Transit Asset Management (TAM) Plan

ALAMEDA CONTRA COSTA TRANSIT DISTRICT

OAKLAND, CA

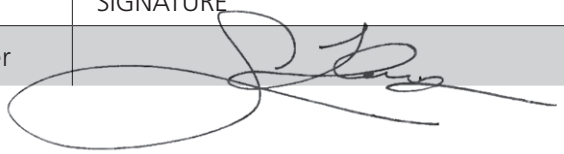
0379-23 092623

Document Control History

VERSION	DOCUMENT TITLE	DATE	COMMENTS
A	Draft Transit Asset Management Plan	2/22/2018	ABB Initial Draft
B	Draft Transit Asset Management Plan	3/7/2018	ABB Second Draft
C	Transit Asset Management Plan	3/9/2018	ABB Final
D	Transit Asset Management Plan	11/27/2019	TAM Core Team Revisions
E	Transit Asset Management Plan	9/27/2023	TAM Advisory Committee Update

Accountable Executive (Authority Acceptance)

The accountable executive is the person who has ultimate responsibility to ensure appropriate resources for implementing the agency's TAM plan and the Public Transit Agency Safety Plan (49 CFR 625.5).

RECIPIENT NAME	TITLE	SIGNATURE
Salvador Llamas	Chief Operating Officer	

TAM Advisory Committee

PARTICIPANT NAME	TITLE
Chris Andrichak	Chief Financial Officer
Ahsan Baig	Chief Information Officer
Salvador Llamas	Chief Operating Officer
Beverly Greene	Executive Dir. of External Affairs & Marketing, Communications
Sebron Flenaugh	Executive Director of Human Resources
Ramakrishna Pochiraju	Executive Director of Planning & Engineering
William Tonis	Director of Business Sciences
Joe Callaway	Director of Capital Projects
Claudia Burgos	Director of Legislative Affairs & Community Rel.
Cecil Blandon	Director of Maintenance
Marla Blagg	Director of Safety, Security, and Training
Robert Del Rosario	Director of Service Development & Planning
David Wilkins	Director of Sustainability and BRT
Dwain Crawley	Director of Transportation
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Mike Carvalho	Information Technology Manager
Brian Muerle	Safety Manager
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Federal law requires recipients and sub-recipients of Federal financial assistance to develop a Transit Asset Management (TAM) Plan. Accordingly, AC Transit's Board of Directors adopted a Transit Asset Management Policy – Board Policy No. 463 which outlines the District's overall asset management approach in a manner consistent with current federal regulations and sets the direction for establishing and following through with TAM strategies that are achievable with available funds.

A Transit Asset Management Advisory Committee was established to improve and modernize asset management programs and deliver an updated TAM Plan that complies with the FTA TAM Regulation and Board Policy No. 463. The TAM Advisory Committee includes representation of key stakeholders from departments that play a critical role in the lifecycle management of District assets and have leadership oversite of frontline managers and employees that execute deliverables of the TAM Plan.

Asset lifecycle management is an ever-changing environment with a faster pace on advances in technology, changes in regulation, funding availability and asset management best practices. Therefore, the TAM Plan is considered a "living document" reviewed and revised as necessary. Revisions are implemented by the TAM Advisory Committee with inputs from various internal and external stakeholders.

Safety Management System Policy

The purpose of the Safety Management System Board Policy is to communicate to the Board of Directors, management, staff, and external stakeholders the District's commitment to an organization-wide approach to managing safety risks and assuring the effectiveness of safety risk mitigations; and align safety priorities that promote continuous improvements in safety performance.

The Federal Public Transportation Agency Safety Plan (PTASP) rule was implemented to improve public transportation safety by guiding transit agencies to more effectively and proactively manage safety risks in their systems. Although the Transit Asset Management (TAM) rule and the PTASP rule have different requirements and applicability, they overlap in certain areas. This TAM Plan outlines the condition ratings and useful life benchmarks used in the PTASP to prioritize the severity of safety risks on physical assets.

Capital Improvement Plan

AC Transit's Capital Plan and Projects Board Policy No. 314 establishes the process for submission and approval of capital projects and a Capital Improvement Program (CIP). Asset inventory and condition assessments are utilized by District staff to submit project requests. Prioritization is grouped into two categories starting with five groupings: Safety, Compliance, Maintenance, Business Case and Enhancement. Then followed by priority levels of High, Medium, and Low for programming the CIP. The CIP will be developed by staff, reviewed by the General Manager, and adopted by the Board.

Strategic Plan

Adopted in April 2019, the AC Transit Strategic Plan considers, the physical and fiscal environment as background and draws on the District's planning documents. The primary elements of the Strategic

Plan consist of: Core Values, Vision and Mission Statements, Goals and Initiatives to organize the direction of the District's work efforts. Key activities supporting the TAM Plan and asset lifecycle management are detailed within Board Policies, Fleet and Facilities Maintenance Plans and Standard Operating Procedures that align with the AC Transit Strategic Plan.

As a continuous improvement process, initial and ongoing training of District employees on the Strategic Plan and TAM Plan will become part of the business culture. This will ensure employees embrace the District's Core Values that lead to executing strategic initiatives and providing deliverables of the TAM Plan.

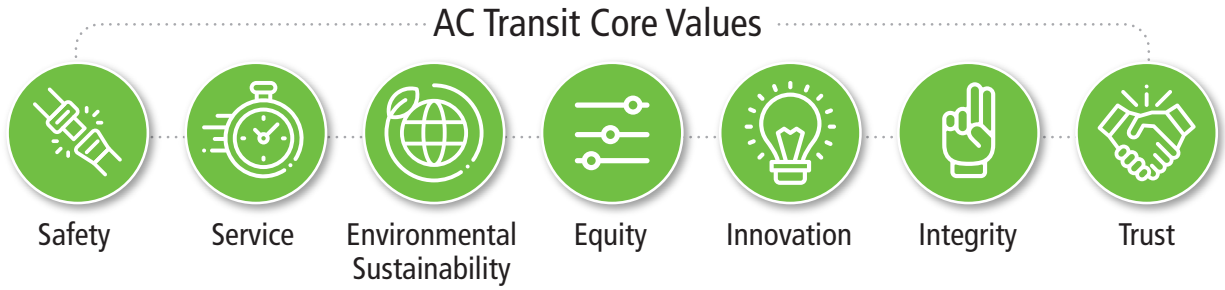
1. Introduction

1.1 Overview of AC Transit

The Alameda-Contra Costa Transit District (AC Transit) is the third-largest public bus-only transit agency in California, serving 13 cities and 9 adjacent unincorporated areas in Alameda and Contra Costa counties. AC Transit has been serving the East Bay since 1960, taking over from the Key System and its predecessors that carried passengers via buses, horse-drawn rail streetcars, electric streetcars, and ferries over the previous 100 years. AC Transit's origins date back to 1869; the year America's two coasts were connected by transcontinental rail. In that same year, AC Transit's predecessor began carrying passengers from the Jack London Waterfront into burgeoning Oakland in a horse-drawn rail car.

AC Transit has a long-standing commitment to preserving and improving the quality and quantity of transit service for 1.5 million East Bay passengers that populate a 364 square mile service area. AC Transit carries over 100,000 riders on an average weekday, along 128 service lines while generating over 16 million annual miles on its bus fleet.

AC Transit is an industry leader at providing public transit solutions that connects the East Bay communities with regional destinations including 16 other public and private bus systems, 25 BART stations, 6 Amtrak stations and 5 ferry terminals. The District uses its Strategic Plan to concentrate time and resources on activities that are of primary focus. Elements of the Strategic Plan consist of: Core Values, Vision and Mission Statements, Goals and Initiatives to organize the direction of the District's work efforts.



Vision Statement:

AC Transit is valued as a leader that helps the Bay Area thrive by connecting East Bay communities to each other and to regional destinations.

Mission Statement:

We deliver safe, reliable, sustainable transit service that responds to the needs of our customers and communities.

District Goals:

- Safe and Secure Operations
- Convenient and Reliable Service
- Financial Stability and Resiliency
- High Performing Workforce
- Strong Public and Policymaker Support
- Prioritize Diversity, Equity, Inclusion and Accessibility
- Environmental Improvement

Figure 1: Strategic Plan Elements

1.2 Tam Approach

A Transit Asset Management Advisory Committee was established to improve and modernize asset management programs and deliver an updated TAM Plan that complies with the FTA TAM Regulation and Board Policy No. 463. The TAM Advisory Committee includes representation of key stakeholders from departments that play a critical role in the lifecycle management of District assets and have leadership oversite of frontline managers and employees that execute deliverables of the TAM Plan.

Figure 2: TAM Organizational Structure

AC Transit's TAM Plan sets agency-wide objectives and strategies for delivering upon the commitments contained with AC Transit's TAM Policy and its Strategic Plan. In addition, this TAM Plan identifies activities to sustain AC Transit's TAM performance and specifies the lifecycle management activities outlined in the Fleet and Facilities Maintenance Plans (FMP's) for each department that is responsible for the operations and/or maintenance of a given Asset Class.

AC Transit's core business is to provide safe, reliable, and sustainable transit service to its communities. To accomplish this, AC Transit must continually improve its management of fleet and facilities. When executed properly, Transit Asset Management improves coordination of all departments across all phases of an asset's lifecycle as shown in Figure 3 to manage assets and required resources more efficiently.

The TAM Plan aims to optimize the costs, risks, and performance of the transit system, and provide a range of benefits to AC Transit through an ongoing planning effort as depicted in the figure below. In addition, the TAM Plan enhances the District's ability to communicate with the public and legislators about the District's successful approach to asset management, the benefits of investing in the transit system and the consequences of underinvestment.

Figure 3: Typical Lifecycle Phases of a Transit Asset

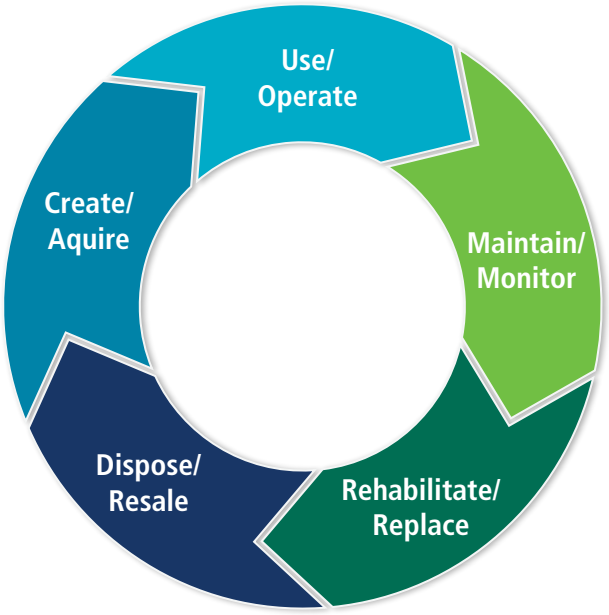
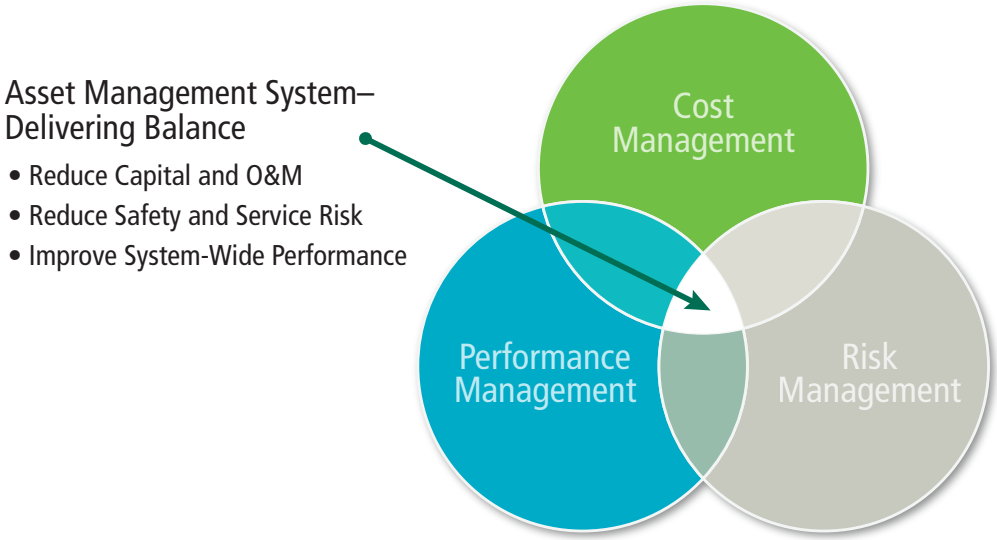


Figure 4: Asset Management Optimizes Cost, Performance, and Risk



Tam Plan Elements

FTA regulation defines the District as a Tier I agency and, as such, requires the District to implement a TAM Plan that includes the nine TAM Elements listed below.

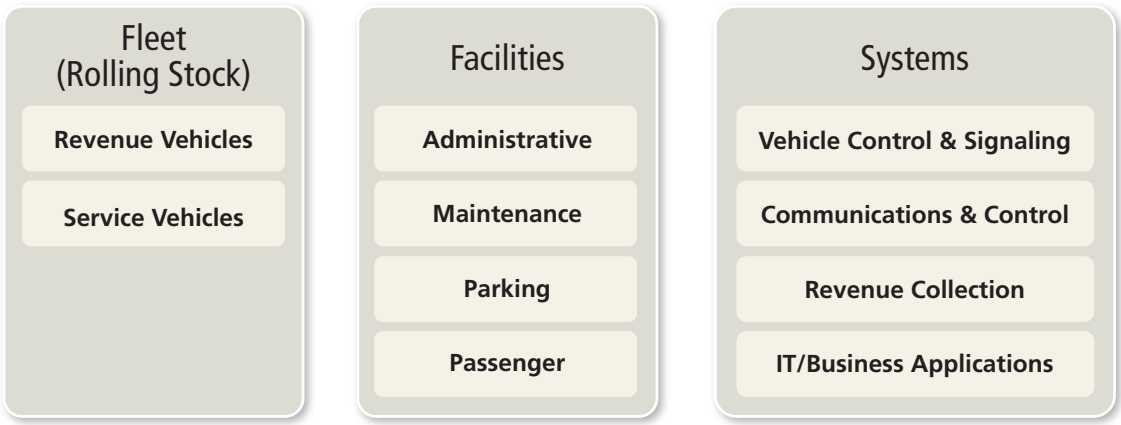
1. **Inventory of assets** – A register of capital assets and information about those assets
2. **Condition assessment** – A rating of the assets' physical state
3. **Decision support tool** – Analytic process/ tool to assist in capital asset investment prioritization needs.

4. **Prioritized list of investments** – A prioritized list of projects or programs to manage or improve the SGR of capital assets
5. **TAM and SGR policy** – Executive-level direction regarding expectations for transit asset management
6. **Implementation strategy** – Operational actions to achieve District TAM goals and policies.
7. **Key annual activities** – Describe the key TAM activity four-year plan
8. **Identification of resources** – List resources needed to carry out the TAM Plan
9. **Evaluation plan** – Monitor and update to support continuous TAM improvement.

Asset Inventory

The TAM plan includes objectives and strategies that will optimize the management of District assets to ensure alignment with the FTA reporting requirements for the National Transit Database (NTD). District assets are registered and monitored in a hierarchy of asset categories and asset classes. Categories include fleet, facilities, and systems. Under each category there are asset classes that include: buses, operations facilities, technology, and security infrastructure. The figure below illustrates the hierarchy of AC Transit's current asset categories and classes.

Figure 5: Asset Hierarchy



Information technology is a critical asset management enabler. Contemporary best practice either at the enterprise level or during any aspect of lifecycle management for individual asset classes is data driven and requires the application of innovative and creative information technologies. AC Transit provides and maintains technology tools that are primarily software-based and hosted in cloud environments. Hardware and software infrastructure provides the transport networks to interconnect buses, mobile devices, and other end points.

AC Transit uses Enterprise Asset Management System (EAMS) software to manage District asset lifecycle activities. During asset procurement and receipt or acceptance, specific asset identification, useful life, warranty, and maintenance interval information data is collected from the Original Equipment Manufacturer (OEM). Fleet and facilities maintenance programs are updated with multiple scheduled maintenance activities required to meet OEM recommended maintenance intervals, along with safety and regulatory compliance. This practice ensures the asset data is properly recorded into the EAMS for effective and efficient lifecycle management. Ellipse asset data is captured to consolidate and create the Alameda-Contra Costa Transit District NTD Asset Inventory Report.

Condition Assessment – Fleet

Condition ratings for fleets are expressed in terms of the percentage of assets that are 'at', or 'beyond' the Useful Life Benchmark (ULB).

Condition Assessment – Facilities and Systems

To determine an asset's condition, AC Transit follows the FTA's Transit Economic Requirements Model (TERM) scale. A TERM scale condition rating ranges from (5) Excellent to (1) Poor. Per the FTA TAM Final Ruling, assets with a condition rating score of 3.0 and above are in a state of good repair. Assets with a condition score lower than 2.9 are not in a state of good repair and may require prioritization during capital programing to ensure safe, efficient, and reliable transit service.

Decision Support Tools and Investment Prioritization

Part of the asset management process is optimizing how funds are allocated based on the assessed asset inventory to help achieve and maintain a state of good repair. This includes both capital and operating funds. AC Transit's capital budget funds the planning, design, acquisition, capital maintenance and rehabilitation of all assets subject to the TAM Plan.

AC Transit's Capital Plan and Projects Board Policy No. 314 establishes the process for submission and approval of capital projects and a Capital Improvement Plan (CIP) by the General Manager and then by the Board. This policy also outlines the District's five-year CIP which shall be updated every two-years. The basic process for assembling a multi-year CIP is shown below.

Figure 6: Capital Investment Process

The prioritization process works with the priority attributes of the project requests and the funding available, as well as the timing of both the requests and the funding, to arrive at a CIP. Within the entire CIP and specific years, the funding available limits the requests than can be programmed, and the scope of the various funding sources also limits what projects can be linked to what funds. This step is driven by the Capital Programming Committee, which has the charge to work through this interactive programming process and assemble the CIP. The outcome after this process is a year-by-year list of projects and matched funding that becomes the CIP. This preliminary CIP is approved by the General Manager and then ultimately the Board of Directors. The CIP is then used to estimate the spending levels in any given year and as a basis for the annual capital budgeting process. The priority tiers are as follows:

1. Projects that are fully funded
2. Projects that are high priority but not fully funded
3. Projects that are medium priority and would be funded if opportunities arise
4. Projects that are low priority or planned for completion in the later years of the CIP, contingent on availability of adequate revenue

1.3 Federal TAM Requirements

Overview

Federal regulations require that all assets used in the provision of public transit be subject to this TAM Plan. Industry best practices suggest that the scope of this TAM Plan should be expanded to include all Transit Assets and Land Assets. Land Assets are included in the scope of AC Transit's inventory as part of current asset management practices. Although acquisition and maintenance of these assets compete for the same capital dollars, the TAM Plan does not change the strategy for managing land assets. Accordingly, this TAM Plan includes objectives and strategies to optimize the management of Fleet and Facilities Assets that align with FTA reporting requirements for the National Transit Database (NTD).

State of Good Repair Performance Measures

The TAM Rule requires that transit agencies establish state of good repair (SGR) performance measures and targets for each asset class. As a Tier I provider, AC Transit must report on the SGR measures for the following asset categories as defined by the FTA:

- Rolling stock (revenue vehicles): Percent of vehicles that have either met or exceeded their Useful Life Benchmark (ULB)
- Equipment (non-revenue service vehicles): Percent of vehicles that have either met or exceeded their ULB
- Facilities: Percent of facilities rated below condition 3 on the FTA TERM scale

Note: Infrastructure (rail fixed guideway, track, signals, and systems) does not apply to AC Transit because it is a bus-only transit property.

Transit agencies may also develop additional SGR performance measures for each asset category or class. AC Transit has chosen to do so. And, although the District's immediate focus is on the National Transportation Database (NTD) Reporting requirements, there are many other key performance indicators that allow AC Transit to monitor asset performance and processes to aide in day-to-day operational effectiveness and efficiencies. These measures may be added to future iterations of the TAM Plan.

Tam Reporting Requirements

The FTA requires transit providers to update TAM Plans in their entirety at least once every four (4) years, with the first completed TAM Plan required by October 1, 2018. The District may amend the TAM Plan at any time, but this should be initiated following any major change to the asset inventory, condition assessment, or capital investment. The TAM Plan should also be updated following any change to the prioritization processes affecting the timing of future projects. Although TAM Plans are required to be updated in their entirety at least once every four (4) years, AC Transit currently plans to review its TAM Plan annually and update it as needed to reflect current conditions.

In addition to the performance targets and TAM Plan, the TAM Final Rule requires that two (2) additional asset management reports be submitted to the NTD annually. The following reports are due to the NTD no later than four months after the District's fiscal year end:

- The Data Report should describe the condition of the transportation system currently and the SGR performance targets for the upcoming year.
- The Narrative Report should describe changes in the transportation system condition and report progress on meeting the performance targets from the prior year.

2. Asset Management Policy

AC Transit is committed to effectively managing its capital assets and maintaining its system in a State of Good Report to support safe, efficient, and reliable transit across the organization. An Asset Management Policy No. 463 has been approved by the District's Board of Directors apart from and prior to developing this TAM Plan.

This TAM Plan outlines AC Transit's overall asset management approach in a manner consistent with that policy and current federal regulations (49 U.S.C. 5326) and sets the direction for establishing and maintaining transit asset management strategies and plans that are achievable with available funds.

This TAM Plan complies with federal requirements that mandate transit agencies have TAM and SGR procedures in place. Accordingly, AC Transit commits to:

- Maintain an asset inventory that includes vehicles, innovation, and technology (IT) hardware and software, facilities, and facility equipment used in the delivery of transit service;
- Identify safety-critical assets within the asset inventory and prioritize efforts to maintain those safety-critical assets in an SGR;
- Clearly define ownership, control, accountability, and reporting requirements for assets, including leased and third-party assets;
- Set asset performance targets and measure, monitor, and report on progress towards meeting those targets;
- Base capital project prioritization and other asset management decisions on asset criticality, condition, performance, available funding, safety considerations, and on the evaluation of alternatives that consider full lifecycle benefits, costs, and risks; and
- Maintain an agency-wide TAM Plan current with Federal Transit Administration requirements, AC Transit Board Policies, Fleet and Facilities Maintenance Plans, Standard Operating Procedures and Transit Asset Management best practices.

The approved Transit Asset Management Policy No. 463 is referenced as Appendix "A".

2.1 TAM Approach and Commitment

Transit Asset Management is a strategic approach in managing fleet and facilities; to optimize their performance; their useful life; and to minimize the total cost of ownership. The TAM approach is an extension of AC Transit's mission statement *"We deliver safe, reliable, sustainable transit service that is responsive to the needs of our customers and communities."* The District's TAM commitment is reflected in Figure 7, below, outlining the District's elements to establish and continually improve asset management, strategies, and plans.

Figure 7: TAM Commitment Elements

Commitment Category	TAM Element
Safety	AC Transit's TAM program intends to provide a safe and secure environment for the entire District community. To do that, we will foster a safety culture and align our asset and safety management practices and, will proactively review and communicate safety-related issues.

Commitment Category	TAM Element
Ridership	The District creates innovative initiatives to improve its level of service and increase ridership on its Trunk, Urban Crosstown, Major Corridor, and Transbay routes as the ridership was significantly impacted due to the COVID-19 pandemic. The agency is embarking on a new network plan, and all-door boarding as key initiatives that aim to improve the quality and reliability of service for customers and bus operators. The initiatives are supported by a Service Reliability and Service Quality Task Force that look to maximize service delivery for customers and ensure the long-term sustainability of the District by monitoring performance measures that support TAM.
Quality and Reliability	Through improved management of our assets, we will enhance the customer experience. We will deliver world-class customer service through improved internal/external communications, service reliability, convenience, accessibility, while meeting all agreed standards of service. Our TAM Plan will enable us to continually improve the reliability of the transit system and the agency's overall efficiency. Our maintenance and capital programs will improve operational performance, reduce asset related risks, and reduce our SGR backlog. This will also help reduce the impact of our activities on the environment and develop ways to make our transit system more resilient.
Efficiency and Effectiveness	AC Transit will employ effective asset management business practices and tools, ensure optimal asset performance and useful life, and use timely, quality data to support transparent and cost-effective decision-making and accountability to stakeholders. The District will utilize historical data to better inform future investment decisions by accurately capturing capital and operating costs to assess and optimize the total cost of ownership of our assets. This program will result in the continued delivery of high-quality data that will enable AC Transit to prioritize funding needs and make more informed capital investment decisions for a sustainable and fiscally responsible agency.
Workforce	AC Transit provides professional development programs that contribute to the growth and effectiveness of the organization by empowering employees to maximize their performance and achieve both personal and professional goals.
Communications	The District promotes its services through advertising, public outreach, and public information efforts. The efforts reflect AC Transit's core values of providing safe, convenient, courteous, and reliable transit service to the public.

These agency-wide elements are reflected into appropriate measures in the Fleet Maintenance Plan and the Facilities Maintenance Plan, setting clear expectations for how departments will manage their assets in line with AC Transit's overall mission. AC Transit has incorporated Life-Cycle Management Plans at the Asset Class level that consists of the various tasks performed on a routine basis with a strategic line-of-sight alignment.

3. Levels of Service (LOS)

As a public transportation provider and mobility manager for the California East Bay Area, the District's goal is to provide service in an efficient, effective and equitable manner. To accomplish this goal, AC Transit's Board of Directors adopted Service Standards and Design Policy No. 545 that establishes guiding principles for the design and allocation of services to develop a marketable and well-used transit system.

Service design is continually examined to ensure that service is allocated correctly by measuring performance with respect to ridership, productivity, vehicle load, frequency, and on-time performance. Additional statistical modeling and correlation analysis is used to examine external factors such as variables gas prices, unemployment levels, and weather to model ridership trends and monitor changing trends that impact service types. The Route Type Service Standard is shown below in Figure 8.

Figure 8: Route Type Service Standard

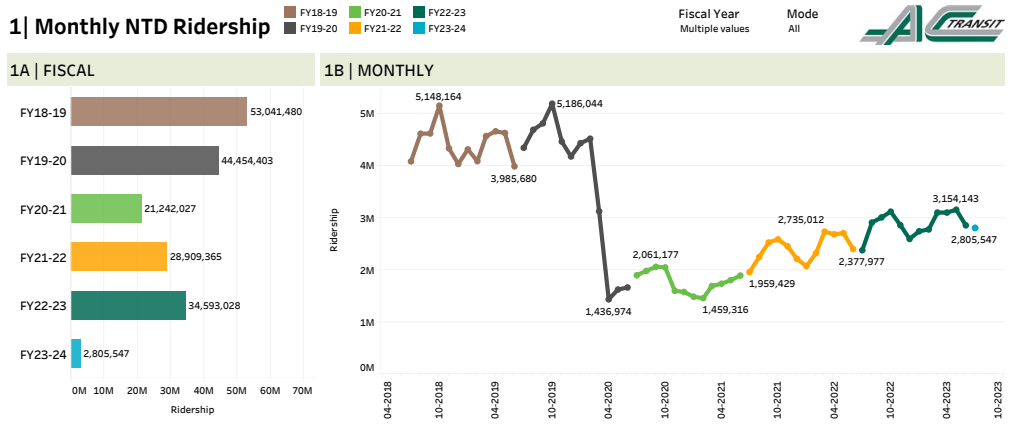
Route Type	Span of Service Standard	Weekday Peak Frequency Standard
Trunk and Major Corridors	LOS A (19 – 24 hrs. daily)	LOS C (15-20 minutes)
Rapid Service	LOS C (14 – 16 hrs. daily)	LOS B (10 – 14 minutes)
Urban Crosstown / Feeder	LOS C (14 – 16 hrs. daily)	LOS C (15 – 20 minutes)
Suburban Crosstown / Feeder	LOS C (14 – 16 hrs. daily)	LOS D (21 – 30 minutes)
Very Low Density	LOS C (14 – 16 hrs. daily)	LOS E (31 – 60 minutes)
All Night (Owl) Service	Owl Gap period	LOS E (31 – 60 minutes)
Transbay	LOS B: Bay Bridge Corridor (17 – 18 hrs. daily); LOS C: DB/San Mateo Corridor (14 – 16 hrs. daily)	LOS D (21 – 30 minutes)

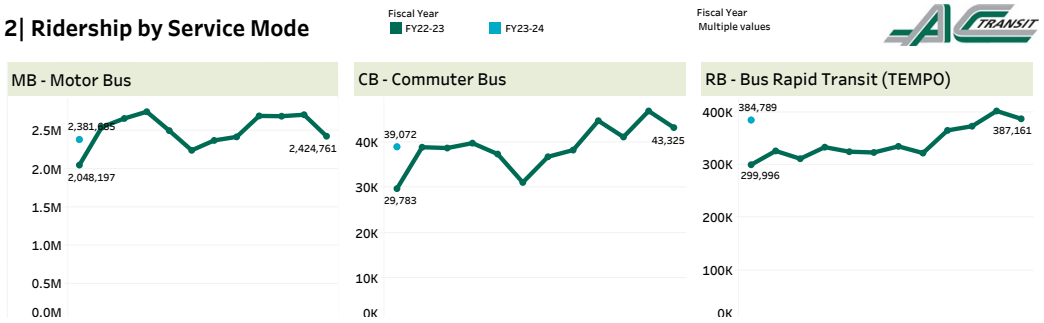
The TAM Plan is built around achieving improvements towards its level of service that include Trunk, Urban Crosstown, Major Corridor, and Transbay types. These service types are directly impacted by its asset reliability standards, preventive maintenance programs, meantime to repair, and fuel efficiency standards. Managing these technical levels provide asset management decision making and investment prioritization to enhance the levels of service.

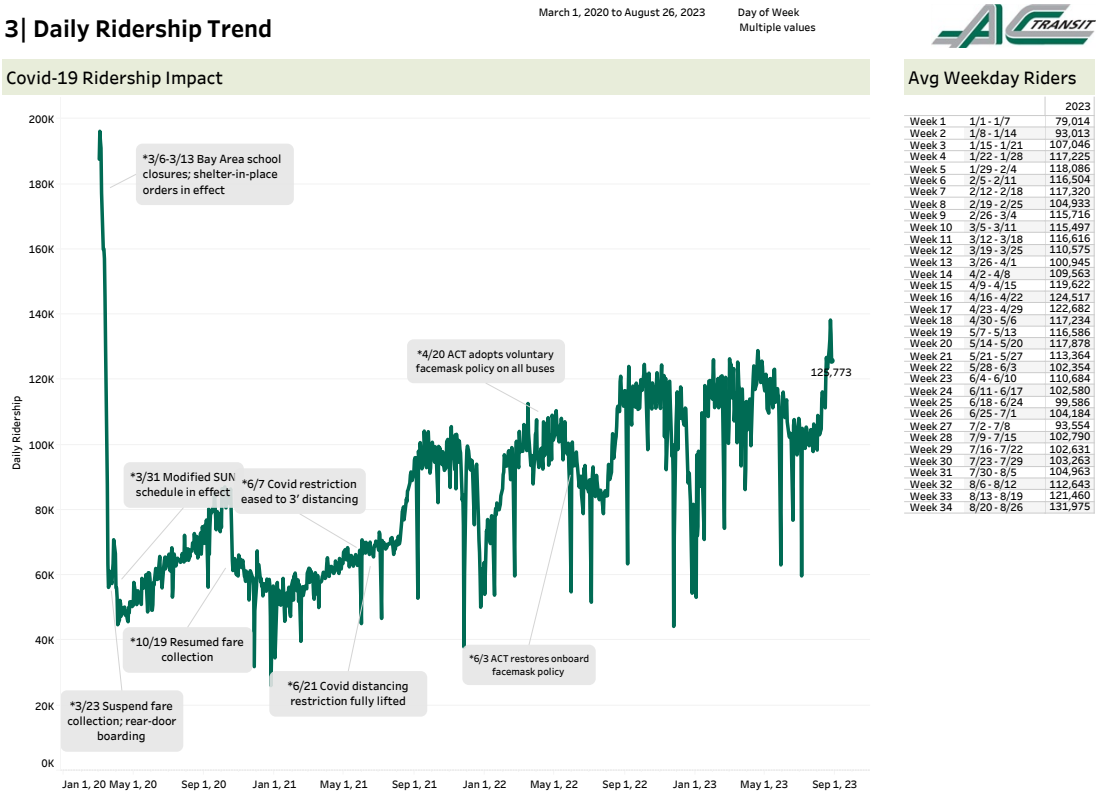
3.1 Ridership Trends

Increasing ridership is an overarching goal for the District. AC Transit's service options are a crucial part of the solution to the East Bay's economic, energy, and environmental challenges helping to bring a better quality of life in the communities it serves. As a key performance indicator, ridership is measured by the average daily passenger boardings. Based on past performance and demographics studies, AC Transit's has produced several ridership forecast scenarios that are the basis for other analyses related to TAM, and to help inform management decisions moving forward. Figure 9 (next page) provides the ridership fluctuation caused by the pandemic.

Figure 9: Ridership Trends







Avg Weekday Riders

		2023
Week 1	1/1 - 1/7	79,014
Week 2	1/8 - 1/14	93,013
Week 3	1/15 - 1/21	107,046
Week 4	1/22 - 1/28	117,225
Week 5	1/29 - 2/4	118,086
Week 6	2/5 - 2/11	116,504
Week 7	2/12 - 2/18	117,320
Week 8	2/19 - 2/25	104,933
Week 9	2/26 - 3/4	115,716
Week 10	3/5 - 3/11	115,497
Week 11	3/12 - 3/18	116,616
Week 12	3/19 - 3/25	110,575
Week 13	3/26 - 4/1	100,945
Week 14	4/2 - 4/8	109,563
Week 15	4/9 - 4/15	119,622
Week 16	4/16 - 4/22	124,517
Week 17	4/23 - 4/29	122,682
Week 18	4/30 - 5/6	117,234
Week 19	5/7 - 5/13	116,586
Week 20	5/14 - 5/20	117,878
Week 21	5/21 - 5/27	113,364
Week 22	5/28 - 6/3	102,354
Week 23	6/4 - 6/10	110,684
Week 24	6/11 - 6/17	102,580
Week 25	6/18 - 6/24	99,586
Week 26	6/25 - 7/1	104,184
Week 27	7/2 - 7/8	93,554
Week 28	7/9 - 7/15	102,790
Week 29	7/16 - 7/22	102,631
Week 30	7/23 - 7/29	103,263
Week 31	7/30 - 8/5	104,963
Week 32	8/6 - 8/12	112,643
Week 33	8/13 - 8/19	121,460
Week 34	8/20 - 8/26	131,975

3.2 Strategic Initiatives

To bridge the District's Vision, Mission, and Goals; five (5) strategic initiatives were developed as big group actions. The following initiatives are intended to target the District's level of service supported by multi-departmental activities. AC Transit's strategic initiatives are as follows:

Service Quality

Attracting and retaining bus riders is a crucial contribution AC Transit can make to addressing the climate crisis. Transit that is not fast, frequent, and reliable will not be attractive to travelers that have better options available. Improving speed and reliability should be a District-wide effort that includes a focus on management of the bus system and upgrading technology and infrastructure that supports this effort. The District will ensure that programs or projects designed to improve service quality are deployed equitably. Projects should be given priority that serve areas of low-income residents, low car ownership, and areas with high BIPOC concentration The pandemic has caused a precipitous drop in transit riders and required the District to suspend service on underused bus lines. As riders slowly return to the system, bus service must be restored in an equitable manner in terms of both race and income.

Infrastructure Modernization

This initiative should consider infrastructure improvements that address climate change as well as the District's functional needs. Priority should be given to projects that reduce greenhouse gas emissions over projects that don't. All new or renovated infrastructure should be designed with energy efficiency and waste reduction in mind. The design and construction of fully zero-emission operating divisions should be accelerated. Efforts should be made to ensure that contracts associated with infrastructure modernization provide ample opportunities to minority and women-owned businesses.

Employee Recruitment, Training and Retention

The COVID-19 pandemic has disrupted labor markets and left many employers scrambling to fill jobs. Public transit was already facing a shortage of bus operators, with the pandemic exacerbating the difficulty in recruitment. Although disrupted by the current labor market conditions, the District should still strive to recruit workers from diverse backgrounds and make AC Transit an attractive place to work by providing opportunities for training and career advancement among other benefits.

Zero Emission Program

This strategic initiative focuses on advancing the transition to a 100% zero-emission bus fleet by 2040. To ensure an equitable distribution of benefits from this initiative, the deployment of zero-emission buses should be prioritized for areas of low-income residents and areas with high BIPOC concentrations that also suffer from high air-pollution burdens. This approach is described in the board-approved Clean Corridors Plan. Avoiding the worst impacts of climate change requires early and substantive actions to reduce emissions of carbon dioxide. This means that we need to take steps immediately to reduce our emissions and develop a plan to reach carbon neutrality. We should strive to purchase the lowest carbon options available for the diesel, hydrogen and electricity that powers our buses. We also need to ensure that we are purchasing the most energy-efficient vehicles available on the market, regardless of fuel.

Financial Efficiency and Revenue Maximization

The COVID-19 pandemic has caused transit ridership to drop at every public transit agency in the country including AC Transit, causing a precipitous drop in fare revenue. We must seek adequate funding from all layers of government to cover the loss of fare revenue. Federal recovery dollars have provided temporary financial relief to the district, but in order to be fiscally sustainable in the long term, AC Transit must raise revenues or decrease expenses. An increase in revenues can come in many forms including a ballot tax measure in the coming years. A decrease in expenses would likely impact the level of service provided by the district either

directly (service reductions) or indirectly (other expenses that would affect service quality). To the extent that the District can provide service more efficiently—a challenging task—costs can be reduced without reducing service.

Internal and External Diversity, Equity, Inclusion, and Accessibility Program and Priorities

AC Transit is a diverse organization that provides a critical service to an equally diverse community. The internal component of the initiative would create a comprehensive internal program to celebrate diversity, address biases, prejudices, and microaggressions, instill cultural competence in all employees, be inclusive, and grow a diverse work force at all levels of the organization with an emphasis on equal employment opportunities. The program would include a wide breadth of activities such as events, training, and creation of new policies. To become a better engaged organization, we must first have zero tolerance for racist actions and discrimination, and address prejudices, microaggressions and unconscious biases in the workplace. We must also acknowledge, celebrate, and provide opportunity to persons of color, women, LGBTQ+, and those with disabilities within AC Transit, and create a safe and welcoming work environment. We expect and welcome ongoing conversation around these issues.

AC Transit's riders are more diverse and lower income than average for our service area. Equity principles should lead us to prioritize our riders above those who have other means of transportation. Our service and public facing activities should meet Title VI and Americans with Disabilities Act (ADA) policies and provide access to everyone with an emphasis on improvements to these two aspects of our core business in communities where residents and workers are dependent on our service. Planning for service changes should consider differences in ridership patterns between lower income and higher income passengers. Lower income households also tend to have lower car ownership rates.

3.3 Asset Benchmark and Targets

To comply with the FTA requirements associated with SGR, the District established performance measures for each capital asset class along with performance targets. Targets for vehicles are expressed in terms of percentage of assets that are at or beyond the Useful Life Benchmark (ULB), therefore the ideal situation is to be less than the target. For all non-revenue vehicles, the District identifies a useful life based on the vehicle characteristics at time of purchase, so the Useful Life (UL) and ULB are shown as ranges. Targets for facilities are expressed in terms of percentage of assets that are rated below the benchmark condition score, therefore the ideal situation is to be less than the target.

Figure 10: Fleet Performance Targets

Asset Class	UL	ULB	Target	Rationale
Revenue Vehicles				
Articulated Buses (AB)	12	14	10%	District standard practice is to replace all revenue vehicles at the end of their useful life. Funding and procurement can delay this, but no more than 10% of buses beyond ULB is reasonable.
40ft/30ft Buses (BU)	12	14	10%	
Over-The-Road Coach Buses (BR)	14	16	10%	
Vans/Cutaways (gasoline) (VN)	5	7	10%	
Vans/Cutaways (diesel) (VN)	7	9	10%	
Non-Revenue Vehicles				
Automobiles	4-7	UL + 2	25%	Target based on reasonable long-term expectation for SGR of non-revenue vehicles. Continuing current funding levels should allow for achieving of the target.
Trucks and Other Rubber-Tired Vehicles	4-12	UL + 3		

Figure 11: Facilities and Systems Performance Targets

Asset Class	Condition Benchmark	Target	Rationale
Facilities/ Systems	3	20%	Facilities and systems rated 2-3 are still functioning and safe and so having 20% not meeting target is reasonable.

The District monitors the revenue fleet service demands, cost effectiveness, and reliability using newly developed asset management reports. AC Transit prioritizes transparency of its operational and Key Performance Indicator (KPI) statistics. These statistics reside on the agency website under Facts and Figures that is sourced using the Data Integration and Management Environment (DIME) process.

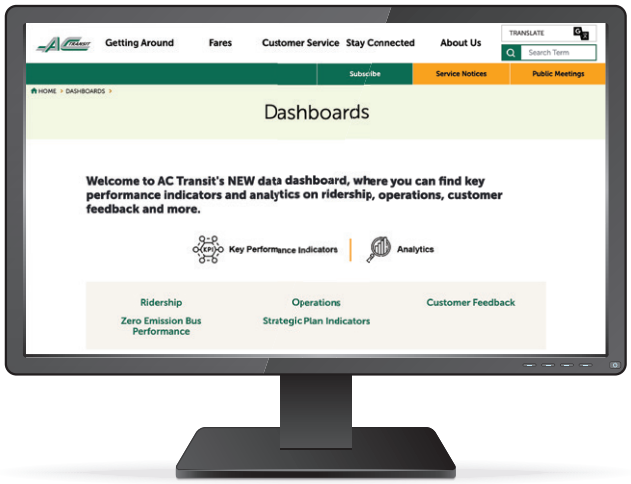
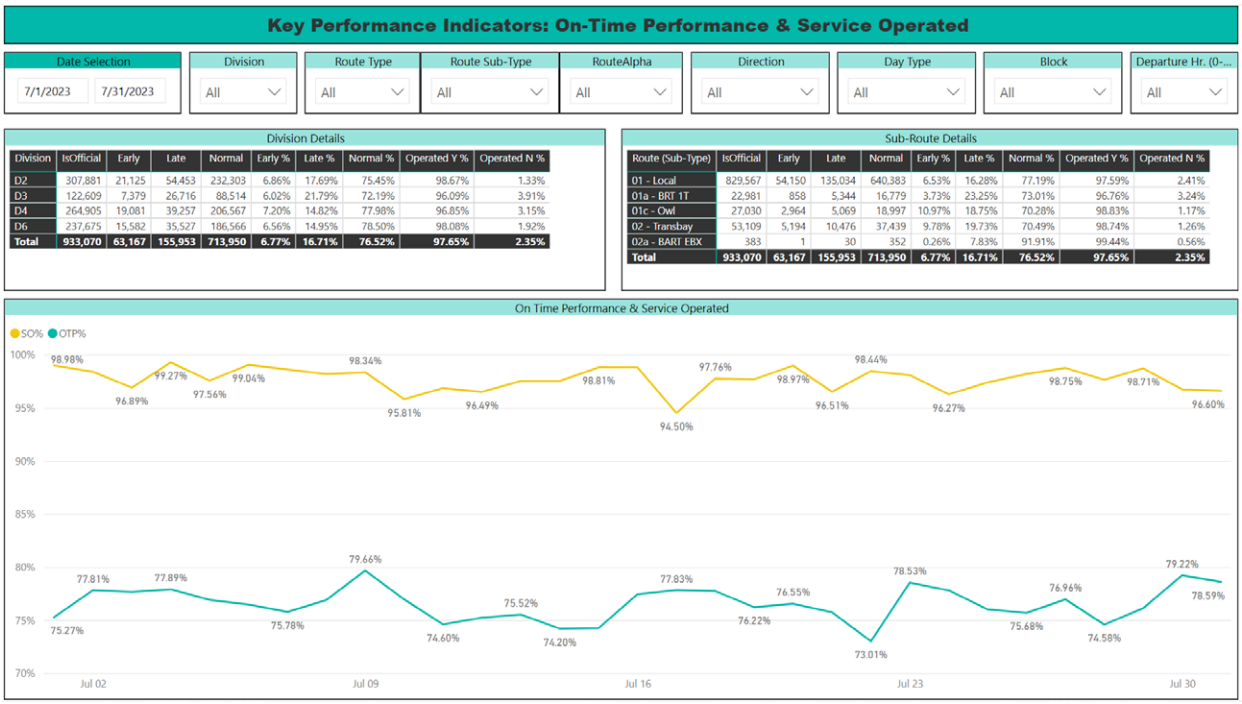


Figure 12: KPI Monitoring



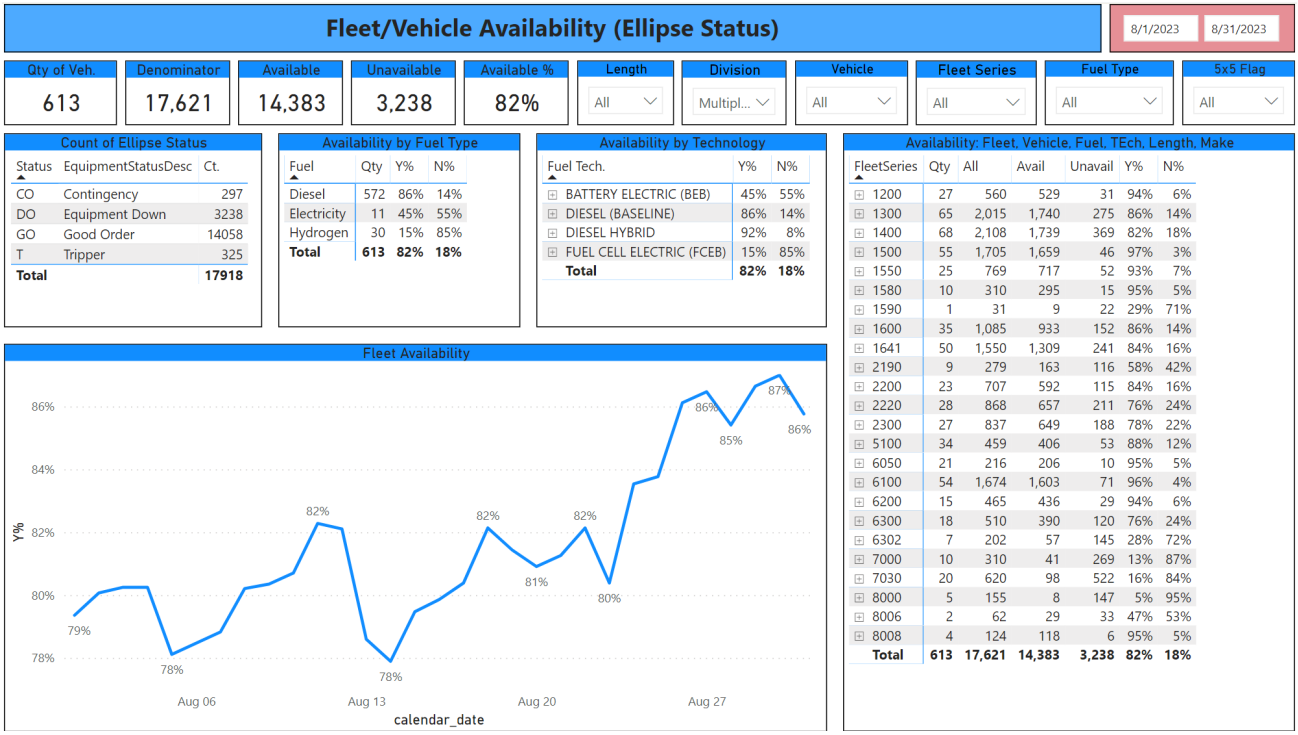
4. Transit Asset Inventory

4.1 Asset Inventory

AC Transit's asset portfolio is comprised of the Asset Category, Class, and Type with an estimated value of approximately $1 billion. The portfolio value excludes soft costs associated with asset replacement such as design and construction management costs. These soft costs could be estimated to be an additional 35% for major systems, and 10% for equipment and vehicles. Appendix C provides the functions of the asset class and examples of the elements.

During asset procurement and receipt or acceptance, specific asset identification, useful life, warranty, and maintenance interval information is collected from the OEM. This practice ensures the asset data is properly recorded into the EAMS for effective and efficient lifecycle management. The EAMS data is used to produce monitoring reports for fleet inventory and performance using data analytics and statistical modeling. Figure 13 provides an example of the availability of the District's revenue bus fleet.

Figure 13: Revenue Vehicle Availability



4.2 Asset Condition

Vehicle Condition Assessment: Condition ratings for vehicles are expressed in terms of the percentage of assets that are 'at', or 'beyond' the Useful Life Benchmark (ULB) based on FTA Circular 9030.1D, paragraph 4.a.

Facilities and Systems Condition Assessment: The District determines an asset's condition by utilizing FTA's Transit Economic Requirements Model (TERM) scale. A TERM scale condition rating ranges from (5) Excellent to (1) Poor. Per the FTA TAM Final Ruling, assets with a condition rating score of 3.0 and above are in a state of good repair. Assets with a condition score lower than 2.9 are not in a state of good repair and may require prioritization during capital programing to ensure safe, efficient, and reliable transit service. The rating criteria is represented in the following figure.

Figure 14: Asset Condition Assessment Rating Criteria

Rating	Assessment	Criteria
5	**Excellent**	• Asset performs its designed function • Asset is new and within the warranty period • Asset does not pose a known unacceptable safety or security risk
4	**Good**	• Asset performs its designed function • Asset has not met its useful life • Asset does not pose a known unacceptable safety or security risk
3	**Adequate**	• Asset performs its designed function • Asset has not met its useful life • Asset does not pose a known unacceptable safety or security risk
2	**Marginal**	• Asset performs its designed function • Asset has met its useful life • Asset does not pose a known unacceptable safety or security risk
1	**Poor**	• Asset has met its useful life • Asset does not perform its designed function • Asset poses a known unacceptable safety or security risk

For Facilities assets, condition assessments are scheduled and completed using in-house staff and outside contractors where a particular set of skills or experience are necessary. These results are compiled into The Condition Assessment Report which can aggregate (roll-up) the individual asset condition assessments to the Asset Class level.

Assets with a condition rating score of 3.0 and above are in a State of Good Repair (SGR). Assets with a condition score lower than 2.9 are not in a SGR, and may require prioritization during capital programing to ensure safe, efficient, and reliable transit service. Note that these condition scores can represent individual asset conditions or can represent the average condition of all assets in each category/sub-category depending on aggregation.

5. TAM Risk Oversight

AC Transit's Transit Asset Management Risk Oversight is implemented on an ongoing process throughout the fiscal year. In accordance with Board Policy No. 101, Article 5, except for reports designated on the agenda as verbal reports, each agenda item submitted by Board Officers or their staff shall be supported by a written staff report and other supplemental documentation that may be necessary to enable the Board to make an informed decision on matters.

Staff Reports are scheduled for the Board of Directors on a monthly, Bi-Monthly, quarterly and annual basis. Staff Reports provide detailed information to the Board of Directors on various topics related to Transit Asset Management by the following departments Operations, Planning, Finance and Audit, and External Affairs. Figure 15 is the review schedule to ensure that Board Policies are properly maintained and kept current.

Figure 15: Board Policy Review Schedule

Section 100 – Governance & Administration – Board Policies contained in Section 100, shall be reviewed as-needed or at a minimum of every three years from the date of adoption or the last amendment.

Section 200 – Human Resources – Board Policies contained in Section 200, shall be reviewed as-needed or at a minimum of every three years from the date of adoption or the last amendment.

Section 300 – Finance - Board Policies contained in Section 300, shall be reviewed once every two years, with the exception of the Investment Policy which shall be reviewed annually.

Section 400 – Operations – Board Policies contained in Section 400, shall be reviewed as-needed or at a minimum of every five years with the exception of those policies in the Procurement and Materials subcategory, which shall be reviewed every two years.

Section 500 – Planning & Service Development – Board Policies contained in Section 500, shall be reviewed as-needed or at a minimum of every five years.

Section 600 – Legal Matters - Board Policies contained in Section 600, shall be reviewed as-needed or a minimum of every three years.

Section 700 – Conflict of Interest & Ethics – Board Policies contained in Section 700, shall be reviewed once every two years.

Administrative Regulation No. 101A: Board Agenda Item Preparation provides detailed requirements for Staff Report format and deadlines. The purpose of this Administrative Regulation is to ensure that members of the Board of Directors, Board Officers and Executive Staff are provided with the necessary information, sufficiently prior to meetings, to permit the adequate study and preparation needed to allow for making informed decisions.

6. Asset Lifecycle Strategies

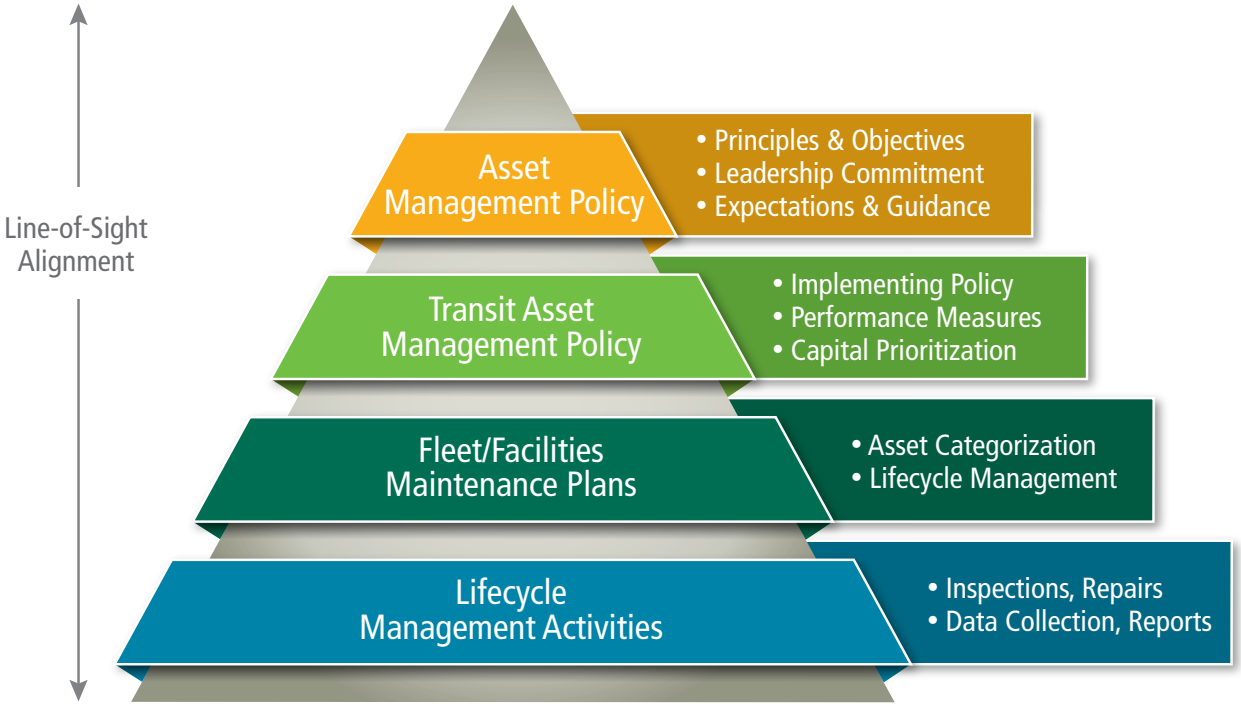
This section identifies AC Transit's key asset management practices across the lifecycle for the Fleet and Facilities assets. The asset strategies, as captured in the Fleet and Facilities Maintenance Plans (FMPs), set out the approach for managing a specific asset class that will deliver AC Transit's strategic objectives in line with the TAM Policy and the TAM Vision.

Recognizing that each asset category and asset class is challenged with a unique set of performance characteristics and resource requirements, AC Transit has developed these FMPs. These Plans provide guidance for managing the Fleet and Facilities to align with this TAM Plan.

AC Transit uses Ellipse™ Enterprise Asset Management and Asset Performance Management software to manage all of the lifecycle management activities. These activities actually make up the lifecycle strategies. This includes all of the Preventive Maintenance Tasks, Standard Operating Procedures (SOPs), Inspections and proactive maintenance activities performed to ensure consistent asset lifecycle management at the asset class level.

These activities all align with the organization's business goals and objectives and provide "Line-of-Sight" organizational alignment. This approach ensures a consistent data collection and analysis as a fundamental aspect of AC Transit's implementation approach. The figure below reflects AC Transit's document hierarchy for these lifecycle activities.

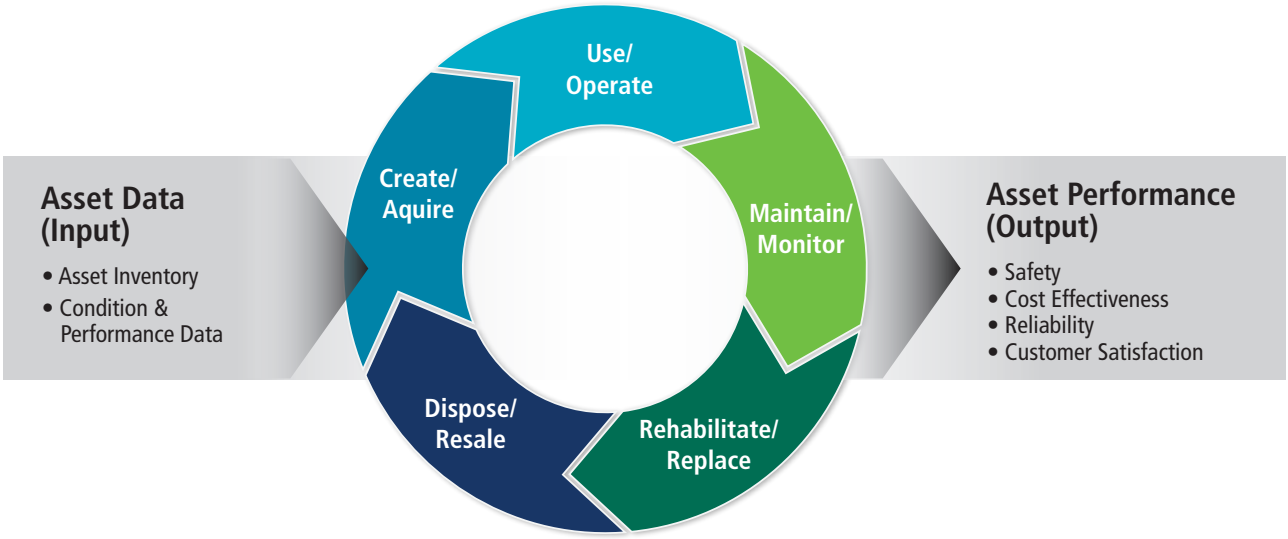
Figure 16: Asset Management Document Hierarchy



6.1 Lifecycle Management Strategies

Transit Asset Management is a strategic approach in managing fleet and facilities; to optimize their performance; their useful life; and to minimize the total cost of ownership. AC Transit has developed a framework for asset management and implementing procedures in the form of Fleet and Facilities Maintenance Plan. These Maintenance Plans will be used to monitor and manage assets to achieve and maintain a state of good repair, improve safety and increase reliability and performance as shown in the figure below. The purpose of these Maintenance Plans is to not only ensure that our assets are maintained in a state of good repair, but also help to enhance our operations by delivering safe, reliable, sustainable transit service that responds to the needs of our customers and communities.

Figure 17: Asset Lifecycle Management Process



6.2 Fleet Maintenance Plan

AC Transit has developed the Fleet Maintenance Plan to monitor and manage assets to achieve and maintain a state of good repair, improve safety, and increase reliability and performance. The purpose of the Fleet Maintenance Plan is to provide an overview of the Department's budget, structure, asset management, and maintenance programs. For all operating revenue and non-revenue fleet assets, the Fleet Maintenance Plan addresses:

- Asset Inventory
- Condition Assessment and Performance Measures
- Condition Reporting
- Organization Structure
- Fiscal Budget
- Replacement Schedule
- Maintenance Program Structure
- Training
- Vehicle Acceptance
- Decommissioning
- Preventative Maintenance, Inspections and Cleanliness Activities
- EAM and Work Control
- Warranty Program
- Capital Improvement Program

6.3 Facilities Maintenance Plan

AC Transit has developed the Facilities Maintenance Plan to monitor and manage AC Transit's assets to achieve and maintain a state of good repair, improve safety, and increase reliability and performance. The purpose of the Facilities Maintenance Plan is to provide an overview of the department's budget, structure, asset management, and maintenance programs. For all operations and support facilities, the Facilities Maintenance Plan addresses:

- Asset Inventory
- Condition Assessment and Performance Measures
- Condition Reporting
- Organization Structure
- Fiscal Budget
- Training
- Maintenance Program Structure
- Preventative Maintenance, Inspections and Cleanliness Activities
- Regulatory Compliance and Cleanliness
- Critical Equipment Inventory
- EAM and Work Control
- Warranty Program
- Capital Improvement Program

7. Investment Prioritization and Funding

This chapter identifies and highlights AC Transit's asset investment needs (capital and operational budget needs, the process used to prioritize investments, and the anticipated impact on current and future staffing resources), based on AC Transit's organizational goals, asset management strategies, core principles and processes.

7.1 Process Overview

Part of the asset management process is optimizing how funds are spent based on the assessed asset inventory to help achieve and maintain a state of good repair. This includes both capital and operating funds. AC Transit's capital budget funds the planning, design, acquisition, capital maintenance and rehabilitation of all assets subject to this TAM Plan. The operating budget funds the use and routine maintenance of those same assets, including the staff needed to perform those functions.

AC Transit currently adopts yearly operating and capital budgets. The capital budget for a given year is based on a longer-term Capital Improvement Plan (CIP) in which capital projects are programmed. The CIP is an effort to strategically plan and prioritize capital expenditures and activities over a five-year span. The District has a large backlog of capital asset rehabilitation and replacement that needs to be addressed, and limited funding and resources with which to accomplish it. A multi-year view of capital needs is essential to maximizing use of grant and District general fund investments. A multi-year plan for capital investments will also allow the District to properly plan for the needed non-financial resources (project managers, operations support, outreach, etc.) to accomplish the projects included in the CIP. The CIP also provides a reference for internal and external stakeholders to understand how the District is investing in capital assets.

The District must optimize how both Operating and Capital funds are spent to most effciently achieve and maintain a state of good repair of capital assets. The Capital Budget funds the planning, design, acquisition, capital maintenance and rehabilitation of all District assets, subject to the capitalization threshold for expenses identified in Board Policy 314, Capital Plan and Projects. The Operating Budget funds the use and routine maintenance of those same assets, including the staff needed to perform those functions.

The CIP focuses on maintaining safe operating and usage conditions, environmental and regulatory compliance, and "state of good repair" for current assets, as well system enhancements and improvements. A combination of capital asset condition and priority information is used by staff to program projects in the CIP, within the constraints of the funding and resources available to the District. This document provides definition for proposed projects within the next five years and larger scale projects beyond the five-year window.

Per Board Policy 314, the CIP will be reviewed and updated at least every two years, with the first year aligned with the current adopted capital budget. The bi-annual review essentially verifies and updates the programming of the projects in the remaining three years of the CIP and adds two more years to renew the five-year horizon of the plan. The Capital Programming Committee meets regularly to review project requests and make decisions on the projects in the CIP.

7.2 Capital Investment Prioritization

AC Transit uses an existing capital project prioritization process which considers asset condition or age along with investment categorization. The basic unit of the prioritization process is the project request. Project requests are created by District staff and have a set of required fields to assist in the prioritization process. The asset inventory and condition assessment are used in this step to create project requests based on the asset age or condition (as applicable to that asset class) for rehabilitation or replacement of the assets that are indicated

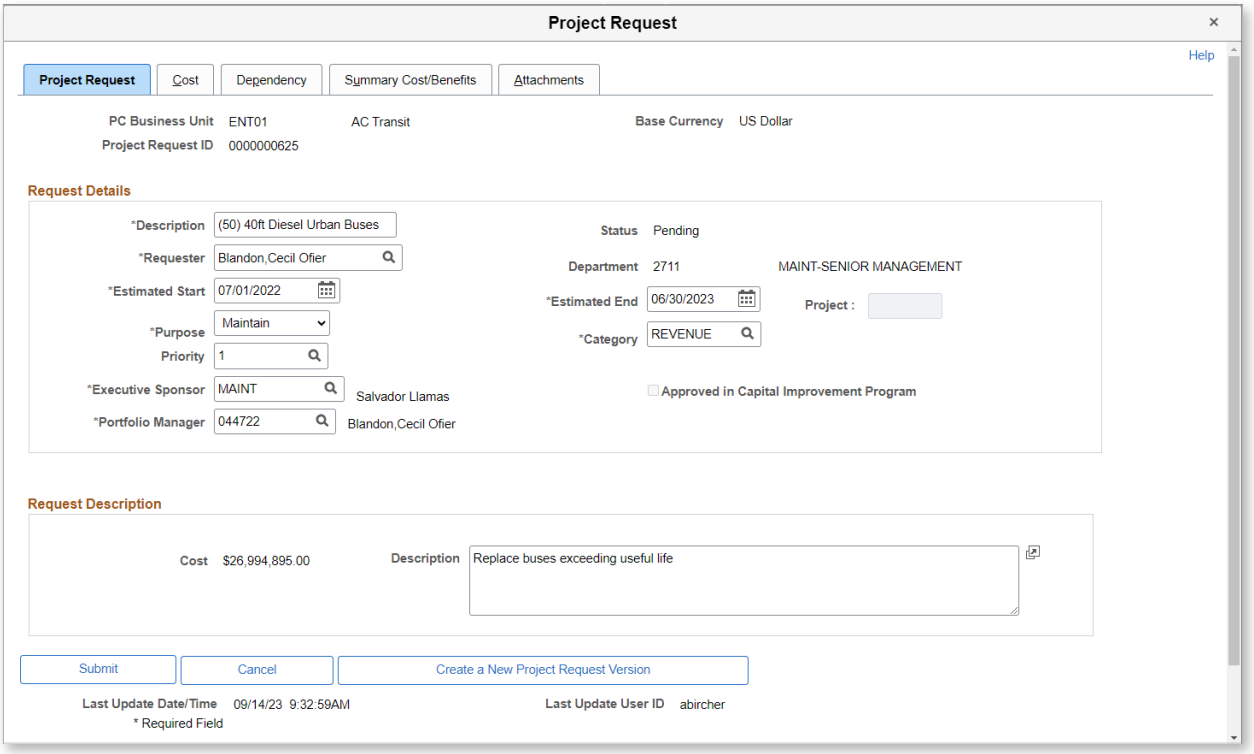
within the CIP period. Requests can cover individual or groups of assets, and also include a cost estimate, sponsoring department and project manager information, and any relevant documentation.

Figure 18: CIP Prioritization Categories

Priority 1	Description
Safety	Requests that concern safety or security critical assets or initiatives. This applies to the safety of both riders and employees.
Compliance	Requests that are necessary to fulfil regulatory compliance requirements.
Maintenance	Requests for maintenance of existing assets. This encompasses the bulk of state of good repair requests.
Business Case	Requests that can show a quantifiable benefit from their implementation. These requests are generally not necessary from a maintenance standpoint but could save the District money in an identifiable and specific way.
Enhancement	Enhancement of existing assets or addition of new assets that are not required for maintenance purposes. Expansion projects.

All project requests must go through an approval workflow process before they are programmed. The workflow goes through six approval steps and finalized with the Chief Financial Officer and collected for programming prioritizing as a project. An example of the Project Request Form is shown below in Figure 19.

Figure 19: Project Request Form



The prioritization and programming are performed by a committee comprised of the department executives, the Capital Projects Manager, and the Capital Planning and Grants Manager. The committee uses the prioritization fields and cost estimates from the project requests along with the capital funding projections to assemble the CIP.

7.3 Capital Investment Planning and Budget

AC Transit's operating budget funds service delivery and maintenance, including employee wages, spare parts, consumables, and a variety of support services used throughout the organization. This also includes payments to third-party contractors responsible for consulting and maintenance activities.

The operating budget is approved on a yearly basis through the Board of Directors. AC Transit's Fiscal Year 2023-24 operating budget is over $545 million, with labor costs as the largest portion of the budget. The Fiscal Year 2023-24 capital budget includes nearly $19 million in District Capital spending and nearly $96 million in grant-funded spending. The development of the operating and capital budget takes into consideration macroeconomic assumptions in the overall economy, population growth, and specific east bay economic metrics such as unemployment rate, wage growth, and home prices as part of the District's subsidies.

8. Implementation Strategy and Evaluation Plan

8.1 Implementation

Key annual activities supporting the TAM Plan and asset lifecycle management are detailed within Board Policies, Staff Reports, Fleet and Facilities Maintenance Plans, TAM Performance Reports, and Standard Operating Procedures. These activities align with the District's strategies, goals, and objectives providing "Line-of-Sight" organizational alignment to ensure a consistent collection and analysis of data as a fundamental element of AC Transit's TAM Plan implementation approach.

8.2 Resource Activities

The TAM Advisory Committee provides leadership oversight and executes deliverables that focuses on improving and modernizing asset management programs. Through collaborative efforts, the committee reviews policies, plans, procedures, and reports that create initiatives for continuous TAM improvements. This process has allowed the District to implement a robust asset management framework that identifies a roadmap of recommendations to improve established TAM programs. Examples of deliverables and recommendations include updates to the Board on strategic plan progress, ZEB transition, state of the fleet, and quarterly operations performance reports.

8.3 Performance Evaluation

In compliance with FTA TAM performance evaluation, AC Transit generates an annual TAM Performance Report. The TAM performance report provides an inventory register of capital assets and the physical state of the asset's condition. To mitigate risk exposure to the District's assets and improve the SGR of capital assets, the performance report identifies projects that are prioritized in the Capital Improvement Program. In addition, the performance report identifies actions for the TAM Advisory Committee geared towards improving efficiencies with targeted goals. Annual performance reports are secured within the District's intranet and located under the TAM Program document library in the MYACT platform.

Appendix A: Key Definitions

CIP: Capital Improvement Program

EAMS: Enterprise Asset Management System

FMP: Fleet and Facilities Maintenance Plans

FTA: Federal Transit Administration

NTD: National Transit Database

OEM: Original Equipment Manufacturer

SOP: Standard Operating Procedure

State of Good Repair (SGR): Defined by 49 U.S.C. Chapter 53 as the "condition in which a [transit asset or] capital asset is able to [safely] operate at a full level of performance." The State of Good Repair is further defined by an asset's Useful Life Benchmark (for rolling stock and equipment) or physical condition (for facilities). Assets are considered in a State of Good Repair when they do not meet or exceed their ULB or physical condition threshold. Vehicle and equipment assets, for example, are considered in a State of Good Repair, when rated as a 2.5 or above on AC Transit's TERM Lite scale, where 2.5 is equivalent to the ULB set for an asset class. Additionally, facilities, are considered in a State of Good Repair when rated as a 3 or above on FTA's TERM scale. Also see definition for Useful Life Benchmark.

TERM Scale: The five category rating system used in the FTA's Transit Economic Requirements Model (TERM) to describe the condition of an asset, where 5 is excellent condition and 1 is poor condition.

Tier I Transit Provider: An entity that receives Federal financial assistance under 49 U.S.C. Chapter 53, either directly from FTA or as a sub recipient, that owns, operates, or manages either (1) one hundred and one (101) or more vehicles in revenue service during peak regular service across all fixed route modes or in any one non-fixed route mode, or (2) rail transit.

Transit Asset Management (TAM): Defined by 49 U.S.C. Chapter 53 as "the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation."

Transit Asset Management Plan (TAM Plan): This document, which describes: the capital asset inventory; condition of inventoried assets; TAM performance measures, targets, and prioritization of investments aligned with the agency's TAM and SGR policy, strategic goals and objectives; as well as the strategies, activities, and resources required for delivering this Plan (including decision support tools and processes); and other agency-wide approaches to continually improve TAM practices. While this TAM Plan exists as a standalone document, LMPs may be considered an extension of the TAM Plan by reference.

Useful Life: Defined by 49 U.S.C. Chapter 53 as "either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA." It generally defines the minimum eligibility for retirement, replacement, or disposal of an asset.

Useful Life Benchmark (ULB): Defined by 49 U.S.C. Chapter 53 as "the expected life cycle or the acceptable period of use in service for a capital asset, as determined by a transit provider, or the default benchmark provided by FTA." The ULB is the realistic expectation for when an asset would be disposed or replaced based on operating environment and procurement timelines. It is not the same as "Useful Life" in FTA grant programs, is reported by age (in years), and usually only pertains to rolling stock or equipment. It is a single number shared for or within specified asset classes, although may vary across different asset classes and providers.

Appendix B: U.S. 49 CFR Compliance Matrix

No:	TAM Reference	Requirement	TAM Plan Compliance
1	49CFR§625.25 (b)(1)	Inventory of the number and type of all capital assets a provider owns, except equipment with an acquisition value under $50,000 that is not a service vehicle.	Capital Inventory for all asset-classes, including assets with an acquisition value greater than $50,000, are presented in Section 4 ASSET INVENTORY of the TAM Plan. Annual changes to the inventory will also be reported in Section 4 in future issues of the TAM Plan.
2	49CFR§625.25 (b)(1)	An inventory must also include third- party owned or jointly procured exclusive-use maintenance facilities, passenger station facilities, administrative facilities, rolling stock, and guideway infrastructure used by a provider in the provision of public transportation.	Ownership of inventory is included in Section 4 ASSET INVENTORY of the TAM Plan, which captures AC Transit - owned inventory.
3	49CFR§625.25 (b)(2)	Condition assessment of those inventoried assets for which a provider has direct capital responsibility and to level of detail to monitor, predict performance of assets, and inform investment prioritization.	The assessed condition of the assets is included in Section 4.2 ASSET CONDITION of the TAM Plan.
4	49CFR§625.25 (b)(3)	Description of analytical processes or decision-support tools to estimate capital investment needs over time and develop its investment prioritization.	Use of tools, asset lifecycle strategies, and approaches to support decision making is described in Section 6 ASSET LIFECYCLE STRATEGIES of the TAM Plan
5	49CFR§625.25 (b)(4)	Project-based prioritization of investments.	The prioritized list of investment projects is set out in Section 7 INVESTMENT PRIORITIZATION AND FUNDING of the TAM Plan.
6	49CFR§625.25 (b)(5)	Provider's TAM and SGR policy.	Transit Asset Management Policy No. 463 is approved by the AC Transit's Board of Directors and is summarized in Section 2 "ASSET MANAGEMENT POLICY of the TAM Plan.
7	49CFR§625.25 (b)(6)	Provider's TAM Plan implementation strategy.	TAM Plan implementation strategy is defined in Section 2 .1 TAM APPROACH AND VISION along with Section 6 ASSET LIFECYCLE STRATEGIES which includes the Lifecycle management activities addressed in the Fleet Management Plan and the Facilities Maintenance Plan. The TAM Plan and the Fleet & Facilities Maintenance Plans will both be monitored and reviewed annually or if needed based on changing environment or business needs.
8	49CFR§625.25 (b)(7)	A description of key TAM activities that a provider intends to engage in over the TAM Plan horizon period.	Section 6 ASSET LIFECYCLE STRATEGIES describes the TAM business process activities. The TAM Plan and Fleet and Facilities Maintenance plans will be revised on an annual basis or as needed in case of operational environment or business condition changes.
9	49CFR§625.25 (b)(8)	A summary or list of the resources, including personnel that a provider needs to develop and carry out the TAM Plan.	Resource and access Plan are defined in Section 1 INTRODUCTION where the TAM Core Team is defined and in Section 7 INVESTMENT PRIOROTIZATION where capital investments are defined.
10	49CFR§625.25 (b)(9)	An outline of how a provider will monitor, update, and evaluate, as needed, it's TAM Plan and related business practices, to ensure the continuous improvement of its TAM practices.	TAM business processes related to TAM Planning and continuous improvement are included in Section 6 ASSET LIFECYCLE STRATEGIES in the TAM Plan.

The following will be considered when developing investment prioritization:			
11	49CFR§625.33 (a)	Include an investment prioritization that includes program of projects to improve or manage the SGR of capital assets for which the provider has direct capital responsibility over the TAM Plan horizon period;	Prioritization of investments, work Plans, cost and budget schedules by year are presented in Section 7 INVESTMENT PRIORITIZATION AND FUNDING in the TAM Plan.
12	49CFR§625.33 (b)	Rank projects to improve or manage the SGR of capital assets in order of priority and anticipated project year;	Prioritization of investments, work Plans, cost and budget schedules by year are presented in Section 7 "7 INVESTMENT PRIORITIZATION AND FUNDING in the TAM Plan.
13	49CFR§625.33 (c)	Ensure project rankings are consistent with its TAM policy and strategies;	The approach to prioritizing projects is set out in Section 6 ASSET LIFECYCLE STRATEGIES and in Section 7 7 INVESTMENT PRIORITIZATION AND FUNDING in the TAM Plan.
14	49 CFR § 625.33 (d)	Give due consideration to state of good repair projects to improve those that pose an identified unacceptable safety risk;	Identification and management of risks are set out in Section 7 7 INVESTMENT PRIORITIZATION AND FUNDING in the TAM Plan.
15	49 CFR § 625.33 (e)	Take into consideration its estimation of funding levels from all available sources that it reasonably expects will be available in each fiscal year during the TAM Plan horizon period; and	Prioritization of investments, work plans, cost and budget schedules by fiscal year are presented in Section 7 INVESTMENT PRIORITIZATION AND FUNDING in the TAM Plan.
16	49 CFR § 625.33 (f)	Take into consideration requirements under 49 CFR 37.161 and 37.163 concerning maintenance of accessible features and the requirements under 49 CFR 37.43 concerning alteration of transportation facilities.	Strategies for maintaining assets are described in Section 6 ASSET LIFECYCLE STRATEGIES and in detail in the Fleet and Facilities Maintenance Plans.
17	49 CFR § 625.55 (a)(1) and (a)(2)	Each provider must submit the following reports: (1) An annual data report to FTA's National Transit Database that reflects the SGR performance targets for the following year and condition information for the provider's public transportation system (2) An annual narrative report to the National Transit Database that provides a description of any change in the condition of the provider's transit system from the previous year and describes the progress made during the year to meet the performance targets set in the previous reporting year."	NTD Reporting requirements are addressed in Section 1.3.4 which outlines the annual data report reflecting SGR Performance Targets for the upcoming year and the Narrative report will provide a description of changes in condition from the prior year.

Appendix C: Asset Class Functions and Elements

Asset Category	Asset Class	Function	Example of Elements
Fleet (Rolling Stock)	Revenue Vehicles	Type of transit vehicle that generates revenue by carrying passengers. These vehicles are typically used for transporting passengers in exchange for fares in modes of public transportation.	Bus service modes include Articulated Bus, Bus, Double Decker Bus, and Over-the-road Bus
	Service Vehicles	Vehicles that are a supporting role in the operation and maintenance of the transit system. The vehicles are essential for ensuring the smooth functioning of the transit network and providing necessary services to passengers.	Service vehicles include maintenance vehicles, utility trucks, repair vehicles, and other similar types of equipment.
Facilities	Administrative	Facility or building used for the administrative functions of a transit agency or organization. These facilities are not directly involved in the revenue-generating aspects of transit services but are crucial for managing and overseeing the operation of the transit system.	Administrative facilities may include offices for management and administrative staff, conference rooms, training rooms, maintenance management areas, dispatch centers, and other spaces dedicated to the planning, coordination, and supervision of transit services.
	Maintenance	Facility or complex dedicated to the maintenance, repair, and servicing of transit vehicles and equipment. These facilities are crucial for ensuring the safety, reliability, and operational efficiency of the transit system.	Maintenance facilities often include various areas and resources such as repair bays, workshops, storage areas, wash bays, maintenance management offices, and service areas.
	Parking	Designated area or structure where transit passengers can park their personal vehicles before using public transportation services.	Parking facilities associated with public transportation include Park-and-Ride Lots, Transit Center Parking, and Parking Garages
	Passenger	Physical space or infrastructure designed to accommodate and serve transit passengers. These facilities are intended to provide a safe, comfortable, and efficient environment for passengers as they wait for, board, or disembark from transit vehicles.	Passenger facilities include Bus Stops and Shelters, Train or Subway Stations, Light Rail Stations, Ferry Terminals, Transit Centers, and Airport People Movers and Terminals
Systems	Vehicle Control & Signaling	Control the movement of vehicles from origin to destination safely and reliably	Includes equipment, hardware and software supporting TSP, communications kits, interlocking switches, wayside and onboard detection and surveillance devices, and cables
	Communications and Control	System control, collection of information, and transfer of data through a communications network	Includes equipment, hardware, and software supporting CAD/AVL, CCTV, PA, Radio, Telephone, and SCADA)
	Revenue Collection	System control, collection of information, and transfer of data for the purposes of collecting passenger revenue	Includes equipment, hardware, and software supporting fare vending machines, fare gates, workstations, servers, switches, and routers
	IT/ Business Applications	System control, information collection, and transfer of data through communications network to support a variety of business applications	Includes equipment, hardware and software supporting enterprise asset management, payroll, crew management, budget, and financial applications