## **Pace Suburban Bus Division**

## INITIAL TRANSIT ASSET MANAGEMENT PLAN 2020 UPDATE





We're Driven For You



## PACE SUBURBAN BUS DIVISION

of the Regional Transportation Authority of Northeastern Illinois

# INITIAL TRANSIT ASSET MANAGEMENT PLAN

#### APPROVAL

ACCOUNTABLE EXECUTIVE	SIGNATURE	DATE
Melinda J. Metzger, General Manager/ Chief Operating Officer, Pace Suburban Bus	mer & migr	Мапси, 2019

### PACE AND WSP DOCUMENT CONTROL

#### Release Details

Release Date	October 1, 2018
Version	Initial Transit Asset Management Plan
Release Date	October 16, 2020
Version	Initial Transit Asset Management Plan 2019 Update
Release Date	October 15, 2021
Version	Initial Transit Asset Management Plan 2020 Update
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



### TABLE OF CONTENTS-MAIN DOCUMENT

	4
Background	4
Why an Asset Management Plan?	5
Initial TAM Plan Purpose	5
Asset Management Policy	6
Asset Inventory And Condition	6
Asset Management Enablers and Lifecycle Management Strategies	8
Investment Prioritization	
Asset Management Implementation	9
1. Introduction	10
About Pace	10
Pace History and Agency Milestones	11
Go Green with Pace	
Accountable Executive	14
TAM Plan Scope and Objectives	14
Relationship to Other Documents	
TAM Plan Period	
TAM Plan Requirements	
TAM Plan Structure	19
2. Transit Asset Management Policy & The Budget Process	20
2. Transit Asset Management Folicy & The Budget Flocess	_
Budget Process	
Budget ProcessBudget Amendment Process	22 23
Budget Process	22 23
Budget Process	22 23 24
Budget Process	22 23 24
Budget Process	22 23 24 25 25
Budget Process.  Budget Amendment Process.  Budget Calendar.  3. Levels of Service.  Overview.	22 23 24 25 25
Budget Process	
Budget Process.  Budget Amendment Process.  Budget Calendar.  3. Levels of Service.  Overview.  Services Characteristics.  Service Standards.	
Budget Process	
Budget Process.  Budget Amendment Process.  Budget Calendar.  3. Levels of Service.  Overview.  Services Characteristics.  Service Standards.  Service Measures.  4. Asset Inventory.	
Budget Process	
Budget Process.  Budget Amendment Process.  Budget Calendar.  3. Levels of Service.  Overview.  Services Characteristics.  Service Standards.  Service Measures.  4. Asset Inventory.  Asset Condition and Performance.  Condition Rating Methodology.	
Budget Process Budget Amendment Process Budget Calendar  3. Levels of Service Overview Services Characteristics Service Standards Service Measures  4. Asset Inventory Asset Condition and Performance Condition Rating Methodology Facility Condition Assessments 2020	
Budget Amendment Process Budget Calendar  3. Levels of Service.  Overview Services Characteristics. Service Standards. Service Measures.  4. Asset Inventory Asset Condition and Performance. Condition Rating Methodology. Facility Condition Assessments 2020. NTD Performance Targets FY2020.	
Budget Amendment Process Budget Calendar  3. Levels of Service Overview Services Characteristics Service Standards Service Measures  4. Asset Inventory Asset Condition and Performance Condition Rating Methodology Facility Condition Assessments 2020 NTD Performance Targets FY2020  5. Asset Management Enablers	
Budget Amendment Process Budget Calendar  3. Levels of Service Overview Services Characteristics Service Standards Service Measures  4. Asset Inventory Asset Condition and Performance Condition Rating Methodology Facility Condition Assessments 2020 NTD Performance Targets FY2020  5. Asset Management Enablers Overview	



6. Lifecycle Management Strategies	44
Overview	
RTA's New Role: Strategic Asset Management (SAM)	
Current Lifecycle Management Strategies	
Acquisition	
Maintenance	
Preventative Maintenance	
Corrective Maintenance	
Overhaul/Rehabilitation	
Disposal	47
7. Investment Prioritization	
Regional Transportation Authority (RTA) Performance Based Allocation Framework	
Pace Investment Prioritization Process	
Investment Prioritization Criteria and Scoring Ranges  Project-Based Prioritization of Capital Investments	
Estimation of Available Capital Funding	
Operations and Maintenance Costs	
8. Asset Management Implementation	58
TAM Plan Update and Evaluation	
Improvement Plan	
APPENDICES	
Introduction to the Appendices	69
A. Appendix A – NTD Annual Reporting	71
B. Appendix B – Facilities	82
C. Appendix C – Service Vehicle	131
D. Appendix D – Revenue Vehicle	137
E. Appendix E – Electrical, Signal, and Communications	159
F. Appendix F – Support Facilities & Equipment	167
G. Appendix G – Stations and Passenger Facilities	169
H. Appendix H – Abbreviations and Acronyms	172
I. Appendix I – Terms and Definitions	173



### **TABLES**

Table 1. TAM Plan Requirements and Section Correspondence	17
Table 2. Pace Services	26
Table 3. Condition Rating Methods	34
Table 4. Condition Rating Levels	35
Table 5. Condition Scores for Facilities Assessed in 2020	
Table 6. Core Business Processes	39
Table 7. Core Support Systems	
Table 8. Ranked List of Capital Projects, 2021	54
Table 9. Ranked List of Capital Projects, 2022-2025	
Table 10. Capital Improvement Program Expected Funds (\$000s), FY2021-2025	
Table 11. Operating and Maintenance Costs (\$millions), 2019-2023	
Table 12. Operating Expenses (\$000s)	
Table 13. TAM Plan Improvement Objectives - 2020	
FIGURES	
Figure 1. Transit Asset Lifecycle Diagram	6
Figure 2. Pace Quick Facts, Service Characteristics	
Figure 3. Pace Quick Facts, Ridership	
Figure 4. Pace Service Area	28
Figure 5. Pace's Strategic Goals and Performance Measures	30
Figure 6. Pace Rolling Stock – Active Fleet	
Figure 7. FY2020 Targets	
Figure 8. Asset Management Organization (as of 12/31/2020)	
Figure 9. 2021-2025 Suburban Service Capital Business Plan (000s) - Constrained	



### **EXECUTIVE SUMMARY**

#### **BACKGROUND**

In 2012, Moving Ahead for Progress in the 21st Century (MAP-21) was signed into law, requiring the Department of Transportation (DOT) Secretary to develop rules to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, and to establish performance measures, and the Fixing America's Surface Transportation (FAST) Act reaffirmed this requirement. The regulations apply to all Transit Providers that are recipients or subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 and own, operate, or manage transit capital assets used in the provision of public transportation.

On July 26, 2016, the Federal Transit Administration (FTA) published the Transit Asset Management (TAM) Final Rule requiring all Transit Providers to have an Initial TAM Plan in place by no later than October 1, 2018. Pace successfully met this federal requirement. The September 27, 2019, FTA Triennial Exit Conference identified the Pace Initial TAM Plan as "...exemplary amongst its peers, and near the top of those plans reviewed thus far".

The Final Rule also puts Transit Providers into two categories: Tier I, and Tier II. The following graphic shows the TAM Plan elements that are required by each category by Transit Provider. Since Tier II Transit Providers generally operate fewer complex systems, their TAM Plan requirements are not as extensive.

Inventory of Capital Assets
 Condition Assessment
 Decision Support Tools
 Investment Prioritization
 TAM and SGR Policy
 Implementation Strategy
 List of Key Annual Activities
 Identification of Resources
 Evaluation Plan

By FTA definition, Pace is considered a Tier I Transit Provider because we operate greater than 101 vehicles across all fixed route modes. The Tier I FTA applicability also meant Pace was required to comply with the more stringent requirement of a nine element TAM Plan in place by October 1, 2018, versus that of a four element Tier II transit provider TAM Plan requirement.

In 2019, the National Transit Database

(NTD) Transit Asset Management Asset Inventory Module (AIM) Forms were introduced to public transit agencies to start using for NTD Report Year (RY) 2018. The NTD TAM AIM Forms are prescriptive in nature and are required to be used to collect information on capital assets, and infrastructure. The FTA intent is to assemble a nationwide inventory to improve its ability to forecast capital costs for the future replacement, and necessary capital renewal activities of existing transit assets to maintain a State of Good Repair (SGR).

Pace has two NTD ID Reporting Numbers: 50113 for the Suburban Bus Division, and 50182 for the Regional ADA Paratransit Services. Pace is not required to set Performance Targets for ID



Reporting Number 50182 Regional ADA Paratransit Services because of no capital responsibility. Annually, Pace must upload a Full Reporter submission to the NTD Website Portal by April 30 since the Pace fiscal year aligns with the calendar year, January 1 through December 31. The Pace NTD TAM AIM Annual Report must include two parts, a Data Report, and a Narrative Report. The NTD RY2020 Report submittal can be found in **Appendix A - NTD Reporting.** 

#### WHY AN ASSET MANAGEMENT PLAN?

An Asset Management Plan provides an additional agency wide view of asset conditions to help Pace establish and maintain a State of Good Repair of its capital assets. This Asset Management 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 initiatives

#### **INITIAL TAM PLAN PURPOSE**

In October 2017, Pace awarded a five-year contract to WSP USA Inc., to provide TAM Plan consulting services to assist Pace with meeting our MAP-21 regulatory obligations of having an Initial TAM Plan in place by October 1, 2018, with a fully updated TAM Horizon Period Plan in place by no later than October 1, 2022. The WSP contract includes two Disadvantaged Business Enterprise (DBE) subconsultants, Kristine Fallon Associates, Inc. and Intueor Consulting, Inc. to provide support for the TAM Plan.

This Initial TAM Plan cover 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 Initial 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.

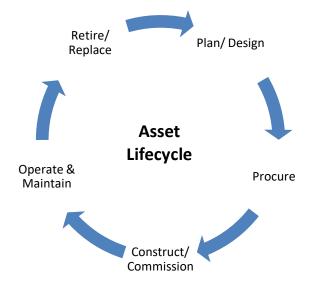


- Assess the capital and operating budgets necessary to support Pace's agency-wide performance goals which support the core business process of providing excellent public transportation service. The goals are to provide public transportation that is:
  - ✓ Safe
  - Reliable
  - ✓ Courteous
  - ✓ Efficient
  - ✓ Effective

#### ASSET MANAGEMENT POLICY

Pace's first Transit Asset Management Policy was successfully in place 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 the general Transit Asset Lifecycle diagram below.

Figure 1. 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



Initial TAM Plan provides preliminary condition information for all required asset classes, which will be updated in future iterations of the Initial TAM Plan.

Preliminary condition information reveals that many of our assets are in good condition. However, expansion or procurement of additional assets, such as garage space, 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.

At a high-level, Pace's Capital Asset Inventory includes:



769 Fixed Route Buses



594 Vanpool Vans



26 Passenger Facilities



448 Paratransit Vehicles



12 Administration and Operating Divisions



134 Community Transit & On-Demand Vehicles



243 Service Vehicles (Non-Revenue)



## ASSET MANAGEMENT ENABLERS AND LIFECYCLE MANAGEMENT STRATEGIES

The Accountable Executive with responsibility for carrying out Asset Management practices is Pace's General Manager and Chief Operating Officer, **Melinda J. Metzger.** Asset Management activities at Pace, including the development of this TAM Plan, are led by the Capital Infrastructure Program Manager and the Transit Asset Management Coordinator who are responsible for day-to-day activities related to the TAM Plan. Many other departments throughout Pace have been involved in the development of our Initial TAM Plan, and subsequent updates through participation in workshops and provision of relevant data and information and will continue to play an important role in managing Pace's assets moving forward.

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 our Initial TAM Plan, the Lifecycle Strategies for all major assets were reviewed, and a shift to more advanced Asset Management principles and planning has begun at Pace see Section 8 – Asset Management Implementation. To continue to implement innovative solutions to provide more reliable, efficient, and effective service, Pace must invest in both new and existing assets and technology. Pace's Bus on Shoulder (BoS) and PULSE rapid transit service programs are representative of the direction Pace is moving to increase reliability and on-time performance. However, innovative programs will require additional investment to enable Pace to provide these services while continuing to practice effective Asset Management.

#### 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 shifting agency priorities.

Annually in May, the Budget Planning and Analysis 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 Budget Planning and Analysis Department, in coordination with the user departments and Senior Staff, to prioritize the projects that will receive funding. The General Manager and Chief Operating Officer 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 which may inform future adjustments to our Capital Project Scoring process.

#### ASSET MANAGEMENT IMPLEMENTATION

At a minimum, our Initial TAM Plan will undergo a comprehensive annual update with a full review conducted every four years, with a preferred update cycle of every three years to coincide with the FTA Triennial Review process. This includes a review of asset condition, performance targets (as part of annual submissions to the National Transit Database), and a framework for Asset Management Improvement Objectives.

Building on our existing strengths in Asset Management, such as our established Capital Project Scoring process, we have made significant strides toward improving our Asset Management practices, see Section 8 – Asset Management Implementation. Pace has written and approved our Initial Transit Asset Management Policy and our Initial Transit Asset Management Plan and have contracted with WSP USA Inc to develop a condition assessment methodology for Facilities to comply with FTA requirements, conduct on-site condition assessments, and produce an annual report. The WSP USA Inc annual conditions reports conducted are in Appendix B – Facilities.

Pace looks forward to building on these first steps to grow a mature Asset Management system that will enable us to improve our State of Good Repair and ensure the successful operations of our Regional Bus and Paratransit services for many years to come.

**END OF EXECUTIVE SUMMARY** 



## 1. INTRODUCTION

This Initial 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, and environmentally responsible transit options for the residents of 284 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.

For its first few years, Pace focused on the unification efforts and renewing its 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 itself 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.





#### **GO GREEN WITH PACE**

One of Pace's priorities is to reduce our carbon footprint and improve the quality of our communities and environment:

- 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 its employees with \$75/month incentive to commute to work in a Vanpool, in addition to providing free bus passes to its 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.

For statistics on our Service and Ridership, reference Figure 2 and Figure 3. Quick Facts from the *Pace Suburban Service and Regional ADA Paratransit Budget, Final Program, November* 2020.



Figure 2. Pace Quick Facts, Service Characteristics<sup>1</sup>

				2019 Actual	2020 Estimate	2021 Budget
Fixed Route Service			Ridership (000s)			
Number of Fixed Routes (August 2020)	220		Fixed Route	26,192	13,951	15,771
Regular Routes	159		Demand Response*	968	579	579
Feeder Routes	42		Vanpool	1,361	799	820
Shuttle Routes	19		<b>Total Suburban Service</b>	28,521	15,329	17,170
(All Routes are Accessible)			Regional ADA*	4,281	2,173	2,587
Peak Period Vehicle Requirements	462		Total System	32,802	17,502	19,757
Vehicles in Service	769					
Number Accessible	769		Vehicle Miles (000s)			
Average Vehicle Age	7.5	years	Fixed Route	30,074	25,985	22,796
Number of Private Contractors	2		Demand Response	4,690	3,307	3,307
Number of Pace-owned Garages	11		Vanpool	7,985	3,862	5,305
Number of Pace Municipal Contractors	2		<b>Total Suburban Service</b>	42,749	33,154	31,408
			Regional ADA	29,251	16,334	20,610
Paratransit			Total System	72,000	49,488	52,018
Number of Communities Served	284					
Number of Local Demand Response Projects	48		Vehicle Hours (000s)			
Pace-owned Fleet Size (Includes Suburban ADA)	508		Fixed Route	1,962	1,728	1,543
Average Vehicle Age Community Transit Vehicles in Service (August	4.1	years	Demand Response	254	190	190
2020)	95		Vanpool	N/A	N/A	N/A
Contractor-owned Vehicles in City ADA Service	828		<b>Total Suburban Service</b>	2,216	1,918	1,733
			Regional ADA	2,155	1,271	1,332
Vanpool			Total System	4,371	3,189	3,065
Vans in Service (August 2020)—Traditional	115					
Vans in Service (August 2020) — Shuttle	24					
Vans in Service (August 2020)—Advantage	321					
Total Vans in Service	460					
Average Vehicle Age	4.5	years				

#### Other

Number of Pace Employees (Includes ADA Staff) 1,732.5

<sup>&</sup>lt;sup>1</sup> Pace Suburban Service and Regional ADA Paratransit Budget: 2021 Operating and Capital Program; 2021-2023 Business Plan for Operations; 2021-2025 Capital Business Plan. Final Program, November 2020 pg. 116



35,000 30,000 25,000 20,000 15,000 10,000 5,000 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Est. ■ Fixed Route ■ Demand ■ Vanpool ■ ADA Response

Figure 3. Pace Quick Facts, Ridership<sup>2</sup>

#### **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 Initial Transit Asset Management Plan is **Melinda Metzger**, General Manager/Chief Operating Officer.

#### TAM PLAN SCOPE AND OBJECTIVES

The purpose of this Initial 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.

<sup>&</sup>lt;sup>2</sup> Pace Suburban Service and Regional ADA Paratransit Budget: 2021 Operating and Capital Program; 2021-2023 Business Plan for Operations; 2021-2025 Capital Business Plan. Final Program, November 2020 pg. 117



- Document the key processes, organization, technology, and tools that enable effective Transit Asset Management.
- Establish action plans for improving Pace's approach to Transit Asset Management activities.

This Initial TAM Plan provides a baseline from which Pace will continue to build and improve our Transit Asset Management practices.

#### RELATIONSHIP TO OTHER DOCUMENTS

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

- In 2002, Pace adopted Vision 2020: The Blueprint for the Future, which has served as the agency's guiding planning document throughout the past two decades. Vision 2020 called for many ambitious major initiatives such as Expressway-based services, new vehicle technologies, and arterial rapid transit service now known as PULSE. Pace is currently developing a new strategic vision plan called *Driving Innovation*, The Pace Strategic Vision Plan. This Plan will succeed Vision 2020 and guide new and updated programs, services, and initiatives for the coming years.
- The Annual Operating and Capital Program; Three-Year Business Plan for Operations; and Five-Year Capital Business Plan which 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, 2019, and 2020.
- 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.

This Initial 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 has also published *Invest in Transit: the 2018-2023 Regional Transit Strategic Plan*.

Future updates to this Initial TAM Plan will 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 Initial TAM Plan and the annual budget due to these varying cycles, however, Pace will make appropriate updates to our Initial 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.<sup>3</sup> 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 1. TAM Plan Requirements and Section Correspondence** which lists the requirements of FTA's TAM Final Rule and describes how the contents of this document relate to these requirements.

<sup>&</sup>lt;sup>3</sup> 49 CFR 625.25 (a)



**Table 1. TAM Plan Requirements and Section Correspondence** 

	49 CFR PART 625	RELEVANT DOCUMENT SECTION	PAGE NUMBER (STARTING)
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	<b>625.25 (3)</b> A provider's Accountable Executive.	Accountable Executive	14
TAM Plan Core Elements	<b>625.25 (b)</b> A TAM Plan must include: <b>(1)</b> An inventory of the number and type of capital assets.	Asset Inventory	31 and Appendices
	(2) A condition assessment of those inventoried assets for which a provider has direct capital responsibility.	Asset Condition and Performance	34 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	48
	(4) A provider's project-based prioritization of investments,	Project-Based Prioritization of Capital Investments	52
	(5) A provider's TAM and SGR policy;	Transit Asset Management Policy	19
	(6) A provider's TAM Plan implementation strategy;	Asset Management Implementation	57
	(7) A description of key TAM activities that a provider intends to engage in over the TAM Plan horizon period;	Lifecycle Management Strategies	39, 43, 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	37
	(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	58



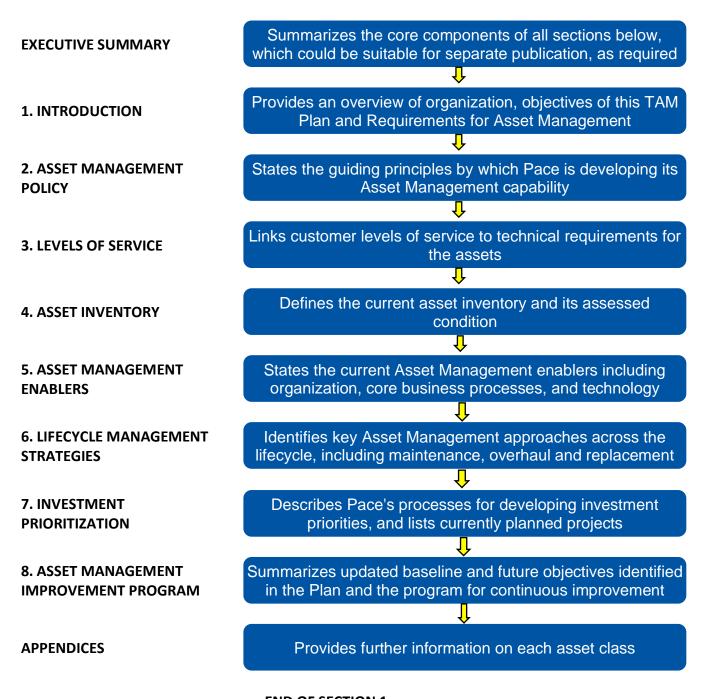
Table 1. TAM Plan Requirements and Section Correspondence (Continued)

	49 CFR PART 625	RELEVANT DOCUMENT SECTION	PAGE NUMBER (STARTING)
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.	Investment Prioritization	48
	<b>(b)</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.		
	<ul> <li>625.45 Setting performance targets for capital assets. (a) <i>General</i>. (1) A provider must set one or more performance targets for each applicable performance measure.</li> <li>(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</li> </ul>		35



#### TAM PLAN STRUCTURE

The outline below describes the sections in our Transit Asset Management Plan.



**END OF SECTION 1** 



# 2. TRANSIT ASSET MANAGEMENT POLICY & THE BUDGET PROCESS

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.

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

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

Internal Services-01

Section: CFI 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 establishing 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 shall 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 is administered by Pace's Internal Services Department, with input and assistance from other Pace Departments, as required.

- A. TAM Plan: In accordance with Moving Ahead for Progress in the 21<sup>st</sup> 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 aides 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 target 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

- 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

- 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.



V	FFFFCTI\	/F DATE

This Policy shall be in effect on the date on which it is signed by Pace's General Manager/Chief Operating Officer.

Melinda J. Metzger,

Accountable Executive General Manager Chief Operating Officer

orner operating officer

2019

Date

#### **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 its 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.

With the amendment of the RTA Act in 2008 to address ADA Paratransit, a specific recovery ratio of 10% was established for the ADA Paratransit program budget. The ADA recovery ratio is independent of the ratios set by the RTA for Pace's suburban service.

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 and program document and hold at least one public hearing on the budget in each of the six counties. Due to its 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 consolidated regional budget must also achieve certain criteria. Chief among them is the requirement for the consolidated budget to cover 50% of its operating costs from fares and other operating revenue. This is the regional recovery rate requirement. 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 AMENDMENT PROCESS**

The Pace Board may make additional appropriations, transfers between line items, and other changes to its budget at any time, if the changes do not alter the basis upon which the RTA made its balanced budget determination. Budget amendments are made from time to time by the Pace Board and are generally accomplished by revision to the annual appropriations



ordinance. In the event a 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.

Budget amendments which do not impact the RTA balanced budget determination basis are provided to the RTA for information purposes. 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. Generally, 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 time frame. Additionally, the RTA may require the service boards to submit amended budgets to reflect a revision to public funding or the recovery ratio, as deemed necessary by the RTA. The service boards have 30 days from date of notice to submit a revision. There are no public hearing requirements for budget amendments which do not affect fares or services.

#### **BUDGET CALENDAR**

Below are key dates and events in the Pace 2021 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.

#### 2021 Budget Development Calendar

Date (2020)	Event
May 15	Release budget call to Agency management
May-August	Budget discussions/meetings with RTA and other Service Boards
June 12	Budget call requests due from management
June-August	Staff develops a preliminary budget
September 10	RTA to set 2021 Funding and Recovery Marks
September 16	Pace Board meets to discuss preliminary 2021 budget
September 19-30	Staff develops Proposed 2021 Budget per Board directives
October 16	Staff submits Proposed 2021 Budget to RTA
October 21	Pace Board releases Proposed 2021 Budget for Public Hearing
October 23-30	Public Hearings on Pace's Proposed 2021 Budget
November 12	Pace Board adopts Final 2021 Budget
November 15	Submit Final 2021 Budget to RTA
November	RTA evaluates Pace budget for compliance
November 19	RTA Finance Committee Review
December 17	RTA scheduled to approve/adopt 2021 Budget for Pace

#### **END OF SECTION 2**



## 3. LEVELS OF SERVICE

This section of the Initial 2018 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.

Prior to the COVID-19 pandemic Pace operated 224 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 35 million annual rides. An overview of our Service Characteristics, and Service Area are described below and in the following pages.

#### **SERVICES CHARACTERISTICS**

#### **Fixed Route**

159 regular, 42 feeder, 19 shuttle, and numerous seasonal routes are operated by Pace pre COVID-19 pandemic. These routes serve 203 communities and carry over 1.625 million rides per month utilizing 462 vehicles during peak periods. All routes are fully wheelchair accessible.

#### **Demand Response**

362 lift-equipped vehicles are utilized to provide curb-to-curb service to approximately 86,400 riders each month prior to COVID-19 or 48,243 riders each month, down from last year due to COVID-19. Most of the ridership are elderly and/or people with disabilities. Pace contracts directly with private service providers for the operation of 35 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 two On Demand projects. These projects provide services to approximately 284 communities throughout the six-county area.



#### **Suburban ADA Paratransit**

362 lift-equipped vehicles are utilized to provide origin to destination service to approximately 72,557 riders each month prior to COVID-19 or 43,685 riders each month, down from last year due to COVID-19. 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.

847 vehicles, as well as taxi providers, are used to provide service to approximately 210,960 riders each month prior to COVID-19 or 143,167 riders each month, down from last year due to COVID-19.

**Table 2. 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 87 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 in 48 different communities by directly contracting with two 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 ( <b>TAP</b> ). This program provides subsidized taxi service to ADA eligible riders.

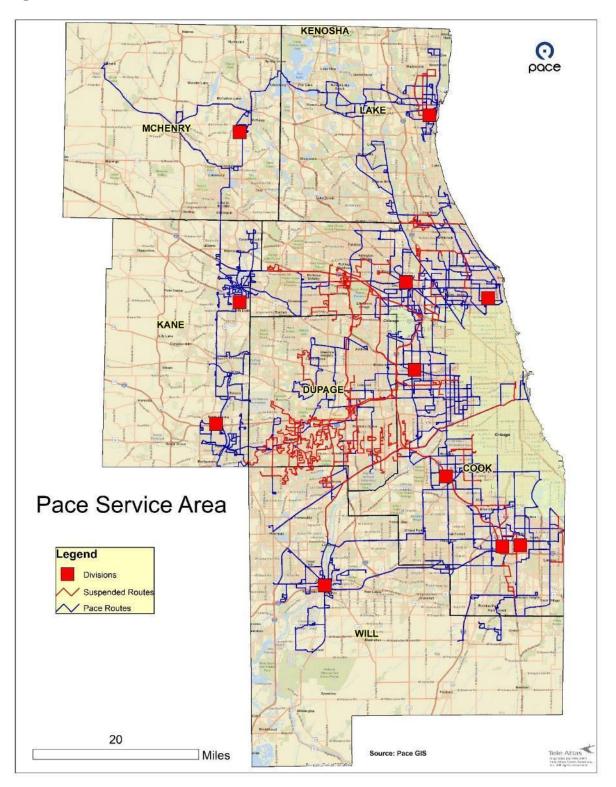


### **Table 2. Pace Services (Continued)**

TYPE	DESCRIPTION
Demand Response	Pace partners in 69 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.



Figure 4. 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

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



Figure 5. Pace's Strategic Goals and Performance Measures<sup>4</sup>

		2019	2020	2021
Safety		Actual	Estimate	Projected
Goal: Provide Safe Public Transportation Services				
Measure(s):	Performance Goal			
Accidents per 100,000 Revenue Miles	Less than 5	7.43	6.00	5.20
Reliability				
Goal: Provide Reliable Public Transportation Services				
Measure(s):	Performance Standard			
On-Time Performance	Greater than 85%	72.60%	76.90%	77.00%
Actual Vehicle Miles per Road Call	Greater than 14,000	13,278	17,400	17,800
Percent Missed Trips per Total Trip Miles	Less than .5%	0.16%	0.30%	0.25%
Courtesy				
Goal: Provide Courteous Public Transportation Services				
Measure(s):	Performance Standard			
Complaints per 100,000 Passenger Miles	Less than 4	4.40	4.20	4.10
Website Hits on Web Watch Site	Increase over prior period	-6.40%	-31.30%	20.00%
Efficiency				
Goal: Provide Efficient Public Transportation Services				
Measure(s):	Performance Standard			
Revenue Miles per Revenue Hour	Greater than 17	17.29	17.31	20.36
Revenue Miles per Total Operator Pay Hours	Greater than 10*	11.36	10.44	11.59
Expense per Revenue Mile	Less than \$6.50*	\$4.67	\$5.24	\$5.20
Expense per Revenue Hour	Less than \$125.00*	\$80.75	\$90.70	\$105.89
Recovery Ratio	Greater than 18%	28.00%	12.40%	16.30%
Subsidy per Passenger	Less than \$4.00	\$3.13	\$7.10	\$6.37
Effectiveness				
Goal: Provide Effective Public Transportation Services				
Measure(s):	Performance Standard			
Ridership	Increase from prior period	-5.35%	-46.74%	14.93%
Passenger Miles per Revenue Miles	Greater than 9*	6.77	3.74	4.00
Productivity (Passengers per Revenue Hour)	Greater than 24*	18.57	11.18	13.92
Ridership per Revenue Mile	Greater than 1.5*	1.07	0.65	0.68
Vanpool Units in Service	Increase from prior period	-3.00%	-49.00%	33.00%
* Performance Goal Under Evaluation				

Below performance goal

Within 10% of performance goal Meets/exceeds performance goal

#### **END OF SECTION 3**

<sup>&</sup>lt;sup>4</sup> Pace Suburban Bus. *Suburban Service and Regional ADA Paratransit Budget: 2021 Operating and Capital Program; 2021-2023 Business Plan for Operations; 2021-2025 Capital Business Plan.* Final Program, November 2020, Appendix D Performance Measures p76.



## 4. ASSET INVENTORY

Pace's robust portfolio of assets enables transit service across 3,446 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;

At a high-level, Pace asset inventory includes:



769 Fixed Route Buses



594 Vanpool Vans



26 Passenger Facilities



448 Paratransit Vehicles



12 Administration and Operating Divisions



134 Community Transit & On-Demand Vehicles



243 Service Vehicles (Non-Revenue)

An illustrative example of Pace's Rolling Stock asset inventory is provided in **Figure 6. Pace Rolling Stock – Active Fleet**. Additional FY2020 information on each asset class can be found in the Appendices.



Figure 6. Pace Rolling Stock – Active Fleet<sup>5</sup>

Fixed Route (Fully Accessible)				Vanpool					
	Model					<u>Model</u>			
<u>Manufacturer</u>	<u>Year</u>	# of Vehicles	Age	Length	Manufacturer	<u>Year</u>	# of Vehicles	Age	Length
NABI	2003	10	17	40'	Ford E350	2005	1	15	18'
NABI	2005	53	15	40'	Ford E350	2007	1	13	18'
ElDorado	2007	101	13	30'	Ford E350	2009	3	11	20'
ElDorado	2008	38	12	30'	Ford E350	2010	9	10	20'
ElDorado	2009	24	11	30'	Dodge Caravan	2011	3	9	17'
ElDorado Aerolite	2009	1	11	24'	Ford E350	2011	21	9	19'
ElDorado	2010	58	10	30'	Dodge Caravan	2012	11	8	17'
Orion Hybrid	2011	2	9	30'	Dodge Caravan	2013	41	7	17'
ElDorado	2011	4	9	30'	Ford E350	2013	100	7	18'-20'
ElDorado	2013	77	7	40'	Ford E350	2016	50	4	19'
MCI	2013	13	7	40'	Dodge Caravan	2016	15	4	17'
ElDorado Aerolite	2014	3	6	25'	Ford Transconnect	2016	19	4	20'
ElDorado	2014	37	6	40'	Dodge Caravan	2017	182	3	17'
ElDorado	2015	47	5	40'	Ford Transit	2017	54	3	20'
MCI	2015	9	5	40'	Ford Transit	2018	84	2	19'-20'
ElDorado CNG	2015	19	5	40'	Total		594		
ElDorado	2016	90	4	40'	Average Age			4.5	years
ElDorado	2017	86	3	40'					
ElDorado Trolley	2017	7	3	30'					
ElDorado CNG	2017	71	3	40'					
MCI	2017	8	3	40'					
ElDorado CNG	2018	11	2	40'					

Total 769

Average Age 7.5 Years





<sup>&</sup>lt;sup>5</sup> Pace Suburban Bus. *Suburban Service and Regional ADA Paratransit Budget: 2021 Operating and Capital Program; 2021-2023 Business Plan for Operations; 2021-2025 Capital Business Plan.* Final Program, November 2020, Appendix D Performance Measures p60.



#### Figure 6. Pace Rolling Stock - Active Fleet (Continued)<sup>6</sup>

#### Paratransit (Fully Accessible)

## Community Transit & On Demand Vehicles Model

	Model	<u># of</u>		
Manufacturer	<u>Year</u>	<b>Vehicles</b>	Age	Length
ElDorado Aerotech	2009	5	11	23'
ElDorado Aerolite	2010	3	10	22'
ElDorado Aerotech	2010	18	10	23'
ElDorado Aerotech	2014	145	6	25'
Champion Challenger	2014	78	6	22'
Champion Crusader	2015	2	5	23'
ElDorado Aerotech	2016	49	4	25'
ElDorado Aerotech	2017	120	3	25'
ElDorado Aerotech	2018	28	2	25'
Total		448		
Average Age			5.0	years

	IVIOUEI			
Manufacturer	<u>Year</u>	# of Vehicles	Age	Length
Champion Crusader	2007	1	13	21'
Champion Crusader	2009	6	11	21'
Ford E350	2011	3	9	19'
Champion Crusader	2012	5	8	21'
Dodge Caravan	2012	1	8	17'
Dodge Caravan	2013	10	7	17'
Ford E350	2013	18	7	18'-19'
Champion Crusader	2015	17	5	23'
Ford Transit	2016	1	4	20'
Dodge Caravan	2017	3	3	17'
Champion Crusader	2017	35	3	23'
Ford Transit	2017	1	3	19'
Champion Crusader	2018	3	2	21'-23'
Ford Transit	2018	9	2	19'
Champion Crusader	2019	21	1	21'
Total		134		
Average Age			4.5	Years





<sup>&</sup>lt;sup>6</sup> Pace Suburban Bus. *Suburban Service and Regional ADA Paratransit Budget: 2021 Operating and Capital Program; 2021-2023 Business Plan for Operations; 2021-2025 Capital Business Plan.* Final Program, November 2020, Appendix D Performance Measures p61.



#### 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 (SGR) 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 National Transit Database (**NTD**) and used to measure performance against targets. Table 3. Condition Rating Methods describes the condition rating method required by the FTA and used by Pace.

**Table 3. Condition Rating Methods** 

	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

In **Table 4. Condition Rating Levels** are the WSP USA Inc. Condition Assessment scores they used which are based on the FTA-defined condition rating levels.

<sup>&</sup>lt;sup>7</sup> 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.



**Table 4. 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

#### **FACILITY CONDITION ASSESSMENTS 2020**

In **Table 5. Condition Scores for Facilities Assessed in 2020** are the additional nine Facilities inspected as part of our four-year cycle of condition assessments to complete another quarter of Pace's Facilities. The Facilities assessed this year are Administrative/Maintenance, or Passenger Facilities.

Table 5. Condition Scores for Facilities Assessed in 2020

	PRIOR TO 2020 CONDITION	2020 CONDITION RATING	
ASSET LOCATION NAME	RATING		COMMENTS ON DIFFERENCES
ADMINISTR	ATIVE/MAIN	TENANCE FA	CILITIES
Pace Administration Headquarters	4	4	No change in score.
Northwest Division	1	2	Scores slightly increased; rounding brought score up a grade.
West Division	2	4	Improvement campaign completed in 2020.
P	ASSENGER	FACILITIES	
Northwest Transportation Center Facility	4	3	Scores slightly decreased; rounding brought score down a grade.
Northwest Transportation Center Park-n-Ride	4	3	Scores slightly decreased; rounding brought score down a grade.
Elgin Transportation Center	4	4	No change in score.
Bridgeview Transit Center Facility	5	5	No change in score.
Bridgeview Transit Center Park-n-Ride	5	5	No change in score.
I-90 Barrington Road Park-n-Ride	5	5	No change in score.
I-90 Barrington Road Pedestrian Overpass Bridge and Bridge Access Buildings	5	5	No change in score.
Hillside Park-n-Ride	2	3	Scores slightly increased; rounding brought score up a grade.
Plainfield Park-n-Ride	5	5	No change in score.
Plainfield Passenger Shelter Building	5	5	No change in score.



#### NTD PERFORMANCE TARGETS FY2020

In compliance with the TAM Final Ruling, **Figure 7. FY2020 Targets** were set by Pace. For additional information see **Appendix A – NTD Annual Reporting.** 

#### Figure 7. FY2020 Targets

NTD ID	50113	
Reporter Name	Pace - Suburban Bus Division	
Report	2020 (Original Submission)	

# Transit Asset Management Performance Measure Targets (A-90)

#### 1) Rolling Stock - Percent of revenue vehicles that have met or exceeded their useful life benchmark

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
AB - Articulated Bus	N/A			N/A
AO - Automobile	N/A			N/A
BR - Over-the-road Bus	0.00	0.00	0.00	0.00
BU - Bus	12.72	18.31	-5.59	14.86
CU - Cutaway	61.67	61.16	0.51	77.11
DB - Double Decker Bus	N/A			N/A
MV - Minivan	17.01	22.57	-5.56	28.02
OR - Other	N/A			N/A
SB - School Bus	N/A			N/A
SV - Sports Utility Vehicle	N/A			N/A
VN - Van	39.10	31.67	7.43	41.90

#### 2) Equipment - Percent of service vehicles that have met or exceeded their useful life benchmark

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
Automobiles	36.17	57.75	-21.58	89.74
Trucks and other Rubber Tire Vehicles	44.14	51.16	-7.02	41.48
Steel Wheel Vehicles	N/A			N/A

#### 3) Facility - Percent of facilities rated below 3 on the condition scale

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
Passenger / Parking Facilities	19.23	16.67	2.56	16.67
Administrative / Maintenance Facilities	25.00	16.67	8.33	16.67

#### **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.

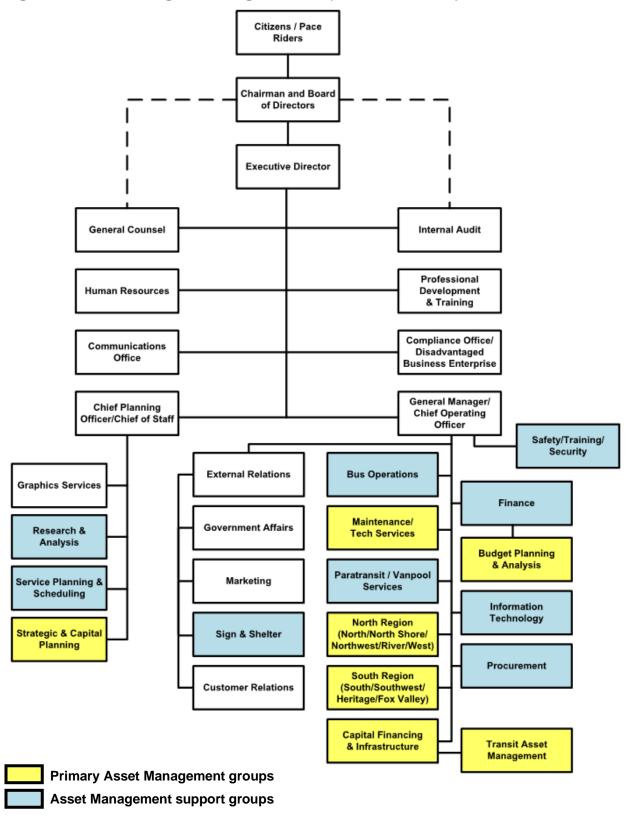
#### ORGANIZATION AND RESOURCE PLAN

**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 General Manager/Chief Operating Officer 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 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 (as of 12/31/2020) depicts Asset Management responsibilities at Pace.



Figure 8. Asset Management Organization (as of 12/31/2020)





#### **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 6. Core Business Processes** depicts the existing key Asset Management processes and identifies future improvement initiatives. The processes are grouped according to the eight pathways against which Pace was assessed by WSP in their GAP Analysis: alignment to organizational goals; control of assets; Asset Management planning; capital planning and delivery; maintenance planning and delivery; operations and incident management; informed decisions; resource capabilities.

**Table 6. Core Business Processes** 

0005	
CORE BUSINESS	
PROCESS	
	DESCRIPTION
	Alignment to Organizational Goals
Strategic Planning	Pace developed our long-term strategic plan, <b>Vision 2020</b> in 2001, and an update to it, <b>Driving Innovation, The Pace Strategic Vision Plan</b> is currently under development and is anticipated to be adopted by the Pace Board in late 2021.
	Vision 2020 has guided many of Pace's actions over the past twenty years, and <i>Driving Innovation</i> is expected to do the same over the next twenty. Shorter-term planning is represented in Pace's annual budget, which sets out annual goals and an outline of how Pace will achieve them.
Management Office	To spend capital dollars and deliver projects that will provide significant and substantive benefits to its customers, Pace will establish a Priority Project Management Office (PPMO) in 2021. This office will coordinate Planning, Engineering, Finance, Procurement, Outreach, and other functions related to the delivery of the Agency's upcoming major capital projects and strategic initiatives, including <i>Driving Innovation</i> .
	The PPMO will complement existing functions within the agency's administrative structure, and in general will help streamline processes and outcomes.  Ultimately, this office will help ensure successful delivery of these important projects in a timely manner and set the agency on a path to expand transit options and improve the quality of Pace service throughout the region.
Planning and Scheduling	Pace's Service Planning and Scheduling group (within the Strategic Services Department) 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.
	Control of Assets
Management	Failure rates are tracked and used to estimate required spares ratios to mitigate risk. In addition, plans are in place (and regularly used) to mitigate the effects of weather-related risks on service.



**Table 6. Core Business Processes (Continued)** 

CORE	,				
BUSINESS					
PROCESS GROUPS	DESCRIPTION				
Citoti C	Control of Asset (Continued)				
	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.				
	Asset Management Decision Making				
Asset Management Plans	This document represents Pace's Initial Asset Management Plan, establishing a baseline on which future iterations will build. Refer to <b>Section 8. Asset Management Implementation</b> for more detail.				
Asset Strategies	Lifecycle Strategies for Pace's assets have been formalized as part of this plan, building on existing practices. Refer to <b>Section 6. Lifecycle Management Strategies</b> for more detail.				
	Capital Planning and Delivery				
Capital Expenditure Evaluation	Since 1991 Pace has an established and documented evaluation process in place which has been adjusted over time to incorporate lessons learned and reflect changing priorities Refer to <b>Section 7. Investment Prioritization</b> 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, which are then scored by an Evaluation Committee of an agreed upon size, appointed by the General Manager/Chief Operating Officer.				
0	The Budget Planning and Analysis Department provides score information to Senior Staff who decide which projects to include, in coordination with Pace's Board of Directors, who must ultimately 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.				
	Pace's asset commission and handover processes include ensuring that required materials and documentation have been received, training, including warranties, manuals, waivers, etc.				



**Table 6. Core Business Processes (Continued)** 

CORE	
BUSINESS PROCESS	
GROUPS	DESCRIPTION
	Maintenance Planning and Delivery
Planning and	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 Materials Management 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.
	Operations and Incident Management
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 works with local authorities as needed to implement the recommendations.
	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.
	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.



#### **Table 6. Core Business Processes (Continued)**

CORE BUSINESS PROCESS GROUPS	DESCRIPTION
	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 Professional Development continued by staff receiving weekly notification of free virtual training and development opportunities. Also, Pace held Microsoft suite Monday virtual classes too.
	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 can restrict vendors from bidding, either indefinitely or temporarily, due to severe performance issues.

#### **CORE ASSET MANAGEMENT SUPPORT SYSTEMS**

**Table 7. 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 7. Core Support Systems** 

SYSTEM	DESCRIPTION	DEPARTMENT
Business Suite (EBS)	Oracle EBS Suite 12.1.3 Fleet maintenance software used for fixed route vehicles maintained by Pace.  Maintenance of Paratransit, Vanpool, and Non-Revenue Vehicles are not recorded in Oracle EBS but in contractor hosted solutions.	Vehicle Maintenance
Asset	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)	Farebox (Revenue Collection), Bus Operations, and Safety Training	Finance, Paratransit/Vanpool Services, Bus Operations, and Safety/Training/Security
	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	Used for paratransit scheduling and operations. Paratransit operations uses Trapeze to track service-related issues and performance measures. Paratransit contractors have their own communications system, using Motorola radios that were updated to use Trapeze. There are no interfaces between Oracle eAM and Trapeze.	Paratransit Operations



**Table 7. Core Support Systems(Continued)** 

SYSTEM	DESCRIPTION	DEPARTMENT
System (IBS)	Fixed route uses Intelligent Bus System (IBS), a satellite-based communications technology, to improve the tracking of buses, collection of data, and communication between Pace and our drivers and passengers. IBS interfaces with TRAPEZE.	Fixed Route Operations, Safety/Training/Security
	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, Operations
	An Oracle module used by Human Resources to store information such as organization, location, job, position, grade, and more.	Human Resources
HASTUS	Schedulers use a program called HASTUS for scheduling different "work pieces" that need to be assigned to the different departments. 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
	Third party fuel and mileage monitoring system for Revenue Vehicles.	Operations
	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
System Upgrade	Pace is currently in the process of replacing its 37-year-old fareboxes. Pace has maintained these fare collection devices well-beyond their standard 15-year lifespans, 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, and is expected to be awarded in late 2021 and completed between late 2022 and early	Bus Operations
DriveCam	2023.  All Pace buses are equipped with constantly recording internal security cameras and DriveCam technology that enables external recording of eight minutes 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.	Bus Operations

#### **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 (SGR), 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 their consultant, WSP. The purpose of this Initial 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.

#### RTA'S NEW ROLE: STRATEGIC ASSET MANAGEMENT (SAM)

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 State of Good Repair 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**.

As part of its financial oversight function the Regional Transportation Authority (RTA), has historically maintained an interest in ensuring that the Service Boards (Pace, Metra, and CTA) 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 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 required to maintain TAM programs, plans, and datasets for submission to the National Transit Database (NTD).

#### 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, IDOT, the RTA, or 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 Financing & 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 Stations, 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 is 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 to be 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**

Buses receive rehabilitations at mid-life, which are performed by third-party vendors. 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.

If the proceeds from the asset exceed a certain dollar value or have remaining useful life, then the Grants Administration Department will coordinate repayment to the funding agency and obtain concurrence. Pace has an agreement with the FTA that allows Pace to retain all funds due back to the FTA, with the assurance that Pace acquire new assets with the funds and give the FTA 100% equity in those assets.

#### **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

In December of 2019, the RTA Board passed an ordinance stipulating that capital funding allocations to each of the three Service Boards will be performance-based, beginning in 2025.

To develop this, a committee comprised of representatives of the RTA and Service Boards met throughout the first half of 2020 to create a Performance Bases Allocation Framework that would better communicate the goals, processes, and outcomes of capital programming in a transparent manner. This Framework, which was released for public comment in July 2020, 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.

In September 2020, the RTA Board deferred action on adoption based on public comments and tasked the committee with further developing the framework in 2021.

#### PACE INVESTMENT PRIORITIZATION PROCESS

Pace's Investment Prioritization method, in the following pages, aligns with our Capital Project Scoring Criteria, and the process currently used to select projects during the annual budget cycle. It is Pace's intent to align our Five-Year Capital Program with our Investment Prioritization forecast whereby exceeding the FTA requirement of updates to the overall TAM Plan every four years. The General Manager and Chief Operating Officer will appoint a Cross-Functional Evaluation Committee of an agreed to size.

Pace's capital planning process begins with the RTA's Budget Call. The Budget Planning and Analysis Department sends out instructions and forms—some with subsets for different dollar thresholds representing different asset classes—to Senior Staff and relevant department managers, who are required 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 Budget Planning and Analysis Department collects, compiles, and catalogs all complete requests. The Budget Department implements a scoring process across all the projects. A version of this process has been in place since 1991, though it has been adjusted over the years to incorporate lessons learned and reflect changing priorities.

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 Budget Planning and Analysis Department meet with Senior Staff to present recommendations/ information 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 Budget Planning and Analysis 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

<sup>&</sup>lt;sup>8</sup> FTA Transit Asset Management Final Rule, Vol. 81, No. 143, July 26, 2016



RTA in October followed by the final Capital Program in November. The RTA Board adopts the consolidated regional budget and Capital Program in December.

#### **YEAR ONE**

Within each asset category reside individual asset class projects which are scored by predetermined criteria and scoring ranges assigned to achieve a maximum of 39 total points in year one. Each of the evaluators' scores are averaged to produce an overall asset category score to assign a ranking within the year-one program.

After the evaluation of projects, the Budget Planning and Analysis 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 Regional Transportation Authority (RTA) Marks which are adopted no later than the September 15 statutory funding deadline.

#### YEAR TWO THROUGH YEAR FIVE

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 projections (Marks). Listed below is an overview of the current year two through year five prioritization process.

**Decision Support Tool Steps:** 

- Define Unconstrained needs
- Enter the RTA Marks
- Reduce quantities/remove projects (to balance to the RTA marks) based on:
  - Scoring
  - Funding type (restrictive by scope/capital eligibility)
  - Available Staff Resources/Project timelines (phasing)
  - Dependencies on other projects (sequencing)
  - Historical funding levels, trends, or forecasts

Lastly, additional criteria for years two through five may be vetted during this Initial effort and incorporated over the course of the TAM Plan horizon period.



#### INVESTMENT PRIORITIZATION CRITERIA AND SCORING RANGES

The following criteria are used by the Budget Team during the scoring phase of the capital project prioritization process:

#### 1. RIDERSHIP

Each passenger counted each time that person boards a transit vehicle.

Score Range: 0-2

0 = Negative	1 = Neutral	2 = Positive
--------------	-------------	--------------

#### 2. RECOVERY RATIO

Operating revenues divided by operating expenses to calculate a percentage that measures efficiency.

Score Range: 0-2

0 = Negative	1 = Neutral	2 = Positive
--------------	-------------	--------------

#### 3. PASSENGER BENEFITS

Improvements to Safety; Service Reliability; Capacity; Passenger Comfort and/or Convenience; Accessibility.

Score Range: 0-5

Each of the criteria can be awarded up to one point.

#### 4. NEW, NORMAL REPLACEMENT, REHABILITATION, URGENT

New is defined as an asset that is not currently in the inventory (i.e., not a replacement). Normal Replacement is ongoing replacement of existing assets as they reach the end of their expected useful life. Rehabilitation is ongoing rehabilitation needs for existing assets as required to maintain a State of Good Repair (SGR). Urgent is an asset that is well beyond its useful life or is adversely affecting daily operations.

Score Range: 0, 9, or 10

0 = New	9 = Normal Replacement	9 = Rehabilitation	10 = Urgent
---------	------------------------	--------------------	-------------

#### 5. PRIOR OR PROGRAMMED COMMITMENT

A Prior Commitment is a project committed to by a previous funding source that may require additional funding in the current and/or out years. A Programmed Commitment is a high-level agency commitment which may include, but is not limited to, Intergovernmental Agreements (IGA) or contracts with other entities.

Score Range: 0 or 10

0 = Not a Prior or	10 = Prior Commitment	10 = Programmed
Programmed Commitment		Commitment



#### 6. SAFETY/SECURITY, MISSION CRITICAL, OR REGULATORY

An internal project that addresses Safety/Security concerns or to comply with the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), or the Illinois Emergency Management Agency (IEMA). A Mission Critical asset or initiative is essential to the daily business operation to minimize disruption or shutdown. A Regulatory mandated project is to comply with federal/state regulations, municipal code, or current industry standards such as the Environmental Protection Agency (EPA) or the Americans with Disabilities Act (ADA).

Score Range: 0 or 10

0 = Not Safety/Security, Mission	10 =	10 = Mission	10 =
Critical or Regulatory	Safety/Security	Critical	Regulatory

# PROJECT-BASED PRIORITIZATION OF CAPITAL INVESTMENTS

Due to the timing of the annual budget process, **Figure 9. 2021-2025 Suburban Service Capital Business Plan (000s) - Constrained**, on the following page, summarizes Pace's final five-year capital program by asset class, as of November 2020. 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:

- Fixed Route Buses, Paratransit Vehicles, Community Transit Service (CTS) Vehicles, and Vanpool Vehicles
- Administrative and Maintenance Facilities improvements, and preventative maintenance for Support Facilities and Equipment
- Passenger Station Facility improvements



Figure 9. 2021-2025 Suburban Service Capital Business Plan (000s) - Constrained<sup>9</sup>

	<u>2021</u>	2022	<u>2023</u>	2024	2025	<u>Total</u>
Rolling Stock Quantities						
Fixed Route Diesel Buses	0	15	36	27	0	78
Fixed Route CNG Buses	115	18	0	0	0	133
Fixed Route Coach Buses	0	0	0	13	0	13
Paratransit Vehicles	28	105	29	136	0	298
Community Transit/On Demand Vehicles	8	27	27	27	0	89
Vanpool Vehicles	0	0	82	82	0	164
Rolling Stock						
Fixed Route Diesel Buses	\$0	\$7,500	\$18,000	\$13,500	\$0	\$39,000
Fixed Route CNG Buses	63,250	9,900	0	0	0	73,150
Fixed Route Coach Buses	0	0	0	9,750	0	9,750
Paratransit Vehicles	1,983	7,403	2,043	9,564	0	20,993
Community Transit/On Demand Vehicles	600	2,025	2,025	2,025	0	6,675
Vanpool Vehicles	0	0	3,280	3,280	0	6,560
Engine/Trans Retrofits & Associated Capital	7,597	18,421	20,580	8,498	0	55,096
Subtotal	\$73,430	\$45,249	\$45,928	\$46,617	\$0	\$211,224
Electrical/Signal/Communications						
Transit Signal Priority	\$1,386	\$1,469	\$1,553	\$2,000	\$0	\$6,408
Intelligent Bus System	100	2,300	1,500	2,350	0	6,250
Subtotal	\$1,486	\$3,769	\$3,053	\$4,350	\$0	\$12,658
Support Facilities & Equipment						
Improve Support Facilities	\$0	\$500	\$1,500	\$1,500	\$0	\$3,500
Computer Systems/Hardware & Software	1,100	1,000	1,500	1,500	0	5,100
Support Equipment/Non-Revenue Vehicles	500	500	850	500	0	2,350
Farebox System Replacement	6,000	4,000	0	0	0	10,000
Northwest Wheeling Garage	10,000	0	0	0	0	10,000
Plainfield Garage	8,300	0	0	0	0	8,300
North Shore Division Expansion	0	2,000	18,000	0	0	20,000
Southwest Division Expansion	0	2,000	16,000	0	0	18,000
Office Equipment/Furniture	0	0	500	0	0	500
Subtotal	\$25,900	\$10,000	\$38,350	\$3,500	\$0	\$77,750
Stations & Passenger Facilities						
Improve Passenger Facilities	\$120	\$500	\$1,500	\$10,475	\$0	\$12,595
Bus Stop Shelters/Signs	1,330	1,000	1,500	1,500	0	5,330
Bus Tracker Signs	600	550	1,500	1,000	0	3,650
Pulse Dempster Line Easements	600	0	0	0	0	600
I-55 Park-n-Rides	0	750	6,000	0	0	6,750
I-294 Stations & Park-n-Rides	0	0	3,500	31,500	0	35,000
Subtotal	\$2,650	\$2,800	\$14,000	\$44,475	\$0	\$63,925
Miscellaneous						
Vision Plan Implementation Study	\$1,000	\$0	\$0	\$0	\$0	\$1,000
Project Management	1,000	1,000	1,000	1,000	0	4,000
Transit Asset Management	400	0	0	0	0	400
Subtotal	\$2,400	\$1,000	\$1,000	\$1,000	\$0	\$5,400
Grand Total - Constrained	\$105,866	\$62,818	\$102,331	\$99,942	\$0	\$370,957

<sup>9</sup> Pace Suburban Bus. Suburban Service and Regional ADA Paratransit Budget: 2021 Operating and Capital Program; 2021-2023 Business Plan for Operations; 2021-2025 Capital Business Plan. Final Program, November 2020, p 44.



Based on the prioritization methodology described in the previous section, see **Table 8. Ranked** List of Capital Projects, 2021 and Table 9. Ranked List of Capital Projects, 2022-2025.

Table 8. Ranked List of Capital Projects, 2021

PROJECT RANK	PROJECT NAME	ASSET CATEGORY	AMOUNT REQUESTED	AVERAGE SCORE
1	CNG buses (replacement)	Rolling Stock	\$63,250,000	25
2	Farebox system replacement	Support Facilities & Equipment	\$6,000,000	24.75
3	TAM consulting	Miscellaneous	\$400,000	24
4	Wheeling Garage construction	Support Facilities & Equipment	\$10,000,000	23.5
5	Hastus consulting and licenses	Support Facilities & Equipment	\$710,000	20.25
6	Bus Tracker - Pulse vertical marker screens	Stations & Passenger Facilities	\$75,000	20
7	Paratransit vehicles (replacement)	Rolling Stock	\$10,010,000	19.75
8	Project Management (priority capital projects)	Miscellaneous	\$1,000,000	19.75
9	Driving Innovation implementation consulting	Miscellaneous	\$1,000,000	18
10	On Demand vehicles (replacement)	Rolling Stock	\$350,000	17.25
11	Pulse Dempster Line easements	Stations & Passenger Facilities	\$600,000	16.5
12	Paratransit associated capital	Rolling Stock	\$702,000	16.25
13	Fixed Route Bus associated capital	Rolling Stock	\$892,933	16.25
14	Fixed Route Bus engine/transmission retrofits	Rolling Stock	\$7,360,000	16
15	Intelligent Bus System bidirectional amplifiers	Electrical/Signal/Communications	\$100,000	14.75
16	Plainfield Garage construction	Support Facilities & Equipment	\$8,300,000	14.25
17	Transit Signal Priority radios	Electrical/Signal/Communications	\$2,310,000	13.75
18	Paratransit vehicles (expansion)	Rolling Stock	\$4,690,000	11.5
19	Bus stop engineering drawings	Stations & Passenger Facilities	\$375,000	11.5
20	Compact SUVs	Support Facilities & Equipment	\$450,000	11
21	Minivan w/ ramp (non-rev)	Support Facilities & Equipment	\$50,000	11
22	Pace website consulting/programming	Support Facilities & Equipment	\$100,000	10.75



**Table 8. Ranked List of Capital Projects, 2021 (Continued)** 

PROJECT RANK	PROJECT NAME	ASSET CATEGORY	AMOUNT REQUESTED	AVERAGE SCORE
23	Bus Tracker signs	Stations & Passenger Facilities	\$525,000	10.75
24	Bus stop concrete pads and shelters	Stations & Passenger Facilities	\$900,000	9
25	On Demand vehicles (expansion)	Rolling Stock	\$210,000	8.75
26	Waukegan heated shelter	Stations & Passenger Facilities	\$30,000	6.75
27	Ventra machine	Stations & Passenger Facilities	\$120,000	5.75
28	Bus stop benches	Stations & Passenger Facilities	\$25,000	5.25
29	ARC GIS licenses and training	Support Facilities & Equipment	\$1,300	4.5
30	Digital screens for bus interior	Support Facilities & Equipment	\$250,000	4
31	Ridecheck software	Support Facilities & Equipment	\$24,000	2.75

Table 9. Ranked List of Capital Projects, 2022-2025

PROJECT RANK	PROJECT NAME	ASSET CATEGORY	UNCONSTRAINED NEED (MILLIONS)	AVERAGE SCORE
1	North Shore Division expansion	Support Facilities & Equipment	\$20	23.5
2	Southwest Division expansion	Support Facilities & Equipment	\$18	23.5
3	Burr Ridge Park-n- Ride	Stations & Passenger Facilities	\$1	20.25
4	Intelligent Bus System	Electrical/Signal/Communications	\$6.4	18.5
5		Rolling Stock	\$9.9	17
6	Pulse Halsted Line stations	Stations & Passenger Facilities	\$39.7	17
7	I-55 Park-n-Rides	Stations & Passenger Facilities	\$6.8	15.5
8	Fixed Route diesel buses (replacement)	Rolling Stock	\$51.3	15.25
9	I-294 Stations and Park-n-Rides	Stations & Passenger Facilities	\$35	15.25
10	Vanpool vehicles (replacement)	Rolling Stock	\$9.80	15
11	Chicago Heights Transfer Center	Stations & Passenger Facilities	\$2.5	14.75
12	Riverdale Bus Turnaround	Stations & Passenger Facilities	\$1.5	14.75
13	Hillside Park-n-Ride	Stations & Passenger Facilities	\$1	14.75
14		Stations & Passenger Facilities	\$0.8	14.75
15	Pulse 95th Line stations	Stations & Passenger Facilities	\$25.3	14.5
16	Transit Signal Priority	Electrical/Signal/Communications	\$6	13.5



#### **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 10. Capital Improvement Program Expected Funds (\$000s), FY2021-2025**.

Table 10. Capital Improvement Program Expected Funds (\$000s), FY2021-2025

ASSET CLASS	PROJECT	2021	2022	2023	2024	2025	5 Year (2021-2025) Total
	Federal 5307	\$ 42,597	\$ 43,236	\$ 43,885	\$ 44,543	\$ -	\$ 174,261
Federal	Federal 5339	1,983	2,013	2,043	2,074	-	8,113
Funds	Subtotal - Federal Funds	44,580	45,249	45,928	46,617	-	182,374
Ctoto	State Bond	48,550	4,750	43,500	41,975	-	138,775
State Funds	State PayGo	11,350	11,350	11,350	11,350	-	45,400
i unus	Subtotal - State Funds	59,900	16,100	54,850	53,325	-	184,175
RTA	RTA ICE	1,386	1,469	1,553	-	-	4,408
Funds	Subtotal - RTA Funds	1,386	1,469	1,553	-	-	4,408
Total	Total	\$ 105,866	\$ 62,818	\$ 102,331	\$ 99,942	\$ -	\$ 370,957

#### **OPERATIONS AND MAINTENANCE COSTS**

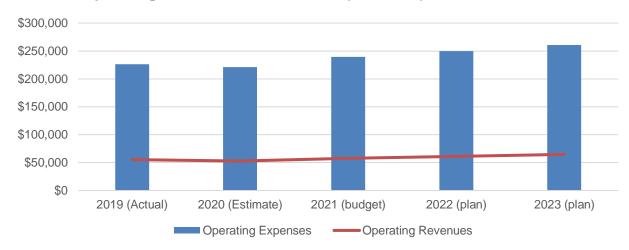
Capital investments have an impact on operating and maintenance costs, which are typically higher for older, less efficient Vehicles, Equipment, and Facilities, which are more prone to breakdowns, and for which there may no longer be adequate support from suppliers. Pace's Suburban Service Operating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

In 2019 and 2020, operating revenue covered slightly less than 25% of operating expenses for both years 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 5.8%, expenses at 4.3%, and public funding at 3.8% including both sales tax and federal revenue sources.

**Table 11. Operating and Maintenance Costs (\$millions), 2019-2023** shows the actual/expected system-generated revenues, public funds, and total operating expenses from 2019 through 2023. Of Pace's total operating expenses, approximately 58.22% is for labor and fringes.



Table 11. Operating and Maintenance Costs (\$millions), 2019-2023



**Table 12. Operating Expenses (\$000s)** 

	2019	2020	2021	2022	2023
OPERATING EXPENSES	(ACTUAL)	(ESTIMATE)	(BUDGET)	(PLAN)	(PLAN)
Labor/Fringes	\$129,874	\$133,371	\$140,644	\$144,558	\$148,191
Healthcare	24,686	27,166	26,398	28,351	30,449
Parts/Supplies	6,166	5,816	9,233	9,922	10,635
Purchased Transportation	25,725	16,778	22,194	23,642	26,107
Fuel	12,394	7,693	8,611	9,321	10,042
Utilities	2,506	2,875	3,066	3,254	3,448
Insurance	9,685	10,407	11,089	11,918	12,778
Other (includes Debt Service)	23,002	25,979	27,431	28,188	28,805
Bond Interest	216	186	154	119	82
Regional ADA Support Credit	(8,311)	(9,127)	(9,432)	(9,714)	(10,006)
Budget Balancing Actions	0	0	0	0	0
Total expenses before depreciation	\$225,943	\$221,144	\$239,388	\$249,559	\$260,531

**END OF SECTION 7** 



# 8. ASSET MANAGEMENT IMPLEMENTATION

Pace recognizes that this Initial TAM Plan is only the first step of many towards achieving the organization's Asset Management improvement objectives.

#### 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

At a minimum, this Plan will undergo a comprehensive update and review every four years, with a preferred update cycle of every three years to coincide with the FTA triennial review process. Certain aspects of the Plan will be reviewed more frequently, on an annual cycle. This includes a review of asset condition, Performance Targets (as part of annual submissions to the NTD), and progress towards Asset Management objectives.

To ensure the 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 initiatives – including future versions of this Asset Management plan.
- Guidance for the delivery of maintenance and capital programs.
- Performance targets shall be monitored annually and reviewed as to their ability to deliver the required level of service for each asset class.
- The asset inventory and condition information shall be updated annually as part of NTD reporting.
- Pace's five-year capital plan shall be updated annually, following the investment prioritization procedures laid out in this document.
- Pace's maintenance manuals and other guiding maintenance and management documents will be monitored and updated as needed, to ensure that the lifecycle management strategies contained therein continue to adequately address our assets' maintenance needs.

#### **IMPROVEMENT PLAN**

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

Originally WSP proposed 23 initiatives to support the October 1, 2018, Pace Initial TAM Plan. These were developed in response to a Gap Assessment, which evaluated Pace's general Asset Management maturity. The proposed initiatives cut across several Asset Management knowledge pathways, suggesting key actions to improve Pace's Asset Management capabilities



in multiple overlapping areas. The proposed initiatives are drawn from the "Principles of Asset Management" a training course offered by WSP. Currently, the WSP training course is an out-of-scope item.

In 2019, the proposed 23 initiatives underwent a conscientious review to focus on results rather than tasks to ensure we were not too rigid in our original thinking.

Recognizing Pace strengths, the proposed 23 initiatives were divided into two categories, Baseline and Future TAM Plan Improvement Objectives, versus a prescriptive 5-year calendar for Pace's TAM Plan implementation strategy. As another "tool in our toolbox" to help map our TAM and NTD organizational mission, a guidance manual was created **Pace TAM Improvement Objectives Handbook – 2019** to outline our TAM Plan Baseline and Future Improvement Objectives. This Handbook can assist with developing, mentoring, and training, a crossfunctional committee(s) to educate staff in ways to approach transit Asset Management as a strategic business plan initiative.

During 2020, the **Pace TAM Plan Objectives Handbook – 2019** came to be recognized as a living document that is fully expected and intended to be annually updated as our TAM Department and the Enterprise Asset Management maturity evolves. The transit industry witnessed dramatic changes due to the COVID-19 Pandemic, causing equal amounts of disruption and opportunity for the TAM Department to review and adjust our 2019 Baseline and Future Objectives outlook again.

The TAM Department review concluded all Baseline Objectives (1-4) will remain "as is" for the Pace TAM Plan Objectives Handbook – 2020 Update. These Baseline Objectives are well underway, with our commitment to continuing, expanding, or otherwise maintaining. Whereas the Pace TAM Plan Objectives Handbook – 2020 Update divides the Future Objectives into two categories: Further Investigate or Implement Later. The 2019 Future Objective numbering system will remain "as is" in the 2020 Handbook Update for cross-reference purposes.

Further Investigate: This category treats these as *potential* Objectives which need to be further explored to determine whether they should be programmed. If accepted, these *potential* Objectives may advance to Implement Later.

Implement Later: These are *new* Objectives that the TAM Department is committed to moving forward with in general. The timing of these *new* Objectives is currently unknown, and most will likely require other Objectives or preliminary work to be completed before these can start and be moved to Baseline Objective.



#### **Table 13. TAM Plan Improvement Objectives - 2020**

#### **BASELINE IMPROVEMENT OBJECTIVES**

#### 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." The overall TAM Plan preferred update cycle is every three years to coincide with the FTA Triennial review process. Certain aspects of the TAM Plan may be updated on an annual cycle. This may include limited scope Status Updates to inform internal and external stakeholders.

#### 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).

#### **IMPLEMENTATION UPDATE:**

The Pace TAM Department is in FTA compliance with that 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.

All Nine TAM Plan Elements and supporting Appendices of the Initial October 1, 2018, TAM Plan were refreshed to show the implementation status of the TAM Program in 2019, and in 2020.

The Pace TAM Department *exceeds* the FTA Final Rule, that a provider must update its entire TAM Plan at least once every four years which translates to October 1, 2022, for Pace.

#### 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 to 5, 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. Pace contracted with WSP, USA Inc to define an asset condition assessment approach and accompany Pace staff in the field to produce an Annual Capital Asset Condition Assessment Report.

#### **IMPLEMENTATION UPDATE:**

The Pace TAM Department is in FTA compliance with annually assessing at least onequarter of its 36 facilities each year and will complete condition assessments of all facilities in the FTA prescriptive four-year cycle.



#### BASELINE IMPROVEMENT OBJECTIVES (Continued)

#### 3 PERFORMANCE TARGETS

Develop key Performance Measure Targets at the asset level in accordance with FTA requirements for annual NTD Asset Inventory reporting.

#### SCOPE:

Develop key performance targets that are aligned with Pace strategic and asset management objectives. Establish a method for capturing and monitoring asset performance, and for routinely re-evaluating performance measures.

#### **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. As of 2018, State of Good Repair (SGR) Performance Target Setting is a required component of the new NTD Asset Inventory Module (AIM) annual reporting.

#### 4 VEHICLE TRACKING SYSTEM

A system to track status of vehicles with data input from multiple parties to limit disparate silos of information which will ensure an accountability of the number of vehicles Pace maintains as active and inactive, based on whether a vehicle is: accepted, in service, on legal hold, in maintenance, out for extended maintenance, or possible other statuses not yet documented. This information will be used to inform staff on State of Good Repair Target Setting, vehicle replacement/expansion planning, and Key Performance Indicator (KPI) development.

#### SCOPE:

Develop a system in either ORACLE, ORACLE Application Express (APEX), or other IT platform to document Vehicles, Revenue and Non-Revenue, throughout their expected life cycle.

Coordinate data input to the system through various key staff and other system events to limit that amount of information which is required to be hard entered.

System output shall be able to present State of Good Repair performance at Year, Month, and Daily levels; along with showing total quantities of active and inactive 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.

#### **IMPLEMENTATION UPDATE:**

The TAM Department drafted a Vehicle Tracking System (VTS) white paper to consider adding fields to the existing Oracle Application Express (APEX) Fixed Asset Inventory Module. The VTS white paper describes fields to be added to unify in house National Transit Database (NTD) reporting for Rolling Stock and Service Vehicles inventories. This draft white paper shall be the road map on which the TAM Department advocates for more consistent documentation of asset data.



#### Table 13. TAM Plan Improvement Objectives - 2020 (Continued)

#### **FURTHER INVESTIGATE**

#### 5 INVESTMENT PRIORITIZATIONS

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

#### 7 RISK MANAGEMENT PROCESSES

Design and implement an enterprise-wide risk management program, integrated across departments.

#### 8 LEVEL OF SERVICE DEFINITIONS

Quantify the required levels of service and the vehicles required to meet the service obligation, so that facility and equipment planning can be undertaken during planning of new services.

#### 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.

#### 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.

#### 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 systems, processes, and procedures for review and analysis of failures to prevent reoccurrences, and ensure corrective action is taken as appropriate.

#### 18 BUSINESS CONTINUITY PLAN

Create a formal Business Continuity Plan that identifies enterprise and asset risks, threats and vulnerabilities that could impact Pace's continued operations.

#### 21 SUCCESSION PLANNING

Formalize succession planning efforts to improve knowledge management and mitigate the impacts associated with a potential loss of institutional knowledge.

#### 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.

#### 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.



#### Table 13. TAM Plan Improvement Objectives - 2020 (Continued)

#### IMPLEMENT LATER

#### 6 ASSET MANAGEMENT ORGANIZATIONAL DEVELOPMENT

Ensure organizational capacity exists to successfully implement Asset Management through alignment of enterprise strategy and goals with Asset Management improvement objectives.

#### 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.

#### 10 LIFE CYCLE COSTING

Incorporate lifecycle cost information into investment decision-making, budget preparation, and asset policies and strategies.

#### 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:

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.

#### 20 MASTER DATA GOVERNANCE

Expand the number and type of asset-level condition and performance metrics tracked, identify ways to use this data to predict failure and produce a Master Data Governance Framework, which includes:

Assigning authorized officers to establish and approve changes to asset data configuration, such as definition of asset class, characteristics, acceptable values, damage, cause codes, hierarchy and location referencing scheme, changes to the Bill of Materials, etc.

- **b**) Data Stewards that would ensure that data is correct before it is added to the system. Software checks and balances that would ensure that values are not entered into the system that are not a part of approved value lists.
- **d**) Reporting mechanisms to ensure that all changes are updated in all systems of record. Work processes that include master data update requirements, enabling inspectors to compare the asset in the field with the database on a mobile device, and update the master data and appropriate workflow as necessary.

Minimum asset data standards and requirements including standard asset definitions, naming conventions, and formats

#### **END OF TAM PLAN MAIN DOCUMENT**

## **Pace Suburban Bus Division**

# INITIAL TRANSIT ASSET MANAGEMENT PLAN 2020 UPDATE Appendices





We're Driven For You



### PACE SUBURBAN BUS DIVISION

of the Regional Transportation Authority of Northeastern Illinois

# INITIAL TRANSIT ASSET MANAGEMENT PLAN

#### APPROVAL

ACCOUNTABLE EXECUTIVE	SIGNATURE	DATE
Melinda J. Metzger, General Manager/ Chief Operating Officer, Pace Suburban Bus	mes & migr	MANCH, 2019

#### PACE AND WSP DOCUMENT CONTROL

#### Release Details

Release Date	October 1, 2018
Version	Initial Transit Asset Management Plan
Release Date	October 16, 2020
Version	Initial Transit Asset Management Plan 2019 Update
Release Date	October 15, 2021
Version	Initial Transit Asset Management Plan 2020 Update
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



### TABLE OF CONTENTS-APPENDICES

Introdu	ıction to the Appendices	. 69
A. App	pendix A - NTD Annual Reporting	. 71
B. App	pendix B – Facilities	82
B.1 I	NTD Asset Definition	. 82
B.2 I	NTD RY2020 Asset Inventory	. 83
B.3	Asset Condition	. 91
B.4 I	Lifecycle Management Strategies	. 94
B.5 /	Asset Management Enablers	. 97
	Capital Plans	
B.7 \	WSP Condition Assessment Reports	100
	pendix C – Service Vehicle	
	Asset Definition	
	NTD RY2020 Asset Inventory	131
	Asset Condition	
	Lifecycle Management Strategies	133
	Asset Management Enablers	
	Capital Plans	
D. App	pendix D – Revenue Vehicle	137
D.1 /	Asset Definition	137
D.2 I	NTD RY2020 Asset Inventory	137
D.3 /	Asset Condition	152
D.4 I	Lifecycle Management Strategies	152
	Asset Management Enablers	
D.6 (	Capital Plans	158
E. App	pendix E – Electrical, Signal, & Communications1	159
	Asset Definition	159
E.2 /	Asset Inventory^	159
E.3 /	Asset Condition	164
	Lifecycle Management Strategies	164
	Asset Management Enablers	
E.6 (	Capital Plans	166
F. App	pendix F – Support Facilities & Equipment1	167
	Asset Definition	
F.2 I	FY2020 Support Facilities Inventory	167
	Asset Condition	
G. Apr	pendix G – Stations and Passenger Facilities	169
	Asset Definition	
	FY2020 Stations & Passenger Facilities Inventory	
	Asset Condition	
	pendix H – Abbreviations and Acronyms	
	pendix I – Terms and Definitions	
II ADL	JEHUIN I - I EHII AHU DEHHIUVII 3	112



#### **TABLES**

Table B - 1. Facilities inventory as of 12/31/2020	84
Table B - 2. Passenger Facilities Condition Rating Levels	
Table B - 3. Building Systems Weightings	92
Table B - 4. Condition Scores for Facilities Assessed in 2020	93
Table B - 5. Performance Targets for Stations and Passenger Facilities	94
Table B - 6. Facilities Capital Budget Forecast (\$000s)	100
Table B - 7. WSP Inspection Report - Gurnee Mills	101
Table B - 8. WSP Inspection Report – Prairie Stone	
Table B - 9. WSP Inspection Report – I-90 Randall Road	103
Table B - 10. WSP Inspection Report – I-90 IL 25 Park N Ride	104
Table B - 11. WSP Inspection Report – Bolingbrook Old Chicago	105
Table B - 12. WSP Inspection Report – Bolingbrook Canterbury	106
Table B - 13. WSP Inspection Report – Burr Ridge	107
Table B - 14. WSP Inspection Report – Buffalo Grove	108
Table B - 15. WSP Inspection Report – Elk Grove	
Table B - 16. WSP Inspection Report – Heritage Division Facility	110
Table B - 17. WSP Inspection Report – Homewood Park-N-Ride	111
Table B - 18. WSP Inspection Report – Harvey Transportation Center	
Table B - 19. WSP Inspection Report – Blue Island Park-N-Ride	
Table B - 20. WSP Inspection Report – North Shore Division Facility	114
Table B - 21. WSP Inspection Report – McHenry Paratransit Facility	
Table B - 22. WSP Inspection Report – North Division Facility	
Table B - 23. WSP Inspection Report – River Division Facility	117
Table B - 24. WSP Inspection Report – Fox Valley Division Facility	118
Table B - 25. WSP Inspection Report – Administration Headquarters	
Table B - 26. WSP Inspection Report – Northwest Transportation Center	
Table B - 27. WSP Inspection Report – Northwest Division Facility	121
Table B - 28. WSP Inspection Report – Hillside Park-n-Ride	
Table B - 29. WSP Inspection Report – West Division Facility	
Table B - 30. WSP Inspection Report – I-90 / Barrington Road Park-n-Ride	124
Table B - 31. WSP Inspection Report – I-90 / Barrington Road Park-n-Ride	
Table B - 32. WSP Inspection Report – Elgin Transportation Center	
Table B - 33. WSP Inspection Report – Plainfield Bus Transfer Center	
Table B - 34. WSP Inspection Report – Plainfield Park-n-Ride	128
Table B - 35. WSP Inspection Report – Bridgeview Transit Center	129
Table B - 36. WSP Inspection Report – Bridgeview Park-n-Ride	130
Table C - 1. A-35 Service Vehicle Inventory Form as of 12/31/2020	132
Table C - 2. Performance Targets for Equipment	
Table C - 3. Examples of Planned Maintenance Frequency	
Table C - 4. Equipment Capital Budget Forecast (\$000s)	136



## **TABLES (CONTINUED)**

Table D - 1. Revenue Vehicle Inventory (A-30) - DR PT 50113	139
Table D - 2. Revenue Vehicle Inventory (A-30) - DR DO 50113	
Table D - 3. Revenue Vehicle Inventory (A-30) - DR TX 50113	142
Table D - 4. Revenue Vehicle Inventory (A-30) - MB DO 50113	143
Table D - 5. Revenue Vehicle Inventory (A-30) - MB PT 50113	
Table D - 6. Revenue Vehicle Inventory (A-30) - VP DO 50113	146
Table D - 7. Revenue Vehicle Inventory (A-30) - DR PT 50182	148
Table D - 8. Revenue Vehicle Inventory (A-30) - DR TX 50182	
Table D - 9. Performance Targets for Rolling Stock	152
Table D - 10. Rolling Stock Capital Budget Forecasts (\$000s)	158
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. Pending Nexus Alpha Bus Tracker signs at shelters	
Table E - 5. Parsons Video-style Bus Tracker signs at Pulse stations	
Table E - 6. Pending Parsons video-style Bus Tracker signs at Pulse stations	
Table E - 7. Pending "e-ink" CHK Bus Tracker signs embedded in shelters	
Table E - 8. Installed Wayside Bus Tracker signs at shelters	
Table E - 9. Electrical, Signal, & Communications Capital Budget Forecasts (\$000s)	166
Table F - 1. Support Facility Inventory	168
Table G - 1. Stations & Passenger Facilities Inventory	
Table G - 2. Milwaukee Pulse Stations (MILWPS)	171
FIGURES	
Figure A-1. Typical Annual NTD Reporting Timeline	72
Figure A-2, NTD Asset Inventory Module (AIM) Reporting Forms	



### 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**

**Appendix A - NTD Annual Reporting** contains a copy of the submitted Narrative Report for NTD RY2020 Narrative Report.

#### **Appendix B - Facilities**

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, 2019, and 2020, along with a copy of the submitted NTD RY2020 A-15, Transit Asset Management Facilities Inventory Form.

#### **Appendix C - Support Vehicle / Equipment**

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 submitted NTD RY2020, A-35 Service Vehicle Inventory Form.

#### **Introduction to the Appendices**



#### **Appendix D - Revenue Vehicles**

**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 submitted **NTD RY2020, A-30 Revenue Vehicle Inventory Forms**.

#### Appendix E - Electrical, Signal, and Communications

**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 - Support Facilities and Equipment**

**Appendix F - Support Facilities and Equipment** 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 F - Support Facilities and Equipment** provides only an asset inventory.

#### **Appendix G - Stations and Passenger Facilities**

**Appendix G – Stations and Passenger Facilities** 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 F - Support Facilities and Equipment** provides only an asset inventory.

#### **Appendix H - Abbreviations and Acronyms**

This Appendix lists abbreviations used in this document.

#### **Appendix I - Terms and Definitions**

This Appendix 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 ANNUAL REPORTING

Per the Federal Transit Administration's guidance:

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 RY2020 submission is required to be uploaded to the NTD website no later than April 30, 2021.

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. In addition to the required Narrative Report, the Pace NTD RY2020 Submittal included:

PACE TAM	AIM DATA REPORT FORMS
A-90	Transit Asset Management Performance Targets
A-15	Transit Asset Management Facilities Inventory
A-20	Transit Way Guideway (Performance Target is Applicable Only for Rail Agencies. Pace does not set Performance Measure Targets for this asset category)
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



#### **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".

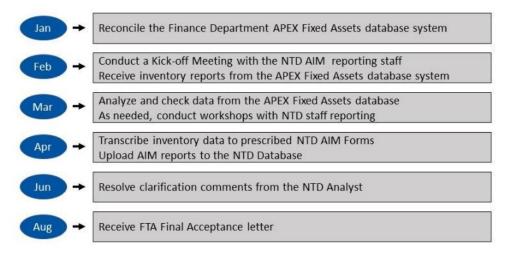
OUR ANNUAL TAM DEPARTMENT NTD MISSION STATEMENT is responsive to the required TAM Plan Element 6: Asset Management Implementation, and TAM Plan Element 7: List of Key Annual Activities.

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.

The **TAM DEPARTMENT NTD RY2020 STRATEGIC GOAL**: Publish a data entry guidance manual for NTD reporting staff to ensure consistency.

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

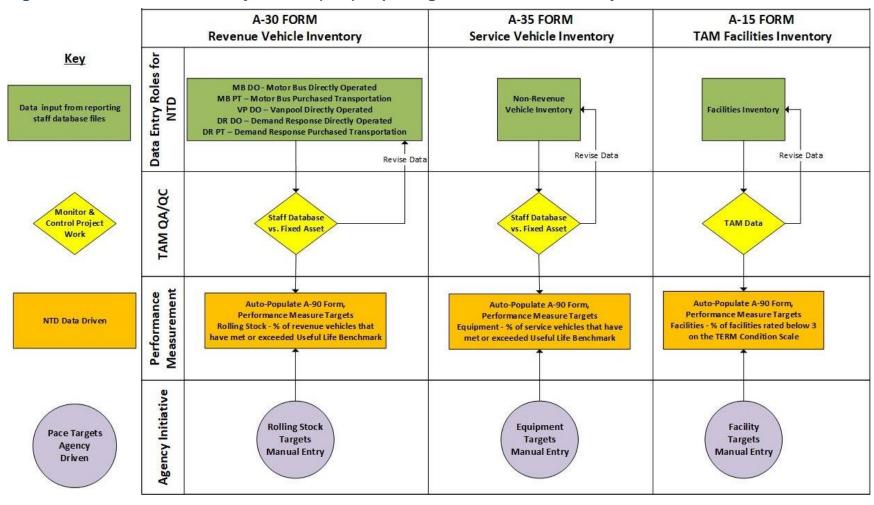
Figure A-1. Typical Annual NTD Reporting Timeline



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 RY2020 ANNUAL NARRATIVE REPORT

## **REPORTING ID 50113 and 50182**





The NTD TAM AIM Forms are prescriptive in nature and are required to be used to collect information on capital assets, and infrastructure. The Federal Transit Administration (FTA) intent is to assemble a nationwide inventory to improve its ability to forecast capital costs for the future replacement, and necessary capital renewal activities of existing transit assets to maintain a State of Good Repair (SGR).

Pace has two NTD ID Reporting Numbers: 50113 for the Suburban Bus Division, and 50182 for the Regional ADA Paratransit Services. Pace is not required to set Performance Targets for ID Reporting Number 50182 Regional ADA Paratransit Services because of no capital responsibility. Annually, Pace must upload a Full Reporter submission to the NTD Website Portal by April 30 since the Pace fiscal year aligns with the calendar year, January 1 through December 31.

The Pace NTD TAM AIM Annual Report must include two parts, a Data Report, and a Narrative Report. Except as noted, the Pace Data Report contains the TAM AIM Forms listed below. This Narrative Report identifies Pace's progress toward achieving the FY2020 Performance Targets, comparing these set for FY2021 with supporting our "why". Currently, FTA does not implement a reward or penalty pertaining to target attainment.

Due to the COVID-19 Pandemic, the TAM, Budget Planning and Analysis, and Finance Departments performed additional levels of coordination for AIM Reporters. Starting in early February, the TAM Department posted a Kick-Off Notice, attaching an AIM Reporter Handbook derived from the NTD 2020 Policy Manual to standardize data entry across the "A" Forms. Virtual Reporter workshops were conducted in addition to the TAM and Information Technology Departments creating a SharePoint site to serve as a central repository for all NTD Reporter submittal work.

PACE TAM	AIM DATA REPORT FORMS
A-90	Transit Asset Management Performance Targets
A-15	Transit Asset Management Facilities Inventory
A-20	Transit Way Guideway (Performance Target is Applicable Only for Rail Agencies. Pace does not set Performance Measure Targets for this asset category)
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

## TRANSIT ASSET MANAGEMENT PERFORMANCE MEASURE TARGETS (A-90)

Transit agencies must report the next Fiscal Year (FY) Performance 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 TAM Final Rule defines a Performance Target as a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time required by FTA (in this case, in the next Fiscal Year). Therefore, NTD Reporters should contact appropriate personnel involved in TAM planning to make sure the Performance Targets they report are accurate.

A Transit agency is required to report an asset to the NTD in the Fiscal Year that the agency begins using the asset for public transportation service. Transit agencies should not report assets that are being assembled, assets under construction, or assets that are in testing at the end of the Fiscal Year.

Per TAM Guidelines, targets should be set according to realistic expectations, available data, and expected financial resources from all sources over the upcoming year. During Target setting, an agency needs to consider its ability to improve or maintain the state of its capital assets, as well as the perception of the intended audience when determining how high or low to set the Target. Here is the Pace annual Task calendar to achieve Performance Target setting milestones for NTD reporting.

MONTH	TASK
January/February	The Finance Department reconciles the APEX Fixed Assets year-end database to
	submit it to the TAM, and the Budget Planning and Analysis Departments.
February/March	The TAM, and the Budget Planning and Analysis Department start performing
	data analysis of the year-end capital asset inventory.
March/April	The TAM, and the Budget Planning and Analysis Department draft proposed
	Performance Targets.
April	Provide the draft Narrative Report and proposed Performance Targets for review
	and approval to the Pace Accountable Executive prior to the upload.

Lastly, provided below are both A-90 Export files from the NTD Web Portal for the 50113 Suburban Bus Division, and the Regional ADA Paratransit Services (50182) with the latter checking all boxes as N/A because Pace has no capital responsibility.



NTD ID	50113	
Reporter Name	Pace - Suburban Bus Division	
Report	2020 (Original Submission)	

# Transit Asset Management Performance Measure Targets (A-90)

## 1) Rolling Stock - Percent of revenue vehicles that have met or exceeded their useful life benchmark

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)	
AB - Articulated Bus	N/A			N/A	
AO - Automobile	N/A			N/A	
BR - Over-the-road Bus	0.00	0.00	0.00	0.00	
BU - Bus	12.72	18.31	-5.59	14.86	
CU - Cutaway	61.67	61.16	0.51	77.11	
DB - Double Decker Bus	N/A			N/A	
MV - Minivan	17.01	22.57	-5.56	28.02	
OR - Other	N/A			N/A	
SB - School Bus	N/A			N/A	
SV - Sports Utility Vehicle	N/A			N/A	
VN - Van	39.10	31.67	7.43	41.90	

## 2) Equipment - Percent of service vehicles that have met or exceeded their useful life benchmark

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
Automobiles	36.17	57.75	-21.58	89.74
Trucks and other Rubber Tire Vehicles	44.14	51.16	-7.02	41.48
Steel Wheel Vehicles	N/A			N/A

## 3) Facility - Percent of facilities rated below 3 on the condition scale

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
Passenger / Parking Facilities	19.23	16.67	2.56	16.67
Administrative / Maintenance Facilities	25.00	16.67	8.33	16.67



NTD ID	50182

Reporter Name Pace-Suburban Bus Division, ADA Paratransit Services

Report 2020 (Original Submission)

## **Transit Asset Management Performance Measure Targets (A-90)**

### 1) Rolling Stock - Percent of revenue vehicles that have met or exceeded their useful life benchmark

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
AO - Automobile	N/A			N/A
BU - Bus	N/A			N/A
CU - Cutaway	N/A			N/A
MV - Minivan	N/A			N/A
OR - Other	N/A			N/A
SB - School Bus	N/A			N/A
SV - Sports Utility Vehicle	N/A			N/A
VN - Van	N/A			N/A

#### 2) Equipment - Percent of service vehicles that have met or exceeded their useful life benchmark

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
Automobiles	N/A		- <u>\</u>	N/A
Trucks and other Rubber Tire Vehicles	N/A			N/A
Steel Wheel Vehicles	N/A			N/A

#### 3) Facility - Percent of facilities rated below 3 on the condition scale

Performance Measure	2020 Target (%)	2020 Performance (%)	2020 Difference	2021 Target (%)
Passenger / Parking Facilities	N/A			N/A
Administrative / Maintenance Facilities	N/A			N/A

## TRANSIT ASSET MANAGEMENT FACILITIES INVENTORY (A-15)

In October 2017, Pace awarded a five-year contract to WSP, USA, Inc., to provide TAM Plan consulting services to assist Pace with meeting our MAP-21 regulatory obligations. On an annual basis, WSP shall refine, and annually update the capital asset inventory, and conduct annual capital asset condition assessments.

The Pace Performance Measure Targets for Passenger / Parking Facilities, and Administrative / Maintenance Facilities are reviewed, and set on an annual basis as described under the Transit Asset Management Performance Measure Targets (A-90) section. Pace calculates the Facility Performance Measure Targets by comparing the number of Facilities which score < 3 on the FTA TERM Scale to the total number of Facilities as outlined per the TAM Final Rule. The Suburban Bus Division (50113) Facility Inventory database reflects Passenger / Parking Facilities used by Pace in the provision of service including



the Administrative / Maintenance Facilities for which Pace has capital responsibility. Pace uses the NTD Shared Lookup function for reporting Passenger / Parking Facilities owned and operated by two other regional FTA-reporting entities: the Chicago Transit Authority (CTA), and Metra.

As shown in the table below, Pace Facility Targets usually reflect modest movement year over year because most Facility construction projects typically span greater than one year or more. Additionally, for the Passenger / Parking Facilities the change in 2020 from 2019 can be attributed to:

- Reduction in Total Facilities.
- ➤ 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 change.
- ➤ The WSP FY2020 Condition Assessment report score revised the Hillside Park-n-Ride to "3 Adequate" from "2 Marginal".

For the Administrative / Maintenance Facilities the change in 2020 from 2019 can be attributed to:

- Condition score change.
- ➤ The WSP FY2020 Condition Assessment report score revised the West Division to a "4 Good" from "2 Marginal" to account for a recently completed Improvement Campaign.

With no new projects scheduled to be completed, and no additional facilities anticipated to go below 3 on the TERM Scale, the 2021 Performance Measure Targets are projected to remain stable at 16.67% for both Facility type categories.

PERFORMANCE	E FY2020		RY2020		FY2021		PERFORMANCE		
MEASURES	MEASURES Target		Actual		Target		(%)		
Facility Type	Facility Score < 3	Total Facility	Facility Score < 3	Total Facility	Facility Score < 3	Total Facility	FY2020 Target	RY2020 Actual	FY2021 Target
Passenger / Parking Facilities	5	26	4	24	4	24	19.23	16.67	16.67
Administrative / Maintenance Facilities	3	12	2	12	2	12	25.00	16.67	16.67

## TRANSIT WAY MILEAGE (A-20)

Pace does not set Performance Targets.

## **REVENUE VEHICLE INVENTORY (A-30)**

Pace calculated the 2020 Performance (%) for Revenue Vehicles by dividing the number of active vehicles beyond their Useful Life Benchmark (ULB) by the total active vehicles in the fleet. These fleets for Performance Targets are categorized by FTA vehicle types (detailed below), which differs from the A-30 Report Categories (MB DO, MB PT, DR DO, DR PT, VP DO). To calculate the 2021 Performance Targets, Pace estimated the number of new vehicles it expects to receive during the year based on existing contract schedules and added them to the projected fleet. Pace also estimated the number of active vehicles it expects to retire during the year and removed them from the projected active fleet. The age of the



vehicles was increased by one year and the number of active vehicles beyond their ULB was divided by the total active vehicles in the projected fleet.

**BR** – **Over the Road Bus Vehicles:** Pace met its 2020 Target of 0% as none of the 30 vehicles have exceeded their ULB (12). Since the oldest vehicles in the fleet will be at eight years at the end of this year, the 2021 Performance Target will remain at 0%. Pace is expecting to expand this fleet by seven vehicles in 2021.

*BU – Bus Vehicles:* Pace missed its 2020 Target by 5.59%. Part of this shortfall was because 23 new vehicles projected for 2020 were received near the end of the year and not put into service until the beginning of 2021. The COVID-19 Pandemic contributed to longer production and delivery schedules than originally planned. Pace also had 20 more active buses in its fleet at the end of 2020 than projected, all of which were beyond ULB (12). Pace projects to improve upon its Performance Target in 2021 by reducing the total active fleet quantity as vehicles are retired to achieve a Target of 14.86%.

**CU - Cutaway Vehicles**: Pace exceeded its 2020 Target by 0.51%. Pace projects the 2021 Performance Target to increase by nearly 16% over 2020 actuals, primarily because a relatively significant number of vehicles (155) in relation to the projected total active fleet (533) will be reaching their ULB (4). Pace is expecting to replace 70 vehicles in 2021.

*MV – Minivan Vehicles:* Pace missed its 2020 Target by 5.56%. Although the total active fleet size was reduced as projected due to program attrition, the reduction was less than expected, causing the Target shortfall as vehicles beyond ULB (5) were retained. Pace projects the 2021 Performance Target to increase nearly 5.5% over 2020 actuals because no replacement vehicles are expected in 2021.

*VN – Van Vehicles*: Pace exceeded its 2020 Target by 7.43% due to a greater quantity of new vehicles received in 2020 than projected. These additional vehicles with a ULB (5) were funded with existing backlog funds being identified during 2020. Pace projects the 2021 Performance Target to increase approximately 10% over 2020 actuals despite replacement of 28 vehicles expected in 2021.

PERFORMANCE	FY2	020	RY2	020	FY2	021	PE	RFORMA	NCE
MEASURES	Tar	get	Act	ual	Tar	get		(%)	
Vehicle Type	Beyond ULB	Total Active	Beyond ULB	Total Active	Beyond ULB	Total Active	FY2020 Target	RY2020 Actual	FY2021 Target
BR – Over the Road Coach	0	30	0	30	0	37	0.00	0.00	0.00
BU – Bus	94	739	139	759	108	727	12.72	18.31	14.86
CU – Cutaway	333	540	326	533	411	533	61.67	61.16	77.11
MV – Minivan	41	241	58	257	72	257	17.01	22.57	28.02
VN – Van	156	399	127	401	168	401	39.10	31.67	41.90

## **SERVICE VEHICLE INVENTORY (A-35)**

Pace calculated the 2020 Performance Measure (%) and 2021 Performance Targets for Service Vehicles using the similar methodology as for Revenue Vehicles (see A-30 section). This category includes both active and inactive vehicles in the fleet calculations.



Automobiles: Pace missed its 2020 Target by 21.58%. COVID-19 Pandemic restrictions halted vehicle disposal during the year, and these vehicles beyond their ULB (5) remained in the fleet Performance calculations. Pace projects the 2021 Performance Target to increase nearly 32% over 2020 actuals, which is being driven by the fact that many vehicles (26) in relation to the projected total fleet (39) will be reaching their ULB. Pace will likely retain these vehicles for longer than ULB due to decreased use/mileage caused by the COVID-19 Pandemic.

*Trucks and Other Rubber Tire Vehicles*: Pace missed its 2020 Target by 7.02%. COVID-19 Pandemic restrictions halted vehicle disposal during the year, and these vehicles beyond ULB (10 for trucks and 5 for other vehicles) remained in the fleet Performance calculations. Pace projects the 2021 Performance Target to decrease by nearly 10% from 2020 actuals, as vehicles can be disposed of in 2021.

The Suburban Bus Division (50113) Service Vehicle Inventory database is compiled for service and maintenance vehicles, administrative vehicles, or those which indirectly deliver transit service. The Regional ADA Paratransit Services (50182) Inventory data is not subject to NTD reporting requirements because we do not have service vehicles that support either two modes, Purchased Transportation Demand Response (DR PT) and Demand Response Taxi (DR TX).

PERFORMANCE MEASURES		2020 rget		2020 tual	FY2 Tai	2021 get	PE	RFORMAN (%)	CE
Vehicle Type	Beyond ULB	Total Vehicles	Beyond ULB	Total Vehicles	Beyond ULB	Total Active	FY2020 Target	RY2020 Actual	FY2021 Target
Automobiles	17	47	41	71	35	39	36.17	57.75	89.74
Trucks & Other Rubber Tire Vehicles	64	145	88	172	56	135	44.14	51.16	41.48

Pace Transit Asset Management staff contact information is:

Janet Kuhn, PMP® Jonathan Christ
Capital Infrastructure Program Manager
Capital Grants Administration and
Transit Asset Management
Capital Grants Administration and
Transit Asset Management
Transit Asset Management

Pace Suburban Bus Service Pace 550 West Algonquin Road 550 Arlington Heights, Illinois 60005-4412 Arli 847-228-2430 Direct 847 janet.kuhn@pacebus.com

Pace Suburban Bus Service 550 West Algonquin Road Arlington Heights, Illinois 60005-4412 847-228-2367 Direct

jonathan.christ@pacebus.com

**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:<sup>1</sup>

## **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, safety,

<sup>&</sup>lt;sup>1</sup> Federal Transit Administration, U.S. Department of Transportation, "TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation", Version 1.2, March 2018



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 RY2020 ASSET INVENTORY**

Pace Facilities are located across Northeast Illinois. See Table B – 1. Facilities Inventory as of 12/31/2020 for a copy of the NTD RY2020 A-15, Transit Asset Management Facilities Inventory 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. Facilities Inventory as of 12/31/2020

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Transit Asset Management Facilities Inventory (A-15)

ID	Name	Section of Larger Facility?	Street	City	State Zip	Lat		Condition Assessment	Est. Date of Condition Assessment	Primary Mode	Non- Agency Mode	Secondary Modes	Private Mode	Facility Type	Year Built or Reconstructed as New	SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)	Notes
16050	Administration Headquarters		550 W. Algonquin Road	Arlington Heights	IL 60005	42.04769	-87.98839	4	9/28/2020	MB				Administrative Office / Sales Office	2009	65,000		100.00	
16051	Fox Valley Division	false	400 North Overland Drive		IL 60542	41.797808	-88.336962	3	7/12/2019	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	1994	56,833		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16052	Heritage Division	false	9 Osgood Street	Joliet	IL 60433	41.519922	-88.080697	3	7/8/2019	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	2019	66,077		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16053	McHenry Paratransit Garage	false	5007 Prime Parkway	McHenry	IL 60050	42.307525	-88.293032	3	7/10/2019	DR		MB	3	Combined Administrative and Maintenance Facility (describe in Notes)	2001	28,097		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16054	North Division	false	1400 W. Tenth Street	Waukegan	IL 60085	42.365700	-87.850166	3	7/10/2019	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	1987	57,746		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16055	North Shore Division	false	2330 Oakton Street	Evanston	IL 60202	42.023526	-87.707944	4	7/9/2019	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	1994	81,471		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16056	Northwest Division	false	900 E. Northwest Highway	Des Plaines	IL 60016	42.05003	-87.90025	2	9/29/2020	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	2002	82,700		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16057	River Division	false	975 S. State Street	Elgin	IL 60123	42.020844	-88.283485	3	7/11/2019	МВ		DR		Combined Administrative and Maintenance Facility (describe in Notes)	1989	63,235		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16058	South Division	false	2101 W. 163rd Place	Markham	IL 60428	41.59212	-87.66897	3	6/7/2018	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	2017	191,182		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16059	South Holland Acceptance Facility		405 W. Taft Drive	South Holland	IL 60473	41.59324	-87.62812	1	6/7/2018	MB				Vehicle Testing Facility	1994	44,700		100.00	
16060	Southwest Division	false	9889 S. Industrial Drive	Bridgeview	IL 60455	41.71184	-87.80263	3	6/7/2018	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	1994	81,471		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16061	West Division		3500 W. Lake Street	Melorse Park	IL 60160	41.8956	-87.87731	4	9/30/2020	МВ				Combined Administrative and Maintenance Facility (describe in Notes)	2020	223,004		100.00	Administration Office / Sales Office and Maintenance Facility (Service and Inspection)
16062	Blue Island Park-n- Ride		3060 W. Burr oak	Blue Island	IL 60406	41.662651	-87.679602	3	7/8/2019	MB				Surface Parking Lot	1996		62	100.00	
16063	Bolingbrook - Canterbury Lane Park-n-Ride		170 Canterbury Lane	Bolingbrook	IL 60440	41.69676	-88.07893	3	9/18/2018	МВ				Surface Parking Lot	2010		179	100.00	
16064	Bolingbrook - Old Chicago Park-n-Ride		120 E. Old Chicago Drive		IL 60440	41.68054	-88.06592	3	9/18/2018	MB				Surface Parking Lot	2016		219	100.00	
16065	Buffalo Grove Transportation Center	false	801 Commerce Court	Buffalo Grove	IL 60089	42.17112	-87.94323	3	9/20/2018	МВ				Bus Transfer Center	2011	3,442		100.00	
16066	Burr Ridge Park-n- Ride	false	7650 Lincolnshire Drive	Burr Ridge	IL 60527	41.75183	-87.91222	2	9/18/2018	MB				Surface Parking Lot	1995		81	100.00	
16067	Chicago Heights Transportation Center		1620 Vincennes Avenue	Chicago Heights	IL 60411	41.50235	-87.63809	2	6/7/2018	МВ				Bus Transfer Center	1998	152		100.00	
16068	Elgin Transportation Center		100 W. Chicago Street	Elgin	IL 60120	42.03692	-88.2865	4	10/6/2020	MB				Bus Transfer Center	2016	1,817		100.00	
16070	Harvey Transportation Center		15330 Park Avenue	Harvey	IL 60426	41.61056	-87.6431	2	7/8/2019	МВ				Bus Transfer Center	1999	17,951		100.00	
16071	Hillside Park-n-Ride		Darmstadt Road & Elm Street	Hillside	IL 60162	41.87144	-87.90438	3	9/29/2020	MB				Surface Parking Lot	2001		79	100.00	
16072	Hodgkins UPS Bus Terminal 1	Idise	One UPS Way	Hodgkins	IL 60525	41.74665	-87.88486	3	6/7/2018	MB				Bus Transfer Center	2003	3,691		100.00	
16073	Hodgkins UPS Bus Terminal 2	false	One UPS Way	Hodgkins	IL 60525	41.75032	-87.88208	3	6/7/2018	MB				Bus Transfer Center	2003	1,736		100.00	
16074	Homewood Park-n- Ride	false	750 Ridge Road		IL 60430	41.562302	-87.637988	3	7/8/2019	МВ				Surface Parking Lot	2010		109	100.00	
16075	I-90/Barrington Road	false	2410 Central Road	Hoffman Estates	IL 60192	42.06772	-88.14263	5	10/6/2020	MB				Bus Transfer Center	2018	13,300		100.00	
16076	I-90/IL-25 Park-n- Ride	false	1475 Dundee Avenue	Elgin	IL 60120	42.06368	-88.26494	5	9/18/2018	MB				Surface Parking Lot	2017		197	100.00	



ID	Name	Section of Larger Facility?	Street	City	State Zip	Lat		Condition Assessment	Est. Date of Condition Assessment	Primary Mode	Non- Agency Mode	Secondary Modes	Private Mode	Facility Type	Year Built or Reconstructed as New	SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)	Notes
16077	I-90/Randall Road Park-n-Ride		2001 N. Randall Road	Elgin	IL 60192	42.08378	-88.33553	5	9/18/2018	МВ				Surface Parking Lot	2016		150	100.00	
16078	Northwest Transportation Center	false	1730 Kimberly Drive	Schaumburg	IL 60173	42.04088	-88.03705	3	9/28/2020	MB		DR		Bus Transfer Center	2019	35,972		100.00	
16079	Plainfield Park-n- Ride		14740 Depot Drive	Plainfield	IL 60544	41.6195	-88.2101	5	10/7/2020	MB				Bus Transfer Center	2018	24,015		100.00	
16081	Bridgeview Transit Center	false	7000 South Harlem Avenue	Bridgeview	IL 60455	41.76342	-87.80285	5	10/7/2020	MB				Bus Transfer Center	2019	9,803		100.00	
16082	1701 Woodfield Drive	false	1701 Woodfield Drive	Schaumburg	IL 60173	42.04162	-88.03743			MB				Surface Parking Lot	2018		50	0.00	Capital responsibility belongs to 1701 Woodfield, LLC.
16084	Atrium Center Park- n-Ride		3800 Golf Road	Rolling Meadows	IL 60008	42.0543	-88.02414			MB				Surface Parking Lot	2018		255	0.00	Capital responsibility belongs to Whetstone Atrium, LLC.
16085	DeVry University Park-n-Ride	false	18624 W. Creek Drive	Tinley Park	IL 60477	41.5525	-87.79926			MB				Surface Parking Lot	2016		797	0.00	Capital responsibility belongs to DeVry University, Inc.
16086	White Fence Farm Romeoville Park-n- Ride		1376 Joliet Road	Romeoville	IL 60446	41.67676	-88.05633			МВ				Surface Parking Lot	2014		110	0.00	Capital responsibility belongs to White Fence Farms.
16087	Yorktown Mall	false	203 Yorktown Center	Lombard	IL 60148	41.84213	-88.00453			MB				Surface Parking Lot	2005		30	0.00	Capital responsibility belongs to Yorktown Holdings, LLC.
16088	Sears Centre Arena Lot C Park-n-Ride		5333 Prairie Stone Parkway	Hoffman Estates	IL 60192	42.07003	-88.21074			MB				Surface Parking Lot	2013		33	0.00	Capital responsibility belongs to Village of Hoffman Estates.
16095	13171 UPNW Des Plaines		1501 Miner St.	Des Plaines	IL 60016	42.04084	-87.88664			MB				At-Grade Fixed Guideway Station	2004	30,688		0.00	Capital responsibility belongs to Metra.
16096	05235 MEDML Homewood		Ridge Rd. At Harwood Ave.	Homewood	IL 60430	41.56222	-87.66834			MB				Elevated Fixed Guideway Station	1995	9,852		0.00	Capital responsibility belongs to Metra.
16098	15230 MDN Lake Cook Road		601 Lake Cook Road	Deerfield	IL 60015	42.15184	-87.84104			MB				At-Grade Fixed Guideway Station	1995	23,274		0.00	Capital responsibility belongs to Metra.
16099	11085 UPW Oak Park Marion St.		1115 W North Blvd	Oak Park	IL 60301	41.88703	-87.80152			MB				Elevated Fixed Guideway Station	2001	21,013		0.00	Capital responsibility belongs to Metra.
16104	10380 BNSF Aurora	false	233 N Broadway	Aurora	IL 60505	41.75946	-88.30909			MB				At-Grade Fixed Guideway Station	1990	32,966	i	0.00	Capital responsibility belongs to Metra.
16106	10316 BNSF Route 59	false	1090 N Route 59	Aurora	IL 60504	41.77805	-88.20873			MB				At-Grade Fixed Guideway Station	1990	25,473		0.00	Capital responsibility belongs to Metra.
16107	10285 BNSF Naperville	false	105 E 4th Ave	Naperville	IL 60540	41.77975	-88.14555			МВ				At-Grade Fixed Guideway Station	1983	11,545		0.00	This facility is shared with Amtrak. Capital responsibility belongs to Metra.
16111	10212 BNSF Downers Grove Main St.	false	5001 Main Street	Downers Grove	IL 60515	41.79552	-88.00986			MB				At-Grade Fixed Guideway Station	2004	10,046		0.00	Capital responsibility belongs to Metra.
16112	10195 BNSF Westmont	false	18 West Quincy	Westmont	IL 60559	41.79559	-87.97636			MB				At-Grade Fixed Guideway Station	2004	17,673		0.00	Capital responsibility belongs to Metra.
16116	10138 BNSF LaGrange Road	false	25 W Burlington Rd	LaGrange	IL 60525	41.81588	-87.87096			МВ				At-Grade Fixed Guideway Station	1996	6,468		0.00	This facility is shared with Amtrak. Capital responsibility belongs to Metra.
16117	10131 BNSF Congress Park	false	1/2 mile West of Maple St on Burlington Ave		IL 60513	41.8189	-87.85756			МВ				At-Grade Fixed Guideway Station	2001	3,476	3	0.00	Capital responsibility belongs to Metra.
16118	10123 BNSF Brookfield	false	8858 Burlington Ave	Brookfield	IL 60513	41.82212	-87.84323			MB				At-Grade Fixed Guideway Station	1980	5,068		0.00	Capital responsibility belongs to Metra.
16119	10101 BNSF Harlem Avenue		7135 Windsor Ave	Berwyn	IL 60402	41.83141	-87.80194			MB				At-Grade Fixed Guideway Station	2005	17,118		0.00	Capital responsibility belongs to Metra.
16120	10096 BNSF Berwyn	false	6801 Windsor Ave	Berwyn	IL 60402	41.8333	-87.79351			MB				At-Grade Fixed Guideway Station	1987	13,364		0.00	Capital responsibility belongs to Metra.
16121	10091 BNSF LaVergne	false	Windsor & Ridgeland Ave	Berwyn	IL 60402	41.83543	-87.78399			MB				At-Grade Fixed Guideway Station	1984	8,206	;	0.00	Capital responsibility belongs to Metra.
16122	09372 HC Joliet	false	GWFC+RC	Joliet	IL 60432	41.52451	-88.07889			МВ				Elevated Fixed Guideway Station	2018	24,629		0.00	This facility is shared with Amtrak. Capital responsibility belongs to Metra.
16123	09329 HC Lockport	false	13th St. & State St.	Lockport	IL 60441	41.5851	-88.06027			MB				At-Grade Fixed Guideway Station	1988	12,167		0.00	Capital responsibility belongs to Metra.
16124	08248 SWS Orland Park 153rd St.	false	10401 W 153rd St	Orland Park	IL 60462	41.61123	-87.87327			MB				At-Grade Fixed Guideway Station	2005	11,340		0.00	Capital responsibility belongs to Metra.
16125	08236 SWS Orland Park 143rd St.		143rd St & Southwest Hwy		IL 60462	41.6318	-87.85827			MB				At-Grade Fixed Guideway Station	2006	19,428		0.00	Capital responsibility belongs to Metra.



ID	Name	Section of Larger Facility?	Street	City	State Zip	Lat		Condition Assessment	Est. Date of Condition Assessment	Primary Mode	Non- Agency Mode	Secondary Modes	Private Mode	Facility Type	Year Built or Reconstructed as New	SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)	Notes	
16126	08182 SWS Worth	false	110th St & Depot Rd	Worth	IL 60482	41.69143	-87.79599			MB				At-Grade Fixed Guideway Station	1996	11,080	)	0.00	) Ca	apital responsibility belongs to Metra.
16127	08168 SWS Chicago Ridge		103rd & Ridgeland Ave	Chicago Ridge	IL 60415	41.70329	-87.78058			MB				At-Grade Fixed Guideway Station	2005	19,348	3	0.00	Ca	apital responsibility belongs to Metra.
16128	08152 SWS Oak Lawn		9225 S Tulley Ave	Oak Lawn	IL 60453	41.71955	-87.74869			MB				At-Grade Fixed Guideway Station	2006	21,476		0.00	Ca	apital responsibility belongs to Metra.
16176	04189 MEDBI Blue Island		Vermont St. near Irving St.	Blue Island	IL 60406	41.65599	-87.67589			MB				At-Grade Fixed Guideway Station	2004	2,697	•	0.00	) Ca	apital responsibility belongs to Metra.
16177	04184 MEDBI Burr Oak	false	Burr Oak Ave. near Lincoln St.	Blue Island	IL 60406	41.66232	-87.66879			MB				At-Grade Fixed Guideway Station	1961	2,997		0.00	Ca	npital responsibility belongs to Metra.
16178	04167 MEDBI West Pullman		Halsted St., South of 120th St.	Chicago	IL 60628	41.67419	-87.64229			MB				At-Grade Fixed Guideway Station	1961	3,577		0.00	) Ca	apital responsibility belongs to Metra.
16179	05315 MEDML University Park		1900 University Pkwy	University Park	IL 60466	41.45951	-87.72328			MB				Elevated Fixed Guideway Station	2004	15,878	;	0.00	) Ca	npital responsibility belongs to Metra.
16181	05276 MEDML 211th St. Lincoln Hwy.		3200 W. 211th St.	Olypmia Fields	IL 60461	41.50629	-87.69813			MB				Elevated Fixed Guideway Station	1999	14,960	)	0.00	Ca Ca	apital responsibility belongs to Metra.
16182	05228 MEDML Calumet		Wood St., South of 174th St.	East Hazel Crest	IL 60429	41.57287	-87.66265			MB				Elevated Fixed Guideway Station	2001	9,437		0.00	) Ca	apital responsibility belongs to Metra.
16183	05223 MEDML Hazel Crest		Park Ave. & 170th St.	Hazel Crest	IL 60429	41.58081	-87.65842			MB				Elevated Fixed Guideway Station	1999	7,852	2	0.00	Ca	npital responsibility belongs to Metra.
16184	05200 MEDML Harvey	false	Park Ave. & 154th St.	Harvey	IL 60429	41.60842	-87.64368			MB				Elevated Fixed Guideway Station	2004	8,412	!	0.00	Ca	apital responsibility belongs to Metra.
16185	05190 MEDML 147th St. Sibley Blvd.		147th St. & Clinton St.	Harvey	IL 60426	41.62268	-87.63596			MB				Elevated Fixed Guideway Station	1989	8,679	•	0.00	) Ca	apital responsibility belongs to Metra.
16186	05173 MEDML Riverdale		137th St. & Illinois St.	Riverdale	IL 60827	41.64647	-87.62326			MB				Elevated Fixed Guideway Station	1989	9,638	:	0.00	Ca	npital responsibility belongs to Metra.
16187	05120 MEDML 95th St. Chicago State Univ.	false	95th St. & Cottage Grove Ave.	Chicago	IL 60619	41.72175	-87.60393			МВ				Elevated Fixed Guideway Station	1990	1,785	;	0.00	Ca	npital responsibility belongs to Metra.
16188	06235 RIDML Tinley Park		6700 South St	Tinley Park	IL 60477	41.576	-87.78275			MB				At-Grade Fixed Guideway Station	2003	9,082	!	0.00	Ca	npital responsibility belongs to Metra.
16189	06204 RIDML Oak Forest	false	4850 W 159th St	Oak Forest	IL 60452	41.60436	-87.7386			MB				At-Grade Fixed Guideway Station	2013	24,686	1	0.00	Ca	apital responsibility belongs to Metra.
16190	06184 RIDML Midlothian		3750 W 147th St	Midlothian	IL 60445	41.62622	-87.71219			MB				At-Grade Fixed Guideway Station	2002	21,214	ı	0.00	) Ca	npital responsibility belongs to Metra.
16191	06157 RIDML Vermont St. Blue Island	false	2300 W Grove St	Blue Island	IL 60406	41.65469	-87.67756			MB				At-Grade Fixed Guideway Station	1967	9,473		0.00	) Ca	npital responsibility belongs to Metra.
16192	07158 RIDBB Prairie Street		2100 W Prairie St	Blue Island	IL 60406	41.66239	-87.67504			MB				Exclusive Platform Station	1980	2,787	•	0.00	Ca	npital responsibility belongs to Metra.
16193	07117 RIDBB 95th St. Beverly Hills		1766 W 95th St	Chicago	IL 60643	41.72146	-87.66749			MB				At-Grade Fixed Guideway Station	2000	10,131		0.00	Ca	apital responsibility belongs to Metra.
16194	06109 RIDML 95th St. Longwood		9501 S Vincennes Ave	Chicago	IL 60643	41.72093	-87.65044			MB				At-Grade Fixed Guideway Station	1991	579	)	0.00	) Ca	npital responsibility belongs to Metra.
16195	12398 MDW Big Timber Road		2025 Big Timber	Elgin	IL 60123	42.05864	-88.32785			MB				At-Grade Fixed Guideway Station	2000	14,776	i	0.00	Ca Ca	apital responsibility belongs to Metra.
16196	12366 MDW Elgin	false	109 W. Chicago St.	Elgin	IL 60123	42.03619	-88.28632			MB				At-Grade Fixed Guideway Station	2005	13,963	1	0.00	Ca	apital responsibility belongs to Metra.
16197	12284 MDW Hanover Park	false	1975 W Lake St.	Hanover Park	IL 60193	41.98812	-88.14922			MB				At-Grade Fixed Guideway Station	1995	19,334	ı	0.00	) Ca	apital responsibility belongs to Metra.
16203	12172 MDW Bensenville		Front St. and Lincoln St.	Franklin Park	IL 60130	41.94176	-87.88404			MB				At-Grade Fixed Guideway Station	1976	2,612	!	0.00	Ca	pital responsibility belongs to Metra.
16204	12132 MDW Franklin Park		3148 Rose Steet.	Franklin Park	IL 60131	41.93648	-87.86649			MB				At-Grade Fixed Guideway Station	2002	13,101		0.00	Ca	apital responsibility belongs to Metra.
16205	12114 MDW River Grove		8421 Arnold Ave.	River Grove	IL 60171	41.93101	-87.83642			MB				At-Grade Fixed Guideway Station	1995	12,611		0.00	) Ca	pital responsibility belongs to Metra.
16212	12102 MDW Elmwood Park		7600 W. Grand Ave.	Elmwood Park	IL 60707	41.92501	-87.81515			MB				At-Grade Fixed Guideway Station	2006	13,410		0.00	Ca	apital responsibility belongs to Metra.
16213	12095 MDW Mont Clare		7007 W. Medill Streeet	Chicago	IL 60707	41.92186	-87.80153			МВ				At-Grade Fixed Guideway Station	2006	10,100	)	0.00	) Ca	apital responsibility belongs to Metra.
16214	15495 MDN Fox Lake		Nippersink Blvd At Grand Ave.	Fox Lake	IL 60020	42.39834	-88.1824			MB				At-Grade Fixed Guideway Station	2003	9,950		0.00	) Ca	apital responsibility belongs to Metra.
16215	15478 MDN Ingleside	false	Washington St. and Rollins Rd.	Fox Lake	IL 60041	42.38379	-88.15354			MB				At-Grade Fixed Guideway Station	2003	5,926		0.00	) Ca	apital responsibility belongs to Metra.



ID	Name	Section of Larger Facility?	Street	City	State Zip	Lat		Condition Assessment	Est. Date of Condition Assessment	Primary Mode	Non- Agency Mode	Secondary Modes	Private Mode	Facility Type	Year Built or Reconstructed as New	SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)	Notes
16220	15440 MDN Round Lake		Route 134 and Cedar Lake Rd.	Round Lake	IL 60073	42.35464	-88.094			MB				At-Grade Fixed Guideway Station	1991	13,292	!	0.00	Capital responsibility belongs to Metra.
16221	15355 MDN Libertyville	false	200 W. Lake St at Milwaukee Ave.	Libertyville	IL 60048	42.29103	-87.9562			MB				At-Grade Fixed Guideway Station	2000	8,854		0.00	Capital responsibility belongs to Metra.
16223	15242 MDN Deerfield	false	860 Deerfield Rd.	Deerfield	IL 60015	42.168	-87.84976			MB				At-Grade Fixed Guideway Station	1967	17,808	:	0.00	Capital responsibility belongs to Metra.
16224	15211 MDN Northbrook		1401 Shermer Rd.	Northbrook	IL 60062	42.12685	-87.82776			MB				At-Grade Fixed Guideway Station	2005	13,987		0.00	Capital responsibility belongs to Metra.
16225	15174 MDN Glenview	false	1116 Depot Street	Glenview	IL 60025	42.07499	-87.80584			МВ				At-Grade Fixed Guideway Station	1995	27,864	ı	0.00	This facility is shared with Amtrak. Capital responsibility belongs to Metra.
16227	15116 MDN Edgebrook	false	5438 W. Devon	Chicago	IL 60646	41.9978	-87.76571			MB				At-Grade Fixed Guideway Station	1991	11,928	:	0.00	Capital responsibility belongs to Metra.
16228	11355 UPW Geneva	false	328 Crescent Place	Geneva	IL 60134	41.88153	-88.31006			MB				At-Grade Fixed Guideway Station	2006	10,271		0.00	Capital responsibility belongs to Metra.
16229	11250 UPW Wheaton	false	402 W Front St	Wheaton	IL 60187	41.86438	-88.11208			MB				At-Grade Fixed Guideway Station	1999	21,963	1	0.00	Capital responsibility belongs to Metra.
16230	11238 UPW College Avenue	false	303 N. President Street		IL 60187	41.86829	-88.09036			MB				At-Grade Fixed Guideway Station	2005	19,885	;	0.00	Capital responsibility belongs to Metra.
16231	11157 UPW Elmhurst	false	128 W. 1st St (at York Rd.)	Elmhurst	IL 60126	41.89967	-87.94089			MB				At-Grade Fixed Guideway Station	1989	17,450		0.00	Capital responsibility belongs to Metra.
16232	11113 UPW Melrose Park	false	1801 W. Main St.	Melrose Park	IL 60160	41.89023	-87.85585			MB				At-Grade Fixed Guideway Station	1990	7,612	!	0.00	Capital responsibility belongs to Metra.
16233	11105 UPW Maywood	false	450 W. St. Charles	Maywood	IL 60153	41.88833	-87.83868			MB				At-Grade Fixed Guideway Station	1994	9,556		0.00	Capital responsibility belongs to Metra.
16234	11097 UPW River Forest	false	8001 W. Central Avenue	River Forest	IL 60305	41.88684	-87.82461			MB				Elevated Fixed Guideway Station	2000	15,092	2	0.00	Capital responsibility belongs to Metra.
16235	16369 NCS Mundelein	falco	205 N. Archer Ave.	Mundelein	IL 60060	42.26687	-87.99783			MB				At-Grade Fixed Guideway Station	1996	13,848		0.00	Capital responsibility belongs to Metra.
16236	16295 NCS Buffalo Grove		825 Commerce Ct.	Buffalo Grove	IL 60089	42.16909	-87.94144			MB				At-Grade Fixed Guideway Station	2007	14,690	)	0.00	Capital responsibility belongs to Metra.
16237	16272 NCS Wheeling	false	400 Town Street	Wheeling	IL 60090	42.13651	-87.92716			MB				At-Grade Fixed Guideway Station	1996	15,520		0.00	Capital responsibility belongs to Metra.
16238	16240 NCS Prospect Heights		55 South Wolf Road	Prospect Heights	IL 60070	42.09231	-87.90788			MB				At-Grade Fixed Guideway Station	2002	14,680	)	0.00	Capital responsibility belongs to Metra.
16239	16156 NCS Rosemont	false	9898 Berwyn Ave.	Rosemont	IL 60018	41.9757	-87.873			MB				At-Grade Fixed Guideway Station	2005	11,696		0.00	Capital responsibility belongs to Metra.
16240	16148 NCS Schiller Park	false	4555 Ruby St.	Schiller Park	IL 60176	41.96251	-87.87041			MB				At-Grade Fixed Guideway Station	2006	13,720	)	0.00	Capital responsibility belongs to Metra.
16241	17359 UPN Waukegan	false	95 N. Spring St.	Waukegan	IL 60085	42.36008	-87.82813			MB				At-Grade Fixed Guideway Station	1988	19,470	)	0.00	Capital responsibility belongs to Metra.
16242	17332 UPN North Chicago	false	1633 Lakeside Ave.	North Chicago	IL 60064	42.32877	-87.83712			MB				At-Grade Fixed Guideway Station	1986	9,700	)	0.00	Capital responsibility belongs to Metra.
16243	17322 UPN Great Lakes	false	3000 S Sheridan Road	North Chicago	IL 60088	42.30697	-87.84661			MB				At-Grade Fixed Guideway Station	2003	13,386	;	0.00	Capital responsibility belongs to Metra.
16245	17230 UPN Highland Park		1700 St. Johns Ave.	Highland Park	IL 60035	42.18326	-87.79758			MB				At-Grade Fixed Guideway Station	1995	17,038	1	0.00	Capital responsibility belongs to Metra.
16247	17192 UPN Glencoe	false	724 Green Bay Rd.	Glencoe	IL 60022	42.13548	-87.75816			MB				At-Grade Fixed Guideway Station	1989	12,782	:	0.00	Capital responsibility belongs to Metra.
16248	17177 UPN Hubbard Woods		1065 Gage St.	Winnetka	IL 60093	42.11835	-87.74366			MB				At-Grade Fixed Guideway Station	1989	14,076	;	0.00	Capital responsibility belongs to Metra.
16249	17166 UPN Winnetka	false	754 Elm St	Winnetka	IL 60093	42.1052	-87.7329			MB				At-Grade Fixed Guideway Station	1989	16,792		0.00	Capital responsibility belongs to Metra.
16250	17158 UPN Indian Hill	false	111 N. Green Bay Rd.	Winnetka	IL 60093	42.09449	-87.72365			MB				Elevated Fixed Guideway Station	1993	12,000		0.00	Capital responsibility belongs to Metra.
16251	17152 UPN Kenilworth	false	400 Richmnd Rd.	Kenilworth	IL 60043	42.08629	-87.71689			MB				At-Grade Fixed Guideway Station	1984	14,746		0.00	Capital reeneneibility belongs to
16252	17144 UPN Wilmette	false	722 Green Bay Rd.	Wilmette	IL 60091	42.07732	-87.70936			MB				At-Grade Fixed Guideway Station	2001	23,350		0.00	Canital responsibility belongs to
16253	17133 UPN Central St. Evanston	false	1826 Central St.	Evanston	IL 60201	42.064	-87.69818			MB				Elevated Fixed Guideway Station	1996	19,760	)	0.00	Canital responsibility belongs to
16254	17120 UPN Davis St. Evanston	false	901 Davis St.	Evanston	IL 60201	42.04781	-87.68468			MB				Elevated Fixed Guideway Station	2005	25,590		0.00	Canital reananaihility halanga ta



ID	Name	Section of Larger Facility?	Street	City	State Zip	Lat		Condition Assessment	Est. Date of Condition Assessment	Primary Mode	Non- Agency Mode	Secondary Modes	Private Mode	Facility Type	Year Built or Reconstructed as New	SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)	Notes
16255	14506 UPNW McHenry (Branch Line)		4005 Main St	McHenry	IL 60050	42.34345	-88.27631		-	МВ				At-Grade Fixed Guideway Station	1967	7,238	1	0.00	Capital responsibility belongs to Metra.
16256	13516 UPNW Woodstock	false	90 Church Street	Woodstock	IL 60098	42.31705	-88.44742			MB				At-Grade Fixed Guideway Station	1967	10,168		0.00	Capital responsibility belongs to Metra.
16257	13432 UPNW Crystal Lake	false	70 E. Woodstock Ave. & Grant St.	Crystal Lake	IL 60014	42.24417	-88.317			MB				At-Grade Fixed Guideway Station	2005	16,318		0.00	Capital responsibility belongs to Metra.
16258	13228 UPNW Arlington Heights	false	45 W. Northwest Highway	Arlington Heights	IL 60004	42.08413	-87.98368			MB				At-Grade Fixed Guideway Station	2001	28,518		0.00	Capital responsibility belongs to Metra.
16259	13200 UPNW Mount Prospect		13 E. Northwest Hwy.	Mount Prospect	IL 60056	42.06296	-87.93618			MB				At-Grade Fixed Guideway Station	1989	22,454		0.00	Capital responsibility belongs to Metra.
16260	13186 UPNW Cumberland	false	475 E. Northwest Highway	Des Plaines	IL 60016	42.05228	-87.91227			MB				At-Grade Fixed Guideway Station	1986	13,405		0.00	Capital responsibility belongs to Metra.
16261	13150 UPNW Dee Road		950 Bussee Highway	Park Ridge	IL 60068	42.02406	-87.85637			MB				At-Grade Fixed Guideway Station	2005	18,725		0.00	Capital responsibility belongs to Metra.
16262	13135 UPNW Park Ridge	false	100 S. Summit Ave.	Park Ridge	IL 60068	42.01011	-87.83169			MB				At-Grade Fixed Guideway Station	2007	17,906	5	0.00	Capital responsibility belongs to Metra.
16263	13126 UPNW Edison Park		6730 North Olmstead Avenue	Chicago	IL 60631	42.00215	-87.8176			MB				At-Grade Fixed Guideway Station	2007	20,416		0.00	Capital responsibility belongs to Metra.
16264	13091 UPNW Jefferson Park	false	4963 N. Milwaukee Ave.	Chicago	IL 60630	41.97075	-87.76211			MB				Elevated Fixed Guideway Station	2007	18,252		0.00	Capital responsibility belongs to Metra.
16265	08000 OTHER Union Station		225 S. Canal St	Chicago	IL 60606	41.87867	-87.6392			МВ				Other, Passenger or Parking (describe in Notes)	1991	230,740	)	0.00	Terminal passenger station; multi- level. This facility is shared with Amtrak. Capital responsibility belongs to Metra.
16266	05000 MEDML Millennium Station	false	151 N. Michigan Ave.	Chicago	IL 60602	41.88446	-87.62456			МВ				Other, Passenger or Parking (describe in Notes)	2016	159,780		0.00	Terminal passenger station; multi- level. Capital responsibility belongs to Metra.
16267	Howard	false	7519 N. Paulina St.	Chicago	IL 60626	42.019069	-87.672878			MB				Elevated Fixed Guideway Station	2009	18,200		0.00	Capital responsibility belongs to CTA.
16268	Cermak - Chinatown	false	138 W. Cermak Road	Chicago	IL 60616	41.853244	-87.630994			MB				At-Grade Fixed Guideway Station	1969	16,287		0.00	Capital responsibility belongs to CTA.
16269	95th - Dan Ryan	false	15 W. 95th Street	Chicago	IL 60620	41.722385	-87.624309			MB			Shared With Non- Public Mode: Airport, Private Bus Transit	At-Grade Fixed Guideway Station	2017	69,583		0.00	Capital responsibility belongs to CTA.
16270	Rosemont	false	5801 N. River Road	Rosemont	IL 60018	41.983468	-87.858961			MB				At-Grade Fixed Guideway Station	1983	13,100	)	0.00	Capital responsibility belongs to CTA.
16271	Cumberland	false	5800 N. Cumberland Avenue	Chicago	IL 60631	41.984136	-87.837961			МВ			Shared With Non- Public Mode: Airport, Private Bus Transit	At-Grade Fixed Guideway Station	1983	13,300	)	0.00	Capital responsibility belongs to CTA.
16272	Harlem - O'Hare	false	5550 N. Harlem Avenue	Chicago	IL 60656	41.982253	-87.80895			MB				At-Grade Fixed Guideway Station	1983	18,900	)	0.00	Capital responsibility belongs to CTA.
16273	Jefferson Park	false	4917 N. Milwaukee Avenue	Chicago	IL 60630	41.970286	-87.76188			MB				At-Grade Fixed Guideway Station	1971	16,700	)	0.00	Capital responsibility belongs to CTA.
16274	Clinton - Dear'n Sub.	false	426 S. Clinton Street	Chicago	IL 60607	41.875542	-87.640992			MB				Underground Fixed Guideway Station	1958	12,700	)	0.00	Capital responsibility belongs to CTA.
16275	Racine	false	430 S. Racine Avenue	Chicago	IL 60607	41.875917	-87.659446			MB				At-Grade Fixed Guideway Station	1958	10,500	)	0.00	Capital responsibility belongs to CTA.
16276	Cicero - Forest Park	false	720 S. Cicero Avenue	Chicago	IL 60644	41.871586	-87.745199			MB				At-Grade Fixed Guideway Station	1958	7,900	)	0.00	Capital responsibility belongs to CTA.
16277	Austin - Forest Park	false	1050 S. Austin Avenue	Oak Park	IL 60304	41.870871	-87.776876			MB				At-Grade Fixed Guideway Station	1960	8,800	)	0.00	Capital responsibility belongs to CTA.
16278	Oak Park - Congress	false	950 S. Oak Park Avenue	Oak Park	IL 60304	41.872052	-87.791661			MB				At-Grade Fixed Guideway Station	1960	8,800	1	0.00	Capital responsibility belongs to CTA.
16279	Harlem - Forest Park	false	701 S. Harlem Avenue	Forest park	IL 60130	41.873513	-87.806588			MB				At-Grade Fixed Guideway Station	1960	8,900	)	0.00	Capital responsibility belongs to CTA.
16280	Forest Park	false	711 S. Des Plaines avenue	Forest park	IL 60130	41.8743	-87.81724			MB				At-Grade Fixed Guideway Station	1982	16,150		0.00	Capital responsibility belongs to CTA.
16287	Harlem/Lake	false	1 S. Harlem Avenue	Forest Park	IL 60130	41.886841	-87.803145			MB				Elevated Fixed Guideway Station	1962	11,000		0.00	Capital responsibility belongs to CTA.
16288	Oak Park - Lake	false	100 S. Oak Park Avenue	Oak Park	IL 60304	41.887007	-87.793807			MB				Elevated Fixed Guideway Station	1962	8,000		0.00	Capital responsibility belongs to CTA.
16289	Ridaeland	false	36 S. Ridgeland	Oak Park	IL 60302	41.887193	-87.78363			MB				Elevated Fixed Guideway	1962	6.700	)	0.00	Capital responsibility belongs to CTA.



ID	Name	Section of Larger Facility?	Street	City	State Zip	Lat		Condition Assessment	Est. Date of Condition Assessment	Primary Mode	Non- Agency Mode	Secondary Modes	Private Mode	Facility Type	Year Built or Reconstructed as New	SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)	Notes
16290	Austin - Lake	false	351 N. Austin Avenue	Chicago	IL 60644	41.887311	-87.774179			МВ				Elevated Fixed Guideway Station	1962	8,000		0.00	Capital responsibility belongs to CTA.
16291	Cicero - Lake	false	4800 W. Lake Street	Chicago	IL 60644	41.886529	-87.744696			МВ				Elevated Fixed Guideway Station	1996	10,400		0.00	Capital responsibility belongs to CTA.
16292	Midway	false	4612 W. 59th Street	Chicago	IL 60629	41.786637	-87.73785			МВ			Shared With Non- Public Mode: Airport, Private Bus Transit		1993	33,400		0.00	Capital responsibility belongs to CTA.
16293	Linden	false	349 W. Linden Avenue	Wilmette	IL 60091	42.073147	-87.690711			MB				At-Grade Fixed Guideway Station	1993	9,400		0.00	Capital responsibility belongs to CTA.
16294	Davis	false	1612 N. Benson Avenue	Evanston	IL 60201	42.047702	-87.683547			MB				Elevated Fixed Guideway Station	1994	11,900		0.00	Capital responsibility belongs to CTA.
16295	54th/Cermak	false	2134 S. 54th Street	Cicero	IL 60650	41.851815	-87.756688			MB				At-Grade Fixed Guideway Station	2003	15,100		0.00	Capital responsibility belongs to CTA.
16296	Cicero - Douglas	false	2133 S. 48th Avenue	Cicero	IL 60650	41.851851	-87.745291			MB				At-Grade Fixed Guideway Station	1978	23,500		0.00	Capital responsibility belongs to CTA.
16297	Damen - Douglas	false	2010 S. Damen Avenue	Chicago	IL 60608	41.854533	-87.675931			MB				Elevated Fixed Guideway Station	2004	13,450		0.00	Capital responsibility belongs to CTA.
16298	Oakton-Skokie	false	4800 W. Oakton Street	Skokie	IL 60076	42.026242	-87.747214			MB				At-Grade Fixed Guideway Station	2012	10,651		0.00	Capital responsibility belongs to CTA.
16299	Dempster-Skokie	false	5001 W. Dempster Street	Skokie	IL 60077	42.038953	-87.75191			MB				At-Grade Fixed Guideway Station	1994	5,700		0.00	Capital responsibility belongs to CTA.
16880	Buffalo Grove Park-n- Ride	false	801 Commerce Court		IL 60089	42.17112	-87.94323	3	9/20/2018	в мв				Surface Parking Lot	2011		92	100.00	Surface parking lot for Facility ID 16065.
16881	Harvey Transportation Center Park-n-Ride	false	15330 Park Avenue	Harvey	IL 60426	41.61056	-87.6431	2	7/8/2019	э мв				Surface Parking Lot	1999		68	100.00	Surface parking lot for Facility ID 16070.
16882	I-90/Barrington Road Park-n-Ride	false	2410 Central Road	Hoffman Estates	IL 60192	42.06772	-88.14263	5	10/6/2020	) MB				Surface Parking Lot	2018		174	100.00	Surface parking lot for Facility ID 16075.
16883	Northwest Transportation Center Park-n-Ride	false	1730 Kimberly Drive	Schaumburg	IL 60173	42.04088	-88.03705	3	9/28/2020	) MB		DR	ı	Surface Parking Lot	2019		193	100.00	Surface parking lot for Facility ID 16078.
16884	Plainfield Park-n- Ride	false	14740 Depot Drive	Plainfield	IL 60544	41.6195	-88.2101	5	10/8/2020	) МВ				Surface Parking Lot	2018		600	100.00	Surface parking lot for Facility ID 16079.
16885	Bridgeview Transit Center Park-n-Ride	false	7000 South Harlem Avenue	Bridgeview	IL 60455	41.76342	-87.80285	5	10/7/2020	) МВ				Surface Parking Lot	2016		288	100.00	Surface parking lot for Facility ID 16081.
17995	17245 UPN Highwood	false	317 Green Bay Rd.	Highwood	IL 60040	42.20334	-87.8107			MB				At-Grade Fixed Guideway Station	1998	10,690		0.00	Capital responsibility belongs to Metra.
17996	17257 UPN Fort Sheridan	false	461 W. Old Elm Road	Highwood	IL 60040	42.21738	-87.8211			MB				At-Grade Fixed Guideway Station	1998	8,360		0.00	Capital responsibility belongs to Metra.
17997	17110 UPN Main St. Evanston	false	600 Main St.	Evanston	IL 60202	42.03359	-87.68013			МВ				Elevated Fixed Guideway Station	1988	16,164		0.00	Capital responsibility belongs to Metra.
18351	Hegewisch Station Platform	false	13730 South Brainard Ave.	Chicago	IL 60633					MB				At-Grade Fixed Guideway Station	2006	3,320		0.00	Capital responsibility belongs to NICTD.
18940	11224 UPW Glen Ellyn	false	511 Crescent VIvd. (at Main St)	Glen Ellyn	IL 60137	41.87642	-88.06471			MB				At-Grade Fixed Guideway Station	1987	16,512		0.00	Capital responsibility belongs to Metra.
18941	16439 NCS Washington St.	false	330 W. Washington St.	Grayslake	IL 60030	42.3597	-88.0505			MB				At-Grade Fixed Guideway Station	2006	7,202		0.00	Capital responsibility belongs to Metra.
18942	16459 NCS Round Lake Beach	false	680 East Mallard Creek Dr.	Round Lake Beach	IL 60073	42.38512	-88.06534			MB				At-Grade Fixed Guideway Station	1996	13,060		0.00	Capital responsibility belongs to Metra.
18943	13631 UPNW Harvard	false	1 N. Ayer Street	Harvard	IL 60033	42.41962	-88.61738			MB				At-Grade Fixed Guideway Station	1994	9,297		0.00	Capital responsibility belongs to Metra.
18944	Main	false	836 N. Chicago Avenue	Evanston	IL 60202	42.033467	-87.679516			MB				Elevated Fixed Guideway Station	1910	9,000		0.00	Capital responsibility belongs to CTA.
18945	South Blvd.	false	601 W. South Boulevard	Evanston	IL 60626	42.027393	-87.678389			MB				Elevated Fixed Guideway Station	1931	8,700		0.00	Capital responsibility belongs to CTA.
16069	Elk Grove Park-n- Ride	false	35 Northwest Point Boulevard	Elk Grove Village	IL 60007	42.03355	-87.98521	3	9/20/2018	B MB				Surface Parking Lot	1997		40	100.00	
16080	Prairie Stone Transportation Center	false	5401 Trillium Boulevard	Hoffman Estates	IL 60192	42.0734	-88.21307	3	9/18/2018	в мв				Bus Transfer Center	1993	170		100.00	
16083	95th Street Park-n- Ride	false	91st Street and Normantown	Naperville	IL 60564	41.71583	-88.23367			МВ				Surface Parking Lot	2008		202	9.00	Capital responsibility belongs to City of Naperville.



ID	Name		Section of Larger Facility?	Street	City	State Zip	Lat	Long	Condition Assessment	Est. Date of Condition Assessment	Primary Mode	Non- Agency Mode	Secondary Modes	Private Mode	Facility Type	Year Built or Reconstructed as New	SqFt	Parking Spaces	Transit Agency Capital Responsibility (%)	Notes
16109		10226 BNSF Belmont	false	5000 Belmont Road	Downers Grove	IL 60515	41.79545	-88.03811			ME	3			At-Grade Fixed Guideway Station		26,700		0.00	Capital responsibility belongs to Metra.
16113	(	10183 BNSF Clarendon Hills	false	1 South Prospect Ave	Clarendon Hills	IL 60514	41.79713	-87.95404			ME	3			At-Grade Fixed Guideway Station		8,053		0.00	Capital responsibility belongs to Metra.
16114		10169 BNSF Hinsdale	false	21 E Hinsdale Ave	Hinsdale	IL 60521	41.80297	-87.92826			ME	3			At-Grade Fixed Guideway Station		20,269		0.00	Capital responsibility belongs to Metra.
16115	W	10155 BNSF /estern Springs	false	914 Burlington Ave	Western Springs	IL 60558	41.80907	-87.9012			ME	3			At-Grade Fixed Guideway Station		14,900		0.00	Capital responsibility belongs to Metra.
16180	(	05293 MEDML Richton Park	false	F7PR+75	Richton Park	IL 60471	41.48581	-87.70914			ME	3			Elevated Fixed Guideway Station		10,716		0.00	Capital responsibility belongs to Metra.
16198		12265 MDW Schaumburg	false	2000 S. Springinsguth Rd.	Schaumburg	IL 60172	41.98924	-88.11822			ME	3			At-Grade Fixed Guideway Station		20,624		0.00	Capital responsibility belongs to Metra.
16201	12239	9 MDW Roselle	false	Medinah Rd.	DuPage County	IL 60157	41.97854	-88.05235			ME	3			At-Grade Fixed Guideway Station		11,598		0.00	Capital responsibility belongs to Metra.
16202	1221	10 MDW Itasca	false	119 Division Street	Wood Dale	IL 60191	41.96236	-87.97476			ME	3			At-Grade Fixed Guideway Station		16,214		0.00	Capital responsibility belongs to Metra.
16222	15	280 MDN Lake Forest	false	911 Telegraph Road	Lake Forest	IL 60045	42.22365	-87.87457			ME	3			At-Grade Fixed Guideway Station		17,605		0.00	Capital responsibility belongs to Metra.
16226		8 MDN Glen of North Glenview	false	3000 Old Williow Rd.	Glenview	IL 60025	42.09756	-87.81573			ME	3			At-Grade Fixed Guideway Station		20,035		0.00	Capital responsibility belongs to Metra.
16244	17	7283 UPN Lake Forest	false	691 N. Western Ave.	Lake Forest	IL 60045	42.25243	-87.83978			ME	3			At-Grade Fixed Guideway Station		20,908		0.00	Capital responsibility belongs to Metra.
16246	17205	UPN Braeside	false	10 N. St. Johns Ave.	Highland Park	IL 60035	42.15277	-87.77267			ME	В			At-Grade Fixed Guideway Station		8,656		0.00	Capital responsibility belongs to Metra.
18350		07164 RIDBB ermont St. Blue Island	false	2300 W Grove St	Blue Island	IL 60406	41.65469	-87.67756			ME	3			At-Grade Fixed Guideway Station		9,875		0.00	Capital responsibility belongs to Metra.



## **B.3 ASSET CONDITION**

## **B.3.1 CONDITION ASSESSMENT**

The condition ratings reported in this Plan for Pace's facilities assets reflect a mix of sources:

- RTA's Capital Optimization Support Tool (COST)
- Desktop Review by Pace Facilities Maintenance and Revenue Services staff
- Physical Condition Assessment by WSP, USA, Inc. (2018, 2019 & 2020)

As shown in **Table B - 2. Passenger Facilities Condition Rating Levels**, in all cases the condition scores follow the FTA-defined condition ratings.

Table B - 2. Passenger Facilities Condition Rating Levels

CONDITION	DEFINITION
5 (Excellent)	No visible defects, new or near new condition, may still be under warranty if applicable
•	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

Between 2012 and 2016, the annual RTA Budget Ordinance required Pace, CTA, and Metra, (i.e., Service Boards) to run the RTA's Capital Optimization Support Tool (COST) as another "tool in their toolbox" to produce a data driven report to assess transit capital investment needs. The COST condition rating process is based on the FTA's *TERM-Lite* software which uses an age/decay-curve based approach for asset condition estimation, supplemented by a small sample of actual asset condition observation site visits were conducted by the RTA consultant that also developed the COST tool. At that time, the RTA asset condition sampling forms were tailored at a high level and used to gather general site and building conditions by visual observation only. For many assets, the condition data were collected for individual components and scores were aggregated into a single, overall condition score for that asset. After the RTA's consultant contract expired in 2017, Pace no longer uses their methodology to assess facility condition.

## WSP FACILITY CONDITION ASSESSMENTS CONDUCTED IN 2018, 2019 & 2020

Beginning in 2018, Pace commenced assessing the condition of our Facilities using the FTA guidance document for Facilities Condition Assessments. As per the guidance, Pace intends to assess at least one-quarter of our Facilities each year, completing assessments of all facilities on a four-year cycle. In October 2017, Pace contracted with WSP USA, Inc. to conduct the Facility physical condition assessments over the TAM Plan horizon period of four years, ending in 2022.



The condition scores collected prior to 2018 (see **Table B - 4. Condition Scores for Facilities Assessed in 2020**) will remain in place for Facilities not yet assessed using the new methodology. This prior methodology is discussed above. As the remaining Facilities are assessed in the coming four years those older scores will be replaced. The older scores use the same TERM scale detailed in **Table B - 2. Passenger Facilities Condition Rating Levels** but the RTA consultant scores were based on a different breakdown of sub-assets within each facility and summed using a different calculation.

In 2018, 2019 and 2020, nine different Facilities were inspected annually by the WSP Inspection Team. The 2020 condition assessments are summarized in **Table B - 4. Condition Scores for Facilities Assessed in 2020**. 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, elevators, plumbing, HVAC, fire protection, electrical, site, and fare collection), 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.7 Condition Assessment Reports but are summarized in Table B - 3. Building Systems Weightings. 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.

Table B - 3. Building Systems Weightings

ID	BUILDING SYSTEM	WEIGHTINGS (%)
Α	Substructure	5-15
В	Shell	20-35
С	Interiors	5-10
D	Conveyance	1-5
E	Plumbing	5-10
F	HVAC	5-10
G	Fire Protection	1-5
Н	Electrical	1-5
	Equipment / Fare Collection	10-15
J	Site	10-15
Total		100%

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 2018, 2019 and 2020 scorecards found in **Section B.7. Condition Assessment Reports**.

Pace staff accompanied the WSP Inspection Team on their walks while they made observations of the site, made observations of each structure, and walked through and observed all accessible spaces and equipment of each Facility. Pace supplied background (not verified asbuilt) 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.3.2 CURRENT CONDITION INFORMATION AND PERFORMANCE TARGETS**

Condition information for Pace's Passenger Facilities, as of December 31, 2020 (used for the FY 2021 performance targets), is reported by facility in **Table B – 1. Facilities Inventory as of 12-31-2020**, while updated condition rating for facilities assessed by WSP in 2020 is included in **Table B - 4. Condition Scores for Facilities Assessed in 2020** and was used for the FY 2021 performance target setting.

Table B - 4. Condition Scores for Facilities Assessed in 2020

ASSET NAME	CONDITION RATING (PRIOR TO 2020)	CONDITION RATING (2020)	COMMENTS ON DIFFERENCES
	Passenger Fa	cilities	
Northwest Transportation Center Facility	4	3	Scores varied slightly, rounding brought score down.
Northwest Transportation Center Park-n-Ride	4	3	Scores varied slightly, rounding brought score down.
Hillside Park-n-Ride	2	3	Scores varied slightly, rounding brought score up.
I-90 / Barrington Road Park-n-Ride	5	5	No change in score.
I-90 / Barrington Road Pedestrian Overpass Bridge and Bridge Access Buildings	5	5	No change in score.
Elgin Transportation Center	4	4	No change in score.
Bridgeview Transit Center Facility	5	5	No change in score.
Bridgeview Transit Center Park-n-Ride	5	5	No change in score.
Plainfield Park-n-Ride	5	5	No change in score.
Plainfield Passenger Shelter Building	5	5	No change in score.
Ad	dministrative and Maint	tenance Facilities	
Pace Administration Headquarters	4	4	No change in score.
Northwest Division	1	2	Scores varied slightly, rounding brought score up.
West Division	2	4	Division recently completed an improvement campaign.



Condition ratings will be 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)."<sup>2</sup>

"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."

Information on Pace's performance targets for facilities is contained in **Table B - 5**. **Performance Targets for Stations and Passenger Facilities**. Performance Targets are developed per FTA's guidance for locations where Pace has capital responsibility.

Table B - 5. Performance Targets for Stations and Passenger Facilities

ASSET TYPE	2020 TARGET	2020 PERFORMANCE	2021 TARGET
Passenger / Parking Facilities	19.23%	16.67%	16.67%
Administrative / Maintenance	25.00%	16.67%	16.67%
Facilities			

## **B.4 LIFECYCLE MANAGEMENT STRATEGIES**

## **B.4.1 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.

#### **B.4.2 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, and professionalism.

<sup>&</sup>lt;sup>2</sup> Federal Transit Administration, U.S. Department of Transportation, National Transit Database Asset Inventory Module 2017-2018 Reporting Guide

<sup>&</sup>lt;sup>3</sup> Ibid 2.



These four goals ensure that 1) safety and comfort of the agency's passengers are the primary consideration of all maintenance functions, 2) the fleet is serviced at a rate that covers the needs of the agency and addresses any emergencies that might arise, 3) the lowest cost is maintained without sacrificing safety, and 4) maintenance is technologically current.

All equipment shall be maintained as listed in the Pace Capital Financing & 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 Financing & Infrastructure Facilities Maintenance logbook, the Revenue Services, Superintendent of Maintenance shall consult the Capital Financing & 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 Financing & 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 Financing & 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 Financing & 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 Financing & 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 Financing & 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 an 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 Facilities Maintenance, Section Manager, 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.4.3 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.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 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.

If the proceeds from the asset exceed a certain dollar value or have remaining useful life, then the Section Manager, Grants Administration will coordinate repayment to the funding agency and obtain concurrence. Pace has an agreement with the FTA that allows Pace to retain all funds due back to the FTA, with the assurance that Pace acquire new assets with the funds and give the FTA 100% equity in those assets.

## **B.4.5 SUPPLY CHAIN AND PROCUREMENT**

Size and scope of the project influences which department, Capital Financing & Infrastructure / Design & Construction, Capital Financing & 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 Financing & 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.5 ASSET MANAGEMENT ENABLERS**

## **B.5.1 ORGANIZATION**

Responsibility for operations and maintenance of Pace's Passenger and Parking Facilities is divided across the organization, between Capital Financing & 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 Facility Maintenance Specialists based out of South Holland Acceptance Facility 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 Financing & 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-\$10,000,000 with around 12 active projects at any time.

## **B.5.2 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.5.3 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.



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.5.5 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 Financing & 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.5.6 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.6 CAPITAL PLANS**

In FY2021 through FY2025, Pace expects to spend over \$121 million on facilities. In **Table B - 6. Facilities Capital Budget Forecast (\$000s)** below is a snapshot of Pace's anticipated capital spends in this asset class.



Table B - 6. Facilities Capital Budget Forecast (\$000s)

PROJECT	2021 BUDGET	2022 FORECAST	2023 FORECAST	2024 FORECAST	2025 FORECAST
Improve Passenger Facilities	\$120	\$500	\$1,500	\$10,475	\$0
Bus Stop Shelters/Signs	1,330	1,000	1,500	1,500	0
Bus Tracker Sign Deployment	600	550	1,500	1,000	0
Pulse Dempster Line Easements	600	0	0	0	0
I-55 Park-n-Rides	0	750	6,000	0	0
I-294 Station & Park-n-Rides	0	0	3,500	31,500	0
Improve Support Facilities	0	500	1,500	1,500	0
Northwest Wheeling Garage	10,000	0	0	0	0
Plainfield Garage	8,300	0	0	0	0
North Shore Division Expansion	0	2,000	18,000	0	0
Southwest Division Expansion	0	2,000	16,000	0	0
Office Equipment/Furniture	0	0	500	0	0
Total	\$20,950	\$7,300	\$50,000	\$45,975	\$0

## **B.7 WSP CONDITION ASSESSMENT REPORTS**

The following 27 scoresheets, **Table B - 7** through **Table B - 36.** 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 2018 and Reference for RY 2018 NTD Reporting
- Pace Facilities Inspection Report 2019 and Reference for RY 2019 NTD Reporting
- Pace Facilities Inspection Report 2020 and Reference for RY 2020 NTD Reporting



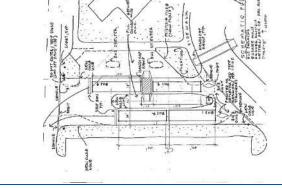
## Table B - 7. WSP Inspection Report - Gurnee Mills

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

ID#	NAME	ASSET QUANTITY		CONDITION RATING	ASSIGNED WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	168	SF	2	6				100		
В	Shell	432	SF	1.86	10				86	14	
С	Interiors	0	SF	0	0						
D	Conveyance	0	Each	0	0						
Ε	Plumbing	3	Each	3	1			100			
F	HVAC	0	Each	0	0						
G	Fire Protection	0	SF	0	0						
Н	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 - 8. WSP Inspection Report - Prairie Stone

Inspection Date	September 18, 2018
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Prairie Stone Transit Center
<b>Address / Location</b>	5401 Trillium Blvd. Hoffman Estates, IL 60192

ID#	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	976	SF	2	10				100		
В	Shell	9,426	SF	2.79	25			84	11	5	
С	Interiors	170	SF	1.79	4				79	21	
D	Conveyance	0	Each	0	0						
Е	Plumbing	4	Each	2.5	4			75		25	
F	HVAC	2	Each	3	1			100			
G	Fire Protection	1	SF	3	1			100			
Н	Electrical	30	Each	1.67	5				67	33	
I	Equipment	0	Each	0	0						
J	Site	58,409	SF	2.7	50			80	10	10	

Total Aggregate Rating
Aggregate Rating Rounded

3

Representative Inspection Photo

Site Plan



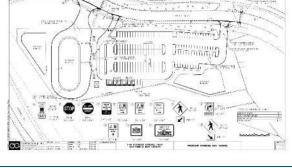
## Table B - 9. WSP Inspection Report - I-90 Randall Road

Inspection Date	September 18, 2018
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	I-90 Randall Road Transit Center
<b>Address / Location</b>	2001 N. Randall Road Elgin, Illinois 60123

ID #	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT					
					VALUE	5	4	3	2	1
Α	Substructure	755	SF	5	10	100				
В	Shell	2,230	SF	4.99	20	99	1			
С	Interiors	703	SF	4.98	4	98	2			
D	Conveyance	0	Each	0	0					
E	Plumbing	2	Each	5	4	100				
F	HVAC	4	Each	5	1	100				
G	Fire	0	SF	0	0					
	Protection									
Н	Electrical	18	Each	5	5	100				
I	Equipment	1	Each	1	1					100
J	Site	155,248	SF	4.99	55	99	1			

Total Aggregate Rating 4.95
Aggregate Rating Rounded 5





Representative Inspection Photo

Site Plan



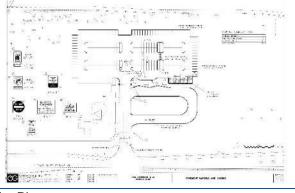
## Table B - 10. WSP Inspection Report - I-90 IL 25 Park N Ride

Inspection Date	September 18, 2018
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	I-90 / IL 25 Park n Ride
<b>Address / Location</b>	1475 Dundee Ave. Elgin, IL 60120

ID#	NAME	ASSET QUANTITY		CONDITION RATING	ASSIGNED WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	224	SF	5	13	100					
В	Shell	1,012	SF	4.99	20	99	1				
С	Interiors	0	SF	0	0						
D	Conveyance	0	Each	0	0						
Е	Plumbing	0	Each	0	0						
F	HVAC	2	Each	5	1	100					
G	Fire Protection	0	SF	0	0						
Н	Electrical	17	Each	5	5	100					
	Equipment	1	Each	2.5	1		50			50	
J	Site	115,200	SF	4.85	60	94.5		2	3	0.5	

Total Aggregate Rating 4.88
Aggregate Rating Rounded 5





Representative Inspection Photo

Site Plan



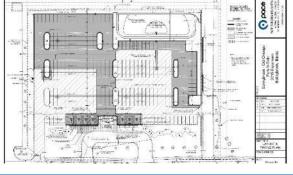
## Table B - 11. WSP Inspection Report - Bolingbrook Old Chicago

Inspection Date	September 18, 2018
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Bolingbrook Old Chicago
Address / Location	120 East Old Chicago Drive Bolingbrook 60440

ID#NAME		ASSET QUANTITY	l .	CONDITION RATING	ASSIGNED WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	112	SF	3	12			100			
В	Shell	506	SF	3	20			100			
С	Interiors	0	SF	0	0						
D	Conveyance	0	Each	0	0						
Ε	Plumbing	0	Each	0	0						
F	HVAC	1	Each	4	1		100				
G	Fire Protection	1	Each	2	1				100		
Н	Electrical	15	Each	3.7	5		85	6	6		
I	Equipment	1	Each	0	1		50			50	
J	Site	139,730	SF	3.26	60		36	54	10		

Total Aggregate Rating 3.16
Aggregate Rating Rounded 3





Representative Inspection Photo

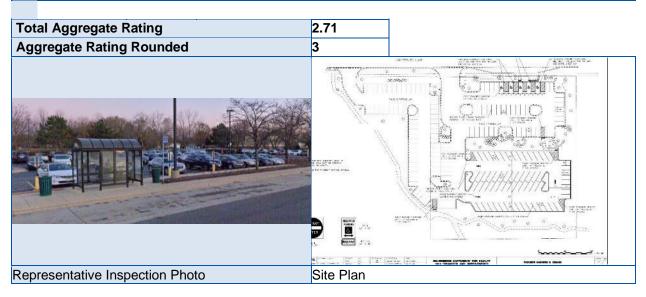
Site Plan



## Table B - 12. WSP Inspection Report – Bolingbrook Canterbury

Inspection Date	September 18, 2018
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Bolingbrook Canterbury
Address / Location	170 Canterbury Lane Bolingbrook, Illinois 60440

ID #NAME		ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1
Α	Substructure	112	SF	3	12			100		
В	Shell	506	SF	2	20				100	
С	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
Е	Plumbing	0	Each	0	0					
F	HVAC	1	Each	3	1			100		
G	Fire Protection	1	Each	2	1				100	
Н	Electrical	7	Each	2.72	5			72	28	
I	Equipment	1	Each	2	1			50		50
J	Site	88,680	SF	2.9	60			95		5





## Table B - 13. WSP Inspection Report - Burr Ridge

Inspection Date	September 18, 2018
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		WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION				
					VALUE	5	4	3	2	1
Α	Substructure	324	SF	2.85	10			85	15	
В	Shell	594	SF	2.4	20			70		30
С	Interiors	0	SF	0	0					
D	Conveyance	0	Each	0	0					
E	Plumbing*	88,680	SF	3	3			100		
F	HVAC	0	Each	0						
G	Fire Protection	0	Each	0						
Н	Electrical	10	Each	2.5	5			60	30	10
	Equipment	1	Each	2	1			50		50
J	Site	88,680	SF	1.8	60			40		60

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

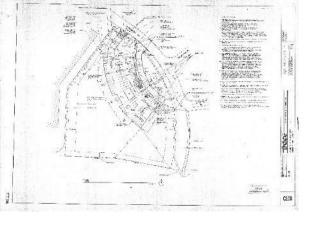
**Total Aggregate Rating** 

2.08

**Aggregate Rating Rounded** 

2





Representative Inspection Photo



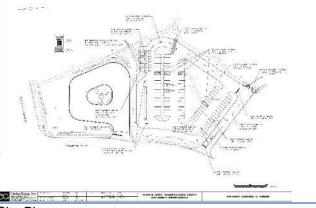
## Table B - 14. WSP Inspection Report - Buffalo Grove

Inspection Date	September 20, 2018
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Buffalo Grove Park n Ride
<b>Address / Location</b>	801 Commerce Ct, Buffalo Grove, Illinois 60089

ID #	NAME	ASSET QUANTITY		CONDITION / RATING	WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	464	SF	4	10		100				
В	Shell	594	SF	3.97	15		99			1	
С	Interiors	510	SF	3	5			100			
D	Conveyance	10	Each	0	0						
E	Plumbing	4	Each	2	2				100		
F	HVAC	2	Each	2	2				100		
G	Fire Protection	10	Each	0	0						
Н	Electrical	24	Each	2.84	5			92		8	
I	Equipment	1	Each	2.5	1		50			50	
J	Site	72,481	SF	3.5	60		65		45		

Total Aggregate Rating 3.49
Aggregate Rating Rounded 3





Representative Inspection Photo

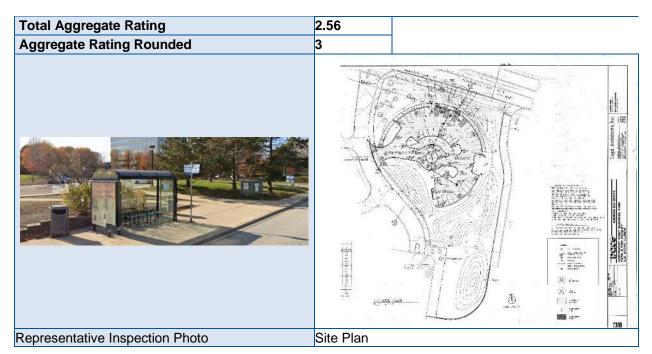


### Table B - 15. WSP Inspection Report - Elk Grove

Inspection Date	September 20, 2018
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	AME ASSET UNIT OF QUANTITY MEASUR			WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	112	SF	3	10			100			
В	Shell	624	SF	3	15			100			
С	Interiors	10	SF	0	0						
D	Conveyance	10	Each	0	0						
E	Plumbing*	75,673	Each	3	2			100			
F	HVAC	10	Each	0	0						
G	Fire Protection	10	Each	0	0						
Н	Electrical	16	Each	2.5	5			50	50		
I	Equipment	1	Each	2.5	1		50			50	
J	Site	75,673	SF	2.66	60			68	30	2	

<sup>\*</sup> Plumbing in this instance refers to a sprinkler system over the whole site.





### Table B - 16. WSP Inspection Report - Heritage Division Facility

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

ID #	NAME	AME ASSET UNIT OF QUANTITY MEASURE		CONDITION ASSIGNED RATING WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1
Α	Substructure	66,077	SF	2.8	15			85	10	5
В	Shell	66,077	SF	2.85	35			80	20	5
С	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		
Н	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	





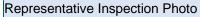
### Table B - 17. WSP Inspection Report - Homewood Park-N-Ride

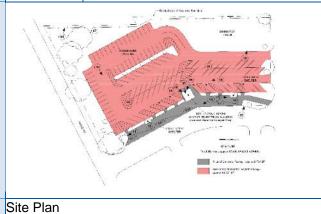
Inspection Date	July 8, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Homewood Park-N-Ride
<b>Address / Location</b>	750 Ridge Road, Homewood, Illinois 60430

ID#	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT			NT OF BY C		
					VALUE	5	4	3	2	1
Α	Substructure	435	SF	2.9	10			90	10	
В	Shell	435	SF	2.9	20			90	10	
С	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					
Н	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









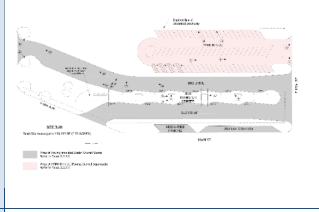
### Table B - 18. WSP Inspection Report – Harvey Transportation Center

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

ID#	NAME	ASSET QUANTITY	UNIT OF MEASURE					NT OF		
					VALUE	5	4	3	2	1
Α	Substructure	1,983	SF	2.95	25			95	5	
В	Shell	1,566	SF	1.7	10				70	30
С	Interiors	720	SF	2.1	10			20	70	10
D	Conveyance	0	Each	0	0					
Ε	Plumbing*	6	Each	2	3			100		
F	HVAC	1	Each	3	5				100	
G	Fire Protection	0	SF	0	0					
Н	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



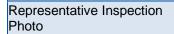
### Table B - 19. WSP Inspection Report - Blue Island Park-N-Ride

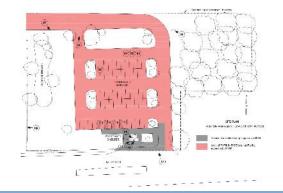
Inspection Date	July 8, 2019
Inspector Name	Cary Els / Rafael Ruiz
Facility Name	Blue Island Park-N-Ride
<b>Address / Location</b>	3060 W. 127th Street, Blue Island, Illinois 60406

ID#	NAME	AME ASSET QUANTITY		UNIT OF CONDITION A MEASURE RATING	WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	100	SF	2.95	15			95	5		
В	Shell	100	SF	2.8	15			80	20		
С	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			
Н	Electrical	121,973	SF	2.9	4			90	10		
I	Equipment	0	Each								
J	Site	121,973	SF	2.83	65			88	7	5	

Total Aggregate Rating 2.82
Aggregate Rating Rounded 3









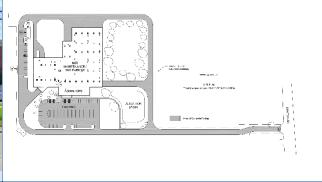
### Table B - 20. WSP Inspection Report - North Shore Division Facility

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

ID#	NAME	ASSET UNIT O QUANTITY MEASUR		CONDITION ASSIGN RATING WEIGH		PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	81,471	SF	2.95	15			95	5		
В	Shell	81,471	SF	3.75	35		80	15	5		
С	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			
Н	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





Representative Inspection Photo



### Table B - 21. WSP Inspection Report - McHenry Paratransit Facility

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

ID#	NAME	ASSET UNIT OF QUANTITY MEASURE				RATING WEIGHT		PERCENT OF ASSET QUANTITY BY CONDITION				
					VALUE	5	4	3	2	1		
Α	Substructure	28,097	SF	2.95	15			95	5			
В	Shell	28,097	SF	3.3	35		40	50	10			
С	Interiors	28,097	SF	3.4	10		50	40	10			
D	Conveyance	0	Each	0	0							
Е	Plumbing*	6	Each	3	5			100				
F	HVAC	1	Each	3	6			100				
G	Fire Protection	0	SF	0	2							
Н	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







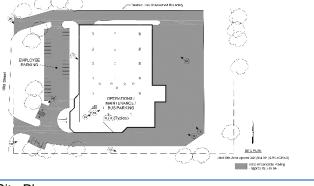
### Table B - 22. WSP Inspection Report - North Division Facility

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

ID#	NAME	ASSET UNIT OF QUANTITY MEASURE			ASSIGNED WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	57,754	SF	2.75	15			80	15	5	
В	Shell	57,754	SF	3.2	35		30	60	10		
С	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						
Н	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



### Table B - 23. WSP Inspection Report - River Division Facility

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

ID#	NAME	ASSET QUANTITY	UNIT OF MEASURE	CONDITION RATING	ASSIGNED WEIGHT		PERCENT O			
					VALUE	5	4	3	2	1
Α	Substructure	63,235	SF	2.9	15			90	10	
В	Shell	63,235	SF	2.7	35			70	30	
С	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		
Н	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 Rounded 3

Aggregate Rating Rounded 5

Representative Inspection Photo Site Plan



## Table B - 24. WSP Inspection Report - Fox Valley Division Facility

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

ID#	NAME	ASSET QUANTITY		_ I			RCE	_		
					VALUE	5	4	3	2	1
Α	Substructure	56,833	SF	2.95	15			95	5	
В	Shell	56,833	SF	2.95	35		20	60	15	5
С	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	
Н	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 Rounded

3

General Live of Progress Davidey

Aggregate Rating Rounded

Site Plan

Total Aggregate Rating Rounded

Site Plan



## Table B - 25. 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					PERCENT OF ASSET QUANTITY BY CONDITION				
					VALUE	5	4	3	2	1
Α	Substructure	63,970	sf	4	15		100			
В	Shell	63,970	sf	4	35		100			
С	Interiors	1	system	4.5	10	50	50			
D	Conveyance	1	ea	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			
Н	Electrical	3	systems	4.75	5	75	25			
I	Equipment			N/A	0					
J	Site	541,375	sf	4	15		100			

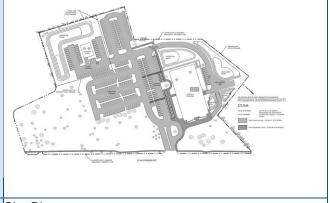
Total Aggregate Rating

4.12

Aggregate Rating Rounded







Representative Inspection Photo



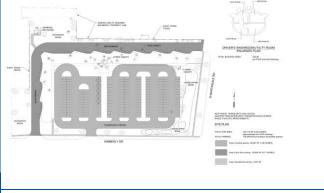
### Table B - 26. WSP Inspection Report - Northwest Transportation Center

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#			RATING WEIGHT		PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1
Α	Substructure	293	sf	3	15			100		
В	Shell	293	sf	2.3	35			30	70	
С	Interiors	293	sf	3	10			100		
D	Conveyance			N/A	0					
E	Plumbing*	2	systems	2.4	6			40	60	
F	HVAC	2	systems	3	6			100		
G	Fire Protection			N/A	0					
Н	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



### Table B - 27. WSP Inspection Report - Northwest Division Facility

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

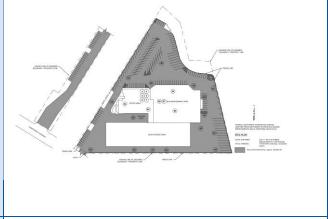
ID#	NAME	ASSET QUANTITY		CONDITION RATING	ASSIGNED WEIGHT	_		NT OF ASSET BY CONDITION		
					VALUE	5	4	3	2	1
Α	Substructure	83,484	sf	2	15				100	
В	Shell	83,484	sf	1.8	33				80	20
С	Interiors	83,484	sf	2	10				100	
D	Conveyance	1	ea	3	2			100		
E	Plumbing*	5	Systems	1.6	5				60	40
F	HVAC		Fans / HW							
		20	Systems / RTUs	1.5	6				50	50
G	Fire Protection	3	Systems	1.7	2			10	50	40
Н	Electrical	3	Systems	1.5	2				50	50
I	Equipment	4	ea	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





Representative Inspection Photo



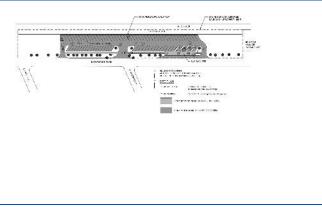
### Table B - 28. WSP Inspection Report - Hillside Park-n-Ride

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

ID #	NAME			UNIT OF CONDITION A MEASURE RATING	WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure			N/A	0						
В	Shell			N/A	0						
С	Interiors			N/A	0						
D	Conveyance			N/A	0						
E	Plumbing*	6	ea	3	10			100			
F	HVAC			N/A	0						
G	Fire Protection	ı		N/A	0						
Н	Electrical	2	systems	3	5			100			
I	Equipment			N/A	0						
J	Site	78,667	sf	2.77	85		6	65	29		

Total Aggregate Rating 2.8
Aggregate Rating Rounded 3







### Table B - 29. WSP Inspection Report - West Division Facility

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

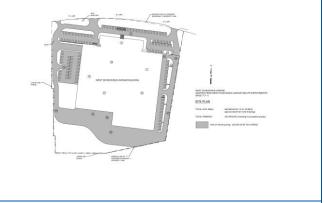
ID#	NAME	ASSET QUANTITY	UNIT OF MEASURE			RATING WEIGH			RCE!			
					VALUE	5	4	3	2	1		
Α	Substructure	222,308	sf	3.5	15		50	50				
В	Shell	222,308	sf	4	32		100					
С	Interiors	222,308	sf	4.2	10	50	35		15			
D	Conveyance	1	ea	4	3		100					
E	Plumbing*	2	systems	4	5		100					
F	HVAC	2	systems	3.1	6		70			30		
G	Fire Protection	4	systems	3.6	2		75	10	15			
Н	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





Representative Inspection Photo

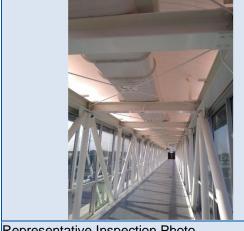


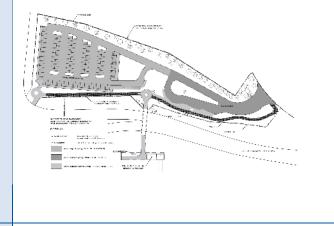
## Table B - 30. WSP Inspection Report - I-90 / Barrington Road Park-n-Ride

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		RATING WEIGHT QUA			_	_	ASS ONDI	
					VALUE	5	4	3	2	1
Α	Substructure	7,052	sf	5	15	100				
В	Shell	7,052	sf	5	30	100				
С	Interiors	7,052	sf	5	10	100				
D	Conveyance	2	ea	5	6	100				
E	Plumbing*	2	systems	5	6	100				
F	HVAC	(2)AHU	ea	5	6	100				
G	Fire Protection	1	system	5	3	100				
Н	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



### Table B - 31. WSP Inspection Report - I-90 / Barrington Road Park-n-Ride

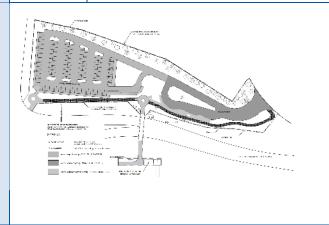
Inspection Date	October 6, 2020
Inspector Name	Lindsay Zanders/Joe Millham
Facility Name	I-90 / Barrington Road Park-n-Ride
<b>Address / Location</b>	2410 Central Road, Hoffman Estates, IL 60192

ID#	#NAME	ASSET QUANTITY		CONDITION RATING	WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION				
					VALUE	5	4	3	2	1
Α	Substructure	3 (Bus		_	_	400				
		Shelters)	ea	5	5	100				
В	Shell	3 (Bus								
		Shelters)	ea	5	5	100				
С	Interiors			N/A						
D	Conveyance			N/A						
E	Plumbing*			N/A						
F	HVAC			N/A						
G	Fire Protection			N/A						
Н	Electrical			N/A						
I	Equipment			N/A						
J	Site	461,840	sf	5	90	100				

### **Total Aggregate Rating**

### **Aggregate Rating Rounded**





Representative Inspection Photo

Site Plan



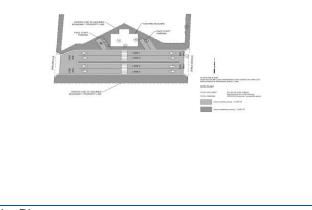
### Table B - 32. WSP Inspection Report - Elgin Transportation Center

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

ID#	NAME	ASSET QUANTITY		CONDITION A RATING	WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	1,817	sf	3.7	15		70	30			
В	Shell	1,817	sf	3.7	30		70	30			
С	Interiors	1,817	sf	3.7	10		70	30			
D	Conveyance			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					
Н	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



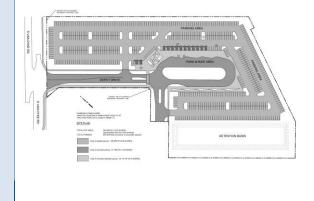
### Table B - 33. WSP Inspection Report - Plainfield Bus Transfer Center

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

ID#	NAME	IE ASSET UNIT OF QUANTITY MEASURE		_	WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure	1,433	sf	5	15	100					
В	Shell	1,433	sf	5	35	100					
С	Interiors	1,433	sf	5	10	100					
D	Conveyance			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					
Н	Electrical	3	systems	5	5	100					
I	Equipment	1	ea	5	10	100					
J	Site	546,655	sf	5	10	100					

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





Representative Inspection Photo



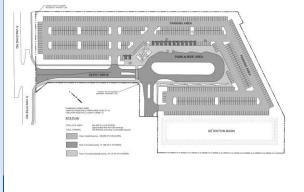
### Table B - 34. WSP Inspection Report - Plainfield Park-n-Ride

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

ID#	NAME			JNIT OF CONDITION A EASURE RATING	WEIGHT	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1	
Α	Substructure			N/A	0						
В	Shell			N/A	0						
С	Interiors			N/A	0						
D	Conveyance			N/A	0						
E	Plumbing*			N/A	0						
F	HVAC			N/A	0						
G	Fire Protection			N/A	0						
Н	Electrical			N/A	0						
I	Equipment			N/A	0						
J	Site	546,655	sf	5	100	100					

Total Aggregate Rating 5
Aggregate Rating Rounded 5





Representative Inspection Photo



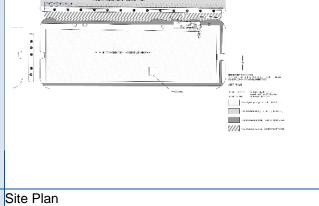
### Table B - 35. WSP Inspection Report - Bridgeview Transit Center

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

ID #	NAME			RATING WEIGHT C			PERCENT OF ASSET QUANTITY BY CONDITION				
					VALUE	5	4	3	2	1	
Α	Substructure	2,400	sf	5	15	100					
В	Shell	2,400	sf	5	35	100					
С	Interiors	2,400	sf	5	10	100					
D	Conveyance			N/A	0						
E	Plumbing*	3	Systems	5	10	100					
F	HVAC	3	Systems	4.9	8	90	10				
G	Fire Protection			N/A	0						
Н	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





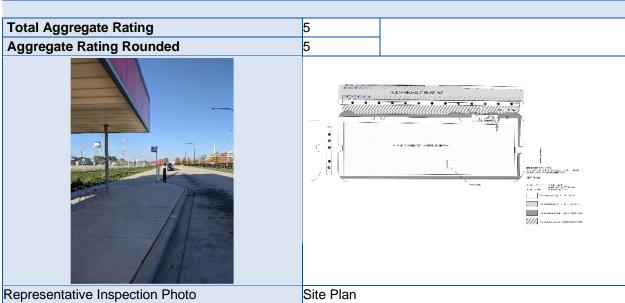
Representative Inspection Photo



### Table B - 36. WSP Inspection Report - Bridgeview Park-n-Ride

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

ID#	NAME	ME ASSET UNIT OF QUANTITY MEASURE		1	PERCENT OF ASSET QUANTITY BY CONDITION					
					VALUE	5	4	3	2	1
Α	Substructure			N/A						
В	Shell			N/A						
С	Interiors			N/A						
D	Conveyance			N/A						
Е	Plumbing*			N/A						
F	HVAC			N/A						
G	Fire Protection	ı		N/A						
Н	Electrical			N/A						
I	Equipment			N/A						
J	Site	252,850	sf	5	100	100				



### **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),<sup>4</sup> 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 RY2020 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. A-35 Service Vehicle Inventory Form as of 12/31/2020 for a copy of the submitted NTD RY2020, A-35 Service Vehicle Inventory 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.

Initial Transit Asset Management Plan 2020 Update Appendices

<sup>&</sup>lt;sup>4</sup> Federal Transit Administration, U.S. Department of Transportation, National Transit Database Asset Inventory Module 2017-2018 Reporting Guide



# Table C - 1. A-35 Service Vehicle Inventory Form as of 12/31/2020

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Service Vehicle Inventory (A-35)

ID Agency Fle	et Id Fleet Name	Vehicle Type	Primary Mode Y	/ear Manufactured	Estimated Cost	Useful Life Benchmark (Years) Useful Life	Remaining (Years) To	tal Vehicles Transit	Agency Capital Responsibility (%)	Year Dollars of Estimated Cost	Secondary Modes Notes Statu
19577	Chevy C7H042	Trucks and other Rubber Tire Vehicles	MB - Bus	1994	\$46,071.00	10	-16	1	100.00	1994	Active
19578	GMC C7H042	Trucks and other Rubber Tire Vehicles	MB - Bus	1994	\$51,706.00	10	-16	1	100.00	1994	Active
19579	International 4170	Trucks and other Rubber Tire Vehicles	MB - Bus	1995	\$219,900.00	10	-15	4	100.00	1995	Active
19580	International 4700	Trucks and other Rubber Tire Vehicles	MB - Bus	1995	\$109,950.00	10	-15	2	100.00	1995	Active
19581	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2000	\$39,663.00	10	-10	1	100.00	2000	Active
19582	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2005	\$28,330.00	10	-5	1	100.00	2005	Active
19583	Ford F250	Trucks and other Rubber Tire Vehicles	MB - Bus	2009	\$57,196.00	10	-1	2	100.00	2009	Active
19584	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	\$47,876.00	10	0	2	100.00	2010	Active
19585	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	\$207,010.20	10	0	6	100.00	2010	Active
19586	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	\$164,510.80	10	0	4	100.00	2010	Active
19587	Ford E350 Cube Van	Trucks and other Rubber Tire Vehicles	MB - Bus	2012	\$62,694.00	10	2	2	100.00	2012	Active
19588	Ford F250	Trucks and other Rubber Tire Vehicles	MB - Bus	2012	\$35,989.00	10	2	1	100.00	2012	Active
19589	Dodge Ram 1500	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	\$73,875.00	10	3	3	100.00	2013	Active
19590	International 7400	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	\$231,461.00	10	3	1	100.00	2013	Active
19591	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2016	\$35,514.48	10	6	1	100.00	2016	Active
19592	Ford F350	Trucks and other Rubber Tire Vehicles	MB - Bus	2016	\$48,120.00	10	6	1	100.00	2016	Active
19593	Freightliner 35T	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	\$321,999.00	10	8	1	100.00	2017	Active
19594	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	\$157,065.00	10	8	5	100.00	2018	Active
19595	Ford F550	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	\$103,556.00	10	8	1	100.00	2018	Active
19597	Chevy Malibu	Automobiles	MB - Bus	2009	\$25,975.00	5	-6	1	100.00	2009	Active
19598	Dodge Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2009	\$53,730.00	5	-6	3	100.00	2009	Active
19599	Ford Focus	Automobiles	MB - Bus	2009	\$66,173.00	5	-6	5	100.00	2009	Active
19600	Chevy Impala	Automobiles	MB - Bus	2010	\$154,017.60	5	-5	8	100.00	2010	Active
19601	Ford E350	Trucks and other Rubber Tire Vehicles	MB - Bus	2010	\$522,222.30	5	-5	13	100.00	2010	Active
19602	Ford Focus	Automobiles	MB - Bus	2010	\$354,246.00	5	-5	24	100.00	2010	Active
19604	Dodge Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2011	\$49,634.80	5	-4	2	100.00	2011	Active
19605	Dodge Grand Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2012	\$387,291.00	5	-3	15	100.00	2012	Active
19606	Dodge Grand Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	\$352,833.60	5	-2	14	100.00	2013	Active
19607	Ford Explorer	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	\$316,778.88	5	-2	12	100.00	2013	Active
19608	Ford Transit Connect Mini	Trucks and other Rubber Tire Vehicles	MB - Bus	2013	\$109,532.00	5	-2	5	100.00	2013	Active
19609	Ford Focus	Automobiles	MB - Bus	2014	\$33,388.00	5	-1	2	100.00	2013	Active
19610	Ford Focus - Electric	Automobiles	MB - Bus	2014	\$32,380.00	5	-1	1	100.00	2014	Active
19611	Dodge Grand Caravan	Trucks and other Rubber Tire Vehicles	MB - Bus	2016	\$82,335.00	5	1	3	100.00	2016	Active
19612	Ford Taurus	Automobiles	MB - Bus	2016	\$483,392.00	5	1	26	100.00	2016	Active
19613	Ford Explorer	Trucks and other Rubber Tire Vehicles	MB - Bus	2017	\$55,996.00	5	2	2	100.00	2017	Active
19614	Ford Taurus	Automobiles	MB - Bus	2017	\$85,436.00	5	2	4	100.00	2017	Active
19615	Ford Escape	Trucks and other Rubber Tire Vehicles	MB - Bus	2018	\$195,416.00	5	3	8	100.00	2018	Active
26340	Ford Escape	Trucks and other Rubber Tire Vehicles	MB - Bus	2019	\$1,297,150.00	5	4	50	100.00	2019	Active
26341	Ford F250	Trucks and other Rubber Tire Vehicles	MB - Bus	2020	\$42,945.52	10	10	1	100.00	2020	Active
26342	Ford F150	Trucks and other Rubber Tire Vehicles	MB - Bus	2020	\$136,791.84	10	10	4	100.00	2020	Active

Total Vehicles: 243



### **C.3 ASSET CONDITION**

#### C.3.1 CONDITION ASSESSMENT

For Service Vehicles, condition is measured based on the asset's 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 Transit Provider's operating environment, or as per FTA guidance.

#### C.3.2 CURRENT CONDITION INFORMATION AND PERFORMANCE TARGETS

Table C - 1. A-35 Service Vehicle Inventory Form as of 12/31/2020 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.

Table C - 2. Performance Targets for Equipment

ASSET TYPE	2020 TARGET	2020 PERFORMANCE	2021 TARGET
Automobiles	36.17%	57.75%	89.74%
Trucks and Other Rubber Tire Vehicles	44.14%	51.16%	41.48%

### 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 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. 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. Company cars, uniquely, are the responsibility of the Non-Revenue Vehicle Fleet Administrator. 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 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 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. Field personnel can report problems with equipment to their supervisor, who determines whether replacement is necessary, and if so, makes a request to Procurement 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.

If the proceeds from the asset exceed a certain dollar value or have remaining useful life, then the Section Manager, Grants Administration will coordinate repayment to the funding agency and obtain concurrence. Pace has an agreement with the FTA that allows Pace to retain all funds due back to the FTA, with the assurance that Pace acquire new assets with the funds and give the FTA 100% equity in those assets.

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 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.

#### C.5.2 TECHNOLOGY / ASSET KNOWLEDGE AND INFORMATION

Pace relies on several software applications to support improved performance management and decision making including FLEETWATCH Fuel and Fluids Management System, Oracle Enterprise Asset Management (eAM), and Oracle Application Express (APEX). APEX is used to record all asset information. The records in APEX are used to track cost, useful life, depreciation, grant funding, location, and the status of the asset. The application also has many reporting capabilities.



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 FY2021 through FY2025.

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

PROJECT	2021 BUDGET	2022 FORECAST	2023 FORECAST	2024 FORECAST	2025 FORECAST
Computer Systems/ Hardware & Software	\$1,100	\$1,000	\$1,500	\$1,500	\$0
Support Equipment/Non- Revenue Vehicles	500	500	850	500	0
Farebox System Replacement	6,000	4,000	0	0	0
Total	\$7,600	\$5,500	\$2,350	\$2,000	\$0

**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:<sup>5</sup>

#### **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 RY2020 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**. **through Table D – 8**. for a copy of the submitted **NTD RY2020**, **A-30 Revenue Vehicle Inventory Form** 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

Initial Transit Asset Management Plan 2020 Update Appendices

<sup>&</sup>lt;sup>5</sup> Federal Transit Administration, U.S. Department of Transportation, National Transit Database Asset Inventory Module 2017-2018 Reporting Guide



The following tables are organized by NTD ID and type of service:

- NTD ID: 50113 Suburban Bus Division
  - Table D 1. Revenue Vehicle Inventory (A-30) DR PT 50113
  - Table D 2. Revenue Vehicle Inventory (A-30) DR DO 50113
  - Table D 3. Revenue Vehicle Inventory (A-30) DR TX 50113
  - Table D 4. Revenue Vehicle Inventory (A-30) MB DO 50113
  - Table D 5. Revenue Vehicle Inventory (A-30) MB PT 50113
  - Table D 6. Revenue Vehicle Inventory (A-30) VP DO 50113
- NTD ID: 50182 Regional ADA Paratransit Services
  - Table D 7. Revenue Vehicle Inventory (A-30) DR PT 50182
  - Table D 8. Revenue Vehicle Inventory (A-30) DR TX 50182

At the present time for the ADA service in the City of Chicago, Pace utilizes private contractors who own their vehicles. The ADA private contractor fleet is comprised of 843 vehicles which have not been individually listed in a separate table. This inventory will be included in the NTD reporting.

Section **D.3 ASSET CONDITION** continues page 152.



### Table D - 1. Revenue Vehicle Inventory (A-30) - DR PT 50113

 NTD ID
 50113

 Reporter Name
 Pace - Suburban Bus Division

 Report
 2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - DR PT

RVI ID	Agency Vehicle Fleet Id Type	e Tot Veh	al A	ctive ehicles	Dedicated Fleet	No Capital Replacement Responsibility	Automated or Autonomous Vehicles	Manufacturer	Describe Other Manufacturer	Model	Year Manufactured	Year Rebuil	Fuel t Type	Other Fuel Type	Dual Fuel Vehicle : Type Length (	Seating 5 Capacity (	Standing Ownersh Capacity Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewa	Useful Life Benchmark	Useful Lif Remainin	e Miles g This	Year pe	etime	tatus Notes
58114	Cutawa (CU)	ay	6	3	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH	2009		Diesel Fuel		24	15	0 OOPA		UA	3	i		4	-	7 16	3,129 21	7,057 Ad	ctive
58115	Cutawa (CU)	ay	3	1	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROLITE	2010		Diesel Fuel		22	12	0 OOPA		UA	1			4	-1	6 2	2,441 14	6,720 Ad	ctive
58117	Cutawa (CU)	ay	17	13	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH	2010		Diesel Fuel		24	15	0 OOPA		UA	13			4	-1	6 72	2,564 21	4,681 Ad	ctive
58118	Cutawa (CU)	ay	82	82	Yes			CMC - Champion Motor Coach Inc.		CHALLENGER	2014		Gasoline	9	22	11	0 OOPA		UA	82			4	-4	2 908	3,315 11	7,480 Ad	ctive
58119	Cutawa (CU)	ay	150	135	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH	2014		Gasoline	•	25	15	0 OOPA		UA	135			4	-5	2 2,360	),025 22	24,511 Ac	ctive
58315	Cutawa (CU)	ay	1	- 1	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2007		Gasoline	•	21	13	0 OOPA		UA	1	(	)	4	-(	9 12	2,626 14	5,552 A	ctive
58318	Cutawa (CU)	ay	7	6	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2009		Gasoline	9	21	13	0 OOPA		UA	6			4	-	7 28	3,550 10	6,443 Ad	tive
58324	Van (VN)		3	3	Yes			FRD - Ford Motor Corporation		E-350 CONVLIFT	2011		Gasoline	•	18	7	0 OOPA		UA	2			5		4 6	5,283 4	7,751 Ad	ctive
58325	Cutawa (CU)	ay	5	4	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2012		Gasoline	•	21	12	0 OOPA		UA	4			4	-	4 16	5,382 9	6,676 A	ctive
58326	Miniva (MV)	n	1	1	Yes			DTD - Dodge Division — Chrysler Corporation		CARAVAN	2012		Gasoline	9	16	7	0 OOPA		UA	0			5	4	3 3	3,444 9	1,229 Ad	stive
58327	Van (VN)		12	11	Yes			FRD - Ford Motor Corporation		E-350 CONVLIFT	2013		Gasoline	9	18	7	0 OOPA		UA	11			5	4	2 53	3,140 6	3,714 Ad	tive
58328	Miniva (MV)	n	10	10	Yes			DTD - Dodge Division — Chrysler Corporation		CARAVAN	2013		Gasoline	•	16	6	0 OOPA		UA	10			5	4	2 51	1,019 7	8,773 Ad	ctive
58329	Cutawa (CU)	ay	15	15	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2015		Gasoline	•	21	12	0 OOPA		UA	15			4	-	1 113	3,762 6	5,301 A	ctive
337654	Cutawa (CU)	ay	1	1	Yes	Yes		EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH.	2008		Gasoline	9	24	13	0 OOPA		NFPA	0					5	5,088 17	1,121 Ad	ctive



## Table D - 1. Revenue Vehicle Inventory (A-30) - DR PT 50113 (Continued)

NTD ID Reporter Name	50113
	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - DR PT

	Agency Fleet Id	Vehicle Type		Active Vehicles	Dedicated Fleet	No Capital Replacement Responsibility	Automated or Autonomous Vehicles	Manufacturer	Describe Other Manufacture	Model	Year Manufactured	Year Rebuilt		Other Fuel Type	Dual Fuel Vehicle Type Length	Seating Capacity	Standing Capacity	Ownership Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewa	Useful Life Benchmark	Useful Life Remaining	e Miles ) This Year	Avg Lifetime Miles per Active Vehicle	Status Note
337657		Cutaway (CU)	1	1	Yes	Yes		EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH.	2011		Gasoline		24	13	0	OOPA		NFPA	0					7,623	138,772	Active
348740		Cutaway (CU)	1	1	Yes	Yes		STR - Starcraft		ALLSTAR.	2016		Gasoline		23	14	0	OOPA		NFPA	1					13,269	59,218	Active
348741		Cutaway (CU)	49	49	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH 240	2016		Gasoline		25	15	0	OOPA		UA	49			4	C	1,184,607	135,788	Active
354590		Cutaway (CU)	120	120	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AREOTECH 240	2017		Gasoline		25	15	0	OOPA		UA	120			4	1	2,890,842	77,858	Active
354591		Cutaway (CU)	1	1	Yes	Yes		STR - Starcraft		ALLSTAR.	2017		Gasoline		24	20	0	OOPA		NFPA	1					7,615	78,397	Active
354592		Van (VN)	5	5	Yes			FRD - Ford Motor Corporation		E-350 CONV- 10	2013		Gasoline		18	10	0	OOPA		UA				5	-2	5,644	16,448	Active
354593		Cutaway (CU)	32	32	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2017		Gasoline		21	12	0	OOPA		UA	32			4	1	317,260	47,510	Active
354594		Minivan (MV)	2	2	Yes			DTD - Dodge Division — Chrysler Corporation		CARAVAN	2017		Gasoline		16	7	0	OOPA		UA				5	2	5,783	20,818	Active
354595		Van (VN)	1	1	Yes			FRD - Ford Motor Corporation		TRANSIT CONV-14	2017		Gasoline		18	14	0	OOPA		UA				5	2	5,566	34,884	Active
362875		Van (VN)	1	1	Yes			FRD - Ford Motor Corporation		TRANSIT CONV-LI	2016		Gasoline		18	7	0	OOPA		UA	1			5	1	4,712	49,510	Active
362876		Van (VN)	8	8	Yes			FRD - Ford Motor Corporation		TRANSIT CONV14	2018		Gasoline		18	14	0	OOPA		UA	7			5	3	58,732	19,927	Active
362877		Cutaway (CU)	3	3	Yes			CMD - Chevrolet Motor Division — GMC		CRUSADER	2018		Gasoline		21	12	0	OOPA		UA	3			4	2	6,234	6,800	Active
362878		Cutaway (CU)	28	28	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AREOTECH 240	2018		Gasoline		25	15	0	OOPA		UA	28			4	2	931,741	72,828	Active
380511		Cutaway (CU)	21	21	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2019		Gasoline		21	12	0	OOPA		UA	21			4	3	101,014	8,480	Active
388943		Cutaway (CU)	1	1	Yes	Yes		STR - Starcraft		ALLSTAR	2019		Gasoline		25	15	0	OOPA		NFPA	1					14,033	14,033	Active
Total			587	560		•					-							-			547	0				9,204,443		



# Table D - 2. Revenue Vehicle Inventory (A-30) - DR DO 50113

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - DR DO

RVIID	Agency Fleet Id		Total Vehicles		Dedicated	No Capital Replacement Responsibility	Automated or Autonomous Vehicles	Manufacturer	Describe Other Manufacturer	Model	Year Manufactured	Fuel Type	Other D Fuel F Type T	Dual Vehicle Fuel Length	Seating Capacity	Standin Capacit	ig Ownershi y Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Miles This Year	Avg Lifetime Miles per Active Vehicle	Status Notes
58418		Cutaway (CU)	3	2	Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH	2009	Diesel Fuel		24	15		0 OOPA		UA	2			4	-7	25,53	160,067	Active
58420		Cutaway (CU)	8	2	Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		AEROTECH	2010	Diesel Fuel		24	15		0 OOPA		UA	2			4	-6	9,31	3 208,139	Active
342589		Cutaway (CU)	4	4	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2015	Gasoline		23	12		0 OOPA		UA	4			4	-1	29,25	7 116,750	Active
388949	•	Cutaway (CU)	2	2	Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		AEROTECH 240	2014	Gasoline		25	15		0 OOPA		UA	2			4	-2	47,36	7 23,684	Active
388950		Cutaway (CU)	1	1	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2012	Gasoline		20	12		0 OOPA		UA	1			4	-4	8,96	139,969	Active
388951		Cutaway (CU)	3	3	Yes			CMC - Champion Motor Coach Inc.		CHALLENGER	2014	Gasoline		22	11		0 OOPA		UA	3			4	-2	23,51	7,837	Active
388952		Cutaway (CU)	3	3	Yes			CMC - Champion Motor Coach Inc.		CRUSADER	2017	Gasoline		23	12		0 OOPA		UA	3			4	1	19,22	6,410	Active
Total	ī		24	17																17	- (	,			163,17	1	



# Table D - 3. Revenue Vehicle Inventory (A-30) - DR TX 50113

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - DR TX

RVIID	Agency Fleet Id	Vehicle Type	Total Vehicles	Active Vehicle	Dedicated s Fleet	No Capital Replacement Responsibility	Automated or Autonomous Vehicles	Manufacturer	Describe Other Manufacturer	Model	Year Y Manufactured F	'ear Fuel Rebuilt Type	Other I Fuel I Type	Dual Vehic Fuel Lengt Type	le Seating th Capacit	j Stand ty Capa	ding Ownership	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Avg Miles Lifetime This Miles per Year Active Vehicle	Status Notes
43039		Van (VN)	100	10	10 No			N/A	N/A	N/A	N/A	N/A Gasoline		N	/A	5	N/A OOPE		NFPE	0	N/A	A				Active
Total			100	10	00															(	0	)			0	



# Table D - 4. Revenue Vehicle Inventory (A-30) - MB DO 50113

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - MB DO

RVIID Agency Fleet Id	Vehicle Type	Total Ad Vehicles Ve	tive De hicles Fle	dicated No Capital Replacement et Responsibility	Automated or Autonomous Vehicles	Describe Other Manufacturer	Model	Year Yea Manufactured Reb	r uilt <sup>Fuel</sup> Type	Other Dual Vehicle Fuel Fuel Length Type Type	Seatir Capac	ng Standi city Capac	ng Ownershi ity Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewa	Useful Life Benchmark			Avg Lifetime Miles per Active Vehicle	Status Notes
7234	Bus (BU)	53	0 Yes	:	NAB - North American Bus Industries Inc. (form. Ikarus USA Inc./IKU)		4028	2005	Diesel Fuel	40		34	17 OOPA		UA	0	6	i	12	-3			Active
7235	Bus (BU)	19	0 Yes	;	NAB - North American Bus Industries Inc. (form. Ikarus USA Inc./IKU)		4028	2003	Diesel Fuel	40		34	17 OOPA		UA	0	5		12	-5			Active
7236	Bus (BU)	25	0 Yes	:	NAB - North American Bus Industries Inc. (form. Ikarus USA Inc./IKU)		3505	2003	Diesel Fuel	35		27	14 OOPA		UA	0	17		12	-5			Active
28890	Bus (BU)	45	45 Yes	:	EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		EZII	2007	Diesel Fuel	30		27	15 OOPA		UA	45	C		12	-1	1,454,167	429,564	Active
28891	Bus (BU)	23	23 Yes		EDN - EIDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2008	Diesel Fuel	30		27	15 OOPA		UA	23		ı	12	0	969,785	488,645	Active
37463	Bus (BU)	25	24 Yes		EDN - EIDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2009	Diesel Fuel	30		27	15 OOPA		UA	24	(		12	1	1,044,210	461,548	Active
42049	Bus (BU)	23	19 Yes		EDN - EIDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2010	Diesel Fuel	30		27	15 OOPA		UA	19	(		12	2	345,607	337,422	Active
42050	Bus (BU)	4	4 Yes		EDN - EIDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2011	Diesel Fuel	30		27	15 OOPA		UA	4			12	3	137,997	303,209	Active
52441	Bus (BU)	54	54 Yes		EDN - EIDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2013	Diesel Fuel	40		37	18 OOPA		UA	54	. (		12	5	1,682,017	322,814	Active
58477	Bus (BU)	15	15 Yes		EDN - EIDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2013	Diesel Fuel	40		35	18 OOPA		UA	15	C		12	5	479,982	284,750	Active
58478	Bus (BU)	8	8 Yes		EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		Axess	2013	Diesel Fuel	40		37	18 OOPA		UA	8	C		12	5	296,494	260,608	Active
58507	Over- the- road Bus (BR)	13	13 Yes	;	MCI - Motor Coach Industries International (DINA)		D4000	2013	Diesel Fuel	40		49	0 OOPA		UA	13	C		12	5	561,273	358,270	Active
34648	Bus (BU)	7	7 Yes		EDN - EIDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2014	Diesel Fuel	40		37	18 OOPA		UA	7	C		12	6	279,630	244,870	Active



# Table D - 4. Revenue Vehicle Inventory (A-30) - MB DO 50113 (Continued)

RVIID	Agency Vehicle Fleet Id Type	e Total Vehic	l Active cles Vehicle	Dedicate s Fleet	d No Capital Replacement Responsibility	Automated or Autonomous Vehicles	Manufacturer	Describe Other Manufacturer	Model	Year Y Manufactured R	'ear Rebuilt	Fuel Type	Other D Fuel Fi Type Ty	ual uel Vehic /pe Leng	th Cap	iting 5	Standing Capacity	Ownership Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergence Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Miles Thi Year	Avg Lifetimes Miles per Active Vehicle	Status Note
334649	Over- the- road Bus (BR)		9	9 Yes			MCI - Motor Coach Industries International (DINA)		D4000	2015		Diesel Fuel		4	40	49	0	OOPA		UA	ę		0	12	7	423,80	5 294,53	3 Active
334650	Bus (BU)		47 4	7 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2015		Diesel Fuel		4	40	37	18	OOPA		UA	47	,	0	12	7	1,824,64	2 221,93	4 Active
334651	Bus (BU)		20 2	0 Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		Axess	2015		Compressed Natural Gas		4	40	37	18	OOPA		NFPA	20	)	0	12	7	710,69	8 199,57	2 Active
334652	Bus (BU)		30 3	0 Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		Axess	2014	ı	Diesel Fuel		4	40	37	18	OOPA		UA	3(	)	0	12	6	1,149,36	6 249,08	3 Active
348469	Bus (BU)		25 2	5 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2016	I	Diesel Fuel		4	40	35	18	OOPA		UA	25	5	0	12	8	1,506,75	0 286,33	4 Active
348471	Bus (BU)		54 5	3 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2016		Diesel Fuel		4	40	37	18	OOPA		UA	5	3	0	12	8	2,358,05	2 195,66	0 Active
354507	Bus (BU)		11 1	1 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2016	ı	Diesel Fuel		4	40	37	18	OOPA		UA	1	,	0	12	8	467,91	3 149,26	8 Active
354508	Bus (BU)		71 7	1 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2017		Compressed Natural Gas		4	40	37	18	OOPA		NFPA	7	ı	0	12	9	3,219,75	7 170,66	8 Active
354509	Over- the- road Bus (BR)		8	8 Yes			MCI - Motor Coach Industries International (DINA)		D4000	2017		Diesel Fuel		4	40	49	0	OOPA		UA		3	0	12	9	363,56	8 195,62	9 Active
354510	Bus (BU)		54 5	4 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2017		Diesel Fuel		4	40	37	18	OOPA		UA	54	1	0	12	9	1,845,49	8 110,82	5 Active
362734	Bus (BU)		32 3	2 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2017		Diesel Fuel		4	40	37	18	OOPA		UA	32	2	0	12	9	1,082,69	3 103,88	0 Active
862735	Bus (BU)		11 1	1 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Axess	2018		Compressed Natural Gas		4	40	37	18	OOPA		NFPA	1	ı	0	12	10	533,98	9 116,40	3 Active
881875	Bus (BU)		6	6 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2008	2019	Diesel Fuel		3	30	27	15	OOPA		UA		6	0 Mid-Life Overhaul	I 12	0	239,65	8 479,65	3 Active
81876	Bus (BU)		14 1	4 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2010	2019	Diesel Fuel		3	30	27	15	OOPA		UA	14	1	0 Mid-Life Overhaul	12	2	271,27	5 326,90	2 Active
888924	Bus (BU)		85 8	5 Yes			NFA - New Flyer of America		XD40	2020		Diesel Fuel		4	40	37	18	OOPA		UA	8	5	0	12	12	1,693,36	5 20,71	7 Active
188925	Bus (BU)		6	6 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat.		Axess	2020		Compressed Natural Gas		4	40	37	18	OOPA		NFPA		3	0	12	12	89,82	3 17,21	1 Active
Total			797 69		-		Coach/ NCC														69-	1 2				25,032,0		



# Table D - 5. Revenue Vehicle Inventory (A-30) - MB PT 50113

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - MB PT

	Agency Fleet Id		Total Vehicles	Dedicate	d No Capital Replacement Responsibility	Automated or Autonomous Vehicles		Describe Other Manufacturer	Model	Year Manufactured	Year Rebuilt	Fuel t Type	Other D Fuel F Type T	oual uel Vehicle ype Length	Seating Capacity	Standing Capacity	Ownership Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewa	Useful Life Benchmark	Useful Li Remainir	fe Miles This rg Year	Avg Lifetime Miles per Active Vehicle	r Status Notes
22556		Bus (BU)	57	56 Yes			EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		EZII	2007		Diesel Fuel		30	27	15	OOPA		NFPA	56	0		12		-1 418,049	248,341	Active
28893		Bus (BU)	9	9 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2008		Diesel Fuel		30	27	15	OOPA		UA	8	0		12		0 361,171	550,008	Active
42053		Bus (BU)	21	21 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2010		Diesel Fuel		30	27	15	OOPA		UA	21	0		12		2 103,453	192,321	Active
52721		Cutaway (CU)	1	0 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		Aerolite	2009		Diesel Fuel		20	13	0	OOPA		UA	0	0		4		-7		Active
52723		Bus (BU)	2	2 Yes			OBI - Orion Bus Industries Ltd. (formerly Ontario Bus Industries)		7	2011		Hybrid Diesel		30	29	15	OOPA		UA	0	0		12		3 33,490	182,724	Active
355128		Bus (BU)	7	7 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		EZII	2017		Diesel Fuel		30	25	15	OOPA		UA	7			12		9 11,424	29,801	Active
380519		Cutaway (CU)	3	3 Yes			EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		AEROTECH 240	2014		Gasoline	e	25	15	0	OOPA		UA	3			4		-2 24,829	253,548	Active
Total			100	98		-				-				•						95	0				952,416		



# Table D - 6. Revenue Vehicle Inventory (A-30) - VP DO 50113

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - VP DO

RVIID Age	ency Vehicle et ld Type	Total Vehicles	Active Vehicles	Dedicated Fleet	No Capital Replacement Responsibility	 Manufacturer	Describe Other Manufacturer		Year Manufactured	Year F Rebuilt 1	Fuel Type	Other E Fuel F Type T	ual Veh uel Ler	nicle Songth C	eating apacity	Standing Capacity	Ownership Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Miles This Ye	ear Mil	fetime	Status Notes
29205	Van (VN)	1	1	Yes		FRD - Ford Motor Corporation		E-350	2005	(	Gasoline			18	13	(	OOPA		UA	0	0		5	-10	) ;	268	62,846	Active
29208	Van (VN)	1	0	Yes		FRD - Ford Motor Corporation		E-350	2007	C	Gasoline			18	7	C	OOPA		UA		0		5	-8			i	Active
36939	Van (VN)	1	1	Yes		FRD - Ford Motor Corporation		E-350	2009	(	Gasoline			18	7	(	OOPA		UA	1	0		5	-6		48	36,451	Active
36940	Van (VN)	2	2	Yes		FRD - Ford Motor Corporation		E-350	2009	C	Gasoline			18	14	(	OOPA		UA	0	0		5	-6	1,6	629 1	101,919	Active
42149	Van (VN)	10	6	Yes		FRD - Ford Motor Corporation		E-350	2010	(	Gasoline			18	14	(	OOPA		UA	0	0		5	-{	20,3	300	81,200	Active
46860	Minivan (MV)	4	2	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2011	C	Gasoline			16	7	C	OOPA		UA	0	0		5	-4	3,7	702	88,644	Active
46861	Van (VN)	15	5	Yes		FRD - Ford Motor Corporation		E-350	2011	(	Gasoline			18	7	(	OOPA		UA	5	0		5	-4	6,1	174	45,778	Active
46862	Van (VN)	6	4	Yes		FRD - Ford Motor Corporation		E-350	2011	C	Gasoline			18	14	(	OOPA		UA	0	0		5	-4	6,1	124	60,739	Active
46863	Van (VN)	3	2	Yes		FRD - Ford Motor Corporation		E-350	2011	(	Gasoline			18	10	(	OOPA		UA	0	0		5	-4	8,8	855	76,186	Active
52309	Minivan (MV)	16	8	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2012	(	Gasoline			16	7	(	OOPA		UA	0	0		5	-3	33,2	217	84,566	Active
58452	Minivan (MV)	49	37	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2013	(	Gasoline			16	7	(	OOPA		UA	0	0		5	-2	133,6	604	77,261	Active
58453	Van (VN)	12	11	Yes		FRD - Ford Motor Corporation		E-350	2013	(	Gasoline			18	7	(	OOPA		UA	11	0		5	-2	11,9	920	36,681	Active
58454	Van (VN)	66	58	Yes		FRD - Ford Motor Corporation		E-350	2013	(	Gasoline			18	14	(	OOPA		UA	0	0		5	-2	132,	511	75,511	Active
58455	Van (VN)	26	18	Yes		FRD - Ford Motor Corporation		E-350	2013	C	Gasoline			18	10	(	OOPA		UA	0	0		5	-2	64,4	451	69,887	Active
341930	Minivan (MV)	17	14	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2016	(	Gasoline			16	7	C	OOPA		UA	0	0		5	1	75,4	402	76,111	Active



# Table D - 6. Revenue Vehicle Inventory (A-30) - VP DO 50113 (Continued)

NTD ID	50113
Reporter Name	Pace - Suburban Bus Division
Report	2020 (Revision: 2)

#### Revenue Vehicle Inventory (A-30) - VP DO

RVI ID	Agency Vel Fleet Id Typ	hicle T be V	otal /ehicles	Active Vehicles	Dedicated Fleet	No Capital Replacement Responsibility	Manufacturer	Describe Other Manufacturer	Model	Year Y Manufactured F	/ear Fuel Rebuilt Type	Oti Fu Typ	ner Dua el Fue pe Type	Vehicle Length	Seating Capacity	Standing Capacity	Ownership Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Miles This Yea	Avg Lifetime Miles per Status Notes Active Vehicle
341931	Var (VI	n N)	19	19	Yes		FRD - Ford Motor Corporation		Transit	2016	Gaso	line		18	10	C	OOPA		UA	0	(		5		50,60	2 43,984 Active
341932	Var (VI	n N)	30	29	Yes		FRD - Ford Motor Corporation		Transit	2016	Gaso	line		18	14	C	OOPA		UA	0	(	)	5		171,81	1 62,266 Active
348596	Var (VI	n N)	19	19	Yes		FRD - Ford Motor Corporation		Transit	2016	Gaso	line		18	7	O	OOPA		UA	19	(		5		41,07	3 39,451 Active
348597	Var (VI	n N)	1	1	Yes		FRD - Ford Motor Corporation		Transit	2016	Gaso	line		18	10	C	OOPA		UA	0	(		5		1 2,97	9 48,621 Active
354522	Mir (M)	nivan V)	184	183	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2017	Gaso	line		16	7	O	OOPA		UA	0	C	)	5		2 1,816,62	5 52,905 Active
354523	Var (VI	n N)	39	39	Yes		FRD - Ford Motor Corporation		Transit	2017	Gaso	line		18	14	C	OOPA		UA	0	C	)	5		2 230,66	9 47,415 Active
354524	Var (VI	n N)	15	15	Yes		FRD - Ford Motor Corporation		Transit	2017	Gaso	line		18	7	C	OOPA		UA	15	(		5		30,04	6 26,769 Active
362895	Var (VI	n N)	67	67	Yes		FRD - Ford Motor Corporation		Transit	2018	Gaso	line		18	14	0	OOPA		UA	0	(		5		322,22	2 20,414 Active
380447	Var (VI	n N)	18	18	Yes		FRD - Ford Motor Corporation		Transit	2018	Gaso	line		18	7	O	OOPA		UA	18	c		5		37,96	5 6,267 Active
388940	Var (VI	n N)	25	25	Yes		FRD - Ford Motor Corporation		Transit	2020	Gaso	line		18	7	0	OOPA		UA	0	C	)	5		5 1,84	8 157 Active
388941	Var (VI	n N)	10	10	Yes		FRD - Ford Motor Corporation		Transit	2020	Gaso	line		18	10	C	OOPA		UA	0	(		5		5 1	0 20 Active
388942	Var (VI	n N)	22	22	Yes		FRD - Ford Motor Corporation		Transit	2020	Gaso	line		18	14	0	OOPA		UA	0	(		5		5 2	2 21 Active
Total			678	616																69		)			3,204,07	7



# Table D - 7. Revenue Vehicle Inventory (A-30) - DR PT 50182

 NTO ID
 50182

 Reporter Name
 Pace-Suburban Bus Division, ADA Paratransit Services

 Report
 2020 (Revision: 1)

#### Revenue Vehicle Inventory (A-30) - DR PT

RVIID	Agency Vehicl Fleet Id Type	le To Vé	otal Active	e Dedicate les Fleet	d No Capital Replacement Responsibility	Automated or Autonomous Vehicles	Manufacturer	Describe Other Manufacturer	Model	Year Yea Manufactured Reb	r Fuel uilt Type	Other Dual Fuel Fuel Vehicle Type Type Length	Seating Capacity	Standing Ownersh Capacity Type	ip Other Ownership Func Type	ding AD Ace Vel	A cessible Emergency hicles	, Type of Useful Life Last Benchmark	Useful Life Miles Thi k Remaining Year	Avg Lifetime s Miles per Active Vehicle	Status Notes
58352	Cutaw (CU)	ay	3	1 Yes	Yes		EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROLITE	2010	Diesel Fuel	22	12	0 OOPA	UA		1		2,44	11 146,720 /	Active
58356	Cutaw (CU)	ray	6	4 Yes	Yes		EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH	2009	Diesel Fuel	24	15	0 OOPA	UA		4		19,89	95 216,674	Active
58360	Cutaw (CU)	ray	150 1	35 Yes	Yes		EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		AEROTECH 240	2014	Gasoline	e 25	15	0 OOPA	UA		135		2,360,02	25 224,511	Active
58391	Cutaw (CU)	ray	5	0 Yes	Yes		SPC - Startrans (Supreme Corporation)		SENATOR	2011	Gasoline	e 20	8	0 OOPE	NEP	PΕ					Retired
58396	Cutaw (CU)	ray	3	0 Yes	Yes		SPC - Startrans (Supreme Corporation)		SENATOR	2012	Gasoline	e 26	21	0 OOPE	NFP	E					Retired
58397	Cutaw (CU)	ray	1	0 Yes	Yes		SPC - Startrans (Supreme Corporation)		CANIDATE CII	2013	Gasoline	e 20	8	0 OOPE	NEP	Έ				1	Retired
336465	Miniva (MV)	in	14	14 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2015	Gasoline	e 17	6	0 OOPE	NFPI	PΕ	14		393,18	5 200,741	Active
336466	Cutaw (CU)	ray	7	7 Yes	Yes		EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		Aerolite 210	2014	Gasoline	e 22	12	0 OOPE	NFPI	È	7		38,87	74 158,879 A	Active
336467	Cutaw (CU)	ay	22	0 Yes	Yes		STR - Starcraft		STARLITE	2014	Gasoline	e 20	8	0 OOPE	NFPI	E					Retired
336468	Cutaw (CU)	ray	5	0 Yes	Yes		STR - Starcraft		ALLSTAR	2014	Gasoline	23	12	0 OOPE	NFPI	E					Retired
336469	Cutaw (CU)	ray	3	0 Yes	Yes		STR - Starcraft		ALLSTAR	2014	Gasoline	e 26	21	0 OOPE	NFPI	Έ					Retired
336472	Miniva (MV)	ın	2	0 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2013	Gasolin	e 16	6	0 OOPE	NFP	PE					Retired
336473	Miniva (MV)	in	43	0 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2014	Gasolin	e 16	6	0 OOPE	NFP	PΕ					Retired
336479	Cutaw (CU)	ay	12	0 Yes	Yes		ZZZ - Other (Describe)	MobilityWorks (Transit Works)	TW Paratransi	t 2014	Gasolin	e 23	12	0 OOPE	NFP	PE					Retired
336505	Miniva (MV)	in	65	0 Yes	Yes		DTD - Dodge Division — Chrysler Corporation	roney	Caravan	2014	Gasolin	e 16	5	0 OOPE	NFP	PΕ					Retired
336507	Miniva (MV)	in	26	0 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2014	Gasolin	e 16	5	0 OOPE	NFP	PΕ					Retired
336509	Cutaw (CU)	ay	8	0 Yes	Yes		CMC - Champion Motor Coach Inc.		CHALLENGER	R 2014	Gasolin	e 22	12	0 OOPE	NFP	PE					Retired



# Table D - 7. Revenue Vehicle Inventory (A-30) - DR PT 50182 (Continued)

NTD ID

Reporter Name Pace-Suburban Bus Division, ADA Paratransit Services Report

2020 (Revision: 1)

#### Revenue Vehicle Inventory (A-30) - DR PT

RVIID	Agency Fleet Id	Vehicle Type	Total Vehicle	Active s Vehicle	Dedicate es Fleet	No Capital Replacement Responsibility	Automated or Autonomous Vehicles	s Manufacturer	Describe Other Manufacturer	Model	Year Manufactured	Year Rebuil	Fuel t Type	Other Dual Fuel Fuel Vehic Type Type Leng	le Seating th Capacit	Standi ty Capaci	ng Ownershi ity Type	p Other Ownership Type	Funding Type	ADA Accessible Vehicles Vehicles	Type of Us Last Be Renewal	seful Life U enchmark R	seful Life Mi emaining Ye	Li les This M ar pe A	vg fetime iles er ctive ehicle	Status Note:
37635	(	Cutaway (CU)	17	12	2 Yes	Yes		EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		AEROTECH	2010		Diesel Fuel	2	4 1	5	0 OOPA		UA	12				68,798 2	15,246	Active
37636		Cutaway (CU)	57	5	7 Yes	Yes		CMC - Champion Motor Coach Inc.		CHALLENGER	2014		Gasoline	2	2 1	1	0 OOPA		UA	57				730,132 13	34,153	Active
42547	(	Cutaway (CU)	2	. (	Yes Yes	Yes		STR - Starcraft		ALLSTAR	2015		Gasoline	2	6 2	1	0 OOPE		NFPE							Retired
42548	(	Cutaway (CU)	7		) Yes	Yes		STR - Starcraft		ALLSTAR	2015		Gasoline	2	3 1	2	0 OOPE		NFPE							Retired
42550	M ()	Minivan (MV)	4	. (	) Yes	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2015		Gasoline	1	6	7	0 OOPE		NFPE							Retired
42552	(	Minivan (MV)	9		9 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		Caravan	2015		Gasoline	1	6 (	6	0 OOPE		NFPE	0				254,621 24	44,775	Active
48757	M (	Minivan (MV)	92	92	2 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		CARAVAN	2016		Gasoline	1	6 ;	7	0 OOPE		NFPE	92			3	,015,475 17	78,259	Active
48758		Minivan (MV)	80	) (	) Yes	Yes		DTD - Dodge Division — Chrysler Corporation		CARAVAN	2016		Gasoline	1	6	6	0 OOPE		NFPE							Retired
48759	(	Cutaway (CU)	30		) Yes	Yes		STR - Starcraft		ALLSTAR22	2016		Gasoline	2	3 1	4	0 OOPE		NFPE							Retired
48760	(	Cutaway (CU)	49	49	9 Yes	Yes		EDN - EIDorado National (formerly EI Dorado/EBC/Nat. Coach/ NCC		AEROTECH 240	2016		Gasoline	2	5 1	5	0 OOPA		UA	49			1	,184,607 13	35,895	Active
54621	M (	Minivan (MV)	48	: (	) Yes	Yes		DTD - Dodge Division — Chrysler Corporation		CARAVAN	2017		Gasoline	1	6 (	6	0 OOPE		NFPE							Retired
54622		Minivan (MV)	17	. (	) Yes	Yes		DTD - Dodge Division — Chrysler Corporation		CARAVAN	2017		Gasoline	1	6	7	0 OOPE		NFPE							Retired
54623	(	Cutaway (CU)	3		) Yes	Yes		STR - Starcraft		ALLSTAR	2017		Gasoline	2	6 2	1	0 OOPE		NFPE							Retired
54624	(	Cutaway (CU)	7		) Yes	Yes		STR - Starcraft		ALLSTAR	2017		Gasoline	2	3 1	4	0 OOPE		NFPE							Retired
54625	(	Cutaway (CU)	111	111	1 Yes	Yes		EDN - ElDorado National (formerly El Dorado/EBC/Nat. Coach/ NCC		AREOTECH 240	2017		Gasoline	2	5 1	5	0 OOPA		UA	111			2	722,626	79,750	Active
54626		Minivan (MV)	46	46	3 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		CARAVAN	2017		Gasoline	1	6	7	0 OOPE		NFPE	46			1	,604,360 14	45,281	Active
54627	M (	Minivan (MV)	15	15	5 Yes	Yes		DTD - Dodge Division — Chrysler Corporation		CARAVAN	2017		Gasoline	1	6	7	0 OOPE		NFPE	15				417,989 13	35,046	Active



# Table D - 7. Revenue Vehicle Inventory (A-30) - DR PT 50182 (Continued)

NTD ID

Reporter Name Pace-Suburban Bus Division, ADA Paratransit Services Report

2020 (Revision: 1)

#### Revenue Vehicle Inventory (A-30) - DR PT

RVIID	Agency Vehic Fleet Id Type	cle T V	otal /	Active Vehicles		No Capital Replacement Responsibility		Manufacture	Model er	Year Manufactured	Year Rebuilt	Fuel Type	Other Dua Fuel Fue Type Type	I Vehicle Sea Length Car	ting St acity Ca	tanding apacity	Ownership Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewa	Useful Life Benchmark	Useful Life Remaining	Miles This Year	Avg Lifetime Miles per Active Vehicle	Status Notes
354627	Miniva (MV)	an	15	15	Yes	Yes	DTD - Do Division - Chrysler Corporat	dge -	CARAVAN	2017		Gasoline		16	7	0	OOPE		NFPE	15	5				417,989	135,046	Active
362944	Miniva (MV)	an	46	46	Yes	Yes	DTD - Do Division - Chrysler Corporati	-	CARAVAN	2018		Gasoline		16	7	0	OOPE		NFPE	46	3				1,705,455	94,933	Active
362945	Miniva (MV)	an	110	0	Yes	Yes	DTD - Do Division - Chrysler Corporat	-	CARAVAN	2018		Gasoline		16	6	0	OOPE		NFPE								Retired
362946	Miniva (MV)	an	20	0	Yes	Yes	DTD - Do Division - Chrysler Corporat	-	CARAVAN	2018		Gasoline		16	7	0	OOPE		NFPE								Retired
362947	Cutaw (CU)	/ay	28	28	Yes	Yes	EDN - EI National (formerly Dorado/E Coach/ N	EI BC/Nat.	AREOTECH 240	2018		Gasoline		25	15	0	OOPA		UA	21	3				931,741	72,828	Active
388953	Cutaw (CU)	/ay	150	150	Yes	Yes	STR - St	rcraft	STARLITE	2020		Gasoline		24	12	0	OOPE		NFPE	150	)				1,195,675	7,971	Active
388954	Cutaw (CU)	/ay	130	130	Yes	Yes	EDN - EI National (formerly Dorado/E Coach/ N	EI BC/Nat.	ADVANTAGE	2020		Gasoline		24	12	0	OOPE		NFPE	130	)				268,365	2,064	Active
388958	Cutaw (CU)	ray	31	31	Yes	Yes	EDN - EI National (formerly Dorado/E Coach/ N	EI BC/Nat.	ADVANTAGE	2020		Gasoline		24	12	0	OOPE		NFPE	3.					7,114	229	Active
388960	Cutaw (CU)	/ay	260	260	Yes	Yes	STR - St	rcraft	STARLITE	2020		Gasoline		24	12	0	OOPE		NFPE	260	)				1,841,513	7,083	Active
Total			1,744	1,197																1,18	3 (	)			18,762,901		



# Table D - 8. Revenue Vehicle Inventory (A-30) - DR TX 50182

NTD ID	50182
Reporter Name	Pace-Suburban Bus Division, ADA Paratransit Services
Report	2020 (Revision: 1)

#### Revenue Vehicle Inventory (A-30) - DR TX

RVI ID A	gency \ leet ld	/ehicle Type	Total Vehicles	Active Vehicles	Dedicated Fleet	No Capital Replacement Responsibility	Automated or Autonomous Vehicles	Manufacturer	Describe Other Manufacturer	Model	Year Manufactured I	Year Fuel Rebuilt Type	Other Fuel Type	Dual V Fuel L Type	/ehicle \$ .ength C	eating apacity	Standing Capacity	Ownership Type	Other Ownership Type	Funding Type	ADA Accessible Vehicles	Emergency Vehicles	Type of Last Renewal	Useful Life Benchmark	Useful Life Remaining	Miles Lifetime This Miles per Year Active Vehicle	Status Notes
43040	(	/an VN)	665	665	No			N/A	N/A	N/A	N/A	N/A Gasoline	9		N/A	5	N/A	OOPE		NFPE	91	N/A					Active
Total			665	665	5																91	(	)		-	0	



# 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.** through **Table D – 8.** 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."

In **Table D - 9. Performance Targets for Rolling Stock** are Pace's FTA-required Performance Measure Targets for Rolling Stock.

**Table D - 9. Performance Targets for Rolling Stock** 

ASSET TYPE	2020 TARGET	2020 PERFORMANCE	2021 TARGET
BR - Over-the-road Bus	0.00%	0.00%	0.00%
BU – Bus	12.72%	18.31%	14.86%
CU - Cutaway	61.67%	61.16%	77.11%
MV - Minivan	17.01%	22.57%	28.02%
VN – Van	39.10%	31.67%	41.90%

# 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

<sup>&</sup>lt;sup>6</sup> 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** 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
- Cash box dump into fare collection vault
- Tires checked
- Notation of all defects
- Washing/cleaning of interior and exterior



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 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 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 Budget Planning and Analysis 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.

If the proceeds from the asset exceed a certain dollar value or have remaining useful life, then Grants Administration will coordinate repayment to the funding agency and obtain concurrence. Pace has an agreement with the FTA that allows Pace to retain all funds due back to the FTA, with the assurance that Pace acquire new assets with the funds and give the FTA 100% equity in those assets.

For Revenue Vehicles, a request is made from Procurement 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 Materials Management department using a Min-Max inventory model. Materials management 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 - 10. Rolling Stock Capital Budget Forecasts (\$000s) Pace expects to spend approximately \$211 million on rolling stock FY2021 through FY2025.

Table D - 10. Rolling Stock Capital Budget Forecasts (\$000s)

PROJECT	2021 BUDGET	2022 FORECAST	2023 FORECAST	2024 FORECAST	2025 FORECAST
Fixed Route Diesel Buses	\$ 0	\$ 7,500	\$ 18,000	\$ 13,500	\$ 0
Fixed Route CNG Buses	63,250	9,900	0	0	0
Fixed Route Coach Buses	0	0	0	9,750	0
Paratransit Vehicles	1,983	7,403	2,043	9,564	0
Community Transit/On Demand Vehicles	600	2,025	2,025	2,025	0
Vanpool Vehicles	0	0	3,280	3,280	0
Engine/Transmission Retrofits	7,597	18,421	20,580	8,498	
Total	\$ 73,430	\$ 45,249	\$ 45,928	\$ 46,617	\$ 0

**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 onbus security system called DriveCam.

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. The TSP implementation along these intersections is expected to be completed by end of year 2021. 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 DriveCam technology that enables external recording of eight minutes 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. Pending Nexus Alpha Bus Tracker signs at shelters

# Appendix E - Electrical, Signal, & Communications

- Table E 5. Parsons Video-style Bus Tracker signs at Pulse stations
- Table E 6. Pending Parsons video-style Bus Tracker signs at Pulse stations
- Table E 7. Pending "e-ink" CHK Bus Tracker signs embedded in shelters
- Table E 8. Installed Wayside Bus Tracker signs at shelters—donated signs to test solar functionality



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

LOCATION	OODNED/OITE	OITV	COLINITY
LOCATION	CORNER/SITE	CITY	COUNTY
Indiana Ave & 136th St	#1 in TC	Riverdale	Cook
Indiana Ave & 136th St	#2 in TC	Riverdale	Cook
Lincolnshire & McClintock	Park-n-Ride	Burr Ridge	DuPage
Sheridan/Washington	#1(N) on E Side	Waukegan	Lake
Sheridan/Washington	#5(S) on E Side	Waukegan	Lake
Old Chicago Rd/Route 53 (Park-n-Ride)	NW	Bolingbrook	Will
Canterbury/Briarcliffe (Park-n- Ride)	SE	Bolingbrook	Will
Oak Park/South Blvd	SE	Oak Park	Cook
Joliet Jr. College	n/a	Joliet	Will
Galena Square Walmart	EB	Aurora	Kane
Des Plaines Metra canopy	South side	Des Plaines	Cook
I-90/Randall Park-n-Ride	n/a	Elgin	Kane
Lyle/Grandstand	NW	Elgin	Kane
Lake Cook Metra	n/a	Deerfield	Lake
Rosemont Blue Line Station	TC	Rosemont	Cook
Madison St & 19th Street	SE	Maywood	Cook
Main/Victory	SE	Park Forest	Cook
UPS	Terminal 1	Hodgkins	Cook
UPS	Terminal 2	Hodgkins	Cook
Harlem Ave/Cermak Rd	SW	North Riverside	Cook
Western Ave/135 <sup>th</sup> St	NE	Blue Island	Cook
I-90/IL25 Park-n-Ride	Park-n-Ride	Elgin	Kane
Central/12th St	SE	Wilmette	Cook



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

,			
LOCATION	CORNER/SITE	CITY	COUNTY
Naperville Metra STATION	South side	Naperville	DuPage
Gregory/York	SE	Blue Island	Cook
519 W. Algonquin Rd	EB	Arlington Heights	Cook
Halsted St/Sibley	SE	Harvey	Cook
South Blvd & Ridgeland Ave		Oak Park	Cook
Forest Park Blue Line Station	TC, north	Forest Park	Cook
Forest Park Blue Line Station	TC, south	Forest Park	Cook
Linden Purple Line Station	In building	Wilmette	Cook
Mannheim Rd/Washington St	NE	Bellwood	Cook
159 <sup>th</sup> St/Oak Ave	NE	Oak Forest	Cook
Triton College	n/a	River Grove	Cook
Jefferson/Joyce	SW	Joliet	Will
Bridgeview TC (Harlem/71st)	N wall	Bridgeview	Cook
Bridgeview TC (Harlem/71st)	W wall	Bridgeview	Cook
Lake St/East Ave		Oak Park	Cook
Aurora TC	Bay 2	Aurora	Kane
Aurora TC	Bay 4	Aurora	Kane
Aurora TC	Bay 6	Aurora	Kane
Aurora TC	Bay 8	Aurora	Kane
Halsted St/144 <sup>th</sup> St	NE	Riverdale	Cook
Northwest Pointe Park-n-Ride	In Pace Park-n-Ride	Elk Grove Village	Cook
22nd St. & McDonald's Dr.	SE	Oak Brook	DuPage
Busse Hwy & Mark Ln		Elk Grove Village	Cook
Lively Blvd & Chase Blvd		Elk Grove Village	Cook



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

LOCATION	CORNER/SITE	CITY	COUNTY
127th St & Gregory	NW	Blue Island	Cook
Golf Rd & Golf Terrace Rd	north side	Niles	Cook
Touhy Ave & Milwaukee Ave	SE	Niles	Cook



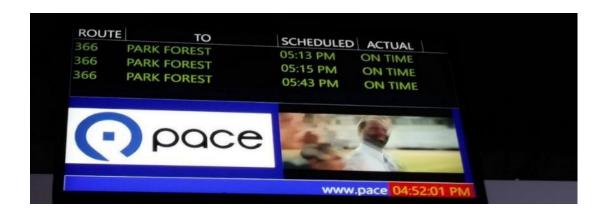
# Table E - 2. "e-ink" CHK Bus Tracker signs embedded in shelters (Continued)

LOCATION	CORNER/SITE	CITY	COUNTY
Touhy Ave & Harlem Ave	SE	Niles	Cook
159 <sup>th</sup> St/93rd Ave.	SE	Orland Hills	Cook
Mannheim Rd & Irving Park Rd	NE	Schiller Park	Cook
Roosevelt Rd & 5 <sup>th</sup> Ave	NW	Maywood	Cook
Oak Park Ave/Cermak Rd	NE	Berwyn	Cook
Chicago Rd & Sibley Blvd	NE	Dolton	Cook



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

LOCATION	# OF SIGNS	CITY	COUNTY
Barrington Rd pedestrian bridge	2	Hoffman Estates	Cook
Chicago Heights TC	6	Chicago Heights	Cook
Harvey TC	8	Harvey	Cook
Northwest TC	4	Schaumburg	Cook
Elgin TC	5	Elgin	Kane
Plainfield Park-n-Ride	2	Plainfield	Will





# Table E - 4. Pending Nexus Alpha Bus Tracker signs at shelters

LOCATION	CORNER/SITE	CITY	COUNTY
159 <sup>th</sup> St/Kedzie	SE	Markham	Cook
Future I-90/Barrington Road Park-n-Ride (at boarding location B)	Park-n-Ride	Hoffman Estates	Cook
Future I-90/Barrington Road Park-n-Ride (at boarding location C)	Park-n-Ride	Hoffman Estates	Cook
Future I-90/Barrington Road Park-n-Ride (at boarding location D)	Park-n-Ride	Hoffman Estates	Cook
Hawthorn Mall	n/a	Vernon Hills	Lake
Gary Ave/Hiawatha	SW	Carol Stream	DuPage
Maine South High School		Park Ridge	Cook
Lincolnwood Town Center		Lincolnwood	Cook

# Table E - 5. Parsons Video-style Bus Tracker signs at Pulse stations<sup>7</sup>

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

# Table E - 6. Pending Parsons video-style Bus Tracker signs at Pulse stations

LOCATION	CITY	COUNTY
Milwaukee/Devon Southbound	Chicago	Cook
Milwaukee/Central Southbound	Chicago	Cook
Milwaukee/Central Northbound	Chicago	Cook

# Table E - 7. Pending "e-ink" CHK Bus Tracker signs embedded in shelters

LOCATION	CORNER/SITE	CITY	COUNTY
Harlem Ave/Roosevelt Rd	NE	Oak Park	Cook
Liberty/West (Metra station)	WB	Wheaton	DuPage
Jefferson/Stryker	SE/EB	Joliet	Will
Cass Ave/Chicago St	NE	Joliet	Will

<sup>&</sup>lt;sup>7</sup> Two signs have been installed at each of these locations: one on each side of the vertical marker.

# Table E - 7. Pending "e-ink" CHK Bus Tracker signs embedded in shelters (Continued)

LOCATION	CORNER/SITE	CITY	COUNTY
Western/Broadway	NW	Joliet	Will
Grand Ave/Genesee	NW	Waukegan	Lake
Roosevelt Rd/Finley	SE	Lombard	DuPage
Torrence Ave/170h St	NW	Calumet City	Cook
Torrence Ave/Oak St	SW	Calumet City	Cook
Sibley Blvd/Torrence Ave	NW	Calumet City	Cook
Lincoln/Lake	NW	Addison	DuPage
Louis Joliet Mall entrance	n/a	Joliet	Will
Chicago Rd & 142 <sup>nd</sup> St	NE	Dolton	Cook

# Table E - 8. Installed Wayside Bus Tracker signs at shelters—donated signs to test solar functionality

LOCATION	CORNER/SITE	CITY	COUNTY
550 W. Algonquin Road	N side	Arlington Heights	Cook
North Ave & 38th Ave	EB	Stone Park	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 **Vision 2020**: **The Blueprint for the Future**, which will be succeeded by **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 signals, electrical, 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 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.

# pace

# Appendix E - Electrical, Signal, & Communications

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.

If the proceeds from the asset exceed a certain dollar value or have remaining useful life, then Grants Administration will coordinate repayment to the funding agency and obtain concurrence. Pace has an agreement with the FTA that allows Pace to retain all funds due back to the FTA, with the assurance that Pace acquire new assets with the funds and give the FTA 100% equity in those assets.

## **E.4.3 SUPPLY CHAIN AND PROCUREMENT**

For work done in-house, repair and maintenance parts are procured and used. These items are procured by the Materials Management 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 Materials Management Department is also tasked with inventory tracking and work order processing of these parts.

# **E.5 ASSET MANAGEMENT ENABLERS**

#### **E.5.1 ORGANIZATION**

Pace's Strategic and Capital Planning group within Strategic Services focuses on longer-term planning for initiatives that rely on signal and communications improvements and modernization, including the Bus on Shoulder program, **PULSE**, and TSP. The Research and Analysis group 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. Strategic and Capital Planning 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 Headquarters. Pace attempts to resolve issues first from Headquarters, before

# • pace

# Appendix E - Electrical, Signal, & Communications

going into the field to address the issue if needed. of 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), a satellite-based communications technology, to improve the tracking of buses, collect data, and communicate between Pace and our drivers and passengers. IBS interfaces with Trapeze, our Paratransit scheduling and trip booking software. Paratransit contractors have their own communications system, using Motorola radios that were updated to use Trapeze.

The TSP System is monitored by 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, log all activity, and perform 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 - 9. Electrical, Signal, and Communications Capital Budget Forecasts (\$000s) Pace expects to spend approximately \$13 million on Electrical, Signal, and Communications assets, for IBS and TSP upgrades FY2021 through FY2025.

Table E - 9. Electrical, Signal, and Communications Capital Budget Forecasts (\$000s)

	2020	2021	2022	2023	2024
PROJECT	BUDGET	<b>FORECAST</b>	FORECAST	<b>FORECAST</b>	<b>FORECAST</b>
Transit Signal Priority	\$ 1,386	\$ 1,469	\$ 1,553	\$ 2,000	\$0
Intelligent Bus System Upgrades	100	2,300	1,500	2,350	0
Total	\$ 1,486	\$ 3,769	\$ 3,053	\$ 4,350	\$ 0

#### **END OF APPENDIX E**



# F. APPENDIX F – SUPPORT FACILITIES & EQUIPMENT

# F.1 ASSET DEFINITION

Per the Transit Asset Management Final Rule issued on July 26, 2016:

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 with 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

**Appendix F** is included to cover Maintenance and Administration type assets that are *not* included in the NTD **Appendix B – Facilities – Transit Asset Management Facilities Inventory A-15 Form** for RY2020 due to NTD Reporting requirements.

# F.2 FY2020 SUPPORT FACILITIES INVENTORY

Pace uses several Facilities other than those captured in the NTD A-15 data to provide services throughout the Northeastern Illinois region. **Table F - 1. Support Facility Inventory** lists 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 F - 1. Support Facility Inventory**

ASSET NAME	ADDRESS	YEAR BUILT (RENOVATED)	CONDITION RATING
Non-Pag	ce-Owned Administration and Maintenance I	Facilities	
Pace Chicago 10th Floor	547 W. Jackson, Chicago	(2006)	N/A
Pace Chicago 8th Floor	547 W. Jackson, Chicago	(2018)	N/A
80-86 N. Lively - Printshop	80-86 N. Lively Boulevard, Elk Grove Village	(2010)	N/A
515 W. Algonquin - Vanpool	515 W. Algonquin Rd., Arlington Heights	(2013)	N/A
Pace East Dundee	401 Christina Dr., East Dundee	(2016)	N/A
	d - Purchased Service Administration and Mainte	enance Facilities	
City of Highland Park	1150 Half Day Road, Highland Park	(1974)	N/A
Village of Niles	6859 West Touhy Avenue, Niles	(2001)	N/A
First Student - Glen Ellyn	22 W 760 Poss Street, Glen Ellyn	(1976)	N/A
First Student - Naperville	31 W330 Schoger Drive, Naperville	(1994)	N/A
First Student - Westmont	250 West 53rd Street, Westmont	(1967)	N/A
MV Transportation – Batavia	1896 Suncast Lane, Batavia, IL 60510	(2006)	N/A
MV Transportation – Romeoville	720 Parkwood Avenue, Romeoville, IL 60446	(1970)	N/A
Cook DuPage Transportation	1200 W. Fulton, Chicago, IL 60607	(1942)	N/A
First Transit - Chicago	615 W. 41st Street, Chicago, IL 60609	(1952)	N/A
MV Transit – Chicago	4400 W. 45th Street, Chicago, IL 60632	(1955)	N/A
SCR Transportation	8801 S. Greenwood Ave., Chicago, IL 60619	(2013)	N/A
First Transit – Grayslake	39 Ziegler Drive, Grayslake, IL 60030	(1987)	N/A
First Transit Joliet	2085 Oak Leaf, Joliet, IL	(1995)	N/A
First Transit West Cook	2020 Indian Boundary Dr., Melrose Park, IL	(1970)	N/A
MV Transportation - Alsip	12500 Lombard Lane, Alsip, IL 60803	Unavailable	N/A
MV Transportation - Niles	6230 W. Gross Point Road, Niles, IL 60714	(1974)	N/A
Ride Right – Batavia	1375 Paramount Parkway, Batavia, IL 60510	(1990)	N/A
Aurora Township	80 N. Broadway, Aurora, IL 60505	(1968)	N/A

# F.3 ASSET CONDITION

## **F.3.1 CONDITION ASSESSMENT**

In **Table F-1. Support Facility Inventory** Pace is not required to complete a Condition Assessment as it does not have Capital Responsibility at these locations. This is outlined in the Transit Asset Management Final Rule.

## **END OF APPENDIX F**



# G. APPENDIX G – STATIONS AND PASSENGER FACILITIES

# **G.1 ASSET DEFINITION**

Per the Transit Asset Management Final Rule issued on July 26, 2016:

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 with 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.

This appendix is included to cover Passenger Facility type assets that are not included in NTD **Appendix B – Facilities – Transit Asset Management Facilities Inventory A-15 Form** due to NTD Reporting requirements.

# G.2 FY2020 STATIONS & PASSENGER FACILITIES INVENTORY

Pace uses several facilities other than those captured in the NTD RY2020 A-15 data to provide services throughout the Northeastern Illinois region. In **Table G – 1. Stations & Passenger Facilities Inventory** is a listing of these facilities that are either leased or used in coordination with a contracted service agreement.

The capital responsibility, if any, is typically outlined in agreements that Pace enters for use of a property. In the case that Pace owns the property, the capital responsibility remains Pace's. However, this inventory is 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.

**Table G – 2. Pulse Milwaukee Line Stations** lists Pace's **PULSE** Stations, which are not yet reportable to the NTD, but may require reporting in the future.

# Appendix G – Stations and Passenger Facilities

# Table G - 1. Stations & Passenger Facilities Inventory

ASSET NAME	ADDRESS	YEAR BUILT (RENOVATED)	CONDITION RATING
	Boarding and Turnaround Facilities	,	
Antioch	305 Depot St., Antioch	Unavailable	N/A
College of Lake County	19351 West Washington, Grayslake 60030	Unavailable	N/A
Palatine Metra	Smith St. at Wood St., Palatine	2000	N/A
Park Forest Turnout	Main St. at Victory St., Park Forest	Unavailable	N/A
Summit CTA/Pace	IL Route 171 at 63rd St., Summit	Unavailable	N/A
Prairie View - Metra	Main St., between Easton Ave. and Illinois Route 22	Unavailable	N/A
Riverdale Bus Turnaround	13600 Indiana Ave., Riverdale	2002	2
Round Lake Beach - Metra	680 East Mallard Creek Dr., Round Lake Beach	Unavailable	N/A
South Suburban College - South Holland	Indiana Ave. at 162nd St., South Holland	Unavailable	N/A
Vernon Hills – Metra	75 East Route 45, Vernon Hills, IL	Unavailable	N/A
Waukegan Transit Center	Sheridan Rd. north of Washington St., Waukegan	Unavailable	N/A
	Transportation Centers		
Gurnee Mills TC	6170 W. Grand Ave., Gurnee	1992 (1992)	1
	Park-n-Ride Lots* (Non-Pace Owned)		
Chancellory PNR	500 Park Boulevard, Itasca	Unavailable	N/A
Larry's Diner	24522 Lockport St., Plainfield	Unavailable	N/A
Community Christian Church	1635 Emerson Lane, Naperville	Unavailable	N/A
St. Thomas the Apostle Church	1500 N Brookdale Rd., Naperville	Unavailable	N/A
Wheatland Salem Church	1852 W. 95th St., Naperville	Unavailable	N/A
IDOT Channahon PNR	I-55 and Route 6, Channahon	Unavailable	N/A
IDOT Shorewood PNR	I-55 and Route 52, Shorewood	Unavailable	N/A
IDOT Joliet PNR	I-55 and Route 30, Joliet	Unavailable	N/A
Fairview Plaza	75th St. and Fairview, Downers Grove	Unavailable	N/A
Meadowbrook Shopping Center	Belmont Rd., South of 63rd St., Downers Grove	Unavailable	N/A
McHenry DOT PNR	Virginia Rd. at IL 31, Lake in the Hills	Unavailable	N/A
Palos Heights Metra	11451 Southwest Highway, Palos Heights	Unavailable	N/A
Oak Lawn Metra	9525 S. Tulley Ave., Oak Lawn	Unavailable	N/A

# Appendix G - Stations and Passenger Facilities

## Table G - 2. Pulse Milwaukee Line Stations

ASSET LOCATION
Austin Northbound
Austin Southbound
Central Northbound
Central Southbound
Dempster Northbound
Dempster Southbound
Devon Northbound
Devon Southbound
Golf Mill Terminal – Northern Limit
Harlem Northbound
Harlem Southbound
Main Northbound
Main Southbound
Oakton Northbound
Oakton Southbound
Touhy Northbound
Touhy Southbound

# **G.3 ASSET CONDITION**

# **G.3.1 CONDITION ASSESSMENT**

In **Table G – 1. Stations & Passenger Facilities Inventory**, Pace intends to conduct a Condition Assessment only at Riverdale Bus Turnaround and Gurnee Mills because it has Capital Responsibility. However, Pace is not required to complete a Condition Assessment for these other locations as it does not have Capital Responsibility. This is outlined in the Transit Asset Management Final Rule.

#### **END OF APPENDIX G**



# H. APPENDIX H – 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 H**



# I. APPENDIX I – 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.	



# Appendix I – Terms and Definitions

Asset Management Objectives  Service 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.  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 I**

# **END OF TAM PLAN APPENDICES**