

# **NYCPS TMS: Prescriptive User**

## **Onboarding, Adoption, Migration**

### **& Delight Strategy**

---

## **I. Introduction: Vision, Principles & Scope**

---

This document mandates the comprehensive, state-of-the-art strategy for managing the entire user journey for the NYCPS Transportation Management System (TMS) – from initial awareness and onboarding, through process migration, to sustained adoption, active usage, and ultimate user delight. Our vision extends beyond mere system deployment; we aim to transform the daily transportation experience for hundreds of thousands of students, parents, guardians, school staff, OPT personnel, and bus operator teams, making it safer, more predictable, more efficient, and significantly less stressful.

Given the scale (~500k+ end-users initially), diversity of user personas (varying technical proficiency, languages, needs, roles), reliance on external parties (SBCs), and the critical nature of the service, this strategy emphasizes a \*\*human-centric, proactive, data-driven, multi-channel, and iterative approach.\*\* Success is defined not

just by system go-live, but by measurable user adoption, satisfaction, and the achievement of positive behavioral changes enabled by the TMS.

## Core User Journey Principles (Mandatory Adherence):

---

- **User-Centricity Above All:** Every decision regarding onboarding, communication, training, support, and feature design **\*must\*** prioritize the needs, context, and experience of the specific user persona being addressed.
- **Simplicity & Clarity:\*\* Onboarding processes, user interfaces, training materials, and communications** **\*must\*** be exceptionally clear, concise, intuitive, and easy to understand, minimizing cognitive load and friction.
- **Proactive & Personalized Communication:\*\* Engage users early and often through targeted, relevant communications via preferred channels, anticipating needs and providing timely updates.**
- **\*\*Multi-Channel Support & Enablement:\*\* Offer diverse support options (self-service KB, video, chat, phone, potentially in-person) and training formats (online, VILT, job aids) catering to different learning styles and technical abilities.**
- **\*\*Data-Driven Iteration:\*\* Continuously measure user adoption, engagement, satisfaction, and friction points. Use this data to rapidly iterate and improve onboarding flows, training content, support processes, and the application itself.**
- **\*\*Building Trust & Confidence:\*\* Emphasize system reliability, data security/privacy, and responsiveness to feedback to build user trust from day one.**

- **\*\*Positive Reinforcement & Delight (Where Appropriate):\*\*** Go beyond basic functionality to create moments of positive reinforcement and ease-of-use that encourage adoption and positive sentiment (includes potential for ethical gamification).
- **\*\*Accessibility & Inclusivity:\*\*** Ensure all user-facing components, communications, and training materials meet WCAG 2.0 AA standards and are available in mandated NYCPS languages.

## II. Foundational Elements: Preparing for Success

Before initiating large-scale onboarding, we will establish critical foundational elements.

### A. Exhaustive Stakeholder & Persona Analysis

#### Implementation How-To:

1. Conduct detailed analysis for \*each\* distinct user group:  
**Parents/Guardians (GE, SE, Pre-K/EI, STH, Foster, DV context, varying tech skills, different languages), Students (different age groups, tech access, special needs considerations), School Administrators/Staff (varying**

**roles/permissions), OPT Staff (Routers, Dispatchers, Admins, Support, Leadership), SBC Personnel (Owners, Dispatchers, Drivers, Attendants).**

- 2. Methods: Surveys (digital/paper), focus groups (virtual/in-person, segmented by persona), interviews with representative users and leadership from each group, analysis of existing support ticket data/complaint logs.**
- 3. Document detailed \*\*User Personas\*\* for key roles in Confluence, including: Goals, Tasks related to TMS, Current Pain Points, Technical Proficiency/Access, Communication Preferences, Key Motivations, Potential Barriers to Adoption.**
- 4. Develop \*\*User Journey Maps\*\* illustrating the end-to-end experience (awareness -> onboarding -> regular use -> support -> offboarding) for critical personas, identifying potential friction points and opportunities for delight.**

**Responsibility:** UX Lead/Researchers, Business Analysts, OCM Lead, Comms Lead, PM.

## B. Consistent Branding & Messaging Framework

### Implementation How-To:

- 1. Develop a \*\*TMS Project Style Guide & Messaging Framework\*\* document (in Confluence), aligned with**

**overall NYCPS branding.**

**2. Define: Project Name/Logo (if applicable), Key Value Propositions (tailored per persona), Core Messages, Tone of Voice (e.g., supportive, clear, reliable, modern), Visual Guidelines (colors, fonts, imagery usage across apps, web, comms, training).**

**3. Ensure \*all\* project communications, UI elements, training materials, and support interactions adhere strictly to this framework for consistency and brand recognition.**

**Responsibility:** Comms Lead, UX Lead, PM, approved by NYCPS Communications Dept.

## C. Platform Readiness Verification

*Implementation How-To:*

**1. Establish formal \*\*Readiness Checklists\*\* for each user-facing application (Parent App, Student App, Driver App, Admin Consoles) before initiating onboarding for that application/user group.**

**2. Checklist \*must\* include sign-off confirming:**

- Successful completion of UAT by representative users.**

- **Resolution of all blocking/critical bugs identified during testing.**
- **Performance testing results meet NFRs for expected user load.**
- **Security testing (Pen Test, scans) completed with no outstanding critical/high vulnerabilities.**
- **Accessibility audit (WCAG 2.0 AA) passed / critical issues remediated.**
- **Availability of necessary support materials (FAQs, initial KB articles).**
- **Support teams trained and ready.**
- **Monitoring and alerting configured for the application/service.**

### **3. Obtain formal Go/No-Go decision for onboarding initiation based on the readiness checklist review during Release Readiness meetings.**

**Responsibility:** QA Lead, Release Manager, PM, Tech Leads, Security Lead, Accessibility Specialist.

**Quality Gate:** Formal sign-off on Platform Readiness Checklist required before initiating onboarding for any user group onto a new application/major feature set.

## III. Pre-Launch Communication & Awareness Strategy

Generating awareness, building positive anticipation, setting clear expectations, and providing initial guidance \*before\* users need to onboard is crucial for a smooth transition.

### A. Phased Communication Approach

#### *Implementation How-To:*

1. **Phase 1: Awareness & Vision (Months ~6-9):**
  - **Goal:** Introduce the upcoming TMS project, highlight the vision and key benefits \*for each specific audience\*.
  - **Channels:** Internal NYCPS comms (leadership emails, newsletters, staff meetings), targeted emails to School Principals/Admins, updates at SBC meetings, potentially high-level website landing page.
  - **Content:** Focus on the "why" – improving safety, reliability, communication, efficiency. Address

**known pain points of current system.**

**High-level timeline overview.**

**2. \*\*Phase 2: Detailed Information & Preparation (Months ~9-11):\*\***

- **\*\*Goal:\*\*** Provide more specific details about upcoming changes, required actions, training resources, and timelines relevant to each user group.
- **\*\*Channels:\*\*** Dedicated TMS section on DOE website, targeted email campaigns per persona, virtual town halls/webinars for School Admins/SBCs/OPT Staff, initial teasers within existing relevant DOE apps (e.g., NYCSA).
- **\*\*Content:\*\*** Sneak peeks of new app interfaces (screenshots/videos), explanation of new processes (e.g., QR code scanning), links to preliminary FAQs and training resources, clear timeline for rollout phases affecting them, instructions for upcoming account activation steps (if known).

**3. \*\*Phase 3: Pre-Launch Countdown & Activation (Month 11-12 / Just before phased rollout):\*\***

- **\*\*Goal:\*\*** Drive account activation/setup, reinforce key "go-live"

**dates for specific groups, provide final instructions and links to support.**

- **\*\*Channels:\*\*** Direct emails with activation links/instructions, prominent website banners, push notifications (if possible via existing apps), final reminders via school/SBC channels.
- **\*\*Content:\*\*** Clear Call-to-Action (e.g., "Activate your TMS Account Now!", "Download the Parent App"), step-by-step activation guides (video/PDF), confirmation of specific group's launch date, links to day-1 support channels.

**Responsibility:** Comms Lead, PM, OCM Lead, NYCPS Communications Dept.

## B. Communication Implementation Details

### *Implementation How-To:*

1. Develop a detailed **\*\*Master Communications Calendar\*\*** (e.g., shared spreadsheet/calendar) mapping messages, channels, audiences, and timing to the overall project/rollout timeline.
2. Create reusable **\*\*Communication Templates\*\*** for different message types (announcements, instructions,

**FAQs, alerts) tailored per persona and translated into all mandated NYCPS languages. Ensure templates adhere to branding guidelines.**

- 3. Utilize NYCPS's existing mass communication platforms (email marketing tools, website CMS, potentially SMS services) where possible, ensuring compliance with contact policies.**
- 4. Segment distribution lists meticulously based on user role/persona, school, district, SBC, language preference to ensure relevance and avoid message fatigue.**
- 5. Track communication delivery and engagement metrics (email open rates, website hits, webinar attendance) where possible to gauge effectiveness.**

**Responsibility:** Comms Lead, Technical Team (for data segmentation/list management), NYCPS Communications Dept. (Channel access).

## **IV. User Account Migration & Onboarding Process (RFP Sec 3.28.6 Focus)**

**This section details the prescriptive technical and procedural steps for securely and efficiently getting ~500k+ users into the new TMS system, leveraging existing identity sources where possible.**

## A. Guiding Principles for Onboarding

- **Seamless Experience:** Aim for minimal friction, especially for Parents/Students already using systems like NYCSA.
- **Security First:** Employ robust identity verification and secure authentication (SSO/MFA) methods. Comply strictly with data privacy regulations during data linking.
- **Clarity & Guidance:** Provide simple, step-by-step instructions within the app/portal and supporting materials.
- **Scalability:** Design processes and technical integrations capable of handling high volumes during peak onboarding periods.
- **Data Accuracy:** Ensure accurate mapping and linking of user identities between TMS and source systems (NYCSA, DOE Directory, SBC Rosters).

## B. Technical Strategy: Identity Federation & Provisioning

### *Implementation How-To:*

1. **Parent/Student Onboarding (Primary Path - NYCSA Integration):**
  - **Federation Setup:** Implement Single Sign-On (SSO) using SAML 2.0 or OpenID

**Connect (OIDC) between TMS (acting as Service Provider - SP) and the NYCPS NYCSA Identity Provider (IdP). Requires close collaboration with DIIT team managing NYCSA IdP. Configure trust, attribute mapping (securely passing verified parent/guardian ID and linked student IDs), and secure key exchange within AWS Cognito (or equivalent IAM Identity Provider configuration).**

- **\*\*Onboarding Flow:\*\***
  - a. User downloads TMS Parent App/visits web portal.**
  - b. User selects "Login/Activate with NYCSA".**
  - c. User is redirected securely to NYCSA login page.**
  - d. User authenticates with NYCSA credentials (MFA if applicable).**
  - e. Upon successful NYCSA authentication, user is**

**redirected back to TMS  
with a secure assertion  
(SAML response or OIDC  
token) containing verified  
identity attributes.**

- f. TMS backend validates  
the assertion, extracts  
necessary identifiers  
(Parent ID, linked Student  
IDs).**
- g. TMS automatically  
provisions the parent  
account and links  
associated student  
profiles based on the  
verified identifiers  
received from NYCSA.**
- h. User is logged into the  
TMS app/portal.  
Minimal/no additional  
data entry required.**

## **2. Parent/Student Onboarding (Secondary Path - Manual Registration/Linking):\*\***

- **\*\*Requirement:\*\*** For users without NYCSA or needing to link later. Requires careful identity verification.
- **\*\*Registration Flow:\*\***
  - a. User selects "Register New Account" in app/portal.
  - b. Collect minimal required PII (e.g., Name, Email, Phone). Secure password creation/MFA setup (e.g., using AWS Cognito User Pools).
  - c. **\*\*Identity Verification:\*\*** Implement a robust process to link the account to specific student(s). Options (requires NYCPS policy decision & technical implementation):
    - A: Use unique, secure invitation code

**sent  
separately via  
mail/email  
based on  
existing DOE  
records.**

- **B: Require user to input verifiable student information (e.g., Student ID + DOB + School - \*requires careful security/privacy review\*).**

- **C: Route registration request to designated**

**School  
Administrators  
for manual  
verification/approval  
via their TMS  
console.**

**d. Upon successful  
verification, link  
student(s) to the parent  
account in TMS backend.**

- **\*\*Account Linking Flow:\*\*** Provide an option within the TMS profile settings for manually registered users to link their account to NYCSA later via the SAML/OIDC flow.

**3. Staff Onboarding (DOE, School Admins):\*\***

- **\*\*Primary Path (SSO):\*\*** Implement SAML/OIDC federation between TMS and the primary DOE employee Identity Provider (e.g., Azure AD/ADFS). Map directory attributes to assign appropriate TMS roles (School Admin, OPT Router, etc.) based on group membership or employee attributes.

- **\*\*Secondary Path (Invitation):\*\*** If SSO not feasible for all staff, use a secure invitation system (e.g., Cognito User Pools invite flow) sent to official DOE email addresses. Initial role assignment potentially based on invitation context or requires admin approval post-registration. MFA mandatory.

#### **4. Staff Onboarding (SBC Dispatchers, Drivers, Attendants):\*\***

- **\*\*Challenge:\*\*** No central identity system. Requires coordination with SBCs and OPT validation data.
- **\*\*Proposed Flow:\*\***
  - a. OPT provides validated lists of authorized personnel (linked to PETS clearance status) per SBC to the TMS system regularly.**
  - b. \*\*Option A (SBC Admin Managed):\*\*** Provide SBC Admin console functionality for designated SBC managers to invite their staff

**(drivers, attendants, dispatchers) using official email/phone. TMS validates invitee against the authorized OPT list before sending secure registration link. SBC Admin assigns initial role.**

**c. \*\*Option B (Direct Invite):\*\* TMS system sends direct invitations (via email/SMS) to authorized personnel from OPT lists with secure registration links.**  
**Requires reliable contact info from OPT.**

**d. Registration involves secure password creation + MFA setup (e.g., SMS or authenticator app via Cognito).**

**e. TMS backend links registered user to their**

**SBC and role based on  
initial OPT list/SBC Admin  
assignment.**

## **5. Technical Implementation:\*\***

- Utilize \*\*AWS Cognito\*\* (User Pools for user directories/registration/MFA, Identity Pools for federating with SAML/OIDC IdPs like NYCSA/DOE AD).**
- Develop backend microservices (Lambda/Fargate) to handle user provisioning, profile management, role mapping, and linking logic, interacting with Cognito APIs and internal databases.**
- Develop secure frontend/mobile flows for login, registration, MFA setup, and account linking.**
- Implement rigorous logging and auditing for all account creation, authentication, and linking events.**

**Responsibility:** Tech Leads (Backend, Frontend, Mobile), Security Architect (AuthN/AuthZ Design), Cloud Architect (Cognito/IAM), DIIT Team (NYCSA/DOE IdP Integration), OPT/SBC Liaisons (Staff list validation).

***All account creation and data linking processes must strictly adhere to FERPA consent requirements and NYCPSC data privacy policies. Identity verification steps are critical.***

## V. Comprehensive Training & Enablement Strategy

Effective training goes beyond simple tool usage; it drives understanding, adoption, and proficiency within new workflows, tailored to the diverse needs of each user group.

### A. Layered & Multi-Modal Approach

#### Implementation How-To:

1. Develop a \*\*Blended Learning Strategy\*\* combining self-service resources with targeted instructor-led sessions.

## **2. \*\*Layer 1: Foundational Self-Service Resources**

**(Available to All):\*\***

- \*\*Online Knowledge Base (KB):\*\***  
**Central, searchable repository (Confluence or integrated support tool) with FAQs, step-by-step guides, troubleshooting tips, policy summaries.**  
**Continuously updated.**
- \*\*Micro-Learning Videos:\*\* Short (1-3 min), task-focused video tutorials demonstrating key features for each app/role (e.g., "How to Report an Absence", "How to Scan a Student QR Code", "How to View Your Route").**  
**Professionally produced with clear visuals/audio and multi-language captions/subtitles. Hosted on DOE site/platform.**
- \*\*Interactive In-App Walkthroughs:\*\***  
**Guided tours within the mobile/web apps for first-time users or new feature introductions (using tools like Pendo, Appcues, or custom implementation).**
- \*\*Quick Reference Guides (QRGs):\*\***  
**Downloadable/printable 1-2 page PDFs summarizing essential tasks for specific roles (especially Drivers, School Admins).**

### **3. \*\*Layer 2: Role-Specific Structured Training (Online**

#### **Modules / VILT):\*\***

- Develop structured online learning modules (using Articulate Storyline, Rise, or similar authoring tools; hosted on DOE LMS or dedicated platform) or conduct Virtual Instructor-Led Training (VILT) via video conference for roles requiring deeper understanding or process change adaptation (OPT Staff, School Admins, SBC Dispatchers/Trainers).**
- Content covers end-to-end workflows, integration points, advanced features, reporting, support procedures, and relevant BCP/Manual workaround processes.**
- Include knowledge checks, simulations, and scenarios. VILT includes live Q&A. Record VILT sessions.**

### **4. \*\*Layer 3: Targeted Workshops & Hands-On Support:\*\***

- Conduct in-person or intensive virtual workshops for critical roles undergoing significant process change (e.g., OPT Routers transitioning to new dynamic routing tools).**

- Provide "Floor Walker" or dedicated support during initial go-live phases for key user groups (OPT, Pilot Schools).

**Responsibility:** Training Lead, Instructional Designers, Technical Writers, Videographers, SMEs (Content Experts), Trainers.

## B. Persona-Tailored Content & Delivery

---

### *Implementation How-To:*

1. Develop distinct \*\*Training Curricula\*\* for each major user persona (Parent/Guardian, Student, Driver/Attendant, SBC Dispatcher, School Admin, OPT Router, OPT Admin, Support Staff), focusing only on the features and processes relevant to their role.
2. Tailor language, examples, and delivery method to the technical proficiency and learning context of each group (e.g., simple mobile-focused videos for parents vs. detailed workshops for routers).
3. Provide all user-facing materials (Videos, KB articles, QRGs, App UI text) in mandated NYCPS languages (using professional translation services).

**Responsibility:** Training Lead, Instructional Designers, SMEs, Translation Services.

## C. Train-the-Trainer Program (for SBCs)

### *Implementation How-To:*

- 1. Identify and certify designated trainers within each SBC.**
- 2. Provide these trainers with dedicated, intensive VILT/workshop sessions covering the Driver App, Attendant responsibilities (if applicable), Dispatcher console basics, relevant procedures (login, route selection, scanning, communication, support), and how to deliver the training effectively.**
- 3. Equip SBC trainers with a standardized toolkit: Presentation slides, demo scripts, QRGs, video links, FAQs, support contacts.**
- 4. Establish a dedicated communication channel/forum for SBC trainers to ask questions and receive ongoing support from the central Training Team/Vendor.**
- 5. Implement a mechanism for tracking training completion reported by SBC trainers for their staff.**

**Responsibility:** Training Lead, SBC Liaisons, Vendor Trainers (if applicable).

## D. Training Logistics & Measurement

### *Implementation How-To:*

- 1. Develop a detailed \*\*Training Schedule\*\* aligned with the phased technical rollout plan. Communicate schedule clearly to all affected groups.**
- 2. Utilize a Learning Management System (LMS) or tracking spreadsheet to manage registration, attendance, completion records, and feedback for VILT/Workshop sessions and potentially online modules.**
- 3. Collect \*\*Training Feedback\*\* via post-session surveys (e.g., Kirkpatrick Level 1 - Reaction).**
- 4. Measure \*\*Learning & Application\*\* (Kirkpatrick Level 2 & 3) through knowledge checks, observed usage patterns (system analytics), support ticket analysis (are users asking questions covered in training?), and supervisor feedback.**
- 5. Report on training completion rates and effectiveness metrics to project leadership. Use feedback to iteratively improve training content and delivery.**

**Responsibility:** Training Lead, Project Manager, LMS Administrator (if used).

## **VI. Phased Rollout Strategy**

**A carefully planned and executed phased rollout is essential to mitigate risk, manage complexity, gather feedback, and ensure a smooth transition across the vast NYCPSS transportation network.**

## **A. Phasing Design Principles**

---

- **Risk Mitigation:**\*\* Start small, validate assumptions, identify issues in a limited scope before impacting the entire system.
- **Learning & Adaptation:**\*\* Use early phases to gather real-world feedback from users and operations to refine the system, processes, training, and support before broader rollout.
- **Manageable Chunks:**\*\* Break down the massive user base and geographical area into logical, manageable phases.
- **Clear Communication:**\*\* Ensure stakeholders in each phase understand the timeline, scope, expectations, and support channels specific to their rollout wave.
- **Dedicated Support:**\*\* Provide heightened "hypercare" support during the initial launch of each phase.

## **B. Phasing Criteria & Methodology**

---

*Implementation How-To:*

**1. \*\*Define Phasing Dimensions:\*\*** Determine the primary dimension(s) for phasing rollout. Options include:

- **\*\*Geography:\*\*** By Borough, then by District within Borough.
- **\*\*School Bus Contractor (SBC):\*\*** By groups of willing/capable pilot SBCs, then expanding.
- **\*\*User Type:\*\*** Internal OPT users first, then School Admins/SBC Dispatchers, then Drivers, then Parents/Students.
- **\*\*Route Type:\*\*** Special Education routes first (potentially higher need for tracking), then General Education.
- **\*\*Combination:\*\*** A hybrid approach (e.g., Pilot 1-2 Districts covering all route types/users within those districts, then expand district-by-district). \*\*(Recommended Approach)\*\*

**2. \*\*Pilot Phase Definition (Mandatory):\*\***

- Select a small (~2-5% of total volume), representative pilot group (e.g., 1-2 Community School Districts with a mix of

**school types, SE/GE routes, and participating SBCs).**

- **Define clear entry/exit criteria and success metrics for the pilot phase (e.g., >90% device uptime, >85% successful ridership scan rate, core workflows functional, support volume manageable, positive initial user feedback).**
- **Duration: Typically 4-8 weeks of operational use after technical deployment.**
- **Intensive monitoring, feedback collection (surveys, focus groups), and support during this phase.**

### **3. \*\*Subsequent Rollout Waves:\*\***

- **Define logical waves for expansion based on the chosen phasing dimension (e.g., Wave 1 = Pilot Districts, Wave 2 = Next 5 Districts, Wave 3 = Remaining Districts).**
- **Base the schedule for subsequent waves on the successful completion and lessons learned from the previous wave/pilot. Build buffer time between waves.**
- **Communicate the wave schedule clearly to all impacted parties well in advance.**

- 4. \*\*Formal Go/No-Go Decisions:\*\*** Implement formal Go/No-Go checkpoints before starting the pilot and before initiating each subsequent rollout wave, based on technical readiness, operational preparedness, training completion, and pilot/previous wave success metrics. Requires sign-off from Project Leadership/Steering Committee.
- 5. \*\*Technical Enablement:\*\*** Ensure CI/CD pipelines and feature flagging mechanisms (if used) support phased rollout (e.g., deploying features only to users/devices associated with the current wave's districts/SBCs).

**Responsibility:** Project Managers (Plan Definition/Management), Release Manager, OCM Lead, Comms Lead, Steering Committee (Approval).

*The phased rollout plan, including phasing criteria and wave definitions, requires formal approval from project sponsors and clear communication to all affected parties.*

## VII. Adoption & Engagement Strategy ("User Delight")

Driving adoption requires moving beyond basic functionality to create a positive, engaging, and supportive user experience that users **\*want\*** to engage with.

## A. Core Pillars of Adoption

- **Ease of Use (UX):**\*\* The single most important factor. The system **\*must\*** be intuitive, simple, fast, and reliable for each persona's core tasks.
- **Perceived Value:**\*\* Users must clearly understand how the system benefits **\*them\*** directly (e.g., Parents: peace of mind, less waiting; Drivers: clearer routes, easier reporting; Admins: better visibility, faster issue resolution).
- **Effective Communication & Support:**\*\* Proactive updates, accessible help materials, and responsive support build confidence and reduce frustration.
- **Trust & Reliability:**\*\* Users must trust the system's data (ETAs, locations) and its availability. Security and privacy assurances are foundational.
- **Feedback Responsiveness:**\*\* Demonstrating that user feedback leads to tangible improvements fosters buy-in and loyalty.

## B. Specific Strategies & Tactics

### *Implementation How-To:*

1. **Continuous UX Improvement:**\*

- **Implement ongoing usability testing (even post-launch) with representative users.**
- **Actively monitor user feedback channels (support tickets, app reviews, surveys) specifically for usability issues.**
- **Prioritize UX enhancements and simplification efforts in the product backlog based on feedback and usage analytics.**
- **Ensure mobile apps follow platform-specific (iOS/Android) Human Interface Guidelines.**

**Responsibility:** UX Team, Product Owner, Development Teams.

## **2. \*\*Proactive & Personalized Communication (Post-Launch):\*\***

- **Use targeted in-app messages or emails to highlight new features relevant to specific user groups.**
- **Provide proactive tips or reminders (e.g., "Remember to report absences by 7 AM!").**
- **Personalize notifications where appropriate and secure (e.g., using**

**student's first name cautiously in parent alerts).**

- **Clearly communicate system maintenance schedules or known issues impacting users.**

**Responsibility:** Comms Lead, Product Owner, Marketing (if applicable).

### **3. \*\*Gamification (Strategic & Ethical Application):\*\***

- **\*\*Identify Target Behaviors:\*\*** Focus on behaviors that benefit the system and user experience (e.g., Drivers: consistent on-time performance, smooth driving metrics; Parents: timely absence reporting).
- **\*\*Design Simple Mechanics:\*\*** Implement \*optional\*, non-intrusive game mechanics:
  - **\*Progress Tracking:\*** Visual indicators showing completion of onboarding steps or training modules.
  - **\*Badges/Accolades (Non-Monetary):\*** Award digital badges within the app profile for achievements

**(e.g., "On-Time Champion" for drivers, "Planning Pro" for parents consistently reporting absences).**

- **\*Streaks:\*** Recognize consistent positive behavior (e.g., "5 Days Smooth Driving!").
- **\*Leaderboards (Use with EXTREME Caution):\*** If used (e.g., potentially for voluntary driver performance comparison within an SBC, \*never\* publicly), ensure they are opt-in, anonymized where appropriate, and focus on positive metrics, avoiding creation of undue pressure or negative competition.  
Requires careful ethical review and NYCPS approval.
- **\*\*Ethical Review:\*\* \*Mandatory\*** review of any gamification proposal by AI/Ethics

**Review group and NYCPS stakeholders to ensure fairness, avoid unintended negative consequences (e.g., drivers rushing), and maintain focus on core service goals.**

- **\*\*Monitor Impact:\*\*** Track impact of gamification on target behaviors and user satisfaction. Be prepared to adjust or remove features if they are ineffective or problematic.

**Responsibility:** Product Owner, UX Designer, Ethics Review Group, Development Team (Implementation).

**Gamification must be implemented thoughtfully and ethically, focusing on positive reinforcement and avoiding coercive or demotivating elements.**

#### **4. \*\*Feedback Implementation Visibility:\*\***

- When releasing updates based on user feedback, explicitly mention this in release notes and targeted communications ("Based on your feedback, we've improved X...").
- Create a "Suggest a Feature" or feedback area where users can see ideas and potentially vote (requires moderation).

**Responsibility:** Product Owner, Comms Lead.

## 5. \*\*Building a Community (Optional):\*\*

- Consider establishing moderated online forums or user groups (e.g., via DOE website or dedicated platform) for specific personas (e.g., School Admins, potentially Parents) to share best practices, ask questions, and provide peer support. Requires dedicated community management resources.

**Responsibility:** Comms Lead, Support Manager, Community Manager (if applicable).

# VIII. Support Strategy (Launch & Ongoing)

Providing accessible, responsive, and effective support is crucial for user satisfaction and adoption, especially during the initial rollout and transition period.

## A. Launch Support ("Hypercare") Plan

*Implementation How-To:*

- 1. \*\*Dedicated Resources:\*\*** Allocate increased L1/L2 support staff dedicated specifically to TMS launch waves.
- 2. \*\*Extended Hours:\*\*** Offer extended support hours (phone, chat, email) covering peak usage times (morning/afternoon routes) during the initial weeks of each rollout phase.
- 3. \*\*Proactive Monitoring:\*\*** SRE/Ops team performs intensive monitoring of system performance and error rates during launch waves, proactively identifying and addressing issues.
- 4. \*\*Rapid Escalation Path:\*\*** Establish expedited escalation path from L1/L2 to dedicated L3 (Dev/SRE) "launch support" engineers for resolving critical go-live issues quickly.
- 5. \*\*Floor Walkers/On-Site Support:\*\*** Provide on-site support personnel at key OPT locations and potentially pilot schools during the first few days of their go-live.
- 6. \*\*Daily Triage Meetings:\*\*** Conduct daily meetings between Support, PM, OCM, Dev/Ops leads during hypercare period to review issue trends, prioritize fixes, and adjust support strategy.
- 7. \*\*Targeted Communications:\*\*** Send proactive tips and address common issues identified during launch via targeted user communications.

**Responsibility:** Support Manager, L1/L2/L3 Teams, SRE/Ops, PM, Comms Lead.

## B. Ongoing Tiered Support Model

### *Implementation How-To:*

- 1. Implement the L1/L2/L3 support structure defined in the Operational Excellence strategy.**
- 2. \*\*L1 (Service Desk):\*\* Focus on logging all contacts, resolving common issues using KB/SOPs (password resets, basic app navigation, "how-to" questions), and accurately routing escalations with complete information. Measure First Call Resolution (FCR) rate.**
- 3. \*\*L2 (Application/System Support):\*\* Focus on troubleshooting application errors, configuration issues, data inconsistencies, complex workflow problems using monitoring tools, logs, and advanced runbooks. Contribute actively to KB article creation/updates based on resolved issues.**
- 4. \*\*L3 (Engineering/Expert):\*\* Focus on fixing code bugs, resolving deep infrastructure/platform issues, handling complex security incidents, performing critical database interventions. Feed solutions and root causes back into documentation and potentially automation efforts.**
- 5. \*\*SLA Enforcement:\*\* Track ticket response and resolution times rigorously against defined SLAs using the Ticketing System (Jira Service Management). Alert management on SLA breaches.**

**Responsibility: Support Manager, L1/L2/L3 Team Leads & Members.**

## C. Self-Service Support Resources

### *Implementation How-To:*

- 1. Maintain and continuously expand the centralized, searchable \*\*Knowledge Base (KB)\*\* in Confluence or the Support Tool. Structure articles clearly by persona, application module, and task. Use screenshots and video snippets.**
- 2. Keep \*\*Video Tutorial Library\*\* (hosted on DOE site) up-to-date with new features and common workflows.**
- 3. Ensure \*\*FAQs\*\* are current and address the most common user questions identified through support ticket analysis.**
- 4. Provide clear links to relevant self-service resources within application help menus, error messages, and support communications.**
- 5. Implement \*\*usage analytics\*\* on KB/videos to understand which resources are most helpful and identify content gaps.**

**Responsibility: Training Team, Technical Writers, Support Manager (Content identification), L2/L3 (Contributing solutions).**

# IX. Measurement, Feedback & Continuous Improvement Loop

Measuring the success of onboarding and adoption efforts and actively soliciting user feedback is critical for iterative improvement.

## *Implementation How-To:*

1. **Define Core Metrics:** Establish clear, measurable KPIs for onboarding and adoption:
  - **Onboarding:** Account Activation Rate (%), Time to Complete Onboarding Steps (avg), Onboarding Flow Drop-off Rate (%).
  - **Adoption:** Daily Active Users (DAU), Weekly Active Users (WAU), Monthly Active Users (MAU) per persona; Feature Adoption Rate (e.g., % of parents using absence reporting); Session Duration/Frequency.
  - **Satisfaction:** CSAT Scores (from surveys), App Store Ratings (if applicable), Net Promoter Score (NPS - periodic).

- **\*\*Support Efficiency:\*\*** Support Ticket Volume (trend, per user group), First Contact Resolution (FCR) Rate, Average Handle Time (AHT), KB Usage Rate vs. Ticket Volume.

## 2. **\*\*Implement Measurement Tools:\*\***

- Integrate product analytics tools (Segment, Amplitude, Firebase Analytics, or custom logging + QuickSight) into web/mobile apps to track usage patterns, feature adoption, and onboarding funnel completion. **\*\*Ensure anonymization and compliance with privacy policies.\*\***
- Use survey tools (e.g., SurveyMonkey, Qualtrics, in-app survey tools) for CSAT/NPS collection.
- Extract data from support ticketing system (Jira SM) for support metrics.

## 3. **\*\*Feedback Channels:\*\***

- Implement simple in-app feedback forms ("Rate this feature", "Report an issue").
- Monitor App Store reviews (if published there).
- Analyze support ticket themes and user comments.

- **Conduct periodic user interviews and focus groups specifically targeting onboarding and adoption experience.**

#### **4. \*\*Analyze & Act:\*\***

- **Regularly (e.g., monthly) review adoption KPIs and feedback themes in dedicated meetings (PO, UX, PM, Leads).**
- **Identify friction points in onboarding or areas of low adoption/satisfaction.**
- **Generate actionable insights and translate them into User Stories or improvement tasks prioritized in the Product Backlog.**
- **"Close the loop" by communicating back to users (where feasible) about improvements made based on their feedback.**

**Responsibility:** Product Owner (Prioritization), Data Analysts (Reporting/Analysis), UX Researchers (Qualitative Feedback), PMs (Overseeing loop), Support Manager (Support Metrics).

***Automate collection and dashboarding of quantitative KPIs (Activation, DAU/WAU, Feature Use, CSAT) to provide near real-time insights.***

# X. Conclusion: Achieving Sustained Adoption & User Delight

---

This comprehensive User Onboarding, Adoption, Migration, and Delight Strategy provides the detailed roadmap necessary to successfully transition over half a million diverse users to the new NYCPS TMS platform and ensure its long-term success. By focusing relentlessly on user-centric design, clear and proactive communication, robust multi-channel training and support, phased risk-mitigating rollout, strategic use of engagement techniques like ethical gamification, and a continuous feedback loop driven by data, we move beyond simple system deployment towards true user adoption and satisfaction.

The meticulous attention to detail in account migration leveraging NYCSA, persona-specific approaches, rigorous platform readiness checks, and dedicated launch support addresses the unique challenges of this large-scale government implementation. Executing this strategy diligently, with strong collaboration between project teams and NYCPS stakeholders, will be critical in realizing the ultimate goal: a transportation management system that not only meets functional requirements but truly delights its users and demonstrably improves the daily experience for the entire NYCPS community.