

CHAPTER 6 - TRANSPORTATION PERFORMANCE MANAGEMENT

Under federal transportation planning requirements, most recently continued with the passing of the Bipartisan Infrastructure Law (BIL), state DOTs, MPOs and RPOs, and public transportation providers must utilize a Transportation Performance Management (TPM) strategy. TPM is an ongoing, data-driven approach that uses system information to inform investment and policy decisions related to the transportation network.

Performance Based Planning and Programming (PBPP) is the application of processes that agencies use to achieve TPM, including establishing performance measures and reasonable performance targets for each measure. Ultimately, PBPP aims to efficiently allocate resources to maximize return on investment and achieve desired performance outcomes. A chart reflecting the six elements of TPM and the high-level PBPP processes involved in achieving successful TPM is included in Appendix E.



Transportation Performance Management

Focusing on Performance for Safe, Reliable Journeys

The Federal Highway Administration defines Transportation Performance Management (TPM) as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.



Investment Decisions

Using goals, measures, and data to make better informed decisions about how to invest transportation funding.



Aimed at a Better Performing Transportation System

Setting targets, developing plans, reporting results, and being accountable for performance.



For Connected and Productive Communities

Focusing on the efficient delivery of goods and safe, reliable journeys to work, to school, to shopping, to community activities.

Source: FHWA

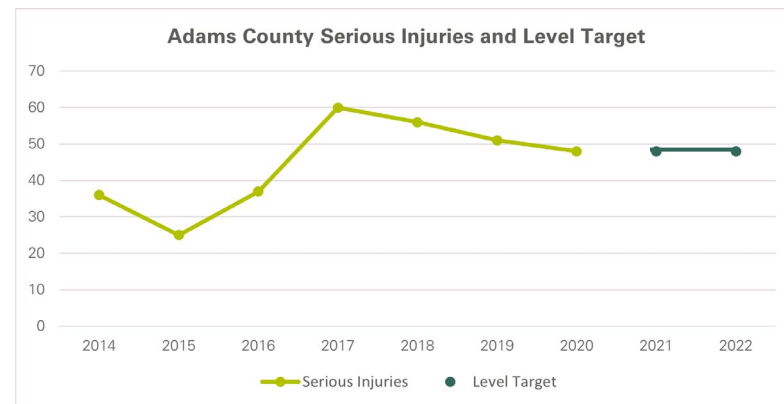
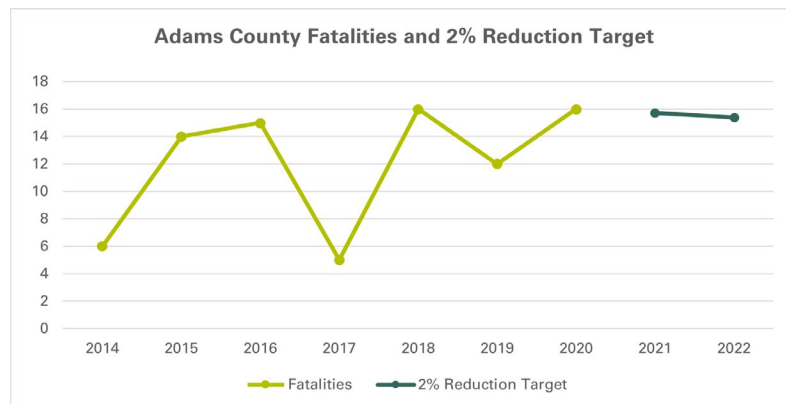
PM-1: SAFETY PERFORMANCE MEASURES

Federal regulation established five performance measures to assess safety on the transportation network. Performance targets are established on an annual basis for each performance measure. To determine whether a state has made significant progress toward meeting safety targets, at least 4 out of the 5 safety performance targets must be either met or the actual outcome for the target must be better than baseline performance. Although MPOs and RPOs have the option to set unique performance targets for their region, ACTPO

has formally agreed to support the performance targets established by PennDOT since 2018.

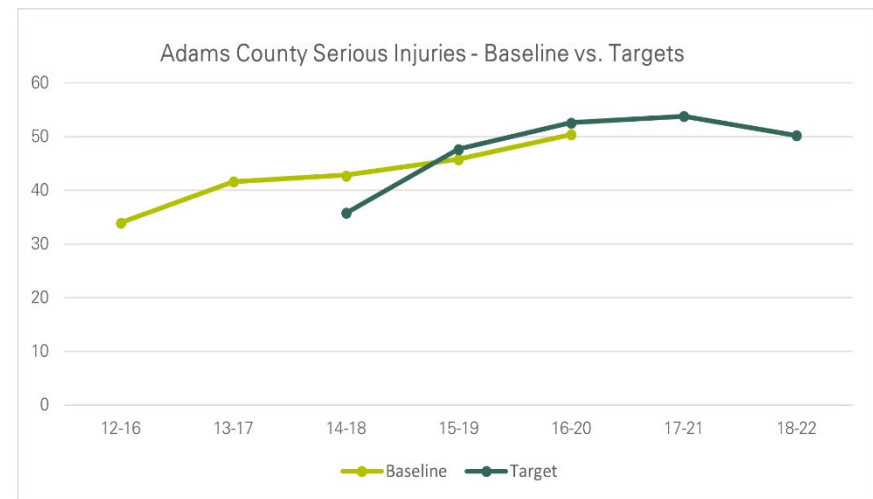
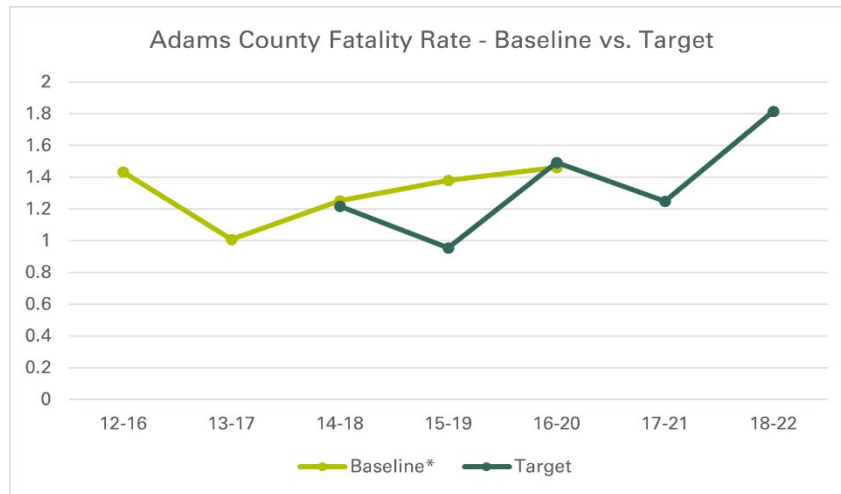
In an effort to achieve the established targets, safety projects are planned and programmed in Adams County, in collaboration with PennDOT, to support the goal of improving safety and reducing fatalities and serious injuries. The following charts and graphs display Adams County's data and targets for supporting PM-1.

TOTAL FATALITIES, SERIOUS INJURIES, AND TARGET									
ADAMS COUNTY FATALITIES AND 2% REDUCTION TARGET									
	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	6	14	15	5	16	12	16		
2% Reduction Target								15.7	15.4
ADAMS COUNTY SERIOUS INJURIES AND LEVEL TARGET									
Serious Injuries	36	25	37	60	56	51	48		
Level Target								48.0	48.0



FATALITIES AND SERIOUS INJURIES – BASELINE VS. TARGET							
ADAMS COUNTY FATALITIES							
	12-16	13-17	14-18	15-19	16-20	17-21	18-22
Baseline*	12.8	9	11.2	12.4	12.8		
Target			10.8	8.7	13.5	11.3	15
ADAMS COUNTY SERIOUS INJURIES							
Baseline*	34	41.6	42.8	45.8	50.4		
Target			35.8	47.7	52.6	53.8	50.2

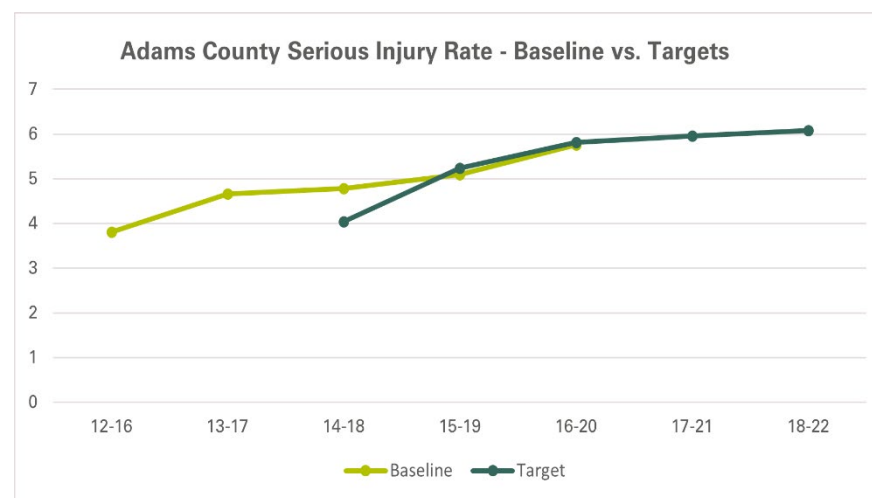
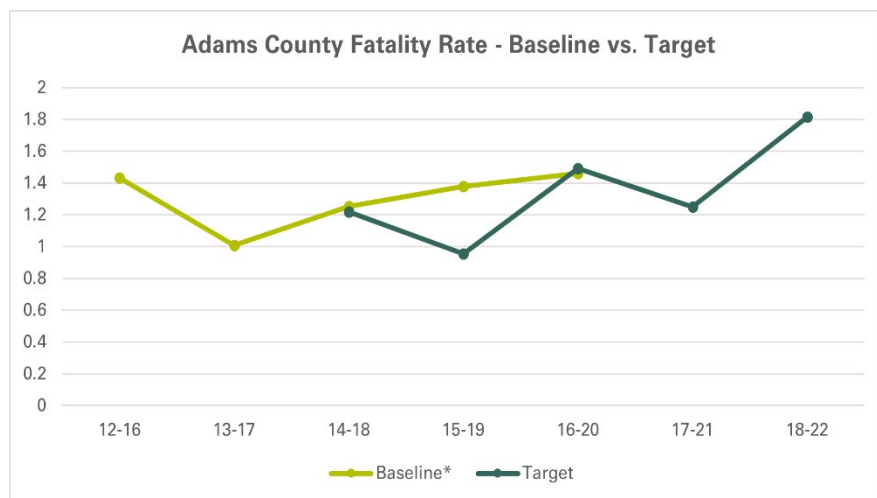
*Baseline = 5-Year Rolling Average



FATALITY AND SERIOUS INJURY RATE – BASELINE VS. TARGET							
ADAMS COUNTY FATALITY RATE** - BASELINE VS. TARGET							
	12-16	13-17	14-18	15-19	16-20	17-21	18-22
Baseline*	1.433	1.008	1.253	1.38	1.461		
Target			1.218	0.956	1.492	1.25	1.816
ADAMS COUNTY SERIOUS INJURY RATE** - BASELINE VS. TARGET							
Baseline*	3.805	4.659	4.787	5.098	5.754		
Target			4.044	5.242	5.812	5.953	6.079

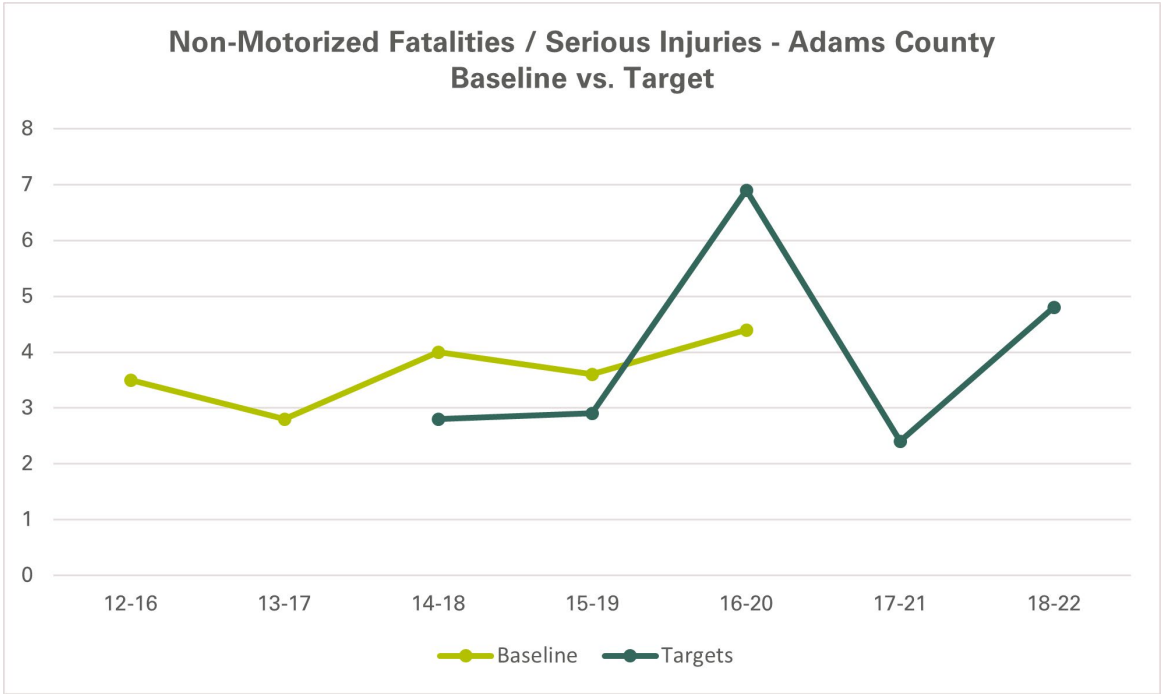
* Baseline = 5-Year Rolling Average

** Fatality/Serious Injury rate based on number of fatalities/serious injuries per 100 million vehicle miles traveled (VMT)



NON-MOTORIZED FATALITIES / SERIOUS INJURIES							
	12-16	13-17	14-18	15-19	16-20	17-21	18-22
Baseline*	3.5	2.8	4	3.6	4.4		
Target			2.8	2.9	6.9	2.4	4.8

* Baseline = 5-Year Rolling Average

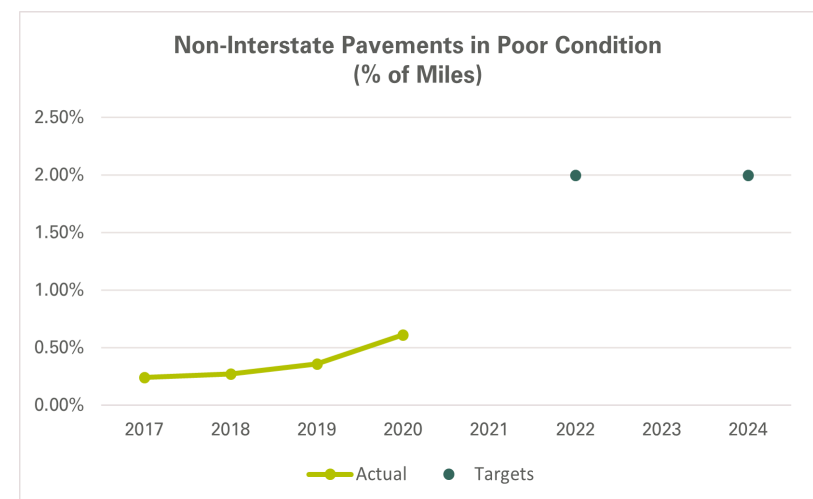
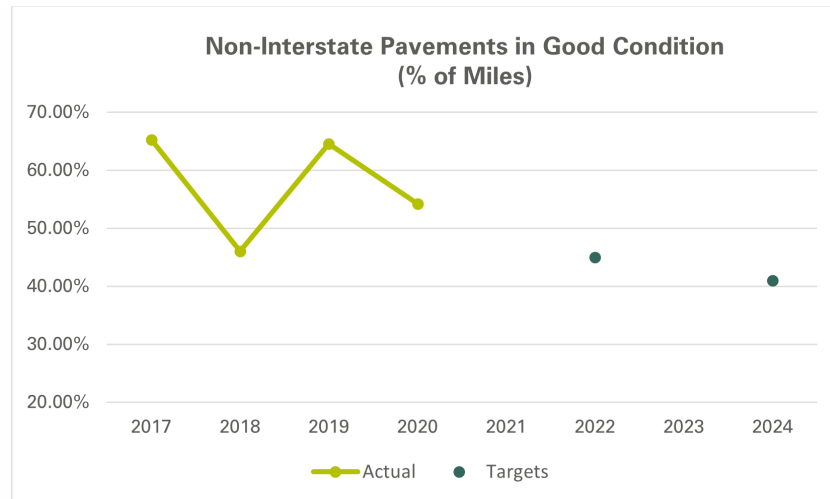


PM-2: PAVEMENT/ BRIDGE PERFORMANCE MEASURES

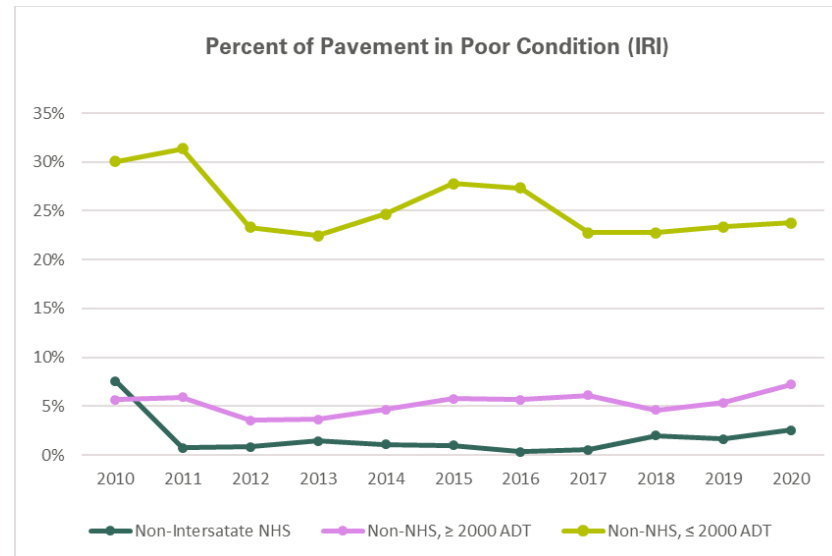
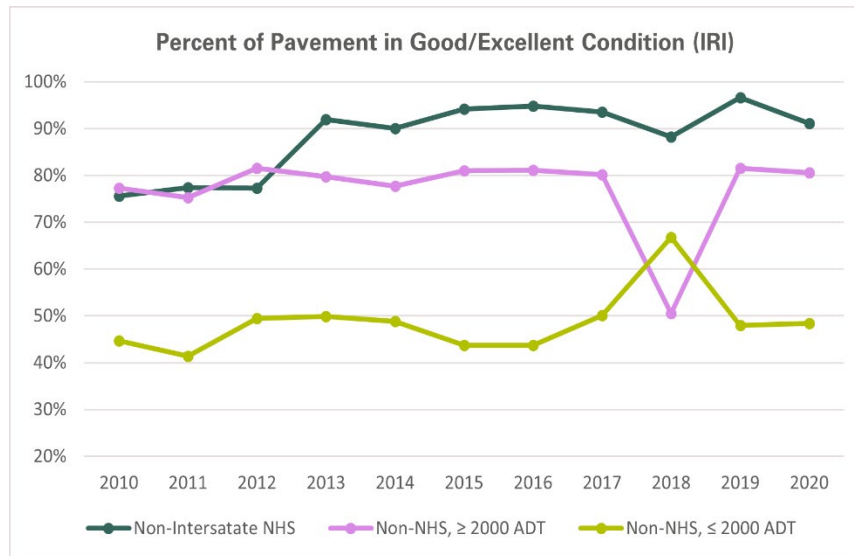
Six national infrastructure performance measures assess the condition of pavement and bridge assets on the National Highway System (NHS). Targets are established by State DOT's biennially for these measures as part of a four-year performance period. MPO's establish 4-year targets by supporting the State's target or by establishing their own targets. Adams County has agreed to support PennDOT's targets since 2018. The purpose is to ensure that Federal-

aid fund investments help achieve the goals of the State's asset management plan. The charts and graphs display Adams County's performance baselines and targets for PM-2. Targets for the upcoming performance period, 2022 through 2025, will be established in October 2022. No data is presented for performance measures specifically related to interstates, as there are no interstates located within Adams County.

ADAMS COUNTY NON-INTERSTATE PAVEMENT CONDITION PERCENTAGE								
NON-INTERSTATE PAVEMENTS IN GOOD CONDITION (%)								
	2017	2018	2019	2020	2021	2022	2023	2024
Actual	65.23%	46.00%	64.55%	54.21%				
Targets						45%		41%
NON-INTERSTATE PAVEMENTS IN POOR CONDITION (%)								
	2017	2018	2019	2020	2021	2022	2023	2024
Actual	0.24%	0.27%	0.36%	0.61%				
Targets						2%		2%



ADAMS COUNTY PAVEMENT CONDITIONS											
PERCENT OF PAVEMENT IN GOOD/EXCELLENT CONDITION (IRI)											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Non-Intersatate NHS	75.56%	77.45%	77.30%	92.00%	90.02%	94.15%	94.81%	93.54%	88.23%	96.68%	91.13%
Non-NHS, ≥ 2000 ADT	77.27%	75.27%	81.54%	79.78%	77.76%	81.04%	81.16%	80.15%	50.58%	81.53%	80.58%
Non-NHS, ≤ 2000 ADT	44.70%	41.43%	49.42%	49.85%	48.80%	43.71%	43.77%	50.13%	66.76%	47.98%	48.43%
PERCENT OF PAVEMENT IN POOR CONDITION (IRI)											
Non-Intersatate NHS	7.55%	0.73%	0.83%	1.43%	1.10%	0.98%	0.32%	0.55%	1.99%	1.62%	2.52%
Non-NHS, ≥ 2000 ADT	5.68%	5.90%	3.54%	3.63%	4.65%	5.78%	5.65%	6.11%	4.61%	5.34%	7.22%
Non-NHS, ≤ 2000 ADT	30.05%	31.37%	23.31%	22.47%	24.67%	27.79%	27.35%	22.78%	22.76%	23.34%	23.75%



PM-3: SYSTEM PERFORMANCE MEASURES

Six national performance measures were established through federal rulemaking that assess system performance, freight movement, and congestion mitigation and air quality as it relates to the transportation network. Like PM-2, targets are established by State DOT's biennially for these measures as part of a four-year performance period. MPO values are available for review and information purposes to evaluate

how the region is contributing to statewide target achievement. The chart below displays the baselines and targets that are applicable to Adams County for PM-3. Statewide targets for the second performance period, 2022 – 2025, will be established in October 2022.

Statewide Total	INTERSTATE RELIABILITY					NON-INTERSTATE RELIABILITY					TRUCK TRAVEL TIME RELIABILITY INDEX				
	2017 Baseline	2018	2019	2020	2021*	2017 Baseline	2018	2019	2020	2021*	2017 Baseline	2018	2019	2020	2021*
	89.8%	89.6%	89.9%	96.2%	93.8%	87.4%	88.2%	88.4%	92.6%	94.1%	1.34	1.39	1.36	1.23	1.3
Statewide Target	89.5% 2 & 4-Year Target					87.4% 4-Year Target					1.4 2 & 4-Year Target				
Targets only Apply to Statewide Total - MPO Numbers Provided for Information Purposes Only															
Adams County	Not Applicable					86.2%	89.8%	93.4%	95.8%	92.3%	Not Applicable				

* Note 2021 values were not finalized as of adoption date

TRANSIT PERFORMANCE MEASURES

Transit Asset Management

In July 2016, FTA issued a final rule (TAM Rule) requiring transit agencies to maintain and document minimum Transit Asset Management (TAM) standards, policies, procedures, and performance targets. The TAM rule divides transit agencies into two categories (Tier I and II) based on size and mode. The TAM process requires agencies to annually set performance measure targets and report performance against those targets.

In January 2022, the Susquehanna Regional Transportation Authority (SRTA) was formed. The responsibilities of the assets of the Cumberland-Dauphin-Harrisburg Transit Authority (aka CAT) and the Central Pennsylvania Transportation Authority (CPTA) have been contractually assigned to SRTA. Formerly, CAT was a Tier II agency and part of the PennDOT Tier II Agency Group Plan. CPTA was a Tier I agency. The SRTA is categorized as a Tier I agency, and the new TAM Plan for the

combined assets now under SRTA is in the final stages of development. The SRTA will follow the same procedures followed by the CPTA with annual evaluation of current performance and target updates as needed. The data shown below was gathered during the development of the new SRTA TAM Plan. The FY2020-21 targets are estimated from both CAT and CPTA asset data.

The SRTA is a regional transportation authority with an 11-county service area, including Adams County. The Performance Measure targets presented for both the TAM and safety are combined targets for the SRTA as a whole.

TRANSIT ASSET MANAGEMENT TARGETS (SRTA)				
Performance Measure	Asset Class	FY2020-21 Target	Current Performance	FY 2021-22 Target
ROLLING STOCK (REVENUE VEHICLES)				
Age % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Over-the-Road Bus (BR)	0%	0%	0%
	Bus (BU)	21.4%	2%	2%
	Articulated Bus (AB)	N/A	0%	0%
	Trolleybus (TR)	0%	N/A	N/A
	Cutaways (CU)	0.5%	30%	30%
	Van (VN)	0%	19%	19%
	Minivan (MV)	7.9%	68%	68%
EQUIPMENT (NON-REVENUE VEHICLES)				
Age % of non-revenue/service vehicles within a particular asset class that have met or exceeded their ULB	Maintenance Equipment	0%	0%	0%
	Automobiles	37%	21%	21%
FACILITIES				
Condition % of facilities with a condition rating below 3.0 on the FTA TERM scale	Administrative / Maintenance Facilities	0%	0%	0%
	Passenger Facilities	0%	50%	50%
	Parking Facilities	0%	0%	0%

Transit Safety

In addition to the Transit Asset Management Performance, FTA issued a final rule on Public Transportation Agency Safety Plans (PTASP), effective July 19, 2019. The PTASP final rule (49 C.F.R. Part 673) is meant to enhance safety by creating a framework for transit agencies to manage safety risks in their organization. It requires recipients of FTA funding to develop and implement safety plans that support the implementation of Safety Management Systems (SMS).

As part of the plan development process, performance targets must be established for the following areas:

- Fatalities
- Injuries
- Safety Events
- System Reliability

The SRTA completed an update to the PTASP in January 2022, combining the former CAT and CPTA PTASPs.

SAFETY TARGETS		
Measure	Mode of Service	
	Fixed Route Bus Routes	Non-Fixed Route Bus Modes
Fatalities (annual reported events)	0	0
Fatalities (per 100k VRM)	0	0
Injuries (annual reported events)	7	9
Injuries (per 100k VRM)	0.39	0.18
Safety Events (annual reported events)	6	10
Safety Events (per 100k VRM)	0.34	0.21
System Reliability Events (per 100k VRM)	9.75	0.99