Transit Asset Management
2018 Group TAM Plan

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FTA National Transit Asset Management Rule, October 2016

▶ Achieve and maintain a state of good repair (SGR) for the nation's public transportation systems.

▶ Applies to all recipients and sub-recipients of Federal Chapter 53 assistance

▶ CDOT sponsors a Group TAM Plan for smaller, Tier 2 agencies

   ▶ 53 of the 56 Tier 2 agencies are participating

▶ TAM Plan complete in October, 2018

▶ Inventory, Measures and Targets reported to NTD

Group TAM Plan Elements

1. Inventory of capital assets

    Revenue & Service Vehicles, Equipment >$50k, Support and Passenger Facilities

2. Condition assessment of capital assets

    ...with direct capital responsibility

3. List of decision-support tools or analytical processes

    Transit Asset Prioritization Tool (TAPT)

4. Project based prioritization of investments

    Based on estimated Federal & State funds

Group TAM Plan Milestones

- TAM Rule Effective, October 1, 2016
- Useful Life Benchmarks (ULB), December 2016
- Initial Conditions & Targets, January 2017
- Asset Inventory Update, July 2018
- Draft TAM Plan outline, July 2018
- Existing 2018 SGR Conditions, August 2018
- Set SGR Targets and Prioritize 2019 Investments

Existing 2018 SGR Conditions

Category	Type	Inventory	% Not in SGR	Measure
Rolling Stock	Revenue Vehicles	1,086	27.7%	Percent of vehicles that are beyond the Useful Life Benchmark (ULB) age
	Service Vehicles	60	26.7%	
	Combined	1,146	27.7%	
Facilities	Admin/Maintenance Facilities	64	15.6%	Percent of facilities rated below 3.0 on the FTA Transit Economic Requirements Model (TERM) scale
	Passenger & Parking Facilities	190	2.1%	
	Combined	254	5.0%	
Equipment	Non-vehicle	26	n/a	n/a

Inventory Analysis - TAPT

▶ Constraint: $9m Federal/State award budget

▶ 20-year projection of asset investment needs

▶ Models priority replacements based on:

1. Age
2. Maintenance cost
3. Passenger Delay cost
4. Replacement cost
5. Emissions cost

Inventory Analysis - 20yr Projection
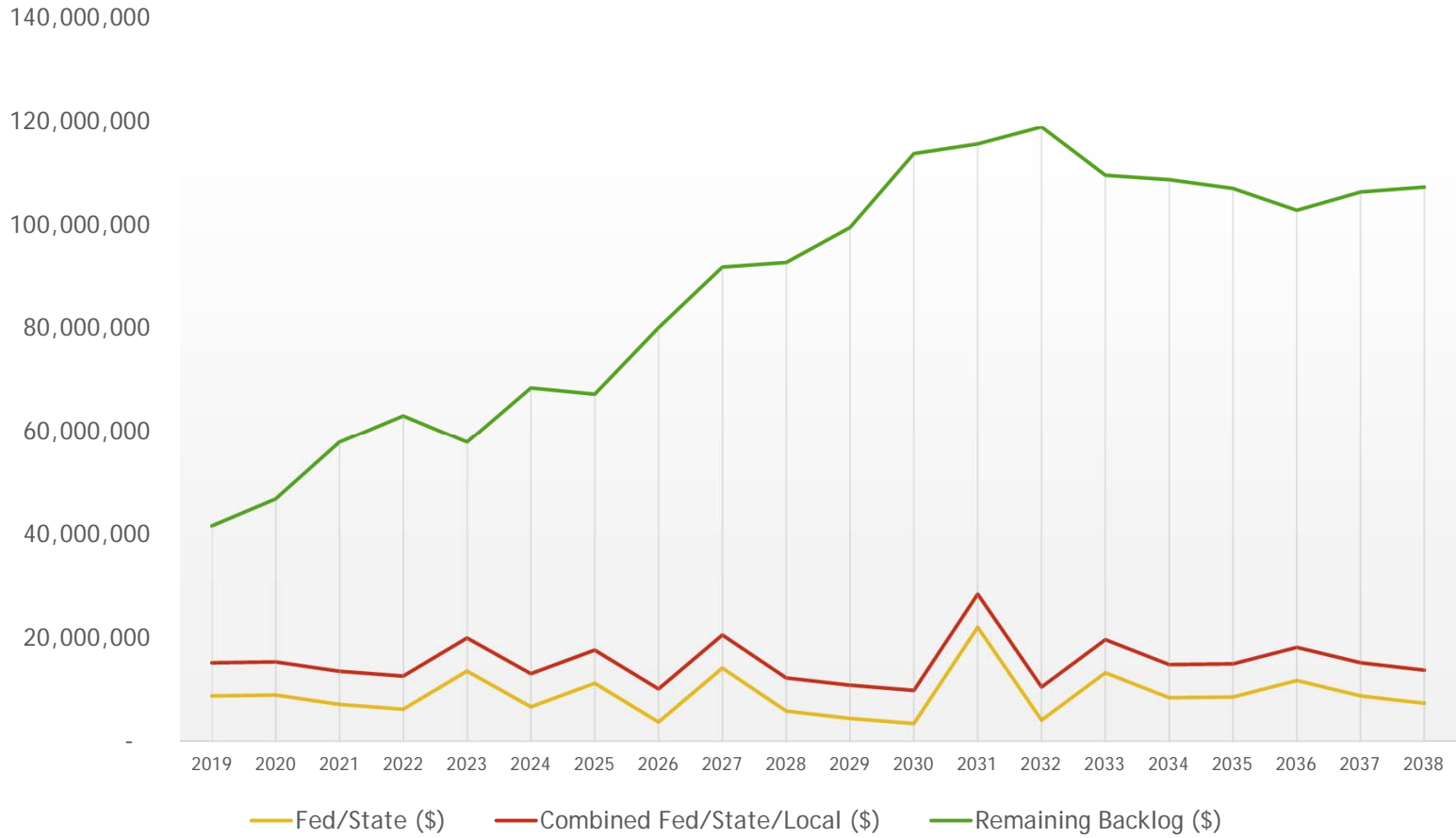
Existing Asset Conditions

Table 3-3 Revenue Vehicle Condition Summary

Vehicle Category	Class	Subtypes	ULB	Total	% in SGR	% Beyond SGR
Revenue Vehicles	Aerial Tramway	Aerial Tramway	12	71	19.7%	**80.3%**
	Bus – Large	Bus 35'-42', OTR Coaches, Articulated	14	286	80.1%	**19.9%**
	Bus – Medium	Bus < 35'	14	80	85%	**15%**
	Cutaway – Large	Cutaway with > 15 seats	10	88	81.8%	**18.2%**
	Cutaway – Small	Cutaway with < 15 seats	10	243	71.2%	**28.8%**
	Van/Minivan	Vans, Minivans	8	254	74%	**26%**
	Automobile	Sedan, Wagon, SUV	8	64	64.1%	**35.9%**
	TOTAL			1086	72.3%	**27.7%**

Table 3-5 Equipment (Service Vehicle) Condition Summary

Category	Equipment Class	Subtype	ULB	Total	% in SGR	% Beyond SGR
Service Vehicles	Trucks & Other Rubber Tire Vehicles	Pickup Truck, Maintenance, Construction	14	37	86%	**14%**
	Automobiles	Sedan, SUV, Van	8	23	52%	**48%**
Total				60	72%	**26.7%**

Table 3-8 Support Facility Condition

Facility Type	Asset Class	Asset type	Total	% in SGR	% Beyond SGR
Support Facilities	Admin/Maintenance	Admin Building	15	87%	**13%**
		Admin Office/Sales Office	2	50%	**50%**
		Bus Maintenance Facility	17	94%	**6%**
		Bus Parking Facility	15	80%	**20%**
		Combined Admin and Maintenance Building	3	67%	**33%**
		Maintenance Facility (Service and Inspection)	1	100%	**0%**
		Other Support Facility	12	100%	**0%**
		Other, Admin and Maintenance	9	67%	**33%**
		Storage Yard	3	100%	**0%**
		Vehicle Fueling Facility	1	100%	**0%**
		TOTAL	78	86%	**14%**

Table 3-9 Passenger Facility Condition

Facilities Category	Class	Subtype	Total	Count Beyond SGR	% in SGR	% Beyond SGR
Stations - Terminals	Passenger and Parking	Bus Shelter	86	1	99%	**1%**
		Bus Station	35	1	97%	**30%**
		Intermodal Terminal	12	0	100%	**0%**
		Other Transit Facility	63	2	97%	**3%**
		Park and Ride Lot	1	0	100%	**0%**
		Parking Garage	3	0	100%	**0%**
		Parking Lot	3	0	100%	**0%**
		TOTAL	203	4	96%	**4%**

TAPT Inventory Analysis – Project-based Prioritization of Projects:

Asset Class	2019	2020	2021	2022	Grand Total
Aerial Tramway	50	7			57
Automobile (Rev)	18	6	4	3	31
Automobile (Serv)	10	2			12
Bus - Lg		5	12		17
Bus - Md	1	5		7	13
Cutaway - Lg	3	8	2	1	14
Cutaway - Sm	26	21	4	25	76
Facility-Substructure		4			4
Trucks & Other	3	1	1		5
Van/Minivan	61	8	16	13	98
Grand Total	**172**	**67**	**39**	**49**	**327**

Asset Class	2019	2020	2021	2022	Grand Total
Aerial Tramway	25.7%	3.5%	0.0%	0.0%	8.3%
Automobile (Rev)	6.8%	2.2%	1.9%	1.6%	3.3%
Automobile (Serv)	3.9%	0.8%	0.0%	0.0%	1.3%
Bus - Lg	0.0%	27.0%	81.2%	0.0%	26.5%
Bus - Md	5.3%	26.0%	0.0%	52.7%	19.5%
Cutaway - Lg	3.0%	7.9%	2.5%	1.4%	4.0%
Cutaway - Sm	26.4%	20.9%	5.0%	35.9%	21.8%
Facility-Substructure	0.0%	7.6%	0.0%	0.0%	2.2%
Trucks & Other	1.4%	0.5%	0.6%	0.0%	0.7%
Van/Minivan	27.4%	3.5%	8.8%	8.3%	12.4%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Resulting 2019 SGR Targets

Category	Class	# Beyond SGR	% Beyond SGR	2019 Projects	Resulting % Beyond SGR
Revenue Vehicles	Aerial Tramway	57	**80.3%**	50	**9.9%**
	Bus – Large	57	**19.9%**		**19.9%**
	Bus – Medium	12	**15%**	1	**13.8%**
	Cutaway – Large	16	**18.2%**	3	**14.8%**
	Cutaway – Small	70	**28.8%**	26	**18.1%**
	Van/Minivan	66	**26%**	61	**2.0%**
	Automobile	23	**35.9%**	18	**7.8%**
	TOTAL	**1086**	**27.7%**	**159**	**13.1%**
Service Vehicles	Trucks & Other Rubber Tire Vehicles	5	**13.5%**	3	5.4%
	Automobiles	11	**47.8%**	10	**4.3%**
	TOTAL	**16**	**26.7%**	**13**	**5.0%**
Facilities	**Support & Passenger Facilities (combined)**	**254**	**5.0%**	**4**	**5.0%**