

SISKIYOU COUNTY BOARD OF SUPERVISORS
RESOLUTION # _____

RESOLUTION ADOPTING TRANSIT ASSET MANAGEMENT PLAN 2022

WHEREAS, the Siskiyou Transit and General Express (STAGE) is responsible for the public transit services in Siskiyou County; and

WHEREAS, Siskiyou Transit and General Express is a subrecipient of Federal revenues under 49 U.S.C Chapter 53 and is required to meet federal regulatory requirements for Transit Asset Management (TAM) rule, set forth in 49 CFR part 625.; and

WHEREAS, Siskiyou Transit and General Express chooses to establish its own Transit Asset Management Plan that contains an inventory of assets, a condition assessment of inventoried assets, a documentation of the use of a decision support tool and a prioritization of investments; and

WHEREAS, the Transportation Manager of the Siskiyou Transit and General Express is the accountable executive for the Transit Asset Management; and

WHEREAS, The Siskiyou Transit and General Express has prepared a Transit Asset Management Plan to meet current Federal Transit Administration Guidelines.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Siskiyou that Siskiyou Transit and General Express agrees to comply with all conditions and requirements set forth in the Transit Asset Management Plan.

NOW, THEREFORE, BE IT RESOLVED that the Siskiyou County Board of Supervisors approves and adopts the Siskiyou Transit and General Express Transit Asset Management Plan and authorizes the Transportation Manager to execute and file the Transit Asset Management Plan and any other required documents.

The foregoing resolution was adopted at a regular meeting of the Board of Supervisors of the County of Siskiyou, State of California, held on the 3rd day of January, 2023 by the following vote:

- Ayes:
- Noes:
- Absent:
- Abstain:

Attest:
Laura Bynum, County Clerk

By: _____
Deputy

, Chair
Board of Supervisors
County of Siskiyou
State of California



TRANSIT ASSET MANAGEMENT PLAN

**General Services
190 Greenhorn Road
Yreka, CA 96097**

The Siskiyou Transit and General Express (STAGE), through the operation of fixed route and on demand services, strive to provide safe, reliable, affordable transportation to residents and visitors of Siskiyou County. STAGE seeks to increase fare recovery ratio by reducing operational costs and increasing ridership through continuing our focus on providing excellent customer service and public outreach. To this end, all employees shall conduct themselves in a professional manner; in addition, they shall work to ensure the safety and security of passengers, seek new opportunities to improve and/or expand services, and coordinate public transit services with other agencies, organizations, and transit providers.

About STAGE

Siskiyou Transit and General Express (STAGE) were established in 1979. STAGE is the public transit service that is operated by the Siskiyou County Department of General Services. STAGE is the sole provider of public transportation for the Siskiyou County area and is responsible for providing fixed route bus transportation service along the I5 corridor, including Hornbrook, Yreka, Mt. Shasta, Weed, McCloud, Dunsmuir and Montague. Additionally, STAGE operates in outlying communities and corridors, including the Scott Valley corridor, Fort Jones, Klamath River corridor, Happy Camp, and the North Valley corridor.

STAGE has one Administration facility and one Maintenance facility in the city of Yreka, and two bus parking stations: Weed city yard and Fort Jones city yard. Now that the Covid-19 pandemic is over we have folded back out to 5 routes. Our routes service a largely rural and sparsely populated mountainous area, with small towns and cities separated by fairly long travel distances. Because of Covid-19 our Route frequency of the various routes changed to morning and evening stops. Our current service hours are between 5:30 am to 9:30 pm, Monday through Friday. STAGE also assists with persons with disabilities in fulfilling their transportation needs and to meet requirements of the Americans with Disabilities Act of 1990.

Acknowledgements

STAGE TAM Plan Administrative Staff:

Joy Hall /Deputy Director of General Services
Angie Stumbaugh/Transportation Service Manager/
Accountable Executive
Steve Serdahl/Transportation Service Coordinator
Marvin Allen/ Senior Heavy Equipment Mechanic
Angie Adkison/Staff Service Analyst II

Siskiyou County Board of Supervisors:

Brandon Criss, Chair
Ed Valenzuela, Vice Chair
Michael N Kobseff, Supervisor
Nancy Ogren, Supervisor
Ray Haupt, Supervisor

Summary

A Transit Asset Management Plan (TAM Plan) is a business model that uses the condition of assets to guide the optimal prioritization of funding at transit agencies in order to keep transit systems in a State of Good Repair (SGR). By implementing a TAM Plan, the benefits include:

- Improved transparency and accountability for safety, maintenance, asset use, and funding investments.
- Optimized capital investment and maintenance decisions.
- Data-driven maintenance decisions, and:
- System Safety & Performance Outcomes.

The consequences of an asset not being in a SGR include:

- Safety risks;
- Decreased system reliability (On-time performance);
- Higher maintenance costs; and/or
- Lower system performance (Missed runs due to breakdown).

STAGE has developed this TAM Plan to aid in: (1) Assessment of the current condition of capital assets. (2) Determine what condition and performance of its assets should be (if they are not currently in a State of Good Repair). (3) Identify the unacceptable risks, including safety risks, in continuing to use an asset that is not in a State of Good Repair. And: (4) Deciding how to best balance and prioritize reasonably anticipated funds (revenues from all sources) towards improving asset condition and achieving a State of Good Repair within those means.

Agency Overview

STAGE provides fixed route bus transportation services for a population of approximately 44,118 people, as of July 1st April 2021, in the Siskiyou County area. STAGE's inventory of vehicles and capital assets include the following:

- 5 Fixed route buses/10 total buses in our fleet
- Vehicle storage/refueling & maintenance facility
- Administration/Transit Station/Equipment

Local operating conditions of the transit system consist of Monday through Friday service from 5:30 AM to 9:30PM. The operating climate conditions in the service area consist of cold and snowy winter weather four to six months out of the year. Additionally, warm weather conditions characterize on average four to five months out of the year. Warmer weather conditions place a strain on the A/C and climate controls of revenue service vehicles during the varying four seasons experienced in the service area.

STAGE has maintained an asset management approach for fleet replacement & facility maintenance. As funding has been available, vehicle replacement and building maintenance and upgrades have been completed. The TAM Plan is further aiding STAGE to assess the condition of its existing assets and determine its needs over time for keeping the now expanding system in a State of Good Repair (SGR).

Introduction

STAGE is currently operating as a FTA-defined *Tier II* transit operator. Tier II transit providers are those transit agencies that do not operate rail fixed- guideway public transportation systems, and have either 100 or fewer vehicles in fixed-route revenue service during peak regular service, or have 100 or fewer vehicles in general demand response service during peak regular service hours.

This TAM Plan provides a window into how STAGE will assess, monitor, and report the physical condition of assets utilized in the operation of our public transportation system. The STAGE's approach to accomplishing an overall SGR includes: the strategic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based upon quality of information; additionally, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired SGR over the lifecycle of our capital assets at a minimum practicable cost.

Per FTA TAM requirements, each transit operator receiving FTA funding shall designate an "Accountable Executive" to implement the TAM Plan. The STAGE's Accountable Executive must balance transit asset management, safety, day-to-day operations, and expansion needs in approving and carrying out the TAM Plan and a public transportation agency safety plan.

As a Tier II public transportation provider, STAGE has developed and implemented a TAM Plan containing the following elements:

1. Asset Inventory Portfolio: An inventory of the number and type of capital assets to include: Rolling Stock, Facilities, and Equipment.
2. Asset Condition Assessment: A condition assessment of those inventoried assets for which STAGE has direct ownership and capital responsibility.
3. Decision Support Tools & Management Approach: A description of the analytical processes and decision-support tools that STAGE uses to estimate capital investment needs over time, and develop its investment prioritization.
4. Investment Prioritization: STAGE's project-based prioritization of investments.

State of Good Repair (SGR) Standards Policy

A capital asset is in a State of Good Repair (SGR) when each of the following objective standards is met:

1. The asset is in a condition sufficient to operate at a full level of performance. An individual capital asset may operate at a full level of performance regardless of whether or not other capital assets within a public transportation system are in a SGR;
2. The asset is able to perform its manufactured design function;
3. The use of the asset in its current condition does not pose an identified unacceptable safety risk and/or deny accessibility; and,
4. The assets life-cycle investment needs have been met or recovered, including all scheduled maintenance, rehabilitation and replacements (ULB).

The TAM Plan allows STAGE to predict the impact of its polices and investment justification decisions on the condition of its assets throughout the asset's life cycle, and enhances the ability to maintain a SGR by proactively investing in an asset before the asset's condition deteriorates to an unacceptable level. STAGE shall establish annual TAM goals, which are separate from annual SGR performance goals, based upon tangible criteria related to asset performance. For FY 22-23, STAGE shall use this time period to gather data in order to establish baseline measures.

It is the belief of STAGE that TAM Plan implementation and monitoring provides a framework for maintaining a SGR by considering the condition of its assets in relation to the local operating environment. STAGE has developed its SGR policies to account for the prevention, preservation, maintenance, inspection, rehabilitation, disposal, and replacement of capital assets. The goal of these policies is to allow STAGE to determine and predict the cost to improve asset condition(s) at various stages of the asset life cycle, while balancing prioritization of capital, operating and expansion needs. The two foundational criteria of SGR performance measures are *Useful Life Benchmark* (ULB) and *Condition*.

Useful Life Benchmark

The *Useful Life Benchmark* (ULB) is defined 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. For the purposes of this TAM Plan, STAGE utilized FTA ULB measure for transit assets and rolling stock.

Condition Assessment

The physical condition of an asset is rated as a SGR performance measure because it is a direct reflection of its ability to perform its intended function. As part of the TAM Plan SGR Standards, STAGE requires each vehicular asset and facility meeting FTA TAM Plan criteria to have a physical condition assessment conducted on an annual basis, where applicable. The condition assessments use *the Transit Economic Requirements Model* (TERM), a 1-5 rating scale, with 5 being new and 1 being poor, to rate the current physical appearance, maintenance requirements, safety and accessibility of an asset.

SGR Performance Measures & Targets

SGR performance measures combine the measures of ULB and physical condition to create performance measures from which asset performance targets can be derived on an annual basis. These performance measures are directly related to asset lifecycle (ULB & condition) and maintenance needs. By the time an asset meets or exceeds its assigned ULB, it should have reached its prescribed mileage, maintenance, and condition requirements

- **Rolling Stock: (Age)** The SGR performance measure for rolling stock is the percentage of revenue vehicles (fixed route) within a particular asset class that have either met or exceeded their ULB.
- **Equipment (non-revenue service vehicles): (Age)** The SGR performance measure only applies to non-revenue service vehicles. The SGR performance measure for non-revenue, support-service and maintenance vehicles equipment is the percentage of those vehicles that have either met or exceeded their ULB.
- **Facilities: (Condition)** The SGR performance measure for facilities is the percentage of facilities within an asset class, rated below condition 3 on the FTA TERM rating scale.

Asset Inventory

The capital asset items that STAGE owns, operates and has a direct capital responsibility, included in the TAM Plan asset inventory, are, as follows: Rolling Stock, Equipment, and Facilities.

STAGE utilizes *Cost Accounting Management System (CAMS)* software, to maintain inventory and schedule maintenance, and we are currently adding SGR performance measures to track the condition of assets and SGR target setting. The target tracking has not been added to the system yet, but we are still anticipating this operation in our system.

Rolling Stock

Rolling stock is a STAGE-owned and operated revenue service vehicle used in the provision of providing public transportation, and includes vehicles used to primarily transport passengers. STAGE does not utilize or operate any third-party rolling stock assets. STAGE condition assessment consists of assigning a condition rating to all rolling stock assets for which STAGE owns and has direct capital responsibility. The *Useful Life Benchmark (ULB)* is used to measure performance.

Equipment

Equipment evaluated per FTA requirements in this TAM Plan, is all non-revenue service vehicles regardless of value, and any authority-owned equipment with a cost of \$50,000 or less in acquisition value. Equipment includes non-revenue service vehicles that are primarily used to support maintenance

and repair work for a public transportation system, supervisory work, or for the delivery of materials and equipment, or driver transportation to and from bus storage areas. STAGE condition assessment consists of assigning a condition rating to all equipment assets for which STAGE owns and has direct capital responsibility. The ULB is used to measure performance. Currently, STAGE uses Non-Revenue Vehicles that come from a County pool. We are charged a flat rate from the County for the use of these vehicles and their maintenance, which is performed by the Auto Shop located at the County Maintenance Yard. We do not maintain these vehicles directly, and when they have exceeded their viable service life, and are deemed to be no longer financially viable for use in support purposes they are disposed of by the County, apart from any operations conducted at STAGE.

Equipment: At or Over \$50,000 in Acquisition Value

This category of equipment consists of any STAGE owned capital asset items with a cost at or over \$50,000 in acquisition value. Equipment includes items that are utilized in the operations of providing public transportation service. STAGE does not utilize or operate any third-party equipment assets. All equipment assets are owned and operated by STAGE. STAGE's condition assessment consists of assigning a condition rating to all equipment assets for which STAGE owns and has direct capital responsibility. The ULB is used to measure performance. Currently, STAGE uses Non-Revenue Vehicles that come from a County pool. We are charged a flat rate from the County for the use of these vehicles and their maintenance, which is performed by the Auto Shop located at the County Maintenance Yard. We do not maintain these vehicles directly, and when they have exceeded their viable service life, and are deemed to be no longer financially viable for use in support purposes they are disposed of by the County, apart from any operations conducted at STAGE.

Facilities

Facilities are any structures used in providing public transportation for which STAGE owns, and has a direct capital responsibility. Facilities utilized and owned or operated by STAGE Include: Operations Administrative Building (Transit Center) and one-third of the Maintenance Facility, both of which are located in Yreka, CA. STAGE Facility condition assessment consists of assigning a physical condition rating, based on the FTA TERM Scale and the Median Value Method is used to calculate the overall condition.

Asset Condition Assessment

STAGE assesses the condition of its assets on an annual basis by utilizing visual condition rating assessment scale. This rating scale assigns a numerical value or rank based on the physical condition(s) presented by each individual asset throughout its life cycle: once again using the TERM rating scale is based on numbers 1 to 5, with five being new and one being poor. Assets with a rating of 3.0 or higher are considered to be in a SGR. All completed asset inspection forms will be documented in CAMS or our network files.

The inspection process and documentation forms utilized to assess facility, vehicle and equipment assets are detailed in the following FTA TAM Plan documents:

TAM Facility Performance Measure Reporting Guidebook
Condition Assessment Calculation
Asset Management Guide for Small Providers
Focusing on Management of Our Transit Investments

STAGE's condition assessment inspection for vehicles and equipment are taking place around January thru June of each calendar year. STAGE's condition assessment inspection for major facility components and subcomponents will take place once a year around May/June and will be conducted by the Transportation Service Coordinator with results and data reported to the Executive Director.

Decision Support Tools

STAGE staff within the maintenance, finance/grants, compliance, operations & safety, and executive departments utilizes a variety of management practices, policies, and technology to manage, maintain, and plan throughout the life cycle of an asset. This includes PM schedules, work order process, vendor contracts and inspection needs. The Capital Plan lists projects in rank of order on the priority list of projects needed in order to maintain SGR of an asset. Stage is also working with Cost Accounting Management System (CAMS) software technology to add asset condition reports to all assets.

STAGE's Procurement Procedure lists all of FTA's purchasing policies, contract/bidding requirements and regulations, asset purchasing procedures, and disposal procedures.

Throughout each asset's life cycle, STAGE shall monitor all assets for unsafe and inaccessible conditions. However, identifying an opportunity to improve the safety of an asset does not necessarily indicate an unsafe condition. Throughout each asset's life cycle, STAGE shall monitor all assets for unsafe and inaccessible conditions. STAGE's risk management philosophy is the proactive approach of identifying future projects and ranking preventative projects with better return on investment higher in the investment prioritization risk.

Performing an analysis of the asset life cycle at the individual asset level is just one management approach STAGE uses to maintain a SGR. This analysis follows the asset from the time it is purchased, placed in operation, maintained, and ultimately disposed of.

We were hit hard during the 2nd round of Covid-19 with a 60% reduction in our service level due to drivers and staff out of the office or removing themselves from the occupation. We currently have 3 to 4 interested drivers on a waiting list when the time comes to increase our routes. STAGE is also currently redesigning the route schedule to meet the needs of the community. We will be creating circular routes to be more frequent during the day in the cities and outlying areas and we will have express buses traveling I5, stopping at designated areas so riders can reach the other side of county faster. This new route service will require 5-6 routes.

Management Approach to Asset Management

The primary management approach utilized to maintain a SGR is risk mitigation. This management applies risk mitigation strategies (policies and procedures) throughout the assets life cycle, both from a maintenance perspective (breakdowns) and a safety & accessibility perspective (Accidents/ADA Requirements). Rolling Stock and Equipment are replaced based on ULB and funding availability and Facilities are maintained on annual bases to extend ULB.

Maintenance Strategy

Rolling Stock	BU – Bus CU – Cut-a-way	Clean and Wash	Daily
		Pre-trip inspection	Daily
	PM Service	Mileage	
	SGR Inspection	Annually	
	Transmission Inspection	Mileage	
	Rear End Inspection	Mileage	
	Engine Breather Inspection	Monthly	
	A/C Inspection	Monthly/Quarterly	
	Camera System Inspection	Quarterly	
	Farebox Inspection	Monthly	
	Tire Inspection	Daily	
ADA System Inspection	Daily/Quarterly		
Equipment	Non Rev Vehicles	Clean and Wash	Weekly
		Pre-trip Inspection	Daily
		Post-trip Inspection	Daily
		PM Service	Mileage
		SGR Inspection	Annually
Facilities	Administrative Maintenance	Facility and Equip. Insp	Daily/Monthly
		SGR Inspection	Annually

Overhaul/Replacement Strategy

Determines how and when assets get overhauled or replaced. It is STAGE’s policy to repair damaged or non-functioning assets and components on an “as needed” basis. Assets are replaced once the following conditions are met: (1) the asset’s ULB has been met, or (2) the asset is considered a total loss by covering insurance. The following are buses are inactive and are awaiting replacement:

STAGE five Gillig buses 3031, 3032, 3033, 3034, and 3035 and five Ford cutaways 3036, 3037, 3038, 3039 (too small to use for a route), and 3040.

Cutaways #3036, #3037, #3038 and 3040, 2017 thru 2021 Ford E-450 StarCraft buses are our most recent acquisitions. Despite garnering excellent TERM marks due to their age, these buses have begun to have expensive repairs to the braking and exhaust and some other systems at/around 50,000 to 70,000 miles' odometer readings. After careful monitoring of ongoing, and increasing repair costs of these assets, we have determined that these buses will most optimally serve us if we transition them in approximately 2-4 years. Thus, we will then be looking to replace these buses with new acquisitions that are a better fit for the diversity of territory that our routes entail.

All the Gillig buses have the same ULB of 2027, but due to their 400,000 plus mileage we may not reach the ULB. Our mechanic continues to monitor and rate these buses at a high condition rate, in spite of their high mileage. Because of the close age and ULB predictions STAGE is concerned that all vehicles will start to have difficulties at the same time.

STAGE staff has performed an analysis of the assets as a result of the analysis two cutaways have been ordered in 2022 with a delivery in 2023. Two additional buses will be purchased in the next three years to maintain a State of Good Repair and continue service up until our Zero Emission Buses and Infrastructure can be achieved. STAGE is considering used buses because of the ZEB deadlines.

Risk Management

The follow are relevant risks to our assets along with the mitigation strategies:

The loss of significant amounts of federal or state funding would cause a cut back on maintenance and service activities that are in balance with the budget and we would have to extend the asset ULB. Loss of funding could result in the loss of public transportation for Siskiyou County, CA.

So far we are okay, the CARESAct funds have assisted us in maintaining the transit system and helping to us get back to a better transit system for our community.

Catastrophic loss due to natural disasters, STAGE would have to use backup facilities and reserve vehicles.

Investment Strategy

STAGE shall perform an investment prioritization analysis on a yearly basis, in order to determine what capital investments are needed, how much and when in order to maintain SGR and then rate and rank SGR programs and projects in order of implementation priority.

The investment prioritization analysis aids STAGE in making more informed investment decisions to improve SGR of our capital assets, and define when an asset needs overhaul or replacement. The Investment Prioritization List contains the work plan(s) and schedules(s) of the proposed projects.

STAGE will rank selected projects and programs to improve or manage the SGR of capital assets for which STAGE has a direct capital responsibility. Priority consideration will be given to local projects and programs that both improve SGR and correct any identified unacceptable safety risks, and take into consideration ADA requirements concerning maintenance of accessible features and alteration of transit facilities. When developing an Investment Prioritization List, STAGE shall take into consideration its estimation of funding levels from all sources that it reasonably expects will be available in each fiscal year during the TAM Plan period.

Annual Performance Targets and Measures

STAGE shall establish a performance target for each applicable asset class performance measure on an annual basis for the next fiscal year. SGR performance targets are based on realistic expectations derived from the most recent available data (ULB/condition), FTA performance measure criteria, and the financial resources from all sources that STAGE reasonably expects will be available during the 2022 TAM Plan period for capital planning purposes. SGR performance targets for the current fiscal year shall be monitored on a quarterly basis. The Accountable Executive is required to approve each annual performance target submission to FTA/NTD.

Now that the pandemic is over we have been able to increase our route back out to 5. Our projected targets for calendar year 2023 is 10-15% for all revenue vehicles even though we look like we have adequate revenue vehicles for our current route system, we have a lot of changes coming in 2023 with our routes, bus system, aging buses, and better buses for our diverse territory.

Reporting Records:

STAGE shall maintain all supporting TAM Plan records and documents. STAGE shall make TAM Plan records available to Federal (FTA) and State (ODOT) that provides funding to STAGE, and to aid in the planning process. STAGE shall report, on an annual basis, to the FTA's National Transit Database (NTD):

- Inventory of assets;
- SGR performance targets for the next fiscal year;
- Condition inspection assessments and performance measures of capital assets; and
- An annual narrative shall also be included and reported to NTD that provides a description of any change in the condition of the STAGE's transit system or operations from the previous year, and describe the progress made during the reporting year to meet the performance targets set in the previous reporting year.

Per NTD requirements, because STAGE's fiscal year ends on 30 June, annual TAM data reporting to NTD shall be completed by STAGE by the last business day of September of each calendar year.

Updates and Continuous Improvements

The TAM Plan can be considered a “living document” that shall be reviewed on at least a quarterly basis, updated, and incorporated into STAGE’s capital and budget planning, and reporting processes. Data shall serve as a “baseline” measure of asset performance management. As more data is collected, additional monitoring categories and goals will be included to support condition and reliability-based decision-making.

This document shall cover a “period” of time (starting 10/1/2018 to 9/30/2023) beginning with the completion of the initial TAM plan in 2018, continuing with full implementation in FY 2018, and ending four years later on FY 2023. Projected Fleet Replacement will change annually as new data is entered into the TAM Plan Template. This TAM Plan shall be updated annually in conjunction with annual NTD reporting.