

ALASKA RURAL TRANSIT ASSET MANAGEMENT PLAN



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**Alaska Community Transit, a Program of the Alaska
Department of Transportation & Public Facilities,**

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Alaska Rural Transit Asset Management Plan

OVERVIEW, VISION, POLICY, & DEFINITIONS

Transit Asset Management (TAM) is the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risk, and costs over their life cycles for the purpose of providing safe, cost-effective, and reliable public transportation. TAM uses a transit asset condition to guide how to manage capital assets and prioritize funding to improve or maintain a state of good repair (SGR).

TAM Vision: The purpose of developing the Alaska Rural Transit Asset Management (TAM) plan is to aid Alaska's rural public transit providers in achieving and maintaining a SGR for all rural public transit assets in the State of Alaska. This is an important component of our Department of Transportation & Public Facilities' (DOT&PF) mission statement: *To support the DOT&PF mission by providing access and mobility within the communities of Alaska, both urban and non-urban, through transit services that are safe, appealing, efficient, and easily-available to both the general public and transit-dependent populations.*

The Federal definition of SGR is the condition in which a capital asset is able to operate at a full level of performance. This means that the asset:

1. Is able to perform its designed function,
2. Does not pose a known unacceptable safety risk, and
3. Its lifecycle investments have been met or recovered.

TAM and SGR Policy: The Moving Ahead for Progress in the 21st Century Act (MAP-21) (2012) and its successor, the Fixing America's Surface Transportation Act (FAST) (2015) require the Secretary to develop rules to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, and to establish performance measures. The Fixing America's Surface Transportation (FAST) Act reaffirmed this requirement. On July 26, 2016, Federal Transit Administration (FTA) published the Transit Asset Management (TAM) Final Rule.

The Final Rule groups providers into two categories: Tier I and Tier II.

Tier I providers own, operate, or manage: rail, more than 100 vehicles across all fixed-route modes, or more than 100 vehicles in one non-fixed route mode. In Alaska, the Tier I providers are the Municipality of Anchorage and the Fairbanks North Star Borough. These are both urban providers and have a direct relationship with FTA.

Tier II providers are subrecipients of 5311 funds that own, operate, or manage less than 101 vehicles across all fixed route methods, referred to as modes, or less than 101 vehicles in one non-fixed route mode. The ACT TAM Plan is directed at this group of providers. At this time, there is only one Alaska Native Tribe, Gulkana Village Council, included in this plan.

The TAM rule requires every public transit provider that receives federal financial assistance under 49 U.S.C. Chapter 53 to develop a TAM plan or be a part of a group TAM plan prepared by a sponsor. TAM Tier II plans must contain:

- An inventory of assets
- A condition assessment of inventoried assets
- Documentation of the use of a decision support tool
- A prioritization of investments

PROGRAM ADMINISTRATION

Alaska Community Transit (ACT), a program of DOT&PF, acts as the sponsor for the rural Alaska public transit providers TAM Plan. The Accountable Executives from each transit provider are included in Attachment A to this plan.

Accountable Executive: It is the expectation of ACT to have the continued support and feedback of the Metropolitan Planning Organizations (MPO) and public transit providers to define, implement, enhance and achieve the goals of the ACT TAM plan. Each agency participating in ACT's TAM Plan has provided a policy statement documenting their participation, signed by their designated Accountable Executive. An Accountable Executive is a single, identifiable individual who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out transit asset management practices; and control or direction over the human and capital resources needed to develop and maintain the agency's transit asset management plan in accordance with 49 USC 5326. The TAM accountable executives meet annually to discuss the status of the targets set in the TAM plan and to review the upcoming need for replacement vehicles.

Updates: The ACT TAM Plan will be updated in its entirety every four years, more often if needed. With the resulting information from the Annual Statewide Asset Inventory, performance targets will be reported annually to the National Transit Database (NTD).

ACT's Commitment: ACT is committed to fostering a safe public transportation program throughout Alaska that promotes economic growth and opportunity for all Alaska travelers. Use of public transit relieves road congestion, improves air quality, reduces fuel consumption, connects people of all ages and abilities and allows persons to remain in their home and community of choice.

Alaska's communities tend to be small, isolated, and many are landlocked. Glacier silt, permafrost and other natural challenges result in poor road conditions and the potential for early deterioration of vehicles. Maintaining a transit fleet in an ongoing state of good repair is essential to providing continued safe and reliable transportation.

Public transit providers range in size and scale from daily fixed route service to demand response service. They provide rides to the elderly, persons with disabilities, the general public and low-income individuals to medical, nutrition, education, social and commercial services.

ALASKA'S TAM GOALS AND OBJECTIVES (TARGETS) FOR RURAL TRANSIT SYSTEMS

Goal 1: Reduce the number of vehicles that have passed their ULB life by 3% annually.

- Prioritize the replacement of vehicles that have passed their ULB.

Goal 2: Reduce the number of vehicles not in a SGR by 3% by 2020.

- Dispose of vehicles that pose an irreparable unacceptable safety risk or provide the necessary repairs and/or refurbishment to place the vehicles back in SGR status.

INVENTORY OF CAPITAL PROJECTS, ROLLING STOCK

Subrecipients of funding through the ACT submit an annual inventory in August. ACT reviews this inventory and uses it as a tool when evaluating grant applications and projecting future need. A Condition Assessment form is completed for each vehicle and submitted with the inventory.

ACT and the TAM accountable executives looked at the following data when determining performance targets and measures:

- Asset Age
- Asset Condition
- Condition of Roads
- Useful Life
- Useful Life Benchmark
- Vehicle Mileage

This data is collected in the annual inventories.

Useful life is the expected lifetime of project property, or the acceptable period of use in service. Useful life of revenue rolling stock begins on the date the vehicle is placed in revenue service and continues until it is removed from service. Following are the Useful Life standards used by ACT. Determination of funding for new vehicles is based on the Useful Life Miles and Years. It is at this point that we will start analyzing when we can expect a replacement vehicle will need to be ordered, looking at the annual mileage, road conditions and condition report scores for the past several years.

Vehicle Classification	Useful Life Miles	Years
Automobile	100,000	4
Sports Utility Vehicle	100,000	4
Mini-Van / Van	100,000	4
Cut-Away	150,000	5
Bus 25'-35' Medium Duty	200,000	7
Bus ~30' Heavy Duty	350,000	10
Bus 35'-40' Heavy Duty	500,000	12
Ferry: Passenger	n/a	25

Useful Life Benchmark: FTA defines a useful life benchmark (ULB) as the expected lifecycle of a capital asset for a particular transit provider’s operating environment or the acceptable period of use in service for a particular transit provider’s operating environment. ULB is not the same as an asset’s useful life. ULB takes into account a provider’s unique operating environment such as geography, service frequency, etc.

The Accountable Executives and ACT determined that the following ULB’s were appropriate for Alaska.

VEHICLE TYPE	ULB YEARS	ULB MILES
Vans	4	200,000
Cutaways	7	250,000
Heavy Duty Cutaway	8	240,000
Bus 25'-35'	14	500,000
Heavy Duty Bus 25'-35'	12	500,000
Bus 41'	14	500,000
Ferry	42	

SFY2018 ULB/SGR RATING

Rolling Stock Category	Quantity	Past ULB Years	% Within Category	Past ULB Miles	% Within Category	NOT SGR
Vans	19	5	26%	1	5%	1
Cutaways	39	20	51%	2	5%	7
Heavy Duty Cutaways	8	1	13%	0	0	0
Buses 25'-35'	25	1	4%	5	20%	3
Heavy Duty Buses	1	0	0%	0	0	0
Buses 41'	9	9	100%	7	78%	0
Totals	101	37		15		11
% Within Fleet		37%		15%		11%
Ferries	2	0	0%	0	0%	0

ROLLING STOCK CONDITION ASSESSMENT

The following Asset Condition Measurement Tool is completed by public transit subrecipients annually and is included as a component of the annual asset inventory.

Vehicles that are scored below moderate are considered to not be in a state of good repair. This is in addition to the Federal SGR requirements of

1. Able to perform its designed function,
2. Does not pose a known unacceptable safety risk, and
3. Its lifecycle investments have been met or recovered.

ROLLING STOCK ASSET CONDITION MEASUREMENT TOOL

Transit System:

Vehicle #:

Scheduled Replacement Date:

No.	System	Description of Subsystem Evaluated	SFY2018
1	Engine	Available compression tests, oil usage, oil analysis and noise	
2	Drive-Train	Transmission and rear-end based fluid analysis, shift quality, fluid leaks and noises	
3	Electrical	Lights, switches, gauges, electrical mechanisms, front to back wiring	
4	Suspension/Steering	Springs, shocks, struts, steering wheel play	
5	A/C, Heating	Cooling and heating throughout vehicle	
6	Structure	Extent of cracks and rust in frame and structure	
7	Body Interior	Condition of floor, windows, seats, side and modesty panels	
8	Body Exterior	Extent of cracks, dents, and rust	
9	Wheelchair Safety	Ability to load and unload passengers safely	
10	Safety Systems	Braking system, emergency brake, emergency exit windows and doors	
Total			

Vehicle Condition Worksheet - Subsystem Rating Guide

Score	Rating	Description
10	Excellent	Brand new, no major problems exist, only routine PM required
7-9	Good	Elements are in good working order, require nominal or infrequent minor repairs (More than 6 months between minor repairs)
4-6	Moderate	Requires frequent minor repairs (<6 months between) or infrequent major repairs (<6 months between)
1-3	Poor	Requires frequent major repairs (<6 months between)
0	Bad	In such poor condition that continued use presents potential problems

Vehicle Condition Scoring Guide

Score
81-100
61-80
41-60
21-40
<=20

SFY2018 CONDITION RATING

Rolling Stock Category	Quantity	Condition	% Within Category	% Within Fleet
Vans	11	Excellent	58%	19%
Vans	5	Good	26%	
Vans	1	Moderate	5%	
Vans	2	Poor	11%	
Cutaways	5	Excellent	12%	39%
Cutaways	10	Good	26%	
Cutaways	19	Moderate	49%	
Cutaways	4	Poor	10%	
Cutaways	1	Bad	3%	
Heavy Duty Cutaways	8	Good	100%	8%
Buses	4	Excellent	12%	33%
Buses	12	Good	35%	
Buses	18	Moderate	53%	
Heavy Duty Buses	1	Good	100%	1%
Ferries	2	Good	100%	100%

A copy of the 2018 Inventory can be found in Attachment B to this plan.

DECISION SUPPORT TOOLS

FTA funds, which are allocated annually, are crucial to the continued operation of public transportation services in Alaska. In order to ensure that the funds are fairly and equitably distributed, a competitive application process has been developed to solicit projects and award funds, providing for the maximum feasible participation by private providers of public transit to participate. These funds are available for replacement, rehabilitation and the purchase of buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.

Urban and small urban provider funding opportunities are managed and coordinated through the local metropolitan planning organizations' (MPO) application and prioritization processes. Direct recipients of federal funds adhere to their own board policies and procedures for funding discretion.

ACT does not currently have an electronic decision support tool. A decision support tool module is scheduled to be added by 2020 to Panther International's BlackCat Grant Management System used by ACT and its subrecipients.

The following tools are used when determining the need and the timeline for the purchase of vehicles:

- Inventory of Capital Assets, both rolling stock and facilities, Attachment B.

- Condition Assessments
- Input from TAM Accountable Executives
- Excel spreadsheets used for tracking and assessment

With these tools, multi-year projections are made in order to prioritize projects to improve and maintain the SGR of capital assets within the rural public transit systems and to assess financial needs for asset investments over time.

These projections are shared with the TAM accountable executives during the annual asset planning meeting.

INVESTMENT PRIORITIZATION

The following are considered when prioritizing investment:

- Availability of match funds
- Replacement capital takes precedent over expansion capital
- Location of the public transit system. Buses are more difficult to maintain in rural and landlocked areas. In addition, it takes longer for delivery of a vehicle, as much as 9 to 12 additional months
- Vehicle minimum age standard is met or exceeded
- Vehicle minimum mileage standard is met or exceeded
- Will a refurbishment of the vehicle be sufficient?

INVENTORY OF CAPITAL PROJECTS, FACILITIES

In keeping with the FTA TAM Final Rule, public transit providers include facilities in their annual asset Inventory. The inventory addresses the following required fields:

- Full or partial capital responsibility
- Facility dedication to transit
- Primary mode
- Facility type
- Rating (required only for facilities where the subrecipient has full or partial capital responsibility)
- Date built
- Square feet
- Address

ACT does not currently receive enough federal formula funding to subsidize the construction of transit facilities. This would generally only happen with Federal discretionary grants passing to a subrecipient through the State, such as FTA Section 5339(b), Bus and Bus Facility funds or FHWA funds transferred to FTA for this purpose.

There are currently nine facilities that seven subrecipients have full or partial capital responsibility for, which are included the following tables.

Year Built	Condition
2012	5
1993	4
1974	4
1980's	4
2006	4
2009	4
2008	3
2006	3
1958	2

Condition % Within Fleet
5 = 11%
4 = 56%
3 = 22%
2 = 11%

There are four facilities that the subrecipients do not have partial or full capital responsibility for. The entity that does have the capital responsibility maintains these facilities.

Rating	Condition	Description
5	Excellent	No visible defects, new or near new condition, and may still be under warranty if applicable.
4	Good	Good condition, but no longer new; may have some slightly defective or deteriorated component(s), but is overall functional.
3	Adequate	Moderately deteriorated or defective components but has not exceeded its useful life.
2	Marginal	Defective or deteriorated component(s) in need of replacement; has exceeded useful life.
1	Poor	Critically damaged component(s) or in need of immediate repair; well past useful life.

FACILITY CONDITION ASSESSMENT

FTA requires that each facility where the subrecipient has partial or full capital responsibility have a condition assessment completed every three years. Facilities to be reviewed include the following:

- Administrative
- Maintenance
- Passenger and Parking

Subrecipients must use the FTA Transit Economic Requirements Model (TERM) scale to report the condition of their facility assets. Detailed information and instructions can be found in the Facility Condition Assessment Guidebook,

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-guidance/asset-management/60361/tam-facility-performance-measure-reporting-guidebook-v1-2.pdf>

ACT will determine the schedule of assessments, providing a minimum of six months advance notice to the subrecipient. Following is the tentative schedule of facility condition assessments through SFY2021.

FISCAL YEAR	FACILITY 1	FACILITY 2	FACILITY 3
2018	City & Borough of Juneau	City & Borough of Juneau	
2019	Valley Transit	Valley Transit	
2020	CARTS	Inter-Island Ferry Authority	Ketchikan Gateway Borough
2021	Glacier Valley Transit	City of Bethel	

This TAM Plan is in its' infancy. ACT anticipates changes and improvements on an ongoing basis as the plan and technology mature. The most current plan will be located at

<http://dot.alaska.gov/transit/resources.shtml>.

ATTACHMENT A

ACCOUNTABLE EXECUTIVES

ATTACHMENT B
2018 INVENTORY