Transit Asset Management: Using Performance Targets to Drive Your TAM Program

Federal regulations initiated by the legislation Moving Ahead for Progress in the 21st Century (MAP-21) and the Fixing America's Surface Transportation (FAST) Act require transit agencies to set annual performance targets for assets for which they have capital replacement responsibility, report these targets to the Federal Transit Administration (FTA) and their Metropolitan Planning Organizations (MPOs), and submit a narrative report each year to the National Transit Database (NTD) describing progress towards meeting targets. Required targets include: the percentage of revenue vehicles beyond their useful life, the percentage of equipment beyond its useful life, the percentage of facilities in poor condition, and the percentage of track miles under performance restriction (see below for an example target calculation for rolling stock). In the context of the regulations, a target is a specific value for a performance measure that an agency expects to achieve given its current asset condition and expected funding.

The table shows how current performance and annual targets can be reported for revenue vehicles.

Asset Category	Vehicle Class/Type	Fleet Size	Vehicle age	default ULB	FY 16 Performance Metric (% Exceeding ULB)	FY17 Target
Rolling Stock	Over the road	10	5	14 years		
	bus (BU)	15	13	I4 years	0%	60%
	Cutaway bus (CU)	19	8	10 years		
		5	12	10 years	21%	21%
	Mini Van (MV)	5	5	8 years	0%	0%
	Van (VN)	1	10	8 years		
		2	5	8 years	67%	67%
Equipment	Auto (AO)	5	4	8 years	0%	0%

While Federal regulations require annual target setting and reporting to FTA, an agency can and should set targets for transit performance measures over a longer period of time, such as mid-term targets (e.g. 4-6 years) to align with a current capital program, and long-term targets (e.g. 10 or more years) to align with the Transit Asset Management (TAM) Plan or Transportation Improvement Program (TIP) investment horizon. These targets are agency-specific and can help to shape strategy and messaging about the capital program.

Short-term, annual targets are used to measure success of the delivery of the capital program planned for the given year. Setting mid- and long-range targets can serve as a communication tool to define state of good repair goals for your agency given existing revenues, expenses, and prioritization practices. These are goals for the level of performance your agency desires to achieve in the future, considering competing objectives. They can also be used to identify funding shortfalls and communicate backlog. Ideally mid- and long-term targets should be set for revenue vehicles, facilities and other assets critical to your agency's mission [link to criticality paper].

Mid-term targets can project the level of state of good repair given your current capital funding plans and serve as a check that the current investment portfolio is moving the agency towards achieving its longer-term targets. Such targets can point to opportunities to accelerate procurement or construction activities, or

gaps in current plans. These targets can help communicate how your revenues, prioritization, and capital packages will (or will not) bring you closer to long-term state of good repair targets.

Long-term targets have two potential uses:

- 1. Communicating the impact on asset condition of the prioritized investments in the TAM plan. This assumes that the prioritization process is complete with a set level of available resources.
- 2. Setting realistic goals for asset state of good repair to drive the capital planning process, including prioritization of projects. For example, if your agency sets a target of 30% of fleet beyond its useful life in 10 years, then that implies a certain investment profile/portfolio. Agencies can use a scenario tool to see how prioritizing different program/project packages can get them closer to their state of good repair targets, using the target to drive the process of packaging needs into projects. These targets also help agencies define what state of good repair realistically means for their agency (e.g. that 100% state of good repair is unattainable given resource constraints). Furthermore, if current resources are insufficient to meet the long-range targets, Agency leadership can use this information to communicate additional funding needs, e.g. "an additional \$X million dollars will buy us this level of improvement in state of good repair."

Mid-term targets can be updated on a rolling basis whenever the capital program is adjusted. For some agencies, this may be annually while for others it may be less frequent. Long-term targets are generally updated less frequently. Some agencies may choose to update them every four years when the TAM plan is refreshed. These targets are more strategic in nature, using executive input bounded by likely revenue and expenses to set levels of state of good repair that will then drive the capital program.

The table below summarizes recommended practice for setting short-, mid- and long-range asset condition targets.

Target	Inputs	What do the targets tell us?	Who is the audience?	How are targets used?	Risks to setting or achieving targets
Short- 1-year	Age/ condition of existing assets Capital plan for next year	What impact will this year's capital program have on asset condition?	FTA MPO Executives Public	Communicate intended impact of current year capital program, evaluate how well an agency executed the current program	Failure to achieve targets can be due to delayed procurement, construction delays, late delivery, failure to receive grant money, or revenue shortfalls
Mid- e.g. 4- year	Age/ condition of existing assets Capital plan for next 4-6 years	How will planned revenues, prioritization and capital packages impact asset condition?	MPO Executives Board	Communicate intended impact of planned capital program	Emergencies or other decisions that result in reprogramming of funds can result in changes to the targets
e.g. 10- year	Age/ condition of existing assets Planned investments in the TAM Plan, TIP Revenue and expense projections Executive input	What will the condition be if we execute projects included in the TAM plan or TIP? What do we want the condition of our assets to be given current conditions and expected funding?	MPO Executives Board	Define state of good repair Communicate projected impact of TAM Plan Drive project prioritization Communicate additional funding needed to meet targets	Changes in revenues, expenses can result in fewer resources available and inability to execute all prioritized projects