Service Providers. This process is critical to the Toll Agencies' ability to pursue unregistered Customers. The

Contractor will work to optimize the ROV lookup process to ensure that ROV results are obtained for as many transactions as possible.

4257	<p>Work with the Toll Agencies, the MVC/DMV and the ROV Lookup Service Providers to obtain a thorough understanding of ROV lookup process, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. the various ROV Lookup Service Providers being used;</li> <li>b. the criteria for selecting a particular ROV Lookup Service Provider for a particular license plate;</li> <li>c. the response codes provided by the ROV Lookup Service Providers, what the codes mean and what follow up action, if any, should be taken;</li> <li>d. how license plate types affect the process;</li> <li>e. the normal/expected number and percentage of matches obtained from the MVC/DMV and each ROV Lookup Service Provider by Jurisdiction and plate type, and</li> <li>f. the rules for entering the license plate correctly by Jurisdiction and plate type.</li> </ul>
4258	Monitor the ROV lookup results for changes to the normal match rates and other potential problems with the ROV lookup process.
4259	Work both independently and with the MVC/DMV and ROV Lookup Service Providers to determine the cause of any potential problems and resolve them.
4260	Use online interfaces to the MVC and other DMVs as they become available to manually look up individual license plates at the request of the Toll Agency or in order to resolve Customer disputes.
4261	Monitor the success of ROV lookup requests, reporting on the number of requests for which an ROV was obtained (successful lookup) and the number for which a request was not obtained (unsuccessful lookup) by Jurisdiction.
4262	Identify Jurisdictions in which the percentage of successful requests decreases by more than five percent from the prior month and work with the MVC/DMV or appropriate ROV Lookup Service Provider to address any issues.
4263	Develop solutions to increase the ROV Lookup success for Jurisdictions with the lowest success rates.
4264	Review all image transactions that are returned from the MVC/DMV or ROV Lookup Service Provider without registered owner information to ensure license plate entry was accurate.
4265	<p>Accurately enter information related to the vehicle identified in each image set, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. plate number;</li> </ul>

	b. plate type, if applicable, and c. Jurisdiction.
4266	Work with the License Plate Review Services Contractor and Toll Agencies Host System/Host and Image Capture Systems contractors to take the necessary steps to correct consistently errors from the automated and manual review process so that they do not continue to occur. For example, a Toll Agencies Host System/Host and Image Capture System may be mistaking the letter "E" for the letter "F" for the state of California so the Contractor would communicate the problem to the specific Toll Agencies Host System/Host and Image Capture System contractor and provide examples of the issue.
4267	Coordinate with the Toll Agencies Host System/Host and Image Capture Systems contractors regarding updates required due to any changes in ROV Requirements.

## 11.26 Audits

### 11.26.1 SSAE Type II Audit

The Contractor shall engage an independent auditor to perform an SSAE-18 Type II audit to cover the operations of the CSC and provide the resulting SOC 1, Type 2 report to NJTA. The auditors have a fiduciary duty to NJTA; however, the coordination of the audit, including managing the audit and related requests, managing interviews with staff, and the preparation of any supporting documentation or schedules shall be the responsibility of the Contractor.

The audit shall be completed within the 90 days preceding the end of NJTA Fiscal Year (December 31) and a final report shall be submitted by December 31 of each year. The Contractor shall supply a bridge letter for the period between the report date and the end of the Fiscal Year, if required by the financial auditor.

4268	The Contractor shall engage an independent auditor, which is a licensed CPA firm and has been Approved by NJTA to perform the annual SSAE-18 Type II audit.
4269	Obtain the services of a new Approved audit firm every five (5) years. The new firm cannot be the audit firm used by the Contractor previously for this Contract.
4270	The selected independent auditor shall be experienced and widely recognized in the US for performing these types of audits. (i.e., the selected audit firm shall perform a minimum of ten (10) such similar audits each year).
4271	The Contractor and auditor shall mutually agree on an audit plan, which shall be provided to NJTA for Approval, including regularly scheduled meetings. The audit plan shall result in the delivery of the SOC 1, Type II report to NJTA by December 31 each year. In addition, the Contractor shall provide a bridge letter to NJTA covering the period from the SOC 1, Type II report date through December 31 of each year, if requested by the financial auditor.

4272	Comply with all changes to requirements under SSAE-18; in the event SSAE-18 is replaced by a new standard, the new standard shall apply and in the event the SOC 1, Type II report is replaced by a new reporting form, the Contractor shall submit the new reporting form.
4273	Fully cooperate with NJTA in responding to the assessor's requests and implement remedies if any issues are identified and obtain auditor approval.
4274	Provide the resulting SOC 1, Type II report to NJTA including issues identified and remedies implemented.
4275	Institute any procedural and operational changes as detailed in the SOC 1, Type II report, and as requested and Approved by NJTA as soon as practicable, but no later than by the close of the following Fiscal Year, or as required and directed by the auditors and agreed to by NJTA.
4276	Promptly notify NJTA of any concerns raised by the auditors, including but not limited to: <ul style="list-style-type: none"> <li>a. any asserted weaknesses;</li> <li>b. limitations on audit scope;</li> <li>c. the auditors' inability to carry out the audit;</li> <li>d. the Contractor's inability to carry out the audit, and</li> <li>e. time delays in scheduled audit completion.</li> </ul>

#### 11.26.2 Financial Audit

4277	The Contractor shall engage an independent auditor (can be the same as above if qualified), which is a licensed CPA firm and has been Approved by the Authorities to perform the annual audit of the assets and liabilities and the cash receipts and cash disbursements.
4278	The Contractor and auditor shall develop an audit plan for each annual audit prior to beginning the engagement. An engagement letter which will include the audit plan, including regularly scheduled meetings, will be provided to NJTA for Approval.
4279	The draft audit report from the annual audit shall be submitted to NJTA within 60 days of the close of the Fiscal Year, with the final report to be delivered within 90 days of the close of the Fiscal Year,
4280	The opinion from the independent CPA firm in the annual audit report shall indicate that the financial statements are accurate and are in compliance with the financial reporting provisions of the Agreement. In the event that the auditor communicates any control deficiencies in their audit of the financial statements, the Contractor will provide within three (3) months a plan to rectify the issues by the following annual audit.

### 11.26.3 Other Audits

Other aspects of the CSC are subject to audit by NJTA and/or third-parties as well as the Contractor. Results of audits conducted by NJTA and/or third-parties, including any prepared audit reports, will be shared with the Contractor, as applicable.

4281	Support NJTA in any audit activity relating to NJTA's toll collection, New Jersey E-ZPass System, and CSC operations.
4282	Conduct audits in accordance with the Operations Quality Assurance Plan. These audits may include but are not limited to:  a. NJTA internal control procedures;  b. Contractor internal control procedures;  c. Customer communication audit (including ensuring accurate information is provided to Customers);  d. revenue/transaction reporting;  e. physical inventory audit;  f. security audits;  g. user group and role audits;  h. financial audit;  i. facility inspections, and  j. operational performance.
4283	As the accountant for the CSC operations, the Contractor shall supply NJTA's auditor(s) and management with information and schedules as requested and respond to requests from NJTA or its auditors in a timely manner.
4284	Provide NJTA and their designee(s) access to the CSC for the purpose of conducting their audit(s).
4285	Provide NJTA and their designee(s) production Accounts for the purpose of conducting testing and for conducting their audits.
4286	Support NJTA by running reports and making all requested documentation available for review.
4287	Support NJTA by making Contractor employees, consultants and other involved Subcontractors and parties available for interview by auditors.

4288	Institute any procedural and operational changes as requested and Approved by NJTA as a result of these audits, as soon as practicable, but no later than by the close of the following Fiscal Year.
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## 11.27 Annual Operations Compliance Certification

The Contractor shall conduct the annual operations compliance certification and exercise the Operations End-to-End Validation Plan every twelfth (12<sup>th</sup>) month of Go-Live. Upon completion of the certification, the certification report and results shall be submitted to NJTA for review and Approval.

4289	The Contractor shall exercise the Operations End-to-End Validation Plan and submit the certification results.
4290	Once the annual evaluation is complete the Contractor shall provide an overview of the findings and submit a certification that includes, but is not limited to an attestation that: <ol style="list-style-type: none"><li>Operations are compliant with each Operations KPI;</li><li>each Operations and System and Maintenance Performance report accurately measures compliance with KPIs;</li><li>the System is operating in compliance with the Approved Business Rules;</li><li>reconciliation processes are accurate and complete;</li><li>each report supporting reconciliation processes is accurate and complete;</li><li>the Case management workflow is accurately and efficiently handling all Case activities, including existing activities, new activities and those that have been modified;</li><li>all Correspondence Items are produced upon Customer qualification and are accurate, and</li><li>all other processes and items documented in the Operations End-to-End Validation Plan are accurate.</li></ol>
4291	Submit a CAP for the discrepancies, defects and non-compliance items identified.
4292	The overview and certification from the annual evaluation shall be provided once every twelve (12) months after Go-Live.

## 11.28 Incident and Revenue Loss Reporting

The Contractor is responsible for investigating all reported or suspected incidents and determining the impact and extent of each issue. When corrective actions are required as a result of an issue, the Contractor shall implement the corrective actions, including any Customer outreach and/or issuance of any Customer credits. In addition, the Contractor is responsible for providing the Toll Agencies with funds to replace lost revenue resulting from issues caused by Contractor's failure to comply with Requirements and/or Contractor's negligence.

4293	The Contractor shall immediately triage all reported or suspected System or operational incidents and create a Case to track the investigation.
4294	<p>Incident investigation shall include, but is not limited to determining:</p> <ul style="list-style-type: none"><li>a. the extent of the issue;</li><li>b. the impact of the issue;</li><li>c. whether the issue is a Priority event as defined in Section 10.10, Maintenance Severities, Response and Repair Times;</li><li>d. record the issue in the PMMS to create a ticket, assign the severity, and categorize and rank the issue as Approved by NJTA.</li><li>e. the cause of the issue, and</li><li>f. immediate corrective actions needed in the form of a CAP.</li></ul>
4295	Work with NJTA to develop a communications protocol for incident and revenue loss reporting (e.g., communications procedures based on incident and priority level) <u>due to an operational incident</u> .
4296	Immediately notify NJTA of any incident or event where the inaccuracies in operational processes, for example mailing transponders to the incorrect address, impacting multiple Customers or security breach has occurred or potentially has occurred or could occur.
4297	Perform immediate actions to mitigate any incident resulting in revenue loss or inaccuracies in operational processes and to support a return to normal operations.
4298	In the event of a loss or potential loss of revenue or data, glitches impacting Customers or security breach, a final version of the RCA Report shall be provided to NJTA within five (5) Business Days of the operational incident.
4299	<p>The RCA Report shall provide details on any operational issue, including but not limited to:</p> <ul style="list-style-type: none"><li>a. identification of the issue and a detailed account of the incident;</li><li>b. cause of the issue;</li><li>c. duration;</li><li>d. resolution or planned resolution including timeline, and</li><li>e. a quantification of actual or potential lost revenue or data or security breach.</li></ul>
4300	Implement planned resolution upon Approval of the long-term correction action.
4301	Regular updates shall be provided until the operational issue has been fully resolved and closed including implementation of the CAP.

4302	The incident and its impacts shall also be further detailed in the subsequent monthly Contractor and System Performance Report Package.
4303	The Contractor shall be held responsible for all lost revenue and data and Customer impacts and credits, including remediation, in accordance with the Agreement.
4304	The Contractor shall be responsible for all costs incurred by other Categories of Services.

## 11.29 Operations Performance Requirements

The Contractor shall meet the Performance Requirements documented in Appendix T-1 Category A CSC Services Performance Requirements. The Operations Performance Requirements are tracked and reported to measure the ability of the Contractor to execute the key business processes and SOPs. As the Contractor performs the operations, the System shall capture performance metrics for Operations Performance Requirements that are included on the Operations Performance Requirement Scorecard as well as metrics for Operations Performance Requirements that are measured per incident. These metrics will be presented in a Operations KPI Dashboards that will provide real-time information on the Operations Performance. It will serve as a monitoring mechanism for the Contractor and shall be available to the Toll Agencies at all times.

### 11.29.1 System and Maintenance KPI Dashboard

4305	The Contractor shall monitor the Operations KPI Dashboard.
4306	Investigate Metrics that display as non-compliant on the Operations KPI Dashboard to identify and resolve issues as quickly as possible.
4307	Work with the Toll Agencies in developing and implementing a CAP.
4308	Enter comments pertaining to incidents of non-compliant metric appearing on the Operations KPI Dashboard.

### 11.29.2 Corrective Actions

The Contractor shall identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures in the future. This will be documented in a CAP.

4309	Identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures.
4310	Failure to meet an Operations Performance Requirement shall not relieve the Contractor of the Requirement to complete the activity associated with the Operations Performance Requirement. Any failure to meet an Operations Performance Requirement that requires the completion of a specific action(s), for example completing daily reconciliations, which is not completed in accordance with the Requirement, shall not relieve the Contractor of the responsibility to perform in accordance with the SOPs and the Requirements.

4311	If an Operations Performance Requirement involving completing work in certain period of time is missed, the work shall be completed in order, such that the oldest work is completed before starting any newer work. The Contractor shall not skip any prior work and process new work to avoid a subsequent Operations Performance Requirement adjustment.
4312	Develop a CAP for each failure to meet an Operations Performance Requirement identifying the root cause(s), the extent of the problem and providing a plan to rectify the current situation and prevent future occurrences. For example, if the Contractor fails to resolve Customer requests completely and accurately within the time required by the Operations Performance Requirement, the unresolved Customer requests shall be completely and accurately resolved and the Contractor must identify the root cause of the failure, the extent of the problem and provide a plan to prevent future occurrences.
4313	If System changes are required to correct the problem, they shall be documented in the CAP with tickets numbers, severity and Release date.
4314	Submit the CAP to NJTA for review and Approval.
4315	The CAP provided by the Contractor shall be in a format Approved by NJTA.

## 12 END OF AGREEMENT TRANSITION

### 12.1 End of Agreement Succession Plan

The Contractor acknowledges that the Services it provides under the terms of the Agreement are vital to the successful operation of the System and that said services shall be continued without interruption. Upon expiration or earlier termination of the Agreement in accordance with the terms and conditions thereof the Contractor shall fully cooperate with NJTA and the Toll Agencies to facilitate a smooth transition pursuant to the End of Agreement Succession Plan during any phase of the Services to NJTA or to NJTA's selected successor for the Services.

The End of Agreement Succession Plan is a deliverable that details the course of action to be taken by the Contractor for Succession at the end of the Agreement. The End of Agreement Succession Plan will cover three separate options as described in the Requirements. These options are mutually exclusive and only one will be executed by NJTA at the time notice of Succession is provided.

4316	Develop and deliver an initial End of Agreement Succession Plan as stated in the Scope of Services that details the following options for succession:
	a. Option 1: transition of the System maintenance and CSC operations to NJTA;
	b. Option 2: transition of System maintenance and CSC operations to a new contractor, or
	c. Option 3: transition to a new Contractor who will implement their own system and operations.

4317	<p>The End of Agreement Succession Plan review and Approval shall be a prerequisite to payment for the System Acceptance milestone. End of Agreement Succession Plan shall be updated and submitted to NJTA for Approval once a year on the anniversary date of Go-Live. Final updates to the End of Agreement Succession Plan shall be made within fourteen (14) Calendar Days of written notice of Succession and shall provide only for the Option identified in NJTA's notice of Succession.</p>
4318	<p>Submit a final End of Agreement Transition Plan which shall set forth in detail reasonably acceptable to NJTA, all Services necessary for the Contractor to perform in order to facilitate a smooth and orderly transition of the Services to NJTA (Option 1) or to new contractor (Option 2 or 3), in accordance with the Requirements.</p>
4319	<p>Detail, within the End of Agreement Succession Plan, the method for the orderly transfer of knowledge/Project history, data, assets, licensing, and business relationships from the Contractor to a Successor in the case of each option. Structure the End of Agreement Succession Plan to prevent any interruption to Services.</p>
4320	<p>Cover, within the End of Agreement Succession Plan, handoff procedures and details for areas for work, including the following, for Option 1, 2 and 3 (as applicable to the Option):</p> <ul style="list-style-type: none"> <li>a. physical assets controlled in any way by the Contractor and used in System Maintenance, Administration and Software Support, including a current list of assets, their owners, and their locations;</li> <li>b. required post office boxes and phone numbers;</li> <li>c. identification of the Succession Project Manager, staffing and organization, including retaining Key Personnel in order to meet required Operations Performance Requirements;</li> <li>d. leasing agreements, including a current list of leases (lessee, purpose, terms, dates, contact information);</li> <li>e. Third-party Service Provider contracts, including a current list of contracts (contracted entity, purpose, terms (termination clauses, available extensions, contact information, etc.));</li> <li>f. business relationships, including a current list of relationships (contact information, relationship description);</li> <li>g. System hardware and network maintenance procedures;</li> <li>h. System administration procedures, including access, training, and use of PMMS, System monitoring and administration procedures; PCI and PII adherence procedures; DevOps and development environments administration procedures;</li> <li>i. Software maintenance procedures, including knowledge of System design; use, location, and access credentials of System build tools; source code repositories; System Configuration settings; System logs; System test and diagnostic tools;</li> </ul>

	<p>j. Authorized User data and handling of access credentials.</p> <p>k. System data, including data dictionaries, database design documentation; use, location and access credentials of database-resident Configuration tables and audit logs, data backup and archive repositories and procedures;</p> <p>l. all other information or knowledge necessary for smooth Succession, and</p> <p>m. transfer of all updated System documentation to reflect the current operation. This shall include the plan for all Release notes and all other documents pertaining to any System changes, updates and upgrades.</p>
4321	Plan for disposition of all Software and Intellectual Property used on the Project, in accordance with the terms of the Agreement and the Requirements.

## 12.2 Succession Coordination and Support

4322	During the transition from the Contractor to either NJTA or new contractor, and upon NJTA's written notice of Succession, the Contractor shall provide Succession services for a period of up to one year, or until all Succession activities are completed, as defined in the End of Agreement Succession Plan and in accordance with the Requirements.
4323	<p>Provide the following Services regardless of which transition Option (1, 2 or 3) is selected by NJTA:</p> <p>a. develop a comprehensive schedule and include in the End of Agreement Succession Plan update, detailing all activities necessary to transition to a successor, including dates for transferring of responsibilities for each division of work and providing the Succession/transition Services specified. This schedule shall be updated to NJTA within fourteen (14) Calendar Days of the Contractor receiving notice of Succession;</p> <p>b. provide the Succession Project Manager identified in the latest End of Agreement Succession Plan within one (1) week of receiving such written notice of Succession. The Succession Project Manager shall be part of the Contractor's Project team, be familiar with the New Jersey E-ZPass Program and be available at all required times and shall serve as the single point of contact for all Succession related activities;</p> <p>c. update and submit the initial End of Agreement Succession plan, and</p> <p>d. provide all documentation and deliverables identified in the Approved End of Agreement Succession Plan, including Escrow deposits where applicable, and all other documentation useful to the continued operations and System Administration, Maintenance and Software Support in a commonly used electronic and editable form acceptable to NJTA.</p>
4324	The following Requirements apply only to Option 1 and Option 2 transition of the System maintenance and CSC operations to the Successor (NJTA for Option 1 and the new Contractor for Option 2):

	<ul style="list-style-type: none"><li>a. furnish, install, Configure and verify at a location specified by NJTA a complete, current, and fully functional System development environment comprised of all hardware, Software, network components, simulators, third-party tools and licenses necessary to view, edit or otherwise alter, update or otherwise upgrade, compile, debug and test all aspects of the System;</li><li>b. train NJTA (Option 1) or new contractor (Option 2) personnel and all Successor designees in the efficient and effective use of this System development environment;</li><li>c. assign all licenses to the Successor and transfer all data to the Successor necessary to use this System Software development environment in an effective and efficient manner;</li><li>d. train Successor personnel and all Successor designees in the use of the System's PMMS, preventive maintenance, troubleshooting, System Maintenance, Administration Software Support, and all other System responsibilities;</li><li>e. seamlessly transfer the cloud environments to the Successor, and</li><li>f. furnish the full spare parts inventory in good, working order. The inventory shall be inclusive of the greater of the initial spare parts inventory or the documented inventory used on the System over the twelve (12) month period prior to notice of Succession.</li></ul>
4325	Work cooperatively with NJTA and NJTA's designees to accurately migrate all the System's data to the System's future replacement (Option 3).
4326	Provide sufficiently experienced personnel in each division of work during the entire Succession period to ensure the quality of services is maintained at the levels required by this Agreement.
4327	Allow the Successor to conduct on-site interviews with the employees outside of normal Business Hours in a manner that will not disrupt current operations.
4328	For Option 1 and 2, provide the necessary software and systems support services to assist the Successor in setting up the systems, transferring of appropriate licenses and third-party software and Services and transitioning all New Jersey E-ZPass CSC data required to sustain uninterrupted service.
4329	For Option 1 and 2, ensure that escrowed Software is current and operational and is available to the Successor in accordance with the terms of the Agreement, including Software license and Escrow Agreement.
4330	Provide for the orderly transition of the facilities, equipment, materials, documents, inventory, and work in progress to the Successor.

**Attachment 2:**  
**Category B – License Plate Review Services**  
**Scope of Services**



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## NEW JERSEY E-ZPASS SERVICES RFP

### ATTACHMENT 2: CATEGORY B – LICENSE PLATE REVIEW SERVICES SCOPE OF SERVICES

November 2023

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## 1 INTRODUCTION

The New Jersey Turnpike Authority (“NJTA”) operates and maintains the New Jersey Turnpike (“NJTP”) and Garden State Parkway (“GSP”). The New Jersey E-ZPass Group includes NJTA (lead Toll Agency), South Jersey Transportation Authority (“SJTA”), the Delaware River Port Authority (“DRPA”), the Delaware River and Bay Authority (“DRBA”), Delaware River Joint Toll Bridge Commission (“DRJTBC”), Burlington County Bridge Commission (“BCBC”), and Cape May County Bridge Commission (“CMCBC”). Each participating Toll Agency operates and maintains its independent toll collection system(s) and Toll Agency Host systems that interface with the New Jersey E-ZPass System. The Toll Agencies use the New Jersey E-ZPass System to collect payments from customers using their Toll Facilities. NJTA, as lead Toll Agency, holds and manages the current contract with the existing New Jersey E-ZPass Services Contractor to perform back-office and customer service support for the New Jersey E-ZPass Program and will continue under this procurement.

### 1.1 New Jersey E-ZPass Toll Agencies

The following provides a brief description of the participating Toll Agencies and their Toll Facilities.

#### 1.1.1 New Jersey Turnpike Authority

NJTA operates and maintains toll plazas on the New Jersey Turnpike (NJTP) and the Garden State Parkway (GSP). The NJTP is a closed tolling system where vehicles are detected at entry and exit, and a vehicle trip is created. Tolls are charged for the distance traveled and are assessed when the vehicle exits the NJTP. Plazas 6A, 17 and 19w are barrier plazas and tolls are charged at the plazas. NJTP accepts cash (for tickets) and E-ZPass methods of payment. In a manual cash lane, motorists can request an insufficient fund slip and make a payment later. NJTP has five (5) plazas with open road tolling (ORT) lanes. GSP is a barrier system, and a toll is charged at each toll plaza. Both cash (automatic coin machine (ACM) and manual) and E-ZPass are accepted methods of payment. In a manual cash lane, motorists can request an insufficient fund slip and make a payment later. GSP has seven (7) toll plazas with ORT lanes. NJTA may move to All Electronic Tolling (AET), eliminating cash payments on all Toll Facilities on GSP, and possibly moving to AET or continuing to collect cash on the NJTP, over the Contract Term.

#### 1.1.2 South Jersey Transportation Authority

The SJTA operates and maintains the toll plazas on the Atlantic City Expressway (ACE) and parking facilities at the Atlantic City International Airport and other locations in Atlantic City where E-ZPass Plus is accepted as a form of payment for parking. ACE is a barrier system and tolls are charged at each toll plaza and both cash and E-ZPass are accepted methods of payment. SJTA will move to AET in a phased deployment before Phase 1 Go-Live, eliminating cash payments on the ACE.

#### 1.1.3 Delaware River Port Authority

The DRPA is a regional transportation agency serving Southeastern Pennsylvania and Southern New Jersey. DRPA operates and maintains the Benjamin Franklin; Walt Whitman; Commodore Barry, and Betsy Ross bridges. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment. All four bridges are part of the E-ZPass network.

#### **1.1.4 Delaware River and Bay Authority**

The DRBA owns and operates the Delaware Memorial Bridge that connects New Jersey to Delaware as well as other transit related facilities. A toll is charged for traveling across the bridge from New Jersey to Delaware and both cash and E-ZPass are accepted methods of payment. The bridge is part of the E-ZPass network.

#### **1.1.5 Delaware River Joint Toll Bridge Commission**

The DRJTBC owns and operates twenty (20) bridges, eight (8) of which are tolled. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment at all but Scudder Falls Bridge, which is AET. The Commission plans to transition to All Electronic Tolling (AET), eliminating cash payments on its Toll Facilities from 2024-2025.

#### **1.1.6 Burlington County Bridge Commission**

The BCBC maintains and operates two (2) major bridges, the Tacony-Palmyra Bridge and Burlington-Bristol Bridge, as well as six (6) small bridges. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment. BCBC is part of the New Jersey E-ZPass System through an agreement with DRPA.

#### **1.1.7 Cape May County Bridge Commission**

CMCBC is responsible for five (5) toll bridges on Ocean Drive from Cape May to Ocean City within the county. The Grassy Sound and Corsons Inlet bridges have tolls in the northbound direction, while the Middle Thorofare, Townsends Inlet, and Ocean City-Longport bridges have southbound tolls. Both cash and E-ZPass are accepted at the bridges. CMCBC will move to AET in a phased deployment before Phase 1 Go-Live, eliminating cash payments on the CMCBC's Toll Facilities.

#### **1.1.8 Facility Overview**

The following provides a summary of the Toll Facilities described in the previous section.

**Table 1-1: Overview of Toll Facilities – Current Operations**

Toll Agency	Facility	Facility Type	Payment Accepted
New Jersey Turnpike Authority	Garden State Parkway	Toll Road	Cash and E-ZPass <sup>1</sup>
	New Jersey Turnpike	Toll Road	Cash and E-ZPass <sup>1</sup>
South Jersey Transportation Authority	Atlantic City Expressway	Toll Road	Cash and E-ZPass <sup>2</sup>
	Atlantic City International Airport and other parking locations	Parking	Cash and E-ZPass
Delaware River Port Authority	Benjamin Franklin Bridge	Bridge	Cash and E-ZPass
	Walt Whitman Bridge	Bridge	Cash and E-ZPass
	Commodore Barry Bridge	Bridge	Cash and E-ZPass
	Betsy Ross Bridge	Bridge	Cash and E-ZPass

Toll Agency	Facility	Facility Type	Payment Accepted
Delaware River and Bay Authority	Delaware Memorial Bridge	Bridge	Cash and E-ZPass
Delaware River Joint Toll Bridge Commission	Delaware Water Gap (I-80)	Bridge	Cash and E-ZPass <sup>3</sup>
	Easton-Phillipsburg (Route 22) Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	I-78 Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Milford-Montague Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	New Hope-Lambertville Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Portland-Columbia Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Trenton-Morrisville (Route 1) Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
Burlington County Bridge Commission	Scudder Falls Bridge	Bridge	E-ZPass and TOLL-BY-PLATE
	Burlington-Bristol Bridge	Bridge	Cash/Credit Card and E-ZPass
Cape May County Bridge Commission	Tacony-Palmyra Bridge	Bridge	Cash/Credit Card and E-ZPass
	Grassy Sound Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Corsons Inlet Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Middle Thorofare Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Townsend's Inlet Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Ocean City-Longport Bridge	Bridge	Cash and E-ZPass <sup>2</sup>

<sup>1</sup>May convert to AET over the Contract Term<sup>2</sup>Will convert to AET before Phase 1 Go-Live<sup>3</sup>Will transition to AET in 2024-2025

## 1.2 Customer Service Center

Currently, the main New Jersey E-ZPass CSC is located in Newark, NJ, and includes a Walk-in Center (WIC). A second WIC is located in Camden, NJ. DRBA also operates a WIC at its facility in New Castle, DE.

## 1.3 Current New Jersey E-Z Pass System Statistics

Table 1-2 provides the transaction volume breakdown by Toll Agency. Additional statistics on the New Jersey E-ZPass operations are provided in Appendix A New Jersey E-ZPass Program Volumes.

**Table 1-2: Transaction Statistics**

Toll Agency	Current Average Monthly IBT and GCMM Trip Volumes (Maximum)		Potential Volumes with AET	
	Image-Based Transactions (IBT)	Gross Class Mismatch (GCMM)	Image-Based Transactions	Gross Class Mismatch
NJTP	1,000,000	500,000	4,200,000	1,300,000
GSP	1,100,000	n/a	5,800,000	400,000
SJTA <sup>1</sup>	250,000	n/a	1,000,000	n/a
DRPA	125,000	n/a	150,000	n/a
DRJTBC (AET)	99,000	n/a	150,000	n/a
DRJTBC (non-AET)	323,000	n/a	0	n/a
DRBA	50,000	n/a	60,000	n/a
BCBC	25,000	n/a	30,000	n/a
CMCBC	2,000	n/a	2,000	n/a
<b>Total</b>	<b>2,974,000</b>	500,000	<b>11,392,000</b>	<b>1,700,000</b>

<sup>1</sup>Volumes may vary with the implementation of trip building

## 1.4 Future Plans

NJTA has discussed plans to potentially move towards AET on the New Jersey Turnpike and GSP. If implemented, the conversion would occur in phases which would overlap the Term of the Agreement As such, the Contractor may need to support the transition of NJTA Toll Facilities to AET at varying Phases of the Contract Term. Additionally. DRJTBC plans to establish three (3) WICs in Pennsylvania that will be operated by the Commission to service New Jersey E-ZPass customers and SJTA plans to establish a WIC at Farley. In addition, some Toll Agencies may perform manual image review. If the estimated images manually reviewed by the Contractor reduces by ten percent (10%) consistently over six (6) months, then price adjustments will be evaluated.

## 1.5 Project Overview

NJTA's contract with the Existing New Jersey E-ZPass Services Contractor for the New Jersey E-ZPass System and New Jersey E-ZPass System Support and Operations expires on October 16, 2025. At its sole discretion, the Authority can extend the contract for an additional two (2) one (1) year extensions. Through this RFP, NJTA is procuring the contractors to provide, implement, and maintain an integrated New Jersey E-ZPass System, and operate New Jersey E-ZPass customer service facilities and provide associated CSC

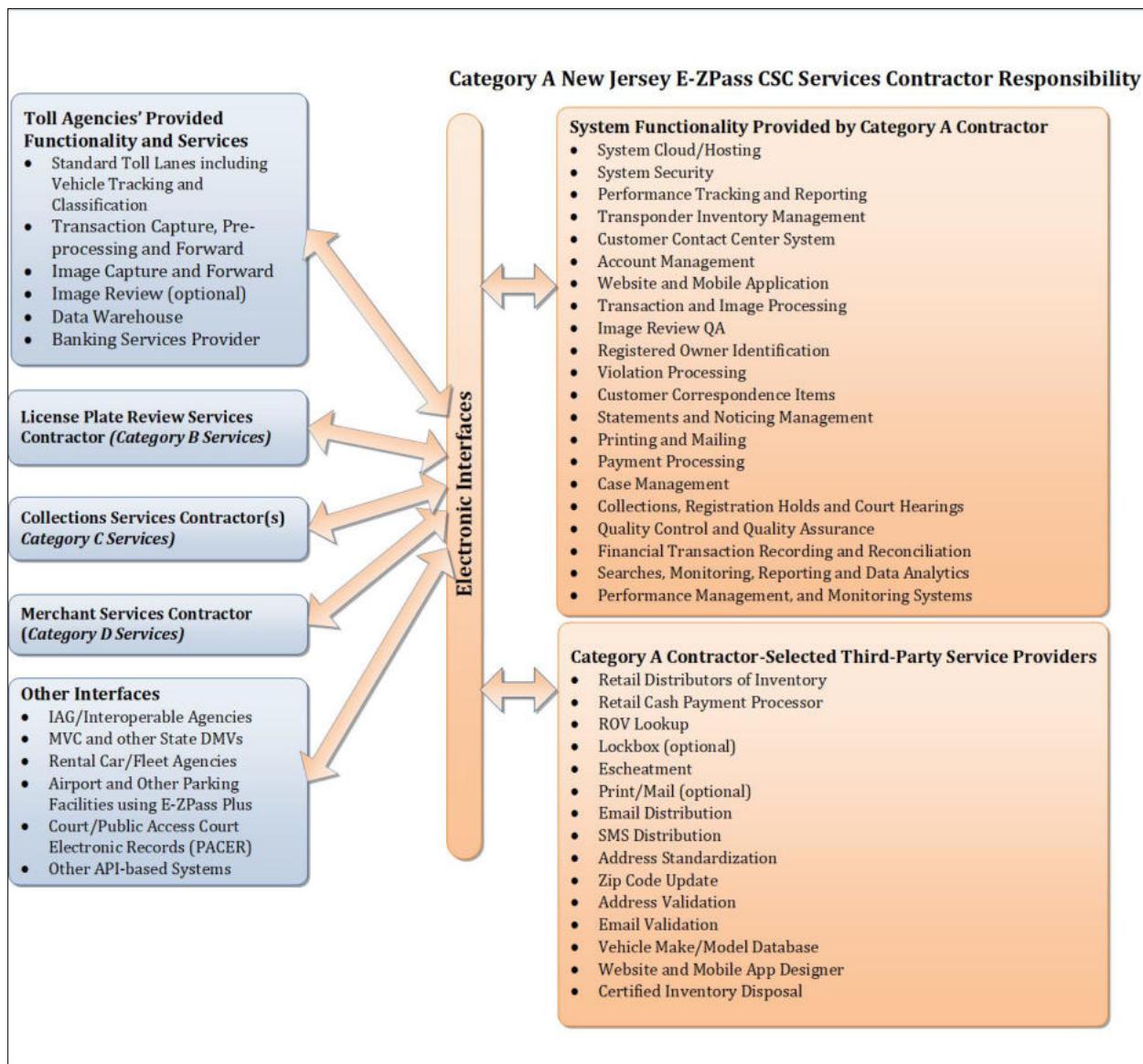
services, namely, License Plate Review Services, Collections Services and Merchant Services (collectively, the “New Jersey E-ZPass Services”).

NJTA is seeking best-in-class solutions for the New Jersey E-ZPass Program that provides customers optimized self-service options, streamlines operations, supports technology growth, has Configurable and flexible application program interfaces (APIs) for third-party interfaces and improves revenue collection. The Requirements included in this Scope of Services are to provide a framework for the solutions while providing customers and Toll Agencies features they currently have and new features which will enhance the program, over the Term of the Agreement. NJTA encourages innovation as well as the use of industry available tools within the proposed solutions.

The New Jersey E-ZPass Program services will be split into four (4) Categories of Services, as described below:

- **Category A** – Customer Service Center services (“CSC Services”): provide, implement, maintain and operate (1) a System containing all required functionality to support the provision of customer service and the processing/payment of tolls for the New Jersey EZ-Pass Group, which shall include best-in-class Customer Contact Center System, customer self-service tools, system architecture and environments, redundancy, reporting and Data Warehouse capabilities, interfaces, interoperability and security; and (2) customer contact facilities and services, including labor, for effective and efficient ongoing customer contact, customer service, payment processing, financial and operational reconciliation, and other services further described in the detailed Requirements. In addition, CSC Services include System Maintenance, Administration, Software Support Services, and CSC Operations Services required to meet System and Operations Performance Requirements, and to keep the System current, up-to-date, and continuously improved. The Successful Proposer for Category A Services will be referred to herein as the CSC Services Contractor.
- **Category B** – License Plate Review Services: provide image review services, including automated image processing and manual image review services, for Image-Based Transactions and perform Gross Class Mismatch reviews. The Successful Proposer for Category B Services will be referred to herein as the Contractor.
- **Category C** – Collections Services: provide debt collection services, including skip tracing, for collection of outstanding tolls and fees. The Authority plans to procure the services of two contractors for the Collection Services. The Successful Proposers for Category C Services will be referred to herein as the Collections Services Contractor(s).
- **Category D** – Merchant Services: provide a Payment Orchestration Platform (POP) that integrates with the New Jersey E-ZPass System and provides payment gateway for CSC Customers, allowing for multiple payment service providers, including credit card and automated clearinghouse (ACH), payment processing. Provide Tokenization and hosted third-party storage for all payment processing. The Successful Proposer for Category D Services will be referred to herein as the Merchant Services Contractor.

The E-ZPass Program will be supported by and will require the coordination with a variety of entities, including the Toll Agencies, IAG/Interoperable Agencies, Third-party Entities, Third-party Service Providers, Subcontractors, Toll Agency Host and Image Capture System contractors and other contractors. The following diagram provides a high-level overview of the responsibilities between these entities and serves as an example of functional responsibilities between the different Categories of Services.



**Figure 1-1: New Jersey E-ZPass CSC Functional Responsibilities Diagram**

## 1.6 Category B License Plate Review Services

This Scope of Services describes the Requirements for Category B – License Plate Review Services. The selected License Plate Review Service Provider (the “Contractor”) shall implement a new LPR System and provide LPR Operations Services for the New Jersey E-ZPass Program. LPR Services include automated

image review (AIR) and manual image review (MIR) for Toll Agencies Configured to require such services, as well as review of Gross Class Mismatch trips for Toll Agencies Configured to require Gross Class Mismatch review. The Contractor will provide design, implementation, testing, training, and all Services necessary to interface with the New Jersey E-ZPass System and transition to the new LPR Services. Beyond transition, the Contractor will provide ongoing LPR System operations, maintenance, and software support services.

## 1.7 Requirements of Scope of Services

The Requirements in this Scope of Services are being specified on a functional level. It is the intent of these Requirements to permit the Contractor the flexibility in the design and development of the LPR System and associated LPR Operations Services to reflect innovation and incorporate the latest technology and services that are fully capable of meeting the performance, operational, and contractual Requirements.

The Contractor shall be responsible for furnishing and mobilizing all required equipment, facilities, and resources to meet the Contract Requirements. This includes, but is not limited, to mobilization, demobilization, and all permits, licenses, fees, insurance, and bonds; coordination and cooperation with third-parties, the CSC Services Contractor, and Toll Agencies; development and production of plans, documentation, and manuals; schedules; training; testing; and safety, quality control (QC), and quality assurance (QA).

In accordance with the plans cited in Section 1.4 Future Plans of this Scope of Services, NJTA has selected TransCore as the toll system integrator for the AET program. As an optional service under the AET contract, TransCore is required to provide LPR System and LPR Operations Services. NJTA could transition to AET any time during the Contract Term. Should NJTA not exercise these optional Services, the Contractor shall also be responsible furnishing and mobilizing additional equipment, facilities, and resources, and for coordination and interface with the TransCore Host and Image Capture Systems Contractor necessary to meet those additional Requirements.

## 2 PROJECT MANAGEMENT REQUIREMENTS

The Contractor shall employ a project management system that is sufficiently detailed to enable NJTA to review and ascertain that the Contractor has the necessary management, staff, and controls in place to meet the Requirements.

The Project is divided into two phases: The Implementation Phase (from Notice to Proceed until LPR System Acceptance) and the Operations and Maintenance Phase (after Go-Live through the end of the Agreement).

1	Provide all management, project controls, supervisory and operations staff, including qualified management, professional, technical, and administrative personnel, to professionally design, implement, maintain, and operate the LPR System and provide LPR Operations Services in a manner that meets all required performance criteria.
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2	Provide the resources, organizational structure and staffing required to meet these Requirements for each phase of the Project including Subcontractors and Third-party Service Providers. Subcontractors and Third-party Service Providers shall be active participants in all coordination and technical meetings, and NJTA shall have full access to the Contractor's staff, Subcontractors and Third-party Service Providers.
3	Identify the tools and products used to manage the Project including project controls, software development and delivery lifecycle and the internal controls instituted by the Contractor to guarantee successful delivery of the Project.

## 2.1 Security and Confidentiality

The Contractor shall comply with all federal, state and NJTA security standards. The Contractor shall maintain compliance with these standards as they evolve over the Term of the Agreement. In any circumstance of conflict between requirements, standards or statutes, the Contractor shall adhere to the most stringent requirement.

4	The Services performed under the Agreement are considered highly confidential and the Contractor personnel shall at all times comply with Personally Identifiable Information (PII) Requirements.
5	Comply with the most current version of all state and federal security standards and guidelines including California Consumer Privacy Act, where applicable.
6	<p>The Contractor's approach and compliance to System and user security shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>a. cloud infrastructure and/or hosting data centers meet the Federal Risk and Authorization Management Program (FedRAMP) standards;</li> <li>b. compliance with the New Jersey Statewide Information Security Manual published by New Jersey Office of Information Technology and the New Jersey Office of Homeland Security, which is provided as Attachment 5 to the RFP. The most recent copy of which can be found at <a href="https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf">https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf</a>;</li> <li>c. compliance with PCI DSS Security Standards as applicable;</li> <li>d. compliance with the FIPS, including FIPS 199 (Standards for Security Categorization of Federal Information and Information Systems) and FIPS 200 (Minimum Security Requirements for Federal Information and Information Systems);</li> <li>e. protecting the confidentiality of PII in accordance with the recommendations in publication 800-122 from the NIST, and</li> <li>f. conformance to applicable best practices for information security management as described by the International ISO/IEC 27000-series standards.</li> </ul>

7	Comply with the security standards required in the New Jersey Statewide Information Security Manual.
8	If the LPR System employs cloud computing, the Contractor shall ensure information assets are secure and that security and privacy are maintained using de facto best practices aligned with FIPS as well as NIST Publications. Those best practices include, but not limited to: <ul style="list-style-type: none"> <li>a. NIST 800-144: Guidelines on Security and Privacy in Public Cloud Computing;</li> <li>b. NIST Special Publication 800-146: Cloud Computing Synopsis and Recommendations; and</li> <li>c. Cloud Security Alliance: Cloud Controls Matrix Version 3.0 (CCMv3).</li> </ul>
9	Provide for secure communications with the New Jersey E-ZPass CSC, Toll Agency Host and Image Capture Systems, and all external interfaces, for example, https or similar.
10	Make the necessary Software changes required to ensure compatibility with the evolving technologies and the latest Software vendor and best practices for security and protection of PII.
11	Design the LPR System to anticipate that during the Implementation and Operations and Maintenance Phases, the LPR System will become subject to more restrictive digital privacy laws and regulations (for example, similar to European Union General Data Protection Regulation and California privacy laws). During design within the Implementation Phase, the Contractor shall provide documentation (within applicable deliverables) and demonstrate (during testing) the LPR System's preparedness to anticipate more restrictive privacy Requirements including the capability to purge specific but not all PII information, specific file types related to PII specific triggering events, and transactional field-level data while retaining other information within the data record.
12	System shall be designed to support future privacy regulations that restricts access to PII data.
13	All employees of the Contractor shall not discuss their Services with unauthorized personnel, or any individuals not directly associated with the New Jersey E-ZPass Program.
14	Obtain Approval by NJTA prior to any discussion of Services with the media, in oral presentations, in written publications, or in any other form, not related to this Agreement.
15	Retain all information regarding the Contractor's activities pursuant to this Agreement confidential and communicate such information only with authorized Toll Agency personnel or designated representatives.

## 2.2 Project Management Plan

The Contractor shall develop and employ a Project Management Plan (PMP) that is sufficiently detailed to enable NJTA to review and confirm that the Contractor has the necessary management, staff, and controls in place to meet the Requirements of this Scope of Services.

16	Develop and submit the PMP to NJTA within forty-five (45) Business Days of Notice to Proceed (NTP) for review and Approval.
17	<p>The PMP shall, at a minimum, include the following elements:</p> <ul style="list-style-type: none"><li>a. Project scope and key deliverables;</li><li>b. staffing plan that includes an organization chart for all Project staffing during the Implementation Phase and a separate chart for the Operations and Maintenance Phase, including location and level of commitment of all resources;</li><li>c. Project team (Contractor staff, the Toll Agencies and NJTA representatives, and the CSC Services Contractor) contact information;</li><li>d. a description of the Project planning, documentation and reporting methods to be utilized, both for use within the Contractor's staff and externally to NJTA, Toll Agencies, and other entities;</li><li>e. approach to risk identification, issue management, escalation, and resolution of Project issues with the Authority;</li><li>f. schedules for meetings with Toll Agencies and other entities;</li><li>g. resourcing needs, including estimated staff time, for Toll Agency staff for administrative and technical coordination;</li><li>h. baseline Project Implementation Schedule;</li><li>i. a description of the process and template used for reporting, updating, and tracking the Project Implementation Schedule and Project performance;</li><li>j. approach to software delivery, consistent with the Requirements, including a description of the process for managing and tracking the design and development process, schedule management, software development, LPR System Configuration, testing, integration, and delivery;</li><li>k. approach to change management, consistent with the Requirements, including a description of the process for documenting and submitting change requests, the Approval process, and how the change management approach will be integrated into day-to-day Project management in accordance with the Agreement;</li><li>l. approach to document control, including utilizing a Contractor-provided Electronic Document Management System (EDMS) that is accessible to the Project team by username and password;</li><li>m. overall approach to testing, including a brief description of how each test will be performed;</li><li>n. approach to Quality Control and Quality Assurance, including an overview of the Audit process;</li></ul>

	<ul style="list-style-type: none"> <li>o. approach to operational readiness, including a transition and Cut-Over checklist;</li> <li>p. a section with all Approved Project forms and document templates, including but not limited to meeting agenda, meeting notes, action items tracking log, and monthly progress report for both Implementation and Operations and Maintenance Phase;</li> <li>q. a description of the invoice submission process and format that meets the Agreement requirements, including invoice backup information, verification, and Approval process, and</li> <li>r. an emergency contact list as described further below.</li> </ul>
18	Multiple draft versions of the PMP shall be submitted that reflect the updates made to address NJTA comments. A Final PMP shall be submitted with all previously received comments addressed and closed to the satisfaction of NJTA.

## 2.3 Project Implementation Schedule

19	<p>Develop a detailed Project Implementation Schedule in Microsoft Project format (Office 365 or above) for the LPR System and LPR Operations Services Implementation that lists all tasks related to the design, development, Configuration, testing, installation, transition, and deployment of the LPR System and LPR Operations Services, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. staffing;</li> <li>b. key intersection points/dependencies with the CSC Services Contractor;</li> <li>c. key intersection points/dependencies with the Toll Agencies;</li> <li>d. key intersection points/dependencies with Third-party Service Providers and external interfaces, including type of resource required;</li> <li>e. software development process, including workshops, submission of use cases, user stories and other required meeting materials, internal testing, demonstrations, integration, and delivery of each LPR System module;</li> <li>f. internal and formal testing tasks and activities, including delivery of test plans, test cases, test procedures; conducting testing; and delivery of test results;</li> <li>g. document development and delivery, including multiple draft document deliveries, comment period, comment resolution meetings, delivery of the Final Document for Approval and Approval of the document by NJTA;</li> <li>h. fit-out/installation (including communications infrastructure installation and Configuration) of the LPR System;</li> <li>i. training;</li> <li>j. transition;</li> </ul>
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	<p>k. LPR System and operational Cut-Over, and</p> <p>l. all ongoing Project activities throughout the Implementation Phase, such as scheduled meetings and their frequency/periodicity.</p>
20	The Project Implementation Schedule shall identify all critical path tasks and shall be used to manage the Project.
21	The Project Implementation Schedule shall be resource loaded, shall include all draft document submissions and review cycles, and shall include all tasks required of the Toll Agencies.
22	The Project Implementation Schedule shall be baselined upon Approval and the Contractor is required to update the Project Implementation Schedule on a monthly basis showing percent complete.
23	This Project Implementation Schedule shall form the basis for all subsequent schedules and updates throughout the duration of the Project.
24	All changes to the baseline Project Implementation Schedule must be Approved by NJTA.
25	All changes to Approved milestones shall be coordinated with the CSC Services Contractor and shall be submitted to NJTA in writing for Approval.

## 2.4 Monthly Progress Report

26	<p>The format of the Implementation Phase monthly progress report shall be agreed upon as one of the initial Project tasks upon NTP and shall be incorporated by the Contractor into the PMP. The report shall contain the following elements:</p> <ul style="list-style-type: none"> <li>a. a summary, outlining progress, status, and percentage completion for each task, as compared to planned activities in the Project Implementation Schedule. Comments shall be included where appropriate. The summary also shall identify key milestones met and missed in the period;</li> <li>b. an analysis of all critical path tasks, potential risks associated with the tasks and proposed contingency/workaround plans to avoid or mitigate delays to the Project;</li> <li>c. a discussion of schedule compliance and an updated progress schedule showing status against the Approved Project Implementation Schedule. Past due tasks shall be updated to show impact on the overall schedule, and actual dates shall be recorded for completed tasks. Any proposed changes from the Approved Project Implementation Schedule should also be identified and discussed;</li> <li>d. an updated action items list that tracks the status of all outstanding activities and issues that need decision/resolution;</li> <li>e. an Approved payment request/invoice for completed and Approved milestones in accordance with the Agreement (payment requests will only be considered as a part of the monthly report package); and</li> </ul>
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	f. the previous monthly final meeting minutes for Approval.
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## 2.5 Project Coordination and Meetings

### 2.5.1 Cooperation and Coordination

The Contractor shall work closely with NJTA in the management and operation of the LPR System and services and associated facilities. The Contractor will also be responsible for coordinating with other relevant entities in order to meet the Requirements.

27	<p>Cooperate to the fullest extent with external parties, as Approved by NJTA, to support any activity related to the New Jersey E-ZPass Program, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Toll Agency staff and representatives;</li> <li>b. CSC Services Contractor staff, and</li> <li>c. Toll Agencies' Host and Image Capture System contractors.</li> </ul>
28	Attend any workshops, comment reviews and New Jersey E-ZPass System design meetings as requested by the CSC Services Contractor in-person. Remote participation is only allowed by express written permission of NJTA.
29	Attend any workshops, comment reviews and New Jersey E-ZPass System design meetings as requested by the Toll Agencies' Host and Image Capture System contractors.
30	Participate in regular meetings with the CSC Services Contractor and Toll Agencies in-person to ensure the LPR System Project Implementation Schedule is aligned with the New Jersey E-ZPass System Project Implementation Schedule, including but not limited to testing and Go-Live activities. No meetings shall be held without NJTA's participation unless written Approval is granted by the CIO. Remote participation is only allowed by express written permission of NJTA.

### 2.5.2 Implementation Phase Reporting and Meetings

31	<p>Set-up, facilitate, and attend meetings in-person, unless remote participation is allowed by express written permission of NJTA, to perform the Services and meet these Requirements, during the Implementation Phase, to include, at a minimum:</p> <ul style="list-style-type: none"> <li>a. Requirements gathering workshop(s), as needed;</li> <li>b. LPR System design review, as needed;</li> <li>c. interface design and testing for the interface between the New Jersey E-ZPass System and the LPR System, as needed but no less than bi-weekly during the Implementation Phase, and</li> <li>d. Project status and progress meeting, at least weekly.</li> </ul>
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32	<p>Perform the following tasks related to all Contractor led meetings, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. identify and notify other attendees as applicable;</li> <li>b. distribute notices of Project meetings in accordance with document control Requirements;</li> <li>c. prepare the agenda and meeting materials in coordination with NJTA and distribute at least two (2) Business Days prior to the meeting;</li> <li>d. host the meeting with all required staff in attendance;</li> <li>e. prepare minutes of the meeting and forward them to NJTA within five (5) Business Days after the day of the meeting, and</li> <li>f. maintain an action items list for each type of meeting, identifying issues that need to be resolved at the project level and reported on in subsequent meetings.</li> </ul>
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### **2.5.3 Operational Management Reporting and Meetings**

The Contractor is responsible for the management of and regular reporting on operations of the LPR System and LPR Operations Services. The Contractor's management personnel shall maintain a close liaison with and provide rapid response to NJTA for all day-to-day License Plate Review Services operational matters including administration, quality control, and performance. The Contractor will participate in monthly Active Management Meetings conducted by NJTA and will conduct monthly Performance Review Meetings to present and discuss operations and maintenance activities and performance.

#### **2.5.3.1 Monthly Active Management Meeting**

The Contractor shall participate in the monthly Active Management Meetings led by NJTA.

33	Attend and participate in monthly, in person, Active Management Meetings with the CSC Services Contractor and NJTA at a location Approved by NJTA. Remote participation is only allowed by express written permission of NJTA.
34	At a minimum, the License Plate Review Operations Manager and the Operations Quality Assurance Manager shall attend these meetings.
35	<p>During the monthly Active Management Meeting, the Contractor shall review LPR Operations Services and associated LPR System updates, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. operational statistics (number of transactions transmitted, number of transactions received, number of images accepted, number of images rejected, quantity by reject reason and category, automation rates, accuracy of AIR and MIR, vehicle classification corrections) for the previous reporting period compared to historical trends;</li> <li>b. staffing statistics for the previous period compared to historical trends;</li> </ul>

	<ul style="list-style-type: none"> <li>c. operational performance (images not meeting LPR Performance Requirements, accuracy, review timeline, image reject rates) during the previous reporting period compared to historical trends;</li> <li>d. any issues encountered with the LPR System or operations during the reporting period and report on resolution status;</li> <li>e. status of any new or ongoing projects or initiatives, and</li> <li>f. status of action items, including item description, responsible party, due date, and status.</li> </ul>
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### 2.5.3.2 Monthly Performance Review Meetings

36	Conduct monthly Performance Review Meetings beginning at Go-Live and continuing through the Term of the Agreement and present the Contractor's monthly Performance Report Package to NJTA.
37	Conduct monthly, in person, Performance Review Meetings with NJTA at a location Approved by NJTA. Remote participation is only allowed by express written permission of NJTA.
38	<p>For the monthly Performance Review Meetings, perform the following tasks:</p> <ul style="list-style-type: none"> <li>a. develop and coordinate the meeting schedule;</li> <li>b. distribute notices of meetings in accordance with document control Requirements;</li> <li>c. prepare the agenda and meeting materials in coordination with NJTA and distribute at least two (2) Business Days prior to the meeting;</li> <li>d. host the meeting with all required staff in attendance;</li> <li>e. prepare draft minutes of the meeting and forward them to NJTA within five (5) Business Days after the day of the meeting, and</li> <li>f. maintain an action items list for each type of meeting identifying issues that need to be resolved at the project level and reported on in subsequent meetings.</li> </ul>
39	At a minimum, the License Plate Review Operations Manager and the Operations Quality Assurance Manager shall attend the monthly Performance Review Meetings.
40	<p>During the monthly Performance Review Meeting, the Contractor shall review operational statistics and performance for the previous period compared to historical trends, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. number of transactions transmitted and received;</li> <li>b. number of images accepted;</li> <li>c. number of images rejected by reason code and category;</li> <li>d. automation rates;</li> </ul>

	<ul style="list-style-type: none"> <li>e. number of vehicle classification corrections;</li> <li>f. adherence to review timelines, and</li> <li>g. image review accuracy (AIR and MIR).</li> </ul>
41	<p>During the monthly Performance Review Meeting, the Contractor shall review the contents of the monthly Performance Report Package, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. detailed comparison of the Contractor's performance, based on results from LPR System generated reports, against the LPR Services Performance Requirements in a tabular and graphical form;</li> <li>b. trend analysis and summary of the LPR System generated reports and data for the past twelve (12) months and previous calendar year;</li> <li>c. details regarding any failure to meet the performance criteria within the monthly Performance Report Package including the Contractor's corrective action plan (CAP) to correct such occurrences;</li> <li>d. details of any exception that is to be excluded from the calculations with supporting documentation, and</li> <li>e. a summary of any liquidated damages or monthly fee adjustments for such failure to meet the LPR Services Performance Requirements</li> </ul>

### 2.5.3.3 Other Meetings

42	<p>Upon the request of NJTA, participate in the following meetings led by the CSC Services Contractor in-person, unless remote participation is allowed by express written permission of NJTA:</p> <ul style="list-style-type: none"> <li>a. Change Control Board meetings, occurring no less than monthly, and</li> <li>b. Software Release validation, operational status, and continuous improvements discussions, occurring weekly.</li> </ul>
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## 2.6 Staffing and Key Personnel

### 2.6.1 Key Personnel

43	Maintain and assign a sufficient number of competent and qualified professionals and other technical personnel to meet the Requirements.
44	As a part of its PMP, the Contractor shall provide NJTA with an organization chart that identifies the employees dedicated to this Project (the "Key Personnel") under this Agreement. Key Personnel for this Project shall include, at a minimum, those defined in Table 2-1.

45	All Key Personnel shall be subject to the Secure Workers Access Consortium (SWAC) <a href="http://secureworker.com/default.asp">http://secureworker.com/default.asp</a> screening and membership process. All Key Personnel shall complete the SWAC screening process and receive the appropriate tier of membership ID.
46	Provide a Business Analyst for Image Review to coordinate and support the CSC Services Contractor in the design and implementation of the license plate identification process and in ongoing Operations and Maintenance Services.
47	When required, Key Personnel shall be on-site at NJTA offices located at 1 Turnpike Plaza, Woodbridge, New Jersey.
48	NJTA can request/demand replacement of Key Personnel and such personnel shall be replaced within thirty (30) days of the request.
49	Proposals for the replacement of Key Personnel by the Contractor shall be planned and submitted to NJTA for review and concurrence prior to replacement of the individual.
50	The Contractor is responsible for ensuring a seamless and successful transition of the Key Personnel.
51	Every year on the anniversary date of Go-Live, the Contractor and NJTA shall walk through Key Personnel, their goals and objectives for the New Jersey E-ZPass Program, and institute necessary changes to their roles to better serve the Program.

**Table 2-1: Key Personnel**

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Project Principal</b> – responsible for the oversight of the Project Manager and a point of contact for any escalated Project issues that cannot be resolved by the Project Manager. Required to meet with NJTA executives upon request.</p> <p>Should meet or exceed the following:</p> <ul style="list-style-type: none"> <li>• Full-time employee of the Contractor or its parent company for at least two (2) years at the time of Proposal submission</li> <li>• Five (5) years of senior management responsibility</li> <li>• Client management responsibility for at least one (1) project of \$5 million or more in value</li> </ul>	X		As requested by NJTA	As Needed
		X	As requested by NJTA	As Needed
<b>Project Manager (Implementation Phase)</b> – shall be Contractor's Day-to-Day contact person for all Project matters and shall be responsible for the overall management and delivery of the Services.	X		<p>For all status meetings, design workshops, demonstrations, and reviews</p> <p>100% on-site from the beginning of UAT through LPR System Acceptance</p>	100%

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>License Plate Review Operations Manager</b> – responsible for the daily operations of the LPR Services.</p> <p>Should meet or exceed the following:</p> <ul style="list-style-type: none"> <li>• Two (2) years of experience with license plate review operations management of a similar scope to this Project</li> </ul>	X		<p>For all Project functionality meetings, workshops, and demonstrations</p> <p>100% for a minimum of three (3) months prior to Cut-Over</p>	As required
		X	At LPR System Performance Review Meetings	100%
<p><b>License Plate Review Operations Deputy Manager</b> – responsible for assisting the Operations Manager in the daily operations of the LPR Services.</p> <p>Should meet or exceed the following:</p> <ul style="list-style-type: none"> <li>• One (1) years of experience with license plate review operations management of a similar scope to this Project</li> </ul>	X		<p>For all Project functionality meetings, workshops, and demonstrations</p> <p>100% for a minimum of three (3) months prior to Cut-Over</p>	As required
		X	At LPR System Performance Review Meetings	100%
<b>Operations Quality Assurance Manager</b> - conducts the QA monitoring and Audits of the operations, validates compliance to LPR Services Performance Requirements, reconciles QA reviews performed by the Toll Agencies and CSC Services Contractor, and attend the Performance Review Meetings.		X		100 %
<p>Should meet or exceed the following:</p> <ul style="list-style-type: none"> <li>• Two (2) years as Quality Assurance Manager on projects of a similar scope to the services on this Project</li> <li>• Specialized training and/or certification in quality management</li> </ul>				

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Operations Quality Assurance Deputy Manager</b> – Assists the Operations Quality Assurance Manager in conducting the QA monitoring and Audits of the operations, validates compliance to LPR Services Performance Requirements and attend the Performance Review Meetings.</p> <p>Should meet or exceed the following:</p> <ul style="list-style-type: none"> <li>• One (1) year experience with quality assurance management on projects of a similar scope to the services on this Project and/or specialized training and/or certification in quality management</li> </ul>		X		100%
<p><b>Business Analyst</b> – coordinates with and supports the CSC Services Contractor in the design and implementation of the license plate identification process and SOPs, and in ongoing LPR Services.</p> <p>Should meet or exceed the following criteria:</p> <p>Five (5) years' LPR services experience on a project of similar size to the Project.</p>	X		<p>For all reporting and data management meetings and workshops.</p> <p>100% from beginning of UAT through Cut-Over.</p>	As needed
		X	100%	100%

## 2.6.2 Contractor Employee Requirements

52	Provide all required management, supervisory, financial and operations staff, including qualified management, professional and clerical personnel, to design, develop, and implement the LPR System and to professionally operate and administer the LPR Services and image review operations in a manner that meets all required LPR Services Performance Requirements. Staffing levels may fluctuate based on operational efficiencies as long as the Contractor continues to meet the Requirements.
53	Each staff member providing LPR Services shall be a U.S. citizen or possess an Alien Registration Card.
54	Only persons/organizations located in the United States shall perform all LPR System Maintenance, Administration and Software Support Services on both the primary and secondary environments, unless otherwise Approved by NJTA. Such Approval is not guaranteed and is subject to demonstration of controls satisfactory to NJTA.
55	Only persons located in the United States shall perform LPR Services associated with this Agreement.
56	Comply with all applicable laws and regulations related to operating and staffing, including but not limited to: <ul style="list-style-type: none"> <li>a. Americans with Disabilities Act (ADA);</li> <li>b. Occupational Safety and Health Act (OSHA);</li> <li>c. Equal Employment Opportunity Commission (EEOC);</li> <li>d. Federal Fair Credit Reporting Act (FCRA)- FCRA only applies to those investigations conducted by an outsourced company;</li> <li>e. Driver Protection Policy Act (DPPA);</li> <li>f. New Jersey State statute regarding protection of PIIx, and</li> <li>g. Payment Card Industry Data Security Standards (PCI DSS) as applicable.</li> </ul>
57	All staff who access the LPR System shall sign the non-disclosure form(s) provided by the Toll Agencies.

## 2.6.3 Availability and Access to Contractor Staff

In addition to the monthly management and reporting meetings, NJTA will be actively engaged in the LPR Services. The Contractor will work directly with NJTA to achieve the goals of the Program. This approach provides benefits both to NJTA and the Contractor increasing transparency and agility in decision-making and allowing NJTA decision-makers to be familiar with the operations, its staff, performance, challenges, and opportunities. This proactive communication approach also helps identify operational changes that will increase efficiency and allow the Contractor to support NJTA priorities.

58	For all meetings, (including design reviews, testing, and workshops) all Contractor staff who are integral to the conduct of the meeting, including those leading the discussion for the Contractor, shall be in physical attendance.
59	<p>Designate a responsible party for each functional area associated with the LPR System and Services. The Contractor responsible party activities shall include but are not limited to:</p> <ul style="list-style-type: none"> <li>a. managing the operations, including its performance against the LPR Services Performance Requirements, adherence to the Approved Business Rules, SOPs and quality of all deliverables and Services;</li> <li>b. developing Business Rules, SOPs and other materials in collaboration with NJTA;</li> <li>c. identifying and providing timely notification of issues and its performance against to the LPR Services Performance Requirements to NJTA responsible party and seeking feedback and joint issue resolution as applicable;</li> <li>d. developing the annual plan and goals in collaboration and NJTA;</li> <li>e. proposing changes to improve performance;</li> <li>f. proactively providing useful information to NJTA upon realizing that it would be beneficial and jointly making recommendations for continuous improvement, and</li> <li>g. planning scheduled and ad-hoc meeting(s) as necessary.</li> </ul>
60	Ensure Key Personnel are readily accessible to NJTA and working during normal business hours 9:00 am to 5:00 pm Eastern time, and as needed to meet the Requirements, during the Implementation Phase regardless of their physical location and time zone.
61	LPR Services shall be performed by qualified staff and, at a minimum, during normal business hours 9:00 am to 5:00 pm Eastern time.
62	Ensure Key Personnel and named staff are readily accessible to NJTA and are working during New Jersey E-ZPass business hours throughout the Operations and Maintenance Phase regardless of physical location and time zone.
63	Ensure Appropriate Key Personnel shall be available during Software Release activities, as identified in Section 5.2.2 System Configuration and Release Management of this Scope of Services, throughout the Operations and Maintenance Phase.
64	Key Personnel and named personnel shall not be replaced without the prior Approval of NJTA and NJTA shall have the right to request replacement of any Contractor personnel, in accordance with the terms and conditions of the Agreement.
65	The Contractor is responsible for ensuring a seamless and successful transition of the Key Personnel.

66	Provide and maintain a current emergency contact list to NJTA at all times for the purpose of handling emergencies and escalations. The emergency contact list shall name Contractor's preferred points of contact, in order of precedence, and shall include, at minimum, Contractor's License Plate Review Operations Manager, License Plate Review Deputy Operations Manager, Operations Quality Assurance Manager, Operations Quality Assurance Deputy Manager, and Business Analyst for Image Review, and other LPR Services support staff. The purpose of the emergency contact list is to ensure Contractor can be reached outside of normal New Jersey E-ZPass business hours and to address urgent matters.
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## 2.7 Quality Assurance Program

67	Establish and maintain an effective quality assurance (QA) program that ensures adequate quality throughout all areas of performance during the Term of the Agreement.
68	All hardware, software and services provided under this Agreement, whether designed, developed or performed within the Contractor's facilities or other location or by a Subcontractor, shall be controlled by the Contractor at all points necessary to ensure conformance with the Quality Requirements of the Agreement.
69	The QA program shall provide for the prevention and ready detection of discrepancies and for timely and positive corrective action.
70	The QA program shall include effective QC of subcontracted Services.
71	The Contractor's Operations Quality Assurance Manager shall lead the team of Contractor's staff to meet all the Requirements related to quality and to assure NJTA that the Services of the Contractor is in accordance with the QA program and the Operations Quality Assurance Plan.
72	Make objective evidence, in form of reports and other documents related to quality conformance, readily available to NJTA, and NJTA shall have the right to review and verify the Contractor's compliance to the QA program and the Operations Quality Assurance Plan.

## 3 PRODUCT DESIGN AND DEVELOPMENT REQUIREMENTS

The Contractor shall institute Software Development Lifecycle (SDLC) concepts to meet the Requirements of the Scope of Services. To ensure that the design Requirements for the LPR System and LPR Operations Services are fully understood by NJTA and the Contractor a series of Requirements and design review steps are specified herein. If existing software is being used as the basis of the LPR System, the software will be demonstrated for compliance to requirements, and NJTA will have an opportunity to request changes, and have those changes implemented at no cost to NJTA.

73	Employ effective techniques and methodologies to understand and trace the Software Requirements and Business Rules for the Project through the design and development lifecycle.
74	Utilize available Contractor documentation and templates; however, all changes and additions required to meet the Requirements shall be incorporated or clearly documented.

75	Identify and correct all Software issues and defects in its design or product that impact the Contractor's ability to deliver an LPR System and LPR Operations Services that meet the Requirements. This shall apply to issues or defects found at any point during the Implementation Phase or the Operations and Maintenance Phase.
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### 3.1 System Requirements Review

Prior to design and development activities beginning, the Contractor shall conduct a series of LPR System Requirements review meetings to ensure that the Contractor fully understands the Requirements.

76	Manage, facilitate, and conduct a series of LPR System Requirements review meetings with NJTA to outline how the Requirements shall be met. The outcome of these meetings shall be a Requirements Traceability Matrix (RTM) that shall be used to validate each Requirement against a design item(s), design documentation, and testing procedure(s).
77	Any changes to Requirements identified during the Requirement review and design process shall be tracked and submitted to NJTA for Approval. Once Approved, the RTM shall be updated to reflect the change and such changes shall be tracked in the RTM.

### 3.2 Business Rules Development

The Contractor shall support the CSC Services Contractor and work with the Toll Agencies in building upon the existing Business Rules (provided as Appendix C-1: Master New Jersey E-ZPass CSC Business Rules - Draft), to establish a consolidated set of Business Rules related to the LPR System and LPR Operations Services for the future New Jersey E-ZPass Program.

78	Participate in a series of Business Rules review and development workshops led by the CSC Services Contractor, with the participation of the Toll Agencies, to develop and document the New Jersey E-ZPass Business Rules associated with the Image-Based Transaction processing, license plate corrections, and Gross Class Mismatch trips.
79	Conduct a series of Business Rules review and development workshops with the participation of the Toll Agencies, to develop and document the New Jersey E-ZPass Business Rules associated with the LPR System and LPR Operations Services.
80	Upon Approval, the Business Rules shall be incorporated into the RTM that shall be used to validate each Business Rule against a design item(s), design documentation and testing procedure(s).
81	Update the Business Rules and the RTM throughout the Implementation Phase and the Operations and Maintenance Phase, as the Business Rules are potentially altered and updated as a result of design, testing, operations, and legislation.
82	Provide updates to the Approved Business Rules document and the RTM to NJTA with any changes to the LPR System.

### 3.3 System Design, Use Cases, Dashboards, and Reports Design Workshops

83	<p>Conduct LPR System design workshops with NJTA designated participants that will include, but not be limited to, Contractor's presentation of:</p> <ul style="list-style-type: none"> <li>a. data flow diagrams that reflect the lifecycle of all transactions and files;</li> <li>b. proposed initial set of image reject reason codes and consolidation of reason codes into categories;</li> <li>c. demonstrate pre-production working products (such as beta versions) to demonstrate screen designs and process flows, and</li> <li>d. demonstrate how the LPR System design meets the Business Rules and Requirements.</li> </ul>
84	Conduct use case workshops with NJTA to help develop the use cases that will be used in conjunction with test procedures to validate that the LPR Services Requirements have been met.
85	Conduct multiple, iterative, Dashboard and reports design workshops with NJTA. Bring technical leads to the workshops, as appropriate, for the report type(s) being reviewed during the meeting.
86	Create a Software Release at the fifty (50) percent development cycle and conduct a formal test witnessed by the Toll Agencies. Test cases shall be submitted to NJTA for review and Approval. Upon the completion of the test, submit test results for NJTA review and Approval. Software Release testing shall continue until NJTA deems fifty (50) percent development has been completed and tested successfully. The fifty (50) percent Software Release shall be deployed in the Toll Agency test environment.
87	Provide feedback and conduct coordination meetings with the CSC Services Contractor to allow designing, developing and/or modifying CSC Services Contractor interfaces, reports and Dashboards related to high-level reporting.
88	Participate in as many iterative workshops and demonstrations as deemed necessary by NJTA to obtain Approval of the design of the LPR System, Dashboards, and reports.

## 4 TESTING REQUIREMENTS

The Requirements described in this section detail the labor, materials, facility, environments, and support services necessary to test the LPR System, its integration to the New Jersey E-ZPass System and other external entities, and production readiness. All formal tests will be performed by the Contractor and witnessed and Approved by NJTA. NJTA shall have the ability to test the LPR System and all defects identified, and comments provided shall be documented similar to formal testing. Approval of any aspect of testing shall not relieve the Contractor's responsibility in meeting the full Requirements or fixing defects.

89	Testing shall be conducted in various phases and stages as detailed below to validate the LPR System design, integration, reliability, functionality, and compliance to the Requirements, including without limitation, those set forth in the Scope of Services.
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90	Provide all necessary resources, environments, and facilities to conduct all testing.
91	Manage all test logistics required to validate and test the LPR System, and for coordinating all testing activities with the CSC Services Contractor.
92	<p>Provide a defect tracking system to document and track all defects identified as part of LPR System testing and any subsequent actions taken to correct those defects. This system shall be made available to the Toll Agencies via browser-based internet and the Toll Agencies shall have the ability to record a problems or request through a web interface and generate reports from the system. This same defect tracking system is to be used during the Operations and Maintenance Phase. The defect tracking system shall be capable of the following, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. categorizing defects;</li> <li>b. recording and updating the statuses of the defect;</li> <li>c. prioritizing defects;</li> <li>d. description of the erroneous behavior;</li> <li>e. details on how to correct the defect;</li> <li>f. identification of all functionalities that utilize any part of the code or the Configuration parameters that will be modified to correct the defect;</li> <li>g. details on how to test the correction, including functional testing, negative testing, end-to-end testing, and any regression testing required;</li> <li>h. documenting schedule for Release of correction of the defect, and</li> <li>i. generating reports that provide status of the defects.</li> </ul>
93	At each testing phase, the Contractor shall support and perform all ad-hoc tests requested by NJTA. Defects identified during the ad-hoc testing shall be included in the defect tracking system.
94	After each testing phase, and prior to the subsequent testing phase, update the RTM (including the Approved Business Rules) and the System Detailed Design Document (SDDD) as required, based on results of the test.
95	During all test phases, when testing a software or Configuration change, comprehensive regression testing shall be performed to ensure the changes have not introduced new faults and to assure the change does not have unexpected impact on other parts of the LPR System.
96	Develop and implement a plan for utilizing standard automated regression testing procedures that shall execute specified test scripts/test cases at specific intervals and when critical software components are changed and report any regressions to NJTA.

97	Conduct regression testing in a Contractor-provided test environment prior to each Software Release in all project phases.
98	Testing shall occur in the following order, subject to NJTA's Approval of the final testing process documented within the Project Management Plan: <ol style="list-style-type: none"><li>a. System Integration and Interface Testing (SIIT);</li><li>b. User Acceptance Testing (UAT);</li><li>c. Production Readiness Testing (PRT), and</li><li>d. System Operational Acceptance Test (SOAT).</li></ol>
99	Obtain Approval from NJTA and meet the entry conditions prior to the start of each test, including but not limited to: <ol style="list-style-type: none"><li>a. Approval of all predecessor tests and successful closeout of outstanding issues and defects;</li><li>b. Approved test procedures with approved automated test scripts, test cases, and/or use cases for each individual test as specified in the test procedure;</li><li>c. Approved test schedule;</li><li>d. Approved inventory of automated test scripts as specified in the test procedure;</li><li>e. Regression test is completed as part of dry runs and included in the formal testing;</li><li>f. successful dry run of the applicable test with results and outcomes provided to, and validated by, NJTA;</li><li>g. test data is prepared and loaded into the test environment;</li><li>h. submittal of the latest Approved version of the RTM showing test validation against the Requirements, and</li><li>i. test environment confirmed ready to test.</li></ol>
100	Facilitate and support NJTA's participation in the testing and witnessing of each test. Provide NJTA with full access to the test data, results, defects identified and outcome of each test.
101	The exit criteria identified for each test phase shall be completed and test Approved by NJTA prior to the Contractor moving to the next phase of testing/transition.
102	After the completion of each test phase, the Contractor shall submit to NJTA, for review and Approval, a test report that documents the results of the test, any anomalies and issues identified, comments provided by NJTA, the test data, and the corrective action/resolution of each item and any re-tests that are necessary to successfully complete each testing phase.

103	Continue the testing process until all anomalies and defects are closed out, updated as such in the defect tracking system, and the final test report is Approved by NJTA.
104	Only NJTA has the right to determine whether the functionality demonstrated meets the Requirements.
105	Approval or validation of any aspect of the testing shall not relieve the Contractor's responsibility in meeting the full Requirements of the Agreement.

#### 4.1 System Integration and Interface Testing (SIIT)

The SIIT, or end-to-end testing, seeks to validate that the interfaces between individual components and the completely integrated LPR System meets its Requirements. The Contractor shall also conduct load/performance testing as part of SIIT.

106	Conduct SIIT, which shall include end-to-end integration testing of all functionalities (AIR and MIR), all Dashboard and reporting as part of integrated test scripts/test cases, interface testing, security testing, and performance/load testing. In addition, all reports shall be validated and made available to NJTA at all times throughout SIIT.
107	The SIIT shall be conducted within the timeframe of the New Jersey E-ZPass System SIIT.
108	<p>Conduct SIIT, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. testing all functional elements of the LPR System, including all screen validations and the end-to-end testing from receipt of transaction data and images through reconciliation with the New Jersey E-ZPass System;</li> <li>b. reports/Dashboard testing using simulated, and keyed-in data;</li> <li>c. verification and validation that the various LPR System environments are operating per the Requirements;</li> <li>d. load/performance testing of the entire LPR System in terms of internal and external interfaces, back-end process and jobs, and file processing;</li> <li>e. full primary LPR System environment failover testing;</li> <li>f. operating the secondary LPR System environment as production LPR System for a period of time;</li> <li>g. full primary LPR System environment failover recovery (back to primary LPR System) testing;</li> <li>h. validation of all LPR Services Performance Requirements and performance reports;</li> <li>i. adherence to the Security Standards;</li> <li>j. purging process testing;</li> </ul>

	<ul style="list-style-type: none"> <li>k. comprehensive Maintenance Online Management System (MOMS) testing;</li> <li>l. Providing all interface test scripts/test cases, and documentation required to confirm that the interfaces conform with the Requirements, Approved design, and the Toll Agencies' Business Rules;</li> <li>m. testing using test environment systems provided by NJTA, Toll Agencies, and Third-party Service Providers (if available);</li> <li>n. exception testing, and</li> <li>o. sustained operations test.</li> </ul>
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## 4.2 User Acceptance Testing

UAT is defined as the testing phase where testing is conducted by using Authorized User roles to make sure the LPR System can handle required tasks and workflows in real-world operational scenarios, according to the Requirements, design, and specifications.

109	<p>In addition to the entry conditions discussed in Section 3.4 Testing Requirements, the following criteria must be met prior to commencement of UAT:</p> <ul style="list-style-type: none"> <li>a. remote access to the Contractor's UAT environment must be functioning and able to support all remote participants;</li> <li>b. required training must be completed, and</li> <li>c. the Toll Agency test environment shall be operational and contain identical software and data to the Contractor's UAT environment.</li> </ul>
110	The UAT shall be conducted by the Contractor, and witnessed by the Toll Agencies, to verify that all functional elements of the LPR System (AIR and MIR), including the MOMS and operational Dashboards, provided by the Contractor are in conformance with NJTA's technical, functional, and operational Requirements, Business Rules, and the final LPR System design as Approved by NJTA.
111	The UAT shall be conducted within the timeframe of the New Jersey E-ZPass System UAT.
112	The UAT shall be conducted either at the Contractor's facility or at a facility designated in accordance with the Project Management Plan.
113	Provide support for remote participation in UAT including remote access to the UAT environment and live viewing of the test process.
114	Provide all needed support for UAT, including dedicated UAT environments, provisioning/aging system, running batch jobs, and developing test scripts/test cases using use cases with all affected reports being baselined and then reviewed by the Contractor at the end of each applicable test script/test case or user story and the results reported on a daily basis. In addition, all validated reports shall be made available to NJTA at all times throughout UAT.

115	Ten (10) Business Days prior to commencement of UAT, provide in-person training for up to twenty (20) staff from the Toll Agencies and their representatives as well as support for additional remote participants, all of whom will witness the UAT.
116	Ten (10) Business Days prior to commencement of UAT, train Contractor staff to perform the test scripts/test cases that mimic the work they will be assigned post Go-Live Date.
117	Provide PII-free test data for UAT that represents a full set of production data.
118	Develop and retest necessary revisions identified during the UAT testing process.
119	Provide technical personnel to support UAT.
120	Once NJTA has approved the UAT, the Contractor shall ready the Toll Agency test environment for Toll Agency testing activities during the transition period and assure that it is equipped with the latest versions of all software.

### 4.3 Production Readiness Testing

As part of the transition process, and after the completion and Approval of UAT, the Toll Agency test environment will be made available to the Toll Agencies. As part of the PRT, Toll Agency staff members who were trained will test and operate the Toll Agency test environment. During this transition period, the formal PRT activities will be conducted by the Contractor and witnessed by the Toll Agencies.

121	The PRT shall be conducted by the Contractor, and witnessed by the Toll Agencies in the environment that will become the LPR System production environment to verify that LPR System is ready for transition and cut-over.
122	<p>Conduct PRT using the LPR System production environment, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. testing that demonstrates the LPR System (AIR and MIR) is completely installed, integrated, and operational, and all environments are installed, Configured and ready for production and the LPR System is completely accessible by Authorized Users;</li> <li>b. software and test data are loaded;</li> <li>c. testing of internet connectivity and speed;</li> <li>d. Testing MOMS Configuration and setup, and conversion into production;</li> <li>e. testing the speed of the LPR System while performing various functions;</li> <li>f. testing Toll Agency access to all aspects of the LPR System, and</li> <li>g. testing of primary LPR System environment failover to secondary LPR System environment and continuous operations in the secondary LPR System environment.</li> </ul>
123	Test the business continuity procedures to validate they are functioning per the design.

124	As part of the PRT, Toll Agency staff members who were trained will test and operate the Toll Agency test environment. All defects and changes identified during this testing will be documented in the Punch-list.
125	Conduct transition on the LPR System production environment in accordance with the Approved Project Implementation Schedule, taking into consideration the CSC Services Contractor's schedule and the relevant existing systems, including but not limited to the Existing New Jersey E-ZPass System.

#### 4.4 LPR System Operational Acceptance Test

The objective of the SOAT is to observe the LPR System and operations to ensure that the LPR System functions over the test period with limited manual intervention in live operations.

126	SOAT shall be conducted by the Contractor upon authorization by NJTA to commence such testing. The LPR System (AIR and MIR) and operations shall be observed in live operations by the Contractor and NJTA for a minimum of three (3) complete monthly audit cycles. Contractor developed and NJTA Approved validation processes and checklists shall be completed each day and made available to the Toll Agencies.
127	The objective of the SOAT is to ensure that the LPR System functions over the test period with limited manual intervention in live operations, with the exception of MIR Services. It is intended to confirm that the LPR System and the network are sized and configured correctly, and data is processed without interruption.
128	The SOAT shall validate the Interface to the New Jersey E-ZPass System and reconcile the transactions end to end.
129	The SOAT shall verify the LPR System accuracy, performance of the LPR System and operations, LPR System reliability, and auditability during the test period.
130	Dashboards and reports shall be verified daily for accuracy and reconciled to operations and interface files. Queries shall be generated to validate the reports.
131	The SOAT shall validate that all LPR Services Performance Requirements are being consistently met.
132	Anomalies and defects identified shall be categorized by severity and priority and tracked as a Punch-list. All Punch-list items shall be resolved to the satisfaction of NJTA, and the SOAT shall be repeated until NJTA is satisfied that the LPR System and operations meet the Requirements.
133	During the SOAT the Contractor shall audit and reconcile the LPR System and operations every day and successfully close the audit month in accordance with the Requirements.
134	Daily, weekly, and monthly reports shall be generated and compared to reports generated by the New Jersey E-ZPass System.

135	All interfaces shall be monitored, and processing of all records shall be validated through the LPR System during the duration of the test. All errors and exceptions shall be identified, tracked, and investigated.
136	On a daily basis, all transaction and processing queues and reports shall be validated to confirm that data is flowing through the Modules and processes as designed.
137	All PII policies and standards are being adhered to.
138	The operations of the LPR System shall be monitored for the duration of the SOAT verify LPR Services Performance Requirements.
139	Configurable parameters shall be verified to be correct and supporting the Business Rules.
140	All performance reports shall be generated for each audit month and confirmed to be accurate and complete.

## 4.5 LPR System Acceptance

After a minimum of three (3) complete months of operations, and upon the successful completion of the System Operational Acceptance Test for LPR System, the closure of all Punch-list items, and completion and submission of all required documents, the Contractor shall be given the Acceptance for the LPR System.

## 5 FACILITIES, EQUIPMENT, AND INSTALLATION REQUIREMENTS

The Contractor shall provide all facilities and equipment required to provide the LPR System and perform LPR Services in accordance with the Requirements. The facilities, equipment and operations shall be integrated, tested, Approved and ready to start operations to meet the CSC Services Go-Live date.

### 5.1 Equipment, Furniture, and Supplies

141	Provide and equip all facilities and provide all equipment, furniture, and consumables required for the LPR System and LPR Operations Services, and replace such equipment, furniture, supplies, and consumables should the need arise in accordance with the System Maintenance, Administration, and Software Support Services.
142	Monitor the usage of the equipment, supplies, and consumables, and replenish them as needed to meet the Requirements.
143	NJTA may take possession of the LPR System and LPR Operations Services equipment upon the termination, for any reason, of the Agreement. The Contractor is responsible for proper use and care of the equipment and shall have full liability for all equipment.

### 5.2 Data Security and Facility Access Control

144	Ensure that the Contractor's facility is accessed only by authorized personnel with the appropriate privileges and the Contractor shall ensure that this security is not breached.
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145	Provide and maintain an access matrix that lists all personnel that have access privileges to the Contractor's premises and the LPR System, their position, and the functionality or activities and associated information to which they have access.
146	Establish and carry out Approved security procedures and policies for all visitors accessing facilities where Services are performed.
147	Ensure all facilities where Services are performed are established, operated, and maintained in compliance with Section 4.5 Cybersecurity Specifications, Standards and Policies.
148	Provide and install an access control system and video monitoring system and institute internal controls at the facilities to safeguard the Contractor operation and staff.
149	Provide NJTA with a copy of proof of insurance for any facility space occupied by the Contractor.

### 5.3 Accessibility

150	Provide facilities that meet the ADA standards for accessibility and comply with the ADA and any relevant New Jersey laws if the facilities are in the state of New Jersey.
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### 5.4 Installation

This section details the Requirements for the installation and Configuration of the LPR System infrastructure and connectivity at the primary and secondary third-party cloud locations and/or hosted data centers and the build-out and set up of the facilities to support LPR Services. The Contractor shall have an installation program that addresses all aspects of the installation, integration, and Configuration of the LPR System and LPR Operations Services, including all installation design, submissions, and if applicable, coordination with third-party solution provider or service agreements for cloud-based approaches, and facilities build-out.

151	The Contractor is responsible for installation of all equipment associated with the LPR System and performance of LPR Operations Services.
152	The Contractor is responsible for the design, procurement, installation, cabling, Configuration, check-off, and testing of all infrastructure, including hardware, equipment, cloud environments, communications, Services, and software, and fixtures provided by the Contractor as part of the LPR System and Services.
153	Be responsible for producing all documentation and drawings required to install and adhere to the required installation standards, laws, ordinances and/or codes.
154	Be responsible for acquiring and maintaining any permits, plan reviews, inspections, and certifications.
155	Provide and build out the Contractor's location/data center as required to house the primary and secondary LPR System equipment to support the Contractor's LPR System solution.

156	Verify that the CSC Services Contractor has secured the required communication lines for the primary and secondary LPR System locations to the CSC Services Contractor's primary and secondary New Jersey E-ZPass Systems.
157	Secure the required communication lines from the primary and secondary LPR System locations to the Contractor's License Plate Review Operations Services facilities.
158	Install the security access system and all communication lines necessary for the LPR Operations Services from all applicable locations.
159	Adhere to all applicable local, state, and federal standards, laws, and PII standards as applicable to the data, ordinances, and codes in its installation and Configuration of the LPR System and LPR Operations Services infrastructure, including but not limited to: <ul style="list-style-type: none"> <li>a. building;</li> <li>b. electrical;</li> <li>c. environmental;</li> <li>d. safety;</li> <li>e. security, and</li> <li>f. installation.</li> </ul>
160	Upon request, NJTA or its designated representative shall have access to the Contractor's facilities and personnel. This access may be restricted to those portions of the facilities and personnel involved with or who are otherwise performing Services under this Agreement. Such access shall be for the purpose of inspecting the facilities; verifying progress; inspection of materials; work-in-progress; or finished products or verifying test performance or results.

## 5.5 Installation/Configuration Checklist

The Contractor shall complete all installation, Configuration and certification activities and Approved Agreement deliverables Requirements prior to the Go-Live date established by NJTA.

161	Develop and maintain an installation checklist that tracks the progress and completion of all installation and Configuration activities for the LPR System and LPR Operations Services installation. The activities shall include the installation and Configuration of the interface to all Third-party Service Providers, cloud environments, third-party software, and Contractor software.
162	Conduct a final inspection of all installations, facility build-out, certify the installation and Configuration work and record certification in the checklist.
163	The checklist shall identify all discrepancies and exceptions and Contractor shall be responsible for all corrections.

164	The checklist shall be used to document all changes identified, and all such changes shall be Approved by NJTA.
165	A representative(s) from NJTA shall have the right to observe and Approve the implementation.
166	NJTA shall have the right to perform independent inspections, and the Contractor shall be responsible for the correction of all discrepancies and deficiencies identified during the inspections.
167	Submit to NJTA a copy of the checklist signed and approved by the Contractor, attesting to the completeness of the installation, Configuration, and certification after the completion of each LPR System environment where Contractor equipment is being housed.

## 6 DOCUMENTATION REQUIREMENTS

The Contractor is required to provide various hardware, software, Business Rules, design, testing, installation, user manuals, and system administration documentation in accordance with the Approved Project Implementation Schedule. This section provides details on the document management process and the details to be included in each document. For detailed Requirements regarding the processes and LPR System functionality, see relevant sections throughout the Scope of Services.

### 6.1 Contractor-Developed Documentation Process

An online Contractor-provided Electronic Document Management System (EDMS) shall be used to control the saving, versioning, and storage of all Project-related documents, including the Contractor's deliverables and other design, implementation, transition and maintenance, and operations support documentation provided by the Contractor that must be available to the Project team. The Contractor shall save all Contractor deliverables and other support documentation to the EDMS and provide formal notification to NJTA of the deliverable submission.

It is expected that all documentation will go through an iterative review process until NJTA provides Approval. The Contractor shall utilize acceptable standards when updating documents and submitting revisions.

168	All documentation submitted under this Agreement shall be accurate and comply with the Requirements.
169	Utilize a Contractor-provided EDMS that is accessible to the Project team by username and password to manage the upload of all Project-related documentation required under this Agreement, deliverable submissions, and NJTA review comments.
170	Label each document with the proper title, date updated, revision number, revision history, summary of changes, author's name, the name of the person who performed QA, and version, and the names of the author, the person who performed quality controls and the Approver.
171	Provide a logical indexing system for ease of access for NJTA Approval to be used to locate documents in the Contractor-supplied EDMS.

172	Submit multiple versions of the draft documents to NJTA for review and comment, followed by Final Documents that incorporate all NJTA's review comments. Submission shall include the track changes and clean versions of the document.
173	NJTA shall have the right to require additional interim drafts should draft documentation submitted not be of adequate quality or have missing or incorrect information or does not incorporate NJTA review comments.
174	The Contractor shall submit all documents to NJTA for review and Approval. For documents containing less than hundred (100) pages, NJTA will review and provide comment on preliminary draft documents within fifteen (15) Business Days. For documents containing at least hundred (100) pages, NJTA will review and provide comment on preliminary draft documents within twenty five (25) Business Days. NJTA will review and provide comment on all final draft and final documents within ten (10) Business Days. When multiple documents are submitted to NJTA simultaneously, or within one week of each other, the number of Business Days required for review will be cumulative by document. For example, if two twenty (20) page documents are submitted simultaneously, then NJTA would have thirty (30) Business Days to review both documents.
175	Provide a Customer Review Form (CRF) with each submitted document for NJTA to provide the Contractor with written comments on all submitted documents. Respond in writing to all comments through the CRF. If needed, schedule and conduct meetings to clarify and resolve any remaining questions and issues concerning the comments and responses provided. Submit the Final Document for Approval by NJTA when all comments have been successfully resolved and closed by NJTA.
176	Submit electronic versions of all Contractor developed documentation for NJTA review and Approval. Acceptable softcopy formats are Microsoft Office 365 Suite (or higher) and Visio 2021 (or higher) for Contractor-prepared documentation.
177	The Contractor shall update documentation as changes occur throughout the Term of the Agreement. All changes shall be submitted to NJTA for Approval.
178	All Project documents submitted under this Agreement shall be available at all times to NJTA for review and download.

## 6.2 Use Cases, Test Cases, Test Procedures, and Test Reports

179	Provide use cases that demonstrate end-to-end functionality of the LPR System feature/Requirement being tested, as well as successful interaction with any other systems, modules, and/or third-parties. Submit use cases at least ten (10) days prior to the scheduled demonstration date for all demonstrations. Demonstrations may not occur prior to Approval by NJTA.
180	Provide detailed test procedures for NJTA's Approval for each test described in these Requirements at least sixty (60) days prior to the scheduled start date for the test, that include but are not limited to:

	<ul style="list-style-type: none"><li>a. unique identifier for the test procedure;</li><li>b. purpose of the test;</li><li>c. test entry and exit criteria, including what steps and tests are precedents;</li><li>d. detailed test schedule;</li><li>e. all necessary hardware and Software;</li><li>f. test preparation activities;</li><li>g. test data needed and the data source(s);</li><li>h. identification of testing to be performed using automated test tools;</li><li>i. timing of periodic status meetings in the course of testing;</li><li>j. all necessary personnel, and</li><li>k. test success measures and planned test reporting.</li></ul>
181	<p>Provide detailed test cases for NJTA's Approval, that include but are not limited to:</p> <ul style="list-style-type: none"><li>a. unique test case ID;</li><li>b. reference to the Requirement;</li><li>c. description of the test;</li><li>d. preconditions;</li><li>e. numbered test steps that test all functions and features, including thorough testing of both positive and negative conditions;</li><li>f. expected results for each step;</li><li>g. criteria for successful outcome of the test case, and</li><li>h. the ability to document results observed, defects identified and outcome.</li></ul>
182	<p>Submit a test report to NJTA for each test within twenty (20) days of each test procedure's completion. Test reports shall include but not be limited to the following:</p> <ul style="list-style-type: none"><li>a. outcome of testing;</li><li>b. results observed;</li><li>c. results of electronic monitoring of System performance during testing;</li><li>d. defects noted along with severity and priority, and</li><li>e. plan and schedule for defect resolution.</li></ul>

## 6.3 System Security Plan

183	<p>Develop and submit a System Security Plan, which shall comprehensively cover (detailed design or procedures may be referenced in other documents) the Contractor's general approach to meeting all Requirements in Section 4.4 System and User Security and Section 4.5 Cybersecurity Specifications, Standards and Policies of this Scope of Services and other relevant Requirements, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. key design aspects of LPR System security;</li> <li>b. access control approach for every type of LPR System user;</li> <li>c. approach to protection of Confidential Personal Information;</li> <li>d. approach to safeguarding data in the LPR System;</li> <li>e. LPR System design approach to monitor, prevent and combat unauthorized access and other LPR System vulnerabilities and potential security breaches;</li> <li>f. LPR System administration approach to continuously monitor, prevent, and combat unauthorized access and other LPR System vulnerabilities and potential security breaches;</li> <li>g. third-party services to monitor and scan the LPR System for vulnerabilities in compliance with PII Requirements and the Contractor's best practices;</li> <li>h. processes for escalation, mitigation, and corrective action, including notification to NJTA and customers, and</li> <li>i. a summary of the Contractor's Incident Response Plan.</li> </ul>
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## 6.4 Disaster Recovery Plan

184	Develop and submit a Disaster Recovery Plan that describes the approach as well as Disaster Recovery Procedures to take place in the event of a disaster for the LPR System.
185	<p>LPR System failures and emergency conditions shall be handled in accordance with policies and procedures developed by the Contractor and Approved by NJTA in the Disaster Recovery Plan. The following are a few examples of emergency conditions:</p> <ul style="list-style-type: none"> <li>a. data center related;</li> <li>b. LPR System outages;</li> <li>c. third-party service outage or communication failure, and</li> <li>d. security breaches.</li> </ul>
186	Provide the process for defining an LPR System failure or disaster within the Disaster Recovery Plan.

187	<p>The Disaster Recovery Plan shall document the approach to recovering from a disaster, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. assessment of failure and emergency event and risks;</li> <li>b. preventive measures;</li> <li>c. preparations in the event of a failure and emergency event;</li> <li>d. failure and emergency event declaration and disaster recovery process to invoke;</li> <li>e. sites and equipment presented in a diagram format;</li> <li>f. failover process initiation and completion checklist;</li> <li>g. conditions that require initiation of failover to the secondary environment, including at NJTA's direction;</li> <li>h. software and data replication processes;</li> <li>i. detailed logistical processes for activation of secondary site and systems;</li> <li>j. detailed technical processes for activation of secondary site and systems;</li> <li>k. detailed operational functions for activation of secondary site, and</li> <li>l. detailed technical processes for reactivation of primary site, operations, and systems.</li> </ul>
188	<p>As a subsection within the Disaster Recovery Plan, include an Operations Business Continuity Plan that defines the process for defining a business continuity event and describes the Contractor's staffing capabilities and approaches to supporting business continuity and the resumption of LPR Services and operational processes after unplanned disruptions, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. weather related;</li> <li>b. public safety related;</li> <li>c. health related. For example, in response to a COVID-19 or similar outbreak;</li> <li>d. facility related;</li> <li>e. System outages;</li> <li>f. third-party power outage or communication failure, and</li> <li>g. security breaches.</li> </ul>
189	<p>The Operations Business Continuity Plan shall also provide the Contractor's approach for:</p> <ul style="list-style-type: none"> <li>a. LPR Services staff to continue work in order to meet the LPR Performance Requirements in the event of a disaster at any Contractor facility where such work is performed;</li> </ul>

	<ul style="list-style-type: none"> <li>b. maintaining site and LPR System security to ensure continued compliance with the Requirements, and</li> <li>c. ensuring efficient ramp up of equipment and staffing resources at the other Contractor facilities, or provision of remote operations with on-site staffing.</li> </ul>
190	The Contractor shall coordinate with the CSC Services Contractor and other Third-party Service Providers to ensure that the Contractor's business continuity approach will work to efficiently support the New Jersey E-ZPass operations without disruption to Services.

## 6.5 Requirements Traceability Matrix

The RTM provides traceability between Requirements, Business Rules and LPR System functionality in a matrix format, including the product design and development roadmap. The RTM shall be the basis for all design, development and testing efforts and documentation to be developed by the Contractor.

191	Upon completion of the LPR System Requirements and Business Rules review processes, deliver an RTM that details all the Requirements and Business Rules for the LPR System.
192	<p>The RTM shall include:</p> <ul style="list-style-type: none"> <li>a. unique Requirement ID for each Requirement and Business Rule;</li> <li>b. listing and categorization of all Requirements;</li> <li>c. listing and categorization of all software related Requirements;</li> <li>d. identification of the source of all Requirements;</li> <li>e. identification of the design section of the SDDD that addresses the Requirement;</li> <li>f. provide traceability of the Requirements to the test/use cases for each stage of testing, and</li> <li>g. description of all Requirements and constraints that affect software functionality.</li> </ul>
193	During the design and development of the software this document shall be updated to reflect any changes to the Requirements that have been Approved by NJTA.
194	RTM shall be used during design and testing to verify the LPR System compliance to the Requirements, use cases and test cases.
195	Upon Approval of the RTM, it shall be the basis for functional verification of design, development, and testing.

## 6.6 Business Rules Document

196	Upon completion of the LPR System Requirements and Business Rules review processes, develop and submit a Business Rules document, which shall include:
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	<ul style="list-style-type: none"> <li>a. detailed Business Rules for all aspects of the LPR System including policies and processes;</li> <li>b. detailed description of all LPR System Configurable options, ranges, and thresholds (Configurable within the LPR System or Configurable by Authorized User) for each Business Rule (if applicable);</li> <li>c. events that trigger the Business Rules and the results;</li> <li>d. all exceptions and constraints when applying the Business Rules;</li> <li>e. cross-reference all Business Rules to the underlying Requirements, and</li> <li>f. LPR System behavior and operational impact and outcome of the Business Rule.</li> </ul>
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## 6.7 System Detailed Design Document

The Contractor shall submit an SDDD that describes the design specifications of all hardware and Software provided as part of the LPR System to meet the Requirements.

197	Develop and submit an SDDD, making use of diagrams, figures, and tables and for all environments, including production, secondary, development, training, and UAT.
198	<p>The SDDD shall include:</p> <ul style="list-style-type: none"> <li>a. System and hosted/cloud architecture, including equipment layout diagrams;</li> <li>b. complete bill of materials, including hardware, software, tools, components of all hosted/cloud hardware, and software services and support/maintenance agreements;</li> <li>c. Server design, including sizing and processing calculations;</li> <li>d. storage system design, including sizing and processing calculations;</li> <li>e. data backup systems design, including sizing and processing calculations;</li> <li>f. high LPR System availability design, including Servers; storage; network; database, and application;</li> <li>g. disaster recovery design, including Servers; storage; network; database, and application;</li> <li>h. detailed infrastructure software design;</li> <li>i. detailed data center(s) rack and Server placement design;</li> <li>j. detailed desktop computer hardware Configurations;</li> <li>k. detailed desktop computer software Configurations;</li> <li>l. detailed desktop peripherals Configurations, including Requirements for all peripheral device interfaces and control;</li> </ul>

	<ul style="list-style-type: none"> <li>m. all developed software;</li> <li>n. all provided software;</li> <li>o. detailed database design, schema, and entity relationship modeling, including sizing and processing calculations for each environment;</li> <li>p. software Module level descriptions and interaction among various software Modules;</li> <li>q. detailed description to the Module and/or process level for all of the functions according to the Requirements of the LPR System;</li> <li>r. all internal LPR System interfaces;</li> <li>s. detailed interface specifications between all software components;</li> <li>t. design of external System interface to the CSC Services Contractor and other third-party services and interfaces;</li> <li>u. detailed Report database design and schema;</li> <li>v. detailed data management design and processes, including summarization, and purging;</li> <li>w. all user interfaces (including Dashboards, reports, and screen formats);</li> <li>x. System data dictionaries;</li> <li>y. data flow diagrams, workflows, state diagrams and data queues;</li> <li>z. application performance monitoring design;</li> <li>aa. access/identity security methodology;</li> <li>bb. comprehensive approach to protection of Confidential Personal Information;</li> <li>cc. security access system layout and interconnections, and</li> <li>dd. network sizing and design details including internet protocol (IP) scheme.</li> </ul>
199	Contractor shall provide detailed information on proposed network, infrastructure and relevant boundary protections, such as servers, storage units, databases, firewalls, routers, gateways, network based malicious code analysis, virtualization system, and encrypted tunnels implemented within a security architecture.
200	Upon the completion of the software development and prior to start of the UAT, the Contractor shall submit the Final SDDD that includes all changes made during the software development portion of the Implementation Phase.

## 6.8 Operations Staffing and Human Resources Management Plan

201	Develop an Operations Staffing and Human Resource Management Plan that includes details of the Contractor's staffing program.
202	Include the Contractor's approach for compliance with the SWAC <a href="http://secureworker.com/default.asp">http://secureworker.com/default.asp</a> screening and membership process. Include all of the Contractor's and Subcontractor's employees identified as Key Personnel.
203	The Operations Staffing and Human Resources Plan shall include a hiring/assignment schedule for anticipated resource requirements for the duration of the Project.
204	The Operations Staffing and Human Resources Plan shall specifically address the hiring plan and schedule during initial ramp up, including when each training class will be held and how many hires, by position, each class will include, in order to meet the staffing requirements for Go-Live.
205	The Operations Staffing and Human Resources Plan shall include a description of each department/functional area and provide sufficient detail for NJTA to understand the functions and responsibilities of each department and how it will be staffed, managed, and operated.
206	The Operations Staffing and Human Resources Plan Management shall include the location of all personnel required to meet Project Requirements (on-site or remote), as well as the Contractor's approach to providing on-site training and support for remote staff.
207	<p>The Operations Staffing and Human Resources Plan shall include but is not limited to:</p> <ul style="list-style-type: none"><li>a. an organizational chart with all staff positions (including Subcontractors), head count and reporting relationships;</li><li>b. job descriptions for all staff positions by position type;</li><li>c. identification of functions which have been Subcontracted, the name of the Subcontractor, Subcontractor responsibilities and name(s) and contact information for Subcontractor's key personnel;</li><li>d. Holidays and hours of operation, if applicable;</li><li>e. a description of the staff and volume forecast process;</li><li>f. a schedule describing the daily and weekly staff shifts and a description of how the Contractor will adjust staffing to accommodate seasonal and dynamic changes in work volume;</li><li>g. the approach to employee engagement;</li><li>h. recruitment process;</li><li>i. background investigation approach;</li><li>j. pre-employment testing;</li></ul>

	<ul style="list-style-type: none"> <li>k. training, testing, and re-training policies and procedures including refresher and remedial training for both remote and local staff;</li> <li>l. human resources and staffing policies and procedures;</li> <li>m. employee code of conduct;</li> <li>n. dress code policy;</li> <li>o. employee retention and career development program;</li> <li>p. succession planning;</li> <li>q. employee monitoring, performance evaluation and coaching;</li> <li>r. employee disciplinary process, and</li> <li>s. employee termination process.</li> </ul>
208	The Operations Staffing and Human Resource Management Plan shall include the description of the employee incentive programs to promote staff performance and retention.

## 6.9 Operations Quality Assurance Plan

The Operations Quality Assurance Plan will include details about how the Contractor will plan and implement the LPR Services quality program, how to address errors (quality-related events) and how to make improvements before an error occurs (continuous quality improvement).

209	Develop an Operations Quality Assurance Plan that details the Contractor's quality assurance program for both the Implementation and Operations and Maintenance Phases, covering the entire Project, including all Services provided under this Agreement.
210	Provide the capability to support on-demand and batch/scheduled report generation, record review, analysis, and reporting and after-the-fact investigations of incidents.
211	<p>The Operations Quality Assurance Plan shall describe the quality procedures and methodology for the Project, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. quality management and organizational structure;</li> <li>b. quality management tools;</li> <li>c. quality management of LPR Services;</li> <li>d. coordination of QA review by Toll Agencies and CSC Services Contractor;</li> <li>e. identification of quality related KPIs;</li> <li>f. quality management documentation;</li> <li>g. ongoing Continuous Improvement program;</li> </ul>

	<ul style="list-style-type: none"><li>h. Root Cause Analysis (RCA);</li><li>i. quality review and verification;</li><li>j. processes in place to identify revenue loss due to image rejects and mitigation plan;</li><li>k. Contractor's audit to ensure compliance with Operations Performance Requirements;</li><li>l. Contractor's audit to ensure accuracy of performance reports;</li><li>m. providing staff feedback, and</li><li>n. reporting and metrics.</li></ul>
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## 6.10 Standard Operating Procedures

212	Develop and submit Standard Operating Procedures (SOPs) that provide a description of the policies and detailed, step-by-step procedures for every task the Contractor performs in the operation of the LPR System and performance of LPR Services.
213	<p>The SOPs shall integrate the LPR System application with the associated manual procedures required to fully complete each task, including but not limited to:</p> <ul style="list-style-type: none"><li>a. confidentiality;</li><li>b. facility safety procedures;</li><li>c. start and end of shift;</li><li>d. queue monitoring;</li><li>e. use of knowledge base;</li><li>f. image review for license plate data determination;</li><li>g. Gross Class Mismatch data review;</li><li>h. supervisor duties;</li><li>i. task lead duties;</li><li>j. quality control;</li><li>k. audit;</li><li>l. reconciliation, and</li><li>m. Compliance to key performance indicators (KPIs).</li></ul>

## 6.11 User Manuals

Various manuals shall be provided as described below to allow NJTA to understand the operations of the LPR System.

214	New manuals provided under this Agreement that are not standard commercial catalogs or manuals shall meet the Requirements set forth in this section.
215	Submit draft copies of all manuals at the seventy-five (75) percent completion level or higher to NJTA for review and comment.
216	Submit 100% completed manuals prior to Cut-Over and final manuals prior to LPR System Acceptance.
217	Submit the draft and final manuals described below in accordance with the Approved Project Implementation Schedule.
218	NJTA reserves the right to require additional interim drafts should the draft manuals not be of adequate quality or have missing or incorrect information.
219	Whenever possible, all manuals shall be printable on 8-1/2" x 11" sheets; foldouts shall be 11" x 17".
220	Each manual shall contain a title sheet, table of contents, list of illustrations (if applicable), list of reference drawings and exhibits (if applicable), and a parts list (if applicable). All manuals with over fifty pages shall have an index.
221	All manuals prepared for NJTA under this Agreement shall be produced, or editable using Microsoft Office 2020 Suite (or above). In addition, soft copies of manuals may be provided in unsecured Portable Document Format (.pdf) if requested by NJTA.
222	Any special software required to produce scalable typefaces or other graphs shall be provided by the Contractor as part of the documentation for the manuals.
223	Submit electronic copies of all of the manuals listed below.

### 6.11.1 LPR System Support and Administration Service Manual

The Contractor shall develop and submit a an LPR System Support and Administration Service Manual that describes the Contractor's approach to services, staffing and resources to fulfill the System Maintenance, Administration and Software Support Services Requirements throughout the Operations and Maintenance Phase. The Contractor shall have appropriate LPR System documentation available to all maintenance and software support personnel, as required to perform their respective duties.

224	Submit an LPR System Support and Administration Service Manual that describes the Contractor's approach to fulfilling the LPR System Maintenance, Administration, and Software Support Services Requirements.
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225	<p>The LPR System Support and Administration Service Manual shall include, but not be limited to the following:</p> <ul style="list-style-type: none"><li>a. organizational structure, organizational chart and job descriptions and responsibilities related to hardware, software, and administrative support Services;</li><li>b. staffing plan, schedule, and locations for all job categories;</li><li>c. approach to training for all job categories;</li><li>d. third-party system support agreements overview;</li><li>e. detailed LPR System monitoring requirements;</li><li>f. schedule of all LPR System maintenance activities, including anticipated third-party patches and updates/upgrades;</li><li>g. maintenance procedures, communication protocols and Approval processes for LPR System upgrades, software deployments, scheduled maintenance activities, change management and scheduled downtime;</li><li>h. approach to identifying, prioritizing, documenting, testing, approving, and applying security patches;</li><li>i. spares levels, equipment and third-party software warranty tracking and return material processes;</li><li>j. equipment replacement/refresh schedule and detailed plan;</li><li>k. upgrades to third-party software and tools;</li><li>l. approach to identifying, receiving, documenting, and prioritizing issues, failures, software defects (bugs) and changes;</li><li>m. reporting, categorization, prioritization, escalation, and disposition of issues, failures, and software defects;</li><li>n. approach to code management and software escrow;</li><li>o. approach to code verification and regression testing;</li><li>p. procedures, communication protocols and Approval processes for change management, Software Release management, scheduled downtime;</li><li>q. documented change control procedures;</li><li>r. schedule of all Software Support activities, including anticipated Release of upgrades/updates and Software changes;</li><li>s. Software updates to comply with license plate and plate type updates and changes, and Third-party Service Provider interface changes;</li></ul>
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	<ul style="list-style-type: none"><li>t. Software updates to be compliant with applicable PII and audit Requirements;</li><li>u. monitoring LPR System performance for compliance with LPR Services Performance Requirements;</li><li>v. sample maintenance performance reports and reporting processes;</li><li>w. processes for supporting internal and external audits;</li><li>x. security compliance monitoring, upgrades, and safeguards;</li><li>y. system intrusion monitoring and safeguards;</li><li>z. process for initiating failover to secondary LPR System environment;</li><li>aa. process for operating secondary LPR System as the primary for a period of time;</li><li>bb. communication protocol for coordination with the CSC Services Contractor, Third-party Service providers, and Toll Agencies, and</li><li>cc. processes in place to meet LPR Services Performance Requirements.</li></ul>
226	<p>The LPR System Support and Administration Service Manual shall be also prepared for properly trained technical personnel assigned to the administration and support of the Software installed under this Agreement by including:</p> <ul style="list-style-type: none"><li>a. detailed database design;</li><li>b. database administration activities required to keep the LPR System operational shall be clearly documented, including the scheduling of such activities;</li><li>c. detailed procedures and processes for all system administrative activities;</li><li>d. description of the programs and processes that need to be monitored to ensure that the LPR System is operational;</li><li>e. procedures for validating tasks, processes and jobs have successfully completed, and errors and exceptions encountered;</li><li>f. procedures for validating the successful transfer and receipt of files for all interfaces, including but not limited to New Jersey E-ZPass System and third-party services;</li><li>g. a listing of all the error codes, their meanings and potential associated problems shall be included in the manual, with a step-by-step guide to troubleshooting and correcting the problem;</li><li>h. ad-hoc reporting tools and use of the tools to generate ad-hoc reports shall be documented;</li></ul>

	<ul style="list-style-type: none"> <li>i. details of the security access system Configuration, user access privileges and controls, and user tracking processes utilized to ensure System security and maintain data integrity;</li> <li>j. use of the MOMS for notification and tracking of problems;</li> <li>k. monitoring the system network for all vulnerabilities and unauthorized access attempts;</li> <li>l. review of audit logs;</li> <li>m. detailed procedures for backup and purging of data;</li> <li>n. detailed procedures for testing disaster recovery systems;</li> <li>o. detailed schedule for desktop and peripheral preventive maintenance activities;</li> <li>p. detailed schedule for all preventative maintenance activities;</li> <li>q. technical contact lists for all external interfaces;</li> <li>r. detailed procedures for secure Configuration, installation and operation of the LPR System, components, and services;</li> <li>s. detailed procedures for effective use and maintenance of security and privacy functions and mechanisms, and</li> <li>t. detailed procedures for monitoring the system for vulnerabilities regarding Configuration and use of administrative or privileged functions and actions to take when such issues are identified.</li> </ul>
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#### 6.11.2 Image Review Services Manual

227	Provide an Image Review Services Manual that shall be used by the Contractor to operate the LPR System and provide AIR and MIR Services for Image-Based Transaction and Gross Class Mismatch trips.
228	The Image Review Services Manual shall include screenshots detailing the step-by-step activities that need to be completed in order to perform a specific function.
229	All screens, reports and data fields shall be clearly explained in the Image Review Services Manual using sample formats that are applicable to the LPR System.
230	The Image Review Services Manual shall also be used for training purposes.
231	Samples of all reports shall be included in the Image Review Services Manual or as an attachment to the manual with any specific instructions that may be applicable for a given report.
232	The Image Review Services Manual shall describe the following, but not be limited to:

	<ul style="list-style-type: none"> <li>a. user-accessible security and privacy functions and mechanisms and how to effectively use those functions and mechanisms;</li> <li>b. methods for user interaction, which enable individuals to use the system, component, or service in a more secure manner and protect individual privacy, and</li> <li>c. user responsibilities in maintaining the security of the system, component, or service and privacy of individuals – security roles and user roles matrix.</li> </ul>
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### 6.11.3 LPR Services Audit Manual

233	The LPR Services Audit Manual shall detail all procedures used to audit and reconcile the LPR System.
234	The LPR Services Audit Manual shall include the reconciliation of transactions and images within the LPR System and with the New Jersey E-ZPass System.
235	A complete description of all audit procedures and a non-technical description of the screens, reports, and functions shall be provided in the LPR Services Audit Manual.
236	The LPR Services Audit Manual shall contain illustrations and pictorial diagrams to demonstrate the step-by-step operations required for performing the audit and reconciliation functions.
237	<p>The LPR Services Audit Manual shall contain an end-to-end validation plan that details the procedures for annual validation and certification of the LPR System, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Image-Based Transactions requiring license plate extraction and/or MIR;</li> <li>b. Gross Class Mismatch review;</li> <li>c. Operational reporting, and</li> <li>d. Quality Assurance processes.</li> </ul>
238	Samples of all reports shall be included in an attachment to the LPR Services Audit Manual with any specific instructions that may be applicable to a given report. Reports included in the submittal shall have correct and accurate data and this manual shall be used to train the auditors.

### 6.12 As-Built Documentation

Prior to NJTA Acceptance of the Project, as-built documentation shall be provided that documents the final LPR System design and implementation.

### 6.12.1 System Detailed Design Document

239	After the Approval of the SOAT and prior to NJTA Acceptance of the LPR System, the Contractor shall submit, via upload to the EDMS, the As-Built SDDD that includes all software and hardware changes made during the LPR System development, implementation, and testing phases.
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## 7 TRAINING REQUIREMENTS

The Contractor shall provide comprehensive training of the LPR System, including but not limited to the operations and audit of the LPR System and LPR Operations Services provided under this Agreement.

### 7.1 Training Requirements

The Contractor shall be solely responsible for supplying all of the items necessary to complete the delivery of the training program.

240	Conduct comprehensive training related to all aspects of the LPR System functionality, administration, maintenance, and operations.
241	Ensure all LPR Services staff are trained in a manner which ensures high quality performance as measured by the LPR Services Performance Requirements.
242	The training shall be hands-on and use the LPR System in the training environment on a LPR Service staff workstation.
243	The Contractor's program shall include formal and informal instruction, manuals, diagrams, and functional application as required.
244	All data used for the training database shall comply with PII Requirements.
245	Ensure that NJTA or their representatives shall have the right to attend any training sessions and to make recordings and copies of all training program materials.
246	Obtain releases from all employees /Subcontractors to allow unlimited, royalty free use and copies of recordings and provide the same to NJTA upon request.
247	Gather trainee feedback and trainer evaluations at the conclusion of each training course and fine tune and revise the training based on the results.
248	For Contractor's training of its own personnel, the Contractor shall provide all required systems and training facilities.
249	Provide training of Toll Agency personnel. Training of Toll Agency personnel shall include but not be limited to:  a. provision of training at NJTA or the local LPR service facility, at the discretion of NJTA;

	<ul style="list-style-type: none"><li>b. provision of three (3) separate training sessions for staff from all Toll Agencies. The number of trainees designated by the Toll Agencies for each training session is not anticipated to exceed twenty (20);</li><li>c. setup of the training environment, loading workstations with all Software required for the training and verification of the Configuration of the workstations prior to each individual training course;</li><li>d. provision of all workstations, or provide access from Toll Agencies equipment, and</li><li>e. provision of all required connectivity or provision of a portable, stand-alone training environment that represents the full functionality of the applicable System components.</li></ul>
250	Provide for training for Third-party Service Provider staff in a manner sufficient for required staff to understand and use the LPR System. The time and place for this training will be mutually determined.
251	All training materials, videos and manuals shall reside in an online knowledge base that is accessible for all Contractor staff and Toll Agency staff and one (1) reproducible set of documentation in electronic form that may be used for future training sessions.
252	For each training course, the Contractor shall provide the following, including but not limited to: <ul style="list-style-type: none"><li>a. course agenda;</li><li>b. course objectives;</li><li>c. schedule of sessions;</li><li>d. manual, and</li><li>e. lesson outlines and summaries.</li></ul>
253	Notify NJTA of the range of dates for training sessions and shall provide a minimum two weeks' notice to allow NJTA participants a reasonable lead time. NJTA shall Approve the training schedule.
254	Upon Approval of training dates, send out meeting invitations to NJTA attendees.
255	Provide the capability to provide the full set of training courses, including all LPR Services and auditing, remotely using online tools.
256	Provide the following training courses to NJTA and their designated personnel. Training manuals (including Contractor provided manuals or relevant portions thereof), guides, videos, training aids, and student and instructor workbooks shall accompany the courses listed below.
257	Accommodate NJTA requests for additional training courses to be offered or additional personnel to be provided training, to the extent possible with on-site personnel and documentation that is readily available.

## 7.2 LPR System Training

258	LPR System training is to be attended by all Toll Agency personnel who require a detailed understanding of the operations of the LPR System, including the audit application, and how to access information and reports from the LPR System on items such as status, workflow, interfaces, transactions, MOMS, and system maintenance.
259	One (1) session of the LPR System user training course is required with a class size of up to twenty-four (24) people and a minimum of four (4) hours per training class.

## 7.3 LPR Operations Services and Dashboard/Reports Training

260	LPR Operations Services training is to be attended by NJTA staff responsible for oversight of LPR Operations Services, including operations Dashboard and reports, the process for running ad-hoc reports, and the use of any third-party reporting/analytics tools. The class shall include a review and description of each of the LPR Operations Service processes and procedures, and system Dashboards and reporting, with at least two (2) functioning workstations with actual LPR System software.
261	One (1) session of the LPR Operations Services training course is required with a class size of up to 12 (twelve) people with a minimum of sixteen (16) hours per training class.

## 7.4 Training Facilities

262	Furnish classroom facilities or meeting space, the location of which shall be Approved by NJTA, within the state of New Jersey for all training.
263	Provide the ability for each training class to be administered remotely through the use of collaborative video sessions (MS Teams, Zoom, etc.).

## 7.5 Scheduling and Preparation for Training

264	Provide sufficient notice to NJTA on the types of training it will provide and the timing for each training session. NJTA will identify a list of participants that Contractor shall notify trainees to schedule their participation in the training.
265	Perform all scheduling activities to accommodate the maximum number of persons for each training session given scheduling conflicts. Contractor shall provide sufficient notice to allow participants a reasonable lead time.
266	Notify NJTA of the proposed dates or range of dates Contractor would like to hold training sessions at Toll Agency offices and shall coordinate with the Toll Agencies to arrange the proper classroom setting and assure computer hardware and software are installed and the space is configured for each training session.

## 7.6 Training Materials

267	Draft copies of all training materials shall be submitted to NJTA for review, comment, and Approval, prior to final printing of quantities required for training.
268	NJTA shall have the right to require additional interim drafts should draft training materials submitted not be of adequate quality or have missing or incorrect information. For each course described in the section above, Contractor shall provide the materials listed below.

### 7.6.1 Instructor Guides

269	Provide an instructor guide for each training course. The guide shall include the following elements:  a. course agenda;  b. course objective;  c. procedures for managing training session;  d. resource and facilities required, including workstations, power, and communications Requirements;  e. detailed lesson plans;  f. a description of training aids and items to aid in on the job performance (e.g., where applicable, pocket guides or reference sheets);  g. test to be administered to assure satisfactory completion, and  h. instructions for using any audio-visual support equipment or materials.
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### 7.6.2 Training Aids

270	Provide training aids such as PowerPoint presentations, video demonstrations, and simulations as are necessary to successfully complete the course agenda and meet the course objective.
271	Succinct LPR Services training guides shall be developed for purposes of training image reviewers on LPR System changes from each Software Release.

### 7.6.3 Student Workbook

272	Provide for each course an electronic student workbook which shall include but not be limited to course agenda, course objectives, schedule of sessions, copies of all overheads and visuals and lesson outlines and summaries.
273	Materials such as operations and user manuals may be used to supplement the material provided in the student workbook.

274	If such material is used appropriate cross-references shall be included in the student workbook so as to identify the complete set of training materials provided to the student.
275	Location of any online training available as a reference to staff.

#### 7.6.4 Training Videos

276	The training courses shall be recorded for use by the Toll Agency staff and for refresher training of operational staff. Videos shall not be used in place of live training for new hires.
277	Training videos shall be updated with any changes to LPR System functionality, operational procedures, or New Jersey E-ZPass Program updates.
278	Training videos shall be made available to the Toll Agencies.

#### 7.6.5 Training Room Set-up and Software Installation

279	Contractor shall be responsible for loading any special software required on the classroom computers (provided by the Contractor). It is the Contractor's responsibility to ensure that the software is operating as expected on each of the classroom computers. It is also the Contractor's responsibility to ensure that appropriate communications are in place.
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## 8 SYSTEM REQUIREMENTS

The Contractor shall provide the LPR System that meets the Performance Requirements as specified in the Scope of Services. Most Requirements are derived from performance standards the LPR System has to meet as it relates to reliability, availability, disaster recovery, and auditability.

The LPR System shall be compliant with all applicable regulations, standards, and legislation. All third-party products, services, software, and tools necessary to monitor the LPR System for compliance and verify compliance shall be part of the delivered LPR System.

### 8.1 Environments

The System shall include multiple environments, as required to complete the design, development, integration, testing, delivery, and Acceptance of the LPR System, sustain day-to-day operations, and provide operations and maintenance of the LPR System. The Contractor is encouraged to provide innovative solutions including the use of virtualization technologies, high availability architectures, hosting and/or cloud services for meeting these Requirements.

It is the Contractor's responsibility to provide additional NJTA-Approved environments should the ones listed herein be insufficient for the Contractor to deliver the optimal solution or meet the Requirements.

280	Provide a dedicated primary LPR System located within the continental United States sufficient to meet the Requirements set forth herein, including but not limited to:
	a. production reporting environment;

	<ul style="list-style-type: none"><li>b. production MOMS environment (physically and logically separated to provide proper monitoring of the LPR System);</li><li>c. a dedicated training environment(s) to support LPR Services operations;</li><li>d. a dedicated UAT environment for use through all project phases, and</li><li>e. a dedicated Toll Agency test environment.</li></ul>
281	Provide a dedicated secondary LPR System environment or architecture within the continental United States in a different cloud region (if cloud-based) or in a separate time zone and a minimum of 500 miles away from the production environment (if hosted).
282	LPR System environments shall be located at one or a combination of the following locations: <ul style="list-style-type: none"><li>a. hosted at a Tier 3 data center facility, and/or</li><li>b. hosted by a well-established cloud service provider.</li></ul>
283	In areas under the full responsibility of the Contractor, equipment and data shall be fully secured in these areas by Contractor, and security shall be in compliance with the New Jersey Statewide Information Security Manual, latest version that will be available upon Go-Live. The areas that are expected to be under the full responsibility of the Contractor shall include, but not be limited to: <ul style="list-style-type: none"><li>a. hosted primary and secondary data centers;</li><li>b. LPR Services facilities, and</li><li>c. all other locations related to the provision of the LPR Services.</li></ul>
284	For a cloud environment, the LPR System shall have a dedicated infrastructure such that NJTA-dedicated LPR System shall run on dedicated virtual machines and/or containers such that only upgrades to the data center/cloud infrastructure and NJTA LPR System applications would potentially affect the uptime of the LPR System and there is no possibility that functional or infrastructure upgrades required to service the Contractor's other customers' applications would cause any downtime or affect the LPR System in any way.
285	For a hosted environment, the LPR System shall have a dedicated infrastructure such that NJTA-dedicated LPR System shall run on dedicated hardware and virtual machines such that only upgrades to the data center infrastructure and NJTA LPR System applications would potentially affect the uptime of the LPR System and there is no possibility that functional or infrastructure upgrades required to service the Contractor's other customers' hardware or applications would cause any downtime or affect the LPR System in any way.
286	If the LPR System, or a portion of the LPR System, is in a Contractor-controlled data center and not the cloud or third-party hosted, then secure access control shall be provided for the location.
287	If the primary and/or secondary LPR Systems are hosted in a data center(s), the data center(s) shall meet the following criteria;

	<ul style="list-style-type: none"><li>a. Tier 3 (minimum) data center specifications with the applicable redundancies and uptimes;</li><li>b. ISO 9000 (process) certified;</li><li>c. ISO 27000 (security) certified;</li><li>d. located in the US at sites Approved by NJTA;</li><li>e. provider shall have been in operation for at least the last five (5) years, and</li><li>f. have industry certified on-site staff available 24/7/365 for administration, management, and monitoring.</li></ul>
288	Ensure all LPR System environments are kept current with all major releases of operating systems, databases, Software and firmware upgrades, patches, fixes, or modification. Releases shall not be more than one release behind the manufacturer's latest major release unless Approved by NJTA.
289	With the exception of the development and UAT environments, which may change as part of testing and development cycles, the Contractor shall keep operating systems, databases, Software, and firmware consistent across all environments, including, but not limited to Configuration and patch level.
290	Provide a secondary LPR System environment which, in the event of a partial or full failure of the production environments, the Recovery Time Objective (RTO) shall be four (4) hours from the declared failure of the primary LPR System and shall include the LPR System being fully available to all Authorized Users, all reporting, all LPR System monitoring, all interfaces reconnected and operational, and all processes active and up to date.
291	The LPR System design and operations shall provide a near-zero Recovery Point Objective (RPO) based on near-continuous data protection. The LPR System shall provide for continuous replication of the data in order to meet this objective. The LPR System design and operations approach to meet the RPO shall be Approved during the Implementation Phase.
292	Provide a secondary LPR System environment which, in the event of a partial or full failure of the production environment, shall be capable of sustaining LPR System and LPR Operations Services operations indefinitely, or until such time as the primary production environment is back online and fully functional.
293	As part of the disaster recovery process and planning, provide capability to recover and make fully operational all non-production environments within five (5) days of a declared disaster.
294	All non-production data shall be backed up multiple times per day and electronically sent to the disaster recovery site on a daily basis.
295	The Contractor shall coordinate with CSC Services Contractor to integrate the non-production environments for the purposes of testing and training. The integrated non-production environments shall be maintained for the Contract Term.

296	<p>It is the Contractor's responsibility to ensure full and ongoing compliance with the New Jersey Statewide Information Security Manual and all updates to this manual throughout the life of the Agreement. The manual is provided as Attachment 5. The most recent copy of which can be found at <a href="https://www.nj.gov/it/docs/ps/NJ%20Statewide%20Information%20Security%20Manual.pdf">https://www.nj.gov/it/docs/ps/NJ Statewide Information Security Manual.pdf</a>. Initially, the Contractor will develop the LPR System to comply with the Attachment 5 New Jersey Statewide Information Security Manual. NJTA plans to develop NJTA-specific security policies, which will supersede the use of the New Jersey Statewide Information Security Manual upon completion.</p> <p>Areas of required compliance detailed in this manual include, but are not limited to:</p> <ul style="list-style-type: none"><li>a. physical and environmental security;</li><li>b. access control;</li><li>c. configuration management;</li><li>d. identity and authentication;</li><li>e. planning;</li><li>f. personally identifiable information processing and transparency;</li><li>g. media protection;</li><li>h. contingency planning;</li><li>i. information security and privacy program;</li><li>j. organizational security;</li><li>k. personnel security;</li><li>l. security and awareness training;</li><li>m. risk assessment;</li><li>n. system and information integrity;</li><li>o. system and communications protection;</li><li>p. system and services acquisition;</li><li>q. supply chain risk management;</li><li>r. assessment, authorization, and monitoring;</li><li>s. audit and accountability;</li><li>t. maintenance, and</li><li>u. incident response.</li></ul>
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## 8.2 Network and Communications

297	Provide the purchasing (including all recurring costs and bandwidth upgrades), implementation, and installation of all local area networks (LANs), wide area networks (WANs), communication lines, communication equipment, virtual private networks (VPNs) and remote access, security applications and systems to provide complete connectivity with both the production and secondary LPR System environments of, including but not limited to:  a. all LPR System environments;  b. all Contractor facilities where LPR Services are provided;  c. all work from home image reviewers (Approved by NJTA), and  d. all Contractor-selected Third-party Service Providers.
298	Ensure that the LPR System, networks, and communications are compliant with all applicable cybersecurity and privacy requirements set forth in the New Jersey Statewide Information Security Manual in addition to the Section 4.5 Cybersecurity Specifications, Standards and Policies of this Scope of Services.
299	Provide secure remote access to the application user interface (UI) to all Authorized Users.
300	Provide highly secure network equipment from well-known manufacturers as appropriate to meet the LPR System and operational Requirements.
301	Procure, furnish, and install network monitoring software to monitor all network equipment, connectivity, throughput, and intrusion points related to the LPR System. Provide NJTA credentials to the network monitoring software.
302	All network events, processes, and alarms shall be reported to the MOMS.
303	Provide the capability for time synchronization to one or more Stratum 1 time Server(s). Provide for redundant certified time sources should the primary source be unavailable. All System hardware that maintains time shall be synchronized to the same Stratum 1 clock.
304	Size the network to provide optimal speeds and response times.
305	Provide secure remote access to the full capabilities of the LPR System for NJTA's Authorized Users, for example via a VPN connection with multiple factor authentication at a service center or from a remote location (e.g., onsite special event).
306	The network connection to the CSC Services System and the NJTA Host and Image Capture System (if exercised) shall be of sufficient bandwidth to support the transfer of images and meet the LPR System Performance Requirements.

### 8.3 Hardware, Software, and Other Equipment

307	Provide all hardware, software, APIs, cloud services, third-party software, and firmware required to support the LPR System.
308	Any leases or service agreements entered into for infrastructure, hardware, Software, network, communications, and cloud services shall be in name of NJTA.
309	All materials procured, furnished, and installed under this Agreement shall be new, commercially available products currently manufactured of the latest design/version at the time of purchase, unless otherwise Approved by NJTA.
310	The database schema, all data, and licenses shall be owned by NJTA.
311	All APIs developed for the New Jersey E-ZPass Program shall be owned by NJTA.
312	All materials procured, furnished, and installed under this Agreement shall be obtainable from multiple sources readily available to NJTA, unless otherwise Approved by NJTA. An exception to this may be the Contractor's custom-developed Software.
313	During the Implementation Phase, the Contractor shall provide a dated invoice for all materials procured under this Agreement. Shipping bills shall be retained, and copies furnished to NJTA along with the invoice on which they appear.
314	All commercial Software provided as part of the LPR System shall be enterprise class, however, unlimited use licenses are not necessary. Enterprise class applications are designed to be robust and scalable across a large organization and are customizable to meet the specific needs of the LPR System.
315	Provide all labor, office space, utilities, occupancy services, equipment (including workstations), furniture, consumables, and all other materials required to perform the LPR Services.
316	All System computer operating systems shall provide for soft real-time operation, multi-tasking support, process level scheduling and priority Configuration, implement strong security measures and be highly stable. The Contractor shall provide the Software Development Kit (SDK) and have API's available to NJTA so that NJTA can interface with and monitor the performance of all aspects of the LPR System.
317	The hardware and equipment furnished shall be appropriately sized for capacity (including growth expansion estimates), scalable (allowing for additional Toll Agencies to join in), and shall meet the LPR Services Performance Requirements.
318	Use hardware, software and equipment Configurations that support future upgrades to processors, memory, storage, operating system, database, and other system components.

319	All LPR System computer operating systems shall provide for soft real-time operation, multi-tasking support, process level scheduling and priority Configuration, implement strong security measures and be highly stable. The Contractor shall provide the Software Development Kit (SDK) or API to NJTA so that NJTA can interface with and monitor the performance of the LPR System.
320	NJTA shall have rights to all third-party Software and firmware procured, furnished, and installed as part of the LPR System in accordance with the Agreement Section 16.0 Intellectual Property.
321	Make available upon request SDKs, APIs, and/or management information bases (MIBs) for all software and hardware being proposed by the Contractor.
322	All computers and hardware procured, furnished, and installed under this Agreement shall have the most current and up to date protection from ransomware, denial-of-service (DoS), virus, unauthorized access, malware detection, and spam protection and other security software to protect the LPR System.
323	All hardware and equipment of any type shall automatically obtain security software and other security updates according to an Approved (Configurable) maintenance schedule. Security updates shall be installed in accordance with requirements of New Jersey Statewide Information Security Manual.
324	The LPR System shall detect all unauthorized access, intrusions, and security events at all levels and report such events to the MOMS.
325	Security Software shall continuously and automatically monitor the LPR System for unauthorized access; access violations shall be reported to the MOMS as Priority 1 MOMS Alert (see Section 5.2.3 Maintenance Priorities, Response and Repair Times of this Scope of Services for definition of Priority 1) and notifications and measures shall be taken as further described in the Requirements and Agreement.
326	Provide backups performed on physically separate hardware and software from the data being backed up and stored at a different location than the source data.
327	All hardware, software and other equipment shall be entered into the MOMS's Asset Management repository upon receipt.

## 8.4 System and User Security

The Contractor shall provide security and access controls in accordance with all federal, state and NJTA security standards. The Contractor shall maintain compliance with these standards as they evolve over the Contract Term. In any circumstance of conflict between requirements, standards or statutes, the Contractor shall adhere to the most stringent requirement.

328	Design and implement the LPR System to prevent Security Incidents and provide monitoring and detection tools to detect any attempts to breach the security of the LPR System.
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329	Comply with the most current version of all state and federal security standards and guidelines, including California Consumer Privacy Act, where applicable.
330	<p>The Contractor's approach and compliance to LPR System and user security shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>a. cloud infrastructure and/or hosting data centers meet the Federal Risk and Authorization Management Program (FedRAMP) standards;</li> <li>b. compliance with the New Jersey Statewide Information Security Manual;</li> <li>c. compliance with PCI DSS Security Standards as applicable;</li> <li>d. compliance with the Federal Information Processing Standards (FIPS), including FIPS 199 (Standards for Security Categorization of Federal Information and Information Systems) and FIPS 200 (Minimum Security Requirements for Federal Information and Information Systems);</li> <li>e. protecting the confidentiality of PII in accordance with the recommendations in publication 800-122 from the National Institute of Standards and Technology (NIST), and</li> <li>f. conformance to applicable best practices for information security management as described by the International Organization for Standardization/International Electromechanical Commission 27000-series (ISO/IEC 27000) standards.</li> </ul>
331	Certify that the LPR System is in compliance with the security standards required in the New Jersey Statewide Information Security Manual.
332	<p>If the LPR System employs cloud computing, the Contractor shall ensure information assets are secure and that security and privacy are maintained using de facto best practices aligned with FIPS as well as NIST Publications. Those best practices include, but not limited to:</p> <ul style="list-style-type: none"> <li>a. NIST 800-144: Guidelines on Security and Privacy in Public Cloud Computing;</li> <li>b. NIST Special Publication 800-146: Cloud Computing Synopsis and Recommendations, and</li> <li>c. Cloud Security Alliance: Cloud Controls Matrix Version 3.0 (CCMv3).</li> </ul>
333	Provide for secure communications with the CSC Services Contractor, Third-party Service Provider portals, and all external interfaces, for example, https or similar.
334	Make the necessary Software changes required to ensure compatibility with the evolving technologies and the latest software vendor and best practices for security and protection of PII.

335	Design the LPR System to anticipate that, during the Implementation and Operations Maintenance Phase, the LPR System will become subject to more restrictive digital privacy laws and regulations (for example, similar to European Union General Data Protection Regulation and California privacy laws). During design within the Implementation Phase, the Contractor shall provide documentation (within applicable deliverables) and demonstrate (during testing) the LPR System's preparedness to anticipate more restrictive privacy Requirements including the capability to purge specific but not all Account information, specific file types related to customers based on Account specific triggering events, and transactional field-level data while retaining other information within the data record.
336	LPR System shall be designed to support future privacy regulations that restricts access to customer data.
337	The LPR Services Contractor, its Subcontractors and all persons performing the Services shall not show, disclose, transmit or transfer to, or allow access to Confidential Personal Information by, any person or entity, for any purpose or time period, whose residence, offices, operation or personnel are located outside the geographic borders of the United States, or which is established, incorporated, formed in a country other than United States, or who is not legally authorized to work in the United States.
338	Provide the capability for multi-factor authentication for all LPR System access. Multi-factor authentication to include secret key via email, short message service (SMS) verification (user selectable) or call.
339	All PII data shall use strong encryption both during transmission (in-motion) and when stored within the LPR System (at rest).
340	Provide the capability to prevent an Authorized User or system administrator from viewing encrypted information in unencrypted form.
341	Prevent any Authorized User, system, or database administrator from viewing encrypted information in unencrypted form, while providing the capability for Authorized Users with a particular user role, Approved by NJTA, to view encrypted information in unencrypted form. An audit trail will be created each time unencrypted information is viewed.
342	Ensure no PII information is present in any non-production environments unless specifically requested and Approved by NJTA. All customer related data, for example license plate information shall be scrambled.
343	Provide comprehensive user credential controls that are compliant with PII standards, including but not limited to:  a. prevent the creation of 'generic' Authorized User accounts – all Authorized User accounts shall be associated to a specific person. For example, use the unique employee ID as a required field for each Authorized User account. Duplicate IDs would be rejected, and

	b. prevent an Authorized user (role-based) from logging in at two different machines at the same time, while allowing a single Authorized User on a single machine to have multiple sessions open at the same time.
344	System administration and database Authorized Users shall have separate and unique super user accounts.
345	Provide the capability for an Authorized User to set, based on user role, the length of inactivity time before a session time out.
346	Provide the capability to Configure different credential controls for different types of users, including but not limited to: <ul style="list-style-type: none"> <li>a. Authorized Users who will access the LPR System, and</li> <li>b. Third-party Service Providers who will access the LPR System via portal.</li> </ul>
347	Provide the capability for an Authorized User session time out after a Configurable period of inactivity.
348	When an Authorized User's account is disabled, provide the capability to immediately and automatically take actions, including but not limited to: <ul style="list-style-type: none"> <li>a. disable all System access;</li> <li>b. invalidate all passwords, and</li> <li>c. notify NJTA of the update to the account.</li> </ul>

#### 8.4.1 Secure Remote Access

349	Provide secure remote access to support image reviewers and other Authorized User remote access to the LPR System.
350	Provide secure remote access for all customer service personnel to support the Contractor's approach to at-home image reviewers (Approved by NJTA).
351	Provide secure remote access to support the Contractor's approach and meet the Requirements of disaster recovery and business continuity.
352	Provide secure remote access for all Authorized Users at NJTA's discretion including CSC Services contractor staff.
353	Provide secure remote access that allows NJTA to manage all database access, including Contractor's access to the database.
354	Provide secure remote access for all System functionality, user roles and Toll Agency access.

355	Provide secure remote access for Authorized NJTA Users to have full access to all data in the production database throughout the Contract Term. This includes the ability to create and generate queries.
356	Provide, for the same user, the capability to limit access to certain screens and functionality based on location (inside the secure network vs remote via secure remote access).
357	Provide secure remote access that requires multi-factor authentication (MFA) at the highest level supported by the Authorized User's device and operating system.
358	Provide the capability to manage registration for multi-factor authentication. Deliver a registration code or notice of proofing through an out-of-band channel (e.g. delivery to business email address or business mobile telephone number on file) to ensure that the individual associated with an address of record is the same individual that participated in the registration.
359	Provide continuous updates to the secure remote access to support new modes of multi-factor authentication on all device types and operating systems.
360	Provide secure remote access for all device types and operating systems, including but not limited to:  a. Desktops/laptops;  b. tablets, and  c. mobile devices.
361	Network connection for remote access sessions shall be limited to no more than eight (8) consecutive hours without requiring the Authorized User to re-authenticate.
362	Remote activation of collaborative computing devices shall be prohibited without providing explicit indication of use to Authorized Users physically present at the devices.
363	Network Connection shall be terminated after a thirty (30) minute period of inactivity, and Authorized Users shall re-authenticate to resume or establish a new session.

## 8.5 Cybersecurity Specifications, Standards and Policies

Contractor shall comply with the latest version of the State of New Jersey Statewide Security Manual at the time of Go-Live. In any circumstance of conflict between requirements, standards or statutes, the Contractor shall adhere to the most stringent requirement.

364	Obtain and maintain compliance with all applicable regulatory and contractual responsibilities with regard to cybersecurity and privacy in accordance with the Requirements, based on the data processed and function of the Contractor and its system.
365	Comply with National Institute of Standards and Technology (NIST) 800-53 for Security and Privacy Controls for Information Systems and Organizations and at a minimum, comply with the security control baselines for a "Moderate-Impact" information system.

366	Comply with and follow the NIST Risk Management Framework (RMF).
367	Comply with and provide evidence of compliance with NIST controls standard as applicable and fill out the CSO Security Controls Matrix (NIST based for an on-premise solution and/or off-premise solution, Cloud Security Alliance (CSA) based for cloud solution, and both for hybrid combination) to be provided upon Agreement award.
368	For the applicable security and privacy controls, the Contractor, system, network, and all interfaces shall comply with all cybersecurity policies and standards published by New Jersey Office of Information Technology and the New Jersey Office of Homeland Security, including Attachment 5 Statewide Information Security Manual. It is the Contractor's responsibility to be aware of any additions to or modifications of IT policies and standards located at <a href="https://www.nj.gov/it/whatwedo/policylibrary/">https://www.nj.gov/it/whatwedo/policylibrary/</a> (or revised location).
369	Adopt and follow secure SDLC (System Development Life Cycle) process standard (i.e. OWASP (Open Web Application Security Project)).
370	Provide strong end-to-end encryption for all sensitive information, including Confidential Personal Information stored within databases (at rest) and being transmitted (in-motion).
371	Use strong encryption methods such as AES FIPS-179 (128 bits and higher) or RSA (2048 bits and higher), or an equivalent if Approved by NJTA.
372	Adhere to all aspects of the DPPA – 18 US Code, Section 2721.
373	If any security-related Requirements are in conflict, conform to the more stringent version of the Requirement, as determined by NJTA.
374	Ensure that LPR System processes are not co-mingled with other of Contractor's customers and/or merchants.
375	Implement authentication, authorization, data validation, and encryption for all APIs and transport communications.

## 8.6 Records, Data Retention, and Purging

NJTA is a public agency and is, therefore, subject to the law governing the retention and disposition of information considered as public record. The Contractor shall maintain compliance with data retention standards as they evolve over the Contract Term. Initially, the Contractor will develop the LPR System to comply with the Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion.

The Requirements for purging include Requirements for automating these activities in a way that maintains compliance with the data retention standards and all applicable state and federal laws, while providing NJTA a method to Approve the disposition of records before they are deleted.

376	Provide the capability for fully automated and Configurable data purging in accordance with NJTA's data retention Requirements.
377	Purge routines shall be Configurable for each impacted data element, including but not limited to:  a. data;  b. Images, and  c. interface files.
378	The Contractor shall provide the capability to retain license plate data, images, and LPR System logs on-line for a minimum of two (2) years and archived license plate data and images for one (1) year in accordance with the data backup and retention procedures described in the Business Rules, and in accordance with any state or federal data retention and PII statutes. In the event of conflict between these retention requirements, the Contractor shall maintain records for the longer retention period.
379	Provide the capability to notify maintenance personnel a Configurable number of days in advance and require manual approval when archival and purging jobs are to be executed, including but not limited to:  a. data elements to be impacted;  b. date range applied, and  c. data size impact.
380	After successful archival of data and confirmation via the MOMS, the deletion of online data shall be automatic, without user intervention, and shall generate a message to be transmitted according to the MOMS rules. Absolutely no transactions shall be deleted unless confirmed to be successfully archived. The System servers shall be sized to accommodate for the restoration of selected archived data (1 year minimum), if needed, Authorized Users shall be able to generate queries from the restored data.
381	Standards for records management and retention may change during the Contract Term. The Toll Agencies will provide any updates to their internal policies and procedures that may impact the Services as appropriate; however, it is the Contractor's responsibility to ensure it is aware of any changes to all non-Toll Agency's standards, as described in these Requirements, and to incorporate those changes, as appropriate.

## 8.7 Interfaces

The Contractor is responsible for establishing the required Agreements, relationships and interfaces required to provide the Services. The Contractor shall have full responsibility for working with the CSC Services Contractor in the designing; developing; documenting; testing and implementing of all required interfaces, web services, and application programming interfaces (APIs).

The intent of the Requirements in this section is to obtain a data transfer interface solution that:

- provides the flexibility to adapt easily to the changing needs of the New Jersey E-ZPass operations;
- provides the Configurability to adapt easily to each Toll Agency's changing needs;
- is industry standard and complies with established industry specifications;
- provides an audit trail for confirmation of successful transfer of data between the entities, and
- provides one hundred percent (100%) reconciliation of timely data transfer.

382	Provide electronic automated interfaces, web services, and application programming interfaces (APIs), including but not limited to: <ol style="list-style-type: none"><li>a. New Jersey E-ZPass CSC System;</li><li>b. NJTA AET Host System (Optional);</li><li>c. NJTA AET Image Capture System (Optional), and</li><li>d. NJTA's Data Warehouse.</li></ol>
383	Provide for guaranteed transmission of data for all interfaces, web services, and APIs.
384	Provide real-time MOMS Alerts for interface and data transmission failures.
385	Provide for one hundred percent (100%) reconciliation of the transmitted data and files.
386	Utilize secure file transmission protocols for the transfer of data and/or files via interfaces, web services, and APIs.
387	Data and file transfers shall utilize industry standard secure and reliable transfer protocols to be determined jointly with NJTA during System design.
388	Provide the capability to transmit and receive multiple files during each scheduled batch.
389	Provide the capability to transmit and receive multiple files in a day.
390	Utilize file naming conventions that prevent the over-write of data and/or files (for example include the date and time of transmission).
391	Utilize file handling and processing methods that provide a complete audit trail of the data and/or file transfer process (for example files that are successfully processed are moved to a processed folder).
392	Validate records and identify errors in the received data and/or files, including but not limited to: <ol style="list-style-type: none"><li>a. mandatory fields;</li><li>b. data formats;</li></ol>

	<ul style="list-style-type: none"><li>c. data validity (for example Account number not found in the LPR System);</li><li>d. duplicate records;</li><li>e. responses that indicate error conditions;</li><li>f. unexpected response;</li><li>g. checksum/record count verification;</li><li>h. incorrect status, and</li><li>i. incorrect change in state.</li></ul>
393	When issues with received data and/or files are detected, transmit the error details to the transmitting entity.
394	Provide Authorized Users a user interface to correct and re-transmit data and/or files.
395	Provide the capability to process re-transmitted data and/or files.
396	Provide the ability to identify missing records/transactions/images, create MOMS Alerts and request the transmission of such missing records/transactions/images.
397	Reconcile the transmitted records to the records received and accepted by the receiving entity.
398	<p>Provide the means to identify interface issues by validating the file transmission process, including but not limited to:</p> <ul style="list-style-type: none"><li>a. creation and transmission of data and/or a file at the scheduled time even if there are no records to transmit;</li><li>b. determining if the data and/or file was transmitted or received at the scheduled time;</li><li>c. identifying conditions outside of normal trends, creating MOMS Alerts, and pausing file/data processing;</li><li>d. creation of MOMS Alerts if data and/or file was not created or received at the scheduled time;</li><li>e. creation of MOMS Alerts if received data and/or file was not acknowledged;</li><li>f. creation of MOMS Alerts if records in the received data and/or file had errors when processed;</li><li>g. provide details to the MOMS of each failed record;</li><li>h. creation of emails/SMS to Authorized Users when file has been successfully transmitted;</li><li>i. creation of emails/SMS to Authorized Users when third-party data and/or file had errors, and</li></ul>

	j. creation of MOMS Alerts when response has not been received for individual records within the expected duration.
399	Provide data and/or file transmission and reconciliation reports as described in these Requirements.
400	Provide a Dashboard that tracks the progress of the file transmissions through each stage and their Acknowledgements by the receiving entity, including but not limited to: a. transactions eligible for transmission; b. file and /or data created with file name; c. file and/or data transmitted; d. file and/or data received; e. file and/or data accepted; f. file and /or data rejected; g. file and/or data re-transmitted; h. number of records in the file and/or data set, and i. number of failed records.
401	Provide Authorized Users the capability to establish, update and modify the parameters related to file and/or data transmission for each interface.
402	Monitor the disk capacity where files and/or data are deposited and send a MOMS Alert and automatically notify any Authorized Users if folders are near a Configurable capacity level and if full.
403	Provide the tools to automatically manage the folders by archiving successfully processed data and/or files after a Configurable number of days in accordance with data retention Business Rules.
404	Provide the tools to import data to reconcile file transmissions.
405	Conform to all existing ICDs/API specifications if applicable, modify existing interface documentation as necessary, and develop all new/missing interface documentation.
406	Maintain a repository of interface documentation and modify interface documentation as needed throughout all Project phases.
407	The System shall interface to NJTA Security Information and Event Management (SIEM) to transmit all security related incidents and alerts as Approved.

### 8.7.1 Interface to the New Jersey E-ZPass CSC System

This interface connects the LPR System to the New Jersey E-ZPass CSC System for the transfer of images and image data, LPR Review Services results, QA results, Plate Correction List and other relevant data as determined during the design and documented in the ICDs.

### 8.7.2 Interface to NJTA AET Host Image Capture Systems (Optional)

If the option is exercised as described in Section 8 LPR System and LPR Operations Services for NJTA (Optional Services), this interface connects the LPR System with the NJTA AET Host Systems and Image Capture Systems for the transfer of images and image review results.

### 8.7.3 Interface to NJTA's Data Warehouse

This interface connects the primary and secondary LPR System with NJTA's Data Warehouse to transfer image review results and data as determined during design in accordance with the ICDs.

### 8.7.4 Interface to Time Server

Interface with Stratum 1 source Approved by NJTA to synchronize time.

## 8.8 Logging and Audit Mechanisms

These mechanisms provide chronological recording of system events and Authorized User account access and account activities. They also document the sequence of activities that have been affected at any time during a specific operation, procedure, or event.

408	Provide comprehensive, Configurable systemwide logging capabilities ensuring that every transaction of any type is logged including, but not limited to, changes to any record in the LPR System (LPR System settings and parameters). All Authorized User and customer access shall be logged. Audit logs shall be retained in compliance with Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion.
409	Provide logging in compliance with all PII requirements and best practices.
410	Provide logging of all access and changes to Authorized User accounts.
411	Provide System audit reports, including but not limited to: a. reports of logged activity by Authorized User; b. reports of logged activity by activity type, and c. reports of logged activity by Authorized User accounts.
412	Create an audit trail when a user role is assigned to an Authorized User, changed, or removed from an Authorized User.
413	Provide screens so that Authorized Users can view all log files.

414	Provide filter and search capability for log file viewing screens with the capability to export screen contents.
415	Provide the capability to export all log files based on Approval by Authorized Users.
416	Provide logging of all disabling or deleting of an Authorized User account.
417	Provide logging of all Authorized User account login attempts, including but not limited to: a. username; b. originating IP address; c. date; d. time, and e. success/failure.
418	Provide the capability to log all changes to System Configurations or settings and record the Authorized User's username, date, time, and IP address from which the change was made.
419	Provide the capability to generate a MOMS Alert when debugging logs are turned on within the production environment.
420	Provide the capability to generate a MOMS Alert when debugging logs are turned off within the production environment.
421	Prevent tampering with log file data. Ensure there are no alterations of the original audit log's content or time ordering.
422	Provide the capability to log and track changes to applications, databases, and operating systems.

## 8.9 Transaction and Image Processing

Currently, Transponder-Based and Image-Based Transactions and images are transmitted from the individual Toll Agencies to the New Jersey E-ZPass System, where AIR and MIR is performed for all Toll Agencies. With the implementation of the new New Jersey E-ZPass System, some Toll Agencies may elect to perform the AIR and/or MIR at the Toll Agency Host System. The new New Jersey E-ZPass System will transmit images and associated transaction data requiring further processing to the LPR System, in accordance with the Approved ICDs. The receipt of images from the New Jersey E-ZPass System will be one-hundred percent reconcilable with zero loss of images. The Contractor will provide a combination of AIR and/or MIR to meet the LPR Services Performance Requirements for accurate identification of license plates and vehicle classification and will send the resulting information to the New Jersey E-ZPass System.

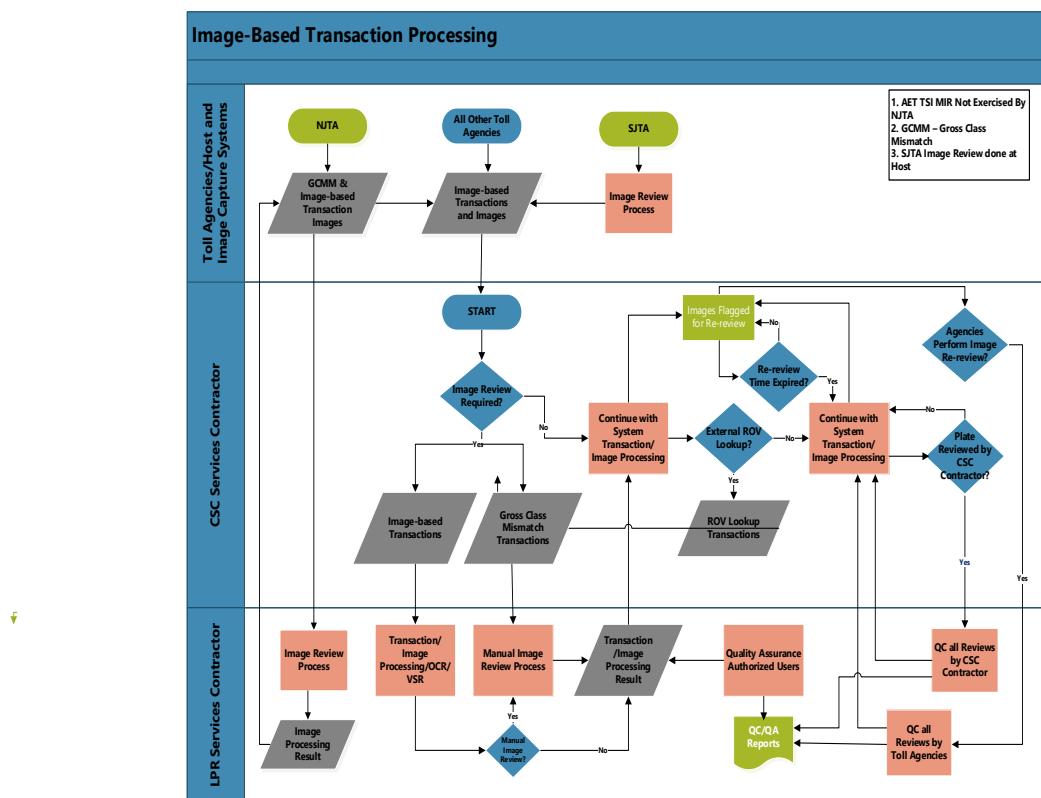
Image enhancement tools provided will provide image reviewers the capability to identify every human readable plate and comply with the LPR Services Performance Requirements. The screens, enhancement

tools, and navigation methods will be optimized for speed, reliability, and accuracy. Enhanced images that result from the manual review process, upon which a license plate determination is based, will be saved for use in the downstream processes, in addition to the saving of the original unaltered images. Image disposition reasons and categories will be Configurable and will cover all possible conditions upon which a disposition could be based.

The intent of the Requirements in this section is to obtain a license plate extraction and image review solution that:

- automates the license plate extraction process to the extent possible;
- provides operational efficiency;
- results in the accurate determination of license plate and vehicle classification information, and
- provides the Toll Agencies visibility into the image review process and capability to audit the process.

Figure 4-1 illustrates the processing flow for Image-Based and Gross Class Mismatch trips.



**Figure 8-1: Image-Based Transaction and Gross Class Mismatch Trip Processing Flow**

423	The LPR System shall receive transactions and associated images from the New Jersey E-ZPass System in accordance with the Approved ICDs.
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424	<p>The LPR System shall provide Configurable capability to support, at a minimum:</p> <ul style="list-style-type: none"><li>a. multiple Toll Agencies through different interfaces;</li><li>b. type of service (license plate or vehicle classification) based on Toll Agency;</li><li>c. image types of varying resolution, and</li><li>d. different number of images per Transaction.</li></ul>
425	<p>The LPR System shall process transactions and images that are designated for:</p> <ul style="list-style-type: none"><li>a. AIR, with potential subsequent MIR;</li><li>b. MIR;</li><li>c. quality control review where corrections to license plate is made by Toll Agency Authorized Users and CSC Services Contractor, and</li><li>d. Gross Class Mismatch review.</li></ul>
426	<p>The LPR System shall be Configured to process images and present the images on the image review screen in accordance with image specifications including, but not limited to:</p> <ul style="list-style-type: none"><li>a. whether images are black and white or color;</li><li>b. whether image set has front and rear images or only rear images;</li><li>c. whether image set has the region of interest included in the transmitted package, and</li><li>d. the number of images in a set.</li></ul>
427	<p>The Contractor shall work with the Toll Agencies and the CSC Services Contractor to design, develop and implement image processing services that meet LPR Services Performance Requirements.</p>
428	<p>During design, the Contractor shall work with the Toll Agencies and the CSC Services Contractor to develop specific processes, logic, and interfaces that optimize the image processing and license plate identification process in accordance with the high-level flow provided in Figure 4-1.</p>
429	<p>Work with the CSC Services Contractor to develop the ICDs as described in these Requirements.</p>

430	The LPR System shall require that, at all times, the license plate information is normalized/standardized within all subsystems as it relates to the alphanumeric plate characters, jurisdiction, and plate type so that the license plate number includes the required pre-fix and suffix in compliance with each jurisdiction's requirements. The Contractor shall work with the CSC Services Contractor to ensure that the normalization/standardization shall result in the license plate number format being the same regardless of where it is input, including but not limited to the New Jersey E-ZPass System, AIR during the license plate extraction process and image reviewers during the image review process.
431	The LPR System shall reconcile all transactions and images received for image review processing back to the CSC Services System, without loss of any image, in accordance with the Approved ICD.
432	The LPR System shall reconcile all Gross Class Mismatch trips received back to the New Jersey E-ZPass System, without loss of any image, in accordance with the Approved ICD.

### 8.9.1 Automated Image Review

The Contractor shall provide an AIR solution to aid in automatically identifying license plates. This AIR process will automatically locate and extract the license plate numbers, plate type and issuing jurisdiction from the license plate images and store them in computer-readable format along with confidence information that can be used to determine whether or not MIR is required. The confidence levels are a measure of the merit of each image and the various elements comprising the plate data, representing the likelihood that the plate data produced by the LPR System is correct. The AIR process will be required to recognize a very high percentage of all license plates with a confidence high enough to warrant bypass of MIR or use of the results for MIR process.

AIR is performed at some of the Toll Agencies' Host and/or Image Capture Systems; for such Toll Agencies, the AIR results will be provided as part of the image data. The LPR System shall apply Business Rules based on the AIR results (Toll Agency Host or LPR System) when processing images to improve the automation and accuracy of the license plate information. The LPR System will enable the AIR confidence threshold, Fingerprinting/ Vehicle Signature Recognition (VSR) algorithm, and/or any other automated plate processing parameters to be Configured so that it can be adapted to changing conditions and improvements in the LPR System.

The AIR solution shall include vehicle Fingerprinting/VSR, optical character recognition (OCR), or other similar methods that improve automation and accuracy. In addition, a VSR database of vehicle fingerprints that match to known license plate data shall be maintained. The VSR database shall contain license plate data that has been 'Truthed', meaning they were verified by the manual review process a known (Configurable) number of times.

433	The LPR System shall provide AIR techniques allowing it to extract license plate information (alphanumeric characters, issuing jurisdiction, and plate type, i.e., plate data) from all images received from the New Jersey E-ZPass System. Plate data shall include legal stacked characters and any required plate character prefixes, suffixes, or special characters.
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434	The AIR shall correctly handle vertically, horizontally, and diagonally stacked characters.
435	The AIR shall correctly handle and represent symbols that are legally allowed to be part of the license plates.
436	The AIR results shall include the alphanumeric plate characters, issuing jurisdiction, and plate type for both the front and rear license plates of the vehicle.
437	The AIR shall incorporate Fingerprinting/VSR or similar technologies that would assist in automating the image review process and improving the accuracy.
438	For each type of technology provided (Fingerprinting/VSR, OCR, etc.) the LPR System shall individually provide at a minimum: <ol style="list-style-type: none"><li>a. confidence levels for the license plate number and jurisdiction for each image processed for downstream processing, filtering, and reporting, and</li><li>b. tools to monitor the performance of the solution and to update and Configure the software in order to maintain and enhance LPR System performance.</li></ol>
439	The AIR shall support a Configurable confidence threshold. The confidence threshold is a number within the range of confidence levels determined and established by the LPR Services Performance Requirements to optimize image processing.
440	The LPR System shall maintain a database of vehicle signatures (VSR database) that match to known license plate data.
441	Work with the CSC Services Contractor to develop an optimal Truthing and license plate correction process that increases image processing efficiency and review accuracy.
442	The LPR System shall be Configurable as to whether or not “first time” plate data (data that has not previously been seen in the LPR System) shall require Truthing.
443	The LPR System shall be Configurable as to the number of times plate data must be seen until it is no longer considered “first time” data.
444	Provide the capability to automatically correct and re-Truth the VSR database when an image is designated for MIR.
445	Provide the capability to maintain and update a Plate Correction List which contains license plates that pose challenges to AIR and require manual review and verification. This list will be updated based on error plates identified and sent to the Contractor by the CSC Services Contractor and the QA process of the Contractor.
446	Provide the capability to Configure the MIR process based on inclusion on the Plate Correction List whereby it was flagged to have an error.
447	The LPR System shall utilize a Configurable parameter (jurisdiction-specific parameters or parameters specific to other criteria) to set the AIR confidence threshold for each Toll Agency, which is defined as the value at or above which a confidence level must be to bypass MIR.

448	The LPR System shall be furnished with a rules-based process to determine when MIR is required.
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### 8.9.2 Manual Image Review

LPR System will provide a MIR function that will allow review of images and confirmation/entry of plate data from captured images or assignment of the proper reject code if the plate data cannot be ascertained. To help ensure accurate AIR, MIR will be required for an image the first time (Truth) the license plate is seen on the roadway, even if its confidence level is above the human review threshold. This is also true of any license plate which has previously been seen by the LPR System, but which has been deemed ‘problematic’ (e.g., continual errors, duplicate plate) as identified in the Plate Corrections List or requires re-Truthing due to age and is designated as requiring MIR.

The Contractor shall provide MIR functionality for inspecting, entering, editing, and confirming plate data from images designated for MIR. This functionality will be provided on two levels:

- Image Reviewer – Image reviewers are responsible for reviewing all images designated as requiring MIR. The MIR functionality must support the required number of simultaneous image reviewers and allow them to process images rapidly to meet the LPR Services Performance Requirements set forth in this Scope of Services, and
- Supervisor/QA Staff – These staff are responsible for spot checking image reviewers and/or resolving questionable plate data.

449	The LPR System shall be furnished with a comprehensive and Configurable MIR function allowing review (including entering, confirming, editing, and/or rejecting) of plate data, as necessary, to ensure that accurate plate data or reject code are utilized throughout all LPR System processes.
450	Provide the capability to Configure the image review process based on Toll Agency whereby images from a specific Toll Agency can be Configured for separate review processes.
451	Provide the Configurable capability to queue images for separate MIR processes based on AIR confidence range. This will provide the capability to queue low quality images for specialized image review.
452	<p>Provide the capability to Configure the image review process for image reviewers to:</p> <ul style="list-style-type: none"> <li>a. accept AIR license plate data if it is displayed and determined to be correct;</li> <li>b. enter license plate data and accept the image;</li> <li>c. reject the image;</li> <li>d. retrieve license plate results from prior history of same vehicle so license plate results can be entered;</li> <li>e. skip the image, and</li> </ul>

	f. flag the image for supervisory review/action.
453	The MIR function shall provide image reviewers a screen or screens for rapid review of images and transaction data.
454	The MIR function shall be Configurable to allow for a double-blind review process whereby results from two reviews (AIR or MIR) are required to match before review is deemed complete.
455	The LPR System shall route images to a supervisor for resolution when the plate data differs during double-blind review process.
456	Image review screens shall allow editing certain pre-populated plate data, including alphanumeric plate characters, issuing jurisdiction, and plate type. Plate type shall be a required field for any jurisdiction for which it is applicable.
457	The LPR System shall allow for the rejection of the images with a transaction if none of the images is human readable.
458	The LPR System shall provide the Configurable capability that may require all or some rejected images being queued for supervisory review.
459	The LPR System shall support a Configurable list of potential reject reasons codes and categories to be used when images associated with the transaction are rejected.
460	The MIR function shall provide tools for image enhancement including, but not limited to, zooming, contrast adjustment, and brightness adjustment. These tools will not alter the original image but shall apply these adjustments for viewing purposes. Enhanced images that result from the manual review process, upon which a license plate determination is based, will be saved for use in the downstream processes, in addition to the saving of the original unaltered images.
461	The image review functionality shall be optimized for operational efficiency whereby the image review process can be completed without the use of mouse clicks but by utilizing hot keys if the image review is performed on a workstation.
462	The image review functionality shall be optimized for operational efficiency whereby the image review process can be completed using a tablet/touch screen.
463	The LPR System shall provide the capability to Configure the image review display screens so that the LPR System displays only those buttons, data, and functions that are applicable to the specific review level, including but not limited to first review, secondary review, special reviews, supervisory review, QA review, and corrective reviews.
464	Provide the capability to track the rejected images and generate MOMS Alerts to specific Toll Agencies if rejected images are above a Configurable threshold for each lane for a Configurable period of time.
465	Provide the capability to track the rejected images and generate MOMS Alerts if rejected images are above a Configurable threshold for an image reviewer for a Configurable period.
466	Provide the capability to identify and flag unidentified plates for possible fraudulent activity.

467	Provide the capability to record and track the temporary plates and identify frequent usage of temporary plates.
468	Track MIR statistics to allow for a comprehensive QA process, to analyze and refine the MIR process, and to track individual image reviewer productivity and accuracy.
469	Track any edits to plate data and maintain a full history of such edits, including the ID of the name of the user making the edit, the date/time of the edit, and the before/after edited plate data.
470	The MIR function shall be fully auditable, generating audit trails of all activity, and shall provide comprehensive audit trail search and review capability.
471	Transmit the results of the AIR and MIR results to the New Jersey E-ZPass System at scheduled intervals per day in accordance with the Approved ICD for all transactions for which the image review process is completed.

### 8.9.3 Gross Class Mismatch Review

The LPR System shall provide Authorized Users the capability to review Gross Class Mismatch trips whereby the vehicle classification on the transaction can be changed to reflect the actual class of the vehicle.

472	Provide the capability to review images of Gross Class Mismatch trips which are transactions flagged as a Gross Class Mismatch in accordance with Business Rules.
473	The Gross Class Mismatch review functionality shall be capable of displaying data received by the New Jersey E-ZPass System, including any digital video and all images corresponding to the mismatched transactions, with the ability for Authorized User to playback the recorded video.
474	If an overview image is provided as part of the image package, then the overview image shall be presented to the image reviewer as the primary image.
475	Provide the capability to maintain Configurable vehicle classification table including default vehicle class by Toll Agency and by Roadway/Plaza.
476	The Gross Class Mismatch review functionality shall be optimized for operational efficiency whereby the review process can be completed without the use of mouse clicks but by utilizing hot keys if the review is performed on a workstation.
477	The Gross Class Mismatch review functionality shall be optimized for operational efficiency whereby the review process can be completed using a tablet/touch screen.
478	LPR System shall track Gross Class Mismatch review statistics to allow for a comprehensive QA process, to analyze and refine the Gross Class Mismatch review process, and to track individual image reviewer productivity and accuracy.
479	The Gross Class Mismatch review function shall be fully auditable, generating audit trails of all activity, and shall provide comprehensive audit trail search and review capability.

480	Provide the capability to Configure the review display screens whereby only those buttons, data, and functions that are applicable to the Gross Class Mismatch review are displayed.
481	Provide the capability to assess and accept a default vehicle classification by Toll Agency and by Roadway/Plaza in accordance with the Business Rules if the vehicle classification cannot be determined.
482	Provide the capability for the image reviewer to select the Configurable gross class (e.g., car, truck, or bus) during image review.
483	Provide the capability to electronically transmit the adjusted vehicle classification to the New Jersey E-ZPass System in accordance with the Approved ICD.
484	Provide the capability to track the adjusted Gross Class Mismatch images and generate a MOMS Alert to the specific Toll Agency if adjustments are above a Configurable threshold for each lane for a Configurable period of time.
485	Provide the capability to track the Gross Class Mismatch images for which the default vehicle classification was accepted and generate MOMS Alerts to specific Toll Agencies if such images are above a Configurable threshold for each lane for a Configurable period of time.
486	Provide the capability to track the Gross Class Mismatch images for which the default vehicle classification was accepted and generate MOMS Alerts if such images are above a Configurable threshold for an image reviewer for a Configurable period.
487	Track any edits to vehicle classification data and maintain a full history of such edits, including the ID of the name of the user making the edit, the date/time of the edit, and the before/after edited vehicle classification data.

#### 8.9.4 Image Processing Audit Portal

488	Provide an online audit portal that the CSC Services Contractor, Toll Agencies and Contractor QA staff will use to perform license plate and Gross Class Mismatch processing quality audit reviews.
489	The audit application for image processing reviews shall include the same enhancement tools as the MIR function.
490	Provide the capability to present for review a random sampling of images based on a specified time period and location, and for criteria such as review type, Toll Agency, rejected images, reject reasons or categories, or for certain Jurisdictions.
491	Provide the capability for the Authorized User to correct license plate data for images that were deemed to have incorrect plate data and Contractor to validate the updated plate data.
492	Provide the capability for the Authorized User to enter the correct license plate data for images that were rejected during image review and Contractor to validate the entered plate data.

493	Provide the capability to display other incorrect license plates for the same plate over a Configurable period of time by Toll Agency for bulk correction of the plates.
494	Provide the capability to transmit corrected plate data to the New Jersey E-ZPass System in accordance with the process determined during the design process.
495	An audit history of all the image review activity shall be captured and presented to the Authorized User, including: <ol style="list-style-type: none"><li>a. original image reviewer (Employee, AIR etc.);</li><li>b. timestamp of original image review;</li><li>c. ancillary transaction information;</li><li>d. detailed original image review result (Accept/Reject);</li><li>e. license plate data (original and corrected);</li><li>f. reject category;</li><li>g. reject reason;</li><li>h. audit reviewer name;</li><li>i. audit review time stamp;</li><li>j. audit result, and</li><li>k. audit dispute status/notes.</li></ol>
496	Provide the capability to present for review a random sampling of Gross Class Mismatch trips based on a specified time period and for criteria such as adjusted vehicle classifications or for certain Jurisdictions.
497	Provide the capability for Toll Agency designated auditor to correct the vehicle classification data for images that were deemed to have incorrect vehicle classifications.
498	Provide the capability to transmit corrected vehicle classification data to the New Jersey E-ZPass System in accordance with the process determined during the design process.
499	An audit history of all the Gross Class Mismatch review activity shall be captured in the audit application and presented to the Gross Class Mismatch auditor, including: <ol style="list-style-type: none"><li>a. original reviewer (employee, automated etc.);</li><li>b. timestamp of original image review;</li><li>c. ancillary transaction information;</li><li>d. detailed original image review result (accept/reject);</li></ol>

	e. vehicle classification (original and corrected);
	f. audit reviewer name;
	g. audit review time stamp;
	h. audit result, and
	i. audit dispute status/notes.

## 8.10 Search Functionality

500	Provide via screens, the capability to search and view all stored information regarding images and transactions, including but not limited to:  a. reviewer user ID;  b. original and adjusted license plate number;  c. partial license plate number;  d. license plate type;  e. Jurisdiction;  f. image disposition;  g. reject category;  h. reject reason;  i. transaction type;  j. transaction ID;  k. transaction date and time;  l. image review queue;  m. transmission date and time;  n. AIR results;  o. AIR confidence level;  p. lane anomaly;  q. original and adjusted vehicle classification;  r. Toll Agency;  s. toll facility, and
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	t. lane ID.
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## 8.11 Operational Dashboards

The intent of the Requirements in this section is to obtain Operational Dashboards that provide the capability to manage and audit operations (personnel and processes). Areas that should be monitored, include but are not limited to:

- image processing, review, and transfer;
- Image processing and image rejects statistics;
- image review QA;
- LPR Services KPI, and
- LPR System interfaces.

The Contractor shall work closely and collaboratively with the Toll Agencies to design Dashboards and reporting related to LPR Services. The System should be designed with the flexibility where Authorized Users can create, add, delete, or modify Dashboards.

501	The LPR System shall provide real-time Dashboards to allow monitoring of all aspects of the LPR System, including AIR, MIR, Gross Class Mismatch reviews, LPR Service KPI, and LPR System interfaces.
502	Provide Authorized User the ability to create Dashboards.
503	Provide Authorized User the ability to customize their Dashboard and save such setting.
504	Provide information on Dashboard(s), by Toll Agency and all Toll Agencies, of the LPR System operations and performance, and reviewer performance and productivity, at all stages of operations process flow, including: AIR process, license plate image review, Gross Class Mismatch review, and quality control.
505	Provide information on Dashboard(s), by Toll Agency and all Toll Agencies, of all images rejected by reject code and reviewer.
506	Provide information on Dashboard(s), of Toll Agency and CSC Services Contractor QA results.
507	Provide information on Dashboard(s), of Toll Agency and CSC Services Contractor image re-review results and reprocessing.
508	Generate automated maintenance notifications when specified deviations from established thresholds are detected within a user defined Configurable period of time and provide such notifications on the Dashboard.
509	Provide, via Dashboard, all required information on status of the Contractor workflows for reporting on image processing statuses, quality, and production.

510	Provide, via Dashboard, tracking of current performance to performance indicators established for all aspects of the LPR Services for Configurable periods of time for example, for a given month.
511	Provide the capability to export the data and graphs to user selected format, for example excel.
512	Provide user the capability to drill to the individual details and back-up information of any transaction state, status, or problem, for example rejected images.
513	Provide user interface to establish various Configurable thresholds to monitor and assess System and operations performance.

## 8.12 Reporting and Reconciliation Requirements

Standardized reporting shall be made available to Authorized Users and shall be achieved via canned and ad-hoc reporting interfaces using both the production database for real-time reporting, reports database for more complex, non-real-time and/or data intensive reports.

The LPR System shall provide reports that are intuitive, flexible, responsive, have automated guidance, and are able to be scheduled as needed by Authorized Users. Summary information about current reports are provided in this section and the LPR System shall provide the similar information. All reports developed, designed, and deployed in the LPR System shall meet the following general Requirements:

514	Design, develop, test, and implement functionality to generate reports that enable users to retrieve data entered into the LPR System and or generated in the LPR System. Data elements shall be consistent and reconcile through all the reports of similar nature.
515	Provide the capability to generate reports with flexible selection, sort, and grouping criteria that allows Authorized Users to obtain related information through a single report. All reports should allow for the input of any identified criteria to be selected by range (for example, transaction dates from and to, etc.), and multi-list selection. The user interface for all reports generated in the LPR System shall be consistent.
516	Provide a web-based ad-hoc reporting solutions allowing Authorized Users to design and generate professional and accurate multi-format reports. Ad-hoc report templates created by Authorized Users shall be made available to all Authorized Users, including addition to the reports menu.
517	Provide for the generation of selected reports “as of” a specified date or as of the current date.
518	Provide image transmission reconciliation reports that help validate that all images and associated data files transmitted by the New Jersey E-ZPass System were successfully received by the LPR System. The reports shall list all of the image files that were transmitted to the LPR System, the number of images and data set in each file, the time these files were acknowledged by the LPR System. Files that were rejected and status of the re-transmission and images that were exceptioned by the LPR System shall be reported.

519	Provide the capability to track and reconcile one-hundred percent (100%) of the Image-Based Transactions and images received from the CSC Services Contractor and transmit review results in status in accordance with the ICD.
520	Provide the capability to track and reconcile one-hundred percent (100%) of the Gross Class Mismatch trips and associated data received from the CSC Services Contractor and transmit review results in accordance with the ICD.
521	Provide image reconciliation reports that help identify issues, including but not limited to transmission errors, data validity errors, missing images, missing transactions, and exceptions.
522	Provide reports that allows Authorized Users to access the results of the review for selected Toll Agency, location and review disposition, including but not limited to: <ol style="list-style-type: none"><li>a. number of transactions transmitted;</li><li>b. Number of transactions received;</li><li>c. number of images accepted;</li><li>d. images rejected;</li><li>e. quantity by reject categories;</li><li>f. quantity by reject reasons;</li><li>g. automation rates;</li><li>h. accuracy of AIR and MIR, and</li><li>i. vehicle classification corrections.</li></ol>
523	Provide reports that allow NJTA to monitor the LPR Services Contractor performance against agreed to LPR Services Performance Requirements, including but not limited to: <ol style="list-style-type: none"><li>a. number of images that did not meet review LPR Services Performance Requirement;</li><li>b. established accuracy LPR Services Performance Requirement;</li><li>c. variance from accuracy LPR Services Performance Requirement;</li><li>d. non-compliance to review timeline;</li><li>e. image reject rates, and</li><li>f. exceptions to the LPR Services Performance Requirements by license plate Jurisdiction.</li></ol>
524	Provide reports that display the results of the audits, re-reviews and QA by Toll Agencies and CSC Services contractor.
525	Provide reports that display image review trends and comparisons, including but not limited to:

	<ul style="list-style-type: none"> <li>a. license plate review timeline;</li> <li>b. staffing and image review performance;</li> <li>c. unidentified plates;</li> <li>d. image rejects by image reviewers;</li> <li>e. image rejects by Toll Agency and toll facility;</li> <li>f. image rejects by reject category;</li> <li>g. Gross Class Mismatch statistics, and</li> <li>h. automation statistics.</li> </ul>
526	The current status of all Performance Requirements shall be available to NJTA for applicable Configurable comparative periods within the report (for example, month, year, last three (3) months).

### 8.13 Maintenance Online Management System

The MOMS supports System Maintenance, Administration and Software Support Requirements for all hardware, Software, and other LPR System components by monitoring LPR System processes, equipment, jobs, and interfaces in real-time to identify degradations in performance or availability before they impact end users. In addition, the MOMS monitors and evaluates selected data points to determine when Configurable conditions occur that are of operational interest. The LPR System generates real-time MOMS Alerts, automatically creates actionable tickets, and allows Authorized Users to create, view and update tickets that are tracked to resolution. Both real-time and historical MOMS detail and summary data is available to Authorized Users via Dashboards, access to the MOMS ticket repository, and through reports. Authorized Toll Agency users shall have access to all MOMS screens. In addition, all MOMS data and all data coming into the MOMS shall be available to the Toll Agencies.

527	Provide a MOMS that is an integrated component of the LPR System and supports LPR System maintenance and administration operations for all Software, hardware and other LPR System components, in accordance with these Requirements.
528	The MOMS shall be Configurable and flexible to accommodate multiple Toll Agencies and facilities, changing staff, reporting Requirements, changes in systems, subsystems, components, and parts.
529	The Contractor shall provide the Toll Agencies with access to all MOMS screens and data as well as all data coming into the MOMS.

530	<p>As part of the MOMS, the Contractor shall provide an enterprise-level monitoring solution to monitor all LPR System equipment, System operations, connectivity, throughput, and intrusion points related to the LPR System. The monitoring solution shall utilize best practices for automated monitoring and alerting based on both real-time data and trending data. The monitoring solution shall be SNMP v2, v3 and MIB-II compliant (or the latest version at the time of design) and shall be capable of becoming compliant with later versions as they become available. The monitoring solution shall provide robust capabilities to assure network, device and equipment health, including but not limited to:</p>
	<ul style="list-style-type: none"><li>a. receive alarms from devices and equipment through SNMP traps, MOMS tickets and e-mail;</li></ul>
	<ul style="list-style-type: none"><li>b. identify events by evaluating logs, alarms and SNMP traps and take Configured actions;</li></ul>
	<ul style="list-style-type: none"><li>c. provide real-time notification, to Configured recipients, of failures, MOMS Alerts and other events detected;</li></ul>
	<ul style="list-style-type: none"><li>d. provide an overview Dashboard showing the current status of the LPR System and all current failures, Alerts or other events detected with the ability to easily navigate to view detailed information;</li></ul>
	<ul style="list-style-type: none"><li>e. support filtering of MOMS Alerts and events;</li></ul>
	<ul style="list-style-type: none"><li>f. support comprehensive log management;</li></ul>
	<ul style="list-style-type: none"><li>g. perform monitoring of production and non-production environments;</li></ul>
	<ul style="list-style-type: none"><li>h. provide metrics, and</li></ul>
	<ul style="list-style-type: none"><li>i. produce both canned and custom reports.</li></ul>
531	Third-party cloud infrastructure monitoring software or a cloud monitoring service shall be implemented if any portion of the LPR System is hosted by a cloud service provider.
532	<p>Provide a MOMS that automatically monitors, sends MOMS Alerts and generates tickets in real-time for all processes, equipment, jobs, repositories and interfaces and updates and tracks those tickets through resolution, including but not limited to:</p>
	<ul style="list-style-type: none"><li>a. communications issues;</li></ul>
	<ul style="list-style-type: none"><li>b. interface issues;</li></ul>
	<ul style="list-style-type: none"><li>c. electrical power and facility issues;</li></ul>
	<ul style="list-style-type: none"><li>d. hardware issues;</li></ul>
	<ul style="list-style-type: none"><li>e. software issues or failures;</li></ul>
	<ul style="list-style-type: none"><li>f. file systems and file system issues;</li></ul>
	<ul style="list-style-type: none"><li>g. issues with scheduled jobs, processes, or data flows;</li></ul>

	<ul style="list-style-type: none"> <li>h. transactions and/or images not properly advancing through the workflow;</li> <li>i. processes not running or completing as scheduled;</li> <li>j. System health – overall and by component;</li> <li>k. System application performance and response;</li> <li>l. low storage space (Configurable thresholds);</li> <li>m. CPU utilization (Configurable thresholds);</li> <li>n. CPU load (Configurable thresholds);</li> <li>o. memory utilization (Configurable thresholds);</li> <li>p. all security events;</li> <li>q. logs;</li> <li>r. access controls;</li> <li>s. secondary environment data transfer and synchronization status and issues;</li> <li>t. backup;</li> <li>u. image and data purge, and</li> <li>v. data restores.</li> </ul>
533	Provide a MOPS that monitors, sends MOPS Alerts, and tracks in real-time when Configurable events occur that are of interest to operations.
534	Maintain a list of all third-party products and services utilized in the Contractor's MOPS solution along with a description of the tool, its role, the devices and resources it monitors, and the types of events it is responsible for identifying.
535	Provide a diagram illustrating components, communications, and dataflow within the MOPS, including all third-party products and services.
536	The MOPS shall provide self-diagnosis functions to detect and report on the status and functioning of the MOPS and shall notify Authorized Users in case of failure.
537	<p>The MOPS shall constantly monitor the LPR System and user inputs, and generate automated notification of degraded LPR System and LPR Service performance to the Toll Agencies and on the Dashboard based on Configurable criteria, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. percent of images reviewed and rejected by lane and reject code over a Configurable time period;</li> <li>b. percent of images reviewed and rejected by reviewer and reject code over a Configurable time period;</li> </ul>

	<ul style="list-style-type: none"> <li>c. percent of images failing to auto-certify via AIR by lane;</li> <li>d. AIR degradation;</li> <li>e. percent of Gross Class Mismatch corrections by lane over a Configurable time period;</li> <li>f. percent of unidentified license plates over a Configurable time period, and</li> <li>g. when there is degradation in the quality of the images from specific Toll Facilities and lanes.</li> </ul>
538	<p>The Contractor shall use the MOMS to document all categories of changes submitted from various sources, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Authorized Users;</li> <li>b. Toll Agencies and their contractors and representatives;</li> <li>c. legislative mandates;</li> <li>d. Requirements not deployed;</li> <li>e. Business Rules;</li> <li>f. updates and upgrades;</li> <li>g. maintenance activities;</li> <li>h. MOMS, and</li> <li>i. Contractor's operations and support teams.</li> </ul>
539	<p>The MOMS shall interface to NJTA Security Information and Event Management (SIEM) to transmit all security related incidents and alerts as Approved.</p>

## 9 OPERATIONS AND MAINTENANCE SERVICES

Operations and Maintenance Phase Services include both LPR System Maintenance, Administration, and Software Support Services and LPR Operations Services.

### 9.1 Operations and Maintenance Documentation

Numerous documents related to the Operations and Maintenance Phase will be developed during the Implementation Phase. These documents shall be updated on a regular basis throughout the Contract Term to reflect any updates or changes to the LPR System or operational procedures.

540	Ensure that all documents, including those listed below, provided under this Scope of Services remain current. Submit changes to relevant sections with each Software Release and submit full versions of all documentation to NJTA for Approval once every year, or at NJTA's request, after the first year of operation.
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	<ul style="list-style-type: none"> <li>a. Disaster Recovery Plan, including the Operations Business Continuity Plan;</li> <li>b. Business Rules document;</li> <li>c. SOPs;</li> <li>d. Operations Staffing and Human Resources Management Plan;</li> <li>e. Operations Quality Assurance Plan;</li> <li>f. LPR System Support and Administration Services Manual;</li> <li>g. Image Review Services Manual, and</li> <li>h. LPR Services Audit Manual.</li> </ul>
541	Control and keep current all manuals and documents related to LPR Services operations. Track all revisions and send to NJTA for Approval. All documentation, electronic and otherwise, developed by the Contractor, including that developed to support training shall be the property of NJTA.
542	Update the Disaster Recovery Plan within 30 calendar days of the Disaster Recovery testing which occurs every six (6) months.
543	Update the Operations Business Continuity Plan within 30 calendar days of the Business Continuity testing which occurs every six (6) months.

## 9.2 System Maintenance, Administration, and Software Support Services

The Requirements described in this section detail the Contractor's responsibility for providing System Maintenance, Administration and Software Support Services for the LPR System, including but not limited to:

- System hardware and network maintenance;
- System monitoring and administration;
- System adherence to security, applicable PII best practices, standards, and certifications, and
- Software Support Services including continuous improvements.

In delivering the Maintenance, Administration, and Software Support Services, the Contractor is expected to provide the following services, including but not limited to:

- well documented and adherence to maintenance schedules, updates, upgrades, equipment refreshes and processes;
- well documented and adherence to security, applicable PII best practices and processes;
- well documented and adherence to quality processes;
- continuous improvements to applications and interfaces;
- change management;

- Configuration management and Software Release management;
- onsite support as requested for all Toll Agencies' staff;
- complete around-the-clock maintenance and administration of the LPR System;
- significant participation with Toll Agencies' staff in meetings and processes, and
- ample spare parts inventory and support agreements.

### 9.2.1 General Requirements

544	Provide LPR System Maintenance, Administration, and Software Support Services for all equipment, services, Software, communications, and Systems provided for the LPR System per the Requirements, including maintenance associated with compliance to the terms of the Software warranty.
545	Perform all LPR System Maintenance, Administration and Software Support Services activities from Go-Live throughout the Operations and Maintenance Phase.
546	Any System Maintenance, Administration and Software Support Services and/or replacement costs for equipment, furniture, and supplies, including consumables shall be included in the Contractor's Price Proposal and will not be separately paid for by NJTA unless explicitly noted.
547	Regularly upgrade all LPR System environments to maintain a high-level of performance, reliability and provide for the implementation of the manufacturer's current system and security firmware/software.
548	Upgrade (at a minimum every 5 years) the network hardware to maintain a high-level of LPR System reliability and provide for the implementation of the manufacturer's current system and security firmware/software. Any equipment that is not capable of operating within the manufacturer's latest security or other manufacturer suggested software patches or firmware upgrades shall be upgraded or replaced no less than six (6) months before obsolescence.
549	Provide continuous administration and maintenance of the dedicated Toll Agency test environment for the Toll Agencies to use for ad-hoc testing, Software Release testing, and QA purposes during both the Implementation Period and the Operations and Maintenance period. The dedicated Toll Agency test environment shall be maintained and administered in the same manner as the Contractor's primary test environment. The dedicated Toll Agency test environment will be refreshed after every major release or upon NJTA request. Contractor will support all requests by the Toll Agencies for setup and Configuration of the dedicated Toll Agency test environment to support pre and postproduction testing of all and/or specific functionality. Provide the capability to test all reports and Dashboards associated with functional testing.
550	Perform the necessary support services required by the CSC Services Contractor and Toll Agencies in order to keep day to day operations and data transfers current, such as operating system upgrades.

551	Provide LPR System administrative Services for all elements of the LPR System in all environments provided in accordance with the Requirements.
552	Implement updates to ensure System is in compliance with applicable PII Requirements.
553	<p>Ensure the LPR System and all Services by the Contractor complies with the New Jersey Statewide Information Security Manual and all updates to this manual throughout the life of the Agreement. NJTA plans to develop NJTA-specific security policies, which will supersede the use of the New Jersey Statewide Information Security Manual upon completion.</p> <p>Complete, at a minimum of once every twelve (12) months, a comprehensive review of the LPR System compliance to the security standards required in the New Jersey Statewide Information Security Manual. Submit a report to NJTA detailing the findings of this review within 30 days of the Go-Live anniversary.</p>
554	Perform, in coordination with NJTA, monthly security tests, including penetration tests and vulnerability scans, that are scheduled in the MOMS, as well as every time a new Software Release is deployed, or new network equipment is added or replaced to evaluate the security risk to the LPR System and identifying potential vulnerabilities. NJTA Information Technology (IT) security shall be a party to these security tests and shall be notified in advance of any scheduled tests. Test results shall be submitted no later than ten (10) days of the test.
555	Provide notice of access failures, attempted unauthorized access, access violations and attempted security breaches and incidents (Security Incidents) to NJTA in accordance with the Agreement, including Agreement Section 22.0 Security Incident. Take all actions to mitigate and address a Security Incident as identified in the Agreement.
556	<p>Perform continuous monitoring of LPR System operations to verify if functional processes are being executed correctly and according to the required processing timeframes, and the LPR System are operating per LPR Services Performance Requirements, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. all data exchanges via all interfaces in compliance with the ICDs and the LPR System design;</li> <li>b. all network and communications hardware and software (including all logs);</li> <li>c. all security hardware and software (including all logs);</li> <li>d. System is functioning/responding properly and available to all Authorized Users;</li> <li>e. all reports are accurate and successfully generated and available to Authorized Users;</li> <li>f. all processes are functioning, jobs are being executed, and data and images are moving successfully through the queues;</li> <li>g. evaluating sample transactions data and aggregate data trends for exceptions;</li> <li>h. reviewing comparative data/reports to identify system performance degradation;</li> </ul>

	<ul style="list-style-type: none"> <li>i. confirming secondary systems are synchronized;</li> <li>j. monitoring backups, and</li> <li>k. reviewing all error logs and MOMS Alerts.</li> </ul>
557	<p>Monitor the LPR System and keep current the following, as appropriate, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. updates and upgrades;</li> <li>b. implementing patches;</li> <li>c. obtaining updated license plate information and plate types;</li> <li>d. tuning the automated systems;</li> <li>e. implementing interface changes;</li> <li>f. updates to Business Rules and Standard Operating Procedures (SOPs);</li> <li>g. changes to reject reasons or categories, and</li> <li>h. quality assurance.</li> </ul>
558	Apply, in coordination with NJTA, all security patches, updates, and other fixes for COTS Software issued by the COTS Software's original manufacturer and for firmware issued by its original manufacturer.
559	Obtain updated license plate information and plate types for all states at least quarterly to aid in tuning the AIR for optimal performance.
560	Update license plate types in all screens and reports to eliminate license plate rejects. Any image rejected due to absence of license plate type shall be considered incorrect reject in accordance with the Performance Requirements.
561	Implement changes to the interface and ICD made by the CSC Services Contractor as authorized by NJTA.
562	Implement updates to the LPR System as needed to conform to updates to the Business Rules as authorized by NJTA.
563	Implement updates to the LPR System as needed to modify reject codes as requested by any Toll Agency.

### 9.2.2 System Configuration and Release Management

Recording, tracking, and managing the changes to the LPR System after Go-Live, resulting from improvements, defects, deficiencies, updates, and upgrades, is critical and shall be part of the Contractor's quality assurance and change control process. Regardless of the source of the change, each change shall be categorized, prioritized, and implemented in accordance with the QA Program.

564	Contractor shall provide a Configuration management system to maintain and manage all System changes and updates.
565	Perform Configuration management, tracking all changes and updates to the LPR System and its software, including but not limited to: <ol style="list-style-type: none"><li>a. source code;</li><li>b. Configuration settings and files;</li><li>c. scripts;</li><li>d. ICDs;</li><li>e. database Configuration;</li><li>f. hardware components;</li><li>g. firmware, and</li><li>h. application of patches.</li></ol>
566	Perform versioning and revision level management ensuring that all Configuration data is recorded with each System component change.
567	All changes shall be categorized, prioritized, and Approved by NJTA.
568	The change tracking list shall be submitted to NJTA monthly and shall be part of the monthly status meetings during the Operations and Maintenance Phase of the Project.
569	A detailed description of the change, corrective action, design, and test results shall be submitted to NJTA for Approval for all aspects of the LPR System impacted by corrective action.
570	At NJTA's discretion, Toll Agencies may participate directly and/or witness testing of all Software Releases depending on the complexity of the change.
571	Perform security tests, including penetration tests and vulnerability scans, immediately after each software Release is deployed and submit test results.
572	The Toll Agencies may choose to perform some limited review/testing of software changes. To support this activity, Software Releases shall be deployed to the Toll Agency test environment well in advance of the release to production, at a date and time Approved by NJTA.
573	A checklist and documentation shall be prepared by the Contractor prior to each Release and submitted to NJTA for Approval. The checklist and the documentation shall be used to assure readiness for the Release and shall include but not be limited to the following items: <ol style="list-style-type: none"><li>a. the updated software version/revision number;</li><li>b. Release notes;</li></ol>

	<ul style="list-style-type: none"> <li>c. new or updated plans, manuals, and training documentation;</li> <li>d. results of security tests, assessments, and certifications (penetration tests and vulnerability scans) and the plan for conducting such tests immediately after the Release;</li> <li>e. confirmation of escrow deposit;</li> <li>f. details of any outages required for the Release;</li> <li>g. documentation of the rollback procedures that would be followed if issues are encountered during installation or immediately after;</li> <li>h. description of testing performed, dates performed and results, including but not limited to functional testing, regression testing, installation dry run testing, rollback procedures testing;</li> <li>i. changes to Business Rules and SOPs;</li> <li>j. MOMS impacts, such as new Alerts;</li> <li>k. impacts to existing reports;</li> <li>l. Toll Agency impacts;</li> <li>m. impact to ICDs, interfaces and/or data exchanges, and</li> <li>n. impact on third-parties.</li> </ul>
574	Upon completion of the Software Release, conduct the necessary control runs to confirm accurate operations of the LPR System.

### 9.2.3 Maintenance Priorities, Response and Repair Times

575	<p>Response and repair time is defined as the time from failure to repair/correction with the LPR System being returned to normal operations. Response and repair times are noted in the LPR Services Performance Requirements according to the following priority levels:</p> <ul style="list-style-type: none"> <li>a. Priority 1: Defined as any defect, change/improvement, malfunction, or fault that will result in the loss of revenue; negative financial impact to customers; security breach; hazard to personnel; loss of audit data; loss of redundancy in any redundant LPR System component; degradation in LPR System performance; has potential legal impacts for the Toll Agencies; loss of functionality that impacts New Jersey E-ZPass System operations. Priority 1 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</li> </ul>

	<ul style="list-style-type: none"> <li>b. Priority 2: Defined as any defect, change/improvement, malfunction, or fault, for which no workaround is available that is acceptable to NJTA, that will degrade the LPR System performance; result in inaccurate audit data; inaccurate reporting; inability to reconcile revenue; or result in loss of LPR System functionality that impacts Authorized User access to data. Priority 2 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</li> <li>c. Priority 3: Defined as any defect, change/improvement, malfunction, fault, action or event that has the potential to result in a malfunction or degrading of the LPR System performance but has not impacted performance and is not anticipated to immediately impact performance; will not significantly affect operations or Authorized Users; and that has a workaround approved by NJTA. Priority 3 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring and to preventive maintenance activities.</li> <li>d. Priority 4: Assigned to preventive maintenance activities and MOMS Alerts created when implementing Approved activities that impact LPR System operations.</li> </ul>
576	Any downtime that is a part of scheduled and approved preventive maintenance, including scheduled new Software Releases not associated with a maintenance event shall not affect the LPR Services Performance Requirements calculation. However, in this event the Contractor does not make the LPR System available and/or fully restore LPR Services operations within the approved schedule window, the resulting downtime shall be included in the LPR Services Performance Requirements calculations.
577	Response and repair times for every LPR System maintenance event shall be recorded and reported by the Contractor, and such reports shall be provided to NJTA.
578	No incident shall be closed by a technical staff before the equipment or software service has logged a recovery, for example if a service is degraded because of a loss of a redundant component, the incident cannot be closed until the redundant component has been replaced and service has returned to normal.

#### 9.2.4 Disaster Recovery Testing

For the purpose of validating sustained operations of both the primary and secondary New Jersey E-ZPass System environments throughout the Implementation and Operations and Maintenance Phases, the primary and secondary sites will alternate as the production site on a six-month basis.

579	Perform Disaster Recovery Procedures in accordance with the Disaster Recovery Plan in the event of an LPR System failure, disaster or business continuity event and return the LPR System to a fully operational condition.
580	Test the Disaster Recovery Procedures every six (6) months to validate that they are functioning per the design. NJTA shall participate in the planning and witness the test, and the Contractor shall provide a report outlining the test, test results and any anomalies encountered for NJTA's review and Approval.

581	Provide the capability, at NJTA's direction, for the secondary System environment to become the production site for a six (6) month period for the purpose of Disaster Recovery testing.
582	Meet the Recovery Point Objective (RPO), Recovery Time Objective (RTO) and level of service (LOS) levels specified in Section 4.1 Environments.
583	Address any issues encountered from the Disaster Recovery testing, which occurs every six (6) months.

### 9.3 LPR Operations Services

Image review operations services include the review of license plate images and Gross Class Mismatch trips transmitted by the New Jersey E-ZPass System and transmission of results. Additional image review operations services include reconciliation, reporting, quality control and assurance activities, coordination with the CSC Services Contractor and the provision, training, and management of the personnel required to run the operations.

The image review operations shall cover all Services for the functional areas as summarized below. While some of the activities, triggers, and thresholds are automated, it should be understood that there are monitoring, manual inputs, and interactions required of the Contractor staff. The Contractor shall use the LPR System and other systems as designated by NJTA to perform all image review Services.

584	Provide required number of trained and qualified management, supervisory, and operations staff, including qualified management, professional, and clerical personnel, to professionally operate and administer the image review Services in a manner that meets all required LPR Services Performance Requirements.
585	Develop and put in place the organizational structure and headcount required to meet the Requirements.
586	Perform all Services in accordance with all applicable laws, rules, regulations, ordinances, and in compliance with all NJTA policies and guidelines for such contracted labor.
587	All staff shall at all times adhere to and comply with PCI and Sensitive Material Policy as documented in the SOPs.
588	Image Review staff shall not bring or possess the following personnel devices on the operations center floor:  a. cell phones/smart watches;  b. devices that take photographs or digital images;  c. audio/video recording devices;  d. USB jump drives or other digital recording media;  e. Bluetooth phone earpieces, etc., and

	f. laptops or other devices that have internet access.
589	Employees may bring any of the noted devices to the facility, but such devices must be turned off and placed in the employee's assigned locker before entering the operations center.
590	Employees may use any of the stated above devices in other areas of the facility (i.e. any break room, workout room, kiosk room or outside).
591	Perform all LPR Operations Services functions in accordance with the SOPs.
592	Should an unplanned event require the full or partial closure of the Contractor's facility, support business continuity through mix of secondary site and at-home agents, in accordance with the Operations Business Continuity Plan.
593	<p>Monitor the LPR Services and keep current the following, as appropriate, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. updates to Business Rules;</li> <li>b. changes to reject reasons or categories, and</li> <li>c. quality assurance.</li> </ul>

### 9.3.1 Training

The Contractor shall provide comprehensive training for all aspects of the LPR Services operation including training in the use of the LPR System, operational procedures, policies and guidelines, and rules of conduct. Training shall be ongoing throughout the entire Contract Term.

594	Provide comprehensive LPR Services training which includes a review and description of each of the appropriate processes and procedures with actual System software and equipment.
595	Ensure all students have their own workstations and telephone equipment and are able to interact directly with the training environment.
596	<p>Identify the training needs, plan, design, and develop all the training curriculum and materials for the implementation and management of the LPR Services on-going training program. The types of training include, but are not limited to:</p> <ul style="list-style-type: none"> <li>a. Toll Agencies background information including, E-ZPass, AET, and violation processing business rules and Toll Facility specific information ("content training");</li> <li>b. handling of Toll Agency Images including rejection rules and non-revenue policies;</li> <li>c. handling of license plate types by state including addition of new license plates and license plate types;</li> <li>d. work from home training, if applicable;</li> <li>e. SOPs and policies;</li> </ul>

	<p>f. Security topics as required by the New Jersey Statewide Information Security Manual published by the New Jersey Office of Homeland Security and Preparedness. Topics shall include but not be limited to PII, data, physical security, information security and privacy awareness, and role-based security, and</p> <p>g. Contractor employment related requirements.</p>
597	<p>Include, within the training program, training at different times and for different reasons during the Contract Term, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. new hire – this training, conducted prior to Go-Live and throughout the Operations and Maintenance Phase as new employee classes are hired, provides the new employee thorough, in-depth training covering all of the skills and information required to fully understand and fulfill their role;</li> <li>b. refresher – this training, conducted throughout the Operations and Maintenance Phase, provides additional training focused on topics on which the attendees have been previously trained but which the Training Manager, Contractor's operations management, or other Toll Agency's management staff identify as requiring additional training for a group of employees;</li> <li>c. remedial – this training, conducted throughout the Operations and Maintenance Phase, is individually focused on the needs of a particular employee(s) based on Toll Agency feedback, management or QA observation, or employee request;</li> <li>d. new job/promotion – this training, conducted throughout the Operations and Maintenance Phase, is required when an employee changes jobs or gains additional responsibilities;</li> <li>e. new functionality - this training, conducted throughout the Operations and Maintenance Phase, is required when Software Releases are implemented that introduce new functionality or changes to existing functionality;</li> <li>f. new content/program – this training, conducted throughout the Operations and Maintenance Phase, is required when the Toll Agencies introduce a new project or program or makes a significant change to the SOPs or the LPR System, and</li> <li>g. leadership/management training – this training, conducted prior to Go-Live and throughout the Operations and Maintenance Phase, is required for all management personnel (managers, supervisors, leads), to teach the skills required to coach and effectively manage people.</li> </ul>
598	Gather trainee feedback and trainer evaluations at the conclusion of each training course and fine tune and revise the training based on the results.

599	Keep accurate training records on all staff training. NJTA shall be permitted to review the training records and evaluations at any time. The retention of training records shall be in compliance with Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion.
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### 9.3.2 Image Review Services

#### 9.3.2.1 License Plate Image Review

600	Complete review of one hundred percent (100%) of images transmitted by the New Jersey E-ZPass System that are flagged for manual image review and transmit the results back to the New Jersey E-ZPass System in accordance with performance Requirements.
601	Manual image review shall include all types of reviews including secondary review, quality control review, and supervisory review.
602	For the purposes of this section and for performance evaluation, the term “completion” is defined as identifying the license plate results for the image or rejecting the image as unreadable and properly coding it in accordance with the associated Business Rules.

#### 9.3.2.2 Gross Class Mismatch Review

603	Complete review of one hundred percent (100%) of transactions and images transmitted by the New Jersey E-ZPass System for Gross Class Mismatch review, and transmit the results back to the New Jersey E-ZPass System in accordance with performance Requirements.
604	For the purposes of this section and for performance evaluation, the term “completion” is defined as identifying the vehicle classification based upon the data and images/video provided.

#### 9.3.2.3 Quality Assurance Review

605	Conduct quality assurance reviews on a random sampling of reviewed results, both AIR and MIR, and confirm that the accuracy and rejection rates are in compliance with performance Requirements. Contractor shall conduct quality assurance reviews for 25% of the images that are accepted and 25% for each reject reason.
606	Conduct quality assurance reviews on a random sampling of Gross Class Mismatch results and confirm that the accuracy is in compliance with performance Requirements. Contractor shall conduct quality assurance reviews for 25% of Gross Class Mismatch trips.

### 9.3.3 Toll Agency and CSC Services Contractor Coordination

607	Notify the CSC Services Contractor and the Toll Agencies when new license plate types are detected during image review.
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608	Automatically notify the Toll Agencies when there is degradation in the quality of the images from specific Toll Facilities and lanes and when there is high number of rejected images at a specific lane.
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### 9.3.4 Business Continuity Testing

The Contractor must support business continuity and the resumption of the LPR Operations Services after unplanned disruptions. To ensure effectiveness of the business continuity processes, the Contractor shall conduct Business Continuity testing every six months.

609	Conduct Business Continuity testing every six (6) months.
610	During Business Continuity testing, conduct all operations under the business continuity mode for a period of one (1) week.
611	Provide a minimum of fifteen (15) Business Days' notice to NJTA prior to conducting Business Continuity testing.
612	Facilitate and support NJTA's witnessing of and participation in the Business Continuity testing.
613	After the completion of each the Business Continuity Test, submit to NJTA, for review and Approval, a test report that documents the results of the test, any anomalies and issues identified, comments provided by NJTA, and the corrective action/resolution of each item and any re-tests required.
614	Continue the testing process until all anomalies and defects are closed-out and the final test report is Approved by NJTA.

## 9.4 Audits

### 9.4.1 SSAE Type II Audit

The Contractor shall engage an independent auditor to perform an SSAE-18 Type II and provide the resulting SOC 2 report to NJTA. The auditors have a fiduciary duty to NJTA; however, the coordination of the audit, including managing the audit and related requests, managing interviews with staff, and the preparation of any supporting documentation or schedules shall be the responsibility of the Contractor.

The audit shall be completed within the 90 days preceding the end of NJTA fiscal year (December 31). The Contractor shall supply a bridge letter for the period between the report date and the end of the fiscal year, if required by the financial auditor.

615	The Contractor shall engage an independent auditor, which is a licensed CPA firm and has been Approved by the Authorities to perform the annual SSAE-18 Type II audit.
616	Obtain the services of a new Approved audit firm every five (5) years.

617	The selected independent auditor shall be experienced and widely recognized in the United States for performing these types of audits. (i.e., the selected audit firm shall perform a minimum of ten (10) such similar audits each year).
618	The Contractor and auditor shall mutually agree on an audit plan, which shall be provided to NJTA for Approval, including regularly scheduled meetings. The audit plan shall result in the delivery of the SOC 2 report to NJTA by December 31 each year. In addition, the Contractor shall provide a bridge letter to NJTA covering the period from the SOC 2 report date through December 31 of each year, if requested by the financial auditor.
619	Comply with all changes to requirements under SSAE-18. In the event SSAE-18 is replaced by a new standard, the new standard shall apply; and in the event the SOC 2 is replaced by a new reporting form, the Contractor shall submit the new reporting form.
620	Fully cooperate with NJTA in responding to the assessor's requests and implement remedies if any issues are identified and obtain auditor approval.
621	Provide the resulting SOC 2 report to NJTA including issues identified and remedies implemented.
622	Institute any procedural and operational changes as detailed in the SOC 2 report, and as requested and Approved by NJTA as soon as practicable, but no later than by the close of the following fiscal year, or as required and directed by the auditors and agreed to by NJTA.
623	Promptly notify NJTA of any concerns raised by the auditors, including but not limited to: <ul style="list-style-type: none"> <li>a. any asserted weaknesses;</li> <li>b. limitations on audit scope;</li> <li>c. the auditors' inability to carry out the audit;</li> <li>d. the Contractor's inability to carry out the audit, and</li> <li>e. time delays in scheduled audit completion.</li> </ul>

#### 9.4.2 Other Audits

624	Support Toll Agencies in any audit activity relating to the LPR System and LPR Operations Services.
625	Conduct audits in accordance with the Project Management Plan. These audits may include but are not limited to: <ul style="list-style-type: none"> <li>a. Toll Agency internal control procedures;</li> <li>b. Contractor internal control procedures;</li> <li>c. security audits;</li> </ul>

	d. facility inspections, and e. operational performance.
626	Perform annual validation and certification of the full cycle of LPR Services processes and submit the audit report detailing each audit and deficiencies identified to NJTA.
627	Support Toll Agencies by running reports and making all requested documentation available for review.
628	Support Toll Agencies by making Contractor employees available for interview by auditors.
629	Institute any corrective measures and procedural or operational changes as requested and Approved by NJTA as a result of audits and process validation. Items identified by NJTA as critical shall be corrected immediately. Other items identified by NJTA as non-critical shall be prioritized and shall be corrected in accordance with the LPR Services Performance Requirements.

## 9.5 Incident and Revenue Loss Reporting

The Contractor is responsible for all corrective actions and lost revenue resulting from Contractor's failure to comply with Requirements and Contractor's negligence, at no additional cost to NJTA.

630	Work with NJTA to develop a communications protocol for incident and revenue loss reporting (e.g., communications procedures based on incident and priority level) due to an operational incident.
631	Immediately notify NJTA of any incident or event where there are inaccuracies in LPR System or operational processes impacting multiple images or Authorized Users, processing delays, or security breach has occurred, potentially has occurred, or could occur.
632	Perform immediate corrective actions to mitigate any incident resulting in revenue loss, processing delays, or inaccuracies in System functions or operational processes and to support a return to normal operations.
633	In the event of a loss or potential loss of revenue or data, glitches impacting customers or security breach, a Root Cause Analysis (RCA) report shall be provided to NJTA within five (5) Business Days of the operational incident.
634	<p>The RCA report shall provide details on any operational issue, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. identification of the issue and a detailed account of the incident;</li> <li>b. cause of the issue;</li> <li>c. duration;</li> <li>d. resolution or planned resolution, and</li> </ul>

	e. a quantification of actual or potential lost revenue or data or security breach.
635	Implement planned resolution upon Approval by NJTA of the long-term correction action.
636	Regular updates shall be provided until the operational issue has been fully resolved and closed including implementation of the CAP.
637	The incident and its impacts shall also be further detailed in the subsequent, monthly Performance Report Package.
638	The Contractor shall be held responsible for all lost revenue and data and customer impacts and credits, including remediation, in accordance with the Agreement.
639	Support on-demand and batch/scheduled report generation, record review, analysis, and reporting requirements and after-the-fact investigations of incidents.
640	The Contractor shall be responsible for all costs incurred by other Categories of Services resulting from Contractor's failure to comply with Requirements and/or the Contractor's negligence.

## 9.6 LPR Services Performance Requirements

The Contractor shall meet the Performance Requirements documented in Appendix T-2 Category B LPR Services Performance Requirements. For the purposes of determining adherence to LPR Services Performance Requirements, Severity 1, 2 and 3 events are defined in Section 5.2.3 Maintenance Priorities, Response and Repair Times. Severity 4 is used for events that serve as informational alerts which are not subject to a monthly fee adjustment.

As the LPR System operates and Contractor performs System Maintenance, Administration and Software Support Services, the Performance Requirements shall be captured and presented in LPR System KPI Dashboards that will provide real-time information on the LPR performance. It will serve as a monitoring mechanism for the Contractor and shall be available to the Toll Agencies at all times.

### 9.6.1 Chargeable Failures

641	Chargeable failures are subject to monthly fee adjustment and include any performance at levels below the standards specified in Appendix T-2 that are not specifically identified as non-chargeable per the Agreement. Chargeable failures include but are not limited to the following: <ul style="list-style-type: none"> <li>a. a malfunction or defect which prevents an LPR System component (hardware or software) from performing its designated function;</li> <li>b. an occurrence where data and images are not successfully transmitted between the New Jersey E-ZPass System and the LPR System, the Toll Agency Host/Image Capture System, the LPR System and external interfaces, or within the LPR System modules, unless such failure occurred on a module the Contractor was not responsible for;</li> </ul>
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	<ul style="list-style-type: none"> <li>c. a failure of equipment or software that allows revenue loss to occur or causes loss of auditability that is not already accounted for as a separate performance failure;</li> <li>d. software anomalies and defects that affect the performance, accuracy, and operation of the LPR System and LPR Operations Services;</li> <li>e. shutdown or unavailability of any element of the LPR System that impacts Toll Agencies, Authorized Users, and operations, unless specifically directed by NJTA;</li> <li>f. failure to properly register or report an LPR System-related event;</li> <li>g. failure to properly reconcile the transactions and images with the New Jersey E-ZPass System;</li> <li>h. failure to generate the reports required to reconcile and audit the LPR System, and</li> <li>i. failure due to Contractor negligence.</li> </ul>
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## 9.7 Corrective Actions

The Contractor shall identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures in the future. This will be documented in a CAP that includes the schedule for the corrective action.

642	Identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures.
643	Failure to meet a Performance Requirement shall not relieve the Contractor of the Requirement to complete the activity associated with the Performance Requirement. Any failure to meet a Performance Requirement that requires the completion of a specific action(s), for example completing daily reconciliations, which is not completed in accordance with the Requirement, shall not relieve the Contractor of the responsibility to perform in accordance with the SOPs and the Requirements.
644	Develop a CAP for each failure to meet a Performance Requirement identifying the root cause(s), the extent of the problem and providing a plan to rectify the current situation and prevent future occurrences. For example, if the Contractor fails to perform MIR within the time required by the Performance Requirement, the unreviewed images shall be completely and accurately reviewed and the Contractor must identify the root cause of the failure, the extent of the problem and provide a plan to prevent future occurrences.
645	Submit the CAP to NJTA for review and Approval.
646	The CAP provided by the Contractor shall be in a format Approved by NJTA.

## 10 LPR SYSTEM AND LPR OPERATIONS SERVICES FOR NJTA (OPTIONAL SERVICES)

NJTA, under a separate agreement, is replacing its toll collection system for the GSP and NJTP and transitioning to AET. This work will be performed by TransCore and the AET transition will occur during the Contract Term. Until GSP and NJTP transition to AET, GSP and NJTP images will be transmitted to New Jersey E-ZPass CSC System from where the images will be routed to the LPR System for AIR and MIR. When that new AET Host and Image Capture System is placed into production, Image-Based Transactions (first for GSP and subsequently, approximately one year later, for NJTP) will no longer be transmitted to the New Jersey E-ZPass CSC System until the images are fully processed (license plate and class information obtained).

As part of the AET agreement, TransCore is required to provide AIR, and MIR service is optional. If NJTA exercises the option for MIR, then TransCore will perform MIR services for all GSP and NJTP images as each Toll Facility transitions to AET, and Contractor is not required to perform MIR on NJTA and GSP images (LPR Services for GSP and NJTP will be descoped). If NJTA does not exercise the option for MIR service with TransCore, then Contractor is required to provide MIR services whereby NJTP and GSP images that are not accurately identified by the TransCore AIR process will be transmitted directly from the AET Host and Image Capture Systems to the LPR System for the extraction of license plate data, with results returned to the AET Host System. In addition, transactions flagged for Gross Class Mismatch review will be transmitted directly from the AET Host and Image Capture Systems to the LPR System for Gross Class Mismatch review, with results returned to the AET Host System. Per the Requirements of Section 4.9 Transaction and Image Processing of this Scope of Services, the LPR System shall be Configurable to support multiple Toll Agencies through different interfaces.

Under this option, the Contractor will:

- Receive transactions and images from the AET Host and Image Capture Systems requiring either LPR or Gross Class Mismatch review, process them in accordance with the Requirements, and transmit results back to AET Host System, and the AET Host and Image Capture Systems.

This work could occur during the Operations and Maintenance phase of the Project and Contractor is required to perform such work as part of the Agreement. The following Requirements detail the Services associated with supporting this interface and any additions to Operations and Maintenance Services to support these optional Services.

### 10.1 Implementation of Optional Services

During NJTA's AET project, the Contractor will modify the LPR System and conduct testing of the Interface with TransCore.

647	Provide the resources, organizational structure and staffing required to support the implementation of these optional Services.
648	Ensure that Services associated with the implementation of these optional Services do not impact ongoing Operations and Maintenance Services for the LPR System.

649	All modifications to the LPR System to incorporate these optional Services shall be tested in an UAT environment and Released into the production environment only upon Approval from NJTA.
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#### 10.1.1 Project Management

650	Develop a detailed Implementation Schedule for the LPR System and LPR Operations Services Implementation that lists all tasks related to the design, development, Configuration, testing, and deployment of modifications to the LPR System and LPR Operations Services as needed for these optional Services.
651	The Implementation Schedule shall be baselined upon Approval and the Contractor is required to update the Implementation Schedule on a monthly basis showing percent complete.
652	All changes to Approved milestones must be submitted to NJTA in writing for Approval.
653	Provide a Monthly Progress Report to NJTA throughout the Implementation of the optional Services.

#### 10.1.2 Meetings and Coordination

654	Cooperate with TransCore to support NJTA AET project activities pertaining to LPR System and LPR Operations Services.
655	Attend any workshops, comment reviews and interface design meetings as requested by TransCore.
656	Participate in regular meetings with TransCore to ensure the Implementation Schedule is aligned with the AET Go-live activities.

#### 10.1.3 Documentation

The Contractor shall update documents to incorporate the interface to the AET Host and Image Capture Systems, as appropriate.

657	Update the Business Rules Document as needed to incorporate specific rules pertaining to receipt of transactions and data from the AET Host and Image Capture Systems.
658	Update the LPR System Detail Design Document, or provide an appendix, including but not limited to: <ul style="list-style-type: none"> <li>a. modifications to Dashboards and user interfaces;</li> <li>b. the design of AET Host and Image Capture Systems interface, and</li> <li>c. workflows that reflect receipt of transactions and data from two sources and return of data to the source.</li> </ul>

659	Update the SOPs to incorporate processing of transactions and data received directly from AET Host and Image Capture Systems.
660	Update the LPR System Support and Administration Service Manual, including but not limited to addition of:  a. communication protocol for coordination with TransCore, and  b. procedures for validating the successful transfer and receipt of files for the interface(s) to the AET Host and Image Capture Systems.
661	Update the Image Review Services Manual to incorporate changes associated with these optional Services.
662	Update the LPR Service Audit Manual to include reconciliation of transactions and images within the LPR System and with the AET Host and Image Capture Systems.
663	Update any other document, as appropriate, to reflect changes associated with these optional Services.
664	Updated documents shall become the new documents of record and shall be updated in accordance with Section 5.1 Operations and Maintenance Documentation of this Scope of Services.

#### 10.1.4 Interface

665	TransCore shall have primary responsibility for development of the ICDs between the AET Host and Image Capture Systems and the LPR System. The Contractor shall work cooperatively with TransCore to support development of the ICD and shall have responsibility for development of the LPR System side of the Interface.
666	The Contractor shall be responsible for establishing all other Interfaces required for network connections described in Section 4.2 Network and Communications of this Scope of Services.

#### 10.1.5 Transaction and Image Processing

667	The LPR System shall receive transactions and associated images from the AET Host and Image Capture Systems in accordance with the Approved ICDs.
668	The LPR System shall reconcile all transactions and images received for image review processing back to the AET Host and Image Capture Systems, without loss of any image, in accordance with the Approved ICD.
669	The LPR System shall provide AIR solutions allowing it to extract license plate information (alphanumeric characters, issuing jurisdiction, and plate type, i.e., plate data) from all images received from the AET Host and Image Capture Systems. Plate data shall include legal stacked characters and any required plate character prefixes, suffixes, or special characters.

670	Transmit the results of the AIR and MIR results to the AET Host and Image Capture Systems at scheduled intervals per day in accordance with the Approved ICD for all transactions for which the image review process is completed.
671	Provide image transmission reconciliation reports that help validate that all images and associated data files transmitted by the AET Host and Image Capture Systems were successfully received by the LPR System. The reports shall list all of the image files that were transmitted from the AET Host and Image Capture Systems, the number of images and data set in each file, the time these files were acknowledged by the LPR System. Files that were rejected and status of the re-transmission, and images that were exceptioned by the LPR System shall be reported.
672	Provide the capability to track and reconcile one-hundred percent (100%) of the Image-Based Transactions and images received from the AET Host and Image Capture Systems Contractor and transmit review results in status in accordance with the ICD.

#### 10.1.6 Dashboard and Reports

673	Dashboard shall be updated to include the interface to the AET Host and Image Capture Systems.
674	All reports shall include the interface to the AET Host and Image Capture Systems.

#### 10.1.7 Testing

The Contractor shall prepare modified test procedures and perform formal tests to validate the LPR System and LPR Operations Services functionality required to perform the optional Services.

675	Testing shall be conducted in various stages as detailed below to validate the LPR System design, integration, reliability, functionality, and compliance to the Requirements included, without limitation, in these optional Services.
676	Prior to the start of testing, work with TransCore to optimize the LPR System and operations.
677	Testing shall be conducted in accordance with the Requirements of Section 3.4 Testing Requirements of this Scope of Services, except as noted below.
678	Testing shall occur in the following order: <ul style="list-style-type: none"> <li>a. UAT;</li> <li>b. PRT, and</li> <li>c. SOAT.</li> </ul>

#### 10.1.7.1 UAT

679	The Contractor shall perform a Phase 2 UAT, which validates the interfaces between the AET Host and Image Capture Systems and the LPR System using simulated data. Changes made to support the new interface shall be validated including Dashboards and reports. UAT shall include regression testing to make sure changes have no impact on the live operational processing.
680	Provide a modified version of the original UAT test procedures for NJTA's Approval at least thirty (30) days prior to the scheduled start date for the test.

#### 10.1.7.2 PRT

681	The Contractor shall perform a PRT during the timeframe of the AET Host and Image Capture Systems PRT, which validates end-to-end processing of images and data collected at all Toll Facilities. Phase 2 PRT environment shall be created and PRT shall not impact the production system.
682	The performance of the AIR will be verified, and reconciliation of transmissions validated.
683	Provide a modified version of the original PRT test procedures for NJTA's Approval for Requirements at least thirty (30) days prior to the scheduled start date for the test.
684	Upon successful completion of the PRT and approval by NJTA, the Contractor shall perform a Software Release in accordance with the Section 5.2.2 System Configuration and Release Management of this Scope of Services.
685	Coordinate with the CSC Services Contractor to disable the transmission of NJTA images from the New Jersey E-ZPass System.
686	The new Interface to the AET Host and Image Capture Systems shall be activated.

#### 10.1.7.3 SOAT

687	The SOAT shall be conducted by the Contractor upon authorization by NJTA to commence such testing. The LPR System and operations shall be observed in live operations by the Contractor and NJTA for a minimum of one (1) complete monthly audit cycle.
688	The SOAT shall validate the Interface to the New Jersey E-ZPass System and the AET Host and Image Capture Systems and reconcile the transactions end to end.
689	The SOAT shall follow all procedures of Section 3.4.4 LPR System Operational Acceptance Test of this Scope of Services.

#### 10.1.7.4 Optional Services System Acceptance

After a minimum of one (1) complete month of operations, and upon the successful completion of the System Operational Acceptance Test for LPR System, the closure of all Punch-list items, and completion and submission of all required documents, the Contractor shall be given the Acceptance for the LPR System.

## 10.2 Operations and Maintenance Services

The Contractor shall provide any additional Operations and Maintenance Services needed for these optional Services.

690	Provide all LPR System Maintenance, Administration, and Software Support Services for any additional hardware or software in accordance with Section 5.2 System Maintenance, Administration, and Software Support Services of this Scope of Services.
691	Implement changes to the interface and ICD made by the AET Host and Image Capture Systems Contractor as authorized by NJTA.
692	<p>The Contractor shall meet all LPR Performance Requirements, in accordance with the LPR Performance Requirements, for transactions and data received from all sources, and including the following additions to chargeable failures:</p> <ul style="list-style-type: none"><li>a. an occurrence where data and images are not successfully transmitted between the AET Host and Image Capture Systems and the LPR System, the LPR System and external interfaces, or within the LPR System modules, unless such failure occurred on a module the Contractor was not responsible for, and</li><li>b. failure to properly reconcile the transactions and images with the AET Host and Image Capture Systems</li></ul>

## 11 END OF AGREEMENT TRANSITION

### 11.1 End of Agreement Succession Plan

The Contractor acknowledges that the LPR Services it provides under the terms of the Agreement are vital to the successful operation of the New Jersey E-ZPass Program and that said LPR Services must be continued without interruption. Upon expiration or earlier termination of the Agreement, in accordance with the terms and conditions thereof, the Contractor shall fully cooperate with NJTA to facilitate a smooth Agreement closeout. All transition support shall be provided at no additional cost to NJTA.

The End of Agreement Succession Plan is a deliverable that details the course of action to be taken by the Contractor for Succession at the end of the Agreement. The End of Agreement Succession Plan will cover three separate options:

- 1) transition of the LPR System maintenance and LPR Operations Services to NJTA;
- 2) transition of LPR System maintenance and LPR Operations Services to a new contractor who will operate the LPR System, and
- 3) transition to a new Contractor who will implement their own system and operations.

These options are mutually exclusive and only one will be executed by NJTA at the time notice of Succession is provided.

693	Develop and deliver an initial End of Agreement Succession Plan that details the following options for Succession:
	<ul style="list-style-type: none"><li>a. Option 1: transition of the LPR System maintenance and LPR operations to NJTA;</li><li>b. Option 2: transition of LPR System maintenance and LPR operations to a new contractor, or</li><li>c. Option 3: transition to a new Contractor who will implement its own system and operations.</li></ul>
694	The End of Agreement Succession Plan review and Approval shall be a prerequisite to payment for the LPR System Acceptance milestone. End of Agreement Succession Plan shall be updated and submitted to NJTA for Approval once a year on the anniversary date of Go-Live. Final updates to the End of Agreement Succession Plan shall be made within fourteen (14) Calendar Days of written notice of Succession and shall provide only for the option identified in NJTA's notice of Succession.
695	Submit a final End of Agreement Transition Plan which shall set forth in detail reasonably acceptable to NJTA, all Services necessary for the Contractor to perform in order to facilitate a smooth and orderly transition of the Services to NJTA (Option 1) or to new contractor (Option 2 or 3), in accordance with the Requirements.
696	Detail, within the End of Agreement Succession Plan, the method for the orderly transfer of knowledge/Project history, data, assets, licensing, and business relationships from the Contractor to a Successor in the case of each option. Structure the End of Agreement Succession Plan to prevent any interruption to Services.
697	<p>Cover, within the End of Agreement Succession Plan, handoff procedures and details for areas for work, including the following, for Option 1, 2 and 3 (as applicable to the Option):</p> <ul style="list-style-type: none"><li>a. physical assets controlled in any way by the Contractor and used in LPR System Maintenance, Administration and Software Support, including a current list of assets, their owners, and their locations;</li><li>b. required post office boxes and phone numbers;</li><li>c. identification of the Succession Project Manager, staffing and organization, including retaining Key Personnel in order to meet required LPR Operations Performance Requirements;</li><li>d. leasing agreements, including a current list of leases (lessee, purpose, terms, dates, contact information);</li><li>e. Third-party Service Provider contracts, including a current list of contracts (contracted entity, purpose, terms (termination clauses, available extensions, contact information, etc.);</li></ul>

	<ul style="list-style-type: none"> <li>f. business relationships, including a current list of relationships (contact information, relationship description);</li> <li>g. LPR System hardware and network maintenance procedures;</li> <li>h. LPR System administration procedures, including access, training, and use of MOMS, LPR System monitoring and administration procedures; PII adherence procedures; DevOps and development environments administration procedures;</li> <li>i. Software maintenance procedures, including knowledge of LPR System design; use, location, and access credentials of LPR System build tools; source code repositories; LPR System Configuration settings; LPR System logs; LPR System test and diagnostic tools;</li> <li>j. Authorized User data and handling of access credentials;</li> <li>k. LPR System data, including data dictionaries, database design documentation; use, location and access credentials of database-resident Configuration tables and audit logs, data backup and archive repositories and procedures;</li> <li>l. all other information or knowledge necessary for smooth Succession, and</li> <li>m. transfer of all updated LPR System documentation to reflect the current operation. This shall include the plan for all release notes and all other documents pertaining to any LPR System changes, updates and upgrades.</li> </ul>
698	Plan for disposition of all Software and Intellectual Property used on the Project, in accordance with the terms of the Agreement and the Requirements.

## 11.2 Succession Coordination and Support

699	During the transition from the Contractor to either NJTA or new contractor, and upon NJTA's written notice of Succession, the Contractor shall provide Succession services for a period of up to one year, or until all Succession activities are completed, as defined in the End of Agreement Succession Plan and in accordance with the Requirements.
700	<p>Provide the following Services regardless of which transition Option (1, 2 or 3) is selected by NJTA:</p> <ul style="list-style-type: none"> <li>a. develop a comprehensive schedule and include in the End of Agreement Succession Plan update, detailing all activities necessary to transition to a successor, including dates for transferring of responsibilities for each division of work and providing the Succession/transition Services specified. This schedule shall be updated to NJTA within fourteen (14) Calendar Days of the Contractor receiving notice of Succession;</li> </ul>

	<ul style="list-style-type: none"> <li>b. provide the Succession Project Manager identified in the latest End of Agreement Succession Plan within one (1) week of receiving such written notice of Succession. The Succession Project Manager shall be part of the Contractor's Project team, be familiar with the LPR Services and be available at all required times and shall serve as the single point of contact for all Succession related activities;</li> <li>c. update and submit the initial End of Agreement Succession Plan, and</li> <li>d. provide all documentation and deliverables identified in the Approved End of Agreement Succession Plan, including Escrow deposits where applicable, and all other documentation useful to the continued operations and LPR System Administration, Maintenance and Software Support in a commonly used electronic and editable form acceptable to NJTA.</li> </ul>
701	<p>The following Requirements apply only to Option 1 and Option 2 transition of the LPR System maintenance and LPR operations to the Successor (NJTA for Option 1 and the new contractor for Option 2):</p> <ul style="list-style-type: none"> <li>a. furnish, install, Configure and verify at a location specified by NJTA a complete, current, and fully functional LPR System development environment comprised of all hardware, Software, network components, simulators, third-party tools and licenses necessary to view, edit or otherwise alter, update or otherwise upgrade, compile, debug and test all aspects of the LPR System;</li> <li>b. train NJTA (Option 1) or new contractor (Option 2) personnel and all Successor designees in the efficient and effective use of this LPR System development environment;</li> <li>c. assign all licenses to the Successor and transfer all data to the Successor necessary to use this LPR System Software development environment in an effective and efficient manner;</li> <li>d. train Successor personnel and all Successor designees in the use of the LPR System's MOMS, preventive maintenance, troubleshooting, LPR System Maintenance, Administration Software Support, and all other LPR System responsibilities;</li> <li>e. seamlessly transfer the LPR System environments to the Successor, and</li> <li>f. furnish the full spare parts inventory in good, working order. The inventory shall be inclusive of the greater of the initial spare parts inventory or the documented inventory used on the LPR System over the twelve (12) month period prior to notice of Succession.</li> </ul>
702	Work cooperatively with NJTA and NJTA's designees to accurately migrate all the LPR System's data (if applicable) to the LPR System's future replacement (Option 3).
703	Provide sufficient experienced personnel in each division of work during the entire Succession period to ensure the quality of Services is maintained at the levels required by this Agreement.
704	Allow the Successor to conduct on-site interviews with the employees outside of normal Business Hours in a manner that will not disrupt current operations.

705	For Option 1 and 2, provide the necessary software and LPR Systems support services to assist the Successor in setting up the systems, transferring of appropriate licenses and third-party software and Services and transitioning all LPR System data required (if applicable) to sustain uninterrupted service.
706	For Option 1 and 2, ensure that escrowed Software is current and operational and is available to the Successor in accordance with the terms of the Agreement, including Software license and Escrow Agreement.
707	Provide for the orderly transition of the facilities, equipment, materials, documents, inventory, and work in progress to the Successor.

**Attachment 3:**  
**Category C – Collections Services**  
**Scope of Services**



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## **NEW JERSEY E-ZPASS SERVICES RFP**

### **ATTACHMENT 3: CATEGORY C – NEW JERSEY E-ZPASS COLLECTIONS SERVICES SCOPE OF SERVICES**

**November 2023**

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## 1 INTRODUCTION

The New Jersey Turnpike Authority (“NJTA”) operates and maintains the New Jersey Turnpike (“NJTP”) and Garden State Parkway (“GSP”). The New Jersey E-ZPass Group includes NJTA (lead Toll Agency), South Jersey Transportation Authority (“SJTA”), the Delaware River Port Authority (“DRPA”), the Delaware River and Bay Authority (“DRBA”), Delaware River Joint Toll Bridge Commission (“DRJTBC”), Burlington County Bridge Commission (“BCBC”), and Cape May County Bridge Commission (“CMCBC”). Each participating Toll Agency operates and maintains its independent toll collection system(s) and Toll Agency Host and Image Capture Systems that interface with the New Jersey E-ZPass System. The Toll Agencies use the New Jersey E-ZPass System to collect payments from customers using their Toll Facilities. NJTA, as lead Toll Agency, holds and manages the current contract with the existing Customer Service Center (CSC) Contractor to perform back-office and customer service support for the New Jersey E-ZPass Program and will continue under this procurement.

### 1.1 New Jersey E-ZPass Toll Agencies

The following provides a brief description of the participating Toll Agencies and their Toll Facilities.

#### 1.1.1 New Jersey Turnpike Authority

NJTA operates and maintains toll plazas on the New Jersey Turnpike (NJTP) and the Garden State Parkway (GSP). The NJTP is a closed tolling system where vehicles are detected at entry and exit, and a vehicle trip is created. Tolls are charged for the distance traveled and are assessed when the vehicle exits the NJTP. Plazas 6A, 17 and 19w are barrier plazas and tolls are charged at the plazas. NJTP accepts cash (for tickets) and E-ZPass methods of payment. In a manual cash lane, motorists can request an insufficient fund slip and make a payment later. NJTP has five (5) plazas with open road tolling (ORT) Lanes. GSP is a barrier system, and a toll is charged at each toll plaza. Both cash (automatic coin machine (ACM) and manual) and E-ZPass are accepted methods of payment. In a manual cash lane, motorists can request an insufficient fund slip and make a payment later. GSP has seven (7) toll plazas with ORT lanes. NJTA may move to All Electronic Tolling (AET), eliminating cash payments on all Toll Facilities on GSP, and possibly moving to AET or continuing to collect cash on the NJTP, over the Contract Term.

#### 1.1.2 South Jersey Transportation Authority

The SJTA operates and maintains the toll plazas on the Atlantic City Expressway (ACE) and parking facilities at the Atlantic City International Airport and other locations in Atlantic City where E-ZPass Plus is accepted as a form of payment for parking. ACE is a barrier system and tolls are charged at each toll plaza and both cash and E-ZPass are accepted methods of payment. SJTA is expected to move to All Electronic Tolling (AET) in a phased deployment before Phase 1 Go-Live, eliminating cash payments on the ACE.

#### 1.1.3 Delaware River Port Authority

The DRPA is a regional transportation agency serving Southeastern Pennsylvania and Southern New Jersey. DRPA operates and maintains the Benjamin Franklin; Walt Whitman; Commodore Barry, and Betsy Ross bridges. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment. All four bridges are part of the E-ZPass network.

#### **1.1.4 Delaware River and Bay Authority**

The DRBA owns and operates the Delaware Memorial Bridge that connects New Jersey to Delaware as well as other transit related facilities. A toll is charged for traveling across the bridge from New Jersey to Delaware and both cash and E-ZPass are accepted methods of payment. The bridge is part of the E-ZPass network.

#### **1.1.5 Delaware River Joint Toll Bridge Commission**

The DRJTBC owns and operates twenty (20) bridges, eight (8) of which are tolled. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment at all but Scudder Falls Bridge, which is AET. The Commission plans to transition to All Electronic Tolling (AET), eliminating cash payments on its Toll Facilities during 2024 and 2025.

#### **1.1.6 Burlington County Bridge Commission**

The BCBC maintains and operates two (2) major bridges, the Tacony-Palmyra Bridge and Burlington-Bristol Bridge, as well as six (6) small bridges. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment. BCBC is part of the New Jersey E-ZPass System through an agreement with DRPA.

#### **1.1.7 Cape May County Bridge Commission**

CMCBC is responsible for five (5) toll bridges on Ocean Drive from Cape May to Ocean City within the county. The Grassy Sound and Corsons Inlet bridges have tolls in the northbound direction, while the Middle Thorofare, Townsends Inlet, and Ocean City-Longport bridges have southbound tolls. Both cash and E-ZPass are accepted at the bridges. CMCBC is expected to All Electronic Tolling (AET) in a phased deployment before Phase 1 Go-Live, eliminating cash payments on the CMCBC's Toll Facilities, over the Contract Term.

#### **1.1.8 Facility Overview**

The following provides a summary of the Toll Facilities described in the previous section.

**Table 1-1: Overview of Toll Facilities – Current Operations**

Toll Agency	Facility	Facility Type	Payment Accepted
New Jersey Turnpike Authority	Garden State Parkway	Toll Road	Cash and E-ZPass <sup>1</sup>
	New Jersey Turnpike	Toll Road	Cash and E-ZPass <sup>1</sup>
South Jersey Transportation Authority	Atlantic City Expressway	Toll Road	Cash and E-ZPass <sup>2</sup>
	Atlantic City International Airport and other parking locations	Parking	Cash and E-ZPass
	Benjamin Franklin Bridge	Bridge	Cash and E-ZPass

Toll Agency	Facility	Facility Type	Payment Accepted
Delaware River Port Authority	Walt Whitman Bridge	Bridge	Cash and E-ZPass
	Commodore Barry Bridge	Bridge	Cash and E-ZPass
	Betsy Ross Bridge	Bridge	Cash and E-ZPass
Delaware River and Bay Authority	Delaware Memorial Bridge	Bridge	Cash and E-ZPass
Delaware River Joint Toll Bridge Commission	Delaware Water Gap (I-80)	Bridge	Cash and E-ZPass <sup>3</sup>
	Easton-Phillipsburg (Route 22) Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	I-78 Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Milford-Montague Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	New Hope-Lambertville Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Portland-Columbia Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Trenton-Morrisville (Route 1) Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
Burlington County Bridge Commission	Scudder Falls Bridge	Bridge	E-ZPass and TOLL-BY-PLATE
	Burlington-Bristol Bridge	Bridge	Cash/Credit Card and E-ZPass
Cape May County Bridge Commission	Tacony-Palmyra Bridge	Bridge	Cash/Credit Card and E-ZPass
	Grassy Sound Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Corsons Inlet Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Middle Thorofare Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Townsend's Inlet Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Ocean City-Longport Bridge	Bridge	Cash and E-ZPass <sup>2</sup>

<sup>1</sup> May convert to AET over the Contract Term<sup>2</sup> Will convert to AET before Phase 1 Go-Live<sup>3</sup> Will transition to AET in 2024-2025

## 1.2 Customer Service Center

Currently, the main New Jersey E-ZPass CSC is located in Newark, NJ, and includes a Walk-in Center (WIC). A second WIC is located in Camden, NJ. DRBA also operates a WIC at its facility in New Castle, DE.

## 1.3 Current New Jersey E-Z Pass System Statistics

Table 1-2 provides the transaction volume breakdown by Toll Agency. Additional statistics on the New Jersey E-ZPass operations are provided in Appendix A New Jersey E-ZPass Program Volumes.

**Table 1-2: Transaction Statistics**

<b>Toll Agency</b>	<b>Current Average Monthly IBT and GCMM Transaction Volumes (Maximum)</b>		<b>Potential Volumes with AET</b>	
	<b>Image-Based Transactions (IBT)</b>	<b>Gross Class Mismatch (GCMM)</b>	<b>Image-Based Transactions</b>	<b>Gross Class Mismatch</b>
NJTP	1,000,000	500,000	4,200,000	1,300,000
GSP	1,100,000	n/a	5,800,000	400,000
SJTA <sup>1</sup>	250,000	n/a	1,000,000	n/a
DRPA	125,000	n/a	150,000	n/a
DRJTBC (AET)	99,000	n/a	150,000	n/a
DRJTBC (non-AET)	323,000	n/a	0	n/a
DRBA	50,000	n/a	60,000	n/a
BCBC	25,000	n/a	30,000	n/a
CMCBC	2,000	n/a	2,000	n/a
<b>Total</b>	<b>2,974,000</b>	500,000	<b>11,392,000</b>	<b>1,700,000</b>

<sup>1</sup>Volumes may vary with the implementation of trip building

## 1.4 Debt Volumes

NJTA currently forwards between 1 million and 2 million placements per month, representing an average dollar amount of over \$55 million per month. A detailed breakdown of debt placed and collected in recent years is shown and Tables 1-3 and -4, respectively. Debt includes unresolved tolls, fees, and negative balance

amount on the New Jersey E-ZPass Account. Currently debt is placed in collections if debt amount is not resolved after two violation notifications. There are two Collections Services Contractors supporting the collections process. Some of the Toll Agencies also take flagrant violators to Court, place Vehicle Registration Holds, and use other methods to more rigorously collect debt in future.

Debt volumes for the New Jersey E-ZPass Program will be impacted by factors including but not limited to traffic growth, toll rate adjustments, Customer behavior, payment trends, and other factors.

**Table 1-3: Collections Placements by Type and Year/Month<sup>1</sup>**

Placement Month/Year	Tolls (\$)	NSF's (\$)	Admin Fees (\$)	Total Placed (\$)
<b>Year 2021</b>	<b>\$ 52,600,000</b>	<b>\$ 15,400</b>	<b>\$ 468,100,000</b>	<b>\$ 520,700,000</b>
January 2022	\$ 6,400,000	\$ 1,500	\$ 55,800,000	\$ 62,200,000
February 2022	\$ 5,500,000	\$ 1,300	\$ 51,700,000	\$ 57,200,000
March 2022	\$ 4,600,000	\$ 1,100	\$ 41,500,000	\$ 46,200,000
April 2022	\$ 5,100,000	\$ 1,300	\$ 44,000,000	\$ 49,100,000
May 2022	\$ 5,200,000	\$ 1,500	\$ 47,300,000	\$ 52,400,000
June 2022	\$ 5,500,000	\$ 1,300	\$ 47,300,000	\$ 52,800,000
July 2022	\$ 6,200,000	\$ 1,900	\$ 54,500,000	\$ 60,700,000
August 2022	\$ 6,200,000	\$ 1,200	\$ 54,600,000	\$ 60,800,000
September 2022	\$ 6,500,000	\$ 2,200	\$ 57,100,000	\$ 63,500,000
October 2022	\$ 6,800,000	\$ 1,900	\$ 60,700,000	\$ 67,500,000
November 2022	\$ 8,700,000	\$ 2,300	\$ 77,900,000	\$ 86,500,000
December 2022	\$ 6,600,000	\$ 1,200	\$ 59,600,000	\$ 66,200,000
January 2023	\$ 7,500,000	\$ 2,000	\$ 67,200,000	\$ 74,700,000
February 2023	\$ 7,400,000	\$ 1,900	\$ 64,700,000	\$ 72,100,000
March 2023	\$ 6,600,000	\$ 1,500	\$ 56,200,000	\$ 62,800,000
April 2023	\$ 7,000,000	\$ 1,100	\$ 59,500,000	\$ 66,600,000

<sup>1</sup>Volumes may vary based on the debt migration plan

**Table 1-4: Collections Placements Payments by Year/Month<sup>1</sup>**

Placement Year/Month	Payments						Total Paid	
	Tolls		NSF's		Admin Fees			
	Amount	%	Amount	%	Amount	%	Amount	%
Year 2021	\$ 8,600,000	16.3%	\$ 5,500	35.7%	\$ 42,700,000	9.1%	\$ 51,300,000	9.9%
January 2022	\$ 850,000	13.3%	\$ 500	33.3%	\$ 3,900,000	7.0%	\$ 4,700,000	7.6%
February 2022	\$ 700,000	12.7%	\$ 500	38.5%	\$ 3,200,000	6.2%	\$ 3,900,000	6.8%
March 2022	\$ 590,000	12.8%	\$ 300	27.3%	\$ 2,600,000	6.3%	\$ 3,200,000	6.9%
April 2022	\$ 560,000	11.0%	\$ 400	30.8%	\$ 2,400,000	5.5%	\$ 2,900,000	5.9%
May 2022	\$ 520,000	10.0%	\$ 400	26.7%	\$ 2,600,000	5.5%	\$ 3,100,000	5.9%
June 2022	\$ 500,000	9.1%	\$ 600	46.2%	\$ 2,600,000	5.5%	\$ 3,100,000	5.9%
July 2022	\$ 570,000	9.2%	\$ 600	31.6%	\$ 3,200,000	5.9%	\$ 3,800,000	6.3%
August 2022	\$ 540,000	8.7%	\$ 500	41.7%	\$ 3,100,000	5.7%	\$ 3,700,000	6.1%
September 2022	\$ 560,000	8.6%	\$ 800	36.4%	\$ 3,400,000	6.0%	\$ 4,000,000	6.3%
October 2022	\$ 560,000	8.2%	\$ 700	36.8%	\$ 3,400,000	5.6%	\$ 4,000,000	5.9%
November 2022	\$ 700,000	8.0%	\$ 800	34.8%	\$ 4,200,000	5.4%	\$ 5,000,000	5.8%
December 2022	\$ 490,000	7.4%	\$ 200	16.7%	\$ 2,900,000	4.9%	\$ 3,400,000	5.1%
January 2023	\$ 510,000	6.8%	\$ 700	35.0%	\$ 2,900,000	4.3%	\$ 3,400,000	4.6%
February 2023	\$ 470,000	6.4%	\$ 500	26.3%	\$ 2,400,000	3.7%	\$ 2,900,000	4.0%
March 2023	\$ 310,000	4.7%	\$ 400	26.7%	\$ 1,600,000	2.8%	\$ 1,900,000	3.0%
April 2023	\$ 110,000	1.6%	\$ 100	9.1%	\$ 500,000	0.8%	\$ 600,000	0.9%

<sup>1</sup>Volumes may vary based on the debt migration plan

Newly assigned debts will be submitted to the Contractor on a daily basis when the unpaid debt escalates to collection. The daily transmission of placements to the Contractor will include updates of debts previously assigned to the Contractor as well as any newly assigned debts. On a daily basis the Contractor will provide updates on the placements including payments and establishment of payment plans. Other data may be exchanged to reconcile and synchronize the collection debt.

Additional statistics on the New Jersey E-ZPass operations are provided in Appendix A New Jersey E-ZPass Program Volumes.

## 1.5 Future Plans

NJTA has discussed plans to potentially move towards AET on the NJTP and GSP and, if implemented, the conversion would occur in phases which would overlap the Contract Term. As such, the Contractor may need to support the transition of NJTA Toll Facilities to AET at varying Phases of the Contract Term, which may result in changing debt volumes. Additionally, to serve New Jersey E-ZPass Customers, DRJTBC plans to establish three (3) WICs in Pennsylvania that will be operated by the Commission, and SJTA plans to establish and operate a WIC at the Farley Service Plaza.

## 1.6 Project Overview

NJTA's contract with the existing New Jersey E-ZPass Services Contractor for the New Jersey E-ZPass System and New Jersey E-ZPass System support and operations expires on October 16, 2025. At its sole discretion, the Authority can extend the contract for an additional two (2) one (1) year extensions. Through this RFP, NJTA is procuring the contractors to provide, implement, and maintain an integrated New Jersey E-ZPass System and operate New Jersey E-ZPass Customer Service Centers (CSCs) and provide associated CSC services, namely, License Plate Review Services, Collections Services and Merchant Services (collectively, the "New Jersey E-ZPass Services").

NJTA is seeking best-in-class solutions for the New Jersey E-ZPass Program that provides Customers optimized self-service options, streamlines operations, supports technology growth, has Configurable and flexible application program interfaces (APIs) for third-party interfaces and improves revenue collection. The Requirements included in this Scope of Services are to provide a framework for the solution while providing Customers and Toll Agencies features, they currently have in production and new features which will enhance the program, over the Contract Term. NJTA encourages innovation as well as the use of industry available tools within the proposed solution.

The New Jersey E-ZPass Program services will be split into four (4) Categories of Services, as described below:

- **Category A** – Customer Service Center services ("CSC Services"): provide, implement, maintain and operate (1) a System containing all required functionality to support the provision of Customer service and the processing/payment of tolls for the New Jersey EZ-Pass Group, which shall include best-in-class Customer Contact Center System, customer self-service tools, system architecture and environments, redundancy, reporting and Data Warehouse capabilities, interfaces, interoperability and security; and (2) customer contact facilities and services, including labor, for effective and efficient ongoing customer contact, customer service, payment processing, financial and operational reconciliation, and other services further described in the detailed Requirements. In addition, CSC Services include System Maintenance, Administration, Software Support Services, and CSC Operations Services required to meet System and Operations Performance Requirements, and to keep the System current, up-to-date, and continuously improved. The Successful Proposer for Category A Services will be referred to herein as the CSC Services Contractor.

- **Category B** – License Plate Review Services: provide image review services, including automated image processing and manual image review services, for Image-Based Transactions and perform Gross Class Mismatch reviews. The Successful Proposer for Category B Services will be referred to herein as the License Plate Review Services Contractor.
- **Category C** – Collections Services: provide debt collection services, including skip tracing, for collection of outstanding tolls and fees. The Authority plans to procure the services of two contractors for the Collection Services. The Successful Proposers for Category C Services will be referred to herein as the Contractor(s).
- **Category D** – Merchant Services: provide a Payment Orchestration Platform (POP) that integrates with the New Jersey E-ZPass System and provides payment gateway for CSC Customers, allowing for multiple payment service providers, including credit card and automated clearinghouse (ACH), payment processing. Provide Tokenization and hosted third-party storage for all payment processing. The Successful Proposer for Category D Services will be referred to herein as the Merchant Services Contractor.

The E-ZPass Program will be supported by and will require the coordination with a variety of entities, including the Toll Agencies, IAG/Interoperable Agencies, Third-party Entities, Third-party Service Providers, Subcontractors, Toll Agency Host and Image Capture System contractors and other contractors. The following diagram provides a high-level overview of the responsibilities between these entities and serves as an example of functional responsibilities between the different Categories of Services.

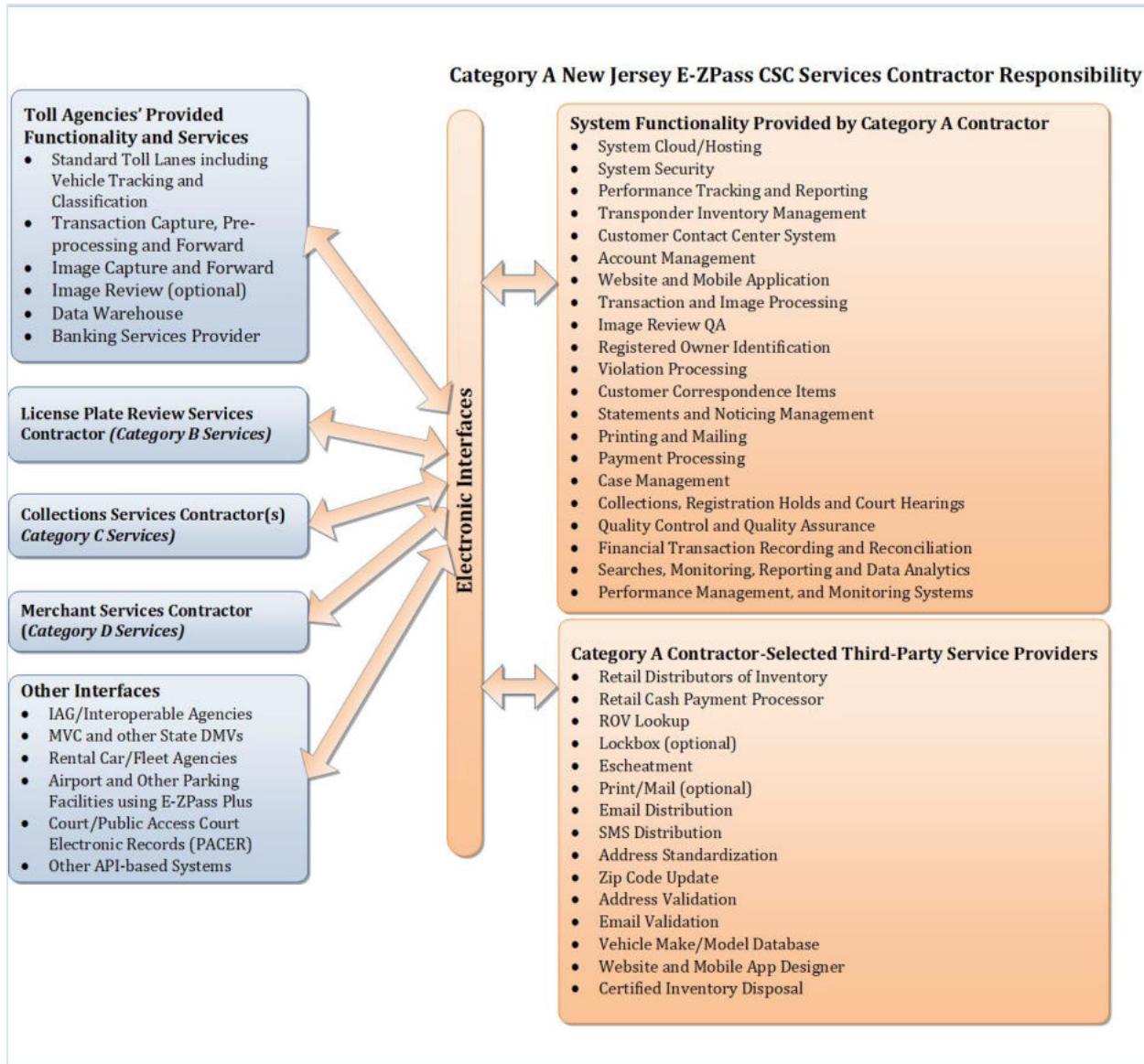


Figure 1-1: New Jersey E-ZPass Program Functional Responsibilities Diagram

## 1.7 Category C Collections Services

This Scope of Services describes the Requirements for Category C – Collections Services. The selected Collections Services Providers (the “Contractors”) will provide debt collection services for amounts due to NJTA, which includes outstanding tolls and fees due from Customers, as well as outstanding violation tolls and fees. The debt collection services shall include Customer outreach and dispute management, payment processing, and Skip Tracing. The Contractor will provide design, implementation, data migration, testing, training, and all Services necessary to interface with the New Jersey E-ZPass System and transition to the new Contractor’s Collections System and Services. The following paragraphs describe NJTA’s process for sending debt to collections.

Delinquent Accounts, Violation Notices, and in certain cases Toll Bills, Post-paid Statements, and unpaid transactions not on a Violation Notice, that have not been paid, shall be escalated to collections, Vehicle Registration Suspension/Hold and/or court status in accordance with the Business Rules. Currently, Transponder-based Accounts that have an outstanding balance after a Configurable period of time, and Violation Notices that are unpaid after the second notice automatically escalate to collections status.

With the objective of getting debt to the collections process sooner, the Toll Agencies may change the current Business Rule whereby if any Account already has a violation that has been sent to collections, then all subsequent Violation Notices (after 1<sup>st</sup> level notice) are sent directly to collections. All debt is referred based on citation numbers and current level. Collections debt will be based on a minimum outstanding balance on the Violation Notice and/or delinquent E-ZPass Account. Additionally, Toll Agencies may introduce Vehicle Registration Suspension/Hold anytime in the escalation process to discourage non-payment of tolls.

For all debts placed with the Contractor, the intended duration of Collections Placement will be ninety (90) days with the option for NJTA to remove these debts at any time after the ninety (90) day period if the debt is pursued through the courts or Vehicle Registration Suspension/Hold. Until such time that debt is Recalled, the Contractor will continue to pursue the debt. When bankruptcy proceeding is filed, pursuit of all debt on or prior to the filing date will be paused until adjudication.

For violations and delinquent Accounts escalated to collections, Contractor shall make all attempts to collect the debt due in accordance with generally accepted methods of debt collection, in compliance with all applicable laws and regulations, including the Fair Debt Collection Practices Act. Such attempts shall include Skip Tracing and Payment Plan offers in accordance with Toll Agency Approved Business Rules.

## 1.8 Requirements of Scope of Services

The Requirements in this Scope of Services are being specified on a functional level. It is the intent of these Requirements to permit the Contractor the flexibility in the design and development of the Collections System and associated Services to reflect innovation and incorporate the latest technology and services that are fully capable of meeting the performance, operational and contractual Requirements.

The Contractor shall be responsible for furnishing and mobilizing all required equipment, facilities, and resources to carry out this Scope of Services and to meet the Requirements. This includes but is not limited to mobilization, demobilization, all permits, licenses, certifications, fees, insurance, and bonds; coordination and cooperation with third-parties, and the CSC Services Contractor, development and production of plans, documentation, and manuals; schedules; training; testing; safety, quality control (QC) and quality assurance (QA).

The Project is divided into two phases: The Implementation Phase (from Notice to Proceed until Go-Live) and the Operations and Maintenance Phase (after Go-Live through the end of the Agreement).

## 2 PROJECT MANAGEMENT REQUIREMENTS

The Contractor shall employ a project management program that is sufficiently detailed to enable NJTA to review and ascertain that the Contractor has the necessary management, staff, and controls in place to meet the Requirements.

### 2.1 Program Management Plan

The Contractor shall develop and employ a Project Management Plan (PMP) that describes how the Contractor shall deliver, implement, and manage the Project, including staffing, scheduling, and communication procedures for controlling all workshops, meetings, demonstrations, testing, data migration and transition activities, submittals, communications between the Contractor and the Toll Agencies, and communications with Third-party Service Providers.

1	Develop and submit the Program Management Plan (PMP) to NJTA for review and Approval.
2	<p>The PMP shall at a minimum include the following elements:</p> <ul style="list-style-type: none"><li>a. Project scope and key deliverables;</li><li>b. staffing plan that includes an organization chart for all Project staffing during the Implementation Phase and a separate chart for the Operations and Maintenance Phase, including location and level of commitment of all resources;</li><li>c. Project team contact information and emergency contact list;</li><li>d. a description of the Project planning, documentation, and reporting methods to be utilized, including utilizing the Contractor-provided Electronic Document Management System (EDMS) that is accessible to the Project team by username and password;</li><li>e. tools and products used to manage the Project including project controls, software development and delivery lifecycle and the internal controls;</li><li>f. approach to issue management, escalation, and resolution of Project issues with NJTA;</li><li>g. schedules for meetings with NJTA, CSC Services Contractor and other entities including the format of the meeting;</li><li>h. inclusion of the Project Implementation Schedule and description of process for updating;</li><li>i. approach to Software delivery, consistent with the Requirements, including a description of the process for managing and tracking the design and development process, schedule management, Software development, testing, integration, and delivery;</li><li>j. approach to change management;</li><li>k. approach to risk identification and management;</li><li>l. approach to QC and QA;</li></ul>

	<ul style="list-style-type: none"> <li>m. approach to operational readiness, including a Cut-Over check list;</li> <li>n. a section with all Approved Project forms including but not limited to, meeting agenda, meeting notes, action items tracking log, and</li> <li>o. description of the invoice submission process and format that meets the Agreement requirements, including invoice backup information, verification, and Approval process.</li> </ul>
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## 2.2 Project Implementation Schedule

3	<p>Develop a detailed Project Implementation Schedule in Microsoft Project format (Office 365 or above) for the Implementation Phase that lists all tasks related to the design, development, Configuration, data migration, testing, installation, transition, and deployment of the Collections System. The Project Implementation Schedule shall include:</p> <ul style="list-style-type: none"> <li>a. key intersection points/dependencies with the CSC Services Contractor;</li> <li>b. key intersection points/dependencies with the Toll Agencies;</li> <li>c. key intersection points/dependencies with external interfaces;</li> <li>d. Software development process;</li> <li>e. internal and formal testing tasks and activities including delivery of test plans, test cases, procedures and conducting testing;</li> <li>f. document development and delivery;</li> <li>g. fit-out/installation (including communications infrastructure installation and Configuration) of system;</li> <li>h. training;</li> <li>i. data migration and transition;</li> <li>j. Collections System and operational Cut-Over, and</li> <li>k. all ongoing Project activities throughout the Implementation Phase, such as scheduled meetings and their frequency/periodicity.</li> </ul>
4	The Project Implementation Schedule shall identify all critical path tasks and shall be used to manage the Project.
5	The Project Implementation Schedule shall identify all milestones and tasks starting with the Notice to Proceed through the date of Collections System Acceptance and shall align with relevant milestones identified in the Preliminary Milestone Schedule (Exhibit AH to the RFP).
6	The Project Implementation Schedule shall be baselined upon Approval and the Contractor is required to update the Project Implementation Schedule as tasks are completed.

7	This Project Implementation Schedule shall form the basis for all subsequent schedules and updates throughout the duration of the Project.
8	Work closely with the CSC Services Contractor to ensure that all dependent tasks including Go-live are synchronized.
9	Submit all changes to the baseline Project Implementation Schedule for Approval by NJTA.
10	Submit all changes to Approved milestones to NJTA in writing for Approval.

## 2.3 Monthly Progress Report

11	The monthly progress report shall contain the following elements:
	a. a summary, outlining progress, status, and percentage of Services completed for each task, as compared to planned activities in the Project Implementation Schedule. Comments shall be included where appropriate. The summary also shall identify key milestones met and missed in the period;
	b. an analysis of all critical path tasks, potential risks associated with the tasks and proposed contingency/workaround plans to avoid or mitigate delays to the Project;
	c. a discussion of schedule compliance and an updated progress schedule showing status against the Approved Project Implementation Schedule. Any proposed changes from the Approved Project Implementation Schedule should also be identified and discussed;
	d. an updated action items list that tracks the status of all outstanding activities and issues that need decision/resolution;
	e. a payment request/invoice for completed and Approved milestones (payment requests will only be considered as a part of the monthly report package), and
	f. the previous monthly final meeting minutes for Approval.

## 2.4 Project Coordination and Meetings

The Contractor will be responsible for coordinating and attending a variety of meetings to ensure proper coordination, planning, issue tracking and resolution and Project progress reporting. This will include a combination of regularly scheduled meetings as well as ad-hoc Project meetings required during the course of the Project to address specific deliverables, Services items and issues as they arise.

### 2.4.1 Cooperation with Other Contractors and Providers

12	Cooperate to the fullest extent with all external parties who are involved in the execution of this Agreement including the Toll Agencies, the CSC Services Contractor, and external entities.
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#### 2.4.2 Contractor-Led Meetings

13	Set-up, facilitate meetings, as needed to perform the Services and meet these Requirements, during the Implementation Phase and Operations and Maintenance Phase.
14	<p>Perform the following tasks related to all Contractor-led meetings, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. identify and notify other attendees as applicable;</li> <li>b. distribute notices of Project meetings in accordance with document control Requirements;</li> <li>c. prepare the agenda and meeting materials in coordination with NJTA and distribute at least two (2) Business Days prior to the meeting;</li> <li>d. host the meeting with all required staff in attendance;</li> <li>e. prepare draft minutes of the meeting and forward them to NJTA within five (5) Business Days after the day of the meeting, and</li> <li>f. maintain an action items list for each type of meeting identifying issues that need to be resolved at the project level and reported on in subsequent meetings.</li> </ul>

#### 2.4.3 Participation in CSC Services Contractor-led Meetings

15	Attend one weekly Project Reporting and Progress Meeting facilitated by the CSC Services Contractor per month during the Implementation Phase.
16	Attend various workshops, comment reviews and design meetings as requested by the CSC Services Contractor.
17	Facilitate as-needed coordination meetings related to the design, installation, and testing of the interface between the Collections System and the New Jersey E-ZPass System.

### 2.5 Documentation

The Contractor is required to provide various documentation. This section provides details on the document management process and the details to be included in each document. For detailed Requirements regarding the processes, see relevant sections throughout the Scope of Services.

#### 2.5.1 Contractor-Developed Documentation Process

An online Contractor-provided Electronic Document Management System (EDMS) shall be used to control the saving, versioning, and storage of all Project-related documents, including the Contractor's deliverables and other design, implementation, transition and maintenance, and operations support documentation provided by the Contractor that must be available to the Project team. The Contractor shall save all Contractor deliverables and other support documentation to the EDMS and provide formal notification to NJTA of the deliverable submission.

It is expected that all documentation will go through an iterative review process until NJTA provides Approval. The Contractor shall utilize acceptable standards and Requirements stated below when updating documents and submitting revisions.

18	Ensure all documentation submitted under this Agreement is accurate and complies with the Requirements.
19	Submit electronic versions of all Contractor-developed documentation for NJTA' review and Approval and use the Contractor-supplied Electronic Document Management System (EDMS) for submission and storage of all Project deliverables, unless otherwise directed by NJTA.
20	Label each document with the proper title, date updated, revision number, revision history, summary of changes, author's name, the name of the person who performed QA, and version, and the names of the author, the person who performed QC and the Approver.
21	Provide a logical indexing system for ease of access for NJTA Approval to be used to locate documents in the Contractor -provided EDMS.
22	Submit multiple versions of the draft documents to the Toll Agencies for review and comment, followed by Final Documents that incorporate all the Toll Agencies' review comments. Submissions shall include tracked changes and clean version of the document.
23	Submit additional interim drafts, at the request of NJTA, should draft documentation submitted not be of adequate quality or have missing or incorrect information or does not incorporate NJTA review comments.
24	Submit all documents to NJTA for review and Approval. For documents containing less than one hundred (100) pages, NJTA will review and provide comment on preliminary draft documents within fifteen (15) Business Days. For documents containing at least one hundred (100) pages, NJTA will review and provide comment on preliminary draft documents within twenty-five (25) Business Days. NJTA will review and provide comment on all final draft and final documents within ten (10) Business Days. When multiple documents are submitted to NJTA simultaneously, or within one week of each other, the number of Business Days required for review will be cumulative by document. For example, if two twenty (20) page documents are submitted simultaneously, then NJTA would have thirty (30) Business Days to review both documents.
25	Provide a Comment Review Form (CRF) with each submitted document upon which NJTA will provide the Contractor with written comments on all submitted documents. Respond in writing to all comments through the CRF. If needed, schedule and conduct meetings to clarify and resolve any remaining questions and issues concerning the comments and responses provided. Prepare a revised version of the document for Approval by NJTA.
26	Submit electronic versions of all Contractor-developed documentation for NJTA review and Approval. Acceptable softcopy formats are Microsoft Office 365 Suite (or higher) and AutoCad 19 (or higher) for Contractor-prepared documentation.

27	Update documentation as changes occur through the Implementation Phase and the Operations and Maintenance Phase. All changes shall be submitted to NJTA for Approval. Maintain a document submittals list on the EDMS identifying all versions of documents, the date submitted, the nature of changes and identify what the changes are within the documentation.
28	Ensure all Project documents submitted under this Agreement are available at all times to NJTA for review and download.

### 2.5.2 System Security Plan

29	Develop and submit a System Security Plan, which shall comprehensively cover (detailed design or procedures may be referenced in other documents) the Contractor's general approach to meeting all Requirements in the System and User Security and Section 3.4.2 Cybersecurity Specifications, Standards and Policies of this Scope of Services and other relevant Requirements, including but not limited to: <ul style="list-style-type: none"> <li>a. key design aspects of Collections System security;</li> <li>b. access control approach for every type of Collections System user;</li> <li>c. approach to protection of Confidential Personal Information;</li> <li>d. approach to safeguarding data in the Collections System;</li> <li>e. Collections System design approach to monitor, prevent and combat unauthorized access and other Collections System vulnerabilities and potential security breaches;</li> <li>f. Collections System administration approach to continuously monitor, prevent, and combat unauthorized access and other Collections System vulnerabilities and potential security breaches;</li> <li>g. third-party services to monitor and scan the Collections System for vulnerabilities in compliance with PII Requirements and the Contractor's best practices;</li> <li>h. processes for escalation, mitigation, and corrective action, including notification to NJTA and customers, and</li> <li>i. a summary of the Contractor's Incident Response Plan.</li> </ul>
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### 2.5.3 Disaster Recovery Plan

30	Develop and submit a Disaster Recovery Plan that describes the approach as well as Disaster Recovery Procedures to take place in the event of a disaster for the Collections System.
31	Collections System failures and emergency conditions shall be handled in accordance with policies and procedures developed by the Contractor and Approved by the NJTA in the Disaster Recovery Plan. The following are a few examples of emergency conditions:

	<ul style="list-style-type: none"> <li>a. data center related;</li> <li>b. Collections System outages;</li> <li>c. third-party service outage or communication failure, and</li> <li>d. security breaches.</li> </ul>
32	Provide the process for defining a Collections System failure or disaster within the Disaster Recovery Plan.
33	<p>As a subsection within the Disaster Recovery Plan, include an Operations Business Continuity Plan that defines the process for defining a business continuity event and describes the Contractor's staffing capabilities and approaches to supporting business continuity and the resumption of Collections Services and operational processes after unplanned disruptions, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. weather related;</li> <li>b. public safety related;</li> <li>c. health related. For example, in response to a COVID-19 or similar outbreak;</li> <li>d. facility related;</li> <li>e. System outages;</li> <li>f. third-party power outage or communication failure, and</li> <li>g. security breaches.</li> </ul>
34	<p>The Operations Business Continuity Plan shall also provide the Contractor's approach for:</p> <ul style="list-style-type: none"> <li>a. Collections Services staff to continue work in order to meet the Collections Performance Requirements in the event of a disaster at any Contractor facility where such work is performed;</li> <li>b. maintaining site and Collections System security to ensure continued compliance with the Requirements, and</li> <li>c. ensuring efficient ramp up of equipment and staffing resources at the other Contractor facilities, or provision of remote operations with on-site staffing.</li> </ul>
35	The Contractor shall coordinate with the CSC Services Contractor and other Third-party Service Providers to ensure that the Contractor's business continuity approach will work to efficiently support the NJ E-ZPass operations without disruption to Services.

#### 2.5.4 Business Rules Document

36	Develop and submit a Business Rules document, which shall include:
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	<ul style="list-style-type: none"> <li>a. detailed Business Rules for all aspects of Collections Services including policies and processes;</li> <li>b. detailed Business Rules related to Customer outreach and notifications;</li> <li>c. events that trigger the Business Rules and the results;</li> <li>d. all exceptions and constraints when applying the Business Rules;</li> <li>e. cross-reference all Business Rules to the underlying Requirements, and</li> <li>f. Collections System behavior and operational impact and outcome of the Business Rule.</li> </ul>
37	Maintain updated Business Rules throughout the Contract Term.

#### 2.5.5 Standard Operating Procedures

38	Develop and maintain the Standard Operating Procedures (SOPs). The SOPs shall use detailed narratives and process flow diagrams in providing step-by-step procedures for every task the Contractor performs. Collections System interactions, including screen shots, shall be included in the detailed description of the task.
39	Update Approved, new policies, procedures and changes to existing policies and procedures in the SOPs quarterly. Distribute, train, and educate the collections staff in accordance with the SOPs.

#### 2.5.6 System Detailed Design Document

The Contractor shall submit a System Detailed Design Document (SDDD) that describes the design specifications of all hardware and software provided as part of the Collections System to meet the Requirements and illustrate that the Collections System is designed with appropriate measures in place to provide redundancy or employ disaster recovery procedures.

40	Develop and submit a System Detail Design Document (SDDD), making use of diagrams, figures, and tables and for all environments.
41	<p>The SDDD shall include:</p> <ul style="list-style-type: none"> <li>a. Collections System and hosted/cloud architecture, including equipment layout and network diagrams;</li> <li>b. data backup systems design;</li> <li>c. disaster recovery design, including Servers; storage; network; database, and application;</li> <li>d. detailed desktop, peripherals configurations, including Requirements for all peripheral device interfaces and control;</li> <li>e. all developed software;</li> </ul>

	<ul style="list-style-type: none"> <li>f. all provided software;</li> <li>g. detailed database design, schema, and entity relationship modeling, including sizing and processing calculations for each environment;</li> <li>h. software Module level descriptions and interaction among various software Modules;</li> <li>i. detailed description to the Module and/or process level for all of the functions according to the Requirements of the System;</li> <li>j. all internal Collections System interfaces;</li> <li>k. design of external Collections System interface to the New Jersey E-ZPass System and other third-party services and interfaces;</li> <li>l. all user interfaces (UIs) (including Dashboards, reports, and screen formats);</li> <li>m. detailed report database design and schema;</li> <li>n. Collections System data dictionaries;</li> <li>o. data flow diagrams, workflows, state diagrams, and data queues;</li> <li>p. application performance monitoring design;</li> <li>q. access/identity security methodology, and</li> <li>r. comprehensive approach to protection of Confidential Personal Information.</li> </ul>
42	Provide detailed information on proposed network, infrastructure and relevant boundary protections, such as servers, storage units, databases, firewalls, routers, gateways, network based malicious code analysis, virtualization system, and encrypted tunnels implemented within a security architecture.
43	Upon the completion of the software development and prior to start of the User Acceptance Test (UAT), submit the Final SDDD that includes all changes made during the software development portion of the Implementation Phase.

## 2.6 Staffing and Key Personnel

### 2.6.1 Key Personnel

44	Hire and retain Key Personnel for this Project including, at a minimum, those defined in Table 2-1. The Contractor shall maintain and assign a sufficient number of competent and qualified professionals and other technical personnel to meet the Requirements.
45	As a part of its PMP, provide NJTA with an organization chart that identifies the employees dedicated to this Project (the “Key Personnel”) under this Agreement. Key Personnel for this Project shall include, at a minimum, those defined in Table 2-1.

46	For all Key Personnel, complete the Secure Workers Access Consortium (SWAC) screening process ( <a href="http://secureworker.com/default.asp">http://secureworker.com/default.asp</a> ) and receive the appropriate tier of membership ID.
47	Ensure Key Personnel are readily accessible to NJTA and working during Business Hours, and as needed to meet the Requirements, during the Implementation Phase regardless of their physical location and time zone.
48	When required, Key Personnel shall be on-site at NJTA offices located at 1 Turnpike Plaza, Woodbridge, New Jersey.
49	Ensure Key Personnel are readily accessible to NJTA and working during facility operating hours throughout the Operations and Maintenance Phase and as needed to meet the Requirements, regardless of their physical location and time zone.
50	NJTA can request/demand replacement of personnel and such personnel shall be replaced within thirty (30) days of the request.
51	Proposals for the replacement of Key Personnel by the Contractor shall be planned and submitted to NJTA for review and concurrence prior to replacement of the individual.
52	The Contractor is responsible for ensuring a seamless and successful transition of the Key Personnel.
53	Every year on the anniversary date of Go-Live, the Contractor and NJTA shall walk through Key Personnel, their goals and objectives for the New Jersey E-ZPass Program, and institute necessary changes to their roles to better serve the Program.

Table 2-1: Key Personnel

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Project Manager (Implementation Phase)</b> – shall be Contractor's day-to-day contact person for all Project matters and shall be responsible for the overall management and delivery of the Services.</p> <p>Should meet or exceed the following:</p> <ul style="list-style-type: none"> <li>• Five (5) years' experience as a Project Manager in the debt collection industry or other related operations environment</li> <li>• Project Manager for at least one (1) project of \$10 million or more in value</li> <li>• Project management certification such as PMP is desired</li> </ul>	X		<p>For all status meetings, design workshops, demonstrations, testing, and reviews</p> <p>100% on-site from the beginning of UAT through Go-Live.</p>	100%
<p><b>Client Services Manager</b> – serves as a point of contact for any escalated Project issues and is responsible for providing a monthly health assessment of the Program at an executive level during the Implementation and Operations and Maintenance Phases. Required to meet with NJTA executives upon request.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Client management responsibility for at least one (1) project of \$25 million or more in value</li> </ul>	X		At Executive Meetings and as requested by NJTA	As needed
		X	At Executive Meetings, Quarterly Innovations and Enhancement Meetings and as requested by NJTA	As needed

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Software/Technology Manager</b> – responsible for management of overall Collections System design, Software, integration, network and Collections System implementation. During the Operations and Maintenance Phase, the Software/Technology Manager will manage on-going resolution of Software bugs and development of improvements and new functionality.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Experience with technical management of a Software development project of a similar scope to this Project</li> <li>• Five (5) years' experience with system design and implementation</li> <li>• Five (5) years' experience with systems security for systems which include credit card processing</li> <li>• Direct project experience using the proposed solution</li> <li>• Experience with Collections System design and implementation of a similar scope to the systems provided on this Project</li> </ul>	X		<p>For all design meetings, workshops, demonstrations, and testing</p>	100%
		X	<p>For all Collections System functionality, upgrades and enhancements meetings, workshops, and testing.</p> <p>For all Collections System performance related meetings.</p>	As needed
<p><b>Operations Manager</b> – responsible for the daily operations of Collections Services including performance monitoring and oversight of the call center and finance staff.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Five (5) years' experience with operations management of a similar scope to this Project</li> <li>• Three (3) years' experience in debt collection customer service</li> </ul>	X		<p>For all Software functionality meetings, workshops, and demonstrations</p> <p>100% from a minimum of three (3) months prior to Go-Live</p>	As needed
		X	100%	100%

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Collections Manager</b> – responsible for the day-to-day operations of the call center and all customer interactions.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Five (5) years' experience with call center management of a similar scope to this Project</li> <li>• Three (3) years' experience in debt collection customer service</li> </ul>	X		<p>For all Software functionality meetings, workshops, demonstrations, and testing.</p> <p>100% from a minimum of three (3) months prior to Go-Live</p>	100%
		X	100%	100%
<p><b>Finance Manager</b> – responsible for ensuring the Collections System and operations operates in accordance with financial standards and regulations.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Certified Public Accountant (CPA) certification</li> <li>• Bachelor's degree in accounting or related field</li> <li>• Five (5) years of financial and accounting experience, including management or leadership position (e.g., Accounting Manager, Sr. Accountant, Accounting Lead) overseeing accounting operations in a high-volume, debt collection environment</li> <li>• Three (3) years' experience as finance manager for a debt collection project</li> </ul>	X		<p>For all finance and reconciliation meetings and workshops.</p> <p>For all formal testing of transitional and financial reconciliation and reporting.</p> <p>100% from a minimum of three (3) months prior to Go-Live</p>	As needed
		X	100%	100%

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Compliance Manager</b> – responsible for ensuring adherence to all applicable debt collection laws, regulations and standards throughout the Operations and Maintenance Phase.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Bachelor's degree in finance, accounting, business administration, or economics.</li> <li>• At least ten (10) years of relevant work experience, working in the areas of client billing, collections and financial compliance and reporting.</li> <li>• Experience in federal government, state &amp; local government, and commercial contracting.</li> </ul>	X		<p>For all finance and reconciliation meetings and workshops.</p> <p>For all formal testing of transitional and financial reconciliation and reporting.</p>	As needed
		X	100%	100%

## 2.6.2 Availability and Access to Contractor Staff

54	For all meetings, (including design reviews, testing, and workshops) all Contractor staff who are integral to the conduct of the meeting, including those leading the discussion for the Contractor, shall be in physical attendance.
55	Ensure Key Personnel are readily accessible to NJTA regardless of physical location and time zone.
56	Key Personnel shall not be replaced without the prior written Approval of NJTA and NJTA shall have the right to request replacement of any Contractor personnel, in accordance with the terms and conditions of the Agreement.

## 2.7 System Design and Report Development Process

The Contractor shall institute iterative Software Development Lifecycle (SDLC) concepts to meet the Requirements of the Scope of Services. If existing software is being used as the basis of the Collections System, the software will be demonstrated, including recommended changes to the base system, and NJTA will have an opportunity to request changes and have those changes implemented.

The Toll Agencies, as primary stakeholders, will have input into design planning and review. Demonstrations, based on use cases, will be conducted for stakeholder review after each release is deployed to the Contractor test environment. Formal testing, for NJTA Approval, will test functionality released to the Contractor test environment.

To ensure the design Requirements for the Collections System are interpreted the same way by NJTA and the Contractor, a series of Requirements and design review steps are specified herein.

57	Establish and maintain an effective software design and development program to ensure compliance with the Requirements.
58	Employ effective techniques and methodologies to understand and trace the software Requirements and Business Rules for the Project through the design and development lifecycle.
59	Prior to conducting any workshops, Requirements review meetings, and design reviews, develop the necessary documentation for NJTA review and submit such documentation ten (10) Business Days prior to such workshops and meetings. Depending on the workshop's topic, the draft design-related documents might include items such as draft use cases, draft screen mockups, draft flow diagrams, and existing design artifacts for existing baseline products/Modules.
60	Utilize available Contractor documentation and templates; however, all changes and additions required to meet the Requirements shall be incorporated or clearly documented.

61	Manage, facilitate, and conduct Collections System Requirements review meetings with NJTA to outline how the Requirements shall be met. The outcome of these meetings shall be a Requirements Traceability Matrix (RTM) that shall be used to validate each Requirement against a design item(s), design documentation and testing procedure(s).
62	Track and submit to NJTA for Approval any changes to Requirements identified during the Requirement review and design process. Once Approved, the RTM shall be updated to reflect the change and such changes shall be tracked in the RTM.
63	Conduct design workshops throughout the project to solicit and document feedback from stakeholders, including the CSC Services Contractor and Toll Agencies.
64	Create a Software Release at the fifty (50) percent development cycle and conduct a formal test witnessed by the Toll Agencies. Test cases shall be submitted to NJTA for review and Approval. Upon the completion of the test, submit test results for NJTA review and Approval. Software Release testing shall continue until NJTA deems fifty (50) percent development has been completed and tested successfully.
65	Provide input into the development of the Business Rules Document developed by the CSC Services Contractor.
66	Participate in use case workshops, led by the CSC Services Contractor with NJTA, to help develop the use cases that will be used in conjunction with test procedures related to the interface between the New Jersey E-ZPass System and the Collections System and to validate that the Requirements have been met.
67	Identify and correct all Software issues and defects in its design or product that impact the Contractor's ability to deliver a Collections System that meets the Requirements. This shall apply to issues or defects found at any point during the Implementation Phase and the Operations and Maintenance Phase.
68	Manage, facilitate, and conduct a series of reports design workshops with NJTA to develop input on and obtain Approval of the required collections reports.
69	Bring subject matter experts to the Contractor-led workshops to support the design of all reports related to the Collections Services.
70	Participate in multiple, iterative, reports design workshops led by the CSC Services Contractor and NJTA.
71	Provide feedback to allow the CSC Services Contractor to design, develop and/or modify CSC Services Contractor reports related to higher-level collections reporting.
72	Participate in as many iterative workshops and demonstrations as deemed necessary by NJTA to address to obtain Approval of the design of the applicable collections reports.

## 2.8 Quality Assurance Program

73	Establish and maintain an effective quality assurance (QA) program that ensures adequate quality throughout all areas of performance.
74	Maintain control of all hardware, Software and Services provided under this Agreement, whether designed, developed, or performed within the Contractor's facilities or other location or by a Subcontractor, at all points necessary to ensure conformance with the Requirements.
75	The QA program shall provide for the prevention and ready detection of discrepancies and for timely and positive corrective action.
76	The QA program shall include effective QC of subcontracted Services.
77	Make objective evidence of quality conformance readily available to NJTA, and NJTA shall have the right to review and verify the Contractor's compliance to the process.

## 3 TESTING

### 3.1 General Testing Requirements

The Requirements described in this section detail the labor, materials, facility, environments, and support services necessary to test the Collections System, its integration to the New Jersey E-ZPass System, and other external entities, data migration, and production readiness. All formal tests will be performed by the Contractor and witnessed and Approved by NJTA. Approval of any aspect of testing shall not relieve the Contractor's responsibility in meeting the full Requirements.

78	Conduct testing in various phases and stages to validate the Collections System design, integration, reliability, functionality, and compliance to the Requirements.
79	Employ automated testing software, covering all internal processes, interface control document (ICD) messages and data, transaction processing and the user/Customer experience. Make automated testing applications and tools available for use during the Operations and Maintenance Phase.
80	Perform electronic monitoring of Collections System performance, covering all internal processes, ICD messages and data, payment processing, and the user/Customer experience, throughout all testing. Make performance monitoring applications and tools available for use during the Operations and Maintenance Phase.
81	Provide all necessary resources, environments, and facilities to conduct all testing, including access to these resources, environment, and facilities by Toll Agency staff.
82	Provide the required test set-ups and data communications to the New Jersey E-ZPass System test environments, external entities' test sites, external interfaces, and the UAT environments.

83	Ensure that the Collections System and its integration with the New Jersey E-ZPass System and other external entities are systematically and thoroughly tested for compliance with the Requirements, ICDs and for operation in compliance with the established Business Rules.
84	Work closely with the CSC Services Contractor and other external entities to coordinate testing of all interfaces.
85	Test the user application software for browser standards compliance, screen validation, functionality, performance, and standard action.
86	Manage all test logistics required to validate and test the Collections System, and for coordinating all testing activities with the CSC Services Contractor and external entities.
87	<p>Provide a defect tracking system, to document and track all defects identified as part of Collections System testing and any subsequent actions taken to correct those defects. This system shall be made available to NJTA via browser-based internet and the Toll Agencies shall have the ability to record problems or requests through a web interface and generate reports from the system. This same defect tracking system is to be used during the Operations and Maintenance Phase. The defect tracking system shall be capable of the following, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. assigning a unique ticket number to each defect;</li> <li>b. categorizing defects;</li> <li>c. recording and updating the statuses of the defect;</li> <li>d. prioritizing defects;</li> <li>e. logging the date/time the defect was reported;</li> <li>f. the user who reported the defect;</li> <li>g. tracing to the defect's point of discovery, for example the test case;</li> <li>h. description of the erroneous behavior;</li> <li>i. details on how to reproduce the defect;</li> <li>j. details on how to correct the defect;</li> <li>k. identification of all functionality that utilizes any part of the code or the Configuration parameters that will be modified to correct the defect;</li> <li>l. details on how to test the correction, including functional testing, negative testing, end-to-end testing, and any regression testing required;</li> <li>m. documenting schedule for release of correction of the defect;</li> <li>n. documenting any related ticket(s) associated with the defect;</li> </ul>

	<ul style="list-style-type: none"> <li>o. the developers who worked on the defect;</li> <li>p. life-cycle tracking, and</li> <li>q. generating reports that provide status of the defects.</li> </ul>
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### 3.2 System Integration and Interface Testing

System Integration and Interface Testing (SIIT), or end-to-end testing, seeks to validate the interfaces between individual components and the completely integrated Collections System meets its Requirements. The Contractor shall conduct SIIT, compressing logical days as necessary to accommodate process escalation and transaction aging. Multiple testing cycles may be executed depending on defects found and their severity. The Contractor shall also conduct load/performance testing as part of SIIT.

88	Migrate and cleanse all data from NJTA's existing collections systems, as of an agreed-upon date, as an entry criterion for the SIIT. The scope of the actual data to be migrated for testing will be defined in the test procedures.
89	Validate the migrated data and reports and reconcile to the New Jersey E-ZPass System financial system, prior to start of SIIT.
90	Conduct SIIT, which shall include end-to-end integration testing of all functionality, all reporting as part of integrated test scripts/test cases, interface testing, security testing, and performance/load testing. In addition, all reports shall be validated and made available to the Toll Agencies at all times throughout SIIT.
91	Conduct the SIIT within the timeframe of the New Jersey E-ZPass System SIIT.
92	<p>Conduct SIIT, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. testing all functional elements of the Collections System using the procedures for Software integration testing, including all screen validations and the end-to-end testing;</li> <li>b. reports/Dashboard testing using migrated, simulated, and keyed-in data;</li> <li>c. preliminary verification and validation of PCI and PII compliance;</li> <li>d. verification and validation that the various Collections System environments are operating per the Requirements;</li> <li>e. load (stress)/performance and response testing of the entire Collections System in terms of user access, for example, website, mobile application (if applicable), operations staff access, NJTA access, Interactive Voice Response (IVR) and all Customer communication channel access;</li> <li>f. load/performance testing of the entire Collections System in terms of internal and external interfaces, back-end process and jobs, and file processing;</li> <li>g. full and partial primary Collections System environment failover testing;</li> </ul>

	<ul style="list-style-type: none"> <li>h. operating the secondary Collections System environment as the production Collections System for a period of time;</li> <li>i. full and primary Collections System environment failover recovery (back to primary Collections System) testing;</li> <li>j. validation of all Performance Requirements and performance reports;</li> <li>k. adherence to the security standards;</li> <li>l. archiving and purging process testing;</li> <li>m. all interface test scripts/test cases, and documentation required to confirm that the interfaces conform with the Requirements, Approved design, and the Toll Agencies' Business Rules;</li> <li>n. testing using test environment systems provided by the CSC Services Contractor, and external entities;</li> <li>o. exception testing, and</li> <li>p. sustained operations test.</li> </ul>
93	Categorize anomalies and defects identified during SIIT by severity and priority and track as a Punch-list.

### 3.3 User Acceptance Testing

UAT is defined as the testing phase where testing is conducted by using Authorized User and Customer roles to make sure the Collections System can handle required tasks and workflows in real-world operational scenarios, according to the Requirements, design, and specifications.

94	Conduct and allow the Toll Agencies to witness the UAT, to verify that all functional elements of the Collections System provided by the Contractor are in conformance with NJTA technical, functional and operational Requirements, Business Rules and the final Collections System design as Approved by NJTA.
95	Conduct the UAT within the timeframe of the New Jersey E-ZPass System UAT.
96	Conduct the UAT either at the Contractor's facility or at a facility designated by NJTA.
97	Provide support for remote participation in UAT including remote access to the UAT environment and live viewing of the test process.

98	Provide all needed support for the UAT, including providing a dedicated test environment, provisioning/aging Collections System data, running batch jobs, and developing test procedures and test scripts/test cases using use cases with all affected reports being baselined and then reviewed by the Contractor at the end of each applicable test script/test case and the results reported on a daily basis. In addition, all validated reports shall be made available to Toll Agencies at all times throughout UAT.
99	Craft UAT test procedures in such a way to ensure the testing is conducted in logical, flowing sequences in order to demonstrate the Collections System's ability to handle required tasks and workflows in real-world operational scenarios. To support this testing approach, all data entered into the Collections System in various test cases shall be used to test downstream functional areas, for example Collections Placements on a Collections Account will be used to process payments and establish Payment Plans.
100	Provide migrated and cleansed test data for UAT that represents a full set of production data. Additional placements will be processed on the existing Collections Accounts and new Collections Accounts.
101	Provide technical personnel to support UAT.
102	Ten (10) Business Days prior to commencement of UAT, provide in-person training for up to two (2) staff members from the Toll Agencies and their representatives as well as support for additional remote participants, all of whom will witness the UAT.
103	Ten (10) Business Days prior to commencement of UAT, train Contractor staff to perform the test scripts/test cases that mimic the work they will be assigned post Go-Live Date.
104	Categorize anomalies and defects identified during UAT by severity and priority and track as a Punch-list.
105	Develop, and retest necessary revisions identified during the UAT until all Punch-list items are resolved to the satisfaction of NJTA.

### 3.4 Production Readiness Testing and Cut-Over

As part of the transition process, and after the completion and Approval of UAT, the environment will be readied for PRT. During this transition period, the formal PRT activities will be conducted by the Contractor and witnessed by the Toll Agencies.

106	Conduct and allow the Toll Agencies to witness the PRT in the environment that will become the Collections System production environment to verify that the Collections System is ready for transition and Cut-Over.
107	Conduct the PRT using the Collections System production environment including but not limited to:

	<ul style="list-style-type: none"> <li>a. testing that demonstrates the Collections System is completely installed and operational and all environments are installed, Configured and ready for production and the Collections System is completely accessible by Authorized Users, all interfaces are operational, up-to-date, and fully functional;</li> <li>b. Software and test data are loaded;</li> <li>c. PCI application vulnerability, penetration and PII adherence testing, certification of elements not available/tested during previous testing;</li> <li>d. testing of phone system and all customer contact functionality;</li> <li>e. testing of website and mobile application (if applicable) in test mode and friends and family mode (released in the stores but not accessible to the public), and</li> <li>f. testing of primary Collections System environment failover to secondary Collections System environment and continuous operations in the secondary Collections System environment.</li> </ul>
108	<p>Upon successful conclusion of the PRT and of all other pre-Cut-Over testing, provide Certification of Readiness to conduct final data migration, transition, and Go-Live at the Collections System production environment, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. conduct final testing of the exact procedures and tools that shall be used for the migration of data;</li> <li>b. provide evidence that data from the New Jersey E-ZPass System is ready for migration to the Collections System in accordance with the Requirements, and</li> <li>c. complete the data migration and transition checklist to verify the data migration and transition processes are completed.</li> </ul>
109	Begin final collections data migration and transition upon Approval of the PRT including acceptance of the Certification of Readiness.
110	Conduct data migration and transition of the Collections System production environment in accordance with the Approved Project Implementation Schedule, taking into consideration the CSC Services Contractor's schedule and the relevant existing systems, including but not limited to the Existing New Jersey E-ZPass System.

### 3.5 Post-Transition Monitoring and Tuning Period

111	After the Approval of PRT, completion of all transition tasks and Certification of Readiness, the Contractor will be provided Approval to start the Cut-Over at the end of which the System shall be ready for Go-Live.
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112	Monitor the Collections System upon Go-Live for a minimum period of three (3) monthly audit cycles or until such time as the Collections System in operations has been demonstrated to be stable to the satisfaction of NJTA. During this period, the Contractor shall perform any required final adjustments to the Collections System and optimize Collections System performance.
113	Submit performance reports for both maintenance and operations demonstrating compliance to Performance Requirements.
114	Record all issues and defects identified in the defect tracking system. For all recorded issues, correct, test, and release changes to production upon NJTA Approval, and monitor the Collections System for an additional thirty (30) days.
115	Upon successful completion of the monitoring period and all entry criteria satisfied, Collections System Operational Acceptance Testing may begin.

### 3.6 Collections System Operational Acceptance Test

116	Conduct Collections System Operational Acceptance Test upon authorization by NJTA to commence such testing. The Collections System and operations shall be observed in live operations by the Contractor and NJTA for a minimum of three (3) complete monthly audit cycles. Contractor-developed and NJTA Approved test procedures, use cases and checklist shall be utilized during this test. The checklist shall be completed each day and made available to the Toll Agencies.
117	Demonstrate, through the Collections System Operational Acceptance Test, that the Collections System functions over the test period with limited manual intervention in live operations. Demonstrate that the Collections System and the network are sized and Configured correctly, and data is processed without interruption.
118	Demonstrate, through the Collections System Operational Acceptance Test, that all Collections Placements and payments are reconciled, and that settlements and payments are audited and reconciled.
119	Verify, during the Collections System Operational Acceptance Test period, Collections System accuracy, interface accuracy, performance of the Collections System and operations, Collections System reliability, and auditability.
120	Verify, during the Collections System Operational Acceptance Test all customer service, finance, invoicing, and debt collection notification functions of the Collections System. Verify reports daily for accuracy and reconcile to operations and interface files. Generate queries to validate the reports. Coordinate with the CSC Services Contractor to reconcile outstanding debt for all Accounts placed in collections and resolve all discrepancies.
121	Monitor Customer Correspondence Items, IVR operations, and call/chat (if applicable) and website/mobile application (if applicable) operations and validate against the Collections System for the duration of the Collections System Operational Acceptance Test and there shall be no errors or omissions.

122	Monitor all interfaces and validate the processing of all records through the Collections System during the duration of the Collections System Operational Acceptance Test. All errors and exceptions shall be identified, tracked, and investigated.
123	On a daily basis, during the Collections System Operational Acceptance Test, validate all file transfer and processing queues and reports to confirm that data is flowing through the Modules and processes as designed.
124	Demonstrate, through the Collections System Operational Acceptance Test that all Performance Requirements are being consistently met.
125	Demonstrate, through the Collections System Operational Acceptance Test, that all PCI and PII policies and standards are being adhered to and all vulnerabilities remedied prior to Acceptance.
126	Validate, through the Collections System Operational Acceptance Test, adherence to the New Jersey Statewide Information Security Manual.
127	Validate, through the Collections System Operational Acceptance Test, adherence to Federal Information Processing Standards (FIPS) and National Institute of Standards and Technology (NIST) standards, further described in Section 3.4.1 System and User Security of this Scope of Services.
128	Verify, through the Collections System Operational Acceptance Test, Configurable parameters are correct and support the Business Rules.
129	As part of the Collections System Operational Acceptance Test, generate all performance reports for each audit month and confirm each report to be accurate and complete.
130	Make modifications to the interfaces, Collections System, IVR System, Correspondence Items, and website/mobile application (if applicable) to meet operational Performance Requirements. Similarly, correct inefficiencies and deficiencies identified during the Collections System Operational Acceptance Testing.
131	Categorize anomalies and defects identified during the Collections System Operational Acceptance Test by severity and priority and track as a Punch-list.
132	Develop and retest necessary revisions identified during the Collections System Operational Acceptance Test until all Punch-list items shall be resolved to the satisfaction of NJTA.

### 3.7 Collections System Acceptance

After a minimum of three (3) complete monthly audit cycles and upon the successful completion of the Collections System Operational Acceptance Test, the closure of all Punch-list items, and completion and submission of all required documents as set forth in the Section 2.5 Documentation of this Scope of Services and in the Agreement, the Contractor shall be given the Acceptance for the Collections System.

## 4 TRAINING

133	Train Contractor staff to provide Collections Services in accordance with this Scope of Services and any future modifications throughout the Contract Term.
134	<p>Provide training materials, initial on-site training and, as needed and appropriate, training via online, webinar and other means for the Toll Agencies' and CSC Services Contractor's staff forty-five (45) Calendar Days prior to Go-Live. Training shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>a. Collections Services management and notifications;</li> <li>b. Dashboards;</li> <li>c. reconciliation and reporting, and</li> <li>d. performance improvements.</li> </ul>
135	All training materials, videos and manuals used for training NJTA and CSC Services Contractor shall reside online and be accessible to NJTA.

## 5 FUNCTIONAL REQUIREMENTS

The Contractor shall provide the Collections System that meets the performance and operational Requirements of the Toll Agencies. The System Requirements define the overall Requirements for the Collections System architecture; network communications; third-party products; third-party interfaces; back-end processes; error detection, and user interfaces that will provide consistency to the developed Collections System. Most Requirements are derived from performance standards the Collections System has to meet as it relates to reliability; availability; disaster recovery, and auditability.

The intent of the Requirements in this section is to obtain a Collections System hardware and Software solution that:

- provides a reliable Collections System that is available to meet the user and Customer needs and choices;
- provides an architecture that is redundant and secure;
- provides an architecture that is flexible and designed for future growth, and
- provides Customers a reliable and optimal user experience.

The Collections System shall be compliant with all applicable regulations, standards, and legislation. All third-party products, software, and tools necessary to monitor the Collections System for compliance and verify compliance shall be part of the delivered Collections System.

## 5.1 Environment and Locations

136	Provide a dedicated primary Collections System environment or architecture located within the continental United States sufficient to meet the Requirements set forth herein.
137	Provide a dedicated secondary Collections System environment or architecture within the continental United States in a different cloud region (if cloud-based) or in a separate time zone and a minimum of 500 miles away from the production environment (if hosted).
138	Collections System environments shall be located at one or a combination of the following locations:  a. hosted at a Tier 3 data center facility, and/or  b. hosted by a well-established cloud service provider.
139	In areas under the full responsibility of the Contractor, fully secure equipment and data and ensure compliance with the New Jersey Statewide Information Security Manual, latest version that will be available upon Go-Live. The areas that are expected to be under the full responsibility of the Contractor shall include, but not be limited to:  a. Hosted primary and secondary data centers;  b. collections operations facilities, and  c. all other locations related to the provision of the Collections Services.
140	If the Collections System, or a portion of the Collections System, is in a Contractor-controlled data center and not the cloud or third-party hosted, then provide secure access control for the location.
141	Ensure all Collections System environments are kept current with all major releases of operating systems, databases, Software and firmware upgrades, patches, fixes, or modification. Releases shall not be more than one release behind the manufacturer's latest major release unless Approved by NJTA.
142	With the exception of the development environment, which may change as part of testing and development cycles, keep operating systems, databases, Software, and firmware consistent across all environments, including, but not limited to Configuration and patch level.
143	Provide a secondary Collections System environment which, in the event of a partial or full failure of the production environment, shall be capable of sustaining Collections System and Collections Services indefinitely, or until such time as the primary production environment is back online and fully functional.
144	Coordinate with CSC Services Contractor to integrate the non-production environments for the purposes of testing and training. The integrated non-production environments shall be maintained for the Contract Term.

145	<p>Ensure full and ongoing compliance with the New Jersey Statewide Information Security Manual, latest version that will be available upon Go-Live. Areas of required compliance detailed in this manual include, but are not limited to:</p> <ul style="list-style-type: none"> <li>a. physical and environmental security;</li> <li>b. access control;</li> <li>c. Configuration management;</li> <li>d. identity and authentication;</li> <li>e. planning;</li> <li>f. PII processing and transparency;</li> <li>g. media protection;</li> <li>h. contingency planning;</li> <li>i. information security and privacy program;</li> <li>j. organizational security;</li> <li>k. personnel security;</li> <li>l. security and awareness training;</li> <li>m. risk assessment;</li> <li>n. system and information integrity;</li> <li>o. system and communications protection;</li> <li>p. system and services acquisition;</li> <li>q. supply chain risk management;</li> <li>r. assessment, authorization, and monitoring;</li> <li>s. audit and accountability;</li> <li>t. maintenance, and</li> <li>u. incident response.</li> </ul>
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## 5.2 Network and Communications

146	Provide all network and internet connections and communications required for the Contractor to perform the debt collection services including connectivity to the primary and secondary CSC Services Contractor environments.
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147	Ensure that the Collections System, networks, and communications are compliant with all applicable cybersecurity requirements set forth herein in Section 3.4.2 Cybersecurity Specifications, Standards and Policies.
148	Limit network connection for remote access sessions to no more than eight (8) consecutive hours without requiring the Authorized User to re-authenticate.
149	Prohibit remote activation of collaborative computing devices without providing explicit indication of use to Authorized Users physically present at the devices.
150	Network Connection shall be terminated after a 30-minute period of inactivity, and Authorized Users shall re-authenticate to resume or establish a new session.
151	Ensure that the Collections System, networks, and communications are compliant with all applicable PCI standards set forth herein in Section 3.5 Payment Card Industry Standards and Other Compliance of this Scope of Services.

### 5.3 Hardware, Software and Other Equipment

152	Provide all hardware, software, APIs, cloud services, third-party software, and firmware required to support the Collections System.
153	Provide all labor, office space, utilities, occupancy services, equipment (including workstations), furniture, consumables, and all other materials required to perform the Collections Services.
154	Provide hardware and equipment provided/furnished that is appropriately sized for capacity (including growth expansion estimates), scalable (allowing for additional volumes), and meets the operational and Performance Requirements.
155	All computers and hardware procured, furnished, and installed under this Agreement shall have the most current and up to date protection from ransomware, denial-of-service (DoS), virus, unauthorized access, malware detection, and spam protection and other security software to protect the Collections System.
156	All hardware and equipment of any type shall automatically obtain security software and other security updates according to an Approved (Configurable) maintenance schedule. Security updates shall be installed in accordance with requirements of New Jersey Statewide Information Security Manual.
157	The Collections System shall detect all unauthorized access, intrusions, and security events at all levels and report such events to Authorized Users.
158	Security Software shall continuously and automatically monitor the Collections System for unauthorized access; access violations shall be reported to Authorized Users and notifications and measures shall be taken as further described in the Requirements and Agreement.

## 5.4 General System Functionality

### 5.4.1 System and User Security

The Contractor shall provide security and access controls in accordance with all federal, state and NJTA security standards. The Contractor shall maintain compliance with these standards as they evolve over the Contract Term. In any circumstance of conflict between Requirements, standards or statutes, the Contractor shall adhere to the most stringent guideline.

159	Design and implement the Collections System to prevent Security Incidents and provide monitoring and detection tools to detect any attempts to breach the security of the Collections System.
160	Comply with the most current version of all state and federal security standards and guidelines, including California Consumer Privacy Act, where applicable.
161	<p>The Contractor's approach and compliance to Collections System and data security shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>a. cloud infrastructure and/or hosting data centers meet the Federal Risk and Authorization Management Program (FedRAMP) standards;</li> <li>b. compliance with the New Jersey Statewide Information Security Manual and all updates to this manual throughout the life of the Agreement. Initially, the Contractor will develop the System to comply with the Attachment 5 New Jersey Statewide Information Security Manual. The most recent copy of which can be found at <a href="https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf">https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf</a>. NJTA plans to develop NJTA-specific security policies, which will supersede the use of the New Jersey Statewide Information Security Manual upon completion;</li> <li>c. compliance with Payment Card Industry Data Security Standards (PCI DSS);</li> <li>d. compliance with the Federal Information Processing Standards (FIPS), including FIPS 199 (Standards for Security Categorization of Federal Information and Information Systems) and FIPS 200 (Minimum Security Requirements for Federal Information and Information Systems);</li> <li>e. protecting the confidentiality of Personally Identifiable Information (PII) in accordance with the recommendations in publication 800-122 from the NIST, and</li> <li>f. conformance to applicable best practices for information security management as described by the International Organization for Standardization/International Electromechanical Commission 27000-series (ISO/IEC 27000) standards.</li> </ul>
162	Certify that the Collections System is in compliance with the security standards required in the New Jersey Statewide Information Security Manual.

163	<p>If the Collections System employs cloud computing, ensure information assets are secure and that security and privacy are maintained using de facto best practices aligned with FIPS as well as NIST Publications. Those best practices include, but are not limited to:</p> <ul style="list-style-type: none"> <li>a. NIST 800-144: Guidelines on Security and Privacy in Public Cloud Computing;</li> <li>b. NIST Special Publication 800-146: Cloud Computing Synopsis and Recommendations, and</li> <li>c. Cloud Security Alliance: Cloud Controls Matrix Version 3.0 (CCMv3).</li> </ul>
164	<p>Provide for secure communications with the CSC Services Contractor, and all external interfaces, for example, https or similar.</p>
165	<p>Make the necessary Software changes required to ensure compatibility with the evolving technologies and the latest software vendor and best practices for security and protection of PII.</p>
166	<p>Design the Collections System to anticipate that, during the Implementation and Operations Maintenance Phases, the Collections System will become subject to more restrictive digital privacy laws and regulations (for example, similar to European Union General Data Protection Regulation and California privacy laws). During design within the Implementation Phase, the Contractor shall provide documentation (within applicable deliverables) and demonstrate (during testing) the System's preparedness to anticipate more restrictive privacy Requirements including the capability to purge specific but not all Account information, specific file types related to Customers based on Account-specific triggering events, and transactional field-level data while retaining other information within the data record.</p>
167	<p>Design the Collections System to support future privacy regulations that restricts access to Customer data.</p>
168	<p>Restrict access to Confidential Personal Information by location. Any individuals or entities outside of the U.S. Individuals and entities outside of the U.S. shall only have access to the development environments with no Confidential Personal Information.</p>
169	<p>Ensure no cardholder data, such as credit card numbers or card verification is present in any Collections System environments or networks either in transit, at rest, or persisted in any Collections System caches or registers.</p>
170	<p>Ensure no bank account information or numbers are present in any Collections System environments or networks either in transit, at rest, or persisted in any System caches or registers.</p>
171	<p>All PII, PCI, bank account information, Tokenization, voice recordings and other sensitive data shall use strong encryption both during transmission (in-motion) and when stored within the System (at rest).</p>
172	<p>Provide the capability to prevent an Authorized User or system administrator from viewing encrypted information in unencrypted form.</p>

173	Prevent any Authorized User, system, or database administrator from viewing encrypted payment-related information in unencrypted form, while providing the capability for Authorized Users with a particular user role, Approved by NJTA, to view encrypted information in unencrypted form. An audit trail will be created each time unencrypted information is viewed.
174	Ensure no PII, PCI, or bank account information is present in any non-production environments unless specifically requested and Approved by NJTA. All Customer related data, for example contact information shall be scrambled.
175	<p>Provide comprehensive user credential controls that are compliant with PCI standards, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. prevent the creation of 'generic' Authorized User accounts – all Authorized User accounts shall be associated to a specific person. For example, use the unique employee ID as a required field for each Authorized User account. Duplicate IDs would be rejected, and</li> <li>b. prevent a user (role-based) from logging in at two different machines at the same time, while allowing a single user on a single machine to have multiple sessions open at the same time.</li> </ul>
176	Provide separate and unique super user accounts for Collections System administration and database Authorized Users
177	<p>Provide the capability to Configure different user credential controls for different types of users, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Authorized Users who will access the Collections System, and</li> <li>b. Customers who will access the Collections System via the website, mobile application (if applicable), IVR system or other channels, as applicable.</li> </ul>
178	Provide the capability for multi-factor authentication for all Collections System access, including Customers and Authorized Users. Multi-factor authentication to include secret key via email, short message service (SMS) verification (user selectable), push, or call.
179	Provide the capability to manage registration for multi-factor authentication. Deliver a registration code or notice of proofing through an out-of-band channel (e.g., delivery to business email address or business mobile telephone number on file) to ensure that the individual associated with an address of record is the same individual that participated in the registration.
180	Provide the capability to auto-detect clear-text credit card and bank account numbers and automatically replace the credit card/bank account number in a non-encrypted field with a masked credit card/bank account number on all channels of Customer communication.
181	Provide the capability to auto-detect clear-text and send an alert to an Authorized User.

182	Provide the capability, if clear-text is detected, to delete data and automatically move the data to a quarantine location.
183	The Collections System shall interface to NJTA Security Information and Event Management (SIEM) to transmit all security related incidents and Alerts as Approved.

#### 5.4.2 Cybersecurity Specifications, Standards and Policies

The Collections System shall be designed to adhere to cybersecurity requirements in the latest version of the New Jersey Statewide Information Manual at the time of Go-Live. In any circumstance of conflict between Requirements, standards or statutes, the Contractor shall adhere to the most stringent cybersecurity guideline.

184	Obtain and maintain compliance with all applicable regulatory and contractual responsibilities with regard to cybersecurity and privacy in accordance with the Requirements, based on the data processed and function of the Contractor and the Collections System.
185	Comply with NIST 800-53 for Security and Privacy Controls for Information Systems and Organizations and at a minimum, comply with the security control baselines for a “Moderate-Impact” information system.
186	Comply with and follow the NIST Risk Management Framework (RMF).
187	Comply with and provide evidence of compliance with NIST controls standard as applicable and fill out the CSO Security Controls Matrix (NIST based for an on-premise solution and/or off-premise solution, Cloud Security Alliance (CSA) based for cloud solution, and both for hybrid combination) to be provided upon Agreement award.
188	For the applicable security and privacy controls, the Contractor, Collections System, network, and all interfaces shall comply with all cybersecurity policies and standards published by New Jersey Office of Information Technology and the New Jersey Office of Homeland Security, including Attachment 5 Statewide Information Security Manual. It is the Contractor’s responsibility to be aware of any additions to or modifications of IT policies and standards located at <a href="https://www.nj.gov/it/whatwedo/policylibrary/">https://www.nj.gov/it/whatwedo/policylibrary/</a> (or revised location).
189	Adopt and follow secure SDLC process standard (i.e., Open Web Application Security Project (OWASP)).
190	Provide strong end-to-end encryption for all sensitive information, including Confidential Personal Information stored within databases (at rest) and being transmitted (in-motion).
191	Use strong encryption methods such as AES FIPS-179 (128 bits and higher) or RSA (2048 bits and higher), or an equivalent if Approved by NJTA.
192	Adhere to all aspects of the Drivers Privacy Protection Act - 18 US Code, Section 2721.
193	If any cybersecurity-related Requirements are in conflict, conform to the more stringent version of the Requirement, as determined by NJTA.

194	Only persons/organizations located in the United States shall perform all System Maintenance on both the primary and secondary environments, unless otherwise Approved by NJTA. Such Approval is not guaranteed and is subject to demonstration of controls satisfactory to NJTA.
195	Implement authentication, authorization, data validation, and encryption for all APIs and transport communications.

#### 5.4.3 Records, Data Retention, Archiving and Purging

NJTA is a public agency and is, therefore, subject to the law governing the retention and disposition of information considered as public record. The Contractor shall maintain compliance with data retention standards as they evolve over the Contract Term. Initially, the Contractor will develop the Collections System to comply with Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion.

The Requirements for archiving and purging include Requirements for automating these activities in a way that maintains compliance with the data retention standards and all applicable state and federal laws, while providing NJTA a method to Approve the disposition of records before they are deleted.

196	Provide the capability to store the Contractor electronic data and information online for data recovery, audit, dispute resolution and court evidence purposes.
197	Institute processes to ensure that no data is deleted, added or modified unless it is part of the Approved Collections System process or authorized by NJTA.
198	Provide the capability for fully automated and Configurable storage/archiving of historical data (including separate rules by Toll Agency or Jurisdiction) and the permanent deletion of inactive or obsolete data. The specific off-site storage, archiving and purging processes shall be determined during design.
199	Provide the capability for fully automated and Configurable data archival and purging in accordance with NJTA's data retention Requirements.
200	Provide the capability to restrict deleting of Collections Placements and Collections Accounts by Authorized User.
201	Archival and purge routines shall be Configurable for each impacted data element, including but not limited to: <ul style="list-style-type: none"> <li>a. data;</li> <li>b. Customer communications;</li> <li>c. documents, and</li> <li>d. interface files.</li> </ul>

202	Servers shall retain and archive data and system logs, in accordance with the data backup and retention procedures described in the Business Rules and in accordance with any State or Federal data retention and PII statutes and PCI requirements. In the event of conflict between two retention requirements, the Contractor shall maintain records for the longer retention period.
203	Provide the capability to notify NJTA a Configurable number of days in advance and require manual approval for when archival and purging jobs are to be executed.
204	Provide NJTA access to archived data upon request.

## 5.5 Payment Card Industry Standards and Other Compliance

The Payment Card Industry Security Standards Council (PCI SSC) is responsible for the development, management, education, and awareness of the PCI Security Standards, including the Data Security Standard (PCI DSS), Payment Application Data Security Standard (PA-DSS) and PIN transaction security requirements. The PCI Security Standards provide guidance for merchants, vendors, and security consulting companies to mitigate data breaches and prevent payment cardholder data fraud.

The Contractor is fully responsible for achieving PCI compliance prior to the transition of the Existing New Jersey E-ZPass System to the new New Jersey E-ZPass System. The Contractor is required to ensure the Collections System continues to be PCI compliant as updates and upgrades to the software take place through the Contract Term.

205	Ensure the Collections System is in compliance with the PCI DSS for the appropriate merchant level as defined by the PCI SSC at the time of Cut-Over and maintained throughout the Contract Term.
206	Utilize the PCI SSC's Prioritized Approach method to indicate how each PCI Requirement is being addressed prior to Cut-Over. The Prioritized Approach shall be submitted to NJTA along with substantiating evidence for review.
207	Lead the effort in responding to the qualified security assessor's (QSA's) requests and the implementation of remedies for all issues identified and remedy any vulnerabilities prior to Cut-Over.
208	Ensure the Collections System is in compliance with PA-DSS for any COTS software that will be used in payment applications.
209	<p>Provide, prior to Collections System Cut-Over, evidence of PCI compliance, including, but not limited to:</p> <ul style="list-style-type: none"> <li>a. PCI Attestation of Compliance (AOC) by either a qualified internal security assessor (ISA) or an independent QSA, or as required by PCI DSS;</li> <li>b. a report summarizing results of vulnerability scan by an Approved scanning vendor and explaining how any findings were addressed, and</li> </ul>

	c. a report summarizing results of internal and external penetration testing and explaining how any findings were addressed.
210	No more than three (3) months after Go-Live, provide a complete Report on Compliance (ROC), including details about the Collections System environment and the assessment methodology, as well as documentation regarding the Collections System's and operations compliance status for each PCI DSS Requirement. The ROC shall outline a clear plan and schedule (in writing) to achieve full PCI compliance no more than six (6) months after Go-Live.
211	Remedy any identified vulnerabilities and provide a ROC and an updated AOC prior to Collections System Acceptance.
212	Ensure the Collections System is compliant with standards, including but not limited to: <ul style="list-style-type: none"> <li>a. the National Automated Clearing House Association (NACHA) operating rules for the exchange of ACH payments;</li> <li>b. appropriate SSAE 18 Type II financial reporting controls, and</li> <li>c. appropriate legislative requirements for the state of New Jersey.</li> </ul>

## 5.6 Legal and Security Requirements and System Standards

The Contractor is required to be compliant with the regulations and laws that govern debt collection and Customer privacy as well as all applicable legislation, rules, codes, and statutes related to this Scope of Services. The design, development, installation, testing, operation, and maintenance of the Collections System and related operations shall comply with applicable standards. In any circumstance of conflict between Requirements, standards or statutes, the Contractor shall adhere to the most stringent guideline.

213	Comply with all federal, state and local government statutes and legislation that are required for the Contractor to provide the Services.
214	Adhere to the software design standard ISO/IEC/IEEE 26515 in the development of the Collections System.
215	Ensure compliance with PCI Requirements based on the credit card processing solution implemented.
216	Ensure compliance with the Fair Debt Collection Practices Act.

## 5.7 Logging and Audit Mechanisms

Logging and audit mechanisms provide chronological recording of Collections System events and Authorized User account access and activities. They also document the sequence of activities that have been affected at any time during a specific operation, procedure, or event.

217	Provide comprehensive, Configurable systemwide logging capabilities ensuring that every transaction of any type is logged including, but not limited to, changes to any record in the Collections System (Collections System settings, and parameters).
218	Automatically log all Authorized User and Customer access.
219	Retain audit logs in compliance with Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion.
220	Automatically log all access and changes to Authorized User accounts and Collections Accounts.
221	<p>Provide System audit reports, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. reports of logged activity by Authorized User;</li> <li>b. reports of logged activity by activity type, and</li> <li>c. reports of logged activity by Authorized User accounts.</li> </ul>
222	Create an audit trail when a user role is assigned to an Authorized User, changed, or removed from an Authorized User.
223	Provide screens so that Authorized Users can view all log files.
224	Provide the capability to export all log files based on Approval by Authorized Users.
225	Provide for auditing of all activities and Accounts viewed by specific Authorized Users with date and time stamp.
226	Provide logging (Configurable in terms of level of detail to be logged) of Authorized User searches conducted by the search criteria used, Authorized User identification and by the results returned with date and time stamp.
227	Provide logging of all disabling or deleting of an Authorized User account.
228	<p>Provide logging of all Authorized User account login attempts, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. username;</li> <li>b. originating IP address;</li> <li>c. date;</li> <li>d. time, and</li> <li>e. success/failure.</li> </ul>
229	Provide audit logging capabilities that provide the ability to view access by Authorized User and/or by Collections Account to identify all Authorized Users that have accessed the Collections Account even if no changes have been logged.

230	Provide the capability to log all changes to Collections System Configurations or settings and record the Authorized User's username, date, time, and IP address from which the change was made.
231	Prevent tampering with log file data. Ensure there are no alterations of the original audit log's content or time ordering.
232	Provide the capability to log and track changes to applications, databases, and operating systems.

## 5.8 Interfaces

The CSC Services Contractor will develop the ICDs with input from the Contractor that detail the data transfer process between the New Jersey E-ZPass System and the Collections System. The Contractor is responsible for developing any additional ICDs for the internal and external interfaces required to meet the Requirements.

While the Requirements within this section refer to ICDs, the interactions described may be accomplished through alternative means such as through the use of APIs. During the design process the Contractor shall evaluate each interface, consider the capabilities of the external entity, and provide recommendations for how best to accomplish the interactions described in the Requirements.

233	<p>Provide electronic automated interfaces, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. New Jersey E-ZPass System;</li> <li>b. NJTA's Data Warehouse, and</li> <li>c. all other interfaces necessary to support the Collections System and meet the Requirements.</li> </ul>
234	Work cooperatively with the CSC Services Contractor to support development of the ICDs between the New Jersey CSC Services System and the Collections System. The CSC Services Contractor shall have primary responsibility for development of these ICDs.
235	Establish all other interfaces required for network connections described in Section 3.2 Network and Communications of this Scope of Services.

### 5.8.1 New Jersey E-ZPass System Interface

The CSC Services Contractor will provide a two-way electronic interface for the New Jersey E-ZPass System to transmit data to the Collections System and the Collections System to transmit data to the New Jersey E-ZPass System for all updates related to Collections Placements and Skip Tracing. Collections Placements are made on a periodic basis, as frequently as daily, using an electronic file exchange. The Contractor will receive the electronic file exchange from the CSC Services Contractor and will report on any issues with the file transfer. The Contractor will receive Collections Placements not previously referred to the Contractor as well as updates to previously referred Collections Placements. Bidirectional updates include payment activity, collection status changes/Flags, address and contact information.

236	Work with the CSC Services Contractor to provide the capability to obtain status of all activities and venues pursued by the Contractor to collect on the Toll Agencies' debt.
237	<p>Work with the CSC Services Contractor to develop the interface for exchange of data, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Collections Placements for delinquent Accounts and unpaid Toll Bills, Violation Notices, and unpaid Post-paid Statements;</li> <li>b. updates to demographic information, such as address updates, contact information updates, and vehicle information updates;</li> <li>c. collection notices and letters;</li> <li>d. payments received by the Contractor and CSC Services Contractor (full and partial) and adjustments and reversals of those payments;</li> <li>e. reversals and adjustments made on Collections Placements;</li> <li>f. fees on the Collections Placement such as returned payment fee;</li> <li>g. resolution of Collections Placements at the transaction, Toll Bill, Violation Notice, Post-paid Statement, and Account levels;</li> <li>h. summary debt balances on Accounts placed in collections;</li> <li>i. various status changes due to court judgments and MVC/DMV hold/suspension;</li> <li>j. freezing of collections activities or cancellation of the Collections Placement due to bankruptcy;</li> <li>k. information on Accounts identified for escheatment;</li> <li>l. cancellation/Flagging of the Collections Placement due to Recall by the CSC Services Contractor or expiration of the collection period for that Collections Placement;</li> <li>m. Payment Plans, and</li> <li>n. updates to demographic information in response to CSC Services Contractor Skip Trace requests, such as address updates obtained through Skip Tracing.</li> </ul>
238	Provide for guaranteed transmission of data for all interfaces.
239	Provide real-time Alerts to Authorized Users for interface and data transmission failures.
240	Provide for one hundred percent (100%) reconciliation of the transmitted data and files.
241	Utilize Secure File Transfer Protocols (SFTP) for the transfer of data and/or files via interfaces, web services, and APIs.
242	Provide the capability to transmit and receive multiple files during each scheduled batch.

243	Provide the capability to transmit and receive multiple files in a day.
244	Utilize file naming conventions that prevent the over-write of data and/or files (for example include the date and time of transmission).
245	Utilize file handling and processing methods that provide a complete audit trail of the data and/or file transfer process (for example files that are successfully processed are moved to a processed folder).
246	<p>Validate records, identify errors in the received data and/or files, and create alerts to Authorized Users, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. mandatory fields;</li> <li>b. data formats;</li> <li>c. data validity (for example Collections Account number not found in the Collections System);</li> <li>d. out-of-balance errors between the Customer summary count and amount and transaction count and dollar amount;</li> <li>e. duplicate records;</li> <li>f. unexpected response;</li> <li>g. checksum/record count verification;</li> <li>h. incorrect status, and</li> <li>i. incorrect change in state.</li> </ul>
247	Provide Authorized Users a UI to correct and re-transmit data and/or files.
248	Provide the capability to process re-transmitted data and/or files.
249	Transmit the error details to the transmitting entity.
250	Provide the ability to identify missing records/transactions/images, create alerts to Authorized Users and request the transmission of such missing records/transactions/images.
251	Reconcile the transmitted records to the records received and accepted by the receiving entity.
252	Provide data and/or file transmission and reconciliation reports as described in these Requirements.
253	Conform to all existing ICDs if applicable, modify existing interface documentation as necessary, and develop all new/missing interface documentation.

### 5.8.2 Interface to NJTA's Data Warehouse

This interface connects the Collections System with NJTA's Data Warehouse to transfer all collections results and data as determined during design.

254	Interface with the NJTA Data Warehouse to provide the capability to transfer all collections results and data in accordance with the interface specifications.
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## 5.9 System Processing Requirements

255	Provide the capability to receive and update balances for Collections Placement as a result of an updates/adjustment made by or payment made to the CSC Services Contractor.
256	Provide the capability to update and transmit Collections Placement status updates when updates/adjustments/payments are made in the Collections System.
257	Provide the capability to place a Freeze on any Collections Placement, thus suspending all collection activities and no longer allowing collections attempts until the Freeze is removed.
258	Provide the capability to continue all collection activities when the Freeze is removed.
259	Provide the capability to automatically Flag a Collections Placement once a Configurable collections time period has elapsed.
260	Provide the capability (if Configured) to automatically transfer a Collections Placement to the CSC Services Contractor once a Configurable time period has elapsed.
261	Provide the capability to support the Recall of a Collections Placement, Flagging it as CSC Services Contractor Recalled. Once Recalled, the Contractor staff shall not have access to the Collections Placement.
262	Provide the capability to archive and purge Recalled Collections Placements after a Configurable number of days.

## 5.10 Collections Account and Dispute Management

The Collections System shall provide account management functionality that allows for Collections Agents to track interactions with Customers.

263	Provide for Collections Account statuses, sub statuses, and Flags that are updated automatically or via Authorized User input, including but not limited to:
	a. active;
	b. Recalled;
	c. Frozen/suspended;
	d. paid;

	e. bankruptcy, and f. closed.
264	Provide the capability to enter updated Customer address and phone number based on results of Skip Tracing if not updated automatically.
265	Provide the capability to add Collections System and Collections Agent notes to a Collections Account.
266	Automatically attach all outgoing Correspondence Items to the associated Collections Account.
267	Automatically notate the Collections Account with any outbound Customer contact, including phone, email, SMS, chat, and mail, as applicable.
268	Provide the capability to attach incoming communication to a Collections Account.
269	Provide the capability to track disputes associated with a Collections Account, including the status of the dispute and their resolution.
270	Provide the capability to support a hearing process for Driver's License Suspension/Vehicle Registration Suspension/Hold, and court hearings and generate the Evidence Package (See Appendix O Sample Evidence Package).

## 5.11 Customer Correspondence Items

The Contractor will communicate with Customers using available contact information. All Correspondence Items and contact must be properly tracked and associated to the Collections Account and adhere to all applicable laws, regulations and NJTA policies and Business Rules.

271	Provide all outgoing Correspondence Items with a standard look and feel and submit samples of all new or updated Correspondence Items to NJTA for Approval prior to distribution to Customers.
272	Provide the capability to modify each Correspondence Item's format, content, and delivery channel.
273	Provide a process to automatically qualify each Correspondence Item for creation based on the Business Rules.
274	Provide the capability to automatically record the type and date of all Collections System-generated Correspondence Items on the Collections Account along with a copy of the actual Correspondence Item sent or communication made.
275	Provide the capability to have certain outbound communications translated to Spanish, based on Customer preference.
276	Provide the capability to mail Correspondence Items to foreign (non-US) addresses.

277	Provide the capability for a Correspondence Item to be distributed using multiple distribution channels per the Configurable settings and Business Rules.
278	Provide the capability to generate and distribute Correspondence Items manually.
279	Provide the capability to transmit all Correspondence Items sent to Customers to the CSC Services Contractor.

## 5.12 Payment Processing

The Contractor shall make every effort to ensure Customers are able to pay using various channels and payment types.

280	Keep current with advancements in technologies related to Payment Methods, payment sources, payment processing, and payment security practices.
281	Utilize payment Tokenization and hosted third-party credit card and bank account information storage (or equivalent solution).
282	Comply with PCI DSS and all applicable merchant card association agreements and other applicable regulations for the exchange of credit card and debit card payments.
283	Comply with the NACHA operating rules and other applicable regulations for the exchange of ACH payments.
284	Provide strong end-to-end encryption for sensitive payment-related information stored within databases or secure transmissions. Levels of encryption and encryption key management will depend on the type of sensitive information, for example PII versus PCI.
285	Provide the ability to redact Customer information and bank account information on checks and other such payments such that, when accessed by Collections Agents, the information is not visible.
286	Prevent any Authorized User or database administrator from viewing encrypted payment-related information in unencrypted form, while providing the capability for Authorized Users to view encrypted information in unencrypted form. An audit trail will be created each time unencrypted information is viewed.
287	Provide Configurable masks for encrypted payment-related information, for example, display the first three (3) and last four (4) digits on screens and reports and utilize dual-tone multi-frequency (DTMF) suppression or equivalent for data entered via telephone keypad, including but not limited to: <ul style="list-style-type: none"> <li>a. credit card number;</li> <li>b. card verification value (CVV);</li> <li>c. debit card number;</li> </ul>

	<ul style="list-style-type: none"> <li>d. debit card PIN;</li> <li>e. bank account number, and</li> <li>f. bank routing number.</li> </ul>
288	<p>Provide functionality to protect credit card and bank account details for payments accepted by a Collections Agent over the phone, regardless of Collections Agent's physical location, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Card/bank account number is entered by Customer instead of the Collections Agent;</li> <li>b. Collections Agent never hears the card/bank account number;</li> <li>c. Collections Agent never hears keypad tones from which digits entered can be derived, and</li> <li>d. Collections Agent never sees the card/bank account details.</li> </ul>
289	<p>Provide the capability to process transactions, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. payments;</li> <li>b. chargeback and chargeback reversals;</li> <li>c. returned payments (for example, returned checks);</li> <li>d. adjustments;</li> <li>e. reversals;</li> <li>f. voids, and</li> <li>g. refunds.</li> </ul>
290	<p>Provide tracking of Payment Transactions by:</p> <ul style="list-style-type: none"> <li>a. Collections Account number;</li> <li>b. New Jersey E-ZPass Account number;</li> <li>c. Toll Bill/Violation Notice/Post-paid Statement;</li> <li>d. transaction;</li> <li>e. Payment Plan;</li> <li>f. original Collections Placement date;</li> <li>g. Placement Type;</li> <li>h. Payment Method, and</li> </ul>

	i. payment channel.
291	Provide the capability to process partial payments in accordance with the Business Rules.
292	Prevent double-payments, including through all UIs and screens; for example, prevent an Authorized User or Customer from making two identical payments by clicking the payment button twice.
293	Design the payment process to prevent an Authorized User or Customer from making payments in excess of a certain Configurable amount.
294	Provide a confirmation page, including Payment Method details (credit card number obscured) and amount to be paid prior to payer or Authorized User being allowed to submit a payment.
295	Provide detailed tracking and reconciliation of payments.
296	Provide the capability to set a Configurable payment application hierarchy that determines the default order in which payments are applied, in accordance with the Business Rules.
297	Produce receipts for all payments which are transmitted to Customer based on Collections Account preferences and make receipts available to Customers online.
298	Provide the capability to transmit receipts to Customers upon Customer request via any contact channel.
299	Allow for reprinting of receipts for all payments. Reprinted receipts shall be exact copies of the original receipt with the printed date added to it.
300	All receipts shall contain a payment reference number that is traceable through the entire payment clearing process. For example, a credit card payment's reference number as printed on the receipt will also appear on the Customer's credit card statement and is a searchable field in the database, enabling a Collections Agent to identify a payment applied to a Collections Account from only the details available on a Customer's credit card statement.
301	Transfer all payments received to CSC Services Contractor in accordance with the Approved ICD.
302	Provide a detailed breakdown by single or multiple Toll Agencies and full accounting of payment application against all items, including but not limited to: <ul style="list-style-type: none"> <li>a. Toll Bills;</li> <li>b. Post-paid Statements;</li> <li>c. Violation Notices;</li> <li>d. tolls;</li> <li>e. negative balance amounts;</li> <li>f. fees, and</li> </ul>

	g. penalties.
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### 5.12.1 Payment Methods, Channels and Processing

The Contractor shall provide convenient methods for Customers to make payments on Collections Accounts. The payment options should include self-service as well as assisted channels and should offer Customers the ability to use various forms of payment, including check, credit card, debit card, and ACH. The Contractor is encouraged to provide innovative solutions for payment processing that serve a range of Customers.

303	<p>Provide the capability to accept payments via various channels, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. over the phone with a Collections Agent;</li> <li>b. over the phone via the IVR;</li> <li>c. via website;</li> <li>d. via mobile devices by scanning QR code;</li> <li>e. via third-party payment services;</li> <li>f. via mail, and</li> <li>g. via the lockbox (optional).</li> </ul>
304	Provide the capability to accept credit card, debit cards, gift cards (for one-time payment) and ACH payments.
305	Provide the capability to accept personal or business check, cashier's check, or money order payments.
306	Provide real-time payment validation and payment processing.
307	Provide the capability to accept payments for specific transaction-related items in accordance with the Business Rules.
308	Provide the capability to accept payments and adjustments from the CSC Services Contractor in accordance with the Approved ICD.
309	Provide the capability to return checks that cannot be matched successfully to a Collections Placement or Collections Account in accordance with the Business Rules.
310	Provide the capability to track returned checks.
311	Provide the capability for an Authorized User to correct entries on Collections Accounts in accordance with the Business Rules, for example, reversals or correcting an amount applied to the wrong Collections Account.
312	Prevent adjustments to payments that have already been refunded.

313	Ensure that all adjustments made to payments posted to a Collections Account are accounted for.
314	<p>Provide detailed tracking of payments by:</p> <ul style="list-style-type: none"> <li>a. Payment Methods;</li> <li>b. payment sources;</li> <li>c. Payment Transactions, and</li> <li>d. payment locations.</li> </ul>
315	Provide the capability to send confirmation to Customers when a payment is made.

### 5.12.2 Refunds

316	Provide an optimized and streamlined process for refunds based on the original transaction and ensure that such refunds are shown on the Collections Account history and are reconciled.
317	Ensure that the process for refunds is in accordance with State Legislation for escheatment.
318	Support the automated processing of refunds and notify operations of eligible check refunds.
319	Provide the capability to issue refunds to credit cards after obtaining authorization for refunds.
320	Provide the capability to issue refunds by check if the Collections Account does not provide for an electronic method.
321	Provide the capability to issue refunds by check should all the electronic methods fail.
322	Provide the capability to issue refunds by check for overpayments.
323	Provide the capability to prevent refunds if there are outstanding balance on the Collections Placement.
324	Provide the capability for Authorized Users to identify if Customer has additional Collections Placements with outstanding balance and apply the overpayment to the Collections Placement.
325	Track and associate all refunds to the original payment on the Collections Account.
326	Provide detailed credit card authorization activity for refunds by payment type (Visa, MasterCard, American Express, and Discover).
327	Provide the capability to require Authorized User approval for certain for refunds.
328	<p>Provide the capability to input all details regarding the check refund issued, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. check number;</li> <li>b. check amount;</li> </ul>

	<ul style="list-style-type: none"> <li>c. date check refund was requested;</li> <li>d. date check was issued;</li> <li>e. details of who the check was written to;</li> <li>f. the date the check was cashed;</li> <li>g. the reference number, and</li> <li>h. reason for issuing the check.</li> </ul>
329	Provide the capability to transmit a file to the bank that includes the refund check number, issue date, bank account and check amount and obtain check cashed data.
330	Provide the capability for an Authorized User to reverse a refund.

### 5.12.3 Payment Plans

Payment Plans approved by the Toll Agency shall be made available to a Customer by Contractor when the Customer and/or debt records meet certain criteria. The Collections System shall follow the Toll Agencies' established procedures for initiating, monitoring, and termination of Payment Plans as determined by Toll Agency policies/procedures. Additionally, the Contractor will update the New Jersey E-ZPass System of the Payment Plan via an electronic update file.

331	Provide the capability to establish Payment Plans Approved by the Toll Agency when a Collections Account meets Configurable criteria.
332	Provide the capability to establish Toll Agency specific payment criteria in accordance with each Toll Agency's Business Rules.
333	Provide the capability to initiate, monitor, and terminate Payment Plans in accordance with each Toll Agency's Business Rules.
334	Provide the capability to generate payment request notification to customer including the addition of payment stub reminding customers of pending payment and payment options. Notification shall include details of the Payment Plan, outstanding balance, and consequences of failure to make payment.
335	Provide the capability for a customer to select the channel through which they wish to receive their Payment Plan payment request notification.
336	Provide the capability to provide Payment Plan status updates via an electronic update file in accordance with the Approved ICD.

#### 5.12.4 Reconciliation

337	Provide the capability to send payment reconciliation files at intervals (Configurable) to the CSC Services Contractor for all Collections Placement payments during the period. The reconciliation file shall provide detailed data that reconciles the payments and the collections fee, if applicable.
338	Provide the capability to send Collections Placement balance files to the CSC Services Contractor, at intervals (Configurable) for auditing purposes.

#### 5.13 Skip Tracing

The Contractor shall provide Skip Tracing services for Customers with unknown or bad addresses. Skip Tracing will be performed for Customers not yet escalated to Collections Placement as well as for those in collections. Results of Skip Tracing shall be transmitted to the New Jersey E-ZPass System.

339	Utilize a comprehensive Skip Tracing process to identify up-to-date address information and phone number records in order to pursue collection efforts on Customers with unknown or bad addresses.
340	Provide the updated address and phone number information for request records submitted by the CSC Services Contractor and as Collections Placement updates.

#### 5.14 Customer Communication Channels

The Contractor shall provide customer contact channels which employ currently available tools and technologies to best assist Customer interactions. The Contractor is expected to stay up-to-date with current trends in emerging communication channels and evolving Customer preferences to ensure quality customer service.

##### 5.14.1 Telephony and Interactive Voice Response

NJTA intends for the telephony and IVR System to allow Customers to make a payment and obtain Collections Account information. The IVR must provide all required functions in both English and Spanish.

341	Provide an integrated Interactive Voice Response (IVR) System including private branch exchange (PBX) and automated call distribution (ACD).
342	Provide a toll-free number through which Customers can access the IVR System.
343	Provide the capability to transfer calls to the CSC Services Contractor.
344	Provide the capability to auto-dial Customers, deliver messages, play the spoken name, and ask the Customer for a confirmation.
345	Provide the capability for Authorized User outbound calling.
346	Provide the capability to make outbound pre-recorded calls.

347	Provide the capability to manage outbound call campaigns.
348	Provide the capability to restrict automated outbound calls to certain days of the week and to avoid calling on certain holidays.
349	Provide the capability to restrict automated outbound calls to certain time ranges and to assure the selected time ranges are in compliance with the Telephone Consumer Protection Act of 1991.
350	Provide the capability to prevent recording of credit card information.
351	Provide, via the IVR, directed dialog natural language speech recognition for accessing information.
352	Support, via the IVR, bilingual (English and Spanish) interaction and shall provide the interface that supports bilingual options for Customer interaction.
353	The IVR System shall provide the capability for the caller to execute multiple options within the same call (return to previous menu and repeat prompt options).
354	The IVR System shall fully integrate with the Merchant Services Contractor for credit card activities while maintaining PCI compliance.
355	Provide, via the IVR, the capability to make a one-time payment to the Collections Account.
356	Provide, via the IVR, the capability to make payments for Payment Plans.
357	Provide, via the IVR, the capability to request Collections Account balance.
358	Provide, via the IVR, the capability to request copies of Collections Notices.
359	Provide the capability to send confirmation to Customers when payments take place via the IVR.
360	Provide a dedicated support line such that the CSC Services Contractor and the Toll Agencies can call the Contractor with any Collections Placement dispute or issue.

#### 5.14.2 Electronic Communication

The Contractor shall provide the capability for Customers to contact the Contractor electronically.

361	Provide the capability for Customers to contact the Contractor electronically, via the website, mobile application or email.
362	Provide the capability to electronically provide the New Jersey E-ZPass website address and mobile app link to Customers.
363	All electronic communications shall be tracked, responded to, and associated with the appropriate Collections Account.

## 5.15 Reporting and Reconciliation

The Contractor shall work closely and collaboratively with the CSC Services Contractor and NJTA to design reporting related to debt collection services and compliance to Performance Requirements. Contractor shall also provide ad-hoc reporting as requested by NJTA.

364	Design, develop, test, and implement reporting related to debt collection services, providing information about and transparency into all aspects of the debt collection processes and Performance Requirements.
365	<p>Provide reports that enable users to retrieve data entered into the Collections System and or generated in the Collections System. The reports shall meet the general objectives, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. data elements shall be consistent through all the reports of similar nature;</li> <li>b. numbers and amounts that reconcile with other reports that report on the same activity, and</li> <li>c. numbers and amounts that reconcile with other reports that report on similar time period.</li> </ul>
366	Provide the capability to generate reports with flexible selection, sort and grouping criteria that allows users to obtain related information through a single report. All reports should allow for the input of any identified criteria to be selected by range (for example, date from and to, Collections Account number from and to, transaction dates from and to, etc.), and multi-list selection. The UI for all reports generated in the System shall be consistent.
367	Unless otherwise Approved by NJTA, on a report-by-report basis, all reports shall be printable on 8-1/2" x 11", 8-1/2" x 14", or 11" x 17" paper.

### 5.15.1 Reconciliation with New Jersey E-ZPass System

The Contractor shall provide reports which track and reconcile the transmission of files between the New Jersey E-ZPass System and Collections System, and outstanding debt on each Collections Account. Reports addressing the interface shall meet the following Requirements:

368	Provide reports that track and reconcile the transmission of the Collections Placement files and responses from the CSC Services Contractor New Jersey E-ZPass System and Collections System responses, including but not limited to: <ul style="list-style-type: none"> <li>a. transmission date;</li> <li>b. number of records received;</li> <li>c. number of Collections Accounts by type in the collections file;</li> <li>d. outstanding amounts (fees, and tolls);</li> </ul>
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	<ul style="list-style-type: none"> <li>e. number of Violation Notices or Post-Paid Statements;</li> <li>f. number of transactions;</li> <li>g. responses transmitted, and</li> <li>h. status and errors.</li> </ul>
369	<p>Provide reports that track and reconcile the transmission of the payments and resolution of placements (for example payments and Payment Plans) submitted to the Collections System, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. transmission date;</li> <li>b. number of records transmitted;</li> <li>c. number of Violation Notices or Post-Paid Statements;</li> <li>d. number of transactions;</li> <li>e. payment amount, and</li> <li>f. Payment Plan amount.</li> </ul>
370	<p>Provide reports that track and reconcile the transmission of the Skip Tracing results for Skip Tracing requests submitted to the Collections System, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. transmission date;</li> <li>b. number of records transmitted;</li> <li>c. number of license plates received;</li> <li>d. number of successful responses, and</li> <li>e. number of no responses.</li> </ul>
371	<p>Provide collections inventory reports that reconcile to the New Jersey E-ZPass System monthly inventory report and provide status on collections, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. number of outstanding Collections Accounts in collection at the beginning of the month;</li> <li>b. number of delinquent unpaid transactions in collection in collection at the beginning of the month;</li> <li>c. number of Collections Accounts added during the month;</li> <li>d. number of delinquent unpaid added during the month;</li> <li>e. number of Collections Accounts returned at the end of the month by type;</li> <li>f. number of delinquent unpaid returned at the end of the month by type;</li> </ul>

	<ul style="list-style-type: none"> <li>g. number of outstanding Collections Accounts in collection at the end of the month;</li> <li>h. number of delinquent unpaid in collection at the end of the month, and</li> <li>i. outstanding amount in collection at the end of the month.</li> </ul>
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### 5.15.2 Monthly Summary Report

372	<p>Provide monthly summary reports that provide details on performance of the Collections Services for the Programs and by Toll Agency. All information shall be presented according to month of original Collections Placement, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Accounts, Toll Bills/Violation Notices/Post-paid Statements, and transactions in collections;</li> <li>b. toll and fee amounts placed in collections;</li> <li>c. toll and fee collections to date by month;</li> <li>d. outstanding toll and fee amounts;</li> <li>e. Payment Plans established;</li> <li>f. Recalled and Frozen Collections Placements;</li> <li>g. adjustments and corrections;</li> <li>h. any collection disputes, holds or resolution on the Collections Account;</li> <li>i. age of Collections Accounts collected;</li> <li>j. amount of collection fees paid broken out by type of fee;</li> <li>k. amount received for each collections item, and</li> <li>l. how long the Collections Account has been in collections and payment timeline.</li> </ul>
373	Provide a monthly report that reconcile payments received to payments made to Toll Agencies.
374	<p>Provide a monthly detailed report by account with all account status and activity, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. balance at time of placement;</li> <li>b. letters sent;</li> <li>c. calls/emails sent, and</li> <li>d. payments made.</li> </ul>
375	Provide a monthly summary of collections activity and frequency over the previous month (i.e., notice sent, and outbound call made).

376	Provide a monthly summary of disputes detailing dispute status and activity, including, but not limited to: <ol style="list-style-type: none"> <li>a. total count of disputed Collections Accounts;</li> <li>b. summary of dispute reasons;</li> <li>c. percent of accounts that were reversed due to disputes being upheld, and</li> <li>d. reason code for upheld disputes.</li> </ol>
377	Provide a monthly summary of Payment Plan statistics, including but not limited to: <ol style="list-style-type: none"> <li>a. number of Collections Accounts with Payment Plans;</li> <li>b. number of Payment Plans with expiration by month;</li> <li>c. forecasted Payment Plan revenue by month;</li> <li>d. number of Collections Accounts that defaulted by month;</li> <li>e. percent of Accounts that complete Payment Plan agreements on a rolling six-month basis, and</li> <li>f. percent of Collections Placement revenue collected through Payment Plans.</li> </ol>
378	Provide monthly report detailing daily collection rates by Placement Type by age of debt and payment performance as debt ages month-to-month.
379	Provide reports that track collections trends and success rates for unpaid transaction collections. Collections trends and success rates for delinquent E-ZPass Account balance collections shall also be tracked. Such reports shall help determine changes to the collections process to improve collection rates.

#### 5.15.3 Performance Reports

380	Provide reports that provide the ability for NJTA to verify that the Collections Services are in compliance with the Performance Requirements.
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## 6 OPERATIONS AND MAINTENANCE SERVICES

The Requirements described in this section detail the Contractor's responsibility for providing Collections System Maintenance, Administration and Software Support Services for the Collections System and Collections operational services. These Services will commence at Go-Live and extend through the Contract Term and such services will be provided at no additional cost to the Toll Agencies beyond the amounts shown in the Price Proposal.

The Contractor shall provide Collections System maintenance services, including but not limited to:

- System hardware and network maintenance;

- System monitoring and administration;
- System adherence to security, PCI and PII best practices, standards, and certifications, and
- Software Support Services including Continuous Improvements.

The Contractor shall provide Collections operational services which include providing appropriate staffing, facilities and equipment as well as instituting appropriate processes, training, and quality assurance programs to ensure debt collection practices meet the Requirements and are in compliance with applicable laws.

The Contractor shall stay current with new technologies and debt collection practices in order to improve debt collection for NJTA throughout the Contract Term.

## 6.1 System Administration, Maintenance and Software Support Services

The Contractor shall continuously monitor and maintain the Collections System to ensure the security of data and the service of Customers.

381	Provide System Maintenance, Administration and Software Support Services for all equipment, services, Software, communications, and Systems provided for the Collections System per the Requirements, including maintenance associated with compliance to the terms of the Software and hardware warranty.
382	Provide System Maintenance, Administration and Software Support Services that is in compliance with all legislation, codes and statutes.
383	Provide maintenance of the Collections System including but not limited to all equipment, hardware, Software, and systems provided.
384	Support, operate and maintain the Collections System for any time period in which the Collections System is installed, but in which Go-Live has not occurred.
385	Perform continuous monitoring of Collections System operations to verify it is functional processes are being executed correctly and according to the required processing timeframes, and the Collections System are operating in accordance with Performance Requirements.
386	Maintain, and provide documentation to the Toll Agencies upon request, all licenses, registrations, and certifications required by federal, state and local government, that are required for Contractor to provide its Services to the Toll Agencies.
387	Ensure the System and all Services by the Contractor complies with the New Jersey Statewide Information Security Manual and all updates to this manual throughout the life of the Agreement. The manual is provided as Attachment 5. The most recent copy of which can be found at <a href="https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf">https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf</a> .
388	Complete, at a minimum of once every twelve (12) months, a comprehensive review of the Collections System compliance to the security standards required in the New Jersey Statewide Information Security Manual. Submit a report to NJTA detailing the findings of this review within 30 days of the Go-Live anniversary.

389	Restrict access to Confidential Personal Information to any individuals or entities outside of the U.S. Individuals and entities outside of the U.S. shall only have access to the development environments with no Confidential Personal Information.
390	Provide notice of access failures, attempted unauthorized access, access violations and attempted security breaches and incidents (Security Incidents) to NJTA in accordance with the Agreement, including Section 16 Intellectual Property. Take all actions to mitigate and address a Security Incident as identified in the Agreement.
391	<p>Provide Software Support Services to include administrative, monitoring, and corrective action to ensure Collections System performance is in accordance with the Requirements. This shall include but is not limited to:</p> <ul style="list-style-type: none"> <li>a. investigation and analysis of errors and exceptions and taking corrective action including correcting the problem and reprocessing the data;</li> <li>b. updates to Collections System to support upgrades to hardware or third-party software;</li> <li>c. updates to Collections System to support upgrades and changes to Third-party Service Providers' interfaces;</li> <li>d. updates to Collections System to support all changes to Business Rules and Configurable parameters, and deploy changes in production;</li> <li>e. updates to Correspondence templates, Customer facing language and FAQs;</li> <li>f. respond to NJTA's requests to run reports on an ad-hoc basis upon request;</li> <li>g. modifications to deployed reports and addition of three (3) new reports as requested by NJTA;</li> <li>h. updates to Collections System to support the addition of new Toll Agencies to the New Jersey E-ZPass Group;</li> <li>i. updates to Collections System to support the addition of any existing third-party interfaces as Approved by NJTA;</li> <li>j. updates to Collections System to support the addition of new Payment Methods, such as new Digital Wallets, as Approved by NJTA;</li> <li>k. updates to the Collections System to support new mobile devices, new mobile browsers and operating systems, self-service Customer experience trends, self-service payment trends, and trends in mobile devices;</li> <li>l. updates to the Collections System to support new web browsers and operating systems, desktop user experience trends, and new desktop navigation techniques;</li> <li>m. changes to software or code to improve operations and incorporate efficiencies that do not significantly alter the base functionality;</li> </ul>

	<ul style="list-style-type: none"> <li>n. changes for the Contractor's benefit that improve the Contractor's ability to maintain, operate and support the Collections System and to meet the Performance Requirements;</li> <li>o. updates to Collections System and application to support changes to ensure continued compliance to updated PCI and PII Requirements and other privacy regulations, and</li> <li>p. updates to Collections System and applications to support legislative and statutory changes.</li> </ul>
392	Support on-demand and batch/scheduled report generation, record review, analysis, and reporting and after-the-fact investigations of incidents.

## 6.2 System Configuration and Release Management

Recording, tracking, and managing the changes to the Collections System after Go-Live resulting from improvements, defects, deficiencies, updates, and upgrades is critical and shall be part of the Contractor's QA and change control process.

393	<p>Contractor shall use tools to document all categories of changes submitted from various sources, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Authorized Users;</li> <li>b. Customers;</li> <li>c. The CSC Services Contractor;</li> <li>d. Toll Agencies;</li> <li>e. Third-party Service Providers;</li> <li>f. legislative mandates;</li> <li>g. Requirements not deployed;</li> <li>h. changes to Business Rules;</li> <li>i. updates and upgrades;</li> <li>j. maintenance activities, and</li> <li>k. Contractor's operations and support teams.</li> </ul>
394	All changes shall be categorized, prioritized, and submitted to NJTA for Approval by as specified in the Scope of Services.
395	The change tracking list shall be submitted to NJTA monthly and shall be part of the monthly status meetings during the Operations and Maintenance Phase of the Project.

396	A detailed description of the change, corrective action, design, and test results shall be submitted to NJTA for Approval for all aspects of the Collections System impacted by corrective action.
397	At NJTA's discretion Toll Agencies may participate directly and/or witness testing of all software releases depending on the complexity of the change.
398	Perform security tests, including penetration tests and vulnerability scans, immediately after each software release is deployed.
399	<p>A checklist and documentation shall be prepared by the Contractor prior to each release and submitted to NJTA for Approval. The checklist and the documentation shall be used to assure readiness for the release and shall include but not be limited to the following items:</p> <ul style="list-style-type: none"> <li>a. the updated software version/revision number;</li> <li>b. release notes;</li> <li>c. the final design document;</li> <li>d. any new or updated drawings;</li> <li>e. new or updated manuals;</li> <li>f. new or updated plans;</li> <li>g. results of security tests, assessments, and certifications (penetration tests and vulnerability scans) and the plan for conducting such tests immediately after the release;</li> <li>h. training documentation;</li> <li>i. details of any outages required for the release;</li> <li>j. documentation of the rollback procedures that would be followed if issues are encountered during installation or immediately after;</li> <li>k. information on how Customers will be informed if Customer-facing systems will be impacted by outage or changes to functionality;</li> <li>l. description of testing performed, dates performed and results, including but not limited to functional testing, regression testing, installation dry run testing, rollback procedures testing;</li> <li>m. changes to Business Rules;</li> <li>n. changes to Customer-facing UIs;</li> <li>o. new or updated Customer notifications;</li> <li>p. Customer and/or public outreach required;</li> <li>q. new alerts;</li> </ul>

	<ul style="list-style-type: none"> <li>r. impacts to existing reports;</li> <li>s. impacts to ICDs, interfaces and/or data exchanges, and</li> <li>t. impacts on third-parties.</li> </ul>
400	Upon completion of the Software Release, conduct the necessary control runs to confirm accurate operations of the Collections System.

### 6.3 Maintenance Priorities, Response and Repair Times

401	<p>Response and repair time is defined as the time from failure to repair/correction with the Collections System being returned to normal operations. Response and repair times shall also be applied to all Software Support Services changes, improvements and change orders. Response and repair times are noted in the Collection Services Performance Requirements according to the following priority levels:</p> <ul style="list-style-type: none"> <li>a. Priority 1: Defined as any change/improvement or defect, malfunction, or fault that will result in the loss of revenue; security breach; loss of audit data; degradation in Collections System performance; has potential legal impacts for the Toll Agencies; loss of functionality that impacts New Jersey E-ZPass System operations. Priority 1 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</li> <li>b. Priority 2: Defined as any change/improvement or defect, malfunction, or fault, for which no workaround is available that is acceptable to NJTA, that will degrade the Collections System performance; result in inaccurate audit data; inaccurate reporting; inability to reconcile revenue; or result in loss of Collections System functionality that impacts Authorized User access to data. Priority 2 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</li> <li>c. Priority 3: Defined as any change/improvement or defect, malfunction, fault, action or event that has the potential to result in a malfunction or degrading of the Collections System performance but has not impacted performance and is not anticipated to immediately impact performance; will not significantly affect operations or Authorized Users; and that has a workaround approved by NJTA. Priority 3 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring and to preventive maintenance activities.</li> <li>d. Priority 4: Assigned to preventive maintenance activities and Alerts created when implementing Approved activities that impact Collections System operations.</li> </ul>

402	Any downtime that is a part of scheduled and approved preventive maintenance, including scheduled new Software Releases not associated with a maintenance event shall not affect the Collections Services Performance Requirements calculation. However, in this event the Contractor does not make the Collections System available and/or fully restore Collections Services operations within the approved schedule window, the resulting downtime shall be included in the Collections Services Performance Requirements calculations.
403	Response and repair times for every Collections System maintenance event shall be recorded and reported by the Contractor, and such reports shall be accessible and available to NJTA.
404	No incident shall be closed by a technical staff before the equipment or Software service has logged a recovery, for example if a service is degraded because of a loss of a redundant component, the incident cannot be closed until the redundant component has been replaced and service has returned to normal. Closure of all tickets shall be Approved by NJTA.

## 6.4 Coordination and Meetings

### 6.4.1 Cooperation and Coordination

The Contractor shall work closely with NJTA in the management and operation of the Collections Services. The Contractor will also be responsible for coordinating with other relevant entities in order to meet the Requirements.

405	<p>Cooperate with NJTA and external parties as Approved by NJTA to support any activity related to the Collections Services, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. Contractor-selected Third-party Service Providers;</li> <li>a. Toll Agency staff and representatives;</li> <li>b. Escheatment Services Provider;</li> <li>c. NJTA-provided banks, and</li> <li>d. states, and other entities, as directed by NJTA.</li> </ul>
406	Facilitate NJTA CIO visit to data center prior to Go-Live, as well as annually during the Contract Term.

### 6.4.2 Operations and Maintenance Phase Meetings

The Contractor's performance on the program will be reviewed and opportunities for improvement discussed on the monthly meetings.

407	Lead Operations and Maintenance Phase Status Meetings, beginning at Cut-Over and continuing over the Contract Term, on a monthly basis to review performance including tracking of Collections Placements, collections rates, aged debt, summary of disputes, collections trends and changes to improve collections rate.
408	Attend the monthly Contractor and System Performance Review Meetings held by the CSC Services Contractor beginning at Cut-Over and continuing over the Contract Term. Participation shall include reporting on compliance with all Collections System Performance Requirements.
409	Attend the monthly Active Management held by the CSC Services Contractor beginning at Cut-Over and continuing over the Contract Term. Participation shall include reporting on compliance with all operational Performance Requirements.
410	Participate, if requested to do so, as a non-voting member in all Change Control Board meetings during the Operations Phase (no less than monthly) with NJTA and the CSC Services Contractor. These meetings shall be for the purpose of status updates and reviewing, Approving, and prioritizing Collections System and operations changes.

#### 6.4.3 Operations and Maintenance Phase Monthly Report

411	<p>The format of the Operations Phase Monthly Performance Report shall contain the following elements:</p> <ul style="list-style-type: none"> <li>a. a summary of collections activity including Collections Placements received, Recalled and Frozen, letters sent, calls attempted, calls successfully connected with Customers, inbound calls received/handled, call abandon rate, total disputes received, total disputes resolved, escalated issues, payments, and aged debt;</li> <li>b. summary of operational quality tracking;</li> <li>c. a summary and analysis of collections performance against the current target;</li> <li>d. a summary of Payments Plans and collections status;</li> <li>e. a summary of collections campaigns and their success;</li> <li>f. a summary of compliance to Performance Requirements;</li> <li>g. enhancements implemented and measure of success;</li> <li>h. enhancements planned;</li> <li>i. invoice for Services performed with required invoice and support documentation (payment requests will only be considered as a part of the monthly report package);</li> <li>j. a list of open changes and their status and identification of any new change requests;</li> <li>k. an updated action items list that tracks the status of all outstanding activities and issues that need decision/resolution;</li> </ul>
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	<ul style="list-style-type: none"> <li>l. plans for the next month and quarter, and</li> <li>m. the previous monthly final meeting minutes for Approval.</li> </ul>
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## 6.5 Collections Operations Services

The Collections Operations Services shall cover all Services for the functional areas as summarized below. The Contractor shall provide the operational staffing, facilities, and equipment to effectively manage the collection of debt assigned to the Contractor.

412	Perform all Services in accordance with all applicable laws, rules, regulations, ordinances, and in compliance with all NJTA policies and guidelines for such contracted labor.
413	Perform all Collections Operations Services in accordance with the SOPs.
414	Should an unplanned event require the full or partial closure of the collection's facility, support business continuity through a mix of secondary site and at-home agents.

### 6.5.1 Security and Confidentiality

The Contractor agrees that any information provided by NJTA to the Contractor for the purpose of collecting debt and/or performing a Skip Trace will be held by the Contractor in strict confidence and will be used solely for locating the Customer and no other reason.

415	The Services performed under the Agreement are considered highly confidential and the Contractor personnel shall at all times comply with PCI and PII Requirements. All employees of the Contractor shall not discuss their Services with unauthorized personnel, or any individuals not directly associated with NJTA.
416	NJTA will identify and designate a primary point of contact for the Contractor. Under most circumstances, the Contractor will limit communication with NJTA authorized staff and to NJTA's designated point of contact unless otherwise directed by NJTA.
417	Obtain Approval by NJTA prior to any discussion of Services with the media, in oral presentations, in written publications, or in any other form, not related to this Agreement.
418	Retain all information regarding the Contractor's activities pursuant to this Agreement confidential and communicate such information only with authorized NJTA personnel or designated representatives.

### 6.5.2 Record Keeping

419	Ensure all Collections Account documentation that requires a paper application, form or document of any sort, including payment forms and signed Payment Plan agreements are archived by scanning the original documents and storing the scanned files on electronic media in compliance with NJTA retention policy.
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420	Maintain complete business records regarding the Collections Accounts and debt collection activities.
421	Maintain the filing system electronically, in an organized and easily accessible manner that provides for efficient access when needed. Authorized Users shall have access to the electronic filing system at all times.
422	Scan and associate all Correspondence Items with the correct Collections Account. After confirmation of the scanned image, the Correspondence Item shall be catalogued and shredded. Contractor shall comply with NJTA's policies/procedures concerning shredding activities.
423	Associate (by scanning or otherwise) all incoming and outgoing Customer related documentation and Correspondence Items to the applicable Collections Account and make available to the Authorized Users for review when the Account is accessed.
424	Meet all requirements of the Appendix E State of New Jersey General Records Schedule. Appendix E provides the version of this document available at the time of publishing of the RFP for informational purposes. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion. The Contractor is responsible for meeting all of the requirements of the most recent version of this document throughout the Contract Term.
425	Retain and purge data for all electronic and physical documents handled by the Contractor in accordance with NJTA's retention policy described in the Business Rules.
426	Ensure the confidentiality of stored Customer information, including Collections Account information is in compliance with PCI and PII policies and regulations.
427	Ensure compliance with the data retention and record keeping requirements set forth in applicable standards including, but not limited to: <ol style="list-style-type: none"> <li>State of New Jersey General Records Schedule (included as Appendix E);</li> <li>Internal Revenue Service (IRS) requirements;</li> <li>all applicable federal, state, local, and other laws and regulatory matters, and</li> <li>NJTA-specific policies.</li> </ol>
428	Standards for records management and retention may change during the Contract Term. The Toll Agencies will provide any updates to their internal policies and procedures that may impact the debt collection procedures as appropriate; however, it is the Contractor's responsibility to ensure it is aware of any changes to all non-Toll Agency standards, as described in these Requirements, and to incorporate those changes, as appropriate.

### 6.5.3 Customer Privacy

The Contractor shall not release Customer information to anyone other than NJTA authorized staff or their designees, as may be appropriate, Customers seeking information concerning their own Collections

Accounts, and to the CSC Services Contractor (in compliance with the Business Rules) and shall refer any and all other requests, inquiries, and official information requests to NJTA.

429	<p>Only release Customer information to the following:</p> <ul style="list-style-type: none"> <li>a. Toll Agencies' authorized staff;</li> <li>b. verified Customers seeking information concerning their own Accounts;</li> <li>c. the CSC Services Contractor, and</li> <li>d. other entities only as directed by NJTA.</li> </ul>
430	The Contractor shall not report Customers to any third-party for New Jersey E-ZPass-related debt activity, including credit bureaus.
431	Refer all requests, inquiries, subpoenas, and official information requests regarding Customer information to NJTA.
432	Establish reasonable and secure methods to verify the identity of Customers prior to the release of any Collections Account information, and such methods shall be documented in the SOPs.

#### 6.5.4 Outbound Customer Contact

The Contractor shall develop and implement an outbound contact strategy to include letters, outbound calls, and automated voice and/or SMS messaging.

433	Develop a Customer Outreach Plan that defines the method, timeline, and content for outbound Customer communication. The Customer Outreach Plan shall be submitted to NJTA for review and Approval prior to any Customer engagement.
434	<p>The Customer Outreach Plan shall detail all methods of outbound Customer communication, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. written notices;</li> <li>b. automated voice and/or SMS messaging, and</li> <li>c. outbound calls.</li> </ul>
435	Upon Approval of the Customer Outreach Plan, the Contractor shall implement the outreach strategy according to the Approved plan. Any updates to the outreach strategy must be documented for Approval prior to initiating any changes.
436	Provide bilingual staff with English and Spanish-speaking capability.
437	Adhere to the Fair Debt Collection Protection Act (FDCPA) and Consumer Financial Protection Bureau (CFPB) guidelines.

438	Adhere to state and federal laws related to debt collection.
439	Identify the New Jersey E-ZPass on all Correspondence Items and during phone contacts with Customers.
440	Transmit all outgoing Correspondence Items to the CSC Services Contractor for association with the Customer Account within the New Jersey E-ZPass System.

#### 6.5.4.1 Correspondence Templates

441	Provide all outgoing notices and Correspondence Item templates in English and Spanish with a standard look and feel and submit samples of all new or updated Correspondence Items to NJTA for Approval prior to distribution to Customers. The Contractor shall not implement changes to the collection text or format provided by NJTA without prior written Approval.
442	Provide the capability to modify each Correspondence Item's format, content, and delivery channel as directed by NJTA. It is anticipated that at least some Correspondence Items will change over the Contract Term.

#### 6.5.4.2 Phone Scripts

The Contractor will be responsible for placing outbound calls as a primary communication method. NJTA expects the language used to be consistent and adhere to all debt collection standards and regulations, including the FDCPA.

443	Provide script(s) in English and Spanish to be used during collection phone calls for NJTA Approval prior to use with Customers.
444	Obtain Approval on any modifications to script(s) prior to use with Customers.
445	Ensure all phone scripts adhere to the FDCPA, CFPB guidelines, and other Requirements.

#### 6.5.5 Incoming Customer Communication

Responding to Customer inquiries expeditiously is a critical component of Customer service. All incoming Correspondence on all channels needs to be tracked in the Collections System, responded to, forwarded to the CSC Services Contractor or NJTA, as appropriate, and resolved.

The Contractor, at a minimum, will provide live Collections Agents to answer the phone during the operating hours of Monday through Friday from 7:00 a.m. through 7:00 p.m., Eastern Standard Time, and Saturdays from 8:00 a.m. through 2:00 p.m., Eastern Standard Time.

446	Receive, track, escalate, resolve, and provide a response in accordance with the Approved SOPs for all Correspondence received from the Customer regardless of which channel the Customer uses to communicate.
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447	Develop a workflow process for Approval that clearly documents the handling process for incoming Customer communication, ensuring that checks and balances are instituted and that all incoming Correspondence is recorded, reviewed, properly routed, and resolved.
448	Process and respond to all incoming Customer communication based on established policies and Business Rules.
449	Research inquiries using the New Jersey E-ZPass System portal.
450	Ensure that all Customer contacts, regardless of channel, along with Collections Agent activities, are properly documented within the Collections System and associated with a Collections Account, where applicable.
451	Notate Collections Accounts with relevant information received from Customer contacts, in accordance with the Approved SOPs and Business Rules.
452	Ensure incoming Correspondence (paper or electronic) is appropriately redacted, scanned (in the case of paper Correspondence), saved, and associated with the Customer's Collections Account.
453	Transmit all incoming Correspondence to the CSC Services Contractor for association with the Customer Account within the New Jersey E-ZPass System.
454	Ensure responses to all incoming Correspondence meet all FDCPA, CFPB guidelines, and other federal and state debt collection regulations.
455	Provide the ability for Customers to communicate in English or Spanish for all phone, electronic and written communication.
456	At a minimum, the Contractor's toll-free telephone number must be answered by a live Collections Agent Mondays through Fridays during the hours of 7:00 a.m. through 7:00 p.m., Eastern Standard Time, and on Saturdays during the hours of 8:00 a.m. through 2:00 p.m., Eastern Standard Time. Any changes to these hours must be Approved by NJTA.
457	Establish and maintain a post office box for incoming mail.
458	All incoming mail shall be processed and shredded in accordance with applicable standards, including but not limited to: <ul style="list-style-type: none"> <li>a. record retention policies for the Toll Agencies;</li> <li>b. PCI and PII standards, and</li> <li>c. all applicable federal, state, local, and other laws and regulatory matters.</li> </ul>
459	All incoming mail shall be processed under dual control, date stamped, recorded into the Collections System, categorized, and assigned to the appropriate staff for processing.
460	Respond to all electronic communications with a resolution within three (3) days of receipt during operating hours.

### 6.5.6 Disputes

Customers may call in with a dispute of the amount due or other Collections Placement details. The Contractor shall track all disputes and route those that need CSC Services Contractor input or Toll Agency Approval appropriately. If Approved, the Contractor may offer any adjustments or perform dismissals as defined in the Approved dispute resolution. Based on the dispute, Contractor can access the CSC Services Contractor's portal and create a case into the New Jersey E-ZPass System, in accordance with the Approved SOPs.

461	Track disputes received via any incoming communications channel.
462	In accordance with the Approved SOPs, for applicable disputes, initiate a Case via the CSC Services Contractor portal.
463	In accordance with the Approved SOPs, send appropriate disputes to the CSC Services Contractor or Toll Agency for Approval and obtain Approval.
464	In accordance with the Approved SOPs, obtain electronic Approval of proposed dispute resolution.

### 6.5.7 New Jersey E-ZPass System Portal

The CSC Services Contractor will provide access, via a portal, for the Contractor staff, based upon their role, restricted access to directly view, in the New Jersey E-ZPass System, all relevant Customer E-ZPass Account information, E-ZPass Account history and images, for the Toll Bills, Violation Notices and Post-paid Statements, and E-ZPass Accounts in collection and assigned to that Contractor. The portal will also allow the Contractor to enter and update Approved data related to Collections Placements assigned to the Contractor, including managing a Case (initiating, updating, or closing it).

465	Coordinate with the CSC Services Contractor in developing the SOPs, and staff access and role for accessing and updating the New Jersey E-ZPass System Portal.
466	The portal will provide Collections Account management functions, including but not limited to: <ul style="list-style-type: none"> <li>a. search and view all relevant New Jersey E-ZPass Account information and history, images, Case status, New Jersey E-ZPass Account notes, Toll Bills, Post-paid Statements, Violation Notices, delinquent transactions not on a New Jersey E-ZPass System Correspondence Item, and New Jersey E-ZPass Accounts in collection with the specific Contractor;</li> <li>b. add New Jersey E-ZPass Account notes;</li> <li>c. create Cases for CSC Services Contractor follow-up;</li> <li>d. review the status of Cases;</li> <li>e. close a Case (based on permission), and</li> </ul>

	f. upload attachments.
467	Work with the CSC Services Contractor to develop appropriate parameters for entering Cases into the New Jersey E-ZPass System, which should include dispute details, including but not limited to:  a. Collections Account number;  b. New Jersey E-ZPass Account numbers;  c. Collections Placement number;  d. associated Correspondence Item number;  e. dispute reason and details;  f. amount of Collections Placement;  g. disputed amount, and  h. original Collections Placement date.

### 6.5.8 Payment Plans

The Contractor shall follow NJTA's established procedures for initiating, monitoring, and termination of Payment Plans as determined by NJTA policies/procedures. Additionally, the Contractor will update the CSC Services Contractor of Payment Plan via an electronic update file.

468	Support the setting up of manual and automated Payment Plans based on agreement with the Customer in accordance with Toll Agency Business Rules.
469	Process payments for established Payment Plans.
470	Contact Customer if Payment Plan payments are not made in accordance with the agreed upon timeline.
471	Initiate, monitor, and terminate Payment Plans in accordance with the Business Rules.
472	Update the Collections Placement file with Payment Plan status in accordance with the CSC Services Contractor ICD.

### 6.5.9 Settlement Campaigns

During the Contract Term, NJTA may direct the Contractor to offer settlements to a specific set of Collections Accounts. NJTA will provide the parameters for these settlement offers. If a settlement campaign is conducted, the Contractor will be responsible for developing any letters or phone scripts related to the campaign and for any related outreach.

473	Conduct outreach to offer settlements in accordance with guidelines provided by NJTA.
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474	Develop settlement campaign specific letters, phone scripts and other materials as directed by NJTA.
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#### 6.5.10 Evidence Package Support

The Contractor will be responsible for supporting the development of Evidence Packages to support the Toll Agency and CSC Services Contractor in administrative hearings related to Vehicle Registration Suspension/Holds, Driver's License Suspensions as well as court proceedings.

475	Provide to Toll Agencies or CSC Services Contractor, upon request, all relevant documentation regarding the Customer's Collections Account and contact with the Contractor, including information regarding the Customer disputes, and if and how they were resolved.
476	Provide requested information within five Business Days of the request.

#### 6.5.11 Payments, Fees and Refunds

477	Support handling of payments processed by Collections Agents.
478	Post any check or money order payment which is received to the Collections Account, scan and associate the payment instrument to the Collections Account and electronically transfer the payment instrument to the bank no later than the close of Business Day.
479	Support processing of payments and reconcile all payments to Collections Accounts and payments received by the CSC Services Contractor.
480	Research overpayments that Collections System could not apply and identify additional Collections Accounts with outstanding debt to which payments can be applied and apply the overpayment to outstanding debt.
481	Support reconciliation and exception handling for payments and fully process payments which are not processed automatically processed within the Collections System. These include payments which cannot be readily associated with a Collections Account. Conduct timely research on these payments so that they can be posted to a Customer's Collections Account as quickly as possible, and all exceptions correctly disposed. If all research avenues have been exhausted and documented and the payment remains unassociated to a Collections Account, the payment shall be tracked within the Collections System for future resolution in case of Customer contact or made eligible for escheatment.
482	Manage the refund process including research and approval of refunds and preparing and mailing check to Customers who request a refund by check.
483	Use Positive Pay and Payee Positive Pay to deter check fraud for refunds made by check.
484	Institute processes to detect and prevent credit card fraud.
485	Ensure that credit card refunds are authorized and successfully processed.

### 6.5.12 Escheatment

Customers can become eligible for escheatment if unidentified payments are made, and/or if refund checks remain uncashed. The CSC Services Contractor will perform escheatment services. The Contractor is responsible for notifying the CSC Services Contractor of Accounts eligible for escheatment and conducting any required research on relevant Collections Accounts.

486	Provide information and conduct research related to uncashed checks, unidentified payments, and unclaimed funds.
487	Develop an escheatment process flow to identify all events and conditions that trigger escheatment including distribution of money owed to Customers, Customer Correspondence Items and integration to the third-party services.
488	Verify and monitor candidate Collections Accounts or records for possible escheatment, including but not limited to:  a. uncashed checks;  b. unidentified payments, and  c. unclaimed funds.
489	Inform the CSC Services Contractor of Collections Accounts requiring escheatment services within ninety (90) days Business Days of the possible escheatment event.
490	Upon notification to the CSC Services Contractor, identify the funds as sent to CSC Services Contractor for escheatment in the Collections System.
491	Obtain status of escheatment from the CSC Services Contractor and note in the Collections Account.
492	Reconcile all escheated funds in the financial system and Collections Accounts.

### 6.5.13 Recall of Collections Placements

NJTA may Recall Collections Placements at any time during the Contract Term, for example when a Collections Account is in MVC/DMV Registration Suspension/Hold process or court. This will be communicated via Recall of the Collections Placement from the Collections Placement file. Additionally, upon termination or at the end of the Contract Term, the Contractor shall return all assigned Collections Placements to NJTA.

493	For Collections Accounts Recalled during the Contract Term, the Contractor shall immediately cease collections activities.
494	Upon termination or at the end of the Contract Term, return all Collections Placements no later than one (1) week from the date of receipt of a termination or Agreement expiration and immediately cease collections activities.

495	No payment shall be due the Contractor on Recalled Collections Placements unless collected by the Contractor within sixty (60) days after the Collections Placement Recall date.
496	Upon termination or at the end of the Contract Term, the Recall of all Collections Placements with active Payment Plans shall include copies of all Payment Plan agreements with the Contractor.

#### 6.5.14 Bankruptcy

497	Provide CSC Services Contractor and NJTA with a copy of any bankruptcy notices received by the Contractor within two days of receipt of bankruptcy notice.
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### 6.6 Training

498	Conduct comprehensive training related to all aspects of the Collections System functionality, administration, and maintenance as well as operations.
499	Ensure all Collections Agents are trained in a manner which ensures excellent Customer service in every Customer interaction as measured by the Performance Requirements.
500	The training shall be hands-on and use the Collections System in the training environment on a Collections Agent workstation.
501	Training on the phone system shall be hands-on, emulating actual calling scenarios.
502	Provide training for the use of other 3rd-party systems and tools, such as the CSC Services Contractor portal and IVR/telephony system.
503	All data used for the training database shall comply with PCI and PII Requirements.
504	For Contractor's training of its own personnel, the Contractor shall provide all required systems and training facilities.
505	All training materials shall reside in an online knowledge base that is accessible for all Contractor staff and Toll Agency staff and one (1) reproducible set of documentation in electronic form that may be used for future training sessions.
506	Provide training to all Contractor staff on the FDCPA, CFPB guidelines and other requirements.
507	Provide training to all Contractor staff on all state and federal guidelines related to debt collection.
508	Provide training to all Contractor staff on all PCI and PII standards and regulations.
509	Provide training to Toll Agency Authorized Users on the Collections System. Training should include general overview of the Collections System including a demonstration of user roles and associated functionality.

## 6.7 Operational Quality Program

The operational quality program ensures that all Contractor departments adhere to the SOPs and provide high quality service to Customers through quality assurance reviews of all departments' Services. This program identifies and provides suggestions on process improvement as a part the enterprise-wide Continuous Improvement program.

510	Establish and maintain an effective quality program that ensures quality throughout all areas of the Services.
511	The quality program shall provide for the prevention and ready detection of discrepancies and for timely and positive corrective action.
512	Make objective evidence of quality conformance readily available to NJTA.
513	Provide the capability to record all conversations (including voice, chat, SMS, and direct message, as applicable) and associated screens, and allow the synchronized replay of selected conversations and screen captures with sensitive data elements such as credit card and bank account information redacted.
514	Provide NJTA access to listen to both live and recorded calls for the purpose of NJTA quality review and Customer dispute resolution.
515	Monitor and score the Contractor's outgoing communications for accuracy and timeliness.
516	Monitor and score both live and recorded Collections Agent calls for accuracy, efficiency, professionalism, and courteousness.
517	Review and score dispute resolution activities and outcomes for accuracy, efficiency, professionalism, and courteousness.
518	Provide for review by NJTA all documentation related to the Contractor's quality program.
519	Direct the Contractor's Continuous Improvement program.
520	Support on-demand and batch/scheduled report generation, record review, analysis, and reporting requirements and after-the-fact investigations of incidents.

## 6.8 Audits

521	Provide support of all audits, including but not limited to an SSAE-18 Type II audit once every year, and provide all information required by the audit. The CSC Services Contractor is responsible for hiring the auditor.
522	Correct all deficiencies related to Contractor Services discovered during any and all audits, including but not limited to an SSAE-18 Type II audit at the Contractor's cost.

## 6.9 Financial Management

The Contractor is responsible for all financial operations, reconciliation and reporting necessary to successfully manage Collections Services.

523	Develop and implement Approved financial reconciliation procedures to be instituted for Collections Services.
524	Ensure that checks and balances are instituted to minimize errors and omissions.
525	Perform monthly reconciliations of all financial accounts.
526	Provide an annual written confirmation of the accuracy of financial reports signed by the Operations Manager and the Finance Manager.
527	Provide financial information to the Toll Agencies or their designee(s) on an ad-hoc basis upon request.
528	Provide information to auditors on a timely basis, in accordance with the audit schedules.

## 6.10 Collections Services Performance Requirements

The specific method of measuring the Contractor's performance will vary depending on the Performance Requirement, but will generally be measured on a per occurrence, daily or monthly basis. Non-compliance with the Performance Requirements for key performance indicators (KPIs) in Appendix T-3 Category C Collections Services Performance Requirements will result in assignment of an adjustment to the monthly invoice. Regardless of how a Requirement is measured, the Contractor shall provide monthly reporting for all Performance Requirements.

529	Facilitate performance monitoring by reporting of performance in clearly measurable terms, including but not limited to those performance measurements and KPIs set forth in Appendix T-3 Category C Collections Services Performance Requirements.
530	NJTA will conduct a review of the Contractor's performance on a monthly basis, utilizing an Approved combination of reports generated by the Collections System and the Contractor, to be determined during design.
531	Performance reviews shall begin at the end of the first full calendar month following Go-Live.
532	While the Contractor's performance is assessed monthly, performance will in many cases be measured continuously. The current status of all KPIs shall be available to NJTA for applicable Configurable periods within the report (for example, month, year, last three (3) months).

### 6.10.1 Chargeable Failures

The Contractor shall meet the Performance Requirements documented in Appendix T-3 Category C Collections Services Performance Requirements.

533	<p>Chargeable failures are subject to monthly fee adjustment and include any performance at levels below the standards specified in Appendix T-3 that are not specifically identified as non-chargeable per the Agreement. Chargeable failures include but not limited to the following:</p> <ul style="list-style-type: none"> <li>a. a malfunction or defect which prevents the Collections System component (hardware or software) from performing its designated function;</li> <li>b. a malfunction that poses a threat to the safety and security of the Collections System components, Customers, employees, or others;</li> <li>c. an occurrence where data is not successfully transmitted between the New Jersey E-ZPass System and the Collections System, the Collections System, and external interfaces, or within the Collections System modules, unless such failure occurred on a device the Contractor was not responsible for;</li> <li>d. a failure of equipment or software that allows revenue loss to occur or causes loss of auditability that is not already accounted for as a separate performance failure;</li> <li>e. software anomalies and defects that affect the performance, accuracy, and operation of the Collections System;</li> <li>f. shutdown or unavailability of any element of the Collections System that impacts Customers, Authorized Users and external entities unless specifically directed by NJTA;</li> <li>g. failure to properly reconcile the Collections System;</li> <li>h. failure to comply with applicable legislation, and</li> <li>i. failure due to Contractor negligence.</li> </ul>
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## 6.11 Corrective Actions

Failure to meet a Performance Requirement does not relieve the Contractor of the Requirement to complete the activity associated with the Performance Requirement. The Contractor shall identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures in the future. This will be documented in a corrective action plan (CAP) that includes the schedule for the corrective action. NJTA will use the details provided in the CAP to determine if liquidated damages will be waived or paused for the specific impacted performance measure.

534	Identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures.
535	Develop a CAP for each failure to meet a Performance Requirement identifying the root cause(s), the extent of the problem and providing a plan to rectify the current situation and prevent future occurrences.
536	Submit the CAP to NJTA for review and Approval in a format Approved by NJTA.
537	Implement the corrective actions as documented in the Approved CAP.

## 7 END OF AGREEMENT TRANSITION

The Contractor acknowledges that the Services it provides under the Agreement are vital to the success of the New Jersey E-ZPass Program and that said services shall be continued without interruption. Upon expiration or earlier termination of the Agreement in accordance with the terms and conditions thereof the Contractor shall fully cooperate with the Toll Agencies to facilitate a smooth transition pursuant to the End of Agreement Succession Plan during any phase of the Services.

538	Return all debt placements to NJTA and cease collections activity.
539	Turn-over all records, both electronic and hardcopy to NJTA in compliance with NJTA retention policy.
540	Generate Customer notifications and messaging as Approved by NJTA.
541	Settle all payments with the Toll Agencies.
542	Record any amounts owed to Customers that were not escheated.
543	<p>Provide NJTA with a current status of all active Collections Placements, including the reconciled debt and all backup data for Collections Placements, including, but not limited to:</p> <ul style="list-style-type: none"> <li>a. current outstanding balance;</li> <li>b. payments made by the Customer;</li> <li>c. details on any Customer interactions (calls placed, letters sent, inbound contacts), and</li> <li>d. status of associated Payment Plans.</li> </ul>

**Attachment 4:**  
**Category D – Merchant Services**  
**Scope of Services**



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## **NEW JERSEY E-ZPASS SERVICES RFP**

### **ATTACHMENT 4: CATEGORY D - MERCHANT SERVICES SCOPE OF SERVICES**

**November 2023**

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## 1 INTRODUCTION

The New Jersey Turnpike Authority (“NJTA”) operates and maintains the New Jersey Turnpike (“NJTP”) and Garden State Parkway (“GSP”). The New Jersey E-ZPass Group includes NJTA (lead Toll Agency), South Jersey Transportation Authority (“SJTA”), the Delaware River Port Authority (“DRPA”), the Delaware River and Bay Authority (“DRBA”), Delaware River Joint Toll Bridge Commission (“DRJTBC”), Burlington County Bridge Commission (“BCBC”), and Cape May County Bridge Commission (“CMCBC”). Each participating Toll Agency operates and maintains its independent toll collection system(s) and Toll Agency Host Systems that interface with the New Jersey E-ZPass System. The Toll Agencies use the New Jersey E-ZPass System to collect payments from customers using their Toll Facilities. NJTA, as lead Toll Agency, holds and manages the current contract with the Existing New Jersey E-ZPass Services Contractor to perform back-office and customer service support for the New Jersey E-ZPass Program and will continue under this procurement.

### 1.1 New Jersey E-ZPass Toll Agencies

The following provides a brief description of the participating Toll Agencies and their Toll Facilities.

#### 1.1.1 New Jersey Turnpike Authority

NJTA operates and maintains toll plazas on the New Jersey Turnpike (NJTP) and the Garden State Parkway (GSP). The NJTP is a closed tolling system where vehicles are detected at entry and exit, and a vehicle trip is created. Tolls are charged for the distance traveled and are assessed when the vehicle exits the turnpike. Plazas 6A, 17 and 19w are barrier plazas and tolls are charged at the plazas. NJTP accepts cash (for tickets) and E-ZPass methods of payment. In a manual cash lane, motorists can request an insufficient fund slip and make a payment later. NJTP has five (5) plazas with open road tolling (ORT) lanes. GSP is a barrier system, and a toll is charged at each toll plaza. Both cash (automatic coin machine (ACM) and manual) and E-ZPass are accepted methods of payment. In a manual cash lane, motorists can request an insufficient fund slip and make a payment later. GSP has seven (7) toll plazas with ORT lanes. NJTA may move to All Electronic Tolling (AET), eliminating cash payments on all Toll Facilities on GSP, and possibly moving to AET or continuing to collect cash on the NJTP, over the Contract Term.

#### 1.1.2 South Jersey Transportation Authority

The SJTA operates and maintains the toll plazas on the Atlantic City Expressway (ACE) and parking facilities at the Atlantic City International Airport and other locations in Atlantic City where E-ZPass Plus is accepted as a form of payment for parking. ACE is a barrier system and tolls are charged at each toll plaza and both cash and E-ZPass are accepted methods of payment. SJTA is expected to move to All Electronic Tolling (AET) in a phased deployment before Phase 1 Go-Live, eliminating cash payments on the ACE.

#### 1.1.3 Delaware River Port Authority

The DRPA is a regional transportation agency serving Southeastern Pennsylvania and Southern New Jersey. DRPA operates and maintains the Benjamin Franklin; Walt Whitman; Commodore Barry, and Betsy Ross bridges. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment. All four bridges are part of the E-ZPass network.

#### **1.1.4 Delaware River and Bay Authority**

The DRBA owns and operates the Delaware Memorial Bridge that connects New Jersey to Delaware as well as other transit related facilities. A toll is charged for traveling across the bridge from New Jersey to Delaware and both cash and E-ZPass are accepted methods of payment. The bridge is part of the E-ZPass network.

#### **1.1.5 Delaware River Joint Toll Bridge Commission**

The DRJTBC owns and operates twenty (20) bridges, eight (8) of which are tolled. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment at all but Scudder Falls Bridge, which is AET. The Commission plans to transition to All Electronic Tolling (AET), eliminating cash payments on its Toll Facilities during 2024 and 2025.

#### **1.1.6 Burlington County Bridge Commission**

The BCBC maintains and operates two (2) major bridges, the Tacony-Palmyra Bridge and Burlington-Bristol Bridge, as well as six (6) small bridges. A toll is charged for traveling across the bridges from New Jersey to Pennsylvania and both cash and E-ZPass are accepted methods of payment. BCBC is part of the New Jersey E-ZPass System through an agreement with DRPA.

#### **1.1.7 Cape May County Bridge Commission**

CMCBC is responsible for five (5) toll bridges on Ocean Drive from Cape May to Ocean City within the county. The Grassy Sound and Corsons Inlet bridges have tolls in the northbound direction, while the Middle Thorofare, Townsends Inlet, and Ocean City-Longport bridges have southbound tolls. Both cash and E-ZPass are accepted at the bridges. CMCBC is expected to All Electronic Tolling (AET) in a phased deployment before Phase 1 Go-Live, eliminating cash payments on CMCBC's Toll Facilities.

#### **1.1.8 Facility Overview**

The following provides a summary of the Toll Facilities described in the previous section.

**Table 1-1: Overview of Toll Facilities – Current Operations**

Toll Agency	Facility	Facility Type	Payment Accepted
New Jersey Turnpike Authority	Garden State Parkway	Toll Road	Cash and E-ZPass <sup>2</sup>
	New Jersey Turnpike	Toll Road	Cash and E-ZPass <sup>1</sup>
South Jersey Transportation Authority	Atlantic City Expressway	Toll Road	Cash and E-ZPass <sup>2</sup>
	Atlantic City International Airport and other parking locations	Parking	Cash and E-ZPass
Delaware River Port Authority	Benjamin Franklin Bridge	Bridge	Cash and E-ZPass
	Walt Whitman Bridge	Bridge	Cash and E-ZPass
	Commodore Barry Bridge	Bridge	Cash and E-ZPass
	Betsy Ross Bridge	Bridge	Cash and E-ZPass

Toll Agency	Facility	Facility Type	Payment Accepted
Delaware River and Bay Authority	Delaware Memorial Bridge	Bridge	Cash and E-ZPass
Delaware River Joint Toll Bridge Commission	Delaware Water Gap (I-80)	Bridge	Cash and E-ZPass <sup>3</sup>
	Easton-Phillipsburg (Route 22) Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	I-78 Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Milford-Montague Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	New Hope-Lambertville Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Portland-Columbia Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
	Trenton-Morrisville (Route 1) Bridge	Bridge	Cash and E-ZPass <sup>3</sup>
Burlington County Bridge Commission	Scudder Falls Bridge	Bridge	E-ZPass and TOLL-BY-PLATE
	Burlington-Bristol Bridge	Bridge	Cash/Credit Card and E-ZPass
	Tacony-Palmyra Bridge	Bridge	Cash/Credit Card and E-ZPass
Cape May County Bridge Commission	Grassy Sound Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Corsons Inlet Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Middle Thorofare Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Townsend's Inlet Bridge	Bridge	Cash and E-ZPass <sup>2</sup>
	Ocean City-Longport Bridge	Bridge	Cash and E-ZPass <sup>2</sup>

<sup>1</sup> May convert to AET over the Contract Term<sup>2</sup> Will convert to AET before Phase 1 Go-Live<sup>3</sup> Will transition to AET in 2024-2025

## 1.2 Customer Service Center

Currently, the main New Jersey E-ZPass CSC is located in Newark, NJ, and includes a Walk-in Center (WIC). A second WIC is located in Camden, NJ. DRBA also operates a WIC at its facility in New Castle, DE.

## 1.3 Current New Jersey E-Z Pass System Payment Statistics

Table 1-2 provides the transaction processed by type of transaction for a typical month in 2022. This is not a guarantee of future transaction volume. Additional historical statistics are provided in Appendix A New Jersey E-ZPass Program Volumes.

**Table 1-2: Transactions Processed Statistics**

	Walk-In Center		Call Center		IVR		Self-Service Website		Mobile Application		New Jersey E-ZPass System-Generated (recurring/batch)	Total		
	Count	\$	Count	\$	Count	\$	Count	\$	Count	\$	Count	\$		
American Express	600	\$20K	15K	\$350K	2K	\$100K	30K	\$4M	4K	\$500K	300K	\$33M	350K	\$38M
Discover	200	\$5K	5K	\$50K	1K	\$60K	10K	\$500K	3K	\$150K	100K	\$5M	119K	\$5.8M
Visa	10K	\$300K	175K	\$4M	40K	\$3M	300K	\$20M	140K	\$7M	1.1M	\$77M	1.8M	\$111M
MasterCard	2K	\$65K	50K	\$12M	11K	\$8M	90K	\$8M	50K	\$2M	300K	\$24M	500K	\$54M
ACH	50	\$1K	1K	\$20K	3K	\$500K	30K	\$2M	300	\$20K	80K	\$8M	114K	\$10.5M
<b>Total</b>	<b>13K</b>	<b>\$391K</b>	<b>256K</b>	<b>\$16.4M</b>	<b>57K</b>	<b>\$11.7M</b>	<b>460K</b>	<b>\$35M</b>	<b>197,300</b>	<b>\$9.7M</b>	<b>1.9M</b>	<b>\$147M</b>	<b>2.9M</b>	<b>\$220M</b>

## 1.4 Future Plans

NJTA has discussed plans to potentially move towards AET on the NJTA and GSP and, if implemented, the conversion would occur in phases which would overlap the Contract Term. As such, the Contractor may need to support processing of additional payments as the Toll Agencies' transition the Toll Facilities to AET at varying Phases of the Contract Term. Additionally, to serve New Jersey E-ZPass Customers, DRJTBC plans to establish three (3) WICs in Pennsylvania that will be operated by the Commission and SJTA plans to establish and operate a WIC at the Farley Service Plaza.

## 1.5 Project Overview

NJTA's contract with the Existing New Jersey E-ZPass Services Contractor for the New Jersey E-ZPass System and New Jersey E-ZPass System support and operations expires on October 16, 2025. At its sole discretion, NJTA can extend the contract for an additional two (2) one (1) year extensions. Through this RFP, NJTA is procuring the contractors to provide, implement, and maintain an integrated New Jersey E-ZPass System, and operate New Jersey E-ZPass Customer Service Centers (CSCs) and provide associated CSC services, namely, License Plate Review Services, Collections Services and Merchant Services (collectively, the "New Jersey E-ZPass Services").

NJTA is seeking best-in-class solutions for the New Jersey E-ZPass Program that provides Customers optimized self-service options, streamlines operations, supports technology growth, has Configurable and flexible application program interfaces (APIs) for third-party interfaces and improves revenue collection. The Requirements included in this Scope of Services are to provide a framework for the solutions while providing Customers and Toll Agencies features they currently have in production and new features which will enhance the program, over the Contract Term. NJTA encourages innovation as well as the use of industry available tools within the proposed solutions.

The New Jersey E-ZPass Program Services will be split into four (4) Categories of Services, as described below:

- **Category A** – Customer Service Center services (“CSC Services”): provide, implement, maintain and operate (1) a System containing all required functionality to support the provision of Customer service and the processing/payment of tolls for the New Jersey EZ-Pass Group, which shall include best-in-class Customer Contact Center System, Customer self-service tools, system architecture and environments, redundancy, reporting and Data Warehouse capabilities, interfaces, interoperability and security; and (2) Customer contact facilities and services, including labor, for effective and efficient ongoing Customer contact, Customer service, payment processing, financial and operational reconciliation, and other services further described in the detailed Requirements. In addition, CSC Services include System Maintenance, Administration, Software Support Services, and CSC Operations Services required to meet System and Operations Performance Requirements, and to keep the System current, up-to-date, and continuously improved. The Successful Proposer for Category A Services will be referred to herein as the CSC Services Contractor.
- **Category B** – License Plate Review Services: provide image review services, including automated image processing and manual image review services, for Image-Based Transactions and perform Gross Class Mismatch reviews. The Successful Proposer for Category B Services will be referred to herein as the License Plate Review Services Contractor.
- **Category C** – Collections Services: provide debt collection services, including skip tracing, for collection of outstanding tolls and fees. NJTA plans to procure the services of two contractors for the Collection Services. The Successful Proposers for Category C Services will be referred to herein as the Collections Services Contractor(s).
- **Category D** – Merchant Services: provide a Payment Orchestration Platform (POP) that integrates with the New Jersey E-ZPass System and provides payment gateway for CSC Customers, allowing for multiple payment service providers, including credit card and automated clearinghouse (ACH) payment processing. Provide Tokenization and hosted third-party storage for all payment processing. The Successful Proposer for Category D Services will be referred to herein as the Contractor.

The E-ZPass Program will be supported by and will require the coordination with a variety of entities, including the Toll Agencies, IAG/Interoperable Agencies, Third-party Entities, Third-party Service Providers, Subcontractors, Toll Agency Host and Image Capture System contractors and other contractors. The following diagram provides a high-level overview of the responsibilities between these entities and serves as an example of functional responsibilities between the different categories.

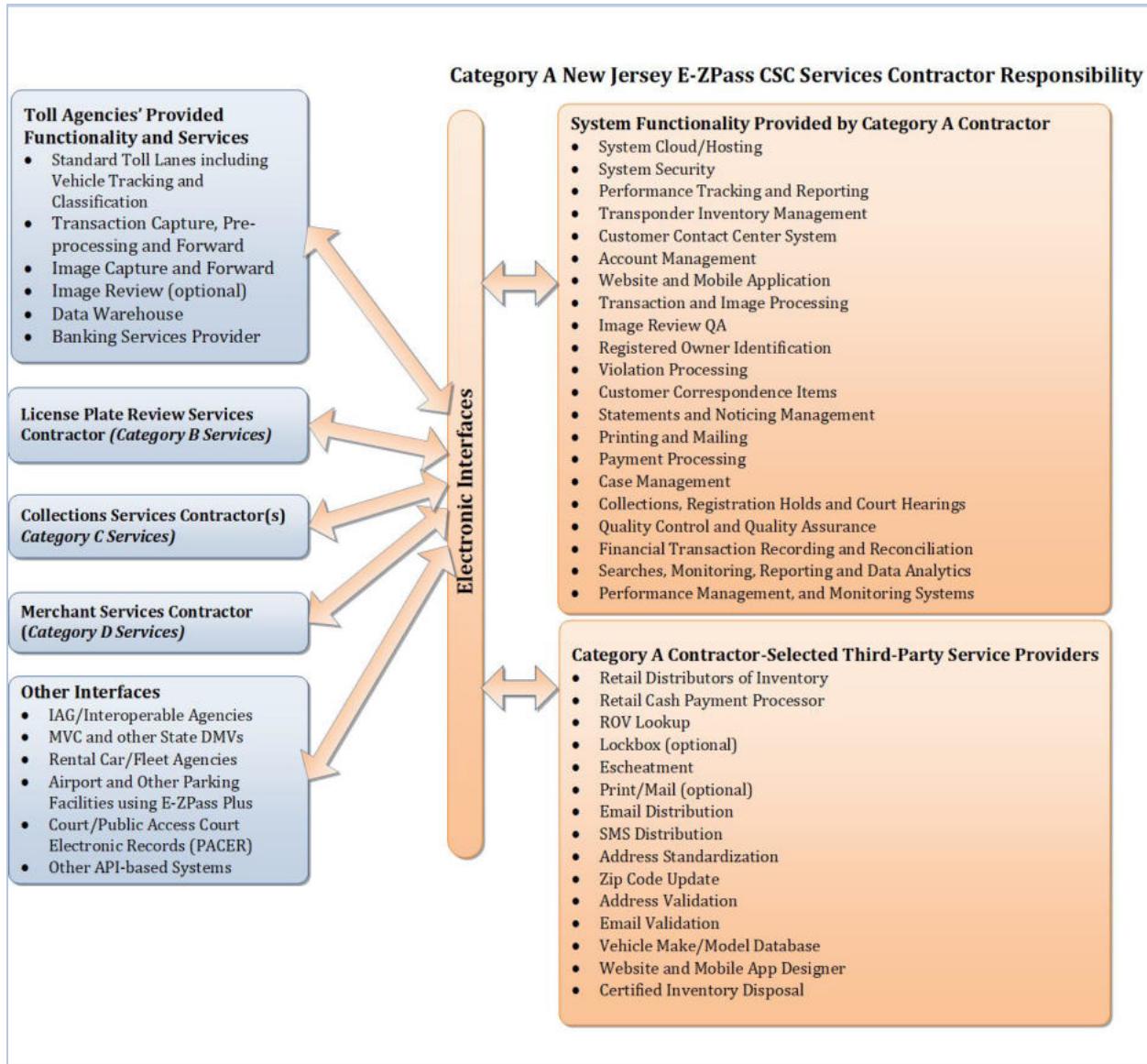


Figure 1-1: New Jersey E-ZPass CSC Functional Responsibilities Diagram

## 1.6 Category D Merchant Services Contractor

This Scope of Services describes the Requirements for the Category D Merchant Services Contractor. The selected Contractor shall provide the New Jersey E-ZPass Program with comprehensive electronic payment processing and related Services, and advice and support that will enable New Jersey E-ZPass to improve the payment processing efficiency, minimize revenue loss risk, and reduce its cost of processing Customers' electronic payments through current and future payment acceptance methods (collectively "Merchant Services"). At a high level, the Contractor is to provide for the payment gateway, payment Tokenization, credit card and ACH storage, and credit card and ACH payment processing for the New Jersey E-ZPass Program. Such Merchant Services shall:

- provide a single POP that the CSC Services Contractor uses to support the New Jersey E-ZPass Program;
- provide all Services required to validate, verify, and process Tokenized credit card, debit card, and ACH transactions submitted by the New Jersey E-ZPass System and provide 100% reconciliation of all transactions and settlements;
- provide Real Time Payment (RTP) services and processes that increase successful payments;
- ensure security of transactions and related data, and the New Jersey E-ZPass Customers' privacy, in accordance with all applicable industry, statutory, and regulatory requirements that are currently in effect and, going forward, as modified and newly enacted;
- support the current, and future changes to, the New Jersey E-ZPass Business Rules and payment options;
- support the current, and future changes, to the New Jersey E-ZPass CSC operations;
- be responsive to CSC Services Contractor conveyance of Customer disputes in terms of convenience, simplicity, and response time;
- be cost efficient in terms of unit cost and total cost;
- minimize the risks of revenue loss and fraud, and
- employ best practices and comply with Payment Card Industry (PCI) data security standards (DSS).

## 1.7 Requirements of Scope of Services

The Requirements in this Scope of Services are being specified on a functional level. It is the intent of these Requirements to permit the Contractor the flexibility in the delivery of Merchant Services to reflect innovation and incorporate the latest security measures, technology, and Services that are fully capable of meeting the performance, operational, and contractual Requirements.

The Contractor shall be responsible for furnishing and mobilizing all required equipment, facilities, and resources to carry out this Scope of Services and to meet the Requirements. The Contractor shall provide all Services, features, and interfaces to meet the Requirements of this Scope of Services, including Services and products that will be beneficial, secure, and cost-effective to the New Jersey E-ZPass Program.

Requirements are organized into functional categories. If there is a conflict between a numbered Requirement and the descriptive text, the numbered Requirement takes precedence.

## 2 PROJECT MANAGEMENT REQUIREMENTS

The Contractor shall employ a project management system that is sufficiently detailed to enable NJTA to review and ascertain that the Contractor has the necessary management, staff, and controls in place to meet the Requirements.

The Project is divided into two phases: The Implementation Phase (from Notice to Proceed until Go-Live) and the Operations and Maintenance Phase (after Go-Live through the end of the Agreement).

## 2.1 Program Management Plan

1	Develop and submit the Program Management Plan to NJTA for review and Approval.
2	<p>The PMP shall at a minimum include the following elements:</p> <ul style="list-style-type: none"><li>a. Project scope and key deliverables;</li><li>b. staffing plan that includes an organization chart for all Project staffing during the Implementation Phase and a separate chart for the Operations and Maintenance Phase, including location and level of commitment of all resources;</li><li>c. Project team contact information and emergency contact list;</li><li>d. a description of the Project planning, documentation and reporting methods to be utilized, including utilizing the Contractor-provided Electronic Document Management System (EDMS) that is accessible to the Project team by username and password;</li><li>e. tools and products used to manage the Project including project controls, Software development and delivery lifecycle and the internal controls;</li><li>f. approach to issue management, escalation and resolution of Project issues with NJTA;</li><li>g. schedules for meetings with Toll Agencies, CSC Services Contractor and other entities including the format of the meeting;</li><li>h. inclusion of the Project schedule and description of process for updating;</li><li>i. approach to Software delivery, consistent with the Requirements, including a description of the process for managing and tracking the design and development process, schedule management, Software development, testing, integration, and delivery;</li><li>j. approach to change management;</li><li>k. approach to risk identification and management;</li><li>l. approach to Quality Control and Quality Assurance;</li><li>m. approach to operational readiness, including a transition check list;</li><li>n. a section with all Approved Project forms including but not limited to, meeting agenda, meeting notes, action items tracking log, and</li><li>o. description of the invoice submission process and format in accordance with the Agreement, including invoice backup information, verification, and Approval process.</li></ul>

## 2.2 Project Implementation Schedule

3	<p>Develop a detailed Project Implementation Schedule in Microsoft Project format (Office 2020 or above) for the Implementation Phase that lists all tasks related to the design, development, Configuration, data migration, testing, installation, transition and deployment of the Merchant Services System. The Project Implementation Schedule shall include:</p> <ul style="list-style-type: none"><li>a. key intersection points/dependencies with the CSC Services Contractor;</li><li>b. key intersection points/dependencies with NJTA;</li><li>c. key intersection points/dependencies with external interfaces;</li><li>d. coordination with the New Jersey E-ZPass System interface design and testing;</li><li>e. internal and formal testing tasks and activities including delivery of test plans, test cases, procedures and conducting testing;</li><li>f. document development and delivery;</li><li>g. communications infrastructure installation and Configuration of system;</li><li>h. training;</li><li>i. data migration and transition, and</li><li>j. all ongoing Project activities throughout the Implementation Phase, such as scheduled meetings and their frequency/periodicity.</li></ul>
4	The Project Implementation Schedule shall identify all critical path tasks and shall be used to manage the Project.
5	The Project Implementation Schedule shall identify all milestones and tasks starting with the Notice to Proceed through the date of Merchant Services System Acceptance and shall align with relevant milestones identified in the Preliminary Milestone Schedule (Exhibit AH to the RFP).
6	The Project Implementation Schedule shall be baselined upon Approval and the Contractor is required to update the Project Implementation Schedule on a monthly basis showing percent complete.
7	The Project Implementation Schedule shall form the basis for all subsequent schedules and updates throughout the duration of the Project.
8	Work closely with the CSC Services Contractor to ensure that all dependent tasks including Go-Live are synchronized.
9	Submit all changes to the baseline Project Implementation Schedule for Approval by NJTA.
10	Submit all changes to Approved milestones to NJTA in writing for Approval.

## 2.3 Monthly Progress Report

11	<p>The monthly progress report shall contain the following elements:</p> <ul style="list-style-type: none"> <li>a. a summary, outlining progress, status and percentage of Services completed for each task, as compared to planned activities in the Project Implementation Schedule. Comments shall be included where appropriate. The summary also shall identify key milestones met and missed in the period;</li> <li>b. an analysis of all critical path tasks, potential risks associated with the tasks and proposed contingency/workaround plans to avoid or mitigate delays to the Project;</li> <li>c. a discussion of schedule compliance and an updated progress schedule showing status against the Approved Project Implementation Schedule. Any proposed changes from the Approved Project Implementation Schedule should also be identified and discussed;</li> <li>d. an updated action items list that tracks the status of all outstanding activities and issues that need decision/resolution;</li> <li>e. a payment request/invoice for completed and Approved milestones (payment requests will only be considered as a part of the monthly report package), and</li> <li>f. the previous monthly Project meeting's final meeting minutes for Approval.</li> </ul>
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## 2.4 Project Coordination and Meetings

The Contractor will be responsible for coordinating and attending a variety of meetings to ensure proper coordination, planning, issue tracking and resolution and Project progress reporting. This will include a combination of regularly scheduled meetings as well as ad-hoc Project meetings required during the course of the Project to address specific deliverables, work items and issues as they arise.

### 2.4.1 Cooperation with Other Contractors and Providers

12	Cooperate to the fullest extent with all external parties who are involved in the execution of this Agreement including NJTA, the CSC Services Contractor, and external entities.
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### 2.4.2 Contractor-Led Meetings

13	Set-up, facilitate monthly project meetings, to coordinate the Services and meet the Requirements, during the Implementation Phase and year one of the Operations and Maintenance Phase.
14	Set-up, facilitate quarterly Project meetings, to coordinate the Services and meet the Requirements, during year two (2) and all subsequent years of the Operations and Maintenance Phase.
15	<p>Perform the following tasks related to all Contractor-led meetings, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. identify and notify other attendees as applicable;</li> </ul>

	<ul style="list-style-type: none"> <li>b. distribute notices of Project meetings in accordance with document control Requirements;</li> <li>c. prepare the agenda and meeting materials in coordination with NJTA and distribute at least two (2) Business Days prior to the meeting;</li> <li>d. host the meeting with all required staff in attendance;</li> <li>e. prepare draft minutes of the meeting and forward them to NJTA within five (5) Business Days after the day of the meeting, and</li> <li>f. maintain an action items list for each type of meeting identifying issues that need to be resolved at the project level and reported on in subsequent meetings.</li> </ul>
16	<p>Conduct, at the discretion of NJTA, a quarterly in-person Quarterly Business Review (QBR) meeting with NJTA at NJTA's offices. Requirements of the QBR include:</p> <ul style="list-style-type: none"> <li>a. the QBR meeting shall include, at a minimum, the Contractor's Account Relationship Manager and representatives from NJTA;</li> <li>b. Contractor's Account Relationship Manager shall attend the QBR meeting in person;</li> <li>c. other Contractor representatives may attend the QBR meeting by conference call, and</li> <li>d. Contractor's Account Relationship Manager is responsible for ensuring the appropriate parties/resources from Contractor are made available for the QBR meeting as needed for various issues, whether by phone or in-person.</li> </ul>

#### 2.4.3 Participation in CSC Services Contractor-led Meetings

17	Participate in regular meetings with the CSC Services Contractor to ensure the Merchant Services Project Implementation Schedule is aligned with the New Jersey E-ZPass System Project Implementation Schedule, including but not limited to testing and Go-Live activities.
18	Attend various workshops, comment reviews and design meetings as requested by the CSC Services Contractor.
19	Facilitate as-needed coordination meetings related to the design, installation and testing of the interface between the Merchant Services System and the New Jersey E-ZPass System.

#### 2.4.4 NJTA Site Visit

20	Facilitate NJTA CIO visit to data center prior to Go-Live, as well as annually during the Contract Term.
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## 2.5 Documentation

### 2.5.1 Merchant Service System and Report Design Documentation

21	Provide the appropriate technical documents, record formats, and definitions for the New Jersey E-ZPass System's interface with Merchant Services System, whenever applicable.
22	Submit the Merchant Service System documentation that identifies and documents the functionality provided to support the New Jersey E-ZPass Program.
23	Document changes and Configurations required to meet the Requirements.
24	Document reconciliation reports used to reconcile CSC Services Contractor files, transactions, authorizations, and settlements.

### 2.5.2 Disaster Recovery Plan/Operations Business Continuity Plan

25	Submit a combined Disaster Recovery Plan/Operations Business Continuity Plan that ensures business continuity for the Merchant Services supporting the New Jersey E-ZPass Program.
26	<p>The Disaster Recovery Plan/Operations Business Continuity Plan shall provide for full seamless continuation of Payment Processing in the event of any disaster affecting either the primary or secondary location and the resumption of the Merchant Services System and operational processes after unplanned disruptions, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. roles and responsibilities of all parties involved in the implementation of the Disaster Recovery Plan/Operations Business Continuity Plan;</li> <li>b. how the Toll Agencies and CSC Services Contractor will be notified in the event of a disaster;</li> <li>c. how the New Jersey E-ZPass Program data is secured in the event of a disaster;</li> <li>d. how payment processing will be seamlessly perpetuated in the event of a disaster;</li> <li>e. how often New Jersey E-ZPass Program data is backed up and a data backup schedule;</li> <li>f. description of scenarios that would require system restoration from backup and processes/resources required to minimize the time required for such restoration;</li> <li>g. a schedule for exercising the Disaster Recovery Plan/Operations Business Continuity Plan, and</li> <li>h. a description of the Toll Agencies' and CSC Services Contractor's participation in Disaster Recovery Testing.</li> </ul>
27	Provide an updated Disaster Recovery Plan/ Operations Business Continuity Plan annually to NJTA.
28	Provide a detailed annual report describing Disaster Recovery Test results and remedies.

### 2.5.3 System Security Plan

29	<p>Provide, at Go-Live and annually thereafter, a System Security Plan, which shall comprehensively cover (detailed design or procedures may be referenced in other documents) the Contractor's general approach to meeting all Requirements in Section 5.11 Data Security of this Scope of Services and other relevant Requirements, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. key design aspects of Merchant Services System security;</li> <li>b. access control approach for every type of Merchant Services System user;</li> <li>c. approach to protection of Confidential Personal Information;</li> <li>d. approach to safeguarding data in the Merchant Services System;</li> <li>e. Merchant Services System design approach to monitor, prevent and combat unauthorized access and other Merchant Services System vulnerabilities and potential security breaches;</li> <li>f. Merchant Services System administration approach to continuously monitor, prevent, and combat unauthorized access and other Merchant Services System vulnerabilities and potential security breaches;</li> <li>g. third-party services to monitor and scan the Merchant Services System for vulnerabilities in compliance with PII Requirements and the Contractor's best practices;</li> <li>h. processes for escalation, mitigation, and corrective action, including notification to NJTA and customers, and</li> <li>i. a summary of the Contractor's Cybersecurity Incident Response Plan (CISRP).</li> </ul>
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### 2.6 Staffing

30	Provide all management, project controls, supervisory and operations staff, including qualified management, professional, technical, and administrative personnel, to provide the Merchant Services and in a manner that meets all Performance Requirements.
31	Provide the resources, organizational structure and staffing required to meet these Requirements for each phase of the Project.
32	Key Personnel for this Project shall include, at a minimum, those defined in Table 2-1.

33	The Account Relationship Manager shall be available for Project questions and/or issues between 8:00 A.M. and 5:00 P.M. (ET), Monday through Friday via work and mobile telephone numbers, and via email, and is the primary point of contact for NJTA's program manager and the CSC Services Contractor's designated primary point of contact. The Account Relationship Manager shall identify to NJTA and the CSC Services Contractor a backup for the Account Relationship Manager, who is familiar with the New Jersey E-ZPass Program and has the same availability, that NJTA or CSC Services Contractor may contact whenever the Account Relationship Manager is not available.
34	All Key Personnel shall be subject to the Secure Workers Access Consortium (SWAC) <a href="http://secureworker.com/default.asp">http://secureworker.com/default.asp</a> screening and membership process. All Key Personnel shall complete the SWAC screening process and receive the appropriate tier of membership ID.

Table 2-1: Key Personnel

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Account Relationship Manager</b> – serves as a point of contact for any escalated Project issues and manages the overall Merchant Services relationship with NJTA and the CSC Services Contractor during the Implementation and Operations and Maintenance Phases. Also required to meet with NJTA executives upon request.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Client relationship management responsibility for at least one (1) project processing \$25 million or more in value each month</li> <li>• Experience with Merchant Services System design and implementation of a similar scope to the systems provided on this Project</li> </ul>	X		At Monthly Meeting, QBR Meetings and as requested by NJTA	As needed
		X	At Monthly Meeting, QBR Meetings and as requested by NJTA	As needed

KEY PERSONNEL	Responsibilities		Dedication	
	Implementation Phase	Operations and Maintenance Phase	Time On-site	Dedication %
<p><b>Software/Technology Manager</b> – responsible for management of overall Merchant Services System design, Software, integration, security (including PCI, PII and other Confidential Personal Information), network and Merchant Services System implementation. During the Operations and Maintenance Phase, the Software/Technology Manager will manage on-going resolution of Software bugs and development of improvements and new functionality</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Experience with technical management of a Software development project of a similar scope to this Project</li> <li>• Five (5) years' experience with system design and implementation</li> <li>• Five (5) years' experience with systems security for systems which include credit card processing</li> <li>• Direct project experience using the proposed solution</li> <li>• Experience with Merchant Services System design and implementation of a similar scope to the systems provided on this Project</li> </ul>	X		For all design meetings, workshops, demonstrations, and testing	As needed
		X	For all Merchant Services System functionality, design workshops and testing.	As needed
<p><b>Business Analyst</b> – responsible for detection of compliance issues and investigation of fraudulent activities, analysis of settlement variances, and supporting the CSC Services Contractor with inquiries and payment disputes.</p> <p>Should meet or exceed the following criteria:</p> <ul style="list-style-type: none"> <li>• Experience with business analysis on a project of a similar scope to this Project</li> <li>• Five (5) years' experience with Merchant Services.</li> </ul>	X		For all Merchant Services System functionality, design workshops and testing.	100%
		X		50%

### 3 TESTING REQUIREMENTS

#### 3.1 Testing

The Requirements described in this section detail the labor, materials, facility, environments, and support services necessary to test the Merchant Services System, its integration to the New Jersey E-ZPass System and other external entities, and production readiness. The Contractor shall perform all formal tests with NJTA as a witness and subject to NJTA's Approval. The Contractor shall provide NJTA access and the ability to test the Merchant Services System and all defects identified, and NJTA comments provided shall be documented similar to formal testing. Approval of any aspect of testing shall not relieve the Contractor's responsibility in meeting the full Requirements or fixing defects.

35	Testing shall be conducted in various phases and stages as detailed below to validate the Contractor's provision of all Merchant Services as required by this Scope of Services.
36	Coordinate with CSC Services Contractor to integrate the non-production environments for the purposes of testing and training. The integrated non-production environments shall be maintained for the Contract Term.
37	The test environment and system that is independent of the production system shall be used to test Software and payment gateways for Tokenization, authorization, settlements and changes including regression testing and testing required by the CSC Services Contractor.
38	The test environment shall support functionality that substantially mirrors the production environment, including all Software, external connections.
39	The test environment shall be capable of interfacing with the New Jersey E-ZPass System's test environment for as-needed usage throughout all Project phases.
40	Categorize anomalies and defects identified during testing by severity and priority and track as a Punch-list.
41	Utilize a defect tracking system, or mechanism, to document and track all defects identified as part of Merchant Services System testing and any subsequent actions taken to correct those defects. Reporting on the status of the related defects shall be made available to NJTA. The Toll Agencies shall have the ability to record a problems or request through a web interface and generate reports from the system. This same defect tracking system is to be used during the Operations and Maintenance Phase.
42	During all test phases, when testing a Software or Configuration change, perform comprehensive regression testing to ensure the changes have not introduced new faults and to assure the change does not have unexpected impact on other parts of the Merchant Services System or the New Jersey E-ZPass System.

43	Create a Software Release at the fifty (50) percent development cycle and conduct a formal test witnessed by the Toll Agencies. Test cases shall be submitted to NJTA for review and Approval. Upon the completion of the test, submit test results for NJTA review and Approval. Software Release testing shall continue until NJTA deems fifty (50) percent development has been completed and tested successfully.
44	<p>Conduct formal testing in accordance with the CSC Services Contractor's testing schedule, which shall include, in the following order:</p> <ul style="list-style-type: none"> <li>a. Token Migration Test;</li> <li>b. System Integration and Interface Test (SIIT);</li> <li>c. User Acceptance Test (UAT);</li> <li>d. Production Readiness Test (PRT), and</li> <li>e. Acceptance Test.</li> </ul>
45	The Token Migration Test shall include testing the migration of existing Tokens and primary account number (PAN) data to the Contractor's repository, testing retrieval of transactions that occurred using the old Token, and performing actions on transactions that occurred prior to Token migration, for example a refund on a transaction created with the old Token.
46	The SIIT shall include end-to-end integration testing of all Merchant Services and reporting including the interface to the New Jersey E-ZPass System using test scripts/test cases. The SIIT shall validate all interfaces, security, and Merchant Services System performance.
47	The UAT shall verify all elements of the Contractor's conformance with the New Jersey E-ZPass Business Rules, and technical, functional, and operational Requirements, including disaster recovery.
48	The PRT shall verify that the Contractor is ready for Go-Live, and the Merchant Services System can be transitioned to revenue operations.
49	The Acceptance Test shall verify that the Merchant Services System operates in a production environment processing transactions, reconciling, and settling in compliance with the Requirements for a period of sixty (60) days.
50	Provide test credit cards, debit cards, tester accounts for Google Pay/Apple Pay/PayPal, and ACH test account information to be used for end-to-end testing throughout the Contract Term.
51	<p>Credit and debit cards used for testing shall:</p> <ul style="list-style-type: none"> <li>a. include Visa, MasterCard, American Express, Discover, and gift test cards;</li> <li>b. include cards with the ability to test online (using personal identification number (PIN)) debit card transactions;</li> </ul>

	<ul style="list-style-type: none"> <li>c. have the ability to generate all type of transactions (e.g., one-time payments, recurring payments, refunds, reversals, voids, and charge backs);</li> <li>d. have the ability to generate all type of transaction responses (e.g., validate, verify authorize, settle, and declined, with reason codes as applicable) and payments shall go through to settlement;</li> <li>e. have the ability to be used for card present and card-not-present transactions;</li> <li>f. be capable of Europay, MasterCard, and Visa (EMV) chip, contactless near-field communication (NFC) transactions;</li> <li>g. have a magnetic strip for testing magnetic stripe readers, and</li> <li>h. include sufficient information to enable the ability to test all authorization and settlement features.</li> </ul>
52	Provide access to an online system, to validate card balances and limits, and monthly card statements for use in reconciling the test cards.
53	Work with the CSC Services Contractor to ensure the test cases for each test include validation of all Merchant Services provided by the Contractor.
54	Test scenarios shall include, but are not limited to, end-to-end testing demonstrating real-time transactions flowing through Tokenization, authorization, chargeback, refunds, settlement, bank deposit and reporting for all types of accepted credit and debit cards as well as ACH transactions.
55	Support volume and stress testing in accordance with the CSC Services Contractor's stress testing.
56	Prior to Go-Live, submit certification of successful completion of DR/Business Continuity test. If deficiencies were revealed in the testing, track as Punch-list items and provide to NJTA the timeline and plan to correct deficiencies and submit certification. NJTA reserves the right to observe the DR/Business Continuity testing, at NJTA's expense.
57	Prior to Go-Live, and every year thereafter, submit any certifications that are required by the Card Organizations, Debit Networks, RTP Networks, National Automated Clearing House Association (NACHA), Payment Card Industry Data Security Standards (PCI DSS) and all licenses, registrations, and certifications required by federal, state and local government, that are required for Contractor to provide its Services to the Toll Agencies.
58	Upon completion of the PRT, migrate Tokens and original PAN data from the existing Tokenization Services provider.
59	If testing reveals a possible interruption of service or loss of data, changes shall be made within twenty-four (24) hours of identified deficiencies.

### 3.2 Merchant Services System Acceptance

After a minimum of two (2) complete monthly audit cycles, the closure of all Punch-list items, and completion and submission of all required documents as set forth in the Section 2.5 Documentation of this Scope of Services and in the Agreement, the Contractor shall be given the Acceptance for the Merchant Services System.

## 4 TRAINING

60	Train Contractor staff to provide Merchant Services in accordance with this Scope of Services and any future modifications throughout the Contract Term.
61	<p>Provide training materials, initial on-site training and, as needed and appropriate, training via online, webinar and other means for the Toll Agencies' and CSC Services Contractor's staff forty-five (45) Calendar Days prior to Go-Live. Training shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>a. Tokenization</li> <li>b. pre-authorization;</li> <li>c. payment settlement;</li> <li>d. recurring billing;</li> <li>e. chargeback disputes;</li> <li>f. Reporting;</li> <li>g. Reconciliation;</li> <li>h. administration, and</li> <li>i. and any applicable regulations of which NJTA should be aware.</li> </ul>
62	Provide training as requested by NJTA, up to a maximum of six (6) times per year, to keep NJTA and CSC Services Contractor staff informed and up-to-date on current credit/debit Card Organization regulations, PCI DSS, and state and federal e-Payment regulations. This training may be accomplished via online media and may be scheduled by the Contractor or made available on demand.
63	All training materials, videos and manuals used for training NJTA and CSC Services Contractor shall reside online and be accessible to NJTA.
64	Retain individual training records in accordance with State and agency specific records retention requirements.

## 5 FUNCTIONAL REQUIREMENTS

65	Provide all Services and activities necessary for the Contractor to provide accurate and timely transaction processing for the New Jersey E-ZPass Program.
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## 5.1 Compliance to Standards

66	Possess and maintain the certifications and any other comparable requirements that are required by the Card Organizations, Debit Networks, RTP Networks, National Automated Clearing House Association (NACHA), Payment Card Industry Data Security Standards (PCI DSS) and, as applicable, any other participating components of the payment processing industry, and all licenses, registrations, and certifications required by federal, state and local government, that are required for Contractor to provide its Services to the Toll Agencies.
67	Make applicable compliance reports and certifications available to Toll Agency Authorized Users, including PCI Certification and SOC 2 reports for Services provided.
68	No more than three (3) months after the Go-Live Date, provide a complete Report on Compliance (ROC), including details about the System environment and the assessment methodology, as well as documentation regarding the Merchant Services System and operations compliance status for each PCI DSS requirement. The ROC shall outline a clear plan and schedule (in writing) to achieve full PCI compliance no more than six (6) months after Go-Live.
69	Remedy any identified vulnerabilities and provide a ROC and an updated AOC prior to System Acceptance.
70	Maintain any e-Payment mandated certifications that may become relevant to the New Jersey E-ZPass Program's transaction processing in the future, including certification resulting from standards promulgated by the Payment Card Industry Security Council.

## 5.2 Core Platform

71	Provide a redundant Core Platform with primary and secondary locations (at a minimum), as part of the Merchant Services System, both located within the continental United States, operating in a hot-hot configuration.
72	Provide 24/7/365 availability to process e-Payments, without interruption and create Alerts when error and failures occur or are detected.
73	The primary and secondary locations shall be in different cloud regions (if cloud-based) or in separate time zones with a minimum of 500 miles geographic separation (if hosted).
74	Provide a single layer, POP that integrates with the New Jersey E-ZPass System and manages the entire payment process. The POP shall be designed to allow for flexibility in future payment service providers and payment gateways.
75	Provide the ability to accept payments from the CSC Services Contractor through the following e-Payment channels: <ul style="list-style-type: none"> <li>a. New Jersey E-ZPass System-initiated real-time single transaction;</li> <li>b. New Jersey E-ZPass System-initiated batch file transfer;</li> <li>c. Point of Sale terminal;</li> </ul>

	<p>d. automated Interactive Voice Response (IVR) phone prompts;</p> <p>e. Self-Service Website, and</p> <p>f. Mobile Application.</p>
76	Accept and process transaction data from the New Jersey E-ZPass System, including but not limited to: <ul style="list-style-type: none"> <li>a. credit/debit card validation;</li> <li>b. bank account verification;</li> <li>c. payments;</li> <li>d. refunds;</li> <li>e. returns, chargebacks;</li> <li>f. reversals, voids, cancellations, and</li> <li>g. credits.</li> </ul>
77	Support transactions submitted from Point of Sale terminals provided by the CSC Services Contractor, that include both card-present (swipe, insert, or tap) and card-not-present (including data key entry) transactions.
78	Authorize, verify and validate credit card, debits cards and bank account information in real-time 24/7/365.
79	Accept, authorize, process, and settle all Visa, MasterCard, American Express, and Discover brand credit cards, both PIN-based and PIN-less debit cards, gift cards.
80	Accept, authorize, verify, process, and settle all types of ACH transactions.
81	Accept and settle customer RTP from participating U.S. banks.
82	Continuously monitor the latency (i.e., round-trip time starting with the receipt of a transaction request and ending with output of the result from the Merchant Services System) for each transaction and create Alerts when average latency is outside acceptable threshold of less than or equal to five (5) seconds (Configurable). The average will be calculated by dividing, for each Processing Day, the total time in seconds of all New Jersey E-ZPass Program transactions by the number of New Jersey E-ZPass transactions submitted for processing.
83	Implement logic to assist in preventing duplicate, erroneous, or invalid payments from being processed and create Alerts for investigation when such transactions are detected.
84	Authorize, process and settle, and clear all US dollar denominated transactions submitted by the New Jersey E-ZPass System that are initiated by the New Jersey E-ZPass System and cardholders.

### 5.3 Transaction Processing Management

85	Manage and Configure transaction processing, including routing of payments to find the best payment route to send electronic transactions.
86	<p>Manage and Configure transaction processing to ensure the lowest rate for which the transaction is qualified by abiding by the following:</p> <ul style="list-style-type: none"> <li>a. Design and manage electronic payment processing to maximize authorized transactions and settled funds, including working with NJTA, CSC Services Contractor, and other entities involved with transaction processing, to define and implement validation rules, authorization data requirements, formats, communication protocols and related processes, to provide coding and monitoring procedures that are sufficient to ensure that, for each rate applicable to an individual transaction, the New Jersey E-ZPass Program receives the best available rate, to assist with transaction declines from Card Issuers and banks, and provide such Services as are required to keep card accounts for recurring payments up-to-date for the Card Organizations that provide an account update service.</li> <li>b. Design and manage its Services so that each cost of transaction processing is the lowest lawful cost, including: (i) the qualification of a transaction to obtain the lowest possible credit or debit interchange applicable to such transaction; (ii) the application of network access and all other fees imposed by the Payment Networks to ensure application is valid; (iii) compliance with 15 U.S.C. 1630o-2 and 12 C.F.R 235 routing requirement for debit transactions to ensure compliance therewith; (iv) the timely notification to NJTA that the New Jersey E-ZPass Program's transactions have been downgraded by a Payment Network and timely investigating the downgrade and designing and implementing a solution; and (v) the timely notification to NJTA of a reduction in fees for which the New Jersey E-ZPass Program may be eligible.</li> </ul>
87	Program the Merchant Services System to ensure that a New Jersey E-ZPass debit card transaction is routed through the network that is least total cost to the E-ZPass Program.
88	Incur, on behalf of NJTA, and pass through the relevant interchange and other fees from the Card Organizations, banks, and other third parties (as necessary).

### 5.4 Payment Authorization and Fraud Prevention

89	<p>Provide, at a minimum, the authorization methods and error-checking listed below to assist with fraud prevention and guarantee payments.</p> <ul style="list-style-type: none"> <li>a. support Address Verification Service Provider and Card Verification Value (CVV) data in authorization requests and require such data from the New Jersey E-ZPass System;</li> </ul>
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	<p>b. reject match failures based on data provided by the e-Payment channel, including but not limited to:</p> <ul style="list-style-type: none"> <li>• CVV – rejecting charges without a CVV match;</li> <li>• Customer name on payment card – rejecting charges with a name mismatch, and</li> <li>• full address or zip code verification – rejecting charges with an address or zip code mismatch;</li> </ul> <p>c. on-screen field-level verification to ensure that credit/debit card numbers are not entered into any fields other than the designated ones;</p> <p>d. double key requirement for routing and bank account numbers;</p> <p>e. populated bank name based on routing number;</p> <p>f. ACH account verification using bank routing and account number to provide real-time account status;</p> <p>g. ACH account authentication to confirm identity/account owner;</p> <p>h. automatic detection and avoidance of duplicate authorizations, refunds, and settlements;</p> <p>i. refunds verified against original authorization (existence and amount);</p> <p>j. automatic detection of high-risk activity (multiple authorizations on the same day and high dollar amounts);</p> <p>k. same-day voids to reverse payments or correct payment amounts prior to settlement;</p> <p>l. validation of customer's payment method and payment details prior to processing payments;</p> <p>m. automated settlement notification (error checking and Alerts);</p> <p>n. real-time credit/debit card authorization, and</p> <p>o. authorization of credit/debit card transactions with the option to cancel individual transactions prior to an end-of-day file being processed for settlement; the end-of-day file must include any cancellations processed in order to remove authorization holds placed on associated credit/debit cards.</p>
90	Provide Early Warning Services, which provides real-time verification of the validity of bank account numbers for accounts held with participating banks.
91	Provide detailed information for all declined payments and support automated reprocessing of transactions based on the decline reasons and type of decline.
92	Provide capability to conduct additional real-time verification on transactions identified as high fraud risk, such as a 3-D Secure layer or multi-factor authentication.

## 5.5 Account Updater Services

The Contractor shall provide credit card account update services to support the maintenance of account information, specifically changes in, or expiration of, cardholder information.

93	Provide Account Updater Services to the New Jersey E-ZPass Program.
94	<p>The Account Updater Services shall include, but not be limited to:</p> <ul style="list-style-type: none"><li>a. updated credit/debit card expiration date;</li><li>b. updated name on the credit/debit card;</li><li>c. updated address on the credit/debit card, and</li><li>d. updated credit/debit card number.</li></ul>
95	Send updated credit and debit card information, including updated Tokens, to the New Jersey E-ZPass System via the method of transmission and formatted to the specifications that Contractor provides to the CSC Services Contractor, or which are developed during design.

## 5.6 Payment Gateway Services

NJTA is seeking a payment gateway that allows for flexibility in payment methods, that can easily be modified and scaled through an open API. The vendor should be prepared to design a gateway that meets current needs and also provide a means for integration of future payment methods in the marketplace and industry.

96	Provide and manage a fully-hosted electronic gateway messenger system (“Payment Gateway Service”).
97	The Payment Gateway Service shall include secure Tokenization and e-Payment processing for all transactions submitted by the New Jersey E-ZPass System.

## 5.7 Tokenization Services

### 5.7.1 Migration of Tokens

98	Migrate Tokens from previous merchant services provider; ensure that actions performed using the old Token can be modified using the new Token, for example a refund can be processed using the new Token for a payment that occurred using the old Token.
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## 5.7.2 Tokenization Services

99	Provide and manage comprehensive Tokenization Services, mitigating the need for the New Jersey E-ZPass System to store credit card, debit card, and bank account numbers and to store only Tokens.
100	<p>The Tokenization Services shall include, but not be limited to, the following use cases:</p> <ul style="list-style-type: none"><li>a. securitization of card-present transactions for all payment channels;</li><li>b. securitization of card-not-present and recurring transactions for all payment channels;</li><li>c. securitization of bank account transactions for all payment channels, and</li><li>d. securitization of recurring ACH transactions.</li></ul>
101	<p>Issue Tokens that have a format-preserving value that enables, and shall not limit, necessary business processes, including but not limited to:</p> <ul style="list-style-type: none"><li>a. settlement;</li><li>b. chargeback disputes;</li><li>c. Customer service inquiries;</li><li>d. refunds;</li><li>e. Customer self-service (via Self-Service Website, Mobile Application, etc.);</li><li>f. fraud detection, and</li><li>g. reporting/analytics.</li></ul>
102	Provide the capability to integrate seamlessly with the New Jersey E-ZPass System's internal and Customer-facing applications/self-service channels so that card and bank account numbers are entered into the Merchant Services System rather than the New Jersey E-ZPass System, permitting, for example, the Customer Contact Center System to immediately and securely perform "PAN to Token matching" to retrieve applicable Token value when an agent enters a PAN without the agent being aware that the number was entered into the Merchant Services System instead of the New Jersey E-ZPass System.
103	Provide the creation, management, and processing of Tokens and the secure storage of all card and bank account information with mapping to Tokens assigned to the New Jersey E-ZPass System in a secure location separate from the New Jersey E-ZPass System, and the location and applicable Token storage security standards shall be identified to NJTA.
104	The Tokenization Service (including Token creation, Token security, Token access control and key management) shall meet applicable industry standards, and best practices and guidelines for securing sensitive payment data using Tokenization and encryption, including any updates to such standards throughout the Contract Term. This includes, but is not limited to:

	<ul style="list-style-type: none"> <li>a. the standards and guidelines of the PCI Security Standards Council,</li> <li>b. EMVCo, and</li> <li>c. any standards issued by recognized standard-setting entities such as the American National Standards Institute Accredited Standards Committee X9, NACHA, and the National Institute of Standards and Technology (NIST).</li> </ul>
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## 5.8 Merchant and Terminal Identification Numbers

105	Provide for the timely set up, maintenance, and closure of Merchant Identification Numbers (“Merchant IDs”), Terminal Identification Numbers (“Terminal IDs”), and any other required account structure upon NJTA’s request.
106	Maintain and process an unlimited number of Merchant IDs and Terminal IDs for the Toll Agencies, for all sales channels combined.

## 5.9 Retrievals and Chargeback Management

NJTA seeks a vendor that will partner in the chargeback management process, providing fraud prevention methods to limit chargebacks that result from fraud. In addition, the vendor should provide the appropriate notifications and a means for NJTA to provide a timely response to chargeback inquiries and dispute, if applicable.

107	Adhere to all chargeback rules and regulations published by the credit/debit Card Organizations accepted by the New Jersey E-ZPass Program for e-Payments.
108	Provide a solution that will accept electronic signatures and support files for chargeback, retrieval and reversal inquiry, merchant response, and attaching of documentation.
109	Provide an electronic chargeback system for receipt of requested chargeback information from the New Jersey E-ZPass System via online tools.
110	Forward chargeback information received from the New Jersey E-ZPass System immediately to the applicable Payment Network and/or cardholder bank as necessary.
111	<p>Immediately notify NJTA and the CSC Services Contractor, by e-mail and/or other electronic means, about any and all retrievals and chargebacks that have been initiated by a cardholder’s issuing bank. Notification shall include, but not be limited to, the following information:</p> <ul style="list-style-type: none"> <li>a. original transaction date;</li> <li>b. merchant name;</li> <li>c. Merchant ID;</li> <li>d. transaction number;</li> </ul>

	<ul style="list-style-type: none"> <li>e. cardholder account number and/or Token (as applicable);</li> <li>f. amount (in US dollars);</li> <li>g. reason code for the chargeback;</li> <li>h. letters or other documents from the cardholder, and</li> <li>i. other available information.</li> </ul>
112	Provide the capability for a response and dispute process for chargebacks that follows card issuer requirements.
113	Provide an electronic system for handling ACH disputes.
114	Maintain a record of all related communications, inquiries, and responses for each chargeback issued.

## 5.10 Payment Settlement

115	Ensure settlement for e-Payment transactions will provide for next Business Day funding.
116	Complete next Business Day deposits after settlement, for each Merchant ID, to NJTA-specified bank accounts.
117	Debit or credit chargebacks and adjustments from NJTA-specified bank account to which the original transaction settled.
118	Debit ACH returns from NJTA-specified bank accounts to which the original transaction settled.
119	For each Merchant ID, reconcile daily gross settlement, by credit/debit Card Organization or ACH bank, transferred to the bank accounts designated by NJTA for the New Jersey E-ZPass Program.

## 5.11 Data Security

Contractor shall comply with the latest version of the New Jersey Statewide Information Security Manual at the time of Go-Live. In any circumstance of conflict between requirements, standards or statutes, the Contractor shall adhere to the most stringent requirement.

120	The Merchant Service System shall comply with the most current version of all state and federal security standards and guidelines including all comprehensive state and federal data privacy acts such as the California Consumer Privacy Act and Connecticut State Data Privacy Law, where applicable. Compliance to security and privacy requirements also applies to similar laws enacted in Mexico and Canada.
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121	<p>The Contractor's approach and compliance to the Core Platform and user security shall include, but not be limited to:</p>
	<p>a. cloud infrastructure and/or hosting data centers meet the Federal Risk and Authorization Management Program (FedRAMP) standards;</p>
	<p>b. compliance with the New Jersey Statewide Information Security Manual and all updates to this manual throughout the life of the Agreement. The manual is provided as Attachment 5: The most recent copy of which can be found at <a href="https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf">https://www.nj.gov/it/docs/ps/NJ_Statewide_Information_Security_Manual.pdf</a>. Initially, the contractor will develop the System to comply with the Attachment 5 New Jersey Statewide Information Security Manual. NJTA plans to develop NJTA-specific security policies, which will supersede the use of the New Jersey Statewide Information Security Manual upon completion New Jersey New Jersey;</p>
	<p>c. compliance with PCI DSS;</p>
	<p>d. compliance with the Federal Information Processing Standards (FIPS), including FIPS 199 (Standards for Security Categorization of Federal Information and Information Systems) and FIPS 200 (Minimum Security Requirements for Federal Information and Information Systems);</p>
	<p>e. protecting the confidentiality of Personally Identifiable Information (PII) in accordance with the recommendations in publication 800-122 from the NIST, and</p>
	<p>f. conformance to applicable best practices for information security management as described by the International Organization for Standardization/International Electromechanical Commission 27000-series (ISO/IEC 27000) standards.</p>
122	<p>Certify annually that the Core Platform is in compliance with the security standards required in the current version of the New Jersey Statewide Information Security Manual (or superseded policy).</p>
123	<p>If the Core Platform employs cloud computing, ensure information assets are secure and that security and privacy are maintained using de facto best practices aligned with FIPS as well as NIST Publications. Those best practices include, but not be limited to:</p>
	<p>a. NIST 800-144: Guidelines on Security and Privacy in Public Cloud Computing;</p>
	<p>b. NIST Special Publication 800-146: Cloud Computing Synopsis and Recommendations, and</p>
	<p>c. Cloud Security Alliance: Cloud Controls Matrix Version 3.0 (CCMv3).</p>
124	<p>Make the necessary Software changes required to ensure compatibility with the evolving technologies and the latest Software vendor and best practices for security and protection of PII.</p>

125	Design the Merchant Services System to anticipate that, during the Implementation and Operations Maintenance Phases, the Merchant Services System will become subject to more restrictive digital privacy laws and regulations (for example, similar to European Union General Data Protection Regulation and the California Consumer Privacy Act). During design within the Implementation Phase, the Contractor shall provide documentation (within applicable deliverables) and demonstrate (during testing) the System's compliance with all such laws and regulations in effect including similar laws and regulations in Mexico and Canada, and preparedness to anticipate more restrictive privacy Requirements including the capability to purge specific but not all Account information, specific file types related to Customers based on Account-specific triggering events, and transactional field-level data while retaining other information within the data record.
126	Restrict access to Confidential Personal Information by location. Individuals and entities outside of the U.S. shall only have access to the development environments with no Confidential Personal Information or Toll Agency data.
127	Prevent any Authorized User, system, or database administrator from viewing encrypted payment-related information in unencrypted form, while providing the capability for Authorized Users with a particular user role, Approved by NJTA, to view encrypted information in unencrypted form. An audit trail will be created each time unencrypted information is viewed.
128	Ensure no PII, PCI, or bank account information is present in any non-production environments unless specifically requested and Approved by NJTA.
129	Provide comprehensive user credential controls that are compliant with PCI standards, including but not limited to: <ol style="list-style-type: none"><li>a. prevent the creation of 'generic' Authorized User accounts – all Authorized User accounts shall be associated to a specific person. For example, use the unique employee ID as a required field for each Authorized User account. Duplicate IDs would be rejected, and</li><li>b. prevent an Authorized User (role-based) from logging in at two different machines at the same time, while allowing a single Authorized User on a single machine to have multiple sessions open at the same time.</li></ol>
130	Provide the capability for multi-factor authentication for all System access including Customers, Third-party Service Providers and Authorized Users. Multi-factor authentication to include secret key via email, SMS verification (user selectable), push or call.
131	Provide the capability to manage registration for multi-factor authentication. Deliver a registration code or notice of proofing through an out-of-band channel (e.g., delivery to business email address or business mobile telephone number on file) to ensure that the individual associated with an address of record is the same individual that participated in the registration.

132	Obtain and maintain compliance with all applicable regulatory and contractual responsibilities with regard to cybersecurity and privacy in accordance with the Requirements, based on the data processed and function of the Core Platform.
133	Comply with NIST 800-53 for Security and Privacy Controls for Information Systems and Organizations and at a minimum, comply with the security control baselines for a “Moderate-Impact” information system.
134	Comply with and follow the NIST Risk Management Framework (RMF).
135	Provide strong end-to-end encryption for all sensitive information, including Confidential Personal Information stored within databases (at rest) and being transmitted (in-motion).
136	Ensure that Merchant Services System processes are not co-mingled with other of Contractor’s Customers and/or merchants to enable processes for forensics and incident response.
137	Implement authentication, authorization, data validation, and encryption for all application program interfaces (APIs) and transport communications.
138	<p>Ensure full and ongoing compliance with the New Jersey Statewide Information Security Manual, latest version that will be available upon Go-Live. Areas of required compliance detailed in this manual include, but are not limited to:</p> <ul style="list-style-type: none"><li>a. physical and environmental security;</li><li>b. access control;</li><li>c. configuration management;</li><li>d. identity and authentication;</li><li>e. planning;</li><li>f. personally identifiable information processing and transparency;</li><li>g. media protection;</li><li>h. contingency planning;</li><li>i. information security and privacy program;</li><li>j. organizational security;</li><li>k. personnel security;</li><li>l. security and awareness training;</li><li>m. risk assessment;</li><li>n. system and information integrity;</li><li>o. system and communications protection;</li></ul>

	<ul style="list-style-type: none"> <li>p. system and services acquisition;</li> <li>q. supply chain risk management;</li> <li>r. assessment, authorization, and monitoring;</li> <li>s. audit and accountability;</li> <li>t. maintenance, and</li> <li>u. incident response.</li> </ul>
139	Provide interface to NJTA Security Information and Event Management (SIEM) to transmit all security related incidents and Alerts as Approved.
140	Limit network connection for remote access sessions to no more than eight (8) consecutive hours without requiring the Authorized User to re-authenticate.
141	Prohibit remote activation of collaborative computing devices without providing explicit indication of use to Authorized Users physically present at the devices.
142	Terminate network connection after a 30-minute period of inactivity, and require Authorized Users to re-authenticate to resume or establish a new session.

## 5.12 Data Management

NJTA is a public agency and is, therefore, subject to the law governing the retention and disposition of information considered as public record. The Contractor shall maintain compliance with data retention standards as they evolve over the Contract Term.

The Requirements for archiving and purging include Requirements for automating these activities in a way that maintains compliance with the data retention standards and all applicable state and federal laws, while providing NJTA a method to Approve the disposition of records before they are deleted.

143	Comply with all applicable federal and State of New Jersey laws pertaining to the retention period for financial information. At a minimum, the Contractor shall maintain the Toll Agencies' transaction processing data records, whether electronic or hard copy, for at least seven (7) years from the expiration date or termination date, as the case may be, of the Agreement. Initially, the Contractor will develop the System to comply with the Appendix E State of New Jersey General Records Schedule. NJTA plans to develop NJTA-specific retention policies, which will supersede the use of the State of New Jersey General Records Schedule upon completion. Said records shall be maintained in accordance with State of New Jersey regulations and the Toll Agencies' policies, including the Attachment 5 New Jersey Statewide Information Security Manual.
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144	Maintain all records, including transaction and billing records, pertaining to the delivery of Merchant Services under the Agreement in auditable form that allows the Toll Agencies to verify that billed, net settled and/or any credit or debit adjustment amounts are consistent with the transactions processed and Contractor's pricing, including the Payment Network and Card Issuer pass-through fees, occurring as part of Contractor's delivery of Merchant Services in accordance with the provisions of the Agreement.
145	Provide access to view processed transactions during the Contract Term.
146	Provide Authorized Users, including the Toll Agencies and CSC Services Contractor, the ability to track an individual transaction from authorization to settlement.
147	Provide access to the Toll Agencies and CSC Services Contractor to view all historical information regarding sales, transactions, settlements, refunds, chargebacks, adjustments, billing and fees generated during the Contract Term.
148	<p>Provide online portal access to Authorized Users, as Approved by NJTA, which includes, but is not limited to, the most recent twenty-four (24) months of data detailing, at a minimum:</p> <ul style="list-style-type: none"> <li>a. transaction type;</li> <li>b. transaction reference number;</li> <li>c. authorization number for transaction;</li> <li>d. authorization reject reason (if applicable);</li> <li>e. dollar amount of transaction with any associated identified code;</li> <li>f. date and time of transaction;</li> <li>g. date of settlement;</li> <li>h. daily subtotal by transaction type;</li> <li>i. authorization number for transaction;</li> <li>j. Token, and</li> <li>k. access to the full Customer credit card or bank account number to Authorized Users, but only in exception situations where NJTA requests access to view the full number and has a valid business reason.</li> </ul>
149	Maintain an audit log of all online portal access, and a secondary audit log of all online portal access for which access to full Customer credit card or bank account number was granted to Authorized Users.
150	<p>Maintain an audit log when any original transaction data fields are modified and include in the log the following data, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. the name of the person performing the change;</li> <li>b. date, time (prior and updated data field values);</li> </ul>

	<ul style="list-style-type: none"> <li>c. description of the change performed;</li> <li>d. reason for the change, and</li> <li>e. the name of the person who requested the change.</li> </ul>
151	<p>Preserve and make available to Authorized Users, including the Toll Agencies and CSC Services Contractor, the following, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. data files;</li> <li>b. records of Configuration settings;</li> <li>c. automated problem tickets;</li> <li>d. audit logs;</li> <li>e. merchant notifications, and</li> <li>f. internal notifications.</li> </ul>

## 5.13 Logging and Audit Mechanisms

152	Ensure that the Merchant Services System includes systemwide logging capabilities that comply with data retention policies. All Authorized User access shall be logged.
153	Provide logging of all access and changes to Authorized User accounts and customer Accounts.
154	<p>Provide System audit reports, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. reports of logged activity by Authorized User;</li> <li>b. reports of logged activity by activity type, and</li> <li>c. reports of logged activity by Authorized User accounts.</li> </ul>

## 5.14 Interfaces

### 5.14.1 New Jersey E-ZPass System Interface

The CSC Services Contractor is responsible for establishing the interface between the New Jersey E-ZPass System and the Merchant Services System (primary and secondary). If a standard interface control document (ICD) does not exist defining the data transmission requirements, either the Contractor's ICD will be used (if available) or the CSC Services Contractor is responsible for developing the ICD in coordination with the Contractor.

155	The Merchant Services System (primary and secondary) shall interface with the primary and secondary New Jersey E-ZPass System.
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156	Provide the appropriate technical documents, record formats, and definitions for the New Jersey E-ZPass System interface with Merchant Services System, whenever applicable.
157	The Merchant Services System shall send Configurable Alerts to the New Jersey E-ZPass System to facilitate monitoring of rejections, returns and chargebacks.
158	<p>The information the New Jersey E-ZPass System needs to receive from the Merchant Services Contractor includes, but is not limited to:</p> <ul style="list-style-type: none"><li>a. Tokens;</li><li>b. credit/debit card validation;</li><li>c. real-time verification of the validity of bank account numbers;</li><li>d. credit/debit card authorizations;</li><li>e. credit/debit card authorization responses;</li><li>f. Address Verification Service Provider responses;</li><li>g. credit/debit card updates (expiration date, card number, name, address);</li><li>h. credit/debit card detailed payments;</li><li>i. ACH detailed payments;</li><li>j. Real-Time Payments (RTP);</li><li>k. reference numbers that, for credit card transactions, tie back to Customers' credit card statements;</li><li>l. credit/debit card summaries;</li><li>m. ACH summaries;</li><li>n. credit/debit card refunds, reversals, voids, and adjustments;</li><li>o. ACH refunds, reversals, voids, and adjustments;</li><li>p. credit/debit card settlements;</li><li>q. RTP settlements;</li><li>r. ACH settlements, and</li><li>s. chargebacks.</li></ul>

#### 5.14.2 Other Interfaces

The Contractor will develop the Core Platform that includes a flexible POP that allows for future payment technologies, such as new digital wallets and/or interface with retailers, car manufacturers, or other third parties.

159	Provide all other interfaces, both internal and external, necessary to provide the Merchant Services required in this Scope of Services.
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## 5.15 Reports

The Contractor shall deliver robust reporting and query tools that assist the Toll Agencies and CSC Services Contractor with Customer service, and accounting and reconciling transactions. The reporting and query tools shall permit selection from a full array of delivered and ad-hoc reports that can be tailored to fit individual needs and are downloadable. The Contractor shall also provide monthly and quarterly reports summarizing processing statistics.

### 5.15.1 On-Demand Reporting

160	Provide the Toll Agencies and CSC Services Contractor with secure access to an online real-time Dashboard that includes information and reports that are timely, available on-demand and accurate to support: (i) NJTA in overall management of the electronic payment processing costs and performance of Contractor under the Agreement and (ii) the CSC Services Contractor in its day-to-day management of card acceptance and electronic payment activity, including Account reconciliation, settlement, chargeback dispute management, and Customer service.
161	Allow Authorized Users to promptly obtain reports through self-service that are general and customized by content, availability and method of delivery.
162	Provide scheduled or on-demand user-generated reports are available to view, retrieve or be e-mailed in real-time immediately upon processing.
163	Provide, via the online portal, data and report export capabilities to Microsoft Excel, PDF, and CSV file format (comma delimited), as well as support for big data exports (such as JSON and Parquet files) that can be interfaces to NJTA Tableau.
164	Through prompts, the online portal shall provide the ability to select any combination of data for viewing and/or download, including but not limited to: <ol style="list-style-type: none"><li>any combination of date range and times;</li><li>individual Card Organizations;</li><li>transaction type;</li><li>Card Issuer banking identification numbers;</li><li>EMV transactions;</li><li>contactless transactions;</li><li>source, and</li><li>terminal and/or location.</li></ol>

165	<p>Standard reports shall include Calendar Day transaction data, both financial and statistical, and calendar month reporting. These shall be available for each Merchant ID and Payment Network. The information in these reports shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>a. transaction validation/verification summary and detail, including reporting on high-risk transactions;</li> <li>b. transaction authorization summary and detail;</li> <li>c. transaction settlement summary and detail;</li> <li>d. chargeback summary and detail;</li> <li>e. deposit totals and batch totals;</li> <li>f. processing fee details, including interchange and other processing rates, and</li> <li>g. monthly invoice supporting documentation.</li> </ul>
166	Provide daily reports for viewing and download by the next Calendar Day after the authorization date.
167	Provide standard reports with sufficient details to reconcile the Toll Agencies bank statement activity to the Contractor's activity.
168	Provide standard reports with sufficient details to reconcile to the New Jersey E-ZPass System reports.
169	Provide the Toll Agencies with custom reports, as requested, and the first fifteen (15) reports in the first two years of the Agreement shall be at no additional charge.

## 6 OPERATIONS AND MAINTENANCE SERVICES

The Requirements described in this section detail the Contractor's responsibility for providing Maintenance, Administration, and Software Support Services, and operational support services for the Merchant Services. These Services will commence at Go-Live and extend through the Contract Term and such Services will be provided at no additional cost to the Toll Agencies beyond the amounts shown in the Price Proposal.

### 6.1 Maintenance Services

The Contractor shall provide Maintenance, Administration, and Software Support Services, including but not limited to:

- Merchant Services System hardware and network maintenance;
- Merchant Services System monitoring and administration;
- Merchant Services System adherence to security, PCI and PII best practices, standards and certifications, and

- Software Support Services including Continuous Improvements.

The Contractor shall stay current with new technologies and process for payment processing in order to improve Customer payment options and reduce cost for the New Jersey E-ZPass Program throughout the Contract Term.

170	Provide corrective maintenance and support, and periodic preventive maintenance and support that avoids the risk of any interruption to Contractor's ability to deliver its Merchant Services.
171	Support, operate and maintain, the Merchant Services System for any time period in which the Merchant Services System is installed, but in which Go-Live has not occurred.
172	Provide maintenance of the Merchant Services System including but not limited to all equipment, hardware, network, Software and systems provided.
173	Perform 24/7/365 monitoring and general trouble shooting of Merchant Services System operations to verify its functional processes are being executed correctly and according to the required processing timeframes, and the Merchant Services System are operating in accordance with Performance Requirements.
174	Maintain, and provide documentation to the Toll Agencies upon request, all licenses, registrations, and certifications required by federal, state and local government, as well as the payment industry, that are required for Contractor to provide its Services to the Toll Agencies.
175	Ensure the System and all Services by the Contractor complies with the New Jersey Statewide Information Security Manual and all updates to this manual throughout the life of the Agreement.
176	Complete, at Go-Live and a minimum of once every twelve (12) months, a comprehensive review of the Merchant Services System compliance to the security standards required in the New Jersey Statewide Information Security Manual. Submit a report to NJTA detailing the findings of this review within thirty (30) days of the Go-Live anniversary.
177	Restrict access to Confidential Personal Information to any individuals or entities outside of the U.S. Individuals and entities outside of the U.S. shall only have access to the development environments with no PII information.
178	Provide notice of access failures, attempted unauthorized access, access violations and attempted security breaches and incidents (Security Incidents) to NJTA in accordance with the Agreement, including Section 22 Security Incident. Take all actions to mitigate and address a Security Incident as identified in the Agreement.
179	Provide Software Support Services to include administrative, monitoring and corrective action to ensure Merchant Services System performance is in accordance with the Requirements. This shall include but is not limited to:  a. investigation and analysis of errors and exceptions and taking corrective action including correcting the problem and reprocessing the data;

	<ul style="list-style-type: none"> <li>b. updates to Merchant Services System to support upgrades to hardware or third-party software;</li> <li>c. updates to Merchant Services System to support upgrades and changes to interfaces;</li> <li>d. updates to Merchant Services System to support the addition of new Payment Methods and channels as Approved by NJTA;</li> <li>e. updates to Merchant Services System and application to support changes to ensure continued compliance to updated PCI and PII Requirements and other privacy regulations;</li> <li>f. updates to the Merchant Services System to support changes to ensure continued compliance to updated regulatory, Card Organizations, Debit Networks, Real-Time Payments network and National Automated Clearinghouse Association (“NACHA”) requirements and standards, and</li> <li>g. updates to Merchant Services System and applications to support legislative and statutory changes.</li> </ul>
180	Support changes in the Toll Agencies' acceptance of a Payment Network's credit and/or debit cards, including the Toll Agencies' decisions to accept or to no longer accept such cards. Any such change shall be implemented by Contractor only pursuant to NJTA's written authorization.
181	Continuously monitor the Merchant Services System for latency Alerts and performance degradation and take corrective action to restore the performance to meet latency threshold.
182	Perform any maintenance that will disrupt service within scheduled maintenance windows, which will be on a Sunday between the hours of 12:00 AM and 6:00 AM ET.
183	Provide an updated annual calendar of scheduled maintenance which may occur once per quarter. If the Contractor anticipates any downtime during any maintenance activity, it shall provide notice to NJTA and the CSC Services Contractor no less than fourteen (14) Calendar Days prior to conducting such maintenance. Failure to provide any notification prior to the performance of the maintenance activity shall result in the downtime being considered unapproved and subject to fee adjustments pertaining to availability.
184	In the event that the Contractor's scheduled maintenance windows change after execution of this Agreement, the Contractor shall submit a notice to NJTA and the CSC Services Contractor in writing no less than (14) Calendar Days prior to the change, and the proposed window shall not be during normal Business Hours.
185	All data center components supporting the Core Platform shall be concurrently maintainable (the capability to perform planned and unplanned emergency maintenance without disrupting the Core Platform functionality or availability).

### 6.1.1 System Configuration and Release Management

Recording, tracking, and managing the changes to the Merchant Services System after Go-Live resulting from improvements, defects, deficiencies, updates, and upgrades is critical and shall be part of the Contractor's quality assurance and change control process.

186	Utilize tools to document all categories of changes submitted from various sources.
187	Submit all changes for categorization, prioritization and Approval by NJTA and the CSC Services Contractor.
188	Submit the change tracking list to NJTA monthly and provide list as part of the monthly status meetings during the Operations and Maintenance Phase of the Project.
189	Perform security tests, including penetration tests and vulnerability scans, immediately after each Software Release is deployed.
190	Prepare a checklist and documentation prior to each Software Release and submit to NJTA for Approval. The checklist and the documentation shall be used to assure readiness for the Software Release.
191	Upon completion of the Software Release, conduct the necessary control runs to confirm accurate operations of the Merchant Services System.

### 6.1.2 Maintenance Priorities, Response and Repair Times

192	<p>Response and repair time is defined as the time from failure to repair/correction with the Merchant Services System being returned to normal operations. Response and repair times shall also be applied to all Software Support Services changes, improvements and change orders. Response and repair times are noted in the Merchant Services Performance Requirements according to the following priority levels:</p> <ul style="list-style-type: none"> <li>a. Priority 1: Defined as any change/improvement or defect, malfunction, or fault that will result in the loss of revenue; negative financial impact to customers; security breach; loss of audit data; loss of redundancy in any redundant Merchant Services System component; degradation in Merchant Services System performance; has potential legal impacts for the Toll Agencies; loss of functionality that impacts New Jersey E-ZPass System operations. Priority 1 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</li> <li>b. Priority 2: Defined as any change/improvement or defect, malfunction, or fault, for which no workaround is available that is acceptable to NJTA, that will degrade the Merchant Services System performance; result in inaccurate audit data; inaccurate reporting; inability to reconcile revenue; or result in loss of Merchant Services System functionality that impacts Authorized User access to data. Priority 2 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring.</li> </ul>
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	<p>c. Priority 3: Defined as any change/improvement or defect, malfunction, fault, action or event that has the potential to result in a malfunction or degrading of the Merchant Services System performance but has not impacted performance and is not anticipated to immediately impact performance; will not significantly affect operations or Authorized Users; and that has a workaround approved by NJTA. Priority 3 will also be assigned to any change/improvement that, once implemented, will prevent such actions from occurring and to preventive maintenance activities.</p> <p>d. Priority 4: Assigned to preventive maintenance activities and Alerts created when implementing Approved activities that impact Merchant Services System operations.</p>
193	Any downtime that is a part of scheduled and approved preventive maintenance, including scheduled new Software Releases not associated with a maintenance event shall not affect the Merchant Services Performance Requirements calculation. However, in this event the Contractor does not make the Merchant Services System available and/or fully restore Merchant Services operations within the approved schedule window, the resulting downtime shall be included in the Merchant Services Performance Requirements calculations.
194	Response and repair times for every Merchant Services System maintenance event shall be recorded and reported by the Contractor, and such reports shall be provided to NJTA.
195	No incident shall be closed by a technical staff before the equipment or software service has logged a recovery, for example if a service is degraded because of a loss of a redundant component, the incident cannot be closed until the redundant component has been replaced and service has returned to normal. Closure of all tickets shall be Approved by NJTA.

## 6.2 Operations Support Services

The Contractor shall provide Merchant Services operational support which include providing appropriate staffing, facilities and equipment as well as instituting appropriate processes, training, and quality assurance programs to ensure debt the Merchant Services meet the Requirements and are in compliance with applicable laws.

196	Provide operations team, led by an Account Relationship Manager, to assist with overall management of the Merchant Services, billing and fee related issues, and to provide support for all transaction related research.
197	Provide an escalation list (personnel) and timeframe or cause when an issue is to be escalated to the next person on the escalation list. For all individuals on the escalation list, Contractor shall provide an e-mail address, and work and mobile telephone numbers where available.
198	Provide a help/service desk for chargeback assistance and/or other processing and reconciliation matters at minimum Monday through Friday during normal business hours, for which NJTA and CSC Services Contractor shall be periodically notified of the days and hours of operation, and any changes thereto.

199	Provide the support needed to research fraudulent charges including notification to CSC Services Contractor and Toll Agencies, and propose preventive and corrective actions.
200	Provide support to reduce chargebacks resulting from cardholder claims of unrecognized transactions on recurring billing accounts, such as through communications with Card Issuers to increase Card Issuers' understanding and support for the New Jersey E-ZPass Program transaction environment, and through advice to the Toll Agencies on best practices for terms and conditions for a Customer recurring account program.
201	Provide toll-free telecommunications access for the New Jersey E-ZPass Program for submission of authorization requests, key exchanges, batch inquiry and batch releases for settlement of authorized transactions.
202	Assist NJTA and the CSC Services Contractor with analyzing the impact of changes in any Card Organization, Debit Network, RTP Network, or NACHA rules, or alleged violation of any rules; and with actions the Toll Agencies, with or without Contractor's participation, decide to take in response to the changes or alleged violations, including advocacy with the applicable Payment Network, research, investigation, dispute of fines, appeals and waiver or variance requests.
203	<p>On a continuing basis, pro-actively advise and assist the Toll Agencies to identify and implement opportunities to lower its electronic payments processing costs and risks, and to improve the Services of the Contractor, Card Issuers, and Payment Networks. In addition, provide advice with respect to all aspects of electronic payments acceptance operations, including but not limited to:</p> <ul style="list-style-type: none"><li>a. improved transaction security including the protection of PII;</li><li>b. reduction of New Jersey E-ZPass System network that is in PCI compliance scope;</li><li>c. new and improved payment and payment fraud technologies;</li><li>d. Merchant Services Systems;</li><li>e. current, revised and pending relevant payments industry rules, rates, regulations, and</li><li>f. best practices.</li></ul>
204	Promptly alert and notify NJTA of innovations or trends in the e-Payment industry that may be of interest to the New Jersey E-ZPass Program.
205	Promptly notify NJTA of any change in the Key Personnel and, to the extent possible, provide for a reasonable transition for the change which includes the new person working with and obtaining a knowledge transfer from the outgoing person.

206	Invite the Toll Agencies to educational and training events that Contractor provides for its merchant Customers that may be relevant to the Toll Agencies, such as but not limited to events that cover upcoming changes to or new Card Organization operating rules, fraud, fraud analysis and new fraud prevention tools. Events may include but are not limited to webinars and live and recorded courses and seminars for which attendance is in person or remote.
207	For projects requested by NJTA, prepare a clearly delineated process that specifies the steps, timeframes, and Contractor approvals required for Contractor to respond to the request.

### 6.3 Operations and Maintenance Phase Meetings

The Contractor's performance on the program will be reviewed and opportunities for improvement discussed during regular coordination meetings. The meetings will occur at a cadence of weekly during year one (1) of the Operations and Maintenance Phase and monthly thereafter.

#### 6.3.1 Coordination Meetings

208	Facilitate monthly coordination meetings with the Toll Agencies and CSC Services Contractor during year one (1) of the Operations and Maintenance Phase.
209	Facilitate monthly coordination meetings with the Toll Agencies and CSC Services Contractor after year one (1) of the Operations and Maintenance Phase through the Contract Term.
210	As part of the coordination meetings, respond to and resolve current issues or inquiries the Toll Agencies or CSC Services Contractor may have with respect to Contractor's provision of Merchant Services. Regular updates shall be provided, as needed, for inquiries and projects identified by either NJTA or the CSC Services Contractor as requiring the Contractor to research or take action.
211	As part of the coordination meetings, review with NJTA the Contractor's performance for the quarter including opportunities for improvements.
212	Maintain and distribute an open issues log to NJTA at least three (3) Business Days prior to the coordination meeting, and update after each quarterly meeting or at any time the status of an open item has changed in a significant way.

#### 6.3.2 Operations Reporting Requirements

213	No later than the 7 <sup>th</sup> Calendar Day following the end of a month, provide a monthly analysis statement showing detailed charges for all account Services for each Merchant ID, including a combined statement analysis, for the prior month.
214	No later than the 30 <sup>th</sup> Calendar Day following the end of a month, provide a monthly analysis statement showing all data inaccuracies for each Merchant ID, including a combined analysis, for the prior month.
215	No later than the 60th Calendar Day following the end of a calendar quarter, provide to NJTA a Quarterly Business Review (QBR) for the preceding calendar quarter just completed.

216	Each QBR documentation shall include, at a minimum, monthly, quarterly and year-over-year comparative processing statistics for each Merchant ID provided in an easy-to-read format using text and graphical presentation to provide summary data showing analysis and trends and highlighting any concerns and the status of any matter that was reported as unresolved during the prior quarterly coordination meeting.
217	<p>For fourth quarter QBRs, additionally include annual data. Such processing statistics shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>a. gross bank card sales volumes and quantities, by payment type (e.g., Card Organization, PIN debit, ACH);</li> <li>b. interchange qualification information detailed by card type and rates charged, and the gross sales and transactions and net sales and transaction counts and dollar volumes that fell under the respective rates for the year;</li> <li>c. analysis of transactions that experienced downgrades with suggestions on how downgrades on similar transactions can be mitigated in the future;</li> <li>d. effective interchange rates and analysis of changes from prior years;</li> <li>e. chargeback data, including (i) gross chargeback volume, and (ii) broken down by chargeback reason code, the break out of chargebacks received from issuer, chargebacks reversed to issuer, chargebacks resubmitted/reversed to issuer, and chargebacks debited to merchant. Include comparison to industry metrics/averages, where applicable;</li> <li>f. fraud rates and analysis (e.g., changes in fraud rates, types and levels over reporting period; comparison to peers in same merchant category code or other merchant industries with similar sales channels and volumes) Include comparison to industry metrics/averages, where applicable;</li> <li>g. fees billed broken out by interchange, network fees and acquirer fees, compared to industry averages (where applicable), and</li> <li>h. industry updates highlighting changes in the payments industry, especially changes in the Payment Networks' operating rules or regulatory environment that could impact the New Jersey E-ZPass card acceptance and transaction processing.</li> </ul>

### 6.3.3 Incident and Revenue Loss Reporting

218	Prior to Go-Live, the Contractor shall work with NJTA and the CSC Services Contractor to develop a communications protocol for incident and revenue loss reporting (e.g., communications procedures based on incident and priority level) due to an operational or Merchant Services System incident. The protocol shall include, but not be limited to, the following types of incidents: <ul style="list-style-type: none"> <li>a. Security Incident;</li> <li>b. detection of fraud;</li> </ul>
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	<ul style="list-style-type: none"> <li>c. compliance issues;</li> <li>d. incidents caused by Contractor personnel mistakes or negligence;</li> <li>e. loss or failure in transaction processing Services, and</li> <li>f. declaration of disaster and implementation of the Disaster Recovery/Operations Business Continuity Plan.</li> </ul>
219	Immediately notify Toll Agencies of any incident or event where the inaccuracies in operational processes impacting multiple Customers, a data breach, a fraudulent activity was detected, or a security breach has occurred or potentially has occurred or could occur.
220	Perform immediate actions to mitigate any incident resulting in revenue loss or inaccuracies in operational processes and to support a return to normal operations.
221	<p>In the event of a loss or potential loss of revenue or data, glitches impacting Customers, or a Security Breach, a Root Cause Analysis (RCA) shall be provided to NJTA within five (5) Business Days of the incident with details, including but not limited to:</p> <ul style="list-style-type: none"> <li>a. identification of the issue and a detailed account of the incident;</li> <li>b. cause of the issue;</li> <li>c. duration;</li> <li>d. Corrective Action Plan (CAP) that details resolution or planned resolution;</li> <li>e. a quantification of actual or potential lost revenue or data or security breach, and</li> <li>f. actions that have been or will be taken to prevent the incident from happening in the future.</li> </ul>
222	Provide regular updates to NJTA until the issue has been fully resolved and closed including implementation of the CAP.
223	Detail the incident, its impacts and CAP in the subsequent QBR.
224	The Contractor shall be held responsible for all lost revenue and data and Customer impacts, including remediation, notifications to Customers, and any credits, in accordance with the Agreement.

#### 6.3.4 Maintenance and Policy Change Notification

	Communicate to NJTA and to the CSC Services Contractor promptly after Contractor has initial knowledge of the matter the following:
	<ul style="list-style-type: none"> <li>a. scheduled maintenance affecting the processing of one-time Point of Sale, Self-Service Website, Mobile Application, or other API transactions and/or recurring billing;</li> </ul>
	<ul style="list-style-type: none"> <li>b. outages occurring on external processing networks/platforms;</li> </ul>

	<ul style="list-style-type: none"> <li>c. if a recurring billing batch file is unable to be processed;</li> <li>d. significant events and updates to significant events in the electronic payment processing, payment data security, Card Issuer, bank, and Payment Network industries;</li> <li>e. Card Organization, Debit Network, RTP Network and NACHA releases for network rule changes, security program changes, guideline changes and other changes to the respective Payment Network operating rules and policies, and</li> <li>f. Payment Card Industry Security Standards Council releases for new standards and revisions to existing standards, including PCI DSS, Payment Application Data Security Standard and PIN Transaction Security requirements.</li> </ul>
226	Provide a clearly delineated process that specifies the Contractor's procedures to timely notify NJTA and the CSC Services Contractor of projects involving changes or enhancements to Merchant Services System initiated by Contractor on a platform that, to any extent, is utilized to provide the New Jersey E-ZPass Program with Merchant Services.
227	If Card Organization or other Payment Network rule changes require technical changes in the New Jersey E-ZPass Program merchant network or its rules, notify NJTA and the CSC Services Contractor of the change promptly after the Contractor is initially informed of the change but, in any event, sufficiently in advance to enable the Toll Agencies, CSC Services Contractor, and Contractor, as applicable, to develop, test and implement the change. The notification shall include a detailed description of the change and a plan and schedule for implementing the change prior to any applicable deadline. Contractor shall assist NJTA to define and timely implement the change and, to the extent applicable, to avoid or mitigate any adverse financial or operational consequences to the Toll Agencies that would result if the change was not implemented in a timely manner.
228	Provide prompt written advance notice of Payment Network rate or other fee changes which Contractor intends to pass through to the Toll Agencies. Such notice shall include (1) an explanation of the change(s), (2) an explanation of the basis on which the fee, if it is a fee set by the Payment Network to be paid by a merchant's acquirer (which in the case of the Toll Agencies is the Contractor), will be passed through to the Toll Agencies, and (3) the opportunity for the Toll Agencies to comment. The Contractor, with the participation and consultation of NJTA, shall use commercially reasonable efforts to represent the Toll Agencies' interests with such Payment Networks and third-parties to (1) maximize the Toll Agencies' right to avoid, or decrease and minimize the Toll Agencies' obligation for, increases and (2) the Toll Agencies' rights to any reductions.
229	Notify NJTA in writing twenty-four (24) months in advance of any modifications or replacements to the Core Platform required by the Contractor that will require substantial programming or processing changes to the New Jersey E-ZPass Program including testing.
230	In the event the Contractor changes their Core Platform, provide NJTA with a new Project Management Plan the includes transition of the New Jersey E-ZPass Program to the new Core Platform within sixty (60) Calendar Days of notification of the Core Platform change. Changes to Core Platform shall not require changes to the New Jersey E-ZPass System other than testing.

231	Notify NJTA in writing twelve (12) months in advance of changes to technology or Software, other than the Core Platform, that is utilized by the New Jersey E-ZPass Program. Additionally, if the Contractor knows the technological changes are of a nature that will impact the New Jersey E-ZPass Program, the notice shall so indicate.
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## 6.4 Merchant Services Performance Requirements

The Contractor shall meet the Performance Requirements documented in Appendix T-4 Category D Merchant Services Performance Requirements. For the purposes of determining adherence to Merchant Services Performance Requirements, Severity 1, 2 and 3 events are defined in Section 6.1.2 Maintenance Priorities, Response and Repair Times. Severity 4 is used for events that serve as informational alerts which are not subject to a Monthly Fee Adjustment.

The specific method of measuring the Contractor's performance will vary depending on the Performance Requirement, but will generally be measured on a per occurrence, daily or monthly basis. Non-compliance with the Performance Requirements for key performance indicators (KPIs) in Appendix T-4 Category D Merchant Services Performance Requirements will result in assignment of an adjustment to the monthly invoice, as defined in the table. Regardless of how a Requirement is measured, the Contractor shall provide monthly reporting for all Performance Requirements.

232	Facilitate performance monitoring by reporting performance in clearly measurable terms, including but not limited to those Merchant Services Performance Requirements set forth in Appendix T-4 Category D Merchant Services Performance Requirements.
233	Provide, on a monthly basis beginning at the end of the first full calendar month following Go-Live, an Approved combination of reports generated by the New Jersey E-ZPass System and the Contractor, to be determined during design, to facilitate NJTA's monthly review of all Merchant Services Performance Requirements.
234	Provide access to the current status of all Merchant Services Performance Requirements to NJTA for applicable Configurable periods within the report (for example, month, year, last three (3) months).

### 6.4.1 Corrective Actions

Failure to meet a Merchant Services Performance Requirement does not relieve the Contractor of the Requirement to complete the activity associated with the Merchant Services Performance Requirement. The Contractor shall identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures in the future. This will be documented in a CAP.

235	When a failure occurs, identify the failure condition, take immediate action to remedy the condition and ensure that corrective action is taken to prevent repeated failures.
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236	Develop a CAP for each failure to meet a Merchant Services Performance Requirement identifying the root cause(s), the extent of the problem and providing a plan to rectify the current situation and prevent future occurrences.
237	Submit the CAP to NJTA for review and Approval, in a format Approved by NJTA.

## 7 END OF AGREEMENT TRANSITION

The Contractor acknowledges that the Merchant Services it provides under the Agreement are vital to the successful operation of the New Jersey E-ZPass Program and that said Merchant Services must be continued without interruption. Upon expiration or earlier termination of the Agreement, in accordance with the terms and conditions thereof, the Contractor shall fully cooperate with NJTA to facilitate a smooth transition to NJTA's selected successor for the Merchant Services. All transition support shall be provided at no additional cost to NJTA.

238	During the transition from the Contractor to a new contractor, and upon NJTA's written notice of transition, provide transition services for a period of up to 365 Calendar Days, or until all transition activities are completed.
239	During the transition period, continue to provide Merchant Services at the established Agreement rates in accordance with these Requirements.
240	Within thirty (30) calendar days of NJTA's request, provide NJTA an extract of the recent and applicable data to NJTA in the Contractor's standard format to assist NJTA with transitioning to a new contractor.
241	Participate in Token Migration (or similar future technology) Testing with the new contractor.
242	Facilitate full Token Migration (or similar future technology) to the new contractor.

# Appendices

- Appendix A New Jersey E-ZPass Program Volumes
- Appendix B New Jersey E-ZPass Network Diagram
- Appendix C-1 Master New Jersey E-ZPass CSC Business Rules
- Appendix C-2 DRJTBC AET Business Rules
- Appendix C-3 SJTA AET Business Rules
- Appendix C-4 New Jersey E-ZPass License Plate Review Business Rules
- Appendix D IAG Interface File and Reporting Specifications
- Appendix E State of New Jersey State General Records Schedule
- Appendix F Facility Operator Interface Files and Reporting Specifications
- Appendix G-1 Bestpass Toll Interface Implementation Guide
- Appendix G-2 Daily Fleet Toll File ICD
- Appendix H NJTA CSC ICD
- Appendix I SJTA DRAFT AET – Host-CSC ICD
- Appendix J BCBC Toll System CSC Interface Specification
- Appendix K NOT USED
- Appendix L DRBA ICD
- Appendix M DRPA Toll System CSC Interface Specification
- Appendix N DRJTBC Toll System CSC Interface Specification
- Appendix O Sample Evidence Package
- Appendix P Sample Notices, Toll Bills and Statements
- Appendix Q New Jersey E-ZPass Customer Communication Matrix
- Appendix R Payment Plan Agreements
- Appendix S List of Current New Jersey E-ZPass Reports and Select Sample Reports
- Appendix T-1 Category A CSC Services Performance Requirements
- Appendix T-2 Category B LPR Services Performance Requirements
- Appendix T-3 Category C Collections Services Performance Requirements
- Appendix T-4 Category D Merchant Services Performance Requirements

## Appendix A New Jersey E-ZPass Program Volumes

*All volumes are estimated averages and current estimated average volumes are not a representation of future average volumes.*

ID	ITEM	2018 VOLUME	2019 VOLUME	2020 VOLUME	2021 VOLUME	2022 VOLUME
<b>Transaction Data Monthly</b>						
A1	Transponder-based Transactions	60,127,000	60,912,000	49,360,100	59,713,000	59,259,000
A2	Image-based Transactions	2,630,000	2,756,000	2,797,00	3,550,000	3,878,000
<b>Transponder-based Transactions by Toll Agency</b>						
A3	NJT	18,700,000	19,000,000	13,920,000	17,800,000	17,720,000
A4	GSP	29,300,000	29,300,000	24,996,000	28,800,000	28,585,000
A5	SJTA	4,500,000	4,000,000	3,694,000	4,400,000	4,461,000
A6	DRPA	3,200,000	3,130,000	2,448,000	2,900,000	2,975,000
A7	DRJTBC (AET)	n/a	437,000	287,000	315,000	284,000
A8	DRJTBC (non-AET)	2,467,000	2,700,000	2,208,000	3,073,000	2,871,000
A9	DRBA	1,300,000	1,300,000	975,000	1,330,000	1,289,000
A10	BCBC (estimate for violations)	660,000	675,000	554,000	725,000	726,000
A11	CMCBC	n/a	370,000	277,000	370,000	348,000
<b>Image-based Transactions by Toll Agency</b>						
A12	NJT	910,000	955,000	951,000	1,230,000	1,414,000
A13	GSP	1,200,000	1,140,000	1,184,000	1,400,000	1,458,000
A14	SJTA	240,000	231,000	268,600	380,000	305,000
A15	DRPA	125,000	125,000	114,000	152,000	170,000
A16	DRJTBC (AET)	n/a	130,000	110,000	102,000	200,000
A17	DRJTBC (non-AET)	118,000	125,000	122,000	213,000	217,000
A18	DRBA	37,000	48,000	46,000	71,000	79,000
A19	BCBC (estimate for violations)	n/a	0	0	n/a	20,000
A20	CMCBC	n/a	2,000	1,600	2,000	15,000
<b>Revenue</b>						
B1	Average Monthly E-ZPass Revenue	\$173,800,000	\$178,900,000	\$151,400,000	\$228,000,000	\$244,200,000
B2	Average Monthly Toll Bill Revenue	N/A	\$350	\$160,000	\$224,000	\$259,000
B3	Average Monthly Post-paid Statement Revenue	\$8,900,000	\$7,988,000	\$9,500,000	\$13,700,000	\$13,300,000
B4	Average Monthly Violation Revenue (toll plus admin fee)	\$6,400,000	\$5,839,500	\$8,800,000	\$12,700,000	\$13,900,000
<b>Account Data</b>						
C1	Monthly Average Accounts Opened by Channel	15,600	15,300	16,500	20,600	18,600
C2	Opened via WIC	1,700	1,700	1,100	1,300	1,400
C3	Opened via Phone	1,600	1,700	1,500	2,100	1,900
C4	Opened via Website	12,100	11,600	13,700	15,500	13,700
C5	Opened via Mail-in	200	300	200	200	100
C6	Opened via Mobile App	N/A	N/A	N/A	1,500	1,500
C7	Monthly Average Accounts Opened by Payment Type	15,600	15,300	16,400	20,500	24,000
C8	Credit Card	15100	14,800	16,100	20,200	18,000
C9	Cash	400	400	200	200	200
C10	Check	100	100	100	100	100
C11	ACH	0	0	0	0	300

Numbers are approximate for summer data.

ID	ITEM	2018 VOLUME	2019 VOLUME	2020 VOLUME	2021 VOLUME	2022 VOLUME
C12	Non-Revenue	0	0	0	0	0
C13	Monthly Average Accounts Opened by Type	15,550	15,250	16,300	20,350	18,500
C14	New Private E-ZPass Accounts	14,900	14,600	15,700	19,500	17,700
C15	New Business E-ZPass Accounts	650	650	600	850	800
C16	New License Plate Accounts	n/a	n/a	n/a	n/a	n/a
C17	Total Current Active Accounts	3,011,000	3,139,000	3,300,000	3,493,000	3,670,000
C18	Average Monthly Accounts Closed	4,600	4,500	3,000	4,300	3,700
<b>Customer Service Activity</b>						
D1	Monthly Average CSR Handled Calls	196,900	212,200	115,500	152,700	181,700
D2	Monthly Average Calls Handled Completely by IVR	344,000	292,800	719,700	723,000	947,100
D3	Monthly Average Calls Abandoned	21,700	5,600	51,500	63,500	108,100
<b>Payment Data</b>						
<b>Monthly Average Customer Account Replenishments by Payment Type</b>						
E1	Credit Card (average number of payments)	2,200,000	2,145,000	1,900,000	2,400,000	2,200,000
E2	Cash/Check (average number of payments)	19,000	12,100	12,500	13,000	12,100
E4	ACH (average number of payments)	25,300	82,000	48,500	76,000	82,000
E5	PayPal	n/a	n/a	n/a	n/a	7,700
<b>Monthly Average Number of Customer Account Replenishments by Payment Channel</b>						
F1	Mail	1,700	1000	2,000	11,000	1,000
F2	WIC	10,000	7,600	2,000	7,000	8,000
F3	Phone-in	48,000	40,000	20,000	80,000	40,000
F4	Automatic/IVR	2,000,000	2,100,000	1,700,000	2,200,000	2,100,000
F5	Website	215,000	209,000	245,000	255,000	210,000
F6	Mobile App	n/a	n/a	n/a	59,100	154,400
<b>Monthly Average Toll Bill Payments by Type</b>						
G1	Credit Card (average number of payments)	N/A	16,000	15,000	18,000	16,000
G2	Check (average number of payments)	N/A	7,100	6,000	7,300	7,100
G3	Cash (average number of payments)	N/A	20	15	<10	20
<b>Monthly Average Toll Bill Payments by Channel</b>						
H1	Mail	N/A	30	15	50	30
H2	WIC	N/A	35	50	50	35
H3	CSC	N/A	1,900	1,1000	1,500	2,000
H4	Website	N/A	13,500	13,000	23,000	13,500
H5	IVR	N/A	800	900	900	800
<b>Monthly Average Post-Paid Invoice by Type</b>						
I1	Credit Card (average number of payments)	80	70	75	100	70
I2	Check (average number of payments)	60	30	50	50	30
I3	Cash (average number of payments)	0	0	0	0	0

Numbers are approximate for summer data.

ID	ITEM	2018 VOLUME	2019 VOLUME	2020 VOLUME	2021 VOLUME	2022 VOLUME
<b>Monthly Average Violation Payments by Type</b>						
J1	Credit Card (average number of payments)	322,000	467,000	700,000	533,000	475,000
J2	Check (average number of payments)	85,000	110,000	250,000	85,000	110,000
J3	Cash (average number of payments)	2,000	1,300	7,000	1,700	1,500
<b>Monthly Average Violation Payments by Channel</b>						
K1	Mail	13,000	41,000	6,000	10,000	41,000
K2	WIC	6,000	11,000	26,000	10,000	11,000
K3	CSC	171,000	216,000	275,000	217,000	215,000
K4	Website	109,000	202,000	455,000	270,000	202,000
K5	IVR	18,000	20,000	35,000	26,000	20,000
<b>Monthly Average Transactions by Card Organization (# of transactions)</b>						
L1	American Express	382,500	357,000	325,000	350,000	360,000
L2	Discover	110,000	115,000	91,000	119,000	115,000
L3	Visa	1,600,000	1,687,500	1,800,000	1,800,000	1,700,000
L4	MasterCard	470,000	484,000	480,000	500,000	485,000
L5	ACH	25,000	80,000	48,000	100,000	80,000
<b>Monthly Average Transactions by Card Organization (\$ amount)</b>						
M1	American Express	\$35,800,000	\$37,400,000	\$28,100,000	\$38,000,000	\$37,500,000
M2	Discover	\$5,300,000	\$5,700,000	\$3,800,000	\$5,800,000	\$5,700,000
M3	Visa	\$90,600,000	\$103,900,000	\$83,000,000	\$111,000,000	\$104,000,000
M4	MasterCard	\$35,000,000	\$44,900,000	\$32,000,000	\$54,000,000	\$45,000,000
M5	ACH	\$2,800,000	\$8,100,000	\$4,000,000	\$10,000,000	\$8,100,000
<b>Monthly Average Refunds/Reversals (# of transactions)</b>						
N1	Chargebacks	500	1,200	1,200	1,350	1,200
N2	Credit Card Refunds/Reversals	6,600	5,300	12,500	5,400	5,300
<b>Monthly Average Refunds/Reversals (\$ amount)</b>						
O1	Chargebacks	\$50,000	\$81,000	\$630,000	\$234,000	\$81,000
O2	Credit Card Refunds/Reversals	\$478,000	\$521,000	\$640,000	\$532,000	\$522,000
<b>Average Monthly Walk-in Center Counts</b>						
P1	Visitors to Newark WIC	10,500	10,200	7,300	8,000	8,400
P2	Visitors to Camden WIC	3,000	2,700	2,000	2,700	4,100
P3	Visitors to New Castle WIC	1,500	1,500	850	950	1,100
<b>Average Monthly Correspondence</b>						
Q1	Incoming Mail Pieces	414,000	438,000	395,000	547,000	294,000
Q2	Outgoing Mail (Account statements)	1,312,000	1,154,000	1,382,000	1,492,000	1,606,000
Q3	Outgoing Mail (other Account related, non-statements)	62,000	74,000	90,000	100,000	133,000
Q4	Outgoing Mail (Post-Paid Invoices)	120	120	100	100	100
Q5	Outgoing Mail (Toll Bills)	N/A	35,000	40,000	45,000	45,000
Q6	Outgoing Mail (Violation First Notice)	653,000	749,000	780,000	1,104,000	1,230,000
Q7	Outgoing Mail (Violation Second Notice)	502,000	179,000	700,000	800,000	950,000
Q8	Outgoing Mail (transponders)	39,000	39,000	36,000	47,000	41,000

Numbers are approximate for summer data.

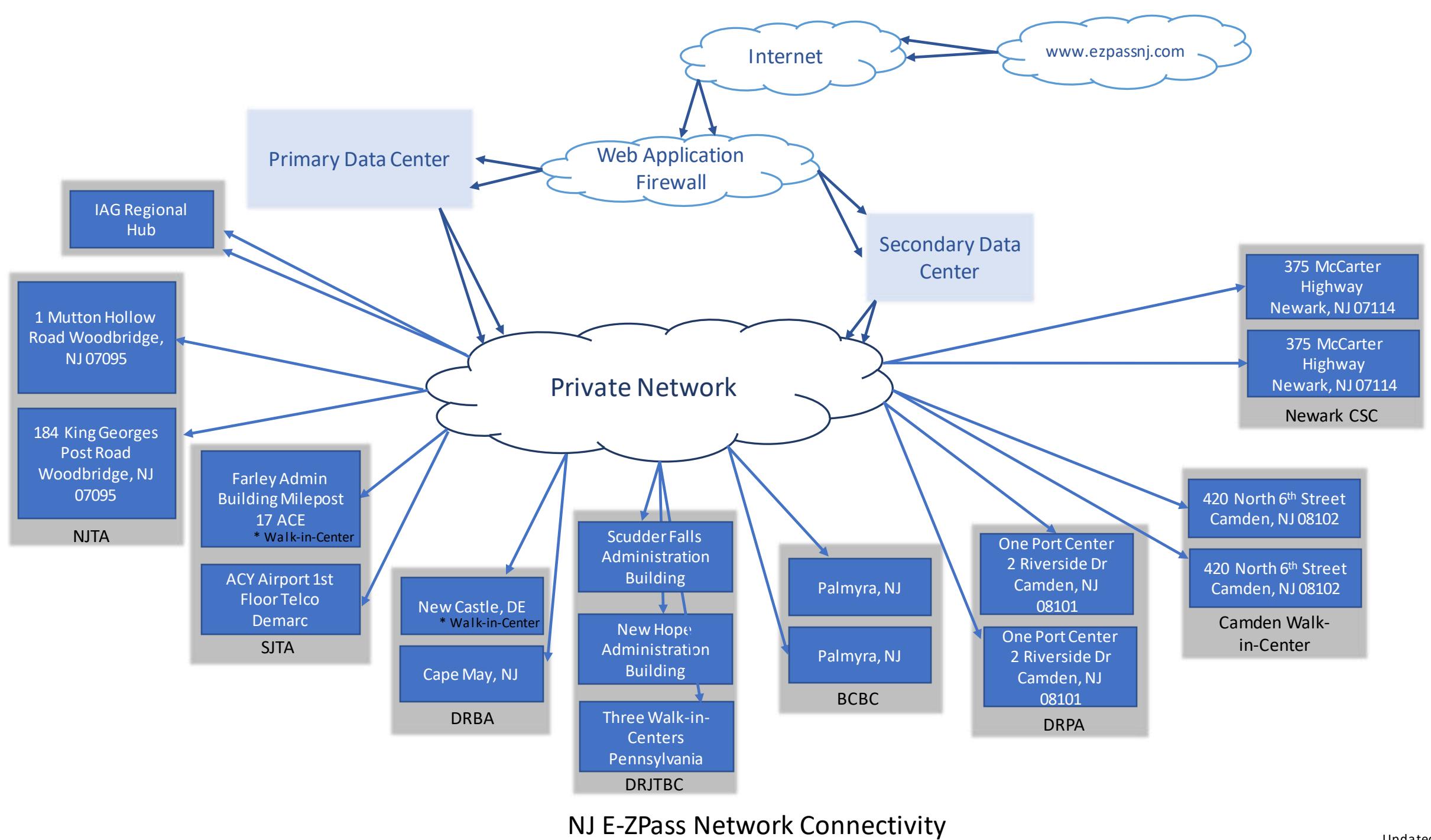
ID	ITEM	2018 VOLUME	2019 VOLUME	2020 VOLUME	2021 VOLUME	2022 VOLUME
	Outgoing Email					
<b>Q9</b>	Sent by Mailhouse	261,000	193,000	145,000	175,000	196,000
<b>Q10</b>	Sent by CRM	956,300	1,020,000	1,162,000	1,019,000	1,488,000
<b>Q11</b>	Outgoing SMS	144,000	224,000	314,500	432,200	572,400
<b>Q12</b>	Nixies returned	34,500	44,600	44,500	73,250	Unknown
	<b>Average Monthly Collections Activity</b>					
<b>R1</b>	Number of collections placements per month	2,800	1,200	4,600	5,800	7,800
	<b>Transponder Data</b>					
<b>S1</b>	Monthly Average of Total Transponders Issued	43,100	42,800	37,700	49,900	43,900
<b>S2</b>	Monthly Average Transponders Returned	15,400	16,600	10,100	11,900	6,400
<b>S3</b>	Total Active Transponders	5,530,400	5,417,200	5,563,600	5,830,500	6,278,500
	<b>Average Monthly Self-Service Website Use</b>					
<b>T1</b>	Total Website Visits	529,000	467,000	334,000	302,000	266,000
<b>T2</b>	Total Mobile App Hits	n/a	n/a	n/a	n/a	316,000

Numbers are approximate for summer data.

## Appendix B

### New Jersey E-ZPass Network Diagram

*High-level representation of the existing New Jersey E-ZPass network. The network is subject to modification and will be updated during Contract Term.*



# Appendix C-1

## Master New Jersey E-ZPass CSC Business Rules

### - DRAFT

*Will be provided upon receipt and validation of the executed Non-Disclosure Agreement (Exhibit E)*

*DRJTBC AET Business Rules will be developed and modified during the Contract Term*

## Appendix C-2 DRJTBC AET Business Rules - Draft

*Will be provided upon receipt and validation of the executed Non-Disclosure Agreement (Exhibit E)*

*DRJTBC AET Business Rules will be developed and modified during the Contract Term*

## Appendix C-3 SJTA AET Business Rules - Draft

*Will be provided upon receipt and validation of the executed Non-Disclosure Agreement (Exhibit E)*

*SJTA AET Business Rules will be developed and modified during the Contract Term*

# Appendix D

## IAG Interface File and Reporting Specifications



## **Inter-Customer Service Center**

### **Interface File and Reporting**

### **Specifications**

Prepared by:  
The E-ZPass IAG Reciprocity Committee  
01/23/2023  
Version CSC 01.60.02

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## 1.0 Introduction

The *Inter-Customer Service Center Interface File and Reporting Specifications* document defines the formats for all files and reports which shall be transmitted between Customer Service Centers (CSCs) belonging to agencies who are signatories to the E-ZPass IAG MOU.

The inter-CSC interface files allow the CSCs to exchange the necessary data allowing customers to use any participating agency's facilities while maintaining a single account and to have all toll activity be shown on that account's statement.

The interface files defined are:

File Name	File Extension	File Usage
Tag Status File	ITAG	Created by the Home Agency/CSC to inform Away Agencies/CSCs as to the status of each tag associated with an account held by the Home Agency/CSC. This file also informs the Away Agencies/CSCs as to the discount plans associated with each tag.
Tag Status Update File	ITGU	Created by the Home Agency/CSC to inform Away Agencies/CSCs as to the updated status of particular new and/or existing tags associated with an account held by the Home Agency/CSC. Used to periodically report updated information throughout the day so that Agencies/CSCs which have the ability to update their lane systems during the day can do so.
Transaction File	ICTX	Created by the Away Agency/CSC to inform the Home Agency/CSC of all toll transactions occurring at Away Agency facilities for valid tags and license plates belonging to the Home Agency.
Transaction Reconciliation File	ICRX	Created by the Home Agency/CSC to inform the Away Agency/CSC as to the disposition of toll transactions processed by the Home Agency/CSC which occurred at the Away Agency's facilities. Performing detailed transaction level reconciliation allows the Away Agency/CSC to ensure that all transactions were properly received and processed and to track toll and non-toll usage accordingly.
Correction File	ITXC	Created by the Away Agency/CSC to replace toll transaction information already sent to the Home Agency/CSC with updated/corrected information and/or to resubmit rejected transactions.
Correction Reconciliation File	IRXC	Created by the Home Agency/CSC to inform the Away Agency/CSC as to the disposition of toll correction transactions processed by the Home Agency/CSC which occurred at the Away Agency's facilities. Performing detailed transaction level reconciliation allows the Away Agency/CSC to ensure that all transactions were properly received and processed and to track toll and non-toll usage accordingly.
Customer License Plate File	ICLP	Created by the Home Agency/CSC to inform the Away Agencies/CSCs of the vehicle license plate numbers of its customers. This file will allow the Away Agency/CSC to collect the toll from the Home Agency/CSC for an untagged or unread tag transaction.
Non-Toll Transaction File	INTX	Created by the Host Agency/CSC to inform the Home Agency/CSC of all non-toll transactions occurring at Host Agency/CSC facilities for valid tags belonging to the Home Agency/CSC.
Non-Toll Reconciliation File	INRX	Created by the Home Agency/CSC to inform the Host Agency/CSC as to the disposition of non-toll transactions processed by the Home Agency/CSC which occurred at the Host Agency's/CSC's facilities. Performing detailed transaction level reconciliation allows the Host Agency/CSC to ensure that all transactions were properly received and processed and to track toll and non-toll usage accordingly.
Non-Toll Correction File	ITXN	Created by the Host Agency/CSC to replace non-toll transaction information already sent to the Home Agency/CSC with updated/corrected information.

File Name	File Extension	File Usage
Non-Toll Correction Reconciliation File	IRXN	Created by the Home Agency/CSC to inform the Host Agency/CSC as to the disposition of non-toll correction transactions processed by the Home Agency/CSC which occurred at the Host Agency's/CSC's facilities. Performing detailed transaction level reconciliation allows the Host Agency/CSC to ensure that all transactions were properly received and processed and to track toll and non-toll usage accordingly.
Acknowledgement File	ACK	The Acknowledgment File shall be created by the From Agency/CSC (the Agency/CSC which received the file) to inform the To Agency/CSC (the Agency/CSC which sent the original file) that the file transmitted was received in its entirety. An Acknowledgement File shall be sent for each of the above referenced files.

The inter-CSC settlement reports define a standard set of documents for the purpose of supporting the transfer of funds between agencies served by different CSCs. This document also defines a suggested set of reports which can be used by agencies to reconcile pre-paid tolls, expected toll revenue and expected non-toll revenue.

The reports defined are:

#### Required Reports- Shared among Agencies

##### Toll

- |   |                         |
|---|-------------------------|
| IAG-1 - Inter-CSC Settlement Report                     | (Home agency generated) |
| IAG-2 - Inter-CSC Transaction Reconciliation Report     | (Home agency generated) |
| IAG-3 - Inter-CSC Toll Correction Reconciliation Report | (Home agency generated) |
| IAG-4 - Inter-CSC Discount Plan Revenue Report*         | (Home agency generated) |
| IAG-5 - Inter-CSC Permit Plan Fees Report*              | (Home agency generated) |
| IAG-6 - Inter-CSC Disputed Toll & Adjustments Report    | (Home agency generated) |
| IAG-7 - Inter-CSC Rejected Transactions Report          | (Home agency generated) |
| IAG-8 - Inter-CSC Rejected Corrections Report           | (Home agency generated) |
| IAG-9 - Inter-CSC Reconciliation Aging Report           | (Away agency generated) |
| IAG-10 – Inter-CSC Discount Plan Analysis Report*       | (Home agency generated) |

##### Non-Toll

- |   |                         |
|---|-------------------------|
| IAG-1N - Inter-CSC Non-Toll Settlement Report                 | (Home agency generated) |
| IAG-2N - Inter-CSC Non-Toll Transaction Reconciliation Report | (Home agency generated) |
| IAG-3N - Inter-CSC Non-Toll Correction Reconciliation Report  | (Home agency generated) |
| IAG-6N - Inter-CSC Disputed Non-toll & Adjustments Report     | (Home agency generated) |
| IAG-7N - Inter-CSC Rejected Non-Toll Transactions Report      | (Home agency generated) |
| IAG-8N - Inter-CSC Rejected Non-Toll Corrections Report       | (Home agency generated) |
| IAG-14N – Inter-CSC Non-toll Credit Card Charge Back Report   | (Home agency generated) |
| IAG-15N – Inter-CSC Declined Non-Toll Transactions Report     | (Home agency generated) |
| IAG-16N – Inter-CSC Non-toll Aggregate Funds Report           | (Host agency generated) |

\* These reports are required only if the Home agency offers the Away agency discount plans.

#### Suggested Reports – Used by Agency generating report

##### Toll

- |  |                         |
|--|-------------------------|
| IAG-11A - Causal Use by Reconciliation File Range Report | (Home agency generated) |
| IAG-11B - Casual Use by Posting Date Range Report        | (Home agency generated) |
| IAG-12 - NPST Report                                     | (Home agency generated) |
| IAG-13A - Local Use By Rec File Report                   | (Away agency generated) |
| IAG-13B - Detailed Local Use by Rec File Report          | (Away agency generated) |
| IAG-13C - Local Use by Collection Date Report            | (Away agency generated) |
| IAG-13D - Detailed Local Use by Collection Date Report   | (Away agency generated) |

## 1.1 Agencies and Agency IDs

The E-ZPass Group assigns permanent “Agency IDs” to Full Members as well as Sponsored Affiliates. Conversely, the terms “Home Agency” and “Away Agency” are examples of agency “types” which are used in the description of a transaction process. As such, an agency will be referred to as a particular type depending on the nature of the transaction or context of the reference. Likewise, the Agency ID will take on different names depending on the agency type in the transaction or context. Throughout this document, there will be references to various types of Agencies and Agency IDs and the following definitions are used:

- **Home Agency** – the entity that manages/owns the customer account to which a tag or plate is associated and who is obligated (per IAG toll guarantee business rules defined elsewhere) to pay tolls incurred by those tags and plates. The Agency ID is referred to as the Home Agency ID.
- **Away Agency** – the entity that sent the toll transaction to the Home Agency and to whom the toll payments are due. This may or may not be the entity that own/operates the toll facility on which the toll transaction was generated. The Agency ID is referred to as the Away Agency ID.
- **Facility Agency** – the entity that owns or operates the toll facility on which the toll transaction was generated. This may or may not be the Away Agency depending on various business arrangements between the Facility Agency and the Away Agency. The Agency ID is referred to as the Facility Agency ID.
- **Tag Agency** – the entity that purchased the tag from the manufacturer for issuance to a customer. This may or may not be the Home Agency. The Agency ID is referred to as the Tag Agency ID.
- **CSC ID** – The identifier assigned to a specific Customer Service Center. This is typically analogous to the Home Agency ID except for CSCs that host multiple Home Agencies (such as the NY CSC). In such a case, one of the Home Agency IDs is assigned as the CSC ID.
- **From Agency** – As used in the IAG Inter-CSC File and Reporting Specifications, the From Agency (and associated From Agency ID) is the Agency or CSC that created a file and transmitted it to another entity.
- **To Agency** – As used in the IAG Inter-CSC File and Reporting Specifications, the To Agency (and the associated To Agency ID) is the Agency or CSC that received a file from the From Agency.

Sponsored Affiliates cannot be Home Agencies, Away Agencies or Facility Agencies. For the purposes of Home Agency, Away Agency or Facility Agency identification, the Agency ID of their sponsoring Agency is used. However, Sponsored Affiliates can issue tags with their assigned Agency ID and, in such a case, the tags would be associated with their sponsoring Agency and the associated Home Agency ID would be that of the sponsoring Agency.

## 2.0 General File and Report Requirements

1. In the event that a Customer Service Center services multiple agencies or administers a tag inventory containing multiple Agency IDs, a single FROM\_AGENCY\_ID shall be assigned to that CSC. See Appendix E for details.
2. All files (except for the Acknowledgement File) shall be compressed (ZIPped) using a standard Lempel-Zif compression algorithm which should yield a compression rate of at least 75% (meaning a file will be reduced so that it is only 25% of its original size).
3. When compressed, file names shall be converted from {FILE\_NAME}.{FILE\_TYPE} to {FILE\_NAME}\_{FILE\_TYPE}.ZIP and all files names shall be created using uppercase characters only. Therefore, when file "008\_19971201001015.ITAG" is compressed, the compressed file shall be named "008\_19971201001015\_ITAG.ZIP".
4. The IAG Reciprocity Agreement requires generation of settlement reports (IAG-1 through IAG-8, IAG-1N through IAG-8N, IAG-14N and IAG-15N) after the settlement period. A Settlement Calendar, agreed to by the operating agencies of this file specification, will establish the settlement reports and settlement funds transfer due dates. The settlement period is to be at least monthly but may be more frequent if agreed by the two agencies.
5. This document adopts the terms Home and Away as defined by the IAG Reciprocity Agreement and the term Host as defined by the IAG Reciprocity II Agreement. The Home agency is the agency that establishes and/or maintains the customer's account and associated tag(s) and the Away agency is any agency that is not the customer's Home agency (though, typically, the Away Agency is the Agency on whose toll facility a transaction transpired). The toll report samples are based on a hypothetical set of toll transactions for trips taken by customers of the Regional Consortium (Home Agency) on the New York State Thruway (Away Agency). The Host agency is the agency with a Facility Operator agreement per Reciprocity II. The non-toll report samples are based on a hypothetical set of non-toll transactions incurred by customers of the Regional Consortium (Home Agency) at the Albany Airport (New York State Thruway – Host Agency). As indicated above, the Home Agency generates all but one of the required settlement reports and some of the suggested reports.
6. The reports as presented do not differentiate between a CSC and an Agency. Many CSCs support several Agencies and the financial settlement requirements depend on the particular CSC and their arrangement with the agencies serviced. When settlement is conducted by the individual Agencies served by a CSC, the IAG reports will be generated with data specific for each Agency. In this case, additional reports must be developed which will allow the Agencies to tie IAG-2, IAG-3, IAG-11A and IAG-13A to the corresponding IAG files.
7. The date/time values contained in a file name are meant to represent the creation date/time of the file and shall always match the date/time value contained in the file's header record.
8. All date/time values (unless otherwise noted) shall utilize Coordinated Universal Time (aka UTC).
9. Fields with values whose lengths are less than the maximum supported by the field shall be right padded with trailing blanks unless otherwise specified.

### 3.0 Tag Status File

#### 3.1 File Type

Variable length, LF delimited

#### 3.2 File Name

{FROM\_AGENCY\_ID}\_YYYYMMDDHHMMSS.ITAG

Example: 0008\_19971201001015.ITAG  
E-ZPass NY tag status file created on 00:10:15 on 12/01/1997

#### 3.3 File Use

The Tag Status File shall be created by the Home Agency/CSC to inform Away Agencies/CSCs as to the status of each tag associated with an account held by the Home Agency/CSC. This file also informs the Away Agencies/CSCs as to the discount plans associated with each tag.

#### 3.4 File Layout

Tag Status File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ITAG
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
FROM_AGENCY_ID	CHAR(4)	Standard agency ID code of the Home Agency/CSC (See Appendix E, Column A)
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(10)	Count of all tags in file. Does not include header record. Values: 0000000000 – 9999999999
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>47</b>	

Tag Status File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
TAG_AGENCY_ID	CHAR(4)	The agency ID encoded on the transponder. Values: 0000 – 9999
TAG_SERIAL_NUMBER	CHAR(10)	The serial number encoded on the transponder. Values: 0000000001 – 9999999999
TAG_STATUS	CHAR(1)	1 – Valid 2 – Low Balance 3 – Zero/Negative Balance (tag is not valid for use and will not be honored by the Home Agency/CSC. However, the tag may become valid again in a future ITAG file).

Tag Status File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
TAG_ACCT_INFO	CHAR(6)	<p>A string of 24 bits (3 characters) converted to Hex-ASCII format (6 characters). The 24 bits represent the following:</p> <p>Bit 1 (rightmost bit): E-ZPass Plus – Parking status 1 – Tag is valid for E-ZPass Plus parking applications 0 – Tag is NOT valid for E-ZPass Plus parking applications</p> <p>Bit 2 – 23: Discount bits 1 – Tag has associated discount plan 0 – Tag does not have associated plan</p> <p>Plan bits are defined as follows:</p> <ul style="list-style-type: none"> <li>Bit 2: PANYNJ Staten Island Bridges</li> <li>Bit 3: PANYNJ Green Discount</li> <li>Bit 4: PANYNJ Carpool</li> <li>Bit 5: PANYNJ Non-revenue</li> <li>Bit 6: NYSBA Discount</li> <li>Bit 7: Reserved</li> <li>Bit 8: Reserved</li> <li>Bit 9: Reserved</li> <li>Bit 10: MTA Rockaway Resident</li> <li>Bit 11: MTA Staten Island Resident</li> <li>Bit 12: DRPA Discount</li> <li>Bit 13: SJTA Discount</li> <li>Bit 14: NJHA Bus Discount</li> <li>Bits 15 – 22: Reserved (must be set to zero)</li> <li>Bit 23: Florida Non-Revenue</li> </ul> <p>Bit 24 (leftmost bit): E-ZPass Plus – Non-Parking status 1 – Tag is valid for E-ZPass Plus non-parking applications 0 – Tag is NOT valid for E-ZPass Plus non-parking applications</p> <p>Note that at this time, Bit 24 should be set to 0.</p> <p>For example, a tag that is valid for E-ZPass Plus Parking and has the PANYNJ Carpool Plan would have the following bit-string:</p> <pre>00000000000000000000000000001001</pre> <p>Converted to a Hex-ASCII string for this field, it would be:</p> <pre>000009</pre>
TAG_HOME_AGENCY	CHAR(4)	<p>The ID assigned to the Home Agency. This is the Agency/CSC that manages the customer account to which toll charges may be posted.</p> <p>The addition of this field will support the concept of tag portability – the ability of a customer to register a tag already in their possession to an account at an Agency/CSC other than the one that is associated with the TAG_AGENCY_ID. This can also support allocation/split of a TAG_AGENCY_ID from one Home Agency to another should an agency be approaching its serial number limit.</p> <p>Values: 0000 – 9999 (See Appendix E, Column C)</p>

Tag Status File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
TAG_AC_TYPE_IND	CHAR(1)	<p>Used to denote the account type to aid Away Agencies/CSCs in processing transactions and researching processing issues. Note that in some cases, based on Home Agency/CSC business rules, more than one of the values below may be applicable. In such a case, it is up to the Home Agency/CSC to determine the most relevant value.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>B – Business/Commercial account with a large number of vehicles (where large is defined by Home Agency/CSC business rules)</li> <li>F – Fleet account (e.g., rental car, etc.) where there is a potential that the same transponder (or license plate) could be temporarily placed on another account or also exist on an account local to the Away Agency/CSC</li> <li>P – Private account with a small number of vehicles (where small is defined by Home Agency/CSC business rules)</li> <li>V – Violation avoidance account with a large number of license plates and a small number of transponders (if any) used to generate I-Tolls in place of violations or video toll invoices. This includes consolidated plate based mobile app accounts.</li> <li>R – Retail transponder that has not yet been registered or is not active when sold. Would only be associated with tags with a TAG_STATUS value of 3. Home Agencies publishing these tags would allow transactions to be sent for them and they may or may not post depending on financial status at the time of posting. If they do not post, the Away Agency should pursue through their normal image-based transaction processes.</li> </ul> <p>* – Account type is unknown/not available</p>
TAG_ACCOUNT_NO	CHAR(50)	The unique account number at the Home Agency/CSC of the associated tag data. Must be provided for all E-ZPass Home Agencies. May not be provided for all NIOP agencies. If not available/provided, will be filled with asterisks (*).
TAG_PROTOCOL	CHAR(3)	<p>The protocol(s) supported by the transponder.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>T – TDM</li> <li>S – SeGo</li> <li>6 – 6C</li> <li>TS – TDM/SeGo</li> <li>T6 – TDM/6C</li> <li>S6 – SeGo/6C</li> <li>TS6 – TDM/SeGo/6C</li> <li>*** – Not Available</li> </ul> <p>Note: If a transponder supports multiple protocols and the TAG_AGENCY_ID/TAG_SERIAL_NUMBER combination differs between protocols, there should be one record in the ITAG file for each unique combination of TAG_AGENCY_ID/TAG_SERIAL_NUMBER used by the transponder.</p> <p>Note: Any linkage of the multiple records would be done via a manifest file provided by the transponder manufacturers and is outside the purview of this specification.</p>
TAG_TYPE	CHAR(1)	<p>The type of transponder.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>F – Feedback (supports sounds, LEDs and/or LCD)</li> <li>G – Feedback and Switchable</li> <li>H – Hardcase including portable hangtag transponders</li> <li>S – Switchable (supports occupancy selection)</li> <li>T – Sticker (non-portable)</li> <li>V – Vehicle Integrated such as the rearview mirror module. Would have a TAG_MOUNT value of "V". If the unit supported Feedback and/or Switchable capabilities, then values of 'F', 'G' or 'S' should be used here instead.</li> </ul> <p>* – Not Available</p>

Tag Status File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
TAG_MOUNT	CHAR(1)	The typical mounting location of the transponder:  Values: I – Interior L – License Plate R – Roof Mount H – Headlamp V – Vehicle Integrated * – Not Available
TAG_CLASS	CHAR(4)	The IAG class expected to be encoded in the transponder.  See Appendix C (Column G) for valid values. **** if not available.
DELIMITER	CHAR(1)	LF
Record Total	86	

### 3.5 Processing Requirements

1. The transmission of the file to the Away Agencies/CSCs shall be completed by the Home Agency/CSC as stipulated in the Transmission Methodology section.
2. Removed.
3. In the event that an invalid header record is encountered (e.g., character data in a numeric field, etc.), the Away Agency/CSC should reject the file and notify the Home Agency/CSC via the Acknowledgement File.
4. In the event that an invalid detail record is encountered (e.g., inappropriate TAG\_STATUS, etc.), the Away Agency/CSC should reject the file and notify the Home Agency/CSC via the Acknowledgement File.
5. The Home Agency/CSC shall perform appropriate sanity checks on the Tag Status File prior to its transmission to the Away Agency/CSC. Such sanity checks should include, but not be limited to:
  - Unusual growth in the number of tags from previous transmission
  - Unusual change in number of tags with a particular tag status
6. The Home Agency/CSC shall, at a minimum, only include information for tags which it manages and for which it will guarantee the toll (for those with TAG\_STATUS values of '1' or '2'). The Home Agency/CSC can, and should, also include information for tags it manages associated with Zero/Negative Balance accounts (TAG\_STATUS of '3') for which it would be willing to post transactions should the account return to a good status (TAG\_STATUS of '1' or '2').
7. A CSC which manages tags under more than one Agency ID shall send only a single Tag Status File containing all tags and not separate Tag Status Files for each Agency ID.
8. Removed
9. The setting of the E-ZPass Plus status bits shall be governed by the appropriate reciprocity agreements and Home Agency business rules.
10. A TAG\_STATUS of Zero/Negative Balance (value of '3') shall override any of the E-ZPass Plus status bits.
11. A unique record in a single ITAG file or across ITAG files is based on the combination of TAG\_HOME\_AGENCY, TAG\_AGENCY\_ID and TAG\_SERIAL\_NUMBER. As such, it is valid to have the same TAG\_AGENCY\_ID and TAG\_SERIAL\_NUMBER values in the same ITAG or across ITAG files so long as the addition of the TAG\_HOME\_AGENCY makes the record unique. The general expectation for multi-protocol tags is that all protocols on the tag share the same TAG\_SERIAL\_NUMBER value. In addition, the TDM and 6C portions should share the same TAG\_AGENCY\_ID value. The SeGo region/agency 16-bit value would be converted to a 4-digit value that would be the same as the TDM/6C TAG\_AGENCY\_ID value based on the table found in Appendix K.

## 4.0 Tag Status Update File

### 4.1 File Type

Variable length, LF delimited

### 4.2 File Name

{FROM\_AGENCY\_ID}\_YYYYMMDDHHMMSS.ITGU

Example: 0008\_19971201001015.ITGU  
E-ZPass NY tag status update file created on 00:10:15 on 12/01/1997

### 4.3 File Use

The Tag Status Update File is created by the Home Agency/CSC to inform Away Agencies/CSCs as to the updated status of particular new and/or existing tags associated with an account held by the Home Agency/CSC. Used to periodically report updated tag information throughout the day so that agencies which have the ability to update their lane systems during the day can do so.

### 4.4 File Layout

Tag Status Update File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ITGU
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
FROM_AGENCY_ID	CHAR(4)	Standard agency ID code of the Home Agency/CSC (See Appendix E, Column A)
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
PREV_FILE_DATE_TIME	CHAR(20)	Date of the Tag Status File (full) for which this is an update and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(10)	Count of all tags in file. Does not include header record. Values: 0000000000 – 9999999999
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>67</b>	

Tag Status Update File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
TAG_AGENCY_ID	CHAR(4)	The agency ID encoded on the transponder. Values: 0000 – 9999
TAG_SERIAL_NUMBER	CHAR(10)	The serial number encoded on the transponder. Values: 0000000001 – 9999999999
TAG_STATUS	CHAR(1)	1 – Valid 2 – Low Balance 3 – Zero/Negative Balance (tag is not valid for use and will not be honored by the Home Agency/CSC. However, the tag may become valid again in a future ITAG file). 4 – Invalid (tag will not be honored by the Home Agency/CSC)
TAG_ACCT_INFO	CHAR(6)	Refer to the description of TAG_ACCT_INFO in the Tag Status File.
TAG_HOME_AGENCY	CHAR(4)	The ID assigned to the Home Agency. This is the Agency/CSC that manages the customer account to which toll charges may be posted for this tag.  Values: 0000 – 9999
TAG_AC_TYPE_IND	CHAR(1)	Refer to the description of TAG_AC_TYPE_IND in the Tag Status File.
TAG_ACCOUNT_NO	CHAR(50)	Refer to the description of TAG_ACCOUNT_NO in the Tag Status File.
TAG_PROTOCOL	CHAR(3)	Refer to the description of TAG_PROTOCOL in the Tag Status File.
TAG_TYPE	CHAR(1)	Refer to the description of TAG_TYPE in the Tag Status File.
TAG_MOUNT	CHAR(1)	Refer to the description of TAG_MOUNT in the Tag Status File.

Tag Status Update File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
TAG CLASS	CHAR(4)	Refer to the description of TAG_CLASS in the Tag Status File.
DELIMITER	CHAR(1)	LF
Record Total	86	

#### 4.5 Processing Requirements

1. Removed.
2. This file is sent in differential format which means that it includes all changes made since the last full Tag Status File, and not just changes since the last update file.
3. Frequency of this file could be as often as hourly.
4. File size should be negligible since the file will primarily be used to inform the Away Agencies/CSCs of updated tag information on an as needed basis.
5. In the event that an invalid header record is encountered (e.g., character data in a numeric field, etc.), the Away Agency/CSC should reject the file and notify the Home Agency/CSC via the Acknowledgement File.
6. In the event that an invalid detail record is encountered (e.g., inappropriate TAG\_STATUS, etc.), the Away Agency/CSC should reject the file and notify the Home Agency/CSC via the Acknowledgement File.
7. In the event that the PREV\_FILE\_DATE\_TIME does not agree with the date/time of the previous full Tag Status File, the update file should be rejected and the Home Agency/CSC should be notified via the Acknowledgement File.
8. The Home Agency/CSC shall only include information for tags which it manages and for which it will guarantee the toll (for those with TAG\_STATUS values of '1' or '2') or for tags that it needs to invalidate (TAG\_STATUS values of '3' or '4').
9. A CSC which manages tags under more than one Agency ID shall send only a single Tag Status Update File containing all tags and not separate Tag Status Update Files for each Agency ID.

## 5.0 Removed

## 6.0 Transaction File

### 6.1 File Type

Variable length, LF delimited

### 6.2 File Name

{FROM\_AGENCY\_ID}\_{TO\_AGENCY\_ID}\_YYYYMMDDHHMMSS.ICTX

Example: 0004\_0022\_19971201001015.ICTX  
NYSTA transactions to NJ CSC create on 00:10:15 on 12/01/1997

### 6.3 File Use

The Transaction File shall be created by the Away Agency to inform the Home Agency of all toll transactions occurring at Away Agency facilities for valid and low balance status tags (TAG\_STATUS = '1' or '2') as well as license plates belonging to the Home Agency that do not have companion accounts at the Away Agency/CSC. Transactions for Zero/Negative Balance tags (TAG\_STATUS = '3') may be included based on agreed upon business rules between the agencies.

Version 1.51 and earlier never explicitly defined the relationship between the Away Agency, Home Agency and the Agency ID values utilized in the Transaction File (and Correction File) and, subsequently, utilized in the various settlement reports. That is rectified herein with the explicit definition of the FROM\_AGENCY\_ID as the Agency ID of the Away Agency and the TO\_AGENCY\_ID as the Agency ID of the Home Agency. These are used here to clearly identify the parties for the file and are to be used in all settlement reports.

### 6.4 File Layout

Transaction File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ICTX
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
FROM_AGENCY_ID	CHAR(4)	The Agency ID of the Away Agency to whom the tolls are owed. See Appendix E, Column E.
TO_AGENCY_ID	CHAR(4)	The Agency ID of the Home Agency based on the TAG_HOME_AGENCY associated with the tag or license plate.
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
ICTX_FILE_NUM	CHAR(12)	A unique sequential number used to identify the Transaction File to the To Agency.  Values 000000000001 – 999999999999
DELIMITER	CHAR(1)	LF
Header Total	61	

Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_TRX_SERIAL_NUM	CHAR(20)	The unique key of a transaction assigned by the Away Agency/CSC.  Values: 00000000000000000000 – 9999999999999999
ETC_REVENUE_DATE	CHAR(8)	The revenue date of the transaction as determined by the Away Agency/CSC. This date shall be used in the generation of any casual use reports by the Home Agency/CSC. This is not a UTC value.  Format: YYYYMMDD

Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_FAC_AGENCY	CHAR(4)	<p>A code indicating the agency which owns/operates the facility on which the transaction occurred. This may or may not be the Away Agency and no such relationship should be assumed.</p> <p>For multi-agency CSCs, this code will not represent the CSC but will represent the agency within the CSC which owns/operates the facility. Therefore, for the NJ Regional CSC, the codes for the individual agencies will be used and not 0022.</p> <p>See Appendix E, Column F for valid values.</p>
ETC_TRX_TYPE	CHAR(1)	<p>This field is used to denote the type of transaction.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>B – Barrier</li> <li>C – Ticketed Complete</li> <li>X – Ticketed Unmatched Exit</li> </ul>
ETC_ENTRY_DATE_TIME	CHAR(25)	<p>The date/time the vehicle entered the facility in the local time zone of the facility and formatted per ISO-8601 as shown below.</p> <p>Format: YYYY-MM-DDThh:mm:ss±HH:MM</p> <p>***** for Barrier/Unmatched Exit</p>
ETC_ENTRY_PLAZA	CHAR(15)	<p>The ETC_FAC_AGENCY plaza code of the plaza at which the vehicle entered the facility.</p> <p>Filled with asterisks (*) for Barrier/Unmatched Exit</p> <p>The contents of this field are left justified and padded with trailing blanks as needed.</p> <p>Refer to Appendix B for the list of valid values for this field.</p>
ETC_ENTRY_LANE	CHAR(3)	<p>The ETC_FAC_AGENCY lane code of the lane at which the vehicle entered the facility.</p> <p>The contents of this field are left justified and padded with trailing blanks as needed.</p> <p>*** for Barrier/Unmatched Exit</p>
ETC_TAG_AGENCY	CHAR(4)	<p>Standard agency ID read from the tag or as retrieved from the Customer License Plate File for a license plate based transaction.</p> <p>Values: 0000 – 9999</p>
ETC_TAG_SERIAL_NUMBER	CHAR(10)	<p>Tag serial number read from the tag or as retrieved from the Customer License Plate File for a license plate based transaction.</p> <p>Values: 0000000001 – 9999999999</p>
ETC_READ_PERFORMANCE	CHAR(2)	<p>The total number of times the tag was read while in the capture zone. Obtained from the AVI reader.</p> <p>Values: 00 – 99 ** if data is unavailable</p> <p>For Ticketed, this would be from the exit transaction.</p>
ETC_WRITE_PERF	CHAR(2)	<p>The total number of times the tag was written to while in the capture zone. Obtained from the AVI reader.</p> <p>Values: 00 – 99 ** if data is unavailable</p> <p>For Ticketed, this would be from the exit transaction.</p>
ETC_TAG_PGM_STATUS	CHAR(1)	<p>The result of the AVI tag program cycle. Obtained from the AVI reader.</p> <p>Values: S – Success U – Unverified F – Failed * if data is unavailable</p> <p>For Ticketed, this would be from the exit transaction.</p> <p>This field along with used in conjunction with ETC_READ_PERFORMANCE and ETC_WRITE_PERF would allow the Home Agency to gauge tag performance over time.</p>

Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_LANE_MODE	CHAR(1)	<p>The mode the lane was operating in at the time of the transaction.</p> <p>Values: E – ETC Only (Dedicated) A – ETC/ACM M – Manual/ETC C – Manual/ETC with Carpool confirmation O – ORT</p> <p>For Ticketed, this would be from the exit transaction.</p>
ETC_VALIDATION_STATUS	CHAR(1)	<p>The tag status from the tag status file at the time of the transaction.</p> <p>Values: 1 – Good 2 – Low Balance 3 – Zero/Negative Balance (only if agreed upon between the agencies) * - where no tag was read but the license plate on the image was found on the Customer License Plate File. Also used if the lane system does not report this value to its CSC.</p> <p>For Ticketed, this would be from the exit transaction.</p>
ETC_LIC_STATE	CHAR(2)	<p>License plate state for a license plate-based transaction. The license plate data presented in the record (ETC_LIC_STATE, ETC_LIC_NUMBER and ETC_LIC_TYPE) must have been present in the Customer License Plate File sent by the Home Agency to which this transaction is being sent.</p> <p>** for tagged transaction.</p>
ETC_LIC_NUMBER	CHAR(10)	<p>License plate number for a license plate-based transaction.</p> <p>***** for tagged transaction.</p> <p>The Home Agency/CSC should attempt to present the transaction on the customer's statement using the license plate information when such is provided (as opposed to the tag information).</p>
ETC_LIC_TYPE	CHAR(30)	<p>License Plate Type as determined by the Away Agency and matched to the Home Agency data from the ICLP File for a license plate based transaction. Filled with asterisks (*) if not included/available.</p>
ETC_CLASS_CHARGED	CHAR(3)	<p>The Away Agency class code used to determine the toll amount. This class is as determined by the Away Agency using any combination of tag class, AVC class, and/or toll collector classification.</p> <p>The contents of this field are left justified and padded with trailing blanks as needed.</p> <p>This field should not be validated by the receiver as to form or content and may be blank. However, Refer to Appendix C for the list of typical values for this field.</p>
ETC_ACTUAL_AXLES	CHAR(2)	<p>The number of axles associated with the vehicle.</p> <p>Values: 00 – 99</p> <p>For facilities that do not capture axle count data as part of their class structure, 00 should be used.</p>
ETC_EXIT_SPEED	CHAR(3)	<p>The speed in MPH of the vehicle as it exited the facility. If the Away Agency cannot/does not measure speed, 000 should be used.</p> <p>Values: 000 – 999</p> <p>This field would allow the Home Agency to gauge customer speed activity over time. It also can be used to offset low counts in the ETC_READ_PERFORMANCE and ETC_WRITE_PERF fields since vehicles traveling at higher speeds typically have lower performance figures.</p>
ETC_OVER_SPEED	CHAR(1)	<p>An indicator of whether or not the speed reported in ETC_EXIT_SPEED was over the allowable threshold for that plaza/lane.</p> <p>Values: Y – Speed is over threshold N – Speed is not over threshold</p>

Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_EXIT_DATE_TIME	CHAR(25)	The date/time the vehicle exited the facility in the local time zone of the facility and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ss±HH:MM
ETC_EXIT_PLAZA	CHAR(15)	The ETC_FAC_AGENCY plaza code of the plaza at which the vehicle exited the facility.  The contents of this field are left justified and padded with trailing blanks as needed.  Refer to Appendix B for the list of valid values for this field.
ETC_EXIT_LANE	CHAR(3)	The ETC_FAC_AGENCY lane code of the lane at which the vehicle exited the facility.  The contents of this field are left justified and padded with trailing blanks as needed.
ETC_DEBIT_CREDIT	CHAR(1)	An indicator as to whether the toll reflected in ETC_TOLL_AMOUNT is to be debited from the customer account or credited to the customer account.  Values: Plus (+) – Debit from customer account Space ( ) – Debit from customer account Minus (-) – Credit to customer account
ETC_TOLL_AMOUNT	CHAR(9)	The toll due (in US cents) as calculated by the Away Agency.  Values: 000000000 (\$0000000.00) – 000499999 (\$0004999.99)  While this field can physically allow for larger values, it shall support a configurable maximum value (currently defined as \$4,999.99). Any values larger than the configurable value detected by the Home Agency/CSC will be rejected with an ETC_POST_STATUS value of RJTA in the Reconciliation File.
DELIMITER	CHAR(1)	LF
Record Total	202	

## 6.5 Processing Requirements

- It shall be the responsibility of the Away Agency/CSC to ensure that the Transaction File does not contain two (or more) non-license plate (i.e., tagged with no ETC\_LIC\_NUMBER information) transactions for the same ETC\_TAG\_AGENCY/ ETC\_TAG\_SERIAL\_NUMBER combination in the same ETC\_EXIT\_PLAZA within a one (1) minute period.

Also, it shall be the responsibility of the Home Agency/CSC to validate incoming Transaction Files to ensure that they do not contain two (or more) non-license plate transactions for the same ETC\_TAG\_AGENCY/ETC\_TAG\_SERIAL\_NUMBER combination in the same ETC\_EXIT\_PLAZA within a one (1) minute period.

Note that license plate transactions which are transactions that contain license plate data (even though they also contain tag data) shall not utilize the tag data they contain for any duplication checking. The tag data in license plate transactions is solely for informational purposes and to aid in identifying the correct E-ZPass account.

- While tag information (in addition to the ETC\_LIC\_NUMBER information) will be passed back to the Home Agency for untagged (i.e., license plate based) transactions (based on the tag information retrieved from the Customer License Plate File), the Home Agency should reflect only the license plate information on the customer's statement so as to avoid potential confusion with another transaction for the same tag.
- A credit transaction must have its own unique ETC\_TRX\_SERIAL\_NUM but may share the same agency, plaza, lane and date/time information so that it may be accurately reflected on the customer account and statement. This duplication of agency, plaza, lane and date/time information should not be considered a duplicate as discussed in requirement #1. This field should NOT be used in lieu of the Transaction Correction File. Its primary use is to generate credit transactions in the same file as the original debit transaction.

For example, NYSTA annual permit holders who pass through the Harriman barrier toll plaza (and create a

debit toll transaction for 50 cents) could proceed North or South on the Thruway. If they proceed South, the 50 cent debit toll transaction will appear on their account. If they proceed North on the Thruway and then exit at the next exit they are given a 50 cent credit since they traversed less than 30 miles of the Thruway. The credit transaction will, in most circumstances, be included in the same Transaction File as the original debit transaction.

4. License plate transactions must be checked for duplicates by the Home Agency/CSC during the posting process to ensure that a tagged transaction does not already exist for the given account at the same plaza within one (1) minute (or less based on agreement between the Home and Away Agencies) of the license plate transaction. If a duplicate is found, the appropriate reconciliation code should be used (RJDP – see Transaction Reconciliation File).

Note that if a tagged transaction is found and used to reject license plate transaction, that tagged transaction should not be used to reject any subsequent license plate transactions. For example, a fleet of three NJ Transit buses traverses a toll plaza within one minute. One is tagged and the other two are not. The tagged transaction posts to the NJ Transit account, the first license plate transaction would get rejected with RJDP. The second license plate transaction should post to the NJ Transit account.

5. Removed.
6. The combination of FROM\_AGENCY\_ID, TO\_AGENCY\_ID and ICTX\_FILE\_NUM forms a unique sequential key which will be used by the receiving agency (the TO\_AGENCY\_ID which is the Home Agency) to verify that each Transaction File was received without any gaps. As such, the same ICTX\_FILE\_NUM can be received by a Home Agency from multiple Away Agencies since it is the combination of the FROM\_AGENCY\_ID, TO\_AGENCY\_ID and ICTX\_FILE\_NUM which makes the ICTX\_FILE\_NUM unique.

If the ICTX\_FILE\_NUM of the current Transaction File does not equal the prior ICTX\_FILE\_NUM received from that FROM\_AGENCY\_ID plus one (1), the Acknowledgement File shall contain a RETURN\_CODE of '06' to signify that a gap in sequence numbers was found. However, the current Transaction File should still be processed.

If the ICTX\_FILE\_NUM of the current Transaction File is equal to the ICTX\_FILE\_NUM of a previous Transaction File, the Acknowledgement File shall contain a RETURN\_CODE of '05' and the current Transaction File should not be processed.

7. An Away Agency/CSC shall first check its own customer base to see if the transaction can be applied to one of its own accounts (possibly a companion account) before including the transaction in a Transaction File destined for another Agency/CSC.
8. Transactions shall be routed to a Home Agency/CSC based on the TAG\_HOME\_AGENCY associated with the tag or license plate. This will provide support for tag portability. The Away Agency/CSC shall utilize its own rules for selecting the appropriate Home Agency/CSC if there is more than one associated with a given tag. Refer to Section 10.5 for the rules related to license plates with multiple Home Agencies/CSCs.
9. A Transaction File shall be created for all transactions originating at the Away Agency and destined for the Home Agency as denoted by the FROM\_AGENCY\_ID and TO\_AGENCY\_ID in the file name.

## 7.0 Transaction Reconciliation File

### 7.1 File Type

Variable length, LF delimited

### 7.2 File Name

{FROM\_AGENCY\_ID}\_{TO\_AGENCY\_ID}\_YYYYMMDDHHMMSS.ICRX

Example: 0005\_0006\_19971201041015.ICRX  
PANYNJ reconciliation to PTC created on 04:10:15 on 12/01/1997

### 7.3 File Use

The Transaction Reconciliation File shall be created by the Home Agency to inform the Away Agency as to the disposition of toll transactions processed by the Home Agency which occurred at the Away Agency's facilities.

### 7.4 File Layout

Transaction Reconciliation File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ICRX
VERSION	CHAR(8)	File format/content version.  Format: ## ## ##
FROM_AGENCY_ID	CHAR(4)	The Agency ID of the Home Agency based on the TAG_HOME_AGENCY associated with the tag or license plate.
TO_AGENCY_ID	CHAR(4)	The Agency ID of the Away Agency to whom the tolls are owed.
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
ICTX_FILE_NUM	CHAR(12)	The file number of the ICTX file to which this ICRX file is associated.  Values: 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>61</b>	

Transaction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_TRX_SERIAL_NUM	CHAR(20)	The unique key of the transaction assigned by the Away Agency/CSC. Values: 00000000000000000000 – 9999999999999999
ETC_POST_STATUS	CHAR(4)	The result of the Home Agency's/CSC's attempt to post the transaction.  Values: for Toll transactions: POST – Toll transaction posted successfully via tag. PPST – Toll transaction posted successfully via license plate. NPST – Toll transaction did not post but Home Agency acknowledges that toll is still owed to the Away Agency. INSU – Rejected, account has insufficient funds where transaction date/time (ETC_EXIT_DATE_TIME) is greater than date/time of acknowledgement from that Away Agency/CSC of receipt of full Tag Status File which indicated that the tag was in an zero/negative balance status.  Transactions rejected as INSU can be resubmitted (by agreement between the Agencies) in an ITXC file with a CORR_REASON of '06' if the transponder in question becomes valid.  RJPL - Rejected license plate transaction. The license plate

Transaction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
		<p>transaction could not be posted. Not to be used if the license plate transaction was rejected due to the duplicate filter rule. RJDP is to be used in such a case.</p> <p>Transactions rejected as RJPL cannot be resubmitted.</p> <p>OLD1 - Rejected, old transaction – account closed. The difference between the date of the transaction and the date the transaction was received by the Home Agency/CSC exceeded that specified in the Reciprocity Agreement under Account Settlement Process for Valid Tag Transactions when accounts are closed.</p> <p>Transactions rejected as OLD1 cannot be resubmitted except by special agreement between the agencies on a case-by-case basis. In such circumstances, the agencies will determine if resubmission is to be via an ICTX or ITXC file.</p> <p>OLD2 - Rejected, old transaction – other. The difference between the date of the transaction and the date the transaction was received by the Home Agency/CSC exceeded that specified in the Reciprocity Agreement under Account Settlement Process for Valid Tag Transactions when accounts are not closed.</p> <p>Transactions rejected as OLD2 cannot be resubmitted except by special agreement between the agencies on a case-by-case basis. In such circumstances, the agencies will determine if resubmission is to be via an ICTX or ITXC file.</p> <p>ACCB - Rejected, account in bad status (revoked, closed, etc.) where transaction date/time (ETC_EXIT_DATE_TIME) is greater than date/time of acknowledgement from that Away Agency/CSC of receipt of full Tag Status File which indicated that the tag was no longer valid (i.e., not present in the file).</p> <p>Transactions rejected as ACCB can be resubmitted as license plate-based transactions in an ITXC file with a CORR_REASON of '06' if the plate data associated with the transaction is determined as belonging to a valid account.</p> <p>RINV - Rejected, the transaction contains invalid data (e.g., invalid agency as defined in Appendix A, invalid plaza as defined in Appendix B, invalid class as defined in Appendix C, etc.).</p> <p>Transactions rejected as RINV can be resubmitted in an ITXC file with a CORR_REASON of '06' and corrected data.</p> <p>TAGB - Rejected, tag in bad status (e.g., lost, stolen, etc.) where transaction date/time (ETC_EXIT_DATE_TIME) is greater than date/time of acknowledgement from that Away Agency/CSC of receipt of full Tag Status File which indicated that the tag was no longer valid (i.e., not present in the file).</p> <p>Transactions rejected as TAGB can be resubmitted as license plate-based transactions in an ITXC file with a CORR_REASON of '06' if the plate data associated with the transaction is determined as belonging to a valid account.</p> <p>RJDP - Rejected, duplicate transaction. Usually associated with a skip read or cross lane read where a tagged transaction and license plate transaction exists for the same customer at the same plaza within one (1) minute. The license plate transaction is rejected as the duplicate.</p> <p>Transactions rejected as RJDP can be resubmitted in an ITXC file with a CORR_REASON of '08' if research by the Away Agency shows that it was not actually a duplicate.</p>

Transaction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
		<p>RJTA - Rejected due to toll amount exceeding the configured maximum amount.</p> <p>Transactions rejected as RJTA can be resubmitted in an ITXC file with a CORR_REASON of '07'.</p> <p>Refer to Appendix L for additional reconciliation scenarios.</p>
ETC_POST_PLAN	CHAR(5)	<p>The Away Agency/CSC discount plan used when the transaction was posted. This is only applicable when the Home Agency/CSC offers the Away Agency/CSC discount plans to its customers.</p> <p>Values: 00002 – PANYNJ Staten Island Bridges            00003 – PANYNJ All Bridges            00004 – PANYNJ Carpool            00005 – PANYNJ Non-revenue            00006 – NYSBA Discount            00007 – NYSTA Annual Permit            00008 – NYSTA Tappan Zee Commuter            00009 – NYSTA Tappan Zee Carpool            00010 – MTA Rockaway Resident            00011 – MTA Staten Island Resident            00012 – DRPA Discount            00013 – SJTA Discount            00014 – NJHA Bus Discount            00023 – FL Non-Revenue</p> <p>If no discount plan is used, this field shall be blank.</p>
ETC_DEBIT_CREDIT	CHAR(1)	<p>An indicator as to whether the amount reflected in ETC_OWED_AMOUNT is to be applied to the amount owed to the Away Agency or removed from that amount.</p> <p>Values: Plus (+) – Apply to amount owed            Space ( ) – Apply to amount owed            Minus (-) – Remove from amount owed</p>
ETC_OWED_AMOUNT	CHAR(9)	<p>The amount (in US cents) owed to the Away Agency. For rejected transactions, this would be 000000000.</p> <p>For correction transactions, this would be the new (corrected) amount from the correction transaction (not the net of the original and corrected amount).</p> <p>Values: 000000000 (\$0000000.00) – 999999999 (\$9999999.99)</p> <p>Allows for values higher than shown in the ICTX file to support corrections submitted with CORR_REASON value of '07'.</p>
ETC_DUP_SERIAL_NUM	CHAR(20)	<p>For transactions rejected with a code of RJDP, this field shall contain the unique key of the transaction assigned by the Away Agency/CSC to which the reconciled transaction was found to be a duplicate.</p> <p>Values: 00000000000000000000 – 99999999999999999999</p> <p>Value of all zeroes is used if the reconciliation code is other than RJDP or if the Home Agency/CSC cannot provide this value.</p>
DELIMITER	CHAR(1)	LF
Record Total	60	

## 7.5 Processing Requirements

- Each reconciliation file shall be associated with a specific Transaction File (as indicated by the ICTX\_FILE\_NUM field in the Header record) and shall include reconciliation information for each and every transaction that was sent in the original Transaction File.
- The ETC\_POST\_STATUS values of INSU, ACCB, and TAGB should not occur in the normal course of events. However, if the Away Agency/CSC was unable to transmit the latest tag status file to its lanes in a timely fashion, it would be possible for the Away Agency/CSC to generate a normal ETC transaction for a tag that the Home Agency/CSC has indicated is "Invalid" and attempt to collect for such a transaction from the Home Agency/CSC.

It would be in these cases that the Home Agency/CSC would reject a transaction since the transaction should have been treated as a violation/video toll in the lane by the Away Agency/CSC and the Home

Agency/CSC will not take responsibility for the Away Agency's/CSC's inability to download tag status files in a timely manner.

3. Removed
4. Monthly settlement between the agencies shall be based on the dates embedded within the Acknowledgement Files for the corresponding Transaction Reconciliation Files and Correction Reconciliation Files. Therefore, settlement for December, 1998, which will occur in January, 1999, will be based on ACK files with FILE\_DATEs which match "199812??" (where the ? is a character wildcard). Settlement is based solely on transactions reconciled with ETC\_POST\_STATUS values of 'POST', 'PPST' or 'NPST'.

Refer to the *Report Specifications* sections (17.0 and on) for a description of the reports required to perform settlement.

5. The ICTX\_FILE\_NUM associated with the Transaction File to which this Transaction Reconciliation File contains reconciliation data is inserted into the header to assist the Away Agency (the TO\_AGENCY\_ID) in tracking the status of reconciliation.

Reconciliation does not have to be performed in a sequential manner, therefore, it is possible to receive ICTX\_FILE\_NUMs which are not in sequence. However, if the receiving agency detects a duplicate ICTX\_FILE\_NUM (implying that a Transaction File which has already been reconciled is now being reconciled again), the Acknowledgement File shall contain a RETURN\_CODE of '05' and the current Transaction Reconciliation File should not be processed. Such files will not be included in the monthly settlement.

6. If the RECORD\_COUNT in the Transaction Reconciliation File header record does not equal the number of transactions in the Transaction File referred to by ICTX\_FILE\_NUM or the Transaction Reconciliation File contains references to transactions which were not included in the Transaction File referred to by ICTX\_FILE\_NUM, the Transaction Reconciliation File should not be processed and the associated Acknowledgement File shall contain a RETURN\_CODE of '04'. Such files will not be included in the monthly settlement.

## 8.0 Correction File

### 8.1 File Type

Variable length, LF delimited

### 8.2 File Name

{FROM\_AGENCY\_ID}\_{TO\_AGENCY\_ID}\_YYYYMMDDHHMMSS.ITXC

Example: 0008\_0006\_19971201001015.ITXC  
MTAB&T transactions to PTC create on 00:10:15 on 12/01/1997

### 8.3 File Use

The Correction File shall be created by the Away Agency/CSC to replace toll transaction information already sent to the Home Agency/CSC with updated/corrected information. This could be for transactions that have been previously posted or for transactions that were rejected and had not been previously posted.

### 8.4 File Layout

Correction File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ITXC
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
FROM_AGENCY_ID	CHAR(4)	The Agency ID of the Away Agency to whom the tolls are owed.
TO_AGENCY_ID	CHAR(4)	The Agency ID of the Home Agency based on the TAG_HOME_AGENCY associated with the tag or license plate.
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
ITXC_FILE_NUM	CHAR(12)	A unique sequential number used to identify the Transaction Correction File to the To Agency.  Values: 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>61</b>	

Correction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
CORR_REASON	CHAR(2)	A code denoting the reason for the correction. Values:  01 – Resolved mismatch: class/toll corrected 02 – Ignore license plate transaction 03 – Ignore tagged transaction 04 – Corrected plaza/lane and toll information 05 – Other correction that could involve any fields from the original record 06 – Resubmission of transaction rejected with codes of ACCB, TAGB, INSU or RINV as indicated in Section 7.4. 07 – Resubmission of transaction rejected with a code of RJTA. The toll amount has either been adjusted to be under the configured threshold or has been verified as being correct (and is still above the configured threshold) and the Home Agency/CSC should not reject this resubmission but should post this excessive amount to the customer account. 08 – Resubmission of transaction rejected with a code of RJDP. The Away Agency/CSC has researched the transaction and determined that it is not an actual duplicate. The Home Agency/CSC should bypass its duplicate filtering and should post this resubmission.

Correction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
All other fields from the Transaction File	CHAR(202)	All fields from the original transaction (refer to Transaction File structure for details) will be retransmitted with the appropriate fields corrected to their required values.
Record Total	204	

## 8.5 Processing Requirements

- The combination of FROM\_AGENCY\_ID, TO\_AGENCY\_ID and ITXC\_FILE\_NUM forms a unique sequential key which will be used by the receiving agency (the TO\_AGENCY\_ID which is the Home Agency) to verify that each Correction File was received without any gaps. As such, the same ITXC\_FILE\_NUM can be received by a Home Agency from multiple Away Agencies since it is the combination of the FROM\_AGENCY\_ID, TO\_AGENCY\_ID and ITXC\_FILE\_NUM which makes the ITXC\_FILE\_NUM unique.

If the ITXC\_FILE\_NUM of the current Correction File does not equal the prior ITXC\_FILE\_NUM received from that FROM\_AGENCY\_ID plus one (1), the Acknowledgement File shall contain a RETURN\_CODE of '06' to signify that a gap in sequence numbers was found. However, the current Correction File should still be processed.

If the ITXC\_FILE\_NUM of the current Correction File is equal to the ITXC\_FILE\_NUM of a previous Correction File, the Acknowledgement File shall contain a RETURN\_CODE of '05' and the current Correction File should not be processed.

- Transactions shall be routed to the Home Agency/CSC to which the original transaction was sent.
- Removed
- Transactions can be corrected/resubmitted multiple times within the number of days from the original Transaction Exit Date/Time as specified in the Reciprocity Agreement under Account Settlement Process for Valid Tag Transactions when accounts are not closed.
- If the account is valid at the time of receipt of a resubmission, a Home Agency/CSC may choose to post the associated transaction even if the account was not valid on the indicated transaction date.
- The same transaction cannot appear in a Correction File more than a configurable number of times (as determined by the agencies) over the life of the transaction.
- The same transaction cannot appear in a Correction File more than once in a calendar day with a CORR\_REASON value of '06'.
- Correction records resulting in a lower toll amount can be accepted by the Home Agency outside of the allowed date range if agreed to between the agencies.

## 9.0 Correction Reconciliation File

### 9.1 File Type

Variable length, LF delimited

### 9.2 File Name

{FROM\_AGENCY\_ID}\_{TO\_AGENCY\_ID}\_YYYYMMDDHHMMSS.IRXC

Example: 0006\_0008\_19971201041015.IRXC  
PTC reconciliation to MTAB&T created on 04:10:15 on 12/01/1997

### 9.3 File Use

The Correction Reconciliation File shall be created by the Home Agency/CSC to inform the Away Agency/CSC as to the disposition of correction transactions processed by the Home Agency/CSC which occurred at the Away Agency's/CSC's facilities.

### 9.4 File Layout

Correction Reconciliation File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	IRXC
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
FROM_AGENCY_ID	CHAR(4)	The Agency ID of the Home Agency based on the TAG_HOME_AGENCY associated with the tag or license plate.
TO_AGENCY_ID	CHAR(4)	The Agency ID of the Away Agency to whom the tolls are owed.
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
ITXC_FILE_NUM	CHAR(12)	The file number of the ITXC file to which this IRXC file is associated.  Values: 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
Header Total	61	

Correction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
Same fields as the Transaction Reconciliation File	CHAR(60)	Same as the Transaction Reconciliation File.

### 9.5 Processing Requirements

1. Each reconciliation file shall be associated with a specific Correction File (as indicated by the ITXC\_FILE\_NUM field in the Header record) and shall include reconciliation information for each and every transaction that was sent in the original Correction File.
2. Monthly settlement between the agencies shall be based on the dates embedded within the Acknowledgement Files for the corresponding Transaction Reconciliation Files and Correction Reconciliation Files. Therefore, settlement for December, 1998, which will occur in January, 1999, will be based on ACK files with FILE\_DATEs which match "199812??" (where the ? is a character wildcard). Settlement is based solely on transactions reconciled with ETC\_POST\_STATUS values of 'POST', 'PPST' or 'NPST'.
3. The ITXC\_FILE\_NUM associated with the Correction File to which this Correction Reconciliation File contains reconciliation data is inserted into the header to assist the Away Agency (the TO\_AGENCY\_ID) in tracking the status of reconciliation.

Reconciliation does not have to be performed in a sequential manner, therefore, it is possible to receive ITXC\_FILE\_NUMs which are not in sequence. However, if the receiving agency detects a duplicate ITXC\_FILE\_NUM (implying that a Correction File which has already been reconciled is now being reconciled again), the Acknowledgement File shall contain a RETURN\_CODE of '05' and the current Correction Reconciliation File should not be processed. Such files will not be included in the monthly settlement.

4. If the RECORD\_COUNT in the Correction Reconciliation File header record does not equal the number of transactions in the Correction File referred to by ITXC\_FILE\_NUM or the Correction Reconciliation File contains references to transactions which were not included in the Correction File referred to by ITXC\_FILE\_NUM, the Correction Reconciliation File should not be processed and the associated Acknowledgement File shall contain a RETURN\_CODE of '04'. Such files will not be included in the monthly settlement.

## 10.0 Customer License Plate File

### 10.1 File Type

Variable length, LF delimited

### 10.2 File Name

{FROM\_AGENCY\_ID}\_YYYYMMDDHHMMSS.ICLP

Example: 0008\_19971201041015.ICLP  
E-ZPass NY license plate file created on 04:10:15 on 12/01/1997

### 10.3 File Use

The Customer License Plate File shall be created by the Home Agency/CSC to inform the Away Agencies/CSCs of the vehicle license plate numbers associated with tags found in the Home Agency's/CSC's Tag Status File. This will include license plates for its valid customers (customers with at least one tag with a TAG\_STATUS of '1' or '2') as well as plate data associated with TAG\_STATUS '3' tags to maintain consistency between the ITAG and ICLP files. This file will allow the Away Agency/CSC to collect the toll from the Home Agency/CSC for a license plate based transaction.

### 10.4 File Layout

Customer License Plate File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ICLP
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
FROM_AGENCY_ID	CHAR(4)	Standard agency ID code of the Home Agency/CSC (See Appendix E, Column A)
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(10)	Count of detail records in the file. Does not include header record. Values: 0000000000 – 9999999999
DELIMITER	CHAR(1)	LF
Header Total	47	

Customer License Plate File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
LIC_STATE	CHAR(2)	Standard State abbreviation (or Province abbreviation for Canada). This field cannot be blank. If this field does not contain a valid state/province abbreviation, the record should be rejected.  Refer to Appendix I for the list of valid values for this field.
LIC_NUMBER	CHAR(10)	Plate number must be left justified with no embedded blanks.  Shall follow format required for DMV lookups including required prefixes, suffixes, or handling of special characters as dictated by the state which issued the plate. This could include hyphens (-), periods (.) or other special characters.  If this field contains invalid characters, the record should be rejected.
LIC_TYPE	CHAR(30)	The license plate type. Filled with asterisks (*) if unavailable/unused. Would be the same plate type data required to perform a DMV lookup for the plate.  Refer to Appendix J for the list of valid values for this field.
TAG_AGENCY_ID	CHAR(4)	Tag agency ID. Values: 0000 – 9999
TAG_SERIAL_NUMBER	CHAR(10)	Tag serial number. Values: 0000000001 – 9999999999

Customer License Plate File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
LIC_EFFECTIVE_FROM	CHAR(20)	<p>The earliest date/time for which the customer has indicated they would claim responsibility for tolls incurred against the license plate and formatted per ISO-8601 as shown below. Transactions with an Exit Date/Time earlier than this date/time will, generally, not be posted by the Home Agency/CSC (though they may be based on Home Agency/CSC business rules).</p> <p>If not provided (filled with asterisks), is assumed to be effective when first seen in an ICLP associated with this tag. This is, generally, to support backward compatibility with ICD 1.51. Home Agencies/CSCs generating ICD 1.60 (and later) files should be populating this field.</p> <p>Format: YYYY-MM-DDThh:mm:ssZ</p>
LIC_EFFECTIVE_TO	CHAR(20)	<p>Date/time that the license plate stopped being associated to the indicated tag and formatted per ISO-8601 as shown below. Transactions with an Exit Date/Time later than this date/time will, generally, not be posted by the Home Agency/CSC (though they may be based on Home Agency/CSC business rules).</p> <p>If the customer removes the plate from their account, this field would be set to that date/time.</p> <p>If not provided (filled with asterisks), is assumed to still be effective as of the date of this ICLP file.</p> <p>Format: YYYY-MM-DDThh:mm:ssZ</p>
LIC_HOME_AGENCY	CHAR(4)	<p>The ID assigned to the Home Agency. This is the Agency/CSC that manages the customer account to which toll charges may be posted for this plate. See Appendix E, Column C.</p> <p>Values: 0000 – 9999</p>
LIC_ACCOUNT_NO	CHAR(50)	<p>The unique account number at the Home Agency/CSC of the associated plate data. Must be provided for all E-ZPass Home Agencies. May not be provided for all NIOP agencies. If not available/provided, will be filled with asterisks (*).</p>
LIC_VIN	CHAR(17)	<p>The vehicle manufacturer Vehicle Identification Number (VIN) associated with the license plate. If not available/provided, will be filled with asterisks (*).</p>
LIC_GUARANTEED	CHAR(1)	<p>Used to denote whether or not transactions with this license plate are guaranteed by the Home Agency based on Home Agency business rules.</p> <p>Values: Y – Guaranteed N, * – Not Guaranteed</p> <p>Refer to Appendix L for toll guarantee scenarios.</p>
LIC_REGISTRATION_DATE	CHAR(20)	<p>Date/time that the customer added the license plate to their account and formatted per ISO-8601 as shown below. This could be a date/time value that is before, during or even after the effective date range.</p> <p>Would be updated if the customer extended the Effective Date range. Would not be updated if the customer shortened the Effective Date range or if the Effective To date was changed from asterisks to a date/time value.</p> <p>If not provided (filled with asterisks), the Registration Date is assumed to be the date/time of the ICLP file in which this license plate was first seen associated with this Home Agency/Account. This is, generally, to support backward compatibility with ICD 1.51. Home Agencies/CSCs generating ICD 1.60 (and later) files should be populating this field.</p> <p>Format: YYYY-MM-DDThh:mm:ssZ</p>

Customer License Plate File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
LIC_UPDATE_DATE	CHAR(20)	Date/Time the customer made any change to the effective dates associated with this license plate and formatted per ISO-8601 as shown below. To be used by the Away Agency/CSC for research and/or dispute resolution purposes.  If not provided (filled with asterisks), the Update Date is assumed to be equal to the Registration Date.  Format: YYYY-MM-DDThh:mm:ssZ
DELIMITER	CHAR(1)	LF
Record Total	209	

## 10.5 Processing Requirements

1. Only license plates associated with tags issued/guaranteed by the Home Agency/CSC should be included in this file and it should not include any license plates associated with companion accounts (i.e., tags issued/guaranteed by another Agency/CSC).
2. The tag information provided by the Home Agency/CSC should be the first valid tag for the account. However, for agencies that maintain a one-to-one tag/plate mapping, the tag information provided should be the tag mapped to the specific license plate.
3. To help ensure that a license plate based transaction is routed to the correct Home Agency/CSC and posted to the account of the customer that most recently claimed responsibility for the license plate, the logic enumerated here will be used by the Away Agency/CSC. Note that the Effective Date range and Registration Dates are based on the most recent ICLP received by the Away Agency while the Tag Status would be the most recent received prior to the transaction date/time (i.e., the Tag Status as of the transaction date/time).
  - a) Find all Non-Fleet (TAG\_AC\_TYPE\_IND <> "F") ICLP records (or records in the Away Agency/CSC customer database) that have an Effective Date range that brackets the toll transaction's date/time and are associated with TAG\_STATUS '1' or '2' tags.
  - b) Of those records found, send the transaction to the Home Agency/CSC which has the most recent Registration Date.
  - c) If no such record is found, find all Fleet ICLP records (or records in the Away Agency/CSC customer database) that have an Effective Date range that brackets the toll transaction's date/time and are associated with TAG\_STATUS '1' or '2' tags.
  - d) Of those records found, send the transaction to the Home Agency/CSC which has the most recent Registration Date.
  - e) If no such record is found, Away Agency/CSC Image Based pursuit business rules should be followed. Alternatively, if there is a license plate associated with a TAG\_STATUS '3' tag, the Away Agency/CSC can send the transaction to the Home Agency/CSC for a posting attempt though posting and payment are not guaranteed.
4. The Away Agency/CSC should maintain a table of all license plate information received from the Home Agency/CSC.

For plates without effective dates (both are filled with asterisks), the following rules should apply:

- a. The table would maintain a date for each license plate which would be updated each time information was received for that license plate (essentially an inferred effective date range).
- b. License plate data would be purged from the table if no data for the license plate was received for the duration as specified in the Reciprocity Agreement under Account Settlement Process for Valid Tag Transactions when accounts are closed.
- c. Since plates associated with Status 3 tags may not be included in the ICLP file, plates can come and go from the file resulting in multiple inferred effective date ranges. Alternatively, since tag status is the final determiner, a single inferred effective date range could be maintained.
- d. For actual validity on a specific date, tag status should be used. If tag was valid on that date, plate transaction should be guaranteed. However, if tag was not valid on that date but is currently valid, can

be submitted but will not be guaranteed. Plate transactions dated before the inferred effective start should not be sent.

For plates with provided effective dates there would only be a single effective date range retained for the Home Agency/tag/plate combination and the following rules should apply:

- e. Effective start provided and end is asterisk – plate is associated with the account from the start date through the current date. For actual validity on a specific date, tag status should be used. If tag was valid on that date, plate transaction should post. However, if tag was not valid on that date but is currently valid, can be submitted but will not be guaranteed. Plate transactions dated before effective start should not be sent unless by agreement between the agencies.
  - f. Effective start and end provided – Plate is associated with the account between effective dates only. Plate transactions outside that period should not be sent. For actual validity on a specific date, tag status should be used. If tag was valid on that date, plate transaction should be guaranteed. However, if tag was not valid on that date but is currently valid, can be submitted but will not be guaranteed.
  - g. Effective end provided and start is asterisk – this is an invalid combination. ICLP record should be skipped.
5. The Away Agency/CSC would utilize this file to look up the license plate retrieved from an image and determine that the plate belongs to a customer of the Home Agency/CSC.

As noted above, the determination of a license plate's validity for posting should be based on the effective from/to date/time range and registration date associated with the license plate combined with the associated tag's status on the given transaction date. If the account is valid at the time of receipt of a license plate transaction, a Home Agency/CSC may choose to post the associated license plate based transaction even if the account was not valid on the indicated transaction date.

In the case of customer image based transaction disputes where the customer is required to add a license plate to their account, the plate effective from date/time should be earlier than the transaction's associated exit date/time.

- 6. In the event that an invalid detail record is encountered (e.g., inappropriate LIC\_STATE or LIC\_NUMBER, etc.), the Away Agency/CSC should skip that record and notify the Home Agency/CSC via the Acknowledgement File with a RETURN\_CODE value of '02'. The remainder of the file should continue to be processed.
- 7. Removed.
- 8. If a complete Customer License Plate File is missing from a Home Agency/CSC, the Away Agency/CSC shall utilize the most recent Customer License Plate File received prior to the missing Customer License Plate File. However, if the Home Agency/CSC does not send any Customer License Plate Files for the duration as specified in the Reciprocity Agreement under Account Settlement Process for Valid Tag Transactions when accounts are closed, then all license plates from that Home Agency/CSC shall be considered invalid.
- 9. The intent of the LIC\_TYPE field is to prevent the incorrect customer from getting charged based on plate duplication. LIC\_TYPE shall be populated when it is necessary to distinguish between actual or potential duplicate plates and not necessarily by default. The onus is on the Home Agency to populate the LIC\_TYPE field appropriately to ensure that their customers get correctly charged for any image-based transactions. If LIC\_TYPE is populated with asterisks, the Home Agency is willing to accept transactions for the plate regardless of plate type. If LIC\_TYPE is populated with a value other than asterisks, the Home Agency will only accept exact matches that include plate type.

To ensure that plate matching can be done under all circumstances, the Away Agency/CSC should capture license plate type along with issuing jurisdiction and required plate characters (per DMV rules).

Usage of LIC\_TYPE by the Away Agency/CSC would be as follows:

- 1) If the ICLP record contains a LIC\_TYPE value (not asterisks), then:

- a) Find a match on LIC\_STATE, LIC\_NUMBER and LIC\_TYPE to the Away Agency plate data captured.
  - 2) If the ICLP record does not contain a LIC\_TYPE (value is asterisks), then:
    - a) Find a match on LIC\_STATE and LIC\_NUMBER to the Away Agency plate data captured.
10. License plates with an effective end date shall remain on the ICLP file for at least the period of the toll guarantee (currently 60 days) after the effective end date has passed.

## 11.0 Non-Toll Transaction File

### 11.1 File Type

Variable length, LF delimited

### 11.2 File Name

{HOST\_AGENCY\_ID}\_{HOME\_AGENCY\_ID}\_YYYYMMDDHHMMSS.INTX

Example: 0004\_0009\_19971201001015.INTX

NYSTA non-toll transactions to DRPA create on 00:10:15 on 12/01/1997

### 11.3 File Use

The Non-Toll Transaction File shall be created by the Host Agency/CSC to inform the Home Agency/CSC of all transactions occurring at non-toll facilities hosted by the Host Agency/CSC for tags indicated as valid for E-ZPass Plus.

Version 1.51 and earlier never explicitly defined the relationship between the Away (Host) Agency, Home Agency and the Agency ID values utilized in the Transaction File (and Correction File) and, subsequently, utilized in the various settlement reports. That is rectified herein with the explicit definition of the FROM\_AGENCY\_ID as the Agency ID of the Away (Host) Agency and the TO\_AGENCY\_ID as the Agency ID of the Home Agency. These are used here to clearly identify the parties for the file and are to be used in all settlement reports.

### 11.4 File Layout

Non-Toll Transaction File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	INTX
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
HOST_AGENCY_ID	CHAR(4)	Standard agency ID code of the Host (Away) Agency (See Appendix E, Column E)
HOME_AGENCY_ID	CHAR(4)	The Agency ID code of the Home Agency (See Appendix E, Column C) based on the TAG_HOME_AGENCY associated with the tag.
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
INTX_FILE_NUM	CHAR(12)	A unique sequential number used to identify the Non-Toll Transaction File to the Home Agency.  Values 000000000001 – 999999999999
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>61</b>	

Non-Toll Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_TRX_SERIAL_NUM	CHAR(20)	The unique key of a transaction assigned by the Away Agency/CSC.  Values: 00000000000000000000 – 99999999999999999999
ETC_REVENU_DATE	CHAR(8)	The revenue date of the transaction as determined by the Away Agency/CSC. This date shall be used in the generation of any casual use reports by the Home Agency/CSC.  Format: YYYYMMDD
ETC_FAC_AGENCY	CHAR(4)	A code indicating the <b>facility operator</b> at which the transaction occurred.  See Appendix E, Column G for valid values.
ETC_TRX_TYPE	CHAR(1)	This field is used to denote the type of transaction. Values: P – Parking Transaction N – Non-Parking Transaction

Non-Toll Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_ENTRY_DATE_TIME	CHAR(25)	<p>The date/time the vehicle entered the facility in the local time zone of the facility and formatted per ISO-8601 as shown below.</p> <p>Format: YYYY-MM-DDThh:mm:ss±HH:MM</p> <p>Optional for Non-Toll transactions. If not provided must be filled with asterisks (*).</p>
ETC_ENTRY_PLAZA	CHAR(3)	<p>The ETC_FAC_AGENCY plaza code of the plaza at which the vehicle entered the facility.</p> <p>Optional for Non-Toll transactions. If not provided must be ***.</p> <p>The contents of this field are left justified and padded with trailing blanks as needed.</p> <p>Refer to Appendix B for the list of valid values for this field.</p>
ETC_ENTRY_LANE	CHAR(3)	<p>The ETC_FAC_AGENCY lane code of the lane at which the vehicle entered the facility.</p> <p>The contents of this field are left justified and padded with trailing blanks as needed.</p> <p>Optional for Non-Toll transactions. If not provided must be ***.</p>
ETC_TAG_AGENCY	CHAR(4)	<p>Standard agency ID read from the tag.</p> <p>Values: 000 – 127</p>
ETC_TAG_SERIAL_NUMBER	CHAR(10)	<p>Tag serial number read from the tag.</p> <p>Values: 00000001 – 16777215</p>
ETC_READ_PERFORMANCE	CHAR(2)	<p>The total number of times the tag was read while in the capture zone. Obtained from the AVI reader.</p> <p>Values: 00 – 99 ** if data is unavailable</p> <p>For Non-Toll transactions, this would be from the exit transaction.</p>
ETC_WRITE_PERF	CHAR(2)	<p>The total number of times the tag was written to while in the capture zone. Obtained from the AVI reader.</p> <p>Values: 00 – 99 ** if data is unavailable</p> <p>For Non-Toll transactions, this would be from the exit transaction.</p>
ETC_TAG_PGM_STATUS	CHAR(1)	<p>The result of the AVI tag program cycle. Obtained from the AVI reader.</p> <p>Values: S – Success U – Unverified F – Failed * if data is unavailable</p> <p>For Non-Toll transactions, this would be from the exit transaction.</p> <p>This field along when used in conjunction with ETC_READ_PERFORMANCE and ETC_WRITE_PERF would allow the Home Agency to gauge tag performance over time.</p>
ETC_LANE_MODE	CHAR(1)	<p>The mode the lane was operating in at the time of the transaction.</p> <p>Values: E – ETC Only (Dedicated) A – ETC/ACM M – Manned/ETC</p> <p>For Non-Toll transactions, this would be from the exit transaction.</p>
ETC_VALIDATION_STATUS	CHAR(1)	<p>The tag status from the tag status file at the time of the transaction.</p> <p>Values: 1 – Good * - Used if the lane system does not report this value to its CSC.</p> <p>For Non-Toll transactions, this would be from the exit transaction.</p>
ETC_LIC_STATE	CHAR(2)	<p>Unused for Non-Toll transactions. Must contain **.</p>
ETC_LIC_NUMBER	CHAR(10)	<p>Unused for Non-Toll transactions. Must contain *****.</p>
ETC_LIC_TYPE	CHAR(30)	<p>Unused for Non-Toll transactions. Must be filled with asterisks (*).</p>
ETC_CLASS_CHARGED	CHAR(3)	<p>Unused for Non-Toll transactions. Must contain ***.</p>

Non-Toll Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_ACTUAL_AXLES	CHAR(2)	The number of axles associated with the vehicle. Values: 00 – 99  If not available, should default to the number of axles encoded on the tag.
ETC_EXIT_SPEED	CHAR(3)	The speed in MPH of the vehicle as it exited the facility. If the Away Agency cannot/does not measure speed, 000 should be used. Values: 000 – 999  This field would allow the Home Agency to gauge customer speed activity over time. It also can be used to offset low counts in the ETC_READ_PERFORMANCE and ETC_WRITE_PERF fields since vehicles traveling at higher speeds typically have lower performance figures.
ETC_OVER_SPEED	CHAR(1)	An indicator of whether or not the speed reported in ETC_EXIT_SPEED was over the allowable threshold for that plaza/lane. Values: Y – Speed is over threshold N – Speed is not over threshold
ETC_EXIT_DATE_TIME	CHAR(25)	The date the vehicle exited the facility in the local time zone of the facility and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ss±HH:MM
ETC_EXIT_PLAZA	CHAR(3)	The ETC_FAC_AGENCY plaza code of the plaza at which the vehicle exited the facility.  The contents of this field are left justified and padded with trailing blanks as needed.  Refer to Appendix B for the list of valid values for this field.
ETC_EXIT_LANE	CHAR(3)	The ETC_FAC_AGENCY lane code of the lane at which the vehicle exited the facility.  The contents of this field are left justified and padded with trailing blanks as needed.
ETC_DEBIT_CREDIT	CHAR(1)	An indicator as to whether the amount reflected in ETC_AMOUNT_DUE is to be debited from the customer account or credited to the customer account. Values: Plus (+) – Debit from customer account Space ( ) – Debit from customer account Minus (-) – Credit to customer account
ETC_AMOUNT_DUE	CHAR(9)	The amount due (in US cents) as calculated by the Away Agency. Values: 00000000 (\$0000000.00) – 999999999 (\$9999999.99)
DELIMITER	CHAR(1)	LF
Record Total	178	

## 11.5 Processing Requirements

- It shall be the responsibility of the Host Agency/CSC to ensure that the Non-Toll Transaction File does not contain two (or more) transactions for the same ETC\_TAG\_AGENCY/ ETC\_TAG\_SERIAL\_NUMBER combination in the same ETC\_EXIT\_PLAZA within a five (5) minute period.  
  
Also, it shall be the responsibility of the Home Agency/CSC to validate incoming Non-Toll Transaction Files to ensure that they do not contain two (or more) transactions for the same ETC\_TAG\_AGENCY/ ETC\_TAG\_SERIAL\_NUMBER combination in the same ETC\_EXIT\_PLAZA within a five (5) minute period.
- A credit transaction must have its own unique ETC\_TRX\_SERIAL\_NUM but may share the same agency, plaza, lane and date/time information so that it may be accurately reflected on the customer account and statement. This duplication of agency, plaza, lane and date/time information should not be considered a duplicate as discussed in requirement #1. This field should NOT be used in lieu of the Correction File. Its primary use is to generate credit transactions in the same file as the original debit transaction.
- Transactions originating at parking facilities will be sent with a value of 'P' in the ETC\_TRX\_TYPE field. Entry information (fields ETC\_ENTRY\_DATE\_TIME, ETC\_ENTRY\_PLAZA and ETC\_ENTRY\_LANE) is optional for parking transactions in that it may be provided or may be filled with asterisks (\*). Exit information (ETC\_EXIT\_DATE\_TIME, ETC\_EXIT\_PLAZA and ETC\_EXIT\_LANE) must always be provided.

In the event that a parking facility charges based on entry to a lot (the fee is not time based), the transaction shall be treated in a fashion similar to a barrier toll transaction and the date, time, plaza and lane information shall be provided in the exit fields.

4. The combination of HOST\_AGENCY\_ID, HOME\_AGENCY\_ID and INTX\_FILE\_NUM forms a unique sequential key which will be used by the receiving agency (the Home Agency) to verify that each Non-Toll Transaction File was received without any gaps. As such, the same INTX\_FILE\_NUM can be received by a Home Agency from multiple Host Agencies since it is the combination of the HOST\_AGENCY\_ID, HOME\_AGENCY\_ID and INTX\_FILE\_NUM which makes the INTX\_FILE\_NUM unique.

If the INTX\_FILE\_NUM of the current Non-Toll Transaction File does not equal the prior INTX\_FILE\_NUM received from that HOST\_AGENCY\_ID plus one (1), the Acknowledgement File shall contain a RETURN\_CODE of '06' to signify that a gap in sequence numbers was found. However, the current Non-Toll Transaction File should still be processed.

If the INTX\_FILE\_NUM of the current Non-Toll Transaction File is equal to the INTX\_FILE\_NUM of a previous Non-Toll Transaction File, the Acknowledgement File shall contain the appropriate RETURN\_CODE and the current Non-Toll Transaction File should not be processed.

5. An Host Agency/CSC shall first check its own customer base to see if the transaction can be applied to one of its own accounts (possibly a companion account) before including the transaction in a Non-Toll Transaction File destined for another Agency/CSC. However, if the companion account is a post-paid account, the Host Agency/CSC should not post the transaction to its own account but should forward it to the Home Agency/CSC for posting.
6. Transactions shall be routed to a Home Agency/CSC based on the TAG\_HOME\_AGENCY associated with the tag.
7. Each Non-Toll Transaction File shall only contain transactions from a single Facility Operator (based on the ETC\_FAC\_AGENCY code in the detail transactions) and a separate Non-Toll Transaction File shall be created for each Home Agency. See Appendix F, Non-Toll Transaction Flow for an example of how non-toll transactions should be grouped and routed to a Home Agency.

## 12.0 Non-Toll Reconciliation File

### 12.1 File Type

Variable length, LF delimited

### 12.2 File Name

{HOME\_AGENCY\_ID}\_{HOST\_AGENCY\_ID}\_YYYYMMDDHHMMSS.INRX

Example: 0009\_0004\_19971201041015.INRX  
DRPA reconciliation to NYSTA created on 04:10:15 on 12/01/1997

### 12.3 File Use

The Non-Toll Reconciliation File shall be created by the Home Agency to inform the Host Agency as to the disposition of non-toll transactions processed by the Home Agency which occurred at facilities hosted by the Host Agency.

### 12.4 File Layout

Non-Toll Reconciliation File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	INRX
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
HOME_AGENCY_ID	CHAR(4)	The Agency ID code of the Home Agency (See Appendix E, Column C) based on the TAG_HOME_AGENCY associated with the tag.
HOST_AGENCY_ID	CHAR(4)	The Agency ID code of the Host (Away) Agency (See Appendix E, Column E).
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
INTX_FILE_NUM	CHAR(12)	The INTX file number with which this INRX file is associated.  Values: 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>61</b>	

Non-Toll Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_TRX_SERIAL_NUM	CHAR(20)	The unique key of the transaction assigned by the Away Agency/CSC. Values: 00000000000000000000 – 9999999999999999
ETC_POST_STATUS	CHAR(4)	The result of the Home Agency's/CSC's attempt to post the transaction.  Values: PSNT - Non-Toll transaction posted successfully. DECL - Credit card declined. Only used for transactions passed directly through to the credit card. NOCC - Rejected, attempt was made to post the transaction to an account that is no longer a credit card account. Only used for credit card based accounts. RJIN - Rejected, the account had insufficient funds to post the transaction. Used for non-credit card based accounts. RJCX - Rejected, the transaction is an attempt to correct a transaction which has already been corrected. ACCC - Rejected, account was in a closed status at the time the post was attempted. This code is used regardless of the status of the account at the time of the transaction.

Non-Toll Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
		<p>OLD3 - Rejected, old transaction – The difference between the date of the transaction and the date the transaction was received by the Home Agency/CSC exceeded that specified in the Non-Toll Reciprocity Agreement .</p> <p>RINV - Rejected, the transaction contains invalid data (e.g., invalid agency as defined in Appendix A, invalid plaza as defined in Appendix B, invalid class as defined in Appendix C, etc.).</p> <p>TAGB – Rejected, tag in bad status (e.g., lost, stolen, etc.) where transaction date/time (ETC_EXIT_DATE_TIME) is greater than date/time of acknowledgement from that Away Agency/CSC of receipt of full Tag Status File which indicated that the tag was in a Lost/Stolen status.</p> <p>RJDP - Rejected, duplicate transaction. Usually associated with a skip read or cross lane read where a tagged transaction and license plate transaction exist for the same customer at the same plaza within five (5) minutes. The license plate transaction is rejected as the duplicate.</p>
ETC_POST_PLAN	CHAR(5)	<p>The Away Agency/CSC discount plan used when the transaction was posted. This is only applicable when the Home Agency/CSC offers the Away Agency/CSC discount plans to its customers.</p> <p>If no discount plan is used, this field shall be blank.</p>
ETC_DEBIT_CREDIT	CHAR(1)	<p>An indicator as to whether the amount reflected in ETC_OWED_AMOUNT is to be applied to the amount owed to the Away Agency or removed from that amount.</p> <p>Values: Plus (+) – Apply to amount owed Space ( ) – Apply to amount owed Minus (-) – Remove from amount owed</p>
ETC_OWED_AMOUNT	CHAR(9)	<p>The amount (in US cents) owed to the Away Agency. For rejected transactions, this would be 000000000.</p> <p>For correction transactions, this would be the new (corrected) amount from the correction transaction (not the net of the original and corrected amount).</p> <p>Values: 000000000 (\$0000000.00) – 999999999 (\$9999999.99)</p>
DELIMITER	CHAR(1)	LF
Record Total	40	

## 12.5 Processing Requirements

1. Each reconciliation file shall be associated with a specific Non-Toll Transaction File and shall include reconciliation information for each and every transaction that was sent in the original Non-Toll Transaction File.
2. The ETC\_POST\_STATUS values of ACCC and TAGB should not occur in the normal course of events. However, if the Away Agency/CSC was unable to transmit the latest tag status file to its lanes in a timely fashion, it would be possible for the Host Agency/CSC to generate a normal ETC transaction for a tag that the Home Agency/CSC has indicated is "Invalid" and attempt to collect for such a transaction from the Home Agency/CSC.

It would be in these cases that the Home Agency/CSC would reject a transaction since the transaction should have been treated as an invalid tag in the lane by the Host Agency/CSC and the Home Agency/CSC will not take responsibility for the Host Agency's/CSC's inability to download tag status files in a timely manner.

3. Monthly settlement between the agencies shall be based on the dates embedded within the Acknowledgement Files for the corresponding Non-Toll Reconciliation Files and Non-Toll Correction Reconciliation Files. Therefore, settlement for December, 1998, which will occur in January, 1999, will be based on ACK files with FILE\_DATEs which match "199812???" (where the ? is a character wildcard). Settlement is based solely on transactions reconciled with ETC\_POST\_STATUS values of 'PSNT'.

Refer to the *Report Specifications* sections (17.0 and on) for a description of the reports required to perform settlement.

4. The INTX\_FILE\_NUM associated with the Non-Toll Transaction File to which this Non-Toll Reconciliation File contains reconciliation data is inserted into the header to assist the Host Agency (the HOST\_AGENCY\_ID) in tracking the status of reconciliation.

Reconciliation does not have to be performed in a sequential manner, therefore, it is possible to receive INTX\_FILE\_NUM values which are not in sequence. However, if the receiving agency detects a duplicate INTX\_FILE\_NUM (implying that a non-Toll Transaction File which has already been reconciled is now being reconciled again), the Acknowledgement File shall contain the appropriate RETURN\_CODE and the current Non-Toll Reconciliation File should not be processed. Such files will not be included in the monthly settlement.

5. If the RECORD\_COUNT in the Non-Toll Reconciliation File header record does not equal the number of transactions in the Non-Toll Transaction File referred to by INTX\_FILE\_NUM or the Non-Toll Reconciliation File contains references to transactions which were not included in the Non-Toll Transaction File referred to by INTX\_FILE\_NUM, the Non-Toll Reconciliation File should not be processed and the associated Acknowledgement File shall contain a RETURN\_CODE of '04'. Such files will not be included in the monthly settlement.
6. Non-Toll Transactions that fail to post to an account and are reconciled with an ETC\_POST\_STATUS of DECL shall cause the associated account to convert from an auto-replenishment account to a cash/check account and/or flag the account as ineligible for non-toll usage and shall cause the generation of a notice to the customer informing them of the decline and the account conversion and encouraging the customer to contact the service center to place a new credit card on the account. The account shall not become eligible again for non-toll usage until a valid credit card is put onto the account.

## 13.0 Non-Toll Correction File

### 13.1 File Type

Variable length, LF delimited

### 13.2 File Name

{HOST\_AGENCY\_ID}\_{HOME\_AGENCY\_ID}\_YYYYMMDDHHMMSS.ITXN

Example: 0005\_0009\_19971201001015.ITXN  
PANYNJ corrections to DRPA create on 00:10:15 on 12/01/1997

### 13.3 File Use

The Non-Toll Correction File shall be created by the Host Agency/CSC to replace non-toll transaction information already sent to the Home Agency/CSC with updated/corrected information.

### 13.4 File Layout

Non-Toll Correction File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ITXN
VERSION	CHAR(8)	File format/content version.  Format: ## ## ##
HOST_AGENCY_ID	CHAR(4)	The Agency ID code of the Host (Away) Agency (See Appendix C, Column E).
HOME_AGENCY_ID	CHAR(4)	The Agency ID code of the Home Agency (See Appendix E, Column C) based on the TAG_HOME_AGENCY associated with the tag.
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
ITXN_FILE_NUM	CHAR(12)	A unique sequential number used to identify the Non-Toll Correction File to the Home Agency. Values 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
Header Total	61	

Non-Toll Correction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
CORR_REASON	CHAR(2)	A code denoting the reason for the correction. Values: 03 – Ignore tagged transaction 04 – Corrected plaza/lane information 05 – Corrected amount 06 – Repost attempt requested
All other fields from the Non-Toll Transaction File	CHAR(178)	All fields from the original transaction (refer to Non-Toll Transaction File structure for details) will be retransmitted with the appropriate fields corrected to their required values.  The only field that must always match the original transaction is the ETC_TRX_SERIAL_NUM since that is the unique key for the transaction.
Record Total	180	

### 13.5 Processing Requirements

1. The combination of HOST\_AGENCY\_ID, HOME\_AGENCY\_ID and ITXN\_FILE\_NUM forms a unique sequential key which will be used by the receiving agency (the Home Agency) to verify that each Non-Toll Correction File was received without any gaps. As such, the same ITXN\_FILE\_NUM can be received by a Home Agency from multiple Host Agencies since it is the combination of the HOST\_AGENCY\_ID, HOME\_AGENCY\_ID and ITXN\_FILE\_NUM which makes the ITXN\_FILE\_NUM unique.

If the ITXN\_FILE\_NUM of the current Correction File does not equal the prior ITXN\_FILE\_NUM received from that HOST\_AGENCY\_ID plus one (1), the Acknowledgement File shall contain a RETURN\_CODE of '06' to signify that a gap in sequence numbers was found. However, the current Non-Toll Correction File should still be processed.

If the ITXN\_FILE\_NUM of the current Non-Toll Correction File is equal to the ITXN\_FILE\_NUM of a previous Non-Toll Correction File, the Acknowledgement File shall contain the appropriate RETURN\_CODE and the current Non-Toll Correction File should not be processed.

2. Transactions shall be routed to the Home Agency/CSC to which the original transaction was sent.
3. All non-toll transactions originating from a single Host Agency shall be included in a single Non-Toll Transaction File and shall not be commingled with transactions from another Host Agency.
4. Removed.
5. The Non-Toll Correction File will be used to correct only non-toll transactions.
6. In the event that a non-toll transaction has been rejected with a code of 'DECL' or 'NOCC', the Away Agency/CSC can request a repost attempt by resending the non-toll transaction in the Non-Toll Correction File with a CORR\_REASON of '06'.
7. Transactions can only be sent in a Correction File once. Subsequent corrections to the same transaction, if required, must be handled manually.

## 14.0 Non-Toll Correction Reconciliation File

### 14.1 File Type

Variable length, LF delimited

### 14.2 File Name

{HOME\_AGENCY\_ID}\_{HOST\_AGENCY\_ID}\_YYYYMMDDHHMMSS.IRXN

Example: 0009\_0005\_19971201041015.IRXN  
DRPA reconciliation to PANYNJ created on 04:10:15 on 12/01/1997

### 14.3 File Use

The Non-Toll Correction Reconciliation File shall be created by the Home Agency/CSC to inform the Host Agency/CSC as to the disposition of non-toll correction transactions processed by the Home Agency/CSC which occurred at facilities hosted by the Host Agency/CSC.

### 14.4 File Layout

Non-Toll Correction Reconciliation File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	IRXN
VERSION	CHAR(8)	File format/content version.  Format: ##.##.##
HOME_AGENCY_ID	CHAR(4)	The Agency ID code of the Home Agency (See Appendix E, Column C) based on the TAG_HOME_AGENCY associated with the tag.
HOST_AGENCY_ID	CHAR(4)	The Agency ID code of the Host (Away) Agency (See Appendix E, Column E).
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below.  Format: YYYY-MM-DDThh:mm:ssZ
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
ITXN_FILE_NUM	CHAR(12)	The file number of the ITXN file to which this IRXN file is associated. Values: 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
Header Total	61	

Non-Toll Correction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
Same fields as the Non-Toll Transaction Reconciliation File	CHAR(40)	Same as the Non-Toll Transaction Reconciliation File.

### 14.5 Processing Requirements

1. Each reconciliation file shall be associated with a specific Non-Toll Correction File (as indicated by the ITXN\_FILE\_NUM field in the Header record) and shall include reconciliation information for each and every transaction that was sent in the original Non-Toll Correction File.
2. Monthly settlement between the agencies shall be based on the dates embedded within the Acknowledgement Files for the corresponding Non-Toll Reconciliation Files and Non-Toll Correction Reconciliation Files. Therefore, settlement for December, 1998, which will occur in January, 1999, will be based on ACK files with FILE\_DATEs which match "199812??" (where the ? is a character wildcard). Settlement is based solely on transactions reconciled with ETC\_POST\_STATUS values of 'PSNT'.
3. The ITXN\_FILE\_NUM associated with the Non-Toll Correction File to which this Non-Toll Correction Reconciliation File contains reconciliation data is inserted into the header to assist the Away Agency in tracking the status of reconciliation.

Reconciliation does not have to be performed in a sequential manner, therefore, it is possible to receive

ITXN\_FILE\_NUMs which are not in sequence. However, if the receiving agency detects a duplicate ITXN\_FILE\_NUM (implying that a Non-Toll Correction File which has already been reconciled is now being reconciled again), the Acknowledgement File shall contain the appropriate RETURN\_CODE and the current Non-Toll Correction Reconciliation File should not be processed. Such files will not be included in the monthly settlement.

4. If the RECORD\_COUNT in the Non-Toll Correction Reconciliation File header record does not equal the number of transactions in the Non-Toll Correction File referred to by ITXN\_FILE\_NUM or the Non-Toll Correction Reconciliation File contains references to transactions which were not included in the Non-Toll Correction File referred to by ITXN\_FILE\_NUM, the Non-Toll Correction Reconciliation File should not be processed and the associated Acknowledgement File shall contain a RETURN\_CODE of '04'. Such files will not be included in the monthly settlement.
5. If the reconciliation is for a correction transaction with a CORR\_REASON of 03 (ignore), then the ETC\_POST\_PLAN will be blank and the ETC\_OWED\_AMOUNT will be zero (0).

## 15.0 Acknowledgement File

### 15.1 File Type

Fixed length, LF delimited

### 15.2 File Name

{FROM\_AGENCY\_ID}\_{FILE\_NAME}\_{FILE\_TYPE}.ACK

Example: 0008\_0022\_19971201041015\_ITAG.ACK

Acknowledgement file from NY CSC in response to the NJ CSC tag status file created on 04:10:15 on 12/01/1997

### 15.3 File Use

The Acknowledgment File shall be created by the From Agency/CSC (the Agency/CSC which received the file) to inform the To Agency/CSC (the Agency/CSC which sent the original file) that the file transmitted was received in its entirety. An Acknowledgement File shall be sent for each of the previously referenced files.

### 15.4 File Layout

Acknowledgment File - Detail Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ACK
VERSION	CHAR(8)	File format/content version. Format: ##.##.##
FROM_AGENCY_ID	CHAR(4)	Standard agency ID code of the Agency/CSC which received the file referenced in ORIG_FILE_NAME_TYPE.
TO_AGENCY_ID	CHAR(4)	Standard agency ID code of the Away Agency/CSC which sent the file referenced in ORIG_FILE_NAME_TYPE.
ORIG_FILE_NAME_TYPE	CHAR(50)	The name and type of the file being acknowledged as received from the To Agency. Format: FILE_NAME.FILE_TYPE where FILE_NAME is the name of the file being acknowledged and FILE_TYPE is the type of the file being acknowledged.
FILE_DATE_TIME	CHAR(20)	Date/time file created and formatted per ISO-8601 as shown below. This is to be used by the To Agency/CSC as the acknowledgement date/time. Format: YYYY-MM-DDThh:mm:ssZ
RETURN_CODE	CHAR(2)	A code indicating the status of the file being acknowledged. Values: 00 – File was successfully received and verified. For the ITAG file, the Away Agency/CSC shall delay transmission of the Acknowledgement File with a '00' RETURN_CODE until it has verified that all Away Agency lanes have received the associated ITAG file data. This acknowledgement shall be utilized by the Home Agency/CSC as the activation/operative date/time for determining the toll guarantee date/time. The Away Agency/CSC shall transmit the acknowledgement within four (4) hours of receipt of the ITAG file. 01 – Header record count does not match the number of detail records found in the file. 02 – Detail record(s) found with invalid data. 03 – Update file date/time does not match full file date/time. 04 – Transaction Reconciliation File (or Correction Reconciliation File) does not match corresponding Transaction File (or Correction File). 05 – Duplicate file sequence number. 06 – Gap in sequence number. 07 – Invalid ZIP file or other file structure defect  Refer to Appendix G for the processing rules associated with the various RETURN_CODE values.
DELIMITER	CHAR(1)	LF
Detail Total	93	

## 15.5 Processing Requirements

1. This file shall contain a single record only. For each file received by the From Agency/CSC, the From Agency/CSC shall generate an Acknowledgement File and transmit the file back to the To Agency/CSC.
2. The FILE\_DATE\_TIME field shall be used by the To Agency/CSC as the acknowledgement date/time of the transmitted file.
3. The From Agency/CSC should generate a report showing any detail records that were skipped due to invalid data (RETURN\_CODE = '02') and should have this report available for the To Agency/CSC if needed.
4. Refer to Appendix G for the various processing rules related to each RETURN\_CODE value.
5. The Acknowledgement File with a RETURN\_CODE value of '00' for the ITAG file shall indicate the activation date/time for the purposes of the toll guarantee and shall be transmitted by the Away Agency/CSC within four (4) hours of the receipt of the ITAG file. If not received by the Home Agency/CSC within the four (4) hour window, the Home Agency/CSC shall use the date/time of the transmission completion of the ITAG file plus four (4) hours as the activation date/time for the given Away Agency/CSC.

Nonetheless, the Away Agency/CSC shall still be required to transmit an Acknowledgement File for each ITAG file received.

## 16.0 Transmission Methodology

1. The files shall be transmitted to all Away Agencies/CSCs on a nightly basis (except for the Tag Status Update File which shall be transmitted on an as needed basis but not more frequently than hourly) unless otherwise agreed to between the agencies.
2. Removed.
3. Removed.
4. Transmission shall be via SFTP (aka SSH File Transfer Protocol).
5. Files will be initially transmitted using a temporary file name. Upon successful completion of each file's transmission, the sending Agency/CSC shall rename the file to its required file name. The receiving Agency/CSC shall wait until it detects the presence of the required file names to begin processing the file. For example, the Customer License Plate File 0008\_19971201041015.ICLP is transmitted using file name 0008\_19971201041015.ICLP.temp and, upon successful transmission, is renamed to 0008\_19971201041015.ICLP. Receiving Agencies/CSCs shall ensure that permissions are set properly on SFTP servers to allow file renaming to be done by sending Agencies/CSCs.

This will eliminate the situation where a receiving Agency/CSC begins processing a file before its transmission was complete.

6. Removed.
7. Removed.
8. Removed.
9. Removed.
10. For additional information related to the transmission of the ITAG file refer to the spreadsheet entitled *ITAG Processing Information – YYYY-MM-DD.xls* where YYYY-MM-DD represents the update date of the document.
11. Upon implementation of the E-ZPass Group Interoperability (EZIOP) Hub, Home Agencies/CSCs will have the option of transmitting only a single copy of ITAG, ITGU and ICLP files to the EZIOP Hub and the EZIOP Hub will transmit those files to all required recipients. In addition, Agencies/CSCs will only be required to utilize a single SFTP account for file transmissions and will be able to deposit all files destined for other Agencies/CSCs into a single directory. Home Agencies/CSCs should strive to support this functionality so as to reduce the number of required SFTP accounts and file transmissions.

## 17.0 IAG-1: Inter-CSC Settlement Report

**Use of Report:** Indicates the actual amount of funds wire transferred from the Home agency to the Away agency at the end of the settlement period.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** IAG-2 through IAG-6. Each of these reports ties to one of the line items on IAG-1.

**Data Set:** Reports IAG-2 through IAG-6.

**Description:**

Report IAG-1

Inter-CSC Settlement Report  
Wire Transfer for  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Payments from Home Agency: Regional Consortium due to Away Agency: NYS Thruway Authority

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<u>Wire Date</u>	<u>Amount</u>	<u>Payment Type*</u>
02/05/1999	\$ 35,656.10	Toll Transactions (from IAG-2)
	\$ 165.00	Toll Corrections (from IAG-3)
	\$ 159.00	Discount Plan Revenue (from IAG-4)
	\$ 400.00	Permit Plans (from IAG-5)
	\$ (25.70)	Disputed tolls and adjustments (from IAG-6)
<hr/>		
Settlement Total	\$ 36,354.40	

\* Additional line items, with supporting reports, are expected to be added to this report as Agencies develop other programs and fees.

## 18.0 IAG-2: Inter-CSC Toll Transaction Reconciliation Report

**Use of Report:** Indicates the amount of funds due to the Away agency due to toll transactions.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Toll Transactions line item on IAG-1. The total amount paid and matching IAG-1 equals the total of amounts in POST, NPST and PPST. The amounts in Rejects are not included.

**Data Set:** Transaction reconciliation files that were acknowledged by the Away agency in the settlement period. There are no restrictions regarding when reconciliation files are produced; i.e. several could be produced in one day for transaction files received previously. Only those reconciliation files acknowledged in the settlement period will appear in this report.

**Description:** The columns in this report are related to the fields in the Transaction Reconciliation File (defined in the IAG inter CSC file spec.) as follows:

ICRX\_FILE - The file name of the Reconciliation file to be included in the settlement period.

ACK DATE - This is the Date field from the Acknowledgement file. All dates must be in the settlement period.

POST & AMT – These fields contain the count and dollar amount respectively of those transactions in the reconciliation file with a resolution code of POST.

NPST & AMT – These fields contain the count and dollar amount respectively of those transactions in the reconciliation file with a resolution code of NPST.

PPST & AMT – These fields contain the count and dollar amount respectively of those transactions in the reconciliation file with a resolution code of PPST

TOT & AMT – These fields contain the sum of the count and dollar amount respectively of the previous fields (to the left).

TOTAL REJECT & AMT – These fields contain the count and dollar amount respectively of those transactions in the reconciliation file with resolution codes of INSU, NPST, RINV, TAGB, ACCB, RJDP, OLD1, OLD2 and RJPL. These codes represent rejected transactions which are further detailed in the Rejected Transactions Report (IAG-7).

Inter-CSC Toll Transaction Reconciliation Report  
 ICRX Files Acknowledged in:  
 Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Toll payments from Home Agency: Regional Consortium due to Away Agency: NYS Thruway Authority

ICRX_FILE	ACK Date	POST	AMT	NPST	AMT	PPST	AMT	TOT	AMT	TOTAL REJECT	AMT
0022_0004_19990102010901.ICRX	1/3/99	231	1,086.00	0	0.00	0	0.00	231	1,086.00	0	0.00
0022_0004_19990105012448.ICRX	1/7/99	156	557.20	0	0.00	0	0.00	156	557.20	0	0.00
0022_0004_19990106011057.ICRX	1/8/99	175	662.30	0	0.00	0	0.00	175	662.30	0	0.00
0022_0004_19990106011458.ICRX	1/8/99	107	425.80	0	0.00	0	0.00	107	425.80	0	0.00
0022_0004_19990107022140.ICRX	1/9/99	159	1,014.40	0	0.00	0	0.00	159	1,014.40	0	0.00
0022_0004_19990107215531.ICRX	1/9/99	155	957.30	0	0.00	0	0.00	155	957.30	0	0.00
0022_0004_19990109022225.ICRX	1/11/99	122	839.70	0	0.00	0	0.00	122	839.70	0	0.00
0022_0004_19990110051614.ICRX	1/12/99	108	847.10	0	0.00	0	0.00	108	847.10	0	0.00
0022_0004_19990110052141.ICRX	1/12/99	133	668.80	0	0.00	0	0.00	133	668.80	0	0.00
0022_0004_19990110220253.ICRX	1/12/99	156	1,008.30	0	0.00	0	0.00	156	1,008.30	0	0.00
0022_0004_199901111215735.ICRX	1/13/99	241	1,022.70	0	0.00	0	0.00	241	1,022.70	0	0.00
0022_0004_19990112215445.ICRX	1/14/99	182	843.20	0	0.00	0	0.00	182	843.20	0	0.00
0022_0004_19990114215618.ICRX	1/16/99	6	21.60	0	0.00	0	0.00	6	21.60	0	0.00
0022_0004_19990114215902.ICRX	1/16/99	212	1,506.70	0	0.00	0	0.00	212	1,506.70	0	0.00
0022_0004_19990114220222.ICRX	1/16/99	165	887.20	0	0.00	0	0.00	165	887.20	0	0.00
0022_0004_19990115220013.ICRX	1/17/99	234	1,509.30	0	0.00	0	0.00	234	1,509.30	0	0.00
0022_0004_19990116215041.ICRX	1/18/99	155	1,088.80	0	0.00	0	0.00	155	1,088.80	0	0.00
0022_0004_19990118215434.ICRX	1/20/99	283	1,595.30	0	0.00	0	0.00	283	1,595.30	0	0.00
0022_0004_19990120214231.ICRX	1/22/99	285	1,057.50	0	0.00	0	0.00	285	1,057.50	2	6.00
0022_0004_19990123031220.ICRX	1/25/99	927	5,277.50	0	0.00	0	0.00	927	5,277.50	1	3.00
0022_0004_19990123215019.ICRX	1/25/99	226	1,416.20	0	0.00	0	0.00	226	1,416.20	3	24.00
0022_0004_19990124215314.ICRX	1/26/99	290	1,692.50	0	0.00	0	0.00	290	1,692.50	0	0.00
0022_0004_19990125215216.ICRX	1/27/99	305	1,273.40	0	0.00	0	0.00	305	1,273.40	1	0.00
0022_0004_19990128015547.ICRX	1/30/99	230	1,417.90	51	153.00	0	0.00	281	1,570.90	0	0.00
0022_0004_19990129215839.ICRX	1/31/99	269	1,741.80	0	0.00	0	0.00	269	1,741.80	0	0.00
0022_0004_19990129220005.ICRX	1/31/99	229	1,507.60	0	0.00	0	0.00	229	1,507.60	0	0.00
0022_0004_19990130215427.ICRX	1/31/99	258	1,756.30	0	0.00	0	0.00	258	1,756.30	0	0.00
0022_0004_19990131215514.ICRX	1/31/99	301	1,820.70	0	0.00	0	0.00	301	1,820.70	0	0.00
Settlement Total		6300	35,503.10	51	153.00	0	0.00	6351	35,656.10	7	33.00

## 19.0 IAG-3: Inter-CSC Toll Correction Reconciliation Report

**Use of Report:** Indicates the amount of funds due to the Away agency because of toll transaction corrections.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Toll Corrections line item on IAG-1.

**Data Set:** Transaction correction reconciliation files that were acknowledged by the Away agency in the settlement period.

**Description:** The 'ORG' column represents the original amount of the transaction that was reconciled previously. The 'NEW' column represents the corrected amount. The amount due and balancing to IAG-1 is the difference, shown in the 'NET' column. The "Total Count" column represents the number of transactions in the corresponding Correction Reconciliation file including rejects. The amount reflected in the Settlement Report (IAG-1) is the Total NET amount.

Inter-CSC Toll Correction Reconciliation Report  
 IRXC Files Acknowledged in  
 Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Toll correction payments from Home Agency: Regional Consortium due to Away Agency: NYS Thruway Authority

	Ack Date	Total Count	POST			NPST			PPST						Total NET	Total Reject	Reject AMT
			ORG	NEW	NET	ORG	NEW	NET	ORG	NEW	NET						
IRXC_FILE																	
0022_0004_19990102010901.IRXC	01/02/1999	5	24.00	35.00	11.00	0.00	0.00	0.00	3.00	0.00	(3.00)				8.00	0	0.00
0022_0004_19990105012448.IRXC	01/05/1999	4	10.00	8.00	(2.00)	0.00	5.00	5.00	0.00	4.00	4.00				7.00	1	3.00
0022_0004_19990106011057.IRXC	01/06/1999	100	825.00	975.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00				150.00	0	0.00
Settlement Total															165.00		

## 20.0 IAG-4: Inter-CSC Discount Plan Revenue Report

**Use of Report:** The Settlement Total indicates the amount of funds due to the Away agency because of unused commuter trips or other discount plan revenue.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Discount Plan Revenue line item on IAG-1.

**Data Set:** This report indicates all unused trips and other fees calculated for discount programs in the settlement period. There are no supporting files transferred for this report.

**Description:**

Inter-CSC Discount Plan Revenue Report  
 Unused Trips or Expirations in  
 Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Plan payments from Home Agency: Regional Consortium due to Away Agency: NYS Thruway Authority

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Plan End Date	Plan	Count of Plans	No. Trips Taken	No. Trips Expired	Unused Trip Amount
<b>01/01/1999</b>	TZC	2	26	8	\$ 8.00
	TZPL	3	25	26	\$ 13.00
Total (Date)					\$ 21.00
<b>01/02/1999</b>	TZC	4	62	14	\$ 14.00
	TZPL	1	12	5	\$ 5.00
Total (Date)					\$ 19.00
•					
•					
•					
<hr/>					
Settlement Total (reporting period)					\$ 159.00

Legend:

TZC – Tappan Zee Commuter Plan (rate \$1.00)

TZPL – Tappan Zee Car Pool Plan (rate \$.50)

## 21.0 IAG-5: Inter-CSC Permit Plan Fees Report

**Use of Report:** The Settlement Total indicates the amount of funds due to the Away agency because of sales of, or credits to, Away agency permit plans during the settlement period.

Note that with the removal of the NYSTA permit plan from the Tag Status File, this report will no longer be required. However, it is left here for possible future use.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Permit Plans line item on IAG-1.

**Data Set:** This report indicates all permit plan sales or credits during the settlement period. There are no supporting files transferred for this report.

**Description:**

Inter-CSC Permit Plan Fees Report  
Permit Plans Added or Refunded in:  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Fee payments from Home Agency: Regional Consortium due to Away Agency: NYS Thruway Authority

Transaction Date	Plan Type	# Sold	\$ Sold	# Refunded	\$ Refunded	Net #	Net \$
01/01/1999	Annual Permit	4	\$ 320	(1)	\$(80)	3	\$240.00
01/02/1999	Annual Permit	2	\$ 160	0	0	2	\$160.00
.							
.							
.							
Settlement Total		6	\$ 480	(1)	\$(80)	5	\$400.00

Note: This report currently applies only to the Regional Consortium which offers the NYSTA permit plan. Any other direct revenue collected by one agency on behalf of another toll authority in the future will require a similar report.

## 22.0 IAG-6: Inter-CSC Disputed Toll & Adjustments Report

**Use of Report:** The Settlement Total indicates the amount of funds due to, or withheld from, the Away agency due to disputed tolls previously paid to the Away agency and subsequently credited to the customer's account. This report should reflect only those transactions which both the Home and Away agencies have agreed to change.

See Appendix H for details on the dispute policy.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Disputed tolls and adjustments line item on IAG-1.

**Data Set:** This report indicates adjustments during the settlement period. There are no supporting files transferred for this report.

**Description:**

Inter-CSC Disputed Toll & Adjustments Report  
 Adjustments Posted in:  
 Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Adjustment payments from Home Agency: Regional Consortium due to (deducted from) Away Agency: NYS Thruway Authority

Original Transaction							Adj. Date	Reason	Adj. Amount
Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	Class	Serial Num	Date/Time			
17	01	19	01	5	123456789	08/21/1998 08:22:18	01/09/1999	DISPUTED TOLL, WAS OUT OF COUNTRY	\$( 5.70)
23	02	19	02	3	123457344	08/21/1998 08:22:18	01/03/1999	DISPUTED TOLL, OTHER REASON	\$( 2.00)
<b>Exit Plaza Subtotal</b>									
40	03	43	02	2	123457777	08/27/1998 09:45:26	01/05/1999	REDUCED TOLL, APPLIED INCORRECT DISCOUNT	\$( 2.00)
39	04	43	02	4	123457892	08/21/1998 08:22:18	01/07/1999	DISPUTED TOLL, REPORTED TAG LOST	\$( 1.60)
<b>Plaza Subtotal</b>									
92	01	3		123456890	08/21/1998 08:22:18	01/03/1999	DISPUTED TOLL, VARIOUS REASONS	\$( 4.50)	
92	01	4		123457888	08/27/1998 09:45:26	01/06/1999	INCREASED TOLL, HONEST CUSTOMER	\$ 3.00	
92	01	5		123457913	08/21/1998 08:22:18	01/20/1999	DISPUTED TOLL, VARIOUS REASONS	\$( 3.70)	
92	01	6		123457945	08/27/1998 09:45:26	01/23/1999	REDUCED TOLL, VARIOUS REASONS	\$( 3.20)	
92	01	7		123457999	08/27/1998 09:45:26	01/24/1999	REDUCED TOLL, VARIOUS REASONS	\$( 6.00)	
<b>Exit Plaza Subtotal</b>									
•									
•									
•									
<b>Settlement Total</b>									\$( 25.70)

## 23.0 IAG-7: Inter-CSC Rejected Transactions Report

**Use of Report:** Indicates the amount of funds that will not be paid to the Away agency due to transactions that were rejected by the Home agency

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** The total dollar amount of rejected transactions ties to that shown on IAG-1 and IAG-2. The subtotals for each rec file number equals the reject amount for that file shown in IAG-2.

**Data Set:** This report details all rejected transactions as indicated on IAG-1.

**Description:**

Inter-CSC Rejected Transactions Report  
For ICRX Files Acknowledged in:  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Transactions rejected by Home Agency: Regional Consortium

Transactions received from Away Agency: NYS Thruway Authority

Acknowledge Date	Rec File #	Transaction #	Tag #*	Account #	Toll Date	Toll Time	Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	Amt	Reject Code
01/22/99		0022_0004_19990120214231.ICRX										
			12345678	00220009876543 8888888	01/19/99	08:39:56	42	01	44	03	2.50	RINV
			12437765	00220002323456 9999999	01/20/99	14:22:34	32	02	21	04	3.50	INSU
		Subtotal									6.00	
01/25/99		0022_0004_19990123031220.ICRX										
			12345987	0022000456789 7979797	01/23/99	10:37:45	19	03	23	01	3.00	TAGB
		Subtotal									3.00	
01/25/99		0022_0004_19990123215019.ICRX										
			12346543	00220009874321 3434343	01/24/99	09:40:57	33	01	18	03	6.50	RINV
			12346457	00220002323457 9999999	01/24/99	16:03:32	17	02	21	04	7.50	INSU
		Subtotal	12346980	00220004567894 7333343	01/24/99	11:27:43	31	03	29	01	10.00	TAGB
											24.00	
01/26/99		0022_0004_19990125215216.ICRX										
			12347123	0020002567832 4323454	01/25/99	01:01:31	19	02	21	02	0.00	RJDP
		Subtotal									0.00	
		Total									\$ 33.00	

\* Note that the tag number, account number, Entry, Plaza, Entry Lane, Exit Plaza, Exit Lane and Amount may not contain valid or complete data due to the fact that these are rejected transaction and the reason for rejection may be invalid data in one of these fields.

Reject Codes (see IAG file spec) are:

RINV	TAGB	RJDP	OLD2
INSU	ACCB	OLD1	

## 24.0 IAG-8: Inter-CSC Rejected Corrections Report

**Use of Report:** Indicates transaction corrections that were not accepted by the Home agency and the amount of funds represented by those transactions.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** The total dollar amount of rejected corrections ties to that shown on IAG-3.

**Data Set:** This report details all rejected transactions as indicated on IAG-3.

**Description:**

Inter-CSC Rejected Corrections Report  
For IRXC Files Acknowledged in:  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Transaction corrections rejected by Home Agency: Regional Consortium

Transaction corrections received from Away Agency: NYS Thruway Authority

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Ack Date	Rec File #	Transaction #	Tag #*	Account #	Toll Date	Toll Time	Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	\$ Amount	Reject Code
01/05/99		0022_0004_19990105012448.IRCX 12345444		00220009873434 8768763	12/30/98	08:39:56	42	01	44	03	3.00	RINV

---

Total	\$ 3.00
-------	---------

- Note that the tag number, account number, Entry, Plaza, Entry Lane, Exit Plaza, Exit Lane and Amount may not contain valid or complete data due to the fact that these are rejected transaction and the reason for rejection may be invalid data in one of these fields.

Reject Codes (see IAG file spec) are:

RINV	TAGB	RJDP	OLD2
INSU	ACCB	OLD1	

## 25.0 IAG-9: Inter-CSC Reconciliation Aging Report

**Use of Report:** Indicates transaction and transaction correction files sent to the Home agency that have not been reconciled. Away agency is to contact the Home agency for action based on the age and number of unreconciled files.

**Generated By:** Away Agency

**Frequency:** This report is generated weekly.

**Related to:** None.

**Data Set:** Represents complete transactions files which have been sent to the Home agency.

**Description:**

Inter-CSC Reconciliation Aging Report  
Unreconciled Transaction/Correction Files as of: 2/29/1999

Report Date: 02/29/1999 15:32

Generated by Away Agency: NYSTA

Transaction files sent from Away Agency: NYSTA

Awaiting reconciliation files from Home Agency: Regional Consortium

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File Name	Days	5 - 10		11 – 15		Over 15	
		File #	Count	\$ Amt	Count	\$ Amt	Count
0004_0022_19990223010901.ICTX	004567	15,876	30,867.00				
0004_0022_19990224010901.ICTX	004568	18,555	27,453.00				
0004_0022_19990217012001.ICTX	004559			13,234	21,333.00		
0004_0022_19990102013001.ICTX	004502					14,678	24,543.00
Totals		34,431	58,320.00	13,234	13,234.00	14,678	21,333.00

## 26.0 IAG-10: Inter-CSC Discount Plan Analysis Report

**Use of Report:** Informational report indicating to the Away agency the approximate number of their discount plans supported by a Home agency.

**Generated By:** Home Agency

**Frequency:** This report is generated monthly.

**Related to:** None.

**Data Set:** Represents all Away agency discount plans held by the Home agency.

**Description:**

Inter-CSC Discount Plan Analysis Report  
For Month of:  
January 1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Discount Plans offered by Home Agency: Regional Consortium

Discount Plans applying to facilities of Away Agency: NYSTA

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Plan Type	Beginning Number	Monthly Additions	Monthly Deletions	Ending Balance
TZC	100	25	5	120
TZPL	200	50	10	240
<b>TOTAL</b>	<b>300</b>	<b>75</b>	<b>15</b>	<b>360</b>

## 27.0 IAG-11A: Casual Use By Reconciliation File Range Report

**Use of Report:** Internal use by Home agency to break down reconciled transactions by posting date and plaza.

**Generated By:** Home Agency

**Frequency:** This report is generated as required.

**Related to:** IAG-2 Posted column. The total amount indicated in this report should equal the total POSTED amount indicated in IAG-2 (Inter-CSC Toll Transaction Reconciliation Report). This amount, when added to the NPST total from report IAG-12 (NPST Report) should equal the Toll Transactions amount in IAG-1 (Inter-CSC Settlement Report).

**Data Set:** Represents reconciled transactions which have been posted to customer accounts.

**Description:**

Casual Use by Reconciliation File Range Report  
 For Reconciliation Files acknowledged from:  
 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Transactions posted by Home Agency: Regional Consortium

Transactions occurring at facilities of Away Agency: NYS Thruway Authority

Posting Date	Plaza ID	Plaza Name	Rec File	Toll Transaction Count	Toll \$ Amount
12/31/1999	06	YONKERS TOLL	0022_0004_19990102010901.ICRX 0022_0004_19990105012448.ICRX	34 21	78.60 56.40
		Plaza Subtotal		55	135.00
	08	HARRIMAN	0022_0004_19990102010901.ICRX 0022_0004_19990105012448.ICRX	08 12	33.00 39.20
		Plaza Subtotal		20	72.20
		•			
		•			
		Posting Date Subtotal			207.20
01/01/1999	06	YONKERS TOLL	0022_0004_19990106011057.ICRX	23	16.00
		Plaza Subtotal		23	16.00
	08	HARRIMAN	0022_0004_19990106011057.ICRX 0022_0004_19990106011458.ICRX	18 13	24.30 18.20
		Plaza Subtotal		31	42.50
		•			
		•			
		Posting Date Subtotal			58.50
		•			
		•			
		Agency Total		6300	35,503.10

## 28.0 IAG-11B: Casual Use By Posting Date Range Report

**Use of Report:** Internal use by Home agency to break down reconciled transactions by posting date and plaza.

**Generated By:** Home Agency

**Frequency:** This report is generated as required.

**Related to:** Postings to customer accounts. This report is organized by posting regardless of transaction date or reconciliation file number. Therefore it will not tie directly to reports based on reconciliation files. The report should tie to other internal financial reports which reflect changes in pre-paid balance for the same posting period.

**Data Set:** Represents reconciled transactions which have been posted to customer accounts.

**Description:**

## Casual Use by Posting Date Range Report

Tolls Posted from:

01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Transactions posted by Home Agency: Regional Consortium

Transactions occurring at facilities of Away Agency: NYS Thruway Authority

Plaza ID	Plaza Name	Toll Date	Toll Transaction Count	Toll \$ Amount
06	YONKERS TOLL	12/15/1998	03	1.20
		12/17/1998	11	4.60
		12/31/1998	36	24.80
		01/01/1999	42	31.10
		01/02/1999	55	36.00
		01/03/1999	18	15.25
		•		
		•		
		•		
	Plaza Subtotal		315	628.70
08	HARRIMAN	12/28/1998	23	1.20
		12/29/1998	42	4.60
		12/31/1998	13	24.80
		01/01/1999	64	31.10
		01/02/1999	32	36.00
		01/03/1999	70	15.25
		•		
		•		
		•		
	Plaza Subtotal		568	1,234.60
	•			
	•			
	•			
	Agency Total		5900	31,224.25

\* A second, agency specific, form of this report breaks out the toll and amount by away agency class. The exact form is determined by the agency requesting the report.

## 29.0 IAG-12: NPST Report

**Use of Report:** Internal use by Home agency to break down reconciled transactions which were not posted (NPST) but will be paid to the Away agency.

**Generated By:** Home Agency

**Frequency:** This report is generated as required.

**Related to:** IAG-2 NPST column. The total amount indicated in this reports should equal the amount shown in the NPST column of report IAG-2 (Inter-CSC Toll Transaction Reconciliation Report). The total of this number and that from report 11A (Casual Use by Reconciliation File Range Report) should equal the Toll Transactions amount in IAG-1 (Inter-CSC Settlement Report).

**Data Set:** Represents reconciled transactions which will be paid to the Away agency but will not be posted to customer accounts.

**Description:** Occasionally a transaction from an Away agency may be received by the Home agency after the account was closed. If the Home agency had indicated that the tag was valid, the Home agency is obligated to pay for the transaction regardless of the account status. These transactions are reconciled as NPST transactions. The Total is the amount paid to the Away agency.

Report IAG-12

NPST Report  
 For Reconciliation Files acknowledged from:  
 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Transactions paid but not posted by Home Agency: Regional Consortium

Transactions occurring at facilities of Away Agency: NYS Thruway Authority

Ack Date	Rec File	Transaction Number	NPST Code*	Tag #	Account #	Toll Date	Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	\$ Amt	IAG Code	Count
<hr/>													
01/30/99	0022	0004_19990128015547.ICRX											
		12345678	xxxx	00220009876543 8888888		01/29/99	43	03	33	01	3.70	72	
		12435672	xxxx	00220002323456 9999999		02/29/99	45	01	21	02	4.20	72	
		•											
		•											
		•											
Rec File Subtotal											153.00		51
<hr/>													
Total											153.00		51

- NPST codes (reason for non postable transactions) are to be developed

## 30.0 IAG-13 A,B,C,D: Local Use Reports

**Use of Report:** The various forms of this report are used to by the Away agency to reconcile transactions on their facilities, by Customers of another agency, to particular days or reconciliation files.

**Generated By:** Away Agency

**Frequency:** This report is generated as required.

**Related to:** IAG-2 (form A & B). The total toll amount in IAG-13A or IAG-13B should equal the amount shown in the Posted plus NPST columns of the IAG-2 report received by the Away agency. This is the same amount as the Toll Transactions shown on IAG-1 received by the Away agency.

Reports IAG-13C and IAG-13D are run by collection date and are used to reconcile the agency host to transactions occurring on a particular day or date range. These reports will not necessarily tie to payments due.

**Data Set:** Represents all transactions which occurred on Away facilities including those that were rejected.

**Description:**

Inter-CSC Local Use by Rec File Report  
 For Reconciliation Files acknowledged from:  
 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Away Agency: NYSTA

Transactions reconciled by Home Agency: Regional Consortium

Transactions occurring at facilities of Away Agency: NYSTA

PLAZA	Trans Date	CLASS									Total Cnt Amt								
		01 Cnt	01 Amt	02 Cnt	02 Amt	03 Cnt	03 Amt	04 Cnt	04 Amt	05 Cnt	05 Amt	06 Cnt	06 Amt	07 Cnt	07 Amt	08 Cnt	08 Amt	09 Cnt	09 Amt
06	YONKERS TOLL																		
	12/31/98																		
	01/01/99																		
	01/02/99																		
	•																		
	•																		
	Plaza Subtotal																		
08	HARRIMAN																		
	12/30/98																		
	12/31/98																		
	01/01/99																		
	01/02/99																		
	•																		
	•																		
	Plaza Subtotal																		
	Grand total																	6362	35,656.10

\* Includes Non Postables (NPST) and rejects

Inter-CSC Detailed Local Use by Rec File Report  
 For Reconciliation Files acknowledged from:  
 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Away Agency: NYSTA

Transactions reconciled by Home Agency: Regional Consortium

Transactions occurring at facilities of Away Agency: NYSTA

PLAZA	Trans Date	Plan*	CLASS									Total Cnt Amt							
			01 Cnt	01 Amt	02 Cnt	02 Amt	03 Cnt	03 Amt	04 Cnt	04 Amt	05 Cnt	05 Amt	06 Cnt	06 Amt	07 Cnt	07 Amt	08 Cnt	08 Amt	09 Cnt
07 YONKERS TOLL	12/31/98																		
		TZC																	
		TZPL																	
		•																	
		•																	
		Reject																	
	Day subtotal																		
	01/01/99																		
		TZC																	
		TZPL																	
		•																	
		•																	
		Reject																	
	Day subtotal																		
		•																	
		•																	
		•																	
Plaza Subtotal																			
08 HARRIMAN																			
		•																	
		•																	
		•																	
Plaza Subtotal																			
		•																	
		•																	
		•																	
Grand total																	6362	35,656.10	

- Includes Non-Postables (NPST)

Report IAG-13C

Inter-CSC Local Use by Collection Date Report  
For all Reconciled Tolls Collected from:  
01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Away Agency: NYSTA

## Transactions reconciled by Home Agency: Regional Consortium

#### Transactions occurring at facilities of Away Agency: NYSTA

PLAZA	Trans Date	CLASS										
		01 Cnt	02 Cnt	03 Cnt	04 Cnt	05 Cnt	06 Cnt	07 Cnt	08 Cnt	09 Cnt	Total Cnt	Total Amt
08	YONKERS TOLL											
	01/01/99											
	01/02/99											
	•											
	•											
	01/31/99											
Plaza Subtotal												
08	HARRIMAN											
	01/01/99											
	01/02/99											
	•											
	•											
	01/31/99											
Plaza Subtotal												
•												
•												
Grand total											6001	34,123.00

\* Includes Non Postables (NPST) and rejects

Inter-CSC Detailed Local Use by Collection Date Report  
 For all Reconciled Tolls Collected from:  
 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Away Agency: NYSTA

Transactions reconciled by Home Agency: Regional Consortium

Transactions occurring at facilities of Away Agency: NYSTA

PLAZA	Trans Date	Plan*	CLASS									Total Cnt Amt							
			01 Cnt	01 Amt	02 Cnt	02 Amt	03 Cnt	03 Amt	04 Cnt	04 Amt	05 Cnt	05 Amt	06 Cnt	06 Amt	07 Cnt	07 Amt	08 Cnt	08 Amt	09 Cnt
09 YONKERS TOLL																			
	01/01/99																		
		TZC																	
		TZPL																	
		•																	
		Reject																	
	Day subtotal																		
	01/02/99																		
		TZC																	
		TZPL																	
		•																	
		Reject																	
	Day subtotal																		
	•																		
	01/31/99																		
		TZC																	
		TZPL																	
		•																	
		Reject																	
	Day subtotal																		
	Plaza Subtotal																		
08 HARRIMAN																			
		•																	
	•																		
	Plaza Subtotal																		
	•																		
	•																		
	Grand total																6001	34,123.00	

- Includes Non-Postables (NPST)

## 31.0 IAG-1N: Inter-CSC Non-Toll Settlement Report

**Use of Report:** Indicates the actual amount of funds wire transferred from the Home agency to the Host agency at the end of the settlement period.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** IAG-2N, IAG-3N, IAG-6N and IAG-14N. Each of these reports ties to one of the line items on IAG-1N.

**Description:**

Report IAG-1N

Inter-CSC Non Toll Settlement Report  
Wire Transfer for  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Payments from Home Agency: Regional Consortium

Due to Host Agency: NYS Thruway Authority

Facility Operator - Albany Airport

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<u>Wire Date</u>	<u>Amount</u>	<u>Payment Type*</u>
02/05/1999	\$ 35,503.10	Non-Toll Transactions (from IAG-2N)
	\$ (132.77)	Non-Toll Transaction fees (from IAG-2N)
	\$ (816.54)	Non-Toll Service fees (from IAG-2N)
	\$ 159.00	Non-Toll Corrections (from IAG-3N)
	\$ (25.70)	Disputed Non-Tolls and adjustments (from IAG-6N)
	\$ (300.00)	Non-Toll Charge Backs and Reversals (from IAG-14N)
<hr/>		
Settlement Total	\$ 34,387.09	

\* Additional line items, with supporting reports, are expected to be added to this report as Agencies develop other programs and fees.

## 32.0 IAG-2N: Inter-CSC Non-Toll Transaction Reconciliation Report

**Use of Report:** Indicates the amount of funds due to the Host agency for non-toll transactions by Home agency customers on a facility with whom the Host agency has an agreement in accordance with IAG Reciprocity II.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Toll Transactions line item on IAG-1N. The total amount paid and matching IAG-1N equals the total of the amount collected (PSNT). Declined and rejected transactions are not included.

**Data Source:** Non Toll Transaction Reconciliation files that were acknowledged by the Away agency in the settlement period. There are no restrictions regarding when reconciliation files are produced; i.e. several could be produced in one day for transaction files received previously. Only those reconciliation files acknowledged in the settlement period will appear in this report. . NOTE: Transaction files from a particular Host agency to a particular Home agency contain data only from a particular Facility Operator. Therefore these reports may be grouped by facility or by Host. It is the responsibility of the Host agency to further breakout the data as they may require.

**Description:** The columns in this report are related to the fields in the Transaction Reconciliation File (defined in the IAG inter CSC file spec.) as follows:

INRX\_FILE - The file name of the Reconciliation file (INRX) to be included in the settlement period.

ACK Date - This is the Date field from the corresponding Acknowledgement (ACK) file. All dates must be in the settlement period.

Total Trans Count - The total number of non-toll transactions in the non-toll reconciliation file (INRX) (INTX). The transaction fee is based on this count.

PSNT Count & PSNT AMT – These fields contain the count and dollar amount respectively of those transactions in the reconciliation file with a resolution code of PSNT. These represent transactions applied directly to the pre-paid balance as well as those applied directly to a credit card.

Service Fee - This field is calculated using the current credit blended card fee rate of the Home agency. This rate is multiplied by the PSNT amount for each non-toll reconciliation file.

DECL Count & DECL AMT – These fields contain the count and dollar amount respectively of those transactions in the reconciliation file with a post status code of DECL. These codes represent transactions that were declined by the credit card processor. These transactions are detailed in IAG-15N (Rejected Non-Toll Transactions Report).

NOCC Count & NOCC AMT – These fields contain the count and dollar amount respectively of those transactions in the reconciliation file with a post status code of NOCC. These codes represent transactions that were rejected at the Host CSC because the account is no longer a replenished via a credit card. These transactions are detailed in IAG-15N (Rejected Non-Toll Transactions Report).

Reject Count and Reject AMT - Total count and dollar amount of rejected non-toll transactions for reasons other than DECL or NOCC above. These transactions will have post status codes of RJIN, RJCX, RINV, TAGB, ACCC, OLD3 and RJDP. These transactions are detailed in IAG-7N (Rejected Non-Toll Transactions Report).

Inter-CSC Non-Toll Transaction Reconciliation Report  
 INRX Files Acknowledged in:  
 Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium  
 Non-Toll payments from Home Agency: Regional Consortium  
 Due to Host Agency: NYS Thruway Authority  
 Facility Operator - Albany Airport

INRX_FILE	ACK Date	Total Trans Count	Trans Fee \$.11	PSNT Count	PSNT AMT	SVC Fee @ 2.30%	DECL Count	DECL AMT	NOCC Count	NOCC AMT	Reject Count	Reject AMT
0022_0004_19990102010901.INRX	1/3/99	31	3.41	29	1,086.00	24.98					2	48.00
0022_0004_19990105012448.INRX	1/7/99	56	6.16	55	557.20	12.82					1	45.00
0022_0004_19990106011057.INRX	1/8/99	75	8.25	75	662.30	15.23						
0022_0004_19990106011458.INRX	1/8/99	07	0.77	07	425.80	9.79						
0022_0004_19990107022140.INRX	1/9/99	59	6.49	59	1,014.40	23.33						
0022_0004_19990107215531.INRX	1/9/99	55	6.05	55	957.30	22.02						
0022_0004_19990109022225.INRX	1/11/99	22	2.42	22	839.70	19.31						
0022_0004_19990110051614.INRX	1/12/99	08	0.88	08	847.10	19.48						
0022_0004_19990110052141.INRX	1/12/99	33	3.63	33	668.80	15.38						
0022_0004_19990110220253.INRX	1/12/99	56	6.16	56	1,008.30	23.19						
0022_0004_19990111215735.INRX	1/13/99	41	4.51	41	1,022.70	23.52						
0022_0004_19990112215445.INRX	1/14/99	82	9.02	82	843.20	19.39						
0022_0004_19990114215618.INRX	1/16/99	6	0.66	6	21.60	0.50						
0022_0004_19990114215902.INRX	1/16/99	12	1.32	12	1,506.70	34.65						
0022_0004_19990114220222.INRX	1/16/99	65	7.15	65	887.20	20.41						
0022_0004_19990115220013.INRX	1/17/99	34	3.74	34	1,509.30	34.71						
0022_0004_19990116215041.INRX	1/18/99	55	6.05	55	1,088.80	25.04						
0022_0004_19990118215434.INRX	1/20/99	83	9.13	83	1,595.30	36.69						
0022_0004_19990120214231.INRX	1/22/99	87	9.57	85	1,057.50	24.32			2	20.00		
0022_0004_19990123031220.INRX	1/25/99	28	3.08	27	5,277.50	121.38	1	50.00				
0022_0004_19990123215019.INRX	1/25/99	29	3.19	24	1,416.20	32.57	2	120.00			3	38.50
0022_0004_19990124215314.INRX	1/26/99	90	9.9	90	1,692.50	38.93						
0022_0004_19990125215216.INRX	1/27/99	06	0.66	04	1,273.40	29.29			1	10.00	1	0
0022_0004_19990128015547.INRX	1/30/99	30	3.3	30	1,417.90	32.61						
0022_0004_19990129215839.INRX	1/31/99	69	7.59	69	1,741.80	40.06						
0022_0004_19990129220005.INRX	1/31/99	29	3.19	29	1,507.60	34.67						
0022_0004_19990130215427.INRX	1/31/99	58	6.38	58	1,756.30	40.39						
0022_0004_19990131215514.INRX	1/31/99	01	0.11	01	1,820.70	41.88						
Settlement Total		1207	132.77	1194	35,503.10	816.54	3	170.00	3	30.00	7	131.50

### 33.0 IAG-3N: Inter-CSC Non-Toll Correction Reconciliation Report

**Use of Report:** Indicates the amount of funds due to the Away agency because of non-toll transaction corrections.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Non-Toll Corrections line item on IAG-1N.

**Data Source:** Non-Toll Transaction correction reconciliation files (IRXN) that were acknowledged by the Away agency in the settlement period.

**Description:** The columns in this report are related to the fields in the Non-Toll Correction Reconciliation File (IRXN) as follows:

IRXN\_FILE - The file name of the Reconciliation file (IRXN) to be included in the settlement period.

ACK Date - This is the Date field from the corresponding Acknowledgement (ACK) file. All dates must be in the settlement period.

Total Count - The total number of non-toll transaction corrections in the non-toll transaction correction reconciliation file (IRXN).

PSNT

ORG - The original amount of the non toll transactions in the correction file.

NEW - The corrected amount of the non toll transactions in the correction file.

NET - The difference (NEW - ORG) in funds represented by the correction file. The total NET amount for all correction files in the settlement period is reflected in IAG-1N.

Reject Count and Reject AMT - Total count and dollar amount of rejected non-toll corrections (including declined). These transactions will have post status codes of DECL, NOCC, RJIN, RJCX, RINV, TAGB, ACCC, OLD3 and RJDP. These transactions are detailed in IAG-7N (Rejected Non-Toll Corrections Report).

Inter-CSC Non-Toll Correction Reconciliation Report  
IRXN Files Acknowledged in  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Toll correction payments from Home Agency: Regional Consortium

Due to Host Agency: NYS Thruway Authority

Facility Operator - Albany Airport

	Ack Date	Total Count	PSNT			Reject Count	Reject AMT
			ORG	NEW	NET		
IRXN_FILE							
0022_0004_19990102010901.IRXN	01/02/1999	5	24.00	35.00	11.00	0	0.00
0022_0004_19990105012448.IRXN	01/05/1999	4	10.00	8.00	(2.00)	1	3.00
0022_0004_19990106011057.IRXN	01/06/1999	100	825.00	975.00	150.00	0	0.00
Settlement Total					159.00		

## 34.0 IAG-6N: Inter-CSC Disputed Non-Toll & Adjustments Report

**Use of Report:** The Settlement Total indicates the amount of funds due to, or withheld from, the Away agency due to disputed tolls previously paid to the Away agency and subsequently credited to the customer's account. This report reflects only those transactions which both the Home and Away agencies have agreed to change.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** Disputed tolls and adjustments line item on IAG-1N.

**Data Set:** This report indicates adjustments during the settlement period. There are no supporting files transferred for this report.

**Description:**

## Report IAG-6N

Inter-CSC Disputed Non-Toll & Adjustments Report  
Adjustments Posted in:  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Adjustment payments from Home Agency: Regional Consortium

Due to (deducted from) Host Agency: NYS Thruway Authority

Facility Operator - Albany Airport

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Original Transaction							Adj. Date	Reason	Adj. Amount
Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	Class	Serial Num	Date/Time			
17	01	19	01	5	123456789	08/21/1998 08:22:18	01/09/1999	DISPUTED TOLL, WAS OUT OF COUNTRY	\$( 5.70)
23	02	19	02	3	123457344	08/21/1998 08:22:18	01/03/1999	DISPUTED TOLL, OTHER REASON	\$( 2.00)
<b>Exit Plaza Subtotal</b>									
40	03	43	02	2	123457777	08/27/1998 09:45:26	01/05/1999	REDUCED TOLL, APPLIED INCORRECT DISCOUNT	\$( 2.00)
39	04	43	02	4	123457892	08/21/1998 08:22:18	01/07/1999	DISPUTED TOLL, REPORTED TAG LOST	\$( 1.60)
<b>Exit Plaza Subtotal</b>									
92	01	3	123456890		08/21/1998 08:22:18	01/03/1999	DISPUTED TOLL, VARIOUS REASONS	\$( 4.50)	
92	01	4	123457888		08/27/1998 09:45:26	01/06/1999	INCREASED TOLL, HONEST CUSTOMER	\$ 3.00	
92	01	5	123457913		08/21/1998 08:22:18	01/20/1999	DISPUTED TOLL, VARIOUS REASONS	\$( 3.70)	
92	01	6	123457945		08/27/1998 09:45:26	01/23/1999	REDUCED TOLL, VARIOUS REASONS	\$( 3.20)	
92	01	7	123457999		08/27/1998 09:45:26	01/24/1999	REDUCED TOLL, VARIOUS REASONS	\$( 6.00)	
<b>Exit Plaza Subtotal</b>									
•									
•									
•									
<b>Settlement Total</b>									\$( 25.70)

## 35.0 IAG-7N: Inter-CSC Rejected Non Toll Transactions Report

**Use of Report:** Indicates the amount of funds that will not be paid to the Host agency due to transactions that were rejected (as opposed to declined) by the Home agency

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** The subtotals for each rec file number equals the reject amount for that file shown in IAG-2N (Reject AMT).

**Data Source:** INRX files. Transactions with post status codes of RINV, TAGB, ACCC, OLD3, RJDP.

Inter-CSC Rejected Non-Toll Transactions Report  
For INRX Files Acknowledged in:  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by CSC: Regional Consortium

Transactions rejected by Home Agency: Regional Consortium

Transactions received from Host Agency: NYS Thruway Authority

Facility Operator: Albany Airport

Acknowledge Date	Rec File #	Transaction #	Tag #*	Account #	Transaction Date	Trans Time	Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	Amt	Reject Code
01/22/99		0022_0004_19990102010901.INRX										
		12345678	00220009876543 8888888	00220009876543 8888888	01/19/99	08:39:56	42	01	44	03	16.00	RINV
		12437765	00220002323456 9999999	00220002323456 9999999	01/20/99	14:22:34	32	02	21	04	32.00	TAGB
		Subtotal									48.00	
01/25/99		0022_0004_19990105012448.INRX										
		12345987	0022000456789 7979797	0022000456789 7979797	01/23/99	10:37:45	19	03	23	01	45.00	ACCC
		Subtotal									45.00	
01/25/99		0022_0004_19990123215019.INRX										
		12346543	00220009874321 3434343	00220009874321 3434343	01/24/99	09:40:57	33	01	18	03	8.00	RINV
		12346457	00220002323457 9999999	00220002323457 9999999	01/24/99	16:03:32	17	02	21	04	20.50	TAGB
		12346980	00220004567894 7333343	00220004567894 7333343	01/24/99	11:27:43	31	03	29	01	10.00	TAGB
		Subtotal									38.50	
01/27/99		0022_0004_19990125215216.INRX										
		12347123	0022000567832 4323454	0022000567832 4323454	01/25/99	01:01:31	19	02	21	02	0.00	OLD3
		Subtotal									0.00	
<b>Total</b>												<b>\$131.50</b>

\* Note that the tag number, account number, Entry, Plaza, Entry Lane, Exit Plaza, Exit Lane and Amount may not contain valid or complete data due to the fact that these are rejected transaction and the reason for rejection may be invalid data in one of these fields.

Reject Codes (see IAG file spec) are: RJIN, RJCX, RINV, TAGB, ACCC, OLD3, RJDP

## 36.0 IAG-8N: Inter-CSC Rejected Non-Toll Corrections Report

**Use of Report:** Indicates transaction corrections that were not accepted by the Home agency and the amount of funds represented by those transactions.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** The total dollar amount of rejected corrections ties to that shown on IAG-3N.

**Data Source:** This report details all rejected transactions as indicated on IAG-3N. These transactions will have post status codes of RJIN, RJCX, RINV, TAGB, ACCC, OLD3 and RJDP. Note that declined transactions are included.

Inter-CSC Rejected Non-Toll Corrections Report  
 For IRXN Files Acknowledged in:  
 Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium

Transaction corrections rejected by Home Agency: Regional Consortium

Transaction corrections received from Host Agency: NYS Thruway Authority

Facility Operator: Albany Airport

Ack Date	Rec File #	Transaction #	Tag #*	Account #	Trans Date	Trans Time	Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	\$ Amount	Reject Code
01/05/99		0022_0004_19990105012448.IRXN 12345444		00220009873434 8768763	12/30/98	08:39:56	42	01	44	03	3.00	RINV

Total \$ 3.00

- Note that the tag number, account number, Entry, Plaza, Entry Lane, Exit Plaza, Exit Lane and Amount may not contain valid or complete data due to the fact that these are rejected transaction and the reason for rejection may be invalid data in one of these fields.

Reject Codes (see IAG file spec) are: RJNT, RJCX, RINV, TAGB, ACCC, OLD3, RJDP

## 37.0 IAG-14N: Inter-CSC Non-Toll Credit Card Charge Back Report

**Use of Report:** Indicates non-toll charges that were charged back to the Home CSC by its credit card processor.  
These charges will be deducted from the amount owed to the Host Agency.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Description:** The total dollar amount of charge backs for the settlement period as shown on IAG-1N.

Inter-CSC Non-Toll (Charge Back) and Reversal Report  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Home Agency: Regional Consortium  
Host Agency: NYS Thruway Authority  
For: Facility Operator: Albany Airport

Ack Date	Rec File #	Transaction #	Tag #*	Account #	Trans Date	Trans Time	Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	\$ Amount	Chrg Back (C) Reversal (R)
01/05/99		0022_0004_19990105012448.INRX	12345444	00220009873434 8768763	12/30/98	08:39:56	42	01	44	03	( 80.00)	C
09/06/98		0022_0004_19990905012234.INRX	33344445	00220004848432 4564789	09/01/98	08:39:56	42	01	44	03	(420.00)	C
07/05/98		0022_0004_19980704015667.IXRN	43456356	00220005557747 2351745	07/04/98	08:39:56	42	01	44	03	100.00	R
<b>Total</b>												<b>(\$ 300.00)</b>

## 38.0 IAG-15N: Inter-CSC Declined and No Credit Card Non-Toll Transactions Report

**Use of Report:** Indicates the amount of funds that will not be paid to the Host agency due to transactions that were declined by the Home agency credit card processor.

**Generated By:** Home Agency

**Frequency:** One report per settlement period.

**Related to:** The subtotals for each rec file number equals the reject amount for that file shown in IAG-2N (RJNT AMT).

**Data Source:** INRX files. Transactions with post status code of DECL and NOCC

Inter-CSC Declined and No Credit Card Non-Toll Transactions Report  
For INRX Files Acknowledged in:  
Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by CSC: Regional Consortium

Transactions rejected by Home Agency: Regional Consortium

Transactions received from Host Agency: NYS Thruway Authority

Facility Operator: Albany Airport

Acknowledge Date	Rec File #	Transaction #	Tag #*	Account #	Transaction Date	Trans Time	Entry Plaza	Entry Lane	Exit Plaza	Exit Lane	Amt	Reject Code
01/22/99		0022_0004_19990120214231.INRX										
		11122334	00220009876543 8888888	00220009876543 8888888	01/19/99	08:39:56	42	01	44	03	5.00	NOCC
		13435477	00220003444444 9999999	00220003444444 9999999	01/20/99	14:22:34	32	02	21	04	15.00	NOCC
		Subtotal									20.00	
01/25/99		0022_0004_19990123031220.INRX										
		22345987	0022000456789 7979797	0022000456789 7979797	01/23/99	10:37:45	19	03	23	01	50.00	DECL
		Subtotal									50.00	
01/25/99		0022_0004_19990123215019.INRX										
		12346543	00220009874321 3434343	00220009874321 3434343	01/24/99	09:40:57	33	01	18	03	80.00	DECL
		12346457	00220002323457 9999999	00220002323457 9999999	01/24/99	16:03:32	17	02	21	04	40.00	DECL
		Subtotal									120.00	
01/27/99		0022_0004_19990125215216.INRX										
		12347123	00220000567832 4323454	00220000567832 4323454	01/25/99	01:01:31	19	02	21	02	10.00	NOCC
		Subtotal									0.00	
<b>Total</b>												<b>\$200.00</b>

\* Note that the tag number, account number, Entry, Plaza, Entry Lane, Exit Plaza, Exit Lane and Amount may not contain valid or complete data due to the fact that these are rejected transaction and the reason for rejection may be invalid data in one of these fields.

Reject Codes (see IAG file spec) are: DECL and NOCC

## 39.0 IAG-16N: Inter-CSC Non-Toll Aggregate Funds Report

**Use of Report:** Indicates the amount of funds due to the Home agency for Aggregate funds as defined by the Reciprocity II agreement.

**Generated By:** Host Agency

**Frequency:** One report per settlement period.

**Related to:** Transaction Fee from IAG-2N. This report is generated by the Host agency and uses the same reconciliation file set as used by the Home agency for settlement.

**Data Source:** Transaction reconciliation files that were acknowledged by the Away agency in the settlement period. There are no restrictions regarding when reconciliation files are produced; i.e. several could be produced in one day for transaction files received previously. Only those reconciliation files acknowledged in the settlement period will appear in this report.

**Description:** The columns in this report are related to the fields in the Transaction Reconciliation File (defined in the IAG inter CSC file spec.) as follows:

INRX\_FILE - The file name of the Reconciliation file (INRX) to be included in the settlement period.

ACK Date - This is the Date field from the corresponding Acknowledgement (ACK) file. All dates must be in the settlement period.

Total Trans Count - The total number of non-toll transactions in the non-toll reconciliation file (INRX) (INTX). The transaction fee is based on this count.

Trans Fee from F.O. - The total transaction fee charged by the Host agency to the Facility Operator for the transactions indicated in the INTX file.

Trans Fee Due Home - The total transaction fee due from the Host agency to the Home agency as reported in IAG-2N.

Aggregate Funds - The difference between the amount the Host agency receives for each transaction from the Facility Operator and the amount the Host agency paid the Home agency for each transaction sent to the Home agency.

Aggregate Funds Due Home - One half of the Aggregate funds are due from the Host agency to the Home agency per Reciprocity II.

Inter-CSC Non-Toll Aggregate Funds Report  
 INRX Files Acknowledged in:  
 Settlement Period: 01/01/1999 to 01/31/1999

Report Date: 02/05/1999 15:32

Generated by Host Agency: NYS Thruway Authority

Aggregate Funds from Host Agency: NYS Thruway Authority

Due to Home Agency: Regional Consortium; Facility Operator - Albany Airport

INRX_FILE	ACK Date	Total Trans Count	Trans Fee from F.O. \$15	Trans Fee Due Home \$.11	Aggregate Funds	Aggregate Funds Due Home
0022_0004_19990102010901.INRX	1/3/99	31	4.65	3.41	1.24	0.62
0022_0004_19990105012448.INRX	1/7/99	56	8.4	6.16	2.24	1.12
0022_0004_19990106011057.INRX	1/8/99	75	11.25	8.25	3	1.5
0022_0004_19990106011458.INRX	1/8/99	07	1.05	0.77	0.28	0.14
0022_0004_19990107022140.INRX	1/9/99	59	8.85	6.49	2.36	1.18
0022_0004_19990107215531.INRX	1/9/99	55	8.25	6.05	2.2	1.1
0022_0004_19990109022225.INRX	1/11/99	22	3.3	2.42	0.88	0.44
0022_0004_19990110051614.INRX	1/12/99	08	1.2	0.88	0.32	0.16
0022_0004_19990110052141.INRX	1/12/99	33	4.95	3.63	1.32	0.66
0022_0004_19990110220253.INRX	1/12/99	56	8.4	6.16	2.24	1.12
0022_0004_19990111215735.INRX	1/13/99	41	6.15	4.51	1.64	0.82
0022_0004_19990112215445.INRX	1/14/99	82	12.3	9.02	3.28	1.64
0022_0004_19990114215618.INRX	1/16/99	6	0.9	0.66	0.24	0.12
0022_0004_19990114215902.INRX	1/16/99	12	1.8	1.32	0.48	0.24
0022_0004_19990114220222.INRX	1/16/99	65	9.75	7.15	2.6	1.3
0022_0004_19990115220013.INRX	1/17/99	34	5.1	3.74	1.36	0.68
0022_0004_19990116215041.INRX	1/18/99	55	8.25	6.05	2.2	1.1
0022_0004_19990118215434.INRX	1/20/99	83	12.45	9.13	3.32	1.66
0022_0004_19990120214231.INRX	1/22/99	87	13.05	9.57	3.48	1.74
0022_0004_19990123031220.INRX	1/25/99	28	4.2	3.08	1.12	0.56
0022_0004_19990123215019.INRX	1/25/99	29	4.35	3.19	1.16	0.58
0022_0004_19990124215314.INRX	1/26/99	90	13.5	9.9	3.6	1.8
0022_0004_19990125215216.INRX	1/27/99	06	0.9	0.66	0.24	0.12
0022_0004_19990128015547.INRX	1/30/99	30	4.5	3.3	1.2	0.6
0022_0004_19990129215839.INRX	1/31/99	69	10.35	7.59	2.76	1.38
0022_0004_19990129220005.INRX	1/31/99	29	4.35	3.19	1.16	0.58
0022_0004_19990130215427.INRX	1/31/99	58	8.7	6.38	2.32	1.16
0022_0004_19990131215514.INRX	1/31/99	01	0.15	0.11	0.04	0.02
Settlement Total		1207	181.05	132.77	48.28	24.14

## 40.0 Modification History

### Changes from CSC 01.60.01 to CSC 01.60.02 (01/23/2023):

1. Added Section 1.1 to clarify definitions of various Agency term/references.
2. Reserved TAG\_ACCT\_INFO Bit 23 for Florida Non-Revenue in Section 3.4.
3. Added clarification text to TAG\_HOME\_AGENCY in Section 3.4.
4. Added clarification text to TAG\_AC\_TYPE\_IND value of 'V' in Section 3.4.
5. Added values of 'H' and 'V' and added clarifications to TAG\_TYPE of Section 3.4.
6. Clarified Processing Requirement #11 in Section 3.5.
7. Added clarification text to Section 6.3 for Home and Away Agency usage.
8. Clarified value of ETC\_ACTUAL\_AXLES for those facilities that do not capture axle count data in Section 6.4.
9. Added timing caveat to Processing Requirement #4 of Section 6.5.
10. Added clarification to Processing Requirement #8 of Section 6.5.
11. Reserved ETC\_POST\_PLAN value of '00023' for Florida Non-Revenue in Section 7.4.
12. Added reference to Appendix L in ETC\_POST\_STATUS of Section 7.4.
13. Clarified File Use of ICLP File in Section 10.3.
14. Clarified descriptions of LIC\_EFFECTIVE\_FROM, LIC\_EFFECTIVE\_TO, LIC\_HOME\_AGENCY, in Section 10.4.
15. LIC\_GUARANTEED flag in Section 10.4 is no longer for future use and is now active per EMC Resolution 2022-08-02.
16. Added LIC\_REGISTRATION\_DATE and LIC\_UPDATE\_DATE to Detail Structure in Section 10.4.
17. Modified Processing Requirements #3, #4 and #5 in Section 10.5 to align with plate selection logic.
18. Added Processing Requirement #10 in Section 10.5 to address retention of plate data whose effective date has passed.
19. Added clarification text to Section 11.3 for Home and Away Agency usage.
20. Added Appendix references as necessary to Non-Toll Transaction File agency fields in Section 11.4.
21. Added Appendix references as necessary to Non-Toll Reconciliation File agency fields in Section 12.4.
22. Added Appendix references as necessary to Non-Toll Correction File agency fields in Section 13.4.
23. Added Appendix references as necessary to Non-Toll Correction Reconciliation File agency fields in Section 14.4.
24. Removed requirement #9 from Section 16, Transmission Methodology.
25. Added Appendix L, Toll Guarantee Scenarios.

### Changes from CSC 01.60.01 to CSC 01.60.01 (12/22/2021):

1. Corrected typo on TAG\_SERIAL\_NUMBER Values (00000001 to 0000000001) in Section 3.4.
2. Corrected typo on TAG\_SERIAL\_NUMBER Values (00000001 to 0000000001) in Section 4.4.

### Changes from CSC 01.60.01 to CSC 01.60.01 (03/11/2021):

1. Replaced embedded tag agency mapping table in Section 3.5, Processing Requirement #11 with reference to new Appendix K.
2. Added placeholder field of LIC\_GUARANTEED to the ICLP file in Section 10.4.
3. Incorporated revised Appendix H – Inter-CSC Dispute Policy – approved by the EMC under Resolution 2021-04-02 on 04/08/2021.

Version CSC 01.60.01 was approved by the EMC under Resolution 2021-04-01 on 04/08/2021 with a goal of implementation not later than 12/31/2022.

### Changes from CSC 01.60.01 to CSC 01.60.01 (02/25/2021):

1. Typo corrected in Section 3.5 Processing Requirement #6: "in" changed to "it".
2. Typo corrected in Section 10.3: "consistence" changed "consistency".
3. Section 8.4, added "ACCB" to list codes associated with CORR\_REASON value of 06 to maintain consistency with Description of ETC\_POST\_STATUS field in Section 7.4.

### Changes from CSC 01.60.00 to CSC 01.60.01 (01/08/2021):

Note: Referenced Tracking numbers can be found in the IAG ICD Issue Tracking document.

1. Miscellaneous edits to correct typos and minor formatting.
2. Format transaction entry and exit date/times per ISO-8601 w/TZ format (Tracking #1).

3. Format all other embedded date/time values per ISO-8601 UTC values (Tracking #2).
4. Removed individual tag status count fields from the ITAG and ITGU header records (Tracking #5).
5. Renamed TAG\_STATUS value of '3' from 'Invalid' to 'Zero/Negative Balance' to better represent its actual usage.
6. Add example of TAG\_ACCT\_INFO field format (Tracking #9).
7. Clarified Processing Requirement #6 of the Tag Status File for tags with TAG\_STATUS value of '3' (Tracking #8).
8. Added Processing Requirement #11 to the Tag Status File to clarify record uniqueness and expectations for multi-protocol tags (Tracking #22).
9. Added TAG\_STATUS value of '4' to the Tag Status Update File (Tracking #32).
10. Clarified Processing Rule #8 of the Tag Status Update File for TAG\_STATUS values of '3' and '4'.
11. Made explicit the requirement for license plate data in the Transaction File (Tracking #26).
12. Made explicit in the Reconciliation File the resubmission rules for rejected transactions based on ETC\_POST\_STATUS (Tracking #18).
13. Clarified File Use section of the Correction File that records may include resubmissions for unposted transactions.
14. Clarified CORR\_REASON values of '04', '05' and '06' in the Correction File (Tracking #12).
15. Clarified valid characters for LIC\_NUMBER in the Customer License Plate File (Tracking #14).
16. Clarified Processing Requirements #1 and #2 (Tracking #29) in the Customer License Plate File.
17. Updated Processing Requirement #3 in the Customer License Plate File to indicate preferred plate selection process (Tracking #35).
18. Restored a modified version of Processing Requirement #4 in the Customer License Plate File (Tracking #35).
19. Added Processing Requirement #9 to the Customer License Plate File to clarify expectations on usage of the LIC\_TYPE field (Tracking #23).
20. Modified Processing Requirement #2 of the Acknowledgement File to remove reference to the 'grace period' that had been replaced by Processing Requirement #5.
21. Clarified Processing Requirement #5 of the Acknowledgement File that, even if a Home Agency/CSC uses an assumed activation date/time, the Away Agency/CSC is still obligated to eventually transmit an Acknowledgement File for an ITAG file (Tracking #33).
22. Clarified Requirement #4 of Transmission Methodology defining SFTP (Tracking #20).
23. Updated Requirement #5 of Transmission Methodology to utilize file renaming instead of CHECK files (Tracking #30).
24. Added Requirement #11 of Transmission Methodology to incorporate the EZIOP Hub's support of reduced file transmissions (Tracking #4).

#### **Changes from CSC 1.51I to CSC 01.60.00 (02/07/2020)**

1. Miscellaneous edits to correct typos and minor formatting.
2. Edits to Introduction (Section 1.0) to align with other changes.
3. Added Requirements #8 and #9 to General File and Report Requirements (Section 2.0).
4. Added field VERSION to the Header of all files in various sections.
5. Expanded Agency ID field from 3 to 4 characters in all file names, file contents and reports in various sections.
6. Expanded Tag Serial Number field from 8 to 10 characters in all files and reports in which it is used.
7. Expanded RECORD\_COUNT and COUNT\_STAT# fields from 8 to 10 characters in the Tag Status File (Section 3.4) and Tag Status Update File (Section 4.4).
8. Removed COUNT\_STAT4 field from the Tag Status File (Section 3.4) and Tag Status Update File (Section 4.4).
9. Removed value of "4" from the TAG\_STATUS field of the Tag Status File (Section 3.4) and Tag Status Update File (Section 4.4).
10. Set to "Reserved" the definition for Bits 7, 8 and 9 of the TAG\_ACCT\_INFO field of the Tag Status File (Section 3.4) and Tag Status Update File (Section 4.4).
11. Added fields TAG\_HOME\_AGENCY, TAG\_AC\_TYPE\_IND, TAG\_ACCOUNT\_NO, TAG\_PROTOCOL, TAG\_TYPE, TAG\_MOUNT, and TAG\_CLASS to the Tag Status File (Section 3.4) and Tag Status Update File (Section 4.4).
12. Removed Processing Requirement #2 of the Tag Status File (Section 3.5).
13. Modified Processing Requirements #6 and #7 of the Tag Status File (Section 3.5) to clarify which transponder the Home Agency/CSC shall include in the file.
14. Modified Processing Requirement #10 of the Tag Status File (Section 3.5) to remove the reference to Lost/Stolen (status '4') tags.

15. Removed Processing Requirement #1 of the Tag Status Update File (Section 4.5).
16. Modified Processing Requirements #8 and #9 of the Tag Status File Update (Section 4.5) to clarify which transponder the Home Agency/CSC shall include in the file.
17. Removed the Invalid Tag Customer File (Section 5.0).
18. Modified the File Use of the Transaction File (Section 6.3) to allow for invalid tags to be included based upon agreed upon business rules.
19. Modified the Descriptions of the FROM\_AGENCY\_ID and TO\_AGENCY\_ID fields in the Transaction File Header (Section 6.4) to indicate that they must represent the Away Agency and Home Agency respectively.
20. Expanded the ICTX\_FILE\_NUM field from 6 to 12 characters in the Transaction File Header (Section 6.4).
21. Expanded the ETC\_TRX\_SERIAL\_NUMBER field from 12 to 20 characters in the Transaction File (Section 6.4).
22. Modified the Descriptions of the ETC\_ENTRY\_TIME and ETC\_EXIT\_TIME fields in the Transaction File (Section 6.4) to indicate that these times are in local time of the facility and not UTC.
23. Expanded the ETC\_ENTRY\_PLAZA and ETC\_EXIT\_PLAZA fields from 3 to 15 characters in the Transaction File (Section 6.4).
24. Added Value of "O – ORT" to the ETC\_LANE\_MODE field of the Transaction File (Section 6.4).
25. Added Value of "3 – Invalid" to the ETC\_VALIDATION\_STATUS field of the Transaction File (Section 6.4).
26. Removed language from the Description of the ETC\_LIC\_NUMBER field of the Transaction File (Section 6.4) that allowed plate data not actually associated with the tag.
27. Added ETC\_LIC\_TYPE field to the Transaction File (Section 6.4).
28. Expanded the ETC\_TOLL\_AMOUNT field from 5 to 9 characters in the Transaction File (Section 6.4) and introduced a configurable maximum allowable value that would cause a unique reconciliation code if exceeded.
29. Clarified Processing Requirement #4 of the Transaction File (Section 6.5) to prevent multiple duplicate rejects from one posted transaction.
30. Modified Processing Requirement #8 of the Transaction File (Section 6.5) to clarify routing of transactions to the correct Home Agency.
31. Modified Processing Requirement #9 of the Transaction File (Section 6.5) to indicate that a Transaction File must be from the actual Away Agency to the Home Agency.
32. Modified the Descriptions of the FROM\_AGENCY\_ID and TO\_AGENCY\_ID fields in the Reconciliation File Header (Section 7.4) to indicate that they must represent the Home Agency and Away Agency respectively.
33. Expanded the ICTX\_FILE\_NUM field from 6 to 12 characters in the Reconciliation File Header (Section 7.4).
34. Expanded the ETC\_TRX\_SERIAL\_NUMBER field from 12 to 20 characters in the Reconciliation File (Section 7.4).
35. Updated Description of the ETC\_POST\_STATUS field of the Reconciliation File (Section 7.4) to remove the reference to the Invalid Tag Customer File.
36. Updated Description of the ETC\_POST\_STATUS field of the Reconciliation File (Section 7.4) to clarify use of RJPL value.
37. Added Value of RJTA to the ETC\_POST\_STATUS field of the Reconciliation File (Section 7.4).
38. Expanded the ETC\_OWED\_AMOUNT field from 5 to 9 characters in the Reconciliation File (Section 7.4).
39. Added ETC\_DUP\_SERIAL\_NUM field to the Reconciliation File (Section 7.4).
40. Removed Processing Requirement #3 of the Reconciliation File (Section 7.5).
41. Modified the Descriptions of the FROM\_AGENCY\_ID and TO\_AGENCY\_ID fields in the Correction File Header (Section 8.4) to indicate that they must represent the Away Agency and Home Agency respectively.
42. Expanded the ITXC\_FILE\_NUM field from 6 to 12 characters in the Correction File Header (Section 8.4).
43. Added new Values of 06, 07, and 08 to the CORR\_REASON field of the Correction File (Section 8.4).
44. Other fields of the Correction File (Section 8.4) modified to match the Transaction File (Section 6.4).
45. Modified Processing Requirement #2 of the Correction File (Section 8.5) to clarify where corrections should be sent.
46. Removed Processing Requirement #3 of the Correction File (Section 8.5).
47. Modified Processing Requirement #4 of the Correction File (Section 8.5) to allow for multiple corrections to be submitted for the same transaction.

48. Added Processing Requirements #5, #6, #7 and #8 of the Correction File (Section 8.5).
49. Modified the Descriptions of the FROM\_AGENCY\_ID and TO\_AGENCY\_ID fields in the Correction Reconciliation File Header (Section 9.4) to indicate that they must represent the Home Agency and Away Agency respectively.
50. Expanded the ITXC\_FILE\_NUM field from 6 to 12 characters in the Correction Reconciliation File Header (Section 9.4).
51. Other fields of the Correction Reconciliation File (Section 9.4) modified to match the Reconciliation File (Section 7.4).
52. Expanded the RECORD\_COUNT field from 8 to 10 characters of the Customer License Plate File Header (Section 10.4).
53. Modified the Description of the LIC\_NUMBER field of the Customer License Plate File (Section 10.4) to clarify usage of special characters.
54. Expanded the LIC\_TYPE field from 2 to 30 characters of the Customer License Plate File (Section 10.4) and clarified its expected values along with a reference to the new Appendix J.
55. Added LIC\_EFFECTIVE\_FROM, LIC\_EFFECTIVE\_TO, LIC\_HOME\_AGENCY, LIC\_ACCOUNT\_NO, and LIC\_VIN fields to the Customer License Plate File (Section 10.4).
56. Removed Processing Requirement #4 of the Customer License Plate File (Section 10.5).
57. Updated Processing Requirement #5 of the Customer License Plate File (Section 10.5) to address usage of new effective from/to fields.
58. Updated Processing Requirement #7 of the Customer License Plate File (Section 10.5) to include the LIC\_TYPE field.
59. Modified the Descriptions of the HOME\_AGENCY\_ID field in the Non-Toll Transaction File Header (Section 11.4) to indicate that it must represent the Home Agency of the tag.
60. Expanded the INTX\_FILE\_NUM field from 6 to 12 characters in the Non-Toll Transaction File Header (Section 11.4).
61. Expanded the ETC\_TRX\_SERIAL\_NUMBER field from 12 to 20 characters in the Non-Toll Transaction File (Section 11.4).
62. Added ETC\_LIC\_TYPE field to the Non-Toll Transaction File (Section 11.4) for compatibility with the Transaction File.
63. Expanded the ETC\_AMOUNT\_DUE field from 7 to 9 characters in the Non-Toll Transaction File (Section 11.4).
64. Modified Processing Requirement #6 of the Non-Toll Transaction File (Section 11.5) to clarify routing of transactions to the Home Agency.
65. Modified the Descriptions of the HOME\_AGENCY\_ID field in the Non-Toll Reconciliation File Header (Section 12.4) to indicate that it must represent the Home Agency of the tag.
66. Expanded the INTX\_FILE\_NUM field from 6 to 12 characters in the Non-Toll Reconciliation File Header (Section 12.4).
67. Expanded the ETC\_TRX\_SERIAL\_NUMBER field from 12 to 20 characters in the Non-Toll Reconciliation File (Section 12.4).
68. Expanded the ETC\_OWED\_AMOUNT field from 7 to 9 characters in the Non-Toll Reconciliation File (Section 12.4).
69. Modified the Descriptions of the HOME\_AGENCY\_ID field in the Non-Toll Correction File Header (Section 13.4) to indicate that it must represent the Home Agency of the tag.
70. Expanded the ITXN\_FILE\_NUM field from 6 to 12 characters in the Non-Toll Correction File Header (Section 13.4).
71. Other fields of the Non-Toll Correction File (Section 13.4) modified to match the Non-Toll Transaction File (Section 11.4).
72. Modified Processing Requirement #2 of the Non-Toll Correction File (Section 13.5) to clarify where corrections should be sent.
73. Modified the Descriptions of the HOME\_AGENCY\_ID field in the Non-Toll Correction Reconciliation File Header (Section 14.4) to indicate that it must represent the Home Agency of the tag.
74. Expanded the ITXN\_FILE\_NUM field from 6 to 12 characters in the Non-Toll Correction Reconciliation File Header (Section 14.4).
75. Other fields of the Non-Toll Correction Reconciliation File (Section 14.4) modified to match the Non-Toll Reconciliation File (Section 12.4).
76. Modified Description of Value '00' of the RETURN\_CODE field of the Acknowledgement File (Section 15.4) to address Tag Status File activation/operative date/time.
77. Added Processing Requirement #5 of the Acknowledgement File (Section 15.5) to address Tag Status File activation.

78. Modified Requirement #1 of Transmission Methodology (Section 16.0) to address frequency of file transmissions.
79. Updated Requirement #4 of Transmission Methodology (Section 16.0) to require all transmission via SFTP.
80. Modified Requirement #5 of Transmission Methodology (Section 16.0) to clarify contents of the CHECK file.
81. Remove Requirement #6 of Transmission Methodology (Section 16.0).
82. Various report formatting updates to address new field sizes defined above. Even if a report sample was not modified, the reports may require modification to address these new field sizes.
83. Added Appendix J for LIC\_PLATE\_TYPE validation.

**Changes from CSC 1.51k to CSC 1.51l (12/18/2018)**

1. Added reference to Appendix I for validation of LIC\_STATE field of ICLP File (Section 10.4).
2. Added Appendix I for validation of LIC\_STATE field of ICLP File.

**Changes from CSC 1.51j to CSC 1.51k (06/19/2018)**

1. Changed description of Bit 3 in TAG\_ACCT\_INFO field of ITAG (Section 3.4) and ITGU (Section 4.4) Files from "All Bridges" to "Green Discount".
2. Updated Appendix H to reflect dispute policy and rules that were approved in June of 2017.

**Changes from CSC 1.51i to CSC 1.51j (05/03/2018)**

1. Added requirement that the ETC\_CLASS\_CHARGED field of the Transaction File (Section 6.4) should not be validated by the recipient.
2. Grammatical corrections in various fields from "This contents..." to "The contents..." .
3. Removed language that is no longer applicable from the File Usage of the Customer License Plate File in the Introduction (Section 1.0).

**Changes from CSC 1.51h to CSC 1.51i (04/08/2014)**

1. Reduced five (5) minute rule to one (1) minute for Tolls. See Section 6.5, Processing Rules #1 and #4 and Section 7.4, ETC\_POST\_STATUS field value RJDP. Five (5) minute rule for Non-Tolls was not changed.

**Changes from CSC 1.51g to CSC 1.51h (10/29/2013)**

1. Added Requirement #7 to Section 2.0, General File and Report Requirements, clarifying the existing rule that the date/time in file names must match the file's header record.
2. Added clarification language to Process Rule #1 of Section 6.5 (Transaction File) for duplicate transaction filtering.
3. Added Processing Rule #8 to Section 10.5 (Customer License Plate File) clarifying the handling of cases where a complete file is missing.
4. Added Processing Rule #6 to Section 12.5 (Non-Toll Reconciliation File) to clarify the effects on an account when a non-toll transaction fails to post to an account and is reconciled as declined (DECL).
5. Incorporated Non-Toll Transaction Flow from the appendix spreadsheet into Appendix F and added details on the processing flow for non-tolls including the effects on the account and the method used by Facility Operators to resubmit non-toll transactions.
6. Incorporated update Dispute Policy in Appendix H

**Changes from CSC 1.51f to CSC 1.51g (03/28/2007)**

1. Updated Processing Requirement #4 of the Tag Status File to clarify invalid record handling.
2. Removed Processing Requirement #8 of the Tag Status File. Systems referenced in that rule no longer exist.
3. Updated Processing Requirement #6 of the Tag Status Update File to clarify invalid record handling.
4. Updated File Layout of Invalid Tag Customer File to clarify required fields.
5. Updated Processing Requirement #2 of the Invalid Tag Customer File to clarify retention period.
6. Updated Processing Requirement #1 of the Transaction File to clarify definition of "non-license plate" transactions.
7. Updated Processing Requirement #2 of the Transaction File to clarify information being sent.

**Changes from CSC 1.51e to CSC 1.51f (10/04/2006)**

1. Updated Processing Requirement #1 of the Transaction File to remove exception to the 5 minute rule.

**Changes from CSC 1.51d to CSC 1.51e (07/31/2006)**

1. Maximum tag serial number corrected from 16777216 to 16777215.
2. Updated Processing Requirement #1 of the Transaction File to indicate that the Home Agency/CSC shall also perform duplicate (within 5 minutes) checking (as per RTF notes from 11/17/2005 meeting).
3. Updated Processing Requirement #1 of the Non-Toll Transaction File to indicate that the Home Agency/CSC shall also perform duplicate (within 5 minutes) checking 9as per RTF notes from 11/17/2005).
4. References to a separate "Report Specifications Document" were changed to refer to sections of this document in keeping with item #1 in the change from 1.51c to 1.51d below.
5. Removed outdated items #2, #3, #7 and #8 from the Transmission Methodology section. Added item #9 referencing the IAG Network document. Added item #10 referencing the ITAG Processing Information spreadsheet.
6. Updated Description of Report IAG-2 to include code of INSU which was missing.
7. Updated Description of Report IAG-6 to refer to the new Appendix H.
8. Added Appendix H – Inter-CSC Dispute Policy

**Changes from CSC 1.51c to CSC 1.51d (06/12/2002)**

1. The IAG Toll Settlement Report Specifications document (CSC-R 1.51) and Non-Toll Settlement Report Specifications document (CSC-N 1.51) were incorporated to create a single Inter-CSC Interface File and Reporting Specifications document which encompasses all files and reports which can be exchanged between E-ZPass Customer Service Centers.
2. The description of Report IAG-14N, Non-Toll Credit Card Charge Back Report, was modified to confirm to the industry definition of a credit card charge back.

**Changes from CSC 1.51b to CSC 1.51c (04/08/2002)**

1. Updated the description of the ETC\_LICENSE\_NUMBER field of the Transaction File to clarify that the plate information in the transaction may not relate to the account indicated by the tag information. This was done based on the rules stipulated in the Automated Violation Toll Posting Procedure.

**Changes from CSC 1.51a to CSC 1.51b (12/12/2001)**

1. Updated the descriptions of the TAG\_ACCT\_INFO field of the Tag Status File and Tag Status Update File to indicate that bit 24 should be set to zero (0).
2. Updated Processing Requirement #6 of the Transaction File to indicate that the proper RETURN\_CODE for skipped file numbers should be '06' and not '04'.
3. Removed the Non-Toll ETC\_POST\_STATUS reconciliation codes from the Transaction Reconciliation File and moved them into the Non-Toll Reconciliation File.
4. Corrected the ETC\_OWED\_AMOUNT description to reflect the size of the actual column. Originally showed rejected transactions as having "0000000" (seven zeroes) when it should have been "00000" (five zeroes). Also corrected the detail Record Total from 29 to 28 bytes.
5. Updated Processing Requirement #6 of the Transaction Reconciliation File to indicate the proper RETURN\_CODE which should be '04' and not '06'.
6. Updated Processing Requirement #1 of the Correction File to indicate that the proper RETURN\_CODE for skipped file numbers should be '06' and not '04'.
7. Corrected the Size of the Detail Record in the Correction Reconciliation File.
8. Updated Processing Requirement #4 of the Non-Toll Transaction File to indicate that the proper RETURN\_CODE for skipped files should be '06' and not '04'.
9. Updated Processing Requirement #2 of the Non-Toll Reconciliation File to reflect the proper ETC\_POST\_STATUS code values.
10. Updated Processing Requirement #1 of the Non-Toll Correction File to indicate that the proper RETURN\_CODE for skipped file numbers should be '06' and not '04'.
11. Corrected Size of the Detail Record in the Non-Toll Correction Reconciliation File.
12. Added a value of '07' to the RETURN\_CODE field of the Acknowledgement File to indicate a bad ZIP file structure or other file structure defect.
13. Added Processing Requirement #4 to the Acknowledgement File to refer to Appendix G.

14. Create Appendix G for the Acknowledgement File RETURN\_CODE values and their associated processing rules.

**Changes from 1.51 to CSC 1.51a (08/23/2001)**

1. Changed the document version naming convention from 1.51 to CSC 1.51. This version becomes CSC 1.51a.
2. Amended Description of ETC\_POST\_STATUS field of the Transaction Reconciliation File (Section 7.4). Codes of ACCB, OLD1 and OLD2 are now reserved solely for toll transactions. Codes ACCC and OLD3 have been added for non-toll transactions. This change applies to all reconciliation files.
3. Amended list of ETC\_POST\_STATUS codes on which toll settlement is based (Section 7.5 paragraph 3) to eliminate the value of 'PSNT' as this is a non-toll code.
4. Amended list of ETC\_POST\_STATUS codes on which toll settlement is based (Section 9.5 paragraph 2) to eliminate the value of 'PSNT' as this is a non-toll code.
5. Amended list of ETC\_POST\_STATUS codes on which non-toll settlement is based (Section 12.5 paragraph 3) to only have the value of 'PSNT' as this is a non-toll code.
6. Amended list of ETC\_POST\_STATUS codes on which non-toll settlement is based (Section 14.5 paragraph 2) to only have the value of 'PSNT' as this is a non-toll code.
7. Corrected Detail Structure record length total of the Correction File from 114 bytes to 112 bytes.
8. Corrected Detail Structure record length total of the Correction Reconciliation File from 31 bytes to 29 bytes.
9. Corrected the values of the RETURN\_CODE field in the Acknowledgement File to correspond to prior versions of the specification.
10. Removed the actual contents of Appendices A, B and C and inserted a reference to the *IAG Inter-CSC Files - Appendix* spreadsheet which now contains that information.
11. Added Facility Code 131 to the list of facilities serviced by the NY CSC (008) in Appendix E.

**Changes from 1.50a to 1.51 (01/05/2001)**

1. Reduced the size of the ETC\_TOLL\_AMOUNT field of the Transaction File. The Correction File is adjusted accordingly. This was done to allow for backward compatibility with version 1.33d. This makes the Non-Toll Transaction File record size different than the Toll Transaction File. It is envisioned that some future version of the specification will bring these two files back to the same format.
2. Added Buffalo Fort Erie Public Bridge Authority (ETC\_FAC\_AGENCY 013) and Delaware River and Bay Authority Plaza Codes (ETC\_FAC\_AGENCY 025) in Appendix B.
3. Added Buffalo Fort Erie Public Bridge Authority and Delaware River and Bay Authority Class Codes in Appendix C.
4. Removed pre-01/01/2000 Class Codes for WVPA from Appendix C.

**Changes from 1.5 to 1.50a (12/21/2000)**

1. Updated the description of the ETC\_POST\_STATUS field of the Transaction Reconciliation File (Section 7.4) to include a value of RJCX to allow non-toll corrections to be rejected if they constitute a second (or greater) attempt to correct the same transaction.
2. Updated the description of the ETC\_OWED\_AMOUNT field of the Transaction Reconciliation File (Section 7.4) to clarify that this amount for a correction transaction is the corrected amount and not the net amount of the original and corrected amount.
3. Updated Processing Requirement #6 of the Transaction Reconciliation File (Section 7.5) to set the RETURN\_CODE to a value of '06' instead of '04' so as to avoid a conflict.
4. Updated the description of the LIC\_NUMBER field of the Customer License Plate File (Section 10.4) to stipulate valid characters.
5. Added Processing Requirement #7 to the Customer License Plate File (Section 10.5) to define the actions required if the same plate information is received from two Home Agencies/CSCs.

6. Updated the File Use of the Non-Toll Transaction File (Section 11.3) to reference valid E-ZPass Plus tags and not tags with a TAG\_STATUS of '1'.
7. Updated the description of the ETC\_VALIDATION\_STATUS field of the Non-Toll Transaction File (Section 11.4) to remove the value of '2' (Low Balance) as it was not a valid value for a non-toll transaction.
8. Updated Processing Requirement #3 of the Non-Toll Transaction File (Section 11.5) to handle parking facilities that charge a fee based solely on entry to the facility.
9. Updated the description of the RETURN\_CODE field of the Acknowledgement File (Section 15.4) to include the new value of '06' and to redefine the usage of the value '04'.
10. Updated Albany Airport Plaza Codes (ETC\_FAC\_AGENCY 128) in Appendix B.

**Changes from 1.41a to 1.5 (11/30/2000)**

1. Modified the TAG\_ACCT\_INFO fields of the Tag Status File and the Tag Status Update File to accommodate E-ZPass Plus applications (both Parking and Non-Parking).
2. Added Processing Requirements #9 and #10 to the Tag Status File to define the setting and handling of the E-ZPass Plus status bits.
3. Updated the description of the ETC\_TRX\_TYPE field of the Non-Toll Transaction File to include a value of 'N' for non-parking transactions.
4. Updated the description of the ETC\_POST\_STATUS field of the Transaction Reconciliation File to include a value of RJIN to allow non-toll transactions against non-credit card accounts to be rejected for insufficient funds.
5. Added Agency ID 130 (McDonalds) to Appendix A.
6. Updated Appendix B to include plaza codes for McDonalds.
7. Updated Appendix E to include Facility Code 130 in the E-ZPass New York CSC.

**Changes from 1.41 to 1.41a (11/20/2000)**

1. Added agency 025 (Delaware River and Bay Authority) to Appendix A.

**Changes from 1.40b to 1.41 (10/31/2000)**

1. Reformatted the list of files in the Introduction for better readability.
2. Modified page numbering scheme for appendices.
3. Clarified the definition of the TAG\_STATUS fields in the Tag Status File and Tag Status Update File.
4. Updated the description of the ETC\_POST\_STATUS field of the Transaction Reconciliation File for the value DECL to indicate that it only applies to transactions passed directly through to the credit card.
5. Added Processing Requirement #4 to the Correction File to indicate that a transaction can only be submitted for correction once.
6. Updated the Customer License Plate File descriptions for the LIC\_STATE and LIC\_NUMBER fields for better error checking. Added Processing Requirement #6 to define processing of invalid records.
7. Updated Processing Requirement #7 of the Non-Toll Transaction File to indicate that each file shall only contain transactions from a single Facility Operator and that a separate file shall be created for each Home Agency.
8. Removed Processing Requirement #8 of the Non-Toll Transaction File.
9. Added Processing Requirement #7 to the Non-Toll Correction File to indicate that a transaction can only be submitted for correction once.
10. Updated Appendix B NJ Turnpike short abbreviation and plaza 17 codes.
11. Added Appendix F, Non-Toll Transaction Flow, as an aid to understanding the grouping and routing of non-toll transactions.

**Changes from 1.40a to 1.40b (09/21/2000)**

1. Updated Appendix B to include plaza codes for the Pennsylvania Turnpike Commission.

**Changes from 1.4 to 1.40a (08/28/2000)**

1. Increased the size of the ETC\_TOLL\_AMOUNT field in the Transaction File from CHAR(5) to CHAR(7) to allow for larger amounts. This increased the record length from 110 to 112 bytes. This in turn will affect the structure of the Correction File accordingly.
2. Increased the size of the ETC\_OWED\_AMOUNT field in the Transaction Reconciliation File from CHAR(5) to CHAR(7) to allow for larger amounts. This increased the record length from 29 to 31 bytes. This in turn will affect the structure of the Correction Reconciliation File and the Non-Toll Reconciliation File accordingly.
3. Increased the size of the ETC\_AMOUNT\_DUE field in the Non-Toll Transaction File from CHAR(5) to CHAR(7) to allow for larger amounts. This increased the record length from 110 to 112 bytes. This in turn will affect the structure of the Non-Toll Correction File accordingly.
4. Section 16 item 4 was modified to remove RCP as a means of file transmission.
5. Appendix D was updated to include PA Turnpike IP address.
6. Added agency 006 (Pennsylvania Turnpike Commission) to Appendix E.

**Changes from 1.33d to 1.4 (08/08/2000)**

1. Removed Processing Requirement #5 of the Transaction File which referred to the processing of parking transactions.
2. Modified values of ETC\_POST\_STATUS field of the Transaction Reconciliation File to handle parking transactions.
3. Added the Non-Toll Transaction File to allow for the processing of non-toll transactions. A new file was added (as opposed to including these transactions in the Toll Transaction File) due to the possible delays in reconciling non-toll transactions and the desire to not hold up reconciliation of toll transactions.
4. Added the Non-Toll Reconciliation file to allow for the reconciliation of Non-Toll Transaction Files.
5. Added the Non-Toll Correction File to allow for correction of non-toll transactions.
6. Added the Non-Toll Correction Reconciliation File to allow for the reconciliation of Non-Toll corrections.
7. Reformatted Appendix B, Plaza Codes, for readability and created short agency descriptions. Added plaza codes for New Jersey Turnpike and updated several MassPike and South Jersey codes. Also, added plaza codes for PANYNJ and Albany Airport plazas.
8. Updated Appendix D, Inter-CSC Network Topology, to include PTC and to include the Area Code and Exchange of the demarcation points.

**Changes from 1.33c to 1.33d (11/22/1999)**

1. Modified description of the TAG\_ACCT\_INFO field of the Tag Status File and the Tag Status Update File to include new discount plans for DRPA (bit 12), SJTA (bit 13) and NJHA (bit 14).
2. Modified description of the ETC\_POST\_PLAN field of the Transaction Reconciliation File to include the new discount plans for DRPA (00012), SJTA (00013) and NJHA (00014). This would also affect the Correction Reconciliation File.
3. Added MassPort and West Virginia plaza code information to Appendix B.
4. Added MassPort and West Virginia class information to Appendix C.
5. Updated Appendix D to reflect the current status of the IAG Network.
6. Added West Virginia to Appendix E.

**Changes from 1.33b to 1.33c (09/13/1999)**

1. Fixed numbering problem in Processing Requirement section of the Customer License Plate File. Also, split the second requirement into two distinct requirements (as they were in 1.32a).
2. Added NJHA plaza codes to Appendix B.

3. Corrected several DRPA class code values in Appendix C. Added Footnote 4 to Appendix C.

**Changes from 1.33a to 1.33b (07/30/1999)**

1. Modified various descriptions of Non-Toll field values to indicate that these are simply reserved values and should not be used in development. Also modified Processing Requirement #5 or the Transaction File to address this issue.
2. Modified Processing Requirement #4 of the Transaction Reconciliation File to refer to the Inter-CSC Settlement Report Specifications.
3. Added Processing Requirement #6 to the Transaction Reconciliation File to handle situations where the file does not correspond properly to the Transaction File.
4. Added Processing Requirement #4 to the Correction Reconciliation File to handle situations where the file does not correspond properly to the Correction File.
5. Modified the RETURN\_CODE value of '04' in the Acknowledgement File to refer to the situation whereby the data contained in a Transaction Reconciliation File (or Correction Reconciliation File) does not match its corresponding Transaction File (or Correction File).

**Changes from 1.33 to 1.33a (07/27/1999)**

1. Reformatted document to include section numbers and other format changes to improve readability.
2. Renamed 'Misc. Requirements' section to 'Processing Requirements'.
3. Added Processing Requirements to the Tag Status File and Tag Status Update File to state that only tags issued by the CSC should be included in the file. This was done to bring the document in line with current CSC operations.
4. Added Appendix E, CSC/Agency Cross Reference. Modified the 'Description/Valid Values' references associated with the fields FROM\_AGENCY\_ID, TO\_AGENCY\_ID and ETC\_FAC\_AGENCY to refer to Appendix E.
5. Reworded General File Requirement #1 to refer to Appendix E.
6. Changed Processing Requirement #3 for the Transaction File to indicate that a credit transaction "may" share information as opposed to "must" share information.
7. Added Processing Requirements to the Tag Status File and Tag Status Update File to indicate that CSCs which issue tags under multiple Agency IDs would create only a single file for all tags and not multiple files by Agency ID. This was done to bring the document in line with current CSC operations.
8. Added Processing Requirements to the Transaction File and Correction File to indicate that CSCs which issue tags under multiple Agency IDs should receive only a single file for all transactions for its tags from a particular Away Agency/CSC and not multiple files by Agency ID. This was done to bring the document in line with current CSC operations.
9. Modified the Valid Values for the LIC\_TYPE field of the Customer License Plate File to show asterisks (\*\*) as the valid unused value instead of blanks. This was done to bring the document in line with current CSC operations.
10. Modified Processing Requirement #1 of the Transaction File to indicate that intentional duplicate transactions must have their exit times one second apart. This was done to bring the document in line with current CSC operations.

**Changes from 1.32a to 1.33 (06/15/1999)**

1. Added a value of P to the ETC\_TRX\_TYPE field of the Transaction File. This value indicates that the transaction occurred at a parking facility as opposed to a toll facility. Updated the description of the ETC\_ENTRY\_DATE, ETC\_ENTRY\_TIME, ETC\_ENTRY\_PLAZA and ETC\_ENTRY\_LANE fields to account for parking (and other Non-Toll) transactions. Added 'Misc. Requirement' #5 to the Transaction File to address parking transactions.
2. Updated 'Misc. Requirement' #1 of the Transaction File to indicate that duplicate transactions may be received under certain circumstances.

3. Added 'Misc. Requirement' #4 to the Transaction File to clarify the method of filtering license plate transactions.
4. Added the field ICTX\_FILE\_NUM to the Transaction File header. Header record increased in size from 33 bytes to 39 bytes. Added 'Misc. Requirement' #6 to the Transaction File to describe the usage of the file sequence number.
5. Added the field ICTX\_FILE\_NUM to the header of the Transaction Reconciliation File. Header record increased in size from 33 bytes to 39 bytes. Added 'Misc. Requirement' #4 to describe its use.
6. Added values of PSNT and RJNT to the ETC\_POST\_PLAN field of the Reconciliation File to be used for Non-Toll transactions. Updated 'Misc. Requirement' #3 to include PSNT as a value to be included in settlement.
7. Renamed the Transaction Correction File to the Correction File.
8. Added the field ITXC\_FILE\_NUM to the Correction File header. Header record increased in size from 33 bytes to 39 bytes. Added 'Misc. Requirement' #1 to the Correction File to describe the usage of the file sequence number.
9. Added the Correction Reconciliation File to allow correction transactions to be reconciled and reported as part of settlement. Updated 'Misc. Requirement' #3 of the Transaction Reconciliation File to include the Correction Reconciliation File as part of settlement.
10. Added values of 04 and 05 to the RETURN\_CODE field of the Acknowledgement File to handle file sequence number problems.
11. Added agency 024 (West Virginia Parkways Authority) to Appendix A. Reserved agency codes 128 through 999 for future non-tag issuing facilities.
12. Updated SJTA (agency 007) and DelDOT (agency 019) plaza information in Appendix B.
13. Highlighted various IAG Class values in Appendix C to indicate those codes which currently cannot be programmed into a tag.
14. IP address for MassPike FTP Host added in Appendix D.

**Changes from 1.32 to 1.32a (05/12/1999)**

1. Changed all record delimiters in all files from CR (carriage return) to LF (line feed). This allows the files to be viewed/edited with standard software.
2. Updated the Transmission Methodology section to include tag files being sent by Agency 021 (MassPike).
3. Update the Transmission Methodology section to reflect the actual method currently used in naming the check file. It now correctly shows {FILE\_NAME}\_{FILE\_TYPE}.CHECK instead of {FILE\_NAME}.CHECK.
4. Added class information for NJTA to Appendix C and filled in missing MTA B&T class information.
5. Added Appendix D – Inter-CSC Network Topology.

**Changes from 1.31 to 1.32 (04/12/1999)**

1. Updated the 'File Use' section of the Tag Status Update File to indicate that the file can contain new tags as well as updated information for existing tags.
2. Added a value of PPST to the ETC\_POST\_STATUS field of the Transaction Reconciliation File. This value indicates that the license plate transaction was successfully posted to an account.
3. Added a value of RJPL to the ETC\_POST\_STATUS field of the Transaction Reconciliation File. This value indicates that the license plate transaction could not be posted to an account.
4. Updated 'Misc. Requirement' #3 of the Transaction Reconciliation File to include PPST as a valid value to be used for settlement.
5. Updated the 'File Use' section of the Customer License Plate File to specify the only license plates associated with valid accounts (accounts with at least one tag with a TAG\_STATUS of '1' or '2') are to be included in the file. Also updated "Misc. Requirement" #1 accordingly.

6. Added the field LIC\_TYPE to the Customer License Plate File to be used to indicate license plate type. Until the values of this field are determined, it shall be filled with blanks. This increase the record length from 24 to 26 bytes.
7. Updated the Transmission Methodology section to incorporate the latest information on transmission schedules.
8. Added plaza information for MassPike to Appendix B. Also modified heading of 'Plaza Abbreviation for Customer Statements' to indicate that the maximum size of this field is three (3) characters.

**Changes from 1.3 to 1.31 (03/18/1999)**

1. Added plaza information for MdTA to Appendix B.
2. Added class information for MdTA and MassPike to Appendix C.
3. Updated the 'File Use' section for the Transaction Reconciliation File to indicate that the file is associated with a single, complete Transaction File, not partial files or multiple files in a single reconciliation file.
4. Updated 'Misc. Requirement' #3 of the Transaction Reconciliation File to modify the rules as to which files are included in a months reconciliation.

**Changes from 1.2 to 1.3 (12/29/1998)**

1. Added General File Requirement #3 to define the naming conventions for compressed files.
2. Updated the description of the TAG\_SERIAL\_NUMBER field in all files to reflect a starting tag serial number value of 00000001 and not 00000000. Some agencies cannot process a tag serial number that is all zeroes.
3. Added 'Misc. Requirement' #7 to the Tag Status File to handle the method whereby tags are removed from the Tag Status File.
4. Updated the description of the ETC\_ENTRY\_PLAZA and ETC\_EXIT\_PLAZA fields of the Transaction File to specify that the fields are left justified and padded with trailing blanks. Also added Appendix B which lists valid plaza codes for each agency.
5. Updated the description of the ETC\_ENTRY\_LANE and ETC\_EXIT\_LANE fields of the Transaction File to specify that the fields are left justified and padded with trailing blanks.
6. Updated the description of the ETC\_CLASS\_CHARGED field of the Transaction File to specify that it is left justified and padded with trailing blanks. Also added Appendix C which lists the valid class codes for each agency and how they relate.
7. Added a value of RINV to the ETC\_POST\_STATUS field of the Transaction Reconciliation File. This value indicates that the Home Agency detected invalid data in one or more of the fields in the referenced transaction record.
8. Updated the description of the ETC\_POST\_PLAN field of the Transaction Reconciliation File to specify the valid values.
9. Added 'Misc. Requirement' #3 to the Transaction Reconciliation File to clarify which transactions are settled each month.
10. Increased the length of the ORIG\_FILE\_NAME\_TYPE field of the Acknowledgment File from 25 characters to 50 characters. The record length increased from 52 bytes to 77 bytes.
11. Moved the list of valid agency ID codes from the General File Requirements to Appendix A.

**Changes from 1.1 to 1.2 (10/01/1998)**

1. Added value of NPST to the ETC\_POST\_STATUS field of the Transaction Reconciliation File. This value indicates that: while the transaction did not post at the Home Agency, the Home Agency still acknowledges that the toll is owed to the Away Agency.
2. Added field of ETC\_DEBIT\_CREDIT to the Transaction File. This field is used by the Away Agency to indicate whether the toll should be debited from the customer account or credited to the customer account. Also added 'Misc. Requirement' #3 to address the use of the field. The record length

increased from 109 bytes to 110 bytes. As a result of this change, transmission time of the compressed file on a T-1 line increased from 73 seconds to 74 seconds.

3. Modified length of Transaction Correction File to accommodate the addition of the ETC\_DEBIT\_CREDIT field in the Transaction File (See #2 above).
4. Added field of ETC\_DEBIT\_CREDIT to the Transaction Reconciliation File. This field is used by the Home Agency to reflect the ETC\_DEBIT\_CREDIT originally transmitted in the Transaction File. The record length increased from 28 bytes to 29 bytes. Transmission time was not increased as a result of this change.
5. Modified the name of the ETC\_POST\_AMOUNT field of the Transaction Reconciliation File to be ETC\_OWED\_AMOUNT. Also modified its description to reflect the fact that the tolls shown in the file indicate amounts owed from the Home Agency/CSC to the Away Agency/CSC.
6. Modified the format of the TAG\_AGENCY\_ID, TAG\_SERIAL\_NUMBER and TAG\_ACCT\_INFO fields of the Tag Status File to convert them from a binary format to a string representation. The record length increased from 9 bytes to 19 bytes. As a result of this change, transmission time of the compressed file on a T-1 line increased from 48 seconds to 102 seconds.
7. Modified the format of the TAG\_AGENCY\_ID, TAG\_SERIAL\_NUMBER and TAG\_ACCT\_INFO fields of the Tag Status Update File to convert them from a binary format to a string representation. The record length increased from 9 bytes to 19 bytes. Impact on transmission time should be negligible.
8. Modified the format of the CUST\_TAG\_AGENCY\_ID and CUST\_TAG\_SERIAL fields of the Invalid Tag Customer File to convert them from a binary format to a string representation. The record length increased from 257 bytes to 264 bytes. As a result of this change, transmission time of the compressed file on a T-1 line increased from 69 seconds to 71 seconds.
9. Modified the format of the TAG\_AGENCY\_ID and TAG\_SERIAL\_NUMBER fields of the Customer License Plate File to convert them from a binary format to a string representation. The record length increased from 17 bytes to 24 bytes. As a result of this change, transmission time of the compressed file on a T-1 line increased from 91 seconds to 128 seconds.
10. Modified description of ETC\_VALIDATION\_STATUS field of the Transaction File to include asterisk (\*) as a valid value if the agency lane system does not report the actual value to its CSC.
11. Modified the File Use sections of the Tag Status File and Tag Status Update File so that all tags associated with accounts held by the Home Agency/CSC are included in the file and not just those tags issued by the Home Agency/CSC. This was done so that tags sold (issued) by one CSC which are later used to open an account at another CSC will be reported by the correct CSC. Also added 'Misc. Requirement' #6 to address the instance where an Away Agency/CSC receives the same tag information from two Home Agencies/CSCs.

#### **Changes from 1.0 to 1.1 (09/14/1998)**

1. Added value of C (Manned/ETC with Carpool confirmation) to the ETC\_LANE\_MODE field of the Transaction File. This value indicates that: a) the vehicle traversed a Manned/ETC lane; b) the tag was associated with a carpool discount plan based on the most recent tag status information; and c) the toll collector confirmed that the carpool vehicle occupancy rules were fulfilled.
2. Updated description of ETC\_READ\_PERFORMANCE and ETC\_WRITE\_PERF fields of the Transaction File to include \* as a valid value if this data is unavailable.
3. Added value of \* to the ETC\_TAG\_PGM\_STATUS field of the Transaction File. This value indicates that the transaction is for an untagged violation or that the data is unavailable.

#### **Version 1.0 (08/19/1998)**

Original Document

## A. Agency Codes

For the list of Agency Codes, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## B. Plaza Codes

For the list of Plaza Codes, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## **C. Class Codes**

For the list of Class Codes, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## D. Inter-CSC Network Topology

For the Inter-CSC Network Topology, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

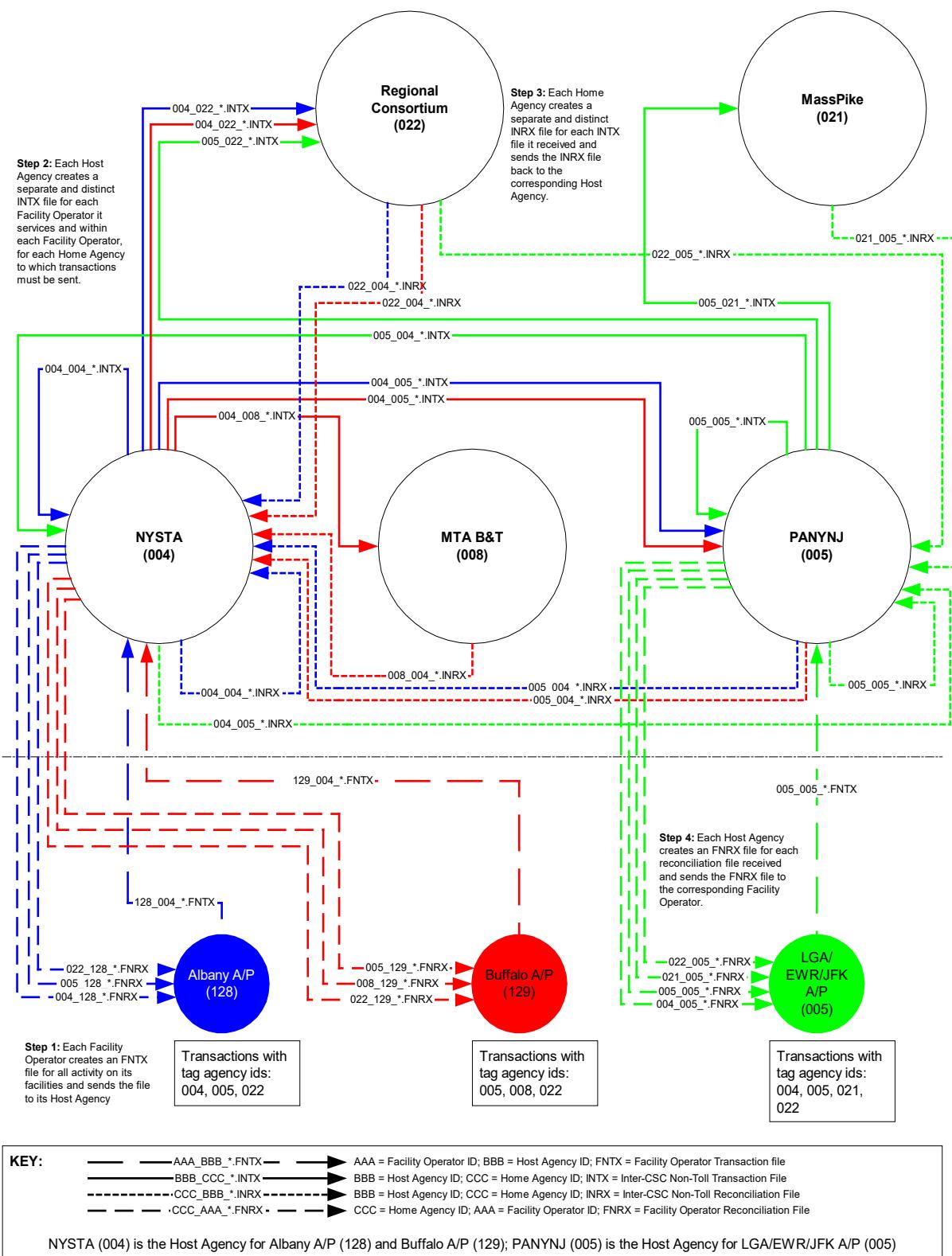
## E. CSC/Agency Cross Reference

For the CSC/Agency Cross Reference, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## F. Non-Toll Transaction Flow



The Non-Toll transaction and reconciliation data flow is as follows:

1. On a nightly basis, the Facility Operator systems gather their non-toll transactions and create FO Transaction Files (FNTX) and transmit them to their Host CSC.
2. The Host CSC processes the FO Transaction File and transmits an Acknowledgement File (ACK) and FO Distribution File (FNDX) to the Facility Operator systems (not shown in the figure above).
3. The Host CSC creates INTX files from the FO Transaction File (FNTX) and transmits them to their corresponding Home CSCs (004\_022\_\*.INTX, etc.). Internally, the Host CSC creates INTX files for tags associated with its own accounts as well (004\_004\_\*.INTX and 005\_005\_\*.INTX).
4. Each CSC, including the Host CSC, posts the E-ZPass Plus transactions valued at < \$20 to the customer's accounts.
5. Each CSC, including the Host CSC, transmits the E-ZPass Plus transactions valued at >= \$20 to their credit card processor.
6. The credit card processor responds to each transaction received indicating whether the transaction was authorized or declined.
7. If the transaction was declined by the credit card processor, the Home CSC flags the associated E-ZPass account as no longer participating in E-ZPass Plus and a notice is generated to the customer informing them that their credit card was declined and requesting a new card be added to the account.
8. The Home CSC creates an INRX file reconciling the data from the INTX file back to the Host CSC (022\_004\_\*.INRX, etc.). The Host CSC creates an INRX file for the transactions processed against its own accounts as well (004\_004\*.INRX and 005\_005\_\*.INRX).
9. For each INRX file received (including the ones the Host CSC generated), the Host CSC creates an FO Reconciliation File (FNRX) and transmits it to the Facility Operator system.
10. The Facility Operator system processes each FO Reconciliation File (FNRX) and updates its database with the information found.
11. Transactions which reconciled back with a code indicating that they were declined by the credit card processor (code of DECL) or with a code indicating that the E-ZPass account no longer has a credit card associated with it (code of NOCC) are kept in a holding queue.
12. Because the E-ZPass account for declined transactions was flagged as no longer participating in E-ZPass Plus, the next FO Tag Status File (FTAG) transmitted by the Host CSC will not include any tags from that account.
13. On a daily basis, the Facility Operator system compares the holding queue to the latest FO Tag Status File (FTAG). If a transaction in the holding queue has a tag that is found in the FO Tag Status File (FTAG), it is an indication that the customer has put a new credit card on their E-ZPass account. Therefore, the Facility Operator system will take this transaction out of the holding queue and will include it in an FO Correction File (FTXN) for transmission to the Host CSC with a CORR\_REASON value of 06 indicating a resubmission.
14. The FO Correction File (FTXN) is processed in the same manner as an FO Transaction File (FNTX) with corresponding FO Distribution Files (FNDX), ITXN and IRXN Files and FO Correction Reconciliation Files (FRXN).

Per IAG guidelines, a transaction can only be resubmitted in an FO Correction File once. Therefore, if the transaction is rejected a second time as DECL or NOCC, the Facility Operator will not be able to pursue payment for the transaction from the Host CSC. Instead, the Facility Operator may issue a manual request to the Home CSC for the associated customer's name and address information so as to contact the customer for any fees due.

## G. Acknowledgement File RETURN\_CODE Values

For the list of Acknowledgement File RETURN\_CODE Values, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## **H. Inter-CSC Dispute Policy**

**Version 4**  
**Approved by the EMC under Resolution 2021-04-02 on 04/08/2021**

This operational policy details how a transaction dispute presented by an E-ZPass customer to their Home agency is generally handled when the transaction occurs at an Away facility. Where permitted, the Home agency will deduct from the Away settlement (or “Pass Back”) any credits applied to the customer’s account.

**NOTE: Home Agencies should refer their customers with PTC transaction disputes to the PTC Customer Service Center. If PTC accepts the dispute, they will credit the Home customer by submitting a transaction correction file to the Home agency for processing. While the Home agency may credit their customer directly, this transaction adjustment will not be eligible for Pass Back to PTC under this Policy.**

Terms are as defined in the IAG Reciprocity Agreement and Inter-CSC Interface File Reporting Specifications.

Exceptions to any portion of this Policy may be made by specific agreement between the affected parties.

This policy is not intended to contradict any Member’s internal policy or to interfere with a Member’s ability to collect a published toll.

### **General Rule # 1: Responsibility of Handling Disputes**

**E-ZPass Customer disputes will be handled by customer’s Home Agency CSC (i.e.: where the customer’s account is managed) unless otherwise noted in General Rule # 1a.**

Home agencies should manage their customer disputes in accordance with their own guidelines. The responsibility of assessing reasonableness and preventing abuse remains with the customer’s Home agency (e.g. reasonably avoid nonsense disputes). In order for a Home agency to assess reasonableness, it is expected that they be familiar about relevant toll structures and policies of Away agency.

Away agencies are expected to make relevant toll structures and policies available, and the acceptance of the dispute lies with the Away agency or automated as described within this policy.

### **General Rule # 1a: Exception(s) to this Policy**

#### **Pennsylvania Turnpike (PTC)**

Home Agencies should refer customers with PTC transaction disputes to the PTC Customer Service Center. If PTC accepts the dispute, PTC will credit the Home customer by submitting a transaction correction file to the Home member for processing. While the Home member may elect to credit their customer directly in accordance with their own guidelines, this transaction adjustment will not be eligible for automatic Pass Back to PTC under this Policy. PTC transaction disputes are wholly at PTC’s discretion due to bonding language, and are never eligible for Pass Back.

### **General Rule # 2: Acceptable Reasons for Pass Back**

**There are certain acceptable reasons for passing back adjustments due to a customer dispute.**

While the Home agency checks the customer dispute claim for reasonableness, the Away agency determines whether they will accept the adjustment passed back as these adjustments normally result in a reduction to their toll revenue. In Table 1 below, definitions are provided of the types of known (typical) disputes and the indication as to whether or not the dispute adjustments may be deducted from settlement. As stated above, exceptions to this rule may be made when specifically agreed to by the affected agencies.

### **General Rule # 3: Acceptable Timeframes for Pass Back and Dispute Handling**

**This covers the time to file and respond to filed disputes. For the purposes of this General Rule “days” is defined as calendar days (including federal and state holidays – holidays may vary by state, with the day to respond to be on the following business day if a calendar day falls on a weekend or holiday).**

A Home agency may deduct from settlement the credit given to Home customers for disputed transactions which occurred during the most recent three calendar months plus the current month of the settlement period (90 days + current)<sup>1</sup>.

Individual member agencies have different policies and/or Account Terms and Conditions regarding how long after the toll transaction date that they will accept a customer's dispute. Independent of member agency policies, the IAG membership has established a common policy for IAG member timeframes. For example, a member which issues quarterly statements, this covers the previous 90 days, the month of statement issuance would be current, but that may extend into another month depending upon timing of issuance, mail issues, and customer response time.

The Away agency must approve, deny, or request additional information within the following timeframe(s):

- 14 days for disputes valued at or below \$100.00 per transaction.
- 30 days for disputes valued where the per transaction and/or total sum of dispute equals or exceeds \$100.01.

If no response is provided by the Away agency within the above parameters, the Home agency may process the dispute as pre-approved. The Home and Away agency may extend the parameters above by mutual agreement.

For Pass Backs that are preapproved by the Away agency, the Home agency will comply with IAG-6 report timing as described in Table 2.

#### **General Rule # 4: Limitations on Multiple, Repeated, or Large Dollar Credits**

**This policy provides limitations on allowable Pass Back transactions due to volume, size, or patterns of particular accounts. These limitations are associated with specific dispute reasons and are detailed in Table 1.**

Limitations have been allowed due to some agency concerns that certain customers may attempt to ‘work around’ paying legitimate tolls by continually submitting disputes, failing to replace defective tags, failing to update license plates. Additionally, some agencies maintain strict dispute policies and require some limits against the risks of a Home agency with an excessively liberal credit policy.

#### **General Rule # 5: Limitations on Individual Credits**

**This policy also provides limitations on allowable Pass Back transactions for individual transactions, as detailed in Table 1.**

The Home agency must use the Away agencies' published toll schedules to determine the appropriate credit amount for each disputed transaction. Failure to do so may result in a denial of the credit passed back by the Away agency. For ticketed system transactions where the point of origin is unknown (maximum fare was charged), the Home agency may accept the customer's word as to the entry point. However, for reasonableness, the Home agency should review prior travel patterns of this customer for similar trips. For duplicate transactions or erroneous violation tolls, the entire amount of the transaction may be credited.

#### **General Rule # 6: Required Reporting**

**The settlement of disputed toll adjustments is based on the IAG-6 Inter-CSC Disputed Toll and Adjustments Report. The Home agency must also provide to the Away agency in an Excel spreadsheet of all disputed transactions to be included in the settlement.**

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<sup>1</sup> Establishing a restriction encourages Home agencies to process disputes timely, and also limits the Away agencies' liability for issues that may have occurred in prior reporting periods.

The purpose of the spreadsheet is to provide the Away agency with a tool to perform an analysis of the items being disputed; the excel document can be sorted and analyzed in a way that allows the Away agency to identify problems within their lanes, or, problems with the dispute being claimed. The excel spreadsheet should contain all of the information on the IAG-6 and must tie to it. The spreadsheet must also indicate customer account number, tag number, original transaction amount, corrected transaction amount, and the amount of the adjustment applied for each transaction. The only dispute reasons that may appear on the report are the acceptable reasons noted in Table 1, or by agreement between the affected agencies. The Home agency must provide the Excel spreadsheet and the IAG-6 Report to the Away agency within 20 calendar days after the settlement period – please refer to Table 2.

#### **General Rule # 7: Settlement Frequency and Schedule**

**Settlement of disputed toll adjustments shall be no more frequently than monthly. Settlement for a particular month occurs on a one-month lag from the current month of toll revenue settlement.**

The one-month lag period for settlement allows the Home agency more time to produce the required reports and the Away agency more time to review the reports. It does not extend the period of time that disputed transactions may be included as indicated in General Rule #3. Illustration of timeframes is shown in Table 2.

#### **General Rule # 8: Settlement with the Adoption of this Policy**

Upon adoption of this Disputed Toll Adjustment Policy by the IAG, the agencies will follow the agreed upon rules going forward. No retroactive adjustments will be applied to a current settlement.

**Table 1: Reasons for Disputes**

Item #	Reason or Type of Txn	Automatic Pass Back? <sup>2</sup>	Allowable Credit	Description / Comments
1.	Maximum Toll	Yes	Max fare minus Correct fare up to \$100 per transaction. Credit allowable for up to 20 transactions per tag/plate for a settlement period.  <b>Repeat occurrences for the same plate/tag require Pre-Approval.</b>	Applies to agencies with a ticketed [closed, non-barrier] system with variable entry points and where the toll fare is based upon a point-to-point schedule. A “maximum toll” dispute occurs when the agency employs a “lost ticket” penalty, such as when a tag does not read on entry, and either the tag read on exit or the customer was correctly identified from a license plate read. In these cases, the customer may have been charged a toll from the furthest point on the facility. The Home agency must review account history to identify and resolve tag read problems in a timely manner. The Away agency reserves the right to deny repeat or cumulative disputes if it is determined that no action was taken by the customer or home agency to correct the problem
2.	U-Turns	No		Applies to agencies with a ticketed system with variable entry points. Maximum fare is charged when the entry and exit transaction location is the same.
3.	Paid Cash	Yes	Up to \$100 per transaction. Credit allowable for up to 20 transactions per tag/plate for a settlement period.  valid receipt only	Home Agency must provide receipt(s) to Away Agency upon request within 60 days.
4.	Resident, Commuter, Permit discount plans	No		The customer believes they should have received a toll rate based upon a resident, commuter, or permit plan offered by the Away Agency. This is usually a Home agency issue and they should review the account and determine that the plan was applied correctly. If the determination was that this was not a Home Agency error, then the plan offering Away Agency should be consulted for possible correction.

<sup>2</sup> Automatic Pass Back?: A Yes in this column represents the operational freedom to process a dispute without any contact to the Away Agency within the conditions and/or parameters described in “Allowable Credit” and/or “Description / Comments” in this table. An exception to the toll dispute policy exists for the Pennsylvania Turnpike Commission (PTC) as indicated in this policy and under General Rule #1. A No in this column invokes the requirement of contact with the Away Agency with all appropriate documentation as requested and invokes General Rule #3.

**Inter-Customer Service Center Interface File and Reporting Specifications**  
**Appendix H – Inter-CSC Dispute Policy**

Item #	Reason or Type of Txn	Automatic Pass Back? <sup>2</sup>	Allowable Credit	Description / Comments
5.	The customer is being charged differently than the vehicle driven.	No		<p>The customer is being charged differently than the vehicle they are driving. This can be the result of:</p> <ol style="list-style-type: none"> <li>1. Customers placing an incorrect tag on a vehicle</li> <li>2. CSCs issuing the wrongly classed tag</li> <li>3. AVC classification error</li> </ol> <p>When a customer disputes a toll caused by (1) an incorrect tag or (2) a wrongly classed tag, the Home Agency can consider adjusting the toll as part of their customer service policies. Reimbursement from the Away Agency can be pursued but this will require preapproval from the Away Agency.</p> <p>(3) Automated Vehicle Classification Systems, or AVC, will sometimes not accurately reclassify a transaction (i.e. rooftop storage or trailers obscuring the actual classification.) In some circumstance this can be caused by the Away Agency AVC logistics. However, it is the Home Agency responsibility to gain preapproval from the Away Agency prior to requesting reimbursement for this type of dispute.</p>
6.	Duplicate  (for 2 or more transactions from tags or accounts managed from the <u>same</u> customer service center)	Yes	Full transaction amount	<p>Because the toll evidence of this dispute can be seen by the Home agency, the results of the Home agency's review will be sufficient to determine if a Duplicate transaction has occurred.</p> <p>Occurring under the following circumstance for 2 or more transactions from tags or accounts managed from the same customer service center:</p> <ol style="list-style-type: none"> <li>1. Tag and Tag – The same tag reads twice within the time limit specified by the Inter-CSC File and Reporting specification, section 6.5.1 "Transaction File, Processing Requirements".</li> <li>2. Tag and Plate - Plate and tag read from the same account within the time limit specified by the Inter-CSC File and Reporting specification, section 6.5.1 "Transaction File, Processing Requirements".</li> <li>3. Multiple tag charges from the same vehicle. This is usually the result of multiple tags being transported by one vehicle and can be seen as: <ul style="list-style-type: none"> <li>- 2 or more tags being read from the same account</li> <li>- 2 or more tags being read from 2 or more accounts for the same customer.</li> <li>- 2 or more tags being read from 2 or more accounts from different customers. (i.e., a husband and wife with different accounts, or other examples of personal or business accounts reasonably related.)</li> </ul> </li> </ol>

**Inter-Customer Service Center Interface File and Reporting Specifications**  
**Appendix H – Inter-CSC Dispute Policy**

Item #	Reason or Type of Txn	Automatic Pass Back? <sup>2</sup>	Allowable Credit	Description / Comments
7.	Duplicate (for 2 or more transactions from tags or accounts managed by <u>different</u> customer service centers)	Yes. With statement evidence.	Full transaction amount	<p>Traveling with tags from multiple CSCs can sometimes result in a duplicate customer charge. Often this occurs when a tag is not safeguarded in its individual foil bag.</p> <p>It is difficult to know which CSC the customer will call to get a particular duplicate tag charge corrected. Accordingly, the inquiring customer will be directed to call the CSC of the agency they are seeking to receive the toll charge reversal. For example, a customer traveling with 2 tags from the New York and Maine CSCs incurs 2 charges on a Ohio roadway. If the customer calls the Ohio CSC, he will be directed to call either the NY or Maine CSCs to seek reversal of one of the tolls.</p> <p>The customer will be asked to provide copies of statements as evidence of the duplicate charge. In this example, if he calls the NY CSC, he will need to submit his Maine statement showing the same toll charge. The NY CSC can request a NY statement or refer to its own records. This proof submission of the 2 or more statements containing the same or similar charge should be sufficient enough to allow the NY CSC to receive reimbursement from Ohio for NY's reversal of the "NY on Ohio" toll. The "Maine on Ohio" toll is not reversed but will remain as the customer's payment for the Ohio toll.</p> <p>(Conceivably, customers could wrongfully request reimbursement from both CSCs. Control of this is best done by having internal CSC guidelines which limit repeated customer reimbursement requests involving the same customer behavior, i.e., 2 tags in 1 vehicle.)</p>
8.	Tag Return	Yes	Full transaction amount	<p>If a tag is charged while in the transport of a mail truck (US Postal or private mail carrier) the Away Agency will accept the pass-back.</p> <p>The Home Agency should reasonably determine that the tag was scheduled for mail delivery</p>
9.	Car Carrier / Tow Truck	Yes	With Proper Documentation up to \$100 per transaction	<p>When a tag is charged incorrectly while in the transport of a tow truck, flat-bed, or a car carrier, the Home Agency shall ensure due diligence by obtaining from the customer the bill of lading and/or other document(s) to verify the transport.</p> <p>Home Agency must provide documentation to Away Agency upon request within 60 days.</p>
10.	Lost / Stolen	No		<p>Tags reported lost or stolen may result in charges due to normal Tag Status update and download timing differences. This is not a reason for automatic pass-back.</p>
11.	Image Toll or Manual Toll	No		<p>A toll is processed to a customer from an image, but the customer was identified incorrectly.</p> <ol style="list-style-type: none"> <li>1. The wrong license plate was identified resulting in the wrong customer being charged.</li> <li>2. A state may issue a variety of different license plate types, i.e., Veteran, Medical, Honorary, etc., and license plate serial numbers may be repeated across these types. When the correct serial number is identified by an Away Agency but is assigned to the wrong customer's plate type, this error may repeat across plazas and result in multiple incorrect charges to a customer.</li> </ol> <p>A toll is processed to a customer's transponder account via some form of manual input or handheld reader, but is identified incorrectly</p> <ol style="list-style-type: none"> <li>3. The wrong transponder number was transcribed by the toll collector (e.g. gated manual tolls).</li> </ol>

Item #	Reason or Type of Txn	Automatic Pass Back? <sup>2</sup>	Allowable Credit	Description / Comments
12.	Preapproval	Yes	As per this Policy or as otherwise agreed between agencies.	The Home Agency can seek Away Agency preapproval for any dispute which is not permitted automatic pass-back.  The Away Agency is expected to apply reasonable judgments in their considerations of when to pre-approve a disputed toll for pass-back.  Disputes processed under General Rule #3 are included with this transaction type.

**Table 2: Settlement Timing for Disputed Tolls**

Dispute Settlement Period	Original Dates of Transactions Disputed	IAG-6 Report and Spreadsheet Due Date	Approximate Payment Date <sup>3</sup>
January	October 1 – Jan. 31	February 20	April 9
February	November 1 – Feb. 28	March 20	May 9
March	December 1 – Mar. 31	April 20	June 9
April	January 1 – April 30	May 20	July 9
May	February 1 – May 31	June 20	August 9
June	March 1 – June 30	July 20	September 9
July	April 1 – July 31	August 20	October 9
August	May 1 – August 31	September 20	November 9
September	June 1 – Sept. 30	October 20	December 9
October	July 1 – Oct. 31	November 20	January 9
November	August 1 – Nov. 30	December 20	February 9
December	September 1 – Dec. 31	January 20	March 9

For preapproved disputed toll Pass Backs, the Home agency has 60 days from the date of approval to submit the IAG-6 report. The settlement schedule of the preapproved Pass Back will be the same as other Pass Backs included on the report.

Individual agencies may have different policies and/or Account Terms and Conditions regarding how long after the toll transaction date that they will accept a customer's dispute. And since some agencies issue bimonthly statements, or do not provide detail transaction on-line, and given that reciprocity tolls may be delayed in posting up to 60 days, a customer might not realize an error has been made for some time. Independent of liberal Home agency policies, the IAG has established a common, conservative yet reasonable policy for timeframes.

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<sup>3</sup> Disputed toll amount may be adjusted to a current toll settlement.

## I. ICLP File LIC\_STATE Values

For the list of ICLP File LIC\_STATE Values, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## J. ICLP File LIC\_PLATE\_TYPE Values

For the list of ICLP File LIC\_PLATE\_TYPE Values, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## **K. Tag Agency Mapping**

For the table of tag agency mapping, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

## L. Toll Guarantee Scenarios

For the table of Toll Guarantee scenarios, please refer to the latest Spreadsheet entitled:

*IAG Inter-CSC Files - Appendix YYYY-MM-DD.xlsx*

Where YYYY-MM-DD represents the update date of the Appendix document.

Scenario	As of Transaction Date/Time				As of Away Agency ICTX Creation and Home Posting Date/Time						Toll Payment Guaranteed by Home	ETC_POST_STATUS Returned by Home Agency	Explanation
	Account Status	Transponder Status	Account Balance [1]	ITAG Status [2]	Account Status	Transponder Status	Account Balance [1]	ITAG Status [2]	ICLP Plate Effective [3]	LIC_GUARANTEED [4]			
T1	Active	Active	Good or Low	1 or 2	Active	Active	Good or Low	1 or 2	n/a	n/a	Yes	POST	When a tag is Valid at the time of the transaction, the toll is guaranteed.
T2	Active	Active	Good or Low	1 or 2	Active	Active	Zero	3	n/a	n/a	Yes	POST	When a tag is Valid at the time of the transaction, the toll is guaranteed.
T3	Active	Active	Good or Low	1 or 2	Active	Lost/Stolen/Returned	Good or Low	4 or Not in File	n/a	n/a	Yes	POST or NPST Depending on Home Agency business rules	When a tag is Valid at the time of the transaction, the toll is guaranteed. The transaction is posted to the Home account if the tag was Valid at the time of the transaction and not posted if the transaction was after tag was reported Lost/Stolen. For the Away agency Toll is guaranteed in either case.
T4	Active	Active	Good or Low	1 or 2	Active	Lost/Stolen/Returned	Zero	4 or Not in File	n/a	n/a	Yes	POST or NPST Depending on Home Agency business rules	When a tag is Valid at the time of the transaction, the toll is guaranteed. The transaction is posted to the Home account if the transponder was Valid at the time of the transaction and not posted if the transaction date/time was after the tag was reported Lost/Stolen (which may not have made it into an ITGU file).
T5a	Active	Active	Good or Low	1 or 2	Closed	Lost/Stolen/Returned	Zero	4 or Not in File	n/a	n/a	Yes	POST or NPST Depending on Home Agency business rules	If posting is within 10 days from Transaction Date/Time. Toll is guaranteed only up to 10 days from transaction date if account is closed by customer (even though Home Agency may not have an account to collect against).
T5b	Active	Active	Good or Low	1 or 2	Closed	Lost/Stolen/Returned	Zero	4 or Not in File	n/a	n/a	No	OLD1	If posting date is greater than 10 days from Transaction Date/Time.
T6a	Active	Active	Zero	3	Active	Active	Good or Low	1 or 2	n/a	n/a	No	POST	When a tag is Status 3 at the time of the transaction, the toll is not guaranteed but good practice recommends it be posted if the account now has a Good balance and the transaction is received within 60 days.
T6b	Active	Active	Zero	3	Active	Active	Good or Low	1 or 2	n/a	n/a	No	TAGB	When a tag is Status 3 at the time of the transaction but is now Valid, the Home Agency can, depending on its business rules, reject the transaction. However, it is recommended that it be posted (see Scenario T6a).
T7	Active	Active	Zero	3	Active	Active	Zero	3	n/a	n/a	No	INSU	When a tag is Status 3 at the time of the transaction and at the time of posting, the toll is not guaranteed and, likely, not posted. The Away Agency should not be sending such transactions to the Home Agency.
T8	Active	Lost/Stolen/Returned	Good/Low/Zero	4 or Not in File	Active	Active	Good/Low/Zero	1 or 2	n/a	n/a	No	TAGB	Tags with Status 4 or not on file at the time of the transaction should not be sent to the Home Agency by the Away Agency and, if sent, should not be honored by the Home Agency.
T9	Active	Lost/Stolen/Returned	Good/Low/Zero	4 or Not in File	Active	Lost/Stolen/Returned	Good/Low/Zero	4	n/a	n/a	No	TAGB	Tags with Status 4 or not on file at the time of the transaction should not be sent to the Home Agency by the Away Agency and, if sent, should not be honored by the Home Agency.
T10	Closed	Returned/Retained	Zero	4 or Not in File	Closed	Returned/Retained	Zero	4	n/a	n/a	No	ACCB	Tags with Status 4 or not on file at the time of the transaction should not be sent to the Home Agency by the Away Agency and, if sent, should not be honored by the Home Agency.
T11	Active	Inventory	Zero	4 or Not in File	Active	Active	Good/Low/Zero	1, 2 or 3	n/a	n/a	No	TAGB	Tags with Status 4 or not on file at the time of the transaction should not be sent to the Home Agency by the Away Agency and, if sent, should not be honored by the Home Agency.
P1a [5]	Active	Active	Good or Low	1 or 2	Active	Active	Good or Low	1 or 2	Yes	Y	Yes	PPST	When the plate is Effective at the time of posting with the Guarantee flag equal to Y, the toll is guaranteed.
P1b [5]	Active	Active	Good or Low	1 or 2	Active	Active	Good or Low	1 or 2	Yes	N	No	PPST	Even though the toll is not guaranteed, if the plate was Effective at the time of posting and the account had a Good balance, the transaction should be posted and the Away Agency paid.
P2a	Active	Active	Good or Low	1 or 2	Active	Active	Zero	3	Yes	Y	Yes	PPST	When the plate is Effective at the time of posting with the Guarantee flag equal to Y, the toll is guaranteed.
P2b	Active	Active	Good or Low	1 or 2	Active	Active	Zero	3	Yes	N	No	RJPL	If Guarantee flag is not equal to Y, plate transactions will not be honored for accounts without a Good balance.
P3 [6]	Active	Active	Good or Low	1 or 2	Active	Active	n/a	n/a	No	n/a	No	RJPL	If plate is not Effective at the time of posting, the transaction will be rejected.
P4 [6]	Active	Active	Good or Low	1 or 2	Closed	Returned/Retained	n/a	n/a	No	n/a	No	RJPL	If plate is not Effective at the time of posting, the transaction will be rejected.
P5a [6]	Active	Active	Good or Low	1 or 2	Closed	Returned/Retained	n/a	n/a	Yes	Y	Yes	PPST	If posting is within 10 days from Transaction Date/Time. Toll is guaranteed only up to 10 days from transaction date if account is closed by customer (even though Home Agency may not have an account to collect against).
P5b [6]	Active	Active	Good or Low	1 or 2	Closed	Returned/Retained	n/a	n/a	Yes	Y	No	OLD1	If posting date is greater than 10 days from Transaction Date/Time.
P5c [6]	Active	Active	Good or Low	1 or 2	Closed	Returned/Retained	n/a	n/a	Yes	N	No	RJPL	If Guarantee flag is not equal to Y, plate transactions will not be honored for accounts without a Good balance.
P6 [7]	Active	Active	Zero	3	Active	Active	Good or Low	1 or 2	Yes	n/a	No	PPST	When the plate is Effective at the time of posting and the account has a Good balance, the toll should be posted and the Away Agency paid. Guarantee flag is not applicable since the associated tag was not Valid at the time of the transaction.
P7 [7]	Active	n/a	n/a	Not in File	Active	Active	Good or Low	1 or 2	Yes	n/a	No	PPST	When the plate is Effective at the time of posting and the account has a Good balance, the toll should be posted and the Away Agency paid. Guarantee flag is not applicable since the associated tag was not Valid at the time of the transaction.

#### Notes

- [1] Account Balance of Low is treated the same as Good. Zero corresponds to whatever balance at the Home Agency triggers an ITAG Tag Status value of 3.
- [2] ITAG Status value of 2 is treated the same as 1 (Valid). Value of 4 is deprecated in ICD 1.60.01 and later. However, it can still appear in ITGU files. If Away Agency utilizes ITGU files, then a Tag Status of 4 should override any previous Tag Status values.
- [3] ICLP Plate Effective value of Yes means that the plate is in the ICLP file and its Effective Date range brackets the Transaction Date/Time. Only ICLP data from the most recent ICLP as of the Posting Date is referenced.
- [4] The license plate guarantee is determined by the LIC\_GUARANTEED status (in the most recent ICLP file as of the Posting Date) and Tag Status of the associated tag as of the Transaction Date/Time.
- [5] Scenario P3 from the EMC Resolution is replaced by P1a and P1b (themselves, modified versions of P1). Since the plate Effective and Registration Date is only relevant as of the time the Away Agency is transmitting the transaction to the Home Agency and the Home Agency is posting, the old Scenario P3 is no longer applicable.
- [6] P3 corresponds to P4 from EMC Resolution; P4 corresponds to P5 from EMC Resolution; P5a and P5b correspond to P6a and P5c corresponds to P6b from EMC Resolution.
- [7] P6 and P7 are new scenarios not shown in EMC Resolution but added for clarity.

## Appendix E

# State of New Jersey General Records Schedule

See

<https://www.nj.gov/treasury/revenue/rms/pdf/G100000-012.pdf>

*NJTA plans to develop NJTA-specific policies, which shall supersede the use of the State of New Jersey General Records Schedule upon completion*

# STATE OF NEW JERSEY



## STATE GENERAL RECORDS SCHEDULE

**G100000-012**



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Prepared by:  
DORES Records Management Services  
33 West State St. 5th Floor, PO Box 661 Trenton NJ 08646-0661  
<https://www.nj.gov/treasury/revenue/rms/>  
609-292-8711

Records Retention and Disposition Schedule		Agency: G100000	Schedule: 012	Page #:1 of 69
Department: STATE GENERAL RECORDS SCHEDULE	<b>Agency Representative:</b>		Robert Benco Jr	
	<b>Title:</b>		Assistant Director	
	<b>Phone #:</b>			

SCHEDULE APPROVAL: Unless in litigation, the records covered by this schedule, upon expiration of their retention periods, will be deemed to have no continuing value to the State of New Jersey and will be disposed of as indicated in accordance with the law and regulations of the State Records Committee. This schedule will become effective on the date approved by the State Records Committee.

Agency Representative Signature:	Date:	Secretary, State Records Committee Signature:	Date:

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
	<b>Financial Records</b>									

0001-0000	Invoice/Quick Invoice(In/QI) --- Usage: to establish an account (s) receivable file. Formerly known as Accounts Receivable Request.									
0001-0001	Invoice/Quick Invoice (Using Agency)				P	7 Years	3 Years	Destroy		
0001-0002	Invoice/Quick Invoice (Electronic Record-Treasury)				P	7 Years	3 Years	Destroy		
0002-0000	Advice Of Charge --- Usage: notifies the Department of the Treasury which accounts need to be charged. Form lists the following information: pay number, pay period, fiscal year, appropriation account number, cost center, gross salary, food maintenance, and net case salary.									
0002-0001	Advice Of Charge (Using Agency)				P	7 Years	3 Years	Destroy		
0002-0002	Advice Of Charge (Electronic Record-Treasury)				P	7 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0003-0000	Cash Receipt/Alternate Cash Receipt/Quick Receipt (CR/C1/QR) --- Usage: record a bank charge representing checks submitted to the State of New Jersey for payment and subsequently dishonored by a bank; to record refunds of disbursement; and to transmit receipts to be recorded in the general journal. Formerly known as Transmittal of Receipts, Refund of Disbursements, and Advice of Dishonored Check.									
0003-0001	Cash Receipt/Alternate Cash Receipt/Quick Receipt (Using Agency)			P	7 Years		3 Years	Destroy		
0003-0002	Cash Receipt/Alternate Cash Receipt/Quick Receipt (Electronic Record - Treasury)			P	7 Years		3 Years	Destroy		
0004-0000	Agency Contract Order/Grant Loan Order(AO/GO) --- Usage: obligate funds in an appropriation account approved agency contract when a agency has entered into a formal contract without the approval of the Purchase Bureau; to issue purchase orders directly to vendors; and change any open obligation. Formerly known as Invoice, Agency Contract Obligation, and Change/Cancel Agency Obligation - Purchase Bureau.									
0004-0001	Agency Contract Order (Using Agency)			P	7 Years		3 Years	Destroy		
0004-0002	Agency Contract Order (Electronic Record-Treasury)			P	7 Years		3 Years	Destroy		
0005-0000	Allotment (AL) --- Usage: allocate funds between the reserve and the current allotment of a given account. Formerly known as Allotment Adjustment.									
0005-0001	Allotment (Using Agency)			P	7 Years		3 Years	Destroy		
0005-0002	Allotment (Electronic Record-Treasury)			P	7 Years		3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0006-0000	Appropriation/Expense Budget (AP/EB) --- Usage: to establish new appropriation accounts and expense budgets and to adjust these accounts. Formerly known as Appropriation Account Number Request and Appropriation Adjustments.									
0006-0001	Appropriation/Expense Budget (Usage Agency)			P	7 Years		3 Years	Destroy		
0006-0002	Appropriation/Expense Budget (Electronic Record - Treasury)			P	7 Years		3 Years	Destroy		
0007-0000	Accounting Bureau Payment Voucher/Using Agency Payment/Payment Voucher (AV/UA/PV/U1/A1) --- Usage: reimbursements of service charges from the using agency; to submit a request for vendor payment for goods or services supplied through direct agency purchases, formal purchases, or contract obligations; to reimbursement for agency's petty cash fund; and request for payment of revenue refunds. Formerly known as Revenue Refund Voucher, Petty Cash Fund Reimbursement, Certificate of Debit and Credit, and Invoice.									
0007-0001	Accounting Bureau Payment Voucher/Using Agency Payment/Expenditure Modificatin (Using Agency)			P	7 Years		3 Years	Destroy		
0007-0002	Accounting Bureau Payment Voucher/Using Agency Payment/Expenditure Modificatin (Electronic Record - Treasury)			P	7 Years		3 Years	Destroy		
0008-0000	DBC Purchase Order (DO) --- Usage: to issue or adjust DBC orders or contracts for architectural and engineering designs. Utilized for building construction alterations and maintenance, buildings and equipment repair, and reservation of funds for a contingency fund. Issued in accordance with the requisition form initiated by a state agency. Formerly known as DBC Order and Change/Cancel Obligation.									

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0008-0001	DBC Purchase Order (Using Agency)				P		7 Years after completion of project	3 Years after completion of project	Destroy	
0008-0002	DBC Purchase Order (Electronic Record - Treasury)				P		7 Years after completion of project	3 Years after completion of project	Destroy	
0009-0000	Revenue Modification/Cash Receipt (RM/CR) --- Usage: to defer recognition of revenue and undefer revenue when earned. Is used in conjunction with a balance sheet account code. Formerly known as Deferred Revenue Adjustment.									
0009-0001	Revenue Modification/Cash Receipt (Using Agency)				P		7 Years	3 Years	Destroy	
0009-0002	Revenue Modification/Cash Receipt (Electronic Record - Treasury)				P		7 Years	3 Years	Destroy	
0010-0000	Fiscal Notes Worksheet --- Usage: determine the cost of implementing a legislative bill if put into law. Original retained by the Department of the Treasury, Office of Management and Budget.									
0010-0001	Fiscal Notes Worksheet (Using Agency)				P		7 Years	3 Years	Destroy	
0010-0002	Fiscal Notes Worksheet (Electronic Record-Treasury)				P		7 Years	3 Years	Destroy	
0011-0000	Printing Requisition --- Request for services of the State Government printing facilities.									
0011-0001	Printing Requisition (Using Agency)				P		7 Years	3 Years	Destroy	
0011-0002	Printing Requisition (Electronic Record-Treasury)				P		7 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0012-0000	DBC Requisition (RD) --- Usage: to reserve appropriation account funds for architectural, engineering design, building construction, alteration, maintenance, and repair of buildings or equipment; to cancel, decrease, or increase outstanding balances and to make adjustments to an outstanding requisition for Division of Building and Construction. Formerly known as Requisition/Requisition Change - Division of Building and Construction (DBC).									
0012-0001	DBC Requisition (Using Agency)						7 Years after completion of project	3 Years after completion of project	Destroy	
<b>Financial Records</b>										
0012-0002	DBC Requisition (Electronic Record-Treasury)					P	7 Years completion of project	3 Years completion of project	Destroy	
0013-0000	Accounting Bureau Requisition/Purchase Bureau Requisition (RA/RP) --- Usage: to cancel, increase, decrease, or create an outstanding or open requisition balance. Formerly known as Requisition Charge - Purchase Bureau.									
<b>Financial Records</b>										
0013-0001	Accounting Bureau Requisition/Purchase Bureau Requisition (Using Agency)				P	7 Years	3 Years	Destroy		
0013-0002	Accounting Bureau Requisition/Purchase Bureau Requisition (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0014-0000	Revenue Budget (RB) --- Usage: to establish new or change a revenue budget. Formerly known as Revenue Account Number - Agency Request and Revenue Anticipation Adjustments.									
0014-0001	Revenue Budget (Using Agency)				P	7 Years	3 Years	Destroy		
0014-0002	Revenue Budget (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0015-0000	Journal Voucher (JV) --- Usage: to record accruals, adjustments, reclassifications, and reversing entries to accounting records. Formerly known as Journal entries which were manually recorded in a general ledger.									
0015-0001	Journal Voucher (Using Agency)				P	7 Years	3 Years	Destroy		
0015-0002	Journal Voucher (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0016-0000	Transfer Appropriation/Transfer Budget (TA/TB) --- Usage: to transfer funds between current fiscal year appropriation accounts. Formerly known as Transfer of Appropriation.									
0016-0001	Transfer Appropriation/Transfer Budget (Using Agency)				P	7 Years	3 Years	Destroy		
0016-0002	Transfer Appropriation/Transfer Budget (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0017-0000	Request For Travel Authorization (TE/TH) --- Employees request for permission to travel on state business, staff training, conferences, and conventions.									
0017-0001	Request For Travel Authorization (Using Agency)				P	7 Years	3 Years	Destroy		
0017-0002	Request For Travel Authorization (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0018-0000	Travel Voucher/Accounting Bureau Payment Voucher/Using Agency Payment (TV/A1/U1) --- Usage: to reimburse state employees for travel expenses while on official state business. Formerly known as Travel Expense Invoice.									
0018-0001	Travel Voucher/Accounting Bureau Payment Voucher/Using Agency Payment (Using Agency)				P	7 Years	3 Years	Destroy		
0018-0002	Travel Voucher/Accounting Bureau Payment Voucher/Using Agency Payment (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0019-0000	Travel Authorization (TE) --- Usage: to authorize travel for state employees while on official state business.									
0019-0001	Travel Authorization (Using Agency)				P	7 Years	3 Years	Destroy		
0019-0002	Travel Authorization (Electronic Record-Treasury)				P	7 Years	3 Years	Destroy		
0020-0000	Travel Authorization For Training (TH) --- Usage: to authorize travel for state employees for training for official state business.									
0020-0001	Travel Authorization For Training (Using Agency)				P	7 Years	3 Years	Destroy		
0020-0002	Travel Authorization For Training (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0021-0000	Travel Refund/Cash Receipt - Travel (TC) --- Usage: to record refund of a vendor payment or for state employee cash advance or excessive payment.									
0021-0001	Travel Refund/Cash Receipt - Travel (Using Agency)				P	7 Years	3 Years	Destroy		
0021-0002	Travel Refund/Cash Receipt - Travel (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0022-0000	Expenditure Modification (EM) --- Usage: to modify recorded expenditures. Formerly known as Disbursement/Journal Entry.									
0022-0001	Expenditure Modification (Using Agency)				P	7 Years	3 Years	Destroy		
0022-0002	Expenditure Modification (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0023-0000	Vendor File - NJMACS-E									
0023-0001	Vendor File - Individual Vendor --- File pertains to vendors utilized by state agencies and used in conjunction with the NJMACS-E system. Contains: vendor name, ID number, and status.				P	7 Years	3 Years	Destroy		
0023-0002	Vendor File - Approved/Denied Vendor List (Copy) --- Listings of vendors whose services may or may not be contracted by state agencies.				P	As updated	As updated	Destroy		
0024-0000	Manual Warrant (MW) --- Usage: to request and record a manual check.									
0024-0001	Manual Warrant (Using Agency)				P	7 Years	3 Years	Destroy		
0024-0002	Manual Warrant (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0025-0000	Federal Aid Master Transaction (FM) --- Usage: to establish and record a new federal grant program.									
0025-0001	Federal Aid Master Transaction (Using Agency)				P	7 Years	3 Years	Destroy		
0025-0002	Federal Aid Master Transaction (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0026-0000	Project (PJ) --- Usage: to establish a project in the Project Module.									
0026-0001	Project (Using Agency)				P	7 Years	3 Years	Destroy		
0026-0002	Project (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0027-0000	DBC Project (PK) --- Usage: to establish a Division of Building and Construction (DBC) project in the Project Module.									
0027-0001	DBC Project (Using Agency)				P	7 Years	3 Years	Destroy		
0027-0002	DBC Project (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
0028-0000	Job Cost (JC) --- Usage: to change costs to the Job Module.									
0028-0001	Job Cost (Using Agency)				P	7 Years	3 Years	Destroy		
0028-0002	Job Cost (Electronic Record - Treasury)				P	7 Years	3 Years	Destroy		
	<b>Bank Records</b>									
0100-0000	Bank Statement --- Statement reflecting the status of an agency's account.				P	7 Years	3 Years	Destroy		
0101-0000	Check File									
0101-0001	Check File-Cancelled Checks, Voided Checks, Bounced Checks, Image Checks, And Lost Check Reference (Electronic And Hardcopy) --- Note: If an agency's checks are imaged by a financial institution, the agency is not required to retain a hardcopy version of the check.				P	7 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
0101-0002	Check File - Check Register --- Contains: reconciliation sheet, outstanding checklists, and copies of issued/received checks.				P	7 Years	3 Years	Destroy	
0101-0003	Check File - Check Stub				P	7 Years	3 Years	Destroy	
0101-0004	Check File - Self-Scanned Deposited Checks --- Hardcopy file of revenue checks that were self- scanned and electronically deposited by an agency into the bank.				P	After deposit input and verification	After deposit input and verification	Destroy	
0102-0000	Deposit Slip (Bank)				P	7 Years	3 Years	Destroy	
0103-0000	Bank Books				P	7 Years	3 Years	Destroy	
0104-0000	Cashier Stubs				P	7 Years	3 Years	Destroy	
	<b>Books Of Account</b>								
0200-0000	Journal - Daily Cash --- Book of orginal entry, recording cash revenue and expense in a chronological order.				P	7 Years	3 Years	Destroy	
0201-0000	Ledger - General Ledger (Genled) And Closed Ledger (Clsdled) --- Central control of open and closed accounts.		X		P	Permanent	Permanent	Permanent	
0202-0000	Ledger - Subsidiary (Treasury And/Or Using Agency) --- Daily transactions that are verified against the controlling accounts in the General Ledger.				P	7 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
<b>Budget Records</b>									
0300-0000	Budget Appropriation Handbook (Copy) --- Indicates the amount of funds allocated for a department's daily operations during a fiscal year. Original retained by the Department of the Treasury.								
0300-0001	Budget Appropriation Handbook-Departmental (Copy)				P	7 Years	3 Years	Destroy	
0300-0002	Budget Appropriation Handbook - Divisional/Sub-Divisional (Copy)				P	1 Years	1 Years	Destroy	
0301-0000	Budget Planning Documents - Departmental, Divisional, And Sub-Divisional (Copy) --- Annually prepared planning documents which include; Program Justification (BB 101), Fiscal and Position Request (BB102), Revenue Statement (BB 103), Revolving Funds (BB 103A), Evaluation Data, Data, Position Data, and Affirmative Action Data (BB 104 [Diskette]), Priority Request (PD 206), Appropriations Data - Minor Object Detail (IPB Report - 1739A), objectives and program descriptions, organization charts, and supporting documentation. Original retained by the Department of the Treasury, Office of Management and Budget.				P	3 Years	3 Years	Destroy	
0302-0000	Budget Request - Departmental (Copy) --- Annual request made to the Department of the Treasury for the allocation of funds for operations during the upcoming fiscal year. Original retained by the Department of the Treasury.								
0302-0001	Budget Request - Departmental (Copy)				P	3 Years	3 Years	Destroy	
0302-0002	Budget Request - Departmental Work Papers				P	3 Years	3 Years	Destroy	
0303-0000	Budget Request - Divisional And Sub-Divisional (Copy) --- Annual request made to the departments fiscal office for the allocation of funds for operations during the upcoming fiscal year. Original retained by the Department of the Treasury.								

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0303-0001	Budget Request - Divisional And Sub-Divisional (Copy)				P	3 Years	3 Years	Destroy		
0303-0002	Budget Request - Divisional And Sub-Divisional (Additional Copy)				P	1 Years	1 Years	Destroy		
0303-0003	Budget Request - Divisional And Sub-Divisional Work Papers				P	3 Years	3 Years	Destroy		
	<b>Additional Financial Records</b>									
0400-0000	Audit Reports - State Agency (Copy) --- Original retained by the Office of Legislative Services, Bureau of State Auditing.				P	3 Years	3 Years	Destroy		
0401-0000	Building Maintenance Work Order				P	3 yrs after work completed	3 yrs after work completed	Destroy		
0402-0000	Cash Receipts				P	7 Years	3 Years	Destroy		
0403-0000	Contracts And Amendments File --- Includes: copies of plans and specifications, bid proposals, progress/performance reports for payment, correspondence, and supporting documentation. Original retained by the Department of the Treasury.									
0403-0001	Contracts And Amendments - Awarded (Original) --- Signed originals and support material.				P	7 Years after completion of contract	3 Years after completion of contract	Destroy		
0403-0002	Contracts And Amendments - Awarded (Copy)				P	3 yrs after completion of contract	3 yrs after completion of contract	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0403-0003	Contracts And Amendments - Cancelled (Original)				P		3 yrs after submission	3 yrs after submission	Destroy	
0403-0004	Contracts And Amendments - Voided (Original)				P		3 yrs after voidance	3 yrs after voidance	Destroy	
0403-0005	Contracts And Amendments - Public Buildings				P		7 Years after disposal of building	3 Years after disposal of building	Destroy	
0403-0006	Contracts And Amendments - Public Buildings, Capital Improvements For Real Property				P		7 Years after disposal of building	3 Years after disposal of building	Destroy	
0403-0007	Contracts And Amendments - Equipment				P		7 Years after disposal of equipment	3 Years after disposal of equipment	Destroy	
0404-0000	Deferred Compensation File -Termination, Disability, Retirement, And Death		X	P	Permanent		Permanent	Permanent	Permanent	
0405-0000	Department Of The Treasury Report Run-Offs (Copy) --- Agency weekly and monthly financial transaction summary reports from the Department of the Treasury. Original retained by the Department of the Treasury.			P	1 Years		1 Years	Destroy		
0406-0000	Grant/Entitlement/Recognition File --- Grants, entitlements, and recognitions between state agencies and federal, state, local, and private institutions for the award of monies to finance operations for state, county, municipal, or private agencies.									

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0406-0001	Grant/Entitlement/Recognition File - Approved (Original) --- File pertains to original documentation for a state agency receiving federal grant monies or for a State agency issuing grant monies or a State agency approving a statutory entitlement granted to eligible applicants.				P		7 Years after termination of grant	3 Years after termination of grant	Destroy	
0406-0002	Grant /Entitlement/Recognition File - Approved (Copy) --- File pertains to state agency receiving state grant monies.				P		3 yrs after termination of grant or receipt of award	3 yrs after termination of grant or receipt of award	Destroy	
0406-0003	Grant/Entitlement/Recognition File - Approved (Additional Copy)				P		1 yr after termination of grant or receipt of award	1 yr after termination of grant or receipt of award	Destroy	
0406-0004	Grant/Entitlement/Recognition File - Denied (Original And Copy)				P	3 Years	3 Years	Destroy		
0406-0005	Grant/Entitlement/Recognition File - Denied (Additional Copy)				P	1 Years	1 Years	Destroy		
0407-0000	Individual Insurance Policy File									
0407-0001	Individual Insurance Policy File - Policy --- File reflecting the numerous types of insurance policies an agency maintains.				P	7 Years after termination of policy	3 Years after termination of policy	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0407-0002	Individual Insurance Policy File - Health Insurance Portability And Accountability Act Of 1996 (HIPAA) --- File pertaining to the privacy policies to safeguard employee medical information. File may contain but is not limited to: Notice of Privacy Policies Overview Letter, Notice of Privacy Policies Brochure, Participant Authorization Form, Privacy and Security Policy Guidelines, Access Request, Amendment Request, Accountability Report, Confidential Communication Request, Complaint, Actions, Activities, Designations, and supporting documentation.				P		7 Years after termination from program	3 Years after termination from program	Destroy	
0408-0000	Payroll File --- Originals may be retained by the Department of the Treasury, and additional hardcopy and microfiche by the agency.									
0408-0001	Payroll Register (Department Of The Treasury, And Autonomous Commissions And Authorites)		X	P	Permanent		Permanent	Permanent		
0408-0002	Payroll Reports - Department Of The Treasury - Generated (Original)			P	7 Years	3 Years	Destroy			
0408-0003	Payroll Reports - Department Of The Treasury - Generated (Agency Copy)			P	30 Days		Destroy			
0408-0004	Payroll Reports - Department Of The Treasury - Generated (Microfiche)			P	3 Years	3 Years	Destroy			
0408-0005	Payroll Reports - Agency - Generated (Original)			P	7 Years	3 Years	Destroy			
0408-0006	Payroll Reports - Agency - Generated (Copy)			P	3 Years	3 Years	Destroy			
0409-0000	Payroll Signature Sheet File --- Sheets identifying employees that have received payroll checks.			P	3 Years	3 Years	Destroy			
0410-0000	Request For Waiver Of Advertising (Copy) --- Used to forgo bid advertising in the event that there is only one supplier, and/or an immediate delivery of an item is necessary. Original retained by the Department of the Treasury.									

Records Retention and Disposition Schedule			Agency: G100000				Schedule: 012			Page #:16 of 69	
Record Series #	Record Title and Description		Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
								Total Retention Period	Minimum Period in Agency		
0410-0001	Request For Waiver Of Advertising (Departmental Copy)					P		7 Years after termination of contract	3 Years after termination of contract	Destroy	
0410-0002	Request For Waiver Of Advertising (Additional Copy)					P	3 Years	3 Years	3 Years	Destroy	
0411-0000	Open And Closed Billing File --- File contains initial billing statements and notice, follow-up notice(s), and closed billing statements.					P	7 Years	3 Years	3 Years	Destroy	
0412-0000	Space Planning Request File(GSA-7 SPR) (Copy) --- Contains: Space Planning Request, lease (copy), lease floor plans, and correspondence. Original maintained by the Department of the Treasury, Division of Purchase and Property. Formerly known as a Space Allocation Request (SAR)I,II,III) .										
0412-0001	Space Planning Request File (GSA-7 SPR) (Department Copy)					P	3 yrs after expiration of lease	3 yrs after expiration of lease	3 yrs after expiration of lease	Destroy	
0412-0002	Space Planning Request File (GSA-7 SPR) (Additional Copy)					P	3 Years	3 Years	3 Years	Destroy	
0413-0000	Transmittal of Salary Refunds File --- Contains transmittals and checks to the Department of the Treasury for employees who were not entitled to receive payment.							3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
<b>Additional Financial Records</b>									
0414-0000	Employee Certification Of Taxability Of The Personal Use Of A State Provided Vehicle (Department Copy) --- Original retained by the Department of the Treasury, Bureau of Central Services and Property Management.				P	3 Years	3 Years	Destroy	
0415-0000	Off-System Funds/Non-Appropriated Accounts File --- State agency funds not appropriated by the State Treasurer. File contains: transaction records, receipts/expenditures, banking records, Division of Investment-Fund Investment Reports (Copy), and supporting documentation.				P	7 Years	3 Years	Destroy	
0416-0000	Telephone Records File								
0416-0001	Telephone Records File - Agency Report Of Protested Third Party Calls (Department/Divisional/Sub-Divisional Copy) --- Original retained by Bell Atlantic - New Jersey.				P	3 Years	3 Years	Destroy	
0416-0002	Telephone Records File - Agency Request For Telephone Service (Department Copy) --- Original retained by the Department of the Treasury.				P	3 yrs after completion	3 yrs after completion	Destroy	
0416-0003	Telephone Records File - Monthly Toll Listing Printout (Department Copy) --- Printout generated by the Department of the Treasury, Office of Information Technology (OIT).				P	3 Years	3 Years	Destroy	
0417-0000	Vehicle Records File								

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0417-0001	Vehicle Records File - Gasoline/Oil Credit Card Transactions File (Departmental Copy) --- Contains charge slip and vendor-submitted monthly transactions summary. Original retained by the Department of the Treasury and a copy by the Central Motor Pool.				P	3 Years	3 Years	3 Years	Destroy	
0417-0002	Vehicle Records File - Vehicle Accident Report				P	3 Years	3 Years	3 Years	Destroy	
0417-0003	Vehicle Records File - Vehicle Assignment Log				P	7 Years after final entry	3 Years after final entry	3 Years after final entry	Destroy	
0417-0004	Vehicle Records File - Vehicle Maintenance/Repair Order				P	3 Years	3 Years	3 Years	Destroy	
0417-0005	Vehicle Records File - Vehicle Usage Report --- Report dealing with the activities of state-owned motor vehicles.				P	3 yrs after disposal of vehicle by department	3 yrs after disposal of vehicle by department	3 yrs after disposal of vehicle by department	Destroy	
0418-0000	Procurement/Credit Card Statement (Hardcopy And Electronic) --- Statement of charges incurred by a state agency for operational transactions.				P	7 Years	3 Years	3 Years	Destroy	
0419-0000	Internal Control Vulnerability Assessment - New Jersey Department Of The Treasury (Copy) --- Self-assessment questionnaire pertaining to status of an agency's system of internal accounting and administrative controls in areas such as security, personnel, finance, and administration. Original is kept by the Department of the Treasury, Office of Management and Budget.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0420-0000	Certificate Of Fire Code Status --- An annual certificate issued by the Fire Marshal, stating that an agency is or is not in compliance with the Fire Code. Categories include: no violation, violation, fees paid, and fees outstanding. ( <u>N.J.A.C.</u> 5:71-3.7(b)9; <u>N.J.S.A.</u> 52:27D-192)									
0420-0001	Certificate Of Fire Code Status - In Compliance				P	7 yrs after final payment	7 yrs after final payment	7 yrs after final payment	Destroy	
0420-0002	Certificate Of Fire Code Status - Not In Compliance				P	7 yrs after final payment and compliance with recommendations	7 yrs after final payment and compliance with recommendations	7 yrs after final payment and compliance with recommendations	Destroy	
	<b>Personnel Records</b>									
0700-0000	Affirmative Action/Equal Employment Opportunity Complaint Case File --- Contains: Discrimination Appeal Processing, Grievance Procedure, correspondence, and relevant case material.				P	7 yrs after conclusion of matter	7 yrs after conclusion of matter	7 yrs after conclusion of matter	Destroy	
0701-0000	Affirmative Action Plan (Copy) --- Agencys annual goals regarding federal and state Affirmative Action requirements and guidelines mandating equal employment regardless of race, gender, religion, age, national origin, sexual orientation, or physically/mentally challenged. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
0702-0000	Survey Of New Jersey State Government Handicapped Employees (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
0703-0000	Current Agency Work Force Analysis File (Copy) --- File contains: Current Agency Work Force Analysis and Current Agency Work Force Analysis by Salary. Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
<b>Classification Records</b>									
0800-0000	Certification Of Eligibility - State Service (Copy) --- List of individuals who have passed a competitive examination and are eligible for appointment to a position in state government. Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
0801-0000	Acknowledgment Of Certification Questionnaire (Copy) --- Certification acknowledgement questionnaire. Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
0802-0000	Eligible/Ineligible Roster --- List of Individuals eligible or ineligible for a position.				P	3 Years	3 Years	Destroy	
0803-0000	Job Specification File								
0803-0001	Job Specification/Request For Copy Of Job Specification (Copy) --- Includes qualifications and duties for positions in state government. Original retained by the Department of Personnel.				P	Periodic review	Periodic review	Destroy	
0803-0002	Request For Copy Of Job Specification (Copy) --- Original retained by the Department of Personnel.				P	Periodic review	Periodic review	Destroy	
0803-0003	Specification Transmittal (Classified And Unclassified) (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0803-0004	Specification Change Sheet (Classified And Unclassified) (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
0803-0005	Specification Transmittal Separation Sheet (Classified And Unclassified) (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
0803-0006	Request For Title Or Specification Modification (Classified And Unclassified) (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
0804-0000	Notification Of Certification (Copy) --- Notification that an individual has passed a competitive examination and is eligible for appointment to a state government position. Original retained by the Department Personnel Office.				P	3 Years	3 Years	3 Years	Destroy	
0805-0000	Personnel Requisition				P	3 Years	3 Years	3 Years	Destroy	
0806-0000	Position Classification Questionnaire (Copy) --- Descriptive report used to obtain basic data about a position in state government. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
0806-0001	Position Classification Questionnaire (Department Personnel Office)				P	3 yrs after final action	3 yrs after final action	3 yrs after final action	Destroy	
0806-0002	Position Classification Questionnaire(Office Of Origin)				P	1 yr after final action	1 yr after final action	1 yr after final action	Destroy	
0807-0000	Certification Delay (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0808-0000	Request For New Title (Copy) --- Agency request to establish a new position class title when the duties of a new/existing position cannot be classified properly. Original retained by the Department of Personnel.									
0808-0001	Request For New Title - Approved (Copy)				P	Duration of title	Duration of title	Destroy		
0808-0002	Request For New Title - Denied (Copy)				P	3 yrs after final action	3 yrs after final action	Destroy		
0809-0000	Request For Reclassification/Reclassification Recommendation (Copy) --- Enables state employees to change the classification of their position. Original retained by the Department of Personnel.									
0809-0001	Request For Reclassification (Copy)				P	3 yrs after final action	3 yrs after final action	Destroy		
0809-0002	Request For Reclassification/Agency Acknowledgment (Copy)				P	Until final decision	Until final decision	Destroy		
0810-0000	Request For Re-Evaluation Of Title (Copy) --- Agency request to re-evaluate a class title based on a change in responsibilities or agency re-organizational. Original retained by the Department of Personnel.									
0810-0001	Request For Re-Evaluation Of Title - Approved (Copy)				P	Duration of title	Duration of title	Destroy		
0810-0002	Request For Re-Evaluation Of Title - Denied (Copy)				P	3 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0811-0000	Request To Appoint Confidential And/Or Unclassified Employee (Copy)									
0811-0001	Request To Appoint Confidential And/Or Unclassified Employee (Copy) - Approved				P		Duration of title	Duration of title	Destroy	
0811-0002	Request To Appoint Confidential And/Or Unclassified Employee (Copy) - Denied				P	3 Years	3 Years	3 Years	Destroy	
0812-0000	Certification Record Card (Copy) --- Record card of an individual who has passed a competitive examination and is eligible for appointment to a position in state government. Original retained by the Department of Personnel.				P	4 Years	4 Years	4 Years	Destroy	
0813-0000	Certification Information Card (Copy) --- Informational card explaining the certification process. Original retained by the Department of Personnel.				P	Periodic review	Periodic review	Periodic review	Destroy	
	<b>Individual Employee File</b>									
0900-0000	Employee Address List				P	As updated	As updated	As updated	Destroy	
0901-0000	Federal And State Withholding Tax File (Copy) --- Employee state and federal withholding tax documentation. Original documents maintained by the Internal Revenue Service.				P	7 Years	3 Years	3 Years	Destroy	
0902-0000	Grievance File --- Records of employees dissatisfaction with working conditions which are beyond his/her control, but which may be subject to remedy by a supervisor. Steps I, II or III settlements, which set departmental, divisional, or sub-divisional precedent or policy are deemed necessary for future reference. File contains: Grievance Procedure, Grievance Appeal, and supporting documentation.									

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0902-0001	Grievance File - Policy-Establishing Settlement (Original)		X	P	Permanent		Permanent	Permanent	Archival review	
0902-0002	Grievance File - Policy-Establishing Settlement (Copy) --- Retained by grievant agency of employment.			P	3 yrs after final settlement		3 yrs after final settlement	3 yrs after final settlement	Destroy	
0902-0003	Grievance File - Policy-Establishing Settlement (Additional Copy)				P	1 yr after final settlement	1 yr after final settlement	1 yr after final settlement	Destroy	
0902-0004	Grievance File - Routine Settlement (Original)				P	3 yrs after final settlement	3 yrs after final settlement	3 yrs after final settlement	Destroy	
0902-0005	Grievance File - Routine Settlement (Copy)				P	1 yr after final settlement	1 yr after final settlement	1 yr after final settlement	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0903-0000	Individual Employee File --- File includes info pertaining to permanent & provisional full-time, part-time, & summer employees. File may contain but is not limited to the following: New Hire Request, Separation Request, Position Classification Questionnaire, Request for Employment Disability leave/Return, Preliminary and Final Notices & Appeal of Disciplinary Action, Application for Re-employment, Application for Promotional Examination, Promotional Announcements, Report on Progress of Probationer, Data Processing Request for Correction of Social Number, Notice of Name Change, Salary Adjustment Request, Correspondence, Notice of lay-off, Final Notice of Lay-off, Unsatisfactory Probation Reports, Pension Program Application (Copy), Employees Report of Accidental Injury or Occupational Disease, Performance Evaluation System (PES), Performance Certification, Salary Increase, Title info, Promotional Certification, Request for Personnel/Position Action Return Slip, Government Employee Interchange, Application for Lump Sum Compensation for Earned & Unused Sick Leave for Retirees, Request for Personnel File/Record Card Info, Permission to Release Confidential Info, and General State-Wide Application for Employment.									
0903-0001	Individual Employee File - Departmental Personnel (Original)				P	6 yrs after termination of employment	6 yrs after termination of employment		Destroy	
0903-0002	Individual Employee File - Departmental Personnel (Copy)				P	3 yrs after termination of employment	3 yrs after termination of employment		Destroy	
0903-0003	Individual Employee File - Sub-Divisional Personnel (Additional Copy)				P	1 yr after termination of employment	1 yr after termination of employment		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0904-0000	Job Applicant Files - Persons Not Hired --- Includes resumes, applications, etc. of persons not hired for employment by state agencies.				P	3 Years	3 Years	Destroy		
0905-0000	Leave Request - Disability, Administrative, Furlough, Sick, Vacation, Maternity, And Family Leave									
0905-0001	Leave Request - Departmental Personnel (Original)				P	7 Years	3 Years	Destroy		
0905-0002	Leave Request - Divisional Personnel (Copy)				P	3 Years	3 Years	Destroy		
0905-0003	Leave Request - Sub-Divisional Personnel (Additional Copy)				P	1 Years	1 Years	Destroy		
0906-0000	State Employee Service Record				P	60 yrs after termination of employment or age 85, whichever is sooner	60 yrs after termination of employment or age 85, whichever is sooner	Destroy		
0907-0000	Personnel Master Monthly List --- Departmental and divisional personnel list categorized by: social security number, pay range, education, etc.				P	1 Years	1 Years	Destroy		
0908-0000	Position History File --- File used for fiscal verification.				P	7 Years	3 Years	Destroy		
0909-0000	Preliminary Notice/Final Notice/Appeal Of Disciplinary Actions (Copy) --- Preliminary, final, and appeal notices of disciplinary actions taken pertaining to a classified, permanent employee. Original and copy retained by the Department of Personnel.									

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0909-0001	Disciplinary Actions - Departmental Personnel (Copy)				P		6 yrs after termination of employment	6 yrs after termination of employment	Destroy	
0909-0002	Disciplinary Actions - Management Personnel (Copy)				P		3 yrs after final action	3 yrs after final action	Destroy	
0909-0003	Disciplinary Actions (Additional Copy)				P	1 Years	1 Years	1 Years	Destroy	
0910-0000	Referrals - External And Internal --- Records of potential job applicants received from sources inside/outside of a state agency.									
0910-0001	Referrals - External				P	3 Years	3 Years	3 Years	Destroy	
0910-0002	Referrals - Internal				P	1 Years	1 Years	1 Years	Destroy	
0911-0000	Request For Employment Disability Leave/Return (Copy) --- Employees request for leave of absence with pay due to disability either through injury or illness incurred from employment. Original retained by the Department of Personnel.									
0911-0001	Request For Disability Leave/Return - Departmental Personnel (Copy)				P	6 yrs after termination of employment	6 yrs after termination of employment	6 yrs after termination of employment	Destroy	
0911-0002	Request For Disability Leave/Return - Departmental Payroll (Copy)				P	3 Years	3 Years	3 Years	Destroy	
0911-0003	Request For Disability Leave/Return (Additional Copy)				P	1 Years	1 Years	1 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0912-0000	Service Award Selection/Nomination/Eligibility Certification File (Copy) --- File for employees who have been employed for specified years in state government service. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
0913-0000	Suggestion Awards File (Copy) --- Includes: Suggestion Evaluation Report, Suggestion Award Card, Interim Note, Employee Suggestion Form, and correspondence. Original retained by the Department of Personnel.									
0913-0001	Suggestion Awards File - Departmental Personnel (Copy)				P	3 Years	3 Years	3 Years	Destroy	
0913-0002	Suggestion Awards File - Departmental Suggestion Awards Committee (Additional Copy)				P	1 Years	1 Years	1 Years	Destroy	
0914-0000	Time Records --- Attendance reports for state employees.									
0914-0001	Time Records - Departmental (Original)				P	7 Years	3 Years	3 Years	Destroy	
0914-0002	Time Records - Divisional (Copy)				P	3 Years	3 Years	3 Years	Destroy	
0914-0003	Time Records - Sub-Divisional (Copy)				P	3 Years	3 Years	3 Years	Destroy	
0915-0000	Employee Medical Records --- Microfilming recommended. Retention period prescribed by federal law. (CFR 1910.1018)				P	40 yrs after termination of employment	40 yrs after termination of employment	40 yrs after termination of employment	Destroy	
0916-0000	Financial Disclosure Statement For Public Employees (Copy) --- Originals are retained by the Governors Counsel and the Executive Commission on Ethical Standards.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
0917-0000	Certified Public Manager Program File (CPM) File (Copy) --- File contains: Application for CPM Program: Levels I-IV, Waiver from CPM Classes, Recommendation for CPM Classes, and supporting documentation.				P	6 yrs after termination of employment	6 yrs after termination of employment	Destroy	
0918-0000	Department Of Personnel Administrative Action File (Copy) --- File contains: Final Administrative Action of the Merit System Board and the Commissioner of Personnel and supporting documentation. Original maintained by the Department of Personnel.				P	6 yrs after termination of employment	6 yrs after termination of employment	Destroy	
0919-0000	Reduction In Force File: Displaced Personnel Questionnaire And Appeal (Copy) --- Questionnaire asking employees to target what regional they would prefer to transfer. Original maintained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
0920-0000	PAR BI-Weekly Report (Copy) --- Submitted by each agency to the Department of Personnel. Original maintained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
0921-0000	Leave Of Absence Bi-Weekly Report (Copy) --- Original maintained by the Department of Pesonnel.				P	3 Years	3 Years	Destroy	
0922-0000	Request For Temporary Employment (Copy) --- Original maintained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
0923-0000	Application For New Jersey Support Specialist Program (Copy) --- Application to receive training for the Support Specialist title. Original maintained by the Department of Personnel.				P	6 yrs after termination of employment	6 yrs after termination of employment	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0924-0000	Elective Instruction Review Application (Copy) --- Review of college credits earned and what is accepted by state government. Original maintained by the Department of Personnel.				P	3 Years	3 Years	Destroy		
0925-0000	Application For Senior Executive Service (Copy) --- Original maintained by the Department of Personnel.				P	6 yrs after termination of employment	6 yrs after termination of employment	Destroy		
0926-0000	Application For Senior Level Clerical (Copy) --- Original maintained by the Department of Personnel.				P	6 yrs after termination of employment	6 yrs after termination of employment	Destroy		
0927-0000	Job Location Declaration (Copy) --- Statement declaring region of transfer. Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy		
0928-0000	Special Reemployment Information/Preference (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy		
0929-0000	Request For Increment Restoration (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy		
0930-0000	Dental Care Program Financial Reports File --- Contains reports pertaining to employees enrolled in the dental care program.				P	7 Years	3 Years	Destroy		
0931-0000	Vision Care Program Financial Reports --- Contains reports regarding employees enrolled in the vision care program.				P	7 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0932-0000	Health Care Provider Program File									
0932-0001	Health Care Provider Program File - Enrollment Card				P		6 yrs after termination of enrollment	6 yrs after termination of enrollment	Destroy	
0932-0002	Health Care Provider Program File - Change Of Status Card				P		6 yrs after termination of enrollment	6 yrs after termination of enrollment	Destroy	
0933-0000	Conflict Of Interest Questionnaire (Copy) --- Originals maintained by the Ethical Standards Commission and the Governors Counsel.				P	1 Years	1 Years	1 Years	Destroy	
	<b>Individual Employee File</b>									
0934-0000	Request For Approval For Attendance At Events - State Ethics Commission (N.J.A.C. 19:61-6)				P	5 Years	1 Years	1 Years	Destroy	
	<b>Performance Evaluation System (PES)</b>									
1000-0000	Performance Evaluation System (PES) Departmental Personnel (Original) --- Contains Performance Agreement, Fact Sheet, and Final Evaluation Review. Copy is retained by the employee.				P	6 yrs after termination of employment	6 yrs after termination of employment	6 yrs after termination of employment	Destroy	
1001-0000	Performance Summary (Copy) --- Contains a listing of: classified employees who have been rated satisfactory or unsatisfactory, unclassified employees not granted a salary increase, and supervisors who have failed to submit a Performance Certification and Salary Increase Recommendation form. Original retained by the Department of Personnel.				P	1 Years	1 Years	1 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
<b>Open Competitive &amp; Promotional Examination Records</b>									
1100-0000	Application For Open Competitive And Application For Promotional Examinations - State Service File (Copy) --- Applications for an open competitive or promotional examination within state government. Original retained by the Department of Personnel.				P	4 Years	4 Years	Destroy	
1101-0000	Application Summary (Copy) --- List of persons eligible for a classified promotion in state government. Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
1102-0000	<u>N.J.A.C.</u> 4A: 4-2.7 Promotional Action (Copy) --- Indicates that a permanent employee has been promoted to a position without examination. Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
1103-0000	Promotional Job Analysis (Copy) --- A job description used in the development of a promotional examination for a specific job title. Original retained by the Department of Personnel.								
1103-0001	Promotional Job Analysis - Departmental Personnel (Copy)				P	5 Years	5 Years	Destroy	
1103-0002	Promotional Job Analysis (Additional Copy)				P	1 Years	1 Years	Destroy	
1104-0000	Promotional Notice File (Copy) --- Contains: Promotional Announcements, Notices of Vacancy, Checklist, Promotional Opportunities, Notice of Promotional Examination, and Notice of Promotional Action. Original retained by the Department of Personnel.								
1104-0001	Promotional Notices File (Copy)				P	Until applicant list has expired	Until applicant list has expired	Destroy	
1104-0002	Promotional Notices File - Departmental Personnel (Copy)				P	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1105-0000	Notification File (Copy) --- Contains: Notification of Examination, Notification of Eligibility, Notification of Ineligibility. Original retained by the Department of Personnel.									
1105-0001	Notification File (Copy)				P	Until applicant list has expired	Until applicant list has expired		Destroy	
1105-0002	Notification File - Departmental Personnel (Copy)				P	3 Years	3 Years		Destroy	
1106-0000	Promotional Examination Seniority Record (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years		Destroy	
1107-0000	Residence Questionnaire (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years		Destroy	
1108-0000	Employment Eligibility List (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years		Destroy	
1109-0000	Information Correction Card (Copy) --- Form to amend incorrect information in an examination application file. Original retained by the Department of Personnel.				P	3 Years	3 Years		Destroy	
1110-0000	Examination Regular Review Form (Copy) --- Form requesting a routine review of an examination. Original retained by the Department of Personnel.				P	3 Years	3 Years		Destroy	
1111-0000	Change In Examination Status (Copy) --- Form used to change qualified/unqualified status to sit for an examination. Original retained by the Department of Personnel.				P	3 Years	3 Years		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1112-0000	Offical Agency Signature Record (Copy) --- Record of an applicants authentic signature. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1113-0000	Veterans File (Copy) --- File of veteran's applications for examination. Contains: Veterans Preference Claims and Notice Concerning Veterans Status. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1114-0000	Request For Extension Of Working Test Period (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1115-0000	Lateral Title Request (Copy) --- Change request for transfer to a lateral title. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1116-0000	Position Post Audit Recommendation (Copy) --- Recommendations stated after a desk audit. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1117-0000	Open Competitive Application For Rapid Response (Copy) --- Response request for emergency title. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1118-0000	Symbol>Title/Closing Date (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1119-0000	New Title Information Booklet (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1120-0000	Title Rights Status (Copy) --- Listing of previous titles held. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1121-0000	Title Code (Copy) --- Examination titles and associated codes. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1122-0000	Local Government Promotion Evaluation Team (Copy) --- Local Government personnel authorized to evaluate examination applicants. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1123-0000	State Government Promotion Evaluation Team (Copy) --- Departmental personnel authorized to evaluate examination applicants. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1124-0000	Promotion Exam Delegation Project Recommend For Exam Action (Copy) --- Review and approval for individuals to sit for examinations. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1125-0000	Promotion Application/Announcement For Delegation To Local Appointing Authorities (Copy) --- Authority for local government to administer in-house examinations. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1126-0000	Provisional Employee Status --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1127-0000	Promotional Annoucement Meets Requirements Under <u>N.J.A.C.</u> 4A:4-2. 7 (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1128-0000	Appeal Letter - Promotion Eligibility (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1129-0000	Certification Disposition Notice (Copy) --- Applicants notice that position has already been filled. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1130-0000	Provisional Appointment Listing (Copy) --- Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
	<b>Training Records</b>									
1200-0000	Course Registration And Report (Copy) --- Used for training by the Department of Personnels Service Training Section. Original retained by the Department of Personnel.				P	1 Years	1 Years	1 Years	Destroy	
1201-0000	Request/Disapproval For Registration (Copy) --- Agency request for staff training by insitutions other than the Department of Personnel or the agency itself. Original retained by the Department of Personnel.									
1201-0001	Staff Training Request (Copy)				P	3 yrs after final payment	3 yrs after final payment	3 yrs after final payment	Destroy	
1201-0002	Staff Training Request (Additional Copy)				P	1 Years	1 Years	1 Years	Destroy	
	<b>Personnel Management Information System (PMIS)</b>									
1300-0000	Personnel Maintenance Request (Copy) --- Input document to update and employees status. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1301-0000	Position Maintenance Request (Copy) --- Input document to update a position's status. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1302-0000	Conversion Of Appointment Type Request (Copy) --- Document used to change an appointment to a new position. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1303-0000	Separation/Losing Authority Request (Copy) --- Documentation to update an agencys file whose employee is terminating employment. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1304-0000	Leave Of Absence Maintenance Request (Copy) --- Document recording basic information about an employee. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1305-0000	Static Information Change Request (Copy) --- Form recording basic information about an employee. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1306-0000	Individual Salary Adjustment Request (Copy) --- Form used to implement a salary change. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1307-0000	Rescind Previous Action Request (Copy) --- Form used to rescind a personnel action. Original retained by the Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	
1308-0000	Special Payment Information Request (Copy) --- Form to initiate special payment to an employee. Original retained by Department of Personnel.				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
1309-0000	Department Of Personnel Position Change/Freeze Request (Copy) --- Request to change or freeze a position. Original retained by the Department of Personnel.				P	3 Years	3 Years	Destroy	
1310-0000	Employee Transaction Verification Report (Copy) --- Verification report issued after an employee action is taken. Report contains: name, social security number, payroll number, action initiated (new hire, retirement, promotion, etc.), time balances, effective date, and PMIS request number. Original retained by the Department of Personnel.				P	30 days after verification	30 days after verification	Destroy	
1311-0000	Automated External Defibrillator (AED) File --- A device that arrests the fibrillation of the muscles of the heart. The maintenance of the device is overseen by the Department of the Treasury, Division of Property Management & Construction, Bureau of Special Services. The Department of Health and Senior Services published the guidelines on the use of an AED in response to P.L. 2001, c375, which mandated the placement of AED's in public agencies.								
1311-0001	Automated External Defibrillator (AED) File - Monthly Maintenance And Post Event Check Lists				P	3 Years	3 Years	Destroy	
1311-0002	Automated External Defibrillator (AED) File - List Of Employees Certified To Operate And AED				P	2 yrs after update	2 yrs after update	Destroy	
1311-0003	Automated External Defirillator (AED) File - Equipment Operational Manual				P	After disposal of equipment	After disposal of equipment	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1312-0000	Garnishment File --- File usually contains documentation for debt owed to State agencies because of former employees being overpaid, overdrawn sick time or bounced check for Health Benefit prepayments. A copy of the separation from PMIS, along with any calculations and Treadhoc copies used to figure amount of debt are included as well as letters sent informing of debt owed. File may include: a copy of the record once entered into the Department of the Treasury, Division of Revenue and Enterprise Services (DORES) system, if any payments have been made, will be copied in the file, Set-Off of Individual Liability File (S.O.I.L.) and related materials.				P		7 yrs after debit is satisfied	7 yrs after debit is satisfied	Destroy	
1313-0000	I-9 Employment Eligibility Verification Forms (Centralized Filing) --- Form I-9 is used for verifying the identity and employment authorization of individuals hired for employment in the United States. All U.S. employers (including State agencies) must use Form I-9 for all employees (Citizens and noncitizens) hired on or after Nov. 6, 1986, who are working in the U.S. To the extent that these forms are included, or required to be included in personnel files, they are subject to the retention period of the personnel files.  Form generated by Department of Homeland Security, U.S. Citizenship and Immigration Services. Retention period prescribed by the Immigration Reform and Control Act of 1986 (IRCA) Pub. L. 99-603.				P		3 yrs after date of hire or 1 yr after termination, whichever is later	3 yrs after date of hire or 1 yr after termination, whichever is later	Destroy	
<b>General Administrative Records</b>										
1400-0000	Administrative Subject File --- Correspondence, memoranda, publications, reports, bulletins, and other information received by a state agency and alphabetically filed by subject.				P	3 Years	3 Years	3 Years	Destroy	
1401-0000	Agency - Sponsored Conferences File --- Public Information meetings sponsored by state agencies.									

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1401-0001	Agency - Sponsored Conferences - Printed Matter Intended For Distribution To The Public (Master)		X	P			20 yrs	20 yrs	Archival Review	
1401-0002	Agency - Sponsored Conferences - Printed Matter Intended For Distribution To The Public (Copy)			P			Periodic review	Periodic review	Destroy	
1401-0003	Agency - Sponsored Conferences - Correspondence And Work Papers			P	3 Years		3 Years	3 Years	Destroy	
1402-0000	Agency Testimony And Subpoena File --- Records of testimony given by representatives of state agencies at public hearings, public meetings, trials, and other official proceedings.			P	10 Years		10 Years	10 Years	Destroy	
1402-0001	Investigation And Research Files --- Files contain agency responses to requests for information pertaining to subpoenas, internal (agency) investigations or audits. Content may be produced and stored in electronic or hardcopy formats									
1402-0002	Original (Record Copy) --- Version used by the investigatory, audit or agency authority for discovery, evidence, analysis and/or report production				P	7 Years After Matter Involved Is Resolved Or Completed, Including Adjudication Of All Appeals If Applicable			Destroy	
1402-0003	Copy				P	3 Years			Destroy	
	<b>General Administrative Records</b>									
1403-0000	Certified Mail Receipt				P	3 Years	3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1404-0000	Commissioner's Subject File --- Subject file of a Commissioner, President, Secretary, Chief of Staff, Deputy Commissioner, and Assistant Commissioner pertaining to all administrative aspects of their offices (i.e., agency policy, procedure, organization, programs, fiscal. and personnel matters). Includes correspondence, minutes (copy), reports, speeches, and supporting documentation.		X	P	4 Years		4 Years	4 Years	Archival Review	
1405-0000	Correspondence (Electronic Or Hardcopy) --- Letters and memoranda in either electronic or printed format, transmitted to and from state agencies during the course of business.									
1405-0001	Correspondence - External				P	3 Years	3 Years	Destroy		
1405-0002	Correspondence - Internal - Administrative				P	1 Years	1 Years	Destroy		
1405-0003	Correspondence - Policy-Non-Statutory/Non-Regulatory		X	P	25 Years	25 Years	25 Years	Archival Review		
1405-0004	Correspondence - Routine Request For Information				P	Periodic review	Periodic review	Destroy		
1406-0000	Hand-Deliver Receipt									
1406-0001	Hand-Deliver Receipt (Original)				P	1 Years	1 Years	Destroy		
1406-0002	Hand-Deliver Receipt (Copy)				P	Periodic review	Periodic review	Destroy		
1407-0000	Informational Survey --- Agency-sponsored statistical study used to gain information for the routine operation of business.				P	Periodic review	Periodic review	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1408-0000	Inventory File --- Itemized list of equipment and supplies completed by state agencies.				P	3 Years	3 Years	Destroy		
1409-0000	Minutes And Agendas File --- Official records of the proceedings of meetings. File includes agenda and supporting documentation.									
1409-0001	Minutes And Agenda File (Original)		X	P	Permanent	Permanent	Archives			
1409-0002	Minutes And Agendas File (Copy)			P	Periodic review	Periodic review	Destroy			
1410-0000	News Release --- Information issued by state agencies for publication or broadcast.									
1410-0001	News Release (Original)		X	P	Permanent	Permanent	Archives			
1410-0002	News Release (Copy)			P	Periodic review	Periodic review	Destroy			
1411-0000	Official Notice Of An Open Public Meeting (Copy) --- Original retained by the Office of the Secretary of State.			P	3 Years	3 Years	Destroy			
1412-0000	Organization Chart									
1412-0001	Organization Chart (Original)		X	P	Permanent	Permanent	Archives			
1412-0002	Organization Chart (Copy)			P	As updated	As updated	Destroy			
1413-0000	Photographs And Slides		X	P	Permanent	Permanent	Archives			

Records Retention and Disposition Schedule			Agency: G100000			Schedule: 012		Page #:43 of 69			
Record Series #	Record Title and Description		Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
								Total Retention Period	Minimum Period in Agency		
1414-0000	Records Removal And Destruction Order --- Original retained by the Department of State, Division of Archives and Records Management.										
1414-0001	Records Removal And Destruction Order (Original)		X	P	Permanent			Permanent	Permanent		
1414-0002	Records Removal And Destruction Order (Copy)			P	10 Years			10 Years	Destroy		
1415-0000	Records Retention And Disposition Schedule (Copy) --- Original retained by the Department of State, Division of Archives and Records Management.			P	As updated			As updated	Destroy		
1416-0000	Request And Authorization For Records Disposal (Copy) --- Original retained by the Department of State, Division of Archives and Records Management.		X	P	Permanent			Permanent	Permanent		
1417-0000	Speeches (Excluding Executive Speeches - See Commissioner's Subject File) --- Records for public speeches given by representatives of state government.		X	P	Periodic review			Periodic review	Archival Review		
1418-0000	Visitor Security Sign-Sheet And Monitoring File			P	3 Years			3 Years	Destroy		
1419-0000	Reference File			P	Periodic review			Periodic review	Destroy		
1420-0000	Reference Material Request			P	Periodic review			Periodic review	Destroy		
1421-0000	Surplus Property File --- File of material assets, including equipment, furniture, and supplies which are or have been candidates for surplus property within a state agency.										

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1421-0001	Surplus Property File - Surplus Equipment Inventory Listing				P		3 yrs after update	3 yrs after update	Destroy	
1421-0002	Surplus Property File - Excess/Surplus Property Notice				P		3 yrs and audit	3 yrs and audit	Destroy	
1422-0000	Annual Internal Control Statement (Copy) File --- Annual Internal performance audit file containing: Annual Internal Control Statement (copy) and agency-generated supporting documentation. Original retained by the Department of the Treasury, Office of Management and Budget.				P	3 Years	3 Years	3 Years	Destroy	
1423-0000	Consultant File --- File reflecting the findings of a professional consultant hired by a state agency. File may contain but is not limited to: work-papers; financial documents; needs analysis, studies documents; surveys; questionnaires; statistics; correspondence; and preliminary, interim, and final reports.									
1423-0001	Consultant File - Final Report		X		P	25 Years	25 Years	Archival Review		
1423-0002	Consultant File - Contract				P	7 Years after termination of contract	3 Years after termination of contract	Destroy		
1423-0003	Consultant File - Financial Documents				P	7 Years	3 Years	Destroy		
1423-0004	Consultant File - Work Papers And Support File				P	3 Years	3 Years	Destroy		
1424-0000	Incoming Mail Log				P	3 Years	3 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1425-0000	Open Public Records Act (OPRA) File --- Open public records access file contains but is not limited to: OPRA Information Request Form, correspondence, and email (hardcopy), response documents (copy), and relevant supporting documentation. (PL 2001,c404)									
1425-0001	Open Public Records Act (OPRA) File Request Form With Fee				P	7 Years	3 Years	Destroy		
1425-0002	Open Public Records Act (OPRA) File - Request Form Without Fee				P	3 Years	3 Years	Destroy		
1425-0003	Open Public Records Act (OPRA) File - OPRA Complaint To Government Records Council (GRC) (Copy) --- Contains: Denial of Access Complaint (copy), Records Custodian Statement of Information (copy), correspondence, email (hardcopy), and supporting documentation				P	3 yrs after resolution	3 yrs after resolution	Destroy		
	<b>Agency Related Policy, Legislation &amp; Operating Proc.</b>									
1500-0000	Administrative Law Case --- Files prepared by the Office of Administrative Law (OAL), containing all documentation related to an Administrative Law case. When a case is resolved the original documentation file and the hearing transcript are sent to the appropriate state agency. OAL retains copies of the cases.									
1500-0001	Administrative Law Case (Original) --- Retained by the state agency.		X	P	20 yrs after case is closed	20 yrs after case is closed	Archival Review			
1500-0002	Administrative Law Case - Transcript (Original) --- Retained by the state agency.		X	P	Permanent	Permanent	Archives			

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1501-0000	Attorney Generals Opinions (Copy) --- Legal opinions dealing with matters relevant to a state agencys activities. Original retained by the Office of the Attorney General.				P		Periodic review	Periodic review	Destroy	
1502-0000	Background Information And Comments On Proposed Changes/Additions To A New Jersey Administrative Code Draft (Copy) --- Background materials, comments, approved and disapproved changes/additions, and supporting documentation for pre-proposals and proposals to revise a state agencys Administrative Code. Original retained by the Office of Administrative Law.		X	P	3 Years		3 Years	3 Years	Archival Review	
1503-0000	Code Of Ethics - Departmental									
1503-0001	Code Of Ethics - Departmental (Original)		X	P	Permanent		Permanent	Permanent	Archives	
1503-0002	Code Of Ethics - Departmental (Copy)			P	Periodic review		Periodic review	Periodic review	Destroy	
1504-0000	Executive Orders - Gubernatorial (Copy) --- Proclamations issued by the Governor as the chief executive of the state. Original retained by the Office of the Secretary of State.			P	Periodic review		Periodic review	Periodic review	Destroy	
1505-0000	General Operating Procedures --- Rules and regulations developed by state agencies for the general operation of business.									
1505-0001	General Operating Procedures (Original)		X	P	25 Years		25 Years	25 Years	Archival Review	
1505-0002	General Operating Procedures (Copy)			P	3 Years		3 Years	3 Years	Destroy	
1506-0000	Hearings - Formal Policy									

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1506-0001	Hearings - Stenotype Transcription				P		1 yr after printing of transcript	1 yr after printing of transcript	Destroy	
1506-0002	Hearings - Real Time Transcription				P		1 yr after printing of transcript	1 yr after printing of transcript	Destroy	
1506-0003	Hearings - Computer-Assisted Transcription				P		1 yr after printing of transcript	1 yr after printing of transcript	Destroy	
1506-0004	Hearings - Audio/Video Recording				P		80 days or until either summary or verbatim transcript have been approved as minutes, whichever is longer	80 days or until either summary or verbatim transcript have been approved as minutes, whichever is longer	Destroy	
1506-0005	Hearings - Transcripts (Original)		X		P	Permanent	Permanent	Permanent	Archives	
1506-0006	Hearings - Transcripts (Copy)				P	Periodic review	Periodic review	Periodic review	Destroy	
1507-0000	Interagency Agreement --- An agreement between state agencies regarding a common subject.									
1507-0001	Interagency Agreement (Original)		X		P	Permanent	Permanent	Permanent	Archives	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1507-0002	Interagency (Copy)				P		Periodic review	Periodic review	Destroy	
1508-0000	Legislation - Agency-Related (Copy) --- Laws dealing with matters relevant to a state agencys activities. Original retained by the Office of Legislative Services.									
1508-0001	Legislation - Agency-Related-Adopted (Copy)				P		Periodic review	Periodic review	Destroy	
1508-0002	Legislation - Agency-Related-Pending (Copy)				P		As updated	As updated	Destroy	
1509-0000	Policy Statement --- Statement issued by an agencys management personnel regarding the governance of agency- related policy and procedure.									
1509-0001	Policy Statement (Original)		X	P	Permanent		Permanent	Permanent	Archives	
1509-0002	Policy Statement (Copy)			P	Periodic review		Periodic review	Periodic review	Destroy	
1510-0000	Public Employees Occupational Safety And Health Act (PEOSHA) File (Copy) --- Contains the Annual Occupational and Illnesses Survey and supporting documentation. File maintained in accordance with <u>N.J.A.C.</u> , 12:110, Subchapter 5 and <u>N.J.S.A.</u> 34:6A-24-28 et seq. Original retained by the Department of Labor.									
1510-0001	Public Employees Occupational Safety And Health Act (Copy)			P	6 Years		6 Years	6 Years	Destroy	
1510-0002	Public Employees Occupational Safety And Health Act (Additional Copy)			P	3 Years		3 Years	3 Years	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1511-0000	Regulations - Agency-Related (Copy) --- State agency proposals for regulations to become part of the New Jersey Administrative Code. Original retained by the Office of Administrative Law.									
1511-0001	Regulations - Agency-Related - Adopted (Copy)				P	Periodic review	Periodic review	Destroy		
1511-0002	Regulations - Agency-Related-Pending (Copy)				P	As Updated	As Updated	Destroy		
1511-0003	Regulations - Agency-Related - Rejected (Copy)				P	Periodic review	Periodic review	Destroy		
1512-0000	Public Meetings - Audio/Video Tape Recordings				P	80 days or until either summary or verbatim transcript have been approved as minutes, whichever is longer	80 days or until either summary or verbatim transcript have been approved as minutes, whichever is longer	Destroy		
1513-0000	Worker & Community Right To Know Act File (Employer Copy) --- This file is maintained in accordance with the Worker and Community Right to Know Act, L.1983,c315,N.J.S.A. 34:5A-1 et seq. Originals are kept by the Departments of Health and Environmental Protection for 30 years. File contains, but is not limited to the following: Hazardous Substance List, Hazardous Substance Training Manual and supporting data, Material Safety Data Sheet (MSDS), and Right to Know Survey/Inventory.				P	6 Years	6 Years	Destroy		

Records Retention and Disposition Schedule		Agency: G100000				Schedule: 012		Page #:50 of 69	
Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
1514-0000	Disaster Prevention And Recovery/Business Continuity Plans --- In the event of a disaster, contingency plans that identify essential personnel, equipment, and alternate space - if closing a facility is deemed necessary - in order to resume an agency's daily operations and mitigate the consequences of such an event.								
1514-0001	Disaster Prevention And Recovery/Business Continuity Plans (Original)				P	3 yrs after update	3 yrs after update	Destroy	
1514-0002	Disaster Prevention And Recovery/Business Continuity Plans (Copy)				P	As updated	As updated	Destroy	
1515-0000	Americans With Disabilities Act (ADA) Transition Plan And Self-Evaluation Plan --- *Microfilming recommended.				P	65 Years	3 Years	Destroy	
	<b>Reports And Publications</b>								
1600-0000	Agency Annual Report --- Annual report highlighting the achievements and activities of a state agency.								
1600-0001	Agency Annual Report - Agency Of Origin (Original)		X	P	Permanent	Permanent	Archives		
1600-0002	Agency Annual Report (Copy)			P	5 Years	5 Years	Destroy		
1601-0000	Agency Monthly Report --- Monthly report highlighting the activities and achievements of a state agency.								
1601-0001	Agency Monthly Report - Agency Of Origin (Original)			P	3 Years	3 Years	Destroy		
1601-0002	Agency Monthly Report (Copy)			P	1 Years	1 Years	Destroy		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
1602-0000	Agency Weekly Report (Original And Copy) --- Weekly report highlighting the activities and achievements of a state agency.				P	1 Years	1 Years	Destroy		
1603-0000	Agency-Generated Newsletter --- Publication highlighting an agencys activities and other relevant information. The New Jersey State Library receives 75 copies of all agency-generated publications.									
1603-0001	Agency-Generated Newsletter (Original)		X	P	Permanent	Permanent	Permanent	Permanent		
1603-0002	Agency-Generated Newsletter (Copy)			P	Periodic review	Periodic review	Destroy			
1604-0000	Agency-Generated Publication --- Printed material created by a state agency. The State Library receives 75 copies of all agency- generated publications.									
1604-0001	Agency-Generated Publication (Original)		X	P	Permanent	Permanent	Permanent	Permanent		
1604-0002	Agency-Generated Publication (Copy)			P	Periodic review	Periodic review	Destroy			
1605-0000	Agency-Generated Statistical Report(Original And Copy)			P	3 Years	3 Years	Destroy			
1606-0000	Data Entry Input Sheets --- Documents used to input raw, test answers, scores, etc. for report compilation.			P	After input and verification	After input and verification	Destroy			

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
<b>Year Two Thousand (Y2K) Conversion Plan</b>									
1700-0000	Year Two Thousand (Y2K) Conversion Plan (Hardcopy, Microfilm, Or Electronic) --- Includes documentation for testing, remediation, and statutory and regulatory requirements for an agencys Y2K system conversion. File contains but is not limited to the following: hardware, applications, and system analysis documentation; testing documentation; system certification documentation; project plans; status reports; internal and external correspondence and e-mail; vendor system compliance letters; system diagnostic testing results; and supporting documentation.								
1700-0001	Year Two Thousand (Y2K) Conversion Plan (Original)				P	7 Years	3 Years	Destroy	
1700-0002	Year Two Thousand (Y2K) Conversion Plan (Copy)				P	Periodic review	Periodic review	Destroy	
<b>Image Processing And Certification</b>									
1800-0000	Audit Reports - Image Processing Systems --- Manual or computer-generated report of audit(s) of contents and functions of an image processing system. An external copy to be maintained as hardcopy or microfilm.				P	7 Years	3 Years	Destroy	
1801-0000	Image Processing System Initial Certification Or System Revocation --- Agency image processing system initial certification or revocation, as granted by the State Records Committee. File contains: initial certification, evaluation, application (copy), correspondence, revocation notification, Scanner Operator Log, and supporting documentation. A copy is maintained by the Division of Archives and Records Management, Department of State.	X	P	Permanent	Permanent	Permanent			

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
1802-0000	Image Processing System Annual Review --- Agency Image processing annual review, as specified by the State Records Committee upon initial certification. File contains: annual review, correspondence, and supporting documentation. A copy is maintained permanently by the Division of Archives and Records Management, Department of State.				P	As updated	As updated	Destroy	
1803-0000	Image Processing Quality Control/Error Inspection Log --- A log denoting an error(s) detected in either a random or routine quality control inspection of a scanned document batch.				P	After remediation and verification	After remediation and verification	Destroy	
1804-0000	Batching Information Data Sheet --- Form can be used when there are questions about an agency's bill. Includes: agency identification information, record series information, batching data, and estimated time of completion.				P	After completion of batch	After completion of batch	Destroy	
	<b>Agency Website File</b>								
1900-0000	Web Usage Log --- Log tracking agency and/or employee Internet usage. Includes: history file listing, cache, cookies, and supporting documentation.				P	30 Days		Destroy	
1901-0000	Transaction/Click Through Log --- Log tracking the number of times and agency's website is accessed from outside the agency.				P	30 Days		Destroy	
1902-0000	Website Creation And Update File --- File pertaining to an agency's website creation and upgrade(s). Contains: research documents, source code, input documents, testing reports, screen copies, and supporting documentation.				P	30 days after website is discontinued	30 days after website is discontinued	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
<b>E-Mail Record</b>									
2000-0000	<p>State Agency E-Mail Record Schedule</p> <p>---</p> <p>This schedule is designed to facilitate the management of the broad category of e-mail records in accordance with State law (P.L. 1953, c.140; N.J.S.A. 47:3-16) and the provisions set forth in State Circular Letter (CL) 14-12 DORES/OIT. Records may be destroyed by agencies sooner than the retention in this e-mail schedule if such destruction is in accordance with a specific general records schedule item and an approved Electronic File Plan (E-FP) as described in CL14-12 DORES/OIT. See below for general record schedule items included in this broadband.</p> <p>NOTE: This schedule covers routine administrative and operational records with a retention period of seven (7) years or less. Agencies will be responsible for maintaining, administering, and providing access to e-mail (including information and/or attachments) for all records 1) with a final disposition greater than 7 years and 2) a disposition of Permanent, Archives or Archival Review until the State Archives has the means to accept transfer of this material.</p>								
2000-0001	<p>State Agency E-Mail Record Schedule</p> <p>---</p> <p>E-Mail Record NJ Comprehensive Financial System (NJCFCS), Off-system and Procurement/ Purchasing System Records Agency e-mail records pertaining to or encompassing: revenue and expenditure journal/ledger entries; cash receipt records; appropriation/expense/revenue budgets; transfers of appropriation/budget; obligations/encumbrances; purchase orders invoices; vouchers; payments; fiscal note worksheets; travel records; bank records; and vendor file content.</p> <p>Records Series Included 0001-0000 through 0007-0002, 0009-0000 through 0011-0002, 0013-0000 through 0026-0002, 0100- 0000 through 0200-0000 and 0402-0000 and 0415-0000 *Destroy as per CL. 14-12 DORES/OIT</p>					P	7 Years	Destroy	

Records Retention and Disposition Schedule		Agency: G100000				Schedule: 012		Page #:55 of 69	
Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2000-0002	E-Mail Record Budget/Audit Records --- Agency e-mail records pertaining to or encompassing: departmental/divisional appropriations handbooks; requests; and State Auditor reports. Records Series included 0300-0000 through 0303-0003, 0400-0000 *Destroy as per CL. 14-12 DORES/OIT				P	7 Years		Destroy	
2000-0003	E-Mail Record Payroll Reports/Signature Sheets --- Records Series Included 0408-0002 through 0409-0000 *Destroy as per CL. 14-12 DORES/OIT				P	7 Years		Destroy	
2000-0004	E-Mail Record Accounts Receivable Records/Billings --- Records Series Included 0411-0000 *Destroy as per CL. 14-12 DORES/OIT				P	7 Years		Destroy	
2000-0005	E-Mail Record Telephone And Vehicle Records (Work Orders, Completed Logs And Maintenance Records) --- Records Series Included 0416-0000 through 041 7-0003, 041 8-0000 *Destroy as per CL. 14-12 DORES/OIT				P	7 Years		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2000-0006	<p>E-Mail Record Personnel Records ---</p> <p>Agency e-mail records pertaining to or encompassing: affirmative action plans (CSC maintains the original or record copy); surveys; work force/job analyses; certifications; notifications; rosters; job specifications; questionnaires; certification records; promotional actions; job and test application s; lists; referrals; leave requests; conflict of interest questionnaires; time and attendance records; requests/approvals to attend events; applications for open competitive and promotional examinations; personnel maintenance requests; and position change/ freeze requests.</p> <p>Records Series Included 0701-0000 through 0805-0000, 0812-0000 through 0813-0000, 0901-0000, 0904 -0000 through 0905 - 0003, 0910-0000 through 0910-0002, 0914-0000 through 0914-0003, 0933-0000, 0934-0000, 1100-0000 through 1103-0002, 1106-0000 through 1130-0000, 1300-0000 through 1309-0000</p> <p>*Destroy as per CL. 14-12 DORES/OIT</p>				P	7 Years		Destroy	
2000-0007	<p>E-Mail Record General Administrative Records ---</p> <p>E-Mail Record General Administrative Records</p> <p>Agency e-mail records pertaining to or encompassing: administrative subject files (excluding commissioner's subject Files) covering routine agency operations and transactions; and external and internal correspondence (excluding commissioner's correspondence and policy correspondence) covering routine agency operations and transactions, surveys, inventories, open public meeting notices, open public records requests, requests for information, surveys, inventories, and reference material.</p> <p>Records Series Included 1400-0000, 1405-0001, 1405-0002, 1405-0004, 1407-0000 through 1408-0000, 1411-0000, 1419-0000 through 1420-0000, and 1425-0002 through 1425-0003.</p> <p>*Destroy as per CL. 14-12 DORES/OIT</p>				P	7 Years		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2000-0008	E-Mail Record Reports And Publications --- Agency e-mail records pertaining to or encompassing: Agency Monthly Report (Copy) and Agency Weekly Report (Original and Copy). Records Series Included: 1601-0000 through 1602-0000. *Destroy as per CL. 14-12 DORES/OIT				P	7 Years		Destroy	
2100-0000	Video Surveillance Recordings --- Real-time footage of buildings, grounds, and physical properties that are owned or controlled via leases or other contractual arrangements by the State of New Jersey. If an incident on the footage has been reported, the agency must defer to appropriate law enforcement schedule. (Incidents may include things such as a slip and fall, motor vehicle accident or crime).				P	30 days after last recording or until the footage is properly passed to a responsible official if an incident is reported		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2101-0000	<p>Body Worn Cameras (BWC)</p> <p>---</p> <p>Device worn by a law enforcement officer that makes an electronic audio/video recording of activities that take place during any law enforcement action. This does not include mobile video recording devices (MVR), any form of electronic recording device worn by a law enforcement officer while acting in an undercover capacity, or electronic recording devices when used to comply with the requirement of Rule 3:17 (electronic recording station house custodial interrogations).</p> <p>(N.J.S.A. 52:17B-98; Attorney General Law Enforcement Directive No. 2015-1)</p> <p>Exceptions:</p> <ul style="list-style-type: none"> <li>A. Recording pertains to a criminal investigation or otherwise records information that may be subject to discovery in a prosecution. Recording shall be treated as evidence and held for the applicable retention.</li> <li>B. Recording of an arrest that did not result in an ongoing prosecution, or records use of police force. Recording shall be kept until the expiration of the statute of limitations for filing a civil complaint.</li> <li>C. Recording of an incident that is the subject of an internal affairs complaint. Recording shall be kept pending final resolution of the internal affairs investigation and any administrative action.</li> </ul>					P	90 Days unless one of the exceptions are met	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
<b>Electronic Records</b>									
2200-0000	<p>Supplemental Information Sources, Finding Aids And Indexes</p> <p>---</p> <p>This series includes electronic abstracts or summaries of records contained in separate original records systems and/or indexes, lists, registers and other finding aids used as reference sources that complement and provide access to separately-stored original records. These records can be used as information sources apart from the related original records.</p>					P	Retain with related original records or when the agency determines that the abstracts, summaries, finding aids/indexes are no longer needed for administrative, legal, audit, or other operational purposes, whichever is later.	Destroy	
2201-0000	<p>Output Records</p> <p>---</p> <p>This series includes records derived directly from the electronic system or database such as system-generated reports (in hardcopy or electronic format), online displays, summary statistical information, or any combination of the above.</p>								
2201-00002	<p>Data File Outputs</p> <p>---</p> <p>(Cont'd from 2201-0000)</p> <p>File the records above with an appropriate agency-specific records series when applicable. If not applicable, contact the Records Management Services Unit to schedule the records.</p>								

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2201-0001	Ad Hoc And Routine Operational Reports --- Includes reports derived from electronic records or system queries created on an ad hoc, one-time basis or on a periodic basis for reference purposes. This item encompasses ad hoc reports created from or queries conducted across multiple linked databases or systems.				P		Retain until business use ceases.	Destroy	
2201-0002	Data File Outputs --- Data files or copies of electronic records created from databases or unstructured electronic records for the purpose of information sharing or reference, including data files consisting of summarized or aggregated information, electronic files consisting of extracted information, print files, and technical reformat files (electronic files consisting of copies of a master file or part of a master file used for information exchange).  Exclusion 1: This schedule does not apply to: <ul style="list-style-type: none"><li>• Reports created to satisfy established reporting requirements (e.g. statistical reports produced quarterly in accordance with an agency directive or law, or other regular reports to management).</li><li>• Query results/electronic reports created in response to a formal request from a higher-level office of the agency or an entity external to the agency.</li><li>• Records containing substantive information not included in the resource electronic records system or database.</li><li>• Data files consisting of summarized information from unscheduled electronic records or records scheduled as permanent but no longer exist or can no longer be accessed. (Cont'd to 2201-00002)</li></ul>				P		Retain until business use ceases.	Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2202-0000	<p>Non-Recordkeeping Copies Of Electronic Records</p> <p>---</p> <p>Includes non-recordkeeping copies of electronic records maintained in email systems, computer hard drives, network drives, collaboration sites, web servers, or other locations, after the official versions have been copied to a centralized recordkeeping system/database, or otherwise preserved. This encompasses non-record keeping copies of e-mails, attachments and associated metadata stored under the centralized framework set forth in CL NO 14-12 DORES/OIT. This series also includes: documents such as letters, memoranda, reports, handbooks, directives, manuals, briefings or presentations created on office applications, including Portable Document Format (PDF) or its equivalent; electronic spreadsheets; digital video or audio files; text messages; digital maps or architectural drawings; and copies of various types of electronic records maintained on websites or web servers, but EXCLUDING web pages themselves.</p>				P	Retain until copied to the centralized recordkeeping system/database or otherwise preserved.		Destroy	
2203-0000	<p>Systems And Data Security Records</p> <p>---</p> <p>Includes records related to maintaining the security of information technology (IT) systems and data, as well as security of facilities. Encompasses records such as official procedures for securing systems/data and maintaining underlying IT infrastructures, as well as system risk management/vulnerability analyses and analyses of security policies, processes, and guidelines. Specific document types included in this record series include: system security, disaster recovery and continuity of operations plans; published computer technical manuals and guides; references materials used to produce guidelines covering security issues (for specific systems and equipment); records on disaster exercises and resulting evaluations; network vulnerability assessments; risk surveys; service test plans; and test files/data.</p>				P	Retain for 1 year after system is superseded by a new iteration or when no longer needed for agency/IT administrative purposes to ensure a continuity of security controls through the life of the system.		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
2204-0000	Computer Security Incident Handling, Reporting And Follow-Up Records --- Contains records that relate to computer incidents as defined by the Office of Information Technology (11-03-P1-NJOIT). Encompasses records that document attempted or actual system security breaches, including break-ins ("hacks," including virus attacks), improper usage by staff, failure of security provisions or procedures, and potentially compromised information assets.				P		Retain for 3 years after all necessary follow-up actions have been completed.		Destroy	
2205-0000	System Access Records --- Includes records that are created as part of the user identification and authorization process associated with information and records system access. The records contained in this records series are used to monitor inappropriate systems access by users. It may include user profiles, log-in files, password files, audit trail files/extracts, system usage files, and usage data required to assess charges for system use.									
2205-0001	System Access Records --- Records associated with systems that do not require special accountability for access.				P		Retain until no longer needed for business use.		Destroy	
2205-0002	System Access Records --- Records associated with systems that require special accountability for access (as defined via regulation or statute) Exclusion: Excludes records relating to electronic signatures.				P		Retain for 7 years following password change or account termination.		Destroy	
2206-0000	System/Transaction Backups And Tape Library Records --- Includes back-up files maintained for potential system or transaction restoration in the event of a system failure or loss of data/records.									

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2206-0001	System/Transaction Backups And Tape Library Records --- Incremental back-up files				P		Retain until superseded by a full back-up.	Destroy	
2206-0002	System/Transaction Backups And Tape Library Records --- Full back-up files				P		Retain until second subsequent full backup is verified as successful.	Destroy	
<b>Electronic Records</b>									
2206-0003	Backups Of Master Files And Databases --- Include back-ups that are full replications of database or records system contents that are to be used as replacements for databases or master files that have been lost due to system failures or errors.				P		Retain until second subsequent full backup is verified as successful.	Destroy	
2207-0000	Public Key Infrastructure (PKI) Records --- Includes records that establish or support authentication by tying the user to a valid electronic credential and other administrative non-PKI records that are retained to attest to the reliability of the PKI transaction process, as well as to transaction- specific records that are generated for each transaction using PKI digital signature technology.								

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
2207-0001	Administrative Records --- Included in this grouping are records involved in the set-up and administration of a PKI program including: policies and procedures; planning records; configuration information; validation records; operation records; audit and monitor records; and termination, consolidation or reorganizing records.					P	Retain for 7 years following the supersession or termination of the certificate authority.		Destroy	
2207-0002	Transaction-Specific Records --- Encompasses transaction-specific records that are generated for each transaction that uses PKI digital signature technology. These records are embedded or referenced within the transaction stream and may be appended to the transaction content or information record. They may vary from transaction-to-transaction and agency-to-agency.					P	Retain for the same period of time set forth in the agency's retention schedule for the transaction that the PKI digital signature is designed to protect.		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2208-0000	<p>Information Technology Development Project Records</p> <p>---</p> <p>Infrastructure project records.</p> <p>Includes records relating to Information Technology (IT) infrastructure, systems, and services projects, which document the basic systems and services used to supply the agency and its staff with access to computers and data telecommunications resources. It includes requirements for and about implementation of functions such as: maintaining servers of all kinds; desktop computers; mobile devices and other hardware; network operating systems and shared applications; and data telecommunications facilities. It may also include records of infrastructure development and maintenance activities encompassing acceptance/authorization of infrastructure components, analysis of component options, feasibility, costs and benefits, and work associated with implementation, modification, and troubleshooting.</p> <p>Examples of record types includes: procurement processing/ tracking content; installation/testing records; installation reviews and briefings; quality assurance and security reviews; requirements/specifications;</p> <p>(Cont'd to 2208-00000)</p>				P	Retain for 7 years following project completion.		Destroy	
2208-00000	<p>Information Technology Development Project Records</p> <p>---</p> <p>(Cont'd from 2208-0000)</p> <p>technology refresh plans; operational support plans; test plans; and models, diagrams, schematics, and technical documentation.</p> <p>Exclusion: Records contained within agency application systems that support or document agency activities and decisions are not covered by this item. Such records must be covered under approved individual agency records schedules and/or approved State General Records Schedule.</p>								

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2209-0000	Information Technology Operations And Maintenance Records --- Includes records that relate to activities associated with the operations and maintenance of information technology systems and services used to supply the agency and its staff with access to computers and data telecommunications. It includes records associated with IT equipment, IT systems, and storage media, IT system performance testing, asset and configuration management, change management, and maintenance on network infrastructure. Record types include: [Files identifying IT facilities and sites; files concerning implementation of IT facility and site management; equip. support services provided to specific sites (reviews, site visit & trouble reports, equip. service histories, reports of follow-up actions, related correspondence); equip. control systems; requests for service; work orders; services histories; workload schedules; run reports, schedules of maintenance and support activities; problem reports and related decision documents reports on operations; measure of benchmarks (performance indicators and monitoring, error and exception reporting, self-assessments, management reports); (Cont'd to 2209-00000)				P	Retain for 6 years.		Destroy	
2209-00000	Information Technology Operations And Maintenance Records --- (Cont'd from 2209-0000) website administration (frames, templates, style sheets, site maps, codes that determine site architecture, changes requests)].  Note 1: If any maintenance activities have a major impact on a system or lead to a significant change, those records should be maintained as part of the Configuration and Change Management Records (See Record Series 2210-0000 below).  Note 2: Records needed to support contracts should be in procurement files, which are scheduled under the State General Records Schedule.								

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2210-0000	<p>Configuration And Change Management Records</p> <p>---</p> <p>Includes records created and retained for asset management, performance and capacity management, system management, configuration and change management, and planning, follow-up, and impact assessment of operational networks and systems. It includes:</p> <ul style="list-style-type: none"> <li>• Inventories of IT assets, network circuits, and building or circuitry diagrams.</li> <li>• Data and detailed reports on implementation of systems, applications and modifications.</li> <li>• Application sizing, resource and demand management records.</li> <li>• Documents identifying, requesting, and analyzing possible changes, authorizing changes, and documenting implementation of changes.</li> <li>• Documentation of software distribution (including COTS software license management files) and release of version management.</li> </ul> <p>Note: For documentation relating to systems containing permanent electronic records, consult with the Department of the Treasury, Records Management Services before initiating disposal actions.</p>				P	Retain for 7 years following system supersession, iteration, or termination.		Destroy	
2211-0000	<p>Electronic Input/Source Records</p> <p>---</p> <p>Includes electronic records consisting of raw data used to create, update, or modify records in an electronic system or database. The types of records that may be included are: electronic files that duplicate information from a source electronic system; electronic records received from another agency and used as input/ source records by the receiving agency; computer files or records containing uncalibrated and unvalidated digital or analog data collected during observation or measurement activities or research and development programs and used as input for a digital master file or database; and metadata or reference data, such as format, range, or domain specifications transferred from a host computer or server to another computer for input, updating, or transaction processing operations.</p> <p>Exclusion 1: Original electronic records maintained in the source system.</p> <p>Exclusion 2: Electronic input records tagged for audit and legal purposes.</p>				P	Retain until data has been entered or otherwise incorporated into the electronic records system or database and verified.		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Retention Policy		Disposition	Citation
						Confidential	Total Retention Period		
2212-0000	<p>Data Administration Records</p> <p>---</p> <p>Includes records relating to data administration, including maintenance of data standards, data models, registries, and data definitions and dictionaries, as well as administrative support for the maintenance of data standards, data definitions and data dictionaries. This schedule includes records that explain the meaning, purpose, logical relationships, and use and origin of data. It also may include any documentation related to electronic records that allows a user to understand or access the information, whether the records are part of an electronic system or stand-alone.</p>				P	Retain for 7 years following system supersession, iteration, or termination of the associated system		Destroy	
2213-0000	<p>System Development Project File</p> <p>---</p> <p>Relates to the development of Information Technology (IT) systems and software applications that provide agencies with specific business functionality from transaction processing, to content storage/analysis and through to policy and decision-making support. It covers records generated in the initial development stages up until hand-off to production, as well as procurement processing and tracking records related to system development activities.</p> <p>Exclusion: This item does not apply to system data or content such as data dictionaries, file specifications, code books, record layouts, etc.</p>				P	Retain for 7 years following implementation of the system		Destroy	
2214-0000	<p>Special Purpose Computer Programs And Applications</p> <p>---</p> <p>Includes computer software programs or applications that are developed by an agency or under its direction solely to use or maintain a master file or database</p> <p>Exclusion: This item does not cover commercial, off-the-shelf (COTS) programs or applications, unless the agency has modified such programs or applications considerably to perform a mission-related function.</p> <p>Note: Computer software needs to be kept as long as needed to ensure access to, and use of, the electronic records in the system throughout the authorized retention period.</p>				P	Retain until related master file or database has been deleted or until there is no longer a business use for the programs/applications		Destroy	

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
2215-0000	Information Technology Compliance Records --- Includes records which document compliance with information technology policies, directives, and plans.  Note: Copies of security plans are covered under General Records Schedule G100000. However, copies of such plans may be interfiled within this series.				P		Retain for 6 years following completion of compliance project/activity/ transaction		Destroy	
2216-0000	Electronic Administrative Resource Files --- Electronic file shares and other digital content stores that contain reference material, periodic reports used for routine daily management of operations, copies of policies and procedures, form templates, staff announcements, work-in-progress materials including drafts of all kinds and associated commentary, help scripts for office information systems, help desk logs, discussion streams regarding daily operations, and contact lists.				P		Retain until no longer needed for administrative purposes.		Destroy	

# Appendix F

## Facility Operator Interface Files and Reporting Specifications



## **Facility Operator to Customer Service Center**

### **Interface File and Reporting Specifications**

Prepared by:  
The E-ZPass Reciprocity Committee  
11/10/2022  
Version FO 1.60.00

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## 1.0 Introduction

The IAG Reciprocity II document was developed to establish a framework in which E-ZPass Agencies could participate in tag use not directly related to tolls, for example parking fees. It is assumed that any contemplated non-toll activity will fall under the framework of Reciprocity II (and the subsequent Reciprocity III).

Actual implementation of non-toll processing requires the various Customer Service Centers to develop internal programs and procedures as well as support the IAG File and Report Specifications which were developed in response to Reciprocity II.

The following files constitute the IAG standard file structure and protocol with which a Host CSC can communicate with a Facility Operator. The fundamental concept is that transaction files from a Facility Operator are split, by the Host CSC, into smaller files for processing by each Agency/CSC. Each file in that group is subsequently reconciled back to the Facility Operator.

The purpose of this document is to establish file specification and protocol necessary for a Facility Operator to exchange information with their Host CSC. The file format and protocol are based on the IAG inter-CSC file specification.

The interface files defined are (inter-Agency/CSC files are shown in **bold** and are not a part of this specification):

File Name	File Extension	File Usage
FO Tag Status File	FTAG	The FO Tag Status File is created each day by the Host CSC for each Facility Operator serviced by the Host. The Tag Status File will contain only valid tags per Reciprocity II.
FO Transaction File	FNTX	The FO Transaction file is created once each day and sent to the Host CSC. This file contains all transactions previously accepted by the Facility Operator but not yet processed by the Host. Transaction Files contain original transactions only (not corrections or re-submittals).
FO Distribution File	FNDX	For every FO Transaction File and FO Correction File received, the Host CSC shall return an FO Distribution File back to the Facility Operator summarizing the transactions in the FO Transaction/Correction File. The file header contains the file number from the corresponding FO Transaction/Correction File. There are $n$ records, one record for each Home Agency/CSC represented in the FO Transaction/Correction File. The Distribution File provides the Facility Operator with assurance that the transactions in the corresponding Transaction/Correction File have been bundled into the appropriate <b>INTX</b> file and sent to that Agency/CSC (including the Host for posting).
FO Transaction Reconciliation File	FNRX	The Host CSC will generate $n$ FO Transaction Reconciliation Files for each FO Transaction File, one file for each Home Agency/CSC represented in the FO Transaction File (including the Host). These files correspond one for one to the <b>INRX</b> reconciliation files received from each Home Agency/CSC in response to an <b>INTX</b> file. The file header contains the corresponding <b>INTX</b> file number and there is one detailed record for each transaction reconciled. Per IAG rules, an <b>INRX</b> file will not be generated until all transactions in the corresponding <b>INTX</b> file have been fully processed. The FO Distribution File provides the link to the original FO Transaction File.

File Name	File Extension	File Usage
FO Correction File	FTXN	<p>The Facility Operator uses the FO Correction File to resubmit rejected, declined or incorrect transactions*. Original transactions may be resubmitted only once and only if the most recent FO Tag Status file indicates that the corresponding tag is valid. The transactions included in a correction file may be from any Home Agency and from any time (within the processing time limits).</p> <p>* Note: While the FO Correction File is used to make adjustments initiated by the Facility Operator, there is no corresponding file to make adjustments initiated by the Host (i.e., reversals and disputes). These adjustments are made at the CSC and the information is related to the Facility Operator via the Host Reports.</p>
FO Correction Reconciliation File	FRXN	<p>The Host CSC will generate <math>n</math> FO Correction Reconciliation Files for each FO Correction File, one file for each Home Agency/CSC represented in the FO Correction File (including the Host). These files correspond one for one to the <b>IRXN</b> reconciliation files received from each Home Agency/CSC in response to an <b>ITXN</b> file. The file header contains the corresponding <b>ITXN</b> file number and there is one detailed record for each transaction reconciled. Per IAG rules, an <b>IRXN</b> file will not be generated until all transactions in the corresponding <b>ITXN</b> file have been fully processed. The FO Distribution File provides the link to the original FO Correction File.</p>
Acknowledgement File	ACK	<p>The Acknowledgment File shall be created, by the entity receiving a file, to inform the entity which sent the original file that the file transmitted was received in its entirety. An Acknowledgement File shall be sent for each of the above referenced files.</p>

## **2.0 Transaction Processing**

1. The Host CSC shall reject original and corrected transactions according to the IAG Specification, including transactions older than 60 days.
2. Non-toll transactions <\$20 will be posted directly to a valid account replenished by a credit card. A transaction that is attempted to be posted to an account that is currently replenished by CASH or CHECK will be rejected as NOCC.
3. A non-toll transaction  $\geq \$20$  will create a separate re-bill request to the credit card processor for the exact amount of the transaction. If the payment is approved by the credit card processor then the payment and the transaction should both be posted to the account. If payment is not approved, then this should be noted on the account (with some means of identifying the associated non-toll transaction), and the transaction rejected as DECL in the INRX (and FNRX) file.

## **3.0 Reporting Requirements**

The following reports are defined for the Host and the Facility Operator. Report formats are in Appendix A & B.

### **Host - Two Reports are defined for the Host**

The Host Agency receives IAG non-toll reports from each Home Agency. These reports indicate the amount that a Home Agency owes to a Host Agency/Facility Operator for a particular settlement period. The reports are based on data in reconciliation (INRX and IRXN) files.

For each settlement period, the Host will compile a "Facility Operator Period Transaction Summary Report" (FH-1) of transactions based on Non-Toll Reconciliation (INRX) files acknowledged in the settlement period and a "Facility Operator Period Correction Summary Report" (FH-2) of transactions based on Non-Toll Correction Reconciliation (IRXN) files acknowledged in the settlement period. Fees and final settlement reports are specific to the particular Host and Facility Operator. Due to the one for one relationship of INRX/IRXN and FNRX/FRXN files, the existing IAG 1.51N reports can serve as supporting documents to reports FH-1 and FH-2. The Host Agency may choose to modify the supporting reports to remove (or add) information.

### **Facility Operator - The Facility Operator will generate four reports.**

The first two reports, FO-1 and FO-2 are nearly identical in format to FH-1 and FH-2 above. Both reports use the FILE\_DATE and FILE\_TIME of the corresponding FNRX/FRXN files, to determine those files in the settlement period. This will ensure that they will match the FH-1 and FH-2 reports generated by the Host which uses the acknowledgement date of the corresponding INRX/IRXN files. Note that the definition of the FILE\_DATE and FILE\_TIME in the FNRX/FRXN file is NOT the same as the definition of those fields in the INRX/IRXN file.

The third report, FO-3, is nearly identical in format to IAG-2N. FO-3 provides supporting details for one row of the FO-1 report. The Facility Operator generates one FO-3 report for each row in the FO-1 report. Again, the date used to generate FO-3 is within the FNRX file while IAG-2N uses an acknowledge date.

The fourth report, FO-4, is nearly identical in format to IAG-3N. FO-4 provides supporting details for one row of the FO-2 report. The Facility Operator generates one FO-4 report for each row in the FO-2 report. Again, the date used to generate FO-4 is within the FRXN file while IAG-3N uses an acknowledge date.

## **4.0 General File Requirements**

1. All files (except for the Acknowledgement File) shall be compressed (ZIPped) using a standard Lempel-Zif compression algorithm which should yield a compression rate of at least 75% (meaning a file will be reduced so that it is only 25% of its original size).

2. When compressed, file names shall be converted from {FILE\_NAME}.{FILE\_TYPE} to {FILE\_NAME}\_{FILE\_TYPE}.ZIP and all files names shall be created using uppercase characters only. Therefore, when file "0008\_19971201001015.FTAG" is compressed, the compressed file shall be named "0008\_19971201001015\_FTAG.ZIP".

## **5.0 FO Tag Status File**

### **5.1 File Type**

Variable length, LF delimited

### **5.2 File Name**

{HOST\_AGENCY\_ID}\_YYYYMMDDHHMMSS.FTAG

Example: 0008\_20011201001015.FTAG  
Tag status file created by NY CSC on 00:10:15 on 12/01/2001

### **5.3 File Use**

The FO Tag Status File shall be created by the Host Agency/CSC to inform the Facility Operator as to the valid tags for that Facility. This file contains tags from the entire E-ZPass region. An FO Tag Status File is created each day for each Facility Operator serviced by the Host. The file will contain only valid tags per Reciprocity II. The file contains a provision to inform the Facility Operator as to certain discounts or non-revenue status associated with each tag.

### **5.4 File Layout**

FO Tag Status File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	FTAG
HOST_AGENCY_ID	CHAR(4)	Standard agency ID code of the Host Agency/CSC (See IAG inter-CSC file spec.)
FILE_DATE	CHAR(8)	Date file created. Format: YYYYMMDD
FILE_TIME	CHAR(6)	Time file created: Format: HHMMSS
RECORD_COUNT	CHAR(10)	Count of all tags in file. Does not include header record. Values: 000000000 – 999999999
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>32</b>	

FO Tag Status File - Detail Structure		
Field Name	Type/Size	Description/Valid Values
TAG_AGENCY_ID	CHAR(4)	Tag agency ID. Values: 0000 – 9999
TAG_SERIAL_NUMBER	CHAR(10)	Tag serial number. Values: 0000000001 – 9999999999
TAG_STATUS	CHAR(1)	1 – Valid
TAG_ACCT_INFO	CHAR(6)	A string of 24 bits (3 characters) converted to Hex-ASCII format (6 characters). This field is not defined by the IAG and may be defined by the Host/Facility operator.
DELIMITER	CHAR(1)	LF
<b>Record Total</b>	<b>22</b>	

### **5.5 Processing Requirements**

1. The transmission of the file to the Facility Operator as stipulated in the Transmission Methodology section.
2. In the event that an invalid header record is encountered (e.g., character data in a numeric field, etc.), the Facility Operator should reject the file and notify the Host Agency/CSC via the Acknowledgement File.
3. In the event that a invalid detail record is encountered (e.g., inappropriate TAG\_STATUS, etc.), the Facility Operator should skip that record and notify the Host Agency/CSC via the Acknowledgement File.
4. The Host Agency/CSC shall perform appropriate sanity checks on the Tag Status File prior to its transmission to the Facility Operator. Such sanity checks should include testing for unusual growth in the number of tags from previous version

5. The Facility Operator must be aware that the FO Tag Status File contains only valid tags. Therefore, each new file must replace the previous file. Any tag that is not in the file is to be considered invalid.
6. The Host CSC shall incorporate into the FO Tag Status File all tags received in the Inter-CSC Tag Status File (ITAG) that have a TAG\_STATUS value of 1 (valid) or 2 (low balance) and that have Bit 1 or Bit 24 of the TAG\_ACCOUNT\_INFO field set to a value of 1. Any tag with a TAG\_STATUS value of 2 shall have that value converted by the Host CSC to 1 for the FO Tag Status File.

## 6.0 FO Transaction File

### 6.1 File Type

Variable length, LF delimited

### 6.2 File Name

{FO\_ID}\_{HOST\_AGENCY\_ID}\_YYYYMMDDHHMMSS.FNTX

Example: 0128\_0004\_20011201001015.FNTX

Albany transactions to NYSTA create on 00:10:15 on 12/01/2001

### 6.3 File Use

The FO Transaction file is created once each day and sent to the Host CSC. This file contains all transactions previously accepted by the Facility Operator but not yet processed by the Host. Transaction Files contain original transactions only (not corrections or re-submittals).

### 6.4 File Layout

FO Transaction File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	FNTX
FO_ID	CHAR(4)	Standard ID code of the Facility Operator (See IAG Inter-CSC File Spec)
HOST_AGENCY_ID	CHAR(4)	Standard agency ID code of the Host Agency (See IAG Inter-CSC file spec)
FILE_DATE	CHAR(8)	Date file created. Format: YYYYMMDD
FILE_TIME	CHAR(6)	Time file created. Format: HHMMSS
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
FNTX_FILE_NUM	CHAR(6)	A unique sequential number used to identify the FO Transaction File to the Host Agency. Values 000001 – 999999.
DELIMITER	CHAR(1)	LF
Header Total	41	

FO Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_TRX_SERIAL_NUM	CHAR(12)	The unique key of a transaction assigned by the Facility Operator. Values: 000000000000 – 999999999999
ETC_REVENUE_DATE	CHAR(8)	The revenue date of the transaction as determined by the Facility Operator. Format: YYYYMMDD
ETC_FAC_AGENCY	CHAR(4)	A code indicating the <b>facility operator</b> at which the transaction occurred.  See IAG Inter-CSC file spec
ETC_TRX_TYPE	CHAR(1)	This field is used to denote the type of transaction. Values: P - Parking Transaction
ETC_ENTRY_DATE	CHAR(8)	The date the vehicle entered the facility. Format: YYYYMMDD  If not provided must be *****.
ETC_ENTRY_TIME	CHAR(6)	The time the vehicle entered the facility. Format: HHMMSS  If not provided must be *****.

FO Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_ENTRY_PLAZA	CHAR(3)	<p>The ETC_FAC_AGENCY plaza code of the plaza at which the vehicle entered the facility.</p> <p>If not provided must be ***.</p> <p>This contents of this field are left justified and padded with trailing blanks as needed.</p> <p>Refer to IAG Inter-CSC file spec for the list of valid values for this field.</p>
ETC_ENTRY_LANE	CHAR(3)	<p>The ETC_FAC_AGENCY lane code of the lane at which the vehicle entered the facility.</p> <p>This contents of this field are left justified and padded with trailing blanks as needed.</p> <p>If not provided must be ***.</p>
ETC_TAG_AGENCY	CHAR(4)	<p>Standard agency ID read from the tag.</p> <p>Values: 0000 – 9999</p>
ETC_TAG_SERIAL_NUMBER	CHAR(10)	<p>Tag serial number read from the tag.</p> <p>Values: 0000000001 – 9999999999</p>
ETC_READ_PERFORMANCE	CHAR(2)	<p>The total number of times the tag was read while in the capture zone. Obtained from the AVI reader.</p> <p>Values: 00 – 99 ** if data is unavailable</p> <p>This would be from the exit transaction.</p>
ETC_WRITE_PERF	CHAR(2)	<p>The total number of times the tag was written to while in the capture zone. Obtained from the AVI reader.</p> <p>Values: 00 – 99 ** if data is unavailable</p> <p>This would be from the exit transaction.</p>
ETC_TAG_PGM_STATUS	CHAR(1)	<p>The result of the AVI tag program cycle. Obtained from the AVI reader.</p> <p>Values: S – Success U – Unverified F – Failed * if data is unavailable</p> <p>This would be from the exit transaction.</p> <p>This field along when used in conjunction with ETC_READ_PERFORMANCE and ETC_WRITE_PERF would allow the Host Agency to gauge tag performance over time.</p>
ETC_LANE_MODE	CHAR(1)	<p>The mode the lane was operating in at the time of the transaction.</p> <p>Values: E – ETC Only (Dedicated) A – ETC/ACM M – Manned/ETC</p> <p>This would be from the exit transaction.</p>
ETC_VALIDATION_STATUS	CHAR(1)	<p>The tag status from the tag status file at the time of the transaction.</p> <p>Values: 1 – Good * - Used if the lane system does not report this value to its CSC.</p> <p>This would be from the exit transaction.</p>
ETC_LIC_STATE	CHAR(2)	<p>Unused. Must contain **.</p>
ETC_LIC_NUMBER	CHAR(10)	<p>Unused. Must contain *****.</p>
ETC_CLASS_CHARGED	CHAR(3)	<p>Unused. Must contain ***.</p>
ETC_ACTUAL_AXLES	CHAR(2)	<p>The number of axles associated with the vehicle.</p> <p>Values: 00 – 99</p> <p>If not available, should default to the number of axles encoded on the tag.</p>

FO Transaction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_EXIT_SPEED	CHAR(3)	<p>The speed in MPH of the vehicle as it exited the facility. If the Facility Operator cannot/does not measure speed, 000 should be used.</p> <p>Values: 000 – 999</p> <p>This field would allow the Home Agency to gauge customer speed activity over time. It also can be used to offset low counts in the ETC_READ_PERFORMANCE and ETC_WRITE_PERF fields since vehicles traveling at higher speeds typically have lower performance figures.</p>
ETC_OVER_SPEED	CHAR(1)	<p>An indicator of whether or not the speed reported in ETC_EXIT_SPEED was over the allowable threshold for that plaza/lane.</p> <p>Values: Y – Speed is over threshold N – Speed is not over threshold</p>
ETC_EXIT_DATE	CHAR(8)	<p>The date the vehicle exited the facility. Format: YYYYMMDD</p>
ETC_EXIT_TIME	CHAR(6)	<p>The time the vehicle exited the facility. Format: HHMMSS</p>
ETC_EXIT_PLAZA	CHAR(3)	<p>The ETC_FAC_AGENCY plaza code of the plaza at which the vehicle exited the facility.</p> <p>This contents of this field are left justified and padded with trailing blanks as needed.</p> <p>Refer to IAG Inter-CSC file spec for the list of valid values for this field.</p>
ETC_EXIT_LANE	CHAR(3)	<p>The ETC_FAC_AGENCY lane code of the lane at which the vehicle exited the facility.</p> <p>This contents of this field are left justified and padded with trailing blanks as needed.</p>
ETC_DEBIT_CREDIT	CHAR(1)	<p>An indicator as to whether the amount reflected in ETC_AMOUNT_DUE is to be debited from the customer account or credited to the customer account.</p> <p>Values: Plus (+) – Debit from customer account Space ( ) – Debit from customer account Minus (-) – Credit to customer account</p>
ETC_AMOUNT_DUE	CHAR(7)	<p>The amount due as calculated by the Facility Operator. Values: 0000000 (\$00000.00) – 9999999 (\$99999.99)</p>
DELIMITER	CHAR(1)	LF
Record Total	116	

## 6.5 Processing Requirements

1. The FO Transaction File is separated by the Host CSC into individual INTX files and sent to the appropriate Home CSC for processing. As such, the Host CSC should expect a corresponding INRX file from the Home CSC when all of the transactions in the INTX are processed. As they are received, the INRX files are translated into FNRX files and sent to the Facility Operator. The Host CSC must produce an FNRX file for ALL Home CSCs including those transactions posted to its own accounts.
2. It shall be the responsibility of the Facility Operator to ensure that the FO Transaction File does not contain two (or more) transactions for the same ETC\_TAG\_AGENCY/ ETC\_TAG\_SERIAL\_NUMBER combination in the same ETC\_EXIT\_PLAZA within a five (5) minute period.
3. A credit transaction must have its own unique ETC\_TRX\_SERIAL\_NUM but may share the same agency, plaza, lane and date/time information so that it may be accurately reflected on the customer account and statement. This duplication of agency, plaza, lane and date/time information should not be considered a duplicate as discussed in requirement #1. This field should NOT be used in lieu of the Correction File. Its primary use is to generate credit transactions in the same file as the original debit transaction.
4. Transactions originating at parking facilities will be sent with a value of 'P' in the ETC\_TRX\_TYPE field. Entry information (fields ETC\_ENTRY\_DATE, ETC\_ENTRY\_TIME, ETC\_ENTRY\_PLAZA and ETC\_ENTRY\_LANE) is optional for parking transactions in that it may be provided or may be filled with asterisks (\*). Exit information (ETC\_EXIT\_DATE, ETC\_EXIT\_TIME, ETC\_EXIT\_PLAZA and

ETC\_EXIT\_LANE) must always be provided.

5. The combination of FO\_ID and FNTX\_FILE\_NUM forms a unique sequential key which will be used by the receiving agency (the Home Agency) to verify that each FO Transaction File was received without any gaps.

If the FNTX\_FILE\_NUM of the current FO Transaction File does not equal the prior FNTX\_FILE\_NUM received from that Facility Operator plus one (1), the Acknowledgement File shall contain a RETURN\_CODE of '04' to signify that a gap in sequence numbers was found. However, the current FO Transaction File should still be processed.

If the FNTX\_FILE\_NUM of the current FO Transaction File is equal to the FNTX\_FILE\_NUM of a previous FO Transaction File, the Acknowledgement File shall contain the appropriate RETURN\_CODE and the current FO Transaction File should not be processed.

6. Transactions shall be routed to a Home Agency/CSC based on the data contained in CSC/Agency Cross Reference found in the IAG Inter-CSC file spec.
7. Each FO Transaction File shall only contain transactions from a single Facility Operator (based on the ETC\_FAC\_AGENCY code in the detail transactions).

## 7.0 FO Distribution File

### 7.1 File Type

Variable length, LF delimited

### 7.2 File Name

{HOST\_AGENCY\_ID}\_{FO\_ID}\_YYYYMMDDHHMMSS.FNDX

Example: 0004\_0128\_20011201041015.FNDX  
NYSTA distribution data to Albany created on 04:10:15 on 12/01/2001

### 7.3 File Use

For every FO Transaction or FO Correction File received, the Host CSC shall return an FO Distribution File back to the Facility Operator summarizing the transactions in the FO Transaction/Correction File. The file header contains the file number from the corresponding FO Transaction/Correction File as well as an indicator as to the file type (Transaction vs. Correction). There are  $n$  records, one record for each Home Agency/CSC represented in the FO Transaction/Correction File. The Distribution File provides the Facility Operator with assurance that the transactions in the corresponding Transaction/Correction File have been bundled into the appropriate **INTX/ITXN** file and sent to that Agency/CSC (including the Host) for posting.

### 7.4 File Layout

FO Distribution File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	FNDX
HOST_AGENCY_ID	CHAR(4)	Standard agency ID code of the Host Agency (See IAG Inter-CSC file spec)
FO_ID	CHAR(4)	Standard agency ID code of the Facility Operator (See IAG Inter-CSC file spec)
FILE_DATE	CHAR(8)	Date file created. Format: YYYYMMDD
FILE_TIME	CHAR(6)	Time file created. Format: HHMMSS
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 0000000 – 99999999
DIST_TYPE	CHAR(4)	Indicates the type of file to which this distribution file applies. Values: FNTX - Transaction File Distribution FTNX - Correction File Distribution
TX_FILE_NUM	CHAR(6)	The file number of the FNTX/FTXN file to which this FNDX file is associated. Values: 000001 – 999999.
DELIMITER	CHAR(1)	LF
Header Total	45	

FO Distribution File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
DIS_HOME_AGENCY_ID	CHAR(4)	Standard agency ID code of the Home Agency/CSC to which a set of transactions were sent in an INTX file.
DIS_TX_NUM	CHAR(12)	The INTX/ITXN file number in which the transactions were sent.
DIS_NUM_TRANS	CHAR(8)	The number of transactions sent in the associated INTX/ITXN file.
DIS_AMOUNT	CHAR(12)	The total dollar value for the transactions sent in the associated INTX /ITXN file. Values: 000000000000 (\$0000000000.00) – 999999999999 (\$9,999,999,999.99)
DELIMITER	CHAR(1)	LF
Record Total	37	

### 7.5 Processing Requirements

1. The Distribution file provides the one-to-many link between FO Transaction/Correction Files (FNTX/FTXN) and FO Transaction/Correction Reconciliation files (FNRX/FRXN).

## 8.0 FO Transaction Reconciliation File

### 8.1 File Type

Variable length, LF delimited

### 8.2 File Name

{HOME\_AGENCY\_ID}\_{FO\_ID}\_YYYYMMDDHHMMSS.FNRX

Example: 0022\_0128\_20011201041015.FNRX

Consortium reconciliation data to Albany. The date and time represents when the corresponding INRX file was acknowledged by the Host (NYSTA) to the Home (Regional Consortium) ( on 04:10:15 on 12/01/2001).

### 8.3 File Use

The Host CSC will generate  $n$  FO Transaction Reconciliation Files for each FO Transaction File, one file for each Home Agency/CSC represented in the FO Transaction File (including the Host). These files correspond one for one to the INRX reconciliation files received from each Home Agency/CSC in response to an INTX file. The file header contains the corresponding INTX file number and there is one detailed record for each transaction reconciled. Per IAG rules, an INRX file will not be generated until all transactions in the corresponding INTX file have been fully processed. The FO Distribution File provides the link to the original FO Transaction File.

### 8.4 File Layout

FO Transaction Reconciliation File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	FNRX
HOME_AGENCY_ID	CHAR(4)	Standard agency ID code of the Home Agency/CSC (See IAG Inter-CSC file spec)
FO_ID	CHAR(4)	Standard agency ID code of the Facility Operator (See IAG Inter-CSC file spec.)
FILE_DATE	CHAR(8)	Date the corresponding INRX file was acknowledged. Format: YYYYMMDD
FILE_TIME	CHAR(6)	Time the corresponding INRX file was acknowledged. Format: HHMMSS
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
INTX_FILE_NUM	CHAR(12)	The file number of the INTX file to which this FNRX file is associated. Values: 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
Header Total	47	

FO Transaction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
ETC_TRX_SERIAL_NUM	CHAR(12)	The unique key of the transaction assigned by the Facility Operator. Values: 000000000000 – 999999999999
ETC_POST_STATUS	CHAR(4)	The result of the Home Agency's/CSC's attempt to post the transaction.  Values: PSNT - Non-Toll transaction posted successfully. DECL - Credit card declined. Only used for transactions passed directly through to the credit card. NOCC - Rejected, attempt was made to post the transaction to an account that is no longer a credit card account. RJIN - Rejected, the account had insufficient funds to post the transaction. Used for non-credit card based accounts. RJCX - Rejected, the transaction is an attempt to correct a transaction which has already been corrected.

FO Transaction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
		<p>RINV - Rejected, the transaction contains invalid data (e.g., invalid agency as defined in IAG Inter-CSC file spec Appendix A, invalid plaza as defined in Appendix B, invalid class as defined in Appendix C, etc.)</p> <p>TAGB - Rejected, tag in bad status (e.g., lost, stolen, etc.) where transaction date/time (ETC_EXIT_DATE/ETC_EXIT_TIME) is greater than date/time of acknowledgement from that Away Agency/CSC of receipt of full Tag Status File which indicated that the tag was in a Lost/Stolen status.</p> <p>ACCC - Rejected, account was in a closed status at the time the post was attempted. This code is used regardless of the status of the account at the time of the transaction.</p> <p>OLD3 - Rejected, old transaction – The difference between the date of the transaction and the date the transaction was received by the Home Agency/CSC exceeded that specified in the Non-Toll Reciprocity Agreement.</p> <p>RJDP - Rejected, duplicate transaction. Usually associated with a skip read or cross lane read where a tagged transaction and license plate transaction exist for the same customer at the same plaza within five (5) minutes. The license plate transaction is rejected as the duplicate.</p>
ETC_POST_PLAN	CHAR(5)	<p>The Facility Operator discount plan used when the transaction was posted. This is only applicable when the Home Agency/CSC offers the Facility Operator discount plans to its customers.</p> <p>Values: 00002 - PANYNJ Non-Revenue</p> <p>If no discount plan is used, this field shall be blank.</p>
ETC_DEBIT_CREDIT	CHAR(1)	<p>An indicator as to whether the amount reflected in ETC_OWED_AMOUNT is to be applied to the amount owed to the Facility Operator or removed from that amount.</p> <p>Values: Plus (+) – Apply to amount owed Space ( ) – Apply to amount owed Minus (-) – Remove from amount owed</p>
ETC_OWED_AMOUNT	CHAR(7)	<p>The amount owed to the Facility Operator. For rejected transactions, this would be 0000000.</p> <p>Values: 0000000 (\$00000.00) – 9999999 (\$99999.99)</p>
DELIMITER	CHAR(1)	LF
Record Total	30	

## 8.5 Processing Requirements

1. The Host CSC is to send FNRX files to the Facility Operator as INRX files are received from other CSCs or produced internally when transactions are posted to Host accounts. (See FO transaction File processing requirement #1).
2. An ETC\_POST\_STATUS of RJIN should normally not be used since the definition of E-ZPass Plus is that the accounts be credit card backed. Therefore, if an account no longer has a credit card associated with it, the ETC\_POST\_STATUS of NOCC should be used. However, the code of RJIN was added to allow for the case whereby a Home Agency/CSC wanted to utilize a business rule that allowed transactions valued at < \$20.00 to post against an account even if the credit card was no longer associated with said account. In such cases, if the account had insufficient funds to allow the non-toll transaction to post, an ETC\_POST\_STATUS of RJIN would be returned.
3. Transactions with an ETC\_POST\_STATUS of DECL or NOCC should be placed in a holding queue by the Facility Operator for potential resubmission via the FO Correction File. See Section 9.5 for additional details.

## **9.0 FO Correction File**

### **9.1 File Type**

Variable length, LF delimited

### **9.2 File Name**

{FO\_ID}\_{HOST\_AGENCY\_ID}\_YYYYMMDDHHMMSS.FTXN

Example: 0128\_0004\_20011201001015.FTXN

Albany transactions to NYSTA create on 00:10:15 on 12/01/2001

### **9.3 File Use**

The Facility Operator uses the FO Correction File to resubmit rejected, declined or incorrect transactions\*. Original transactions may be resubmitted only once and only if the most recent FO Tag Status file indicates that the corresponding tag is valid. The transactions included in a correction file may be from any Home Agency and from any time (within the processing time limits). FO Correction Files may not be sent more frequently than once per week.

\* Note: While the FO Correction File is used to make adjustments initiated by the Facility Operator, there is no corresponding file to make adjustments initiated by the Host (i.e. reversals and disputes). These adjustments are made at the CSC and the information is related to the Facility Operator via the Host Reports.

### **9.4 File Layout**

FO Correction File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	FTXN
FO_ID	CHAR(4)	Standard agency ID code of the Facility Operator (See IAG Inter-CSC file spec.)
HOST_AGENCY_ID	CHAR(4)	Standard agency ID code of the Host Agency (See IAG Inter-CSC file spec)
FILE_DATE	CHAR(8)	Date file created. Format: YYYYMMDD
FILE_TIME	CHAR(6)	Time file created. Format: HHMMSS
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
FTXN_FILE_NUM	CHAR(6)	A unique sequential number used to identify the FO Correction File to the Host Agency. Values 000001 – 999999.
DELIMITER	CHAR(1)	LF
<b>Header Total</b>	<b>41</b>	

FO Correction File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
CORR_REASON	CHAR(2)	A code denoting the reason for the correction. Values: 03 – Ignore tagged transaction 04 – Corrected plaza/lane information 05 – Corrected amount 06 - Repost attempt requested
All other fields from the FO Transaction File	CHAR(116)	All fields from the original transaction (refer to FO Transaction File structure for details) will be retransmitted with the appropriate fields corrected to their required values.
<b>Record Total</b>	<b>118</b>	

### **9.5 Processing Requirements**

1. The combination of FO\_ID and FTXN\_FILE\_NUM forms a unique sequential key which will be used by the receiving agency (the Host Agency) to verify that each FO Correction File was received without any gaps.

If the FTXN\_FILE\_NUM of the current Correction File does not equal the prior FTXN\_FILE\_NUM received from that FO\_ID plus one (1), the Acknowledgement File shall contain a RETURN\_CODE of '04' to signify that a gap in sequence numbers was found. However, the current FO Correction File should still be processed.

If the FTXN\_FILE\_NUM of the current FO Correction File is equal to the FTXN\_FILE\_NUM of a previous FO Correction File, the Acknowledgement File shall contain the appropriate RETURN\_CODE and the current FO Correction File should not be processed.

2. Transactions can only be sent in a Correction File once. Subsequent corrections to the same transaction, if required, must be handled manually.
3. The FO Correction File is separated by the Host CSC into individual ITXN files and sent to the appropriate Home CSC for processing. As such, the Host CSC should expect a corresponding IRXN file from the Home CSC when all of the transactions in the ITXN are processed. As they are received, the IRXN files are translated into FRXN files and sent to the Facility Operator. The Host CSC must produce an FRXN file for ALL Home CSCs including those corrections posted to its own accounts.
4. This file can only contain transactions that have been previously submitted via an FO Transaction File. If the Host CSC detects transactions in this file for which a transaction was not previously received in an FO Transaction File, the Host CSC shall reject the entire FO Correction File with a RETURN\_CODE of '02' in the corresponding Acknowledgement File.
5. As indicated in Section 8.5, the Facility Operator should maintain a holding queue of transactions reconciled with an ETC\_POST\_STATUS of DECL or NOCC. On a daily basis, the Facility Operator system should check the incoming FO Tag Status File to see if tags associated with transactions in the holding queue are present in the FO Tag Status File. If such a match is found, it means that the account associated with the tag is again valid for non-tolls and the Facility Operator may resubmit the associated transaction to the Host CSC via the FO Correction File with a CORR\_REASON value of '06'.

Note that transactions can only remain in the holding queue until the transaction date has exceeded the timeframe allowed for resubmissions as defined in the Non-Toll Reciprocity Agreement. Once that timeframe has been exceeded, such transactions cannot be resubmitted and must be removed from the holding queue. The Facility Operator may manually request from the Home CSC the name and address associated with the given tag so that the Facility Operator may pursue payment of the required non-toll fee.

## **10.0 FO Correction Reconciliation File**

### **10.1 File Type**

Variable length, LF delimited

### **10.2 File Name**

{HOME\_AGENCY\_ID}\_{FO\_AGENCY\_ID}\_YYYYMMDDHHMMSS.FRXN

Example: 0022\_0128\_20011201041015.FRXN

Regional Consortium reconciliation to Albany. The date and time represents when the corresponding IRXN file was acknowledged by the Host (NYSTA) to the Home (Regional Consortium) ( on 04:10:15 on 12/01/2001).

### **10.3 File Use**

The Host CSC will generate  $n$  FO Correction Reconciliation Files for each FO Correction File, one file for each Home Agency/CSC represented in the FO Correction File (including the Host). These files correspond one for one to the **IRXN** reconciliation files received from each Home Agency/CSC in response to an **ITXN** file. The file header contains the corresponding **ITXN** file number and there is one detailed record for each transaction reconciled. Per IAG rules, an **IRXN** file will not be generated until all transactions in the corresponding **ITXN** file have been fully processed. The FO Distribution File provides the link to the original FO Correction File.

### **10.4 File Layout**

FO Correction Reconciliation File – Header Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	FRXN
HOME_AGENCY_ID	CHAR(4)	Standard agency ID code of the Home Agency (See IAG Inter-CSC file spec.)
FO_ID	CHAR(4)	Standard agency ID code of the Facility Operator (See IAG Inter-CSC file spec.)
FILE_DATE	CHAR(8)	Date the corresponding IRXN file was acknowledged. Format: YYYYMMDD
FILE_TIME	CHAR(6)	Time the corresponding IRXN file was acknowledged. Format: HHMMSS
RECORD_COUNT	CHAR(8)	Count of transactions in the file. Does not include header record. Values: 00000000 – 99999999
ITXN_FILE_NUM	CHAR(12)	The file number of the ITXN file to which this FRXN file is associated. Values: 000000000001 – 999999999999.
DELIMITER	CHAR(1)	LF
Header Total	47	

FO Correction Reconciliation File – Detail Structure		
Field Name	Type/Size	Description/Valid Values
Same fields as the FO Transaction Reconciliation File	CHAR(30)	Same as the FO Transaction Reconciliation File.

### **10.5 Processing Requirements**

1. The Host CSC is to send FRXN files to the Facility Operator as IRXN files are received from other CSCs or produced internally when transactions are posted to Host accounts. (See FO Correction File processing requirement #3).
2. An ETC\_POST\_STATUS of RJIN should normally not be used since the definition of E-ZPass Plus is that the accounts be credit card backed. Therefore, if an account no longer has a credit card associated with it, the ETC\_POST\_STATUS of NOCC should be used. However, the code of RJIN was added to allow for

the case whereby a Home Agency/CSC wanted to utilize a business rule that allowed transactions valued at < \$20.00 to post against an account even if the credit card was no longer associated with said account. In such cases, if the account had insufficient funds to allow the non-toll transaction to post, an ETC\_POST\_STATUS of RJIN would be returned.

## **11.0 Acknowledgement File**

### **11.1 File Type**

Fixed length, LF delimited

### **11.2 File Name**

{FROM\_ID}\_{FILE\_NAME}\_{FILE\_TYPE}.ACK

Example: 0128\_0004\_20011201041015\_FTAG.ACK

Acknowledgement file from Albany in response to the NYSTA tag status file created on 04:10:15 on 12/01/2001

### **11.3 File Use**

The Acknowledgment File shall be created, by the entity receiving a file, to inform the entity which sent the original file that the file transmitted was received in its entirety. An Acknowledgement File shall be sent for each of the above referenced files.

### **11.4 File Layout**

Acknowledgment File - Detail Structure		
Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR(4)	ACK
FROM_ID	CHAR(4)	Standard agency ID code of the entity which received the file referenced in ORIG_FILE_NAME_TYPE.
TO_ID	CHAR(4)	Standard agency ID code of the entity which sent the file referenced in ORIG_FILE_NAME_TYPE.
ORIG_FILE_NAME_TYPE	CHAR(50)	The name and type of the file being acknowledged as received from the To Agency. Format: FILE_NAME.FILE_TYPE where FILE_NAME is the name of the file being acknowledged and FILE_TYPE is the type of the file being acknowledged.
FILE_DATE	CHAR(8)	Date ACK file created. Format: YYYYMMDD This is to be used by the To Agency/CSC as the acknowledgement date.
FILE_TIME	CHAR(6)	Time ACK file created. Format: HHMMSS This is to be used by the To Agency/CSC as the acknowledgement time.
RETURN_CODE	CHAR(2)	A code indicating the status of the file being acknowledged. Values: 00 – File was successfully received and verified. 01 – Header record count does not match the number of detail records found in the file. 02 – Detail record(s) found with invalid data. 03 – Not Used. 04 – Transaction Reconciliation File (or Correction Reconciliation File) does not match corresponding Transaction File (or Correction File). 05 – Duplicate file sequence number. 06 – Gap in sequence number. 07 - Invalid ZIP file or other file structure defect  Refer to Appendix C for the processing rules associated with the various RETURN_CODE values.
DELIMITER	CHAR(1)	LF
Detail Total		79

### **11.5 Processing Requirements**

1. This file shall contain a single record only. For each file received by the From Agency/Facility Operator, the From Agency/Facility Operator shall generate an Acknowledgement File and transmit the file back to the To Agency/Facility Operator.

2. The FILE\_DATE and FILE\_TIME fields shall be used by the To Agency/Facility Operator as the acknowledgement date/time of the transmitted file. The To Agency/Facility Operator shall be able to support an optional 'grace period' (for each From Agency/Facility Operator) which the To Agency/Facility Operator shall add to the FILE\_DATE and FILE\_TIME to use as the acknowledgement date/time.
3. The From Agency/Facility Operator should generate a report showing any detail records that were skipped due to invalid data (RETURN\_CODE = '02') and should have this report available for the To Agency/Facility Operator if needed.

## **12.0 Transmission Methodology**

1. The files shall be transmitted on a nightly basis.
2. Transmission shall be via SFTP (aka SSH File Transfer Protocol).
3. Files will be initially transmitted using a temporary file name. Upon successful completion of each file's transmission, the sending entity shall rename the file to its required file name. The receiving entity shall wait until it detects the presence of the required file names to begin processing the file. For example, the Tag Status File is transmitted using file name 0004\_19971201041015\_FTAG.ZIP.temp and, upon successful transmission, is renamed to 0004\_19971201041015\_FTAG.ZIP.

Receiving entities shall ensure that permissions are set properly on SFTP servers to allow file renaming to be done by the sending entity.

This will eliminate the situation where a receiving entity begins processing a file before its transmission was complete.