Creation of Trans-AM

A Joint Venture
between
Virginia, Pennsylvania and the FTA

Where We Started

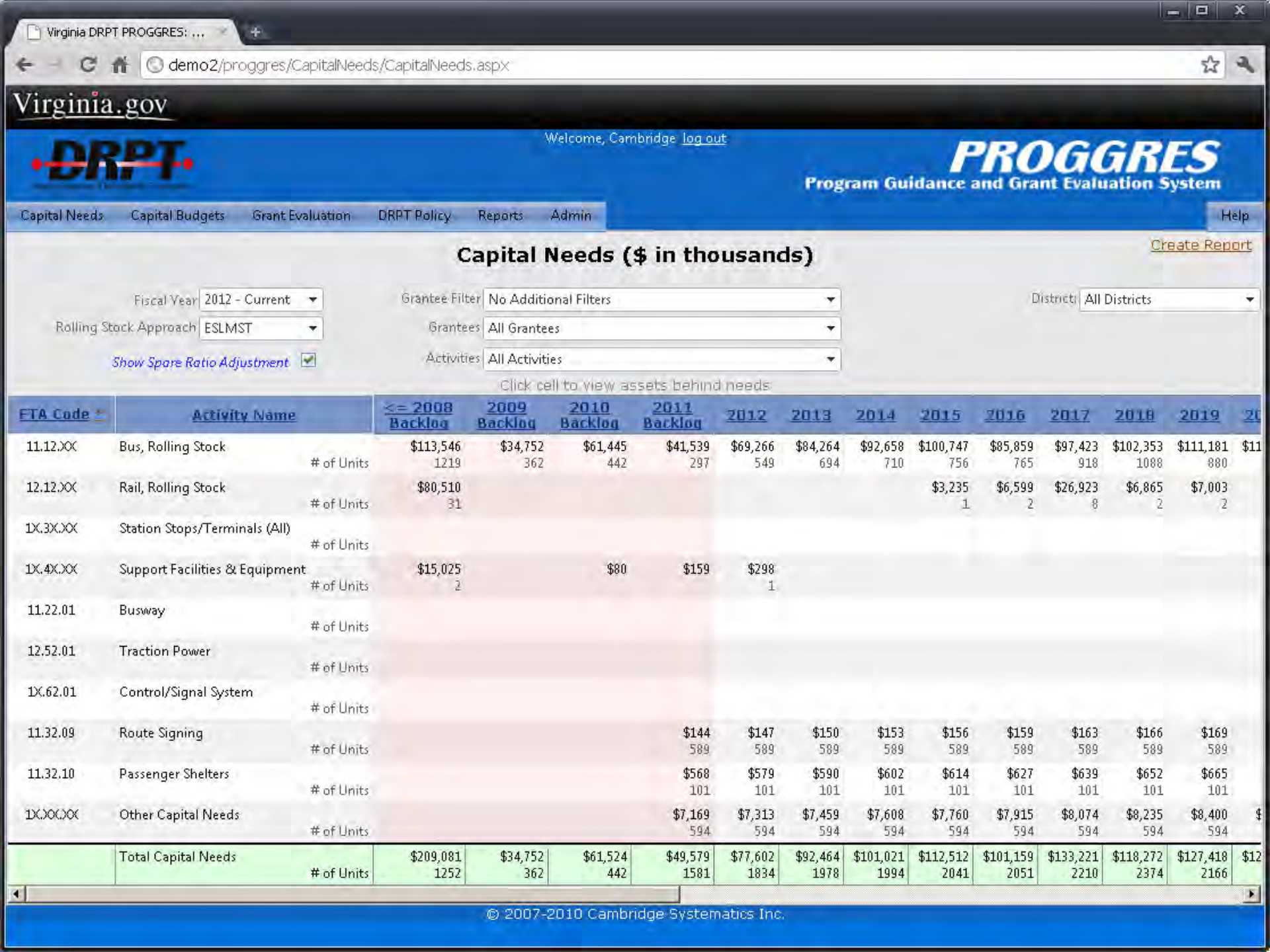
- Topics
- →Brief History of PROGGRES
- →Walk Thru of PROGGRES
- →Discussion of TransAM

Goals of Asset Management System:

- A quick, equitable, and systematic method of assessing the applications for our limited grant resources
- A realistic method of calculating capital needs over a 20 year planning horizon

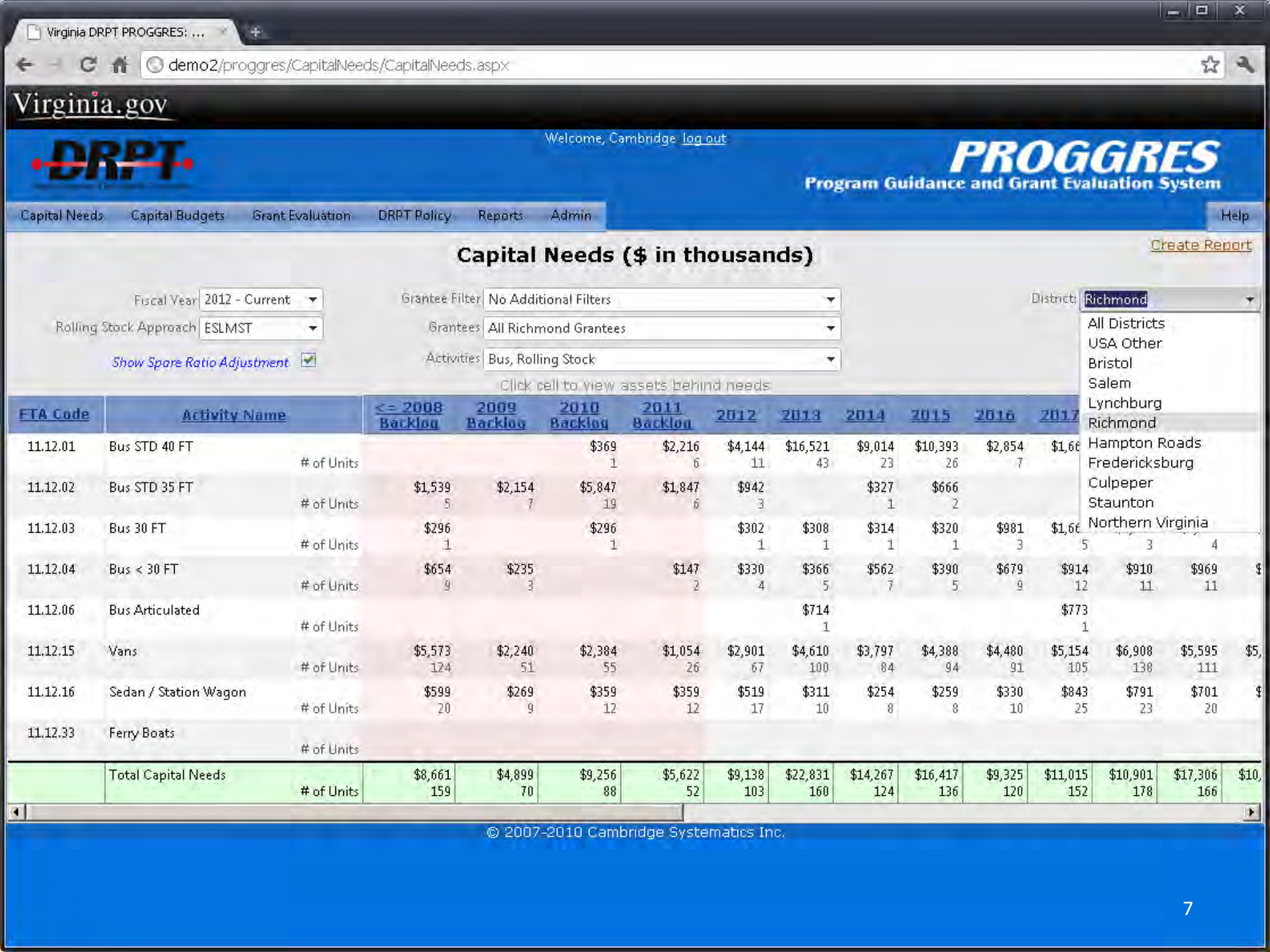
Collecting Data

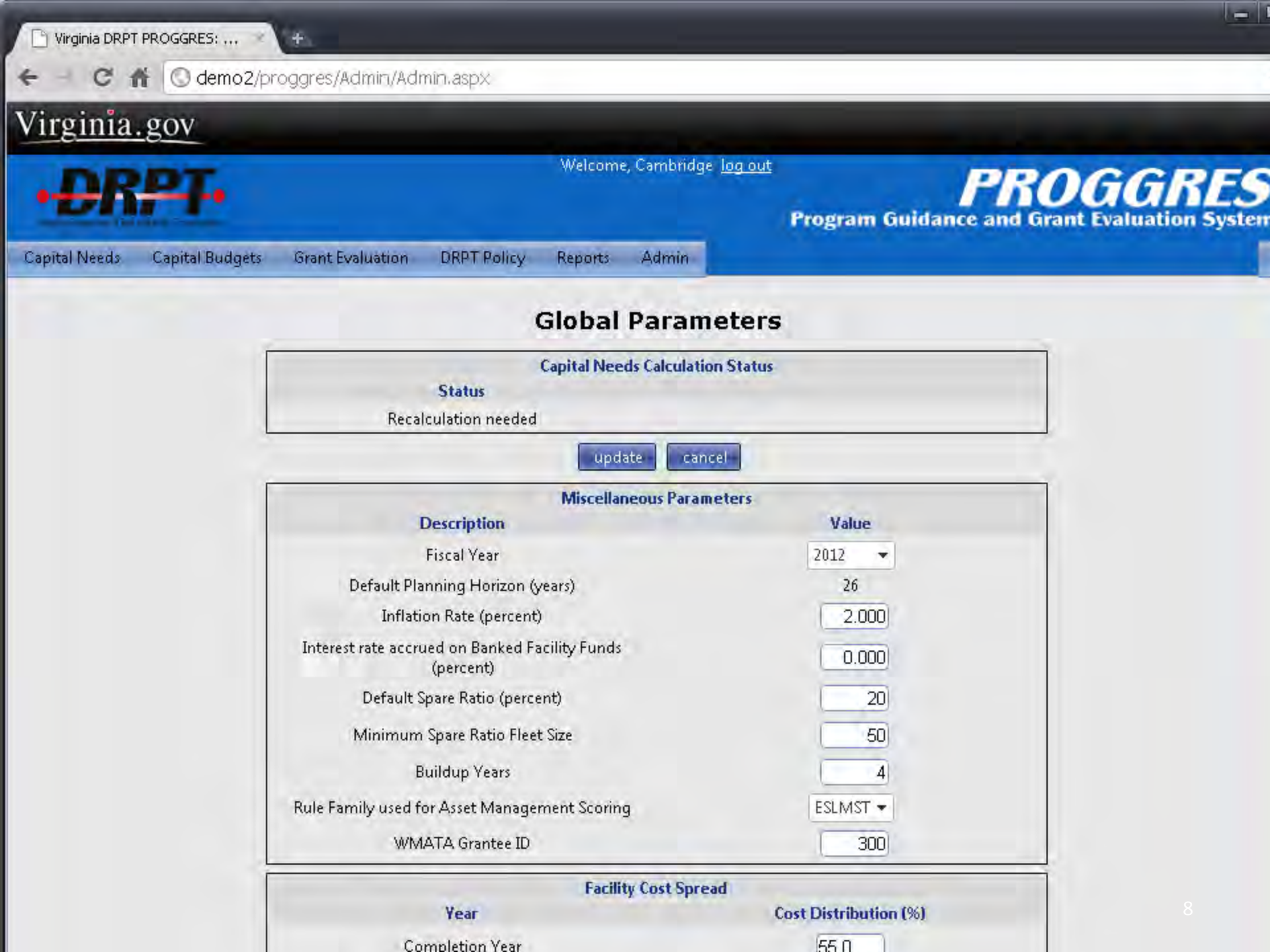
- DRPT put together a user group of service providers to test the system.
- Also formed an internal user group from all facets of DRPT operations
- Hired consultant to work with service providers to enter and validate rolling stock


Virginia DRPT PROGGRES: ...
demo2/proggres/CapitalNeeds/CapitalNeeds.aspx
Virginia.gov
Welcome, Cambridge log out
DRPT
PROGGRES
Program Guidance and Grant Evaluation System
Capital Needs
Capital Budgets
Grant Evaluation
DRPT Policy
Reports
Admin
Help
Create Report
Capital Needs ($ in thousands)
Fiscal Year 2012 - Current
Rolling Stock Approach ESLMST
Show Spare Ratio Adjustment
Grantee Filter No Additional Filters
Grantees All Grantees
Activities All Activities
District All Districts
Click cell to view assets behind needs
FTA Code *
Activity Name
<= 2008 Backlog
2009 Backlog
2010 Backlog
2011 Backlog
2012
2013
2014
2015
2016
2017
2018
2019
11.12.XX
Bus, Rolling Stock
# of Units
$113,546
1219
$34,752
362
$61,445
442
$41,539
297
$69,266
549
$84,264
694
$92,658
710
$100,747
756
$85,859
765
$97,423
918
$102,353
1088
$111,181
880
12.12.XX
Rail, Rolling Stock
# of Units
$80,510
31
$3,235
1
$6,599
2
$26,923
8
$6,865
2
$7,003
2
1X.3X.XX
Station Stops/Terminals (All)
# of Units
1X.4X.XX
Support Facilities & Equipment
# of Units
$15,025
2
$80
$159
$298
1
11.22.01
Busway
# of Units
12.52.01
Traction Power
# of Units
1X.62.01
Control/Signal System
# of Units
11.32.09
Route Signing
# of Units
$144
589
$147
589
$150
589
$153
589
$156
589
$159
589
$163
589
$166
589
$169
589
11.32.10
Passenger Shelters
# of Units
$568
101
$579
101
$590
101
$602
101
$614
101
$627
101
$639
101
$652
101
$665
101
1X.XX.XX
Other Capital Needs
# of Units
$7,169
594
$7,313
594
$7,459
594
$7,608
594
$7,760
594
$7,915
594
$8,074
594
$8,235
594
$8,400
594
Total Capital Needs
# of Units
$209,081
1252
$34,752
362
$61,524
442
$49,579
1581
$77,602
1834
$92,464
1978
$101,021
1994
$112,512
2041
$101,159
2051
$133,221
2210
$118,272
2374
$127,418
2166
© 2007-2010 Cambridge Systematics Inc.

FTA Code	Activity Name		<= 2008 Backlog	2009 Backlog	2010 Backlog	2011 Backlog	2012	2013	2014	2015	2016	2017	2018	2019	202
11.12.01	Bus STD 40 FT		$33,427	$5,540	$13,684	$16,249	$20,738	$30,759	$29,785	$27,982	$22,577	$21,539	$19,091	$31,747	$33,
		# of Units	90	15	37	44	55	80	76	70	55	51	44	73	
11.12.02	Bus STD 35 FT		$9,827	$9,126	$15,430	$10,750	$11,605	$11,482	$18,503	$13,830	$14,177	$12,058	$16,261	$20,217	$20,
		# of Units	30	20	48	33	35	32	47	28	28	23	28	40	
11.12.03	Bus 30 FT		$19,541	$8,547	$10,659	$6,218	$19,630	$18,482	$20,423	$21,152	$21,575	$26,674	$22,447	$26,148	$31,
		# of Units	66	27	36	21	65	60	65	66	66	80	66	73	
11.12.04	Bus < 30 FT		$2,264	$1,248	$2,072	$2,304	$4,182	$4,796	$6,250	$7,226	$4,494	$8,026	$6,529	$5,716	$6,
		# of Units	33	18	20	21	38	50	63	61	51	68	59	58	
11.12.06	Bus Articulated							$714				$773			
		# of Units						1				1			
11.12.15	Vans		$34,667	$8,826	$8,981	$4,581	$11,341	$16,536	$15,887	$19,128	$20,625	$24,274	$32,182	$24,267	$22,
		# of Units	841	233	249	130	298	423	402	481	492	574	721	548	
11.12.16	Sedan / Station Wagon		$4,728	$1,466	$1,526	$1,436	$1,770	$1,494	$1,810	$1,587	$2,412	$4,078	$5,844	$3,086	$2,
		# of Units	158	49	51	48	58	48	57	49	73	121	170	88	
11.12.33	Ferry Boats		$9,092		$9,092					$9,842					
		# of Units	1		1					1					
	Total Capital Needs		$113,546	$34,752	$61,445	$41,539	$69,266	$84,264	$92,658	$100,747	$85,859	$97,423	$102,353	$111,181	$116,
		# of Units	1219	362	442	297	549	694	710	756	765	918	1088	880	

© 2007-2010 Cambridge Systematics Inc.


Virginia DRPT PROGGRES: ...
demo2/proggres/CapitalNeeds/CapitalNeeds.aspx
Virginia.gov
Welcome, Cambridge log out
DRPT
PROGGRES
Program Guidance and Grant Evaluation System
Capital Needs
Capital Budgets
Grant Evaluation
DRPT Policy
Reports
Admin
Help
Create Report
Capital Needs ($ in thousands)
Fiscal Year 2012 - Current
Rolling Stock Approach ESLMST
Show Spare Ratio Adjustment
Grantee Filter No Additional Filters
Grantees All Richmond Grantees
Activities Bus, Rolling Stock
District Richmond
All Districts
USA Other
Bristol
Salem
Lynchburg
Richmond
Hampton Roads
Fredericksburg
Culpeper
Staunton
Northern Virginia
Click cell to view assets behind needs
FTA Code
Activity Name
<= 2008 Backlog
2009 Backlog
2010 Backlog
2011 Backlog
2012
2013
2014
2015
2016
2017
11.12.01 Bus STD 40 FT
$369 $2,216 $4,144 $16,521 $9,014 $10,393 $2,854
# of Units 1 6 11 43 23 26 7
11.12.02 Bus STD 35 FT
$1,539 $2,154 $5,847 $1,847 $942 $327 $666
# of Units 5 7 19 6 3 1 2
11.12.03 Bus 30 FT
$296 $296 $302 $308 $314 $320 $981
# of Units 1 1 1 1 1 3 5
11.12.04 Bus < 30 FT
$654 $235 $147 $330 $366 $562 $390 $679 $914 $910 $969
# of Units 9 3 2 4 5 7 5 9 12 11 11
11.12.06 Bus Articulated
$714 $773
# of Units 1 1
11.12.15 Vans
$5,573 $2,240 $2,384 $1,054 $2,901 $4,610 $3,797 $4,388 $4,480 $5,154 $6,908 $5,595
# of Units 124 51 55 26 67 100 84 94 91 105 138 111
11.12.16 Sedan / Station Wagon
$599 $269 $359 $359 $519 $311 $254 $259 $330 $843 $791 $701
# of Units 20 9 12 12 17 10 8 8 10 25 23 20
11.12.33 Ferry Boats
# of Units
Total Capital Needs
$8,661 $4,899 $9,256 $5,622 $9,138 $22,831 $14,267 $16,417 $9,325 $11,015 $10,901 $17,306
# of Units 159 70 88 52 103 160 124 136 120 152 178 166
© 2007-2010 Cambridge Systematics Inc.


Virginia DRPT PROGGRES: ...
demo2/proggres/Admin/Admin.aspx
Virginia.gov
DRPT
Welcome, Cambridge log out
PROGGRES
Program Guidance and Grant Evaluation System
Capital Needs
Capital Budgets
Grant Evaluation
DRPT Policy
Reports
Admin
Global Parameters
Capital Needs Calculation Status
Status
Recalculation needed
update
cancel
Miscellaneous Parameters
Description
Value
Fiscal Year
2012
Default Planning Horizon (years)
26
Inflation Rate (percent)
2.000
Interest rate accrued on Banked Facility Funds (percent)
0.000
Default Spare Ratio (percent)
20
Minimum Spare Ratio Fleet Size
50
Buildup Years
4
Rule Family used for Asset Management Scoring
ESLMST
WMATA Grantee ID
300
Facility Cost Spread
Year
Cost Distribution (%)
Completion Year
55.0

Impacts of PROGGRES

- Now in use since 2009; considered very successful
- Grant application workflow adapted to leverage SOGR forecasts
- DRPT can justify expenditures and ensure “best use” of funds

Problems with PROGGRES

- Behind DRPT firewall
  - Service providers have no access to data once its entered
  - They reap no benefits from their efforts to provide accurate data
- No information on condition of assets
- Not integrated with any other systems at DRPT (e.g., grant applications, capital budgets)

FTA Funded Scope

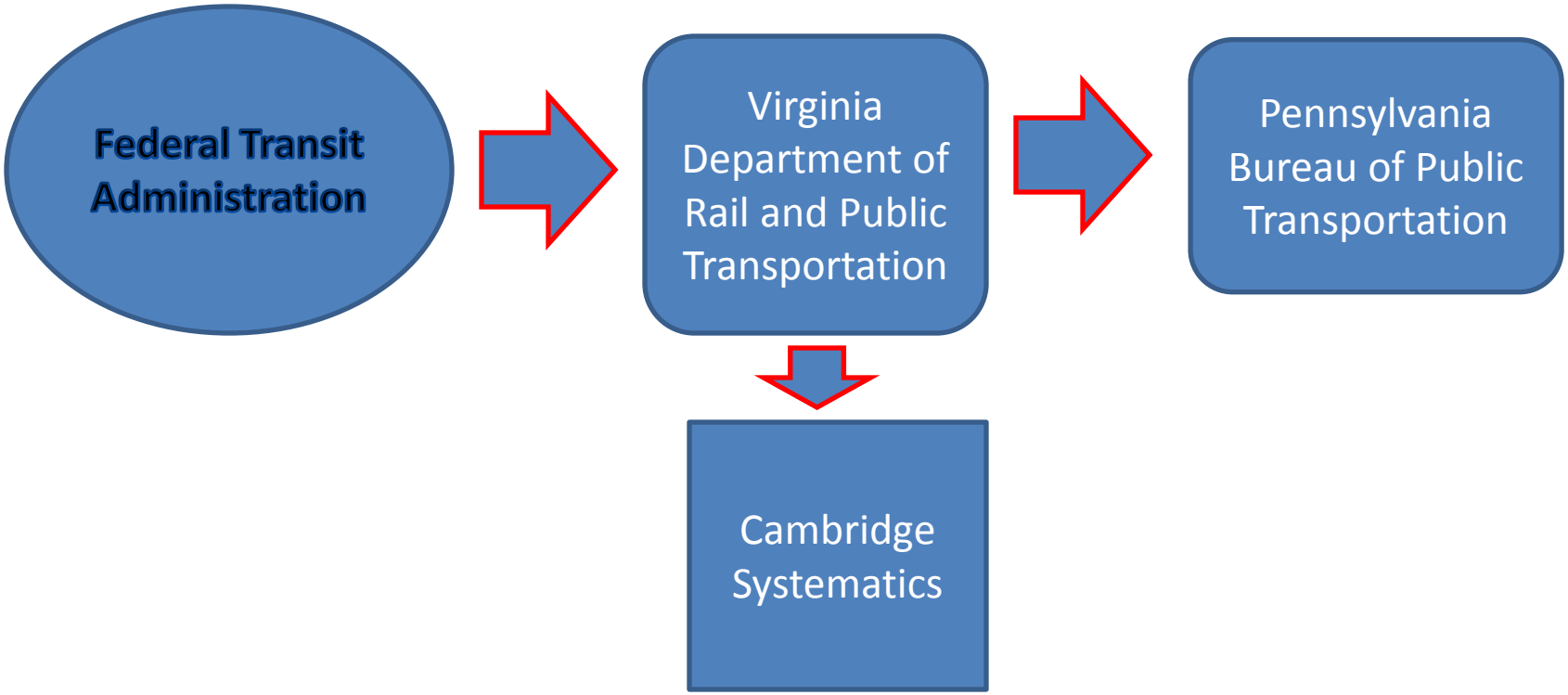
- Enhance PROGGRES to create “Trans-AM”
- Gather requirements from the entire transit community
  - Expanded technical capabilities
  - More modular and flexible
- Implement Trans-AM at DRPT and other participating properties
- Release Trans-AM as Open Source software
  - -Support enhancements and innovation without vendor-imposed limitations

TransAM Overview

- FTA funded project to create an open-source asset management and capital planning tool for transit organizations. Supported by matching funds from
  - Virginia Department of Rail and Public Transportation (DRPT)
  - PennDOT Bureau of Public Transportation (BPT)

- Goal – Develop a needs-driven capital planning process that
  - Creates and maintains an accurate and up-to-date statewide capital inventory of transit assets
  - Streamlines the grant management process for BPT and transit organizations
  - Reduces the reporting burden for transit organizations
  - Provides detailed reporting for BPT, planning partners, and member organizations

Flow of funding



Project Management

- Regularly scheduled meetings
  - Weekly project team meetings
  - Weekly conference calls with Cambridge
  - Twice weekly requirements elicitation meetings
- Executive and project level action items
- Ad hoc conference calls with Cambridge
- On-site visits by Cambridge
- PennDOT IT key team members
- Transit Agency representative team members

Key Participants

Participant	Agency
Terry Brown	DRPT
BPT Division Chief	PennDOT BPT Key Stakeholder
Two BPT Subject Matter Experts (SME)	PennDOT BPT
Transit Agency Director	Transit Agency
Consultant	PA Public Transit Association (PPTA)
Two Technical Advisers	PennDOT IT
IT Project Manager	Project Manager
Two Consultants	Business Analyst
Transit Agency Beta Testers	Transit Agency

Requirements Management

- Collaborative
- Iterative
- Communications Tool

	A	C	D	E	F	G	H
1	Sort #	Req #	Category	Description	Priority	Iteration	Build / Version
8	7	SR301	Assets	The CPT shall explicitly support the following asset types in addition to vehicles: support vehicles, facilities, support facilities, and equipment (including bulk quantity equipment).	H	4	0.4.10.RC5 / 0.0.4.RC2
9	8	SR302	Assets	The CPT shall enable users to associate documents and other data files with any asset.	H	4	0.4.10.RC5 / 0.0.4.RC2
10	9	SR304	Assets	The CPT shall enable users to search assets by entering free form text (like a search engine)	H	4	0.4.10.RC5 / 0.0.4.RC2
12	11	SR311	Assets	The CPT shall maintain a history and timeline of changes to selected data for each asset (e.g., mileage, condition, and other lifecycle events)	H	4	0.4.10.RC5 / 0.0.4.RC2
13	12	SR312	Assets	The CPT shall enable users to update lifecycle event data for any asset.	H	4	0.4.10.RC5 / 0.0.4.RC2
14	13	SR314	Assets	The CPT shall enable users to create, store and view free form text comments associated with any asset.	H	4	0.4.10.RC5 / 0.0.4.RC2
15	14	BR20	Assets	The CPT shall initially be focused on vehicle assets but shall be designed to handle non-vehicle assets as well.	C	4	0.4.10.RC5 / 0.0.4.RC2
16	15	SR57	Assets	The CPT shall maintain a capital inventory for each transit system.	C	4	0.0.5 f / 0.6.0
17	16	SR58	Assets	The CPT shall require each transit agency to update their inventory once a year.	C	4	0.4.10.RC5 / 0.0.4.RC2
				The CPT shall allow transit systems to upload their capital inventory information via			0.4.10.RC5 /

Testing and Bug Tracking

- Collaborative
- Iterative

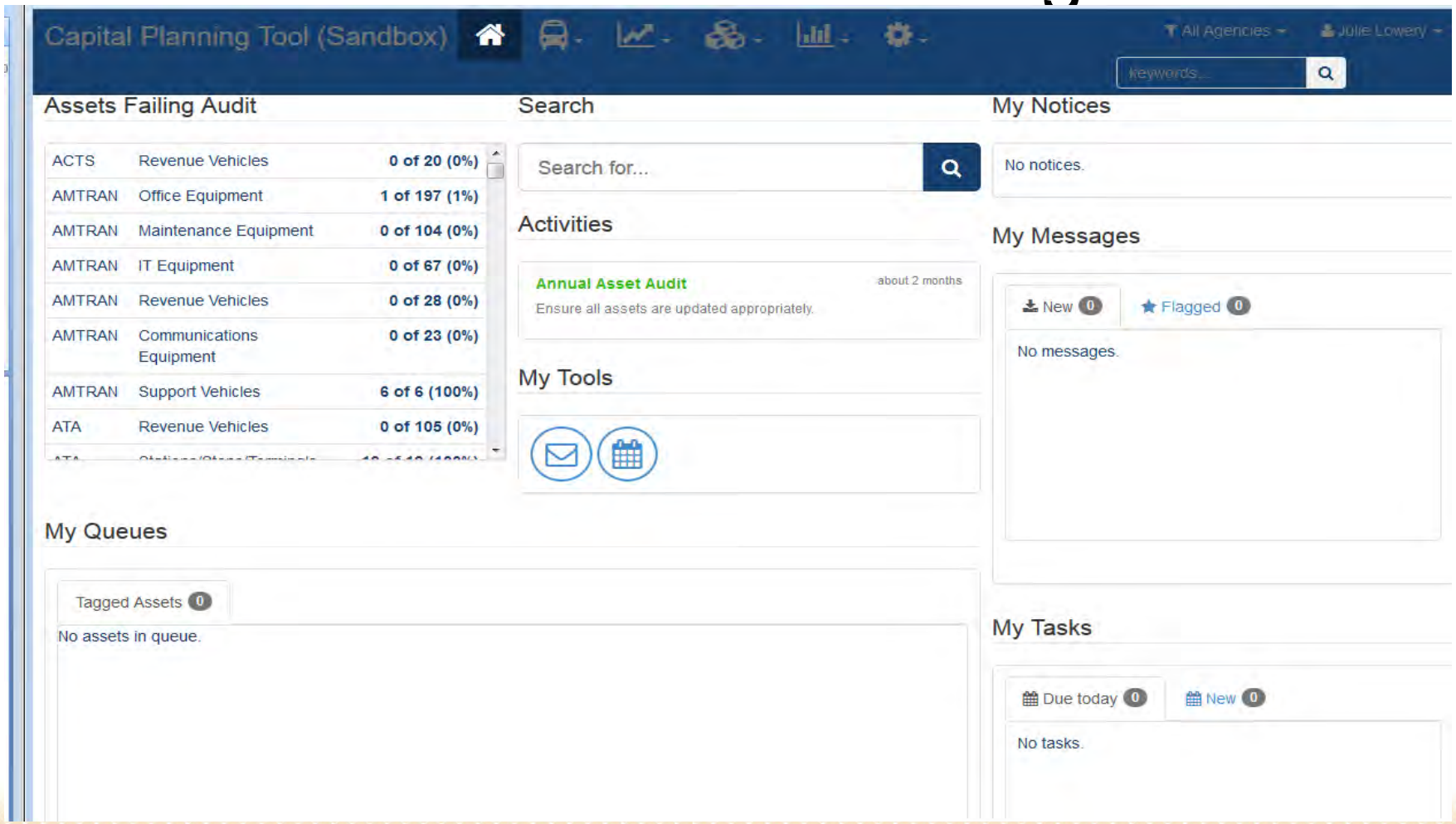
BPT Training for Transit Agencies

- Asset preparation Q & A session
- Webinar training for transit agencies go-live
- Post-implementation support

Outreach Activities

- MTAP Steering Committee Monthly Conference Call
- CPT demonstrations preceding the Public Transit Agency's 5 year Capital and Operating Presentation
- PPTA Spring Conference – April 2013
- 2013 SCOPT and MTAP Winter Meeting – November 18 – 19, 2013
- Transit Agency presentation – March 17, 2014
- Transit Agency Beta Rollout – August 2014
- Fall Planning Partners' Meeting – October 2014
- 21st National Conference on Rural Public and Intercity Bus Transportation Monterey, California – October 26 – 29, 2014
- PPTA Winter Meeting – November 13 – 14, 2014
- Southwestern Planning Commission Meeting – December 2014
- PPTA Spring Conference – April 7 – 9, 2015

TransAM Home Page



TransAM from 10,000 Feet

For Transit Organizations

Capture and maintain an accurate inventory of transit assets

Rolling Stock – Facilities – Equipment

Record annual and final disposition of assets

Provide the basis for a capital planning process that is needs-driven

Replacement – Rehabilitation – Expansion

Maintain a needs-driven list of financially constrained capital projects

Help prioritize projects

Apply for matching funds

Facilitate Federal and State reporting

TransAM from 10,000 Feet *(continued)*

For BPT

Statewide capital inventory of transit assets

Facilitate the annual grant management process

Ties capital projects to physical assets – Review process
Visibility into capital requirements – Prioritization of capital projects

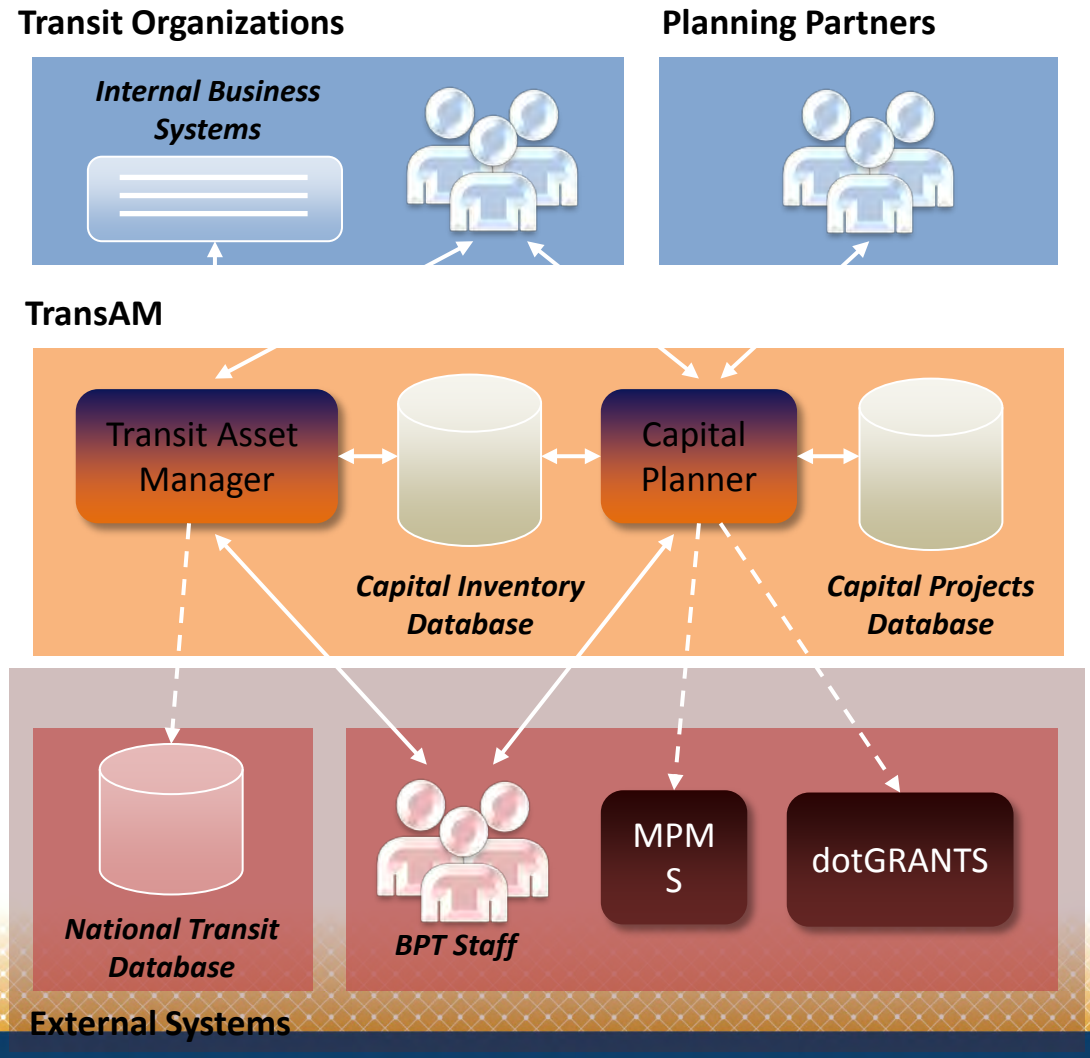
Better Predict Capital Needs

Enhanced Reporting at All Levels

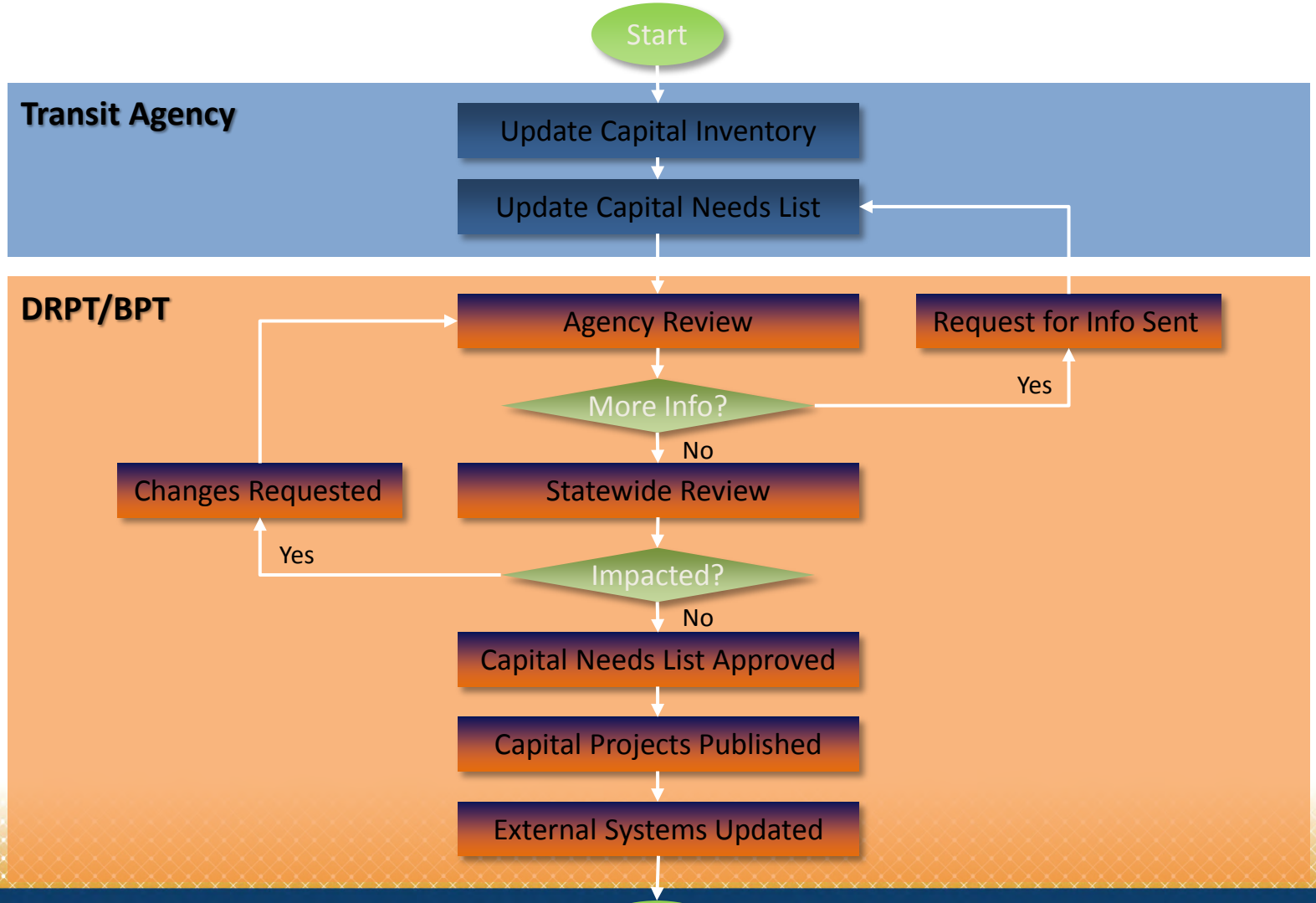
Statewide – Planning partners and other geographies – Transit organizations

TransAM

TransAM consists of two applications, a database of assets and capital projects, and other software components that allow transit organizations, planning partners, BPT staff, and PennDOT business systems to interoperate during the capital planning process



Combined Capital Planning Workflow



Transit Asset Manager

Management tool focused on capturing and maintaining a database of transit assets

Web based – no software required

Available to all member transit organizations

Easy to use

Tracks transit assets over time

Assets identified and tracked individually
Bulk loading makes it easy for organizations with large fleets

Associates transit assets with Federal grants

Detailed reporting

Federal and State reporting

Transit Asset Manager *(continued)*

Revenue Vehicles
Buses – Mini Vans – Station Wagons, Sedans, etc.

Rail Cars
Light – Heavy

Locomotives
Light – Heavy

Facilities
Transit Facilities – Admin and Support Facilities

Support Equipment
Communications – Service Vehicles

Capital Planning Tool

Project capital needs based on individual asset characteristics

Create and maintain a list of capital projects

Replacement – Rehabilitation – Expansion

Use gap analysis tools to prioritize projects

Asset deterioration models – Cost projection models

Program capital projects

Interact with BPT Program Managers to approve list of programmed projects

Capital Planning Tool *(continued)*

Summarize statewide capital needs

Project needs into the future – Across all transit organizations

Facilitate approval of capital projects

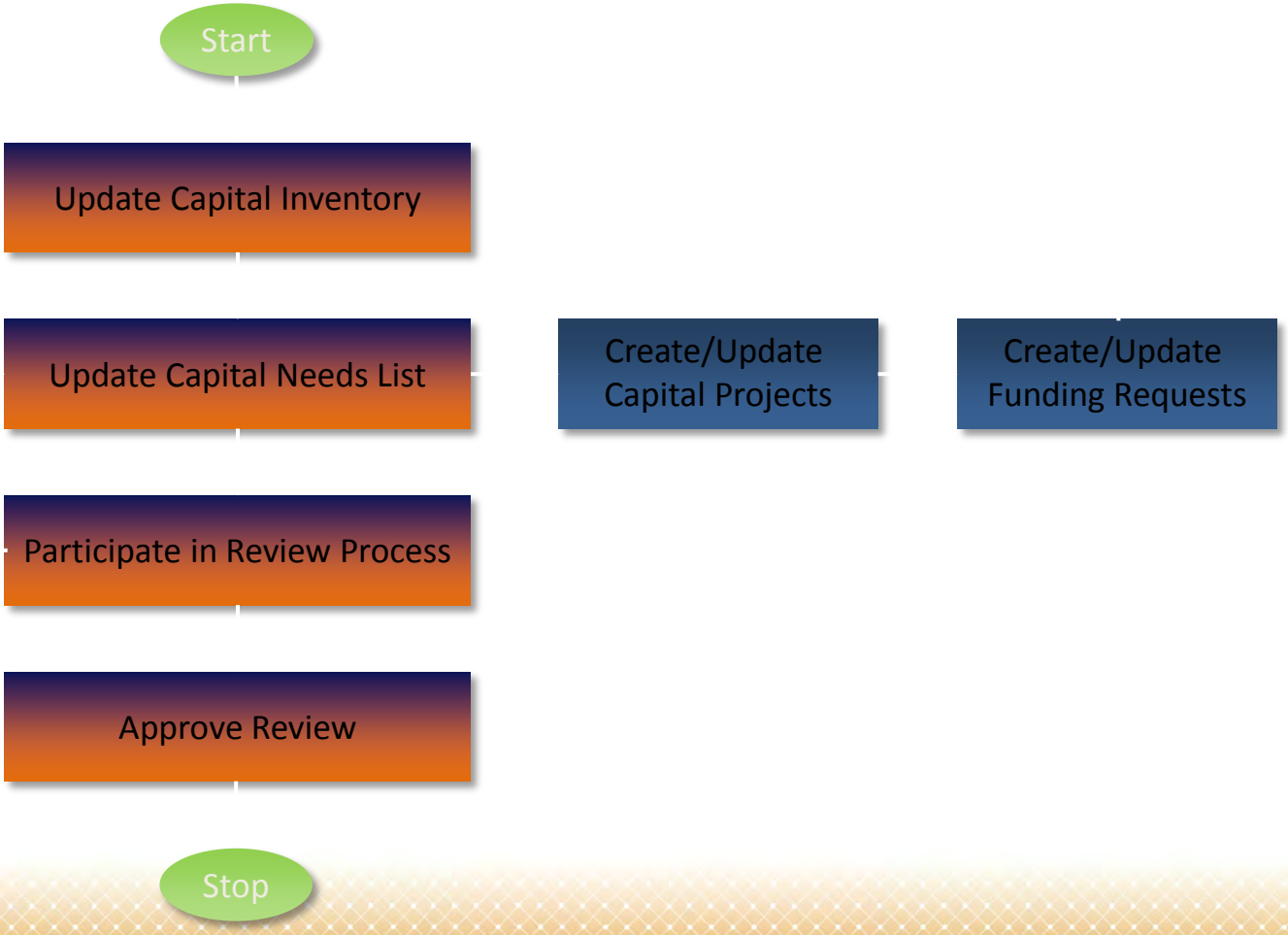
Automate updates to dotGrants and MPMS

Enhance reporting for member organizations

Update external business systems

dotGrants – MPMS

Transit Organization Capital Planning Workflow



TransAM and dotGrants

- TransAM extends the functions of dotGrants
  - Most users will login to dotGrants to access the TransAM components
- Once capital needs lists have been approved, TransAM will share programmed capital projects with dotGrants to initiate the CCA reports
- TransAM will also share data with MPMS to update TIPs

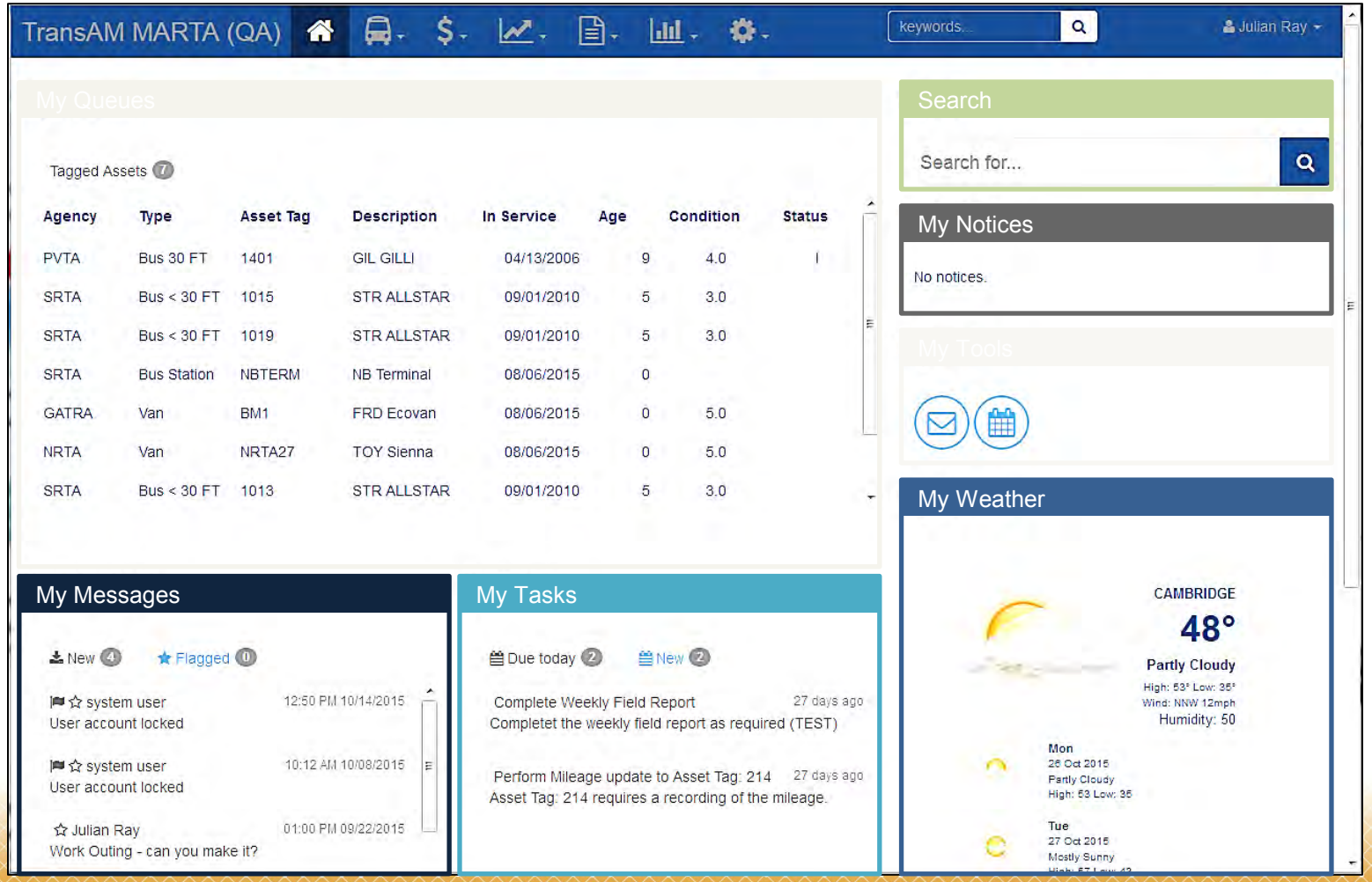
Benefits of TransAM

- Better for everyone
  - More accurate inventory of capital assets makes planning and budgeting easier
  - Linking assets to capital projects makes forecasting and tracking capital needs more efficient and effective
  - Analytical tools help prioritize projects
  - Appropriate tools reduce the amount of time needed to perform workflows
- For transit organizations
  - Software focused on their management needs
  - Open source
    - Free to adopt and modify or use as is
    - Community participation in the evolution of the product keeps the software relevant
    - Access to online tools and the ability to create helpful reporting

Login

Capital Planning Tool
Capital Planning Tool
About TransAM
System Status
Getting Help

Navigating TransAM with the Dashboard

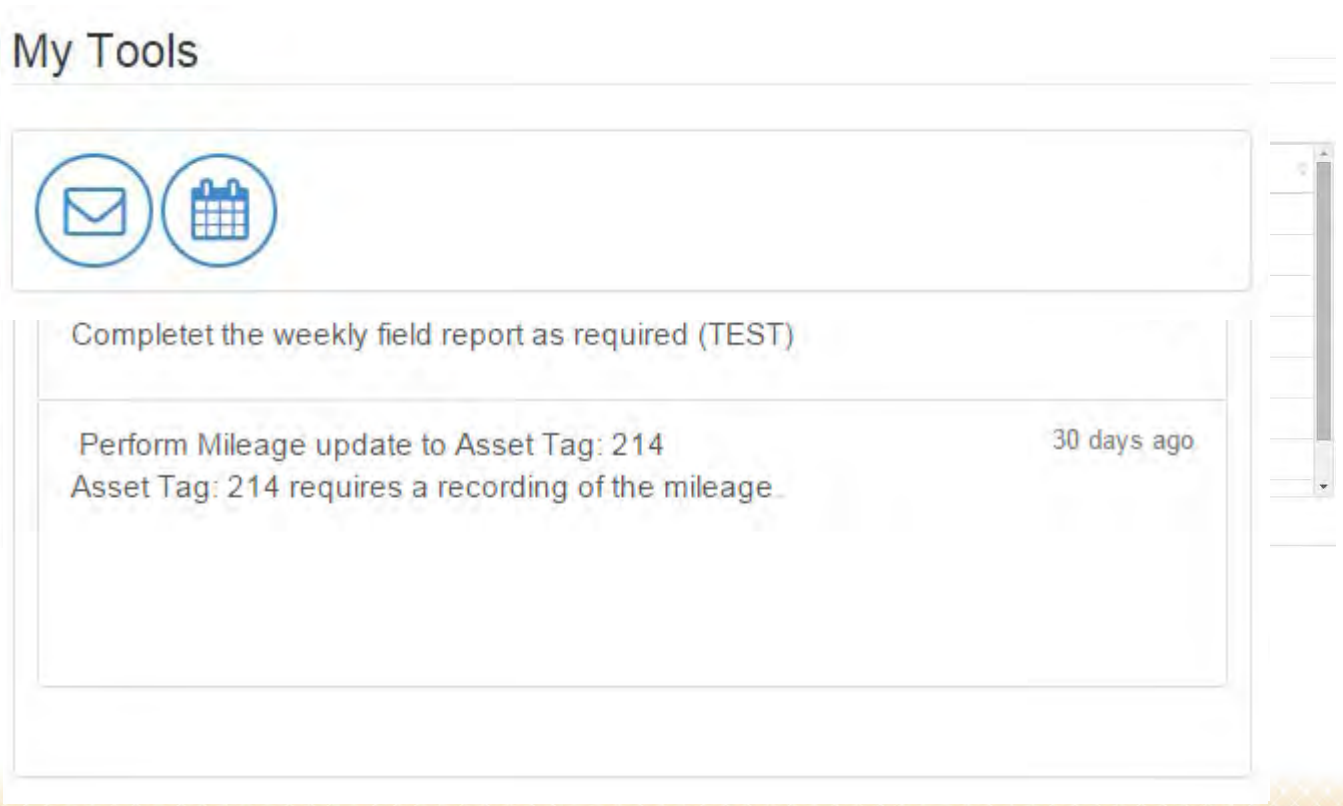


When you login to TransAM you are taken to the 'Dashboard'

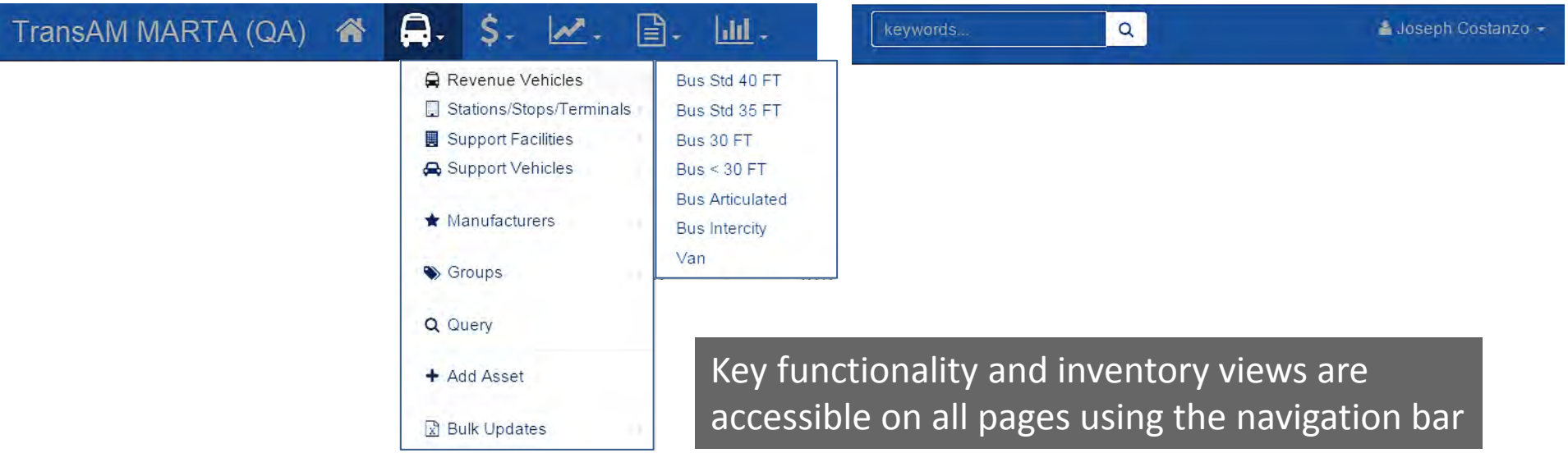
TransAM Dashboard

Concepts

- My Queues
- Search
- My Notices
- My Messages
- My Tasks
- My Tools



Navigating TransAM with the Navigation Bar



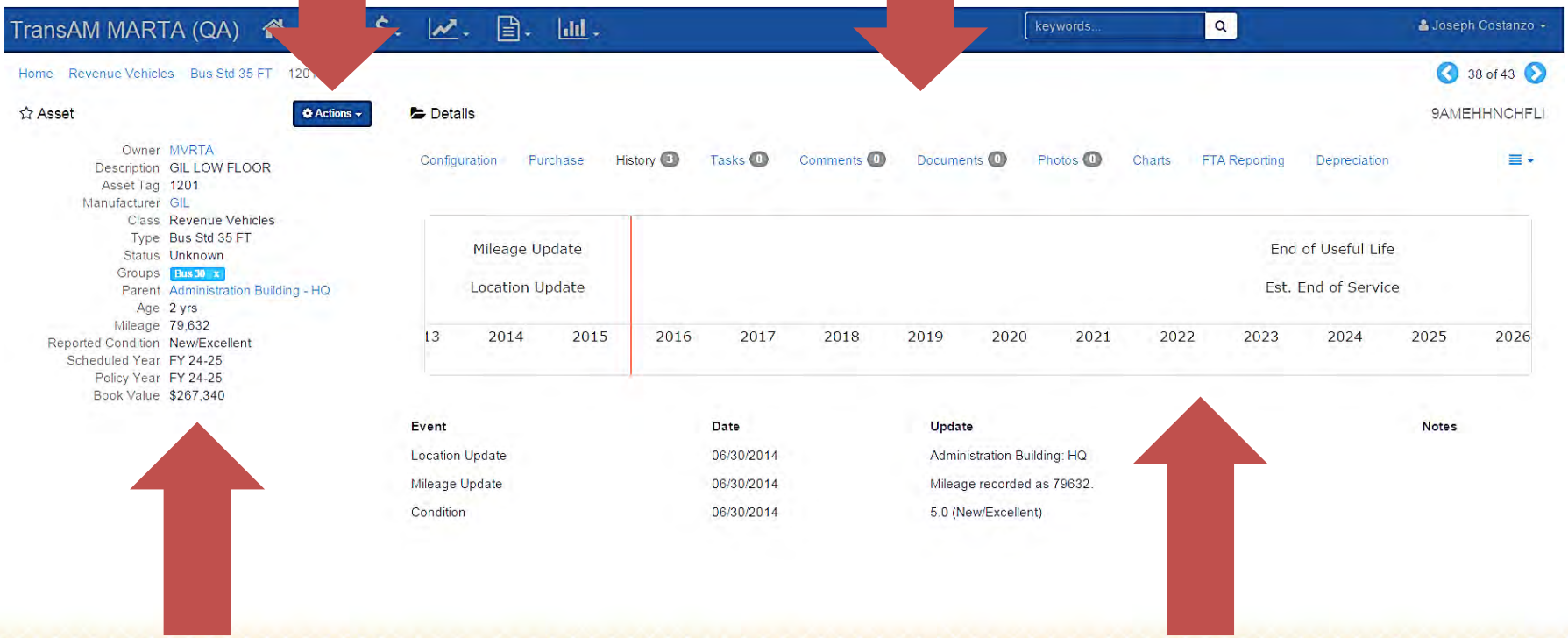
Key functionality and inventory views are accessible on all pages using the navigation bar

Managing Assets

Asset Detail Page

Action Button to make updates to an asset

Detail Tabs with Key Asset Information



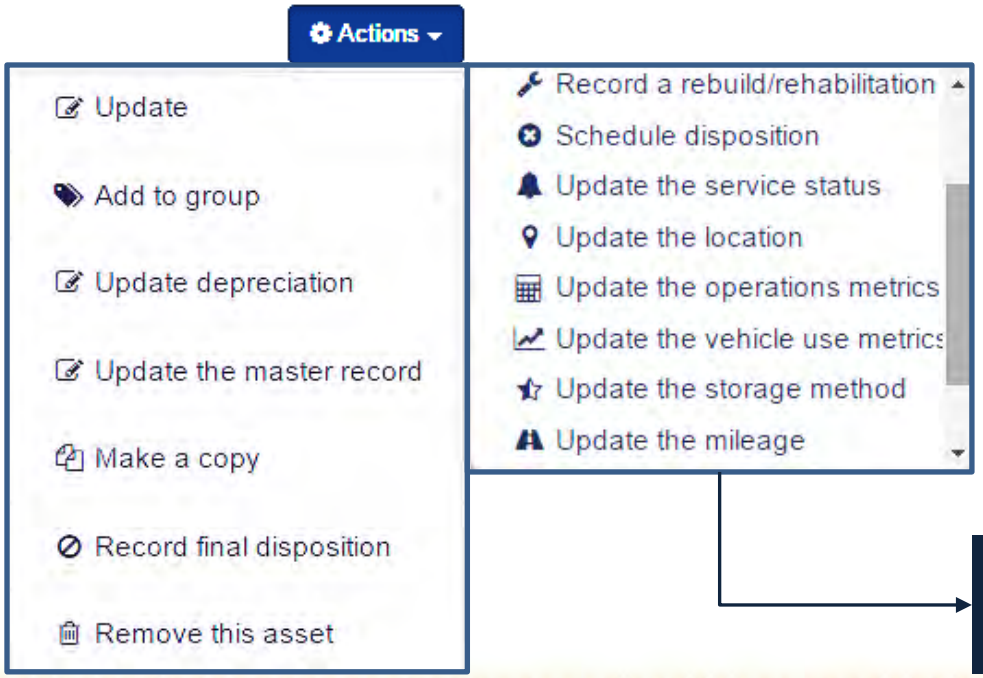
Summary Panel

Events Table

Managing Assets

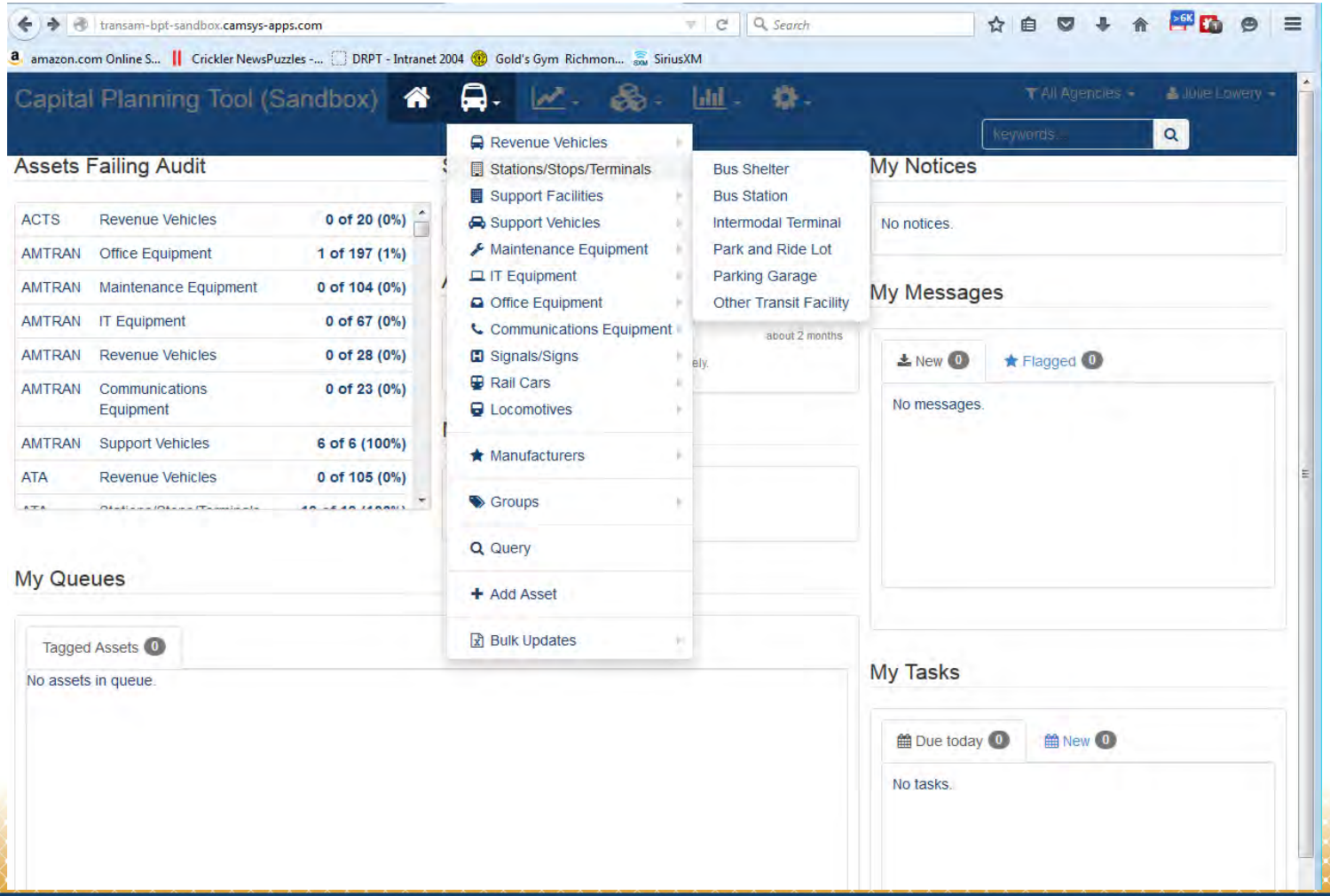
Edit Actions

Click the 'Action' button to select actions to perform on the asset

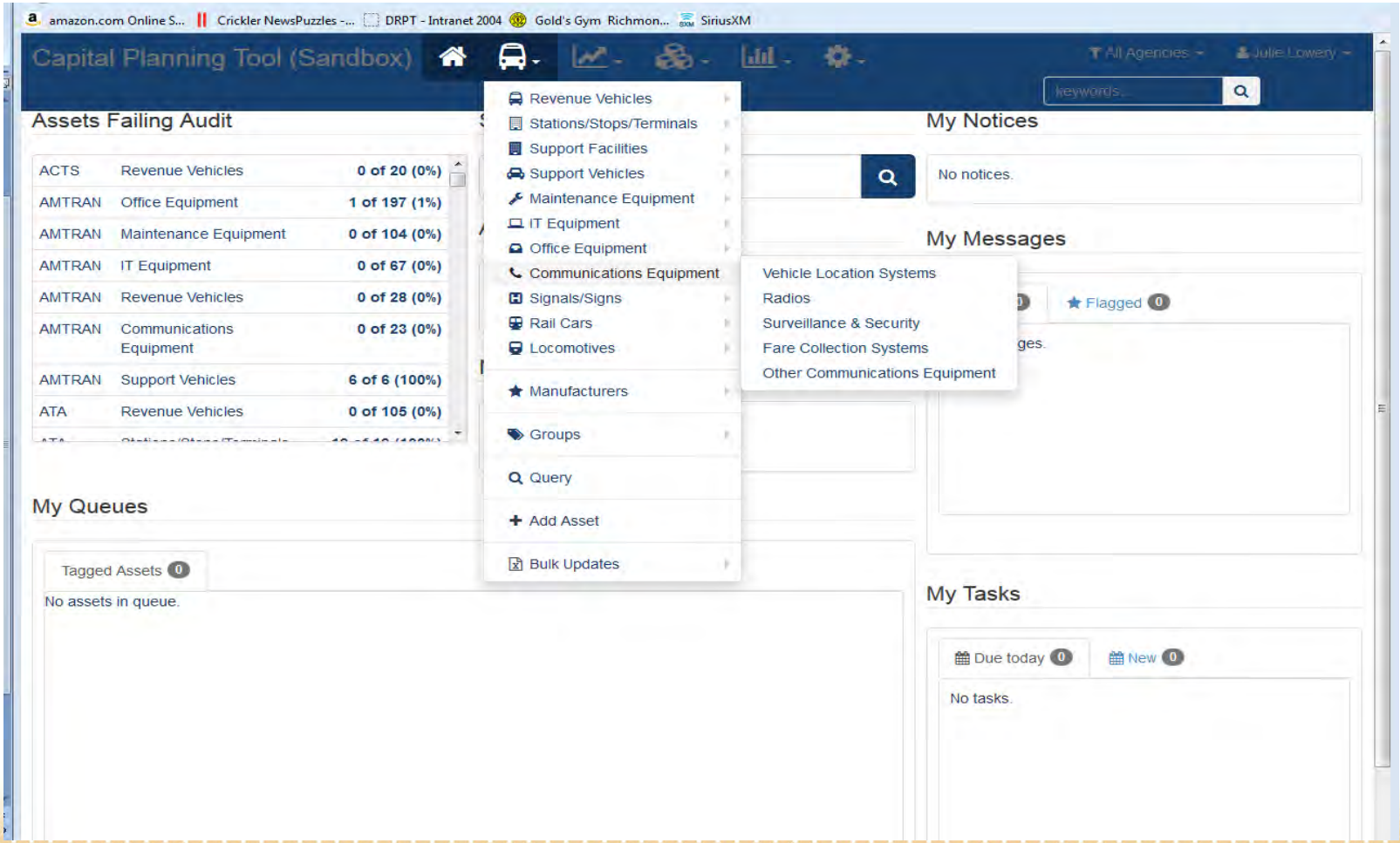


Brings up an asset event form

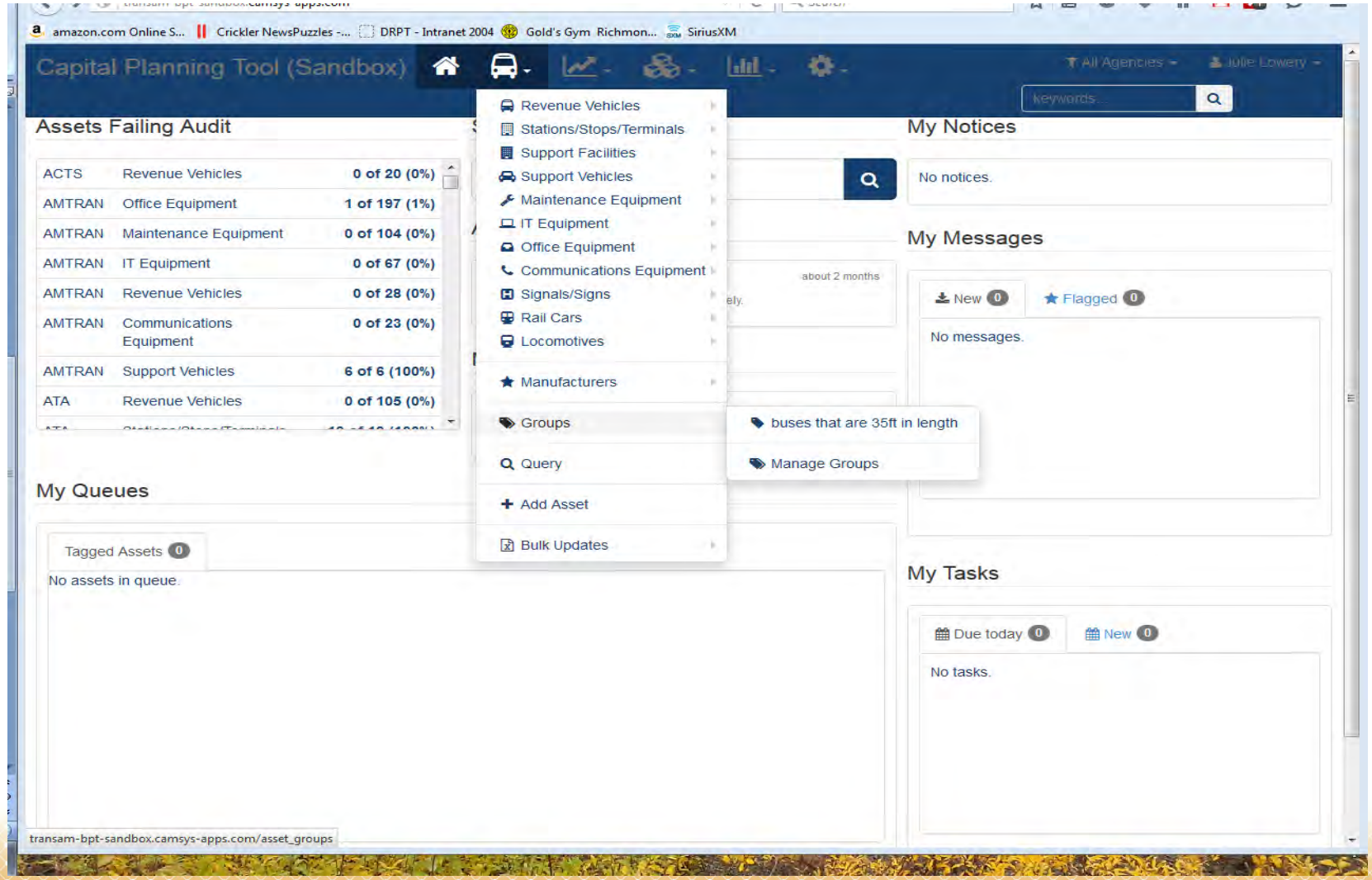
Selection of Asset Type



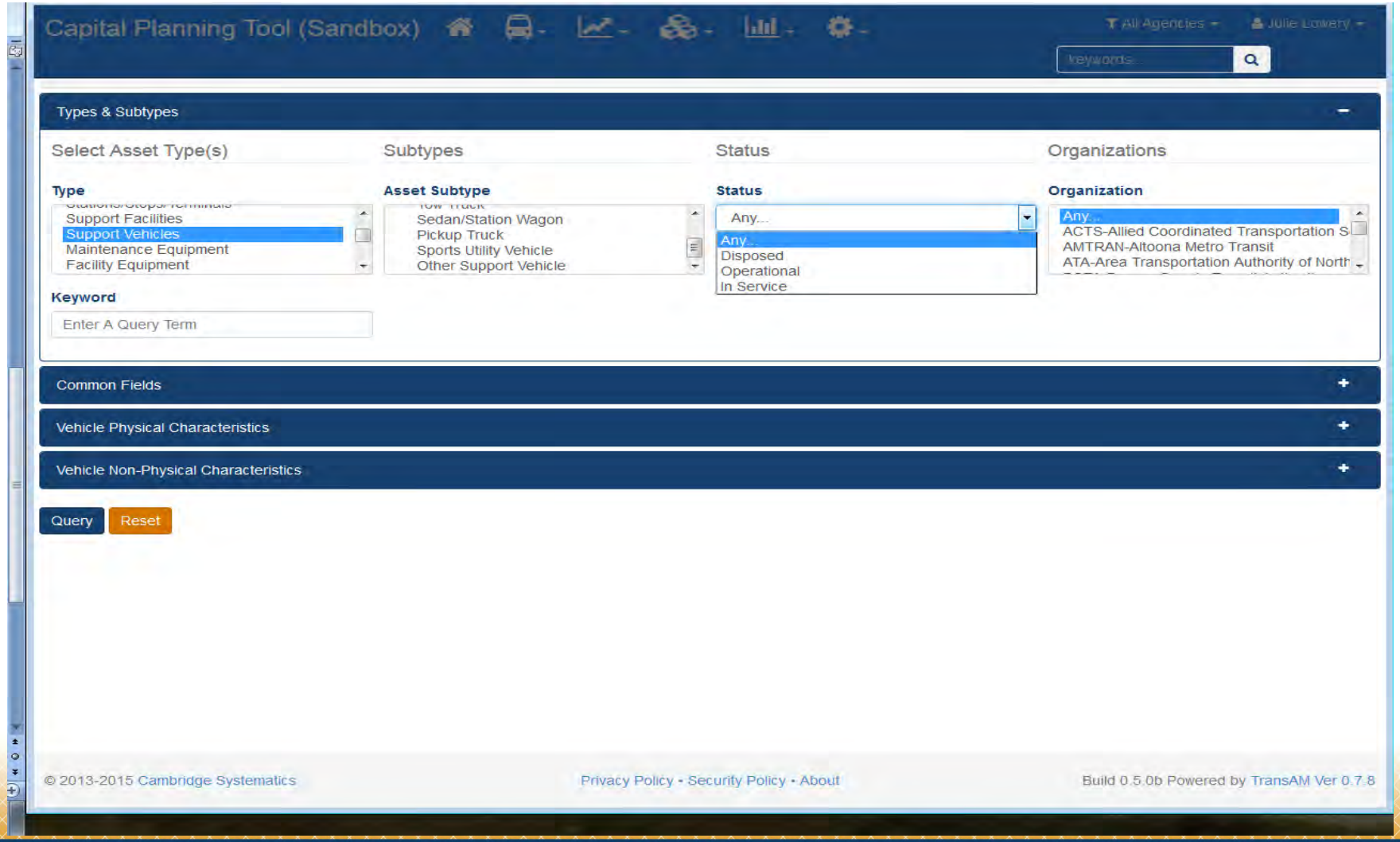
Type of Asset - Detail



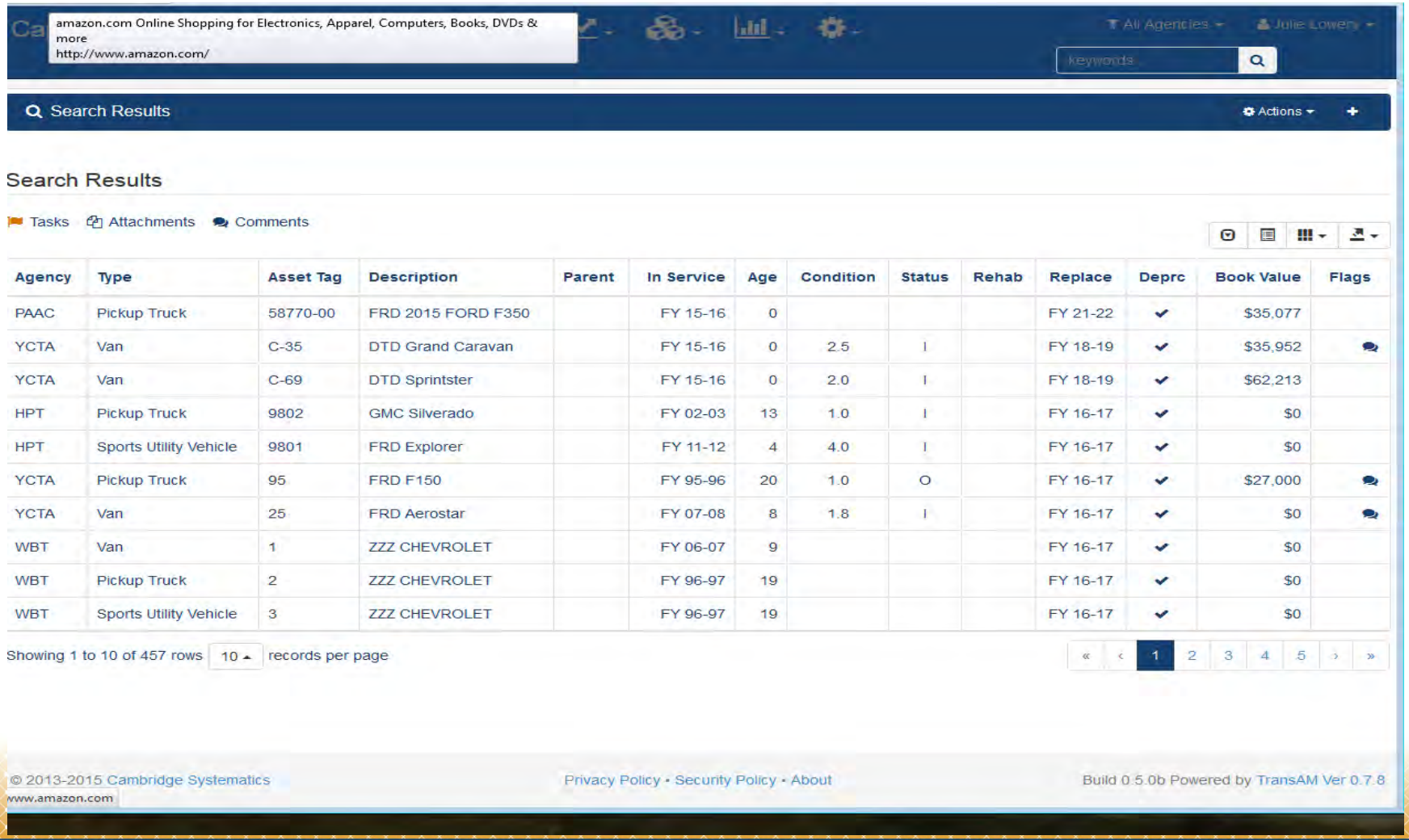
Use of Groups



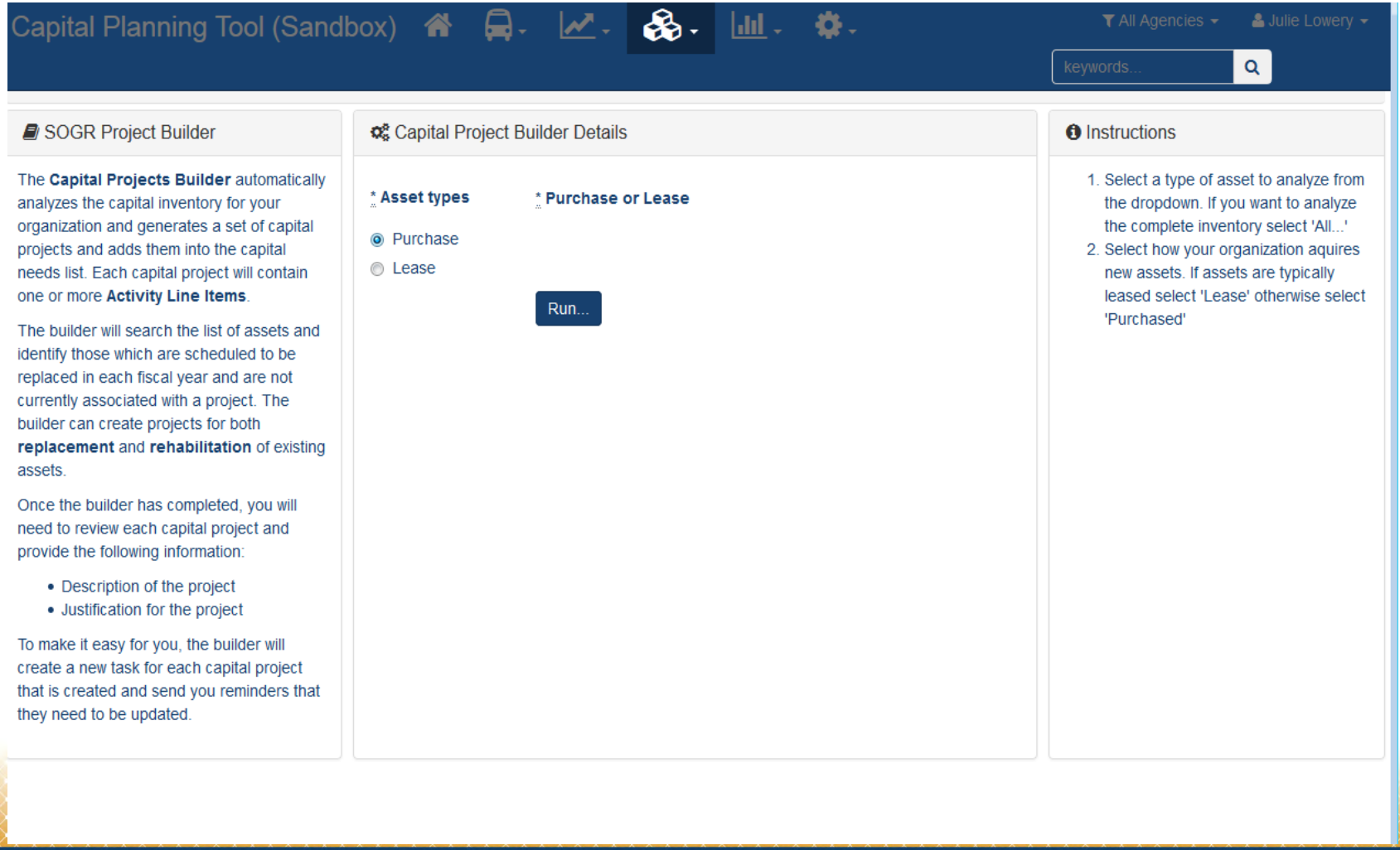
Viewing Assets



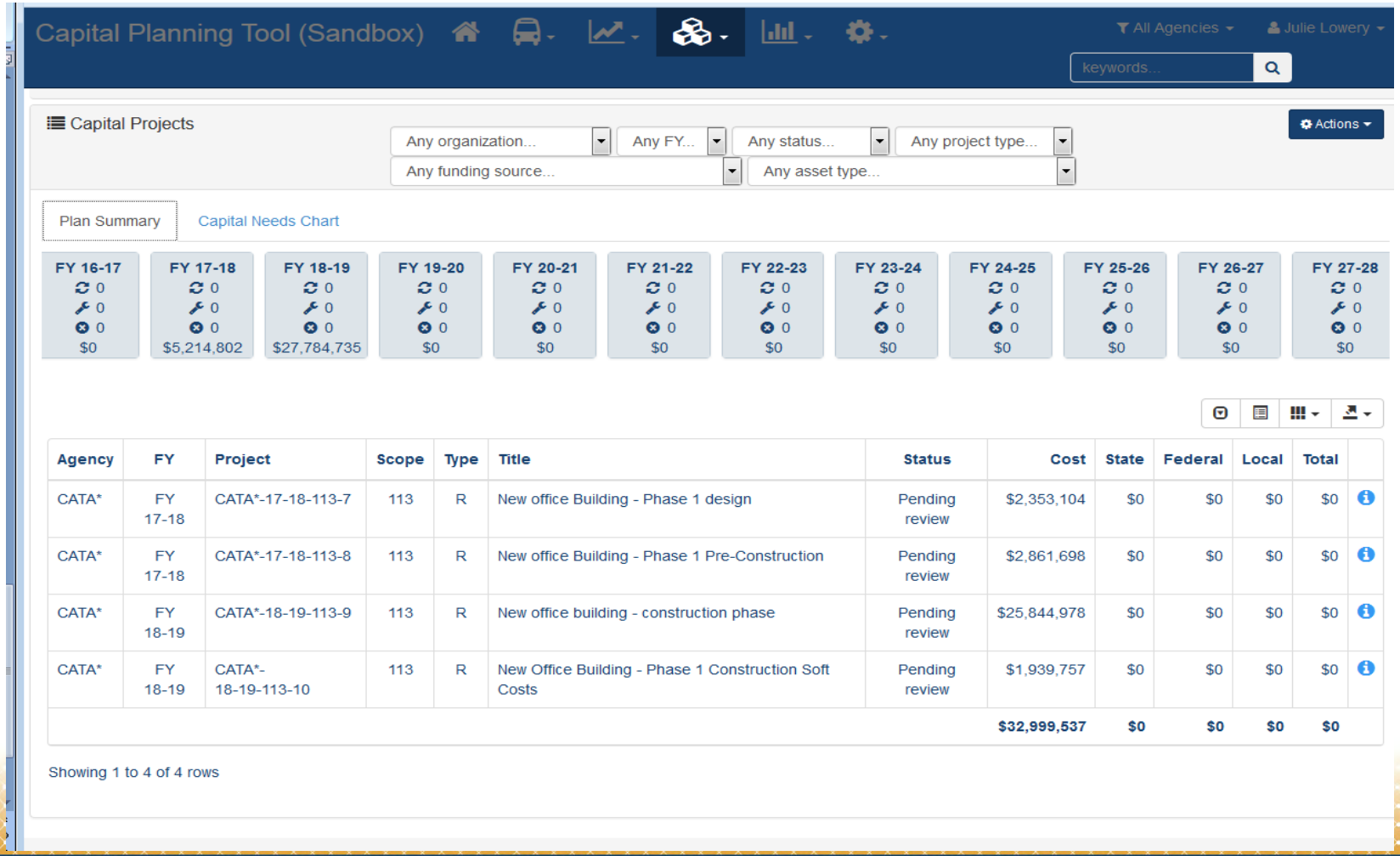
Asset Type Detail



Building the Funding Plan



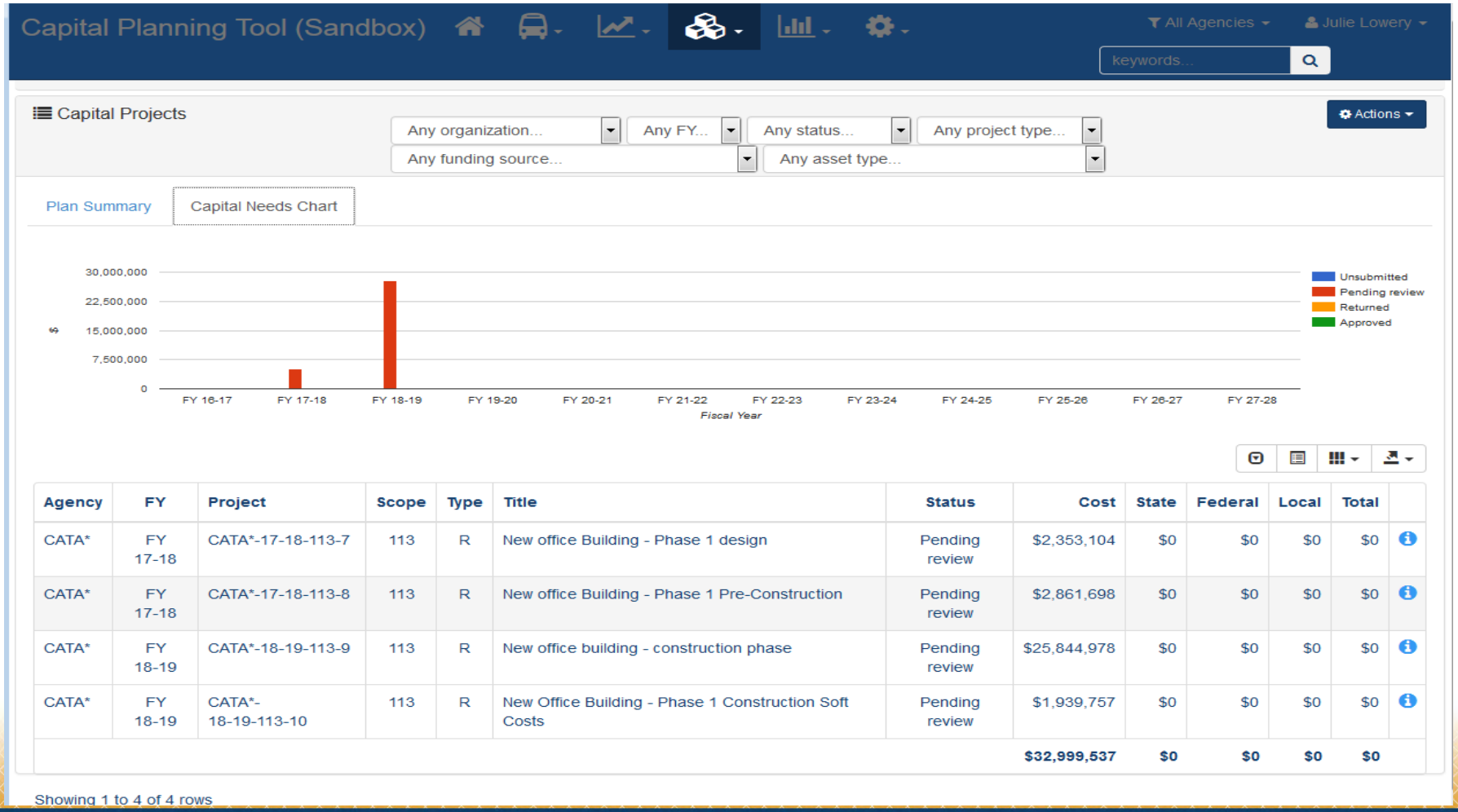
Funding Plan



Agency	FY	Project	Scope	Type	Title	Status	Cost	State	Federal	Local	Total
CATA*	FY 17-18	CATA*-17-18-113-7	113	R	New office Building - Phase 1 design	Pending review	$2,353,104	$0	$0	$0	$0
CATA*	FY 17-18	CATA*-17-18-113-8	113	R	New office Building - Phase 1 Pre-Construction	Pending review	$2,861,698	$0	$0	$0	$0
CATA*	FY 18-19	CATA*-18-19-113-9	113	R	New office building - construction phase	Pending review	$25,844,978	$0	$0	$0	$0
CATA*	FY 18-19	CATA*-18-19-113-10	113	R	New Office Building - Phase 1 Construction Soft Costs	Pending review	$1,939,757	$0	$0	$0	$0
							$32,999,537	**$0**	**$0**	**$0**	**$0**

Showing 1 to 4 of 4 rows

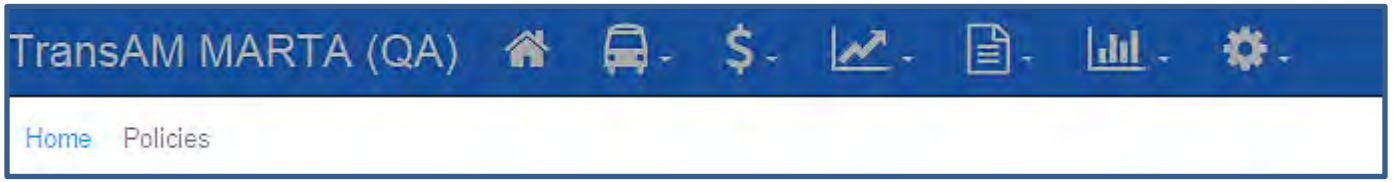
Detailed Funding View



Agency	FY	Project	Scope	Type	Title	Status	Cost	State	Federal	Local	Total	
CATA*	FY 17-18	CATA*-17-18-113-7	113	R	New office Building - Phase 1 design	Pending review	$2,353,104	$0	$0	$0	$0	
CATA*	FY 17-18	CATA*-17-18-113-8	113	R	New office Building - Phase 1 Pre-Construction	Pending review	$2,861,698	$0	$0	$0	$0	
CATA*	FY 18-19	CATA*-18-19-113-9	113	R	New office building - construction phase	Pending review	$25,844,978	$0	$0	$0	$0	
CATA*	FY 18-19	CATA*-18-19-113-10	113	R	New Office Building - Phase 1 Construction Soft Costs	Pending review	$1,939,757	$0	$0	$0	$0	
							$32,999,537	**$0**	**$0**	**$0**	**$0**	

Showing 1 to 4 of 4 rows

Policies

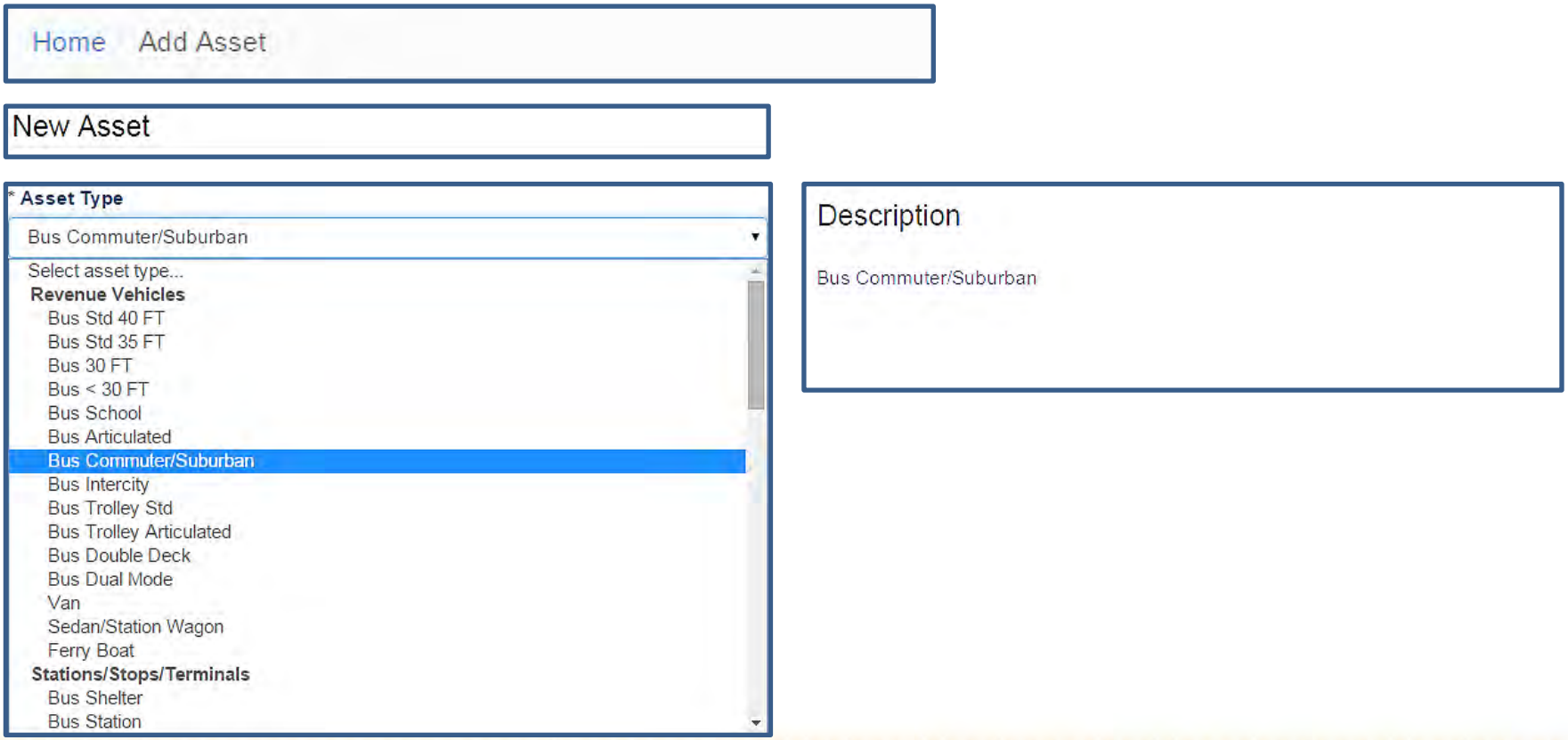


- Organization Policy
- Asset Type Policy
- Asset Subtype Policy

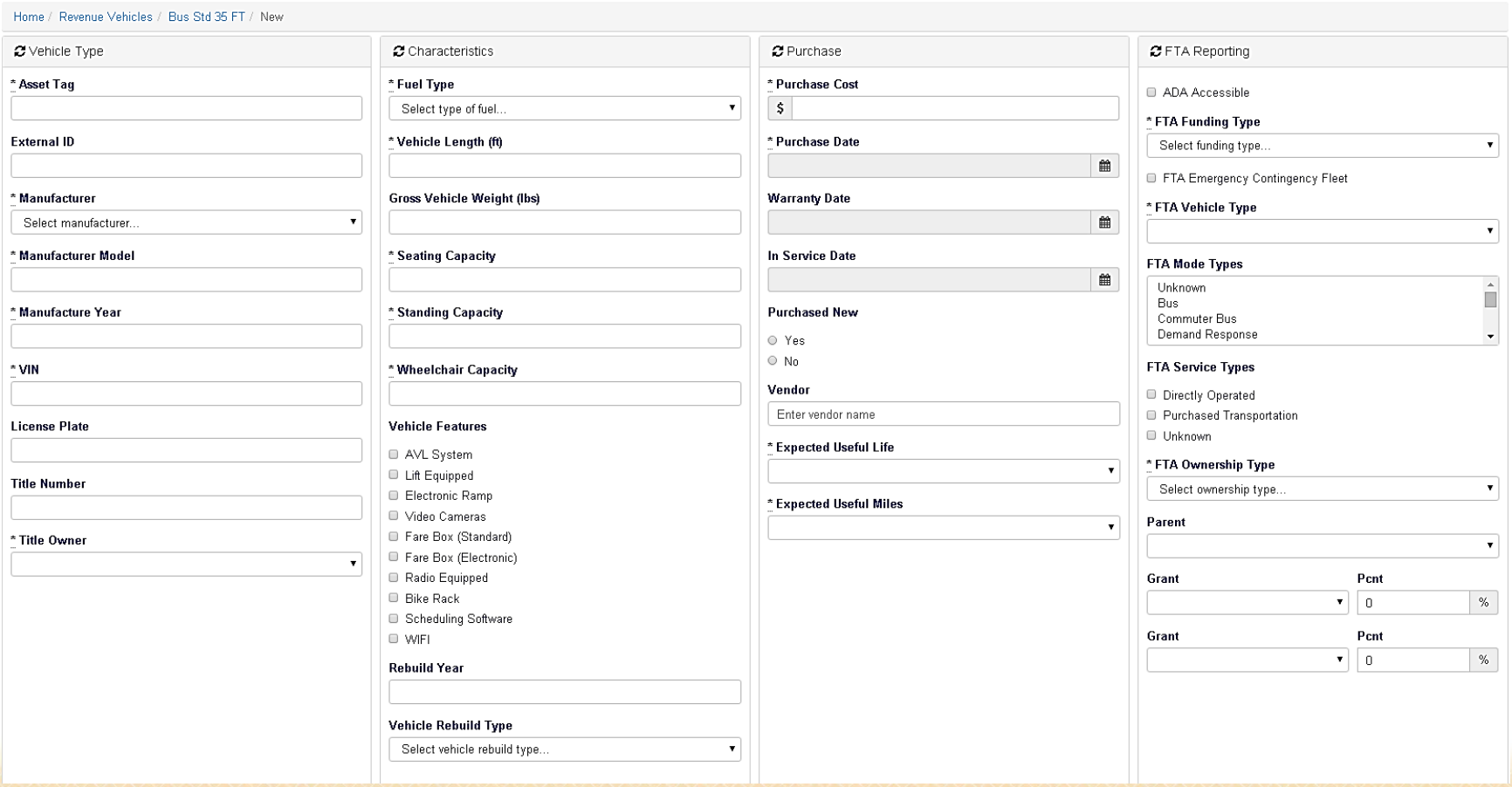
Asset Subtype	Fuel Type	ESL (Mo)	ESL (Mi)	Repl. Cost	Cost FY	Replace New	Replace Leased	Replace Fuel Type	Lease Length (Mo)	Rehab Month	Rehab Cost	Change in ESL (Mo)	Change in ESL (Mi)	ESL Used (Mo)	
Bus Shelter		300		$0	FY 16-17	✔			0	0	$0	0		0	
Bus Station		300		$0	FY 16-17	✔			0	0	$0	0		0	
Ferry Dock		300		$0	FY 16-17	✔			0	0	$0	0		0	
Intermodal Terminal		300		$0	FY 16-17	✔			0	0	$0	0		0	
Park and Ride Lot		300		$0	FY 16-17	✔			0	0	$0	0		0	
Parking Garage		300		$0	FY 16-17	✔			0	0	$0	0		0	
Parking Lot		300		$0	FY 16-17	✔			0	0	$0	0		0	
Other Transit Facility		300		$0	FY 16-17	✔			0	0	$0	0		0	

Managing Assets

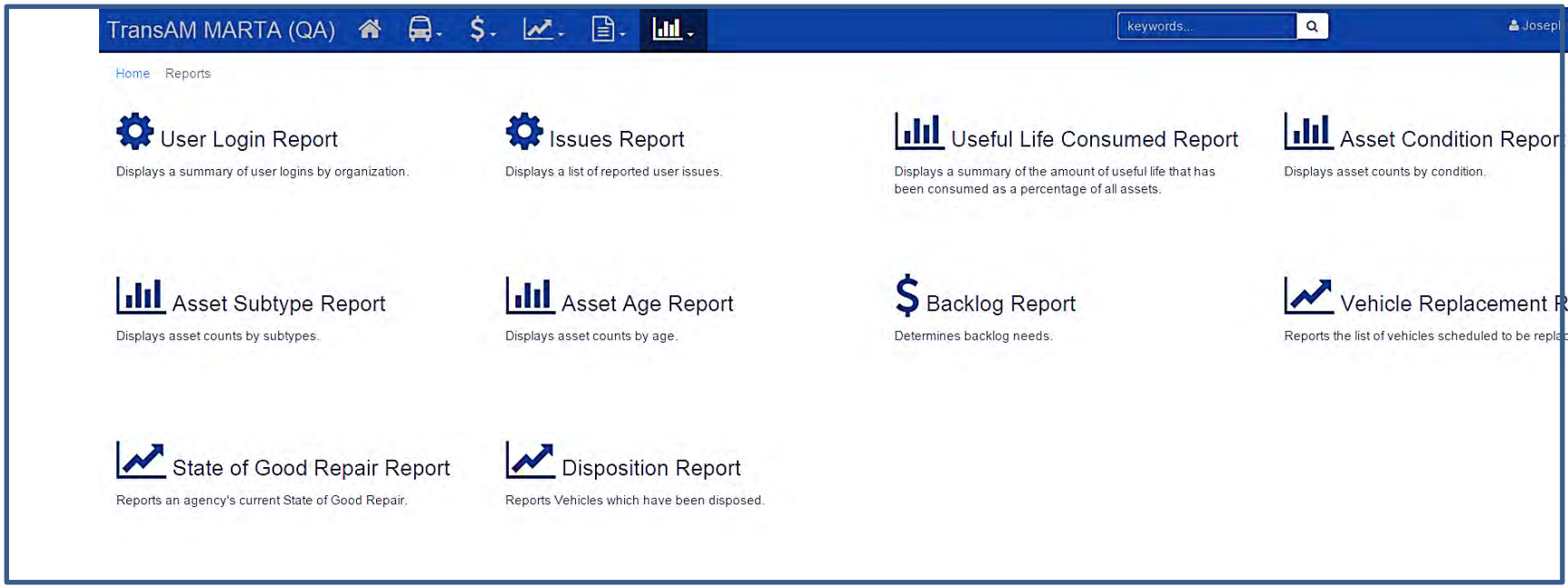
Select the Asset Type for a New Asset



Adding an Asset (35 FT Bus)



Reports


TransAM MARTA (QA)
keywords...
Home Reports
User Login Report
Displays a summary of user logins by organization.
Issues Report
Displays a list of reported user issues.
Useful Life Consumed Report
Displays a summary of the amount of useful life that has been consumed as a percentage of all assets.
Asset Condition Report
Displays asset counts by condition.
Asset Subtype Report
Displays asset counts by subtypes.
Asset Age Report
Displays asset counts by age.
Backlog Report
Determines backlog needs.
Vehicle Replacement Report
Reports the list of vehicles scheduled to be replaced.
State of Good Repair Report
Reports an agency's current State of Good Repair.
Disposition Report
Reports Vehicles which have been disposed.

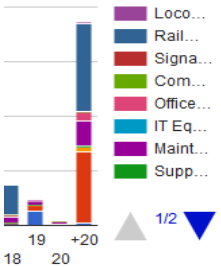
Age of Assets in Aggregate

Capital Planning Tool (Sandbox)

All Agencies | Julie Lowery

keywords...

Any Type...



Age (Years)	Revenue Vehicles	Stations/Stops /Terminals	Support Facilities	Support Vehicles	Maintenance Equipment	IT Equipment	Office Equipment	Communications Equipment	Signals/Signs	Rail Cars	Locomotives
1.00	220.00	5.00	0.00	49.00	13.00	132.00	23.00	34.00	1.00	0.00	0.00
2.00	514.00	5.00	0.00	18.00	75.00	51.00	41.00	23.00	0.00	0.00	0.00
3.00	521.00	9.00	1.00	36.00	18.00	28.00	40.00	20.00	31.00	0.00	0.00
4.00	479.00	20.00	2.00	45.00	43.00	46.00	35.00	66.00	1.00	0.00	0.00
5.00	483.00	12.00	1.00	26.00	40.00	37.00	123.00	216.00	22.00	120.00	0.00
6.00	603.00	0.00	0.00	50.00	34.00	93.00	39.00	23.00	18.00	0.00	0.00
7.00	483.00	0.00	0.00	22.00	35.00	27.00	26.00	31.00	0.00	0.00	0.00
8.00	256.00	2.00	0.00	6.00	30.00	23.00	36.00	155.00	1.00	0.00	0.00
9.00	313.00	1.00	0.00	22.00	61.00	8.00	57.00	63.00	39.00	0.00	0.00
10.00	369.00	6.00	0.00	32.00	39.00	27.00	38.00	27.00	1.00	6.00	0.00
11.00	268.00	10.00	0.00	21.00	42.00	8.00	30.00	14.00	41.00	22.00	0.00
12.00	338.00	1.00	0.00	10.00	35.00	16.00	40.00	28.00	0.00	0.00	0.00
13.00	238.00	3.00	2.00	17.00	27.00	2.00	57.00	5.00	1.00	0.00	0.00
14.00	106.00	2.00	0.00	10.00	12.00	4.00	18.00	27.00	0.00	0.00	0.00
15.00	323.00	2.00	1.00	8.00	56.00	2.00	15.00	9.00	0.00	1.00	0.00
16.00	36.00	8.00	2.00	19.00	74.00	4.00	70.00	9.00	2.00	0.00	0.00
17.00	13.00	1.00	0.00	8.00	34.00	2.00	37.00	2.00	1.00	0.00	0.00
18.00	14.00	1.00	1.00	2.00	41.00	0.00	16.00	1.00	0.00	219.00	0.00
19.00	102.00	42.00	1.00	7.00	26.00	0.00	3.00	0.00	0.00	0.00	1.00
20.00	0.00	1.00	0.00	4.00	20.00	0.00	3.00	1.00	0.00	0.00	0.00

State of Good Repair Report

State of Good Repair: FY 15-16

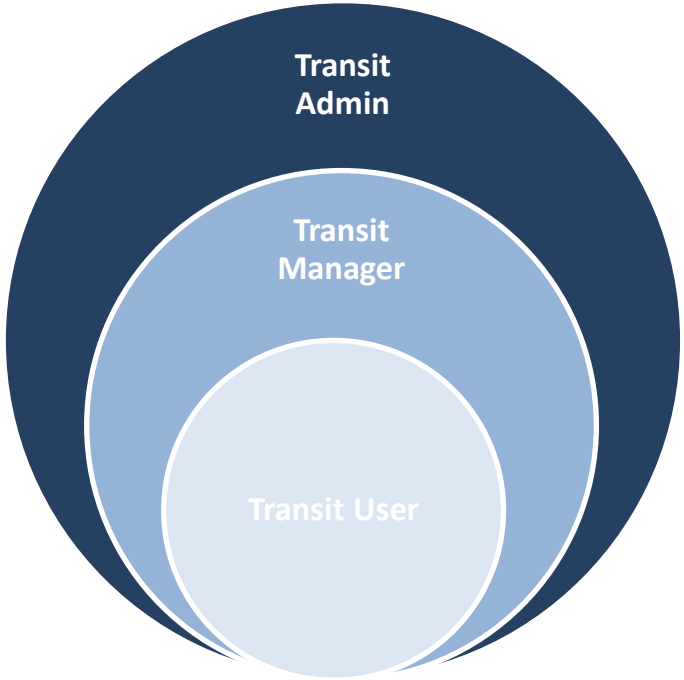
Type	Sub Type	Count	Book Value	Replacement Cost
Revenue Vehicles	Bus Std 40 FT	5	$1,855,160	$1,868,135
Revenue Vehicles	Bus Std 35 FT	15	$2,506,420	$2,523,402
Revenue Vehicles	Bus 30 FT	12	$1,768,663	$1,784,745
Revenue Vehicles	Bus < 30 FT	126	$8,449,324	$8,543,234
Revenue Vehicles	Bus Commuter/Suburban	14	$4,091,489	$4,116,409
Revenue Vehicles	Bus Trolley Std	3	$684,249	$690,000
Revenue Vehicles	Van	3	$108,057	$110,358
Stations/Stops/Terminals	Bus Shelter	10	$59,499	$0
Stations/Stops/Terminals	Bus Station	4	$5,399,521	$0
Stations/Stops/Terminals	Intermodal Terminal	2	$2,792,295	$0
Stations/Stops/Terminals	Park and Ride Lot	1	$252,101	$0
Support Vehicles	Van	6	$98,165	$236,417
Support Vehicles	Sedan/Station Wagon	4	$0	$99,906
Support Vehicles	Pickup Truck	5	$27,000	$274,879
Support Vehicles	Sports Utility Vehicle	3	$0	$96,220
Maintenance Equipment	Bus Maintenance Equipment	2	$2,820	$0
Communications Equipment	Vehicle Location Systems	1	$20,000	$20,220
Communications Equipment	Fare Collection Systems	1	$0	$578,021
		217	**$28,114,763**	**$20,941,946**

Bus Std 40 FT

Asset Tag	VIN / SN	Fuel	Description	Mileage	Length	In Service	Age	Rep. Cost Grant	ADA	FTA Mode	FTA Bus Mode	FTA Ownr	Condition	Sched. Repl.	Policy Repl.	Book Value
316	15GGD3018D1181726	HD	GIL LOW FLOOR BRT	117,487	40	FY 13-14	2	$602,045	✔	MB	FR	OOPA	New/Excellent	FY 24-25	FY 24-25	$597,864
317	15GGD301XD1181727	HD	GIL LOW FLOOR BRT	88,045	40	FY 13-14	2	$602,045	✔	MB	FR	OOPA	New/Excellent	FY 24-25	FY 24-25	$597,864
318	15GGD3011D1181728	HD	GIL LOW FLOOR BRT	113,294	40	FY 13-14	2	$602,045	✔	MB	FR	OOPA	New/Excellent	FY 24-25	FY 24-25	$597,864
314	15GDD2013T1087362	DF	GIL PHANTOM	645,031	40	FY 09-10	6	$31,000	✔	MB	FR	OOPA	Adequate	FY 16-17	FY 14-15	$30,784
315	15GDD2011T1087361	DF	GIL PHANTOM	630,286	40	FY 09-10	6	$31,000	✔	MB	FR	OOPA	Adequate	FY 16-17	FY 14-15	$30,784
								$1,868,135								**$1,855,160**

User Roles

- **Transit Agency Users –** The most common TransAM user – assigned to all standard agency users.
- **Transit Manager –** Each agency has one or more members that are assigned this role to manage their organization and their users' preferences.
- **Transit Admin –** These are the system administrators and have access to special tools that let them oversee and manage the TransAM deployment.



Lessons Learned

- The following changes would have provided added benefit to the project:
  - Full-time project managers and business analysts on all teams
  - Increased collaboration with the FTA throughout the project
  - Development of risk register