Pace Suburban Bus Division

of the Regional Transportation Authority of Northeastern Illinois

TRANSIT ASSET MANAGEMENT PLAN 2022

Photo: Pace Headquarters, Arlington Heights, Illinois, GILLIG Battery Electric Bus

SAFETY | EQUITY | EFFICIENCY | ENVIRONMENTAL RESPONSIBILITY

We're moving towards a brighter and more sustainable future.

Pace Suburban Bus Division

of the Regional Transportation Authority of Northeastern Illinois

550 W. Algonquin Road
Arlington Heights, Illinois 60005
(847) 364-8130

TRANSIT ASSET MANAGEMENT PLAN 2022

This Plan will be in effect from the date on which it is signed by Pace's Executive Director.

Melinda J. Metzger, Executive Director

9/23/2022

Date

Pace Custodians	Janet Kuhn, Capital Infrastructure Program Manager, PMP® Jonathan Christ, Transit Asset Management Coordinator
WSP Support Staff	Thomas Goodyer, Project Manager Sophie Cohen, Deputy Project Manager

SAFETY | EQUITY | EFFICIENCY | ENVIRONMENTAL RESPONSIBILITY

We're moving towards a brighter and more sustainable future.

TABLE OF CONTENTS – MAIN DOCUMENT

APPENDICES

TABLES

FIGURES

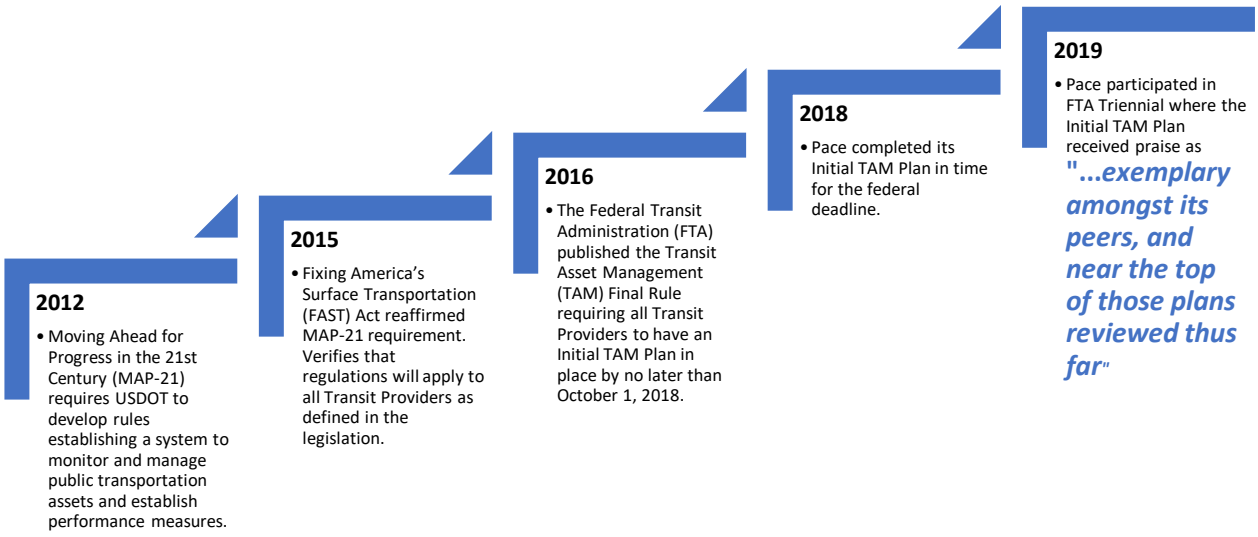
EXECUTIVE SUMMARY

BACKGROUND

Pace, the Suburban Bus Division of the Regional Transportation Authority, is one of three public transportation agencies operating in Northeastern Illinois. We have one of the nation's largest public vehicle fleets and provide a variety of services to our passengers—fixed route bus service, vanpool, and several forms of demand-response service.

This Transit Asset Management (TAM) Plan was developed in response to 2012 legislation and a 2016 Federal Transit Administration rulemaking, as depicted in **Figure 1. Transit Asset Management Timeline**.

Figure 1. Transit Asset Management Timeline



The FTA's TAM Final Rule puts Transit Providers into two categories: Tier I, and Tier II. **Figure 2. TAM Requirements by Tier** shows the TAM Plan elements that are required by each category by Transit Provider.

By FTA definition, **Pace is considered a Tier I Transit Provider** because we operate more than 101 vehicles across all fixed route modes. Pace must comply with all nine elements shown in **Figure 2. TAM Requirements by Tier** in our TAM Plan.

Figure 2. TAM Requirements by Tier

1. Inventory of Capital Asset 2. Condition Assessment 3. Decision Support Tools 4. Investment Prioritization	Tier I & II
5. TAM and SGR Policy 6. Implementation Strategy 7. List of Key Annual Activities 8. Identification of Resources 9. Evaluation Plan	Tier I Only

All information about Pace's assets as contained in this TAM Plan is collected as required by the National Transit Database (NTD) Transit Asset Management Asset Inventory Module (AIM)

Forms and is in compliance with the TAM Final Rule. Every transit agency in America reports data in this same format so FTA can assemble a nationwide inventory and properly forecast capital costs for the future replacement, and necessary capital renewal activities of existing transit assets to maintain a State of Good Repair (SOGR).

For NTD Reporting purposes, Pace submits two separate reports: 50113 for the Suburban Bus Division and 50182 for the Regional ADA Paratransit Services. Those reports are found in the Appendix accompanying this Plan.

WHY A TRANSIT ASSET MANAGEMENT PLAN?

Beyond meeting the federal requirements, Pace's Transit Asset Management Plan provides us an additional agency-wide view of asset conditions to help Pace establish and maintain a State of Good Repair of our capital assets. This TAM Plan provides Pace with:

- A consolidated set of current practices and policies
- Consolidated technical and financial information about Pace's assets
- An understanding of our challenges, and present and future demands
- Clearly established links between organizational goals and Asset Management Improvement Objectives.

The 2022 TAM Plan covers a five-year time horizon. While this is one year longer than the FTA mandated four-year time horizon, it is consistent with Pace's Capital Business Plan, and other Federal planning cycles, such as the region's Transportation Improvement Program (TIP) developed by the Chicago Metropolitan Agency for Planning (CMAP), the region's federally designated Metropolitan Planning Organization (MPO).

The purpose of Pace's TAM Plan is to:

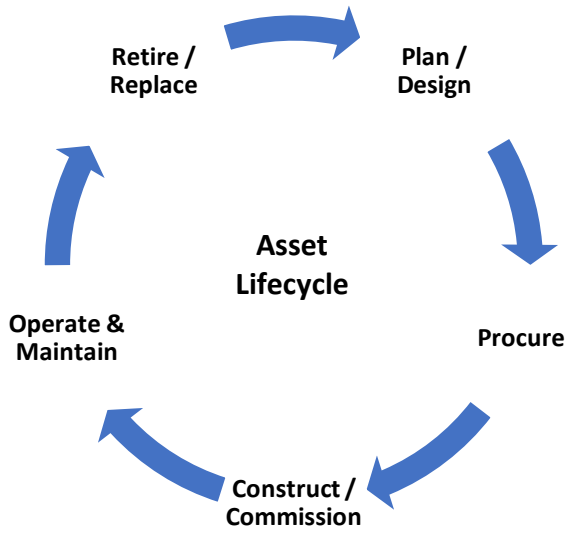
- Document the existing Capital Asset Inventory – including nature, extent, age, and condition of Pace's physical assets.
- Identify existing and proposed Levels of Service to be achieved with these assets.
- Document the key processes, organization, technology, and tools that are required to perform effective Asset Management.
- Identify the Lifecycle Management Strategies of each asset class, including inspection, maintenance, rehabilitation, and replacement.
- Establish objectives for reviewing and improving Pace's approach toward Transit Asset Management maturity.
- Assess the capital and operating budgets necessary to support Pace's agency-wide performance goals which support the core business process of providing excellent public transportation service. The goals are to provide public transportation that is:

✓ Safe	✓ Efficient	✓ Environmentally Responsible
✓ Reliable	✓ Effective	
✓ Courteous	✓ Equitable	

ASSET MANAGEMENT POLICY

Pace's first Transit Asset Management Policy ("Policy") was enacted by October 1, 2018, in accordance with the FTA ruling and existing policies at Pace. The Policy establishes Pace's commitment to maximizing the utilization of our capital assets and establishing a cost-effective plan for long term capital investment needs while balancing service/operational needs and requirements and minimizing lifecycle costs. By design, Transit Asset Management is a financial business model which provides a process for performance planning and establishing the strategy for Transit Capital Assets to be maintained in a State of Good Repair as shown in **Figure 3. Transit Asset Lifecycle Diagram**.

Figure 3. Transit Asset Lifecycle Diagram



ASSET INVENTORY AND CONDITION

The first step to improving the condition of Pace's assets is to identify and document our capital inventory of assets. Pace owns, operates, and maintains a variety of assets, including Rolling Stock (Revenue Vehicles); Support Facilities and Equipment; Stations and Passenger Facilities; and Electrical, Signal and Communications. The TAM Plan Capital Asset Inventory includes assets outside of annual NTD reporting requirements. Additionally, Pace contracts out certain types of transportation services to third party operators including Fixed Route, Paratransit, and some Municipal Services.

The second step to improving the condition of Pace's assets is to understand their current condition. Reliable knowledge of asset condition will enable Pace to justify capital programs, funding requests, and more knowledgably prioritize across multiple divisions and asset classes. Pace already has contracts or processes in place to assess the condition of our Facilities and Rolling Stock, and we will continue to refine our condition inspection and assessment processes and criteria for other asset classes moving forward as reflected in **Appendix B - Facilities**. Our TAM Plan provides condition information for all required asset classes, which will be updated in future iterations.

Condition information reveals that many of our assets are in good condition. However, expansion or procurement of additional assets will be important to continue to maintain our existing assets and grow our ridership. Pace's maintenance and rehabilitation practices enable our assets to function safely and meet our service goals, however, additional resources would allow Pace to continue to expand service and bring our Agency into the future of transportation.

Table 1. Pace Inventory Summary summarizes Pace's asset inventory.

Table 1. Pace Inventory Summary

ASSET CATEGORY	ASSET TYPE	ASSET COUNT
Facilities	Administrative and Maintenance	12 (Pace-owned) 19 (Non-reportable to NTD)
	Passenger	24 (Pace-owned) 136 (non-Pace-owned, Reportable to NTD) 15 (Non-reportable to NTD)[1] 17 Pulse Stations (Non-reportable to NTD)[2]
Revenue Vehicles	Bus	695
	Over-the-road Bus	30
	Cutaway	505
	Minivan	213
	Van	345
Service Vehicles	Automobiles	71
	Trucks and Other Rubber Tire Vehicles	164
Electrical, Signal, and Communications	Bus Tracker Signs	172
	Radio System	1
	Automated Vehicle Location (AVL) system	1
	Intelligent Bus System (IBS)	1
	Transit Signal Priority (TSP) system	1
	On-bus Security System	1

ASSET MANAGEMENT ENABLERS AND LIFECYCLE MANAGEMENT STRATEGIES

The Accountable Executive with responsibility for conducting Asset Management practices is Pace's Executive Director, **Melinda J. Metzger.** Asset Management daily activities at Pace, including the development of this TAM Plan, are delegated to, and performed by the Capital Infrastructure Program Manager and the Transit Asset Management Coordinator.

Enterprise-wide processes and technologies enable Pace to deliver our Transit Asset Management Objectives and make decisions about asset investments. Pace stores information on our Rolling Stock assets in Oracle Enterprise Asset Management (eAM). Pace uses a variety of other programs, such as Oracle Application Express (APEX), to store, manage, and analyze data on asset age, condition, and replacement costs.

During the development of this TAM Plan, the Lifecycle Management Strategies for all major assets were reviewed by Pace staff and our consultant, WSP. The Lifecycle Management Strategies laid out in the asset plans in the **Appendices** to this document begin to define Pace's approach to asset management. Lifecycle Strategies may be similar for asset classes where

[1] Pace reports to the NTD on the facilities for which we have capital responsibility, as well as all passenger stations used in the provision of public transit. Passenger facilities without an enclosed building do not count as stations and, unless owned by Pace, need not be reported to NTD.
[2] Pulse stations are not yet reportable to the NTD but may require reporting in the future.

commonalities exist, such as Revenue Vehicles, and Non-Revenue Vehicles, however, the Lifecycle Management Strategies for each asset class are unique.

INVESTMENT PRIORITIZATION

Since 1991, Pace has had a Capital Project Scoring process in place with Capital Project Scoring Criteria. The Capital Project Scoring Criteria has been adjusted as needed over the years during annual budget cycles to accommodate funding limitations and evolving agency priorities.

Annually in May, the Grants Administration and TAM Department sends out a call for submission of projects to kick-off our budgeting cycle. Capital budget requests must include project funding justifications and demonstrate a need that will be met, while considering Asset Management and impact on State of Good Repair. The total annual request for capital funding typically exceeds the available funding, requiring the Grants Administration and TAM Department, in coordination with the user departments and Senior Staff, to prioritize the projects that will receive funding. The Executive Director assembles a review committee, which uses the existing Capital Project Scoring Criteria to assess the requests, see **Section 7 – Investment Prioritization**.

In 2020, ***Driving Innovation*, The Pace Strategic Vision Plan** was drafted to replace Pace's ***Vision 2020*** Plan that was released in 2002. ***Driving Innovation*** establishes a new long-term vision for Pace, as well as specific goals and objectives to guide the many projects and initiatives that are being proposed.

TRANSIT ASSET MANAGEMENT PLAN IMPLEMENTATION

In our Initial 2018 TAM Plan, Pace had 23 Improvement Objectives, including four "**Baseline**" Objectives that were well underway. For this 2022 TAM Plan, we have elevated four additional Objectives to "**Baseline"** and are actively progressing in the areas of:

- Investment Prioritization
- Asset Management Organization Development
- Business Continuity Plan – Force Majeure
- Asset Management Culture

All remaining Objectives fall under the categories of "**Implement Later**" or "**Further Investigate**." See **Section 8. Asset Management Implementation**.

Pace looks forward to continuing to build on the progress we have made toward growing a mature Asset Management system that will enable us to improve our State of Good Repair and ensure the successful operations of our regional services for many years to come.

END OF EXECUTIVE SUMMARY

1. INTRODUCTION

This 2022 Transit Asset Management (**TAM**) Plan sets out Pace's approach to managing our capital assets to deliver public transportation services in Northeastern Illinois.

ABOUT PACE

Pace Suburban Bus is the premier suburban transit provider, safely and efficiently moving people to work, school, and other regional destinations.

Pace's family of public transportation services offer affordable, innovative, equitable, and environmentally responsible transit options for the residents of 274 municipalities in Cook, Will, DuPage, Kane, Lake, and McHenry counties. The backbone of Chicago's suburbs, Pace serves approximately 127,000 daily riders, pre COVID-19 pandemic. One of the largest bus services in North America, Pace covers 3,677 square miles, an area nearly the size of the state of Connecticut and about 15 times the size of the City of Chicago. Pace's innovative approach to public transportation gives the agency a national reputation as an industry leader.

Pace is governed by a Board of Directors consisting of thirteen directors. Each serves a four-year term and, apart from the Commissioner of the Mayor's Office for People with Disabilities, must be a mayor or Village President from his or her respective region, or a former Mayor or Village President residing in his or her respective region.

PACE HISTORY AND AGENCY MILESTONES

Pace was created by the 1983 RTA Act to unify the numerous disparate suburban bus agencies that existed at that time. In doing so, fares, branding and management were made consistent throughout the region. On July 1, 1984, the consolidated agency began operations as the Suburban Bus Division of the Regional Transportation Authority. A year after that, the brand name '**Pace**' was established.

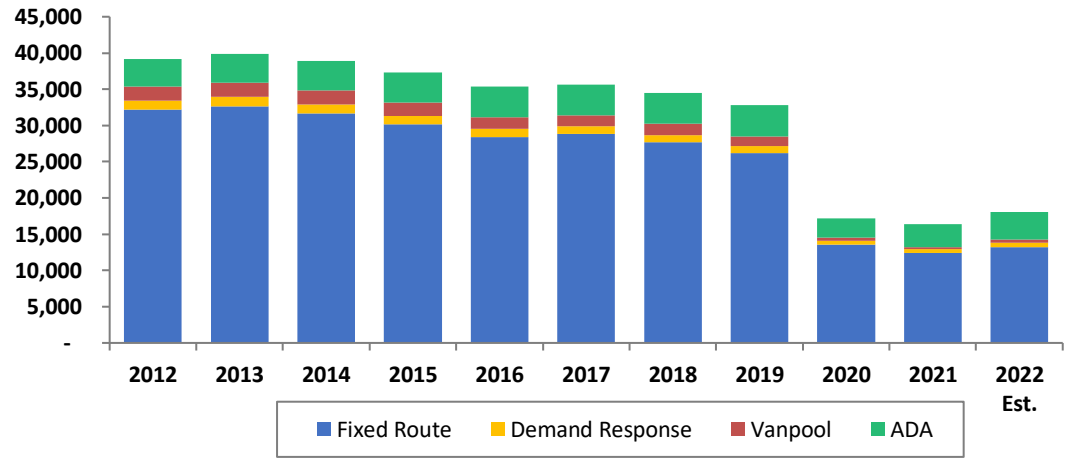
In the first few years of operations, Pace focused on the unification efforts and renewing our bus garages and fleet, but rapid population and employment growth in the suburbs led to multiple strategic planning and long-range planning efforts that took place in the late 1980s and throughout the 1990s.

Accessibility has always been a hallmark of Pace service. Pace provided ''Section 504'' service to people with disabilities several years before this type of service was required by the Americans with Disabilities Act. In 2006, Pace had established the agency as a leader in providing efficient, quality service to people with disabilities, and the Illinois legislature designated that Pace would assume responsibility for ADA paratransit in Chicago from the CTA. The move made Pace one of the largest providers of paratransit service in the United States.

By providing quality public transportation options, Pace helps residents of Northeastern Illinois reduce their carbon footprint, protect the environment for present and future generations, and conserve natural resources. In fact, Pace's family of transit services already removes more than 100,000 cars from our roadways every day.

For statistics on our Service and Ridership, reference **Figure 4. Pace Quick Facts, Ridership** and **Table 2. Pace Quick Facts, Service Characteristics** from the *Pace Suburban Service and Regional ADA Paratransit Budget, Final Program, November 2022*.

Figure 4. Pace Quick Facts, Ridership[3]



[3] Pace Suburban Service and Regional ADA Paratransit Budget: 2023 Operating and Capital Program; 2023-2025 Business Plan for Operations; 2023-2027 Capital Business Plan. Final Program, November 2022.

Table 2. Pace Quick Facts, Service Characteristics[4]

	VALUE
Fixed Route Service	
Number of Fixed Routes *(Aug. 2022)*	137
Regular Routes	132
Feeder Routes	5
Peak Period Vehicle Requirements	481
Vehicles in Service *(All Vehicles are Accessible)*	725
Average Vehicle Age (years)	7.1
Number of Private Contractors	2
Number of Pace-owned Garages	11
Number of Pace Municipal Contractors	2
Paratransit	
Number of Communities Served	274
Number of Local Demand Response Projects	27
Pace-owned Fleet Size *(Includes Suburban ADA)*	424
Average Pace-owned Vehicle Age (years)	6.7
Community Transit Vehicles in Service *(Aug. 2022)*	84
Contractor-owned Vehicles in City ADA Service	843
Vanpool	
Vans in Service (August 2022)—Traditional	79
Vans in Service (August 2022)— Shuttle	17
Vans in Service (August 2022)—Advantage	176
Total Vans in Service	272
Average Vehicle Age (years)	5.0
Other	
Number of Pace Employees (Includes ADA Staff)	1,796.5

	2021 ACTUAL	2022 ESTIMATE	2023 BUDGET
Ridership (000s)			
Fixed Route	12,377	13,210	13,415
Demand Response*	554	622	641
Vanpool	298	417	453
Total Suburban Service	**13,229**	**14,249**	**14,509**
Regional ADA*	3,130	3,792	4,051
Total System	**16,359**	**18,041**	**18,560**
Vehicle Miles (000s)			
Fixed Route	26,069	26,072	27,451
Demand Response	3,467	3,616	3,725
Vanpool	2,192	2,984	3,241
Total Suburban Service	**31,728**	**32,672**	**34,417**
Regional ADA	20,244	19,932	21,155
Total System	**51,971**	**52,604**	**55,571**
Vehicle Hours (000s)			
Fixed Route	1,732	1,773	1,876
Demand Response	198	200	206
Vanpool	N/A	N/A	N/A
Total Suburban Service	**1,930**	**1,973**	**2,082**
Regional ADA	1,430	1,444	1,354
Total System	**3,361**	**3,417**	**3,436**

**Ridership includes companions and personal care attendants.*

[4] Pace Suburban Service and Regional ADA Paratransit Budget: 2023 Operating and Capital Program; 2023-2025 Business Plan for Operations; 2023-2027 Capital Business Plan. Final Program, November 2022.

DIVERSITY, EQUITY, INCLUSION, AND ACCESSIBILITY (DEIA) AT PACE

Pace has demonstrated our continued commitment to diversity, equity, inclusion, and accessibility by establishing the Office of Diversity, Equity, Inclusion and Accessibility (DEIA) in 2019. This Office is led by the Chief Financial Officer/Diversity, Equity and Inclusion Officer and will help ensure Pace provides fair access to resources, job opportunities, programs, and services. Our agency, through an equity lens, will not only enhance our diverse and inclusive work environment, but will also guide our agency in making decisions on prioritizing our investments in capital assets. The Office of DEIA will also help ensure Pace's capital asset investment decisions reflect services and programs provided for persons with disabilities and economically disadvantaged communities and provide contracting opportunities for minority and women-owned businesses.

Driving Innovation is Pace's current strategic vision plan adopted in September 2021 and serves as Pace's primary guiding document that establishes major planning and policy initiatives and priorities, including Pace's continued commitment to equity. In addition, Pace's Title VI Policy supports how our agency is committed to the delivery of equitable and accessible transportation services and how we recognize our responsibility to the communities in which we operate and serve.

Below are just a few examples of how Pace ensures that diversity, equity, inclusion, and accessibility play a critical role in every decision our agency makes.

PROJECTS BENEFITING MARGINALIZED COMMUNITIES

Pace is partnering with Metra to reconstruct the existing Harvey Transportation Center and Metra station into a new multimodal facility. A key component of the project is to revitalize the City of Harvey which is a disadvantaged suburban community outside of Chicago. Pace's investment in this project will help turn the tide of decades of disinvestment by providing a new transit hub with activated vendor space and a parking lot designed to flex into a civic center for festivals and farmers' markets. The project will improve access to job centers and further the goal of providing accessible, affordable, safe, and reliable transit services.

Pace is also collaborating with our regional partners to expand high-quality transit to communities with critical needs. An example is the Fair Transit South Cook Pilot project that aims to increase the use of transit for residents of underserved south suburban communities in Cook County and essential workers by providing lower fares on Metra and more frequent service on Pace's Route 352. Through this partnership Pace is providing safe, reliable, affordable, and more frequent transit opportunities along our South Halsted Corridor and accordingly, will invest in capital assets to meet the increase demand for services.

ZERO-EMISSIONS FLEET

As discussed in more detail in the following section, Pace has made a commitment to having a zero-emissions fleet by 2040. The first garage being fully converted is North Division located in Waukegan, IL. The decision to convert North Division was made based on concerns of environment, equity, and efficiency. Operating a zero-emission fleet will make a much-needed

impact in the Waukegan area, where a high percentage of riders are low income, minorities or from otherwise underserved groups. Services are provided to several schools, economic generators, and employment destinations - which provide access to opportunities and improve the local economy. Over 60% of businesses in Waukegan are minority-owned, and this project helps to transport employees and customers to these businesses.

ADA TRANSFER LOCATIONS

Pace is improving the safety, security, and accessibility for riders of ADA service by constructing transfer locations in Schaumburg and Calumet City to address mobility justice and ensure individuals experience the full joy of movement and mobility regardless of their physical ability. The construction of an ADA transfer centers, particularly in Calumet City, further demonstrate our commitment to invest in capital assets to serve minority and marginalized communities.

INVESTMENT PRIORITIZATION

Pace revised our capital priority scoring criteria for the 2023 capital budget call process to optimize funding opportunities, include recent legislation, incorporate commitment to a zero-emission bus fleet, and reflect regional priorities. For additional information, please see **Section 7. Investment Prioritization**. Highlights include:

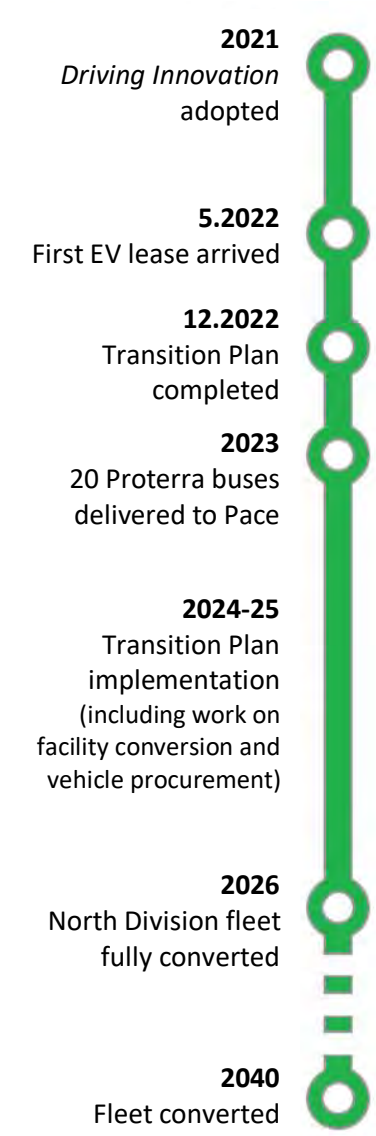
- ✓ Incorporation of new RTA Act requirements for state-funded projects and alignment with the RTA strategic plan to optimize Pace's ability to secure funding to invest in capital assets over the next five years.
- ✓ Adding categories for racial equity, mobility justice and environmental goals to align our priorities for capital investments with funding priorities of local, state, and federal funding agencies.

GO GREEN: PACE'S SUSTAINABILITY EFFORTS

Transit by its nature is among the most environmentally friendly travel modes, reducing the nation's emissions by 37 million metric tons annually.[5] However, Pace recognizes our own responsibility for pollution reduction as an operator of hundreds of vehicles in our region. Therefore, one of Pace's top priorities is to reduce our carbon footprint and improve the quality of our community's environment. **Figure 5. Pace Zero-Emission Vehicles Timeline** summarizes Pace's efforts toward zero-emission vehicles, described in more detail below:

[5] https://www.apta.com/wp, -content/uploads/Resources/resources/reportsandpublications/Documents/greenhouse_brochure.pdf

Figure 5. Pace Zero-Emission Vehicles Timeline



- As part of our Driving Innovation plan, Pace committed in 2021 to making the North Division in Waukegan an electric-bus-only facility by 2026 and to converting Pace's entire bus fleet to zero-emission vehicles by 2040. See **Figure 5. Pace Zero-Emission Vehicles Timeline.**
- As a first step, in March of 2022, Pace's Board of Directors approved the agency's first order of battery-electric buses. The first of the 20 electric buses from Proterra, Inc. are expected to begin operations in 2023. In the meantime, Pace has leased a GILLIG Battery Electric Bus in May and June to introduce the technology to employees and the public. The GILLIG bus will enter service in late 2022.
- Other upcoming efforts include:
- A new Northwest Division facility in Wheeling is being retrofitted to house CNG and electric vehicles.
- In partnership with IDOT, two electric paratransit vehicles will be added to Pace's ADA Paratransit fleet.
- Pace is in discussions with downstate transit agencies to explore a potential statewide initiative to purchase electric vans and paratransit vehicles.
- Pace launched a massive fleet and facility planning effort to transition to an all-electric fleet by 2040.

In addition, Pace is already supporting many environmentally responsible practices, including:

- Pace has 91 buses at South Division in Markham which use Compressed Natural Gas (CNG), a fuel source that emits fewer greenhouse gases than diesel. South Division became a CNG fueling station in 2016 and was retrofitted in 2017-18 to allow for indoor maintenance on CNG buses.
- At the other Divisions, Pace follows federal guidelines relating to clean diesel and for the maintenance of different engine types to maximize productivity and minimize pollution. We use ultra-low sulfur fuels that meet all federal requirements.
- Pace provides our employees with $75/month incentive to commute to work in a Vanpool, in addition to providing free transit passes to our employees.
- Pace recycles tires that can be used for playground flooring, tire retreading and even for tire derived fuel.
- Pace uses Transit Signal Priority (TSP) on several corridors, which saves fuel and reduces carbon emissions released into the air by buses idling at a red light.

- Any newly purchased diesel-fueled bus, from El Dorado National, have transmissions and hydraulic systems which utilize synthetic fluids that extend drain intervals (every 75,000 miles instead of 12,000) for reduced environmental impact.
- In 2012, Pace purchased Hybrid Paratransit Buses for the towns of Schaumburg and Elgin and two full-sized Hybrid Buses for the city of Highland Park.

ACCOUNTABLE EXECUTIVE

625.25 (a)(3) A provider's Accountable Executive is ultimately responsible for ensuring that a TAM Plan is developed and carried out in accordance with this part.

The Accountable Executive with responsibility for carrying out the Pace Transit Asset Management Plan is **Melinda J. Metzger,** Executive Director.

TAM PLAN SCOPE AND OBJECTIVES

The purpose of this 2022 TAM Plan is to:

- Document the capital asset inventory, including nature, extent, age, and condition of Pace's physical assets.
- Identify existing and proposed Levels of Service to be achieved with our capital assets.
- Identify the baseline lifecycle management needs, including maintenance, replacement, and enhancement for each capital asset class.
- Assess the capital budgets necessary to support Safe, Reliable, Courteous, Efficient, and Effective transit services and to maintain the capital assets in a State of Good Repair.
- Document the key processes, organization, technology, and tools that enable effective Transit Asset Management.

This 2022 TAM Plan builds on the initial 2018 plan and will continue to form the foundation for future improvement of our Transit Asset Management practices.

RELATIONSHIP TO OTHER DOCUMENTS

Pace's 2022 TAM Plan is informed by and aligned with other Pace documents. including:

- In 2020, ***Driving Innovation*, The Pace Strategic Vision Plan** was drafted to replace Pace's Vision 2020 Plan that was released in 2002. ***Driving Innovation*** establishes a new long-term vision for Pace, as well as specific goals and objectives to guide the many projects and initiatives that are being proposed which may inform future adjustments to our Capital Project Scoring process
- The Annual Operating and Capital Program; Three-Year Business Plan for Operations; and Five-Year Capital Business Plan provide an overview of Pace's system, describe the funding challenges we face, and outline the capital and operating budget projections.
- The **Rolling Stock, Facilities, and Equipment Maintenance Manual** describes how Pace maintains our fleet of rolling stock and equipment.

- The **Facility Maintenance Plans and Practice Overview and Procedures for Inspections Manual** contains information on how responsibilities are shared across departments, and procedures for various inspections.
- The **Pace Public Transit Agency Safety Plan** (PTASP) adopted in November 2020 by the Pace Board.
- The **Pace Facilities Inspection Reports 2018-2022**.
- Miscellaneous policies, procedures, standards, and plans, which document how Pace operates, providing information used within this TAM Plan.

TAM PLAN PERIOD

625.29 Transit Asset Management plan: horizon period, amendments, and updates. **(a)** ***Horizon period.*** A TAM Plan must cover a horizon period of at least four (4) years. **(b)** ***Amendments.*** A provider should amend its TAM Plan whenever there is a significant change to the asset inventory, condition assessments, or investment prioritization that the provider did not reasonably anticipate during the development of the TAM Plan. **(c)** ***Updates.*** A provider must update its entire TAM Plan at least once every four (4) years. A provider's TAM Plan update should coincide with the planning cycle for the relevant Transportation Improvement Program or Statewide Transportation Improvement Program.

The 2022 TAM Plan covers a five-year time horizon. While this is one year longer than the FTA mandated four-year time horizon, it is consistent with Pace's Capital Business Plan, and other Federal planning cycles, such as the region's Transportation Improvement Program (TIP) developed by the Chicago Metropolitan Agency for Planning (CMAP), the region's federally designated Metropolitan Planning Organization (MPO). In addition, the Regional Transportation Authority (RTA), which is charged with financial oversight, funding, and regional transit planning for Pace and the region's other two transit operators, the Chicago Transit Authority (CTA) and Metra, is required to prepare and adopt a Strategic Plan every five years, as mandated by the 2008 RTA Act. The RTA is now developing the region's next strategic transit plan, the successor to *Invest in Transit, 2018-2023.* Three tracks, which focus on funding, planning, and transparent and collaborative engagement, will advance simultaneously to help articulate a strategic vision that will be considered by the RTA Board for adoption in January 2023.

Future updates to this TAM Plan will continue to be made at least every four years, or more frequently following any major changes to the asset inventory, updated condition assessments, major investments, or revised prioritization processes. As required by the ruling, the update will coincide with the planning cycle for the development of the regional TIP, however, Pace's fiscal year begins on January 1, while the TIP coincides with the federal fiscal year, which begins on October 1. There may be minor misalignment between updates to the TAM Plan and the annual budget due to these varying cycles, however, Pace will make appropriate updates to our TAM Plan as needed to accurately reflect committed funding and agency priorities.

TAM PLAN REQUIREMENTS

In July 2012, the U.S. Government enacted the Moving Ahead for Progress in the 21st Century (MAP-21) Act, a funding and authorization bill that places specific Asset Management requirements on transit operators across the U.S. MAP-21 required that all transit agencies develop and update an Asset Management Plan.[6] Throughout the TAM Plan, callout boxes (highlighted in gray) reference language from the Final Rule for each of the Nine Elements requirements.

The Federal Transit Administration (FTA) released the TAM Final Rule in July 2016, under 625 of Title 49 Code of Federal Regulations. See **Table 3. TAM Plan Requirements and Section Correspondence** on the following two pages, which lists the requirements of FTA's TAM Final Rule and describes how the contents of this document relate to these requirements.

[6] 49 CFR 625.25 (a)

Table 3. TAM Plan Requirements and Section Correspondence

	49 CFR PART 625	RELEVANT DOCUMENT SECTION	STARTING PAGE NUMBER
Objective	**625.25 (a)(1)** Each tier I provider must develop and carry out a TAM Plan that includes each element under paragraph **(b)** of this section. **(2)** Each tier II provider must develop its own TAM Plan or participate in a group TAM Plan. A tier II provider's TAM Plan and a group TAM Plan only must include elements under paragraphs **(b)(1)** through **(4)** of this section.	Entire document	Entire document
Definition	**625.25 (3)** A provider's Accountable Executive.	Accountable Executive	12
TAM Plan Core Elements	**625.25 (b)** A TAM Plan must include: **(1)** An inventory of the number and type of capital assets.	Asset Inventory	28 and Appendices
	(2) A condition assessment of those inventoried assets for which a provider has direct capital responsibility.	Asset Condition and Performance	29 and Appendices
	(3) A description of analytical processes or decision-support tools that a provider uses to estimate capital investment needs over time and develop its investment prioritization;	Investment Prioritization	45
	(4) A provider's project-based prioritization of investments,	Project-Based Prioritization of Capital Investments	51
	(5) A provider's TAM and SGR policy;	Transit Asset Management Policy	18
	(6) A provider's TAM Plan implementation strategy;	Asset Management Implementation	56
	(7) A description of key TAM activities that a provider intends to engage in over the TAM Plan horizon period;	Lifecycle Management Strategies	41 and Appendices
	(8) A summary or list of the resources, including personnel, that a provider needs to develop and carry out the TAM Plan; and	Organization and Resource Plan	32
	(9) An outline of how a provider will monitor, update, and evaluate, as needed, its TAM Plan and related business practices, to ensure the continuous improvement of its TAM practices.	TAM Plan Update and Evaluation	56

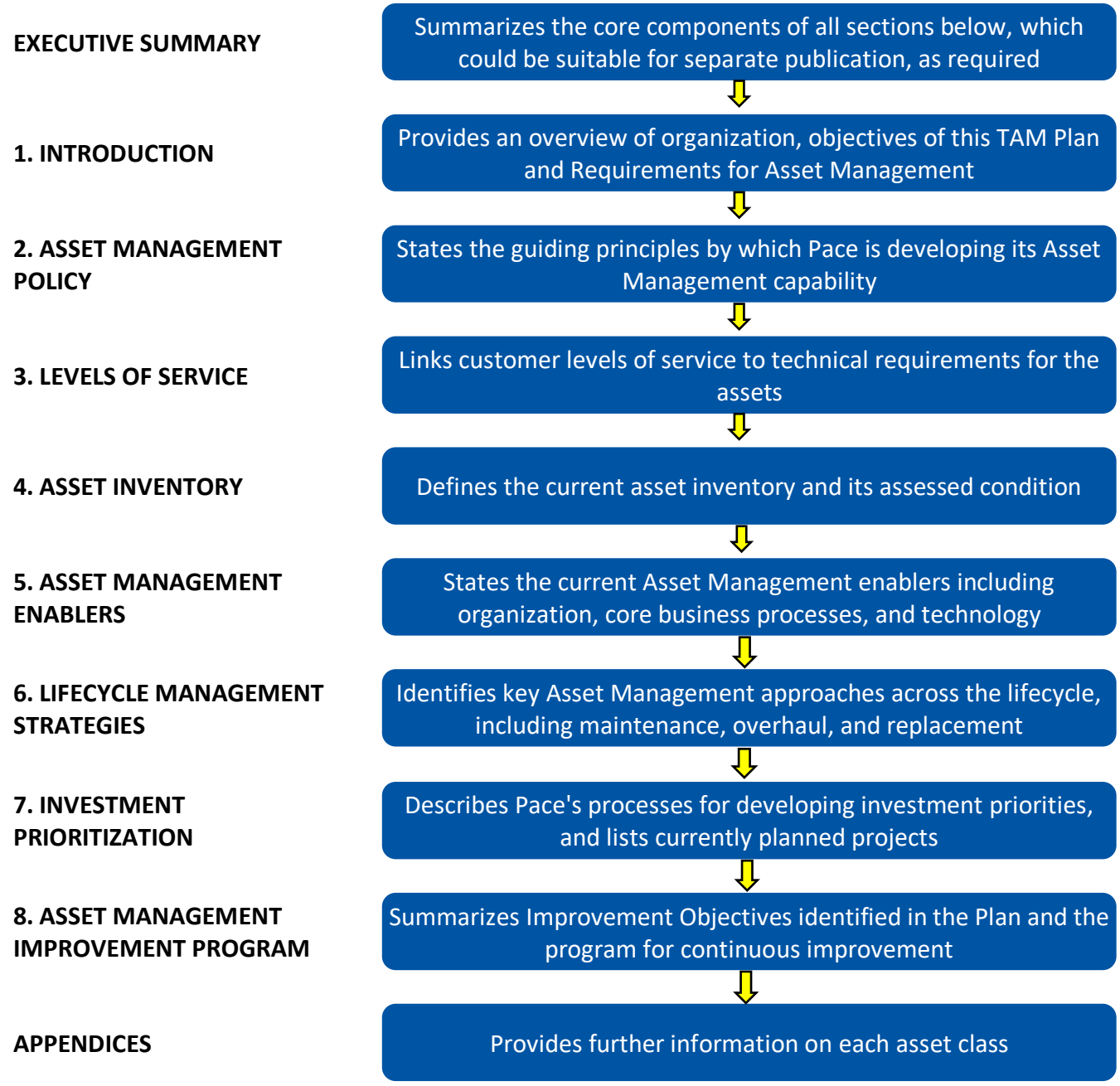
Table 3. TAM Plan Requirements and Section Correspondence (Continued)

	49 CFR PART 625	RELEVANT DOCUMENT SECTION	STARTING PAGE NUMBER
Additional Compliance Items	**625.33** Investment prioritization. **(a)** A TAM Plan must include an investment prioritization that identifies a provider's programs and projects to improve or manage over the TAM Plan horizon period the state of good repair of capital assets for which the provider has direct capital responsibility. **(b)** A provider must rank projects to improve or manage the state of good repair of capital assets in order of priority and anticipated project year. **(c)** A provider's project rankings must be consistent with its TAM policy and strategies. **(d)** When developing an investment prioritization, a provider must give due consideration to those state of good repair projects to improve that pose an identified unacceptable safety risk when developing its investment prioritization. **(e)** When developing an investment prioritization, a provider must take into consideration its estimation of funding levels from all available sources that it reasonably expects will be available in each fiscal year during the TAM Plan horizon period. **(f)** When developing its investment prioritization, a provider must take into consideration requirements under 49 CFR 37.161 and 37.163 concerning maintenance of accessible features and the requirements under 49 CFR 37.43 concerning alteration of transportation facilities.	Investment Prioritization	45
	625.45 Setting performance targets for capital assets. **(a)** ***General.*** **(1)** A provider must set one or more performance targets for each applicable performance measure. **(2)** A provider must set a performance target based on realistic expectations, and both the most recent data available and the financial resources from all sources that the provider reasonably expects will be available during the TAM Plan horizon period.	NTD Performance and Targets FY2021-FY2022	30

TAM PLAN STRUCTURE

Figure 6. TAM Plan Structure describes the sections in our Transit Asset Management Plan.

Figure 6. TAM Plan Structure



END OF SECTION 1

2. TRANSIT ASSET MANAGEMENT POLICY

The Transit Asset Management and State of Good Repair Policy defines the guiding principles by which Pace will manage the assets we own and maintain. The Policy establishes the direction and objectives for developing Asset Management capability and implementing an Asset Management plan.

625.25 (b) A TAM Plan must include **(5)** A provider's TAM and SGR policy.

Pace's Transit Asset Management and State of Good Repair Policy was developed in 2018 in accordance with the FTA ruling and reviewed and updated in 2022. It is included in the following pages.

Internal Services-01

Department: Grants Administration & TAM *Subject: Transit Asset Management Policy*

I. PURPOSE

This Transit Asset Management Policy ("Policy") establishes Pace's commitment to maximizing the utilization of Pace's capital assets and a cost-effective plan for long term capital investment needs while balancing service/operational needs and requirements and minimizing lifecycle costs. Transit Asset Management provides a process for performance planning and establishing the strategy for transit capital assets to be maintained in a state of good repair.

II. DEFINITIONS

The following definitions apply to this policy:

A. Capital or transit asset: a unit of Rolling Stock such as buses and paratransit vehicles; equipment such as maintenance equipment and non-revenue vehicles; and facilities such as headquarters and the garages, with a useful life of one year or more.

B. Lifecycle: the procurement, operation, inspection, maintenance, rehabilitation, replacement, and disposal of a capital or transit asset.

C. Transit Asset Management (TAM): a set of strategic and systematic processes and practices for managing the performance, risk, and costs of transit capital assets over their lifecycle to provide safe, cost-effective, and reliable service.

D. TAM Plan: a plan that establishes the objectives for an asset or group of assets as it relates to delivering service. It sets out the whole life plan for asset maintenance, overhaul, and renewal strategies by specifying capital asset inventories, condition assessments, decision support tools, and investment prioritization.

E. State of Good Repair (SGR): the condition in 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.

III. ADMINISTRATION

This Policy and Pace's TAM Plan are administered by Pace's Grants Administration and TAM Department, with input and assistance from other Pace Departments, as required.

A. TAM Plan: In accordance with Moving Ahead for Progress in the 21st Century (MAP-21), FTA grant recipients or subrecipients are required to develop a TAM Plan and to report data on their capital assets to the National Transit Database (NTD).

1. A TAM plan is a tool that aids Transit Providers in: (a) assessing the current condition of its capital assets; (b) determining what the condition and performance of its assets should be (if they are not already in a state of good repair); (c) identifying the unacceptable risks, including safety risks, in continuing to use an asset that is not in a state of good repair; and (d) deciding how to best balance and prioritize reasonably anticipated funds (revenue from all sources) towards improving asset condition and achieving a sufficient level of performance within those means.
2. The TAM Plan includes capital asset inventories, condition assessments, references to use of decision support tools, and investment prioritization. Pace's report includes the condition of systems, a description of any change in condition since the last report, performance targets in relation to SGR performance measures, progress toward meeting performance targets and subsequent fiscal year performance targets. Pace's core TAM Plan elements are Introduction, Asset Inventory, Condition Assessment, Management Approach, and Work Plans and Schedules.
3. Pace's TAM Plan is a living document that is regularly reviewed, updated, and incorporated into Pace's capital and budget planning and reporting processes.

B. State of Good Repair

1. A capital asset is in a state of good repair when that asset is able to perform its designed function, does not pose a known unacceptable safety risk, and its lifecycle investments have been met or recovered.
2. When transit assets are not in a state of good repair, the consequences include increased safety risks, decreased system reliability, higher maintenance costs, and lower system performance.
3. The FTA's proposed SGR performance measures, set by asset class (rolling stock, equipment, facilities), provide a basis for Pace to determine whether assets are in a condition sufficient to operate at a full level of performance. These performance measures are primarily condition-based utilizing age, visual or measured condition as a measurement of performance, however, Pace considers other performance targets and measures related to service, safety, and reliability as Pace sets performance targets annually for each asset class.

C. National Transit Database

1. The FTA mandates recipients of Federal financial assistance that own, operate, or manage capital assets used in the provision of public transportation to meet reporting requirements.
2. Pace complies with the FTA's mandate by providing an annual report to the FTA's NTD and that report contains: projected targets for the next fiscal year; condition assessments and

performance results; and a narrative report on changes in transit system conditions and the progress toward achieving previous performance targets.

IV. EFFECTIVE DATE

This Policy shall be in effect on the date on which it is signed by Pace's Executive Director.

Melinda J. Metzger, Executive Director

Date

END OF SECTION 2

3. LEVELS OF SERVICE

This section of the 2022 TAM Plan establishes the relationship between Pace's strategic goals, the customer Levels of Service we provide and the required technical performance of our assets.

OVERVIEW

One of the basic cornerstones of good Asset Management practice is to align Asset Management activities with an agency's corporate objectives and customer Levels of Service, thereby ensuring that assets deliver the required Levels of Service efficiently and economically. This alignment enables the relationship to be determined between Levels of Service and the cost-of-service delivery. In turn, this relationship can be evaluated to:

- Determine the affordability of an asset's operating and capital needs to meet the customer service levels.
- Develop Asset Management strategies and plans to meet required Performance Targets.
- Monitor asset performance to ensure Pace continues to meet defined Levels of Service.
- Where necessary, justify additional funding requirements or justify service cut-back requirements.

In 2022 Pace operated 137 Fixed Bus routes (all of which are accessible to people with disabilities), as well as Vanpools, Demand Response, and Regional Paratransit Suburban and City of Chicago Services, providing approximately 18 million annual rides. **Table 4. Pace Services** summarizes Pace services, and a more detailed overview of our Service Characteristics are described in the following pages.

Table 4. Pace Services

TYPE	DESCRIPTION
Fixed Route	*Pace Divisions* Pace is responsible for the direct operation of service from nine facilities in the six-county region. Together, these divisions—North, North Shore, Northwest, South, Southwest, West, Fox Valley, River, and Heritage—carry 90 percent of the total suburban service ridership.
	Public/Municipal Contracted Services Pace contracts directly with two municipalities (Niles and Highland Park), for municipal services, and maintain an agreement with the Village of Schaumburg for fixed route services.
	Private Contract Services Pace provides a portion of fixed route service by directly contracting with private transit companies.
Regional ADA Paratransit Suburban and City of Chicago	The major components of the Regional ADA Paratransit Program consist of Suburban and City of Chicago services. Service delivery under both programs is contracted to private service operators. In addition to the city and suburban cost elements, there are regional support costs which represent the indirect overhead costs of supporting the Regional ADA Paratransit Program, which is overseen by Pace. Pace is also responsible for the provision of subsidized taxi service to ADA eligible riders in the City of Chicago through the Taxi Access Program (**TAP**). This program provides subsidized taxi service to ADA eligible riders.

Table 4. Pace Services (Continued)

TYPE	DESCRIPTION
Demand Response	Pace partners in multiple Demand Response projects throughout the six-county region. Services are operated by townships or local municipalities under contract with Pace or directly by private providers. Pace provides funding for these services based on a formula applied to the total service cost. The local government is also required to contribute a portion of the service cost. Additionally, Pace oversees the Community Transit Program, which allows local municipalities to provide flexible public transportation in their communities.
Vanpool Services	The Vanpool program is a commuting option which provides passenger vans to small groups of four to 14 people, allowing them to commute to and from work together in a Pace-owned van. Pace estimates to have 517 vans in service by year-end 2021 providing 0.820 million rides. Revenue is forecasted to increase in 2021 due to ridership loss recovery from COVID-19, as well as increased participation in the VIP program. Pace's Vanpool Program is comprised of three elements: Vanpool Incentive Program (VIP), Employer Shuttle and Advantage program. The VIP is the core element of the program and is projected to achieve a ridership level of nearly 0.438 million rides with 163 vans in service by the end of 2021. The Advantage Program provides a transit alternative to individuals that commute on a regular basis to worksites or rehabilitative workshops supported by qualifying not-for-profit human service organizations. It is an alternative for those unable to use the regular ADA Paratransit service or those living outside the 3/4-mile ADA service area. Pace estimates to have 330 vans in service at year-end. The Employer Shuttle Program provides vans to suburban employers to shuttle employees to and from nearby transit connections with CTA, Metra, and Pace. Pace will have 24 shuttle vans in service at the end of 2021—no change to 2020 levels.

SERVICES CHARACTERISTICS

FIXED ROUTE

Fixed route service is transit service provided on a regularly scheduled basis along a specific route with vehicles stopping to pick up and discharge passengers along the route.

Pace operates 132 regular, 5 seasonal, and numerous seasonal routes. These routes serve 192 communities and carry over 1.1 million rides per month utilizing approximately 480 vehicles during peak periods. All routes are fully wheelchair accessible.

DEMAND RESPONSE

Demand response service is non-fixed route service dispatching vans or small buses based on origin and destination demand activation from passengers. This includes On Demand services.

Approximately 370 lift-equipped vehicles are utilized to provide curb-to-curb service to approximately 51,800 riders each month, down due to COVID-19. Prior to the pandemic, Pace provided service to 80,600 riders each month. Most of the ridership are elderly and/or people with disabilities. Pace contracts directly with private service providers for the operation of 27 demand response projects, 11 On Demand projects, and has agreements with villages and townships for the operation of 13 other demand response projects. Pace River Division

operates one demand response project and five On Demand projects. These projects provide services to approximately 274 communities throughout the six-county area.

Suburban ADA PARATRANSIT

Approximately 442 lift-equipped vehicles are utilized to provide origin to destination service to approximately 40,800 monthly users, down due to COVID-19. Prior to the pandemic, Pace provided service to 72,400 riders each month. Individuals that are not able to use Pace's fixed routes can register to utilize Pace's ADA Paratransit Service. The RTA administers a regional certification program which determines eligibility for this service. Once eligible, passengers can make travel arrangements for trips within the shaded service area. This area represents a corridor of 3/4 mile to either side of Pace's regular fixed routes in the suburban areas as called for by federal regulations. Pace contracts with private operators strategically located throughout the service area to provide this service.

CITY OF CHICAGO ADA PARATRANSIT

Four contractors (SCR Transportation, CDT/National Express, MV Transportation, and First Transit) provide ADA Paratransit services to locations within 3/4 mile of CTA bus routes and up to a 3/4-mile radius of each CTA rail station.

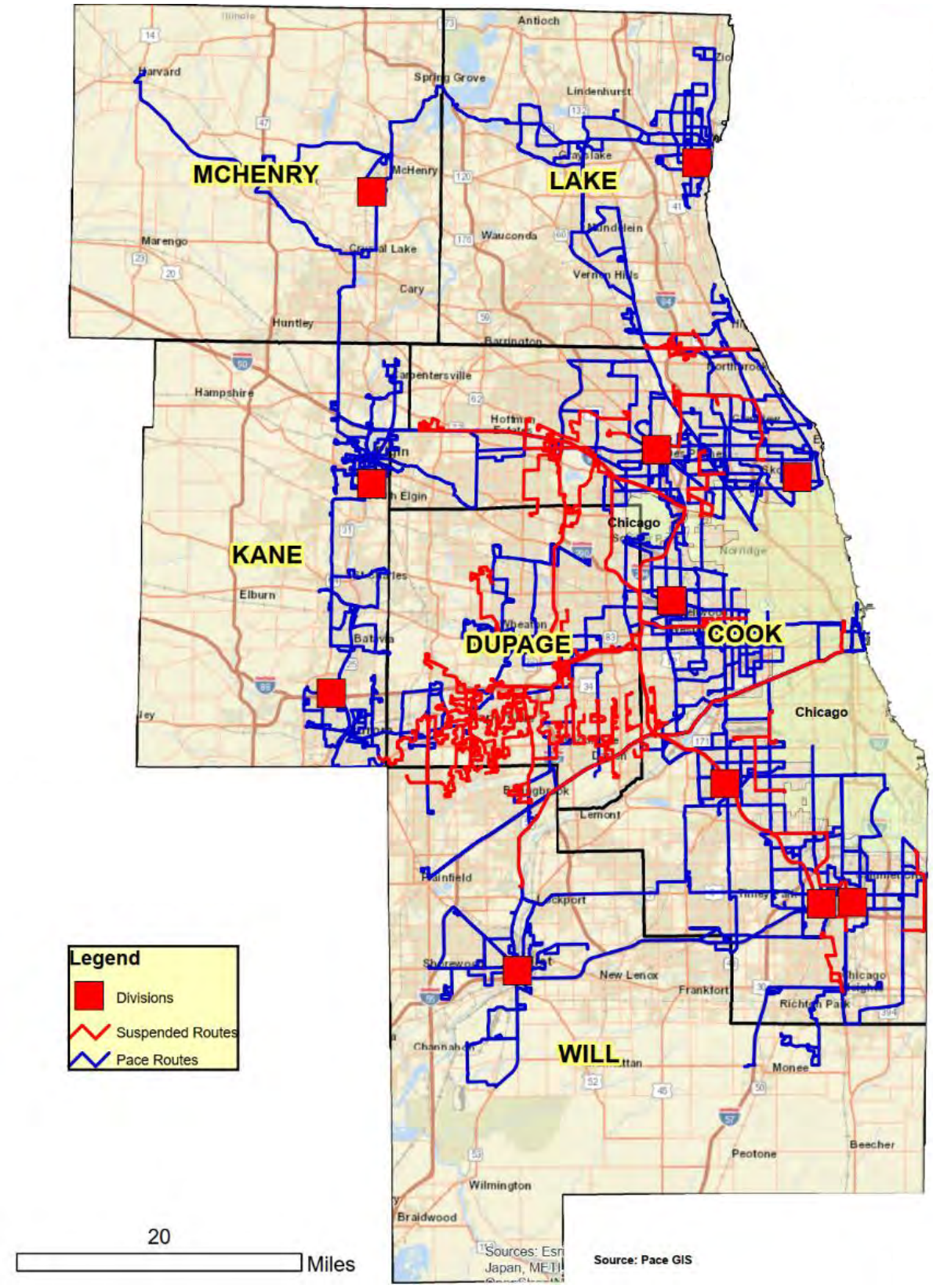
The area served essentially covers the City of Chicago and nearby suburban communities served by regular CTA services.

840 vehicles, as well as taxi providers, are used to provide service to approximately 135,000 riders each month, down due to COVID-19. Prior to the pandemic, Pace provided service to 216,300 riders each month.

SERVICE AREA

Figure 7. Pace Service Area shows Pace's service area and bus routes.

Figure 7. Pace Service Area



SERVICE STANDARDS

Pace abides by service guidelines set to ensure that service features comply with FTA circular 4702.1B (regarding requirements related to Title VI of the Civil Rights Act of 1964). The guidelines indicate that:

- Vehicle Load for most fixed bus routes should not exceed an average maximum vehicle load of 125% during peak hours and 100% during off-peak hours. For express operations, average maximum vehicle load should not exceed 100% for both peak and off-peak hours.
- Maximum service headway on Pace's fixed routes is to operate 60 minutes or better at all times of the day (unless the route has a minimum trip-based headway standard then minimum number of trips applies).
- Pace's on-time performance goal for all fixed route service is 75%, where a bus is on-time if it is no more than one minute early and no more than five minutes late.
- For fixed route buses, bus stop locations are dependent on safety considerations, ease of operation, pedestrian transfer situations, space availability, traffic operations, and location of activity generators.

These standards guide Pace's service planning and scheduling, but Pace is permitted to deviate from these standards where conditions merit. Some routes with especially strong demand may justify service beyond these standards, while others may have special circumstances that justify the opposite.

Service levels are aligned to a set of core goals, set out in the annual budget, and used by Pace to drive improvement.

SERVICE MEASURES

As part of our annual budget, Pace has established agency-wide performance goals which support the core business purpose of providing excellent public transportation service. The goals are to provide public transportation that is:

- ✓ Safe
- ✓ Reliable
- ✓ Courteous
- ✓ Efficient
- ✓ Effective

Table 5. Pace's Strategic Goals and Performance Measures identifies the measures and performance standards that Pace has established for each goal.

Table 5. Pace's Strategic Goals and Performance Measures[7]

		2021 Actual	2022 Estimate	2023 Projected
Safety				
Goal: Provide Safe Public Transportation Services				
Measure(s):	*Performance Goal*			
Accidents per 100,000 Revenue Miles	Less than 5	3.46	2.95	3.10
Reliability				
Goal: Provide Reliable Public Transportation Services				
Measure(s):	*Performance Standard*			
On-Time Performance	Greater than 85%	70.10%	71.60%	72.00%
Actual Vehicle Miles per Road Call	Greater than 14,000	15,572	16,000	16,200
Percent Missed Trips per Total Trip Miles	Less than .5%	0.08%	0.10%	0.10%
Courtesy				
Goal: Provide Courteous Public Transportation Services				
Measure(s):	*Performance Standard*			
Complaints per 100,000 Passenger Miles	Less than 4	4.69	3.90	3.85
Website Hits on Web Watch Site	Increase over prior period	-5.00%	10.00%	15.00%
Efficiency				
Goal: Provide Efficient Public Transportation Services				
Measure(s):	*Performance Standard*			
Revenue Miles per Revenue Hour	Greater than 17	17.28	17.28	17.25
Revenue Miles per Total Operator Pay Hours	Greater than 10*	13.52	13.08	10.35
Expense per Revenue Mile	Less than $6.50*	$5.50	$6.32	$6.42
Expense per Revenue Hour	Less than $125.00*	$94.96	$109.27	$110.75
Recovery Ratio	Greater than 18%	12.54%	10.96%	10.48%
Subsidy per Passenger	Less than $4.00	$8.13	$9.24	$9.87
Effectiveness				
Goal: Provide Effective Public Transportation Services				
Measure(s):	*Performance Standard*			
Ridership	Increase from prior period	-8.96	6.73%	1.56%
Passenger Miles per Revenue Miles	Greater than 9*	3.77	3.91	3.77
Productivity (Passengers per Revenue Hour)	Greater than 24*	9.85	10.24	9.85
Ridership per Revenue Mile	Greater than 1.5*	0.57	0.59	0.57
Vanpool Units in Service	Increase from prior period	-13.12%	3.36%	8.44%

** Performance Goal Under Evaluation*

Below performance goal
Within 10% of performance goal
Meets/exceeds performance goal

[7] Pace Suburban Service and Regional ADA Paratransit Budget: 2023 Operating and Capital Program; 2023-2025 Business Plan for Operations; 2023-2027 Capital Business Plan. Final Program, November 2022, Appendix D Performance Measures.

DRIVING INNOVATION STRATEGIC VISION PLAN

Driving Innovation is Pace's current strategic vision plan adopted in September 2021. As the successor plan to the agency's Vision 2020 plan, ***Driving Innovation*** will serve as Pace's primary guiding document that establishes major planning and policy initiatives and priorities for the coming years.

The purpose of the ***Driving Innovation*** plan is to identify and establish both near-term and long-term priorities for Pace, guided by goals, and organized into discrete planning initiatives, in accordance with an overarching strategic vision.

Overall, ***Driving Innovation*** calls for implementing and innovating fixed-route transit in the highest demand markets, while exploring the potential to harness technology and new mobility solutions to provide more effective coverage services in lower-demand areas.

Given the diversity of development patterns, density, land use and socioeconomic characteristics across the region, Pace provides a variety of transit services intended to tailor service to demand. While Pace currently has a set of performance standards and different sets of service categories, a more detailed and comprehensive framework is needed to help guide and communicate how services are designed and evaluated.

Based on the goals and initiatives as outlined in ***Driving Innovation***, Pace will implement a new Service Standards Framework as a component of the Network Revitalization and System Restructuring initiative. These projects are scheduled to begin in Spring 2023.

END OF SECTION 3

4. ASSET INVENTORY

Pace's robust portfolio of assets enables transit service across 3,677 square miles. Pace's assets are operated throughout Northeast Illinois, in the City of Chicago and the counties of Cook, DuPage, Kane, Lake, McHenry, and Will.

625.25 (b) A TAM Plan must include **(1)** An inventory of the number and type of capital assets. The inventory must include all capital assets that a provider owns, except equipment with an acquisition value under $50,000 that is not a service vehicle. An inventory also must include third-party owned or jointly procured exclusive-use maintenance facilities, passenger station facilities, administrative facilities, rolling stock, and guideway infrastructure used by a provider in the provision of public transportation. The asset inventory must be organized at a level of detail commensurate with the level of detail in the provider's program of capital projects;

To deliver transit service across Northeast Illinois, Pace relies on thousands of assets that get reported annually to the National Transit Database (NTD), as well as many assets that Pace uses but is not responsible for maintaining due to contract service agreements. **Table 6. Pace Asset Inventory** summarizes all assets in active use by Pace.

Table 6. Pace Asset Inventory

ASSET CATEGORY	ASSET TYPE	ASSET COUNT
Facilities	Administration and Maintenance	12 (Pace-owned) 19 (Non-reportable to NTD)
	Passenger	24 (Pace-owned) 136 (non-Pace-owned, Reportable to NTD) 15 (Non-reportable to NTD)[8] 17 Pulse Stations (Non-reportable to NTD)[9]
Revenue Vehicles	Bus	695
	Over-the-road Bus	30
	Cutaway	505
	Minivan	213
	Van	345
Service Vehicles	Automobiles	71
	Trucks and Other Rubber Tire Vehicles	164
Electrical, Signal, and Communications	Bus Tracker Signs	172
	Radio System	1
	Automated Vehicle Location (AVL) system	1
	Intelligent Bus System (IBS)	1
	Transit Signal Priority (TSP) system	1
	On-bus Security System	1

[8] Pace reports to the NTD on the facilities for which we have capital responsibility, as well as all passenger stations used in the provision of public transit. Passenger facilities without an enclosed building do not count as stations and, unless owned by Pace, need not be reported to NTD.

[9] Pulse stations are not yet reportable to the NTD but may require reporting in the future.

ASSET CONDITION AND PERFORMANCE

625.25 (b) A TAM Plan must include: **(2)** A condition assessment of those inventoried assets for which a provider has direct capital responsibility. A condition assessment must generate information in a level of detail sufficient to monitor and predict the performance of the assets and to inform the investment prioritization;
625.45 Setting performance targets for capital assets. **(a)** General. **(1)** A provider must set one or more performance targets for each applicable performance measure. **(2)** A provider must set a performance target based on realistic expectations, and both the most recent data available and the financial resources from all sources that the provider reasonably expects will be available during the TAM Plan horizon period.
625.55 Annual reporting for transit asset management. **(a)** Each provider must submit the following reports: **(1)** An annual data report to FTA's National Transit Database that reflects the SGR performance targets for the following year and condition information for the provider's public transportation system.
(2) An annual narrative report to the National Transit Database that provides a description of any change in the condition of the provider's transit system from the previous year and describes the progress made during the year to meet the performance targets set in the previous reporting year.

It is critical that Pace has clear knowledge of the condition of our assets and their performance. This information enables justification of operating budgets, capital program funding requests and project prioritization across divisions and asset classes. To better communicate needs and the risks of underinvestment, Pace must have a good understanding of our State of Good Repair (SOGR) needs – informed by condition assessments. This condition data will be a key input of Pace's prioritization process to ensure efficient and effective use of public funding.

CONDITION RATING METHODOLOGY

In accordance with the TAM Final Ruling, Pace began in 2018 utilizing the condition metrics required for reporting to the NTD and used to measure performance against targets.[10] **Table 7. Condition Rating Methods** describes the condition rating method required by the FTA and used by Pace.

Table 7. Condition Rating Methods

ASSET CLASS	CONDITION RATING METHOD (TAM NTD)
Rolling Stock	Age-based, % of useful life
Non-Revenue Vehicles	Age-based, % of useful life
Administrative and Maintenance Facilities	Quadrennial inspections, 1-5 rating
Stations and Passenger Facilities	Quadrennial inspections, 1-5 rating

[10] Condition data for some facilities may only be reported to NTD if they meet certain criteria (e.g., any maintenance or administration facility under 100 square-ft. does not need to be included (e.g., security guard shack, stand-alone restroom, storage shelter in which no work is performed) in either of your inventories) defined by FTA including minimum floor area and whether Pace has direct capital responsibility.

NTD PERFORMANCE AND TARGETS FY2021-FY2022

Table 8. FY2021 Performance and FY2022 Targets displays the FY2021 performance of Pace relative to its condition targets for all relevant asset classes, as well as the targets set for FY2022. The column "FY 2021 Performance Status" reveals that for Rolling Stock (Revenue Vehicles) and Equipment (Non-Revenue Vehicles), large shares are past their useful life and in need of replacement when funding allows. Only a small share of our facilities have a condition lower than 3, representing "adequate" condition. For additional information see **Appendix A – NTD Annual Reporting**.

Table 8. FY2021 Performance and FY2022 Targets

	ULB	FY 2021 TARGET	FY 2021 PERFORMANCE STATUS	FY 2021 DIFFERENCE	FY 2022 TARGET
1. Rolling Stock *Percent of revenue vehicles that have met or exceeded their Useful Life Benchmark (ULB)*					
BR - Over-the-road Bus	12	0.00%	0.00%	0.00%	0.00%
BU – Bus	12	14.86%	14.10%	0.76%	13.35%
CU - Cutaway	4	77.11%	89.70%	-12.59%	64.16%
MV - Minivan	5	28.02%	15.49%	12.53%	100.00%
VN - Van	5	41.90%	33.62%	8.28%	45.00%
2. Equipment *Percent of service vehicles past their Useful Life Benchmark (ULB)*					
Automobiles	5	89.74%	94.37%	-4.63%	100.00%
Trucks and other Rubber Tire Vehicles	5/10	41.48%	50.00%	-8.52%	44.78%
3. Facility *Percent of facilities rated below 3 on the condition scale*					
Passenger / Parking Facilities	N/A	16.67%	12.50%	4.17%	13.64%
Administrative / Maintenance Facilities	N/A	16.67%	8.33%	8.34%	7.69%

FACILITY CONDITION ASSESSMENTS

As indicated in **Table 7. Condition Rating Methods**, Pace facilities' condition gets measured based on quadrennial inspections, using a 1-5 rating. **Table 9. Condition Rating Levels** shows the FTA-defined condition rating levels used for the facility condition assessments.

Table 9. Condition Rating Levels

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

Table 10. Condition Scores for Facilities with Pace Capital Responsibility provides the condition rating for all facilities for which Pace has capital responsibility, as well as the date of the most recent assessment. In compliance with the FTA mandate to assess all facilities at least once every four years, Pace, with support from our consultant WSP, has assessed

approximately one-quarter of our facilities each year since 2018. In 2022, WSP re-assessed the facilities first evaluated in 2018.

Table 10. Condition Scores for Facilities with Pace Capital Responsibility

ASSET TYPE	ASSET NAME	CONDITION RATING	DATE OF ASSESSMENT
Administration + Maintenance Facilities	Administration Headquarters	4	9/28/2020
	Fox Valley Division	3	7/12/2019
	Heritage Division	3	7/8/2019
	McHenry Paratransit Garage	3	7/10/2019
	North Division	3	7/10/2019
	North Shore Division	4	7/9/2019
	Northwest Division	2	9/29/2020
	River Division	3	7/11/2019
	South Division	4	10/12/2021
	South Holland Acceptance Facility	4	10/13/2021
	Southwest Division	4	10/13/2021
	West Division	4	9/30/2020
Passenger Stations and Parking	Blue Island Park-n-Ride	3	7/8/2019
	Bolingbrook - Canterbury Lane Park-n-Ride	3	4/28/2022
	Bolingbrook - Old Chicago Park-n-Ride	3	4/28/2022
	Bridgeview Transit Center	5	10/7/2020
	Bridgeview Transit Center Park-n-Ride	5	10/7/2020
	Buffalo Grove Park-n-Ride	3	4/27/2022
	Buffalo Grove Transportation Center	4	4/27/2022
	Burr Ridge Park-n-Ride	2	4/28/2022
	Chicago Heights Transportation Center	3	10/12/2021
	Elgin Transportation Center	4	10/6/2020
	Elk Grove Park-n-Ride	2	4/27/2022
	Harvey Transportation Center	2	7/8/2019
	Harvey Transportation Center Park-n-Ride	2	7/8/2019
	Hillside Park-n-Ride	3	9/29/2020
	Hodgkins UPS Bus Terminal 1	3	10/20/2021
	Hodgkins UPS Bus Terminal 2	3	10/20/2021
	Homewood Park-n-Ride	3	7/8/2019
	I-90/Barrington Road	5	10/6/2020
	I-90/Barrington Road Park-n-Ride	5	10/6/2020
	I-90/IL-25 Park-n-Ride	5	4/29/2022
	I-90/Randall Road Park-n-Ride	5	4/29/2022
	Northwest Transportation Center	3	9/28/2020
	Northwest Transportation Center Park-n-Ride	3	9/28/2020
	Plainfield Park-n-Ride Bus Transfer Center	5	10/7/2020
	Plainfield Park-n-Ride	5	10/8/2020
	Prairie Stone Transportation Center	2	4/29/2022

END OF SECTION 4

5. ASSET MANAGEMENT ENABLERS

Asset Management at Pace is carried out by staff from numerous departments within the agency. Core business processes and support technologies enable effective Asset Management decisions and practices.

OVERVIEW

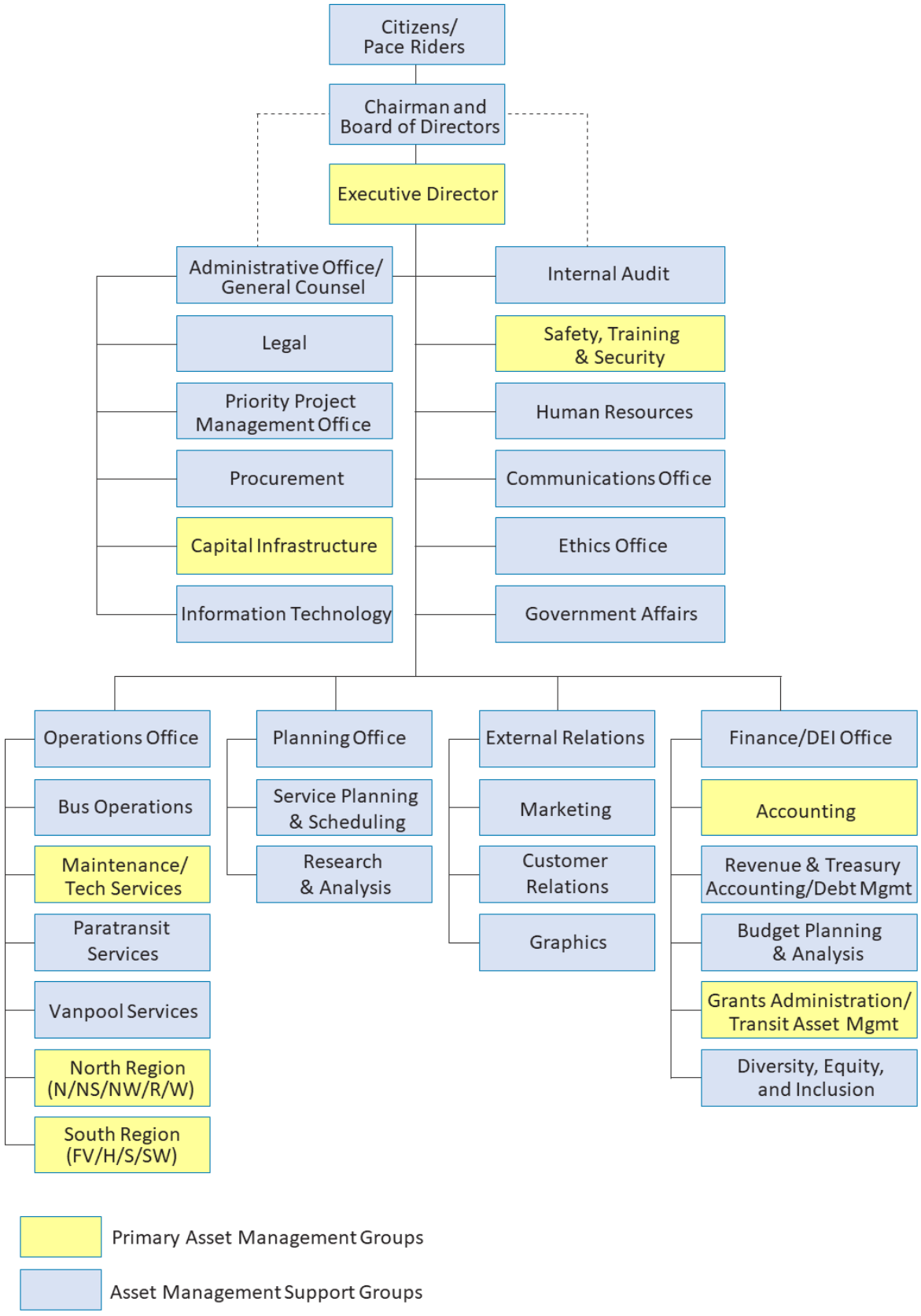
This section describes the organization of Pace, including the roles and responsibilities for Asset Management, and the resources that will be needed to carry out the activities outlined within this plan. It also covers the core business processes in place to assist and guide Pace in delivering Asset Management, and the information and technology systems that support Asset Management, work planning, and decision-making.

ORGANIZATION AND RESOURCE PLAN

625.25 (b) A TAM Plan must include: **(8)** A summary or list of the resources, including personnel, that a provider needs to develop and carry out the TAM Plan

Pace's Executive Director is the Accountable Executive for Asset Management and is responsible for ensuring that this TAM Plan is developed and carried out. Pace also has a Capital Infrastructure Program Manager and a Transit Asset Management Coordinator who are responsible for day-to-day activities related to TAM. Individuals from many other departments throughout Pace have been involved in the development and update of this TAM Plan, through participation in workshops and provision of relevant data and information and will continue to play an important role in managing Pace's assets. **Figure 8. Asset Management Organization** depicts Asset Management responsibilities at Pace.

Figure 8. Asset Management Organization



CORE BUSINESS PROCESSES

625.25 (b) A TAM Plan must include: **(7)** A description of key TAM activities that a provider intends to engage in over the TAM Plan horizon period

Several core business processes enable Pace's ability to develop and implement TAM activities.

Table 11. Core Business Processes depicts the existing key Asset Management processes. The processes are grouped according to the eight pathways against which Pace was assessed by WSP in their 2018 GAP Analysis:

1. Alignment to Organizational Goals
2. Control of Assets
3. Asset Management Planning
4. Capital Planning and Delivery
5. Maintenance Planning and Delivery
6. Operations and Incident Management
7. Informed Decisions
8. Resource Capabilities

Table 11. Core Business Processes

CORE BUSINESS PROCESS GROUPS	DESCRIPTION
1. Alignment to Organizational Goals	
Strategic Planning	***Driving Innovation,*** *The Pace Strategic Vision Plan* was adopted in September 2021. As the successor plan to the agency's *Vision 2020* plan, ***Driving Innovation*** will serve as Pace's primary guiding document that establishes major planning and policy initiatives and priorities for the coming years. The purpose of the ***Driving Innovation*** Plan is to identify and establish both near-term and long-term priorities for Pace, guided by goals, and organized into discrete planning initiatives, in accordance with an overarching strategic vision. Shorter-term planning is also represented in Pace's annual budget, which sets out annual goals and an outline of how Pace will achieve them.
Priority Project Management Office (PPMO)	To spend capital dollars and deliver projects that provide significant and substantive benefits to our customers, Pace established a Priority Project Management Office (PPMO) in 2021. The PPMO coordinates Planning, Engineering, Finance, Procurement, Construction, Grants, Outreach, and other functions related to the delivery of the Agency's major capital projects and strategic initiatives, including ***Driving Innovation***. The PPMO complements existing functions within the agency's administrative structure, and in general helps streamline processes and outcomes. The PPMO helps ensure successful delivery of these important projects in a timely manner and sets the agency on a path to expand transit options and improve the quality of Pace service throughout the region.
Service Planning and Scheduling	Pace's Service Planning and Scheduling group makes service changes throughout the year, typically coinciding with operator run picks. Approximately 140 service changes are made per year, and these changes are tracked in a spreadsheet. Schedulers use HASTUS to develop operator work schedules.

Table 11. Core Business Processes (Continued)

CORE BUSINESS PROCESS GROUPS	DESCRIPTION
2. Control of Assets	
Asset Risk Management	Failure rates are tracked and used to estimate required spares ratios to mitigate risk. In addition, plans are in place and used to mitigate the effects of weather-related risks on service.
Performance Management	Pace's annual budget includes several performance measures, each of which ties to one of Pace's five primary strategic goals: Safety, Reliability, Courtesy, Efficiency, And Effectiveness. Quarterly Board reports measure Ridership, Complaints, and Accidents. Individual departments also regularly track metrics relevant to their assets, such as fuel consumption.
Audit and Assurance	Pace has a robust internal audit process involving all managers from across the agency. As part of the audit process, Pace administers a Controls Self-Assessment which asks managers to rate the effectiveness of all business processes on a scale of 1-5. Processes rated below a 3 are investigated by the Internal Audit Department to better understand why and may be candidates for more in-depth audit projects. The Internal Audit Department develops an audit plan for the year based on the results of the Controls Self-Assessment.
Safety and Hazards Management	Pace's Safety Training/Security Department and Bus Operations Department work together to promote Safety across Pace. A Safety Manager at each Division is responsible for conducting monthly walkthroughs to identify any safety risks/hazards. The Pace Public Transit Agency Safety Plan (PTASP) was adopted by the Pace Board in November 2020.
3. Asset Management Decision Making	
Asset Management Plans	Pace developed an Initial Transit Asset Management Plan in 2018 and made updates in 2019 and 2020. This document continues to build on prior plans, representing a comprehensive refresh of the initial plan.
Asset Strategies	Lifecycle Strategies for Pace's assets have been documented as part of this plan, building on existing practices. Refer to **Section 6. Lifecycle Management Strategies** for more detail.
4. Capital Planning and Delivery	
Capital Expenditure Evaluation	Since 1991, the Pace Capital Project Scoring Criteria has been in place and has been adjusted occasionally during annual budget cycles to accommodate funding limitations and changing agency priorities. Refer to **Section 7. Investment Prioritization** for more detail.
Capital Program Development	To develop the annual capital program, Department Managers and Senior Staff are required to fill out forms detailing their capital requests. The Chief Financial Officer appoints a multi-department cross functional team, approved by the Executive Director, to complete the scoring. The Capital Grants and TAM Department provides score information to Senior Staff who decide which projects to include, in coordination with Pace's Board of Directors, who must approve the capital program.
Quality Management	Pace controls for quality by having Pace Project Managers onsite during construction to monitor work and ensure that products are installed per plans and specifications, and that contractor submittals reflect actual work completed. A Contract Administrator completes all necessary paperwork.
Asset Handover and Transitioning	Pace's asset commission and handover processes include ensuring that required materials and documentation have been received, including warranties, manuals, waivers, etc., and that any relevant training has been provided.

Table 11. Core Business Processes (Continued)

CORE BUSINESS PROCESS GROUPS	DESCRIPTION
5. Maintenance Planning and Delivery	
Maintenance Planning and Definition	Pace has many policies/plans, including those related to maintenance. Maintenance delivery strategies/plans and maintenance manuals are reviewed on an as-needed basis, including when new assets are delivered, or changes are made.
Inventory Management	Pace seeks to optimize inventory holdings by tracking minimum and maximum quantity levels, which are set based on historical data and formulas related to per diem usage. Obsolescence of equipment is also considered when a bus fleet is nearing retirement. The Small Purchases Department begins ordering parts on only an as needed basis. Inventory requirements (including min/max quantities, current stock, stock ordered, and lead time) are available in Oracle.
6. Operations and Incident Management	
Operations Management	Pace has standard operating procedures in place for many assets, and in some cases, these also cover atypical operation (e.g., during special events or weather events). Pace has processes in place for re-routing because of weather, construction, traffic incidents, or other events that make a normal route impractical. Specific alternative routes are defined in advance and provided to the public to limit inconvenience.
Incident Management	The Safety and Bus Maintenance Departments conduct investigations of incidents involving Pace-owned vehicles. The Safety Department talks to witnesses and reviews video from any nearby cameras, while Bus Maintenance examines the bus. Investigations conclude with recommendations on how to avoid similar incidents in the future, and Pace collaborates with local authorities as needed to implement the recommendations.
Business Continuity Planning	Pace has built redundancy into our systems to reduce the likelihood of service disruption. For example, there are contingency plans for recovery for each facility, and a back-up facility assigned in case a center goes down. The South Division also has a 24-hour dispatch center that can pick up for other divisions if needed. Pace employs a mass-calling app (“Call-em-all”), allowing all staff to be reached quickly in case of an emergency.
7. Informed Decisions	
Asset Cost Capture	Maintenance cost information associated with Fixed Route Vehicles and Facilities can be retrieved and reported by activity/job type per asset through Pace’s Oracle eAM system.
Asset Information	Pace’s asset information is stored in two different application databases: A custom Fixed Assets application built on Oracle APEX and Oracle eAM. These databases include fields for asset information including size, material, installation date, model, mileage, etc. In Oracle eAM, Pace can manually access information on asset inspections and work activity histories. The two applications are supplemented by information captured through other automated sources.

Table 11. Core Business Processes (Continued)

CORE BUSINESS PROCESS GROUPS	DESCRIPTION
8. Resource Capabilities	
Training	Pace staff receive necessary training for working with assets, either via the Training Coordinator and/or by user departments. Manufacturers also provide training on new fleets. Despite COVID-19, staff continues to receive weekly notifications of free virtual Professional Development training opportunities.
Supplier Management	Pace's processes for selecting contractors allow for the consideration of other factors beyond cost (at least for some project types and sizes). To monitor contractor quality, Pace visits contractor sites to ensure compliance with requirements. In addition, Pace may debar Suppliers/Contractors from bidding, either indefinitely or temporarily, due to contract performance issues. Based on COVID-19 constraints, Pace initiated electronic iSupplier registration and e-bidding as the digital tool for procurement and supplier management, and B2Gnow, the DBE system that tracks DBE requirements.

CORE ASSET MANAGEMENT SUPPORT SYSTEMS

Table 12. Core Support Systems describes Pace's core support systems, and planned actions for improvement. Pace utilizes several support technologies/systems to store information about our assets, which we rely on to make informed decisions.

Table 12. Core Support Systems

CORE SUPPORT SYSTEMS	DESCRIPTION	DEPARTMENT
Oracle Enterprise Business Suite (EBS)	Used to track fixed route vehicle maintenance information. Also used for comprehensive HR, Finance, Procurement, Grants, and Materials Management. Maintenance information for Paratransit, Vanpool, and Non-Revenue Vehicles are recorded in contractor hosted solutions.	Vehicle Maintenance
Oracle Enterprise Asset Management (eAM)	Costs (including labor and materials) are tracked at the individual vehicle level within Oracle eAM, which also contains additional vehicle information, such as fuel and fluid consumption (imported from FLEETWATCH), mileage, and maintenance history.	Vehicle Maintenance
Oracle Application Express (APEX)	Custom applications for Grants Administration & TAM, Fixed Assets, Vanpool Management, Farebox (Revenue Collection), Bus Operations, and Safety Training. The Vehicle Tracking Utility (VTU) is a custom APEX add on to the Fixed Assets Module for the TAM Department to track vehicle inventory and related information used for FTA/NTD reporting.	Finance, Paratransit/Vanpool Services, Bus Operations, & Safety/Training/Security

Table 12. Core Support Systems (Continued)

CORE SUPPORT SYSTEM	DESCRIPTION	DEPARTMENT
MobilityDR	Pace uses MobilityDR, hosted by DemandTrans, as the software platform to manage Pace On Demand services. The software consists of several components: 1) a driver application, 2) an administrative portal, and 3) a passenger facing website. There is also a backend scheduling service. The driver application is an Android application that is run on an in-vehicle tablet. The administrative portal is powered by Microsoft SQL Server. Pace On Demand is a reservation-based, shared-ride service in 11 designated service areas throughout the suburban region. Pace On Demand services are designed to meet transit demand in areas where ridership demand is too low for traditional fixed route bus service, providing the first/last mile connections with the regional transit network. Reservations and recurring trips (trips with the same origin and destination on the same schedule) can be made in advance. Riders are picked up and dropped off in the most convenient order. Additionally, at prescribed times during the hours of operation, riders may transfer to and from fixed route buses and commuter train stations.	Divisions (Garages), Paratransit Contractors, Planning, and Paratransit Operations
Customer Assistance System (CAS)	Pace uses the CAS as our primary Customer Relationship Management (CRM) system. Customer complaints, commendations, and suggestions are all managed in CAS. Employees from various departments, as well as third party carriers, login to view and respond to customer complaints. The CAS system will be replaced with a new system called ServiceNow Customer Service Management (CSM). The new system is set to go live by 3Q2022.	Bus Operations, Communications, Customer Relations, Divisions (Garages), Ethics Office, Executive Services, Fixed Route Carriers, Government Affairs, Internal Audit, Legal, Marketing, Paratransit, Paratransit Carriers, Planning, Research & Analysis, Revenue & Treasury, Accounting, Risk Management, Sign & Shelter, and Vanpool
Microsoft Office 365 (Excel and Access)	The Human Resources Department (HR) planning is done within Excel, not in a separate HR system (e.g., Hyperion). All departments use Microsoft Excel and Access for data storage and processing.	All
Trapeze Pass	Used for Paratransit scheduling and operations. Paratransit operations uses Trapeze Pass to track service-related issues and performance measures. Paratransit contractors have their own communications system, using Motorola radios that were updated to use Trapeze Pass. There are no interfaces between Oracle eAM and Trapeze Pass.	Paratransit Services

Table 12. Core Support Systems (Continued)

CORE SUPPORT SYSTEM	DESCRIPTION	DEPARTMENT
Intelligent Bus System (IBS)	Intelligent Bus System (IBS) is a satellite-based communications technology, used to improve the tracking of fixed route buses, collection of data, and communication between Pace and our drivers and passengers. IBS interfaces with Trapeze TransitMaster for real-time bus service management and for Computer Assisted Dispatch and Automatic Vehicle Location (CAD/AVL).	Bus Operations, Safety/Training/Security
ArcGIS	ArcGIS is a geographic information system (GIS) that allows the spatial visualization of data along with the capability of tabular data to be mapped and analyzed. GIS uses spatial and statistical methods to analyze and attribute geographic information. ArcGIS is used for long-range planning, service planning, and route visualization.	Strategic and Capital Planning, Service Planning, Bus Operations
Oracle Core-HR	An Oracle module used by Human Resources to store information such as organization, location, job, position, grade, employee information, and more.	Human Resources
HASTUS	Schedulers use a program called HASTUS for scheduling different "work pieces" that need to be assigned to the different routes, trips, operators, and vehicles. HASTUS provides access to on-time performance, vehicle statistics, labor needs, etc. Data is exported from HASTUS to external apps like Google Transit and shared with the Service Analysis group.	Planning Services
FLEETWATCH	Third party fuel, fluid, and mileage monitoring system for Revenue Vehicles.	Revenue Services
RidePro	RidePro is a mobile-friendly commuter management software used to manage Pace's RideShare program. Commuters can access information about Pace Vanpooling, including newly forming vans and open seats in existing vans, carpooling, and other alternative commuting services. The software includes reporting, analysis, and dashboard features.	Strategic Planning / RideShare
Farebox System Upgrade	Pace is currently in the process of replacing our 37-year-old fareboxes. Pace has maintained these fare collection devices well-beyond their standard 15-year useful life, to the point where replacement parts are no longer available. While the amount of cash collected has declined over the years as electronic fare media has become more widely used, providing fareboxes helps maintain an equitable way to collect fares throughout the region. The project calls for all new physical equipment on buses and in garages, as well as new system architecture for the collection, maintenance, and reporting of data that should tie in with Ventra, the automated fare collection system used in region. The new system will be more reliable and provide more information compared with existing systems. The project is a regional partnership with the CTA.	Revenue Services

Table 12. Core Support Systems (Continued)

CORE SUPPORT SYSTEM	DESCRIPTION	DEPARTMENT
Security Cameras	All Pace buses are equipped with constantly recording internal security cameras that enables external recording of incidents. These technologies promote safety of passengers and drivers and enable Pace to identify driver behavior that may pose a safety risk.	Bus Operations, Safety/Training/Security
Oracle Business Intelligence Enterprise Edition (OBIEE) and Tableau	Pace uses Oracle Business Intelligence Enterprise Edition (OBIEE) and Tableau to report and analyze asset information across applications.	All
eBuilder	Enterprise Project Management (EPM) software used for large construction and capital projects. Integrated with Oracle EBS for contracts.	Finance, Capital Infrastructure, PPMO
KnowledgeLake	Pace's enterprise document management system.	All

END OF SECTION 5

6. LIFECYCLE MANAGEMENT STRATEGIES

Lifecycle Management Strategies have been further developed as part of this TAM Plan to capture the baseline or steady state activities necessary to achieve and maintain a State of Good Repair (SOGR), and to ensure Pace's assets are functional, reliable, and are able to continue to support a Safe, Reliable, Courteous, Efficient, and Effective regional operation.

OVERVIEW

625.25 (**b**) A **TAM Plan** must include:

(**7**) A description of key **TAM** activities that a provider intends to engage in over the TAM Plan horizon period;

During the development of this TAM Plan, the Lifecycle Management Strategies for all major assets were reviewed by Pace staff and our consultant, WSP. The purpose of this updated TAM Plan is to develop the long-term maintenance and improvement program which will enable Pace to continue to maintain a State of Good Repair.

The Lifecycle Management Strategies laid out in the asset plans in the Appendices to this document begin to define Pace's approach to asset management. Lifecycle Strategies may be similar for asset classes where commonalities exist, such as Revenue Vehicles, and Non-Revenue Vehicles, however, the Lifecycle Management Strategies for each asset class are unique. The current strategy for each asset class is presented in the **Appendices** – and a general overview of lifecycle management practices is presented in this section.

REGIONAL TRANSPORTATION AUTHORITY (RTA) ROLE: STRATEGIC ASSET MANAGEMENT (SAM)

The RTA, as part of its financial oversight function, has historically maintained an interest in ensuring that the Service Boards have sufficient funding to operate and maintain their physical assets. For many years, the RTA has facilitated regional funding campaigns, overseen the issuing of bonds to provide funding for capital investments, and monitored the delivery of major projects of each of the Service Boards to achieve this objective. These efforts have been challenged for decades, as the lack of consistent, reliable capital funding has led to aging assets, unreliable service, and an enormous backlog of unmet capital funding needs.

The need for RTA to conduct long-term planning for maintaining the region's transit assets was codified in the 2008 RTA Act. In response to the pressure to evaluate and prioritize capital investments, RTA initiated a capital asset condition assessment program in 2009 that was followed by development of a regional transit asset management (TAM) framework. The primary goal of that effort was to estimate the total capital needs for each of the Service Boards and develop a framework to prioritize capital projects based on a condition assessment of the current asset inventory. The initiative also included the development of the Capital Optimization Support Tool (COST), a customization of the Federal Transit Administration's (FTA)

TERM-Lite decision support tool and a database of all the transit assets of the Northeastern Illinois RTA system operated by the three Service Boards.

Several Capital Asset Condition Assessment reports were published during this time that established a regional backlog estimate and other State of Good Repair (SGR) statistics helpful to the region's transit capital advocacy efforts.

The RTA's Capital Asset Condition Assessment activities ended in 2017, following the issuance of the Federal Transit Administration (FTA)'s July 26, 2016, TAM Rule (49 CFR part 625). The Service Boards are now required to maintain TAM programs, plans, and datasets for submission to the National Transit Database (NTD).

The RTA still maintains an interest in regional capital funding activities and has transitioned its TAM activities into a strategic asset management (SAM) framework to monitor the SGR of all the regional transit assets of the system as a combined portfolio. The SAM function provides RTA with the tools to track mid- and long-term regional investment needs and to inform capital programming and planning processes for strategic investments, as referenced in the Framework for Transit Capital Investment.

CURRENT LIFECYCLE MANAGEMENT STRATEGIES

Pace's core objective is to provide a Safe, Reliable, Courteous, Efficient, and Effective suburban bus service. Pace currently employs a variety of lifecycle management strategies to achieve this objective which are detailed in the asset plans in the appendices of this document. Pace's asset lifecycle management strategies fall into the following categories:

- ***Acquisition*** to procure, design, build, and transfer assets considering long-term maintenance and operations.
- ***Maintenance*** including inspection/monitoring, preventative maintenance, and corrective maintenance.
    - ✓ ***Inspection/monitoring*** to confirm the asset can function in its required state and provide a safe operational environment.
    - ✓ ***Preventative maintenance*** to achieve a required level of asset performance and maintain a safe operational environment.
    - ✓ ***Corrective maintenance*** to return the asset to its required function and restore a safe operational environment.
- ***Overhaul/Rehabilitation*** to restore the asset to an operational design standard and maintain performance.
- ***Disposal*** to ensure compliant, efficient, cost-effective retirement of assets.

ACQUISITION

Funding for acquisition is determined through the capital program development process, which is based on a well-developed capital project prioritization methodology. For asset acquisitions,

property and equipment are recorded at historical cost. Pace capitalizes assets with a useful life of one year or more that are:

- Capital equipment
- Operation equipment with a unit cost of $5,000 or more
- Costs incurred to extend an asset's useful life as part of a fleet enhancement or major rebuild/rehabilitation program, or
- An item determined to be highly susceptible to loss or theft

Most of Pace's assets have been acquired through capital grant projects funded by FTA, the Illinois Department of Transportation (IDOT), the RTA, or the Chicago Metropolitan Agency for Planning (CMAP). Fixed Route buses, Paratransit buses, Vans, and Non-Revenue vehicles are set up in the Finance Department Fixed Asset APEX System based on their in-service date. When expanding or changing the revenue fleet, the Chief Planning Office works with the Budget Planning and Analysis Department to provide information on planned expansions or other plans. For equipment, replacements are typically made once equipment becomes unreliable. Equipment procurement is done by the Facilities Maintenance or the Bus Operations Department when a simple replacement occurs, but it is possible for the Capital Infrastructure, Design & Construction Department to handle the asset acquisition, depending on the scope of work. The process for asset acquisitions can be found in the FI-05, Finance Department Fixed Assets Policy.

MAINTENANCE

Pace has a detailed **Rolling Stock, Facilities, and Equipment Maintenance Manual** prescribing planned maintenance for the agency's assets, as well processes to ensure contractor quality and completion, and strict guidelines for disposal of assets. Pace's Maintenance and Technical Services Department is responsible for managing and maintaining buses throughout their lifecycle, while maintenance and repair of Vanpool and Non-Revenue vehicles are conducted by third-party vendors at regular vehicle maintenance shops throughout the region. The Facilities Maintenance Department typically manages the smaller assets and programs that are relevant to the equipment asset category.

INSPECTION/MONITORING

For Administrative and Maintenance Facilities and Passenger Facilities with buildings, inspections are recorded and tracked by the Facilities Maintenance Department on a biannual basis. Division staff conduct inspections of facilities more frequently. For rolling stock, each driver is required to perform a pre-trip inspection of their vehicle prior to pullout. Documentation of inspections are recorded on hardcopies, and any noted defects are entered into Oracle eAM. In-addition to pre-trip inspections, in-service vehicles are serviced daily and ensured by the Maintenance Superintendent.

PREVENTATIVE MAINTENANCE

Pace's maintenance manual prescribes frequencies by which many different assets are inspected. This preventative maintenance ensures that Pace's assets remain safe and reliable to operate. Preventative maintenance for Rolling Stock includes the inspection of the rolling stock,

scheduled oil changes, lubrication, adjustments, service, and repairs that are performed during the inspection/servicing and documented on the appropriate forms. All Preventative Maintenance Inspection (PMI) forms are completed under a work order by an assigned mechanic at the scheduled mileage intervals and the results are forwarded to the Maintenance Superintendent or designee.

CORRECTIVE MAINTENANCE

Some maintenance at Pace is reactive, performed in response to defects identified during routine inspection, preventative maintenance, or reported by field staff. When possible, defects are corrected in short order by Pace staff. Pace also has contracts with third party vendors to complete corrective maintenance as needed.

OVERHAUL/REHABILITATION

Third-party vendors provide buses with an overhaul of engine, transmission, and related components at approximately mid-life (250,000 miles, six years, or as funding permits). Facilities may also receive extensive rehabilitation when condition warrants it. Other assets are replaced rather than overhauled. These processes are identified in the **Facility Maintenance Plans and Practice Overview and Procedures for Inspections Manual** and the **Rolling Stock, Facilities, and Equipment Maintenance Manual.**

DISPOSAL

At Pace, an asset is disposed of if it has exceeded its useful life and is no longer needed or functioning or has been damaged or destroyed before the end of its useful life. When disposal is necessary, an Asset Disposal Form is completed by the division or department that holds or is responsible for the asset. The Asset Disposal Form is submitted to Accounting and the Fixed Asset Accountant reviews the asset to determine if there is any remaining useful life. If there is, then that is noted on the form.

The Asset Disposal Form is then reviewed and approved by the Section Manager, Accounts Payable/Receivable and the Section Manager, Grants Administration if the asset is capital funded. The Fixed Asset Accountant determines whether an asset should be disposed of by the Using Department or sold by the Procurement Department. The Procurement Department is responsible for obtaining payment for the sale of an asset and forwarding those funds directly to the Finance Department.

Per the Bipartisan Infrastructure Law effective 11/15/21, Pace will only be allowed to retain the first $5,000 received for all sales after 11/15/21. If the proceeds from the asset exceed $5000 or have remaining useful life, then the Grants Administration Department will coordinate repayment to the funding agency and obtain concurrence.

END OF SECTION 6

7. INVESTMENT PRIORITIZATION

Since 1991, the Pace Capital Project Scoring Criteria has been in place and has been adjusted occasionally during annual budget cycles to accommodate funding limitations and changing agency priorities.

625.25 (**b**) A TAM Plan must include: (**3**) A description of analytical processes or decision-support tools that a provider uses to estimate capital investment needs over time and develop its investment prioritization; (**4**) A provider's project-based prioritization of investments;

625.33 Investment prioritization. (**a**) A TAM Plan must include an investment prioritization that identifies a provider's programs and projects to improve or manage over the TAM Plan horizon period the state of good repair of capital assets for which the provider has direct capital responsibility. (**b**) A provider must rank projects to improve or manage the state of good repair of capital assets in order of priority and anticipated project year. (**c**) A provider's project rankings must be consistent with its TAM policy and strategies. (**d**) When developing an investment prioritization, a provider must give due consideration to those state of good repair projects to improve that pose an identified unacceptable safety risk when developing its investment prioritization. (**e**) When developing an investment prioritization, a provider must take into consideration its estimation of funding levels from all available sources that it reasonably expects will be available in each fiscal year during the TAM Plan horizon period. (**f**) When developing its investment prioritization, a provider must take into consideration requirements under **49 CFR 37.161** and **37.163** concerning maintenance of accessible features and the requirements under **49 CFR 37.43** concerning alteration of transportation facilities.

REGIONAL TRANSPORTATION AUTHORITY (RTA) PERFORMANCE BASED ALLOCATION FRAMEWORK

For the last several years, the RTA and the Service Boards have been working together to articulate and advance a regional transit capital strategy. **Invest in Transit** emphasizes the importance of transit in Northeastern Illinois and the related infrastructure investment needed for the three transit Service Boards (Pace, Metra & CTA). It includes a vision, goals, core requirements, and priority projects that the RTA and the Service Boards have committed to advancing with additional capital funding.

Despite the COVID-19 pandemic, the RTA and Service Boards, working with the region's funding partners, including the Illinois Department of Transportation (IDOT) and the FTA continue to execute the capital program including granting funds and advancing projects.

Several regional plans and processes are already in place to guide the transit capital programming process, as described in the Draft **Framework for Transit Capital Investments,** developed by the RTA in 2020. This Framework strengthened linkages of capital programming to three Strategic Goals:

- Deliver value on our investment
- Build on the strengths of our network
- Stay competitive

and four Core Requirements:

- Maintain and improve safety and reliability
- Achieve full accessibility
- Improve equity
- Meet regulatory requirements.

Continuing the work of the Investment Framework, the Performance-Based Capital Allocation Process Committee made up of RTA staff in partnership with the CTA, Metra, and Pace developed a Capital Allocation Structure which was adopted by the RTA Board in July 2021 for allocating federal formula and state PAYGO funds. This **Performance Based Capital Allocation process** distributes funds based on need, project delivery timing, and regional priorities. The new approach better matches Service Board needs, puts a focus on equity and accessibility projects and incentivizes the Service Boards to deliver projects to the region in a timely manner. The new allocation method begins with federal formula and PAYGO funds programmed in 2025.

The State of Illinois also enacted legislation in September 2021 requiring a transparent prioritization process for Northeastern Illinois transit projects receiving state capital funds, which considers several factors. Additionally, the RTA is currently reviewing the criteria outlined in the new state legislation alongside current processes and criteria to determine where alignment is already occurring and where there are opportunities to better match with the new state legislation in future programming and reporting efforts.

The Infrastructure Investment and Jobs Act, signed into law on November 15, 2021, is a significant investment in the nation's transit infrastructure. The legislation also authorizes several new transit discretionary programs including a new State of Good Repair discretionary program and there is also a new discretionary program for station accessibility entitled the All-Stations Accessibility Program.

INVESTMENT PRIORITIZATION – IL HB0253

On August 24, 2021, Governor Pritzker approved HB0253 making it Public Act 102-0573. Pertinent to Pace is Section 10. The Regional Transportation Authority (RTA) Act which was amended by adding Section 2.39 Prioritization Process for Northeastern Illinois transit projects.

The RTA shall develop a transparent prioritization process for Northeastern Illinois transit projects receiving State capital funding. Starting April 1, 2022, no project shall be included in the 5-year capital program, or amendments to that program, without being evaluated under the selection process. The prioritization process must consider, at a minimum:

(1) Access to key destinations such as jobs, retail, healthcare, and recreation
(2) Reliability improvement
(3) Capacity needs
(4) Safety
(5) State of good repair
(6) Racial equity and mobility justice
(7) Economic development

Considering HB0253, Pace revisited our 1991 capital priority scoring criteria to apply it to the 2023 capital budget call process. This new scoring guide was developed by the TAM Department with the Chief Financial Officer and was presented at a TAM executive workshop. Highlights include:

- ✓ Updates include new RTA Act requirements for state-funded projects and alignment with the RTA strategic plan.
- ✓ Updates include adding categories for racial equity, mobility justice and environmental goals with an improved weighting system that better reflects evolving capital priorities of Pace and the region.

PACE INVESTMENT PRIORITIZATION METHOD

Pace's Investment Prioritization method, in the following pages, aligns with our new Capital Project Scoring Criteria**,** and the process currently to be used to select projects during the 2023-2027 annual budget cycle.

Pace's capital planning process begins with the RTA's annual Budget Call in May. The Chief Financial Officer along with the Department Manager, Capital Grants and TAM sends out a memo containing instructions with links to forms for Senior Staff to provide their direct reports to return them with their capital requests by a predetermined deadline. Supplemental documents are required as support for certain capital requests, including fleet plans for vehicle requests.

The Capital Grants and TAM Department collects and catalogs all complete requests. Capital projects not selected for year-one may be included in years two through five, however, projects not selected must be resubmitted for consideration every year, and there are no implicit or explicit agreements that a project that does not make it into the plan one year will be prioritized the following year. All submissions are reevaluated and reprioritized every year.

The Capital Grants and TAM Department meet with Senior Staff to present recommendations resulting from the scoring process and to allow Senior Staff to make informed decisions. The prioritization scores are only one factor in the decision process. Another factor may be funding sources, which restrict how money can be spent and must be matched appropriately to specific projects. Based on the feedback received from Senior Staff, the proposed budgets are updated.

Next, Senior Staff and the Capital Grants and TAM Department introduce the draft Capital Program to the Pace Board Chairman and Directors for a review and comment period in late August/early September prior to public budget introduction at the September Board meeting. A formal budget presentation occurs at the October Board meeting before Pace holds mandated public hearings throughout the six county Northeastern Illinois region. The budget information is made available at most public libraries, township, city, and village offices and on the Pace website. After consideration of input from the public process, the final proposed program is approved by the Pace Board in November. The proposed Capital Program is submitted to the RTA in October followed by the final Capital Program in November. The RTA Board adopts the consolidated regional budget and Capital Program in December.

PROJECT SCORING

Within each asset category reside individual asset class projects which are scored by pre-determined criteria and scoring ranges assigned to achieve a maximum of 30 total points. Each of the evaluators' scores are averaged to produce an overall asset category score to assign a ranking within the Five-Year program. The Chief Financial Officer appoints a multi-department cross functional team, approved by the Executive Director, to complete the scoring. All team member scores are averaged to provide a singular score per project.

After the evaluation of projects, the Capital Grants and TAM Department prepares a draft recommended project list and submits it to Senior Staff for review and comment. Recommended projects are tied to available funding as established by the RTA projections (Marks) which are adopted no later than the September 15 statutory funding deadline.

Note that years two through five are approached as an overarching strategic framework for the future direction of potential projects outside of the annual program. The Investment Prioritization Framework is goal-orientated and objective-based in the out-years because it is dependent on the RTA receiving the fully apportioned regional federal grant estimates along with each Service Board receiving potential discretionary funding. Each program year needs to balance to the RTA Five-Year Capital Program Funding Marks.

INVESTMENT PRIORITIZATION CRITERIA AND SCORING RANGES

Below is an outline of our 13 criteria used during the scoring phase of the capital project prioritization process for a maximum total score of 30.

1. SAFETY

Security also a factor in addition to safety improvements.
Max Score: 3

2. STATE OF GOOD REPAIR

< 1 year beyond useful life (1 point), > 1 year beyond useful life or poor condition (3 points).
Max Score: 3

3. RELIABILITY

Reliability of the capital item or service provided.
Max Score: 3

4. MOBILITY

Mobility Justice, ADA specific.
Max Score: 3

5. REGULATORY

Compliance with regulations (0 or 2 score).
Max Score: 2

6. EQUITY
Racial equity, factoring demographics of service area or location of project.
Max Score: 3

7. CAPACITY
Expansion of service or seating or facility space.
Max Score: 2

8. ACCESS TO KEY DESTINATIONS
Jobs, retail, healthcare, recreation, etc.
Max Score: 1

9. ECONOMIC DEVELOPMENT
Positive economic impact to area/location of project.
Max Score: 1

10. DELIVER VALUE ON INVESTMENTS
Operating impacts/ Recovery Ratio improvement and/or reduced O&M costs.
Max Score: 1

11. STAY COMPETITIVE
Improvements to rider experience, technology improvements, and/or ridership increase.
Max Score: 2

12. ENVIRONMENTAL IMPACT
Zero-Emission/Electrification (3 points), CNG (2 points), other (1-2 points).
Max Score: 3

13. AGENCY COMMITMENT
Multi-year funding, Board/Executive priority request, and/or mission critical.
Max Score: 3

BUDGET PROCESS

Notably, many other actions occur in the background or in parallel which lead to the development of overarching plans and policies to comply with federal laws and regulations or other business initiatives.

The RTA Act, which governs Pace's existence, contains specific language describing both the Budget Process and the RTA review criteria. As part of the annual budget process the RTA requires Pace to include our updated TAM Plan.

By September 15, the RTA is to advise Pace and the other Service Boards (CTA and Metra) of the amounts and timing for the provision of operating funding via the RTA for the coming and two following fiscal years and five-year capital funding. At the same time, the RTA is to advise Pace, CTA, and Metra of their required system-generated recovery ratio for the coming fiscal year. In establishing the recovery ratio requirement, the RTA is to take into consideration the

historical system-generated recovery ratio for the services subject to each Service Board. The RTA is not to increase the recovery ratio for a Service Board disproportionately or prejudicially to increases in the ratio for the other Service Boards.

To facilitate the RTA action by September 15, Pace and the other Service Boards begin meetings with the RTA in May. The series of meetings and budget discussions serve to improve the budget process by allowing the RTA to consider up-to-date input on financial matters prior to making their September 15 decision on funding levels and recovery rate requirements.

By November 15, Pace is required to submit to the RTA an Operating Budget Proposal for the coming fiscal year and a financial plan for the two following years and a Five-Year Capital Budget, which is consistent with the recovery ratio and funding marks established by the RTA in September.

Prior to submitting a budget and financial plan to the RTA, Pace is required to prepare and publish a comprehensive budget, program document, and hold at least one public hearing on the budget in each of the six counties. Due to our large size, Pace typically holds three public hearings in Cook County. To facilitate public comment on the ADA Paratransit program in the City of Chicago, Pace typically holds four additional hearings in the city. Public notice of the hearings is run in several widely distributed newspapers throughout the service area. In addition, Pace is to meet with each of the six county boards to review the proposed budget and program. In addition to these required meetings, Pace participates in numerous meetings of local government organizations and councils such as Chicago Metropolitan Agency for Planning (CMAP) and various transportation committees (TMAs, business chambers) to inform the public of the proposed budget and program. Thousands of copies of the proposed budget document and supplemental brochure are printed and distributed to elected officials, local governments, transportation interests, public libraries, and citizens. A copy is also available on Pace's website.

At the conclusion of these meetings and hearings, the Pace Board meets to evaluate the input gained, make recommendations for changes to the proposed budget as necessary, and then adopts a final program and budget by ordinance. This action is taken prior to the submittal of the budget and program to the RTA by November 15.

Once the RTA has evaluated the budget submittals of Pace and the other Service Boards, they then consolidate the information along with their own regional budget and plan information.

The RTA also meets with each county board and holds public hearings in each county on the consolidated regional budget and plan. At the conclusion of these meetings and hearings, the RTA adopts a final budget and plan which requires the approval of twelve of the RTA's sixteen-member Board. The RTA Act requires that the RTA adopt the consolidated regional budget no later than December 31 for presentation to the Governor and General Assembly.

BUDGET CALENDAR

Table 13. 2023 Budget Development Calendar lists key dates and events in the Pace 2023 budget development cycle. The Annual Capital Budget and Five-Year Program, as well as the Three-Year Financial Plan for Operations, are also developed in accordance with this schedule.

Table 13. 2023 Budget Development Calendar

DATE (2022)	EVENT
May 13	Budget call released to Pace management
May – August	Budget discussions/meetings with RTA and other Service Boards
June 10	Budget call requests due from Pace management
June – August	Staff develops a preliminary budget
September 15	RTA sets 2023 Funding and Recovery Marks
September 21	Pace Board meets to discuss preliminary 2023 Budget
October 15	Pace submits Proposed 2023 Budget to RTA
October 19	Pace Board releases Proposed 2023 Budget for Public Hearings
October 20 – 28	Public Hearings on Pace's Proposed 2023 Budget
November 9	Pace Board adopts Final 2023 Budget
November 15	Pace submits Final 2023 Budget to RTA
November	RTA evaluates Pace, Metra, and CTA budgets for compliance
November 17	RTA Finance Committee Review of Regional Budget
December 15	RTA scheduled to approve 2023 Regional Budget

PROJECT-BASED PRIORITIZATION OF CAPITAL INVESTMENTS

Table 14. 2023-2027 Suburban Service Capital Business Plan (000s) - Constrained, on the following page, summarizes Pace's proposed five-year capital program by asset class. Due to the timing of the annual budget process, the information provided in this section shall be considered preliminary until approved by both Pace's and RTA's Boards of Directors in November and December 2022, respectively. More detail can be found in the Appendices.

Pace's Capital Program balances the needs of many different user groups and asset classes. Major projects funded over the coming five years include:

- ***Rolling Stock***
- ***Electrical/Signals/Communications***
- ***Support Facilities & Equipment***
- ***Stations & Passenger Facilities***

Table 14. 2023-2027 Suburban Service Capital Business Plan (000s) - Constrained[11]

	2023	2024	2025	2026	2027	TOTAL
Rolling Stock Quantities						
Fixed Route Electric Buses	0	9	9	14	14	46
Fixed Route Coach Buses	0	13	0	0	0	13
Paratransit Vehicles	19	20	57	53	52	201
Community Transit/On Demand Vehicles	0	9	20	20	20	69
Rolling Stock						
Fixed Route Electric Buses	$0	$11,700	$11,700	$18,200	$18,200	$59,800
Fixed Route Coach Buses	0	9,750	0	0	0	9,750
Paratransit Vehicles	1,802	1,873	5,458	5,113	4,983	19,229
Community Transit/On Demand Vehicles	0	630	1,400	1,400	1,400	4,830
Subtotal	**$1,802**	**$23,953**	**$18,558**	**$24,713**	**$24,583**	**$93,609**
Electrical/Signal/Communications						
Onboard Digital Screens	$2,198	$2,081	$2,055	$2,000	$2,000	$10,334
Transit Signal Priority	0	0	2,000	2,000	2,000	6,000
Intelligent Bus System	0	1,500	500	650	1,000	3,650
Bus Security Cameras	0	2,000	0	0	0	2,000
Subtotal	**$2,198**	**$5,581**	**$4,555**	**$4,650**	**$5,000**	**$21,984**
Support Facilities & Equipment						
North Division Electrification/Expansion	$60,350	$36,307	$0	$0	$0	$96,387
Southwest Division Electrification/Expansion	0	0	14,000	40,025	40,117	94,142
Headquarters Renovations	750	0	16,000	0	0	16,750
Support Equipment/Non-Revenue Vehicles	400	500	1,000	1,000	1,000	3,900
Computer Systems/Hardware & Software	0	500	1,000	1,000	1,000	3,500
Subtotal	**$61,500**	**$37,037**	**$32,000**	**$42,025**	**$42,117**	**$214,679**
Stations & Passenger Facilities						
Pulse 95th A/E & Construction	$1,464	$19,567	$0	$0	$0	$21,031
I-294 Stations	0	0	17,025	0	0	17,025
Bus Stop Shelters	0	1,500	1,500	1,500	1,500	6,000
Harvey Transportation Center Renovations	5,400	0	0	0	0	5,400
Bus Tracker Signs	0	500	500	500	500	2,000
Subtotal	**$6,864**	**$21,567**	**$19,025**	**$2,000**	**$2,000**	**$51,456**
Grand Total – Constrained	**$72,364**	**$88,138**	**$74,138**	**$73,388**	**$73,700**	**$381,728**

Table 15. Ranked List of Capital Projects, 2023 and **Table 16. Ranked List of Capital Projects, 2024-2027** provide the outputs of the prioritization methodology described in the previous section.

[11] Pace Suburban Service and Regional ADA Paratransit Budget: 2023 Operating and Capital Program; 2023-2025 Business Plan for Operations; 2023-2027 Capital Business Plan. Final Program, November 2022.

Table 15. Ranked List of Capital Projects, 2023

PROJECT RANK	PROJECT NAME	ASSET CATEGORY	AMOUNT REQUESTED	AVERAGE SCORE
1	Paratransit Vehicles replacement	Rolling Stock	$3,072,246	20.9
2	North Division Electrification/Expansion	Support Facilities & Equipment	$88,318,983	20.8
3	River Division Electrification/Expansion	Support Facilities & Equipment	$66,390,000	20.1
4	Paratransit Vehicles expansion	Rolling Stock	$6,372,772	18.1
5	Bus Stop Infrastructure (Shelters)	Stations & Passenger Facilities	$520,000	12.3
6	Onboard Digital Screens	Electrical/Signal/Communications	$2,200,000	9.4
7	HQ Expansion and Renovation	Support Facilities & Equipment	$15,500,000	8.9
8	Vehicle Inspection Systems	Support Facilities & Equipment	$245,524	7.0
9	Aligner Combo Kit	Support Facilities & Equipment	$120,000	5.8
10	HQ Replacement of Carpet and Paint	Support Facilities & Equipment	$725,000	3.9

Table 16. Ranked List of Capital Projects, 2024-2027

PROJECT RANK	PROJECT NAME	ASSET CATEGORY	AMOUNT REQUESTED	AVERAGE SCORE
1	Northwest Wheeling Division CNG/Electrification/Expansion	Support Facilities & Equipment	$19,844,629	19.5
2	Southwest Division Electrification/Expansion	Support Facilities & Equipment	$102,000,000	19.1
3	North Shore Division Electrification/Expansion	Support Facilities & Equipment	$82,500,000	18.4
4	Pulse South Halsted	Stations & Passenger Facilities	$45,300,000	18.1
5	Pulse 95th	Stations & Passenger Facilities	$3,792,000	17.9
6	I-294 Cermak Station	Stations & Passenger Facilities	$6,300,000	17.5
7	I-294 O'Hare Station	Stations & Passenger Facilities	$10,995,036	16.6
8	Pulse 95th Electric Buses	Rolling Stock	$18,200,000	15.9

ESTIMATION OF AVAILABLE CAPITAL FUNDING

To pay for our capital investments over the next five years, Pace will rely on funding from the sources described in **Table 17. Capital Improvement Program Expected Funds (000s), FY2023-2027**.

Table 17. Capital Improvement Program Expected Funds (000s), FY2023-2027

	FUND TYPE	2023	2024	2025	2026	2027	TOTAL
Federal	5307	$ 57,748	$59,261	$ 53,128	$ 54,360	$ 55,510	$ 280,007
	5339	1,802	1,873	1,930	2,003	2,073	9,681
	CMAQ	1,464	15,654	-	-	-	17,118
	Subtotal - Federal	**$61,014**	**$76,788**	**$55,058**	**$56,363**	**$57,583**	**$306,806**
State	PayGo	11,350	11,350	17,025	17,025	16,117	72,867
	Subtotal - State	**$11,350**	**$11,350**	**$17,025**	**$17,025**	**$16,117**	**$72,867**
RTA	ICE	-	-	2,055	-	-	2,055
	Subtotal - RTA	**-**	**-**	**$2,055**	**-**	**-**	**$2,055**
Total	**Total**	**$ 72,364**	**$ 88,138**	**$ 74,138**	**$ 73,388**	**$ 73,700**	**$ 381,728**

OPERATIONS AND MAINTENANCE COSTS

Capital investments have an impact on operating and maintenance costs, which are typically higher for older, less efficient Vehicles, Equipment, and Facilities, which are more prone to breakdowns, and for which there may no longer be adequate support from suppliers. Pace's Suburban Service Operating Budget gives a breakdown of our operating revenue/expenses, and public funding received.

In 2021, operating revenue covered slightly less than 15% of operating expenses with public funding covering the remaining balance. In Pace's three-year business plan, operating revenues are expected to grow at an annual compound rate of 2.4%, expenses at 4.5%, and public funding at 2.9% including both sales tax and federal revenue sources.

Figure 9. Operating and Maintenance Costs (000s), 2021-2025 shows the actual/expected system-generated revenues and total operating expenses from 2021 through 2025. Of Pace's total operating expenses, approximately 53% is for labor and fringes.

Figure 9. Operating and Maintenance Costs (000s), 2021-2025

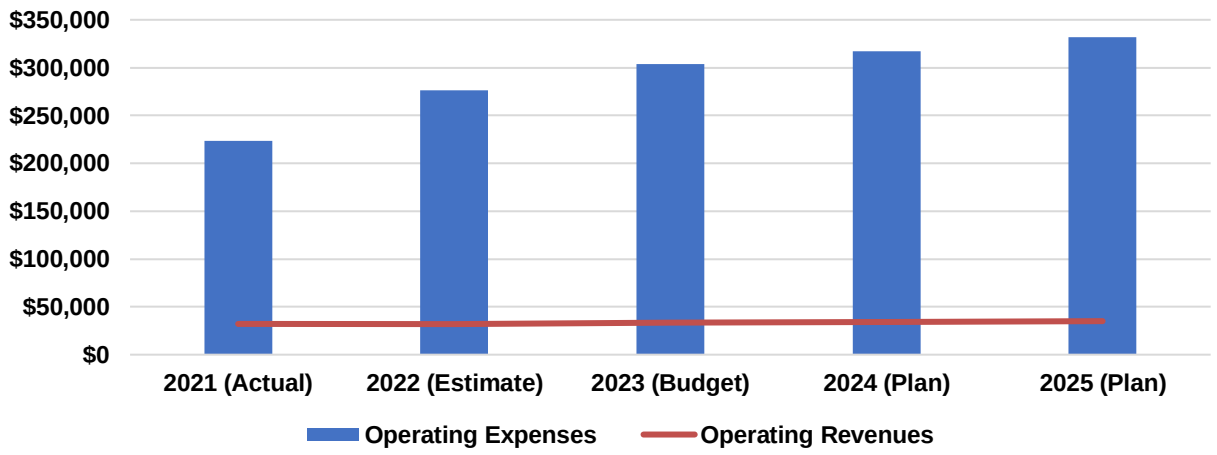


Table 18. Operating Expenses (000s)

OPERATING EXPENSES	2021 (ACTUAL)	2022 (ESTIMATE)	2023 (BUDGET)	2024 (PLAN)	2025 (PLAN)
Labor/Fringes	$134,191	$148,113	$160,621	$167,698	$175,319
Healthcare	23,594	25,231	27,060	29,063	31,242
Parts/Supplies	8,730	11,470	12,356	13,183	14,040
Purchased Transportation	18,223	25,629	26,128	27,548	29,033
Fuel	10,520	18,391	19,437	20,726	20,737
Utilities	3,834	4,806	5,795	6,121	6,456
Insurance	9,571	17,943	14,626	14,823	15,798
Other (includes Debt Service)	22,034	33,294	46,348	47,467	48,577
Bond Interest	154	119	82	42	0
Regional ADA Support Credit	(7,609)	(8,592)	(9,028)	(9,299)	(9,578)
Budget Balancing Actions	0	0	0	0	0
Total expenses before depreciation	**$223,242**	**$276,404**	**$303,425**	**$317,372**	**$331,624**

BUDGET AMENDMENT PROCESS

The Pace Board may make additional appropriations, transfers between line items, and other changes to Pace's budget at any time, if the changes do not alter the basis upon which the RTA made its balanced budget determination. Operating budget amendments are made from time to time by the Pace Board and are accomplished by revision to the annual appropriations ordinance. In the event an operating budget revision results in a general fare increase or a significant reduction of service, the Pace Board will also conduct public hearings in the affected areas.

The RTA may also initiate the need for a budget amendment by Pace or another Service Board if it determines such an amendment is necessary. This would only occur if a Service Board failed to achieve its budgeted recovery ratio and/or exceeded its public funding allocation, in which case the RTA can direct the Service Board to submit an amended budget within a specified period.

Pace's capital budget amendments are made quarterly by the Pace Board, to coincide with RTA quarterly capital budget amendments. Capital budget amendments can occur for a variety of reasons, including but not limited to, updating final appropriations of federal formula funding; adding reprogrammed funds; adding new funds received during the year, such as discretionary grant awards; adding or reducing funding for a project; and/or adding a new project.

END OF SECTION 7

8. ASSET MANAGEMENT IMPLEMENTATION

Pace recognizes the TAM Plan Improvement Objectives Handbook as a roadmap to guide the asset management maturity journey of our Agency.

TAM PLAN UPDATE AND EVALUATION

625.25 (**b**) A TAM Plan must include (**9**) An outline of how a provider will monitor, update, and evaluate, as needed, its TAM Plan and related business practices, to ensure the continuous improvement of its TAM practices

Our Plan will undergo a required review every four years to comply with the TAM Final Rule. Certain aspects of the Plan may be reviewed more frequently, as required by RTA or other external stakeholders.

To ensure our Plan remains useful and relevant, the following are examples of monitoring and review activities that will be undertaken:

- The Transit Asset Management and State of Good Repair Policy which directs the development of future Asset Management Implementation Objectives.
- The Performance Measure Targets and the Asset Inventory and Condition information will be updated annually as part of NTD reporting and reviewed as to their ability to deliver the required level of service for each asset class.
- Annually update Pace's Five-Year Capital Plan.
- All maintenance manuals and other guiding maintenance and management documents are intended to support lifecycle management strategies to address our asset maintenance needs.

CONTINUOUS IMPROVEMENT PLAN

625.25 (**b**) A TAM Plan must include: (**6**) A provider's TAM Plan implementation strategy

WSP, Pace's TAM Plan consultant, conducted a Gap Assessment to evaluate Pace's general Asset Management maturity and to assist with the development of the October 1, 2018, Pace Initial TAM Plan framework.

The WSP Gap Assessment produced a ***Pace TAM Improvement Objectives Handbook***, proposing 23 objectives on expanding asset management culture and implementation. Subsequently, these were divided into three categories:

- **Baseline:** are well underway, with our commitment to continuing, expanding, or otherwise maintaining.
- **Implement Later**: need preliminary work to be completed before these can start and be moved to **Baseline**.
- **Further Investigate**: need to be further explored to determine whether they should be programmed. If accepted, these may advance to **Implement Later**.

The TAM Department is proud to highlight the status of Pace's implementation strategy in **Table 19. TAM Plan Baseline Improvement Objectives – 2022**, with four Objectives progressing in 2022 from 2021 to the **Baseline** category. Note objective implementation is not dependent on a sequential order by the TAM Department or the Agency.

- **Objective 5. Investment Prioritization**
- **Objective 6. Asset Management**
- **Objective 18. Business Continuity Plan – Force Majeure**
- **Objective 22. Develop Asset Management Culture, and Organizational Development**

Table 19. TAM Plan Baseline Improvement Objectives – 2022

1. ASSET MANAGEMENT DOCUMENTS AND SYSTEMS
Per the TAM Final Rule, 625.29 (c), "A provider must update its entire TAM Plan at least once every 4 years." Certain aspects of the TAM Plan may be updated on an annual cycle. **SCOPE:** All TAM Plan elements which will undergo a regular review to evaluate and maintain compliance, reflect any changes in organizational strategy, procedures, and other connected documents. The TAM Plan shall be amended whenever there is a significant change to the asset inventory, condition assessments, investment prioritization, and performance targets, as part of the annual submission to the National Transit Database (NTD). **BENEFITS:** Accessibility of TAM Plan documents throughout the organization. Comprehensive documented procedures to regularly monitor policies procedures requiring updating. **IMPLEMENTATION UPDATE:** Pace has implemented a TAM SharePoint intranet site to access TAM Plans and annual Condition Assessment Reports, and centralize the NTD TAM AIM reporter source, working, and export files to eliminate silos of information. Development of the SharePoint is an iterative process.
2. CONDITION ASSESSMENT PROCESSES
Define an asset condition assessment approach for all critical assets that describes how, when, and what is measured. Condition rating parameters may differ across asset types but the scoring scale, e.g., 1 (poor) to 5 (excellent), should remain consistent to enable comparison. **SCOPE**: A condition assessment process for Facilities, compliant with FTA guidelines, was in place prior to the FTA deadline of October 1, 2018. **BENEFITS**: Condition assessment approaches and results shared can be demonstrated consistently among different evaluators with data compiled for access and analysis to plan for predictive capital budget asset life cycle replacement. **IMPLEMENTATION UPDATE**: The Pace TAM Department is in FTA compliance with annually assessing at least one-quarter of Pace's Facilities each year and will complete condition assessments of all Facilities in the FTA prescriptive four-year cycle. Pace will use consultants to produce asset condition assessments and accompany Pace staff in the field to produce an Annual Capital Asset Condition Assessment Report.

Table 19. TAM Plan Baseline Improvement Objectives – 2022 (Continued)

3. NTD PERFORMANCE MEASURE TARGETS

Develop key performance measure targets at the asset level in accordance with FTA requirements for annual NTD asset inventory reporting.

SCOPE:
Establish a method for capturing and monitoring asset performance, and for routinely re-evaluating performance measures that are aligned with Pace strategic and asset management priorities.

BENEFITS:
Regular collection and reporting of asset performance versus targets aligned with enterprise-wide and departmental objectives, including asset condition.

IMPLEMENTATION UPDATE:
The Pace TAM department is in FTA compliance since 2017 to develop Performance Measure Targets for the assets for which Pace has capital responsibility. Subsequently, FTA required State of Good Repair (SGR) Performance Target Setting to be an annual component of the NTD Asset Inventory Module (AIM) reporting.

4. VEHICLE TRACKING UTILITY (VTU)

Develop a VTU to follow the status of Revenue and Non-Revenue Vehicles with data annually provided by Pace's NTD Reporters. This shall ensure, in as real time as possible, knowing the quantity of vehicles Pace has as either in an Active, Inactive, Retired, or Contingency status. Retired status does not only mean sold and off Pace property. Inactive status includes vehicles on legal hold, out for extended maintenance repairs, and to be sold. This information will be used as input to the NTD Asset Inventory Module (AIM) Annual Performance Measure Target Setting on the A-90 form and for Capital Budget vehicle replacement or expansion planning.

SCOPE:
Develop a VTU in Oracle Application Express (APEX) to document Revenue and Non-Revenue Vehicles throughout their expected life cycle. Coordinate data input to the VTU through the NTD Vehicle Reporters to limit that amount of information which is required to be hard entered. The VTU output shall be able to present State of Good Repair performance at Year levels; along with showing total quantities of Active, Inactive, Retired, and Contingency Vehicles based on vehicle status coordinated with NTD reporting requirements. Further refinements shall allow the system to generate reports on given number of vehicles of any status.

BENEFITS:
Have a central repository to know the quantity of vehicles available to provide the level of service Pace has predetermined needed for daily bus operation. This will benefit the following Business Units: Grants Administration & Transit Asset Management, Budget Planning & Analysis, Planning Office, Bus Operations, Maintenance/Tech Services, Paratransit, and Vanpool Services.

IMPLEMENTATION UPDATE:
Pace has completed a baseline implementation of the VTU which provides additional fields for data in the Fixed Assets APEX system along with some baseline reports. Additional fields, reporting, and features are being determined to further develop with the Utility.

Table 19. TAM Plan Baseline Improvement Objectives – 2022 (Continued)

5. INVESTMENT PRIORITIZATION

Update Pace's legacy capital project prioritization process to include out-year projects, and to consider impact on operations and maintenance, lifecycle costs, asset criticality, and asset condition.

SCOPE:
A capital project prioritization process compliant with FTA guidelines was in place prior to the FTA deadline of October 1, 2018. On August 24, 2021, HB 0253 Illinois Department of Transportation (IDOT) Asset Management was signed into law.

BENEFITS:
New capital planning processes and procedures that are linked to the agency's organizational goals and asset management plan, and fully consider criticality, lifecycle costs, and condition of the asset, as well as the impact on O&M costs.

IMPLEMENTATION UPDATE:
Pace revisited our 1991 capital priority scoring criteria to apply it to the 2023 capital budget call process. The TAM Department with the Chief Financial Officer developed this new scoring guide. Updates include new RTA Act requirements for state-funded projects and alignment with the RTA strategic plan. Updates also include adding categories for racial equity, mobility justice and environmental goals with an improved weighting system that better reflects evolving capital priorities of Pace and the region. The criteria include Safety, State of Good Repair, Reliability, Mobility, Regulatory, Equity, Capacity, Access to Key Destinations, Economic Development, Deliver Value on Investments, Stay Competitive, Agency Commitment.

6. ASSET MANAGEMENT ORGANIZATIONAL DEVELOPMENT

Ensure organizational capacity exists to successfully implement asset management through alignment of enterprise strategy and goals with asset management objectives, formalization of asset management-related roles and responsibilities, TAM organizational structure, appropriate training, and alignment of skills to asset management needs, process, procedure, and continuous improvement initiatives.

SCOPE:
In compliance with FTA requirements, Pace's initial TAM Plan included a summary of Pace's organization and resources that would be involved in carrying out the TAM Plan. The remainder of this objective builds on that base and is focused on refining and implementing organizational governance for asset management including role ownership, organizational structure, training, and establishment of continually improving processes and procedures.

BENEFITS:
Alignment of all tasks, roles to meet asset management objectives with all stakeholders fully understanding the context of what they do, their interdependencies and working together to improve processes over time with changing business conditions.

IMPLEMENTATION UPDATE:
Developed and distributed NTD TAM Asset Inventory Module (AIM) data entry protocols to Reporters. Conducted Reporter workshops to review agreed to data input methodology, monitor progress, and to inherently embed QA/QC oversight into Pace's annual upload to the NTD database.

Table 19. TAM Plan Baseline Improvement Objectives – 2022 (Continued)

18. BUSINESS CONTINUITY PLAN – FORCE MAJEURE

Create a Business Continuity Plan that identifies Force Majeure enterprise and asset management risks, threats and vulnerabilities that could impact our personnel working conditions to manage and operate restricted passenger service before resuming normal daily operations.

SCOPE:
A Business Continuity Plan where all personnel understand their roles, responsibilities, and take action to minimize impacts of incidents and continue services during unforeseen Force Majeure incidents (i.e., world-wide pandemic, climate, or social unrest).

BENEFITS:
Preparation and continued service with safety during asset-related incidents or other major events.

IMPLEMENTATION UPDATE:
Since the world-wide pandemic began, Pace prioritized the safety of our passengers and personnel by deep cleaning and sanitizing our vehicles and facilities daily, cleaning high-touch surfaces throughout the day, providing riders and personnel with hand sanitizer, providing personnel with PPE and thermometers for taking their temperature before reporting to work when not working remotely, separating operators from passengers using temporary and permanent barriers, and operating reduced service on some routes, reflecting reduced ridership while other routes experiencing an increase in demand have been reinstated.

22. DEVELOP ASSET MANAGEMENT CULTURE

Strengthen and build on the existing culture of Asset Management through consistent messaging from Senior leadership and management staff, staff training on Asset Management, and identification of Asset Management knowledge and skills gaps.

SCOPE:
Achieve a collaborative Asset Management Culture with strong leadership at all levels of the organization, and staff with skills and knowledge to deliver asset management.

BENEFITS:
Senior leadership and management staff demonstrate commitment to asset management as a team effort through proactive communication, cross-functional collaboration, with support and empowerment to achieve objectives. Staff have the skills and knowledge to apply asset management effectively.

IMPLEMENTATION UPDATE:
The TAM Department circulated the TAM Objective Handbook and updates which outline the WSP developed implementation Objectives to Executive staff within the organization to assist in the development of Asset Management Culture. TAM Staff discussed with the IT department the ability to improve tracking of NTD information for Pace's fleet of vehicles, see ***Objective 4. Vehicle Tracking Utility (VTU)***. Additionally, the TAM Portal, see ***Objective 1. Asset Management Documents and Systems*** was improved to provide links to additional documentation to staff.

Table 20. TAM Plan Implement Later Improvement Objectives – 2022

9. ASSET INFORMATION REQUIREMENTS FOR CONTRACTORS
Develop standard requirements and guidelines for the provision of asset information by contractors, including asset inventory and data, warranty, OEM manuals, maintenance manuals, and training. Records should be in a form easily incorporated into Pace's EAM systems.
10. LIFE CYCLE COSTING
Incorporate meaningful lifecycle cost information into investment decision-making, budget preparation, and asset policies and strategies using existing tools and information such as Pace's EAM to implement TAM best "cradle to grave" practices.
12. ASSET CRITICALITY
Develop a procedure for assigning and recording asset criticality and use criticality as a criterion in capital project prioritization and investment decision-making.
14. VEHICLE PERFORMANCE ANALYTICS
Enhance and formalize processes for monitoring vehicle performance, analyzing trends in collected data, and making improvements to maintenance plans and procedures.
19. ENTERPRISE ASSET MANAGEMENT (EAM) SYSTEM IMPROVEMENTS
Increase the utility of EAM systems by: A) Defining parent-child asset hierarchies that enable automatic assignment of work orders to specific sub-assets/components. B) Establishing unique identifiers that allow tracking a specific asset across databases. C) Incorporating mobile technology to facilitate data collection. D) Increasing integration between Pace's eAM system and other technology systems. E) Enabling the capture and recording of lifecycle costs associated with an asset.

Table 21. TAM Plan Further Investigate Improvement Objectives – 2022

7. RISK MANAGEMENT PROCESSES
Design and implement an enterprise-wide risk management program, integrated across departments. As part of this program, develop and document processes and procedures for identifying, assessing, and managing asset and asset management related risks (including but not limited to safety risks; operational and capital risks), and record these within a risk register. Communicate risks and risk management strategies to internal and external stakeholders regularly.
8. LEVELS OF SERVICE DEFINITIONS
Quantify the required levels of service and the vehicles required to meet the service obligation, including**,** and not limited to, a zero-emissions fleet so that facility and equipment planning can be undertaken during planning of new or existing services. Clarify the capacity of the existing organization to maintain any additional vehicles using the existing resources and existing maintenance policies and procedures and what compromises would have to be made.
11: IN- VS. OUT-SOURCING
Implement a process for large projects or procurements to consider whether the project should use in-house resources or be contracted out. Discuss and determine appropriateness of developing new in-house capabilities for those not currently available.
13. OPERATIONS AND MAINTENANCE IN CAPITAL PROGRAMMING
Engage maintenance and operations staff during the project development and design process and incorporate information on future maintenance and operations needs and costs into design.
15. FORMALIZE INVENTORY MANAGEMENT
Formalize strategies and processes related to inventory management, including how requirements are set for new assets, and those soon to be retired.

Table 21. TAM Plan Further Investigate Improvement Objectives – 2022 (Continued)

16. AUTOMATIC MONITORING
Expand use of automatic monitoring/feedback systems and enable automatic generation of work orders based on trigger events.
17. FAILURE ANALYTICS
Implement processes, and procedures for review and analysis of failures to prevent reoccurrences, and ensure corrective action is taken as appropriate.
21. SUCCESSION PLANNING
Formalize succession planning efforts to improve asset and knowledge management to mitigate the impacts associated with a potential loss of institutional knowledge.
23. CLARIFY ASSET MANAGEMENT ROLES
Formalize asset management-related roles and responsibilities throughout Pace, including identification of champions and process owners, and consider optimal long-term TAM organizational structure.

For additional information, please visit our website: www.pacebus.com.

END OF TAM PLAN MAIN DOCUMENT

Pace Suburban Bus Division

of the Regional Transportation Authority of Northeastern Illinois

TRANSIT ASSET MANAGEMENT PLAN 2022

Appendices

Photo: Pace Headquarters, Arlington Heights, Illinois, GILLIG Battery Electric Bus

SAFETY | EQUITY | EFFICIENCY | ENVIRONMENTAL RESPONSIBILITY

We're moving towards a brighter and more sustainable future.

Pace Suburban Bus Division

of the Regional Transportation Authority of Northeastern Illinois

550 W. Algonquin Road
Arlington Heights, Illinois 60005
(847) 364-8130

TRANSIT ASSET MANAGEMENT PLAN 2022

This Plan will be in effect from the date on which it is signed by Pace's Executive Director.

Melinda J. Metzger, Executive Director

9/23/2022

Date

Pace Custodians	Janet Kuhn, Capital Infrastructure Program Manager, PMP® Jonathan Christ, Transit Asset Management Coordinator
WSP Support Staff	Thomas Goodyer, Project Manager Sophie Cohen, Deputy Project Manager

SAFETY | EQUITY | EFFICIENCY | ENVIRONMENTAL RESPONSIBILITY

We're moving towards a brighter and more sustainable future.

TABLE OF CONTENTS – APPENDICES

TABLES

FIGURES

INTRODUCTION TO THE APPENDICES

These Appendices cover groups of assets, broken into categories, based on the required Federal Transit Administration (FTA) National Transit Database (NTD) annual reporting, and others based on the Regional Transportation Authority (RTA) annual budget categories.

Per the TAM Final Rule, Section 625.25, lists the TAM plan requirements, including an asset inventory, condition assessments, a description of analytical processes or decision-support tools used to estimate and prioritize capital investment needs over time, and a project-based prioritization of investments. In general, an asset inventory must include all equipment, rolling stock, facilities, and infrastructure that a provider owns. A provider may exclude from its asset inventory any equipment with an acquisition value of less than $50,000 unless the asset is service vehicle equipment. The inventory also must include all Rolling Stock (revenue vehicles), passenger stations, administrative and exclusive use maintenance facilities, and guideway infrastructure owned by a third-party and used by the provider in the provision of public transportation.

The level of detail in a provider's asset inventory should be commensurate to the level of detail in its program of capital projects. A transit provider is required to conduct a condition assessment on all inventoried assets for which the provider has direct capital responsibility and set targets and develop a project-based prioritization of investments for those assets.

A brief overview of each Appendix is contained below.

Appendix A - NTD Annual Reporting contains a copy of the submitted Narrative Report for RY2021 for Reporting IDs 50113, Suburban Service and 50182, Regional ADA Service.

Appendix B - Facilities provides detail on Pace's Passenger / Parking Facilities and Administrative / Maintenance Facilities, including an asset inventory, condition information, lifecycle management strategies, Asset Management enablers, and capital plans. **Appendix B - Facilities** also contains copies of condition assessment reports for 2018 through 2022, along with a copy of the summarized **NTD RY2021 Transit Asset Management Facilities Inventory (A-15) Form**. This section also identifies Facilities Assets Pace's and Third-Party Non-Reportable locations that Pace relies on in the provision of public transit.

Appendix C - Support Vehicle / Equipment provides detail on Pace's Non-Revenue Vehicles and Equipment, including an asset inventory, condition information, lifecycle management strategies, Asset Management enablers, and capital plans. **Appendix C - Support Vehicle / Equipment** also includes a copy of the summarized **NTD RY2021 Service Vehicle Inventory (A-35) Form**.

Appendix D - Revenue Vehicles provides detail on Pace's Rolling Stock assets, including an asset inventory, condition information, lifecycle management strategies, Asset Management enablers, capital plans, and copies of the summarized **NTD RY2021 Revenue Vehicle Inventory (A-30) Forms**.

Appendix E - Electrical, Signal and Communications is based upon the RTA Annual and Multi-Year Capital Budget Category. Due to NTD annual reporting requirements these assets are *not*

included in our annual submittal. **Appendix E - Electrical, Signal and Communications** provides an asset inventory, lifecycle management strategies, and Asset Management enablers and capital plans.

Appendix F - Abbreviations and Acronyms lists abbreviations used in this document.

Appendix G - Terms and Definitions provides terms and definitions used to describe aspects of Asset Management that may be referenced in this document.

END OF INTRODUCTION

A. APPENDIX A – NTD AIM ANNUAL REPORTING

Per the Federal Transit Administration's guidance:[1]

> The National Transit Database (NTD) program's Asset Inventory Module (AIM) is designed to collect basic information on assets and infrastructure used by U.S. transit agencies to deliver service. The purpose of assembling a nationwide inventory is to improve the Federal Transit Administration's (FTA's) ability to project capital costs for the future replacement (and necessary capital renewal activities) of existing transit assets.
>
> This information supports the FTA biennial report to the U.S. Congress regarding cost estimates of transit capital. These estimates directly influence the FTA annual budget request submitted for the Federal fiscal year (FFY). The Transit Asset Management (TAM) rule (49 CFR part 625) is a set of federal regulations that set out minimum Asset Management practices for Transit Providers. Beginning in Report Year (RY) 2018, agencies that receive or benefit from Chapter 53 funds from the Federal Transit Administration are required to report asset inventory and condition and performance information to the National Transit Database.

Each Chapter 53 funding recipient developing a TAM Plan will be required to report annually to the FTA National Transit Database.

Pace's fiscal year aligns with the calendar year, January 1 through December 31. For Pace this means that the RY2021 submission is required to be uploaded to the NTD website no later than April 30, 2022.

Pace has two NTD ID reporting numbers: **50113 for the Suburban Bus Division**, and **50182 for the Regional ADA Paratransit Services**. Pace does not set Performance Targets for ID Reporting Number 50182 Regional ADA Paratransit Services because capital responsibility of those assets belongs to the Contractor, not Pace. In addition to the required Narrative Report, the Pace NTD RY2021 Submittal included:

PACE TAM AIM DATA REPORT FORMS	
A-90	Transit Asset Management Performance Targets
A-15	Transit Asset Management Facilities Inventory
A-30	Revenue Vehicle Inventory: MB DO - Motor Bus Directly Operated MB PT - Motor Bus Purchased Transportation VP DO - Vanpool Directly Operated DR DO - Demand Response Directly Operated DR PT - Demand Response Purchased Transportation
A-35	Service Vehicle Inventory

[1] National Transit Database, Asset Inventory Module, FY 2015 Reporting Manual.

OUR ANNUAL TAM DEPARTMENT NTD MISSION STATEMENT:

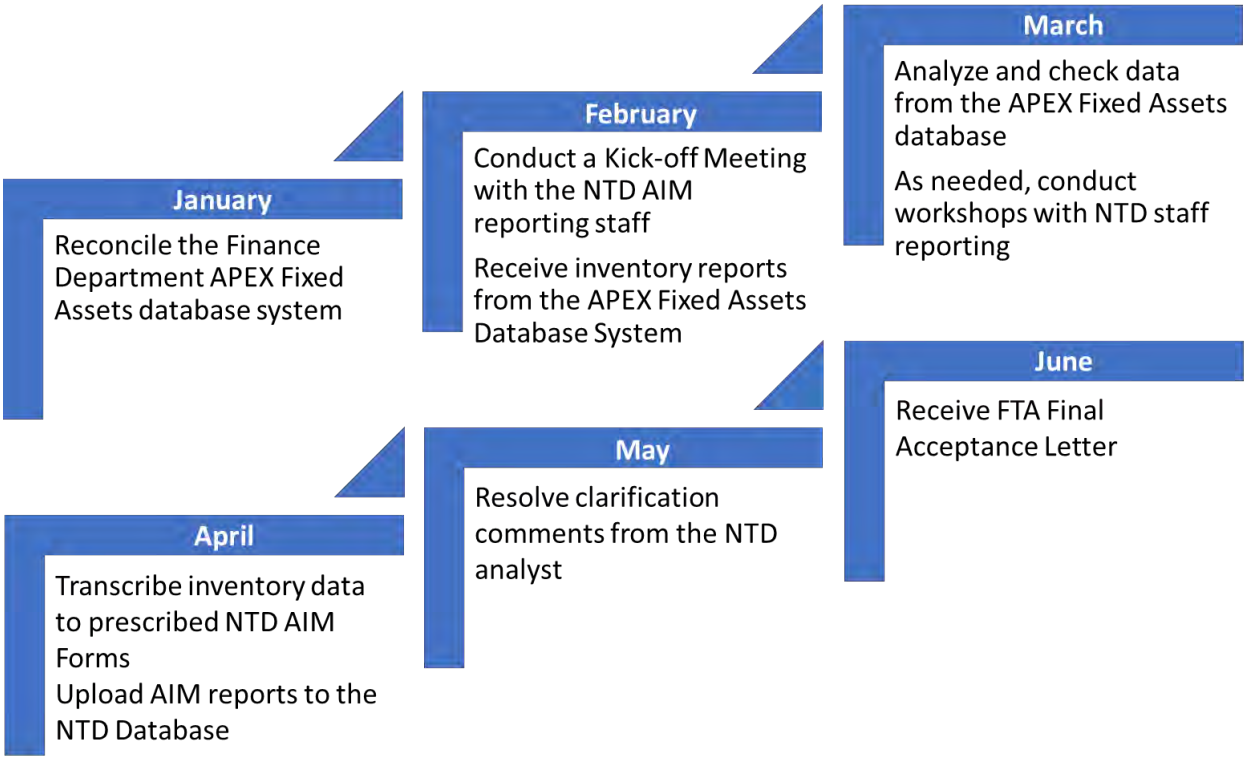
"A compliant TAM submittal using the NTD prescribed Asset Inventory Module (AIM) Forms to annually report the prior fiscal year capital asset inventory, asset condition, and performance data, along with a Narrative Report to describe Pace's progress toward meeting the prior fiscal reporting year performance targets and setting the new projected fiscal year performance targets".

OUR ANNUAL TAM DEPARTMENT NTD MISSION STATEMENT is responsive to the required **TAM Plan Element 6: Asset Management Implementation**, and **TAM Plan Element 7: List of Key Annual Activities**.

Equally, **OUR ANNUAL TAM DEPARTMENT NTD MISSION STATEMENT** advances the TAM Plan Improvement Objectives, specifically **Baseline Improvement Objective 1: Asset Management Documents and Systems** to provide Pace NTD reporting staff with improved access to accurate, timely, consistent, and complete asset data and information, and publish a data entry guidance manual for NTD reporting staff to ensure uniformity.

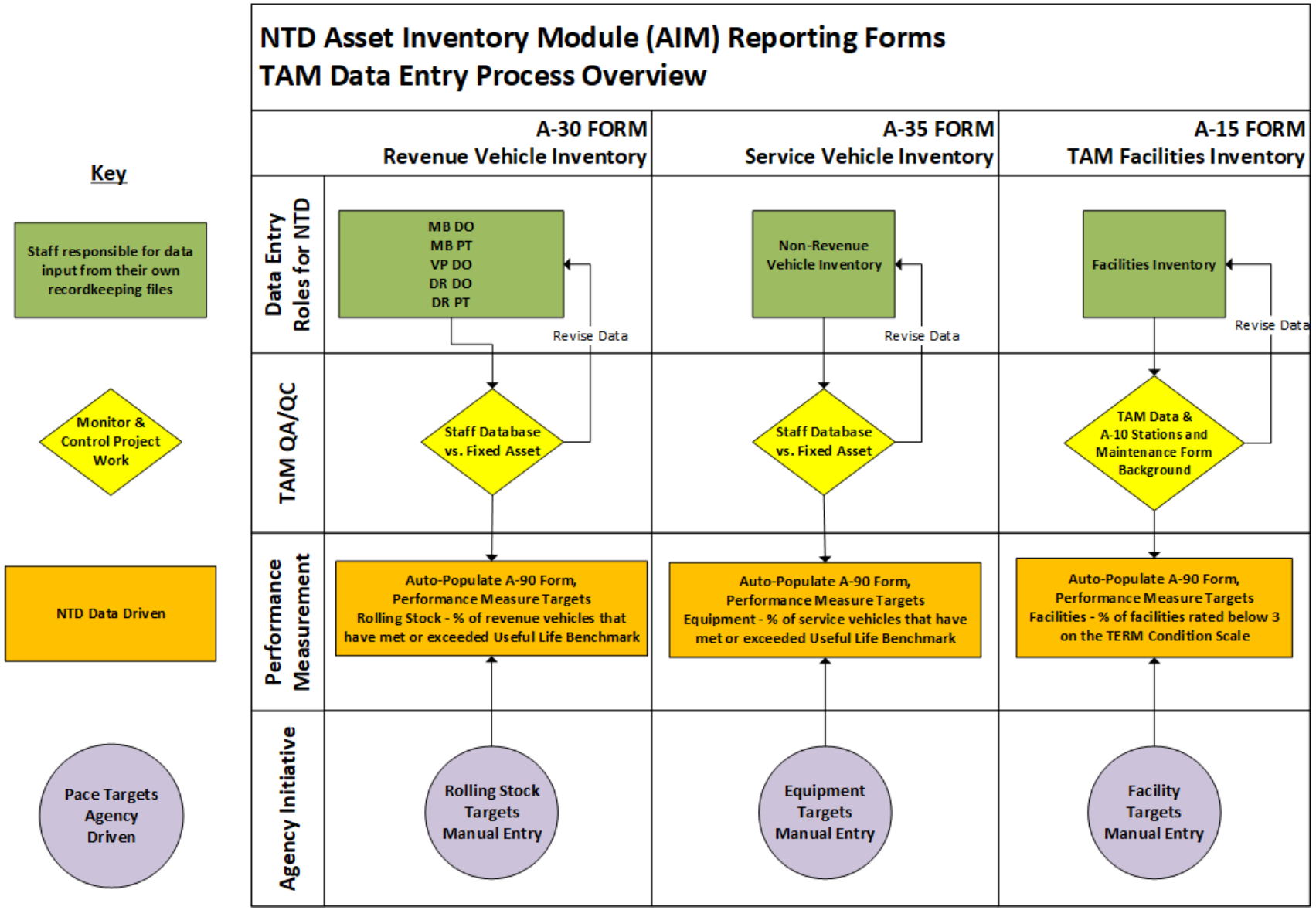
Figure A-1. Typical Annual NTD Reporting Timeline shows the timeline for a typical annual NTD reporting cycle.

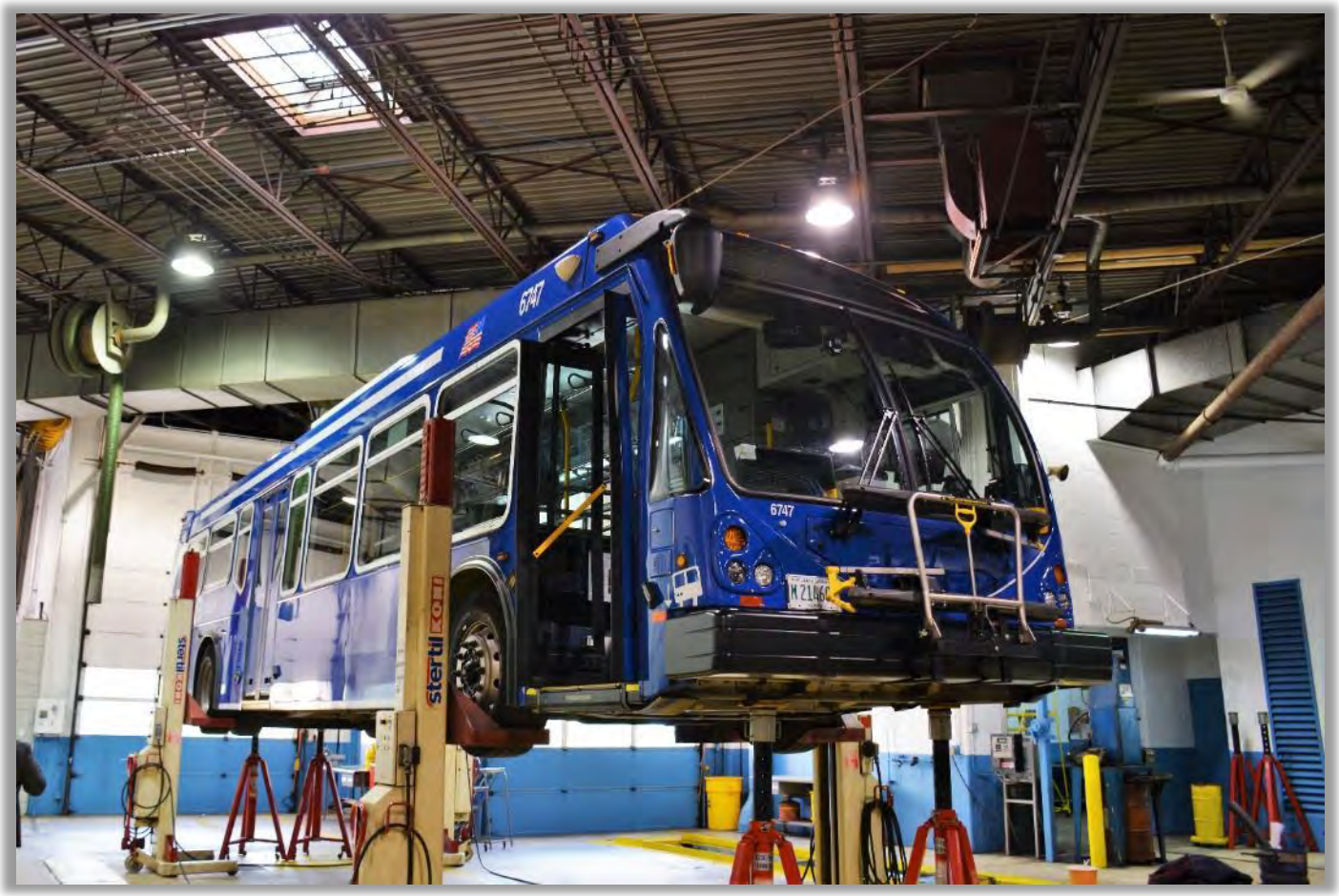
Figure A-1. Typical Annual NTD Reporting Timeline



For additional information see **Figure A-2. NTD Asset Inventory Module (AIM) Reporting Forms, *TAM Data Entry Process Overview*** for the NTD Asset Inventory Module (AIM) Reporting Forms TAM Data Entry Process Overview Validation Issues.

Figure A-2. NTD Asset Inventory Module (AIM) Reporting Forms, *TAM Data Entry Process Overview*





Pace Suburban Bus Division of the Regional Transportation Authority of Northeastern Illinois

NTD RY2021 TRANSIT ASSET MANAGMENT ANNUAL NARRATIVE REPORT

REPORTING ID 50113 and 50182

RY2021 NTD TRANSIT ASSET MANAGEMENT (TAM) ANNUAL NARRATIVE REPORT

The Pace NTD TAM Annual Narrative Report must include two parts, a Data Report, and a Narrative Report. Our Narrative Report identifies Pace's progress toward achieving the Fiscal Year (FY) 2021 Performance Measure Targets, comparing these set for FY2022.

Pace has two NTD ID reporting numbers: 50113 for the Suburban Bus Division, and 50182 for the Regional ADA Paratransit Services. The FY2021 Performance Targets are set only for the 50113 Suburban Bus Division, see the **Transit Asset Management Performance Measure Targets Matrix** below. Pace has no capital responsibility for the 50182 Regional ADA Paratransit Services assets and does not set annual performance targets for these assets. Currently, FTA does not implement a reward or penalty pertaining to target attainment. Pace's fiscal year aligns with the calendar year, January 1 through December 31. For Pace this means that the RY2021 NTD TAM Asset Inventory Module (AIM) submittal is required to be uploaded to the NTD website no later than April 30, 2022.

TRANSIT ASSET MANAGEMENT PERFORMANCE MEASURE TARGETS (A-90)

Transit agencies must report their next fiscal year Performance Measure Targets to the NTD for assets for which they have capital replacement responsibility. Agencies report on their progress towards achieving a State of Good Repair for capital assets by submitting condition assessment and performance data. To support TAM planning, the NTD presents this data side-by-side with Performance Targets set in the prior fiscal year. The Useful Life Benchmarks (ULB) are based on Pace's experience with our assets and vary from those proposed by the FTA. NTD Rolling Stock Performance Measure Targets are categorized by FTA vehicle types. Note, this differs from the Revenue Vehicle Inventory A-30 report forms: MB DO, MB PT, DR DO, DR PT, VP DO, which are based on operation categories. The values in the table represent the percentage of assets past their ULB or rated 2 or below on the FTA TERM Scale.

TRANSIT ASSET MANAGEMENT PERFORMANCE MEASURE TARGETS MATRIX					
1. Rolling Stock Percent of revenue vehicles that have met or exceeded their Useful Life Benchmark (ULB)	**ULB**	**FY 2021 Target**	**FY 2021 Performance Status**	**FY 2021 Difference**	**FY 2022 Target**
BR - Over-the-road Bus	12	0.00%	0.00%	0.00%	0.00%
BU - Bus	12	14.86%	14.10%	0.76%	13.35%
CU - Cutaway	4	77.11%	89.70%	-12.59%	64.16%
MV - Minivan	5	28.02%	15.49%	12.53%	100.00%
VN - Van	5	41.90%	33.62%	8.28%	45.00%
2. Equipment Percent of service vehicles past their Useful Life Benchmark (ULB)	**ULB**	**FY 2021 Target**	**FY 2021 Performance Status**	**FY 2021 Difference**	**FY 2022 Target**
Automobiles	5	89.74%	94.37%	-4.63%	100.00%
Trucks and other Rubber Tire Vehicles	5/10	41.48%	50.00%	-8.52%	44.78%
3. Facility Percent of facilities rated below 3 on the condition scale	**ULB**	**FY 2021 Target**	**FY 2021 Performance Status**	**FY 2021 Difference**	**FY 2022 Target**
Passenger / Parking Facilities	N/A	16.67%	12.50%	4.17%	13.64%
Administrative / Maintenance Facilities	N/A	16.67%	8.33%	8.34%	7.69%

TRANSIT ASSET MANAGEMENT FACILITIES INVENTORY (A-15)

Pace Facility Targets usually reflect modest movement year over year because most facility construction projects typically span greater than one year or more.

For the Passenger / Parking Facilities the change in 2021 Performance from 2020 is:

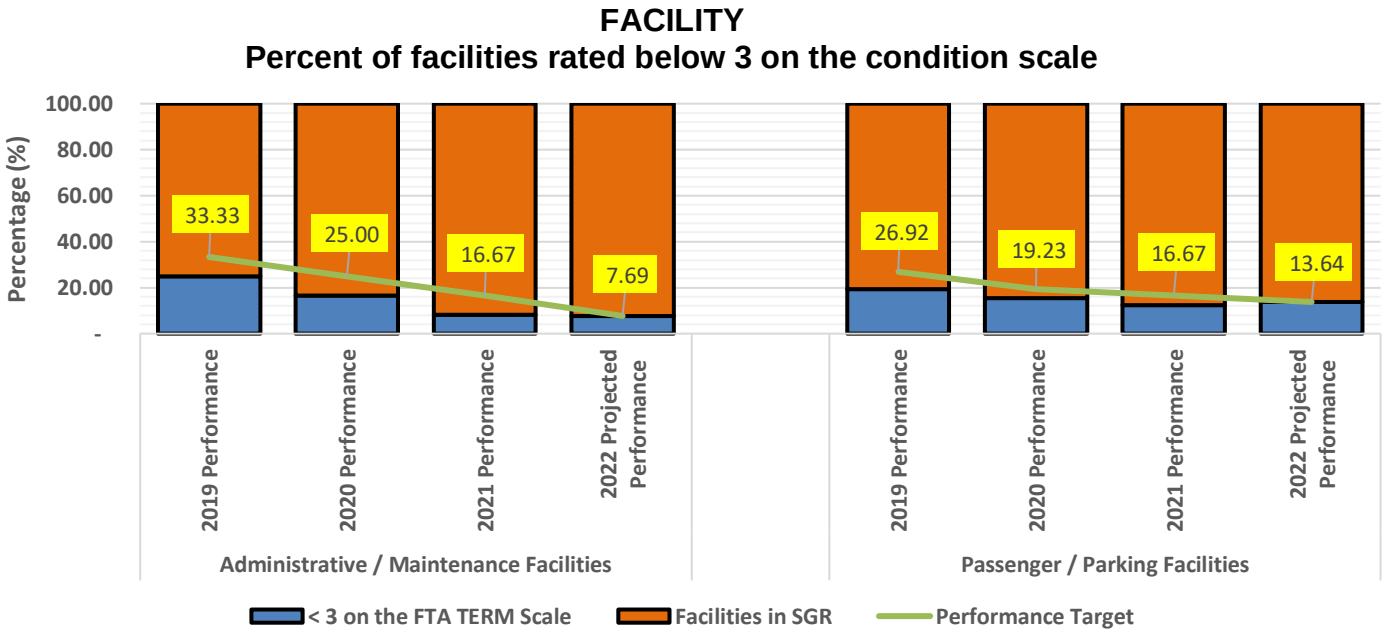
- *Reduction in Total Facilities from 26 Locations to 24 Locations*
  - ➢ Because of COVID-19 ridership decline, Pace discontinued passenger service to Prairie Stone Transportation Center and Northwest Point / Elk Grove Village Park-n-Ride.
- *Condition score.*
  - ➢ The WSP FY2021 Condition Assessment report score revised the Chicago Heights Transportation Center to "3 – Adequate" from "2 – Marginal".

For the Passenger / Parking Facilities the change in 2022 Projected Performance is:

- *Reduction in Total Facilities from 24 Locations to 22 Locations*
  - ➢ After November 30, 2022, Pace no longer has capital responsibility at Hodgkins UPS Terminals 1 and 2.

For the Administrative / Maintenance Facilities the change in 2021 Performance from 2020 is:

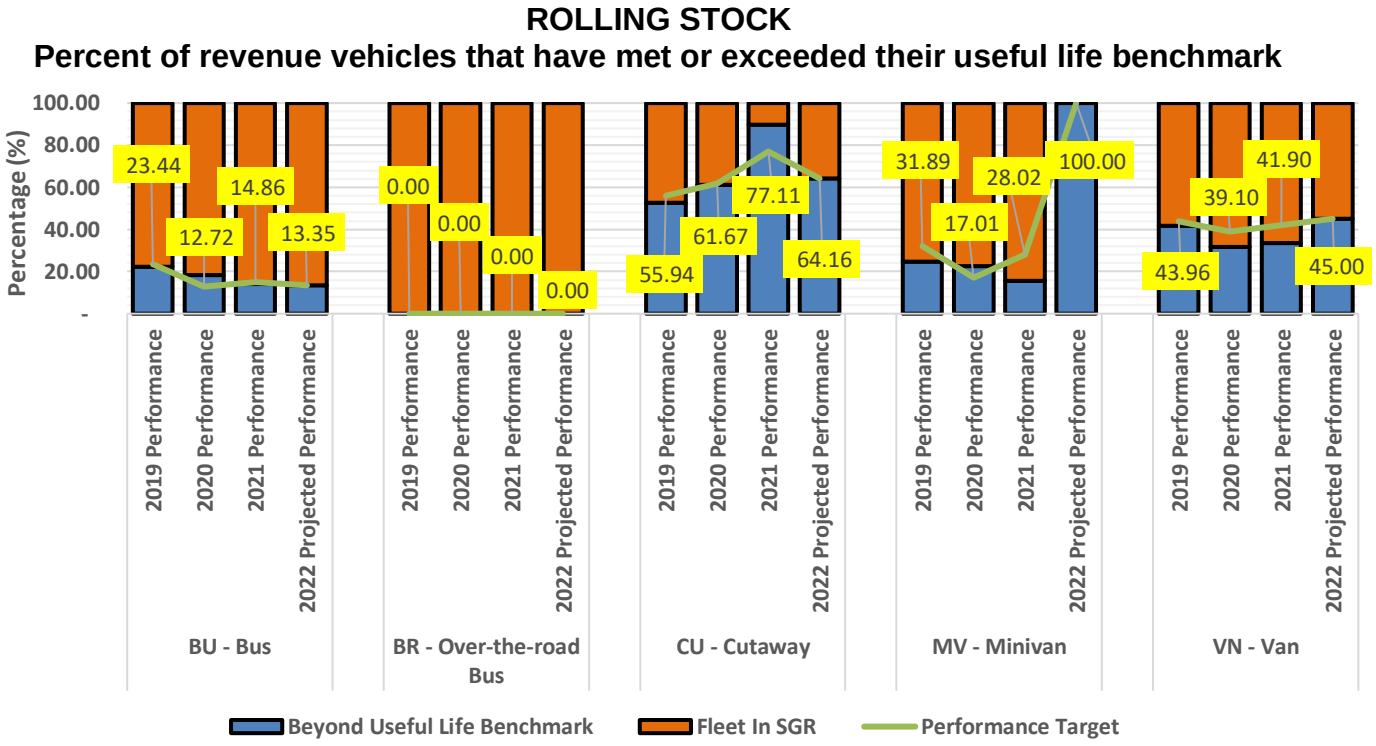
- *Condition score.*
  - ➢ The WSP FY2021 Condition Assessment report score revised the South Holland Acceptance Facility to a "4 – Good" from "1 – Poor". The increase in score can be attributed to rehabilitation work to repair flood damage.



REVENUE VEHICLE INVENTORY (A-30)

Pace calculated the 2021 Revenue Vehicle Performance Measure Targets by dividing the Active Fleet *that have met or exceeded their ULB* by the Total Active Fleet.

To conduct the 2022 Projected Vehicle Targets, one year is added to the vehicles age to re-baseline the fleet age. Pace then estimates the number of new vehicles it expects to receive during the year and adds them to the Projected Active Fleet. Lastly, Pace estimates the number of Active Vehicles it expects to deactivate from service during the year and removes them from the Projected Active Fleet. Pace then calculates the 2022 Revenue Vehicle Projected Performance Measure Targets by dividing the Projected Active Fleet *that will have met or exceeded their ULB* by the Total Projected Active Fleet.



BR – Over the Road Bus Vehicles: Pace maintained the 2021 Performance Measure Target of 0% as none of our vehicles exceeded their ULB. The 2022 Projected Performance Measure Target will be set at 0%.

BU – Bus Vehicles: Pace was favorable to its 2021 Projected Performance Measure Target by 0.76%. The 2022 Projected Performance Measure Target will be set at 13.35%. Pace projects the 2022 Performance Measure Target to decrease approximately 0.75% over 2021 actuals because 44 new 30' diesel Buses are expected to be in service by the end of the year and a decrease of 9 Buses to match service requirements. Availability of hiring Operators will impact Pace's ability to implement service increases which could affect Performance Target Projections.

CU - Cutaway Vehicles: Pace was unfavorable to its 2021 Projected Performance Measure Target by 12.59%. The 2022 Projected Performance Measure Target will be set at 64.16%. Pace projects the 2022 Performance Measure Target to decrease approximately 25.54% over 2021 actuals because 160 new 15-Passenger Cutaway Vehicles are expected to be in service by the end of the year to replace certain vehicles that meet or exceed their ULB in 2022.

MV – Minivan Vehicles: Pace was favorable to its 2021 Projected Performance Measure Target by 12.53%. The 2022 Projected Performance Measure Target will be set at 100.00%. Pace projects the 2022 Performance Measure Target to increase approximately 85.41% over 2021 actuals because a large number of 2017 manufactured vehicles will reach their five-year ULB. No replacement vehicles were in service in 2021, or will be in 2022, and all vehicles will meet or exceed their ULB in 2022. World-wide semi-conductor shortages are delaying new vehicle procurements and causing Pace to keep vehicles beyond their ULB. In addition, COVID-19 has reduced usage and mileage of these vehicles allowing for longer retention.

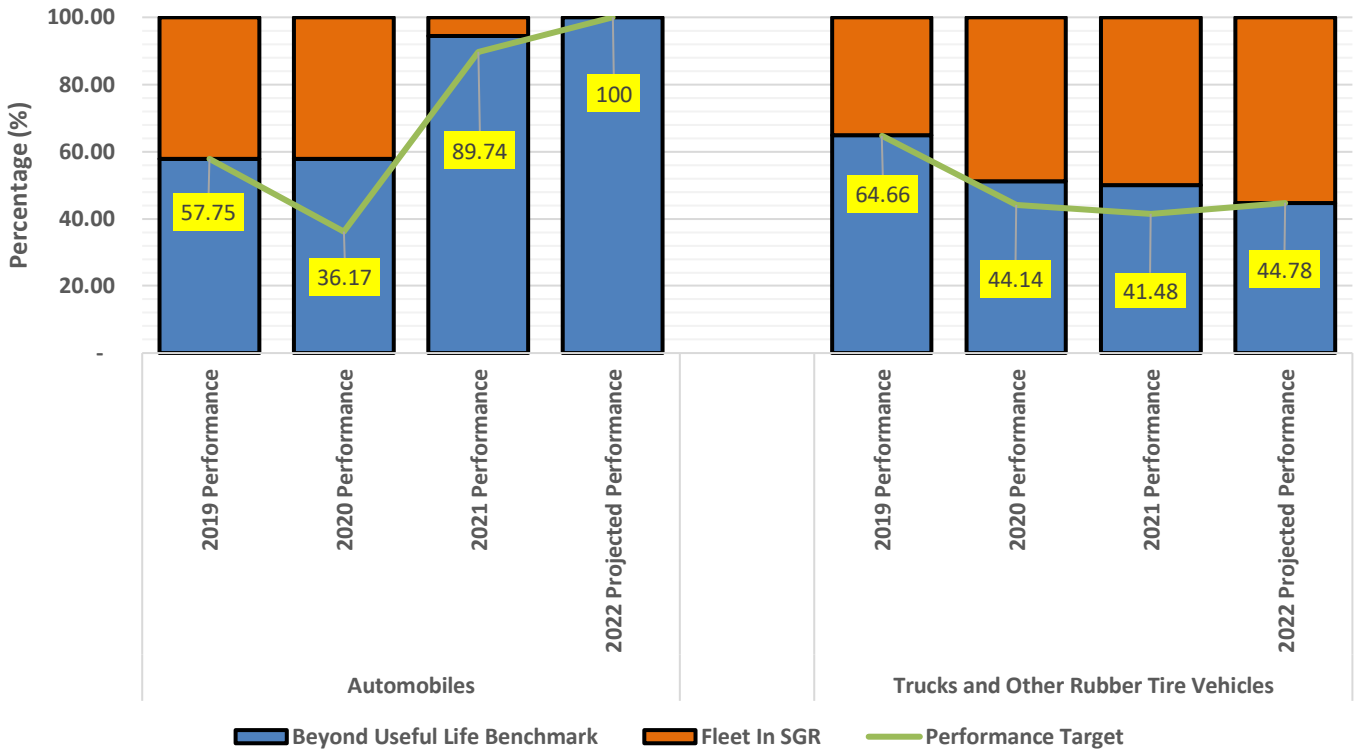
VN – Van Vehicles: Pace was favorable to its 2021 Projected Performance Measure Target by 8.28%. The 2022 Projected Performance Measure Target will be set at 45.00%. Pace projects the 2022 Performance Measure Target to increase approximately 11.38 % over 2021 actuals because no replacement vehicles were in service in 2021, or will be in 2022, and certain vehicles will meet or exceed their ULB in 2022. World-wide semi-conductor shortages are delaying new vehicle procurements and causing Pace to keep vehicles beyond their ULB. In addition, COVID-19 has reduced usage and mileage of these vehicles allowing for longer retention.

SERVICE VEHICLE INVENTORY (A-35)

Pace calculated the 2021 Service Vehicle Performance Measure Targets and the 2022 Service Vehicle Projected Performance Measure Targets using a similar methodology as for Revenue Vehicles (see A-30 section). The Service Vehicles Inventory includes both Active and Inactive Vehicles in the fleet calculations.

EQUIPMENT

Percent of service vehicles that have met or exceeded their useful life benchmark



Automobiles: Pace was unfavorable to its 2021 Projected Performance Measure Target by 4.63%. The 2022 Projected Performance Measure Target will be set at 100.00%. Pace projects the 2022 Performance Measure Target to increase approximately 5.63% over 2021 actuals. World-wide semi-conductor shortages are delaying new vehicle procurements and causing Pace to keep vehicles beyond their ULB. In addition, COVID-19 has reduced usage and mileage of these vehicles allowing for longer retention.

Trucks and Other Rubber Tire Vehicles: Pace was unfavorable to its 2021 Projected Performance Measure Target by 8.52%. The 2022 Projected Performance Measure Target will be set at 44.78%. Pace projects the 2022 Performance Measure Target to decrease approximately 5.22% over 2021 actuals. World-wide semi-conductor shortages are delaying new vehicle procurements and causing Pace to keep vehicles beyond their ULB. In addition, COVID-19 has reduced usage and mileage of these vehicles allowing for longer retention.

End of Narrative Report

END OF APPENDIX A

B. APPENDIX B – FACILITIES

B.1 NTD ASSET DEFINITION

In the ***TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation***, the Federal Transit Administration (FTA) lays out the following guidance and definitions with respect to Facilities:[2]

Passenger Facilities

Agencies report passenger station information for fixed route, fixed schedule services (rail modes, bus modes, trolleybus, ferryboat, and aerial tramway). Each agency must report inventory data for all passenger stations the agency uses in public transportation even if the agency does not own the stations.

Passenger stations are significant structures on a separate right-of-way (ROW). For rail modes, passenger facilities typically mean a platform area and any associated access structures or accessory spaces accessible to passengers or by staff who are in support of passenger service. This definition of passenger facilities includes:

- All rail passenger facilities (except for light rail, cable car, and streetcar modes)
- All light rail, cable car, and streetcar passenger facilities that have platforms and serve track that is in a separate ROW (not in mixed-street traffic)
- All motorbus, rapid bus, commuter bus, and trolley bus passenger facilities in a separate ROW that have an enclosed structure (building) for passengers for items such as ticketing, information, restrooms, and concessions
- All transportation, transit or transfer centers, and transit malls if they have an enclosed structure (building) for passengers for items such as ticketing, information, restrooms, concessions, and telephones

As an example, a bus stop on a street or in a median is not a station if the bus stop does not have a separate, enclosed building. Open shelters, canopies, lighting, signage, or ramps for accessibility alone are not enough to establish a passenger station.

Parking Facilities

Parking Facilities include park-n-ride lots as well as parking garages. Note that passenger and parking facilities are often collectively referenced as "passenger facilities." Parking facilities are those immediately adjacent to passenger facilities.

Administrative Facilities

Administrative Facilities are typically offices that house management and supporting activities for overall transit operations such as accounting, finance, engineering, legal,

[2] Federal Transit Administration, U.S. Department of Transportation, "TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation", Version 1.2, March 2018

safety, security, customer services, scheduling, and planning. They also include facilities for customer information or ticket sales, but that are not part of any passenger station.

Maintenance Facilities

Maintenance Facilities are those where routine maintenance and repairs, or heavy maintenance or unit rebuilds are conducted. Agencies must not report maintenance facilities where third-party vendors perform services, such as a local gasoline service or body shop. Note that characterizing a facility as one maintenance facility type over another will not alter the maintenance and administrative facility performance measure.

B.2 NTD RY2021 ASSET INVENTORY

Pace Facilities are located across Northeast Illinois. See **Table B – 1. TAM Facilities Inventory (A-15) Form - Summarized** for a copy of the **NTD RY2021 Transit Asset Management Facilities Inventory (A-15) Form** for more information along with their address, the year they were built or reconstructed as new, and the condition rating for facilities for which Pace has capital responsibility.

Pace utilizes Bus Transfer Centers, Park-n-Ride lots, and Passenger or Parking Facilities, which are primarily Transportation Centers that combine a Bus Transfer Center with parking. Pace also owns Administrative and Maintenance Facilities and uses Support Facilities owned by others to provide service. Pace's Administrative and Maintenance Facilities contain a mix of offices, garage, storage, and repair functions. Pace provides service to and from several Metra, and CTA stations, and from Park-n-Ride lots not owned by Pace throughout the RTA service area in Northeastern Illinois.

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
16050	Administration Headquarters	550 W. Algonquin Road	Arlington Heights	IL	60005	4	9/28/2020	Administrative Office / Sales Office	2009	65,000	-	100
16051	Fox Valley Division	400 North Overland Drive	North Aurora	IL	60542	3	7/12/2019	Combined Administrative and Maintenance Facility	1994	56,833	-	100
16052	Heritage Division	9 Osgood Street	Joliet	IL	60433	3	7/8/2019	Combined Administrative and Maintenance Facility	2019	66,077	-	100
16053	McHenry Paratransit Garage	5007 Prime Parkway	McHenry	IL	60050	3	7/10/2019	Combined Administrative and Maintenance Facility	2001	28,097	-	100
16054	North Division	1400 W. Tenth Street	Waukegan	IL	60085	3	7/10/2019	Combined Administrative and Maintenance Facility	1987	57,746	-	100
16055	North Shore Division	2330 Oakton Street	Evanston	IL	60202	4	7/9/2019	Combined Administrative and Maintenance Facility	1994	81,471	-	100
16056	Northwest Division	900 E. Northwest Highway	Des Plaines	IL	60016	2	9/29/2020	Combined Administrative and Maintenance Facility	2002	82,700	-	100
16057	River Division	975 S. State Street	Elgin	IL	60123	3	7/11/2019	Combined Administrative and Maintenance Facility	1989	63,235	-	100
16058	South Division	2101 W. 163rd Place	Markham	IL	60428	4	10/12/2021	Combined Administrative and Maintenance Facility	2017	191,182	-	100
16059	South Holland Acceptance Facility	405 W. Taft Drive	South Holland	IL	60473	4	10/13/2021	Vehicle Testing Facility	1994	44,700	-	100
16060	Southwest Division	9889 S. Industrial Drive	Bridgeview	IL	60455	4	10/13/2021	Combined Administrative and Maintenance Facility	1994	81,471	-	100
16061	West Division	3500 W. Lake Street	Melrose Park	IL	60160	4	9/30/2020	Combined Administrative and Maintenance Facility	2020	223,004	-	100
16062	Blue Island Park-n-Ride	3060 W. Burr oak	Blue Island	IL	60406	3	7/8/2019	Surface Parking Lot	1996	-	62	100
16063	Bolingbrook - Canterbury Lane Park-n-Ride	170 Canterbury Lane	Bolingbrook	IL	60440	3	9/18/2018	Surface Parking Lot	2010	-	179	100
16064	Bolingbrook - Old Chicago Park-n-Ride	120 E. Old Chicago Drive	Bolingbrook	IL	60440	3	9/18/2018	Surface Parking Lot	2016	-	219	100
16065	Buffalo Grove Transportation Center	801 Commerce Court	Buffalo Grove	IL	60089	3	9/20/2018	Bus Transfer Center	2011	3,442	-	100
16066	Burr Ridge Park-n-Ride	7650 Lincolnshire Drive	Burr Ridge	IL	60527	2	9/18/2018	Surface Parking Lot	1995	-	81	100
16067	Chicago Heights Transportation Center	1620 Vincennes Avenue	Chicago Heights	IL	60411	3	10/12/2021	Bus Transfer Center	1998	152	-	100
16068	Elgin Transportation Center	100 W. Chicago Street	Elgin	IL	60120	4	10/6/2020	Bus Transfer Center	2016	1,817	-	100
16070	Harvey Transportation Center	15330 Park Avenue	Harvey	IL	60426	2	7/8/2019	Bus Transfer Center	1999	17,951	-	100

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
16071	Hillside Park-n-Ride	Darmstadt Road & Elm Street	Hillside	IL	60162	3	9/29/2020	Surface Parking Lot	2001	-	79	100
16072	Hodgkins UPS Bus Terminal 1	One UPS Way	Hodgkins	IL	60525	3	10/20/2021	Bus Transfer Center	2003	3,691	-	100
16073	Hodgkins UPS Bus Terminal 2	One UPS Way	Hodgkins	IL	60525	3	10/20/2021	Bus Transfer Center	2003	1,736	-	100
16074	Homewood Park-n-Ride	750 Ridge Road	Homewood	IL	60430	3	7/8/2019	Surface Parking Lot	2010	-	109	100
16075	I-90/Barrington Road	2410 Central Road	Hoffman Estates	IL	60192	5	10/6/2020	Exclusive Platform Station	2018	13,300	-	100
16076	I-90/IL-25 Park-n-Ride	1475 Dundee Avenue	Elgin	IL	60120	5	9/18/2018	Surface Parking Lot	2017	-	197	100
16077	I-90/Randall Road Park-n-Ride	2001 N. Randall Road	Elgin	IL	60192	5	9/18/2018	Surface Parking Lot	2016	-	150	100
16078	Northwest Transportation Center	1730 Kimberly Drive	Schaumburg	IL	60173	3	9/28/2020	Bus Transfer Center	2019	35,972	-	100
16079	Plainfield Park-n-Ride	14740 Depot Drive	Plainfield	IL	60544	5	10/7/2020	Bus Transfer Center	2018	24,015	-	100
16081	Bridgeview Transit Center	7000 South Harlem Avenue	Bridgeview	IL	60455	5	10/7/2020	Bus Transfer Center	2019	9,803	-	100
16082	1701 Woodfield Drive	1701 Woodfield Drive	Schaumburg	IL	60173	-	-	Surface Parking Lot	2018	-	50	0
16084	Atrium Center Park-n-Ride	3800 Golf Road	Rolling Meadows	IL	60008	-	-	Surface Parking Lot	2018	-	255	0
16085	DeVry University Park-n-Ride	18624 W. Creek Drive	Tinley Park	IL	60477	-	-	Surface Parking Lot	2016	-	797	0
16086	White Fence Farm Romeoville Park-n-Ride	1376 Joliet Road	Romeoville	IL	60446	-	-	Surface Parking Lot	2014	-	110	0
16087	Yorktown Mall	203 Yorktown Center	Lombard	IL	60148	-	-	Surface Parking Lot	2005	-	30	0
16088	Sears Centre Arena Lot C Park-n-Ride	5333 Prairie Stone Parkway	Hoffman Estates	IL	60192	-	-	Surface Parking Lot	2013	-	33	0
16095	13171 UPNW Des Plaines	1501 Miner St.	Des Plaines	IL	60016	-	-	At-Grade Fixed Guideway Station	2004	30,688	-	0
16096	05235 MEDML Homewood	Ridge Rd. At Harwood Ave.	Homewood	IL	60430	-	-	Elevated Fixed Guideway Station	1995	9,852	-	0
16098	15230 MDN Lake Cook Road	601 Lake Cook Road	Deerfield	IL	60015	-	-	At-Grade Fixed Guideway Station	1995	23,274	-	0
16099	11085 UPW Oak Park Marion St.	1115 W North Blvd	Oak Park	IL	60301	-	-	Elevated Fixed Guideway Station	2001	21,013	-	0
16104	10380 BNSF Aurora	233 N Broadway	Aurora	IL	60505	-	-	At-Grade Fixed Guideway Station	1990	32,966	-	0

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
16106	10316 BNSF Route 59	1090 N Route 59	Aurora	IL	60504	-	-	At-Grade Fixed Guideway Station	1990	25,473	-	0
16107	10285 BNSF Naperville	105 E 4th Ave	Naperville	IL	60540	-	-	At-Grade Fixed Guideway Station	1983	11,545	-	0
16111	10212 BNSF Downers Grove Main St.	5001 Main Street	Downers Grove	IL	60515	-	-	At-Grade Fixed Guideway Station	2004	10,046	-	0
16112	10195 BNSF Westmont	18 West Quincy	Westmont	IL	60559	-	-	At-Grade Fixed Guideway Station	2004	17,673	-	0
16116	10138 BNSF LaGrange Road	25 W Burlington Rd	LaGrange	IL	60525	-	-	At-Grade Fixed Guideway Station	1996	6,468	-	0
16117	10131 BNSF Congress Park	1/2-mile West of Maple St on Burlington Ave	Brookfield	IL	60513	-	-	At-Grade Fixed Guideway Station	2001	3,476	-	0
16118	10123 BNSF Brookfield	8858 Burlington Ave	Brookfield	IL	60513	-	-	At-Grade Fixed Guideway Station	1980	5,068	-	0
16119	10101 BNSF Harlem Avenue	7135 Windsor Ave	Berwyn	IL	60402	-	-	At-Grade Fixed Guideway Station	2005	17,118	-	0
16120	10096 BNSF Berwyn	6801 Windsor Ave	Berwyn	IL	60402	-	-	At-Grade Fixed Guideway Station	1987	13,364	-	0
16121	10091 BNSF LaVergne	Windsor & Ridgeland Ave	Berwyn	IL	60402	-	-	At-Grade Fixed Guideway Station	1984	8,206	-	0
16122	09372 HC Joliet	GWFC+RC	Joliet	IL	60432	-	-	Elevated Fixed Guideway Station	2018	24,629	-	0
16123	09329 HC Lockport	13th St. & State St.	Lockport	IL	60441	-	-	At-Grade Fixed Guideway Station	1988	12,167	-	0
16124	08248 SWS Orland Park 153rd St.	10401 W 153rd St	Orland Park	IL	60462	-	-	At-Grade Fixed Guideway Station	2005	11,340	-	0
16125	08236 SWS Orland Park 143rd St.	143rd St & Southwest Hwy	Orland Park	IL	60462	-	-	At-Grade Fixed Guideway Station	2006	19,428	-	0
16126	08182 SWS Worth	110th St & Depot Rd	Worth	IL	60482	-	-	At-Grade Fixed Guideway Station	1996	11,080	-	0
16127	08168 SWS Chicago Ridge	103rd & Ridgeland Ave	Chicago Ridge	IL	60415	-	-	At-Grade Fixed Guideway Station	2005	19,348	-	0
16128	08152 SWS Oak Lawn	9225 S Tulley Ave	Oak Lawn	IL	60453	-	-	At-Grade Fixed Guideway Station	2006	21,476	-	0
16176	04189 MEDBI Blue Island	Vermont St. near Irving St.	Blue Island	IL	60406	-	-	At-Grade Fixed Guideway Station	2004	2,697	-	0
16177	04184 MEDBI Burr Oak	Burr Oak Ave. near Lincoln St.	Blue Island	IL	60406	-	-	At-Grade Fixed Guideway Station	1961	2,997	-	0
16178	04167 MEDBI West Pullman	Halsted St., South of 120th St.	Chicago	IL	60628	-	-	At-Grade Fixed Guideway Station	1961	3,577	-	0

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
16179	05315 MEDML University Park	1900 University Pkwy	University Park	IL	60466	-	-	Elevated Fixed Guideway Station	2004	15,878	-	0
16181	05276 MEDML 211th St. Lincoln Hwy.	3200 W. 211th St.	Olympia Fields	IL	60461	-	-	Elevated Fixed Guideway Station	1999	14,960	-	0
16182	05228 MEDML Calumet	Wood St., South of 174th St.	East Hazel Crest	IL	60429	-	-	Elevated Fixed Guideway Station	2001	9,437	-	0
16183	05223 MEDML Hazel Crest	Park Ave. & 170th St.	Hazel Crest	IL	60429	-	-	Elevated Fixed Guideway Station	1999	7,852	-	0
16184	05200 MEDML Harvey	Park Ave. & 154th St.	Harvey	IL	60429	-	-	Elevated Fixed Guideway Station	2004	8,412	-	0
16185	05190 MEDML 147th St. Sibley Blvd.	147th St. & Clinton St.	Harvey	IL	60426	-	-	Elevated Fixed Guideway Station	1989	8,679	-	0
16186	05173 MEDML Riverdale	137th St. & Illinois St.	Riverdale	IL	60827	-	-	Elevated Fixed Guideway Station	1989	9,638	-	0
16187	05120 MEDML 95th St. Chicago State Univ.	95th St. & Cottage Grove Ave.	Chicago	IL	60619	-	-	Elevated Fixed Guideway Station	1990	1,785	-	0
16188	06235 RIDML Tinley Park	6700 South St	Tinley Park	IL	60477	-	-	At-Grade Fixed Guideway Station	2003	9,082	-	0
16189	06204 RIDML Oak Forest	4850 W 159th St	Oak Forest	IL	60452	-	-	At-Grade Fixed Guideway Station	2013	24,686	-	0
16190	06184 RIDML Midlothian	3750 W 147th St	Midlothian	IL	60445	-	-	At-Grade Fixed Guideway Station	2002	21,214	-	0
16191	06157 RIDML Vermont St. Blue Island	2300 W Grove St	Blue Island	IL	60406	-	-	At-Grade Fixed Guideway Station	1967	9,473	-	0
16192	07158 RIDBB Prairie Street	2100 W Prairie St	Blue Island	IL	60406	-	-	Exclusive Platform Station	1980	2,787	-	0
16193	07117 RIDBB 95th St. Beverly Hills	1766 W 95th St	Chicago	IL	60643	-	-	At-Grade Fixed Guideway Station	2000	10,131	-	0
16194	06109 RIDML 95th St. Longwood	9501 S Vincennes Ave	Chicago	IL	60643	-	-	At-Grade Fixed Guideway Station	1991	579	-	0
16195	12398 MDW Big Timber Road	2025 Big Timber	Elgin	IL	60123	-	-	At-Grade Fixed Guideway Station	2000	14,776	-	0
16196	12366 MDW Elgin	109 W. Chicago St.	Elgin	IL	60123	-	-	At-Grade Fixed Guideway Station	2005	13,963	-	0
16197	12284 MDW Hanover Park	1975 W Lake St.	Hanover Park	IL	60193	-	-	At-Grade Fixed Guideway Station	1995	19,334	-	0
16203	12172 MDW Bensenville	Front St. and Lincoln St.	Franklin Park	IL	60130	-	-	At-Grade Fixed Guideway Station	1976	2,612	-	0
16204	12132 MDW Franklin Park	3148 Rose Steet.	Franklin Park	IL	60131	-	-	At-Grade Fixed Guideway Station	2002	13,101	-	0

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
16205	12114 MDW River Grove	8421 Arnold Ave.	River Grove	IL	60171	-	-	At-Grade Fixed Guideway Station	1995	12,611	-	0
16212	12102 MDW Elmwood Park	7600 W. Grand Ave.	Elmwood Park	IL	60707	-	-	At-Grade Fixed Guideway Station	2006	13,410	-	0
16213	12095 MDW Mont Clare	7007 W. Medill Street	Chicago	IL	60707	-	-	At-Grade Fixed Guideway Station	2006	10,100	-	0
16214	15495 MDN Fox Lake	Nippersink Blvd At Grand Ave.	Fox Lake	IL	60020	-	-	At-Grade Fixed Guideway Station	2003	9,950	-	0
16215	15478 MDN Ingleside	Washington St. and Rollins Rd.	Fox Lake	IL	60041	-	-	At-Grade Fixed Guideway Station	2003	5,926	-	0
16220	15440 MDN Round Lake	Route 134 and Cedar Lake Rd.	Round Lake	IL	60073	-	-	At-Grade Fixed Guideway Station	1991	13,292	-	0
16221	15355 MDN Libertyville	200 W. Lake St at Milwaukee Ave.	Libertyville	IL	60048	-	-	At-Grade Fixed Guideway Station	2000	8,854	-	0
16223	15242 MDN Deerfield	860 Deerfield Rd.	Deerfield	IL	60015	-	-	At-Grade Fixed Guideway Station	1967	17,808	-	0
16224	15211 MDN Northbrook	1401 Shermer Rd.	Northbrook	IL	60062	-	-	At-Grade Fixed Guideway Station	2005	13,987	-	0
16225	15174 MDN Glenview	1116 Depot Street	Glenview	IL	60025	-	-	At-Grade Fixed Guideway Station	1995	27,864	-	0
16227	15116 MDN Edgebrook	5438 W. Devon	Chicago	IL	60646	-	-	At-Grade Fixed Guideway Station	1991	11,928	-	0
16228	11355 UPW Geneva	328 Crescent Place	Geneva	IL	60134	-	-	At-Grade Fixed Guideway Station	2006	10,271	-	0
16229	11250 UPW Wheaton	402 W Front St	Wheaton	IL	60187	-	-	At-Grade Fixed Guideway Station	1999	21,963	-	0
16230	11238 UPW College Avenue	303 N. President Street	Wheaton	IL	60187	-	-	At-Grade Fixed Guideway Station	2005	19,885	-	0
16231	11157 UPW Elmhurst	128 W. 1st St (at York Rd.)	Elmhurst	IL	60126	-	-	At-Grade Fixed Guideway Station	1989	17,450	-	0
16232	11113 UPW Melrose Park	1801 W. Main St.	Melrose Park	IL	60160	-	-	At-Grade Fixed Guideway Station	1990	7,612	-	0
16233	11105 UPW Maywood	450 W. St. Charles	Maywood	IL	60153	-	-	At-Grade Fixed Guideway Station	1994	9,556	-	0
16234	11097 UPW River Forest	8001 W. Central Avenue	River Forest	IL	60305	-	-	Elevated Fixed Guideway Station	2000	15,092	-	0
16235	16369 NCS Mundelein	205 N. Archer Ave.	Mundelein	IL	60060	-	-	At-Grade Fixed Guideway Station	1996	13,848	-	0
16236	16295 NCS Buffalo Grove	825 Commerce Ct.	Buffalo Grove	IL	60089	-	-	At-Grade Fixed Guideway Station	2007	14,690	-	0

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
16238	16240 NCS Prospect Heights	55 South Wolf Road	Prospect Heights	IL	60070	-	-	At-Grade Fixed Guideway Station	2002	14,680	-	0
16239	16156 NCS Rosemont	9898 Berwyn Ave.	Rosemont	IL	60018	-	-	At-Grade Fixed Guideway Station	2005	11,696	-	0
16240	16148 NCS Schiller Park	4555 Ruby St.	Schiller Park	IL	60176	-	-	At-Grade Fixed Guideway Station	2006	13,720	-	0
16241	17359 UPN Waukegan	95 N. Spring St.	Waukegan	IL	60085	-	-	At-Grade Fixed Guideway Station	1988	19,470	-	0
16242	17332 UPN North Chicago	1633 Lakeside Ave.	North Chicago	IL	60064	-	-	At-Grade Fixed Guideway Station	1986	9,700	-	0
16243	17322 UPN Great Lakes	3000 S Sheridan Road	North Chicago	IL	60088	-	-	At-Grade Fixed Guideway Station	2003	13,386	-	0
16245	17230 UPN Highland Park	1700 St. Johns Ave.	Highland Park	IL	60035	-	-	At-Grade Fixed Guideway Station	1995	17,038	-	0
16247	17192 UPN Glencoe	724 Green Bay Rd.	Glencoe	IL	60022	-	-	At-Grade Fixed Guideway Station	1989	12,782	-	0
16248	17177 UPN Hubbard Woods	1065 Gage St.	Winnetka	IL	60093	-	-	At-Grade Fixed Guideway Station	1989	14,076	-	0
16249	17166 UPN Winnetka	754 Elm St	Winnetka	IL	60093	-	-	At-Grade Fixed Guideway Station	1989	16,792	-	0
16250	17158 UPN Indian Hill	111 N. Green Bay Rd.	Winnetka	IL	60093	-	-	Elevated Fixed Guideway Station	1993	12,000	-	0
16251	17152 UPN Kenilworth	400 Richmond Rd.	Kenilworth	IL	60043	-	-	At-Grade Fixed Guideway Station	1984	14,746	-	0
16252	17144 UPN Wilmette	722 Green Bay Rd.	Wilmette	IL	60091	-	-	At-Grade Fixed Guideway Station	2001	23,350	-	0
16253	17133 UPN Central St. Evanston	1826 Central St.	Evanston	IL	60201	-	-	Elevated Fixed Guideway Station	1996	19,760	-	0
16254	17120 UPN Davis St. Evanston	901 Davis St.	Evanston	IL	60201	-	-	Elevated Fixed Guideway Station	2005	25,590	-	0
16255	14506 UPNW McHenry (Branch Line)	4005 Main St	McHenry	IL	60050	-	-	At-Grade Fixed Guideway Station	1967	7,238	-	0
16256	13516 UPNW Woodstock	90 Church Street	Woodstock	IL	60098	-	-	At-Grade Fixed Guideway Station	1967	10,168	-	0
16257	13432 UPNW Crystal Lake	70 E. Woodstock Ave. & Grant St.	Crystal Lake	IL	60014	-	-	At-Grade Fixed Guideway Station	2005	16,318	-	0
16258	13228 UPNW Arlington Heights	45 W. Northwest Highway	Arlington Heights	IL	60004	-	-	At-Grade Fixed Guideway Station	2001	28,518	-	0
16259	13200 UPNW Mount Prospect	13 E. Northwest Hwy.	Mount Prospect	IL	60056	-	-	At-Grade Fixed Guideway Station	1989	22,454	-	0

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
16260	13186 UPNW Cumberland	475 E. Northwest Highway	Des Plaines	IL	60016	-	-	At-Grade Fixed Guideway Station	1986	13,405	-	0
16261	13150 UPNW Dee Road	950 Busse Highway	Park Ridge	IL	60068	-	-	At-Grade Fixed Guideway Station	2005	18,725	-	0
16262	13135 UPNW Park Ridge	100 S. Summit Ave.	Park Ridge	IL	60068	-	-	At-Grade Fixed Guideway Station	2007	17,906	-	0
16263	13126 UPNW Edison Park	6730 North Olmstead Avenue	Chicago	IL	60631	-	-	At-Grade Fixed Guideway Station	2007	20,416	-	0
16264	13091 UPNW Jefferson Park	4963 N. Milwaukee Ave.	Chicago	IL	60630	-	-	Elevated Fixed Guideway Station	2007	18,252	-	0
16265	08000 OTHER Union Station	225 S. Canal St	Chicago	IL	60606	-	-	Other, Passenger or Parking	1991	230,740	-	0
16266	05000 MEDML Millennium Station	151 N. Michigan Ave.	Chicago	IL	60602	-	-	Other, Passenger or Parking	2016	159,780	-	0
16267	Howard	7519 N. Paulina St.	Chicago	IL	60626	-	-	Elevated Fixed Guideway Station	2009	18,200	-	0
16268	Cermak - Chinatown	138 W. Cermak Road	Chicago	IL	60616	-	-	At-Grade Fixed Guideway Station	1969	16,287	-	0
16269	95th - Dan Ryan	15 W. 95th Street	Chicago	IL	60620	-	-	At-Grade Fixed Guideway Station	2017	69,583	-	0
16270	Rosemont	5801 N. River Road	Rosemont	IL	60018	-	-	At-Grade Fixed Guideway Station	1983	13,100	-	0
16271	Cumberland	5800 N. Cumberland Avenue	Chicago	IL	60631	-	-	At-Grade Fixed Guideway Station	1983	13,300	-	0
16272	Harlem - O'Hare	5550 N. Harlem Avenue	Chicago	IL	60656	-	-	At-Grade Fixed Guideway Station	1983	18,900	-	0
16273	Jefferson Park	4917 N. Milwaukee Avenue	Chicago	IL	60630	-	-	At-Grade Fixed Guideway Station	1971	16,700	-	0
16274	Clinton - Dear'n Sub.	426 S. Clinton Street	Chicago	IL	60607	-	-	Underground Fixed Guideway Station	1958	12,700	-	0
16275	Racine	430 S. Racine Avenue	Chicago	IL	60607	-	-	At-Grade Fixed Guideway Station	1958	10,500	-	0
16276	Cicero - Forest Park	720 S. Cicero Avenue	Chicago	IL	60644	-	-	At-Grade Fixed Guideway Station	1958	7,900	-	0
16277	Austin - Forest Park	1050 S. Austin Avenue	Oak Park	IL	60304	-	-	At-Grade Fixed Guideway Station	1960	8,800	-	0
16278	Oak Park - Congress	950 S. Oak Park Avenue	Oak Park	IL	60304	-	-	At-Grade Fixed Guideway Station	1960	8,800	-	0
16279	Harlem - Forest Park	701 S. Harlem Avenue	Forest Park	IL	60130	-	-	At-Grade Fixed Guideway Station	1960	8,900	-	0

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Space	Transit Agency Capital Responsibility (%)
16280	Forest Park	711 S. Des Plaines Avenue	Forest Park	IL	60130	-	-	At-Grade Fixed Guideway Station	1982	16,150	-	0
16287	Harlem/Lake	1 S. Harlem Avenue	Forest Park	IL	60130	-	-	Elevated Fixed Guideway Station	1962	11,000	-	0
16288	Oak Park - Lake	100 S. Oak Park Avenue	Oak Park	IL	60304	-	-	Elevated Fixed Guideway Station	1962	8,000	-	0
16289	Ridgeland	36 S. Ridgeland Avenue	Oak Park	IL	60302	-	-	Elevated Fixed Guideway Station	1962	6,700	-	0
16290	Austin - Lake	351 N. Austin Avenue	Chicago	IL	60644	-	-	Elevated Fixed Guideway Station	1962	8,000	-	0
16291	Cicero - Lake	4800 W. Lake Street	Chicago	IL	60644	-	-	Elevated Fixed Guideway Station	1996	10,400	-	0
16292	Midway	4612 W. 59th Street	Chicago	IL	60629	-	-	At-Grade Fixed Guideway Station	1993	33,400	-	0
16293	Linden	349 W. Linden Avenue	Wilmette	IL	60091	-	-	At-Grade Fixed Guideway Station	1993	9,400	-	0
16294	Davis	1612 N. Benson Avenue	Evanston	IL	60201	-	-	Elevated Fixed Guideway Station	1994	11,900	-	0
16295	54th/Cermak	2134 S. 54th Street	Cicero	IL	60650	-	-	At-Grade Fixed Guideway Station	2003	15,100	-	0
16296	Cicero - Douglas	2133 S. 48th Avenue	Cicero	IL	60650	-	-	At-Grade Fixed Guideway Station	1978	23,500	-	0
16297	Damen - Douglas	2010 S. Damen Avenue	Chicago	IL	60608	-	-	Elevated Fixed Guideway Station	2004	13,450	-	0
16298	Oakton-Skokie	4800 W. Oakton Street	Skokie	IL	60076	-	-	At-Grade Fixed Guideway Station	2012	10,651	-	0
16299	Dempster-Skokie	5001 W. Dempster Street	Skokie	IL	60077	-	-	At-Grade Fixed Guideway Station	1994	5,700	-	0
16880	Buffalo Grove Park-n-Ride	801 Commerce Court	Buffalo Grove	IL	60089	3	9/20/2018	Surface Parking Lot	2011	-	92	100
16881	Harvey Transportation Center Park-n-Ride	15330 Park Avenue	Harvey	IL	60426	2	7/8/2019	Surface Parking Lot	1999	-	68	100
16882	I-90/Barrington Road Park-n-Ride	2410 Central Road	Hoffman Estates	IL	60192	5	10/6/2020	Surface Parking Lot	2018	-	174	100
16883	Northwest Transportation Center Park-n-Ride	1730 Kimberly Drive	Schaumburg	IL	60173	3	9/28/2020	Surface Parking Lot	2019	-	193	100
16884	Plainfield Park-n-Ride	14740 Depot Drive	Plainfield	IL	60544	5	10/8/2020	Surface Parking Lot	2018	-	600	100
16885	Bridgeview Transit Center Park-n-Ride	7000 South Harlem Avenue	Bridgeview	IL	60455	5	10/7/2020	Surface Parking Lot	2016	-	288	100

Table B - 1. TAM Facilities Inventory (A-15) Form – Summarized (Continued)

ID	Name	Street	City	State	Zip	Condition Assessment	Est. Date of Condition Assessment	Facility Type	Year Built or Reconstructed as New	Building SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)
17995	17245 UPN Highwood	317 Green Bay Rd.	Highwood	IL	60040	-	-	At-Grade Fixed Guideway Station	1998	10,690	-	0
17996	17257 UPN Fort Sheridan	461 W. Old Elm Road	Highwood	IL	60040	-	-	At-Grade Fixed Guideway Station	1998	8,360	-	0
17997	17110 UPN Main St. Evanston	600 Main St.	Evanston	IL	60202	-	-	Elevated Fixed Guideway Station	1988	16,164	-	0
18351	Hegewisch Station Platform	13730 South Brainard Ave.	Chicago	IL	60633	-	-	At-Grade Fixed Guideway Station	2006	3,320	-	0
18940	11224 UPW Glen Ellyn	511 Crescent Blvd. (at Main St)	Glen Ellyn	IL	60137	-	-	At-Grade Fixed Guideway Station	1987	16,512	-	0
18941	16439 NCS Washington St.	330 W. Washington St.	Grayslake	IL	60030	-	-	At-Grade Fixed Guideway Station	2006	7,202	-	0
18942	16459 NCS Round Lake Beach	680 East Mallard Creek Dr.	Round Lake Beach	IL	60073	-	-	At-Grade Fixed Guideway Station	1996	13,060	-	0
18943	13631 UPNW Harvard	1 N. Ayer Street	Harvard	IL	60033	-	-	At-Grade Fixed Guideway Station	1994	9,297	-	0
18944	Main	836 N. Chicago Avenue	Evanston	IL	60202	-	-	Elevated Fixed Guideway Station	1910	9,000	-	0
18945	South Blvd.	601 W. South Boulevard	Evanston	IL	60626	-	-	Elevated Fixed Guideway Station	1931	8,700	-	0
19759	Joliet Gateway Transit Center	50 S. Chicago Street	Joliet	IL	60432	-	-	Bus Transfer Center	2021	30,564	-	0

End of A-15 Table

B.3 NON NTD-REPORTABLE ASSETS

B.3.1 NON NTD-REPORTABLE FACILITIES

In addition to the assets that Pace owns and/or for which it has capital responsibility, Pace relies on several facilities owned by third parties in the provision of public transit. While these are not reportable to the NTD, the FTA's TAM Final Rule issued on July 26, 2016, indicates that these should be included in the TAM Plan itself:[3]

> The **inventory also must include** all Rolling Stock (revenue vehicles), **passenger stations, administrative and exclusive use maintenance facilities**, and guideway infrastructure **owned by a third-party and used by the provider in the provision of public transportation**. The level of detail in a provider's asset inventory should be commensurate with the level of detail in its program of capital projects.

Table B - 2. Non NTD-Reportable Administrative and Maintenance Facility Inventory and **Table B - 3. Non NTD-Reportable Stations & Passenger Facility Inventory** list the facilities that are either leased or used in coordination with a contracted service agreement.

These facilities represent no capital responsibility for Pace's use, though maintenance contracts may cover some of the locations that Pace leases.

Table B - 2. Non NTD-Reportable Administrative and Maintenance Facility Inventory

NON-PACE-OWNED ADMINISTRATIVE AND MAINTENANCE FACILITIES	
Pace City Paratransit Services Office (Metra Building)	547 W. Jackson, 8th Floor, Chicago, IL 60661
Pace Printshop	80-86 N. Lively Blvd., Elk Grove Village, IL 60007
Pace Vanpool	515 W. Algonquin Road, Arlington Heights, IL 60005
Pace East Dundee Garage	401 Christina Drive, East Dundee, IL 60118
NON-PACE-OWNED - PURCHASED SERVICE ADMINISTRATIVE AND MAINTENANCE FACILITIES	
City of Highland Park	1150 Half Day Road, Highland Park, IL 60035
Village of Niles	6859 West Touhy Avenue, Niles, IL 60714
NON-PACE-OWNED - PURCHASED SERVICE ADMINISTRATIVE AND MAINTENANCE FACILITIES	
First Student - Glen Ellyn, DuPage County (ADA)	22 W 760 Poss Street, Glen Ellyn, IL 60137
First Student – Naperville	31 W330 Schoger Drive, Naperville, IL 60544
MV Transportation – Batavia	1896 Suncast Lane, Batavia, IL 60510
CDT/National Express	2005 w. 43rd Street, Chicago, IL 60609
First Transit – Chicago	615 W. 41st Street, Chicago, IL 60609
MV Transportation – Chicago	4400 W. 45th Street, Chicago, IL 60632
SCR Transportation	8801 S. Greenwood Ave., Chicago, IL 60619
NON-PACE-OWNED - PURCHASED SERVICE ADMINISTRATIVE AND MAINTENANCE FACILITIES	
First Transit – Grayslake, Lake County	39 Ziegler Drive, Grayslake, IL 60030
First Transit – Joliet, Will County	2085 Oak Leaf, Joliet, IL 60436
First Transit – Melrose Park, West Cook County	2020-2040 Indian Boundary Dr., Melrose Park, IL 60160
MV Transportation – Niles, North Cook County	6230 W. Gross Point Road, Niles, IL 60714
NON-PACE-OWNED - PURCHASED SERVICE ADMINISTRATIVE AND MAINTENANCE FACILITIES	
Aurora Township	80 N. Broadway, Aurora, IL 60505
CDT/National Express, South Cook County	2200 Bernice Road, Lansing, IL 60438

[3] Federal Register, Vol. 81, No. 143, Tuesday, July 26, 2016, Rules and Regulations, 49 CFR Parts 625 and 630.

Table B - 3. Non NTD-Reportable Stations & Passenger Facility Inventory

BUS TURNAROUND/TERMINAL FACILITIES	
Gurnee Mills Terminal	6170 W. Grand Ave., Gurnee, IL 60031
Prairie Stone Terminal (Hoffman Estates)	5401 Trillium Boulevard, Hoffman Estates, IL 60192
Riverdale Bus Turnaround	13600 Indiana Ave., Riverdale, IL 60827
Waukegan Transit Center	Sheridan Rd. north of Washington St., Waukegan
PARK-N-RIDE LOTS	
Community Christian Church	1635 Emerson Lane, Naperville
Elk Grove Village Park-n-Ride	35 Northwest Point Blvd., Elk Grove Village, IL 60007
Fairview Plaza Park-n-Ride (Downers Grove)	75th St. and Fairview, Downers Grove, IL 60516
IDOT Channahon Park-n-Ride	I-55 and Route 6, Channahon, IL
IDOT Joliet Park-n-Ride	I-55 and Route 30, Joliet, IL
IDOT Shorewood Park-n-Ride	I-55 and Route 52, Shorewood, IL
McHenry DOT Park-n-Ride	Virginia Rd. at IL 31, Lake in the Hills, IL
Naperville – 91st Street Park-n-Ride	91st Street and Normantown, Naperville, IL 60564
Palos Heights Metra Park-n-Ride	11541 Southwest Highway, Palos Heights, IL 60463
St. Thomas the Apostle Church	1500 N Brookdale Rd., Naperville, IL 60563
Wheatland Salem Church	1852 W. 95th St., Naperville, IL 60564

Table B - 4. Pulse Milwaukee Line Stations lists Pace's **PULSE** Stations, which are not yet reportable to the NTD, but may require reporting in the future.

Table B - 4. Pulse Milwaukee Line Stations

PULSE MILWAUKEE LINE STATIONS	
Austin Northbound	Harlem Northbound
Austin Southbound	Harlem Southbound
Central Northbound	Main Northbound
Central Southbound	Main Southbound
Dempster Northbound	Oakton Northbound
Dempster Southbound	Oakton Southbound
Devon Northbound	Touhy Northbound
Devon Southbound	Touhy Southbound
Golf Mill Terminal – Northern Limit	

B.3.2 NON NTD-REPORTABLE EQUIPMENT

Guidance from the FTA suggests that budget line items for equipment assets valued over $50,000 and which remain within facilities can be reported in the TAM Plan inventories and have their conditions reported in the TAM Plan. Such items are not reportable to the NTD either as part of the Equipment or Facilities categories. Pace is reporting no such assets in this TAM Plan.

B.4 ASSET CONDITION

B.4.1 CONDITION ASSESSMENT

The condition ratings reported in this Plan for Pace's facility assets are based on physical condition assessment conducted by WSP, USA, Inc. between 2019 and 2022. The facilities assessed in 2022 were previously assessed by WSP in 2018.

The condition scores follow the FTA-defined condition ratings, as shown in **Table B - 5. Passenger Facilities Condition Rating Levels**.

Table B - 5. Passenger Facilities Condition Rating Levels

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

Each facility was scored using the ***TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation***, issued by the FTA, as the primary source for inspection and grading methodology. The FTA Guidebook relies largely on visual inspection, and in cases of difficult to access areas, it relies on visual inspection from an access point. The FTA Guidebook requires condition scores be given to 10 building systems in each facility (Substructure, Shell, Interiors, Conveyance, Plumbing, HVAC, Fire Protection, Electrical, Equipment/Fare Collection, and Site), which are summed into a single score for each facility using a calculation method at the discretion of the agency.

Pace has used a customized weighting system based upon the criticality of those 10 building systems to delivery of customer service. Those weightings appear in the detailed scorecards in **Section B.8 WSP Condition Assessment Reports** but are summarized in **Table B - 6. Building Systems Weightings**.

Table B - 6. Building Systems Weightings

ID	Building System	Weightings (%)
A	Substructure	5-15
B	Shell	20-35
C	Interiors	5-10
D	Conveyance	1-5
E	Plumbing	5-10
F	HVAC	5-10
G	Fire Protection	1-5
H	Electrical	1-5
I	Equipment / Fare Collection	10-15
J	Site	10-15
	Total:	100%

Ranges are provided because some facilities did not have all the building systems listed so weightings are redistributed accordingly in that case. Many of the sites have large areas of pavement and or landscaping which are scored under “Site” which proportionally reduces the weightings given to the other building systems.

To record grades and notes, the WSP Inspection Team utilized a grading sheet like that available in the FTA Guidebook but modified to allow more room for notes. Where a building system had multiple scores for multiple areas, a weighting system was used to determine an overall score

for that system. This scoring is evident in the scorecards found in **Section B.8. WSP Condition Assessment Reports**.

Pace staff accompanied the WSP Inspection Team while they made observations of the site, made observations of each structure, and observed all accessible spaces and equipment of each Facility. Pace supplied background (not verified as-built) drawings used by the WSP Inspection Team to augment the inspection, including showing possible underground utility locations. Certain difficult to access or difficult items for direct view resulted in the WSP Inspection Team making distant and/or indirect observations where required. All items were classified as part of one of the 10 building systems and graded in accordance with the FTA Guidebook.

B.4.2 CURRENT CONDITION INFORMATION AND PERFORMANCE TARGETS

Condition information for Pace's Passenger Facilities, as of December 31, 2021 (used for the FY2022 performance targets), is reported by facility in **Table B – 1. TAM Facilities Inventory (A-15) Form - Summarized**, while updated condition rating for facilities assessed by WSP in 2022 is included in **Table B - 7. Condition Scores for Passenger Facilities Assessed in 2022.** These updated condition ratings will be used for the FY2023 performance target setting.

Table B - 7. Condition Scores for Passenger Facilities Assessed in 2022

Asset Name	Condition Rating 2018	Condition Rating 2022	Comments
Buffalo Grove Transportation Center	3	4	Score increased due to splitting of lower condition parking facilities into separate reportable facility.
Buffalo Grove Park-n-Ride	N/A	3	Included in Transportation Center in 2018.
Elk Grove Park-n-Ride Facility	3	2	Score decreased due to continued aging of facility.
Burr Ridge Park-n-Ride Facility	2	2	No change in score.
Bolingbrook Old Chicago Park-n-Ride Facility	3	3	No change in score.
Bolingbrook Canterbury Lane Park-n-Ride Facility	3	3	No change in score.
I-90 Randall Road Park-n-Ride Facility	5	5	No change in score.
I-90/IL25 Park-n-Ride Facility	5	5	No change in score.
Prairie Stone Transportation Center	3	2	Score decreased modestly due to continued aging of facility and rounding.

Condition ratings are used for required reporting in the National Transit Database (NTD), and to measure performance against annual targets. With the introduction of TAM, Pace has been required since 2017 to develop performance targets for the assets for which we have capital replacement responsibility. For Passenger/Parking Facilities, the performance target must reflect the "percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) scale (1=Poor to 5=Excellent)."[4]

[4] Federal Transit Administration, U.S. Department of Transportation, National Transit Database Asset Inventory Module 2017-2018 Reporting Guide

"Beginning in Report Year 2019, agencies must upload a narrative report to the NTD that outlines performance targets and their progress toward those targets. This narrative may include any changes in transit system conditions that may affect progress toward targets. There is no prescribed format for the narrative report."[5]

Information on Pace's performance targets for facilities is contained in **Table B - 8. Performance Targets for Facilities.** Performance Targets are developed per FTA's guidance for locations where Pace has capital responsibility. The values in the table represent the percentage of facilities rated 2 or below on the FTA TERM Scale.

Table B - 8. Performance Targets for Facilities

Asset Type	2021 Target	2021 Performance	2022 Target
Passenger / Parking Facilities	16.67%	12.50%	13.64%
Administrative / Maintenance Facilities	16.67%	8.33%	7.69%

B.5 LIFECYCLE MANAGEMENT STRATEGIES

B.5.1 OVERVIEW

Pace has developed several processes to best manage the lifecycle of our facilities. These include a detailed maintenance manual prescribing planned maintenance and useful life information for the agency's assets, processes to ensure contractor quality and completion, and strict guidelines for disposal of assets.

The following sections detail the lifecycle management strategies that Pace uses to maintain our facilities in a State of Good Repair (SOGR).

B.5.2 MAINTENANCE

Pace has developed the **Rolling Stock, Facilities, and Equipment Maintenance Manual**, and the **Facility Maintenance Plans and Practice Overview and Procedures for Inspections Manual**, which describe the agency's standard operating procedures required to maintain the system. The four core goals of the maintenance manual can be broadly described as:

- ✓ Safety
- ✓ Performance
- ✓ Efficiency
- ✓ Professionalism

These four goals ensure that:

- Safety and comfort of the agency's passengers are the primary consideration of all maintenance functions
- The fleet is serviced at a rate that covers the needs of the agency and addresses any emergencies that might arise
- The lowest cost is maintained without sacrificing safety
- Maintenance is technologically current

[5] Ibid 4.

All equipment shall be maintained as listed in the Pace Capital Infrastructure Facilities Maintenance logbook. The frequency of inspections and services shall be no less than those recommended by the manufacturers. In the event there is no recommended service frequency in the Pace Capital Infrastructure Facilities Maintenance logbook, the Revenue Services, Superintendent of Maintenance shall consult the Capital Infrastructure, Section Manager, Facilities Maintenance at Corporate to determine the frequency.

All inspections, service and repairs shall be authorized and documented using Oracle eAM as well as forms in the Pace Facilities Maintenance logbook. From these documentation procedures, the Revenue Services, Superintendent of Maintenance shall prepare a monthly report including inspections, services, and equipment breakdowns.

Preventative Maintenance

The responsibility of maintenance and repairs to passenger facilities lies with Revenue Services/ Bus Operations. The Capital Infrastructure Facilities Maintenance staff do perform bi-annual inspections to those Passenger Facilities where there are buildings (i.e., driver washrooms, passenger waiting areas, etc.).

Building inspections of Administrative and Operating Divisions are conducted by Capital Infrastructure / Facilities Maintenance on a bi-annual basis. Bus Operations staff (e.g., Building Maintainers) conduct inspections of maintenance facilities more frequently. Some contractors are required to conduct preventative maintenance which is tracked in Oracle eAM.

Corrective Maintenance

Any deficiencies found during the Capital Infrastructure / Facilities Maintenance inspections of Passenger Facilities are reported to Bus Operations for follow-up repairs. Any major deficiencies (concrete and asphalt failure, tuck pointing, etc.) are identified and referred to the Capital Infrastructure Department Manager for further analysis to determine whether the infrastructure is nearing the end of its life and if so, develops a replacement cost estimate and recommends that it be included in the next annual capital budget request for funding. The Capital Infrastructure / Design & Construction Department is responsible for writing design and engineering scopes for large scale improvement projects to monitor Pace's effort to returning our infrastructure to a State of Good Repair.

When a defect at the Administrative and Operating Divisions is identified, it is reported to the Division Superintendent of Maintenance. The Supervisor or the Senior Facilities Engineer for Pace's Administrative Building calls the Facilities Maintenance Specialist in Facilities Maintenance assigned to the area to report the defect. In some cases, the Facilities Maintenance Specialist may advise that the Revenue Services, Building Maintainer can address the defect. However, if this is not the case, then the Facilities Maintenance Specialist will call the appropriate vendor.

Contract Maintenance

Pace has several on-call contracts in place for Facilities Maintenance. When the Facilities Maintenance Specialist calls a vendor, they must provide a Facilities Maintenance number (FM number), which is equivalent to a purchase order number, specific to the job. The FM number is

generated through Oracle eAM, which is also where costs are tracked. For service calls more than $500, the vendor must send a quote before performing service, and the quote must be reviewed and approved by the Section Manager, Facilities Maintenance, before work commences. All Facilities Maintenance work carried out by vendors that does not exceed $500 is tracked in Oracle eAM and will be assigned an FM number.

B.5.3 CAPITAL INVESTMENT

The budgeting process for facilities follows the same process outlined in **Section 7. Investment Prioritization** of the TAM Plan. The need for capital investment in Facilities is assessed using Pace's Capital Project Scoring Criteria and prioritized for investment based on funding availability.

B.5.4 DISPOSAL

At Pace, an asset is disposed of if it has exceeded its useful life and is no longer needed or functioning or has been damaged or destroyed before the end of its useful life. When disposal is necessary, an Asset Disposal Form is completed by the division or department that holds or is responsible for the asset. The Asset Disposal Form is submitted to Accounting, and the Fixed Asset Accountant reviews the asset to determine if there is any remaining useful life. If there is, then that is noted on the Asset Disposal Form.

The Asset Disposal Form is then reviewed and approved by the Section Manager, Accounts Payable/Receivable and the Section Manager, Grants Administration, if the asset is capital funded. The Fixed Asset Accountant determines whether an asset should be disposed of by the Using Department or sold by the Procurement Department. The Procurement Department is responsible for obtaining payment for the sale of an asset and forwarding those funds directly to the Finance Department.

Per the Bipartisan Infrastructure Law effective 11/15/21, Pace will only be allowed to retain the first $5,000 received for all sales after 11/15/21. If the proceeds from the asset exceed $5,000 or have remaining useful life, then the Grants Administration Department will coordinate repayment to the funding agency and obtain concurrence.

B.5.5 SUPPLY CHAIN AND PROCUREMENT

Size and scope of the project influences which department, Capital Infrastructure / Design & Construction, Capital Infrastructure / Facilities Maintenance, or Bus Operations manages the procurement. Once a project or procurement has been approved and included in the Capital Program, staff develop the scope of work, conduct research on appropriate specifications and estimated cost. Once complete, the scope is sent to a series of approvers, who may request revisions or modifications to the request as necessary before final approval. The Capital Infrastructure / Design & Construction Department has a formal process that outlines how and when input from other departments should be solicited during the procurement process.

As part of the procurement process, Pace collects all necessary documentation from the winning contractor, including insurance & bonds, if applicable. Pace staff administer construction contracts and perform construction management and oversight of contractors.

Pace has formal processes in place for the following: Requests For Information (RFI), payment application, and change orders.

Once a project reaches substantial completion, the contractor must notify Pace in writing, indicating what work remains to be completed, and request an inspection. If Pace agrees that the project is substantially complete, a punch list is created for all remaining items. At substantial completion, the contractor is eligible for a reduction in retainage (retainage is typically 10% of the contract value), the amount of which differs by subcontract. Upon completion, contractors are paid in full.

Sometimes projects undertaken at existing facilities are completed in multiple phases to reduce the impact of construction on routine business. For example, one portion of a facility will be taken out of service until substantially complete; once it is substantially complete it will be put back into service and another part will be taken out of service.

A contract is closed once Pace has received all deliverables or assets and all parties (prime and sub-contractors) have been fully paid. Substantial completion indicates that the constructed improvements may be used. Prior to declaring substantial completion, Pace will walk through the premises to ensure it is suitable for operation and develop a punch list of remaining items to be completed before closing the contract. As part of close-out procedures, Pace ensures that all materials and documentation have been received, including warranties, manuals, waivers, and certified pay applications.

B.6 ASSET MANAGEMENT ENABLERS

B.6.1 ORGANIZATION

Responsibility for operations and maintenance of Pace's Passenger and Parking Facilities is divided across the organization, between Capital Infrastructure / Facilities Maintenance, and Revenue Services / Bus Operations. At the Transportation Centers, the Facilities Maintenance Department is only responsible for maintaining the HVAC systems.

The Bus Operations Department has four Passenger Facility Maintenance Specialists based out of Headquarters who handle passenger station facility maintenance, and not repairs at the Operating Divisions.

The Facilities Maintenance Department based out of Arlington Heights is responsible for operations and maintenance of the HVAC and mechanical systems, roofing, and other building elements at Pace's Administrative and Maintenance Buildings. The Facilities Maintenance Department is comprised of a Section Manager, one Environmental Coordinator, one Specification Writer, one Project Manager, one Senior Facilities Engineer for Arlington Heights, two Senior Contract Administrators, two Facilities Maintenance Specialists; one for the Northern, and one for the Southern regions to oversee contractors working on equipment assets fixed to the building, and one Senior Facilities Maintenance Specialist Coordinator for all the garages responsible for receiving service calls. The Senior Facilities Specialist Coordinator can troubleshoot any issue to determine whether the issue requires specialized knowledge and expertise, in which case an existing on-call vendor is called.

Revenue Service, Building Maintainers, stationed at each division, are assigned to Bus Operations. Building Maintainers are responsible for interior work, changing filters, and other routine maintenance tasks. They may receive direction from Facilities Maintenance regarding defects.

The Capital Infrastructure / Design & Construction Department is responsible for improvement campaigns, rehabs, expansions, and other larger projects, including anything that requires architectural and engineering (A&E) services. The Design & Construction Department is comprised of a Section Manager, seven Capital Construction Project Managers, one Supervisor, Contract Administrator, two Contract Administrators, and one Construction Document Controller. Capital Construction projects typically range from $200,000-$50,000,000, with around 12 active projects at any time.

B.6.2 TRAINING

When an asset is replaced or modified, training is provided for in-house staff, and a review of operations and maintenance (O&M) manuals and preventative maintenance checklists is completed to ensure they are up to date and relevant to the new assets. Staff from the garages are heavily involved in this update process.

B.6.3 STANDARDS, LEGISLATION, REGULATION, AND OTHER MANDATED REQUIREMENTS

There are multiple “lines of defense” at Pace regarding compliance: managers, compliance areas, and Internal Audit. Managers are the front line, responsible for setting and enforcing policies. Compliance areas such as Ethics, Legal, and Human Resources are the second line. Internal Audit follows Institute of Internal Auditing Standards. Pace has an Audit Charter approved by the Pace Audit Committee and Board of Directors and has a procedure manual.

Compliance Departments such as General Counsel, Ethics, Internal Audit, and Human Resources are primarily responsible for knowing the relevant regulatory requirements. The Accounting, Grants Administration, and Procurement Departments are also responsible for compliance. Internal Audit reviews regulatory requirements, and policies/procedures to ensure Pace compliance as it relates to each audit conducted by Internal Audit and ensures compliance with them. All requirements are captured in policies, which are on the Pace Corporate Intranet, though there is no separate depository for legislative/regulatory requirements at this time.

B.6.4 TECHNOLOGY

Pace relies on several software applications to support improved performance management and decision-making including Oracle Enterprise Asset Management (eAM) and Oracle Application Express (APEX).

Oracle eAM is a comprehensive maintenance management system that delivers numerous efficiencies and cost savings. Pace uses Oracle eAM to:

- Create a preventative maintenance strategy
- Maximize resource availability, including both equipment and labor
- Optimize scheduling and resource efficiency
- Provide Asset Management and Work Management functions

B.6.5 ASSET KNOWLEDGE AND INFORMATION

Pace relies on Oracle eAM to record facilities-related assets. Pace transitioned to eAM from Maximo several years ago. Information on specific assets can, including maintenance history, can be pulled up in eAM; however, there is no comprehensive inventory of all items installed and their individual costs; items that are part of buildings (e.g., HVAC or electrical systems) are not tagged as separate assets.

Oracle eAM contains information that would allow the Department Manager / Capital Infrastructure to assess which facilities are spending the most money or having the most issues, including looking at specific assets.

Pace does not require our contractors to provide asset information to be input directly into eAM. Instead, a list of equipment is provided to Pace's eAM managers within Information Technology, who enter the information into eAM manually.

B.6.6 ASSURANCE

During construction, project managers and technical support staff, including architectural/engineering design consultants and testing consultants as needed, are onsite to monitor contractor performance, including to ensure that all work is performed in accordance with contract requirements.

Consistent with auditing standards and because of limited resources, Internal Audit develops an annual audit plan based on an annual risk assessment. Walk-through facility inspections are included in the plan with a goal to complete six Pace and six contractor facilities annually. The maintenance records are observed as part of the inspection. Walk through facility inspections are not as comprehensive as audits. More comprehensive compliance with maintenance procedures audits is conducted per a management request or based on high risk.

B.7 CAPITAL PLANS

In FY2023 through FY2027, Pace expects to spend over $256 million on facilities. In **Table B - 9. Facilities Capital Budget Forecast (000s)** below is a snapshot of Pace's anticipated capital spends in this asset class.

Table B - 9. Facilities Capital Budget Forecast (000s)

Project	2023	2024	2025	2026	2027	Total
North Division Electrification/Expansion	$60,350	$36,037	-	-	-	$96,387
Southwest Division Electrification/Expansion	-	-	14,000	40,025	40,117	94,142
Pulse 95th A/E & Construction	1,464	19,567	-	-	-	21,031
I-294 Stations	-	-	17,025	-	-	17,025
Headquarters Renovations	750	-	16,000	-	-	16,750
Bus Stop Shelters	-	1,500	1,500	1,500	1,500	6,000
Harvey Transportation Center	5,400	-	-	-	-	5,400
Total	**$67,964**	**$57,104**	**$48,525**	**$41,525**	**$41,617**	**$256,735**

B.8 WSP CONDITION ASSESSMENT REPORTS

The following scoresheets, **Table B - 10. WSP Inspection Report - Gurnee Mills Transit Center** through **Table B - 49. WSP Inspection Report – UPS Bus Terminal 2.** show the scores given for each building system at each Facility, the overall scores, and include a representative photo and thumbnail site plan.

These are all extracts from more detailed reports produced by WSP USA, Inc. on the condition assessments:

- Pace Facilities Inspection Report 2019 and Reference for RY 2019 NTD Reporting
- Pace Facilities Inspection Report 2020 and Reference for RY 2020 NTD Reporting
- Pace Facilities Inspection Report 2021 and Reference for RY 2021 NTD Reporting
- Pace Facilities Inspection Report 2022 and Reference for RY 2022 NTD Reporting

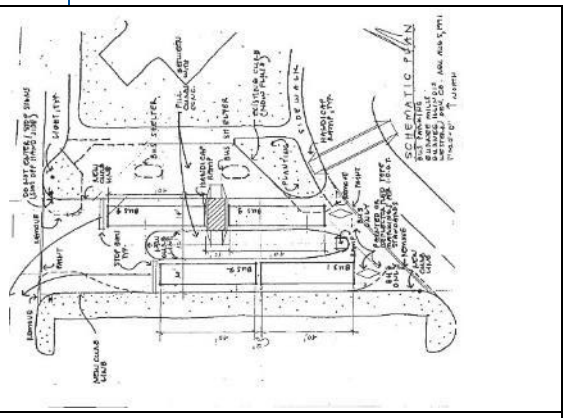
Table B - 10. WSP Inspection Report - Gurnee Mills Transit Center

Inspection Date	September 17, 2018
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Gurnee Mills Transit Center
Address / Location	6170 W. Grand Ave. Gurnee Illinois 60031

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	168	SF	2	6				100	
B	Shell	432	SF	1.86	10				86	14
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	3	Each	3	1			100		
F	HVAC	0	Each	0	0					
G	Fire Protection	0	SF	0	0					
H	Electrical	0	SF	0	0					
I	Equipment	0	Each	0	0					
J	Site	10,070	SF	1.44	83				44	56

Total Aggregate Rating	**1.53**
Aggregate Rating Rounded	**2**

Representative Inspection Photo



Site Plan

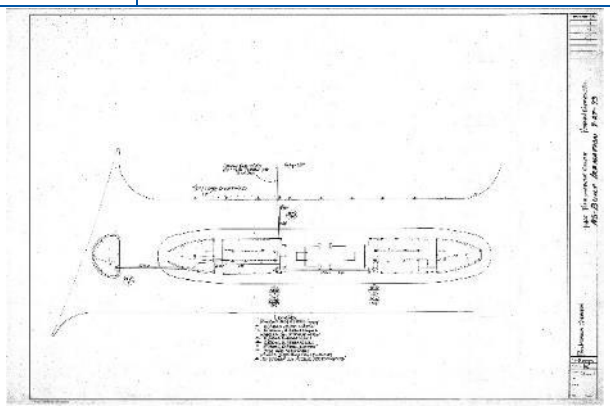
Table B - 11. WSP Inspection Report – Prairie Stone Transportation Center

Inspection Date	April 29, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Prairie Stone Transportation Center
Address / Location	5401 Trillium Blvd. Hoffman Estates, IL 60192

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	976	SF	2	10				100	
B	Shell	9,426	SF	2.79	25			80	15	5
C	Interiors	170	SF	1.79	4				70	30
D	Conveyance	0	Each	0	0					
E	Plumbing	4	Each	2.5	4			70		30
F	HVAC	2	Each	3	1			100		
G	Fire Protection	1	Each	3	1			100		
H	Electrical	30	Each	1.67	5				60	40
I	Equipment	0	Each	0	0					
J	Site	59,625	SF	2.7	50			70	20	10

Total Aggregate Rating	**2.49**
Aggregate Rating Rounded	**2**

Representative Inspection Photo



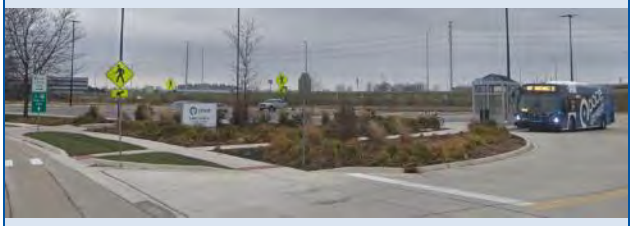
Site Plan

Table B - 12. WSP Inspection Report – I-90 Randall Road Park-n-Ride

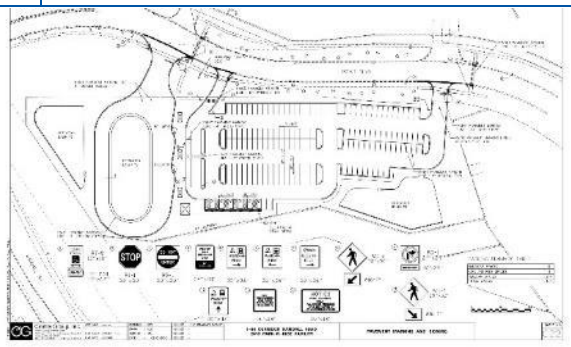
Inspection Date	April 29, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	I-90 Randall Road Park-n-Ride
Address / Location	2001 N. Randall Road Elgin, Illinois 60123

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	755	SF	5	10	100				
B	Shell	2,230	SF	4.99	20	99	1			
C	Interiors	703	SF	4.95	4	95	5			
D	Conveyance	0	Each	0	0					
E	Plumbing	2	Each	5	4	100				
F	HVAC	4	Each	5	1	100				
G	Fire Protection	0	Each	0	0					
H	Electrical	18	Each	5	5	100				
I	Equipment	1	Each	1	1					100
J	Site	212,370	SF	4.9	55	90	10			

Total Aggregate Rating	**4.90**
Aggregate Rating Rounded	**5**



Representative Inspection Photo



Site Plan

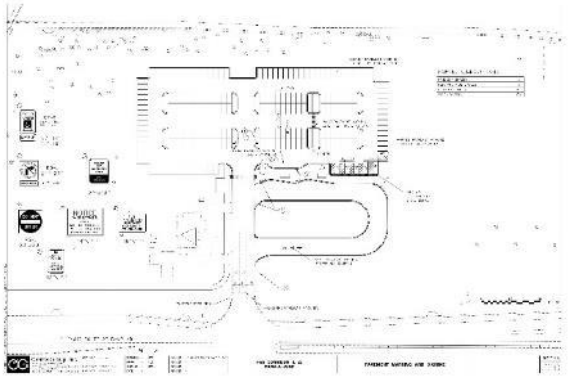
Table B - 13. WSP Inspection Report – I-90 / IL 25 Park-n-Ride

Inspection Date	April 29, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	I-90 / IL 25 Park-n-Ride
Address / Location	1475 Dundee Ave. Elgin, IL 60120

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	224	SF	5	13	100				
B	Shell	1,012	SF	4.99	20	99	1			
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	0	Each	0	0					
F	HVAC	2	Each	5	1	100				
G	Fire Protection	0	SF	0	0					
H	Electrical	17	Each	5	5	100				
I	Equipment	1	Each	4	1		100			
J	Site	148,806	SF	4.98	60	95		2	2	1

Total Aggregate Rating	**4.90**
Aggregate Rating Rounded	**5**

Representative Inspection Photo



Site Plan

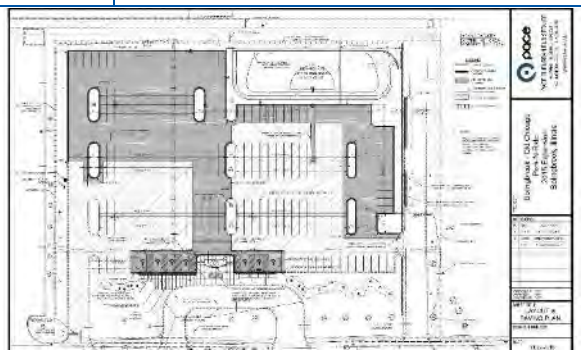
Table B - 14. WSP Inspection Report – Bolingbrook Old Chicago Park-n-Ride

Inspection Date	April 28, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Bolingbrook Old Chicago Park-n-Ride
Address / Location	120 East Old Chicago Drive Bolingbrook 60440

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	112	SF	3	12			100		
B	Shell	506	SF	2	20				100	
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	0	Each	0	0					
F	HVAC	1	Each	3	1			100		
G	Fire Protection	1	Each	2	1				100	
H	Electrical	1	Each	2.7	5			70	30	
I	Equipment	1	Each	2	1			50		50
J	Site	89,391	SF	2.85	60			90	5	5

Total Aggregate Rating	**2.68**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

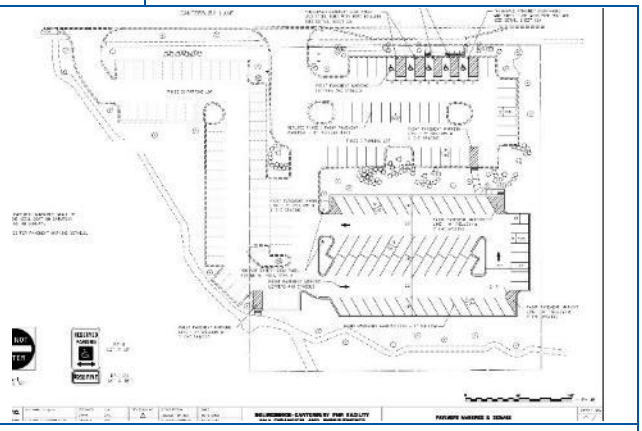
Table B - 15. WSP Inspection Report – Bolingbrook Canterbury Park-n-Ride

Inspection Date	April 28, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Bolingbrook Canterbury Park-n-Ride
Address / Location	170 Canterbury Lane Bolingbrook, Illinois 60440

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	112	SF	3	12			100		
B	Shell	506	SF	2	20				100	
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	0	Each	0	0					
F	HVAC	1	Each	3	1			100		
G	Fire Protection	1	Each	2	1				100	
H	Electrical	1	Each	2.7	5			70	30	
I	Equipment	1	Each	2	1			50		50
J	Site	89,391	SF	2.85	60			90	5	5

Total Aggregate Rating	**2.68**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

Table B - 16. WSP Inspection Report – Burr Ridge Park-n-Ride

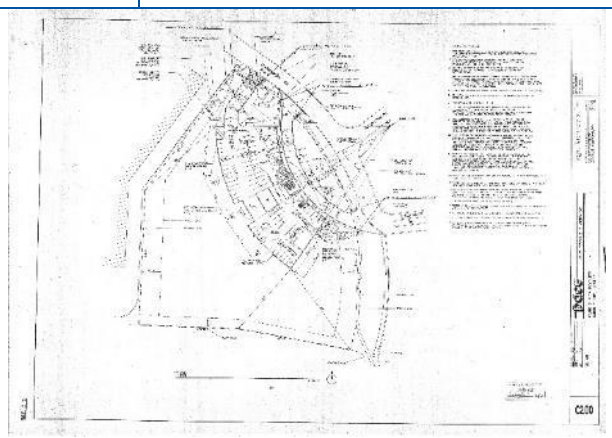
Inspection Date	April 28, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Burr Ridge Park-n-Ride
Address / Location	7650 Lincolnshire Drive, Burr Ridge, Illinois, 60527

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	324	SF	2.8	10			80	20	
B	Shell	594	SF	2.35	20			65	5	30
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing*	195,882	SF	3	4			100		
F	HVAC	0	Each	0	0					
G	Fire Protection	0	Each	0	0					
H	Electrical	10	Each	2.7	5			70	30	
I	Equipment	1	Each	3.5	1		50	50		
J	Site	195,882	SF	2.2	60	10		40		50

* Plumbing in this instance refers to a sprinkler system over the whole site.

Total Aggregate Rating	**2.36**
Aggregate Rating Rounded	**2**

Representative Inspection Photo



Site Plan

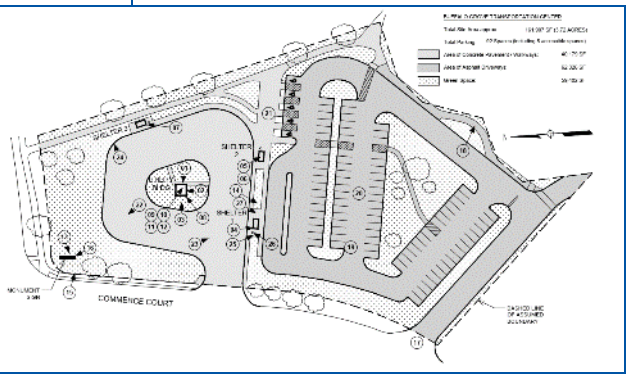
Table B - 17. WSP Inspection Report – Buffalo Grove Transportation Center

Inspection Date	April 27, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Buffalo Grove Transportation Center
Address / Location	801 Commerce Ct, Buffalo Grove, Illinois 60089

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	464	SF	4	10		100			
B	Shell	594	SF	3.96	15		98	1		1
C	Interiors	510	SF	2.98	5			99		1
D	Conveyance	0	Each	0	0					
E	Plumbing	4	Each	2	2				100	
F	HVAC	2	Each	2	2				100	
G	Fire Protection	0	Each	0	0					
H	Electrical	10	Each	2.84	5			92		8
I	Equipment	1	Each	2.45	1		45	5		50
J	Site	66,093	SF	3	60		100			

Total Aggregate Rating	**3.79**
Aggregate Rating Rounded	**4**

Representative Inspection Photo



Site Plan

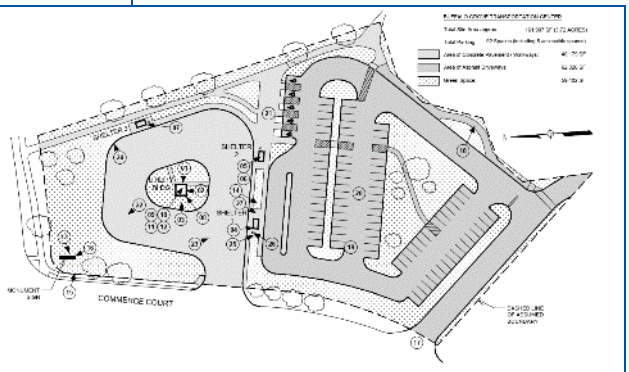
Table B - 18. WSP Inspection Report – Buffalo Grove Park-n-Ride

Inspection Date	April 27, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Buffalo Grove Park-n-Ride
Address / Location	801 Commerce Ct, Buffalo Grove, Illinois 60089

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	0	SF	0	0					
B	Shell	0	SF	0	0					
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	0	Each	0	0					
F	HVAC	0	Each	0	0					
G	Fire Protection	0	Each	0	0					
H	Electrical	14	Each	2.84	5			92		8
I	Equipment	0	Each	0	0					
J	Site	95,814	SF	2.5	95			50	50	

Total Aggregate Rating	**2.52**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

Table B - 19. WSP Inspection Report – Elk Grove Park-n-Ride

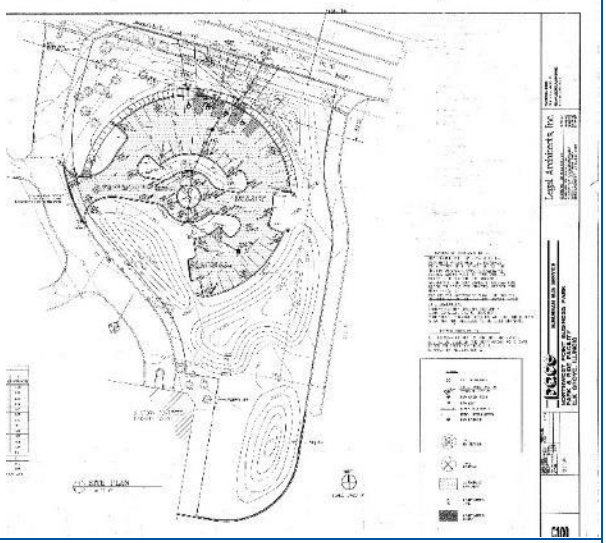
Inspection Date	April 27, 2022
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Elk Grove Park-n-Ride
Address / Location	35 NW Point Blvd Elk Grove Village, Illinois 60007

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	112	SF	3	10			100		
B	Shell	624	SF	1.75	15				75	25
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing*	88,252	SF	3	2			100		
F	HVAC	0	Each	0	0					
G	Fire Protection	0	Each	0	0					
H	Electrical	16	Each	2.5	5			50	50	
I	Equipment	1	Each	2.5	1		50			50
J	Site	88,252	SF	2.4	67			50	40	10

* Plumbing in this instance refers to a sprinkler system over the whole site.

Total Aggregate Rating	**2.38**
Aggregate Rating Rounded	**2**

Representative Inspection Photo



Site Plan

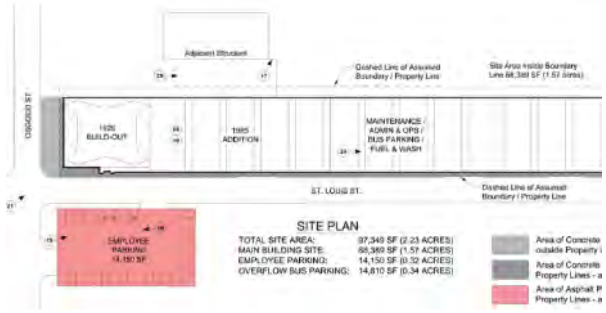
Table B - 20. WSP Inspection Report – Heritage Division Facility

Inspection Date	July 8, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Heritage Division Facility
Address / Location	9 Osgood Street, Joliet, Illinois, 60433

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	66,077	SF	2.8	15			85	10	5
B	Shell	66,077	SF	2.85	35			80	20	5
C	Interiors	66,077	SF	2.8	10			80	20	
D	Conveyance	0	Each	0	0					
E	Plumbing	25	Each	2	5			90	10	
F	HVAC	1	Each	3	6			100		
G	Fire Protection	1	Each	3	2			100		
H	Electrical	106,362	SF	2.9	2			90	10	
I	Equipment	15	Each	2.75	10			75	25	
J	Site	40,285	SF	2.67	15			67	33	

Total Aggregate Rating	**2.77**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

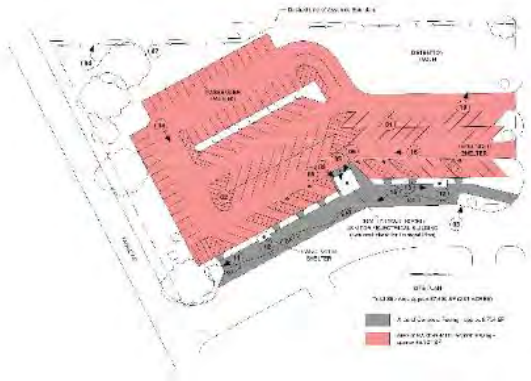
Table B - 21. WSP Inspection Report – Homewood Park-n-Ride

Inspection Date	July 8, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Homewood Park-n-Ride
Address / Location	750 Ridge Road, Homewood, Illinois 60430

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	435	SF	2.9	10			90	10	
B	Shell	435	SF	2.9	20			90	10	
C	Interiors	435	SF	2.95	5			95	5	
D	Conveyance	0	Each	0	0					
E	Plumbing	4	Each	2	4			100		
F	HVAC	2	Each	3	1			100		
G	Fire Protection	0	SF	0	0					
H	Electrical	87,556	SF	3	5			100		
I	Equipment	0	Each	0	0					
J	Site	41,179	SF	2.8	55	0	0	85	10	5

Total Aggregate Rating	**2.82**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

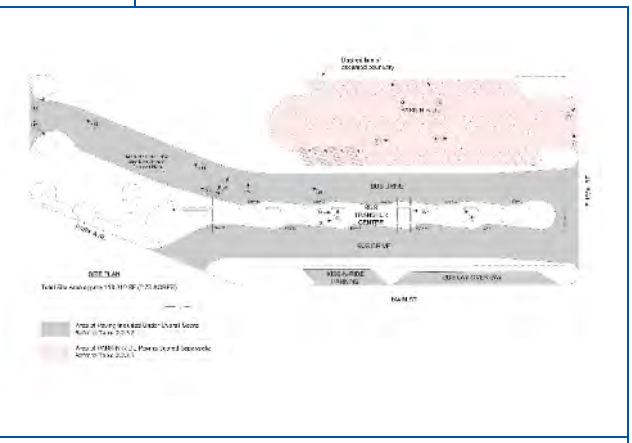
Table B - 22. WSP Inspection Report – Harvey Transportation Center Facility

Inspection Date	July 8, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Harvey Transportation Center Facility
Address / Location	15330 Park Avenue, Harvey, Illinois 60426

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	1,983	SF	2.95	25			95	5	
B	Shell	1,566	SF	1.7	10				70	30
C	Interiors	720	SF	2.1	10			20	70	10
D	Conveyance	0	Each	0	0					
E	Plumbing	6	Each	2	3			100		
F	HVAC	1	Each	3	5				100	
G	Fire Protection	0	SF	0	0					
H	Electrical	14,800	SF	2.9	5			90	10	
I	Equipment	5	Each	3.7	2		90			10
J	Site	45,490	SF	1.5	40				50	50

Total Aggregate Rating	**2.15**
Aggregate Rating Rounded	**2**

Representative Inspection Photo



Site Plan

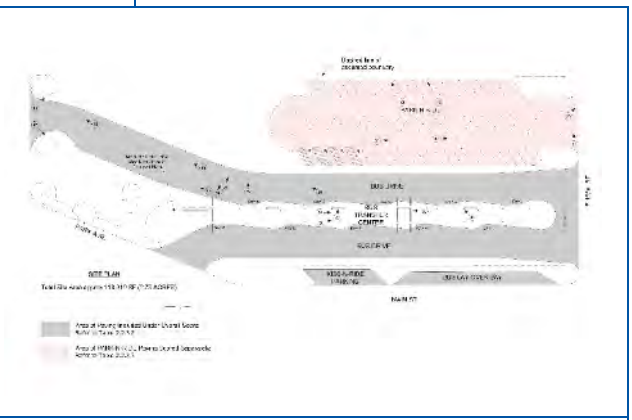
Table B - 23. WSP Inspection Report – Harvey Transportation Center Park-n-Ride

Inspection Date	July 8, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Harvey Transportation Center Park-n-Ride
Address / Location	15330 Park Avenue, Harvey, Illinois 60426

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	0	SF	0	0					
B	Shell	0	SF	0	0					
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	0	Each	0	0					
F	HVAC	0	Each	0	0					
G	Fire Protection	0	SF	0	0					
H	Electrical	0	SF	0	0					
I	Equipment	0	Each	0	0					
J	Site	30,123	SF	1.6	100				60	40

Total Aggregate Rating	**1.6**
Aggregate Rating Rounded	**2**

Representative Inspection Photo



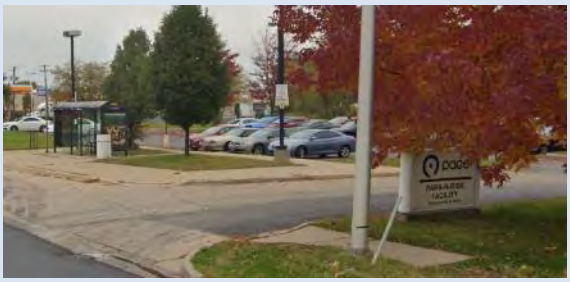
Site Plan

Table B - 24. WSP Inspection Report – Blue Island Park-n-Ride

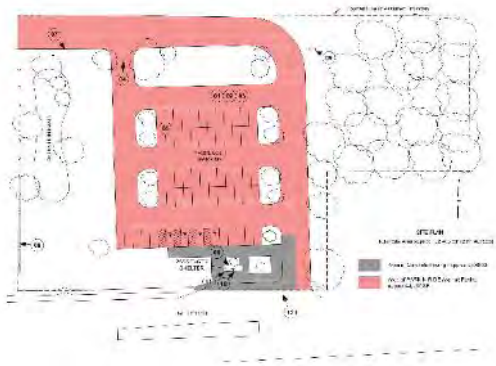
Inspection Date	July 8, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Blue Island Park-n-Ride
Address / Location	3060 W. 127th Street, Blue Island, Illinois 60406

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	100	SF	2.95	15			95	5	
B	Shell	100	SF	2.8	15			80	20	
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	0	Each	0	0					
F	HVAC	0	Each	0	1					
G	Fire Protection	1	SF	3	0			100		
H	Electrical	121,973	SF	2.9	4			90	10	
I	Equipment	0	Each	0	0					
J	Site	121,973	SF	2.83	65			88	7	5

Total Aggregate Rating	**2.82**
Aggregate Rating Rounded	**3**



Representative Inspection Photo



Site Plan

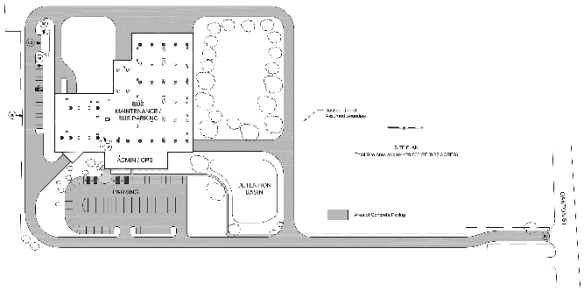
Table B - 25. WSP Inspection Report – North Shore Division Facility

Inspection Date	July 9, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	North Shore Division Facility
Address / Location	2330 Oakton Street, Evanston, Illinois 60202

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	81,471	SF	2.95	15			95	5	
B	Shell	81,471	SF	3.75	35		80	15	5	
C	Interiors	81,471	SF	3.75	10		80	15	5	
D	Conveyance	0	Each	0	0					
E	Plumbing	32	Each	3	5			100		
F	HVAC	1	Each	3.05	6		10	85	5	
G	Fire Protection	0	SF	3	2			100		
H	Electrical	424,258	SF	3	2			100		
I	Equipment	16	Each	3.45	10		50	45	5	
J	Site	342,787	SF	3.8	15		85	10	5	

Total Aggregate Rating	**3.5**
Aggregate Rating Rounded	**4**

Representative Inspection Photo



Site Plan

Table B - 26. WSP Inspection Report – McHenry Paratransit Facility

Inspection Date	July 10, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	McHenry Paratransit Facility
Address / Location	5007 Prime Parkway, McHenry, Illinois 60050

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	28,097	SF	2.95	15			95	5	
B	Shell	28,097	SF	3.3	35		40	50	10	
C	Interiors	28,097	SF	3.4	10		50	40	10	
D	Conveyance	0	Each	0	0					
E	Plumbing	6	Each	3	5			100		
F	HVAC	1	Each	3	6			100		
G	Fire Protection	0	SF	0	2					
H	Electrical	112,837	SF	2.95	2			95	5	
I	Equipment	5	Each	2.7	10			75	20	5
J	Site	85,159	SF	3.07	15		7	93		

Total Aggregate Rating	**3.06**
Aggregate Rating Rounded	**3**

Representative Inspection Photo

Site Plan

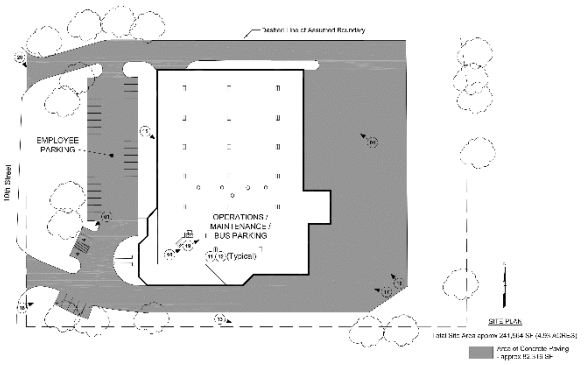
Table B - 27. WSP Inspection Report – North Division Facility

Inspection Date	July 10, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	North Division Facility
Address / Location	1400 W. Tenth Street, Waukegan, Illinois 60085

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	57,754	SF	2.75	15			80	15	5
B	Shell	57,754	SF	3.2	35		30	60	10	
C	Interiors	57,754	SF	2.85	10		20	50	25	5
D	Conveyance	0	Each	0	0					
E	Plumbing	6	Each	2.9	5			95		5
F	HVAC	1	Each	3	6			100		
G	Fire Protection	0	SF	0	2					
H	Electrical	204,628	SF	2.95	2			95	5	
I	Equipment	5	Each	2.95	10		10	80	5	5
J	Site	142,622	SF	3	15	0	20	60	20	0

Total Aggregate Rating	**2.95**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

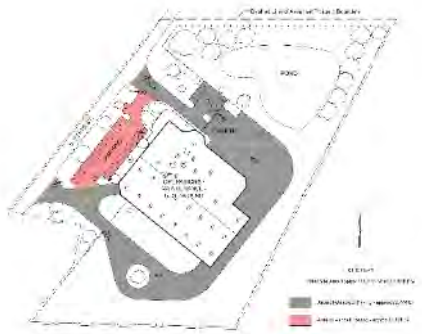
Table B - 28. WSP Inspection Report – River Division Facility

Inspection Date	July 11, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	River Division Facility
Address / Location	975 S. State Street, Elgin, Illinois 60123

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	63,235	SF	2.9	15			90	10	
B	Shell	63,235	SF	2.7	35			70	30	
C	Interiors	63,235	SF	2.7	10			70	30	
D	Conveyance	0	Each	0	0					
E	Plumbing	6	Each	2.9	5			90	10	
F	HVAC	1	Each	2.6	6			60	40	
G	Fire Protection	1	SF	3	2			100		
H	Electrical	385,212	SF	3	2			100		
I	Equipment	16	Each	2.6	10			70	20	10
J	Site	370,405	SF	2.3	15			50	30	20

Total Aggregate Rating	**2.68**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

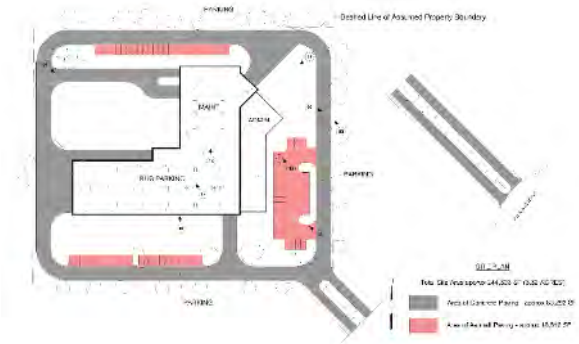
Table B - 29. WSP Inspection Report – Fox Valley Division Facility

Inspection Date	July 12, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Fox Valley Division Facility
Address / Location	400 North Overland Drive, North Aurora, Illinois 60542

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	56,833	SF	2.95	15			95	5	
B	Shell	56,833	SF	2.95	35		20	60	15	5
C	Interiors	56,833	SF	2.9	10		20	50	30	
D	Conveyance	0	Each	0	0					
E	Plumbing	33	Each	2.9	5			90	10	
F	HVAC	3	Each	2.7	6			70	30	
G	Fire Protection	56,833	SF	2.9	2			90	10	
H	Electrical	243,936	SF	2.98	2			98	2	
I	Equipment	11	Each	2.5	10			70	10	20
J	Site	187,103	SF	3	15		20	60	20	

Total Aggregate Rating	**2.89**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

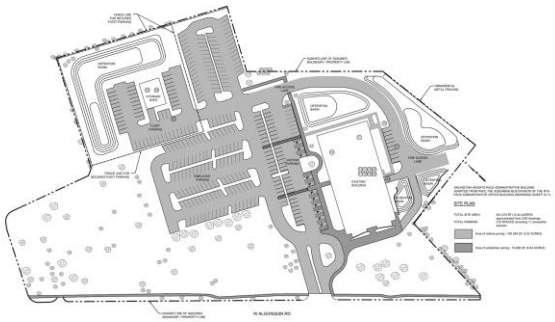
Table B - 30. WSP Inspection Report – Administration Headquarters

Inspection Date	September 28, 2020
Inspector Name	Lindsay Zanders / Joe Millham
Facility Name	Administration Headquarters
Address / Location	550 W. Algonquin Road, Arlington Heights, Illinois 60005

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	63,970	SF	4	15		100			
B	Shell	63,970	SF	4	35		100			
C	Interiors	1	System	4.5	10	50	50			
D	Conveyance	1	Each	4	5		100			
E	Plumbing	3	Systems	4.15	5	15	85			
F	HVAC	5	Systems	4	6		100			
G	Fire Protection	3	Systems	4.5	4	50	50			
H	Electrical	3	Systems	4.75	5	75	25			
I	Equipment	0	Each	N/A	0					
J	Site	541,375	SF	4	15		100			

Total Aggregate Rating	**4.12**
Aggregate Rating Rounded	**4**

Representative Inspection Photo



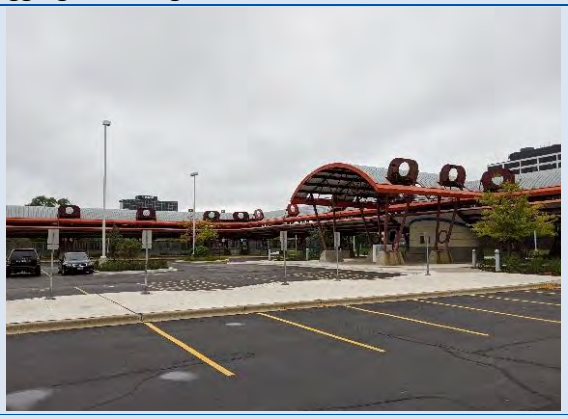
Site Plan

Table B - 31. WSP Inspection Report – Northwest Transportation Center

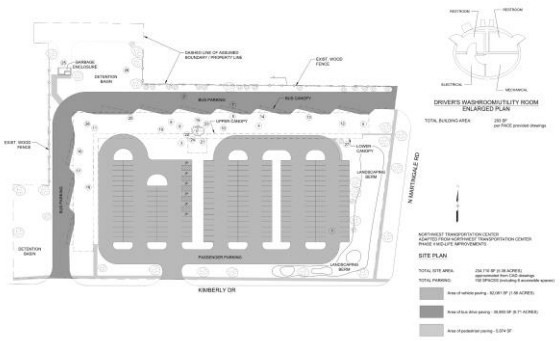
Inspection Date	September 28, 2020
Inspector Name	Lindsay Zanders / Joe Millham
Facility Name	Northwest Transportation Center / Charles Zettek Transportation Center
Address / Location	1730 Kimberly Drive Schaumburg, IL (Behind Streets of Woodfield Mall)

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	293	SF	3	15			100		
B	Shell	293	SF	2.3	35			30	70	
C	Interiors	293	SF	3	10			100		
D	Conveyance	0	Each	N/A	0					
E	Plumbing	2	Systems	2.4	6			40	60	
F	HVAC	2	Systems	3	6			100		
G	Fire Protection	0	Systems	N/A	0					
H	Electrical	2	Systems	4	5		100			
I	Equipment	1	Systems	4	8		100			
J	Site	234,710	SF	2.9	15			90	10	

Total Aggregate Rating	**2.83**
Aggregate Rating Rounded	**3**



Representative Inspection Photo



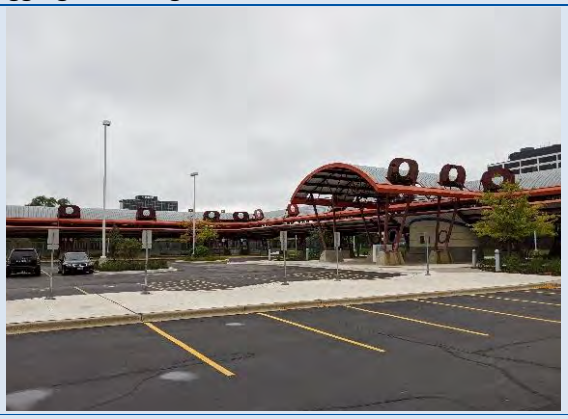
Site Plan

Table B - 32. WSP Inspection Report – Northwest Transportation Center Park-n-Ride

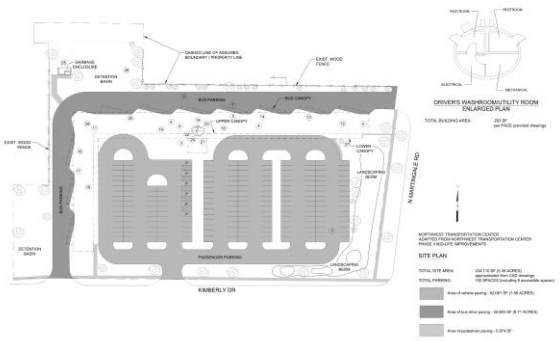
Inspection Date	September 28, 2020
Inspector Name	Lindsay Zanders / Joe Millham
Facility Name	Northwest Transportation Center Park-n-Ride
Address / Location	1730 Kimberly Drive Schaumburg, IL (Behind Streets of Woodfield Mall)

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	0	SF	0	0					
B	Shell	0	SF	0	0					
C	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing	0	Systems	0	0					
F	HVAC	0	Systems	0	0					
G	Fire Protection	0	Systems	0	0					
H	Electrical	0	Systems	0	0					
I	Equipment	0	Systems	0	0					
J	Site	234,710	SF	2.92	100			92	8	

Total Aggregate Rating	**2.92**
Aggregate Rating Rounded	**3**



Representative Inspection Photo



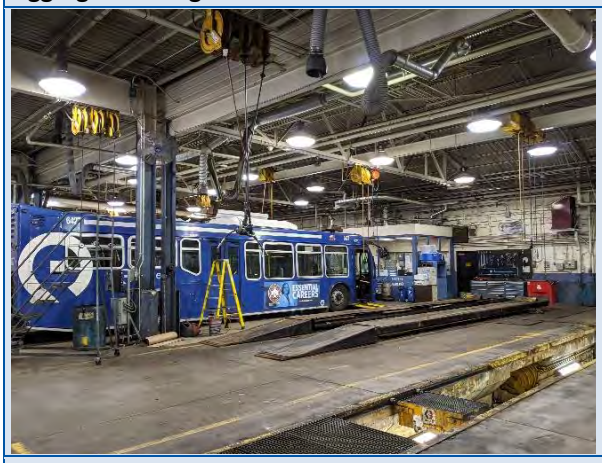
Site Plan

Table B - 33. WSP Inspection Report – Northwest Division Facility

Inspection Date	September 29, 2020
Inspector Name	Lindsay Zanders / Joe Millham
Facility Name	Northwest Division Facility
Address / Location	900 E. Northwest Highway, Des Plaines, IL 60016

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	83,484	SF	2	15				100	
B	Shell	83,484	SF	1.8	33				80	20
C	Interiors	83,484	SF	2	10				100	
D	Conveyance	1	Each	3	2			100		
E	Plumbing	5	Systems	1.6	5				60	40
F	HVAC	20	Fans / HW Systems / RTUs	1.5	6				50	50
G	Fire Protection	3	Systems	1.7	2			10	50	40
H	Electrical	3	Systems	1.5	2				50	50
I	Equipment	4	Each	1.8	10			10	60	30
J	Site	252,111	SF	1.67	15			8	50	42

Total Aggregate Rating	**1.82**
Aggregate Rating Rounded	**2**



Representative Inspection Photo

Site Plan

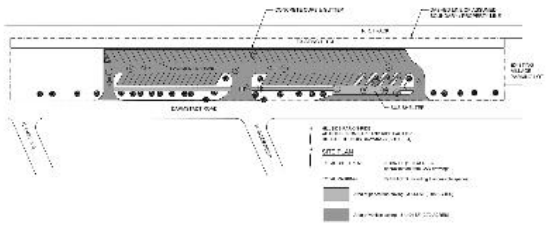
Table B - 34. WSP Inspection Report – Hillside Park-n-Ride

Inspection Date	September 29, 2020
Inspector Name	Lindsay Zanders / Joe Millham
Facility Name	Hillside Park-n-Ride
Address / Location	Darmstadt Road & Elm Street, Hillside, IL

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	0	SF	N/A	0					
B	Shell	0	SF	N/A	0					
C	Interiors	0	SF	N/A	0					
D	Conveyance	0	Each	N/A	0					
E	Plumbing	6	Each	3	10			100		
F	HVAC	0	Systems	N/A	0					
G	Fire Protection	0	Systems	N/A	0					
H	Electrical	2	Systems	3	5			100		
I	Equipment	0	Systems	N/A	0					
J	Site	78,667	SF	2.77	85		6	65	29	

Total Aggregate Rating	**2.8**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



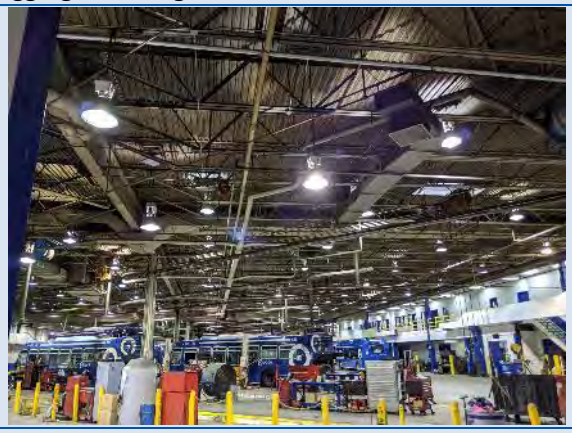
Site Plan

Table B - 35. WSP Inspection Report – West Division Facility

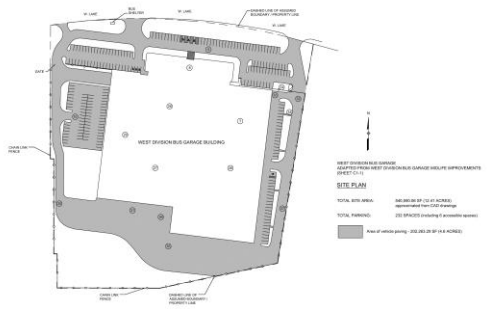
Inspection Date	September 30, 2020
Inspector Name	Lindsay Zanders
Facility Name	West Division Facility
Address / Location	3500 W. Lake St., Melrose Park, IL 60160

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	222,308	SF	3.5	15		50	50		
B	Shell	222,308	SF	4	32		100			
C	Interiors	222,308	SF	4.2	10	50	35		15	
D	Conveyance	1	Each	4	3		100			
E	Plumbing	2	Systems	4	5		100			
F	HVAC	2	Systems	3.1	6		70			30
G	Fire Protection	4	Systems	3.6	2		75	10	15	
H	Electrical	3	Systems	3.7	2		85		15	
I	Equipment	4	Systems	3	10			100		
J	Site	540,590	SF	2.5	15			67	17	17

Total Aggregate Rating	**3.55**
Aggregate Rating Rounded	**4**



Representative Inspection Photo



Site Plan

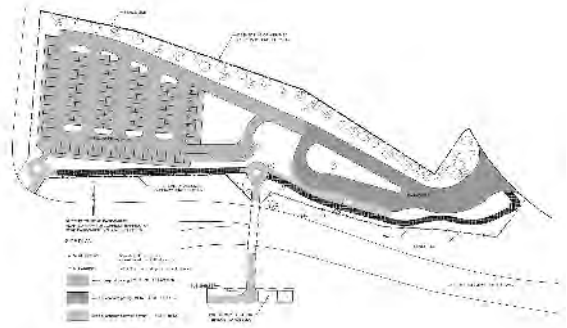
Table B - 36. WSP Inspection Report – I-90 / Barrington Road Park-n-Ride

Inspection Date	October 6, 2020
Inspector Name	Lindsay Zanders/Joe Millham
Facility Name	I-90 / Barrington Road Park-n-Ride
Address / Location	2410 Central Road, Hoffman Estates, IL 60192

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	7,052	SF	5	15	100				
B	Shell	7,052	SF	5	30	100				
C	Interiors	7,052	SF	5	10	100				
D	Conveyance	2	Each	5	6	100				
E	Plumbing	2	Systems	5	6	100				
F	HVAC	(2) AHU	Each	5	6	100				
G	Fire Protection	1	System	5	3	100				
H	Electrical	3	Systems	5	6	100				
I	Equipment	1	System	5	5	100				
J	Site	461,840	SF	5	13	100				

Total Aggregate Rating	**5**
Aggregate Rating Rounded	**5**

Representative Inspection Photo



Site Plan

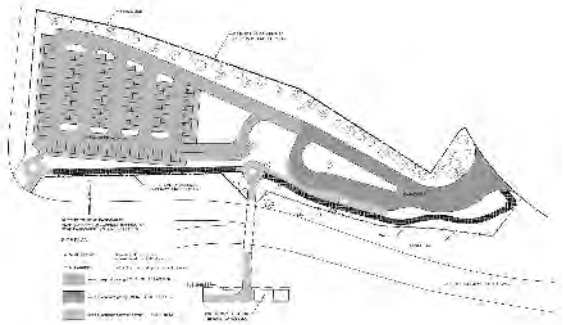
Table B - 37. WSP Inspection Report – I-90 / Barrington Road Park-n-Ride

Inspection Date	October 6, 2020
Inspector Name	Lindsay Zanders/Joe Millham
Facility Name	I-90 / Barrington Road Park-n-Ride
Address / Location	2410 Central Road, Hoffman Estates, IL 60192

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	3 (Bus Shelters)	Each	5	5	100				
B	Shell	3 (Bus Shelters)	Each	5	5	100				
C	Interiors	0	SF	N/A	0					
D	Conveyance	0	Each	N/A	0					
E	Plumbing	0	Systems	N/A	0					
F	HVAC	0	Systems	N/A	0					
G	Fire Protection	0	Systems	N/A	0					
H	Electrical	0	Systems	N/A	0					
I	Equipment	0	Systems	N/A	0					
J	Site	461,840	SF	5	90	100				

Total Aggregate Rating	**5**
Aggregate Rating Rounded	**5**

Representative Inspection Photo



Site Plan

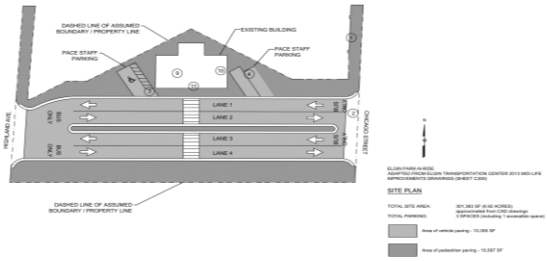
Table B - 38. WSP Inspection Report – Elgin Transportation Center

Inspection Date	October 6, 2020
Inspector Name	Lindsay Zanders/Joe Millham
Facility Name	Elgin Transportation Center
Address / Location	100 W Chicago, Elgin, IL 60120

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	1,817	SF	3.7	15		70	30		
B	Shell	1,817	SF	3.7	30		70	30		
C	Interiors	1,817	SF	3.7	10		70	30		
D	Conveyance	0	Each	0	0					
E	Plumbing	3	Systems	3.8	8		80	20		
F	HVAC	4	Systems	3.6	8		60	40		
G	Fire Protection	1	System	5	2	100				
H	Electrical	3	Systems	4	5	25	50	25		
I	Equipment	2	Systems	4.75	7	75	25			
J	Site	301,383	SF	3.7	15		70	30		

Total Aggregate Rating	**3.81**
Aggregate Rating Rounded	**4**

Representative Inspection Photo



Site Plan

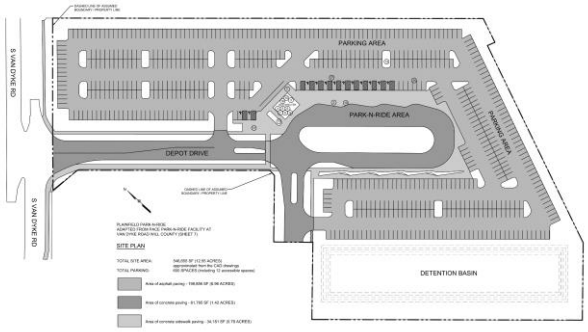
Table B - 39. WSP Inspection Report – Plainfield Bus Transfer Center

Inspection Date	October 7, 2020
Inspector Name	Joe Millham
Facility Name	Plainfield Bus Transfer Center
Address / Location	14740 Depot Drive Plainfield, IL 60544

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	1,433	SF	5	15	100				
B	Shell	1,433	SF	5	35	100				
C	Interiors	1,433	SF	5	10	100				
D	Conveyance	0	Each	N/A	0					
E	Plumbing	3	Systems	5	5	100				
F	HVAC	2	Systems	5	7	100				
G	Fire Protection	2	Systems	5	3	100				
H	Electrical	3	Systems	5	5	100				
I	Equipment	1	Each	5	10	100				
J	Site	546,655	SF	5	10	100				

Total Aggregate Rating	**5**
Aggregate Rating Rounded	**5**

Representative Inspection Photo



Site Plan

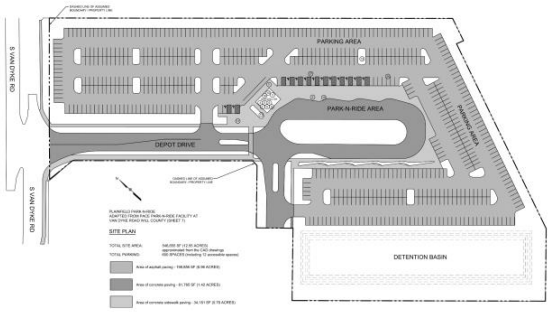
Table B - 40. WSP Inspection Report – Plainfield Park-n-Ride

Inspection Date	October 7, 2020
Inspector Name	Joe Millham
Facility Name	Plainfield Park-n-Ride
Address / Location	14740 Depot Drive Plainfield, IL 60544

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	0	SF	N/A	0					
B	Shell	0	SF	N/A	0					
C	Interiors	0	SF	N/A	0					
D	Conveyance	0	Each	N/A	0					
E	Plumbing	0	Systems	N/A	0					
F	HVAC	0	Systems	N/A	0					
G	Fire Protection	0	Systems	N/A	0					
H	Electrical	0	Systems	N/A	0					
I	Equipment	0	Each	N/A	0					
J	Site	546,655	SF	5	100	100				

Total Aggregate Rating	**5**
Aggregate Rating Rounded	**5**

Representative Inspection Photo



Site Plan

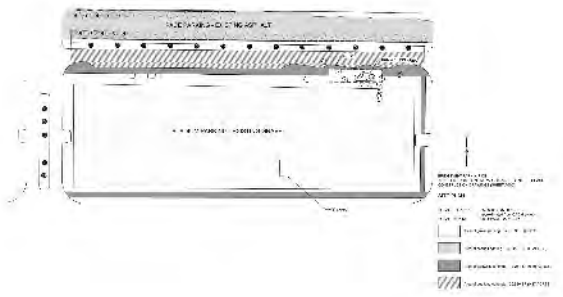
Table B - 41. WSP Inspection Report – Bridgeview Transit Center

Inspection Date	October 7, 2020
Inspector Name	Lindsay Zanders/Joe Millham
Facility Name	Bridgeview Transit Center
Address / Location	7000 S. Harlem Avenue Bridgeview, IL 60455

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	2,400	SF	5	15	100				
B	Shell	2,400	SF	5	35	100				
C	Interiors	2,400	SF	5	10	100				
D	Conveyance	0	Each	N/A	0					
E	Plumbing	3	Systems	5	10	100				
F	HVAC	3	Systems	4.9	8	90	10			
G	Fire Protection	0	Systems	N/A	0					
H	Electrical	2	Systems	5	5	100				
I	Equipment	1	Systems	5	7	100				
J	Site	252,850	SF	5	10	100				

Total Aggregate Rating	**4.99**
Aggregate Rating Rounded	**5**

Representative Inspection Photo



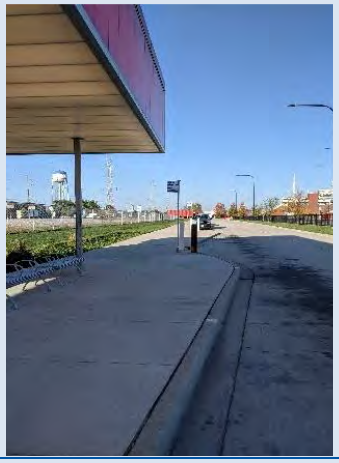
Site Plan

Table B - 42. WSP Inspection Report – Bridgeview Park-n-Ride

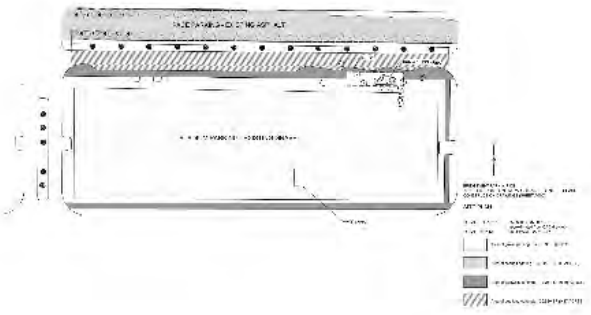
Inspection Date	October 7, 2020
Inspector Name	Lindsay Zanders/Joe Millham
Facility Name	Bridgeview Park-n-Ride
Address / Location	7000 S. Harlem Avenue Bridgeview, IL 60455

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	0	SF	N/A	0					
B	Shell	0	SF	N/A	0					
C	Interiors	0	SF	N/A	0					
D	Conveyance	0	Each	N/A	0					
E	Plumbing	0	Systems	N/A	0					
F	HVAC	0	Systems	N/A	0					
G	Fire Protection	0	Systems	N/A	0					
H	Electrical	0	Systems	N/A	0					
I	Equipment	0	Systems	N/A	0					
J	Site	252,850	SF	5	100	100				

Total Aggregate Rating	**5**
Aggregate Rating Rounded	**5**



Representative Inspection Photo



Site Plan

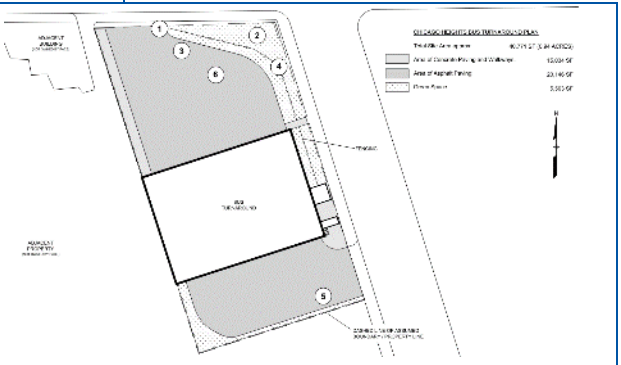
Table B - 43. WSP Inspection Report – Chicago Heights Transportation Center

Inspection Date	October 12, 2021
Inspector Name	Robert Utyro and Clayton Lietz
Facility Name	Chicago Heights Transportation Center
Address / Location	1620 Vincennes Avenue, Chicago Heights, IL 60411

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	152	SF	4.6	15	90				10
B	Shell	152	SF	2.5	35			75		25
C	Interiors	152	SF	2.95	10			95	5	
D	Conveyance	0	Each	N/A	0					
E	Plumbing	3	Systems	3.7	5		90			10
F	HVAC	3	Systems	4	6		100			
G	Fire Protection	1	Systems	1	2					100
H	Electrical	1	Systems	3.7	2		90			10
I	Equipment	7	Systems	3.7	10		90			10
J	Site	28,556	SF	3.18	15	0	36	54	3	7

Total Aggregate Rating	**3.23**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

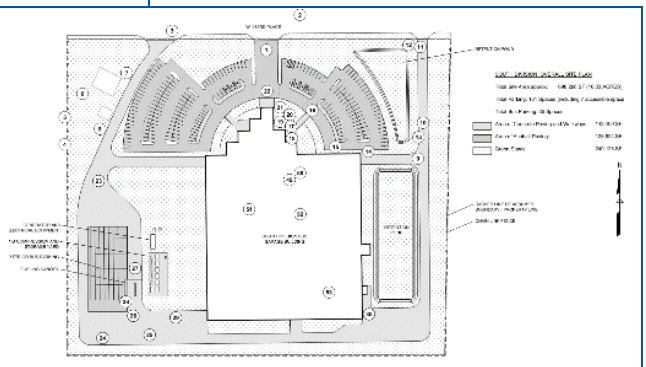
Table B - 44. WSP Inspection Report – South Division Facility

Inspection Date	October 12, 2021
Inspector Name	Robert Utyro and Clayton Lietz
Facility Name	South Division Facility
Address / Location	2101 W. 163rd Place, Markham, IL 60428

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	198,879	SF	3.95	15		95	5		
B	Shell	198,879	SF	3.6	35		80		20	
C	Interiors	198,879	SF	3.85	10		85	15		
D	Conveyance	1	Each	unobserved	0					
E	Plumbing	1	Systems	3.8	5		80	20		
F	HVAC	22	Systems	3.8	6		80	20		
G	Fire Protection	2	Systems	4	2		100			
H	Electrical	1	Systems	3.7	2		70	30		
I	Equipment	2	Systems	3	10			100		
J	Site	698,296	SF	3.48	15		57	34	9	

Total Aggregate Rating	**3.63**
Aggregate Rating Rounded	**4**

Representative Inspection Photo



Site Plan

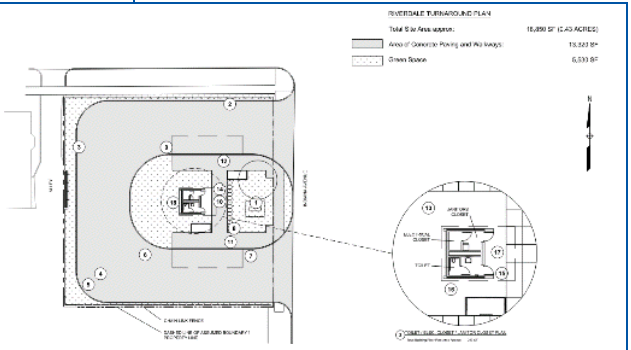
Table B - 45. WSP Inspection Report – Riverdale Bus Turnaround

Inspection Date	October 13, 2021
Inspector Name	Robert Utyro and Clayton Lietz
Facility Name	Riverdale Bus Turnaround
Address / Location	137th St. & Illinois St., Riverdale, IL 60827

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	463	SF	3.95	15		95	5		
B	Shell	463	SF	2.85	35			85	15	
C	Interiors	463	SF	2.9	10			90	10	
D	Conveyance	0	Each	N/A	0					
E	Plumbing	1	Systems	3.8	5		80	20		
F	HVAC	1	Systems	3.6	6		80		20	
G	Fire Protection	1	Systems	1	2					100
H	Electrical	1	Systems	2.8	2			80	20	
I	Equipment	2	Systems	4	10		100			
J	Site	18,850	SF	3.13	15	0	30	53	17	0

Total Aggregate Rating	**3.23**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

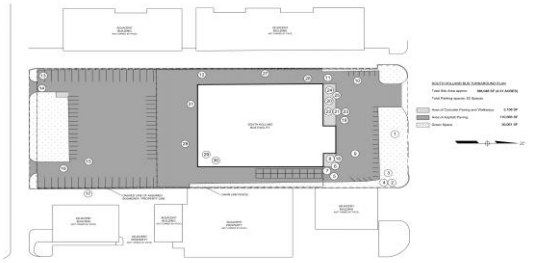
Table B - 46. WSP Inspection Report – South Holland Acceptance Facility

Inspection Date	October 13, 2021
Inspector Name	Robert Utyro and Clayton Lietz
Facility Name	South Holland Acceptance Facility
Address / Location	405 W. Taft Drive, South Holland, IL 60473

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	44,700	SF	3.9	15		90	10		
B	Shell	44,700	SF	3.86	35		90	8		2
C	Interiors	44,700	SF	3.8	10		80	20		
D	Conveyance	0	Each	N/A	0					
E	Plumbing	1	System	3.9	5		90	10		
F	HVAC	4	Systems	3.9	6		90	10		
G	Fire Protection	1	System	4	2		100			
H	Electrical	1	System	3.9	2		90	10		
I	Equipment	1	System	3.4	10		40	60		
J	Site	188,048	SF	1.68	15	0	6	10	30	54

Total Aggregate Rating	**3.5**
Aggregate Rating Rounded	**4**

Representative Inspection Photo



Site Plan

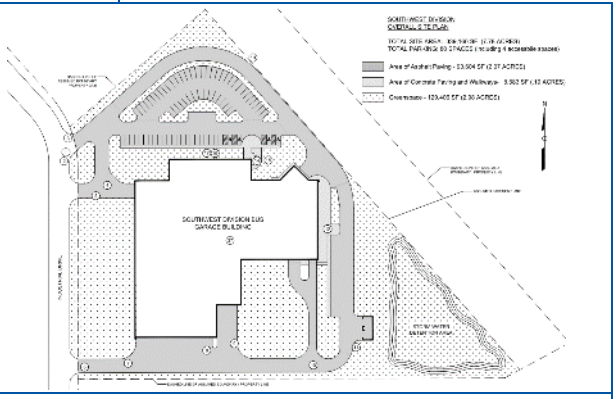
Table B - 47. WSP Inspection Report – Southwest Division Facility

Inspection Date	October 13, 2021
Inspector Name	Robert Utyro and Clayton Lietz
Facility Name	Southwest Division Facility
Address / Location	9889 S. Industrial Drive, Bridgeview, IL 60455

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	81,471	SF	3.95	15		95	5		
B	Shell	81,471	SF	3.6	35		80		20	
C	Interiors	81,471	SF	3.6	10		80		20	
D	Conveyance	0	Each	N/A	0					
E	Plumbing	6	Systems	2.75	5		75	25		0
F	HVAC	4	Systems	2.75	6		80	20		
G	Fire Protection	1	System	4	2		100			
H	Electrical	1	System	2.75	2			75	25	
I	Equipment	3	Systems	3.6	10	30		70		
J	Site	424,489	SF	3.9	15	0	90	10	0	0

Total Aggregate Rating	**3.6**
Aggregate Rating Rounded	**4**

Representative Inspection Photo



Site Plan

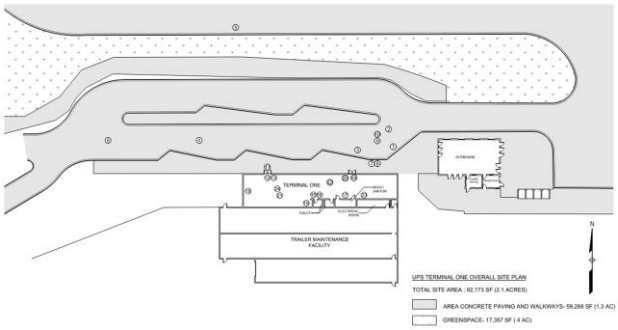
Table B - 48. WSP Inspection Report – UPS Bus Terminal 1

Inspection Date	October 20, 2021
Inspector Name	Robert Utyro and Clayton Lietz
Facility Name	UPS Bus Terminal 1
Address / Location	One UPS Way, Hodgkins, IL 60525

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	3,462	SF	3.95	15		95	5		
B	Shell	3,462	SF	2.85	35			85	15	
C	Interiors	3,462	SF	2.85	10			85	15	
D	Conveyance	0	Each	N/A	0					
E	Plumbing	1	System	3.8	5		80	20		
F	HVAC	3	Systems	2.7	6			70	30	
G	Fire Protection	1	System	4	2		100			
H	Electrical	1	System	3.8	2		80	20		
I	Equipment	2	Systems	4	10		100			
J	Site	18,888	SF	2.85	15	0	0	85	15	0

Total Aggregate Rating	**3.21**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

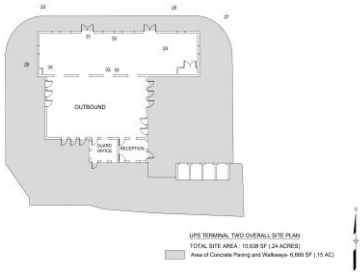
Table B - 49. WSP Inspection Report – UPS Bus Terminal 2

Inspection Date	October 20, 2021
Inspector Name	Robert Utyro and Clayton Lietz
Facility Name	UPS Bus Terminal 2
Address / Location	One UPS Way, Hodgkins, IL 60525

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT VALUE	PERCENT OF ASSET QUANTITY BY CONDITION				
						5	4	3	2	1
A	Substructure	2,241	SF	2.95	15			95	5	
B	Shell	2,241	SF	2.6	35			80		20
C	Interiors	2,241	SF	2.6	10			80		20
D	Conveyance	0	Each	N/A	0					
E	Plumbing	1	System	3.8	5		80	20		
F	HVAC	3	Systems	2.8	6			80	20	
G	Fire Protection	1	System	4	2		100			
H	Electrical	1	System	3.8	2		80	20		
I	Equipment	2	Systems	4	10		100			
J	Site	2,241	SF	2.8	15	0	0	80	20	0

Total Aggregate Rating	**2.95**
Aggregate Rating Rounded	**3**

Representative Inspection Photo



Site Plan

END OF APPENDIX B

C. APPENDIX C – SERVICE VEHICLE

C.1 ASSET DEFINITION

In the ***NTD 2017-2018 Asset Inventory Module Reporting Guide*** (for equipment),[6] the FTA lays out the following guidance and definitions with respect to Equipment:

> **Service Vehicle Inventory**
>
> Transit agencies are required to report data on service vehicles that support revenue operations, maintain revenue vehicles, and perform transit-oriented administrative activities for which they have capital replacement responsibility.
>
> Transit agencies report service vehicle inventory data by groups or fleets. Agencies should group vehicles into fleets if they are identical in all aspects, including vehicle type, manufacture year, primary mode, etc.
>
> Service vehicles must be road worthy, self-propelled, or major pieces of construction equipment to be reportable to the NTD. Examples of reportable service vehicles include automobiles used by supervisors or maintenance staff, wreckers, tow trucks, work trains, tampers, diggers, etc. Flatbed train cars, golf carts, and small forklifts are not considered reportable service vehicles.

C.2 NTD RY2021 ASSET INVENTORY

A fleet of Non-Revenue Vehicles are used at Pace's Facilities, and in the field, to ensure the efficient management of bus service as well as maintain fixed assets such as buildings, grounds, and passenger stations.

Pace's Non-Revenue Fleet consists of vehicles of various make, model, and manufacturer. This fleet consists of on-highway vehicles as well as other specialty support equipment.

See **Table C - 1. Service Vehicle Inventory (A-35) Form – Summarized** for a copy of the **NTD RY2021 Service Vehicle Inventory (A-35) Form** which displays more information on Pace's Non-Revenue Vehicle Fleet, including vehicle type, model year, age, useful life benchmark (ULB, as determined by grant eligibility for replacements), the quantity in service, and the percentage of remaining useful life.

[6] Federal Transit Administration, U.S. Department of Transportation, National Transit Database Asset Inventory Module 2017-2018 Reporting Guide

Table C - 1. Service Vehicle Inventory (A-35) Form - Summarized

ID	Fleet Name	Vehicle Type	Primary Mode	Year Manufactured	Estimated Cost	Useful Life Benchmark (Years)	Useful Life Remaining (Years)	Total Vehicles	Transit Agency Capital Responsibility (%)	Year Dollars of Estimated Cost	Status
19577	Chevy C7H042	Trucks and other Rubber Tire Vehicles	MB - Bus	1994	$46,071	10	-17	1	100	1994	Active
19578	GMC C7H042	Trucks and other Rubber Tire Vehicles	MB - Bus	1994	$51,706	10	-17	1	100	1994	Active
19579	International 4170	Trucks and other Rubber Tire Vehicles	MB - Bus	1995	$219,900	10	-16	4	100	1995	Active
19580	International 4700	Trucks and other Rubber Tire Vehicles	MB - Bus	1995	$109,950	10	-16	2	100	1995	Active
19581	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2000	$39,663	10	-11	1	100	2000	Active
19582	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2005	$28,330	10	-6	1	100	2005	Active
19583	Ford F250	Trucks and other Rubber Tire Vehicles	MB - Bus	2009	$57,196	10	-2	2	100	2009	Active
19584	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	$47,876	10	-1	2	100	2010	Active
19585	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	$207,010	10	-1	6	100	2010	Active
19586	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	$164,511	10	-1	4	100	2010	Active
19587	Ford E350 Cube Van	Trucks and other Rubber Tire Vehicles	MB - Bus	2012	$62,694	10	1	2	100	2012	Active
19588	Ford F250	Trucks and other Rubber Tire Vehicles	MB - Bus	2012	$35,989	10	1	1	100	2012	Active
19589	Dodge Ram 1500	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	$73,875	10	2	3	100	2013	Active
19590	International 7400	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	$231,461	10	2	1	100	2013	Active
19591	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2016	$35,514	10	5	1	100	2016	Active
19592	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2016	$48,120	10	5	1	100	2016	Active
19593	Freightliner 35T	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	$321,999	10	7	1	100	2017	Active
19594	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	$157,065	10	7	5	100	2018	Active
19595	Ford F550	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	$103,556	10	7	1	100	2018	Active
19597	Chevy Malibu	Automobiles	MB - Bus	2009	$25,975	5	-7	1	100	2009	Active

Table C - 1. Service Vehicle Inventory (A-35) Form - Summarized (Continued)

ID	Fleet Name	Vehicle Type	Primary Mode	Year Manufactured	Estimated Cost	Useful Life Benchmark (Years)	Useful Life Remaining (Years)	Total Vehicles	Transit Agency Capital Responsibility (%)	Year Dollars of Estimated Cost	Status
19598	Dodge Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2009	$53,730	5	-7	3	100	2009	Active
19599	Ford Focus	Automobiles	MB - Bus	2009	$66,173	5	-7	5	100	2009	Active
19600	Chevy Impala	Automobiles	MB - Bus	2010	$154,018	5	-6	8	100	2010	Active
19601	Ford E350	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	$522,222	5	-6	13	100	2010	Active
19602	Ford Focus	Automobiles	MB - Bus	2010	$354,246	5	-6	24	100	2010	Active
19604	Dodge Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2011	$49,635	5	-5	2	100	2011	Active
19605	Dodge Grand Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2012	$206,555	5	-4	8	100	2012	Active
19606	Dodge Grand Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	$302,429	5	-3	12	100	2013	Active
19607	Ford Explorer	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	$316,779	5	-3	12	100	2013	Active
19608	Ford Transit Connect Mini	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	$109,532	5	-3	5	100	2013	Active
19609	Ford Focus	Automobiles	MB - Bus	2014	$33,388	5	-2	2	100	2013	Active
19610	Ford Focus - Electric	Automobiles	MB - Bus	2014	$32,380	5	-2	1	100	2014	Active
19611	Dodge Grand Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2016	$82,335	5	0	3	100	2016	Active
19612	Ford Taurus	Automobiles	MB - Bus	2016	$483,392	5	0	26	100	2016	Active
19613	Ford Explorer	Trucks and other Rubber Tire Vehicles	MB - Bus	2017	$55,996	5	1	2	100	2017	Active
19614	Ford Taurus	Automobiles	MB - Bus	2017	$85,436	5	1	4	100	2017	Active
19615	Ford Escape	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	$195,416	5	2	8	100	2018	Active
26340	Ford Escape	Trucks and other Rubber Tire Vehicles	MB - Bus	2019	$1,297,150	5	3	50	100	2019	Active
26341	Ford F250	Trucks and other Rubber Tire Vehicles	MB - Bus	2020	$42,946	10	9	1	100	2020	Active
26342	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2020	$136,792	10	9	4	100	2020	Active
28955	Freightliner 35T	Trucks and other Rubber Tire Vehicles	MB - Bus	2021	$344,767	10	10	1	100	2021	Active
	Total							235			

End of A-35 Table

C.3 ASSET CONDITION

C.3.1 CONDITION ASSESSMENT

For Service Vehicles, condition is measured based on the asset's age relative to Pace's Useful Life Benchmark (ULB). A ULB is the expected lifecycle of a capital asset for a Transit Provider's operating environment, or the acceptable period of use in service for a Transit Provider's operating environment, or as per FTA guidance.

C.3.2 CURRENT CONDITION INFORMATION AND PERFORMANCE TARGETS

Table C - 1. Service Vehicle Inventory (A-35) Form – Summarized contains information on the ULB used to assess the condition and the useful life remaining for each type of service vehicle based on the year it was manufactured. A negative number indicates that the asset is life-expired, though is still being maintained for safe usage. **Table C - 2. Performance Targets for Equipment** contains information on Pace's Performance Targets for Service Vehicles. The values in the table represent the percentage of vehicles beyond their ULB.

Table C - 2. Performance Targets for Equipment

Asset Type	2021 Target	2021 Performance	2022 Target
Automobiles	89.74%	94.37%	100%
Trucks and Other Rubber Tire Vehicles	41.48%	50.00%	44.78%

C.4 LIFECYCLE MANAGEMENT STRATEGIES

C.4.1 OVERVIEW

Pace has developed several processes to best manage the lifecycle of our Non-Revenue Service Vehicles assets. These include processes to ensure contractor quality and completion, and strict guidelines for disposal of assets. Maintenance and repair are conducted by contractors at regular vehicle maintenance shops throughout the region. The Non-Revenue Fleet Administrator manages maintenance of the Non-Revenue Service Vehicle Fleet.

The following sections go into additional detail regarding the lifecycle management strategies Pace employs on a regular basis.

C.4.2 MAINTENANCE

Preventative Maintenance

Table C - 3. Examples of Planned Maintenance Frequency contains an example of planned maintenance frequencies. If any repair work will cost more than $500, the Non-Revenue Vehicle Fleet Administrator reviews and determines whether to move forward.

The Maintenance Management and Accident Management vendors are required to provide annual reviews each year. The vendor receives a monthly report of planned maintenance due. The Non-Revenue Fleet Administrator also performs fleet vehicle inspections on an annual basis.

Table C - 3. Examples of Planned Maintenance Frequency

Asset	Maintenance Frequency
Service Trucks	Every 5,000 miles / 3 months
Cars	Every 5,000 miles / 6 months

Corrective Maintenance

The decision to replace equipment is typically made when it becomes undependable and requires frequent repair. Field personnel may report problems with equipment to the supervisor, who would then make a request for replacement. Requests are centrally reviewed and prioritized.

Contract Maintenance

Non-revenue drivers call into one contractor that acts as a middleman and directs the driver to the appropriate location for repairs. This master contractor also ensures that charges at individual shops are in line with what is expected.

C.4.3 CAPITAL INVESTMENT

The decision to replace equipment is typically made based on a 5-year vehicle replacement plan, with trucks on a 10-year plan. Field personnel can report problems with equipment to their supervisor, who determines whether replacement is necessary, and if so, makes a request to the Non-Revenue Fleet Administrator for the new equipment. Requests are centrally reviewed and prioritized.

C.4.4 DISPOSAL

There are three reasons for an asset disposal:

- Item has exceeded its useful life and is either no longer needed or no longer functioning.
- Item has not met its useful life but is no longer functioning or has been damaged or destroyed.
- Item has been reported lost or stolen.

When disposal is necessary, an Asset Disposal Form is completed by the division or department that holds or is responsible for the asset. The Asset Disposal Form is submitted to Accounting and the Fixed Asset Accountant reviews the asset to determine if there is any remaining useful life. If there is, then that is noted on the Asset Disposal Form.

The Asset Disposal Form is then approved by the Section Manager, Accounts Payable/Receivable and the Section Manager, Grants Administration, if the asset is capital funded. The Fixed Asset Accountant determines whether an asset should be disposed of by the Using Department or the Procurement Department. The Procurement Department is responsible for obtaining payment for the sale of an asset and forwarding those funds directly to the Finance Department.

Per the Bipartisan Infrastructure Law effective 11/15/21, Pace will only be allowed to retain the first $5,000 received for all sales after 11/15/21. If the proceeds from the asset exceed $5,000

or have remaining useful life, then the Grants Administration Department will coordinate repayment to the funding agency and obtain concurrence.

For Non-Revenue Vehicles, a disposal folder is submitted to Accounting and the Fixed Asset Accountants review the asset to determine if there is any remaining useful life. The Asset Disposal Form is then approved by the Section Manager, Accounts Payable/Receivable, and the Section Manager, Grants Administration, if the asset is capital funded. Once approved, the Non-Revenue Fleet Administrator sends all necessary paperwork to our disposal vendor. The disposal vendor will then sell the vehicle through an auction. Once sold, the disposal vendor will send a check directly to Fixed Asset Accounting.

C.4.5 SUPPLY CHAIN AND PROCUREMENT

The Non-Revenue Fleet Administrator handles the procurement of Non-Revenue Vehicles. All Non-Revenue Vehicles are received and inspected at the Arlington Heights Headquarters by the Non-Revenue Fleet Administrator, and if suitable, are accepted for service.

A monthly vehicle in-service report is distributed by the Accounting Department that makes updates as to whether vehicles have been placed into service. When they go into service, the asset record is activated and begins depreciating. The Accounting Department receives the titles for the vehicles and verifies the vehicle identification number against the fixed asset record.

The Pace assigned vehicle number is written on the vehicle title. All titles are stored in a secured room and are not removed until the vehicle is sold or if it is involved in an accident and must be removed from service. The Non-Revenue Fleet has a 5-year replacement plan that is reviewed and updated every 6 months.

C.5 ASSET MANAGEMENT ENABLERS

C.5.1 ORGANIZATION

The Non-Revenue Fleet Administrator manages maintenance of the Non-Revenue Fleet, largely relying on outside contractors to carry out the work. Each division has an assigned employee responsible for fleet management.

C.5.2 TECHNOLOGY / ASSET KNOWLEDGE AND INFORMATION

Pace relies on software applications to support improved performance management and decision making, including a spreadsheet to track basic vehicle information. The master contractor maintains vehicle work history in a system accessible by Pace. Oracle Application Express (APEX) is used to record all financial fixed asset information. The records in APEX are used to track cost, useful life, depreciation, grant funding, location, and the status of the asset.

C.5.3 ASSURANCE

Pace will solicit input from additional departments as a form of quality assurance. This ensures that a cross-section of the agency reviews the proposed policy and/or procedure before it is

acted upon. For example, Vendors that Pace works with will also provide information on their equipment as specifications are being developed.

C.6 CAPITAL PLANS

Table C - 4. Equipment Capital Budget Forecast (000s) provides a snapshot of Pace's anticipated capital spend in this asset class in FY2023 through FY2027.

Table C - 4. Equipment Capital Budget Forecast (000s)

Project	2023	2024	2025	2026	2027	Total
Support Equipment/Non-Revenue Vehicles	$400	$500	$1,000	$1,000	$1,000	$3,900
Computer Systems/ Hardware & Software	-	500	1,000	1,000	1,000	3,500
Total	**$400**	**$1,000**	**$2,000**	**$2,000**	**$2,000**	**$7,400**

END OF APPENDIX C

D. APPENDIX D – REVENUE VEHICLE

D.1 ASSET DEFINITION

In the ***NTD 2017-2018 Asset Inventory Module Reporting Guide***, the FTA lays out the following guidance and definitions with respect to Rolling Stock:[7]

> **Revenue Vehicles**
>
> All transit agencies reporting service data must provide information on revenue vehicles by mode and type of service.
>
> Transit agencies must inventory all revenue vehicles they use to provide public transportation that have not been sold or disposed of at the end of the fiscal year. This inventory identifies the vehicles in the total fleet and includes all revenue vehicles in the following situations.
>
> - Vehicles in operation (i.e., providing revenue service)
> - Vehicles awaiting sale or disposal
> - Vehicles out for long-term repair
> - Vehicles in storage
> - Vehicles retained as part of an FTA-approved emergency contingency plan
>
> Transit agencies report revenue vehicle inventory data by groups or fleets. Agencies should group vehicles into fleets if they are identical in all aspects, including vehicle type, manufacture year, model, and funding source, etc.

D.2 NTD RY2021 ASSET INVENTORY

Pace's Rolling Stock assets used in revenue service include Fixed Route Buses, Paratransit Vehicles, Vanpool Vans, and Community Transit Service (CTS) Vehicles. See **Table D – 1. Revenue Vehicle Inventory (A-30) Form, DR PT 50113 – Summarized** through **Table D – 6. Revenue Vehicle Inventory (A-30) Form, DR PT 50182 – Summarized** for a copy of the submitted **NTD RY2021 Revenue Vehicle Inventory (A-30) Forms** which displays more information on Pace's Revenue Vehicles, including quantity by fleet, length, and year of manufacture.

Pace reports Revenue Vehicle Inventory data across multiple forms, reflecting different types of service separately for the Suburban Bus Division and the Regional ADA Paratransit Services. Some of Pace's revenue vehicle inventory serve both entities and are included in both reports. The meaningful distinction is when the capital responsibility box is checked for Performance Measure Target Setting to avoid double counting.

Pace has two NTD ID reporting numbers: **50113 for the Suburban Bus Division**, and **50182 for the Regional ADA Paratransit Services**. Pace has no capital responsibility for the 50182 Regional ADA Paratransit Services assets and does not set performance targets for these assets.

[7] Federal Transit Administration, U.S. Department of Transportation, National Transit Database Asset Inventory Module 2017-2018 Reporting Guide

Table D - 1. Revenue Vehicle Inventory (A-30) Form, DR PT 50113 – Summarized

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	No Capital Replacement Responsibility	Manufacturer	Model	Year Manufactured	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Useful Life Benchmark	Useful Life Remaining	Miles This Year	Avg Lifetime Miles per Active Vehicle
58114	Cutaway (CU)	3	3	Yes	-	EDN – ElDorado National	AEROTECH	2009	Diesel Fuel	24	3	4	-8	10,183	220,452
58115	Cutaway (CU)	1	1	Yes	-	EDN - ElDorado National	AEROLITE	2010	Diesel Fuel	22	1	4	-7	926	147,646
58117	Cutaway (CU)	11	8	Yes	-	EDN - ElDorado National	AEROTECH	2010	Diesel Fuel	24	8	4	-7	15,954	216,676
58118	Cutaway (CU)	93	93	Yes	-	CMC - Champion Motor Coach Inc.	CHALLENGER	2014	Gasoline	22	93	4	-3	827,169	126,374
58119	Cutaway (CU)	123	114	Yes	-	EDN - ElDorado National	AEROTECH	2014	Gasoline	25	114	4	-3	2,238,603	244,148
58315	Cutaway (CU)	1	1	Yes	-	CMC - Champion Motor Coach Inc.	CRUSADER	2007	Gasoline	21	1	4	-10	16,066	161,618
58318	Cutaway (CU)	5	3	Yes	-	CMC - Champion Motor Coach Inc.	CRUSADER	2009	Gasoline	21	3	4	-8	23,618	114,315
58324	Van (VN)	2	2	Yes	-	FRD - Ford Motor Corp.	E-350 CONVLIFT	2011	Gasoline	18	2	5	-5	9,429	52,465
58325	Cutaway (CU)	4	3	Yes	-	CMC - Champion Motor Coach Inc.	CRUSADER	2012	Gasoline	21	3	4	-5	16,429	101,501
58326	Minivan (MV)	1	0	Yes	-	DTD - Dodge Division — Chrysler Corp.	CARAVAN	2012	Gasoline	16	-	5	-4	-	-
58327	Van (VN)	10	8	Yes	-	FRD - Ford Motor Corp.	E-350 CONVLIFT	2013	Gasoline	18	8	5	-3	28,381	67,261
58328	Minivan (MV)	9	8	Yes	-	DTD - Dodge Division — Chrysler Corp.	CARAVAN	2013	Gasoline	16	8	5	-3	29,386	82,446
58329	Cutaway (CU)	14	13	Yes	-	CMC - Champion Motor Coach Inc.	CRUSADER	2015	Gasoline	21	13	4	-2	112,111	73,925
337654	Cutaway (CU)	1	1	Yes	Yes	EDN - ElDorado National	AEROTECH.	2008	Gasoline	24	0	-	-	1,312	172,433
337657	Cutaway (CU)	1	1	Yes	Yes	EDN - ElDorado National	AEROTECH.	2011	Gasoline	24	0	-	-	8,659	147,431
348740	Cutaway (CU)	1	1	Yes	Yes	STR - Starcraft	ALLSTAR.	2016	Gasoline	23	1	-	-	7,652	66,870
348741	Cutaway (CU)	49	49	Yes	-	EDN - ElDorado National	AEROTECH 240	2016	Gasoline	25	49	4	-1	1,283,175	161,975
354590	Cutaway (CU)	119	119	Yes	-	EDN - ElDorado National	AREOTECH 240	2017	Gasoline	25	119	4	0	3,137,030	104,219
354591	Cutaway (CU)	1	1	Yes	Yes	STR - Starcraft	ALLSTAR.	2017	Gasoline	24	1	-	-	17,327	95,724

Table D - 1. Revenue Vehicle Inventory (A-30) Form, DR PT 50113 – Summarized (Continued)

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	No Capital Replacement Responsibility	Manufacturer	Model	Year Manufactured	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Useful Life Benchmark	Useful Life Remaining	Miles This Year	Avg Lifetime Miles per Active Vehicle
354592	Van (VN)	2	2	Yes	-	FRD - Ford Motor Corp.	E-350 CONV-10	2013	Gasoline	18	0	5	-3	4,352	18,624
354593	Cutaway (CU)	31	31	Yes	-	CMC - Champion Motor Coach Inc.	CRUSADER	2017	Gasoline	21	31	4	0	264,979	56,058
354594	Minivan (MV)	3	3	Yes	-	DTD - Dodge Division — Chrysler Corp.	CARAVAN	2017	Gasoline	16	-	5	1	9,823	24,092
354595	Van (VN)	1	1	Yes	-	FRD - Ford Motor Corp.	TRANSIT CONV-14	2017	Gasoline	18	-	5	1	10,055	44,939
362875	Van (VN)	1	1	Yes	-	FRD - Ford Motor Corp.	TRANSIT CONV-LI	2016	Gasoline	18	1	5	0	1,000	50,510
362876	Van (VN)	10	10	Yes	-	FRD - Ford Motor Corp.	TRANSIT CONV14	2018	Gasoline	18	9	5	2	86,078	28,534
362877	Cutaway (CU)	2	2	Yes	-	CMD - Chevrolet Motor Division — GMC	CRUSADER	2018	Gasoline	21	2	4	1	10,227	11,914
362878	Cutaway (CU)	28	28	Yes	-	EDN - ElDorado National	AREOTECH 240	2018	Gasoline	25	28	4	1	901,061	105,009
380511	Cutaway (CU)	21	21	Yes	-	CMC - Champion Motor Coach Inc.	CRUSADER	2019	Gasoline	21	21	4	2	141,711	15,229
388943	Cutaway (CU)	1	1	Yes	Yes	STR - Starcraft	ALLSTAR	2019	Gasoline	25	1	-	-	8,816	22,849
394516	Cutaway (CU)	1	1	Yes	Yes	GIR - Girardin Corp.	MICRO BIRD G5	2021	Gasoline	24	1	-	-	2,438	2,438
394517	Van (VN)	3	3	Yes	-	FRD - Ford Motor Corp.	TRANSIT350	2020	Gasoline	18	3	5	4	37,384	12,461
Total		***553***	***533***								***524***			***9,261,334***	

Table D - 2. Revenue Vehicle Inventory (A-30) Form, DR DO 50113 – Summarized

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	Manufacturer	Model	Year Manufactured	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Useful Life Benchmark	Useful Life Remaining	Avg Lifetime Miles per Active Vehicle
58418	Cutaway (CU)	2	2	Yes	EDN - ElDorado National	AEROTECH	2009	Diesel Fuel	24	2	4	-8	171,921
58420	Cutaway (CU)	2	2	Yes	EDN - ElDorado National	AEROTECH	2010	Diesel Fuel	24	2	4	-7	217,125
342589	Cutaway (CU)	4	3	Yes	CMC - Champion Motor Coach Inc.	CRUSADER	2015	Gasoline	23	3	4	-2	121,640
388949	Cutaway (CU)	2	1	Yes	EDN - ElDorado National	AEROTECH 240	2014	Gasoline	25	1	4	-3	47,914
388950	Cutaway (CU)	1	0	Yes	CMC - Champion Motor Coach Inc.	CRUSADER	2012	Gasoline	20	-	4	-5	-
388951	Cutaway (CU)	3	3	Yes	CMC - Champion Motor Coach Inc.	CHALLENGER	2014	Gasoline	22	3	4	-3	23,703
388952	Cutaway (CU)	4	4	Yes	CMC - Champion Motor Coach Inc.	CRUSADER	2017	Gasoline	23	4	4	0	9,673
394514	Cutaway (CU)	1	1	Yes	CMC - Champion Motor Coach Inc.	CRUSADER	2018	Gasoline	21	1	4	1	25,466
Total		***19***	***16***							***16***			

Table D - 3. Revenue Vehicle Inventory (A-30) Form, MB DO 50113 – Summarized

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	Manufacturer	Model	Year Manufactured	Year Rebuilt	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Avg Lifetime Miles per Active Vehicle
7234	Bus (BU)	8	0	Yes	NAB - North American Bus Industries Inc.	4028	2005	-	Diesel Fuel	40	0	5	-	12	-4	-
7235	Bus (BU)	6	0	Yes	NAB - North American Bus Industries Inc.	4028	2003	-	Diesel Fuel	40	0	5	-	12	-6	-
7236	Bus (BU)	10	0	Yes	NAB - North American Bus Industries Inc.	3505	2003	-	Diesel Fuel	35	0	9	-	12	-6	-
28890	Bus (BU)	33	23	Yes	EDN - ElDorado National	EZII	2007	-	Diesel Fuel	30	23	8	-	12	-2	451,787
28891	Bus (BU)	22	21	Yes	EDN - ElDorado National	EZII	2008	-	Diesel Fuel	30	21	0	-	12	-1	491,019
37463	Bus (BU)	25	24	Yes	EDN - ElDorado National	EZII	2009	-	Diesel Fuel	30	24	0	-	12	0	505,372
42049	Bus (BU)	23	19	Yes	EDN - ElDorado National	EZII	2010	-	Diesel Fuel	30	19	0	-	12	1	349,841
42050	Bus (BU)	4	4	Yes	EDN - ElDorado National	EZII	2011	-	Diesel Fuel	30	4	0	-	12	2	332,968
52441	Bus (BU)	54	51	Yes	EDN - ElDorado National	Axess	2013	-	Diesel Fuel	40	51	0	-	12	4	347,905
58477	Bus (BU)	15	14	Yes	EDN - ElDorado National	Axess	2013	-	Diesel Fuel	40	14	0	-	12	4	339,152
58478	Bus (BU)	8	8	Yes	EDN - ElDorado National	Axess	2013	-	Diesel Fuel	40	8	0	-	12	4	296,122
58507	Over-the-road Bus (BR)	13	13	Yes	MCI - Motor Coach Industries International	D4000	2013	-	Diesel Fuel	40	13	0	-	12	4	402,595
334648	Bus (BU)	7	7	Yes	EDN - ElDorado National	Axess	2014	-	Diesel Fuel	40	7	0	-	12	5	285,110
334649	Over-the-road Bus (BR)	9	9	Yes	MCI - Motor Coach Industries International	D4000	2015	-	Diesel Fuel	40	9	0	-	12	6	338,152
334650	Bus (BU)	47	47	Yes	EDN - ElDorado National	Axess	2015	-	Diesel Fuel	40	47	0	-	12	6	259,849
334651	Bus (BU)	20	19	Yes	EDN - ElDorado National	Axess	2015	-	Compressed Natural Gas	40	19	0	-	12	6	234,264
334652	Bus (BU)	30	30	Yes	EDN - ElDorado National	Axess	2014	-	Diesel Fuel	40	30	0	-	12	5	287,061

Table D - 3. Revenue Vehicle Inventory (A-30) Form, MB DO 50113 – Summarized (Continued)

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	Manufacturer	Model	Year Manufactured	Year Rebuilt	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Avg Lifetime Miles per Active Vehicle
348469	Bus (BU)	25	25	Yes	EDN - ElDorado National	Axess	2016	-	Diesel Fuel	40	25	0	-	12	7	345,866
348471	Bus (BU)	54	52	Yes	EDN - ElDorado National	Axess	2016	-	Diesel Fuel	40	52	0	-	12	7	239,390
354507	Bus (BU)	11	11	Yes	EDN - ElDorado National	Axess	2016	-	Diesel Fuel	40	11	0	-	12	7	187,767
354508	Bus (BU)	71	70	Yes	EDN - ElDorado National	Axess	2017	-	Compressed Natural Gas	40	70	0	-	12	8	213,877
354509	Over-the-road Bus (BR)	8	8	Yes	MCI - Motor Coach Industries International	D4000	2017	-	Diesel Fuel	40	8	0	-	12	8	242,519
354510	Bus (BU)	54	54	Yes	EDN - ElDorado National	Axess	2017	-	Diesel Fuel	40	54	0	-	12	8	140,460
362734	Bus (BU)	32	32	Yes	EDN - ElDorado National	Axess	2017	-	Diesel Fuel	40	32	0	-	12	8	133,914
362735	Bus (BU)	11	11	Yes	EDN - ElDorado National	Axess	2018	-	Compressed Natural Gas	40	11	0	-	12	9	161,932
381875	Bus (BU)	6	6	Yes	EDN - ElDorado National	EZII	2008	2019	Diesel Fuel	30	6	0	Mid-Life Overhaul	12	-1	520,749
381876	Bus (BU)	16	16	Yes	EDN - ElDorado National	EZII	2010	2019	Diesel Fuel	30	16	0	Mid-Life Overhaul	12	1	328,754
388924	Bus (BU)	85	85	Yes	NFA - New Flyer of America	XD40	2020	-	Diesel Fuel	40	85	0	-	12	11	58,825
388925	Bus (BU)	6	6	Yes	EDN - ElDorado National	Axess	2020	-	Compressed Natural Gas	40	6	0	-	12	11	70,766
394226	Bus (BU)	23	23	Yes	EDN - ElDorado National	Axess	2020	-	Diesel Fuel	30	23	0	-	12	11	29,680
Total		***736***	***688***								***688***	***27***				

Table D - 4. Revenue Vehicle Inventory (A-30) Form, MB PT 50113 – Summarized

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	Manufacturer	Model	Year Manufactured	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Useful Life Benchmark	Useful Life Remaining	Avg Lifetime Miles per Active Vehicle
22556	Bus (BU)	55	19	Yes	EDN - ElDorado National	EZII	2007	Diesel Fuel	30	19	12	-2	257,958
28893	Bus (BU)	5	5	Yes	EDN - ElDorado National	EZII	2008	Diesel Fuel	30	5	12	-1	479,925
42053	Bus (BU)	19	3	Yes	EDN - ElDorado National	EZII	2010	Diesel Fuel	30	3	12	1	191,497
52721	Cutaway (CU)	0	0	Yes	EDN - ElDorado National	Aerolite	2009	Diesel Fuel	20	0	4	-8	-
52723	Bus (BU)	2	2	Yes	OBI - Orion Bus Industries Ltd.	7	2011	Hybrid Diesel	30	2	12	2	192,785
355128	Bus (BU)	7	7	Yes	EDN - ElDorado National	EZII	2017	Diesel Fuel	30	7	12	8	34,745
380519	Cutaway (CU)	3	0	Yes	EDN - ElDorado National	AEROTECH 240	2014	Gasoline	25	0	4	-3	-
395246	Bus (BU)	1	1	Yes	EDN - ElDorado National	Axess	2012	Diesel Fuel	35	1	12	3	174,586
Total		***92***	***37***							***37***			

Table D - 5. Revenue Vehicle Inventory (A-30) Form, VP DO 50113 – Summarized

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	Manufacturer	Model	Year Manufactured	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Useful Life Benchmark	Useful Life Remaining	Avg Lifetime Miles per Active Vehicle
29205	Van (VN)	1	0	Yes	FRD - Ford Motor Corporation	E-350	2005	Gasoline	18	0	5	-11	-
29208	Van (VN)	0	0	Yes	FRD - Ford Motor Corporation	E-350	2007	Gasoline	18	0	5	-9	-
36939	Van (VN)	1	0	Yes	FRD - Ford Motor Corporation	E-350	2009	Gasoline	18	0	5	-7	-
36940	Van (VN)	0	0	Yes	FRD - Ford Motor Corporation	E-350	2009	Gasoline	18	0	5	-7	-
42149	Van (VN)	4	2	Yes	FRD - Ford Motor Corporation	E-350	2010	Gasoline	18	0	5	-6	90,777
46860	Minivan (MV)	2	0	Yes	DTD - Dodge Division — Chrysler Corp.	Caravan	2011	Gasoline	16	0	5	-5	-
46861	Van (VN)	4	2	Yes	FRD - Ford Motor Corporation	E-350	2011	Gasoline	18	2	5	-5	51,833
46862	Van (VN)	2	1	Yes	FRD - Ford Motor Corporation	E-350	2011	Gasoline	18	0	5	-5	78,192
46863	Van (VN)	0	0	Yes	FRD - Ford Motor Corporation	E-350	2011	Gasoline	18	0	5	-5	-
52309	Minivan (MV)	6	1	Yes	DTD - Dodge Division — Chrysler Corp.	Caravan	2012	Gasoline	16	0	5	-4	64,980
58452	Minivan (MV)	33	16	Yes	DTD - Dodge Division — Chrysler Corp.	Caravan	2013	Gasoline	16	0	5	-3	69,863
58453	Van (VN)	6	4	Yes	FRD - Ford Motor Corporation	E-350	2013	Gasoline	18	4	5	-3	18,454
58454	Van (VN)	39	24	Yes	FRD - Ford Motor Corporation	E-350	2013	Gasoline	18	0	5	-3	67,548
58455	Van (VN)	6	5	Yes	FRD - Ford Motor Corporation	E-350	2013	Gasoline	18	0	5	-3	51,325
341930	Minivan (MV)	13	8	Yes	DTD - Dodge Division — Chrysler Corp.	Caravan	2016	Gasoline	16	0	5	0	74,411
341931	Van (VN)	19	18	Yes	FRD - Ford Motor Corporation	Transit	2016	Gasoline	18	0	5	0	42,560
341932	Van (VN)	29	28	Yes	FRD - Ford Motor Corporation	Transit	2016	Gasoline	18	0	5	0	63,809
348596	Van (VN)	19	19	Yes	FRD - Ford Motor Corporation	Transit	2016	Gasoline	18	19	5	0	40,646

Table D - 5. Revenue Vehicle Inventory (A-30) Form, VP DO 50113 – Summarized (Continued)

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	Manufacturer	Model	Year Manufactured	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Useful Life Benchmark	Useful Life Remaining	Avg Lifetime Miles per Active Vehicle
348597	Van (VN)	1	0	Yes	FRD - Ford Motor Corporation	Transit	2016	Gasoline	18	0	5	0	-
354522	Minivan (MV)	183	177	Yes	DTD - Dodge Division — Chrysler Corp.	Caravan	2017	Gasoline	16	0	5	1	59,249
354523	Van (VN)	39	35	Yes	FRD - Ford Motor Corporation	Transit	2017	Gasoline	18	0	5	1	41,205
354524	Van (VN)	15	15	Yes	FRD - Ford Motor Corporation	Transit	2017	Gasoline	18	15	5	1	27,573
362895	Van (VN)	67	67	Yes	FRD - Ford Motor Corporation	Transit	2018	Gasoline	18	0	5	2	24,959
380447	Van (VN)	16	16	Yes	FRD - Ford Motor Corporation	Transit	2018	Gasoline	18	16	5	2	7,830
388940	Van (VN)	25	25	Yes	FRD - Ford Motor Corporation	Transit	2020	Gasoline	18	0	5	4	420
388941	Van (VN)	10	10	Yes	FRD - Ford Motor Corporation	Transit	2020	Gasoline	18	0	5	4	1,375
388942	Van (VN)	22	22	Yes	FRD - Ford Motor Corporation	Transit	2020	Gasoline	18	0	5	4	215
394381	Van (VN)	18	18	Yes	FRD - Ford Motor Corporation	Transit	2020	Gasoline	18	0	5	4	19
394382	Van (VN)	7	7	Yes	FRD - Ford Motor Corporation	Transit	2020	Gasoline	18	7	5	4	285
Total		***587***	***520***							***63***			

Table D - 6. Revenue Vehicle Inventory (A-30) Form, DR PT 50182 – Summarized

RVI ID	Vehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	No Capital Replacement Responsibility	Manufacturer	Model	Year Manufactured	Fuel Type	Vehicle Length	ADA Accessible Vehicles	Useful Life Benchmark	Useful Life Remaining	Avg Lifetime Miles per Active Vehicle
58352	Cutaway (CU)	1	1	Yes	Yes	EDN - ElDorado National	AEROLITE	2010	Diesel Fuel	22	1	-	-	147,646
58356	Cutaway (CU)	4	3	Yes	Yes	EDN - ElDorado National	AEROTECH	2009	Diesel Fuel	24	3	-	-	220,068
58360	Cutaway (CU)	123	114	Yes	Yes	EDN - ElDorado National	AEROTECH 240	2014	Gasoline	25	114	-	-	225,092
336465	Minivan (MV)	14	0	Yes	Yes	DTD - Dodge Division — Chrysler Corp.	Caravan	2015	Gasoline	17	-	-	-	-
336466	Cutaway (CU)	7	0	Yes	Yes	EDN - ElDorado National	Aerolite 210	2014	Gasoline	22	-	-	-	-
337635	Cutaway (CU)	11	8	Yes	Yes	EDN - ElDorado National	AEROTECH	2010	Diesel Fuel	24	8	-	-	217,240
337636	Cutaway (CU)	59	59	Yes	Yes	CMC - Champion Motor Coach Inc.	CHALLENGER	2014	Gasoline	22	59	-	-	142,863
342552	Minivan (MV)	9	0	Yes	Yes	DTD - Dodge Division — Chrysler Corp.	Caravan	2015	Gasoline	16	-	-	-	-
348757	Minivan (MV)	92	0	Yes	Yes	DTD - Dodge Division — Chrysler Corp.	CARAVAN	2016	Gasoline	16	-	-	-	-
348760	Cutaway (CU)	49	49	Yes	Yes	EDN - ElDorado National	AEROTECH 240	2016	Gasoline	25	49	-	-	162,082
354625	Cutaway (CU)	110	110	Yes	Yes	EDN - ElDorado National	AREOTECH 240	2017	Gasoline	25	110	-	-	106,772
354626	Minivan (MV)	46	0	Yes	Yes	DTD - Dodge Division — Chrysler Corp.	CARAVAN	2017	Gasoline	16	-	-	-	-
354627	Minivan (MV)	15	0	Yes	Yes	DTD - Dodge Division — Chrysler Corp.	CARAVAN	2017	Gasoline	16	-	-	-	-
362944	Minivan (MV)	46	0	Yes	Yes	DTD - Dodge Division — Chrysler Corp.	CARAVAN	2018	Gasoline	16	-	-	-	-
362947	Cutaway (CU)	28	28	Yes	Yes	EDN - ElDorado National	AREOTECH 240	2018	Gasoline	25	28	-	-	105,009
388953	Cutaway (CU)	150	150	Yes	Yes	STR - Starcraft	STARLITE	2020	Gasoline	24	150	-	-	28,476
388954	Cutaway (CU)	141	141	Yes	Yes	EDN - ElDorado National	ADVANTAGE	2020	Gasoline	24	141	-	-	17,697
388958	Cutaway (CU)	272	272	Yes	Yes	EDN - ElDorado National	ADVANTAGE	2020	Gasoline	24	272	-	-	1,121
388960	Cutaway (CU)	280	280	Yes	Yes	STR - Starcraft	STARLITE	2020	Gasoline	24	280	-	-	30,700
Total		***1,457***	***1,215***								***1,215***			

End of A-30 Tables

D.3 ASSET CONDITION

D.3.1 CONDITION ASSESSMENT

Per FTA requirements, Pace measures Rolling Stock condition based on age relative to its Useful Life Benchmark (ULB). A ULB is the expected lifecycle of a capital asset for a Transit Provider's operating environment, or the acceptable period of use in service for a particular Transit Provider's operating environment.

D.3.2 CURRENT CONDITION INFORMATION AND PERFORMANCE TARGETS

Table D – 1. Revenue Vehicle Inventory (A-30) Form, DR PT 50113 – Summarized through **Table D – 6. Revenue Vehicle Inventory (A-30) Form, DR PT 50182 – Summarized** contain information on the ULB used to assess the condition of Rolling Stock, and the percentage of useful life remaining for each type of fleet based on the year it was manufactured. A negative number indicates that the asset is life-expired, though is still being maintained for safe usage.

With the introduction of TAM, Pace has been required since 2017 to develop Performance Measure Targets for the assets for which we have capital replacement responsibility. For Rolling Stock, the Performance Target must reflect the "percent of Revenue Vehicles that are expected to meet or exceed their Useful Life Benchmark."[8]

In **Table D – 7. Performance Targets for Rolling Stock** are Pace's FTA-required Performance Measure Targets for Rolling Stock. The values in the table represent the percentage of vehicles beyond their Useful Life Benchmark (ULB).

Table D – 7. Performance Targets for Rolling Stock

Asset Type	2021 Target	2021 Performance	2022 Target
BR – Over-the-road Bus	0.00%	0.00%	0.00%
BU – Bus	14.86%	14.10%	13.35%
CU – Cutaway	77.11%	89.70%	64.16%
MV – Minivan	28.02%	15.49%	100.00
VN – Van	41.90%	33.62%	45.00%

D.4 LIFECYCLE MANAGEMENT STRATEGIES

D.4.1 OVERVIEW

Pace has developed the **Rolling Stock, Facilities, and Equipment Maintenance Manual,** which describes the agency's standard operating procedures required to maintain the system. The Four Core Goals of the maintenance manual can be broadly described as:

- ✓ Safety
- ✓ Performance
- ✓ Efficiency
- ✓ Professionalism

[8] Federal Transit Administration, National Transit Database, 2019 Policy Manual

These Four Core Goals ensure that:

- Safety and comfort of the agency's passengers are the primary consideration of all maintenance functions
- The fleet is serviced at a rate that covers the needs of the agency and addresses any emergencies that might arise
- The lowest cost is maintained without sacrificing safety
- Maintenance is technologically current

Pace's Maintenance and Technical Services Department is responsible for managing and maintaining buses throughout their lifecycle, reflecting four broad goals categorized under safety, availability of rolling stock, efficiency, and professionalism. The lifecycle management strategies for Rolling Stock at Pace are detailed in sections **D.4.2 MAINTENANCE** through **D.4.5 SUPPLY CHAIN AND PROCURMENT** below.

D.4.2 MAINTENANCE

FIXED ROUTE VEHICLES

Pre-Trip Inspections and Work Orders

Each driver is required to perform a pre-trip inspection of his/her Rolling Stock prior to pullout. The driver inspects the bus and documents the inspection, including any problems with the bus, on a "*Bus Pre-Trip Card*." All hard copies are returned to the Maintenance Department for processing, and any noted defects are entered in Oracle eAM, a work order generated, and the hard copy attached to the work order.

When it is determined that a work order is necessary, a Maintenance Superintendent or designee shall prepare a work order utilizing Oracle eAM, a work order form, and the corresponding facility codes. An employee assigned to a work order will evaluate the work and request clarification from the Foreman if necessary. The employee executes the work order, and the Maintenance Superintendent or designee reviews the work order for completeness and accuracy and proceeds to close out the work order once the work has been verified.

Daily Servicing

In addition to Pre-Trip Inspections, in-service Rolling Stock is serviced daily, ensured by the Maintenance Superintendent. Daily Servicing involves:

- Fueling the Rolling Stock Vehicle
- Checking other fluids and filling as needed: engine oil, transmission oil, glycol
- Checking of air filter indicators
- Dumping the cash box into fare collection vault
- Checking tires
- Notation of all defects
- Washing/cleaning of interior and exterior
- Disinfecting the vehicle

Preventative Maintenance

Preventative Maintenance includes inspection of the Rolling Stock, scheduled oil changes, lubrication, adjustments, service, and repairs that are performed during the inspection/servicing and documented on the appropriate forms.

The Maintenance Superintendent or designee prints the Scheduled Maintenance Report from Oracle eAM to determine which vehicles are due for inspection and creates a work order scheduling the inspections and assigning mechanics to the work orders.

All the Preventative Maintenance Inspections (PMI) forms shall be performed under a work order by the assignment mechanic at the scheduled mileage intervals. Defects found during the PMI must be recorded on the Preventative Maintenance Defect Sheet (PMDS), and any minor repairs made during the PMI should be recorded on the PMI Work Order.

After the PMI work order, PMDS, PMI Forms, Lift-U PM Sheet, and brake test results are forwarded to the Maintenance Superintendent or designee, the PMI work order should be closed out with all work recorded in Oracle eAM and a new work order will be opened with all defects found and not repaired from the PMDS.

Damage and Collision Repairs

Pace policy dictates that all collision-damaged Rolling Stock be reported as required in an Accident/Incident Report and shall have repair authorization or direction from the Senior Inspector at South Holland. The accident reporting instructions include:

- All Rolling Stock accidents must be reported immediately to the garage Dispatcher, who then notifies the Safety Supervisor or Transportation Superintendent.
- If it is a service accident or accident with personal injuries, the Dispatcher must also notify Pace Headquarters, Revenue Services Department Manager.
- The vehicle driver must then fill out the Accident Incident Report, submitted to the garage Transportation Superintendent, who forwards it to Pace Safety Department at Fox Valley Division within 24 hours.

After the Accident/Incident Report requirements have been fulfilled, the Maintenance Superintendent should determine if the garage can handle the repair in-house and call the Senior Inspector to authorize the repairs. For in-house repairs, the garage will furnish a detailed estimate of the repairs (Vehicle Repair Estimate Form), while the Senior Inspector will schedule viewings for outside contractor repairs.

Non-Collision Related Repairs

Non-collision-related structural repairs over $1000 need to have repair authorization or direction from the Senior Inspector at South Holland. These structural repairs include straightening, replacement, and welding of body frame and structural components. The Senior Inspector will then take the appropriate steps to have the work performed by body repair contractor, after which the Maintenance Superintendent will prepare a Bus Transfer Form. For those that are under $1000, the Maintenance Superintendent may proceed with the work at the garage.

VANPOOL VEHICLES

Vanpool drivers are required to take the Van in for periodic maintenance checks and repairs. Drivers are also expected to fuel the Van and have it washed once per week. For convenience, the primary driver is provided with a fuel card, maintenance card, and Van wash card, all valid at numerous locations throughout the Pace service region.

PARATRANSIT VEHICLES

Contractors conduct maintenance and heavy repairs of Paratransit Vehicles, which are inspected approximately twice per year. The Superintendent of Maintenance for Paratransit oversees the contractors, including visiting them onsite during their work. Paratransit Vehicles are inspected approximately twice per year.

D.4.3 CAPITAL INVESTMENT

For asset acquisitions, property and equipment are recorded at historical cost. Pace capitalizes assets with a useful life of one year or more that is:

- Capital equipment
- Operation equipment with a unit cost of $5000 or more
- Costs incurred to extend an asset's useful life as part of a fleet enhancement or major rebuild/rehabilitation program, or
- An item determined to be highly susceptible to loss or theft

Most of Pace's assets have been acquired through capital grant projects funded by FTA, IDOT, the RTA or CMAP. Asset Acquisition Forms do not need to be completed for vehicles, associated capital parts, capital maintenance, fleet enhancement activities, and other intangible costs.

Fixed Route buses, Paratransit buses and Vans are set up in the APEX Fixed Asset System based on their in-service date. On a monthly basis, Revenue Services sends a listing of in-service dates for all revenue vehicles to the Senior Fixed Asset Accountant, who then establishes the fixed asset record accordingly and begins depreciating the asset.

When expanding or changing the fixed route revenue fleet, the Strategic Services Department works with the Revenue Services Department to provide information on planned expansions or other plans. The Grants Administration and TAM Department catalogs any requests, analyzes funding sources, and engages in an iterative process to balance needs and make recommendations to Senior Staff. Senior Staff will make the final decisions while the Grants Administration Department applies for the funding.

D.4.4 DISPOSAL

At Pace, an asset is disposed of if it has exceeded its useful life and is no longer needed or functioning or has been damaged or destroyed before its useful life, or the item has been reported lost or stolen. When disposal is necessary, an Asset Disposal Form is completed by the division or department that holds or is responsible for the asset. The Asset Disposal Form is submitted to Accounting and the Fixed Asset Accountant review the asset to determine if there is any remaining useful life. If there is, then that is noted on the Asset Disposal Form.

The Asset Disposal Form is then approved by the Section Manager, Accounts Payable/Receivable and the Section Manager, Grants Administration if the asset is capital funded. The Procurement Department is responsible for obtaining payment for the sale of an asset and forwarding those funds directly to the Finance Department.

Per the Bipartisan Infrastructure Law effective 11/15/21, Pace will only be allowed to retain the first $5,000 received for all sales after 11/15/21. If the proceeds from the asset exceed $5,000 or have remaining useful life, then the Grants Administration Department will coordinate repayment to the funding agency and obtain concurrence.

For Revenue Vehicles, a request is made from the Procurement Department for the vehicle title via a Title Request Form. The Accounting Department removes the title from their files and obtains signature from the requestor who is handling the vehicle sale.

D.4.5 SUPPLY CHAIN AND PROCUREMENT

Lifecycle maintenance cost differentials are typically not considered as part of procurement, although sometimes Maintenance may try to indicate preference for or against components due to cost of maintenance.

The decision to send work to a vendor is based upon an assessment of the Scope of Work, complexity of the work, and available resources. Pace uses metrics and inventory management (Min-Max) to assess procurement needs. Contractors typically have three to five-year terms with multiple bidders and separate contracts for engines, transmissions, repair, and replacement, etc.

For work done in-house, repair and maintenance bus parts are procured and used. These items are procured by the Small Purchases Department using a Min-Max inventory model. Small Purchases is also tasked with inventory tracking and work order processing of these Rolling Stock parts.

D.5 ASSET MANAGEMENT ENABLERS

D.5.1 ORGANIZATION

Vehicle Maintenance is led by the Maintenance Superintendents at different Pace locations. All the Maintenance Superintendents at the different locations report to their respective Division Managers. Maintenance efforts are coordinated with the Maintenance and Technical Services Department at South Holland.

D.5.2 TRAINING

New hires (both drivers and maintenance workers) undergo six weeks of training, including two weeks at the Fox Valley Centralized Training facility, and four weeks in their division. To ensure safe operations, the Safety Training staff conducts behind the wheel training for new employees and retraining for existing employees as needed.

There is also a quarterly refresher training in each garage, and additional training when there are changes in routes, and addition of new routes or equipment. Forklift training is provided when new forklifts are introduced, and retraining is provided as needed.

Formal training is conducted via the Training Coordinator, underneath Revenue Services, and/or by user departments. Manufacturers also provide training on new fleets as needed.

D.5.3 STANDARDS, LEGISLATION, REGULATION, AND OTHER MANDATED REQUIREMENTS

Pace's Rolling Stock maintenance program complies with Federal regulations for inspection, repair, and maintenance, including systematic inspection of vehicles to ensure that vehicle parts are always in working order. Maintenance practices are based on Original Equipment Manufacturer recommendations and are documented in Standard Operating Procedures.

All Pace Rolling Stock meet Federal Transit Administration (FTA) Standards and are tested and meet minimum requirements for service life and quality control as well as Environmental Protection Agency (EPA) Emissions Standards and Americans with Disabilities Act (ADA) Accessibility Guidelines. Federal Motor Vehicle Safety Standards apply to all motor vehicle procurements, including revenue vehicles and non-revenue vehicles, and specify the rules and regulations for motor vehicle design, construction, and performance to meet minimum safety performance and crash test requirements.

D.5.4 TECHNOLOGY

To support improved performance management and decision making, Pace relies on several software applications, including FLEETWATCH Fuel and Fluids Management System, Oracle Enterprise Asset Management (eAM), and Oracle Application Express (APEX).

Oracle eAM is a comprehensive maintenance management system produced by Oracle. It tracks all functions related to the maintenance of vehicles and vehicle maintenance equipment at Pace, including vehicle life-cycle management; repair and preventative maintenance work orders; and parts and inventory management. In addition, Oracle eAM delivers numerous efficiency and cost saving benefits, such as:

- Creating a preventative maintenance strategy
- Maximizing resource availability, including both equipment and labor
- Optimizing scheduling and resource efficiency
- Providing Asset Management and Work Management functions

However, not all maintenance personnel are on Oracle eAM or FLEETWATCH and use paper forms submitted to Maintenance Superintendents. The information provided on these forms is uploaded into the appropriate management system.

D.5.5 ASSET KNOWLEDGE AND INFORMATION

Oracle eAM stores information on Pace's vehicle assets, including defects, pending work orders, daily servicing, preventative maintenance, as well as damage and collision repairs. For vehicle

information that is not uploaded into Oracle eAM, there are extensive processes in place for storing information with hardcopy documentation.

D.5.6 ASSURANCE

It is the responsibility of the Maintenance Superintendent at each location to ensure compliance with all Rolling Stock maintenance procedures and policies daily. Many of these daily responsibilities are outlined in **Section D.4.2 MAINTENANCE**.

D.6 CAPITAL PLANS

In **Table D - 8. Rolling Stock Capital Budget Forecasts (000s)** Pace expects to spend over $93 million on rolling stock FY2023 through FY2027.

Table D - 8. Rolling Stock Capital Budget Forecasts (000s)

Project	2023	2024	2025	2026	2027	Total
Fixed Route Electric Buses (46)	-	$11,700	$11,700	$18,200	$18,200	$59,800
Paratransit Vehicles (201)	$1,802	1,873	5,458	5,113	4,983	19,229
Fixed Route Coach Buses (13)	-	9,750	-	-	-	9,750
Community Transit/On Demand Vehicles (69)	-	630	1,400	1,400	1,400	4,830
Total	**$1,802**	**$23,953**	**$18,558**	**$24,713**	**$24,583**	**$93,609**

END OF APPENDIX D

E. APPENDIX E – ELECTRICAL, SIGNAL, & COMMUNICATIONS

E.1 ASSET DEFINITION

Electrical, Signal, and Communications is *not* a required NTD reporting category for bus agencies. However, it is being included based upon the RTA annual budget categories budgeted for in Pace's Program of Projects, and because it is expected that all assets used in the provision of public transit will be included in the TAM Plan asset inventory.

E.2 ASSET INVENTORY

Pace has several different systems, and associated assets, that comprise our Electrical, Signal, and Communications asset inventory, including a Radio System, an Automated Vehicle Location (AVL) system, an Intelligent Bus System (IBS), a Transit Signal Priority (TSP) system, and an on-bus security system.

The TSP system has been implemented along Pace's new Pulse Milwaukee Line to support the Rapid Transit Program. Pace developed a Regional Interoperable TSP System Platform in coordination with Illinois, Chicago and County DOT's and CTA. Pace also implemented signal timing optimization along 400 plus intersections connecting individual signal interconnects by signal timing offsets.

Pace also identified and designed TSP Signal Timing Plans for 300 intersections for TSP implementation along ten corridors within its service area. Pace plans to continue TSP deployment along other corridors and is also looking at centralized TSP options for future deployments.

IBS is a satellite-based communications technology, used to improve the tracking of fixed route buses, collection of data, and communication between Pace and our drivers and passengers.

All Pace buses are equipped with constantly recording internal security cameras and technology that enables external recording before and after incidents. These technologies promote safety of passengers and drivers and enable Pace to identify driver behavior that may pose a safety risk.

Pace has various types of Bus Tracker signage deployed at most of its highest-ridership locations. These electronic signs offer real-time information about upcoming bus departures and provide for customer-facing messaging. The following series of tables list different types of Bus Tracker signs by location. These tables are:

- **Table E - 1. Nexus Alpha Bus Tracker signs installed at shelters/buildings**
- **Table E - 2. "e-ink" CHK Bus Tracker signs embedded in shelters**
- **Table E - 3. Parsons Video-style Bus Tracker signs at transit centers**
- **Table E - 4. Parsons Video-style Bus Tracker signs at Pulse stations**

Table E - 1. Nexus Alpha Bus Tracker signs installed at shelters/buildings

Location	City	County
519 W. Algonquin Rd.	Arlington Heights	Cook
Galena Square Walmart	Aurora	Kane
Aurora TC, Unit 1	Aurora	Kane
Aurora TC, Unit 2	Aurora	Kane
Aurora TC, Unit 3	Aurora	Kane
Aurora TC, Unit 4	Aurora	Kane
Madison & 25th, SE	Bellwood	Cook
Mannheim Rd. & Washington Blvd., NE	Bellwood	Cook
Cermak Rd & East Ave, NW	Berwyn	Cook
Gregory & York SE	Blue Island	Cook
127th St & Kedzie Ave	Blue Island	Cook
Western Ave. & 135th Pl. (SB)	Blue Island	Cook
Old Chicago Rd/Route 53 (P-n-R)	Bolingbrook	Will
Canterbury/Briarcliffe (P-n-R)	Bolingbrook	Will
Bridgeview Transit Center, Harlem/71st	Bridgeview	Cook
Bridgeview Transit Center, Harlem/71st	Bridgeview	Cook
Lincolnshire & McClintock	Burr Ridge	DuPage
North Ave & Narragansett Ave, NE	Chicago	Cook
CTA Austin Green Line Station	Chicago	Cook
CTA Cumberland Blue Line station	Chicago	Cook
Western Ave & 79th St NE	Chicago	Cook
Lake Cook Metra Station	Deerfield	Lake
Des Plaines Metra Station	Des Plaines	Cook
National St. & Grove Ave, SE	Elgin	Kane
I-90/Rt. 25 (P-n-R)	Elgin	Kane
I-90/Randall (P-n-R)	Elgin	Kane
Lyle/Grandstand	Elgin	Kane
Busse & Greenleaf (NE/NB)	Elk Grove Village	Cook
Busse Hwy & Mark Ln	Elk Grove Village	Cook
Lively & Chase (SE)	Elk Grove Village	Cook
Northwest Pointe Blvd & Arlington Hts Rd	Elk Grove Village	Cook
Davis Purple Line Station	Evanston	Cook
Forest Park Blue Line TC North terminal.	Forest Park	Cook
Harlem Blue Line (Harlem and 290)	Forest Park	Cook
Forest Park Blue Line TC South terminal.	Forest Park	Cook

Table E - 1. Nexus Alpha Bus Tracker signs installed at shelters/buildings (Continued)

Location	City	County
Harlem/Lake Green Line (Harlem and S Blvd)	Forest Park	Cook
Grand Ave & Mannheim Rd, SE	Franklin Park	Cook
Hunt Club Road & Westbrook	Gurnee	Lake
Sibley Blvd (147th St) & Wood St, SW	Harvey	Cook
154th St & Wood, NE	Harvey	Cook
155th/Page EB	Harvey	cook
Broadway & 155th St, NW	Harvey	Cook
Halsted St & 163rd St, SE	Harvey	Cook
Kedzie Ave & 175th St, NE	Hazel Crest	Cook
Harrison St & Wolf Rd, SE	Hillside	Cook
Hines VA Hospital, sign 1 - Tripp Ave and Building 228	Hines	Cook
Hines VA Hospital, sign 3 - Scott Dr and Building 128	Hines	Cook
Tripp Ave and Airmail Rd	Hines	Cook
1 UPS Way	Hodgkins	Cook
1 UPS Way	Hodgkins	Cook
Barrington Rd station (exterior platform)	Hoffman Estates	Cook
Barrington Rd station (exterior platform)	Hoffman Estates	Cook
Cicero Ave/88th, SE	Hometown	cook
Jefferson St & Joyce SW	Joliet	Will
Joliet Jr. College	Joliet	Will
LaGrange Rd & Hillgrove, NB	Lagrange	Cook
159th St & Kedzie WB/NW	Markham	Cook
159th/Kedzie, EB/SE	Markham	Cook
Kedzie Ave & 159th St NB/SE	Markham	Cook
Kedzie Ave & 159th St SB/NW	Markham	Cook
Madison St & 19th Street SE	Maywood	Cook
Madison St & 11th SE	Maywood	Cook
Madison St & 5th Ave NW	Maywood	Cook
Madison St & 5th Ave SE	Maywood	Cook
Naperville Metra Station	Naperville	DuPage
Harlem Ave/Dempster St, SW	Niles	Cook
6909 W. Touhy	Niles	Cook
Maryland & Milwaukee, SW	Niles	Cook
Milwaukee & Albion, SE	Niles	Cook
Milwaukee & Greenwood, NE	Niles	Cook
Buckley Rd (Rt 137) & Lewis Ave, SW	North Chicago	Lake
Harlem Ave. & Cermak Rd., SW	North Riverside	Cook
22nd St. & McDonald's Drive, SE	Oak Brook	DuPage
159th St. & Oak Ave, NE	Oak Forest	Cook
Lake St at Cuyler Ave, SE	Oak Park	Cook
Lake St. & East Ave., NE	Oak Park	Cook
South Blvd. & Ridgeland Ave., NE	Oak Park	Cook
CTA Oak Park Blue Line (OP Ave & 290)	Oak Park	Cook

Table E - 1. Nexus Alpha Bus Tracker signs installed at shelters/buildings (Continued)

Location	City	County
Oak Park Ave. & South Blvd., SE	Oak Park	Cook
Main St & Victory, SE	Park Forest	Cook
Triton College Campus	River Grove	Cook
Halsted St. & 144th St., NE	Riverdale	Cook
Indiana Ave & 136th St	Riverdale	Cook
Indiana Ave & 136th St	Riverdale	Cook
Rosemont Blue Line River Rd Transit Center.	Rosemont	Cook
Oakton St & LaCrosse Ave	Skokie	Cook
Cottage Grove & 162nd St, NE	South Holland	Cook
South Suburban College	South Holland	Cook
Lewis Ave & Belvidere SW	Waukegan	Lake
Northpoint Blvd	Waukegan	Lake
Sheridan/Washington (Eastside)	Waukegan	Lake
Sheridan/Washington (Eastside)	Waukegan	Lake
Central Ave. & 12th St., SE	Wilmette	Cook
Linden CTA Terminal	Wilmette	Cook
Laramie Ave &Thornwood Ave, SW	Wilmette	Cook
Green Bay Rd & Winnetka Ave, NW	Winnetka	Cook
Harlem Ave & 107th St, NW	Worth	Cook
Harlem Ave & Southwest Hwy, NE	Worth	Cook

Table E - 2. "e-ink" CHK Bus Tracker signs embedded in shelters

Location	City	County
Randall Rd & Harnisch NB/NE	Algonquin	McHenry
Randall Rd & Bunker NB/NE	Algonquin	McHenry
Randall Rd & Algonquin SB/SW	Algonquin	McHenry
Randall Rd & Bunker Hill/SB	Algonquin	McHenry
Randall Rd & Harnisch SB/SW	Algonquin	McHenry
Oak Park Ave. & Cermak Rd., NE	Berwyn	Cook
127th St & Gregory NW	Blue Island	Cook

Table E - 2. "e-ink" CHK Bus Tracker signs embedded in shelters (Continued)

Location	City	County
Ring Rd & Victory Center (E unit)	Calumet City	Cook
Ring Rd & Victory Center (W unit)	Calumet City	Cook
Chicago Rd & Sibley, NE	Dolton	Cook
Chicago Rd & Lincoln	Dolton	Cook
154th St & Lexington Ave WB, f/s	Harvey	Cook
Homewood Metra station (N unit)	Homewood	Cook
Homewood Metra station (S unit)	Homewood	Cook
Randall Rd & Algonquin NB/NE	Lake in the Hills	McHenry
Randall Rd & Acorn Ln NB/SE	Lake in the Hills	McHenry
Randall Rd & Acorn Ln SB/SW	Lake in the Hills	McHenry
Roosevelt Rd. & 5th Ave., NW	Maywood	Cook
Roosevelt Rd & Second Ave, SW/EB	Maywood	Cook
North/15th, NW	Melrose Park	Cook
North/15th, SE	Melrose Park	Cook
9000 Golf Rd (at Golf Terrace Rd), WB	Niles	Cook
Touhy Ave & Harlem Ave, SE	Niles	Cook
Touhy Ave & Milwaukee Ave, SE	Niles	Cook
Orland Towne Center (159th & 94th)	Orland Hills	Cook
Golf Rd at Ring Rd, SE	Rolling Meadows	Cook
Mannheim Rd & Irving Park Rd, NE	Schiller Park	Cook
Grand Ave & McAree, SE	Waukegan	Lake
Grand Ave & Genesee, NW	Waukegan	Lake
2479 W. Dugdale (Whispering Oaks)	Waukegan	Lake

Table E - 3. Parsons Video-style Bus Tracker signs at transit centers

Location	City	County	# of signs
Barrington Rd pedestrian bridge	Hoffman Estates	Cook	2
Chicago Heights TC	Chicago Heights	Cook	6
Harvey TC	Harvey	Cook	8
Northwest TC	Schaumburg	Cook	4
Elgin TC	Elgin	Kane	5
Plainfield Park-n-Ride	Plainfield	Will	2
Joliet TC	Joliet	Will	2

Table E - 4. Parsons Video-style Bus Tracker signs at Pulse stations[9]

Location	City	County
Golf Mill Mall	Niles	Cook
Milwaukee/Dempster Southbound	Niles	Cook
Milwaukee/Dempster Northbound	Niles	Cook
Milwaukee/Main Southbound	Niles	Cook
Milwaukee/Main Northbound	Niles	Cook
Milwaukee/Oakton Southbound	Niles	Cook
Milwaukee/Oakton Northbound	Niles	Cook
Milwaukee/Harlem Southbound	Niles	Cook
Milwaukee/Harlem Northbound	Niles	Cook
Milwaukee/Touhy Southbound	Niles	Cook
Milwaukee/Touhy Northbound	Niles	Cook
Milwaukee/Austin Southbound	Chicago	Cook
Milwaukee/Austin Northbound	Chicago	Cook
Milwaukee/Devon Northbound	Chicago	Cook
Milwaukee/Devon Southbound	Chicago	Cook
Milwaukee/Central Southbound	Chicago	Cook
Milwaukee/Central Northbound	Chicago	Cook

E.3 ASSET CONDITION

Electrical, Signal, and Communications is not an FTA required Performance Target asset setting category, and as such Pace does not set Performance Targets for this asset class.

E.4 LIFECYCLE MANAGEMENT STRATEGIES

E.4.1 CAPITAL INVESTMENT

Pace develops strategic and vision plans, such as ***Driving Innovation,*** **The Pace Strategic Vision Plan**. These plans identify new programs that will require procurement of new assets, such as Transit Signal Priority (TSP).

New Electrical, Signal, or Communications assets that are required to implement those programs are identified in the Capital Program once an appropriate funding source has been identified. Real-Time Information displays and related communications network are components of **PULSE** stations, transit stations and at many shelters, and regional installation is on-going.

E.4.2 MAINTENANCE

Pace uses external contractors to perform regular inspections and planned maintenance, as well as corrective maintenance as needed. There are different levels of planned maintenance depending on the type of asset.

E.4.3 DISPOSAL

There are three reasons for an asset disposal:

[9] Two signs have been installed at each of these locations: one on each side of the vertical marker.

- Item has exceeded its useful life and is either no longer needed or no longer functioning.
- Item has not met its useful life but is no longer functioning or has been damaged or destroyed.
- Item has been reported lost or stolen.

When disposal is necessary, an Asset Disposal Form is completed by the division or department that holds or is responsible for the asset. The Asset Disposal Form is submitted to Accounting and the Fixed Asset Accountant review the asset to determine if there is any remaining useful life. If there is, then that is noted on the Asset Disposal Form.

The Asset Disposal Form is then approved by the Section Manager, Accounts Payable/Receivable and the Section Manager, Grants Administration if the asset is capital funded. The Fixed Asset Accountant determines whether an asset should be disposed of by the Using Department or the Procurement Department. The Procurement Department is responsible for obtaining payment for the sale of an asset and forwarding those funds directly to the Finance Department.

Per the Bipartisan Infrastructure Law effective 11/15/21, Pace will only be allowed to retain the first $5,000 received for all sales after 11/15/21. If the proceeds from the asset exceed $5,000 or have remaining useful life, then the Grants Administration Department will coordinate repayment to the funding agency and obtain concurrence.

E.4.4 SUPPLY CHAIN AND PROCUREMENT

For work done in-house, repair and maintenance parts are procured and used. These items are procured by the Small Purchases Department using a Min-Max inventory model. Some items may also be ordered with directive given by Tech Services management, such as in preparation for an upcoming repair or new-installation campaign. The Small Purchases Department is also tasked with inventory tracking and work order processing of these parts. Contractors manage materials for contracted work.

E.5 ASSET MANAGEMENT ENABLERS

E.5.1 ORGANIZATION

Pace's Planning and Priority Project Management Office (PPMO) Departments focus on longer-term planning for initiatives that rely on signal and communications improvements and modernization, including the Bus on Shoulder (BoS) program, **PULSE**, and TSP. The Research and Analysis Department relies on data collected from systems like IBS, to track ridership and fare payment, which inform mid to long-range planning, which may affect asset acquisition. Bus Operations is responsible for TSP maintenance. These services are contracted to DOT approved vendors.

E.5.2 TECHNOLOGY

To support improved performance management and decision making, Pace relies on several software applications, including Oracle Enterprise Asset Management (eAM), and Oracle Application Express (APEX). Oracle Enterprise Asset Management (eAM) is a comprehensive

maintenance management system. Pace uses a distributed system that monitors and feeds data back to our Arlington Heights Headquarters. Pace attempts to resolve issues first from Headquarters, before going into the field to address the issue if needed. Pace's technological assets have extended manufacturer warranties and are simply sent back for replacement if broken.

Fixed route uses an Intelligent Bus System (IBS) based on Trapeze TransitMaster, a satellite-based communications technology, to improve the tracking of buses, collect data, and communicate between Pace and our drivers and passengers. Paratransit contractors have their own communications system, using Motorola radios that were updated to use Trapeze Pass, our Paratransit scheduling and trip booking software.

The TSP System is monitored by a Pace Developed custom Central TSP Management System. The Central TSP Management System is connected to all devices in field and to buses via AVL. The Central System is capable of live health monitoring, systems management, configuration management, logging all activity, and performing data analysis.

Pace can monitor its Bus Tracker Signs remotely to confirm the presence of power, a data connection, and other "health" characteristics of the signs. This remote monitoring occurs through three different content management systems, each provided by the manufacturer of the signs themselves.

E.6 CAPITAL PLANS

In **Table E - 5. Electrical, Signal, and Communications Capital Budget Forecasts (000s)** Pace expects to spend approximately $24 million on Electrical, Signal, and Communications assets, for IBS and TSP upgrades FY2023 through FY2027.

Table E - 5. Electrical, Signal, and Communications Capital Budget Forecasts (000s)

Project	2023	2024	2025	2026	2027	Total
Onboard Digital Screens (467)	$2,198	$2,081	$2,055	$2,000	$2,000	$10,334
Transit Signal Priority (TSP)	-	-	2,000	$2,000	2,000	6,000
Intelligent Bus System (IBS)	-	1,500	500	650	1,000	3,650
Bus Security Cameras	-	2,000	-	-	-	2,000
Bus Tracker Signs	-	500	500	500	500	2,000
Total	**$2,198**	**$6,081**	**$5,055**	**$5,150**	**$5,500**	**$23,984**

END OF APPENDIX E

F. APPENDIX F – ABBREVIATIONS AND ACRONYMS

The following abbreviations and acronyms are used throughout this document.

Abbreviation	Meaning
ADA	Americans with Disabilities Act
AM	Asset Management
AMP	Asset Management Plan
AMS	Asset Management System
APEX	Application Express (Oracle)
AVL	Automated Vehicle Location
A&E	Architectural and Engineering
CIP	Capital Investment Plan
CFI	Capital Financing and Infrastructure
CMAP	Chicago Metropolitan Agency for Planning
COST	Capital Optimization Support Tool
CTA	Chicago Transit Authority
CTS	Community Transit Service
D&C	Design and Construction
EAM	Enterprise Asset Management
FM	Facilities Maintenance
FTA	Federal Transit Administration
GIS	Geographic Information System
HR	Human Resources
IBS	Intelligent Bus System
HVAC	Heating, Ventilation, and Air Conditioning
IGA	Intergovernmental Agreements
IDOT	Illinois Department of Transportation
ISO	International Standards Organization
IT	Information Technology
KPI	Key Performance Indicator

Abbreviation	Meaning
LOS	Level of Service
MAP-21	Moving Ahead for Progress in the 21st Century
MPO	Metropolitan Planning Organization
NTD	National Transit Database
OEM	Original Equipment Manufacturer
O&M	Operations and Maintenance
PAS	Publicly Available Specification
PBV	Positive Budget Variance
PMI	Preventative Maintenance Inspections
QA/QC	Quality Assurance/Quality Control
ROW	Right of Way
RS	Revenue Services
RTA	Regional Transportation Authority
SGR	State of Good Repair
SOGR	State of Good Repair
SOP	Standard Operating Procedure
TAM	Transit Asset Management
TAMP	Transit Asset Management Plan
TAP	Taxi Access Program
TERM	Transit Economic Requirements Model
TIP	Transportation Improvement Program
TSP	Transportation Signal Priority
UL	Useful Life
ULB	Useful Life Benchmark
WSP	Consultant supporting Pace's TAM efforts

END OF APPENDIX F

G. APPENDIX G – TERMS AND DEFINITIONS

The following terms and definitions are used to describe aspects of Asset Management and have been applied in this document.

Asset Management Terms and Definitions	
Asset	*ISO Definition: item, thing or entity that has potential or actual value to an organization.* *More relevant definition*: A tangible item of value that is owned, managed, or leased by Pace for the purposes of providing transit services. Infrastructure assets that are repairable, replaceable, and subject to a preventative maintenance schedule or inspection or calibration or need to be tracked from a capital depreciation point of view. This does not include consumables (e.g., a filter), but does include software (the action of modifying a software version being the repair).
Asset Class	Refers to the sub-group of assets. Within Pace the following asset classes are referred to: Fixed Route Vehicles Vanpool Vehicles Community Vehicles Paratransit Vehicles Non-Revenue Vehicles Administrative and Maintenance Facilities Passenger Stations
Asset Hierarchy	A framework for segmenting an asset inventory into appropriate classifications. The hierarchy is usually represented by a "parent-child" relationship between the top-level asset identifier down to the maintenance managed item (MMI). In many instances, this breakdown will include sub-systems and components (parts of asset). It is important that the asset hierarchy is applicable across all business functions so that costs, performance, and other factors can be analyzed. The framework should therefore consider both maintenance and capital planning as well as asset operation
Asset Register	A record of asset information including asset attribute data such as quantity, type, configuration, cost, condition etc. The Asset Register is structured as per the *Asset Hierarchy.*
Asset Management	*ISO Definition: coordinated activity of an organization to realize value from assets* *More relevant definition*: Asset Management is the optimized lifecycle management of Pace's assets. It is being able to make the right decisions based on facts, to do the right work in the right place, and to spend money where it is needed most.
Asset Management Capability	*ISO Definition: The measure of capacity and ability of Pace to achieve our objectives*. In the context of this report, determined through an assessment of people, processes, technology, data & information, and the ability to provide assurance as compared to good industry practice asset management.
Asset Management Policy	*ISO definition: intentions and direction of an organization as formally expressed by its top management.* *More relevant definition:* The overall intentions and direction of Pace related to our assets and the framework for control of asset-related processes and activities (for example, capital planning, maintenance, operations, etc.). The policy should be derived from and be consistent with Pace's mission, vision, and values.
Asset Management Objectives	*ISO definition: In the context of Asset Management systems, Asset Management objectives are set by the organization, consistent with the organizational objectives and Asset Management policy, to achieve specific measurable results.* *More relevant definition:* Specific outcomes or achievement required of assets and asset management. These can include, for example, condition, reduction in unit costs and/or improvement in performance, as well as more organization focused objectives, including competency, capability, review, and assurance.

Asset Management Terms and Definitions	
Service Objectives	Specific levels of service defined by Pace for the performance of the services provided. This can include frequency and location of services as well as reliability measures.
Asset Management Implementation	Lists the Baseline and Future Objectives proposed to develop Pace's Asset Management capability in line with a stated objective.
Asset Management Plan	*ISO definition: documented information that specifies the activities, resources and timescales required for an individual asset, or a grouping of assets, to achieve the organization's Asset Management objectives.* *More relevant definition*: Specifies the activities (maintenance, overhaul, replacement, and renewal), resources and timescales required for a group of assets to achieve Pace's service and Asset Management objectives. This is consistent with the definition of an Asset Management plan in the following: BSI PAS-55: 2008 – British Standard Specification for the optimized management of physical infrastructure assets ISO-55001:2014 – International Standard for Asset Management – management system requirements. Global Forum for Maintenance and Asset Management International Infrastructure Management Manual
Asset Management System	*ISO definition: set of interrelated or interacting elements of an organization to establish policies and objectives and processes to achieve those objectives.* More relevant definition: The collection of policies, processes and procedures that control and manage the way Pace manages our assets. The management system should consider all stages of the assets lifecycle and Pace's functions or departments that support the full lifecycle approach (including for example Capital Planning, Capital Delivery, Maintenance, and Operations). An established Asset Management System is a requirement of the FTA. The As-Is Processes Report represents an Initial capture of Pace's Asset Management processes.
Enterprise Asset Management (eAM) System.	The Enterprise Asset Management System or eAM system, refers to the technology application used to support the management of the assets. Through the course of the workshops this was often referred to as the 'Asset Management System', but for clarity is referred to in this report as the eAM system. Pace uses Oracle eAM as their eAM system.
Risk Management	Coordinated activities to direct and control an organization regarding risk (From ISO31001: 2009. Risk Management Principles and Guidelines).
Tactical Risk Management	Defined as the use of assessment techniques based on safety or other impacts that prioritize immediate intervention requirements. These typically address issues that have occurred (non-conformities).
Strategic Risk Management	Defined as the use of risk management activities to support asset strategy and Asset Management planning purposes. This is consistent with the definition for risk management from ISO31000 set out above.

END OF APPENDIX G

END OF TAM PLAN APPENDICES