CAMBRIDGE SYSTEMATICS

TransAM

General User

User Guide

prepared for

Orange County Department of Planning (OCDP)

prepared by

Cambridge Systematics, Inc.

user guide

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1.0 Welcome!

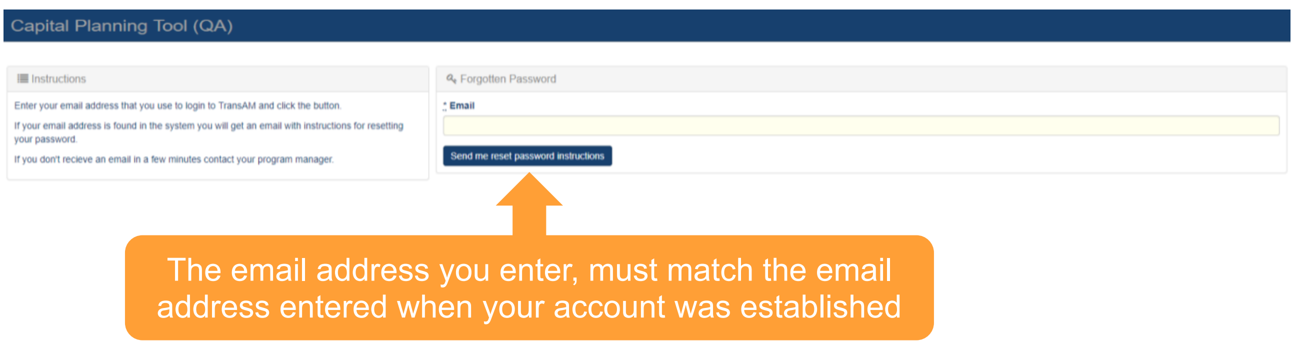
TransAM is an asset management system designed to support the needs of State DOTs, Planning Agencies, and Transit Agencies. The system manages assets of all types, including revenue vehicles, equipment, facilities, and infrastructure. The system stores crucial information about every asset category and maintains a complete history of the asset as it ages, including; changes in condition, usage, value/depreciation, and other lifecycle events are, that are recorded and can be reviewed at any time. A variety of reports can be generated on asset condition, value, and capital replacement needs.

TransAM, an open-source asset management platform developed by Cambridge Systematics. TransAM focuses on transit assets and project planning, and is designed to make it easier for State DOTs, Planning Agencies, and Transit Agencies to share and exchange information related to assets, projects, and funding.

1.1 Initial Log In and Password Reset

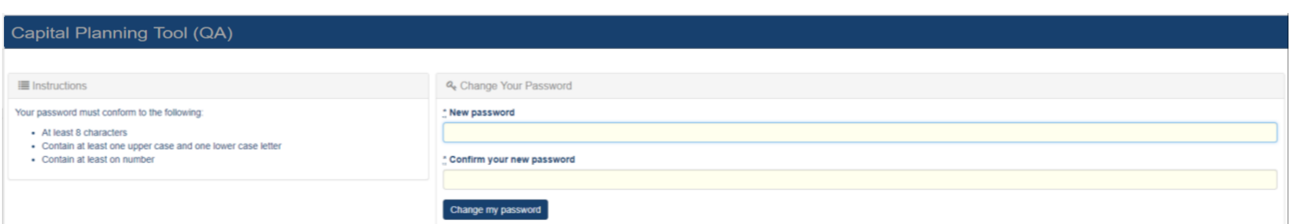
If this is your first time logging in, you should receive an email following the creation of your user account, with a link instructing you to reset your password. Click the link in the email and you will be directed to enter your email address in order to reset your password; enter your email address and click the “Send me reset password instructions” button. If you are an existing user and you forgot your password, you will be taken to the same screen by clicking on the “Forgot Your Password” link on the login page.

Figure 1 Password Reset Request Screen



Once you receive your “Reset Password Instructions” email, click on the “Change my password” link within the email, you will be redirected to the system site in your web browser, and you will be prompted to enter your new password twice. Once you enter your password twice, if it meets the password requirements, you will be automatically logged in.

Figure 2 Set/Reset Password Screen

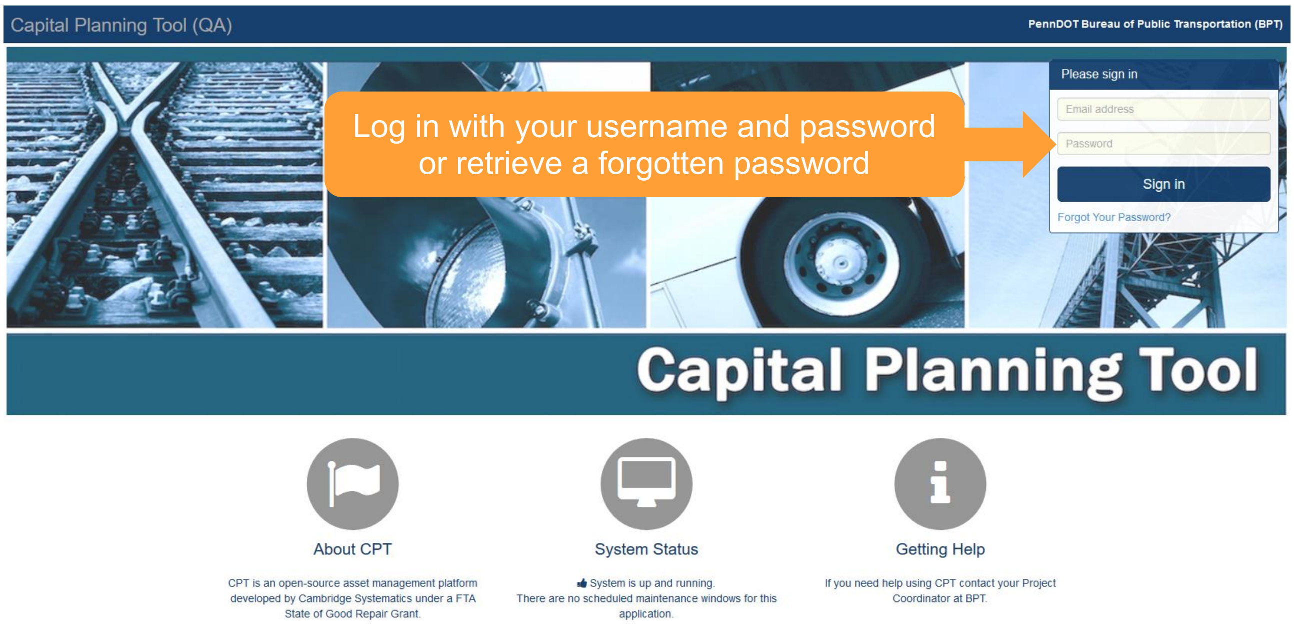


1.2 Ongoing Site Access

The system can be accessed via the following URL: https://transam-ocdp.camsys-apps.com.

Ongoing access can be obtained by bookmarking the site URL in your web browser and clicking on the link, upon which you'll be greeted with a login screen. Enter your credentials in the appropriate fields to login. You also can request a password reset by pressing the "Forgot Your Password?" button.

Figure 3 Login Screen



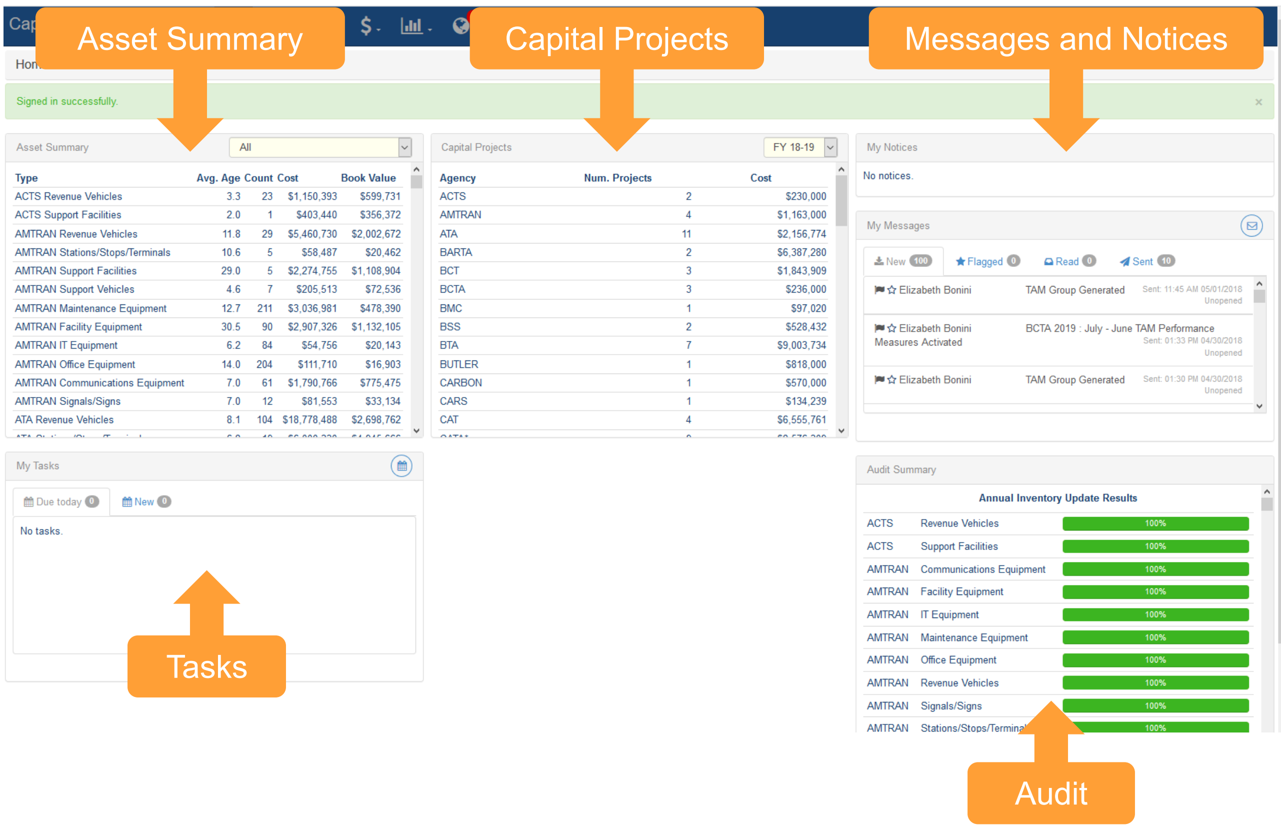
2.0 Dashboard

2.1 Dashboard Elements

Once you're logged in, your first experience will be the dashboard. The dashboard has a variety of elements.

The dashboard widgets highlighted below are: Asset Summary, Capital Projects, My Notices, My Messages, My Tasks, and Audit Summary. These provide a quick glance at the contents within the system.

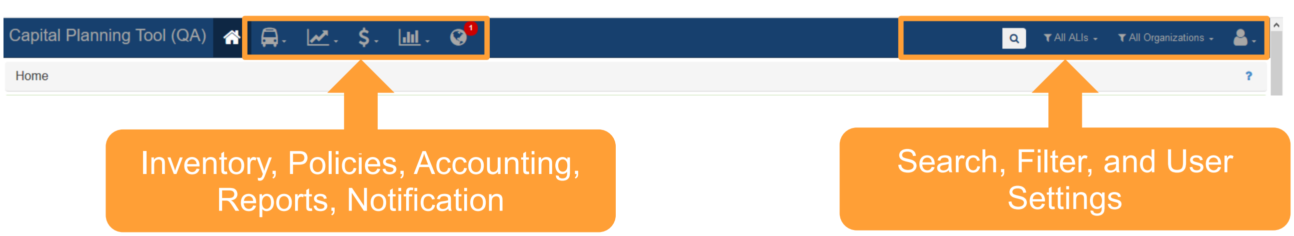
Figure 4 Dashboard Elements



2.2 Header Menu and Controls

The menu icons at the top guide you to the deeper content pages within the system: Inventory, Policies, Accounting, Reports, and Notifications. There also are controls to search, filter Activity Line Items (ALI) or organizations, and user settings.

Figure 5 Header Menu



3.0 General Features and Tools

As you progress through the system, there are some common interface elements that you'll encounter often.

3.1 Table Controls

There are lots of tables inside the system. The tables have common control tools that allow you to manipulate the table contents and export the table.

On header elements, you'll notice two arrows to the right of each column. These controls sort the table ascending or descending based on this column.

Figure 6 Sorting Controls

The Export All button to the top right of the table exports all table elements into an Excel table.

Figure 7 Export Button

There also are a set of tools to the top right of the table. The left button either displays the table with pagination (e.g., the table shows only a configurable number of rows per page), or the entire table.

The center button allows the user to show or hide different columns. Check marks next to the column indicate if a column will be shown and allow the user to toggle the column on or off.

The right button exports the current table view (complete with filters and excluding hidden elements) into a.CSV,.TXT, or an.XLSX (Excel) file format.

Figure 8 Table Tools

3.2 Site Filters

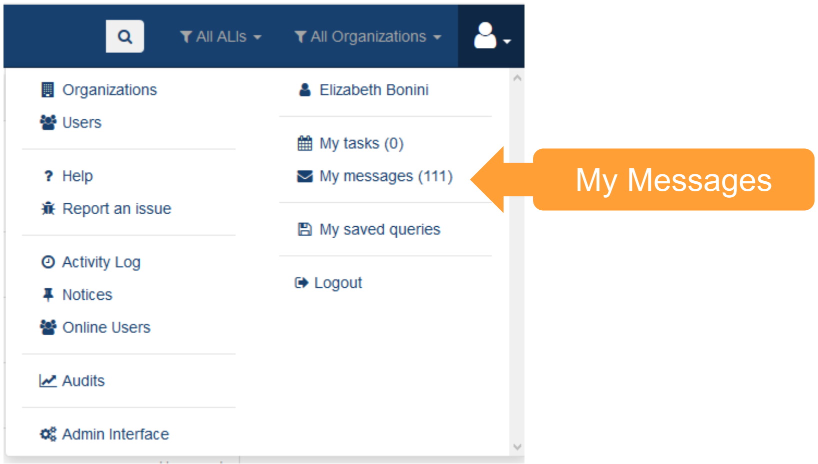
Throughout the site, there are various opportunities to filter data. When you see the following icon it means you can pare down displayed data with a filter.

Figure 9 Filter Icon

3.3 Messages

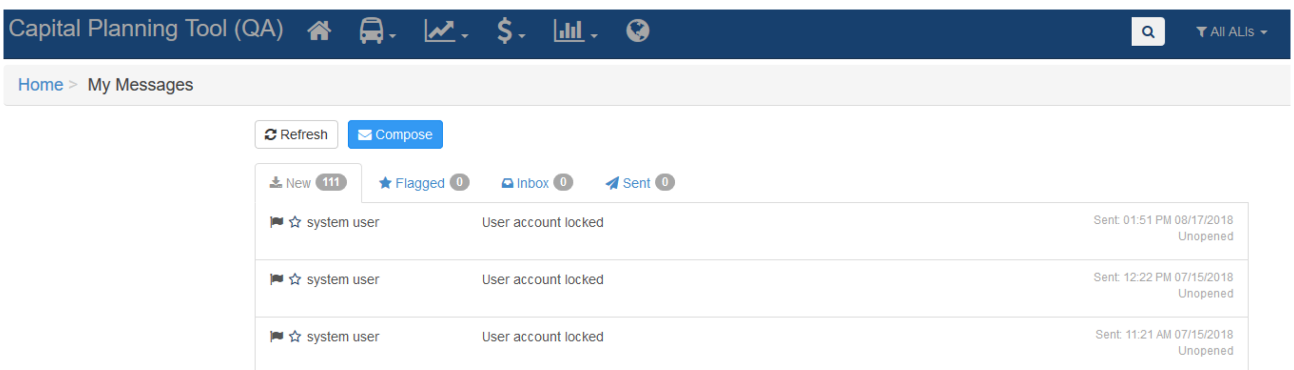
You can access Messages through the User Profile drop down menu.

Figure 10 User Profile
Messages



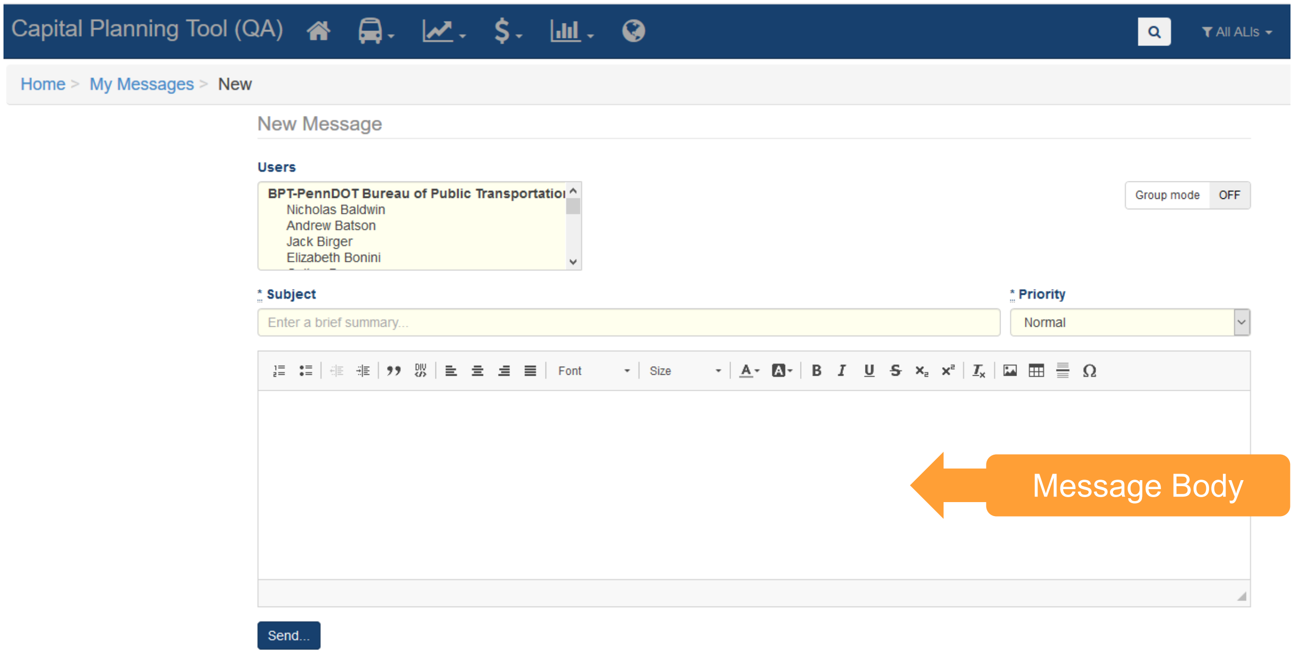
Users are able to send and receive messages to one or more users through the interface.

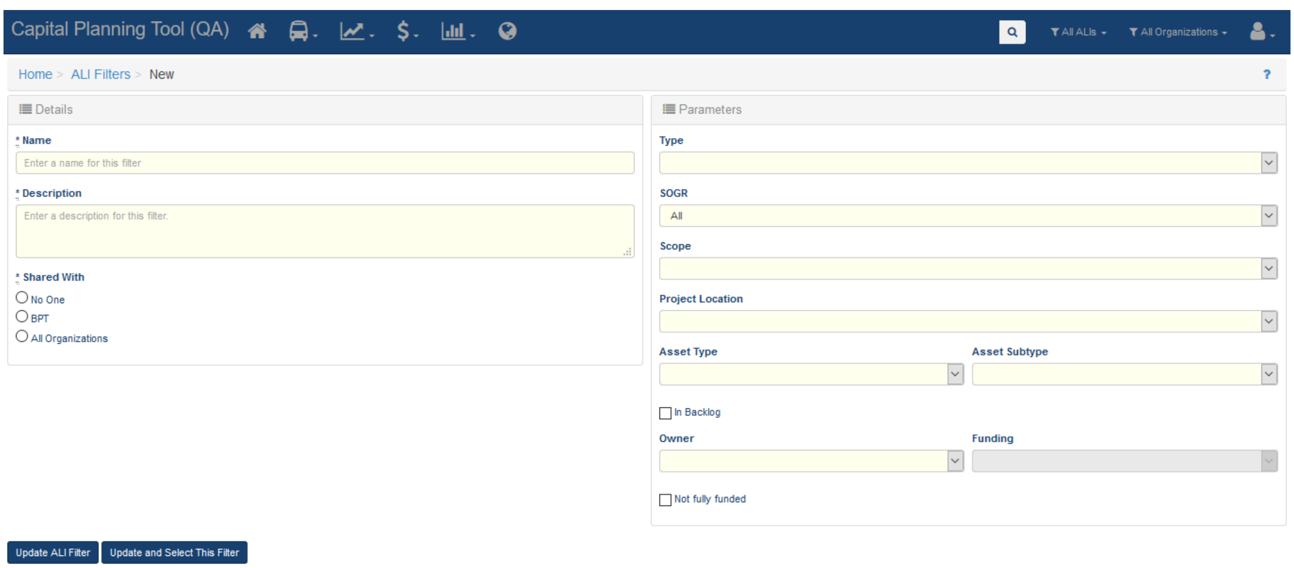
Figure 11 Messages



Selecting Compose will allow you to create a new message. Recipients options will be a list of users in your organization. You can enter the Subject and choose Low, Normal, or High Priority for the message. Type the intended message into the Message Body and press “Send…” when complete.

Figure 12 Message Interface

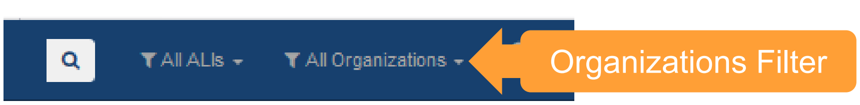




3.4 Organizations Filter

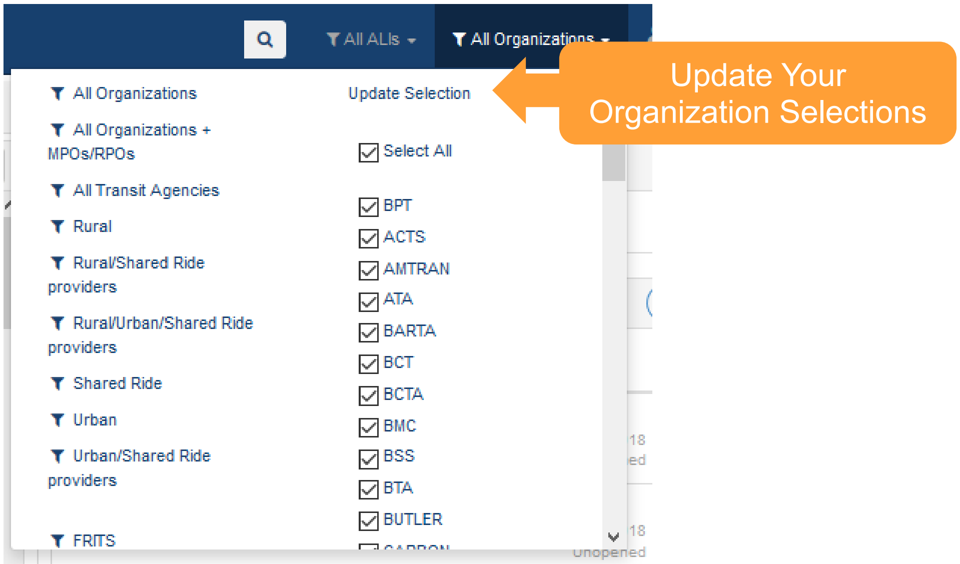
If you have oversight of several organizations, you can limit your scope down to certain organizations, in order to only view organization-specific data across the system.

Figure 13 Organization Filter



After you select the organizations you desire, make sure to click Update Selection at the top of the dropdown menu.

Figure 14 Organization Filter Selections



3.5 Search

The system includes a sitewide search feature. It can be found in the top center-right of each page. Click the magnifying glass icon and enter keywords to search sitewide for content.

Figure 15 Search Box

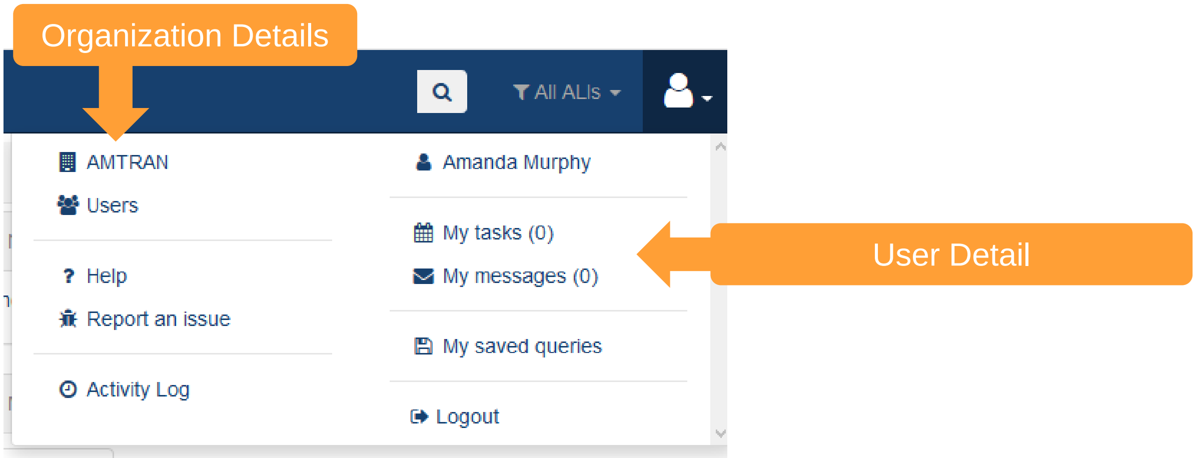
3.6 User and Organization Options

Each user has a menu with personal, organizational, and heads-up information at the top right of the screen.

Figure 16 User Menu

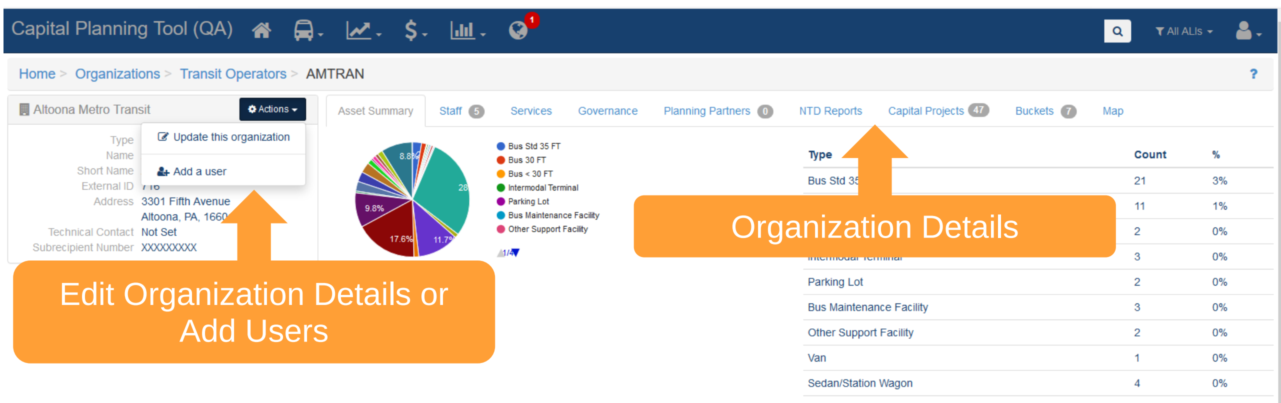
From here, users can explore information about their own organization and their coworkers in the Organization and Users section.

Figure 17 User Menu Dropdown



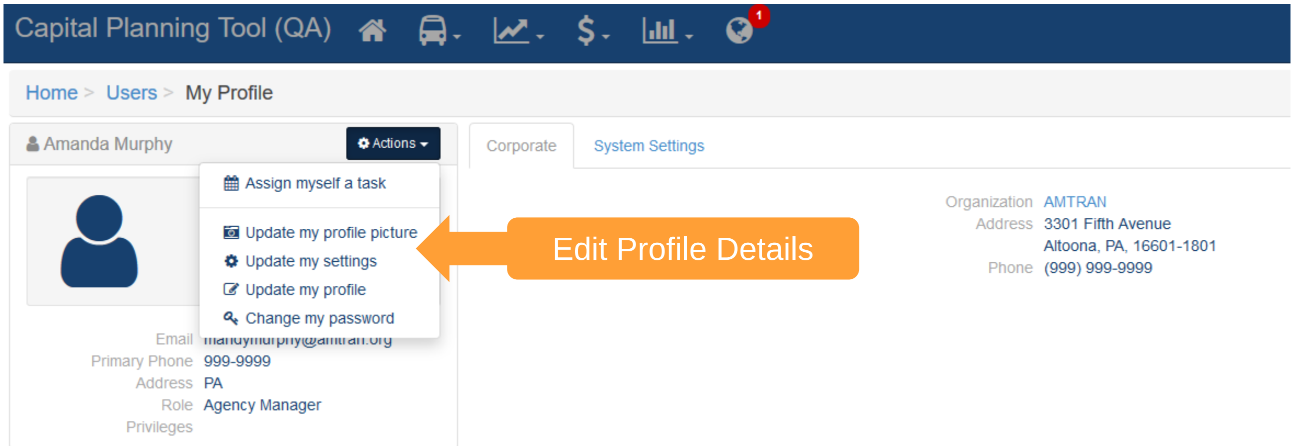
Clicking on your organization name, will allow you to view and edit organization-specific information, and perform certain functions such as adding users.

Figure 18 Organization Details



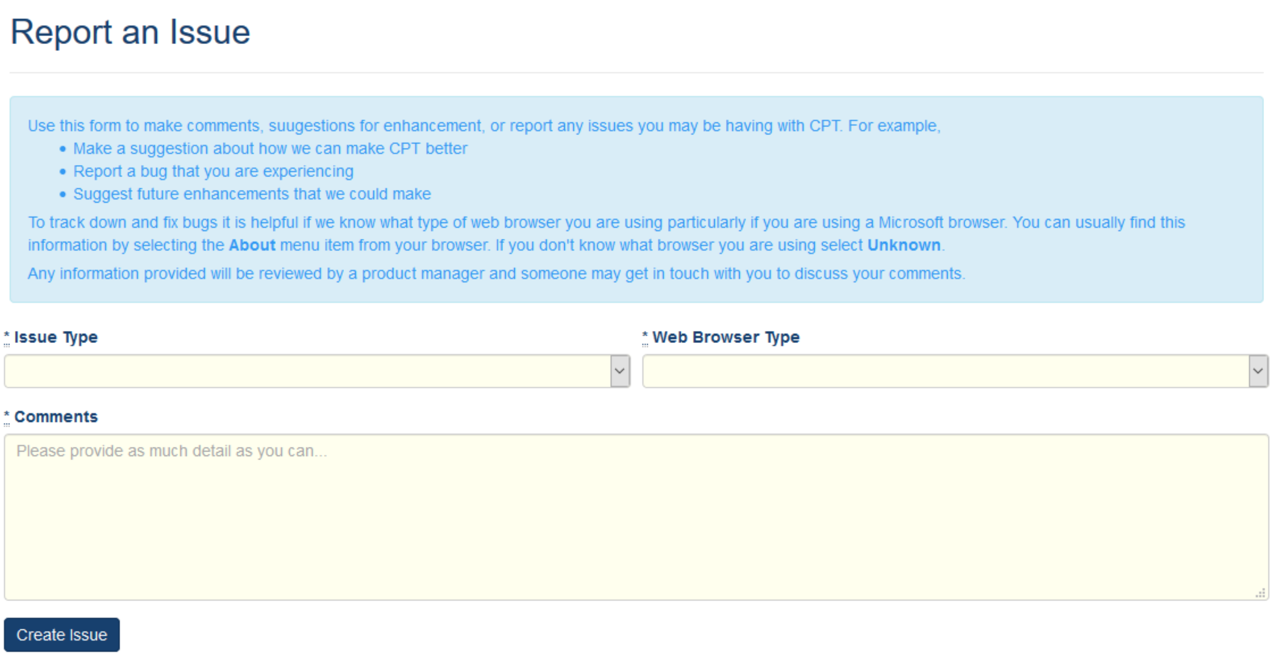
If you click your own name, you can see details about your profile and edit them. You also can assign yourself a task to complete.

Figure 19 Profile Details



You can browse this help document or submit an issue in the Help and Report an issue section. Reporting an issue is easy—just fill out the required information with as much detail as you can provide.

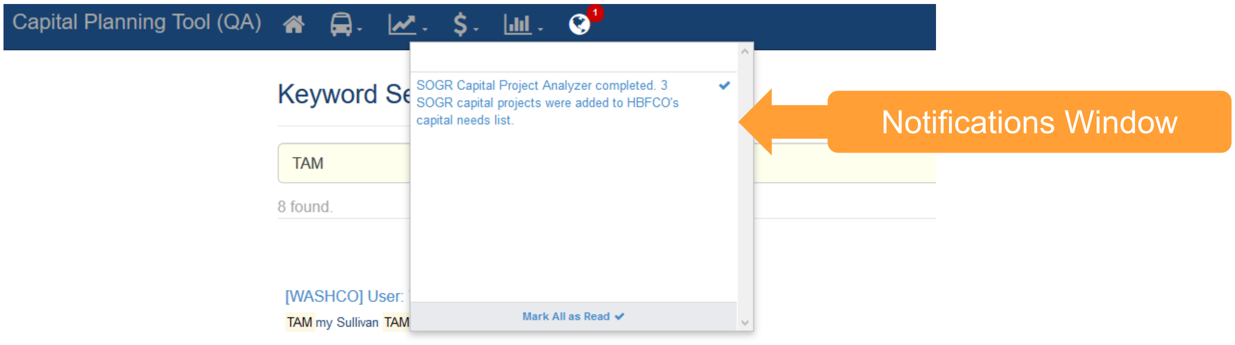
Figure 20 Report an Issue



3.7 Notifications

The notifications dropdown alerts you when there's activity in the system that you should be aware of. The globe at the top of the page will display a number with the count of "unread" notifications since your last check. Clicking on a notification item will take you to the change and mark the notification as read. You also can click individual checkmarks to dismiss individual notifications or "Mark All as Read" to quickly dismiss all notifications.

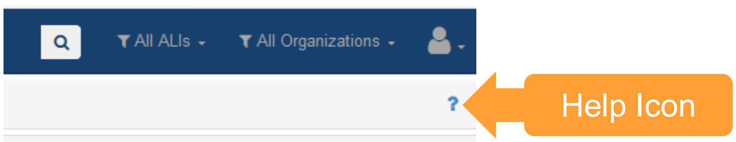
Figure 21 Notification Drawer



3.8 Help

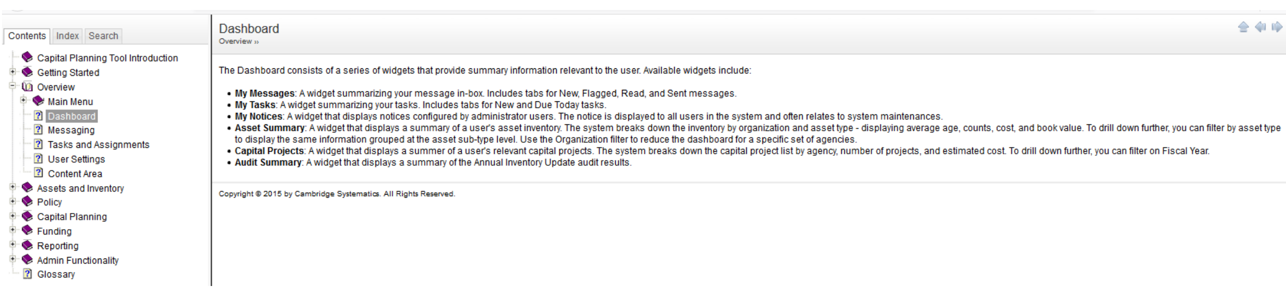
At the top right of each page is a "?" icon.

Figure 22 Help Icon



Clicking the help icon will bring you to the help content regarding that page. The help content provides detailed descriptions of each of the page elements. You also can navigate to help content for other pages. Via the contents, index, or search tabs in the left pane.

Figure 23 Help Content



4.0 Asset Inventory

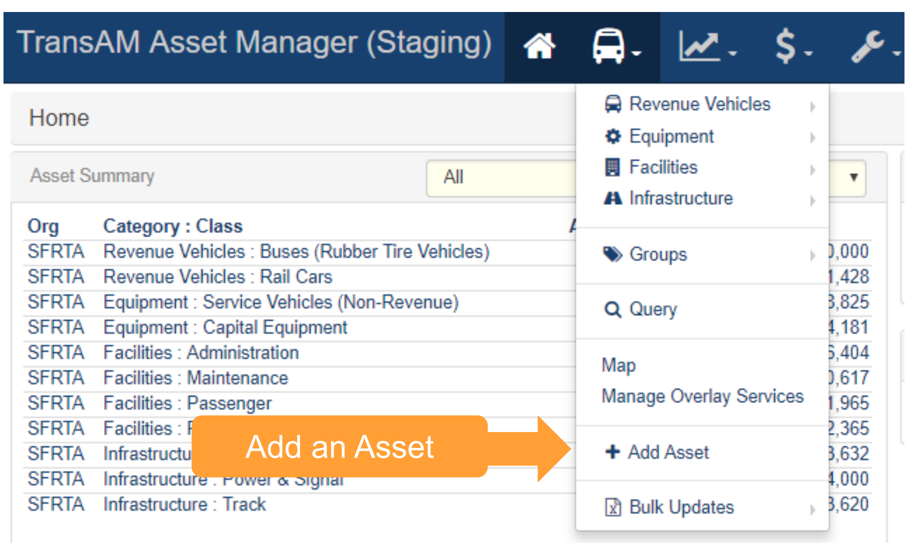
Management of organization assets is carried out through the Asset Inventory dropdown menu. It contains a variety of tools and functions that streamline asset management.

Figure 24 Asset Inventory Dropdown

4.1 Add an Asset

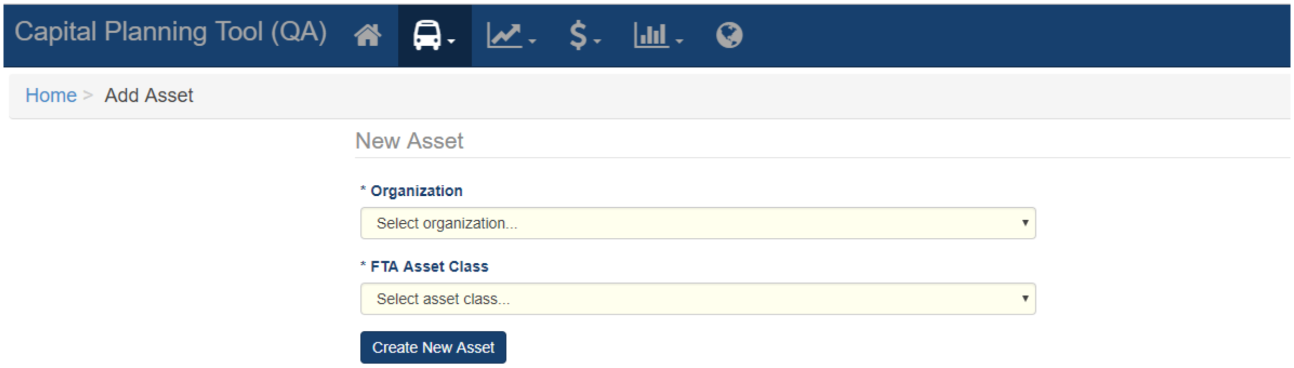
Adding new assets to the asset inventory is simple. First select “Add Asset” from the Asset Inventory dropdown.

Figure 25 Adding an Asset



Select an Organization and an Asset Class, then click “Create New Asset.”

Figure 26 Select the Organization and Asset Class



You'll then be directed to fill out all required fields, as depicted on the required tab, and the option of filling out any optional fields on the recommended tab.

Figure 27 Adding Asset Required Details

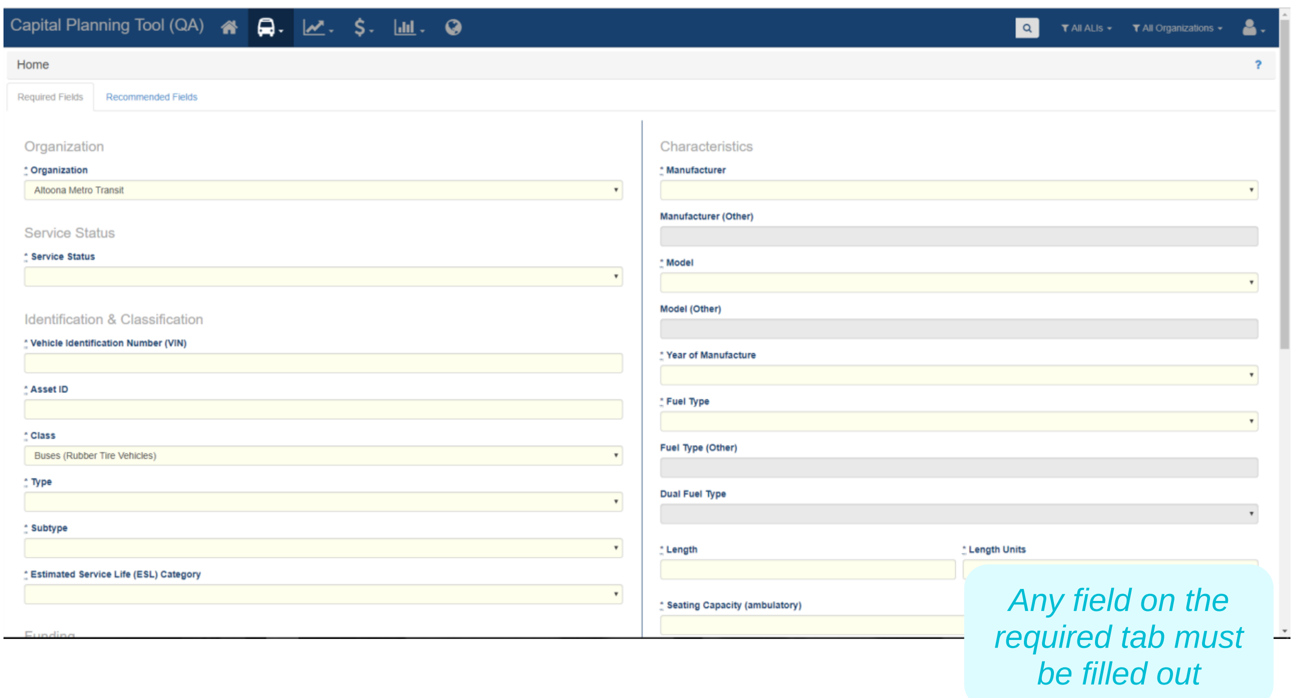
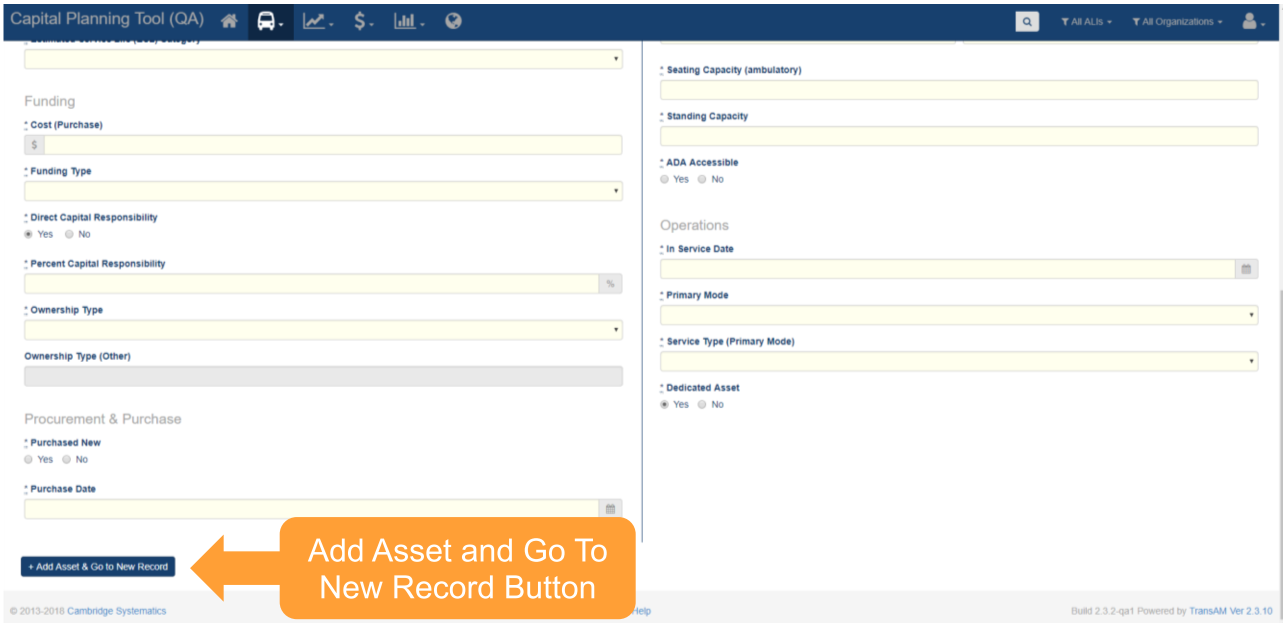


Figure 28 Add the Asset and Go To The New Record

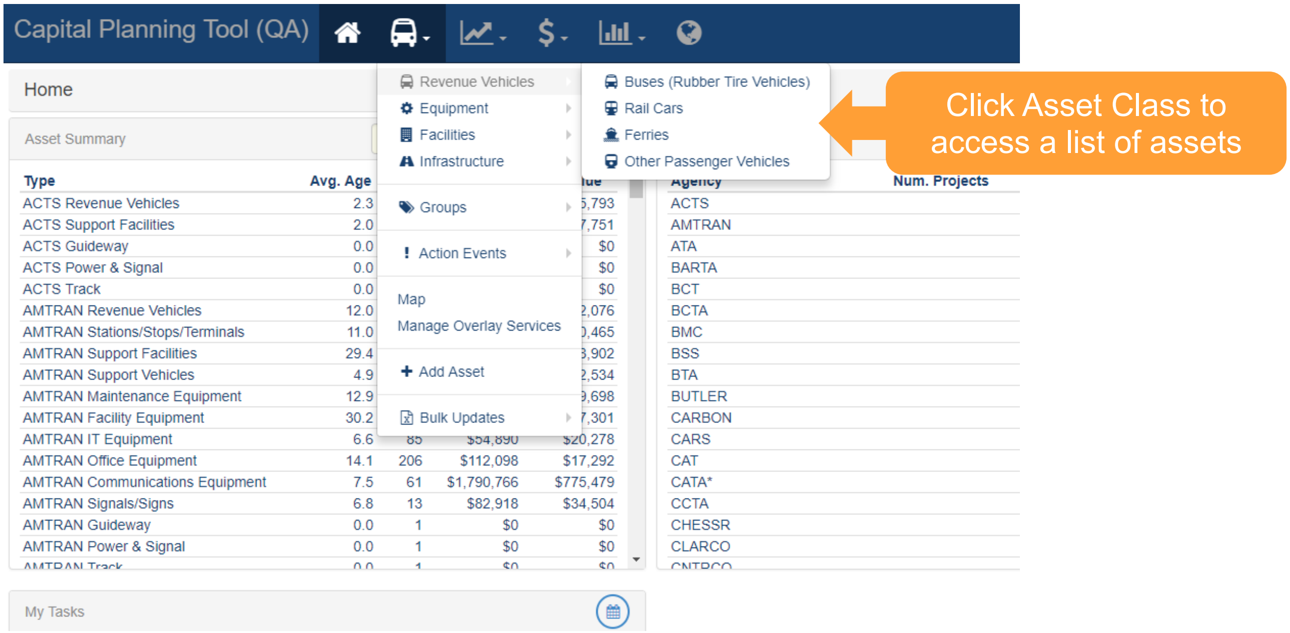


4.2 Accessing Existing Assets

Every asset is categorized by category (e.g., Revenue Vehicles, Equipment), class (e.g., Buses (Rubber Tire Vehicles, Rail Cars), type (e.g., BU-Bus, RL-Commuter Rail Locomotive), and a subtype (e.g., Bus Std 40 FT, Bus Articulated) as part of a standardized hierarchy. The asset category, class, type, and subtype relationship is the taxonomy that defines your inventory and dictates the attributes or data fields that exist for assets. The list of available category, class, and type options are standardized across the system, while subtype options and some data fields have been specifically configured for your specific system deployment.

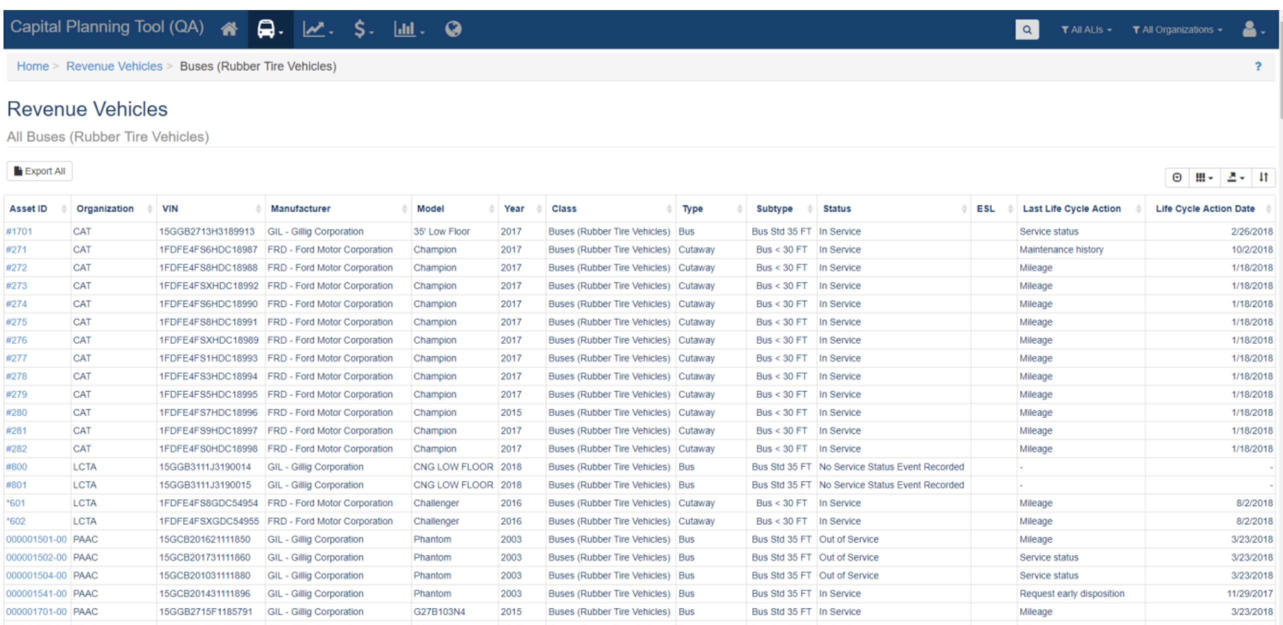
Clicking on an asset class will drill down on the assets an organization possesses within that particular category and class.

Figure 29 Existing Assets



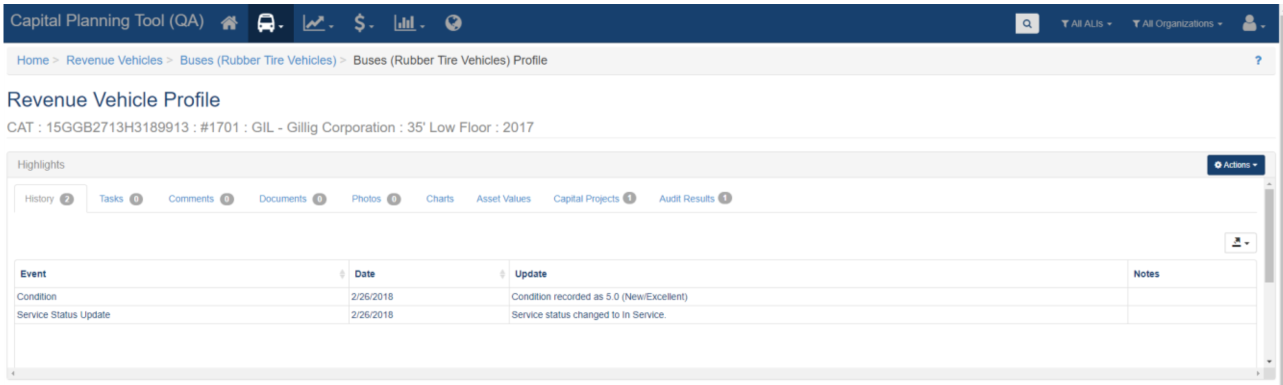
Clicking on the Asset ID text within the row of an asset record, will provide detailed information about that specific asset.

Figure 30 Existing Asset Interface



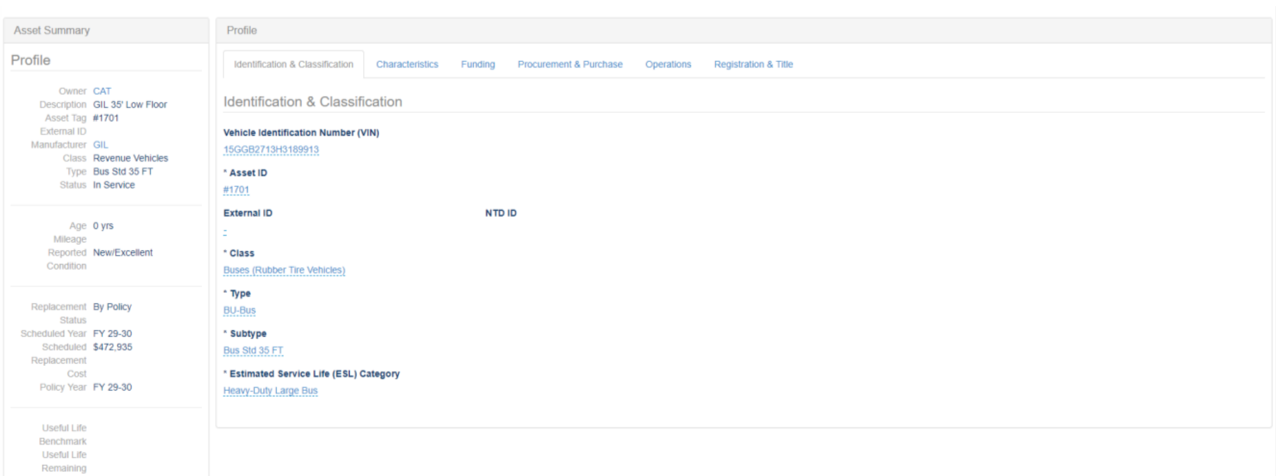
When you access the specific asset record, users can view the highlights section. The highlights sections contains asset summary information such as: a history log, location information, asset charts, asset value information, associated capital projects, and audit results. In addition, tasks, comments, documents, and photos can all be viewed, updated, and edited.

Figure 31 Asset Record: Highlights



In additional to accessing asset highlight information, users can view profile or summary data for that asset.

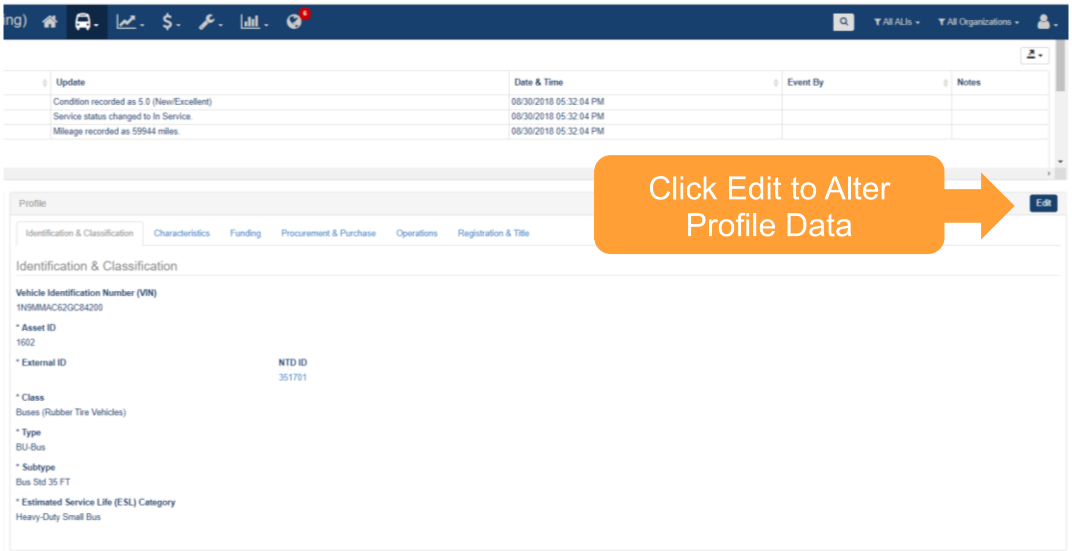
Figure 32 Asset Record: Profile and Summary



4.3 Editing or Updating Existing Asset Profile Data

Editing asset profile data allows users to modify core attributes that are not expected to change, but corrections may be necessary from time to time. Profile data can be modified by clicking on the edit button, editing the data, and clicking the “Save” button. Clicking the “Cancel” button will result in any changes not being saved.

Figure 33 Editing the Profile of an Existing Asset



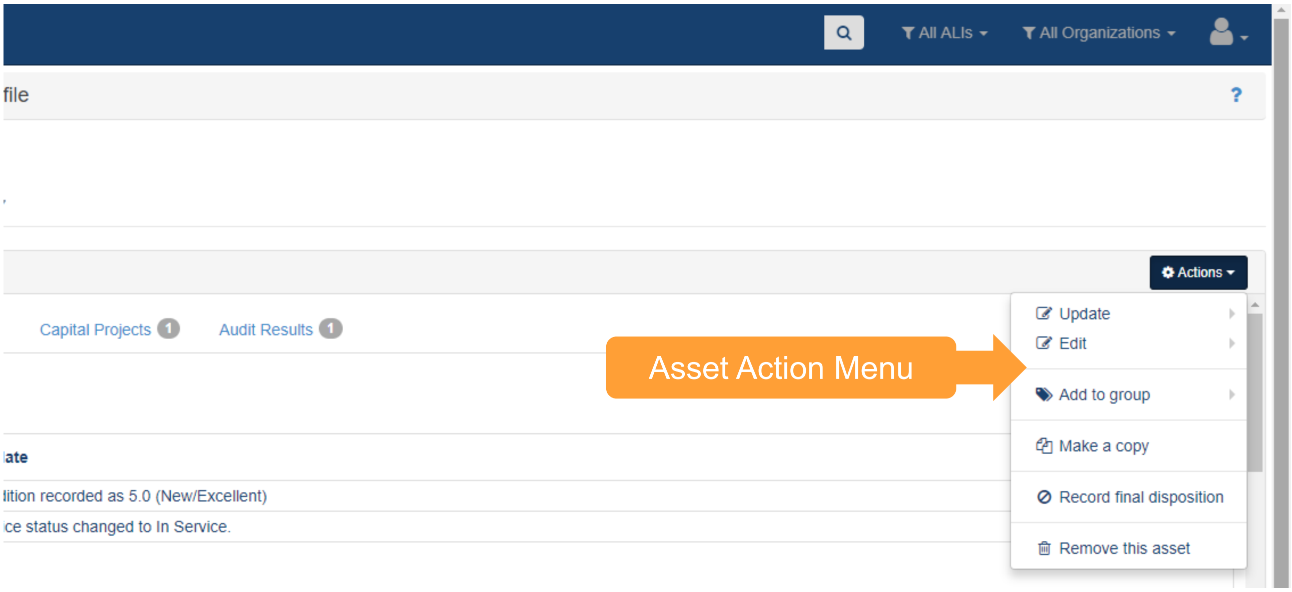
4.4 Updating Existing Asset Lifecycle Data

Asset lifecycle-related information can be edited, updated, changed, or deleted from the action menu in the top right of the screen.

Updating an asset will allow changes to attributes that are expected over the lifecycle of an asset. Asset details such as replacement status, mileage, etc. are expected to be updated periodically. Other actions should only need to happen one time during the life of an asset, such as requesting early or final disposition of an asset.

Removing an asset will permanently delete the asset and should be used only when absolutely necessary. This may option may only be available at certain permission levels.

Figure 34 Updating the Lifecycle of an Existing Asset

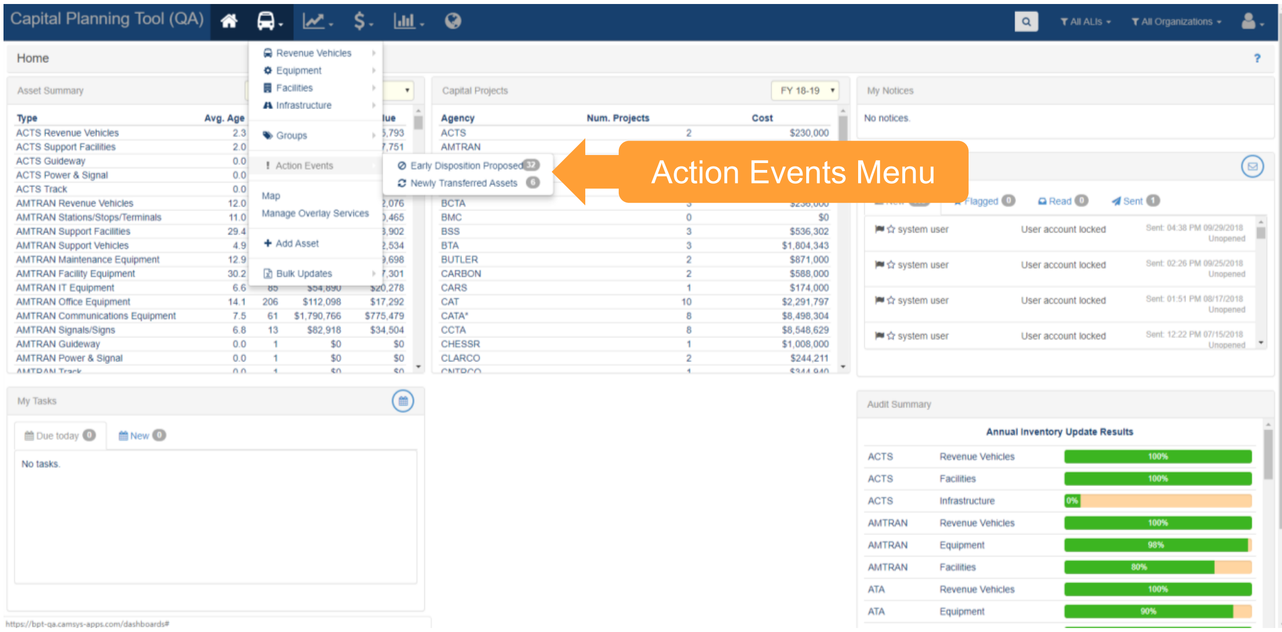


4.5 Action Events (Disposition and Transfer Review)

During an asset's service life, it is possible that the asset might be sold, reprovisioned, traded in, or transferred. As a result, a special event exists to record relevant information, and review any disposition requests that may be submitted, in order to complete the disposition effort.

Action Events depend on the disposition of an asset to perform certain functions. The available functions will vary depending on individual permissions and organizational policy. Action Events occur when an asset is proposed for an early disposition or an asset is newly transferred. You can submit a request for early disposition from the action menu on an asset.

Figure 35 Asset Action Events (Disposition and Transfer)

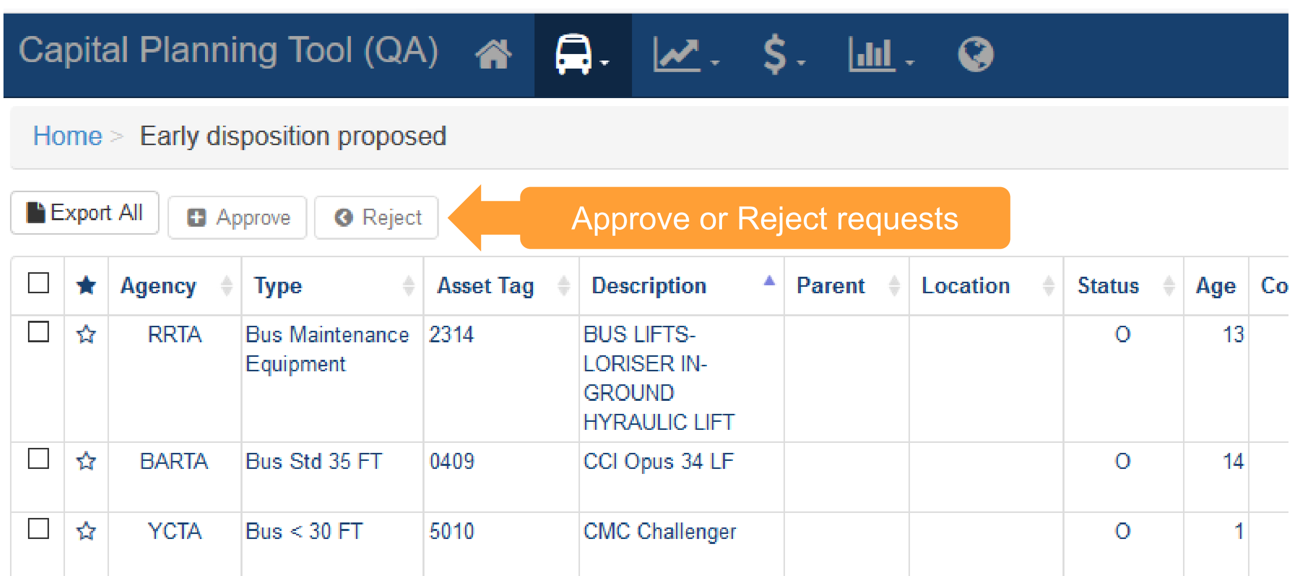


An early disposition instance is where a vehicle fails to fulfill its expected life span. The real world is messy and sometimes mishaps such as accidents occur. Under these circumstances, the asset might require disposition before originally intended.

Record final disposition will keep a record of an asset's existence when it is no longer in service. This option will essentially archive an asset so that the history exists, but the asset is no longer considered in the pool of operational assets for an organization.

Early disposition requests can be reviewed from the Early Disposition Proposed page. Select the check box next to an asset, then the select the button to Approve or Reject a proposed early disposition.

Figure 36 Early Disposition Requests

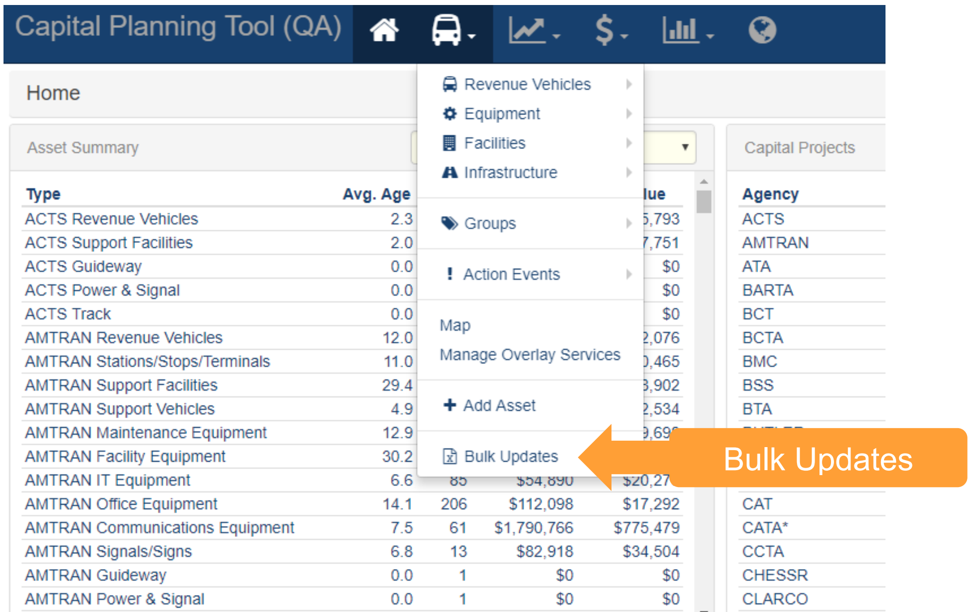


		Agency	Type	Asset Tag	Description	Parent	Location	Status	Age	Co
☐	☆	RRTA	Bus Maintenance Equipment	2314	BUS LIFTS-LORISER IN-GROUND HYRAULIC LIFT			O	13	
☐	☆	BARTA	Bus Std 35 FT	0409	CCI Opus 34 LF			O	14	
☐	☆	YCTA	Bus < 30 FT	5010	CMC Challenger			O	1	

4.6 Adding or Updating Assets by Bulk Update

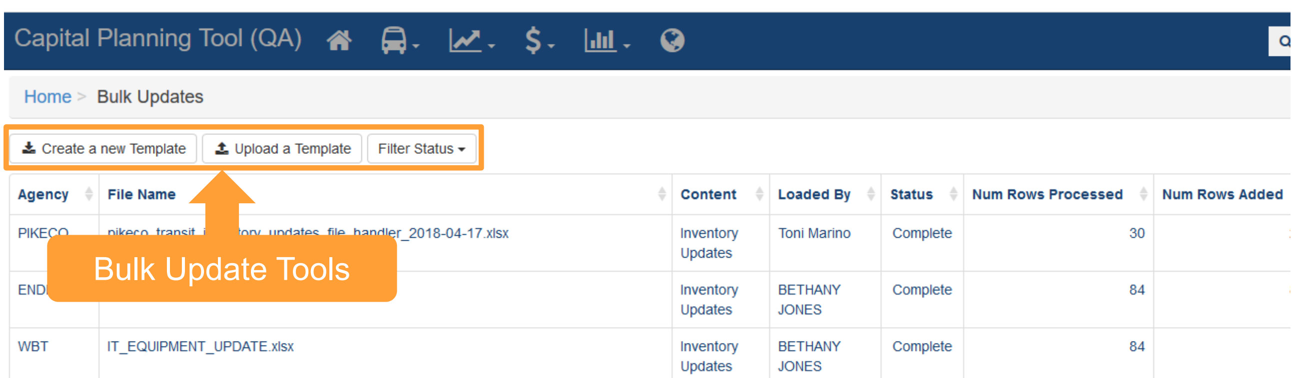
Bulk updates are a faster way to create and edit asset inventories when working with large quantities of asset data. This tool allows users to update service status, condition and mileage of existing inventory, record the last maintenance performed for assets, and identify assets that are going to be reprovisioned or disposed in this planning cycle using their favorite spreadsheet software externally.

Figure 37 Bulk Updates



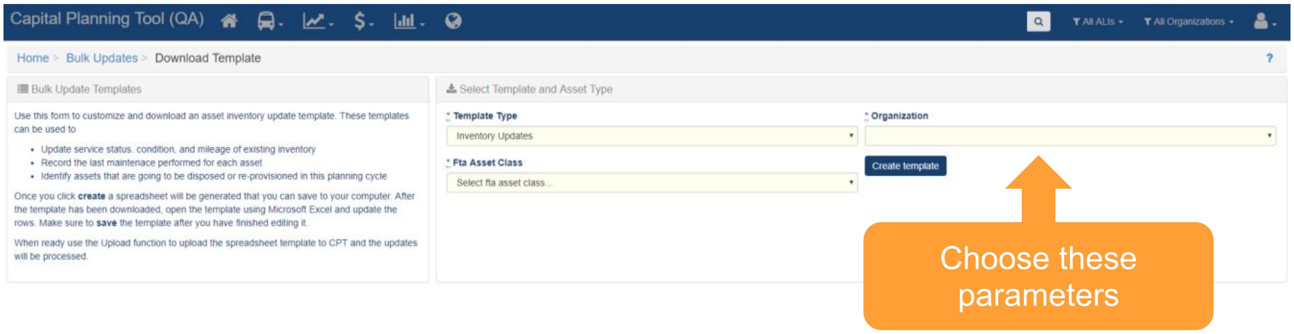
Selecting "Bulk Updates" allows you to Create a new Template, Upload a Template, or see the status of an uploaded template. The main screen also shows previous bulk updates, their content, uploader, status, and stats about the contents of that update and the upload process.

Figure 38 Bulk Update Tools



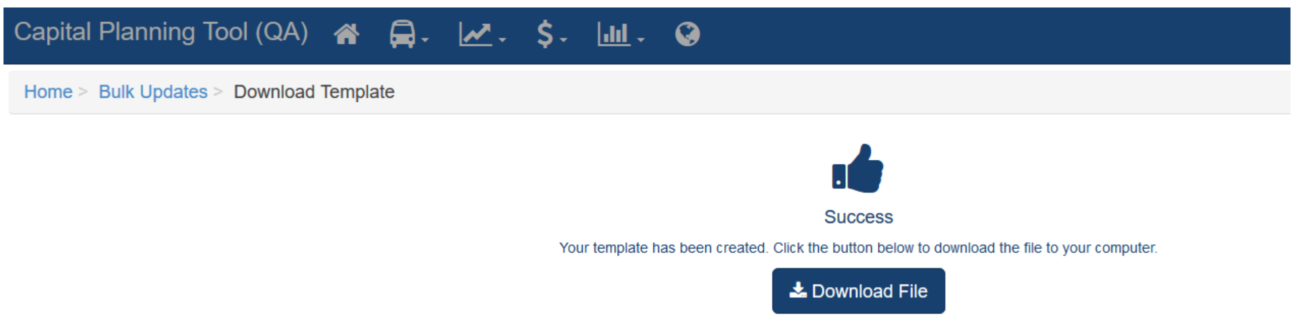
The first step to a bulk update is Creating a Template. Click "Create a new Template", then select your Template Type, Organization, and Asset Class, then select "Create Template."

Figure 39 Bulk Update Details



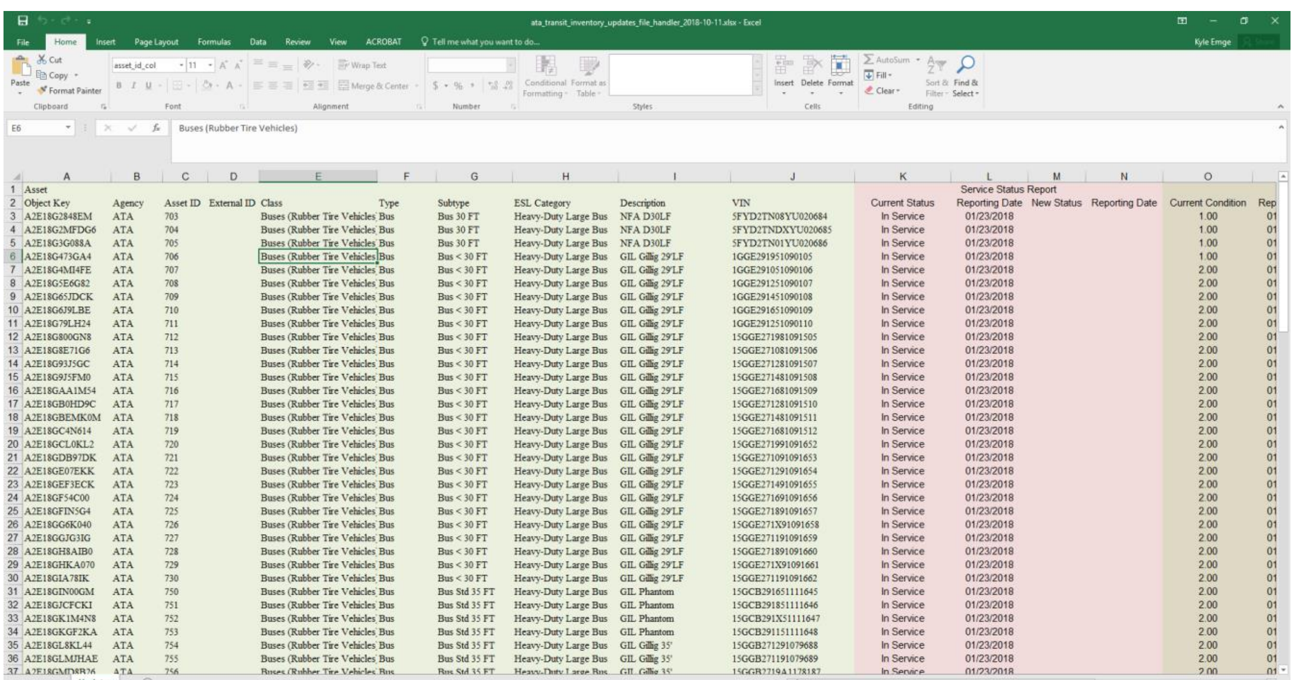
Select "Download File" and save the resulting spreadsheet on your computer.

Figure 40 Bulk Update Spreadsheet Download



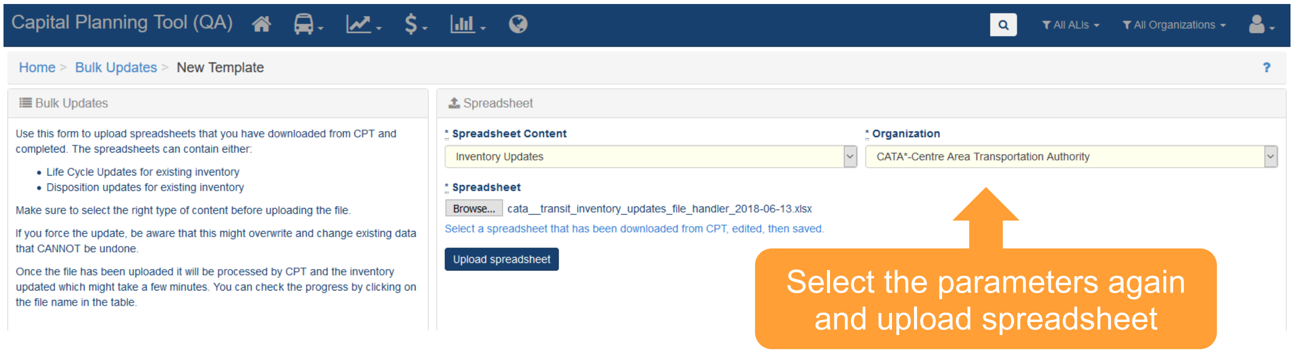
Edit the resulting spreadsheet and make sure you save your changes.

Figure 41 Bulk Update Spreadsheet



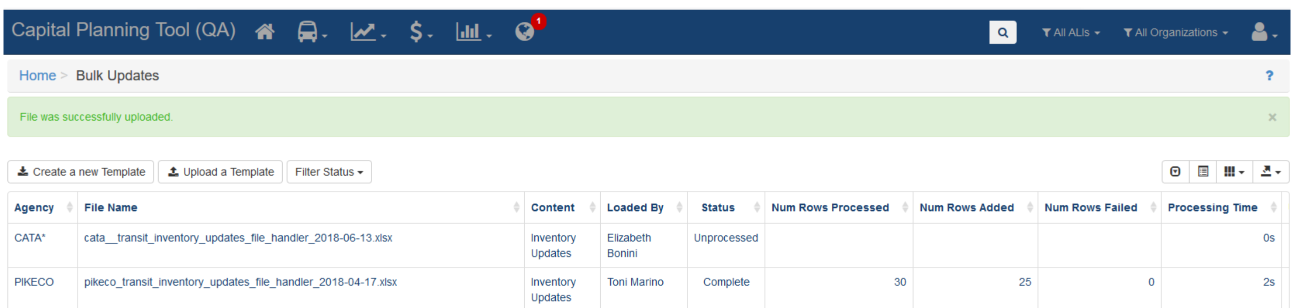
Head back to the Bulk Updates page and at the top select “Upload a Template.” Select the parameters on the right that were used to create the template and then click browse and find your edited spreadsheet. Then click Upload spreadsheet.

Figure 42 Bulk Update Upload



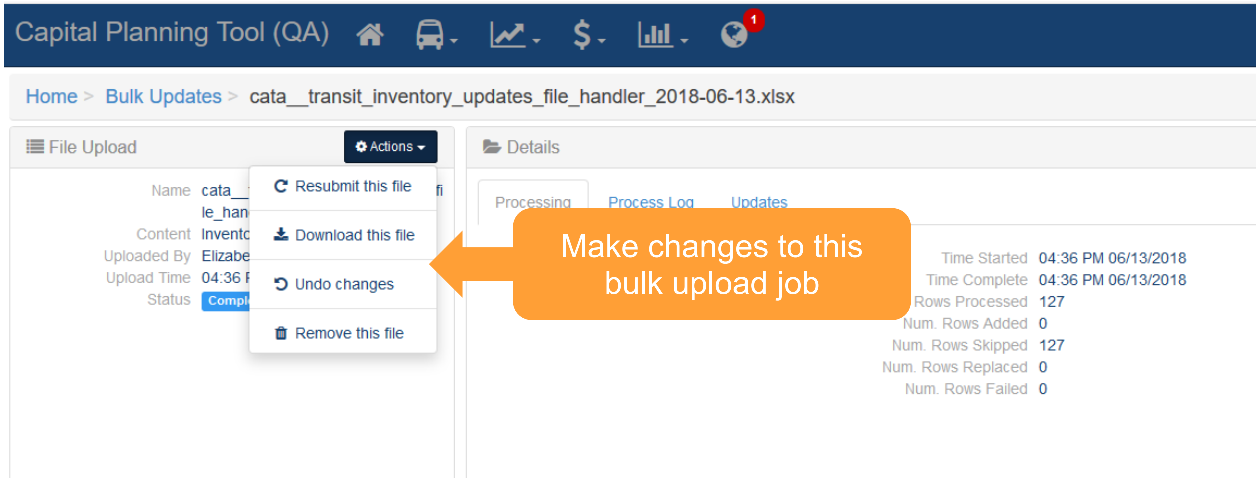
If your file uploads successfully, the main Bulk Update screen should reappear with a “File was successfully uploaded banner” and you should see the most recent update appear at the top of the bulk update history. The system will perform the updates and a new notification will appear in your notification tray once all updates are complete.

Figure 43 Bulk Upload Processing



Each row in the Bulk Update table contains additional information and options if you click that update. Use this interface to identify any issues that might have occurred during the bulk upload process. From the actions menu, you can resubmit the file for processing, download that specific spreadsheet again, revert the changes made by this update, or remove the file used to update from the list.

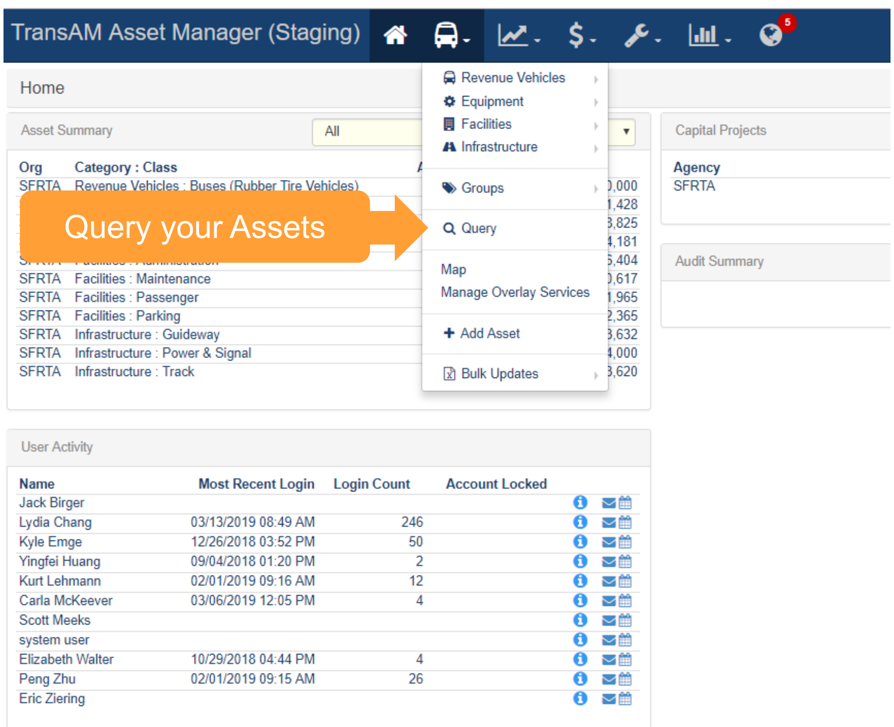
Figure 44 Bulk Update Edit



4.7 Query

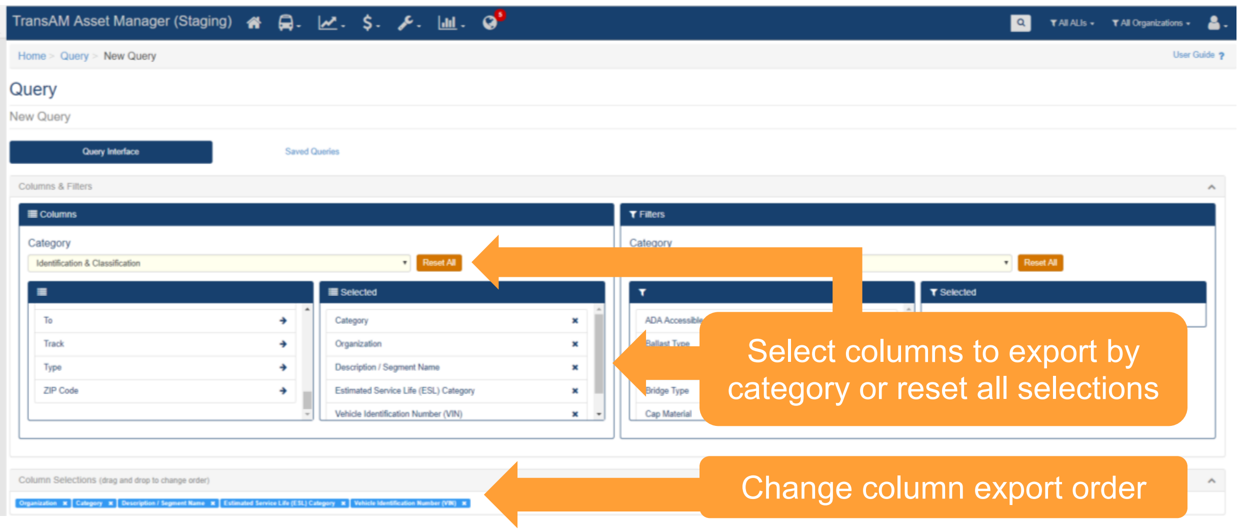
The system has the ability to query the database of all assets for those matching specific search criteria and provides the ability for users to build, save, and share custom data exports.

Figure 45 Asset Query



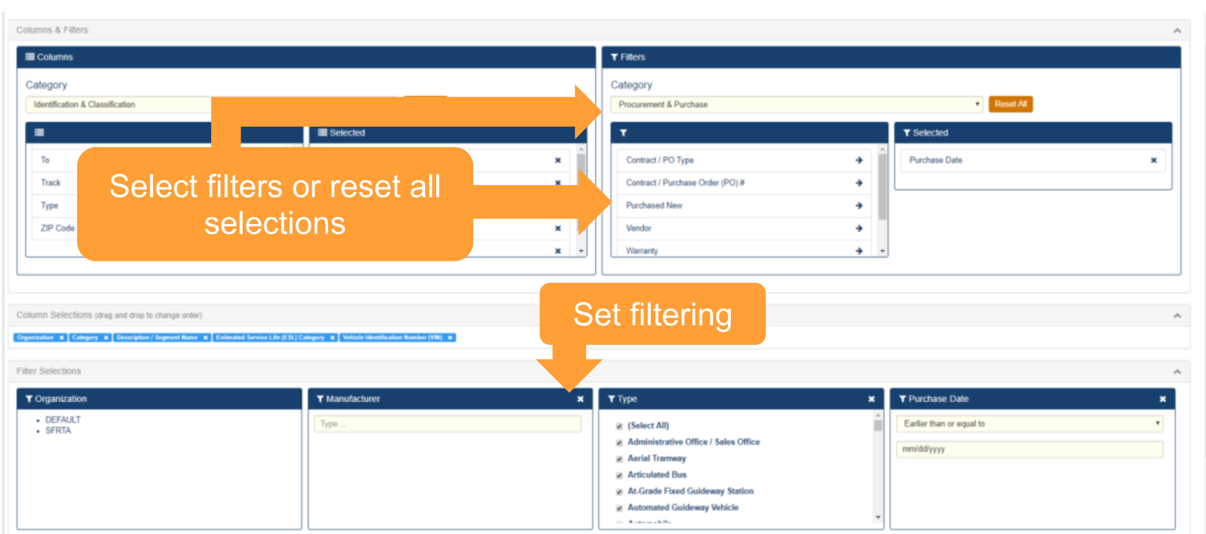
From the Query screen, users can select each data field you want to export from a variety of attributes within the Columns panel. All data fields belong to a specific category. Select a category to refresh the data fields available for selection. Users can select each individual column that you want to add to the export, by moving fields to the Selected box by clicking on the arrow in each field and remove selected fields by clicking on the "x" of each selected field. Selected columns appear in the Column Selections panel, and the order each data field is presented in the export can be modified by utilizing drag and drop functionality. Organization and category data fields are always added as default selections, and all selections can be removed by clicking 'Reset All'.

Figure 46 Column Selection



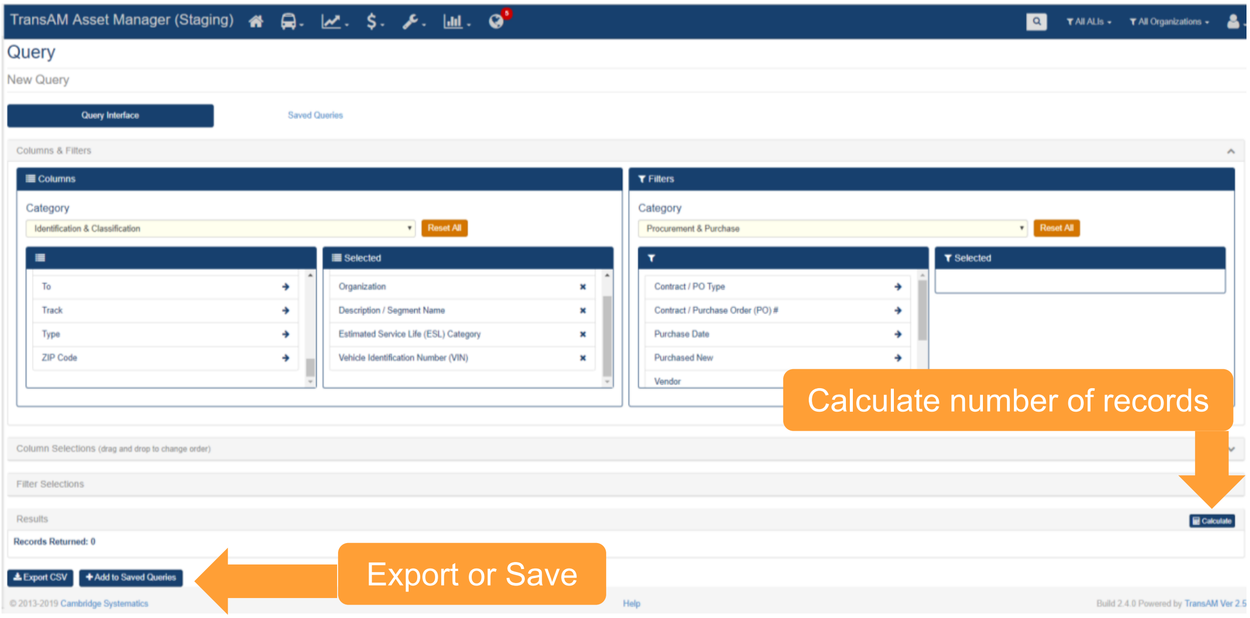
From the Query screen, you can also select what data to filter. Filtering functionality works in a similar manner as column selection. Select each individual data field that you want to filter, by moving fields to the Selected box by clicking on the arrow in each field and remove selected fields by clicking on the "x" of each selected field. Selected filters appear in the Filter Selections panel, where the user can set filtering parameters. The organization data field is always added as default selection, and is non-configurable as it is set by the sitewide organization filter.

Figure 47 Filter Selection



Once the query is ready to be used, users can click the "Calculate" button in the results section to see how many records will be returned. Clicking the "Calculate" button is not required, but serves as a gauge to see if the query that has been developed is returning the anticipated number of records. At this point, users can either export or save the query. If a user chooses to save a query, they will have the ability to share the query with users in associated or child organizations, so long as the user has a Manager user role.

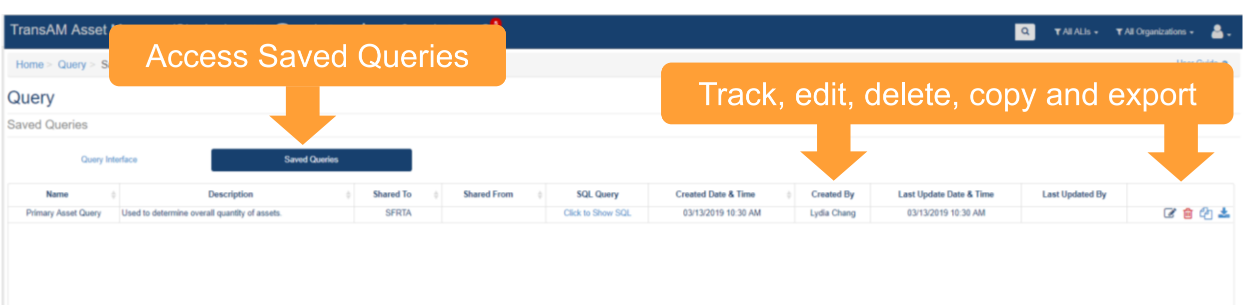
Figure 48 Calculate, Export or Save



Saved queries can be accessed by clicking on the Saved Queries button at the top of the screen. All queries save to the profile of the user initiating the save action. If a user has a Manager user role, the user is allowed to share the query with other users within any organization tied to the Manager. Parent organization users with a Manager role can share queries with associated child organizations as well. Shared queries can only be edited by a Manager from the “Shared From” organization. Shared queries from parent organizations cannot be deleted by child organizations, but queries shared by users within the same organization can be deleted from individual user profiles.

Additional query functionality includes the ability to export, edit, and copy queries, as well as copy the SQL statement, and monitor query history, all from within the saved queries section.

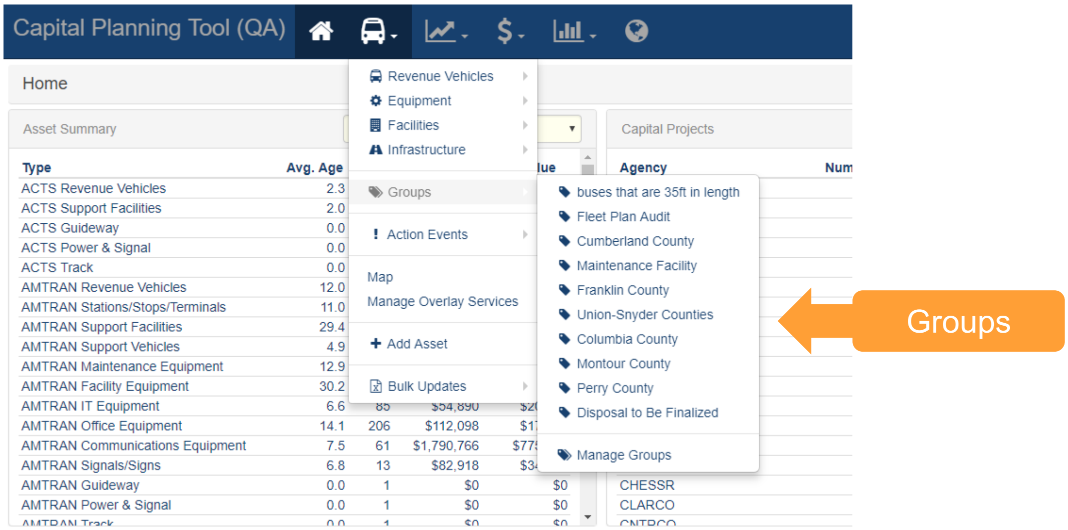
Figure 49 Saved Queries



4.8 Groups

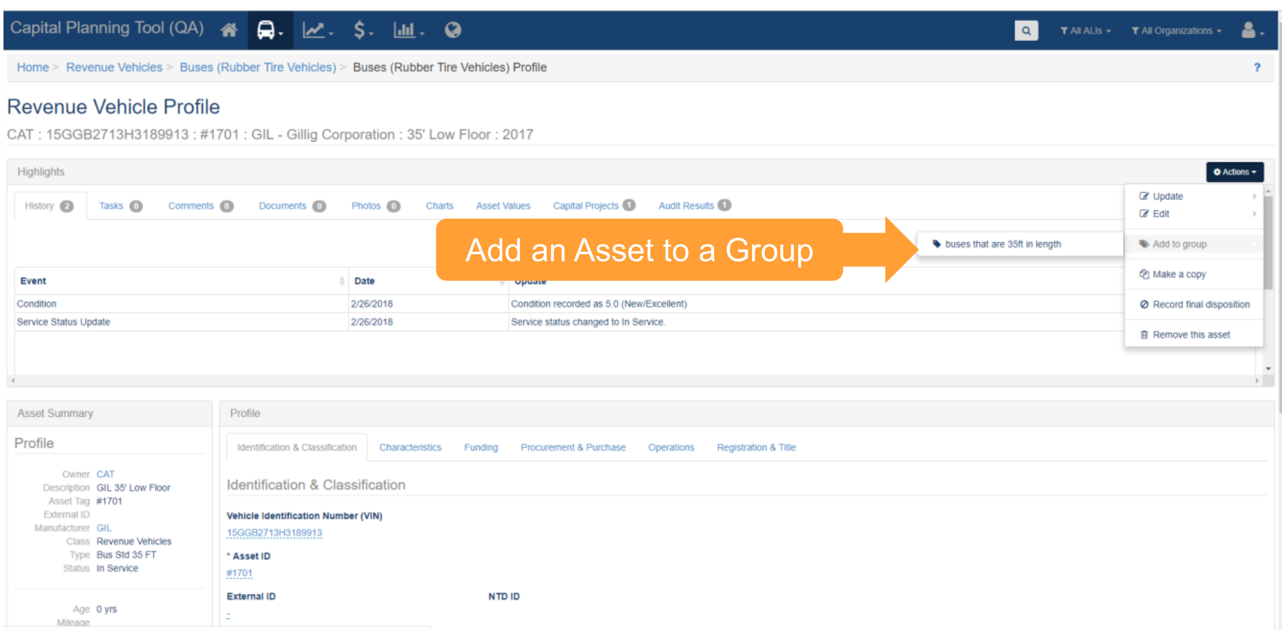
Agencies can create an on-the-fly collection of assets called groups so that they can quickly recall commonly viewed assets all at once. They can be accessed from the Asset Inventory Menu.

Figure 50 Asset Groups



Individual assets can be added to the group from their details menu.

Figure 51 Adding an Asset to a Group



5.0 Maintenance

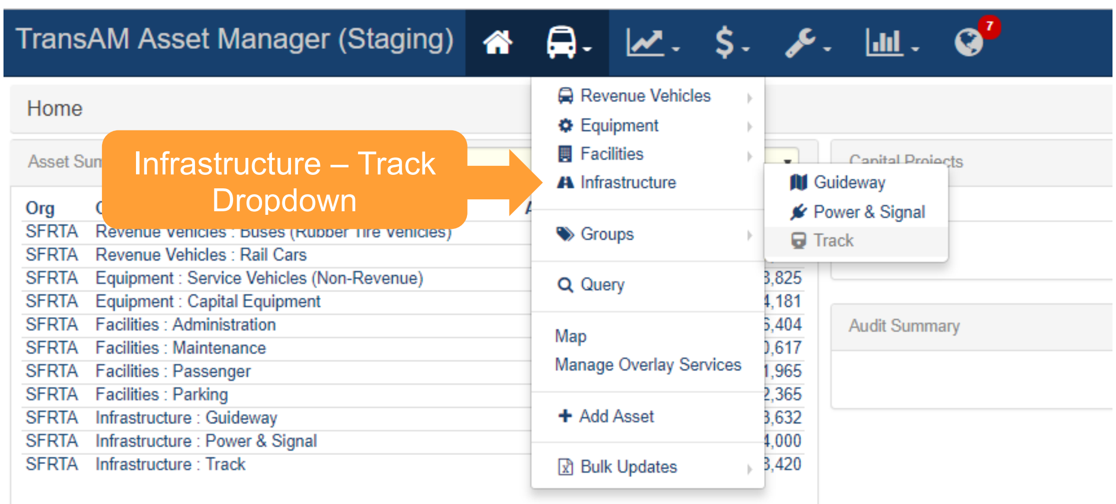
Maintenance of assets is carried out through the Maintenance dropdown menu. Currently, the Maintenance section includes the Performance Restriction feature, which only applies to Infrastructure – Track assets. Additional features will be added to the Maintenance section in the future.

5.1 Performance Restrictions

Organizations that have Infrastructure – Track data in the asset inventory, can utilize the Performance Restrictions feature. This feature can be used to monitor daily, track-based speed restrictions or work restrictions on individual track segments. All restrictions must be reported utilizing the same linear reference method used for the Infrastructure – Track asset data.

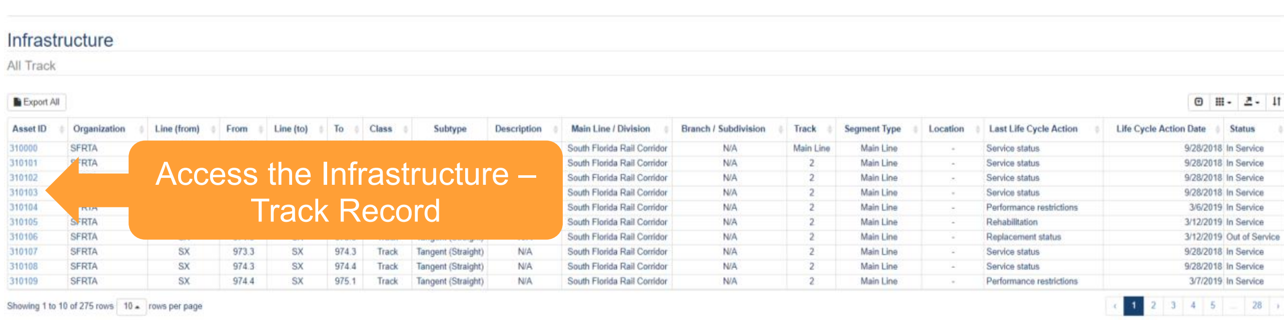
Performance Restrictions can be reported within an individual Infrastructure – Track asset profile, which can be accessed from the Asset Inventory dropdown

Figure 52 Asset Inventory Dropdown : Infrastructure - Track



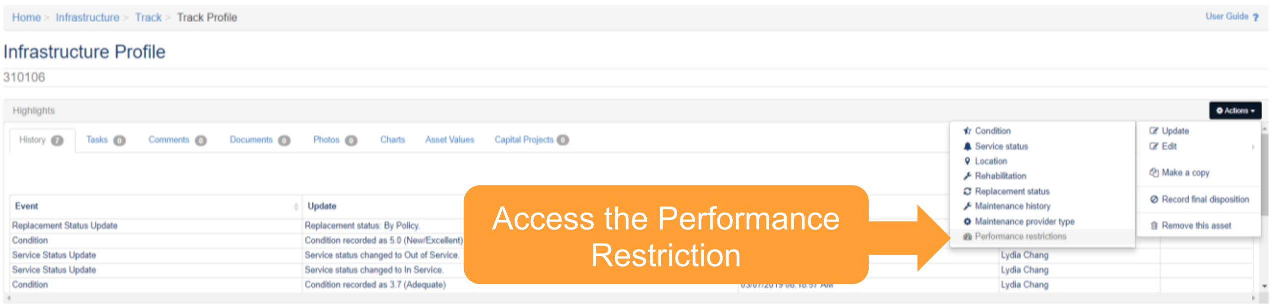
Clicking on the Asset ID text within the row of an asset record, will provide detailed information about that specific asset.

Figure 53 Existing Asset Interface : Infrastructure - Track



Performance Restrictions can be reported from the action menu in the top right of the screen.

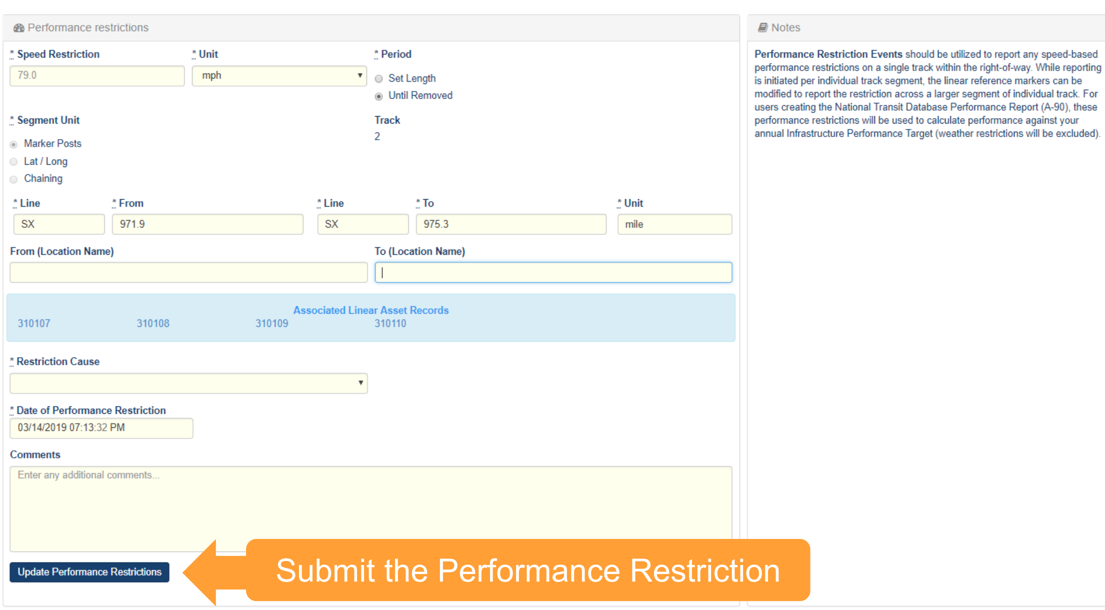
Figure 54 Lifecycle Action Menu



When accessing the Performance Restriction Lifecycle Event, data associated with the track segment auto-populates the event fields, including the maximum permissible speed, which populates the speed restriction field. As a user, you can edit the speed restriction, and set the period of the restriction. The restriction period can be set to “Until Removed”, which means the restriction will be active until a user manually closes the restriction, or the restriction can be set for a specified period of time, to include hours, days or weeks. If the restriction is set to a specified period of time using “Set Length”, the restriction will automatically closeout upon expiration of the specified time period.

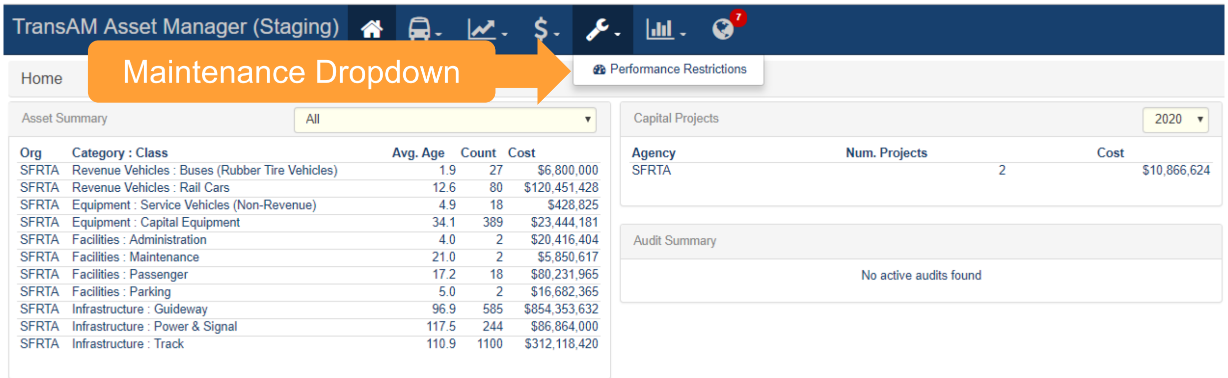
Users can also adjust the linear “From” and “To” marker post values (which were auto-populated from the track record), in order to modify the length of the restriction segment. Modifying the restriction length means the track restriction can be reported for more than one segment of track, even though the event was initiated from a single record. If the “From” or “To” value is extended beyond the “From” and “To” values of the initial reporting segment, all other associated linear segments covered under the new values will appear in the “Associated Linear Asset Records” section. Users can also submit restrictions utilizing on the “From” value, for single location restrictions, such as switch points and all restrictions must have a restriction cause selected.

Figure 55 Performance Restriction Lifecycle Event



Once a Performance restriction is submitted it appears in the Performance Restrictions section, along with all previously submitted restrictions, and can be managed by accessing the Maintenance Dropdown.

Figure 56 Maintenance Dropdown

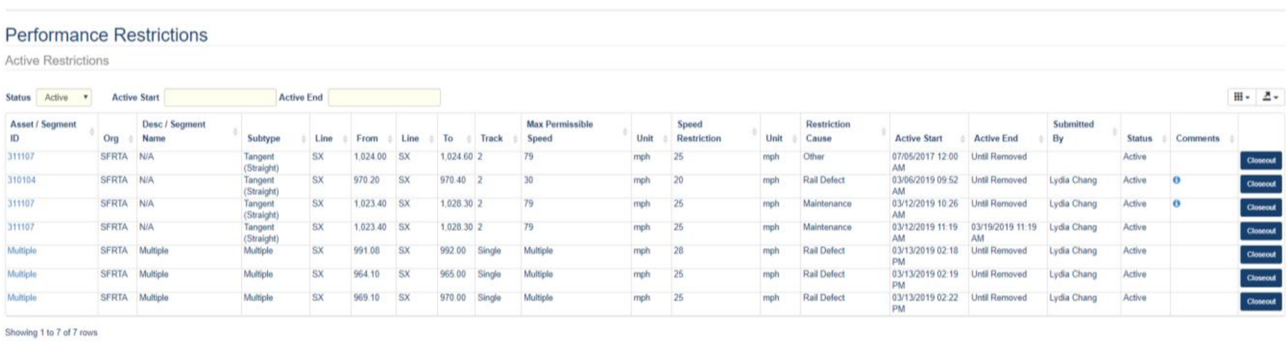


Org	Category : Class	Avg. Age	Count	Cost
SFRTA	Revenue Vehicles : Buses (Rubber Tire Vehicles)	1.9	27	$6,800,000
SFRTA	Revenue Vehicles : Rail Cars	12.6	80	$120,451,428
SFRTA	Equipment : Service Vehicles (Non-Revenue)	4.9	18	$428,825
SFRTA	Equipment : Capital Equipment	34.1	389	$23,444,181
SFRTA	Facilities : Administration	4.0	2	$20,416,404
SFRTA	Facilities : Maintenance	21.0	2	$5,850,617
SFRTA	Facilities : Passenger	17.2	18	$80,231,965
SFRTA	Facilities : Parking	5.0	2	$16,682,365
SFRTA	Infrastructure : Guideway	96.9	585	$854,353,632
SFRTA	Infrastructure : Power & Signal	117.5	244	$86,864,000
SFRTA	Infrastructure : Track	110.9	1100	$312,118,420

Agency	Num. Projects	Cost
SFRTA	2	$10,866,624

All restrictions in an "Active" status appear by default in the management section. Events can be filtered to "All" or "Expired" to view historical restrictions, by status. Filtering can also be achieved by searching for events that were active within a specified period of time. If a restriction is no longer active, it can be manually closed by clicking the "Closeout" button. If a restriction was closed in error, the user can filter for expired restrictions and reopen the restriction event that was closed in error. All restriction event data can be directly exported from the table.

Figure 57 Performance Restriction Management



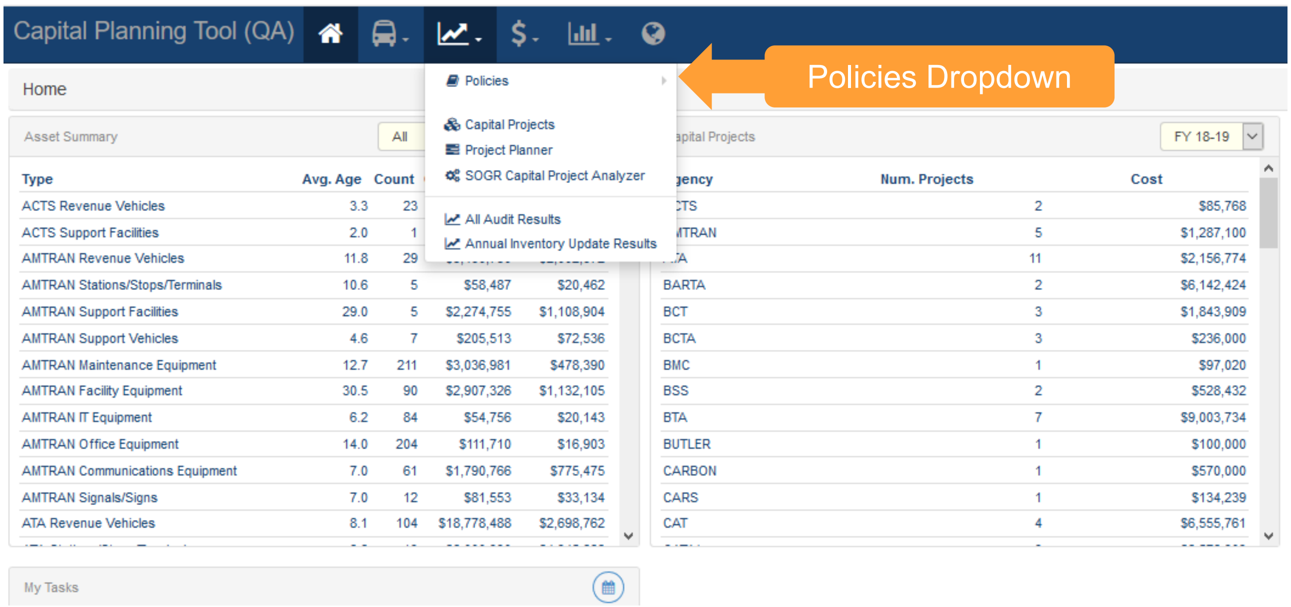
Asset / Segment ID	Org	Desc / Segment Name	Subtype	Line	From	Line	To	Track	Max Permissible Speed	Unit	Speed Restriction	Unit	Restriction Cause	Active Start	Active End	Submitted By	Status	Comments	
311107	SFRTA	N/A	Tangent (Straight)	SX	1,024.00	SX	1,024.60	2	79	mph	25	mph	Other	07/05/2017 12:00 AM	Until Removed		Active		Closeout
310104	SFRTA	N/A	Tangent (Straight)	SX	970.20	SX	970.40	2	30	mph	20	mph	Rail Defect	03/06/2019 09:52 AM	Until Removed	Lydia Chang	Active		Closeout
311107	SFRTA	N/A	Tangent (Straight)	SX	1,023.40	SX	1,028.30	2	79	mph	25	mph	Maintenance	03/12/2019 10:26 AM	Until Removed	Lydia Chang	Active		Closeout
311107	SFRTA	N/A	Tangent (Straight)	SX	1,023.40	SX	1,028.30	2	79	mph	25	mph	Maintenance	03/12/2019 11:19 AM	03/19/2019 11:19 AM	Lydia Chang	Active		Closeout
Multiple	SFRTA	Multiple	Multiple	SX	991.08	SX	992.00	Single	Multiple	mph	28	mph	Rail Defect	03/13/2019 02:18 PM	Until Removed	Lydia Chang	Active		Closeout
Multiple	SFRTA	Multiple	Multiple	SX	964.10	SX	965.00	Single	Multiple	mph	25	mph	Rail Defect	03/13/2019 02:19 PM	Until Removed	Lydia Chang	Active		Closeout
Multiple	SFRTA	Multiple	Multiple	SX	969.10	SX	970.00	Single	Multiple	mph	25	mph	Rail Defect	03/13/2019 02:22 PM	Until Removed	Lydia Chang	Active		Closeout

Showing 1 to 7 of 7 rows

6.0 Policies

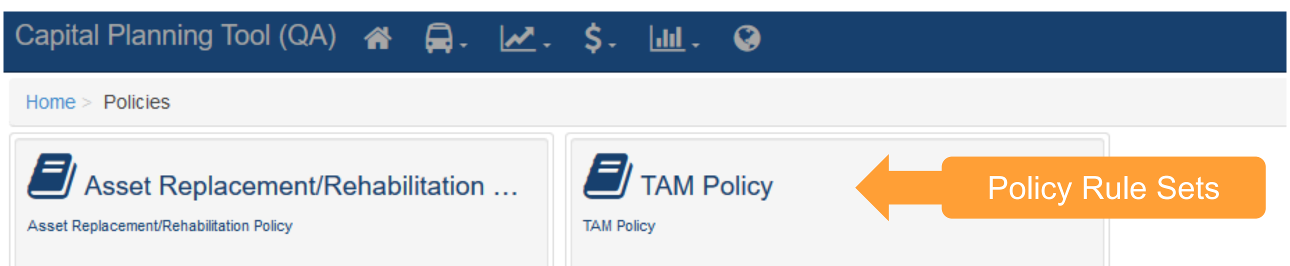
A Policy is a set of parameters that establishes rules related to assets saved within the system. While an organization can create and modify multiple policies, each organization can only have one current policy at a time. The policy is applied to an organization's inventory on an asset by asset basis so that policy rules are reflected on every individual asset.

Figure 58 Policies Dropdown



Clicking "Policies" in the dropdown will display the Policy options that are available. Each individual policy also can be accessed through the submenu navigation options, by hovering over the policies selection in the main navigation dropdown.

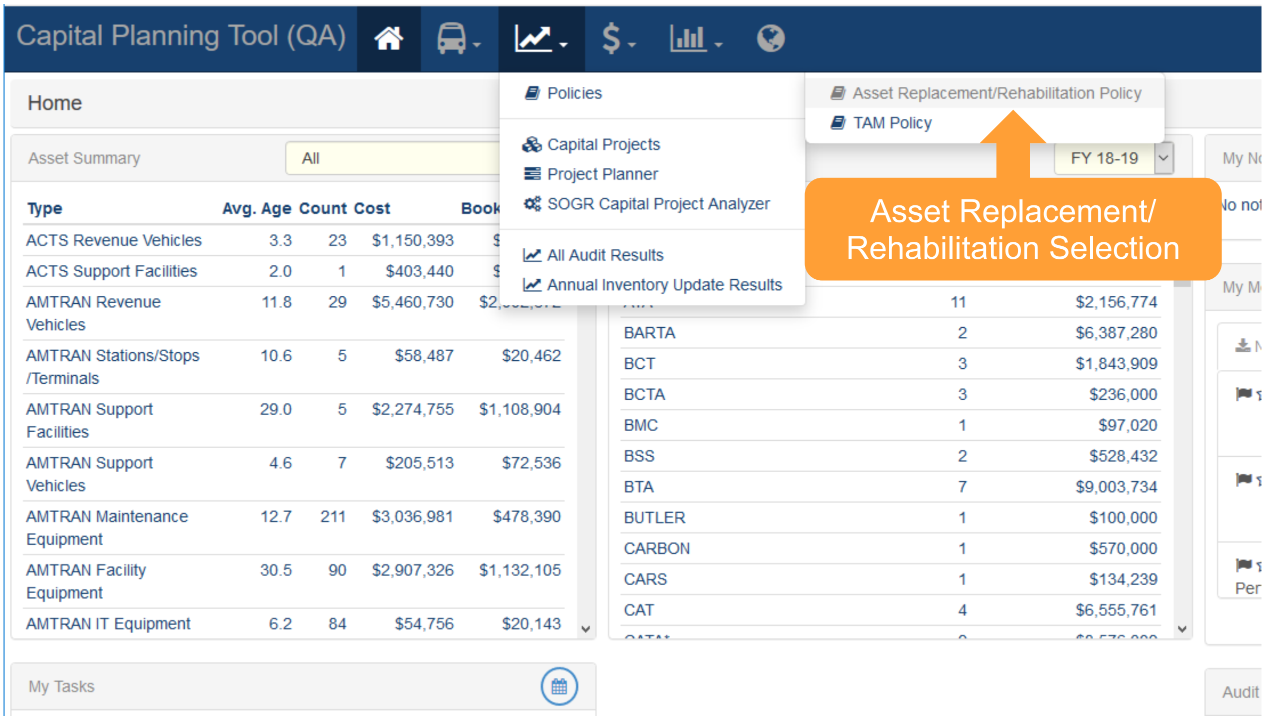
Figure 59 Policy Rule Sets



6.1 Asset Replacement/Rehabilitation Policy

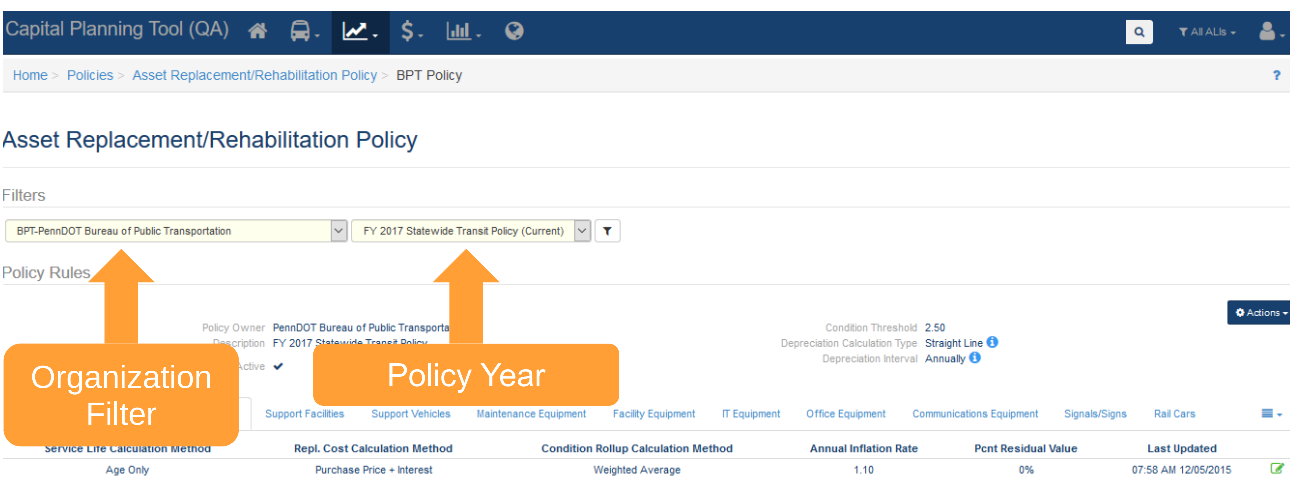
Asset Replacement and Rehabilitation Polices can be chosen under the Policies submenu. The SOGR Capital Project Analyzer, Capital Projects, and Project Planner tools apply this policy to determine the estimated service life, replacement cost, and depreciation of an asset. Asset Replacement/Rehabilitation Policy Rules here can be set at the State or individual organization level. This type of policy set will persist from year to year, unless edited or removed.

Figure 60 Asset Replacement/Rehabilitation Policy



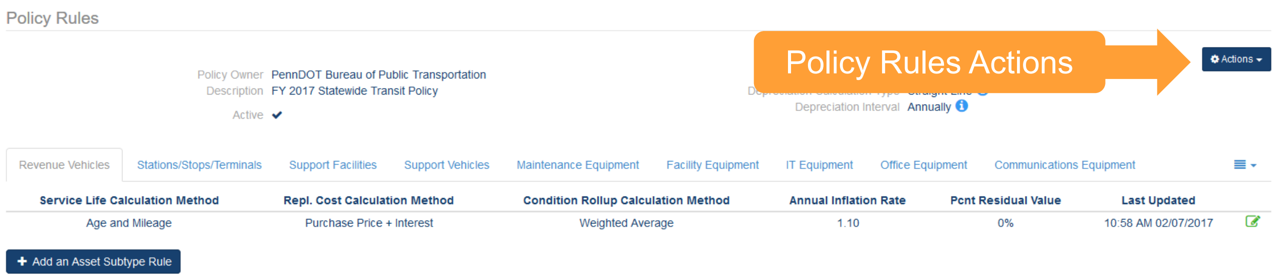
Use the organization filter dropdown to choose the correct organization. You will then need to select the policy year that you wish to work with. Pressing the Filter Button will display the policy rules for the organization and policy year that you have chosen.

Figure 61 Asset Replacement/Rehabilitation Policy Filters



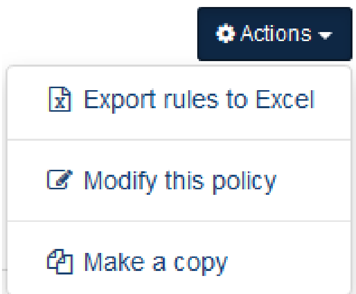
Policy Rules are displayed at one of three levels: organization-wide, asset type, and asset subtype. Organization-wide policy rules can be exported, modified, distributed, copied, and created through the Actions button.

Figure 62 Policy Rules



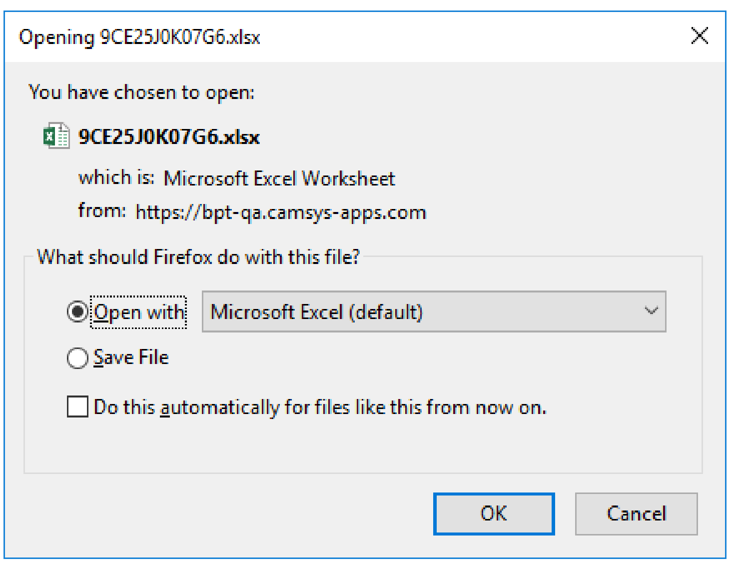
The Actions button will display a list of options as shown.

Figure 63 Policy Rules Actions Dropdown



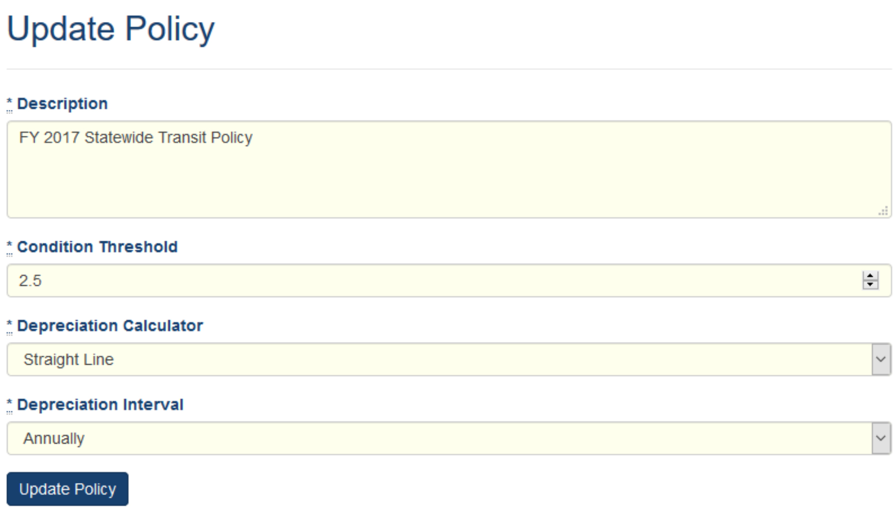
Export rules to Excel opens a dialog box to save the Policy Rule as an Excel spreadsheet file.

Figure 64 Export rules to Excel (Windows dialog box)



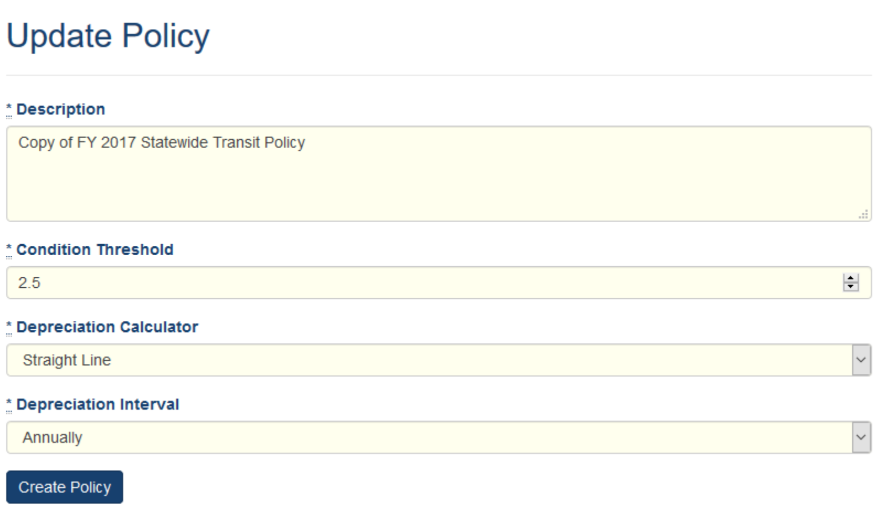
Modify this Policy will open a dialog box that displays the editable fields at the organization level. When you are done making edits, click “Update Policy” button to apply changes.

Figure 65 Modify (Update) Organization Policy Dialog



Users can create new policies by copying an existing policy. Make a Copy displays the same dialog as Update Policy but once saved, a new policy is created based on the copied policy. When copying a policy, you can set the initial organization wide parameters. For example, Depreciation Calculator can be changed from “straight line” to “declining balance.” The new created Policy is named according to the Description text box shown.

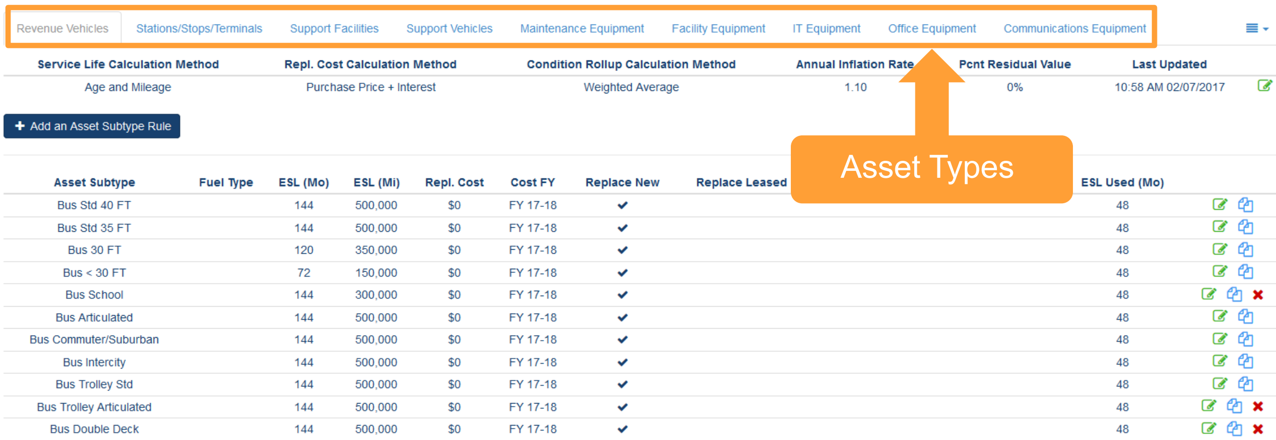
Figure 66 Copy Organization Policy Dialog



Asset types are shown as a series of clickable tabs. Asset subtypes and corresponding asset type rules are listed below each Asset type.

There are a set of rules for each asset type which deal with service life calculation, replacement cost calculation type, condition rollup calculation, annual inflation rate, percent residual value, and condition rollup weight.

Figure 67 Asset Types



Service Life Calculation Method	Repl. Cost Calculation Method	Condition Rollup Calculation Method	Annual Inflation Rate	Pcnt Residual Value	Last Updated
Age and Mileage	Purchase Price + Interest	Weighted Average	1.10	0%	10:58 AM 02/07/2017

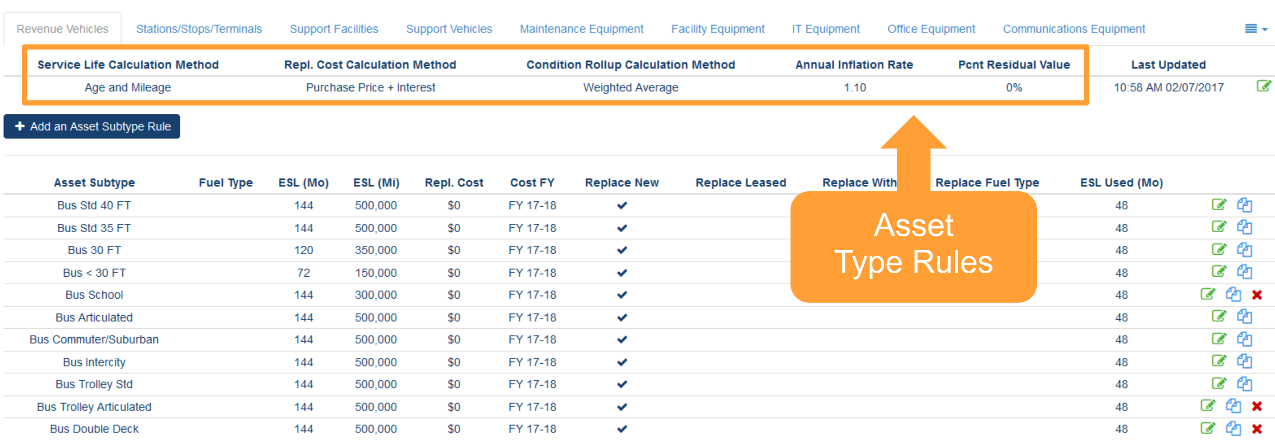
Asset Subtype	Fuel Type	ESL (Mo)	ESL (Mi)	Repl. Cost	Cost FY	Replace New	Replace Leased	ESL Used (Mo)
Bus Std 40 FT		144	500,000	$0	FY 17-18	✔		48
Bus Std 35 FT		144	500,000	$0	FY 17-18	✔		48
Bus 30 FT		120	350,000	$0	FY 17-18	✔		48
Bus < 30 FT		72	150,000	$0	FY 17-18	✔		48
Bus School		144	300,000	$0	FY 17-18	✔		48
Bus Articulated		144	500,000	$0	FY 17-18	✔		48
Bus Commuter/Suburban		144	500,000	$0	FY 17-18	✔		48
Bus Intercity		144	500,000	$0	FY 17-18	✔		48
Bus Trolley Std		144	500,000	$0	FY 17-18	✔		48
Bus Trolley Articulated		144	500,000	$0	FY 17-18	✔		48
Bus Double Deck		144	500,000	$0	FY 17-18	✔		48

If there are too many asset types to fit in the tabs, you will see the dropdown icon, as depicted below.

Figure 68 Additional Assets Dropdown Icon

The Asset Type Rules are listed below the Asset Types.

Figure 69 Asset Type Rules

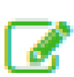


Service Life Calculation Method	Repl. Cost Calculation Method	Condition Rollup Calculation Method	Annual Inflation Rate	Pcnt Residual Value	Last Updated
Age and Mileage	Purchase Price + Interest	Weighted Average	1.10	0%	10:58 AM 02/07/2017

Asset Subtype	Fuel Type	ESL (Mo)	ESL (Mi)	Repl. Cost	Cost FY	Replace New	Replace Leased	Replace With	Replace Fuel Type	ESL Used (Mo)
Bus Std 40 FT		144	500,000	$0	FY 17-18	✔				48
Bus Std 35 FT		144	500,000	$0	FY 17-18	✔				48
Bus 30 FT		120	350,000	$0	FY 17-18	✔				48
Bus < 30 FT		72	150,000	$0	FY 17-18	✔				48
Bus School		144	300,000	$0	FY 17-18	✔				48
Bus Articulated		144	500,000	$0	FY 17-18	✔				48
Bus Commuter/Suburban		144	500,000	$0	FY 17-18	✔				48
Bus Intercity		144	500,000	$0	FY 17-18	✔				48
Bus Trolley Std		144	500,000	$0	FY 17-18	✔				48
Bus Trolley Articulated		144	500,000	$0	FY 17-18	✔				48
Bus Double Deck		144	500,000	$0	FY 17-18	✔				48

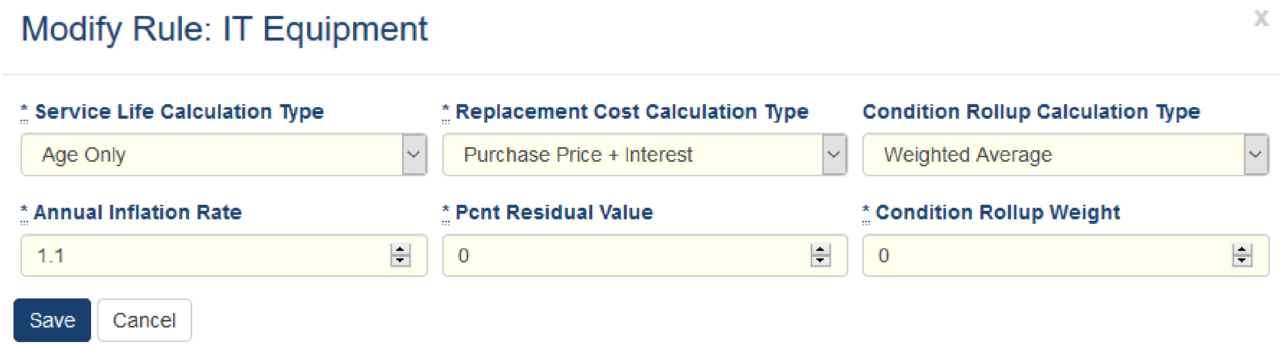
You can edit the Asset Type Rule for a specific asset, by clicking on the edit icon as depicted below.

Figure 70 Edit Icon



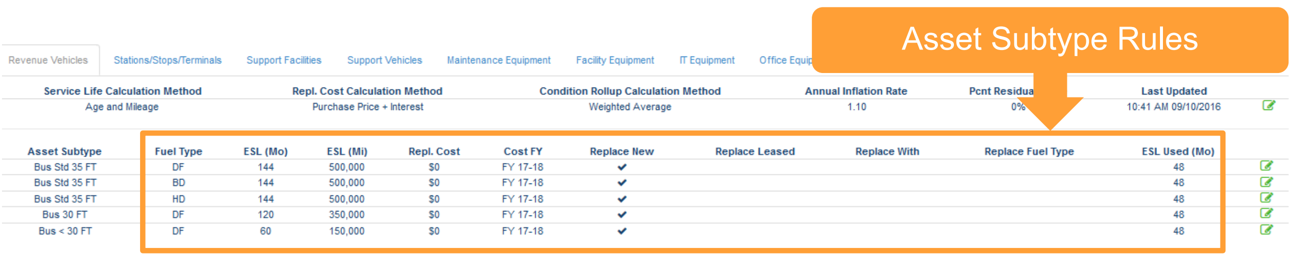
Clicking edit on an “Asset Type Rule” will display a dialog box, allowing you to modify the Asset Policy Rule.

Figure 71 Modify Asset Policy Rule



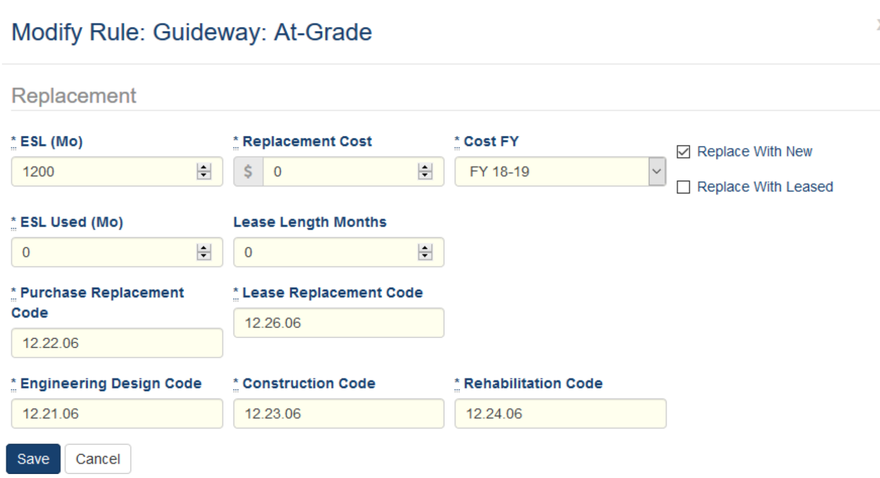
The Asset Subtypes that are displayed will correspond to the Asset Type tab. The available Asset Subtype rules are the same as the Subtypes in your inventory. The estimated service life information at the Asset Subtype level describes the asset and its expected lifespan.

Figure 72 Asset Type and Asset Subtype rules



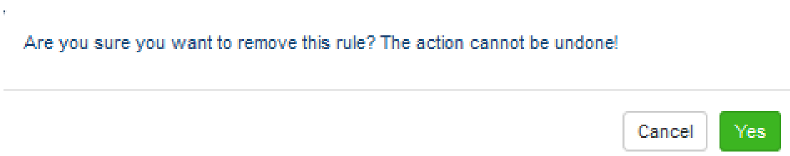
Clicking the Edit icon will bring up a dialog box to modify an Asset Subtype Rule.

Figure 73 Modify Asset Subtype Rule



You also can choose to delete an asset subtype rule when the icon is displayed. You will be prompted with a dialog box before this action is taken!

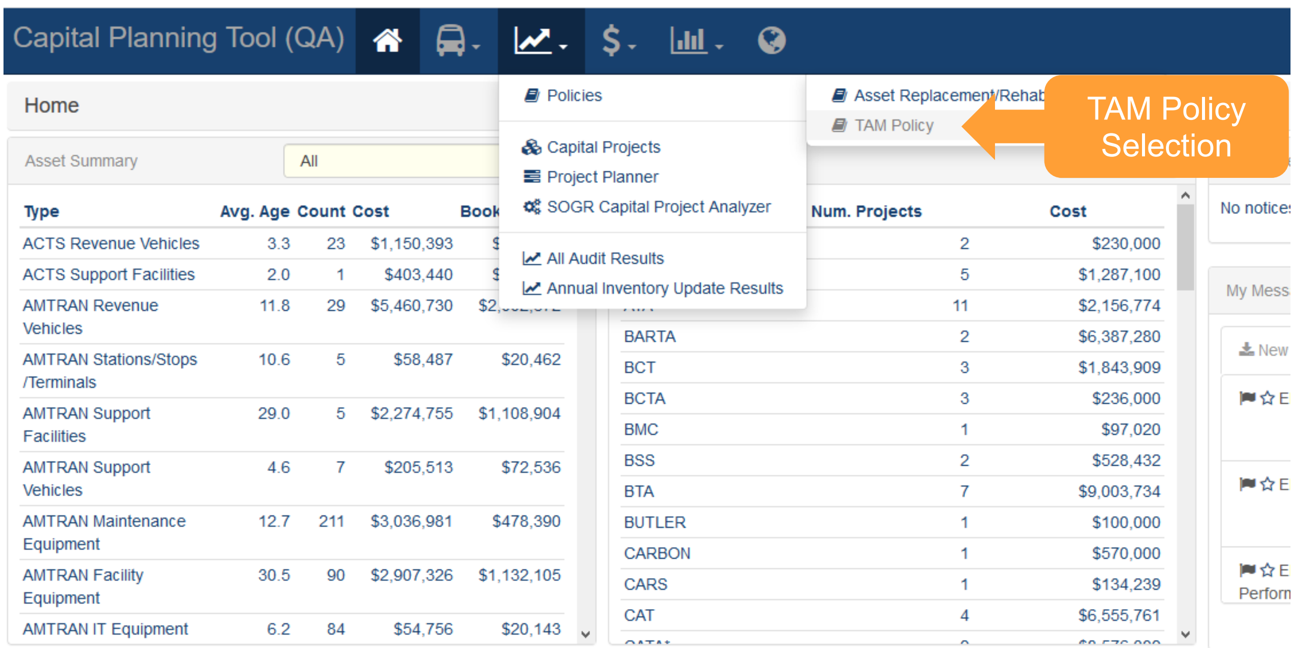
Figure 74 Remove Asset Subtype Rule



6.2 TAM Policy

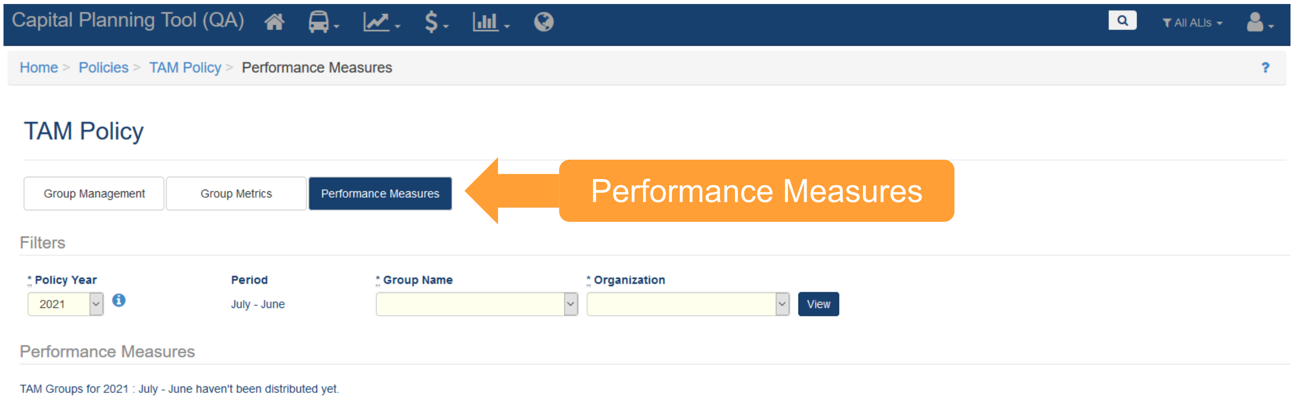
TAM Policies are used to set Useful Life Benchmark (ULB), Transit Economic Requirements Model (TERM), and Performance Measure Percent targets for asset categories on an annual basis. The TAM Policy will be used to conduct performance calculations for the NTD A-90 report. Ideally, TAM Policies should be set at the beginning of an NTD Reporting year (e.g., July–June, October–September, or January–December). Organizations can be grouped by a common characteristic, and policies can be distributed through the group.

Figure 75 TAM Policy Dropdown Menu Selection



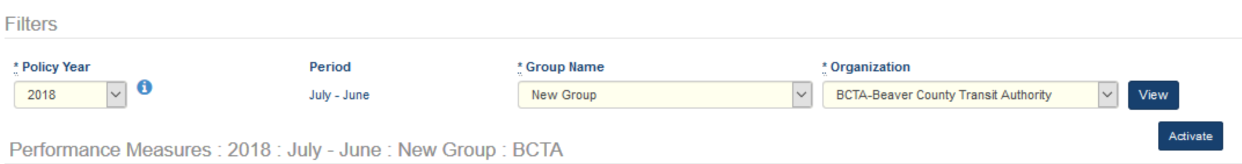
The first step in the creation of a TAM Policy, is to Add a New Policy Year, followed by creating groups. These initial steps can only be completed on the Group Management tab, which is only accessible by users with the TAM Group Manager or Admin permission.

Figure 76 TAM Policy Performance Measures



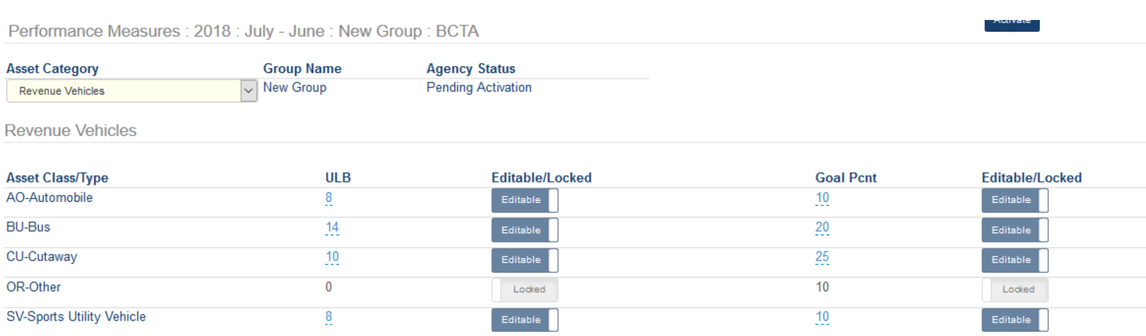
To view an organizations Performance Measures, select the correct Policy Year, Group Name, and Organization and click the “View” button.

Figure 77 Policy Year Filters



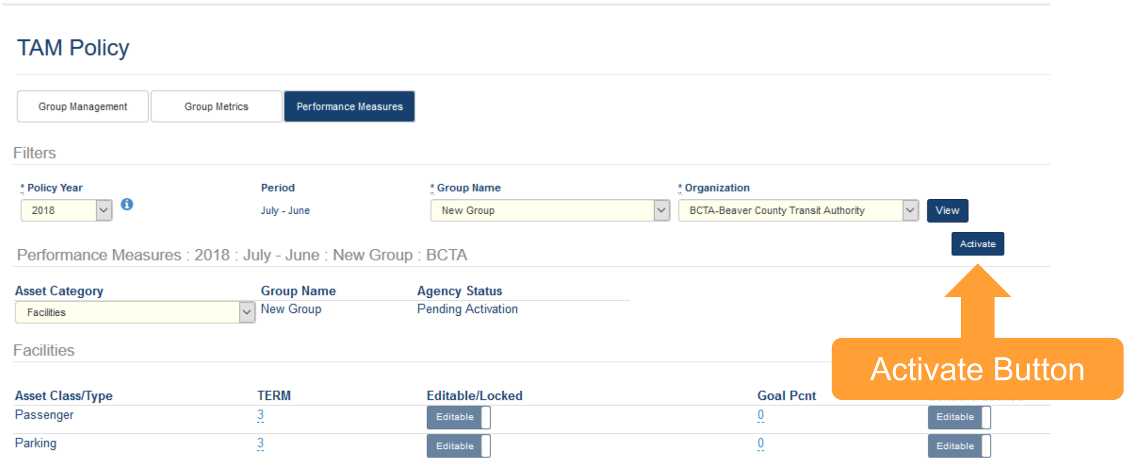
You can select the Asset Category that you wish to view by selecting from the Asset Category dropdown. You can adjust each ULB, TERM value (for Facilities only) or Goal Percent (Goal Pcnt) based on your organization’s need. Any Asset Class/Type that is Locked will not be editable.

Figure 78 Asset Type Percentage Settings



Select the “Activate” button when you are satisfied with the Performance Measures shown. If all of the Editable/Locked toggles were in a state of “Locked” for every asset within each Asset Category, you do not need to Activate the Performance Measures, as they changed to an Active status upon distribution to the Performance Measures tab.

Figure 79 Activate Perfomance Measures



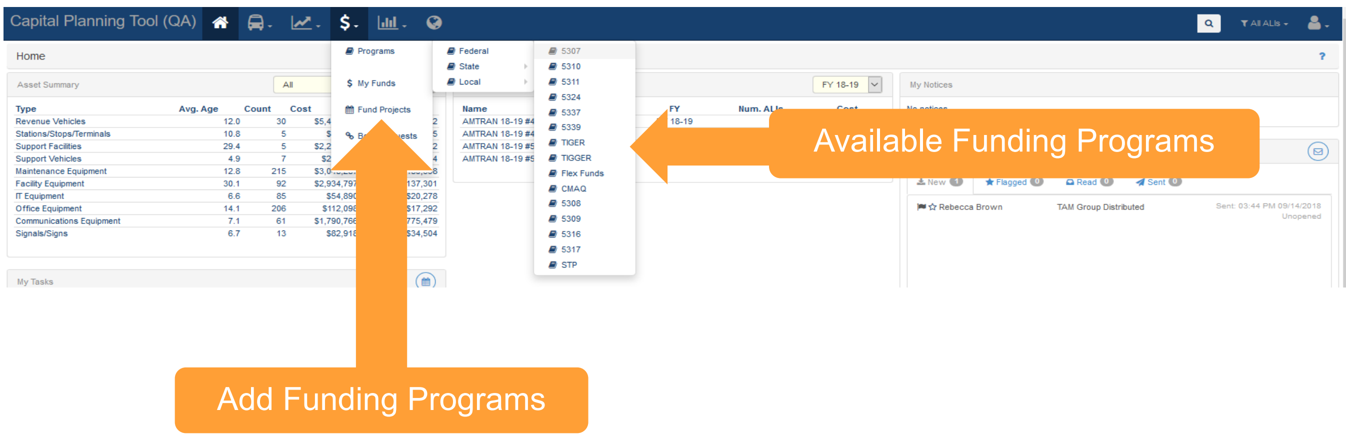
7.0 Funding

Organizations can establish and manage different types of Federal, State, and Local Programs.

7.1 Programs

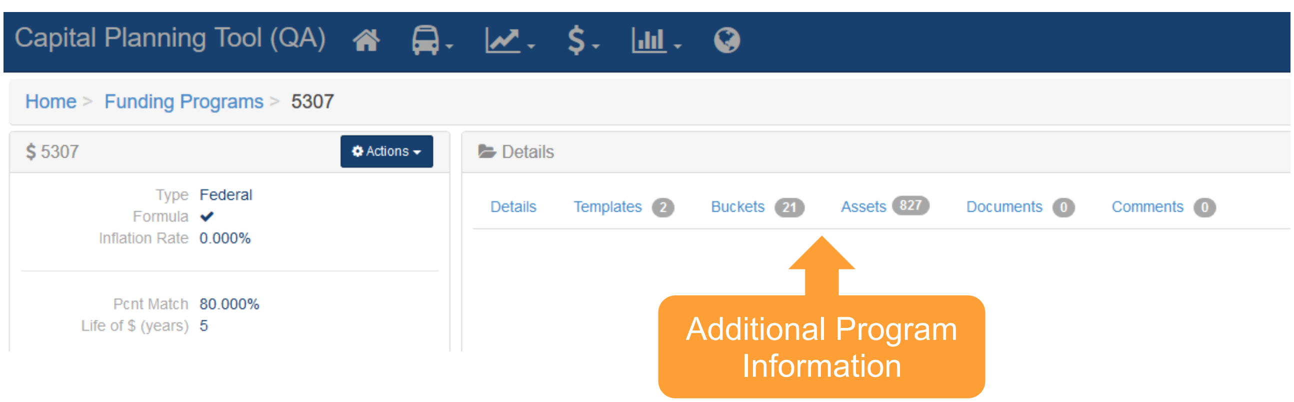
Programs are different types of funding programs which address specific sets of needs and/or objectives. You can see available programs from the Funding dropdown. All funding programs are categorized into an appropriate Source, such as: Federal, State, and Local. New programs can be added by selecting the “Add Funding Program” link.

Figure 80 Available Funding Programs



Clicking on an individual program will give you specific details about that program, like Templates, Buckets, Assets that were funded by the selected program, as well as other pertinent information such as documents, comments, and program details.

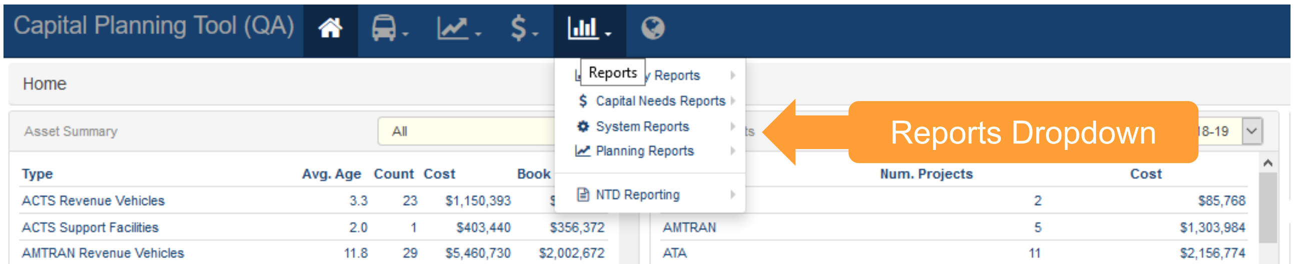
Figure 81 Funding Program Details



8.0 Reports

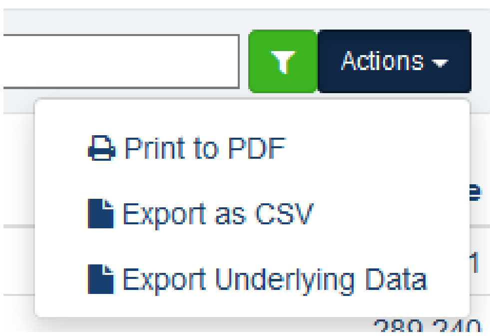
A variety of preconfigured (canned) reports can be generated, ranging in topic areas from Inventory, Capital Needs, System Reports, and Planning.

Figure 82 Reports Dropdown



Reports can be exported into multiple file formats for distribution or further analysis. In the top right corner of each report, look for the Actions menu for available download links.

Figure 83 Report Exports



8.1 Inventory Reports

Inventory reports are a rollup of asset inventory data, including age, condition, and funding related calculations.

Asset Condition Report—The Asset Condition Report displays the count of assets of different types for a range of asset condition ratings (excellent, good, adequate, etc.). The report can filter data by Asset Class.

Figure 84 Asset Condition Report

Asset Age Report—The Asset Age Report displays the count of assets of different classes for a range of asset ages (one year old, two years old, etc.). The report can filter data by Asset Class.

Figure 85 Asset Age Report

Years	Buses (Rubber Tire Vehicles)	Rail Cars	Ferries	Other Passenger Vehicles	Service Vehicles (Non-Revenue)	Capital Equipment	Administration	Maintenance	Passenger	Parking	Guideway	Power & Signal	Track
< 1	66	0	0	0	0	21	1	1	0	0	0	0	1
1	456	0	0	1	28	501	3	0	2	0	0	0	0
2	580	0	0	0	20	933	3	0	3	0	0	0	0
3	712	0	0	0	52	1,398	4	0	8	0	0	0	0
4	566	0	0	2	57	790	4	0	5	0	0	0	0
5	793	0	0	83	43	600	1	0	5	0	0	0	0

The Asset Funding Source Report computes for every funding program, organization (agency), year of purchase, the number of assets that were purchased using a particular funding program as well as the cost (purchase amount) associated with that particular funding program. Drill-down functionality allows the user to see the exact lists of assets, and the dollars spent on each asset for that funding source. Multiple filtering options are available, providing the ability to filter by multiple combinations of data:

- Agency, Funding Program.
- Agency, Funding Program, Year of Purchase.
- Funding Program, Agency.
- Funding Program, Agency, Year of Purchase.
- Funding Program, Year of Purchase.
- Funding Program, Year of Purchase, Agency.
- Year of Purchase, Funding Program.
- Year of Purchase, Funding Program, Agency.

Figure 86 Asset Funding Source Report

1514 Bond

Agency	# Assets	Cost (Purchase)
ACTS	1	$12,500
ATA	3	$126,563
BARTA	4	$3,648,346
EMTA	3	$2,404
MMVTA	8	$687,879
PAAC	30	$3,303,467
RRTA	5	$5,129,995
WASHCO	3	$52,333
WBT	4	$1,920

8.2 Capital Needs Reports

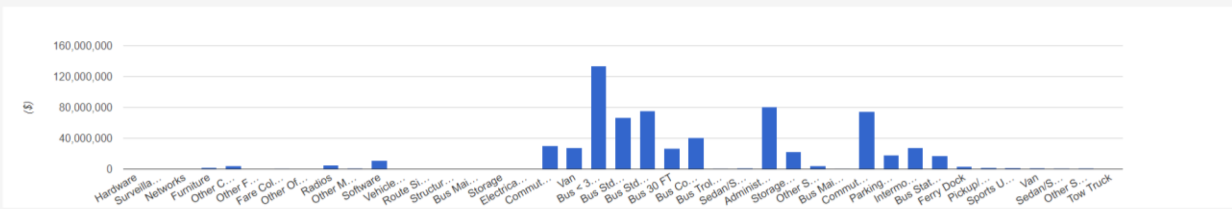
Capital Needs Reports are rollups of information about different asset, projects, ALIs and funding.

The Backlog Report is a list of all system assets associated with individual organizations. The report entails summary data of assets by Subtype, including total count, average replacement cost, and total replacement cost.

Figure 87 Backlog Report

Backlog Report

Actions



Backlog Report

Category			Replacement Cost	
Class	Type	Count	Average	Total
IT Equipment	Hardware	93	$2,432	$226,193
Communications Equipment	Surveillance & Security	72	$5,070	$365,017
IT Equipment	Networks	19	$14,954	$284,129
Office Equipment	Furniture	66	$31,843	$2,101,657

8.3 Planning Reports

Planning Reports are reports that analyze asset-based data such as state of good repair, asset status, and metrics related to service life goals and performance.

The Revenue Vehicle Replacement Report finds and displays summary data for all revenue vehicles that are scheduled to be replaced within a specified year.

Figure 88 Revenue Vehicle Replacement Report

Revenue Vehicle Replacement Report — Jump to... — Fiscal Year FY 19-20 — Actions

All Transit Operators

Fiscal Year	Category	Class	Sub Type	Count	Book Value	Replacement Cost
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Sedan/Station Wagon	19	$220,647	$1,032,574
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Commuter/Suburban	28	$10,703,185	$15,351,540
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Std 35 FT	156	$33,434,345	$64,564,155
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Std 40 FT	151	$25,090,859	$65,899,722
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus < 30 FT	404	$22,996,202	$117,170,310
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus 30 FT	59	$12,698,894	$20,638,200
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Trolley Std	2	$485,086	$717,256
FY 19-20	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Van	936	$24,409,851	$24,272,352
FY 19-20	Revenue Vehicles	Other Passenger Vehicles	Commuter Rail Car Trailer	71	$112,539,277	$25,462,588

The State of Good Repair Report finds and displays summary data for all asset subtypes that are scheduled to be replaced across all planning years. The report is the same as the Revenue Vehicle Replacement Report except it is not limited to revenue vehicles and rolls up values across all planning years.

Figure 89 State of Good Repair Report

State of Good Repair Report

State of Good Repair: All Transit Agencies

Category	Class	Sub Type	Count	Book Value	Replacement Cost
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Articulated	11	$6,197,520	$8,414,445
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Std 35 FT	438	$138,243,902	$189,321,201
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Sedan/Station Wagon	27	$416,191	$1,476,958
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Commuter/Suburban	161	$67,597,460	$92,477,734
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Std 40 FT	623	$208,254,531	$285,018,765
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus < 30 FT	736	$53,347,885	$217,175,923
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus 30 FT	154	$35,377,187	$55,183,445
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Van	1,204	$36,625,492	$31,357,436
Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Trolley Std	31	$8,585,473	$12,003,406
Revenue Vehicles	Other Passenger Vehicles	Commuter Rail Car Trailer	100	$167,850,515	$36,271,696
Revenue Vehicles	Rail Cars	Light Rail Car	9	$25,638,417	$3,887,370
Revenue Vehicles	Rail Cars	Commuter Locomotive Diesel	20	$74,188,285	$65,980,817
Equipment	Service Vehicles (Non-Revenue)	Pickup/Utility Truck	75	$436,717	$2,616,326
Equipment	Service Vehicles (Non-Revenue)	Sports Utility Vehicle	85	$693,546	$2,303,917
Equipment	Service Vehicles (Non-Revenue)	Van	79	$729,509	$2,272,877
Equipment	Service Vehicles (Non-Revenue)	Sedan/Station Wagon	62	$437,762	$1,546,568
Equipment	Service Vehicles (Non-Revenue)	Other Support Vehicle	31	$212,606	$1,610,645
Equipment	Service Vehicles (Non-Revenue)	Tow Truck	2	$0	$344,361
Equipment	Capital Equipment	Bus Maintenance Equipment	1,033	$7,860,493	$11,975,480
Equipment	Capital Equipment	Other Maintenance Equipment	140	$11,904,184	$16,743,863
Equipment	Capital Equipment	Rail Maintenance Equipment	2	$73,195	$1,180,195
Equipment	Capital Equipment	Other Facilities Equipment	416	$3,164,904	$5,017,581

The Disposition Report finds and displays summary data for all asset subtypes that are scheduled to meet their Estimated Service Life within a particular fiscal year and are ready to be disposed.

Figure 90 Disposition Report

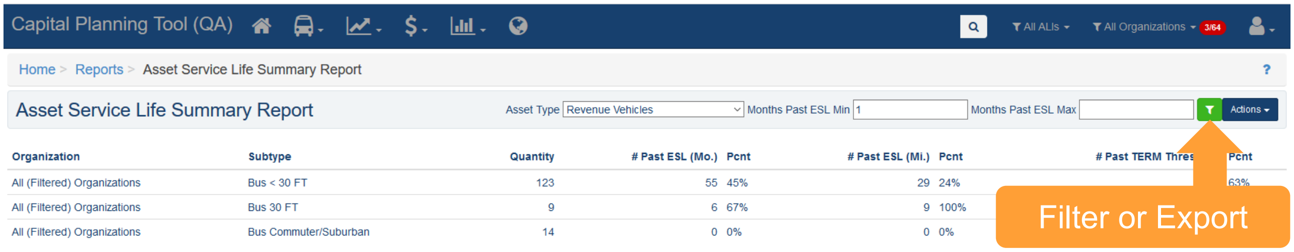
Disposition Report

All Transit Operators

Fiscal Year	Category	Class	Sub Type	Count	Book Value	Replacement Cost
FY 18-19	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Commuter/Suburban	9	$3,138,453	$4,819,364
FY 18-19	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus Std 40 FT	1	$265,314	$426,977
FY 18-19	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Bus 30 FT	3	$679,554	$1,037,982
FY 18-19	Revenue Vehicles	Buses (Rubber Tire Vehicles)	Van	1	$29,493	$25,649
FY 18-19	Equipment	Capital Equipment	Other Facilities Equipment	2	$143	$208
FY 18-19	Equipment	Capital Equipment	Other Communications Equipment	1	$0	$0
		Totals for FY 18-19		**17**	**$4,112,957**	**$6,310,180**

The Asset Service Life Summary Report displays all asset categories, listed by subtype, and calculates the quantity and percentage of assets that are past their Estimated Service Life in month, miles, and the quantity and percentage that have fallen below the TERM threshold as set in the Asset Replacement/Rehabilitation Policy. Data can be filtered by Asset Category, and by a minimum and maximum range in months of assets beyond their Estimated Service Life. A drill-down of data is provided on an organization-level basis, while the table, and the underlying data used to make the calculations can be exported as well.

Figure 91 Asset Service Life Summary Report

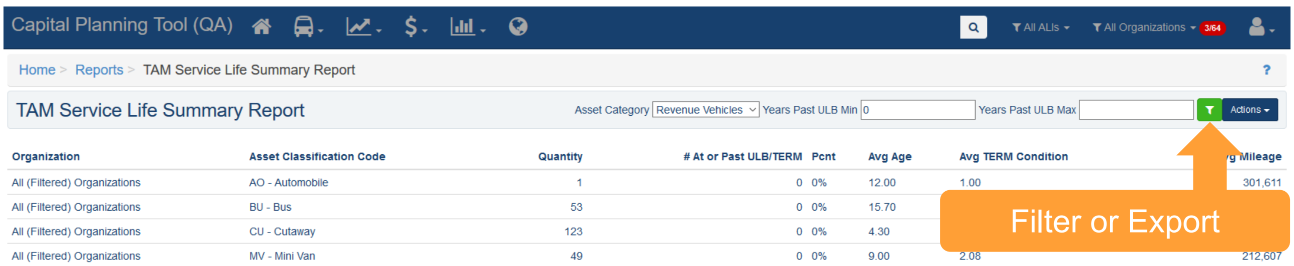


The TAM Service Life Summary Report displays all asset categories, listed by subtype, and calculates the following:

- Revenue Vehicles and Equipment—Service Vehicles: Quantity and percentage that are past their Useful Life Benchmark in months;
- Facilities (Primary): Quantity and percentage of Facilities (Primary) that have fallen below the TERM Policy value; and
- Infrastructure—Track: Linear asset miles of Infrastructure that have Active Performance Restrictions.

The ULB, and TERM values pull from the most recent year of the TAM Policy for each organization that are either in a Pending Activation or Active status. Data can be filtered by Asset Category, and a drill-down of data is provided on an organization-level basis, while the table, and the underlying data used to make the calculations can be exported as well.

Figure 92 TAM Service Life Summary Report



9.0 Specialized Reports

9.1 Asset Fleet Builder

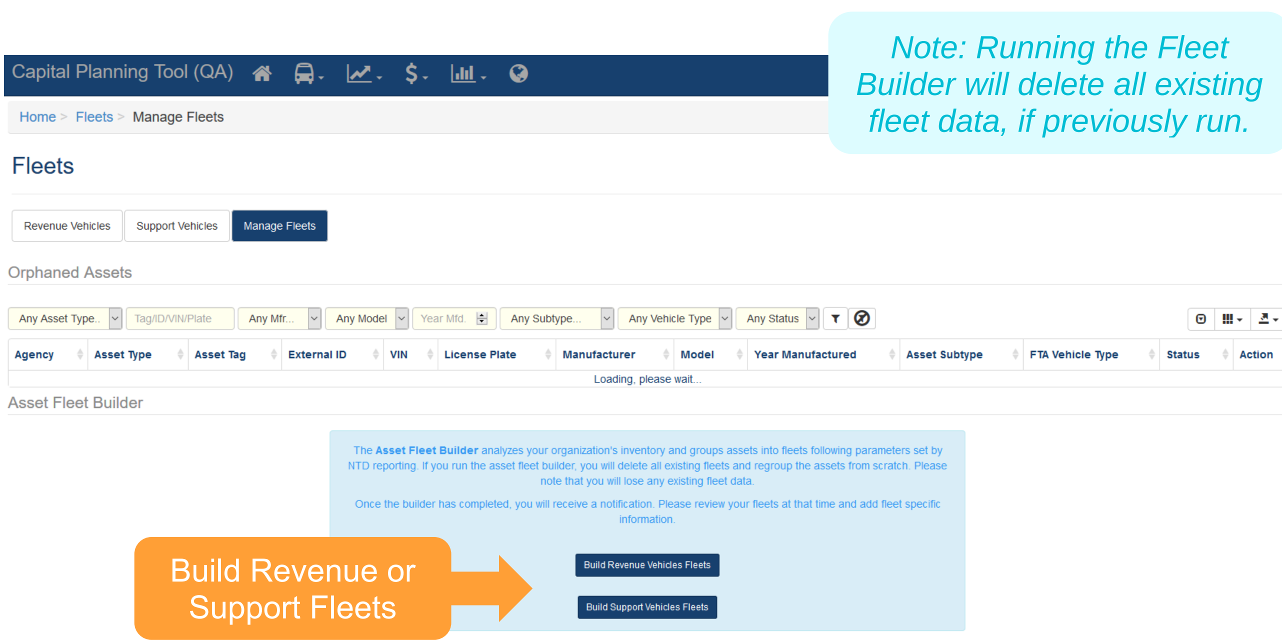
A fleet is a number of vehicles that share the same characteristics. Organizing vehicles into fleets is advantageous because it summarizes rolling stock inventories at a higher level.

The Asset Fleet Builder is a tool specifically designed to assist with the creation of the Revenue Vehicles (A-30), and Service Vehicles (Nonrevenue) (A-35) National Transit Database (NTD) asset reports. Both of these NTD asset forms require data be reported by fleet, and the Asset Fleet Builder provides an interface to auto-create and easily manage both Revenue Vehicle and Service Vehicle (Nonrevenue) fleets.

When building fleets for the first time, you can choose to use the Asset Fleet Builder. The builder analyzes organization inventories and automatically groups assets into fleets based on the unique fleet definitions and sorts those assets into either the Revenue Vehicles or Service Vehicles section. All assets grouped within a fleet will no longer be listed within the Orphaned Assets portion of the Manage Fleets section. When you run the builder, it will function as a background job in the system and notify you once complete in the notifications section. From there, users can review the fleets, add fleet-specific information or manually regroup assets as needed.

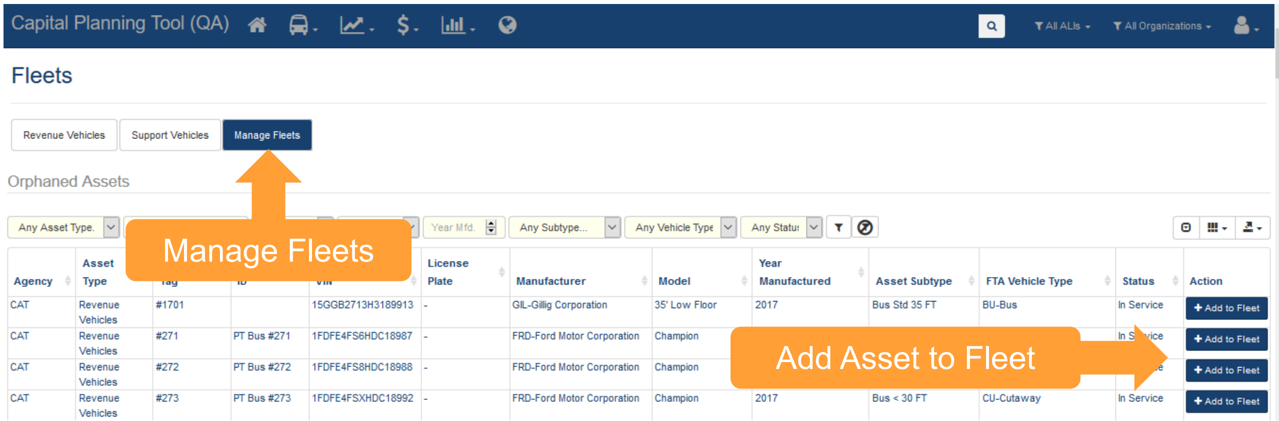
You should only use the builder tool the first time you create a fleet, otherwise you will delete existing fleets.

Figure 93 Asset Fleet Builder



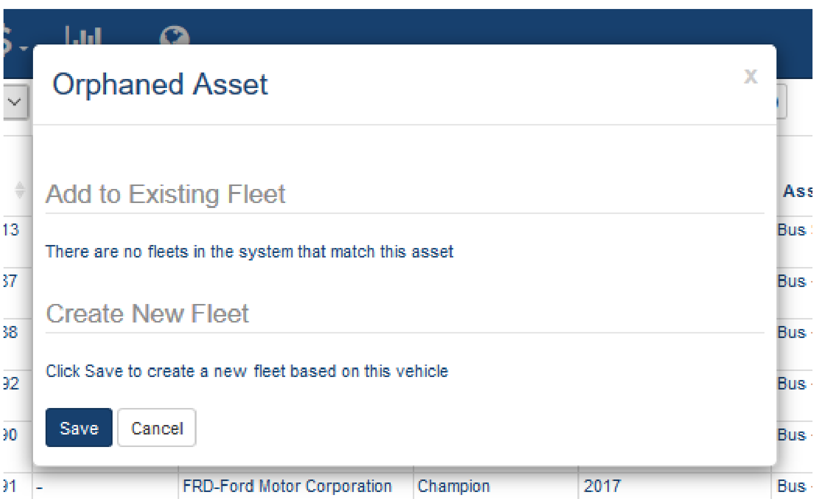
When you add a new asset to the system, the new asset will be added as an Orphaned Asset within the Manage Fleets section.

Figure 94 Asset Fleet Builder—Orphaned Assets



Selecting "Add to Fleet" on the right allows users to add assets to a current fleet or create a new fleet, and will limit options of existing fleets only if all shared characteristics match. Clicking "Save" will either add to an existing fleet, or create a new fleet, depending on what you choose, and allow you to specify details about that fleet.

Figure 95 Adding an Orphaned Asset to a Fleet



When you add the asset to a new fleet, if you wish to update fleet-specific details, look for the actions button, and click "Update this Fleet" to add details. Users also can remove the fleet completely, at which point all fleet assets will return to the Orphaned Assets portion of the Manage Fleets section. Users also can edit other fleet and asset-specific data such as NTD ID, asset odometer readings, and remove or add assets to the fleet from directly within the fleet.

Figure 96 Adding a New Fleet

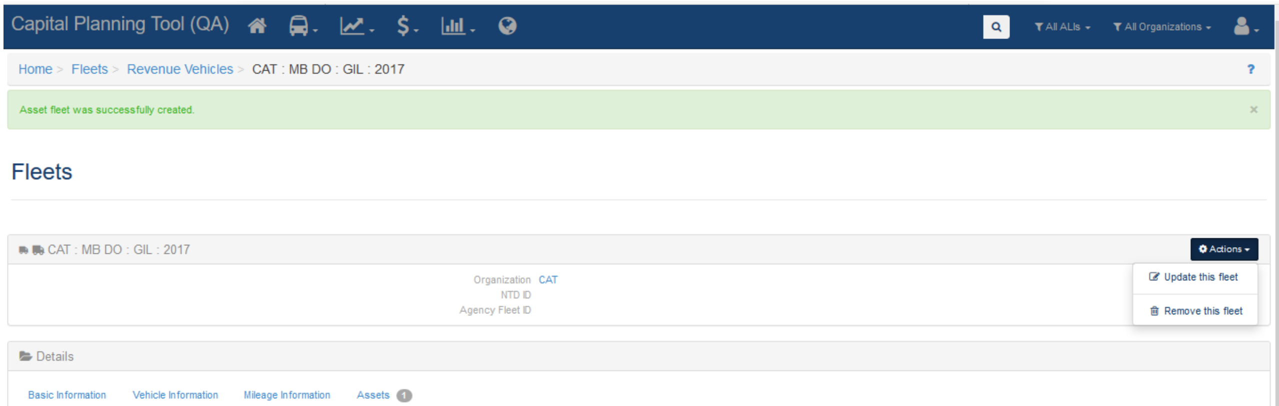


Figure 97 Update Asset Fleet Details

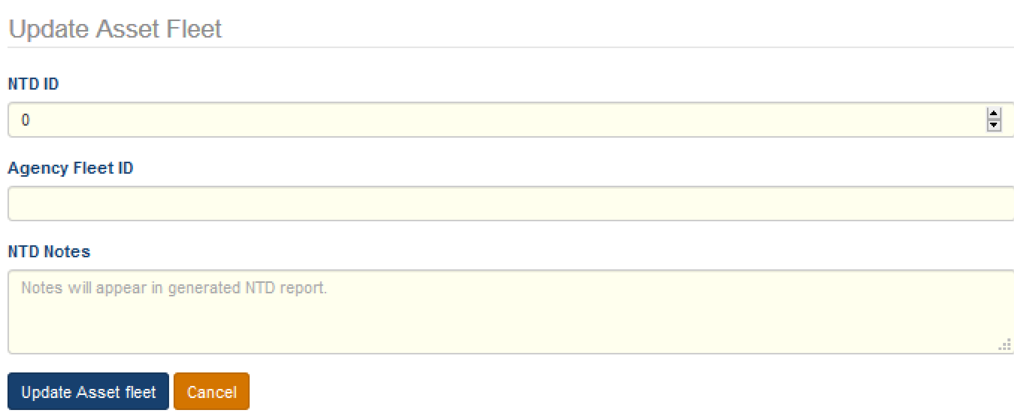


Figure 98 Update Odometer Readings

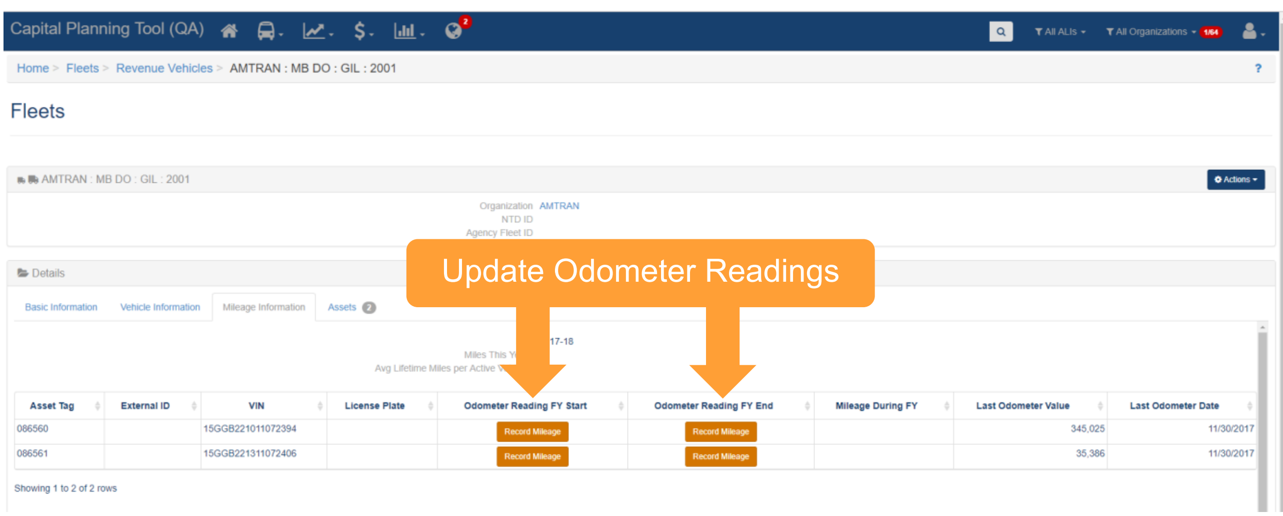
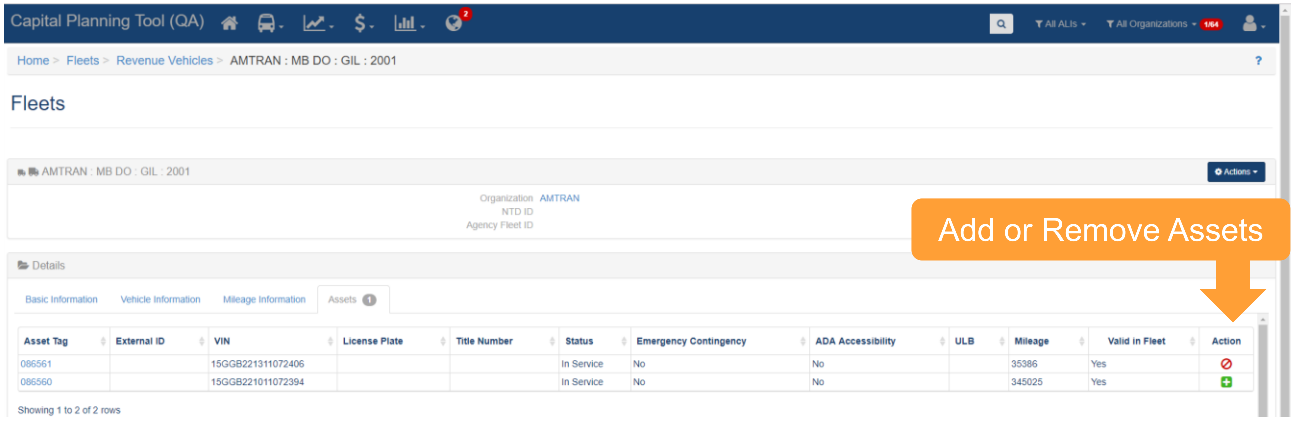


Figure 99 Remove or Add Assets from within a Fleet



9.2 NTD Asset Reports

The NTD Asset Reports are forms that must be submitted on an annual basis for every organization that receives Federal public transit funding. Required forms differ between organization, based on the category of assets in operation for each organization. The specific forms are as follows:

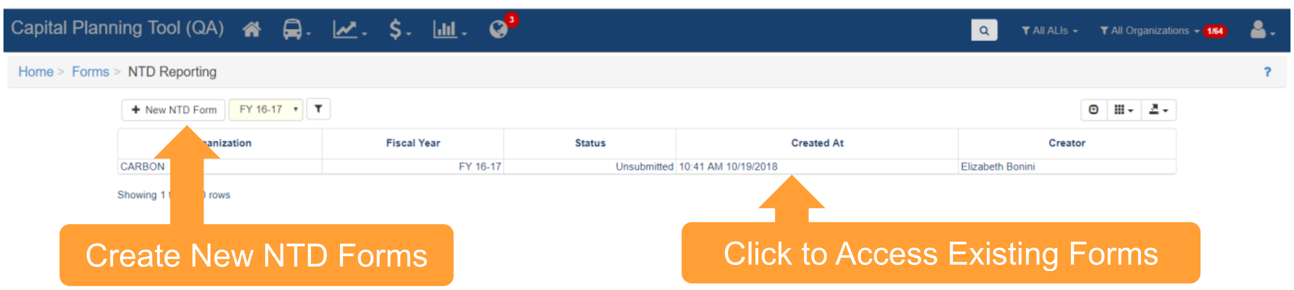
- Facilities (A-15) — Pulls asset data for primary facilities.
- Infrastructure (A-20) — Pulls asset data for infrastructure assets, and produces a separate report for each Primary Mode/Type of Service unique combination.
- Revenue Vehicles (A-30) — Pulls asset data for revenue vehicles, which are included as part of a fleet.
- Service Vehicles (Non-revenue) (A-35) — Pulls asset data for Service Vehicle (Non-Revenue), which are included as part of a fleet.
- Performance Measure Targets (A-90) — Pulls ULB, TERM value, and goal percentages for the TAM Policy associated with the corresponding NTD Report year, and calculates performance.

Each report pulls and calculates data according to the reporting year selected, and the activities associated with the system reporting period, i.e., July—June, October—September, or January—December.

Figure 100 Access NTD Reports

Any NTD reports that have been previously generated can be viewed on the initial report table available when clicking on the NTD Reports module. Existing report data can be accessed by clicking on the row for an individual organization upon which point it can be downloaded, submitted for review, have comments added, updated, or removed. New reports can be generated by clicking on the New NTD Form button.

Figure 101 Table of Previously Generated NTD Reports



When you click on the “New NTD Form” button, you will be prompted to select an organization, reporting year, and enter other user-specific information. Upon clicking “Save NTD Form”, you will be directed to the newly created NTD Details and Data page.

Figure 102 Create New Reporting Year Forms

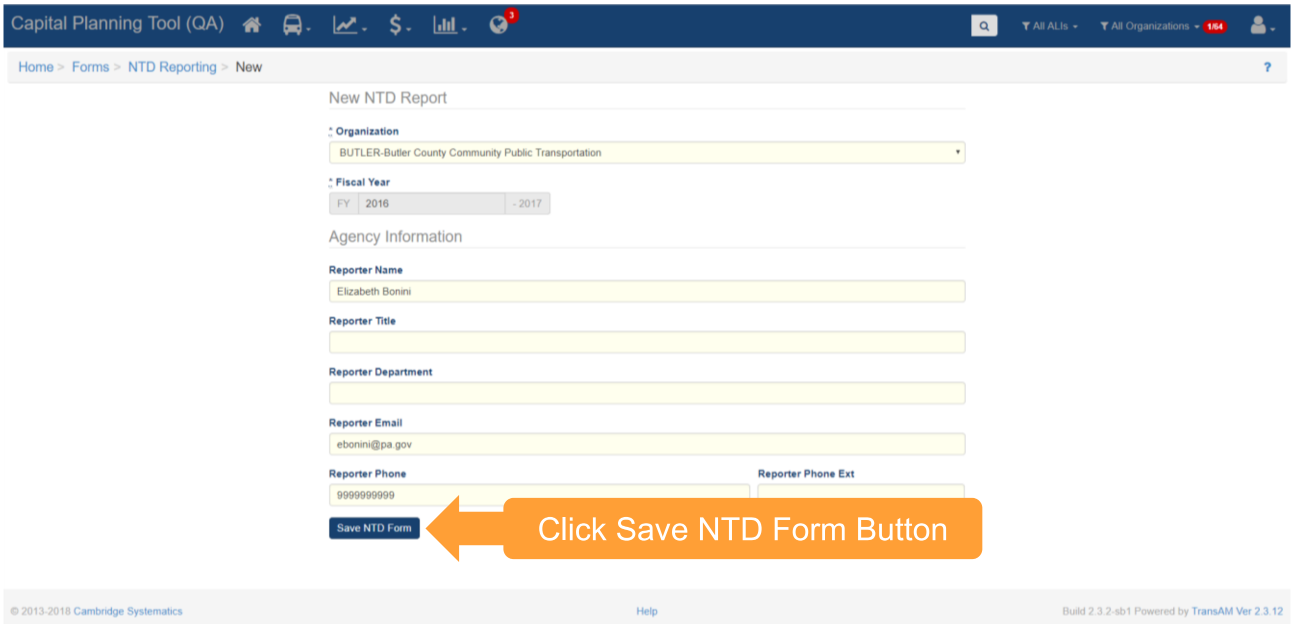
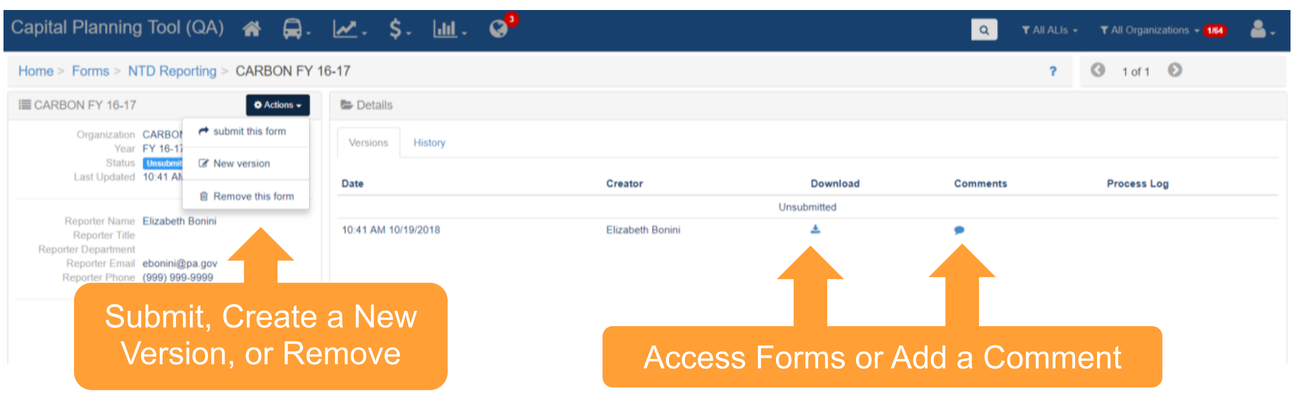


Figure 103 NTD Report Details and Data



When you click on the Download icon, the already generated forms appear and can be downloaded by clicking on the form-specific button. Excel file downloads will initiate upon clicking each form-specific button.

Figure 104 Download each NTD Form