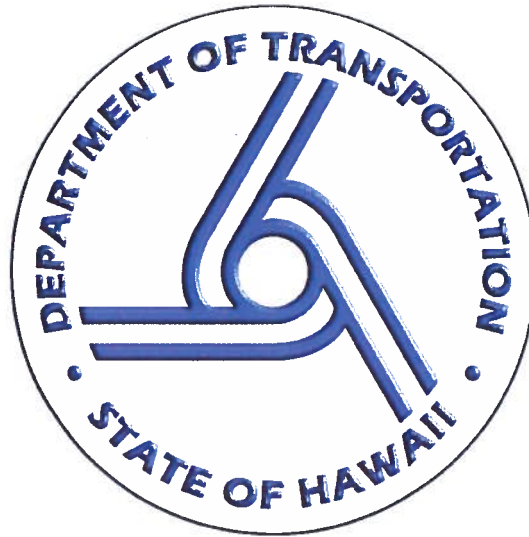



**State of Hawaii**  
**Department of Transportation**



**Tier II**  
**Transit Asset Management**  
**Group Plan**

  
\_\_\_\_\_  
Approved  
JADE T. BUTAY  
Director of Transportation

Nov 1, 2018  
Date

September 2018

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## ACRONYMS

FAST	Fixing America's Surface Transportation
FTA	Federal Transit Administration
HDOT	Hawaii Department of Transportation
MAP-21	Moving Ahead for Progress in the 21st Century Act
SGR	State of Good Repair
STIP	State Transportation Improvement Plan
TAM	Transit Asset Management
TERM	Transit Economic Requirements Model
ULB	Useful Life Benchmark

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# INTRODUCTION

## Hawaii Department of Transportation Statewide Transportation Planning Office

Pursuant to 49, U.S.C 5301 et seq. the Hawaii Department of Transportation (HDOT) is the designated recipient and the agency responsible for administering the Federal Transit Administration's (FTA) Sections 5305 (d & e), 5310, 5311, 5329, and 5339 formula grant programs for all areas outside of Hawaii's urbanized areas of Oahu and Maui. The HDOT Statewide Transportation Planning Office (STP) is responsible for ensuring the fair and equitable distribution of FTA funds; announcing the program and availability of funds; developing a process to solicit, review, and approve eligible funding sources; providing management and technical assistance to applicants and grantees; administering and monitoring contracts; and ensuring compliance with federal requirements by all subrecipients.

Mobility is critical to quality of life; these providers offer connectivity to medical, nutrition, education, employment, social, recreation, and commercial services. Approximately 7.70 million trips are provided annually by the 3-fixed route and demand response agencies (Hawaii County, Kauai County and Maui County) eligible or previously eligible for FTA funds administered through STP. With the Moving Ahead for Progress in the 21st Century Act of 2012 (MAP-21) currently, only agencies in Hawaii County, non-urbanized Maui County, and Kauai County apply to the STP for FTA funds needed for rural fixed route transit, demand response and planning and mobility management needs.

MAP-21 also required the Secretary of Transportation 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, FTA published the Transit Asset Management (TAM) final rule.

## TRANSIT ASSET MANAGEMENT

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 to provide safe, cost-effective, and reliable public transportation. TAM is a business model that prioritizes funding based on the condition of public transportation capital assets to achieve or maintain such assets in a State of Good Repair (SGR).

### Purpose of the Transit Asset Management Plan

The purpose of the TAM is to aid the transit agencies in achieving and maintaining a SGR of all public transportation assets in the State of Hawaii. 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
  3. Lifecycle investments have been met or recovered
-

## Federal Law Related to Transit Asset Management

Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP 21) required 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, FTA issued a final rule, 49 CFR Part 625, requiring public transportation agencies that receives federal financial assistance under 49 U.S.C. Chapter 53 to develop a TAM plan or be a part of a TAM group plan prepared by a sponsor (HDOT/STP).

The TAM final rule groups transit providers into two classifications:

- **Tier I:** Providers own, operate, or manage rail, 101 or more vehicles across all fixed-route modes, or 101 or more vehicles in one non-fixed route mode.
- **Tier II:** Providers are subrecipients of Section 5311 funds, Section 5310, American Indian Tribe, or own, operate, or manage 100 or less vehicles across all fixed-route modes, or 100 or less vehicles in one non-fixed route mode; Tier II transit providers can submit their own TAM plan or join a TAM group plan.

## Required Transit Asset Management Plan Elements

The following sections outline the nine elements of a TAM plan. These nine elements are:

<b>1. Asset Inventory</b> All capital assets a transit provider owns, operates or manages, including those acquired without FTA funds	Tier I & Tier II
<b>2. Asset Condition Assessment</b> Rating of inventoried assets, collected at individual or asset class level	
<b>3. Decision-Support Tools (Management Approach)</b> Analytical processes used to make investment prioritization	
<b>4. Investment Prioritization</b> Ranked list of proposed projects and programs ordered by year of planned implementation	
<b>5. Transit Asset Management and State of Good Repair Policy</b> Public transportation agency's vision, defining, objectives, roles and responsibilities	Tier I only
<b>6. Implementation Strategy</b> Operation level process for implementing TAM plan	
<b>7. Key Activities</b> Actions needed to implement TAM plan for each year of the plan's four-year horizon	
<b>8. Summary of Resources</b> Staff time, funding, technology requirements, etc.	
<b>9. Monitoring, Updating, and Evaluation Outline</b> How TAM activities will be monitored, evaluated and updated to ensure continuous improvement	

## Roles and Responsibilities

As a large urban provider, the City and County of Honolulu is the only provider that meets the requirements of a Tier I transit provider. Statewide fixed route transit providers and their TAM classification include:

- City & County of Honolulu, Department of Transportation Services; Tier I (individual TAM Plan)
- County of Kauai, Transportation Agency; Tier II (TAM group plan)
- County of Maui, Department of Transportation; Tier II (TAM group plan)
- County of Hawaii, Mass Transit Agency; Tier II (TAM group plan)

Each transit agency must designate an Accountable Executive to ensure that the necessary resources are available to provide ongoing safety review and management of the assets. Upon acceptance of federal assets, Hawaii DOT requires that the individual within an agency who has direct control over these responsibilities be identified. This individual is also responsible for ensuring that all FTA Certifications and Assurances are clearly understood, and that the annual affirmation is signed and submitted back to the Hawaii DOT.

<u>Role</u>	<u>Title</u>	<u>Agency</u>
Transit Asset Management	Celia Mahikoa, Executive on Transportation	Kauai Transportation Agency
Transit Asset Management	Don Medeiros, Director	Maui Department of Transportation
Transit Asset Management	Maria Aranguiz, Mass Transit Administrator	Hawaii Mass Transit Agency

## Asset Inventory

TAM plans must include an inventory of capital assets that a public transportation agency owns and operates. The only exception to this inventory is equipment that is not a service vehicle and has an acquisition value over \$50,000.

The inventory must include, but is not limited to:

- ***Rolling stock (revenue vehicles)***
  - Heavy-duty buses: 30-, 35-, 40-foot articulated; double decker; 45-foot over the road coaches
  - Medium duty-cutaway: >30' on truck chassis
  - Light-duty cutaway: <30' on van chassis
  - Light-duty: ADA accessible van and minivan
  - Van: 7-, 12- and 15-passenger vanpool vehicles
- ***Facilities***
  - Passenger stations
  - Administrative buildings
  - Operations and maintenance buildings
  - Employee parking garages
  - Park and ride lots
- ***Equipment***
  - Vehicles used to support revenue vehicles
  - Supervisor vehicles
  - Tow trucks

- Service vehicles
- Snow plows
- **Infrastructure**
  - Catenary systems
  - Signal systems
  - Tracks
  - Power substation

## Asset Condition Assessment

TAM plans must include a condition assessment of all items in the public transportation agency's asset inventory. The condition assessment must be detailed enough to allow the agency to monitor and predict the performance of the assets. The condition assessment informs the investment prioritization

## Transit Asset Management Methodology

To identify the required performance targets, a condition assessment of each FTA funded asset is required. When conducting a condition assessment, it is important to first identify what factors are considered and what that data entails. Hawaii DOT applied the following criteria to determine the asset condition:

- Asset type
- Useful life
- Useful life benchmark (ULB)
- Transit Economic Requirements Model (TERM)/Rating
- Vehicle mileage
- User rating

Useful life - the expected lifetime of project property or the acceptable period of use in service varies based on vehicle and facility type. The useful life of rolling stock begins on the date the vehicle is placed in revenue service and continues until it is removed from service. While the Hawaii DOT utilizes the FTA standards for determining useful life (see Table 2), the Hawaii DOT adjusted the FTA standard for Useful Life Benchmark (ULB). The adjustment is needed because the FTA useful life standards for mileage and age do not directly correlate to the mileage and age utilized by the plan group to determine the ULB.

**Table 2. Useful Life Standards**

Vehicle	Approximate GVWR (pounds)	Length (feet)	Seats	Useful Life
<b>Large, heavy-duty transit bus</b>	33,000–40,000	35–40+	35–40	12 years or 500,000 miles
<b>Medium-size heavy-duty transit bus</b>	26,000–33,000	30–35	25–35	10 years or 350,000 miles
<b>Medium-size medium-duty transit bus and truck chassis cutaway</b>	10,000–26,000	25–30	16–30	7 years or 200,000 miles
<b>Medium-size, light-duty bus and van chassis cutaway</b>	10,000–16,000	20–25	12–16	7 years or 150,000 miles
<b>Small light-duty bus, modified vans, modified minivans</b>	6,000–14,000	<20	3–14	5 years or 100,000 miles

While the ULB of a vehicle is utilized to determine the eligibility for vehicle replacement, for the purpose of this plan, FTA has provided guidance to determine the maximum age of an asset—or the point in which an asset enters the SGR backlog. The FTA defines 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. The ULB considers a provider's unique operating environment such as geography and service frequency (see Table 3). For the purposes of this plan, the Hawaii DOT has determined the ULB criteria to be utilized in determining the condition of an asset.

Additionally, Hawaii DOT combined FTA's TERM scale (see Table 4) to the existing vehicle mileage for each vehicle type in order to apply a rating for the mileage criteria (see Tables 5–9). The TERM scale was also utilized to assess the condition of both facilities and equipment valued over \$50,000.

**Table 3. Useful Life Benchmark**

Vehicle Type	FTA Default ULB (years)
Automobile (AO)	8
Van (VN)	8
Cutaway Bus (CU)	10
Bus (BU)	14

**Table 4. FTA's Transit Economic Requirements Model/Facilities and Equipment**

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

**Table 5. Van (ULB 8 Years)**

Condition	Mileage	Rating
Excellent	0–25,000	5
Good	25,001–70,000	4.9–3.5
Adequate	70,001–100,000	3.4–2.5
Marginal	100,001–150,000	2.4–1.5
Poor	150,001+	1.4–0

**Table 6. Light Duty 25 feet or less (ULB 10 Years)**

Condition	Mileage	Rating
Excellent	0–30,000	5
Good	30,001–120,000	4.9–3.5
Adequate	120,001–180,000	3.4–2.5
Marginal	180,001–240,000	2.4–1.5
Poor	240,000+	1.4–0



**Table 7. Medium Duty Cutaway**

Condition	Mileage	Rating
Excellent	0–40,000	5
Good	40,001–160,000	4.9–3.5
Adequate	160,001–240,000	3.4–2.5
Marginal	240,001–320,000	2.4–1.5
Poor	320,001+	1.4–0

To determine a conditional assessment rating for each vehicle, the ULB, mileage and agency assessment were given a rating. The ratings for each criterion were then weighted (.33) and totaled for the asset condition rating (see Figure 4). Equipment and facilities were rated utilizing the TERM scale (see Table 4).

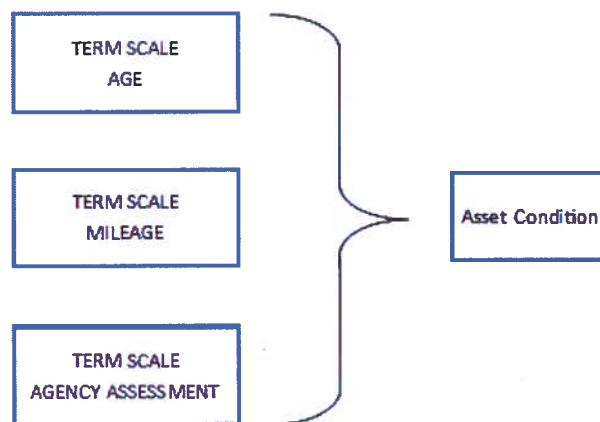
**Table 8. Heavy Duty Small Bus (ULB 14 Years)**

Condition	Mileage	Rating
Excellent	0–70,000	5
Good	70,001–280,000	4.4–3.5
Adequate	280,001–420,000	3.4–2.5
Marginal	420,001–560,000	2.4–1.5
Poor	560,001+	1.4–0

**Table 9. Heavy Duty Large Bus (ULB 14 Years)**

Condition	Mileage	Rating
Excellent	0–80,000	5
Good	80,001–370,000	4.9–3.5
Adequate	370,001–570,000	3.4–2.5
Marginal	570,001–710,000	2.4–1.5
Poor	710,000+	1.4–0

**Figure 4. Vehicle Condition Methodology**



## Decision-Support Tools (Management Approach)

TAM plans identify analytical processes or decision-support tools that a public transportation agency intends to use to estimate capital investment needs over time. These analytical processes or decision-support tools may also be used to help the agency develop its investment prioritization.

## Investment Prioritization

TAM plans must include a project-based investment prioritization, identifying programs and projects that a public transportation agency has a responsibility to improve or manage. An agency's investment prioritization should rank projects in order of priority and project year. The rankings must be consistent with the agency's TAM policy and strategies. Special consideration should be given to programs and projects that pose a safety risk, and to the estimated funding levels from all available sources in each fiscal year during the TAM plan horizon period.

## ASSET PORTFOLIO AND CONDITION ASSESSMENT

Assets included in the Hawaii DOT portfolio include all 5311 FTA funded assets for which each group member has direct responsibility. In total, this 2017 TAM Plan includes 275 vehicles, 5 facilities, and 8 types of equipment (see Tables 10–13). See Appendix A for a complete list of all assets and their condition assessment.

**Table 10. Vehicle Condition Assessment**

Asset Type	#	Average Year Built	Average Age (years)	% of ULB	Term Scale Age (years)	TERM Mileage (miles)	Agency Assessment (years)	Total Average (rating)	Replacement Cost Range
Large Bus	46	2008	10	71	3.0	3.5	3.7	3.4	\$550,000–\$1,000,000
Small Bus	4	2012	6	43	4.5	3.0	3.5	3.7	\$350,000–\$550,000
Cutaway	30	2015	3	30	5.0	4.5	4.3	4.6	\$90,000–\$200,000
Light Duty	60	2014	4	40	5.0	3.5	3.9	4.1	\$90,000–\$200,000
Van	4	2012	6	75	3.0	4.5	4.0	3.8	\$65,000–\$90,000

**Table 11. Percent of Vehicles Below the TERM “Adequate” Rating**

Asset Type	% < Adequate Condition CY 2017	% > Adequate Condition CY 2017
Large Bus	37	63
Small Bus	25	75
Cutaway	0	100
Light Duty	27	73
Van	0	100

**Table 12. Facility Condition Assessment**

Asset Type	#	Year Built	Average Age (years)	% of ULB	TERM Scale Age (years)	Agency Assessment (years)	Total Average (rating)
Parking lot	2	2002	16	80	2.0	3.0	2.5
Admin	3	2002	16	40	4.5	4.3	4.4

**Table 13. Equipment Condition Assessment**

Asset Type	#	Year Built	Average Age (years)	Agency Assessment (years)	Total Average (rating)
Equipment	8	2008	2.5	3.1	2.8

## PERFORMANCE TARGETS

The average age for the majority of assets is within their designated ULB and, perhaps most importantly, the average condition rating for each asset type falls within the TERM “above 3.0” rating. The overall condition average for the fleet is a 3.75, approaching “good” on the TERM scale (see Table 10). It should be noted that while the overall score is “adequate” a large percentage of bus and van assets fall below the “adequate” rating (see Table 11). The ratings are low due to continued use beyond the ULB; however, subrecipients continue to replace these assets each year and increase the overall asset condition rating. In addition, interest in vans has increased due to innovation and design improvements in Americans with Disabilities Act accessibility.

Growing demand, competition for funds, and increasing costs require that the HDOT and their subrecipients continue to ensure that assets are maintained in a SGR. Efforts must be made to ensure that assets are adequately maintained throughout their useful life and beyond. Using performance measures will aid in the ongoing management of all assets, will ensure that limited funding is utilized wisely, and will ensure that assets do not put the public’s safety in jeopardy.

### Performance measures for 2018 include:

- Maintain an overall average for each vehicle category at a 2.0 or better
- Maintain an overall average of 3.0 for all facilities and equipment
- The HDOT group plan participants will maintain an “adequate” rating for all asset categories.

### Asset Condition Detail

Rolling Stock Category	Quantity	Condition	TERM Scale	% of Fleet
	0	Poor	≤1	0%
	6	Marginal	≤2	4%
	32	Adequate	≤3	22%
	52	Good	≤4	36%
	54	Excellent	≤5	38%
Facility Category	Quantity	Condition	TERM Scale	% of Fleet
	0	Poor	≤1	0%
	0	Marginal	≤2	0%
	2	Adequate	≤3	40%
	2	Good	≤4	40%
	1	Excellent	≤5	20%
Equipment Category	Quantity	Condition	TERM Scale	% of Fleet
	0	Poor	≤1	0%
	1	Marginal	≤2	12.5%
	4	Adequate	≤3	50%
	3	Good	≤4	37.5%
	0	Excellent	≤5	0%

## MANAGEMENT APPROACH

The Hawaii DOT manages the FTA funded programs in accordance with the grant application, FTA Master Agreement, Certifications and Assurances and all applicable laws and regulations. As a pass-through of FTA funds, the Hawaii DOT manages an annual multi-step application process that ranges from the announcement of funds to contracting with subrecipients.

## **Prioritization and Risk Management**

### ***FTA Section 5310 Program***

The Section 5310 grant program requires projects to be identified in a Coordinated Public Transit-Human Services Transportation Plan (CSP) developed by a lead local agency. The HDOT completed the statewide CSP, which identifies transportation as the greatest need. As such HDOT utilizes funding for the procurement of vehicles for its 5310 subrecipients. However, because the HDOT does not own or have direct capital responsibility, these vehicles are not part of the HDOT group TAM plan.

### ***Section 5311 and Section 5339***

The Hawaii DOT provides guidance to the County transit agencies on the minimum requirements of the coordinated plan process to ensure projects are eligible for FTA grant program funding. Though encouraged to do so, Section 5311 and Section 5339 projects are not required to be part of the coordinated plan. They do, however, need to be part of the *Hawaii Statewide Transportation Improvement Program and Regional Long-Range Transportation Plans*.

In addition to the annual application process, the Hawaii DOT requires that all fixed route transit providers have an adopted capital improvement plan identifying capital projects, approximate costs, and the year of implementation. Understanding that needs are large, and the funding is limited, it is critical for all fixed route providers to understand all the statewide needs.

### ***Site Visits and Inspections***

Hawaii DOT conducts periodic site visits and inspections of its subrecipients. More frequent visits may be conducted should there be numerous follow-up items on previous visits; complaints regarding service, vehicles, or other items; or grant management issues. Site visits and inspections are performed by the Hawaii DOT FTA Program Manager/staff and includes review of the funded activities. Inspections of the assets are randomly selected including fleet, facilities, and equipment. Infrastructure is not included as the transit agencies do not own or have direct capital responsibility.

The Hawaii DOT has developed standard forms that include specific questions about vehicles, facilities, equipment, and operations. Once the subrecipient review is complete, a final report is sent to the subrecipient's Accountable Executive. Any follow-up items with time frames for responses are identified in this report. HDOT FTA Program Manager/staff tracks and verifies that follow-up items are addressed and documented. All site visit and inspection dates and findings are tracked and summarized in the agency Administrative Record.

### ***Reporting and Performance Measure Oversight***

The Hawaii DOT collects reporting, performance measure, and maintenance data from subrecipients, including internal deadlines and established objectives and requirements. Reporting and tracking field for the items listed below:

- Quarterly reporting
  - Vehicle mileage and trips
  - Pre-trip and Post-trip inspection verification
  - Preventative maintenance verification
  - Accidents and incidents
-

### ***Useful Life Benchmark of Assets***

The Useful Life Benchmark refers to the maximum age of the asset, or the point at which the asset enters the state of good repair backlog. The federal interest expires when the asset reaches its useful life and the asset is deobligated. These requirements exist to protect the federal interest.

Useful life of an asset begins on the date the subrecipient takes possession of the asset and continues until the asset reaches the useful life minimum criteria and deobligated.

### ***Maintenance Strategy***

Each provider adheres to their written vehicle maintenance programs to ensure that vehicles are maintained, at a minimum, in accordance with their manufacturer's maintenance and service guidelines.

### ***Disposal of Rolling Stock***

The federal interest expires when the property reaches its useful life and the vehicle is deobligated. After the minimum useful life of project property is reached and is no longer needed for the original project or program, it may be used by the grantee for other transit projects or program.

If a subrecipient desires to dispose of the property before it meets the end of its useful life benchmark, it can be transferred to another subrecipient for public transportation purposes or the property may be sold with Hawaii DOT and FTA approval. If sold; however, FTA is entitled to its share of the remaining Federal interest. The Federal interest is determined by calculating the fair market value of the project property immediately before the occurrence prompting the withdrawal of the project property from appropriate use. If a vehicle is disposed of before the end of its useful life, Hawaii DOT will send a written request to FTA requesting disposal before the end of the vehicle's useful life, with an explanation of why the disposal is justified

<b>Disposal Type</b>	<b>Disposal Strategy</b>
<b>Dispose</b>	Dispose of vehicles that pose an irreparable unacceptable safety risk
<b>Auction Sale/Open Bid Sale</b>	Follow local procedures for disposal as long as the process involves an open public bid or auction process. Sale proceeds must be retained in the transit program under which the vehicle was initially acquired and used to reduce the cost of the next vehicle purchase.
<b>Transfer to another provider</b>	Requests to transfer the vehicle to another eligible operator providing public transportation. Contact Hawaii DOT prior to the transfer to determine if the operator is eligible. Hawaii DOT staff may consult with the possible eligible provider for that jurisdiction if useful life standards have not been met.
<b>Maintained as spare vehicle</b>	Vehicle is maintained in an operable state in anticipation of immediate need to put in service.



## ***Facilities***

With regular maintenance, assets will operate at the same level on first and last day of service, throughout their useful life. In general, assets within their useful life are considered to be in a SGR. The FTA website states that the “state of good repair is the condition where all assets perform their assigned functions without limitation.” Subrecipients must apply the following useful life standards to facilities funded through the Hawaii DOT:

- **Administration and Maintenance Buildings:** Including building additions; useful life of 40 years
- **Facility Grounds:** Useful life of 20 years

## ***Other Equipment***

For other equipment with an acquisition value greater than \$5,000, Hawaii DOT determines useful life standards on a case-by-case basis that reflects the manufacturer’s estimated useful life. The subrecipient should propose a useful life in its project proposal.

## ***Funding Distribution***

Although Transit Asset Management is essential to the provision of service, it is only one of the considerations in determining the distribution of Federal funds. Additional decision tools for funding distribution are:

1. Needs;
  2. Local match availability;
  3. Past performance;
  4. Organizational capacity; and
  5. Statewide transit provider meetings.
-

**APPENDIX A**





HAWAII STATEWIDE RURAL ROLLING STOCK INVENTORY																					
Date: September					YEARS				MILEAGE				CONDITION				OVERALL RATING				
VEHICLE ID			CLASS	VEHICLE TYPE	In-Service Date		Useful Life Benchmark (ULB)	Term Scale (1-5)	Projected	Prior Year Odometer	Current Odometer	Annual Mileage	Benchmark	Term Scale (1-5)	Projected Performance	Current Condition	Benchmark	Term Scale (1-5)	Projected	County	Equal Weighting
VIN	License #	Description	(BU, CU ETC)	(Vans, Light Duty, Cutaways, Small Bus, Large Bus)	Date	2018															
45	1FDAF5G15FEC18250	CK 2316 FORD BUS 21 PAX	BU	Light Duty	2015	3		5.0		49,264	90,019	40,755		4.0	3.5	4.0				Kauai	4.3
46	1N9HEACL3EC084272	CH3216 2014 ELDORADO BUS	BU	Small Bus	2014	4		5.0		269,201	315,085	45,884		4.0	3.0	4				Hawaii	4.3
47	1FDGF5G1XEAA17209	CK2250 FORD BUS 21 PAX	BU	Light Duty		4		4.5		72,442	98,352	25,910		4.0	3.5	4.0				Kauai	4.2
48	523MF1A67CM101066	LDV-867 MV-1 (Ford V8, 4.5L)	VN	Vans	2013	5		3.5		8,815	11,260	2,445		5.0	5.0	Good				Maui	4.2
49	1M8SDMBAJFP013908	CH3233 2015 MCI BUS MODEL D400	BU	Large Bus	2015	3		5.0		343,648	393,663	50,015		3.5	3.5	4				Hawaii	4.2
50	1M8SDMBA1EP013205	CH3204 2014 MCI BUS	BU	Large Bus	2014	4		5.0		360,445	398,838	38,393		3.5	3.5	4				Hawaii	4.2
51	1M8SDMBAZFP013909	CH3234 2015 MCI BUS MDL D4000	BU	Large Bus	2015	3		5.0		358,421	382,720	24,299		3.5	3.5	4				Hawaii	4.2
52	1M8SDMBA3EP013206	CH3203 2014 MCI BUS	BU	Large Bus	2014	4		5.0		390,028	424,862	34,834		3.5	3.5	4				Hawaii	4.2
53	1N9HEACL1EC084271	CH3214 2014 ELDORADO BUS	BU	Small Bus	2014	4		5.0		423,677	468,244	44,567		3.5	2.0	4				Hawaii	4.2
54	1N9HEACL5EC084273	CH3215 2014 ELDORADO BUS	BU	Small Bus	2014	4		5.0		404,328	440,699	36,371		3.5	2.5	4				Hawaii	4.2
55	1GBB6G5BL2F1128077	CK 2318 CHEVY BUS 14 PAX	BU	Light Duty	2015	3		5.0		69,613	110,316	40,703		4.0	3.0	3.0				Kauai	4.0
56	1GBB6G5BL6F1126719	CK 2320 CHEVY BUS 14 PAX	BU	Light Duty	2015	3		5.0		64,960	105,765	40,805		4.0	3.5	3.0				Kauai	4.0
57	1GBB6G5BL2F1126216	CK 2324 CHEVY BUS 14 PAX	BU	Light Duty	2015	3		5.0		75,470	118,206	42,736		4.0	3.0	3.0				Kauai	4.0
58	1GBB6G5BL0F1125839	CK 2325 CHEVY BUS 14 PAX	BU	Light Duty	2015	3		5.0		57,955	102,320	44,365		4.0	3.5	3.0				Kauai	4.0
59	1GBB6G5BL9F1127539	CK 2326 CHEVY BUS 14 PAX	BU	Light Duty	2015	3		5.0		68,459	109,776	41,317		4.0	3.0	3.0				Kauai	4.0
60	1GBB6G5BL5F1126842	CK 2327 CHEVY BUS 14 PAX	BU	Light Duty	2015	3		5.0		60,248	101,686	41,438		4.0	3.5	3.0				Kauai	4.0
61	1N9MMAC68AC084211	LBE-689 EZ- RIDER II 35'	BU	Large Bus	2010	8		3.5		269,201	315,085	45,884		4.0	4.0	Good				Maui	3.8
62	1FDGF5G1BEEA17210	CK2261 FORD BUS 21 PAX	BU	Light Duty	2014	4		4.5		78,406	114,954	36,548		4.0	3.0	3.0				Kauai	3.8
63	1FDGF5G15EEA11544	CK2262 FORD BUS 21 PAX	BU	Light Duty	2014	4		4.5		80,734	114,366	33,632		4.0	3.5	3.0				Kauai	3.8
64	1FDGF5G11EEA05160	CK2263 FORD BUS 21 PAX	BU	Light Duty	2014	4		4.5		70,266	101,458	31,192		4.0	3.5	3.0				Kauai	3.8
65	1FDAF5G1T6EBB4230	CK 2322 FORD BUS 29 PAX	BU	Light Duty	2015	3		5.0		100,090	143,419	43,329		3.5	2.5	3.0				Kauai	3.8
66	1FDAF5G14FEBB62821	CK 2323 FORD BUS 29 PAX	BU	Light Duty	2015	3		5.0		84,625	146,464	61,839		3.5	2.5	3.0				Kauai	3.8
67	1FDAF5G15FEBB57272	CK 2331 FORD BUS 29 PAX	BU	Light Duty	2015	3		5.0		82,550	140,999	58,449		3.5	2.5	3.0				Kauai	3.8
68	1FDAF5G1T6FEBB62819	CK 2332 FORD BUS 29 PAX	BU	Light Duty	2015	3		5.0		84,796	131,170	46,374		3.5	3.0	3.0				Kauai	3.8
69	1FDAF5G13FEBB62826	CK 2342 FORD BUS 29 PAX	BU	Light Duty	2015	3		5.0		87,266	135,763	48,497		3.5	2.5	3.0				Kauai	3.8
70	1GB3G2B60C1138353	LCZ-415 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		134,233	156,107	21,874		4.0	3.5	Good				Maui	3.8
71	2C4RDGCG1CR214759	LCZ-753 (Mission) Grand Caravan (V6, 3.6L)	VN	Vans	2012	6		3.0		38,294	47,835	9,541		4.5	4.0	Good				Maui	3.8
72	2C4RDGCGXCR214761	LCZ-752 (Mission) Grand Caravan (V6, 3.6L)	VN	Vans	2012	6		3.0		33,497	51,354	17,857		4.5	4.0	Good				Maui	3.8
73	1N9MMAC618C084111	MRT-436 EZ- RIDER II 35'	BU	Large Bus	2008	10		3.0		319,829	363,217	43,388		4.0	3.5	Good				Maui	3.7
74	1N9MMAC6XAC084212	LBE-687 EZ- RIDER II 35'	BU	Large Bus	2010	8		3.5		343,648	393,663	50,015		3.5	3.5	Good				Maui	3.7
75	1N9MMAC61AC084213	LBE-688 EZ- RIDER II 35'	BU	Large Bus	2010	8		3.5		358,421	382,720	24,299		3.5	3.5	Good				Maui	3.7
76	1GBB6G5BL7E1126626	CK2257 CHEVY BUS 14 PAX	BU	Light Duty	2014	4		4.5		96,472	139,776	43,304		3.5	2.5	3.0				Kauai	3.7
77	1GBB6G5BLXE1124728	CK2258 CHEVY BUS 14 PAX	BU	Light Duty	2014	4		4.5		106,604	143,473	36,869		3.5	2.5	3.0				Kauai	3.7
78	1GBB6G5BL7E1125271	CK2259 CHEVY BUS 14 PAX	BU	Light Duty	2014	4		4.5		93,131	129,309	36,178		3.5	3.0	3.0				Kauai	3.7
79	1GBB6G5BL9E1139625	CK 2287 CHEVY BUS 14 PAX	BU	Light Duty	2014	4		4.5		102,319	144,033	41,714		3.5	2.5	3.0				Kauai	3.7
80	1FDGF5G15EEA05159	CK2249 FORD BUS 21 PAX	BU	Light Duty	2014	4		4.5		114,815	139,919	25,104		3.5	3.0	3.0				Kauai	3.7
81	1FDGF5G18EEA17208	CK2260 FORD BUS 21 PAX	BU	Light Duty	2014	4		4.5		103,424	138,357	34,933		3.5	3.0	3.0				Kauai	3.7
82	1GB3G2BG9C1138993	LCZ-405 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		144,547	166,640	22,093		3.5	3.5	Good				Maui	3.7
83	1GB3G2BG4C1139047	LCZ-413 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		153,673	169,840	16,167		3.5	3.5	Good				Maui	3.7
84	1GB3G2BG5C1139610	LCZ-412 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		146,399	169,937	23,538		3.5	3.5	Good				Maui	3.7
85	1GB3G2BG0C1139305	LCZ-414 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		157,333	171,339	14,006		3.5	3.5	Good				Maui	3.7
86	1GB3G2BG2C1138513	LCZ-408 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		163,321	199,014	35,693		3.5	3.0	Good				Maui	3.7
87	1GB3G2BG7C1139107	LCZ-406 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		168,012	199,152	31,140		3.5	3.0	Good				Maui	3.7
88	1GB3G2BG9C1139903	LCZ-416 (ENC) Aero-lite 210 (V8, 6L)	CU	Cutaway	2012	6		3.5		150,890	173,722	22,832		3.5	3.5	Good				Maui	3.7





HAWAII STATEWIDE RURAL ROLLING STOCK INVENTORY																								
Date: September																								
VEHICLE ID				CLASS	VEHICLE TYPE	YEARS					MILEAGE					CONDITION					OVERALL RATING			
VIN	License #	Description	(BU, CU ETC)	(Vars, Light Duty, Cutaways, Small Bus, Large Bus)	In-Service Date	2018	Useful Life Benchmark (ULB)	Term Scale (1-5)	Projected	Prior Year Odometer	Current Odometer	Annual Mileage	Benchmark	Term Scale (1-5)	Projected Performance	Current Condition	Benchmark	Term Scale (1-5)	Projected	County	Equal Weighting			
125	1N9APACL67C084233	MRK-523	AXESS 40'	BU	Large Bus	2007	11		2.5	685,621	766,010	79,389		1.5	1.0	Good		4.0		Maui	2.7			
126	1N9APACL87C084234	MFL-908	AXESS 40'	BU	Large Bus	2007	11		2.5	718,343	733,831	15,488		1.5	1.5	Good		4.0		Maui	2.7			
127	1GB6G5BL9C1113491	CK2177	CHEVY BUS 18 PAX	BU	Light Duty	2012	6		3.5	169,544	202,447	32,903		2.5	2.0	2.0		2.0		Kauai	2.7			
128	1GB6G5BL3C1113339	CK2178	CHEVY BUS 18 PAX	BU	Light Duty	2012	6		3.5	146,953	186,778	39,825		2.5	2.0	2.0		2.0		Kauai	2.7			
129	1GB6G5BL7C1113148	CK2179	CHEVY BUS 18 PAX	BU	Light Duty	2012	6		3.5	151,445	188,956	37,511		2.5	2.0	2.0		2.0		Kauai	2.7			
130	1GB6G5BL5C1113732	CK2181	CHEVY BUS 18 PAX	BU	Light Duty	2012	6		3.5	140,855	183,138	42,283		2.5	2.0	2.0		2.0		Kauai	2.7			
131	1FDGF5GT1EEA23693	CK2244	FORD BUS 31 PAX	BU	Light Duty	2014	4		4.5	178,976	242,237	63,261		1.5	0.5	2.0		2.0		Kauai	2.7			
132	15GCD2011S1085958	CH3217	1995 GILLIG BUS	BU	Large Bus	1995	23		0.5	420,496	465,020	44,524		3.5	3.0	4		4		Hawaii	2.7			
133	1M8SDMEA1AP059235	CH3052	10' MCI BUS	BU	Large Bus	2009	9		3.0	483,828	508,788	24,960		3.0	3.0	2		2		Hawaii	2.7			
134	1GB9G5A62A1104864	CK2107	CHEVY BUS 20 PAX	BU	Light Duty	2010	8		2.5	164,213	167,893	3,680		3.0	3.0	2.0		2.0		Kauai	2.5			
135	1GB9G5AL3A1180020	CK2139	CHEVY BUS 14 PAX	BU	Light Duty	2011	7		3.0	144,148	147,118	2,970		3.5	3.0	1.0		1.0		Kauai	2.5			
136	1GB9G5A62A1104945	CK2118	CHEVY BUS 20 PAX	BU	Light Duty	2010	8		2.5	159,954	192,486	32,532		2.5	2.0	2.0		2.0		Kauai	2.3			
137	1GB9G5AL0A1177561	CK2138	CHEVY BUS 14 PAX	BU	Light Duty	2011	7		3.0	132,511	152,309	19,798		3.0	3.0	1.0		1.0		Kauai	2.3			
138	15GCD2113V1088136	CH3438	1997 Gillig Phantom (Oahu)	BU	Large Bus	1997	21		0.5	212,165	226,096	13,931		4.5	4.0	2		2		Hawaii	2.3			
139	15GCD2115V1088137	CH3436	1997 Gillig Phantom (Oahu)	BU	Large Bus	1997	21		0.5	761,897	776,989	15,092		1.5	1.0	2		2		Hawaii	1.3			
140	15GCD2119V1088139	CH3434	1997 Gillig Phantom (Oahu)	BU	Large Bus	1997	21		0.5	642,824	734,954	92,130		1.5	1.0	2		2		Hawaii	1.3			
141	15GCD2111V1088135	CH3439	1997 Gillig Phantom (Oahu)	BU	Large Bus	1997	21		0.5	789,190	807,608	18,418		1.0	1.0	2		2		Hawaii	1.2			
142	15GCD2115V1088140	CH 3433	1997 Gillig Phantom (Oahu)	BU	Large Bus	1997	21		0.5	797,896	825,541	27,645		1.0	0.5	2		2		Hawaii	1.2			
143	15GCD217V1088138	CH3435	1997 Gillig Phantom (Oahu)	BU	Large Bus	1997	21		0.5	804,165	836,805	32,640		1.0	0.5	2		2		Hawaii	1.2			
144	15GCD211XV1088134	CH3437	1997 Gillig Phantom (Oahu)	BU	Large Bus	1997	21		0.5	768,106	793,500	25,394		1.0	1.0	2		2		Hawaii	1.2			

# HAWAII STATEWIDE RURAL ROLLING STOCK INVENTORY

[illegible]

STATEWIDE FIXED ASSET INVENTORY (EQUIPMENT)

VEHICLE ID			CLASS TYPE	VEHICLE TYPE	YEARS				MILEAGE						CONDITION			OVERALL RATING		
VIN	LICENSE #		(BU, CU ETC)	TOW TRUCK, SERVICE VEHICLES, ETC	In-SERVICE DATE	AGE	ULB	TERM SCALE (YEARS)	ODOMETER READING			BENCH MARK	TERM SCALE (1-5)	PROJECTED PERFORMANCE	TERM SCALE (1-5)					
		DESCRIPTION				2018			LAST YEAR	THIS YEAR	ANNUALLY				CURRENT	BENCH MARK	TERM SCALE RATING	County	Equal Weighting	
1	1FM5K7B81HGA44311	CK 2360	FORD EXPLORER	OTHER	SUPPORT	2017	1	8	2.5	520	4771	4251		5.0		5		5	Kauai	3.75
2	1FDSF20R68EE50568	CK2054	FORD F250	OTHER	SERVICE	2008	10	8	2.5	10652	11165	513		5.0		4		4	Kauai	3.25
3	1FDSF20P07EA77752	CK1933	FORD F250 UTILITY PICKUP W/LIFTGATE	OTHER	SERVICE	2007	11	14	3.5	52126	52695	569		5.0		3		3	Kauai	3.25
4	1GBGC24R1WE208561	CK1566	CHEVROLET 2500 UTILITY PICKUP	OTHER	SERVICE	1998	20	8	2.5	75022	75022	0		3.5		3		3	Kauai	2.75
5	1GBDV13W27D214570	CH2654	2007 Chevy Pvan	OTHER	SERVICE	2007	11	8	2.5	89709	104046	14337		2.5		3		3	Hawaii	2.75
6	1GBDV13W57D213719	CH2655	2007 Chevy Pvan	OTHER	SERVICE	2007	11	8	2.5	83279	93470	10191		3.0		3		3	Hawaii	2.75
7	1GBDV13W97D214517	CH2657	2008 Chevy Pvan	OTHER	SERVICE	2007	11	8	2.5	81026	96958	15932		3.0		3		3	Hawaii	2.75
8	1D8HD38K28F146165	CK2017	DODGE DURANGO SUV	OTHER	SUPPORT	2008	10	8	2.5	37146	38051	905		5.0		1		1	Kauai	1.75

STATEWIDE FIXED ASSET INVENTORY (FACILITIES)

VEHICLE ID			CLASS TYPE	VEHICLE TYPE	YEARS				MILEAGE					CONDITION			OVERALL RATING		
	BUILDING#	DESCRIPTION	(BU, CU ETC)	TOW TRUCK, SERVICE VEHICLES, ETC.	In-SERVICE DATE	AGE	ULB	TERM SCALE (YEARS)	ODOMETER READING			BENCH MARK	TERM SCALE (1-5)	PROJECTED PERFORMANCE	TERM SCALE (1-5)				
						2018			LAST YEAR	THIS YEAR	ANNUALLY				CURRENT	BENCH MARK	TERM SCALE RATING	County	Equal Weighting
1	N/A	1	Administration/Maintenance Building	FAC		2018	0	40 Yr	5	N/A	N/A	N/A	N/A	N/A	5		5	Hawaii	5
2	N/A	1	Administration Building	FAC		2002	16	40 Yr	4.5	N/A	N/A	N/A	N/A	N/A	4		4	Kauai	4.25
3	N/A	2	Maintenance Building	FAC		2002	16	40 Yr	4.5	N/A	N/A	N/A	N/A	N/A	4		4	Kauai	4.25
4	N/A	3	Parking Lot A	FAC		2002	16	20 Yr	3.5	N/A	N/A	N/A	N/A	N/A	3		3	Kauai	3.25
5	N/A	4	Parking Lot B	FAC		2002	16	20 Yr	3.5	N/A	N/A	N/A	N/A	N/A	3		3	Kauai	3.25

Facilities			
Admin/ Maint	Rating	Parking	Rating
0	5.0	0	5.0
8	5.0	4	5.0
16	4.5	8	4.5
24	4.0	12	4.0
32	3.5	16	3.5
40	3.0	20	3.0
48	2.5	24	2.5
56	2.0	28	2.0
64	1.5	32	1.5
72	1.0	36	1.0
80	0.5	40	0.5

Equipment					
Truck / Utility Mileage	Age	Rating	Rubber Mileage	Tire Age	Rating
0	0	5.0	0	-	5.0
25,000	2	5.0	25,000	2.0	5.0
40,000	3	4.5	40,000	5.0	4.5
55,000	4	4.0	55,000	8.0	4.0
70,000	6	3.5	70,000	11.0	3.5
85,000	8	3.0	85,000	14.0	3.0
100,000	10	2.5	100,000	17.0	2.5
125,000	12	2.0	125,000	20.0	2.0
150,000	14	1.5	150,000	23.0	1.5
175,000	16	1.0	175,000	26.0	1.0
200,000	18	0.5	200,000	29.0	0.5