Anaheim Transportation Network

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DATE: MARCH 23, 2022

TO: ATN BOARD OF DIRECTORS

FROM: JIM APPLEBY, DIRECTOR OF OPERATIONS

RE: AGENDA ITEM 9

RECOMMENDATION:

By Resolution No. 2022-002 -- Resolution of the Anaheim Transportation Network authorizing Executive Director Approve to update Fleet Maintenance, Transit Asset Management (TAM) Plans and Zero Emission Bus Transition Plan

DISCUSSION:

The Anaheim Transportation Network (ATN) Board of Directors adopted its Fleet Maintenance Plan in May 2020. The purpose of the Fleet Maintenance Plan is to provide policy and procedures necessary to maintain vehicles, facilities, and equipment in order to provide safe, comfortable, and reliable transportation to our passengers, and effective and efficient service to the community.

The 2022 Fleet Maintenance Plan has been developed to be consistent with and deliver the ATN mission. This Plan addresses:

- Fleet electrification and the replacement of older LNG and LPG units
- Continued maintenance of the fleet to the highest standards to ensure that the fleet is maintained in a State of Good Repair (SGR)
- ATN's capabilities to maintain its facilities and fleet at the highest standards possible
- Fleet numbers reflect the inventory/status of February 1st
- Peak service vehicles reflect the number noted in the January 2022 Board update. 45 peak vehicles
- Update to schedule for full fleet electrification by 2025

The Transit Asset Management Plan (TAM) was first developed during 2017/18, reflecting the reality and maturity of Anaheim Transportation Network (ATN) at this time. The updated plan is based on current asset management best practices, FTA guidance, and locally developed policies that reflect ATN's practical, cost-effective approach to transit asset management.

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As the TAM Plan was developed four primary themes emerged as critical success factors for helping us to achieve our asset management goals:

- Policy - Providing policy direction, ensuring accountability, and committing the resources required for asset management plan implementation, including an effective organizational structure to oversee it.
- People - Establishing an asset management culture, which supports employees through better communication, skills assessment, training, knowledge sharing and succession planning.
- Tools – Providing employees with the systems they need to collect and analyze data relative to asset age, maintenance costs, condition, and performance to support better decision making.
- Business Practices – Developing and implementing processes for improved lifecycle management within each of our major asset classes that will lead to better maintenance practices, extended useful life, a reduction in total lifecycle cost, and improved performance.

The ATN Executive Director has overall responsibility for overseeing the development of asset management plans and procedures, in cooperation with appropriate agency staff, and reporting to the Board of Directors on the status of asset management for the agency. The Executive Director is also known as the "Accountable Executive" with regards to FTA requirements. The Executive Director is also responsible for enforcement of ATN's TAM policy.

The Zero Emission Bus Transition Plan is a new requirement under the Federal Transportation Administration (FTA) for the implementation of the Grants for Buses and Bus Facilities Competitive Program and the Low or No Emission Program. The Bipartisan Infrastructure Law, signed by the President on November 15, 2021, amended the statutory provisions for these programs to include the requirement that any application for projects related to zero-emission vehicles include a Zero-Emission Transition Plan.

A Zero-Emission Transition Plan must, at a minimum:

1. Demonstrate a long-term fleet management plan with a strategy for how the applicant intends to use the current request for resources and future acquisitions.
2. Address the availability of current and future resources to meet costs for the transition and implementation.
3. Consider policy and legislation impacting relevant technologies.
4. Include an evaluation of existing and future facilities and their relationship to the technology transition.
5. Describe the partnership of the applicant with the utility or alternative fuel provider.
6. Examine the impact of the transition on the applicant's current workforce by identifying skill gaps, training needs, and retraining needs of the existing workers of the applicant to operate and maintain zero-emission vehicles and related infrastructure and avoid displacement of the existing workforce

RESOLUTION NO. 2022-002

Resolution of the Anaheim Transportation Network authorizing Executive Director Approve to update Fleet Maintenance, Transit Asset Management Plans and Zero Emission Bus Transition Plan

WHEREAS, the Anaheim Transportation Network ("ATN") is updating its policy documents related to Fleet Maintenance, Transit Asset Maintenance and Zero Emission Bus Transition plans; and

WHEREAS, on December 1, 2021, Federal Transit Administration (FTA) issued a Dear Colleague letter that provides guidance and an update regarding FTA implementation of the grants under the Bus and Bus Facilities Program (49 U.S.C §5339(b)) and Low No Emission program (49 U.S.C §5339(c)).

WHEREAS, The Bipartisan Infrastructure Law, PUL. L. 117-58, signed by President Biden on November 15, 2021, amends statutory provisions for these programs to include requirements that any application for funding of projects related to zero-emission vehicles must include a Zero-Emission Transition Plan; and

WHEREAS, for ATN to be compliant with the Bipartisan Infrastructure Law and maintain its eligibility for the Bus and Bus Facilities Program (49 U.S.C §5339(b)) and Low No Emission program (49 U.S.C §5339(c)), ATN must update its Fleet Maintenance, Transit Asset Maintenance plans and coordinate these plans with the Zero Emission Bus Transition Plan; and

WHEREAS, ATN reviewed and updated Fleet Maintenance, Transit Asset Maintenance plans; and

WHEREAS, ATN is adopting its first Zero Emission Bus Transition Plan; and

WHEREAS, on March 23rd, 2022, a majority of the Board of Directors of ATN approved changes to the updated Fleet Maintenance, Transit Asset Maintenance, and Zero Emission Bus Transition plans and authorized ATN Executive Director to direct implementation of these documents, as appropriate; and

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE ANAHEIM TRANSPORTATION NETWORK DOES HEREBY FIND, RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

ADOPTED, SIGNED and *APPROVED* by the ATN Board of Directors

_____

Fred Brown
Vice Chairman

_____

Diana Kotler
Executive Director

I, Diana Kotler, Executive Director of the Anaheim Transportation Network, DO HEREBY CERTIFY that the foregoing Resolution Number 2022-002 was duly adopted by the Board of Directors at a regular meeting of said Board on the 23rd day of March 2022, and that it was so adopted by the following vote:

AYES:
NOES:
ABSENT:

_____

Diana Kotler
Executive Director
Executive Director

Anaheim Transportation Network – 2022 Fleet Management Plan

Approved by the ATN Board of Directors March, 2022

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RECORD OF REVISIONS

Revision Number	Date	Reason/Action
	March 28, 2013	Fleet Plan approval by ATN Board of Directors
01	November 2, 2014	Assumption of fleet maintenance responsibilities
02	May 25, 2016	Acquisition of zero emission buses and additional LNG buses and Zonar pre-trip system
03	June 24, 2021	Acquisition of Polaris GEM microtransit vehicles and implementation of fleet electrification
04	March 2022	Acquisition of 42 zero emission buses and update on new operations and maintenance facility.

DEFINITION OF TERMS AND ACRONYMS

The following terms and acronyms are used throughout this document:

ARTIC	Anaheim Regional Transportation Intermodal Center
ARC	Anaheim Rapid Connection
ART	Anaheim Resort Transit
ATN	Anaheim Transportation Network
AVL	Automated vehicle locator
APC	Automatic passenger counters
FTA	Federal Transit Administration
FY	Fiscal Year
FMP	Fleet Management Plan
GPS	Global positioning system
HSR	High Speed Rail
MDT	Mobile data terminal
NTD	National Transit Database
OCTA	Orange County Transportation Authority
SGR	State of Good Repair
TDM	Transportation Demand Management

EXECUTIVE SUMMARY

The 2022 Fleet Management Plan (FMP) is the fourth FMP that has been created and used by the Anaheim Transportation Network (ATN). ATN is a private non-profit, quasi-public entity, established by the City of Anaheim and the local business community to specifically serve the transportation needs of The Anaheim Resort®, a 1.75-mile-square area concentrated with high-volume employers and tourist destinations. In 2002, the ATN unveiled its primary public transportation service, Anaheim Resort Transportation (ART). Since that time, there have been three FMPs created to comply with Federal Transit Administration (FTA) Triennial Performance Review requirements. This FMP is updated at an important time in ATN's service history, with the introduction of over forty new electric buses in the past year, the restoration of service in the post-Covid era, and the continued introduction of new technologies into the ATN fleet.

The ATN's mission is to enhance transportation options by delivering reliable and efficient transportation solutions. ATN's commitment to customers consists of integrity, customer service, can-do spirit, communication, and partnerships. The 2022 FMP has been developed to be consistent with and deliver the ATN Mission. This Plan addresses:

1. The final delivery of 42 BYD electric buses into the ATN fleet.
2. Continued maintenance of the fleet to the highest standards to ensure that the fleet is maintained in a State of Good Repair (SGR); and
3. ATN's capabilities to maintain its facilities and fleet at the highest standards possible
4. Construction of new operations and maintenance facilities scheduled for completion in 2023.

The objectives of the 2022 FMP are to properly plan for and carry out competent overall management of ATN's entire revenue vehicle fleet. This goal can be achieved when the entire ATN fleet is consistently in a SGR, which will be achieved by:

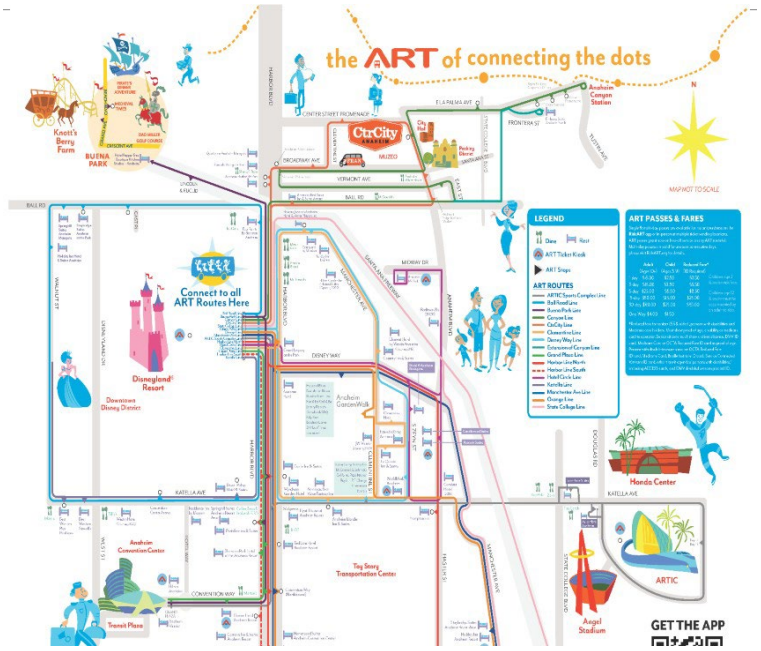
1. Matching fleet size to service requirements;
2. Continually assessing and documenting the status of the revenue fleet;
3. Implementing a five-year plan to timely identify, procure funding and complete life cycle capital investment needs, resulting in the acquisition and retirement of revenue vehicles;
4. Maintaining all facilities and support equipment that support the revenue fleet and service;
5. Continuing an effective preventative and ongoing maintenance program; and
6. Increasing the efficiency and effectiveness of the maintenance program through detailed record keeping and a comprehensive asset management system.

Section I: Introduction

The Anaheim Transportation Network (ATN) was created in 1995 with the mission to provide transportation services to the business community located in the City of Anaheim. The initial services were geared toward facilitation of the Transportation Demand Management (TDM) programs, as well as compliance with the local air quality regulations. In 2002, ATN unveiled its primary service, which was branded as Anaheim Resort Transportation (ART), which initially was intended to provide public transportation services for The Anaheim Resort® District.

Over time, the service has grown to meet customer demand and to extend beyond The Anaheim Resort™ District. During Fiscal Year (FY) 2019-20 the system provides service on 21 routes and serves an annual base of over 9.5 million passengers. To meet service demand ATN utilizes 45 revenue buses in peak revenue service, serving 80 bus stops and providing on average over 20,000 daily trips. All buses within the ATN fleet are accessible to people with disabilities, and include wheelchair lifts, the provision auditory stop and visual announcements that indicate to passengers' upcoming stops. Please refer to Exhibit 1-1, which depicts the current ART service area. Detailed route-by-route service information can be found on the ART website.

Exhibit 1-1 ART Service Area



As depicted in Exhibit 1-1, the ART network provides public transportation throughout the cities of Anaheim and Buena Park, as well as major destinations in the Cities of Costa Mesa, Garden Grove, and Orange. Within The Anaheim Resort® service area, more than 12% of daily event centers' attendees use ART transportation services providing a low-cost and flexible service by transporting a large volume of passengers in a cost effective and sustainable manner.

As the 10th largest city in California, Anaheim has a population of 350,000 and is located in the heart of the greater Los Angeles area (population: 18.5 million). The City of Anaheim hosts over 25 million visitors per year, rivaling tourist destinations such as Boston and Washington, D.C. One impact of the area tourism is the employment opportunities that it brings - the Disneyland® Resort alone is the largest employer in all of Orange County, employing more than 29,000 people. When the tourist impact is coupled with the employee transportation traveling in and out of this small dense area of 1.75 square miles, the result is tremendous traffic congestion that is an air quality hot spot. ART service provides much needed transportation opportunities to the professional, college students and minorities in this highly congested area.

ART service connects 72 area employment establishments with local destinations and attractions, providing vital transportation alternatives to residents, employees and visitors. The destination and employment draw within this area, includes:

- Disneyland® Resort
- Outlets at Orange
- Disney's® California Adventure
- Christ's Cathedral
- Downtown Disney® District
- Anaheim Convention Center (the largest, most-visited convention center on the West Coast)
- Honda Center (home to National Hockey League's Anaheim Ducks and site of numerous concerts and sporting events)
- Angel Stadium (home of Major League Baseball's Los Angeles Angels of Anaheim)
- Anaheim GardenWalk (encompassing retail and restaurants)
- Platinum Triangle (a mixed-use residential and commercial area surrounding Angel Stadium, Honda Center and The Grove of Anaheim)

The opening of the region's newest multimodal transportation center (ARTIC) has created a new hub for intercity/county service, including transit connections to Metrolink, Amtrak, Orange County Transportation Authority (OCTA) buses, shuttles, taxis, tour/charter buses, and will ultimately provide a stop to California's High Speed Rail (HSR) system. Riders that disembark from ARTIC multimodal services can hop on an ART bus and travel seamlessly to the Resort area, the Platinum Triangle and connect to many of the destinations described above.

Section II: Service Needs

The ATN service plan has been developed on the increasing demands for service and continued economic development in the area. Fleet growth to 67 vehicles was achieved with the adoption of an all new on-demand microtransit service in Center City Anaheim. These Polaris GEM low-speed vehicles arestreet legal on streets with a speed limit of 35MPH or less. These all electric units provide emission free on-demand service throughout a 2 square mile area of downtown Anaheim known as Center City.

ATN has enacted a plan known as Electrify Anaheim to move the entire ATN fleet to all zero-emission technology. This process began in 2019 with the orders for 42 BYD battery electric buses. By the end of FY ’22 all of these vehicles will be in service. This allowed the retirement of the entire fleet consisting of LNG and LPG units.

ATN employs a comprehensive technology system to measure on street performance and service, includes the following components:

1. Automated Vehicle Locators (AVL),
2. Global Positioning System devices (GPS),
3. Mobile Data Terminals (MDTs),
4. Radio communication,
5. Onboard cameras,
6. Pre- and Post-trip real-time technologies with passenger counting, and
7. Touchless Fare collection technology system.

Section III: Revenue Fleet Parameters

The ATN operates services from its main facility in the City of Anaheim where all buses are maintained, repaired, fueled, cleaned and dispatched. Based on the franchise agreement between the ATN and the City of Anaheim, the ATN is required to maintain its bus fleet up to its useful life as identified by the federal regulations, more specifically FTA Circular 5010.1E (as amended July 16, 2018).

The following subsections describe in detail the current ATN fleet and the fleets various parameters and components. Refer to Appendix A "Revenue Fleet Summary" which identifies the ATN revenue fleet in detail, including the date each vehicle was placed into service, miles as of February 1, 2022 and other information specific to each vehicle.

1. Vehicle Age

Exhibit 3-1 identifies the percentage of the ATN's fleet that is, or will soon be one or more years beyond ATN's retirement minimum as outlined in FTA Circular 5010.1E. By the end of Fiscal Year 2022 (FY22), approximately 27% (18 units) of the current fleet will be past service-life retirement for vehicle age. With current funding and buses on order, this number will be reduced to 23% by the spring of 2022. ATN is committed to the further electrification of the fleet to achieve a 100% zero-emission fleet by 2025.

Exhibit 3-1 ATN Vehicles Past Retirement Minimum for Age

# of Vehicles	Series & Fuel Type	In Service Date	End of Useful Life	Status
18	Glaval/CNG	October 2012	October 2021	Cut-Away CNG Fleet

2. Vehicle Miles

In addition to fleet availability, ATN monitors closely fleet mileage. At an average rate of 14,789 miles per year, ATN fleet vehicles eclipse minimum service-life requirement of 185,000 miles in 6 years. Exhibit 3-2 provides a summary of the accumulation of vehicles mileage surpassing ATN minimum service-life requirement for vehicle miles.

Exhibit 3-2 ATN Vehicles Past Retirement Minimum for Miles

# of Vehicles	Series & Fuel Type	AVG. Current Mileage	Average Projected Mileage (FY 2023)
18	Glaval/CNG	188,971	200,309

3. The Fleet – Peak and Spare Vehicles

The FY 2021-21 active revenue fleet of buses consists of 67 vehicles of which 45 vehicles are used for peak service and 22 spares (ratio of 33%).

Exhibit 3-3 Summary of Peak and Spare Vehicle

Fleet Description as of February 1, 2022	#	Comments
Peak Fleet Requirement	45	Current Peak Service Needs
# of Spares	22	
Total Fleet	67	
Replacement Needs over three-year period	21	18 2012 Glaval and 3 ENC EZ Rider buses
Anticipated Vehicles Funded	5	Arrival Buses
Remaining Shortfall	16	

In order to ensure system reliability, ATN retains an adequate number of spare vehicles that are maintained and available for service. The spare ratio is calculated by dividing the number of spare vehicles by the total number of vehicles required during peak service. The total number of vehicles required to meet ridership demand for FY2021-22 is 45 vehicles at peak service demand times. The peak and spare fleet are identified in Appendix A, demonstrating the current spare ratio of 33%.

4. Fleet Demand and Supply Balance

As discussed in the foregoing Sections, this Plan is a snapshot of an ongoing planning process. It takes into account the passenger demand for vehicles in revenue service, and demand that is placed on the fleet by system expansion and maintenance requirements. This Section compares the network growth and maintenance needs to the supply of vehicles in both the present fleet and the anticipated new vehicle purchases.

Retirement of buses is based on first the vehicles meeting FTA's useful life/mileage requirements, then based on the availability of grant funding sources. Without availability of grant funding, buses that exceed useful life shall be used to serve in the fleet as either peak vehicles or to meet spare ratio requirements.

5. Growth in Fleet Demand

This Plan assumes a constant rate of growth for surface transportation. With the introduction of ARTIC, as well as other planned surface transportation projects such as Anaheim Rapid Connection (ARC) and HSR, there has and will be an additional increased demand on transit services. Even though projects like ARC have a potential to absorb some demand, potentially moderately reducing demand along some corridors, demand on other corridors may increase as a result of a need to "feed" into the ARC system and/or provide additional transportation services due to the increases in densities and future development projects.

6. Growth in Fleet Supply

By the end of FY '22, the ATN will have placed into service forty-two zero emission BYD Buses that were funded by the State of California TRCIP Program. This funding for zero emissionbuses is was used to replace the aging NABI LNG fleet.

ATN has ordered five Arrival electric buses that are scheduled for delivery in 2023. These vehicles will replace the last CNG buses and allow for fleet expansion.

Section IV: Facilities

In May of 2014, ATN moved its operations to the current combined facility at 1354 South Anaheim Boulevard, Anaheim California 92805 (known throughout the FMP as the Base Facility). ATN is the owner and operator of this Facility and has full control and access to all buildings, bus yard and fueling. The Base is centrally located in the middle of ATN's service territory, and has the following characteristics:

Base Facility – 1354 South Anaheim Boulevard

Characteristics	Measure
Site Acreage	1.90 Acres
Building Sq. Footage	10,213 Sq. Ft
Maintenance Bay Capacity	3 Vehicles
Lifts or other major features within Bays	2 Lifts
Revenue Vehicle Parking Capacity	10 Spaces
Employee/Contract Staff Parking Capacity	46/2 disable Spaces
Visitor Parking Capacity	4/2 Disable Spaces
# of Simultaneous Fueling Dispensers	2

A satellite parking facility to accommodate additional bus parking overflow is located adjacent to the ATN's main administrative facility, at 1280 South Anaheim Boulevard, Anaheim California 92805. This facility is leased on a month-to-month basis from the City of Anaheim. Refer to Exhibit 4-1, which provides an aerial view of both facilities.

Parking Facility – 1280 South Anaheim Boulevard

Characteristics	Measure
Site Acreage	1.80 Acres
Building Sq. Footage	3,500 Sq. Ft
Maintenance Bay Capacity	None
Lifts or other major features within Bays	None
Revenue Vehicle Parking Capacity	80 Spaces
Employee/Contract Staff Parking Capacity	60/2 disable Spaces
Visitor Parking Capacity	0/0 Disable Spaces
# of Simultaneous Fueling Dispensers	None

Other Base features:

1. Administrative Building was built in 1963 and improvements since ATN took possession, include:
    a. Administrative office space of 10,213 square feet, including six offices, reception area, restrooms, conference rooms, lunch/break room for employees, locker room, training classroom assignment boards, cash counting room and operator break room
    b. Dispatch Office
    c. Daily preventative maintenance activities
    d. Heavy repair services which consist of a full chassis and hoist

e. Cash fares are removed weekly. Refer to ATN Finance Policy and Accounting Procedures for cash processing and accountability process
f. Cameras are located throughout the facility and are monitored 24/7 at an off-sire contractor facility as well as on ATN premises. Refer to ATN Security Procedures.

ATN has made considerable investment in buildings, equipment, and machinery. As with vehicle maintenance, the proper maintenance of facilities, machinery, and equipment is key to protecting investments and prolonging the useful life of each and every asset. The ATN facility maintenance program includes:

1. Identifying responsible staff for the facility and equipment maintenance
2. A series of inspections and routine maintenance actions designed to ensure proper care and maximize useful service life of facilities and equipment
3. A record-keeping system that maintains adequate permanent records of maintenance and inspection activity for buildings and equipment

Exhibit 4-1 Aerial View of ATN Facility and Satellite Parking

The facility/equipment maintenance program ensures that these mission critical assets are maintained and operate in a safe manner, and are inspected periodically. This includes the following assets:

1. Buildings
2. Parking lots
3. Vehicle maintenance lifts
4. Heating and/or air conditioning units
5. Security equipment

The total staff compliment (ATN employees and contract staff) that is at the Base Facility on an average day, is approximately 100 employees. These staff are categorized into three areas: A. Administrative, B. Operators and C. Maintenance. Each category is described further below.

A. **Administration** consists of eighteen staff and these functions/positions are provided at the Administration Building within the Bas Facility:

1. Executive Director
2. Finance & Procurement
3. Human Resources
4. Transportation Operations, Planning & Scheduling
5. Customer Relations & Marketing
6. Dispatch
7. Management Information Systems (MIS)
8. Transportation Operations

B. **Operators** consist of approximately 80 contract employees through a contractual relationship with Parking Company of America. Operators utilize the Administration Building to review their assignments, utilize the training and break room, payroll and other human resource functions and discuss assignments with Supervisors and Dispatch.

C. **Maintenance** staff consists of 16 ATN employees. They utilize the following buildings to complete their assignments:

1. Administration Building to utilize the lockers, break room, human resource functions, dispatch, server/computer room and all other administrative.
2. The Maintenance Garage accommodates the following functions:
    a. Heavy Repair
    b. Unit Repair has a multitude of operations including: transmissions rebuilds, battery test and storage, power steering and drive shafts, starters and trans coolers, AC-repair parts cage, brakes, axels, bodywork, sheet metal, non-revenue service area, wheel alignment bay, parts, fluids storage and support space. Many of their services are location and proximity sensitive in order to service the adjacent heavy repair facility
    c. Inventory/storage – services as the main “intake” for deliveries and on site supplies. From there supplies and equipment are delivered and stocked as required. It also services s the repack and return area for parts, which are returned or shipped back.
    d. Office Space
    e. Tires – Tire lease contract with Michelin provide tires and services for the fleet. ATN staff manages aspects of tire program: new, carcass, retread, and reject disposal), rims (new, refurbished, and recycling), and repairs.
    f. Batteries
    g. Radio/com repair or storage
    h. Building/facility office or closet – janitorial, computers, operations

Section V: Maintenance Program

ATN's maintenance program follows FTA requirements and protocols, including, but not limited to Circulars 4220.1F, 5010.1E and 9030.1E. Based on FTA guidance and industry standards, the ATN Maintenance Policy and Procedures were adopted in May 2013 and updated in June 2020 (Appendix B). As such, ATN staff at the Base Facility provides daily and preventative maintenance, as well as heavy-duty repairs to keep the fleet and assets in a State of Good Repair. The ATN contracts with Parking Corporation of America, to provide operators for all ART services. ATN is also a member of the Southern California Regional Transit Training Consortium (SCRTTC).

Preventive Maintenance Inspections (PMI), running repairs and major repairs for out of service vehicles all take place at the Base Facility. As mentioned in Section IV, the Maintenance Department consists of 16 ATN employees, including supervisors, which equates to a ratio of one technician to eleven buses.

The maintenance program monitors and ensures enforcement and monitoring of the following critical maintenance components:

1. Preventive Maintenance standards
2. Driver Vehicle Defect Report
3. Quick resolution of Standard Repair Times (SRT)
4. Supervision of all mechanics;
5. Inventory and purchasing activities
6. Training
7. Quality Assurance (QA)
8. Cleaning and servicing of vehicles
9. General housekeeping

The Preventive Maintenance Plan includes:

1. Drivers' Pre-trip and Post-trip Inspections where the Drivers prepare and submit a report, which triggers Maintenance to quickly address a vehicle shortfall/issue.
2. A Preventive maintenance/safety inspection performed every 3,000 miles +/- 300 miles within 30 days, whichever occurs first. In addition, all maintenance work shall conform, but not be limited to, the requirements of Title 13, Article 6, of the California Vehicle Code. Inspection shall be based upon manufacturers' guidelines for preventive maintenance; with repair of all inspection identified shortfalls and engine tune up requirements.
3. Maintenance will annually complete a campaign for the heating/ventilation, air conditioning (HVAC) system. This program will be based on age and during the prior quarter to ensure fleet readiness for upcoming weather driven seasonal demands.
4. QA process, undertaken by Supervisor(s) to monitor and inspect repairs, as well as to identify any shortfalls and training requirements recommended by manufacturers. This Supervisors monitor work to ensure a consistent level of performance, a high and consistent level of product reliability, as well as consistent documentation by all mechanics.

Maintenance Training – ATN maintains a System of Maintenance Training and Qualification specific to the nature and complexity of each maintenance operation, inspection, or test requirement. The basic training approach used by ATN is supervised on-the-job training assisted by experienced/qualified personnel to provide a "buddy system" of training. Training is typically performed with the same equipment and tools used in the normal maintenance environment. The use of training aids, such as films, photographs and demonstrations of equipment and tools, is typical.

Procurement and Qualification – ATN maintains a system that ensures economical control and conformance to detailed technical and quality requirements of purchased materials (direct and critical indirect) and by providing the following services:

1. Documented instructions for material evaluation, procedures, flow, workmanship standards, test methods and statistical sampling
2. Incoming inspection of parts and materials
3. Identification and segregation of qualified and nonconforming material
4. Vendor qualification and ongoing vendor performance appraisal
5. Feedback of inspection results to suppliers
6. Formal review for disposition of nonconforming materials

Mechanical service calls/road calls (major systems failures) will address the following:

1. Heating systems
2. Electrical/charging
3. Lights (interior/exterior)
4. Air Systems
5. Engine
6. Air intake/fuel exhaust
7. Cooling system
8. Transmission
9. Wheels/Axles
10. Steering
11. Brakes
12. Suspension system
13. Doors
14. Misc. (wiper, panels, visors)

Non-mechanical service calls (minor system failures) will address the following:

1. Fareboxes
2. Trim
3. Destination signs
4. Unsanitary conditions
5. Air Conditioning
6. Accident
7. Tires
8. Lifts/Ramps
9. Low on fuel/power
10. Low on water
11. Radio
12. AVL/GPS
13. Weather related
14. Misc. - mirrors, vandalism, etc.
15. Out of Coolants

ATN has developed a plan to increase the useful life and efficiency of the fleet. The following goals/actions are tied to the improving the statistics/data tied to the Key Maintenance Performance Indicators:

1. **PM Inspections:** Inspect and write-up the defects within zero – 3 hours and complete the basic PM on all minor repairs within three to four hours after write-up. Schedule and continue the major repairs after the minor repairs are completed on each bus, to include electrical/electronic components, A/C/HVAC, ramps/lifts, destination signs, farebox, radios and body paintwork.
2. **Review Vehicle Defect Cards:** Review vehicle defects/discrepancies as reported by the Drivers, inspect all defects within one-half an hour and schedule weekly brake inspections (every 3,000 miles).
3. **Maintain separate files for the following:** PM files, work order files, accident repair files and registration/insurance.
4. **Garage/Bay management:** Mechanics and supervisors will be held accountable for allrepairs in the garages/bay and will monitor all work performed by the mechanics including the SRTs.
5. **Inventory:** Maintain current paid status on all vendors, set up new accounts as soon as the need is identified. Avoid exceeding net payable timeframes. Accounts payable staff should communicate status with vendor of any payable outside of net paid timeframe. Garages have the data and software tools for predictive analysis and forecast of parts and labor required based on data from maintenance system. Develop a list of fast moving parts and kits for Preventive Maintenance Inspections and meet with accounting staff on a weekly basis to expedite critical processes, unexpected conditions, and check on orders and payment statuses.
6. **Maintenance Training:** Develop/upgrade the training curriculum for the mechanics. Develop training curriculum for the garage supervisors. Develop training curriculum for new supervisors. Develop training curriculum for the Dispatchers and Road Supervisors
7. **Quality Assurance:** Monitor Service Call Report monthly to reduce major fleet defects. Conduct random audits of PMI, Running Repair, and the Cleaning and Service of buses.
8. **Cleaning/Bus Wash:** Stock the proper supplies to clean and service the buses on a daily basis. Cleaning and Service crew will thoroughly clean the entire fleet of buses every 90 days. This includes the interior, tires exterior, engine compartment, and windows.
9. **Tire Contracts:** Ensure that the contractor is in compliance with their proposal (track and monitor all work invoiced and completed by the contractor).
10. **General Housekeeping:** Identify all obsolete parts and materials and discard. Remove obsolete parts from the facilities and Unit Repair Shop. Remove unused containers. Remove accumulations of combustibles (boxes, skids, and scrap).

Section VI: Plan Update Process and Action Plan

This action plan is a living document and will be updated with input from the Maintenance Department staff and CEO as the program evolves. Appendix C contains a sample of some of the Performance Measures that are currently being tracked within ATN.

The ATN Maintenance Department uses ***ManagerPlus***, a computerized maintenance management system (CMMS). The system tracks maintenance activities, manages inventory, analyzes maintenance staff productivity, schedules maintenance, and generates Key Performance Indicators (KPIs) that allows ATN managers to monitor the success of the maintenance program.

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ATN maintains several contracts to support Vehicle Maintenance and Operations. A list of these contracts is included in Appendix D.

The 2022 ATN Fleet Maintenance Plan is a strategic document that provides an outlook for fleet growth, fleet maintenance and facility support. This Plan will be updated on as needed basis to ensureconsistency with the local developments and changing funding availability. As a "living document", the Plan will be updated to reflect the progress that ATN achieves with its fleet replacement, electric bus expansion and other improvements described herein.

The following events may trigger the revision and the reissue of the FMP:

1. Significant modifications requested by regulatory agencies
2. Major changes in service levels, vehicle maintenance plan, fleet composition, bus spare ratio or funding scenarios; and/or
3. Audit recommendations.

In addition to the events listed above, the Plan could be updated if the following items so require:

1. Work rules, job description, and other personnel related matters
2. Training needs/updates – fuels, liquid storage/dispensing, and other training related matters
3. Revisions to policies and/or procedures
4. Software/record keeping – changes and updates to ***ManagerPlus*** software, integration and deployment of pre- and post-check software
5. Part inventory and storage
6. Permits from City of Anaheim and related facility improvements
7. Bus/fleet scrapping, auctioning and/or replacement
8. New contracts/procurements
9. Fence, pit, fueling station repairs
10. Onboard vehicle security
11. Additional Facility Security

Appendix A-Revenue Fleet Summary

Asset Category	Class	Subfleet	Model	County	Vehicle #	Asset owner	Year	Age	Miles	Pst ULB	Condition Assessment
Revenue Vehicles		2012 Glaval	Entourage	1	1201	ATN	2012	10	180,895	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1202	ATN	2012	10	184,756	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1203	ATN	2012	10	225,991	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1204	ATN	2012	10	230,982	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1205	ATN	2012	10	151,011	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1206	ATN	2012	10	195,159	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1207	ATN	2012	10	202,557	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1208	ATN	2012	10	188,349	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1209	ATN	2012	10	203,507	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1210	ATN	2012	10	201,686	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1211	ATN	2012	10	174,745	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1212	ATN	2012	10	193,733	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1213	ATN	2012	10	205,029	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1214	ATN	2012	10	200,746	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1215	ATN	2012	10	170,737	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1216	ATN	2012	10	166,401	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1217	ATN	2012	10	144,860	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1218	ATN	2012	10	180,337	Y	3-Adequate
Revenue Vehicles		2013 El Dorado	EZ Rider Low Floor	1	1219	ATN	2013	9	218,683	N	4-Good
Revenue Vehicles		2013 El Dorado	EZ Rider Low Floor	1	1220	ATN	2013	9	224,632	N	4-Good
Revenue Vehicles		2013 El Dorado	EZ Rider Low Floor	1	1221	ATN	2013	9	216,367	N	4-Good
Revenue Vehicles		2020 BYD	K7M	1	3001	ATN	2020	2	40,028	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3002	ATN	2020	2	38,126	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3003	ATN	2020	2	22,686	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3004	ATN	2020	2	19,695	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3005	ATN	2020	2	25,219	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3006	ATN	2020	2	21,618	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3007	ATN	2020	2	22,348	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3008	ATN	2020	2	20,798	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3009	ATN	2020	2	18,089	N	5-Excellent

Asset Category	Class	Subfleet	Model	County	Vehicle #	Asset owner	Year	Age	Miles	Pst ULB	Condition Assessment
Revenue Vehicles		2020 BYD	K7M	1	3010	ATN	2020	2	17,802	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3011	ATN	2020	2	16,479	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3012	ATN	2020	2	17,634	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4001	ATN	2020	2	18,543	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4002	ATN	2020	2	16,292	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4003	ATN	2020	2	22,008	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4004	ATN	2020	2	18,618	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4005	ATN	2020	2	18,633	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4006	ATN	2020	2	19,154	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4007	ATN	2020	2	8,499	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4008	ATN	2020	2	17,581	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4009	ATN	2020	2	18,900	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4010	ATN	2020	2	17,573	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4011	ATN	2020	2	15,577	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4012	ATN	2020	2	13,818	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4013	ATN	2020	2	14,641	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4014	ATN	2020	2	13,217	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4015	ATN	2020	2	16,654	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4016	ATN	2020	2	16,080	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4017	ATN	2020	2	16,327	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4018	ATN	2020	2	15,890	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4019	ATN	2020	2	16,555	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4020	ATN	2020	2	14,111	N	5-Excellent
Revenue Vehicles		2016 BYD	K9A	1	13291	ATN	2016	6	78,391	N	4-Good
Revenue Vehicles		2016 BYD	K9A	1	13292	ATN	2016	6	69,812	N	4-Good
Revenue Vehicles		2016 BYD	K9A	1	13293	ATN	2016	6	38,775	N	4-Good
Revenue Vehicles		2016 BYD	K9A	1	13294	ATN	2016	6	44,718	N	4-Good

Asset Category	Class	Subfleet	Model	County	Vehicle #	Asset owner	Year	Age	Miles	Pst ULB	Condition Assessment
Revenue Vehicles		GEM e6	GEM e6	1	GO1	ATN	2018	4	2,800	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G02	ATN	2018	4	9,940	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G03	ATN	2018	4	7,986	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G04	ATN	2018	4	10,089	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G05	ATN	2018	4	3,768	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G06	ATN	2018	4	6,736	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G07	ATN	2018	4	6,320	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G08	ATN	2018	4	2,786	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G09	ATN	2018	4	641	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G10	ATN	2018	4	1,045	N	5-Excellent

MAINTENANCE POLICIES AND PROCEDURES

Adopted: March 2022

1. FLEET AND MAINTENANCE GENERAL REQUIREMENTS

a. The ATN will be responsible to ensure that all vehicle work is performed in accordance with the warranty conditions.
b. When not in service, all vehicles will be stored in a secure area.
c. The fleet vehicles shall not be used on any other service other than ART service.

2. MAINTENANCE OF FLEET VEHICLES

a. Through an approved preventive maintenance program, the ATN shall cause all components of each fleet vehicle including its body, frame, furnishing, mechanical, electric, and hydraulic or other operating systems, to be maintained in proper working condition free from damage and malfunction. Any significant vehicle damage caused in any accident or otherwise shall require the ATN to immediately repair such damage, which is determined to impair safe mechanical operation of the vehicle.
b. No fleet vehicle shall be operated in ART service that has body, paint, or interior damage unless special permission has been granted by the ATN due to extraordinary circumstances.
c. The ATN shall maintain stores of lubricants, parts, decals, and all other supplies required for the maintenance, repair and operation of all vehicles utilized in ART service. Define where stored, and who is responsible for inventory, and distributing.
d. The ATN shall be required to negotiate and process all vehicle warranty claims through the manufacturer's own warranty department, and is responsible for collection of any monies, extended warranties, or credits for the length of time the warranty is in effect.
e. Any new vehicles procured for ART service by the ATN will be equipped with new ATN-owned tires. The ATN shall be required to provide subsequent tires and wheels. The ATN will furnish and maintain tubes and tires for all vehicles utilized at any time during the term of this Agreement.
f. The ATN shall dispatch a spare vehicle in the event of a vehicle breakdown or accident. A spare vehicle must have exterior marking consistent with the vehicle design, coloration, and signage approved for The Anaheim Resort®. The maximum response time from the moment a trouble call is received until a substitute vehicle arrives shall be established by the ATN.
g. The ATN shall be responsible for keeping a vehicle file by vehicle number, documenting all vehicle maintenance to include Preventive Maintenance (PM), scheduled maintenance and inspections, parts usage, unscheduled maintenance, energy usage, and labor expended on each vehicle. The ATN is responsible for keeping the vehicle file current.
h. The ATN shall be responsible to ensure that a vehicle defect report is completed daily by the driver on each vehicle prior to daily service and at the conclusion of service if there is any change in the vehicle condition the change is reported to the Supervisor on duty.
i. The ATN shall conduct inspections of any vehicle in order to determine compliance with appropriate service and maintenance requirements. The ATN shall immediately remove from operation and shall repair, clean, or take any other reasonable action requested by the ATN in order to cause such vehicle to be in compliance herewith. The ATN will establish procedures for the initial inspection and acceptance of all vehicles.

j. On duty Maintenance Supervisor maintains fleet status board which is posted in the shop where the vehicles are maintained. The status board shall contain, but not limited to, the following:

1. Beginning odometer
2. Vehicle mileage
3. Date, type and mileage of last PM
4. Date and mileage of previous PM
5. PM Interval
6. Mileage since last PM

k. The ATN shall follow a maintenance program. The maintenance program shall meet or exceed manufacturer's recommendations or specified guidelines, including all add-on equipment installed by a second stage manufacturer. Preventive maintenance/safety inspection must be performed every 3,000 miles +/- 300 miles or 30 days, whichever occurs first. In addition, all maintenance work shall conform, but not be limited to, the requirements of Title 13, Article 6, of the California Vehicle Code.

l. The ATN shall perform any required maintenance to ensure constant display operation of all revenue service vehicle destination signs.

m. The ATN shall maintain all decals applied to the surface of the vehicles. This shall include new, redesigned decals (produced by the ATN) and decals worn, torn, or faded due to an accident or daily wear and tear.

n. All painted surfaces shall be in good condition. Normal wear and tear to the finish is to be expected, but paint is to be maintained at a high level of finish as the ATN wishes to present the best possible image to the public. All painted surfaces shall be free from graffiti and scratches, and there shall be no perceivable difference in glass or shades of individual colors.

o. The ATN shall maintain all wheels in a clean and presentable condition. This is to include, but not limited to, cleaning and painting of wheels and wheel hubs in an even appearance as to leave no runs, drips, fogged painting, or overspray. No vehicle is to be in revenue service or in ready status with dirty, unpainted, or improperly painted wheels:

1. Spare wheels are to be maintained and ready to install on a vehicle in a clean and freshly painted or polished appearance on both the inside and outside of the wheel.
2. Aluminum wheels shall be maintained in a polished condition, free from dirt and oxidation.
3. The ATN is granting the ATN permission to install aluminum wheels in place of painted wheels, at ATN's expense, to remove the need for painting and maintain an evenly painted wheel.

p. The ATN shall maintain sufficient supplies of replacement glass to replace broken, scratched, or graffitied windows without affecting revenue operations. No vehicle shall be placed into service with graffiti etched into surface of any window glass or be operated with any cracks in the window. Batteries shall be washed with moderate pressure water jets. High-pressure water jets of hot or cold water with detergent is appropriate for electric machinery.

3. FLEET VEHICLE CLEANLINESS

a. The ATN shall cause, on a regularly scheduled basis, each vehicle to be maintained in a clean condition throughout, both interior and exterior. The ATN shall ensure the cleanliness of each vehicle prior to the commencement of each service day. The exterior of each vehicle shall be kept clean from road dust, mud, tar, grime, and graffiti. The ATN will contract with a Vehicle Cleaning Vendor to ensure the vehicle exteriors shall be washed at least once during each week of service and within twenty-four (24) hours after each rainfall or any other condition affecting vehicles' exterior appearance.

b. The interior of each vehicle will be thoroughly cleaned daily. This complete cleaning shall include, but not be limited to, ceiling, walls, area behind seats, floors, driver area, ancillary equipment, and windows. Seats should be cleaned regularly, and marks and stains removed promptly. Seats that are worn, excessively stained, or torn should be replaced. The interior shall be maintained free from any vermin at all times. The ATN is expressly prohibited from using any vermin control products or application procedure for such project that would be hazardous to the health and wellbeing of the passengers and drivers of such vehicle. The interior passenger compartment of each vehicle shall be free of noxious odors from cleaning product and vermin control products. Any vehicle found by the ATN not in compliance with these cleaning provisions will be removed from service immediately. Once all required actions have been completed by the ATN to correct any deficiencies found within this provision, the ATN must inspect and approve all actions taken prior to the vehicle being eligible for use in scheduled service.

c. The ATN shall remove all graffiti from the vehicle has soon as it is found, or as soon as it is practical at the end of the day or before it goes in service the next day. If the graffiti is offensive or vulgar and cannot be removed, that vehicle shall be taken out of service immediately. No vehicle shall start revenue service with graffiti on any surface of the vehicle. If graffiti is etched or scratched into glass or insert, that glass or insert must be repaired or replaced before the vehicle is placed back into revenue service. Careful painting of the window frames will be allowed if overspray to surrounding surfaces is prevented.

4. GENERAL REPAIRS

a. The ATN shall provide as required all general repairs to vehicles.

b. The ATN will obtain original equipment manufacturer (OEM) parts and supplies.

c. As a result of vehicle repairs, the ATN shall ensure that all re-assembly tasks are performed in such a manner that the vehicle remains in the OEM configuration as it was received. This includes, but is not limited to, wiring configuration and clamping, power train components, and body assembly. No variation or vehicle system modifications will be allowed without the written authorization from the ATN.

d. All vehicle repairs shall be performed by competent repair facilities, which are capable of repairing the vehicle back to its original configuration, appearance, and structural integrity.

e. All repair work must be performed by maintenance personnel who have demonstrated experience and skills in the work to be performed. All mechanics must possess a valid and current ASE certification in all relevant categories pertinent to the mechanic's duties, including preventive maintenance inspections, within twelve (12) months of beginning maintenance work on the vehicles. The ATN's maintenance personnel will have knowledge of and certification in diagnostic procedures, electrical systems, brake systems, and related mechanical parts, methods, and

procedures normally used in servicing mechanical equipment for transit vehicles and over the road coaches. The qualifications of technicians must appear on the proposed Vehicle Maintenance Program and be verifiable to the ATN's satisfaction

5. RADIO AND SMART COMMUNICATIONS SYSTEM

a. The ATN shall provide and install a radio communications system that will allow for timely and efficient dispatching, coordinating, and responding to necessary service calls. The system may be of the ATN's choice but must include the necessary performance elements of the system. Each Fleet Vehicle, as well as each administrative vehicle, shall have a receiver/transmitter installed and operational. In addition, hand-held mobile units shall be provided for all street supervisors, vehicles with temporarily inoperative radios, and other personnel, as needed.
b. The radio system is to be used for operational purposes only.
c. Vehicles will not be operated in ART service without a functioning radio in the vehicle. ATN shall at all times have operating hand-held radios or other communication devices available for distribution to drivers whose vehicle communication systems are inoperative. If a radio fails while in service, the driver shall notify the dispatcher by landline or through another driver, and a hand-held radio shall be dispatched to the driver without delay.

6. REPORTS

a. The Maintenance Manager, in accordance with the established reporting schedule, will prepare all maintenance reports.
b. A Monthly Service Evaluation Report shall be prepared within ten (10) working days after end the end of each month summarizing key service quality measures by route. This report shall be consistent with the information contained in the operating and maintenance performance reports.
c. Road Call/Missed Trip/Incident Report.
d. A Monthly Preventive Maintenance (PM) Report shall be prepared by the end of each month indicating the date and mileage when the last PM was performed for each vehicle, and what type of PM (e.g. "A," "B," LOF, Brake Inspection, HVAC Inspection, etc.) was performed. This report shall match the ATN's maintenance records.
e. A Daily Pre-Trip Inspection Report shall be completed by an operations supervisor at the beginning of service each day.
f. The ATN shall maintain records on a daily basis, for the Vehicle Defect Report indicating the status of all vehicles. The report must also include the repairs necessary to return the vehicle into service and the estimated time/date the repairs will be completed. The report shall be updated throughout the service day should subsequent defects be found.
g. An accident report shall be prepared by the Contractor and transmitted via facsimile or email to the ATN within 24 hours of each accident involving a contracted vehicle. Any major accident involving injuries or significant damage to vehicles shall be immediately reported (regardless of hour or day) through direct person-to-person contact, by telephone or by facsimile, following written summary of the accident/incident.
h. The ATN will prepare data consistent with and necessary for the submission of the annual report as required by the FTA's National Transit Database (NTD) Section 5307 Program, as currently constituted and as amended from time to time.

Appendix C Preventive Maintenance Checklist

BYD Electric Drive Bus Inspection/Follow Up Sheet							Date	/ /	
	Bus #:			Work Order:			Mileage		
Section A:	**Driver Area Inspection**								
Supervisor Q.C.:					Time:	AM/PM	Date Q.C.:		
	Item(s) Inspected:	Status	Inspector	Item(s) Inspected:				Status	Inspector
	1. Master Run Swicth Day/Night & Park operation ** Press & Release Brake Pedal & Power Button simultaniusly Insure (ESD) Decal is legible			20. MDT screen, P/A mic int/ext speaker sound, Canned Msg. ADA display operation					
	2. Instrumental & side Panel Lights, switches, TTLamp & Gauges operation.			21. Check Camera Tag switch status lights					
	3. Operators Foot Control. Turn signals, Dimmer switch, Brake pedal & Accelelator pedal.			22. Check Camera display(s), Images on 7" dash monitor & above driver's head 10" monitor					
	4. Steering Wheel, Column adjustment, Horn operation			23. Check WAVE display module status					
	5. Wipers / Washer Operation			24. Inspect safety equipment fire suppression Amerex driver's module status green light.					
	6. Front / Rear door control & operation, test Bypass			25. Inspect Fire suppression Amerex Fire Push Pin for securnes, inspection tag & sticker					
	8. Brake & Accelerator & Ramp Interlock.								
	9. Kneel operation and alarm			26. Air governor cut out @ _____ psi					
	10. W/C ramp Deploy / Stow function, switches, Cam, Alarm operation.			27. Air governor cut in @ _____ psi					
				28. Low air warning alarm activates @ _____ psi .					
	11. Test E-Cast Raise and Down			29. Low air audiable & Visual alarm					
	12. Sun Visors / Shades Operation and condition			30. Check parking brake pop-up test @ _____ psi					
	13. Driver's Mirrors Operation and adjustment			31. Perform applied air loss @____ psi in one minute					
	14. Driver's side window and latches			32. Perform static air loss test____psi in one minute					
	15. Drivers Seat – Controls Switches, Belts & Condition			33. Check Parking brake operation and holding					
	16. Heater / Defroster Operation and vent distribution			34. Emergency Brake test.					
	17. Driver's blower and A/C vents operations			35. Check registration & B/O card holder					
	18. Destination Sign Display and operator's control unit "OCU" performance operation			36. Inspect all warnings & notice decals					
	19. Fare Box OCU Operation, Decals & Mounting bracket securement			37. Check Safety Equipment Emergency Triangles & Fire Extinguisher securement, date / gauge pressure..					
Section B: Interior Inspection									
Supervisor Q.C.:					Time:	AM/PM	Date Q.C.:		
	Item(s) Inspected:	Status	Inspector	Item(s) Inspected:				Status	Inspector
	1. Check TAP validator with test badge			12. Check camera housings for securement					
	2. Passenger Signals chimes, pull cord, W/C Stop Requested touch pad operation, ADA sign display.			13. Check instructional & safety decals					
				14. Check Interior step lights					
	3. Entrance & Exit door hinges, bushings, glasses, brushes, sensors, sensative edges & operation			15. Check Rear door dump valve, Door operation & Emergency Pull function & cover securness					
	4. Check Front door dump valves operation & emergency access cover securement			16. Check rear deck floor covering & wheel well trim					
				17. Check rear seat hinge & access pannel					
	5. Check schedule guide holder			18. Ensure upper deck left & right four upper ventilation windows are locked & secured					
	6. Windows, locks, liners, vent shocks, emergency exits								
	7. Seats, stanchions, hand straps, floor walls condition			19. Inspect HV Battery Capacities with Laptop					
	8. W/C Q-pod seatbelts, seat locks, W/C securement locks, hooks.			20. Open all interior overhead panels & test service lights.Inspect all High Voltage Orange Cabling for chaffing, rubbing & securement					
	9. Check Radio / Camera Cabinet & equipment for proper securement & slide tray operation								
				21. Deploy W/C ramp, clean platform, panels, Inspect hoses & fittings					
	10. Check Interior Dome Lights & Door Header Lights								
	11. Check Emergency Roof Hatches & secureness			22. Lubricate Door moving mechanisem, hinges. Etc					
Section C: Exterior Inspection									
Supervisor Q.C.:					Time:	AM/PM	Date Q.C.:		
	Item(s) Inspected:	Status	Inspector	Item(s) Inspected:				Status	Inspector
	1. Headlights Hi/Low beams function panel secureness			10. Clearence & Marker lights					
	2. Flashers / Turn signals			11. Brake and tail lights					

Appendix D Outside Maintenance Contractors

Rush Truck Center
H & H Wholesale Parts
TruckPro
H & H Wholesale Parts
TruckPro
Western Peterbilt
Rush Truck Center
Western Peterbilt
Westrux International, Inc.
Southern Counties Lubricants
Elite Automotive Services
Rush Truck Center
Battery Power, Inc.
Elliott Auto Supply Co., Inc.
Rush Truck Center
FleetWash, Inc.
Tranco Upholstery
Les Images Turbo, Inc.
Elliott Auto Supply Co., Inc.
TruckPro
Elliott Auto Supply Co., Inc.
Parts Authority, LLC
TruckPro
H&H Auto Parts
Parts Authority, LLC
Elliott Auto Supply Co., Inc.
TruckPro
Hanover Displays, Inc.
REI
Tranco
Michelin

Anaheim Transportation Network

Transit Asset Management (TAM) Plan

Our Mission

The ATN's mission is to enhance transportation options by delivering reliable and efficient transportation solutions.

ATN's commitment to customers consists of integrity, customer service, can-do spirit, communication and partnerships.

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Contents

Executive Summary

Transit Asset Management (TAM) is a business model that prioritizes funding based on the condition of transit assets, in order to achieve or maintain transit networks in a State of Good Repair (SGR). In July 2016, Federal Transit Administration (FTA) issued a final rule requiring transit agencies to maintain, and document, minimum TAM standards. The new standards will help transit agencies keep their systems operating smoothly and efficiently. This TAM plan was drafted in compliance with these standards.

TAM involves a set of strategic and systematic processes and practices for managingthe performance, risks, and costs of transit assets across their entire lifecycle to deliver service reliably, safely, and cost effectively. Asset management is not just about maintenance, and it is more than technology. To be successful, a comprehensive approach to asset management incorporates the people,processes, technology, data and information, and continual improvement needed to support better management of assets over their entire lifecycle. Particularly for smaller agencies that are constantly challenged to do more with less, ensuring that assets are cost-effectively managed to deliver the service needed becomes critical.

As the TAM Plan was developed four primary themes emerged as critical success factors for helping us to achieve our asset management goals:

1. **Policy** - Providing policy direction, ensuring accountability and committing the resources required for asset management plan implementation, including an effective organizational structure to oversee it.
2. **People** - Establishing an asset management culture, which supports employees through better communication, skills assessment, training, knowledge-sharing and succession planning.
3. **Tools** – Providing employees with the systems they need to collect and analyze data relative to asset age, maintenance costs, condition and performance to support better decision making.
4. **Business Practices** – Developing and implementing processes for improved lifecycle management within each of our major asset classes that will lead to better maintenance practices, extended useful life, a reduction in total lifecycle cost, and improved performance.

This TAM Plan was first developed during 2017/18, reflecting the reality and maturity of Anaheim Transportation Network (ATN) at that time. The plan is based on current asset management best practices, FTA guidance, and locally developed policies that reflect ATN's practical, cost effective approach to transit asset management. It is the first TAM Plan developed in accordance with FTA rules as adopted in October 2016.

The Executive Director, Diana Kotler, has overall responsibility for overseeing the development of asset management plans and procedures, in cooperation with appropriate agency staff, and reporting to the

Board of Directors on the status of asset management for the agency. The Executive Director is also known as the "Accountable Executive" with regards to FTA requirements and is responsible for enforcement of ATN's TAM policy.

Benefits of Transit Asset Management

Through asset management, transit agencies can more effectively use available funds to improve the physical condition and performance of their system. This, in turn, has the potential to increase ridership. ATN recognizes the value and added benefits of an effective transit asset management system. Because of this, ATN has dedicated significant time resources to drafting and implementing this TAM Plan. The table below outlines some of the benefits of a TAM plan identified by the FTA andincorporated into the TAM approach for ATN. [1]

Transit Agency Business Benefits	Asset Management Approach
Improved Customer Service	▪ Improves on-time performance and service operations, vehicle and facility cleanliness; reduces missed trips, slow orders, and station shutdowns ▪ Focuses investments around customer-centered goals and metrics
Improved Productivity and Reduced Costs	▪ Maintains assets more effectively using condition-based approaches and using predictive and preventive maintenance strategies (where these can be employed) to reduce costs while improving service delivery
Optimized Resource Allocation	▪ Better aligns spending with an agency's goals and objectives to obtain the greatest return from limited funds ▪ Incorporates lifecycle cost, risk, and performance trade-offs into capital programming and operations & maintenance budgeting
Improved Stakeholder Communications	▪ Provides stakeholders with more accurate and timely customer-centered performance indicators ▪ Provides tools to communicate forecasted performance metrics (including level of service) based on different levels of funding.

[1] Transit Asset Management Guide, Focusing on the Management of Our Transit Investments

TAM Plan Elements Summary

ATN's TAM Plan was developed utilizing the following guidance and resources:

- FTA Research: Asset Management Guide for Small Providers (Published March 2016)
- FTA TAM Peer Library
- FTA Guidebook: Facility Condition Assessment

This TAM Plan has been structured to address all of FTA's asset management elements required of Tier II providers. These are listed in the table below, labeled 1 through 4. The TAM plan consists of five sections and a series of appendices as follows below:

Section	Contents	TAM Elements	Section of TAM Rule
Section 1: Introduction	Introduction to the agency, this document, and the goals and targets of ATN's TAM plan and program	N/A	49 U.S.C §
Section 2: Asset Portfolio	Broad description of ATN's asset categories and a summary of its inventory	1	49 U.S.C §5326(B)(2) and §5326 (a)(2)(A)
Section 3: Condition Assessment	A description of the methodologies and results of ATN's asset condition assessments	2	49 U.S.C §5326(B)(2) and §5326 (a)(2)(A)
Section 4: Management Approach	Description of ATN's approach to TAM investment prioritization across the organization	3	
Section 5: Work Plans & Schedules	Prioritized list of ATN investments to maintain SGR for its assets	4	
Appendices	**Appendix 1** – Asset Inventory **Appendix 2** – Facility Condition Assessment		

Introduction

Created in 1995, the **Anaheim Transportation Network (ATN)** provides various public transportation services in the City of Anaheim. In its role to preserve integrity of mitigation monitoring measures associated with Anaheim Resort, Disneyland® Resort, Hotel Circle and Platinum Triangle™ Specific plans, ATN strives to mitigate traffic congestion and air quality impacts associated with current and future developments. ATN meets these obligations through purchase and operation of zero emission technologies to serve transportation needs of the Anaheim's commercial, recreational, employment and residential areas.

ATN operates under the guidance standards of the City of Anaheim franchise requirements, as spelled out in the City's Charter. On May 21, 2019, Anaheim City Council approved municipal Franchise Ordinance No. 6464, signifying the importance of public transportation and mobility services for the Anaheim residents, visitors, and businesses community.

Through the foundation created by the City of Anaheim's environmental mitigation process and in partnership with entertainment, retail, and hospitality industries, ATN created an institutional structure to finance and operate local public transportation services to provide customers with convenient access to the destinations and venues located in Anaheim and nearby communities. This transit program, Anaheim Resort Transportation (ART), has evolved over 20 years to meet the growing demand on the transportation network resulting from an increase in tourism, the hospitality industry, employment opportunities and the development of new residential communities. ATN provides public transportation services to and from local theme parks, sports venues, shopping destinations, performing arts centers, hotels, as well as residential communities and employment centers.

Operating through Ordinance No. 6464, ATN operates fixed, deviated fixed, on-demand and e-hail routes and services. Prior to Covid-10 pandemic, over 9.7 million passengers annually used ATN's public transit services.

TAM Policy

ATN's mission is to deliver reliable and efficient transportation solutions. The agency is committed to maintaining its assets in a SGR through implementing a strategic process for acquiring, operating, maintaining, upgrading, and replacing its transit assets.

ATN's policy is to (1) promote a culture that supports asset management at all levels of the organization, (2) employ effective asset management business practices and tools, (3) ensure optimal asset performance and useful life, (4) use timely, quality data to support transparent and cost-effective decision-making for resource allocation and asset preservation. ATN emphasizes the importance of people through coaching and training.

Through state-of-the-art technology, and improved processes, ATN will ensure its workforce'sability to identify and meet asset management needs. The agency will incorporate sustainability and accessibility into all business practices, and deliver the best service and value for every fare andtax dollar spent.

Purpose

The purpose of this policy is to communicate ATN's commitment to implementing a strategic process for acquiring, operating, maintaining, upgrading, and replacing its transit assets to directly support the agency's mission of delivering reliable and efficient transportation solutions.

The objectives of the TAM are to properly plan and carry out competent overall management of ATN's entire revenue vehicle fleet. This goal can be achieved when the entire ATN fleet is consistently in a SGR, which will be achieved by:

- Continually assessing and documenting the status of all assets
- Implementing a plan to timely identify, procure funding and complete life cycle capital investment needs
- Maintaining all facilities and equipment that support the revenue fleet and service
- Continuing an effective preventative and ongoing maintenance program
- Increasing the efficiency and effectiveness of the transit asset management program through detailed record keeping and a comprehensive asset management system

TAM Goals & Objectives

To implement the TAM policy, goals were established to promote asset management principles throughout the agency. For each goal, objectives were identified with corresponding, measurable outcomes. The goals are identified in the table below:

Goals	Objectives
Build and promote financial sustainability through implementation of asset management best practices	▪ More closely align capital project prioritization and budget process with SGR needs ▪ Prioritize SGR investments needs
Ensure operational safety by maintaining assets in a SGR	▪ Maintain all systems, vehicles, and facilities in a SGR ▪ Proactively identify asset maintenance needs for deteriorating assets
Promote organizational culture of asset management prioritization	▪ Create awareness of TAM and TAM goals and objectives across all levels of the organization ▪ Encourage and train ATN staff on TAM

Performance Targets & Measures

ATN has set the following performance targets for in its TAM Plan. Our ultimate goal is to maintain all assets in a SGR. TAM and SGR are interrelated. SGR is defined as the condition at which a capital asset is able to operate at a "full level of performance"—that is, the asset can perform its designed function and does not pose an unacceptable safety risk to users. Assets sufficiently maintained at their full performance level are instrumental to ATN's ability to provide reliable service and minimize operating and maintenance costs over the lifecycle of buses, equipment, and facilities.

It should be noted that these performance measures are primarily "condition" based, utilizing age, visual, or measured condition as a measurement of performance. Good practice asset management, however, will also consider other performance targets and measures related to service, safety, and reliability.

ATN has set the following goals for the horizon of the four years for which this plan was developed:

Category	Class	Performance Target
Rolling Stock (Buses)	39 Heavy-Duty Low-Floor Busses	0% of fleet exceeds Useful Life benchmark of14 years **Target: Maintain Current Rate**
	18 Cutaway Buses	100% of fleet exceeds Useful Life Benchmark of 10 years **Target: Reduce Current Ratio by 0%**
Rolling Stock (Microtransit)	10 Polaris GEM	0% of fleet exceeds Useful Life Benchmark of 10 years **Target: Maintain Current Ratio**
Equipment	Trucks	0% of non-revenue vehicles exceed useful life benchmark of 14 years **Target: Maintain Current Ratio**
Facilities	Base Facility	0% of facilities are below a 3.0 on TERM rating scale. **Target:** 0% of facilities below a 3.0 on TERM rating scale

Performance Targets by Fiscal Year:

Revenue Vehicles: Measured by Age - Percentage of revenue vehicles within a particular asset class that have metor exceeded their Useful Life Benchmark.

Equipment (non-revenue vehicles): Measured by Age - Percentage of vehicles that have met or exceeded theirUseful Life Benchmark.

ATN utilizes two non-revenue vehicles to assist with maintenance and seven non-revenue vehicles for supervision of its services.

Facilities: Measured by Condition - Percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale.

ATN has a base facility that is comprised of three structures. An administrative building, a maintenance building, and a building used for inventory/storage. ATN's performance targets represent an average rating for all buildings that make up the base facility.

Category	Class	Performance Targets (Fiscal Year)				
		2022	2023	2024	2025	2026
Rolling Stock	Heavy Duty Low Floor Buses	0%	0%	0%	0%	0%
	Cutaway Buses	100%	100%	50%	0%	0%
Rolling Stock	Polaris GEM	0%	0%	0%	0%	0%
Equipment	Trucks	0%	0%	100%	100%	100%
Facilities	Base Facility	0%	0%	0%	0%	0%

Asset Portfolio

ATN has included a listing of assets owned, operated, and/or maintained by ATN for the delivery of public transportation services. Creating a portfolio of our assets is essential to organizing and managing asset information. The assets discussed here are listed in further detail in Appendix 1. There is a summary of all assets on Table 1 below.

Table 1

Asset Category	Total Number	Average Age	Avg. Mileage
Revenue Vehicles	**67**	**5**	**73,943**
Cutaway Bus	18	10	188,971
Heavy Duty Low Floor Bus	39	3	38,476
Polaris GEM	10	2	5,211
Equipment	**2**	**10**	**133,500**
Non-revenue vehicles	2	10	133,500
Facilities	1	4.0 (Term rating)	N/A
Administration Building	1	4.0 (Term rating)	N/A

Asset Details

Facilities

In May of 2014, ATN moved its operations to the current combined facility at 1354 South Anaheim Boulevard, Anaheim California 92805. ATN is the owner and operator of this “Base Facility” and has full control and access to all buildings, bus yard and fueling. Construction was completed on this building in 2014 and the purchase value of the facility was $2.25 million. The improvements made to the building, including the buildout of the administrative building, were valued at $800,000. Additionally, in 2017, rehabilitation and resurfacing of the parking lot of the Base Facility was conducted. As explained earlier, the Base Facility includes a building used for administration, a maintenance building, and a building used for inventory/storage.

This property also includes one fueling station. The Compressed Natural Gas (CNG) fueling station on the property is a public fueling station also owned and operated by CleanEnergy, the CNG agreement between ATN and Clean Energy is a fuel contract only.

The Base is centrally located in the middle of ATN's service territory, and has the following characteristics:

ATN Base Facility Characteristics	
Site Acreage	1.90 Acres
Building Sq. Footage	10,213 Sq. Ft
Maintenance Bay Capacity	3 Vehicles
Lifts or other major features within Bays	2 Lifts
Revenue Vehicle Parking Capacity	10 Spaces
Employee/Contract Staff Parking Capacity	46/2 disable Spaces
Visitor Parking Capacity	4/2 Disabled Spaces
# of Simultaneous Fueling Dispensers	2

Revenue Vehicles

ATN's fleet is comprised of 67 revenue vehicles -- 18 of which are cutaway buses, 39 heavy-duty low floor buses, and 10 are GEM electric low-speed vehicles. Appendix 1, attached, describes the ATN revenue fleet in detail, including the date each vehicle was placed into service, miles as of February 2022 and other information specific to each vehicle.

ATN is scheduled to receive ten BYD K11 60' buses by the end of Fiscal Year '22. These vehicle are not included in the inventory shown in Appendix 1.

Non-Revenue Vehicles

ATN currently utilizes 2 non-revenue vehicles for maintenance, both which are below the Useful Life Benchmark of 14 years.

Condition Assessment

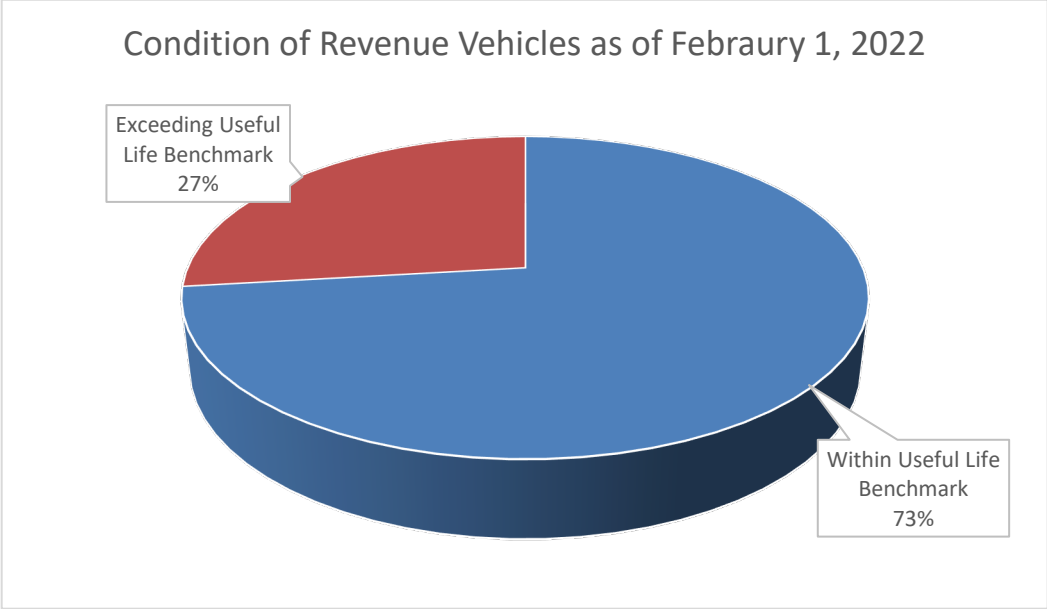
A condition assessment was conducted for all assets which ATN has direct capital responsibility. The FTA defines direct capital responsibility as those which are owned by ATN (or jointly owned) and are responsible for overhauling, refurbishing, or upon which conducting major repairs[2].

Assessment Methods

Revenue Vehicles

The measure used to gauge asset condition for the revenue fleet is vehicle age. To determinethe condition of ATN's current fleet, ATN utilized the default Useful Life Benchmarks established by the FTA.[3] The useful life benchmark is equivalent to a 2.5 on FTA's Transit Economic Requirements Model (TERM).

The addition of over 30 new electric vehicles in 2021 has significantly decreased the number of ATN vehicles that exceed the useful life benchmark.



Facilities

ATN facilities were assessed following the methods identified in the NTD and outlined in the Facility Condition Assessment Guidebook.

[2] FTA TAM FAQs; https://www.transit.dot.gov/TAM/gettingstarted/htmlFAQs#Assets
[3] 2017 Asset Inventory Module Reporting Manual, Page 53

The condition measure used in the NTD is the five-point scale used by FTA's Transit Economic Requirements Model (TERM). An asset is deemed to be in good repair if it has a rating of 3, 4 or 5 on this scale. Likewise, a facility is deemed to be not in good repair if it has a rating of 1 or 2.

Numeric Score	TERM Rating
5	Excellent
4	Good
3	Adequate
2	Marginal
1	Poor

To determine the overall condition of its administrative and maintenance facilities, ATN inspected the following components:

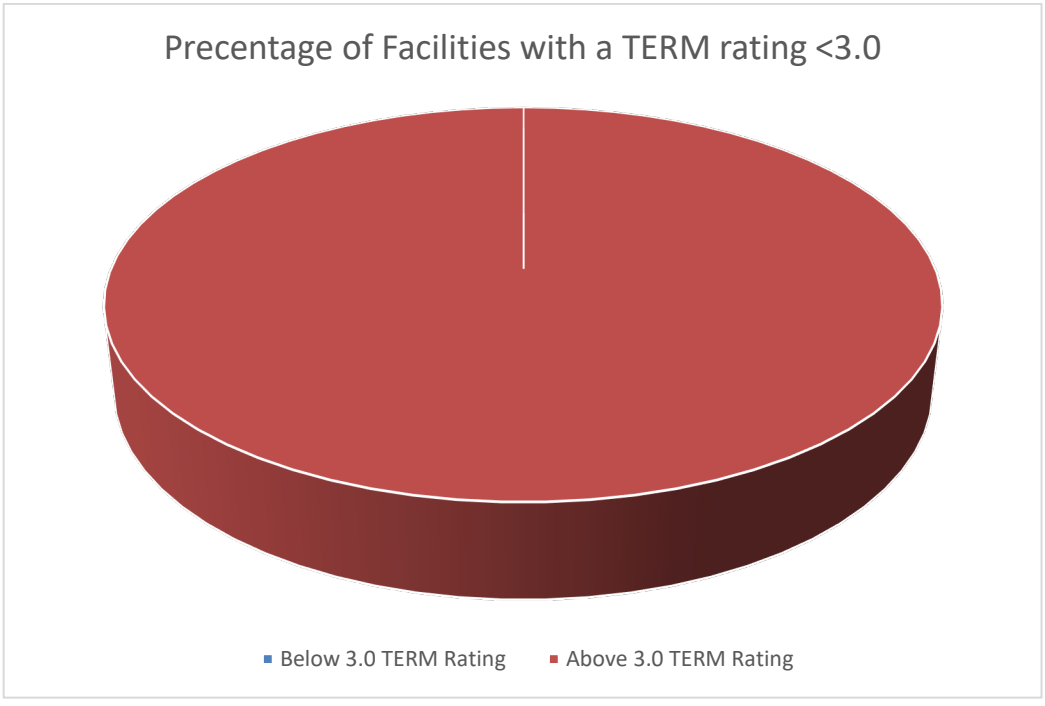
a. Substructure
b. Shell
c. Interiors
d. Conveyance (Elevators and Escalators)
e. Plumbing
f. HVAC
g. Fire Protection
h. Electrical
i. Equipment
j. Site

To determine the overall condition, ATN conducted a visual inspection of all three Buildings that comprise the Base Facility. Building A being the Administration Building, Building B which houses storage and inventory, and Building C which is used for maintenance. Figure 1 below shows an aerial view of the facility. Because ATN does not have direct capital responsibility for the fueling stations located here, these assets were not included in the assessment. The inspection was conducted in October, 2021.

A visual observation of each component of each building was conducted per guidance in the FTA Facility Condition Assessment Guidebook. Each component was photographed to support and document condition assessment efforts. Once each component was assessed for each building, ATN decided to utilize Alternative 2, the Median Value methodology when calculating the overall condition that building. ATN then utilized the median value of each building to create an aggregate condition rating for the entire base facility. Appendix 2 provides detail on the components and building aggregates. The Condition Assessment for the Base Facility yielded an overall condition rating of 4.0 on the TERM scale.

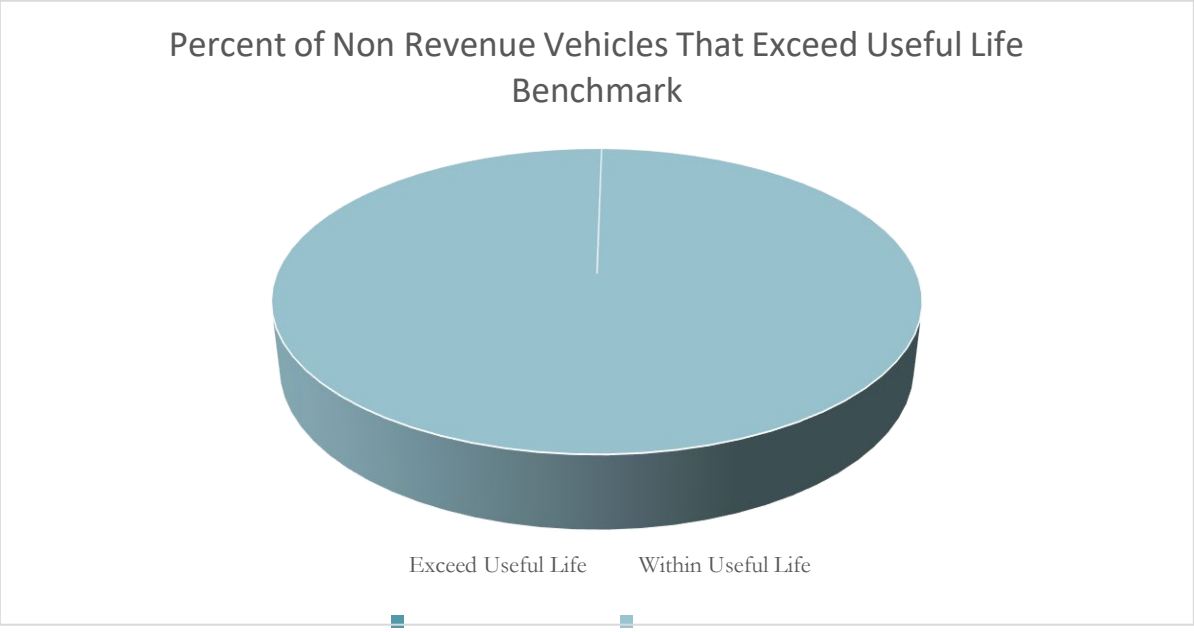
FIGURE 1


BUILDING C
BUILDING A
1354 S Anaheim Blvd
BUILDING B
© 2017 Google


Precentage of Facilities with a TERM rating <3.0
Below 3.0 TERM Rating
Above 3.0 TERM Rating

Equipment

As with revenue vehicles, ATN based its condition rating for its non-revenue vehicles on age. ATN also utilized the Useful Life Benchmarks assigned by the FTA to determine its condition rating. Both of the two non-revenue vehicles ATN utilizes have not reached the Useful Life Benchmark of 14 years. The vehicles are a 2008 Chevy 2500 truck and a 2010 Ford Vehicle. The 2008 Chevy 2500 truck is not in service and is scheduled to be sold.



Management Approach

ATN has made considerable investment in buildings, equipment, and machinery. As with vehicle maintenance, the proper maintenance of facilities, machinery, and equipment is key to protecting investments and prolonging the useful life of each and every asset.

ATN has developed a system for managing their assets over their entire lifecycle, from procurement to disposal. A majority of ATN's maintenance approach is outlined in detail in the Fleet Management Plan. The following section will describe the processes for design/procurement, maintenance, rehabilitation/overhaul, and disposal.

Design/procurement - acquisition procedures, including approval processes

Maintenance - maintenance schedule based on manufacturer recommendations and asset condition

Rehabilitation/overhaul - decision criteria for engaging in major overhaul

Disposal - procedures selling, transferring, or otherwise disposing of assets that have reached the end of their usable lifecycle

Design/Procurement

ATN maintains a system that ensures economical control and conformance to detailed technical and quality requirements of purchased materials (direct and critical indirect) and by providing the following services:

1. Documented instructions for material evaluation, procedures, flow, workmanship standards, test methods and statistical sampling
2. Incoming inspection of parts and materials
3. Identification and segregation of qualified and nonconforming material
4. Vendor qualification and ongoing vendor performance appraisal
5. Feedback of inspection results to suppliers
6. Formal review for disposition of nonconforming materials

Maintenance

ATN is committed to keeping its fleet of buses in service and operational on a consistent and reliable basis. This will be made possible through the quality of the ATN maintenance programs.

The ATN facility maintenance program includes:

1. Identifying responsible staff for the facility and equipment maintenance
2. A series of inspections and routine maintenance actions designed to ensure proper care and maximize useful service life of facilities and equipment
3. A record-keeping system that maintains adequate permanent records of maintenance and inspection activity for buildings and equipment

Based on FTA guidance and industry standards, the ATN Maintenance Policy and Procedures were adopted in May 2013. Subsequent revisions were adopted in May 2016 and April 2018. ATN staff at the Base Facility provide daily preventative maintenance, as well as heavy-duty repairs to keep the fleet and assets in a SGR.

Preventive Maintenance Inspections (PMI), operating repairs and major repairs for out of service vehicles all take place at the Base Facility. The Maintenance Department consists of 23 ATN employees, including supervisors, which equates to a ratio of one technician to eight buses and three technicians to each supervisor.

The maintenance program monitors and ensures enforcement and monitoring of the following critical maintenance components:

1. Preventive Maintenance standards
2. Driver Vehicle Defect Report
3. Quick resolution of Standard Repair Times (SRT)
4. Supervision of all mechanics
5. Inventory and purchasing activities
6. Training
7. Quality Assurance (QA)
8. Cleaning and servicing of vehicles
9. General housekeeping

The following goals and actions are used to improve the Key Maintenance Performance Indicators:

1. **Preventative Maintenance (PM) Inspections:** Inspect and write-up the defects within zero to three hours and complete the basic PM on all minor repairs within three to four hours after write-up. Schedule and continue the major repairs after the minor repairs are completed on each bus. This includes electrical/electronic components, A/C/HVAC, ramps/lifts, destination signs, farebox, radios and body paintwork.

2. **Review Vehicle Defect Cards:** Review vehicle defects/discrepancies as reported by the operators, inspect all defects within 30 minutes and schedule weekly brake inspections (every 3,000 miles).

3. **Maintain Separate Files for the following:** PM, work orders, accident repairs and registration/insurance.

4. **Garage/Bay Management:** Mechanics and supervisors will be held accountable for all repairs in the garages/bay. Supervisors will monitor all work performed by the mechanics including the SRTs.

5. **Accounts Payable/Inventory:** Maintain current paid status on all vendors, set up new accounts as soon as the need is identified. Avoid exceeding net payable timeframes. Accounts payable staff should communicate status with vendor of any payable outside of net paid timeframe. Garages have the data and software tools for predictive analysis and forecast of parts andlabor required based on data from maintenance system. Develop a list of fast moving parts and kits for PM Inspections and meet with accounting staff on a weekly basis to expedite critical processes, unexpected conditions, and check on orders and payment statuses.

6. **Maintenance Training:** Develop/upgrade the training curriculum for the mechanics. Develop training curriculum for the garage supervisors, new supervisors, dispatchers and road supervisors.

7. **Quality Assurance:** Monitor Service Call Report monthly to reduce major fleet defects. Conduct random audits of PM inspections, running repair, and the cleaning and service of the buses.

8. **Cleaning/Bus Wash:** Stock the proper supplies to clean and service the buses on a daily basis. Cleaning and service crew will thoroughly clean the entire fleet of buses every 90 days. This includes the interior, tires exterior, engine compartment, and windows.

9. **Tire Contracts:** Ensure that the contractor is in compliance with their proposal (track and monitor all work invoiced and completed by the contractor).

10. **General Housekeeping:** Identify all obsolete parts and materials and discard. Remove obsolete parts from the facilities and Unit Repair Shop. Remove unused containers. Remove accumulations of combustibles (boxes, skids, and scrap).

Rehabilitation/Overhaul

Retirement of buses is based on (1) the vehicles meeting FTA's useful life/mileage requirements and (2) the availability of grant funding sources. Without availability of grant funding, buses that exceeduseful life will be used to serve in the fleet as either peak vehicles or to meet spare ratio requirements.

ATN has no need to overhaul existing transit vehicles since the large majority of ATN vehicles have been replaced in the last two years by electric buses.

Work Plans and Schedules

Over the past two years, ATN has initiated two major capital projects to significantly replace the revenue fleet and build a new operations facility and maintenance base.

Purchase of Zero Emission Vehicles (ZEV)

In 2018, ATN was awarded funding for acquisition of forty (40) zero emission buses (ZEB) by the State of CaliforniaTransit and Intercity Rail Capital Program (TIRCP). Subsequent to this award, ATN ordered forty ZEV from BYD to expand bus service and to serve growing ridership while replacing aging LNG buses. These new vehicles are a combination of 30-ft (10 buses); 40-ft. (20 buses); and 60-ft articulated (10 buses) buses. All 30-ft and 40-ft buses have been delivered and the 60-ft articulated buses will be delivered by the end of Fiscal Year '22. Five Arrival ZEB have been ordered and estimated delivery is in 2023.

Sixty-nine percent of ATN's fleet is currently operated by zero emission vehicles. The electrification of ATN's fleet is in advance of the California Air Resources Board's (CARB) Innovative Clean Transit (ICT) rule that requires agencies to transition to a completely zero emission fleet by 2040.

Construction of new Operations Facility and Maintenance Base

ATN is building two new facilities in Anaheim, California, which will become the base of operations for ATN and will house operations, staff, maintenance and storage facilities for 82 buses, and electric bus charging infrastructure.

ATN was not able to acquire a parcel large enough to house their operations and maintenance buildings and store the full fleet of buses. As a result, the new facilities will be constructed on two separate properties, located at 1227 Claudina Street and at 100 South Manchester Avenue.

The Claudina site is approximately 2.48 acres and will include up to 79 surface level bus storage spaces during Phase 1, along with 46 battery electric bus (BEB) chargers. In Phase 2, there will be an additional 29 BEB chargers, and six (6) Level 1 chargers for FRAN vehicles at the Claudina site.

The Manchester site will be used for bus maintenance, bus wash, fleet preparation and administrative staff use. This operations and maintenance building will have a footprint of 11,000 square feet, and include a bus maintenance facility on the ground floor. The second floor will include 7,000 square feet of space for ATN administrative staff use.

Proposed Investment Project List/Decision Support

ATN currently prioritizes asset investment based on age and useful life benchmarks as well as the condition assessments conducted to ensure maintenance of all assets in a SGR. ATN is in the process of implementing a project decision matrix which will serve as a more measured determination of investment and as a decision support tool.

On June 6, 2018, ATN adopted its first Capital Improvement Program (CIP) which represented ATN's capital plan and identified projects and large equipment purchases. The CIP also provided a planning tool and identified funding and financing options.

The CIP below represents a five-year planning process spanning from Fiscal Year 2021/22 through 2025/2026 and is part of ATN's ongoing budgetary review and approval process. The proposed CIP program is for $71.46 Million and includes identified funding to complete:

1. Electrification of 46 buses
2. Facility construction and relocation
3. MicroGrid & Solar Installation through a Power Purchase Agreement

Funded Projects	Funded Amount	Comments	Funding Source(s)
Micro Transit - FRAN	$959,175	FRAN service began January 2019. Parking Intergration to be completed Fiscal Year 2021/22	TIRCP SCAG Smart Cities
#ElectrifyAnaheim-ART Fleet Electrification (Phase 1)	$35,111,190	Phase 1 and electrification of 46 buses to be completed Fiscal Year 2021/22	TIRCP FTA ATID Cap and Trade HVIP Program
Construction of new operating facilities-Claudina Site and Manchester Site	$12,360,664	Both facilities under construction and tentatively scheduled for completion summer of 2023.	TIRCP ATID ATN Equity Cap and Trade HVIP Program
Solar Installations, Charge Management Systems and Power Purchase Agreement	$6,989,850	20-Year operating and maintenance service agreements.	P3
Battery Storage System and MicroGrid	$5,375,000	Deployment coordinate with construction of Claudina and Manchester sites	CEC SGIP
Land Purchase	$9,670,000	Claudina and Manchester sites	LCFC Credits
TOTAL	**$7,465,880**		

ATN's CIP identified a need to raise additional $65.0 Million in funding to complete current #ElectrifyAnaheim projects, Mobility as a Service, MicroTransit initiatives, East/West Connector planning proposals, as well as post-Covid re-building activities.

Appendix 1 – Asset Inventory

Asset Category	Class	Subfleet	Model	County	Vehicle #	Asset owner	Year	Age	Miles	Pst ULB	Condition Assessment
Revenue Vehicles		2012 Glaval	Entourage	1	1201	ATN	2012	10	180,895	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1202	ATN	2012	10	184,756	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1203	ATN	2012	10	225,991	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1204	ATN	2012	10	230,982	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1205	ATN	2012	10	151,011	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1206	ATN	2012	10	195,159	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1207	ATN	2012	10	202,557	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1208	ATN	2012	10	188,349	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1209	ATN	2012	10	203,507	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1210	ATN	2012	10	201,686	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1211	ATN	2012	10	174,745	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1212	ATN	2012	10	193,733	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1213	ATN	2012	10	205,029	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1214	ATN	2012	10	200,746	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1215	ATN	2012	10	170,737	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1216	ATN	2012	10	166,401	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1217	ATN	2012	10	144,860	Y	3-Adequate
Revenue Vehicles		2012 Glaval	Entourage	1	1218	ATN	2012	10	180,337	Y	3-Adequate
Revenue Vehicles		2013 El Dorado	EZ Rider Low Floor	1	1219	ATN	2013	9	218,683	N	4-Good
Revenue Vehicles		2013 El Dorado	EZ Rider Low Floor	1	1220	ATN	2013	9	224,632	N	4-Good
Revenue Vehicles		2013 El Dorado	EZ Rider Low Floor	1	1221	ATN	2013	9	216,367	N	4-Good
Revenue Vehicles		2020 BYD	K7M	1	3001	ATN	2020	2	40,028	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3002	ATN	2020	2	38,126	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3003	ATN	2020	2	22,686	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3004	ATN	2020	2	19,695	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3005	ATN	2020	2	25,219	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3006	ATN	2020	2	21,618	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3007	ATN	2020	2	22,348	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3008	ATN	2020	2	20,798	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3009	ATN	2020	2	18,089	N	5-Excellent

Appendix 1 – Asset Inventory

Asset Category	Class	Subfleet	Model	County	Vehicle #	Asset owner	Year	Age	Miles	Pst ULB	Condition Assessment
Revenue Vehicles		2020 BYD	K7M	1	3010	ATN	2020	2	17,802	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3011	ATN	2020	2	16,479	N	5-Excellent
Revenue Vehicles		2020 BYD	K7M	1	3012	ATN	2020	2	17,634	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4001	ATN	2020	2	18,543	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4002	ATN	2020	2	16,292	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4003	ATN	2020	2	22,008	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4004	ATN	2020	2	18,618	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4005	ATN	2020	2	18,633	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4006	ATN	2020	2	19,154	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4007	ATN	2020	2	8,499	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4008	ATN	2020	2	17,581	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4009	ATN	2020	2	18,900	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4010	ATN	2020	2	17,573	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4011	ATN	2020	2	15,577	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4012	ATN	2020	2	13,818	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4013	ATN	2020	2	14,641	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4014	ATN	2020	2	13,217	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4015	ATN	2020	2	16,654	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4016	ATN	2020	2	16,080	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4017	ATN	2020	2	16,327	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4018	ATN	2020	2	15,890	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4019	ATN	2020	2	16,555	N	5-Excellent
Revenue Vehicles		2020 BYD	K9M	1	4020	ATN	2020	2	14,111	N	5-Excellent
Revenue Vehicles		2016 BYD	K9A	1	13291	ATN	2016	6	78,391	N	4-Good
Revenue Vehicles		2016 BYD	K9A	1	13292	ATN	2016	6	69,812	N	4-Good
Revenue Vehicles		2016 BYD	K9A	1	13293	ATN	2016	6	38,775	N	4-Good
Revenue Vehicles		2016 BYD	K9A	1	13294	ATN	2016	6	44,718	N	4-Good

Appendix 1 – Asset Inventory

Asset Category	Class	Subfleet	Model	County	Vehicle #	Asset owner	Year	Age	Miles	Pst ULB	Condition Assessment
Revenue Vehicles		GEM e6	GEM e6	1	GO1	ATN	2018	4	2,800	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G02	ATN	2018	4	9,940	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G03	ATN	2018	4	7,986	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G04	ATN	2018	4	10,089	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G05	ATN	2018	4	3,768	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G06	ATN	2018	4	6,736	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G07	ATN	2018	4	6,320	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G08	ATN	2018	4	2,786	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G09	ATN	2018	4	641	N	5-Excellent
Revenue Vehicles		GEM e6	GEM e6	1	G10	ATN	2018	4	1,045	N	5-Excellent

Appendix 2 - Facility Condition Assessment

Building A

Subcomponent Ratings:

Sub-Component	Rating
Substructure	4
Shell	3
Interiors	4
Conveyance	N/A
Plumbing	4
HVAC	4
Fire Protection	4
Electrical	4
Equipment	5/4
Site	3

Building B

Subcomponent Ratings:

Sub-Component	Rating
Substructure	4
Shell	3
Interiors	4
Conveyance	4
Plumbing	4
HVAC	3
Fire Protection	4
Electrical	4
Equipment	4
Site	3

Building C

Subcomponent Ratings:

Sub-Component	Rating
Substructure	4
Shell	3
Interiors	3
Conveyance	N/A
Plumbing	4
HVAC	N/A
Fire Protection	4
Electrical	4
Equipment	4
Site	3