

GROUP TRANSIT ASSET MANAGEMENT PLAN FOR TIER II OPERATORS IN SOUTHEASTERN WISCONSIN



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MEMORANDUM REPORT
NUMBER 266

**GROUP TRANSIT ASSET MANAGEMENT PLAN
FOR TIER II OPERATORS IN SOUTHEASTERN WISCONSIN**

Prepared by the
Southeastern Wisconsin Regional Planning Commission
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U.S. Department of Transportation
Federal Highway Administration




October 2022

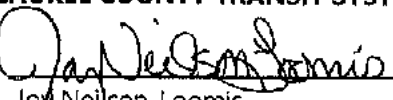
APPROVAL OF GROUP TRANSIT ASSET MANAGEMENT PLAN: 2022-2025

As the Accountable Executive for each transit operator covered by this Group Transit Asset Management (TAM) Plan, the undersigned approve the Group TAM Plan, sponsored by the Southeastern Wisconsin Regional Planning Commission, and confirm its compliance with 49 CFR part 625. The undersigned further agree to comply with the recordkeeping and annual reporting requirements for transit asset management set forth in Sections 625.53 and 625.55. Each transit operators' Accountable Executive shall continue to self-certify compliance with all aspects of the TAM rule in the Certifications and Assurances phase of a grant application and will verify compliance with the TAM rule during Triennial or State Management Reviews.

HARTFORD CITY TAXI

By  Date 9-23-22
Randy Wojtasik
Transit Supervisor, City of Hartford

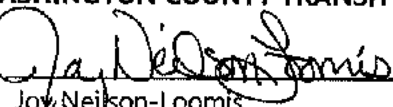
OZAUKEE COUNTY TRANSIT SYSTEM

By  Date 9/19/2022
Joy Nelson-Loomis
Transit Superintendent, Ozaukee County Transit System


RYDE (CITY OF RACINE TRANSIT SYSTEM)

By  Date 9/30/2022
Trevor Jung
Transit and Mobility Director, City of Racine

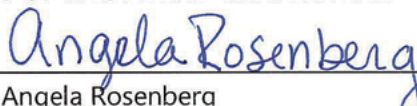
WASHINGTON COUNTY TRANSIT SYSTEM

By  Date 9/19/2022
Joy Nelson-Loomis
Transit Superintendent, Ozaukee County Transit System

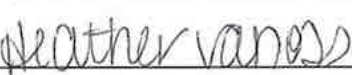
CITY OF WAUKESHA METRO TRANSIT AND THE WAUKESHA COUNTY TRANSIT SYSTEM

By  Date 9/15/22
Brian Engelking
Transit Manager, Waukesha Metro Transit

CITY OF WEST BEND TAXI SERVICE

By  Date 9/15/22
Angela Rosenberg
Transit Assistant, City of West Bend

WESTERN KENOSHA COUNTY TRANSIT

By  Date 9/15/2022
Heather Vanoss
Manager, Elder and Disability Services, Kenosha County Department of Human Services

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1.1 OVERVIEW OF THE GROUP TAM PLAN FOR SOUTHEASTERN WISCONSIN

At the request of transit operators, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) has sponsored and prepared this Group Transit Asset Management (TAM) Plan for the eight participating Tier II operators in Southeastern Wisconsin listed in Table 1.1. The Commission prepared this plan in close coordination with the transit operators to document their asset inventories, condition assessments, maintenance protocols, and asset prioritization. This table also includes the Accountable Executive for each transit operator participating in this Group TAM Plan.

This Group TAM Plan covers a four year planning period from 2022 through 2025. As required in the TAM regulations set forth in 49 CFR part 625, this Group TAM Plan includes the following components:

- An inventory of assets, which includes the number and type of capital assets, such as rolling stock, facilities, and equipment
- A condition assessment of inventoried assets for which the transit operators have direct ownership and capital responsibility
- A description of the processes and decision-support tools that the participating transit operators use to estimate the capital investments needed over time, and develop their investment prioritization
- A prioritized list of projects or programs to manage or improve the state of repair of capital assets

The Group TAM Plan inventories the current transit assets and priorities as of December 31, 2021. Updates to the inventory, condition assessment, and prioritizations have been submitted annual and will continue to be developed during the next four-year planning period. Specifically, as part of the annual reporting requirements set forth in Section 625.53, transit operators will continue to update their annual condition assessment report. In addition, Commission staff will continue to submit an annual data report to FTA's National Transit Database and an annual narrative report pursuant Section 625.55 on behalf of the transit operators participating in this Group TAM Plan. In addition, the Transportation Improvement Program for Southeastern Wisconsin, which includes transit capital priorities, will be updated during the planning horizon of the Group TAM Plan in late 2022 and 2024, respectively.

Federal and State Transit Asset Management Planning Requirements

The Moving Ahead for Progress in the 21st Century Act (MAP-21) established new TAM data reporting requirements. These rules require that each transit provider that receives funds under 49 U.S.C. Chapter 53 as a recipient or subrecipient and either owns, operates, or manages capital assets used for public transportation is required to develop a TAM plan that provides a condition report of their infrastructure to anticipate and monitor the performance of assets in order to provide a basis for investment prioritization. The purpose of the rule is to aid transit providers in making more informed investment decisions that will ultimately improve the overall condition of each transit system's condition of capital assets.

Role of the Southeastern Wisconsin Regional Planning Commission

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) was established in 1960 as the official areawide planning agency for the southeastern region of the State. SEWRPC serves the seven counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha. The Commission, as the Metropolitan Planning Organization for the five urbanized areas in the Region, including the Kenosha, Milwaukee, Racine, and West Bend urbanized areas and a portion of the Round Lake Beach urbanized area, prepares a long-range (20-35 year) transportation plan. SEWRPC Planning Report No. 55,

Table 1.1
Group TAM Plan Participating Transit Operators and Accountable Executives

Transit Operator	Accountable Executive	Title
Hartford City Taxi	Randy Wojtasiak	Transportation Supervisor
Ozaukee County Transit System	Joy Neilson-Loomis	Transit Superintendent
RYDE (City of Racine Transit System)	Trevor Jung	Transit and Mobility Director
Washington County Transit System	Joy Neilson-Loomis	Transit Superintendent
City of Waukesha Metro Transit	Brian Engelking	Transit Manager
Waukesha County Transit System	Brian Engelking	Transit Manager
City of West Bend Taxi Service	Angela Rosenberg	Transit Assistant
Western Kenosha County Transit	Heather Vanoss	Manager of Elder and Disability Services

Source: SEWRPC

VISION 2050: A Regional Land Use and Transportation Plan, July 2017 and updated in 2020, recommends a long-range vision for land use and transportation in the Region. It makes recommendations to local and State government to shape and guide land use development and transportation improvements, including public transit, to the year 2050. Specifically, VISION 2050 proposes a substantial improvement and expansion of transit service in Southeastern Wisconsin over the next 30 years.

In addition to the long-range plan, the Commission prepares the four-year transportation improvement program (TIP) for the seven-county Southeastern Wisconsin Region, and short-range (five-year) transit development plans for each of the Region's public transit systems. The TDPs refine and detail the recommendations for transit services set forth in the regional transportation plan. The plans are prepared at the request of the transit service providers in the region. The Commission completed a TDP for Ozaukee County in June 2018, will complete coordinated plans for the City of Waukesha and Waukesha County and begin a TDP for the City of Kenosha in 2023. A TDP was completed for Racine County in 2013 and Washington County in 2015. As the Commission prepares future plans, the information included in the Group TAM Plan will be incorporated as appropriate to ensure the region's transit assets maintain a state of good repair.

Group Transit Asset Management Planning Coordination Process

The Group TAM Plan update was developed through close coordination with the eight participating transit operators, as well as through the annual narrative reporting process. The coordination process for the Group TAM Plan began in 2018 and continues with annual updates submitted by each participating transit operator. This plan update continues to include the eight participating transit operators that responded affirmatively to be included in the Southeastern Wisconsin Group TAM Plan. The Tier I operators in the region, including the Milwaukee County Transit System, City of Milwaukee Streetcar, and Kenosha Area Transit prepared separate TAM Plans. The remaining Tier II transit operators (Walworth County and City of Whitewater) opted into the statewide Group TAM Plan prepared by the Wisconsin Department of Transportation. For the transit operators that continue to participate in the Group TAM Plan sponsored by the Commission, inventories, condition assessments, and maintenance procedures were collected in early 2022. Commission staff completed the asset inventory and applied the age and customized mileage useful life benchmarks to finalize the Group TAM Plan.

Transit Asset Management Performance Measures

The Commission established the TAM Targets for Southeastern Wisconsin on June 30, 2017, in consultation with all of the Tier I and Tier II operators within the Region.¹ The regional TAM targets, as shown in Table 1.2, rely heavily on the TAM targets established by the Milwaukee County Transit System (MCTS), which, as the largest transit operator in the Region, represents over 90 percent of the replacement value of the publicly owned transit fleets within the Milwaukee urbanized area. As confirmed by MCTS in May 2022, no changes were anticipated to their transit asset management targets. Therefore, no changes were made to the

¹ A Tier I Transit Provider operates rail or has greater than or equal to 101 vehicles across all fixed route modes, or greater than or equal to 101 vehicles in one non-fixed route mode. A Tier II Transit Provider is a subrecipient of 5311 funds, or an American Indian Tribe, or operates less than or equal to 100 vehicles across all fixed route modes, or less than or equal to 100 vehicles in one non-fixed route mode.

Table 1.2
Transit Asset Management Targets for Southeastern Wisconsin

Asset			Performance Measure	Target
Category	Class	Examples		
Rolling Stock	Buses, Other Passenger Vehicles, and Railcars	Bus, Cutaway, Van, Minivan, and Streetcars	Percent of revenue vehicles that have either met or exceeded their useful life benchmark	< 30%
Equipment	Non-revenue service vehicles and equipment over \$50,000	Route Supervisor Vehicles, Maintenance Trucks, Pool Vehicles, DPF Cleaning System, Bus Wash Systems, Fare Collection systems, Vehicle Lifts, etc.	Percent of vehicles and equipment that have either met or exceeded their useful life benchmark	< 30%
Facilities	Support	Maintenance and Administrative Facilities	Percent of facilities within an asset class, rated below 3 on condition reporting system	< 15%
	Passenger	Rail Terminals, Bus Transfer Stations	Percent of facilities within an asset class, rated below 3 on condition reporting system	0%
	Parking	Park-Ride Lots with Direct Capital Responsibility	Percent of facilities within an asset class, rated below 3 on condition reporting system	0%
Infrastructure	Fixed Guideway	Track Segments, Exclusive Bus Rights-of-Way, Catenary Segments, and Bridges	Percent of segments that have performance restrictions	0%

Source: SEWRPC

regional TAM targets as part of this updated TAM Plan. The final TAM Targets for Southeastern Wisconsin were transmitted to the Wisconsin Department of Transportation (WisDOT) on July 10, 2017.

The Commission has fulfilled the requirements of the Moving Ahead for Progress in the 21st Century (MAP-21) and 49 CFR part 625 in relation to TAM target setting. In June 2018, the Commission amended VISION 2050—the year 2050 regional land use and transportation plan—documenting the regionwide TAM targets. On December 9, 2020, the Commission adopted the Transportation Improvement Program (TIP) for Southeastern Wisconsin 2021-2024, which included a description of how the programmed projects promote the achievement of the TAM targets in Appendix E. Specifically, the 2021-2024 TIP includes \$212 million of funds programmed for implementing capital-related transit preservation projects (such as vehicle capitalized maintenance and replacement projects and facility repair and upgrade projects) within the period of 2021-2024 TIP. The capital-related transit preservation projects programmed in the TIP were provided by transit operators based on their processes for monitoring the condition of their vehicles and facilities and prioritizing their maintenance and replacement given the level of available funding. The 2023-2026 TIP, anticipated to be adopted in late 2022, will also include a description of how projects achieve the TAM targets and verify the regional TAM targets.

The asset inventories for vehicles, equipment, and facilities are provided in Table 2.1, Table 2.2, and Table 2.3, respectively. Data for each spreadsheet was provided by each transit operator and verified through an iterative process during the development of the Group TAM Plan, as described in Chapter 1. The inventories include the four required categories of capital assets including facilities, equipment, rolling stock, and infrastructure. The Waukesha County Transit System provides transit services through a contract with a private transit company who owns, operates and manages the transit capital assets. As such, there are no transit assets attributed to the Waukesha County Transit System within this Group TAM Plan. In addition, Western Kenosha County Transit is in the process of purchasing up to three vehicles and anticipates delivery in 2023. Although no vehicles are included in the Group TAM Plan which are considered under the “direct capital responsibility” of Kenosha County, they are included in this plan for now. Once the vehicles are in revenue service, additional discussions will occur between the Wisconsin Department of Transportation and SEWRPC to determine how to incorporate the assets.

Table 2.1 lists assets by transit operator and further divides each operator’s revenue vehicles by asset class, such as buses, cutaway buses, minivans, and automobiles. The vehicle mileage shown represents the odometer reading as of December 2021. The “replacement costs” shown in Table 2.1 were determined as follows: the replacement cost of buses were based on average actual bus purchases in the 2020 Public Transportation Vehicle Database published by the American Public Transportation Association; minivans and automobiles that are not wheelchair accessible were also based on the operators’ most recent purchase prices; and wheelchair accessible cutaway and minivan costs were based on the Wisconsin Department of Transportation’s Section 5310 Application Guidelines for Vehicle Capital, Appendix C: Anticipated Vehicle Description and Costs.

Table 2.2 includes the equipment for each participating transit operator that meets the reporting threshold of \$50,000 acquisition value for one line item or a group of assets, as required in 49 CFR part 625. As required, all service vehicles were included in the equipment inventory, regardless of their value.

Lastly, Table 2.3 lists the transit facilities owned by each participating transit operator, or those facilities for which a transit operator has direct capital responsibility or was jointly procured.

Table 2.1
Revenue Vehicle Inventory

Asset Number	Make	Model	Count	ID/Serial No.	Acquisition Year	Vehicle Mileage ^a	Replacement Cost (\$) ^b
Hartford City Taxi Service							
Mini-Vans							
4	Dodge	Braun Caravan	1	2C7WDGBG3FR652114	2015	74,181	70,400
5	Dodge	Caravan	1	2C7WDGBG4KR800930	2019	15,153	70,400
7	Dodge	Braun Caravan	1	2C7WDGBG6KR664770	2019	48,447	70,400
Ozaukee County Transit System							
Cutaway Buses							
151	Ford	Starcraft	1	1FDEE3FS3HDC28575	2017	186,568	85,400
152	Ford	Starcraft	1	1FDEE3FS5HDC28576	2017	198,988	85,400
153	Ford	Starcraft	1	1FDEE3FS7HDC28577	2017	180,155	85,400
154	Ford	Starcraft	1	1FDEE3FS0HDC68418	2017	154,119	85,400
158	Ford	Metrolite	1	1FDEE3FSXHDC77501	2017	152,427	85,400
159	Ford	Metrolite	1	1FDEE3FS1HDC77502	2017	161,077	85,400
161	Ford	Metrolite	1	1FDEE3FS3JDC06369	2018	148,670	85,400
162	Ford	Starcraft	1	1FDEE3S56KDC04651	2018	99,698	85,400
163	Ford	Starcraft	1	1FDEE3FS8KDC04652	2018	148,167	85,400
165	Ford	Metrolite	1	1FDEE3F66KDC49396	2019	113,297	85,400
Mini-Vans							
150	Dodge	ADA-Cara	1	2C7WDGBG3GR386613	2016	140,484	70,400
155	Dodge	Caravan	1	2C7WDGBG6HR838653	2017	155,094	70,400
160	Ford	Metrolite	1	1FDEE3FSXJDC06367	2018	146,653	85,400
164	Ford	Bariatric Van	1	1FDZX2CM5KKB48371	2019	87,727	85,400
166	Dodge	Caravan	1	2C4RDGBG3LR197111	2019	46,210	70,400
167	Dodge	Caravan	1	2C4RDGBG5LR197112	2019	37,585	70,400
Automobiles							
147	Toyota	Prius	1	JTDKBRFU1G3001300	2016	235,268	27,000
149	Toyota	Prius	1	JTDKBRFU4G3509678	2016	196,911	27,000
156	Toyota	Prius	1	JTDKBRFU8H3054299	2017	163,402	27,000
157	Toyota	Prius	1	JTDKBRFU2H3056176	2017	157,330	27,000
169	Ford	Escape Hybrid	1	1FMCU0BZ8MUA13666	2021	23,619	28,000
170	Ford	Escape Hybrid	1	1FMCU0BZ9MUA15054	2021	21,846	28,000
171	Ford	Escape Hybrid	1	1FMCU0BZ4MUA78014	2021	8,118	28,000
172	Toyota	Prius	1	1FMCU0BZ8MUA78176	2021	9,625	27,000
173	Chrysler	Voyager	1	2C4RC1CGXMR580186	2021	61	28,000
RYDE (City of Racine Transit System)							
Buses							
67	GILLIG	35' Low Floor Bus	1	15GGB291841074583	2004	523,144	560,000
68	GILLIG	35' Low Floor Bus	1	15GGB291841074584	2004	494,639	560,000
69	GILLIG	35' Low Floor Bus	1	15GGB291841074585	2004	481,149	560,000
70	GILLIG	35' Low Floor Bus	1	15GGB291841074586	2004	538,018	560,000
72	GILLIG	35' Low Floor Bus	1	15GGB291841074588	2004	499,581	560,000
75	GILLIG	35' Low Floor Bus	1	15GGB291841074591	2004	522,721	560,000
76	GILLIG	35' Low Floor Bus	1	15GGB271691079708	2009	402,515	560,000
77	GILLIG	35' Low Floor Bus	1	15GGB271691079709	2009	424,139	560,000
78	GILLIG	35' Low Floor Bus	1	15GGB271691079710	2009	421,659	560,000
79	GILLIG	35' Low Floor Bus	1	15GGB2710B178772	2011	447,493	560,000
80	GILLIG	35' Low Floor Bus	1	15GGB2712B1178773	2011	405,885	560,000
81	GILLIG	35' Low Floor Bus	1	15GGB2714B1178774	2011	451,217	560,000
82	GILLIG	35' Low Floor Bus	1	15GGB2716B118775	2011	408,565	560,000
83	GILLIG	35' Low Floor Bus	1	15GGB2718B118776	2011	396,574	560,000
84	GILLIG	35' Low Floor Bus	1	15GGB2717C1180510	2012	339,745	560,000
85	GILLIG	35' Low Floor Bus	1	15GGB2719C1180511	2012	313,543	560,000
86	GILLIG	35' Low Floor Bus	1	15GGB2710C1180512	2012	309,812	560,000
87	GILLIG	35' Low Floor Bus	1	15GGB2714D1181583	2013	340,946	560,000
88	GILLIG	35' Low Floor Bus	1	15GGB2716D1181584	2013	350,704	560,000

Table continued on next page.

Table 2.1 (Continued)

Asset Number	Make	Model	Count	ID/Serial No.	Acquisition Year	Vehicle Mileage ^a	Replacement Cost (\$) ^b
RYDE (City of Racine Transit System) (continued)							
Buses (continued)							
89	GILLIG	35' Low Floor Bus	1	15GGB2718D1181585	2013	338,875	560,000
90	GILLIG	35' Low Floor Bus	1	15GGB271XD1181586	2013	299,736	560,000
91	GILLIG	35' Low Floor Bus	1	15GGB2711D1181587	2013	348,689	560,000
92	GILLIG	35' Low Floor Bus	1	15GGB2713D1181588	2013	325,185	560,000
93	GILLIG	35' Low Floor Bus	1	15GGB2715D1181589	2013	347,576	560,000
94	GILLIG	35' Low Floor Bus	1	15GGB2711D1181590	2013	288,753	560,000
95	GILLIG	35' Low Floor Bus	1	15GGB2713D1181591	2013	345,547	560,000
96	GILLIG	35' Low Floor Bus	1	15GGB2715D1181592	2013	307,003	560,000
97	GILLIG	35' Low Floor Bus	1	15GGB2717D1181593	2013	336,687	560,000
98	GILLIG	35' Low Floor Bus	1	15GGB2719D1181594	2013	331,568	560,000
99	GILLIG	35' Low Floor Bus	1	15GGB2710D1181595	2013	287,504	560,000
1	GILLIG	35' Low Floor Bus	1	15GGB2712D1181596	2013	N/A	560,000
102	GILLIG	35' Low Floor Bus	1	15GGB2710M3195324	2021	16,028	560,000
103	GILLIG	35' Low Floor Bus	1	15GGB2712M3195325	2021	16,240	560,000
104	GILLIG	35' Low Floor Bus	1	15GGB2714M3196217	2021	18,644	560,000
105	GILLIG	35' Low Floor Bus	1	15GGB2716M3196218	2021	14,521	560,000
106	Proterra	BEB	1	7JZTG13J5MS000509	2021	389	950,000
107	Proterra	BEB	1	7JZTG13J1MS000510	2021	353	950,000
108	Proterra	BEB	1	7JZTG13J3MS000511	2021	312	950,000
109	Proterra	BEB	1	7JZTG13J5MS000512	2021	426	950,000
110	Proterra	BEB	1	7JZTG13J7MS000513	2021	266	950,000
111	Proterra	BEB	1	7JZTG13J9MS000514	2021	301	950,000
112	Proterra	BEB	1	7JZTG13J0MS000515	2021	310	950,000
113	Proterra	BEB	1	7JZTG13J2MS000516	2021	358	950,000
114	Proterra	BEB	1	7JZTG13J4MS000517	2021	305	950,000
Cutaway Buses							
209	Ford	E450 Medium Duty	1	1FDEE35L69DA83219	2010	199,925	135,400
211	Ford	E450 Medium Duty	1	1FDEE35L49DA83221	2010	202,827	135,400
212	Ford	E450 Medium Duty	1	1FDEE35L69DA83222	2010	202,772	135,400
215	Ford	E450 Medium Duty	1	1FDFE4FS7GDC50541	2016	113,966	135,400
216	Ford	E450 Medium Duty	1	1FDFE4FS7GDC50538	2016	117,013	135,400
217	Ford	E450 Medium Duty	1	1FDFE4FS5GDC50540	2016	115,573	135,400
218	Ford	E450 Medium Duty	1	1FDFE4FS9GDC50539	2016	114,266	135,400
219	Ford	E450 Medium Duty	1	1FDFE4FS5JDC16587	2018	90,157	135,400
220	Ford	E450 Medium Duty	1	1FDFE4FS9JDC16589	2018	66,223	135,400
Washington County Transit System							
Cutaway Buses							
657	Ford	Starcraft Starlight	1	1FDEE3FS3HDC23537	2017	222,600	85,400
658	Ford	Starcraft Starlight	1	1FDEE3FS5HDC23538	2017	232,081	85,400
659	Ford	Starcraft Starlight	1	1FDEE3FS7HDC23539	2017	243,083	85,400
662	Ford	Starcraft Starlight	1	1FDEE3FS3HDC64346	2017	192,068	85,400
663	Ford	Starcraft Starlight	1	1FDEE3FS7HDC35514	2017	158,676	85,400
664	Ford	Starcraft Starlight	1	1FDEE3FS0HDC35516	2017	166,157	85,400
665	Ford	Starcraft Starlight	1	1FDEE3FS0JDC21007	2018	167,935	85,400
669	Ford	Starcraft Starlite Minibus	1	1FDEE3FS5KDC03409	2018	117,804	85,400
670	Ford	Starcraft Starlite Minibus	1	1FDEE3FS1KDC03410	2018	99,245	85,400
671	Ford	Starcraft Starlite Minibus	1	1FDEE3FS3KDC03411	2018	181,087	85,400
672	Ford	Starcraft Starlite Minibus	1	1FDEE3FS7KDC03413	2018	208,830	85,400
675	Ford	Starcraft Starlight	1	1FDEE3FS6KDC56197	2019	135,567	85,400
676	Ford	Starcraft Startlight	1	1RDEE3FS8KDC56198	2019	88,042	85,400
677	Ford	Starcraft Startlight	1	1FDEE3FSXKDC56199	2019	108,175	85,400
678	Ford	Starcraft Starlight	1	1FDEE3FS2KDC56200	2019	113,861	85,400
Mini-Vans							
655	Dodge	Braun Grand Caravan SE	1	2C7WDGBG9GR377561	2016	167,626	70,400
660	Dodge	Braun Grand Caravan SE	1	2C7WDGBG8HR743009	2017	133,389	70,400
661	Dodge	Braun Grand Caravan SE	1	2C7WDGBG7HR743082	2017	119,568	70,400

Table continued on next page.

Table 2.1 (Continued)

Asset Number	Make	Model	Count	ID/Serial No.	Acquisition Year	Vehicle Mileage ^a	Replacement Cost (\$) ^b
Washington County Transit System (continued)							
Mini-Vans (continued)							
668	Dodge	Braun Grand Caravan SE	1	2C7WDGBG6HR853461	2018	142,498	70,400
673	Dodge	Braun Grand Caravan SE	1	2C7WDGBG7KR683828	2019	93,927	70,400
674	Dodge	Braun Grand Caravan SE	1	2C7WDGBG8KR683790	2019	94,933	70,400
679	Dodge	Braun Grand Caravan SE	1	2C7WDGBG1KR798814	2019	43,708	68,200
680	Dodge	Braun Grand Caravan SE	1	2C7WDGBG1KR798831	2019	67,011	68,200
681	Dodge	Braun Grand Caravan SE	1	2C7WDGBG2KR798837	2019	33,099	68,200
682	Dodge	Braun Grand Caravan SE	1	2C7WDGBG6KR798839	2019	40,837	68,200
683	Dodge	Braun Grand Caravan SE	1	2C7WDGBG0KR799050	2019	34,373	68,200
684	Dodge	Braun Grand Caravan SE	1	2C7WDGBG0KR803095	2019	22,697	68,200
City of Waukesha Metro Transit							
Buses							
153	Gillig	Low Floor 35 ft	1	15GGB271081079493	2008	393,141	560,000
154	Gillig	Low Floor 35 ft	1	15GGB271281079494	2008	390,505	560,000
155	Gillig	Low Floor 35 ft	1	15GGB271481079495	2008	380,632	560,000
159	Gillig	Low Floor 35 ft	1	15GGB2713F1184574	2015	238,056	560,000
160	Gillig	Low Floor 35 ft	1	15GGB2713F1184575	2015	235,593	560,000
161	Gillig	Low Floor 35 ft	1	15GGB2713F1184576	2015	236,267	560,000
162	New Flyer of America	Excelsior XD35	1	5FYD8KV11FB047865	2015	210,974	560,000
163	New Flyer of America	Excelsior XD35	1	5FYD8KV13FB047866	2015	217,932	560,000
164	New Flyer of America	Excelsior XD35	1	5FYD8KV15FB047867	2015	211,402	560,000
165	New Flyer of America	Excelsior XD35	1	5FYD8KV17FB047868	2015	221,584	560,000
166	New Flyer of America	Excelsior XD35	1	5FYD8KV19FB047869	2015	217,294	560,000
167	New Flyer of America	Excelsior XD35	1	5FYD8KV10GC048811	2016	206,418	560,000
168	New Flyer of America	Excelsior XD35	1	5FYD8KV12GC048812	2016	210,898	560,000
169	New Flyer of America	Excelsior XD35	1	5FYD8KV14GC048813	2016	193,728	560,000
170	New Flyer of America	Excelsior XD35	1	5FYD8KV12GB050646	2017	178,563	560,000
171	New Flyer of America	Excelsior XD35	1	5FYD8KV12GB050647	2017	171,173	560,000
172	Gillig	Low Floor 35 ft	1	15GGB2719J188710	2018	113,938	560,000
173	Gillig	Low Floor 35 ft	1	15GGB2710J188711	2018	115,467	560,000
174	Gillig	Low Floor 35 ft	1	15GGB2712K3193166	2019	100,907	560,000
175	Gillig	Low Floor 35 ft	1	15GGB2714K3193167	2019	106,198	560,000
176	Gillig	Low Floor 35 ft	1	15GGB2719M3195371	2021	22,864	560,000
177	Gillig	Low Floor 35'	1	15GGB2710M3915372	2021	22,889	560,000
Cutaway Buses							
700	Ford	Transit	1	1FBU4XM7KKB85220	2019	15,602	85,400
701	Ford	Transit	1	1FBVU5XG0LB74481	2020	5,805	85,400
702	Arboc	Express	1	1HA6GUBB0LN003625	2020	14,842	160,000
703	Arboc	Express	1	1HA6GUBB9LN003641	2020	18,479	160,000
704	Arboc	Express	1	1HA6GUBB2LN003674	2020	14,828	160,000
705	Arboc	Express	1	1HA6GUBB8LN003841	2020	17,390	160,000
City of West Bend Taxi Service							
Cutaway Buses							
98	Ford	Starcraft Starlite	1	1FDEE3FS5HDC26603	2017	112,647	85,400
49	Ford	Starcraft Starlite	1	1FDEE3FS1JDC06600	2018	83,511	85,400
51	Ford	Starcraft Starlite	1	1FDEE3FSXKDC172287	2019	67,570	85,400
52	Ford	Starcraft Starlite	1	1FDEE3FSXKDC172288	2019	62,433	85,400

Table continued on next page.

Table 2.1 (Continued)

Asset Number	Make	Model	Count	ID/Serial No.	Acquisition Year	Vehicle Mileage ^a	Replacement Cost (\$) ^b
City of West Bend Taxi Service (continued)							
Cutaway Buses (continued)							
53	Ford	Starcraft Starlite	1	1FDEE3FSXKDC172289	2019	66,827	85,400
56	Ford	Starcraft Starlite	1	1FDEE3FS7KDC52756	2019	43,376	85,400
57	Ford	Allstar	1	1FDEE3FN8MDC25868	2020	18,853	85,400
Mini-Vans							
97	Dodge	Caravan SE	1	2C4RGBG6HR632243	2017	144,127	70,400
46	Dodge	Grand Caravan	1	2C4RDGBG6HR855530	2017	110,159	70,400
48	Dodge	Grand Caravan	1	2C4RDGBG8HR855867	2017	105,014	70,400
50	Dodge	Grand Caravan	1	2C4RDGBG7JR251118	2018	63,385	70,400
54	Dodge	Grand Caravan	1	2C4RDGBG8KR547430	2019	53,949	70,400
55	Dodge	Grand Caravan	1	2C4RDGBB4KR749648	2019	46,161	70,400
58	Dodge	Grand Caravan	1	2C4RDGBG4LR231668	2020	22,435	70,400

Note: Western Kenosha County Transit did not have direct capital responsibility over transit assets at the time this Group TAM Plan was completed. However, the anticipate vehicles will be purchased during the duration of this plan and are therefore included as a participant.

^a Odometer reading as of December 2021.

^b The replacement costs for buses are based on average actual bus purchases in the 2020 Public Transportation Vehicle Database published by the American Public Transportation Association. Costs will vary depending on equipment included in the bus build. The remaining vehicle costs were based on operator information and the Wisconsin Department of Transportation's Section 5310 Application Guidelines for Vehicle Capital, Appendix C, Anticipated Vehicle Descriptions and Costs for 2022.

Source: RYDE (City of Racine Transit System), Ozaukee County Transit System, Washington County Transit System, Waukesha Metro Transit, Waukesha County Transit System, Western Kenosha County Transit, Hartford City Taxi, City of West Bend Taxi Service, and SEWRPC

Table 2.2
Equipment Inventory

Asset Class ^a	Asset Name	Make	Model	Count	ID/Serial No.	Acquisition Year	Vehicle Mileage ^b	Replacement Cost/Value (\$)
RYDE (City of Racine Transit System)								
(NR)	Vehicle 101, Staff Van	Dodge	Caravan	1	2G4RDGBG3HR647492	2017	118,364	25,000
(NR)	Vehicle 201	Ford	E150 Passenger Van	1	1FMRE11L03HB97731	2018	18,292	25,000
(T)	Vehicle 300	Chevy	Maintenance Support Truck	1	1GBJC34FXV044141	1997	85,361	26,000
(T)	Vehicle 500	Ford	Truck	1	1FDWF3HR5AE21939	2010	7,375	80,000
(NR)	Vehicle 600	Ford	F350 Truck	1	1FDRF3HT0BEB42064	2010	17317	60,000
(M)	Fork Lift	Komatsu	N/A	1	N/A	1995	N/A	27,000
(M)	SEFAC Wheel Lift	N/A	N/A	2	N/A	2009	N/A	27,000
(M)	SEFAC Wheel Lift	N/A	N/A	1	N/A	2017	N/A	27,000
(M)	Hydraulic Bushing Press	N/A	N/A	1	N/A	1990	N/A	3,000
(M)	Ride-on Floor Sweeper	N/A	N/A	1	N/A	1998	N/A	28,000
(M)	CAD/AVL System	TransitMaster	N/A	1	N/A	2004	N/A	350,000
(SS)	Bus Surveillance System	N/A	N/A	25	N/A	2009	N/A	37,500
(SS)	Facility Surveillance System	N/A	N/A	1	N/A	2010	N/A	25,000
(M)	In-ground Hoist	N/A	N/A	1	N/A	2019	N/A	150,000
(M)	Bus wash brush	N/A	N/A	1	N/A	2013	N/A	150,000
(M)	Pressure Washers	Hotzy	N/A	2	N/A	2016	N/A	2,500
(M)	A/C Recovery Unit	N/A	N/A	1	N/A	2017	N/A	7,000
City of Waukesha Metro Transit								
(NR)	Service truck, Mobile 2	Chevrolet	Silverado	1	1GCHK24658E115196	2008	78,374	55,000
(NR)	Chevrolet Traverse, Mobile 5	Chevrolet	Traverse LS	1	1GNKVEED5BJ213629	2011	61,798	32,000
(NR)	Dodge Grand Caravan, Mobile 4	Dodge	Grand Caravan	1	2C4RDGBG0ER245926	2014	57,463	40,000
(NR)	Waukesha Metro Mobile 3	Ford	F-350	1	1FT8X4BT7KEE89090	2019	3,914	57,000
(WS)	Roll Over Gantry Bus Washer	N/A	Rollover Bus Washer	1	N/A	2010	N/A	84,705
(WS)	Pressure Washer Trailer	Hydro Tek Systems	T500 Pressure Washer and Trailer Combination	1	1H9CSC277B1120418	2011	N/A	12,526

^a Asset Class is defined as:

(T) – Trucks and other Rubber Tire Vehicles (M) – Maintenance
(NR) – Non Revenue/Service Automobile (SS) – Surveillance Systems
(WS) – Wash System

^b Odometer reading as of December 2021.

Source: RYDE (City of Racine Transit System), Ozaukee County Transit System, Washington County Transit System, Waukesha Metro Transit, Waukesha County Transit System, Western Kenosha County Transit, Hartford City Taxi, City of West Bend Taxi Service, and SEWRPC

Table 2.3
Facilities Inventory

Asset Class ^a	Asset Name	Count	Location	Acquisition Year	Replacement Cost (\$)
Ozaukee County Transit System					
(A)	Transit Facility	1	741 W. Oakland Avenue	2012	1,700,000
RYDE (City of Racine Transit System)					
(M)	Maintenance Shop	1	1900 Kentucky Street	1976	1,065,000
(M)	Bus storage garage	1	1900 Kentucky Street	1977	3,570,000
(M)	Fuel and wash bay	1	1900 Kentucky Street	1977	397,000
(A)	Administration Office Building	1	1900 Kentucky Street	2010	1,057,000
(TC)	Transit Center	1	1409 State Street	2004	4,786,000
City of Waukesha Metro Transit					
(A),(M)	Administration and Maintenance Building	1	2311 Badger Drive	1986	N/A ^b
(TC)	Downtown Terminal	1	212 E. St. Paul Avenue	2004	8,032,800

^a Asset Class is defined as:

(A) – Administration

(M) – Maintenance

(TC) – Transit Center

^b The total replacement cost for the administration and maintenance building is currently under review by Waukesha Metro Transit to consider the potential costs of a new facility, including future upgrades that would be incorporated to modernize the building.

Source: RYDE (City of Racine Transit System), Ozaukee County Transit System, Washington County Transit System, Waukesha Metro Transit, Waukesha County Transit System, Western Kenosha County Transit, Hartford City Taxi, City of West Bend Taxi Service, and SEWRPC

3.1 USEFUL LIFE BENCHMARKS

This Group TAM Plan utilized the vehicle-age-based Useful Life Benchmark (ULB) provided by the Federal Transit Administration (FTA) in the *National Transit Database Asset Inventory Module for 2017-2018* and incorporated into the FTA's Default ULB Cheat Sheet. Commission staff also developed a mileage-based ULB in coordination with the participating transit operators, utilizing their input from individual meetings, analyses of transit asset condition, and on-going consultation with operators to receive input on potential benchmarks. Based on this iterative process, the Group TAM plan participants supported the inclusion of a customized maximum mileage benchmark based on their local operating environments, historical maintenance records, and manufacturer guidelines. Many of the transit vehicles included in this Group TAM Plan operate in rural and suburban areas that require longer-distance vehicle trips, resulting in a greater average mileage per year than would be expected in more densely populated areas. Also, the vehicles operate in a climate that requires the use of road salt in the winter, resulting in greater impacts to the fleet such as corrosion. Therefore, the use of both an age- and mileage-based ULB better reflect the increased wear on vehicles that impacts the state of good repair for transit vehicles in Southeastern Wisconsin.

The ULB for TAM planning differs from the minimum ULB used to determine Federal funding eligibility for vehicle replacement as identified in FTA Circular 5010.1E. Tracking transit assets for TAM is based on the maximum number of years that a vehicle can operate at a full level of performance. By comparison, the ULB found in FTA's Circular 5010.1E identifies a minimum number of years or mileage that recipients of Federal assistance must meet in order to qualify for new vehicles. Table 3.1 shows the difference between the minimum and maximum useful life benchmarks for both the customized mileage benchmarks and the FTA-developed age benchmarks. The age-based ULB was used to assess the condition of non-revenue service vehicles as part of the transit equipment evaluation. The facilities condition assessment utilized the FTA Transit Economic Requirements Model (TERM) scale as provided in the *TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation*.

3.2 TRANSIT ASSET CONDITION ASSESSMENT

The condition assessment summary for the transit operators participating in this Group TAM Plan is provided in Table 3.2. Approximately six percent of the revenue vehicles across all transit operators are past their transit asset management useful life benchmarks for age, and approximately five percent of revenue vehicles are past their useful life benchmark for mileage. Six buses (approximately nine percent) are beyond the age benchmark and none of the buses are beyond the mileage benchmark. Three cutaway buses (approximately seven percent) exceed the benchmark based on age, while eight cutaway buses (approximately 17 percent) exceed the benchmark based on mileage. In addition, no minivans or automobiles exceed the benchmark based on age or mileage. Overall, all the revenue vehicles inventoried in the Group TAM Plan meet the TAM Targets for Southeastern Wisconsin with under 30 percent of rolling stock. However, the non-revenue service vehicles exceed the benchmark based on age with four (approximately 57 percent) of the non-revenue service vehicles exceeding the age-based benchmark. Tables 3.3 through 3.5 include the condition assessments for group's revenue vehicles, equipment and facilities. Table 3.3 documents the condition assessment for all revenue vehicles by transit operator and asset class. Table 3.4 provides the condition assessment for the transit equipment for all transit operators, which consists of four non-revenue service vehicles and two trucks that exceed the benchmark based on age. The remaining equipment does not have an applicable ULB but are tracked and maintained by each transit operator. Table 3.5 includes the condition assessment for transit facilities for which the transit operator has direct capital responsibility and provides the condition based on the TERM scale. Four of the facilities have been assigned a condition rating of three or less on the TERM scale, including the City of Racine's maintenance shop, bus storage garage, fuel and wash bay, and Transit Center. Although the Transit Center has not exceeded its useful life, there are unfinished rooms and components that are moderately deteriorated. In 2022 through 2023, the City of

Racine is replacing the shop area, transit facility apron, and parking lot. In addition, the City is reconstructing the dispatch offices, drivers' room, and storage area to improve functionality, address structural issues, and comply with the American with Disabilities Act.

Table 3.1
Minimum and Maximum Useful Life Benchmarks

Vehicle Type	Length	Mileage		Age (Years)	
		Minimum ^a	Maximum ^b	Minimum ^a	Maximum ^c
Buses					
Large, heavy-duty transit buses including over-the-road buses (approx. 35' or larger including articulated buses)	35 feet or larger and articulated buses	500,000	600,000	12	14
Small size, heavy-duty transit buses	30 feet	350,000	400,000	10	14
Medium-size, medium duty transit buses	25 feet to 35 feet	200,000	300,000	7	10
Medium-size, light-duty transit buses	25 feet to 35 feet	150,000	200,000	5	14
Light Duty Vehicles					
Cutaways	16 feet to 28 feet	100,000	200,000	4	10
Minivans	16 feet to 28 feet	100,000	175,000	4	8
Automobiles	15 feet (approximately)	100,000	200,000	4	8

^a Minimum useful life as identified in FTA Circular 5010.1E, March 21, 2017, revised July 16, 2018. Minimum useful life is determined by years of service or accumulation of miles, whichever comes first, by asset type.

^b Maximum mileage useful life benchmarks established by participants in the Group TAM Plan based on local operating environments, historical maintenance records, and manufacturer guidelines.

^c Maximum useful life benchmarks set by FTA in the Default Useful Life Benchmark Cheat Sheet and the National Transit Database Policy Manual, Revenue Vehicle Default Useful Life Benchmarks.

Source: Federal Transit Administration and SEWRPC

Table 3.2
Group TAM Plan Asset Condition Summary

Asset Category/Class	Count	Average Age (Years)	Average Mileage	Average Replacement Costs (\$)	Past Age ULB		Past Mileage ULB	
					Number	Percent	Number ^a	Percent
Bus	66	7.5	240,469	613,200	6	9.0	--	--
Cutaway Bus	47	4.5	124,475	101,300	3	6.5	8	17.0
Minivan	28	3.9	81,801	70,400	--	--	--	--
Automobile	9	3.0	90,687	24,900	--	--	--	--
Revenue Vehicles Summary	150	5.7	166,293	200,900	9	6.0	8	5.3
Non-Revenue Service Automobile	7	8.1	50,789	44,400	4	57.1	--	--
Trucks and other Rubber Tire Vehicles	2	18.5	46,368	53,000	2	100	--	--
Bus Wash System	2	11.5	N/A	48,600	2	100	--	--
Equipment Summary	49	13.8	49,806	55,700	8	85.7	N/A	N/A
Administration	3	19.3	N/A	1,378,500	N/A	N/A	N/A	N/A
Maintenance	4	43	N/A	1,677,300	N/A	N/A	N/A	N/A
Facilities Summary	8	28.9	N/A	2,944,000	N/A	N/A	N/A	N/A

^a Percent at or past ULB for miles is based on the customized maximum mileage useful life benchmarks developed in coordination with the participating transit operators and local operating environments, historical maintenance records, and manufacturer guidelines.

Source: Federal Transit Administration and SEWRPC

Table 3.3
Revenue Vehicles Condition Assessment

Asset Number	ID/Serial No.	Age (Years)	Vehicle Mileage ^a	Replacement Cost (\$) ^b	Applicable Age-Based Useful Life Benchmark (Years)	Past Age Useful Life Benchmark	Applicable Mileage-Based Useful Life Benchmark (Miles) ^c	Past Mileage Useful Life Benchmark
Hartford City Taxi Service								
Mini-Vans								
4	2C7WDGBG3FR652114	7	74,181	70,400	8	No	175,000	No
5	2C7WDGBG4KR800930	3	15,153	70,400	8	No	175,000	No
7	2C7WDGBG6KR664770	3	48,447	70,400	8	No	175,000	No
Ozaukee County Transit System								
Cutaway Buses								
151	1FDEE3FS3HDC28575	5	186,568	85,400	10	No	200,000	No
152	1FDEE3FS5HDC28576	5	198,988	85,400	10	No	200,000	No
153	1FDEE3FS7HDC28577	5	180,155	85,400	10	No	200,000	No
154	1FDEE3FS0HDC68418	5	154,119	85,400	10	No	200,000	No
158	1FDEE3FSXHDC77501	5	152,427	85,400	10	No	200,000	No
159	1FDEE3FS1HDC77502	5	161,077	85,400	10	No	200,000	No
161	1FDEE3FS3JDC06369	4	148,670	85,400	10	No	200,000	No
162	1FDEE3S56KDC04651	4	99,698	85,400	10	No	200,000	No
163	1FDEE3FS8KDC04652	4	148,167	85,400	10	No	200,000	No
165	1FDEE3F66KDC49396	3	113,297	85,400	10	No	200,000	No
Mini-Vans								
150	2C7WDGBG3GR386613	6	140,484	70,400	8	No	175,000	No
155	2C7WDGBG6HR838653	5	155,094	70,400	8	No	175,000	No
160	1FDEE3FSXJDC06367	4	146,653	85,400	8	No	175,000	No
164	1FDZX2CM5KK848371	3	87,727	85,400	8	No	175,000	No
166	2C4RDGBG3LR197111	3	46,210	70,400	8	No	175,000	No
167	2C4RDGBG5LR197112	3	37,585	70,400	8	No	175,000	No
Automobiles								
147	JTDKBRFU1G3001300	6	235,268	27,000	8	No	200,000	No
149	JTDKBRFU4G3509678	6	196,911	27,000	8	No	200,000	No
156	JTDKBRFU8H3054299	5	163,402	27,000	8	No	200,000	No
157	JTDKBRFU2H3056176	5	157,330	27,000	8	No	200,000	No
169	1FMCU0BZ8MUA13666	0	23,619	28,000	8	No	200,000	No
170	1FMCU0BZ9MUA15054	0	21,846	28,000	8	No	200,000	No
171	1FMCU0BZ4MUA78014	0	8,118	28,000	8	No	200,000	No
172	1FMCU0BZ8MUA78176	0	9,625	27,000	8	No	200,000	No
173	2C4RC1CGXMR580186	0	61	28,000	8	No	200,000	No
RYDE (City of Racine Transit System)								
Buses								
67	15GGB291841074583	18	523,144	560,000	14	Yes	600,000	No
68	15GGB291841074584	18	494,639	560,000	14	Yes	600,000	No
69	15GGB291841074585	18	481,149	560,000	14	Yes	600,000	No
70	15GGB291841074586	18	538,018	560,000	14	Yes	600,000	No
72	15GGB291841074588	18	499,581	560,000	14	Yes	600,000	No
75	15GGB291841074591	18	522,721	560,000	14	Yes	600,000	No
76	15GGB271691079708	13	402,515	560,000	14	No	600,000	No
77	15GGB271691079709	13	424,139	560,000	14	No	600,000	No
78	15GGB271691079710	13	421,659	560,000	14	No	600,000	No
79	15GGB2710B178772	11	447,493	560,000	14	No	600,000	No
80	15GGB2712B1178773	11	405,885	560,000	14	No	600,000	No
81	15GGB2714B1178774	11	451,217	560,000	14	No	600,000	No
78	15GGB271491079708	9	281,209	430,000	14	No	600,000	No
79	15GGB2710B1178772	7	285,300	430,000	14	No	600,000	No
82	15GGB2716B118775	11	408,565	560,000	14	No	600,000	No

Table continued on next page.

Table 3.3 (Continued)

Asset Number	ID/Serial No.	Age (Years)	Vehicle Mileage ^a	Replacement Cost (\$) ^b	Applicable Age-Based Useful Life Benchmark (Years)	Past Age Useful Life Benchmark	Applicable Mileage-Based Useful Life Benchmark (Miles) ^c	Past Mileage Useful Life Benchmark
RYDE (City of Racine Transit System) (continued)								
Buses (continued)								
83	15GGB2718B118776	11	396,574	560,000	14	No	600,000	No
84	15GGB2717C1180510	10	339,745	560,000	14	No	600,000	No
85	15GGB2719C1180511	10	313,543	560,000	14	No	600,000	No
86	15GGB2710C1180512	10	309,812	560,000	14	No	600,000	No
87	15GGB2714D1181583	9	340,946	560,000	14	No	600,000	No
88	15GGB2716D1181584	9	350,704	560,000	14	No	600,000	No
89	15GGB2718D1181585	9	338,875	560,000	14	No	600,000	No
90	15GGB271XD1181586	9	299,736	560,000	14	No	600,000	No
91	15GGB2711D1181587	9	348,689	560,000	14	No	600,000	No
92	15GGB2713D1181588	9	325,185	560,000	14	No	600,000	No
93	15GGB2715D1181589	9	347,576	560,000	14	No	600,000	No
94	15GGB2711D1181590	9	288,753	560,000	14	No	600,000	No
95	15GGB2713D1181591	9	345,547	560,000	14	No	600,000	No
96	15GGB2715D1181592	9	307,003	560,000	14	No	600,000	No
97	15GGB2717D1181593	9	336,687	560,000	14	No	600,000	No
98	15GGB2719D1181594	9	331,568	560,000	14	No	600,000	No
99	15GGB2710D1181595	9	287,504	560,000	14	No	600,000	No
1	15GGB2712D1181596	9	N/A	560,000	14	No	600,000	No
102	15GGB2710M3195324	1	16,028	560,000	14	No	600,000	No
103	15GGB2712M3195325	1	16,240	560,000	14	No	600,000	No
104	15GGB2714M3196217	1	18,644	560,000	14	No	600,000	No
105	15GGB2716M3196218	1	14,521	560,000	14	No	600,000	No
106	7JZTG13J5MS000509	1	389	950,000	14	No	600,000	No
107	7JZTG13J1MS000510	1	353	950,000	14	No	600,000	No
108	7JZTG13J3MS000511	1	312	950,000	14	No	600,000	No
109	7JZTG13J5MS000512	1	426	950,000	14	No	600,000	No
110	7JZTG13J7MS000513	1	266	950,000	14	No	600,000	No
111	7JZTG13J9MS000514	1	301	950,000	14	No	600,000	No
112	7JZTG13J0MS000515	1	310	950,000	14	No	600,000	No
113	7JZTG13J2MS000516	1	358	950,000	14	No	600,000	No
114	7JZTG13J4MS000517	1	305	950,000	14	No	600,000	No
Cutaway Buses								
209	1FDEE35L69DA83219	12	199,925	135,400	10	Yes	200,000	No
211	1FDEE35L49DA83221	12	202,827	135,400	10	Yes	200,000	Yes
212	1FDEE35L69DA83222	12	202,772	135,400	10	Yes	200,000	Yes
215	1FDFF4FS7GDC50541	6	113,966	135,400	10	No	200,000	No
216	1FDFF4FS7GDC50538	6	117,013	135,400	10	No	200,000	No
217	1FDFF4FS5GDC50540	6	115,573	135,400	10	No	200,000	No
218	1FDFF4FS9GDC50539	6	114,266	135,400	10	No	200,000	No
219	1FDFF4FS5JDC16587	4	90,157	135,400	10	No	200,000	No
220	1FDFF4FS9JDC16589	4	66,223	135,400	10	No	200,000	No
Washington County Transit System								
Cutaway Buses								
657	1FDEE3FS3HDC23537	5	222,600	85,400	10	No	200,000	Yes
658	1FDEE3FS5HDC23538	5	232,081	85,400	10	No	200,000	Yes
659	1FDEE3FS7HDC23539	5	243,083	85,400	10	No	200,000	Yes
662	1FDEE3FS3HDC64346	5	192,068	85,400	10	No	200,000	No
663	1FDEE3FS7HDC35514	5	158,676	85,400	10	No	200,000	No
664	1FDEE3FS0HDC35516	5	166,157	85,400	10	No	200,000	No
665	1FDEE3FS0JDC21007	4	167,935	85,400	10	No	200,000	No
669	1FDEE3FS5KDC03409	4	117,804	85,400	10	No	200,000	No
670	1FDEE3FS1KDC03410	4	99,245	85,400	10	No	200,000	No

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Table 3.3 (Continued)

Asset Number	ID/Serial No.	Age (Years)	Vehicle Mileage ^a	Replacement Cost (\$) ^b	Applicable Age-Based Useful Life Benchmark (Years)	Past Age Useful Life Benchmark	Applicable Mileage-Based Useful Life Benchmark (Miles) ^c	Past Mileage Useful Life Benchmark
Washington County Transit System (continued)								
Cutaway Buses (continued)								
671	1FDEE3FS3KDC03411	4	181,087	85,400	10	No	200,000	No
672	1FDEE3FS7KDC03413	4	208,830	85,400	10	No	200,000	Yes
675	1FDEE3FS6KDC56197	3	135,567	85,400	10	No	200,000	No
676	1RDEE3FS8KDC56198	3	88,042	85,400	10	No	200,000	No
677	1FDEE3FSXKDC56199	3	108,175	85,400	10	No	200,000	No
678	1FDEE3FS2KDC56200	3	113,861	85,400	10	No	200,000	No
Mini-Vans								
655	2C7WDGBG9GR377561	6	167,626	70,400	8	No	175,000	No
660	2C7WDGBG8HR743009	5	133,389	70,400	8	No	175,000	No
661	2C7WDGBG7HR743082	5	119,568	70,400	8	No	175,000	No
668	2C7WDGBG6HR853461	4	142,498	70,400	8	No	175,000	No
673	2C7WDGBG7KR683828	3	93,927	70,400	8	No	175,000	No
674	2C7WDGBG8KR683790	3	94,933	70,400	8	No	175,000	No
679	2C7WDGBG1KR798814	3	43,708	68,200	8	No	175,000	No
680	2C7WDGBG1KR798831	3	67,011	68,200	8	No	175,000	No
681	2C7WDGBG2KR798837	3	33,099	68,200	8	No	175,000	No
682	2C7WDGBG6KR798839	3	40,837	68,200	8	No	175,000	No
683	2C7WDGBG0KR799050	3	34,373	68,200	8	No	175,000	No
684	2C7WDGBG0KR803095	3	22,697	68,200	8	No	175,000	No
City of Waukesha Metro Transit								
Buses								
153	15GGB271081079493	8	393,141	560,000	14	No	600,000	No
154	15GGB271281079494	8	390,505	560,000	14	No	600,000	No
155	15GGB271481079495	8	380,632	560,000	14	No	600,000	No
159	15GGB2713F1184574	7	238,056	560,000	14	No	600,000	No
160	15GGB2713F1184575	7	235,593	560,000	14	No	600,000	No
161	15GGB2713F1184576	7	236,267	560,000	14	No	600,000	No
162	5FYD8KV11FB047865	7	210,974	560,000	14	No	600,000	No
163	5FYD8KV13FB047866	7	217,932	560,000	14	No	600,000	No
164	5FYD8KV15FB047867	7	211,402	560,000	14	No	600,000	No
165	5FYD8KV17FB047868	7	221,584	560,000	14	No	600,000	No
166	5FYD8KV19FB047869	7	217,294	560,000	14	No	600,000	No
167	5FYD8KV10GC048811	6	206,418	560,000	14	No	600,000	No
168	5FYD8KV12GC048812	6	210,898	560,000	14	No	600,000	No
169	5FYD8KV14GC048813	6	193,728	560,000	14	No	600,000	No
170	5FYD8KV12GB050646	5	178,563	560,000	14	No	600,000	No
171	5FYD8KV12GB050647	5	171,173	560,000	14	No	600,000	No
172	15GGB2719J188710	4	113,938	560,000	14	No	600,000	No
173	15GGB2710J188711	4	115,467	560,000	14	No	600,000	No
174	15GGB2712K3193166	3	100,907	560,000	14	No	600,000	No
175	15GGB2714K3193167	3	106,198	560,000	14	No	600,000	No
176	15GGB2719M3195371	1	22,864	560,000	14	No	600,000	No
177	15GGB2710M3915372	1	22,889	560,000	14	No	600,000	No
Cutaway Buses								
700	1FBU4XM7KK85220	3	15,602	85,400	10	No	200,000	No
701	1FBVU5XG0LKB74481	2	5,805	85,400	10	No	200,000	No
702	1HA6GUBB0LN003625	2	14,842	160,000	10	No	200,000	No
703	1HA6GUBB9LN003641	2	18,479	160,000	10	No	200,000	No
704	1HA6GUBB2LN003674	2	14,828	160,000	10	No	200,000	No
705	1HA6GUBB8LN003842	2	17,390	160,000	10	No	200,000	No

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Table 3.3 (Continued)

Asset Number	ID/Serial No.	Age (Years)	Vehicle Mileage ^a	Replacement Cost (\$) ^b	Applicable Age-Based Useful Life Benchmark (Years)	Past Age Useful Life Benchmark	Applicable Mileage-Based Useful Life Benchmark (Miles) ^c	Past Mileage Useful Life Benchmark
City of West Bend Taxi Service								
Cutaway Buses								
98	1FDEE3FS5HDC26603	5	112,647	85,400	10	No	200,000	No
49	1FDEE3FS1JDC06600	4	83,511	85,400	10	No	200,000	No
51	1FDEE3FSXKDC172287	3	67,570	85,400	10	No	200,000	No
52	1FDEE3FSXKDC172288	3	62,433	85,400	10	No	200,000	No
53	1FDEE3FSXKDC172289	3	66,827	85,400	10	No	200,000	No
56	1FDEE3FS7KDC52756	3	43,376	85,400	10	No	200,000	No
57	1FDEE3FN8MDC25868	2	18,853	85,400	10	No	200,000	No
Mini-Vans								
46	2C4RDGBG6HR855530	5	110,159	70,400	8	No	175,000	No
48	2C4RDGBG8HR855867	5	105,014	70,400	8	No	175,000	No
50	2C4RDGBG7JR251118	4	63,385	70,400	8	No	175,000	No
54	2C4RDGBG8KR547430	3	53,949	70,400	8	No	175,000	No
55	2C4RDGBB4KR749648	3	46,161	70,400	8	No	175,000	No
58	2C4RDGBG4LR231668	2	22,435	70,400	8	No	175,000	No
97	2C4RGG6HR632243	5	144,127	70,400	8	No	175,000	No

^a Odometer reading as of December 2021

^b The replacement costs for buses are based on average actual bus purchases in the 2020 Public Transportation Vehicle Database published by the American Public Transportation Association. Costs will vary depending on equipment included in the bus build. The remaining vehicle costs were based on operator information and the Wisconsin Department of Transportation's Section 5310 Application Guidelines for Vehicle Capital, Appendix C, Anticipated Vehicle Descriptions and Costs for 2022.

^c Maximum mileage useful life benchmarks developed in coordination with the participating transit operators and based on local operating environments, historical maintenance records, and manufacturer guidelines.

Source: RYDE (City of Racine Transit System), Ozaukee County Transit System, Washington County Transit System, Waukesha Metro Transit, Waukesha County Transit System, Western Kenosha County Transit, Hartford City Taxi, City of West Bend Taxi Service, and SEWRPC

Table 3.4
Equipment Condition Assessment

Asset Class ^a	Asset Name	Count	ID/Serial No.	Age (Years)	Vehicle Mileage	Replacement Cost/Value (\$)	Useful Life Benchmark (Years)	Past Useful Life Benchmark
RYDE (City of Racine Transit System)								
(M)	A/C Recovery Unit	1	N/A	5	N/A	7,000	N/A	N/A
(M)	Bus wash brush	1	N/A	9	N/A	150,000	N/A	N/A
(M)	CAD/AVL System	1	N/A	18	N/A	350,000	N/A	N/A
(M)	Fork Lift	1	N/A	27	N/A	27,000	N/A	N/A
(M)	Hydraulic Bushing Press	1	N/A	32	N/A	3,000	N/A	N/A
(M)	In-ground Hoist	1	N/A	2	N/A	150,000	N/A	N/A
(M)	Pressure Washers	2	N/A	6	N/A	2,500	N/A	N/A
(M)	Ride-on Floor Sweeper	1	N/A	24	N/A	28,000	N/A	N/A
(M)	SEFAC Wheel Lift	2	N/A	13	N/A	27,000	N/A	N/A
(M)	SEFAC Wheel Lift	1	N/A	5	N/A	27,000	N/A	N/A
(NR)	#101, Dodge Caravan	1	2G4RDGBG3HR647492	5	118,364	25,000	8	No
(NR)	#201, E150 Passenger Support Van	1	1FMRE11L03HB97731	4	18,292	25,000	8	No
(NR)	#600, F350 Service Vehicle	1	1FDRF3HT0BEB42064	12	17,317	60,000	8	Yes
(SS)	Bus Surveillance System	25	N/A	13	N/A	37,500	N/A	N/A
(SS)	Facility Surveillance System	1	N/A	12	N/A	25,000	N/A	N/A
(T)	#300, Maintenance Support Truck	1	1GBJC34FXVF044141	25	85,361	26,000	8	Yes
(T)	#500, Snow Plow Truck	1	1FDWF3HR5AEA21939	12	7,375	80,000	8	Yes
City of Waukesha Metro Transit								
(WS)	Roll Over Gantry Bus Washer	1	N/A	12	N/A	84,705	N/A	N/A
(WS)	Pressure Washer Trailer	1	1H9CSC277B1120418	11	N/A	12,526	8	N/A
(NR)	Ford F-350	1	1FT8X4BT7KEE89090	3	3,914	57,000	8	No
(NR)	Dodge Grand Caravan	1	2C4RDGBG0ER245926	8	57,463	40,000	8	Yes
(NR)	Chevrolet Traverse	1	1GNKVEED5BJ213629	11	61,798	32,000	8	Yes
(NR)	Service truck	1	1GCHK24658E115196	14	78,374	55,000	8	Yes

^a Asset Class is defined as:

(M) – Maintenance (NR) – Non Revenue/Service Automobile
 (SS) – Surveillance Systems (T) – Trucks and other Rubber Tire Vehicles
 (WS) – Wash System

Source: RYDE (City of Racine Transit System), Ozaukee County Transit System, Washington County Transit System, Waukesha Metro Transit, Waukesha County Transit System, Western Kenosha County Transit, Hartford City Taxi, City of West Bend Taxi Service, and SEWRPC

Table 3.5
Facilities Condition Assessment

Asset Class ^a	Asset Name	Age (Years)	TERM Scale Condition	Replacement Cost (\$)
Ozaukee County Transit System				
(A)	Transit facility	10	5	1,700,000
RYDE (City of Racine Transit System)				
(M)	Maintenance shop	46	1	1,065,000
(M)	Bus storage garage	45	1	3,570,000
(M)	Fuel and wash bay	45	1	397,000
(A)	Administration office building	12	5	1,057,000
(TC)	Transit Center	18	3	4,786,000
City of Waukesha Metro Transit				
(A),(M)	Administration and maintenance building	36	4	N/A ^b
(TC)	Downtown Transit Center terminal	19	5	8,032,800

^a Asset Class is defined as:

(A) – Administration

(M) – Maintenance

(TC) – Transit Center

^b The total replacement cost for the administration and maintenance building is currently under review by Waukesha Metro Transit to consider the potential costs of a new facility, including future upgrades that would be incorporated to modernize the building.

Source: RYDE (City of Racine Transit System), Ozaukee County Transit System, Washington County Transit System, Waukesha Metro Transit, Waukesha County Transit System, Western Kenosha County Transit, Hartford City Taxi, City of West Bend Taxi Service, and SEWRPC

4.1 INTRODUCTION

This Group TAM Plan utilizes two processes to determine capital asset investment prioritization and capital needs over time, which includes:

1. Ranking needs based on the maximum useful life benchmarks for age and mileage, and
2. Conducting maintenance and vehicle replacements according to established plans and policies.

First, the Group TAM Plan utilizes a prioritization process to determine the capital investments needed to maintain a state of good repair. The prioritization process ranks needs based on, (1) if the asset has exceeded its maximum useful life benchmark for mileage, and (2) if the asset has exceeded its maximum useful life benchmark for age, as shown in Table 4.1. The use of both mileage and age was determined to be the best indicator of asset condition by the transit operators included in the Group TAM Plan based on their experience operating transit services, their historical maintenance records, and manufacturer guidelines.

Second, each transit operator continues to estimate capital needs over time by utilizing maintenance tracking policies, procedures, condition assessments, and budget processes. In addition, the timing and amount of funding available for replacements are determined through their local capital improvement planning and budget processes. In recent years, some transit operators were able to utilize COVID relief funding to replace older vehicles. However, the recent vehicle market has presented challenges related to vehicle supply and cost, reducing the ability of transit operators to maintain an updated fleet. Although some transit operators are able to pursue facility upgrades with the use of grant funding such as the Low- or No-Emission Grant program, most operators would plan to replace or modernize transit facilities if additional funds were reasonably available for upgrades. The following discussion summarizes each transit operator's maintenance procedures, asset tracking, and goals for replacing transit vehicle assets that help determine what capital investments are needed when to ensure a state of good repair.

Hartford City Taxi

The City of Hartford provides maintenance for the shared-ride taxi vehicles within their fleet. This includes scheduled preventive maintenance and unscheduled maintenance. If the service cannot be conducted by the City, the service is provided through an outside mechanic. The City maintains a maintenance log and has a preventive maintenance checklist. The City of Hartford's useful life service goal is to replace one vehicle every two years, once they reach 100,000 miles. The City of Hartford's Capital Improvement Program specifies the anticipated vehicle by replacements year, which will include replacements in 2023, 2025, and 2027. By continuing their vehicle replacement cycle, the City of Hartford is able to continue full operation while a vehicle being serviced. The City of Hartford has an asset transition protocol that documents their procedures when a vehicle reaches the end of its useful life.

Ozaukee County Transit Services

Ozaukee County has a maintenance plan, which includes standard operating procedures for maintenance activities conducted by County staff. The County tracks the condition of their transit assets and documents any unplanned maintenance within a service log. The County recognizes the importance of properly maintaining their equipment to achieve the goal of operating their shared-ride taxi vehicles until they reach approximately 250,000 to 300,000 miles. To maintain a state of good repair, their vehicle replacement goal is three to six shared-ride taxi vehicles each year, as identified in Ozaukee County's 2022 Adopted Budget. Vehicle replacements are prioritized based on mileage, maintenance history, and additional factors as identified by Ozaukee County's maintenance staff. Asset dispositions are conducted according to FTA requirements within Circular 5010.1E, Awards Management Requirements.

Table 4.1
Maximum Useful Life Benchmarks

Vehicle Type	Length	Maximum Mileage ^a	Maximum Age ^b (Years)
Buses			
Large, heavy-duty transit buses including over-the-road buses (approx. 35' or larger including articulated buses)	35 feet or larger and articulated buses	600,000	14
Small size, heavy-duty transit buses	30 feet	400,000	14
Medium-size, medium duty transit buses	25 feet to 35 feet	300,000	10
Medium-size, light-duty transit buses	25 feet to 35 feet	200,000	14
Light Duty Vehicles			
Cutaways	16 feet to 28 feet	200,000	10
Minivans	16 feet to 28 feet	175,000	8
Automobiles	15 feet (approximately)	200,000	8

^a Maximum mileage useful life benchmarks developed in coordination with the participating transit operators and based on local operating environments, historical maintenance records, and manufacturer guidelines.

^b Maximum mileage useful life benchmarks set by FTA in the Default Useful Life Benchmark Cheat Sheet and the National Transit Database Policy Manual, Revenue Vehicle Default Useful Life Benchmarks.

Source: Federal Transit Administration and SEWRPC

RYDE (City of Racine Transit System)

RYDE's *Maintenance Procedure Manual*, last updated in July 2020, includes policies and procedures to assure that all assets owned by the City of Racine are maintained in the best possible condition. The manual includes policies and procedures to help RYDE meet industry performance standards such as a minimum of 4,000 miles between road calls and a minimum of 19 maintenance labor hours per thousand miles and a maximum of 27 maintenance labor hours per thousand hours. The RYDE/Belle Urban Transit System developed a package of inspections (labeled A, B, C, and D) that occur at every 6,000, 18,000, and 24,000 miles (respectively) for their Gillig buses. They also service all wheelchair lifts and ramps every 6,000 miles. RYDE determines when service is due by utilizing a preventative maintenance schedule spreadsheet. They also track services with a Preventative Maintenance Inspection Report, which is completed monthly. The inspection report also tracks the compliance record to ensure all fixed-route buses are serviced every 6,000 miles, paratransit vehicles are serviced every 5,000 miles, and support vehicles are serviced every 5,000 miles. Similar to Waukesha Metro's manual, their manual also describes the maintenance procedures for buildings, purchasing and inventorying of parts, and the responsibilities for staff involved in the maintenance and operation of the transit system. The City of Racine maintains an asset transition manual documenting procedures for asset disposal. An updated version of the manual will reflect the City's newly purchased Proterra electric bus fleet, charger, and charger dispenser station. In addition, the manual will add a preventable maintenance inspection from and intervals.

Washington County Transit

Washington County Transit contracts with Specialized Transport Services, Inc. for maintenance support of revenue vehicles. As part of the contracted maintenance services, Washington County has a documented policy for monitoring maintenance of transit assets. Their policy states that "Washington County Transit will monitor the continuing control of contractor-operator FTA-funded equipment." This includes the following:

- Conducting an inspection of FTA-funded equipment (vehicles) at a minimum of once a year.
- Tracking condition of the transit equipment on a record sheet as part of a physical inventory of FTA-funded assets.
- Informing FTA Region 5 of any FTA-funded assets that are to be retired (i.e., taken out of service at the end of the asset's useful life). For assets that are to be removed before the end of their useful life, the Transit Manager will immediately notify the FTA Region 5 office in writing and request instructions on proper disposition of these assets.

In addition, Specialized Transportation Services has a written *Taxi Maintenance Plan* for Washington County that identifies activities and roles related to transit asset management. This includes preventative maintenance schedules, daily maintenance, inspection reports, and tracking sheets.

Washington County has a goal of replacing cutaway buses (25 feet to 35 feet) when they reach five years of service or 150,000 miles and other vehicles (e.g., small buses, regular and specialized vans) when they reach four years or 100,000 miles. However, Washington County's plans to replace vehicles beyond their useful life has been reduced due to increased vehicle costs and limited availability.

City of Waukesha Metro Transit and Waukesha County Transit

Waukesha Metro Transit's *Maintenance Procedure Manual* documents the purpose, policies, standards, and staff utilized to assure that all assets owned by the Transit System are maintained to the best possible condition. The "best possible condition" is defined by Waukesha Metro to mean that revenue vehicles are available to meet scheduled peak service requirements, and that the exterior of the vehicles are free of graffiti and accident damage. The goal of Waukesha Metro is to protect their equipment and facilities by setting goals and standards that either meet or exceed the accepted industry standards. Waukesha Metro also has a disposition policy that details their policies and procedures for disposing vehicles and supplies, which is included in their Procurement Policy.

As stated in the manual, Waukesha Metro recognizes the importance of properly maintaining their equipment with timely preventative maintenance and strives for 100 percent on-time performance for preventative maintenance activities. In order to track maintenance processes, Waukesha Metro utilizes a software program that alerts them 750 miles prior to the mileage when preventative maintenance is due and produces a vehicle aging report by vehicle, which ranks vehicles by years and life miles. As part of Waukesha Metro's routine maintenance program, a mechanic inspects every bus before it begins service by checking belts, hoses, wiring, tires, and for fluid leaks. These activities help Waukesha Metro meet their goal of increasing the mileage between road calls and reduces the chance for breakdowns. Their manual also describes the maintenance procedures for buildings, purchasing and inventorying of parts, and the responsibilities for staff involved in the maintenance and operation of the transit system.

Waukesha Metro has been authorized through the City of Waukesha's Capital Improvement Program to perform mid-life rehabs on fixed route buses, replace a 35-foot bus, replace a staff vehicle, add a second vehicle for transit maintenance, replace a driver relief van, and replace a paratransit/supervisor vehicle for years 2022 through 2026.

The Waukesha County Transit System provides transit services through a contract with a private transit company who owns, operates and maintains the transit capital assets. As such, there are no transit maintenance procedures attributed to the Waukesha County Transit System.

City of West Bend Taxi Service

The City of West Bend has a Maintenance Plan that identifies goals, maintenance procedures, and maintenance schedules and forms. The fleet manager for the City of West Bend is GoRiteway and they have the overall responsibility for maintenance of the transit assets. The maintenance program adheres to a manufacturer minimum requirement and complies with applicable Federal and State maintenance requirements. The fleet manager performs daily pre- and post-trip inspections on every transit vehicle in service. Drivers also perform inspections using vehicle-specific checklists that reflect industry best practices. Maintenance and repair activities are tracked using CFA fleet management software. The City of West Bend fleet manager uses this software to establish a preventative maintenance schedule, monitor fleet expenses, and track vehicle performance. Maintenance staff also uses this software to document performed maintenance. Assets are disposed of utilizing the City's Asset Disposal Form, which requires approval from the City Administrator prior to disposal. The City of West Bend's 2022 adopted budget includes goals to improve maintenance intervals and purchase three new vehicles.

Western Kenosha County Transit

Western Kenosha County Transit is in the process of purchasing up to three vehicles and anticipates delivery in 2023. Although no vehicles are included in the Group TAM Plan which are considered under the “direct capital responsibility” of Kenosha County, they are included in this plan for now. Once the vehicles are in revenue service, additional discussions will occur between the Wisconsin Department of Transportation and SEWRPC to determine how to incorporate the assets. Once the vehicles are in revenue service, it is anticipated that the vehicles will be leased to Kenosha Achievement Center, Inc. who will maintain the vehicles as documented in their *Vehicle and ADA Accessibility Maintenance Program*, which also includes goals for overall equipment maintenance, responsibilities of key maintenance staff, and the preventive maintenance schedules. Vehicles are maintained on a schedule to ensure compliance with federal and state recommendations and requirements, including the disposal of vehicles.

As described in Chapter 4, Decision Support Tool, transit needs are prioritized based on the maximum TAM useful life benchmarks and each transit operators' condition assessments based on their documented maintenance procedures. This chapter provides the output from these two considerations. First, Table 5.1 lists the transit vehicle assets (revenue service vehicles and non-revenue service vehicles) that exceed the maximum TAM age-based useful life benchmark or the maximum TAM mileage-based useful life benchmark by asset class, as applicable. Based on this evaluation, six buses and three cutaway buses exceed the maximum TAM useful life benchmark based on their age. In addition, eight cutaway buses exceed the maximum TAM useful life benchmark based on their mileage. There are six non-revenue service vehicles that exceed the maximum TAM age-based useful life benchmark, including four service vehicles and two trucks. The mileage-based useful life benchmark was not used in the evaluation of non-revenue service vehicles as they are not used to transport revenue passengers. The total replacement cost of all transit vehicle assets that exceed the maximum TAM age-based useful life benchmark or the mileage-based useful life benchmark is approximately \$5.0 million in 2022. Although not shown in Table 5.1, transit operators would plan to replace or modernize transit facilities if funds were reasonably available. However, the funding required for all facility upgrades is not available at this time.

Second, each transit operator prioritizes transit asset needs through on-going preventative maintenance procedures, including regular inspections and tracking of assets. In addition to their maintenance procedures, transit operators request funding as needed in local Capital Improvement Programs and include projects within the four-year Regional Transportation Improvement Program (TIP) in order to be eligible for Federal capital or operating funding. Table 5.2 identifies the transit capital projects listed in the *Transportation Improvement Program for Southeastern Wisconsin: 2021-2024*, which is the most recently adopted TIP and subsequent amendments. This listing of projects indicates the transit capital priorities for each transit operator based on the estimated available funding. The TIP, which includes transit capital priorities, will be updated during the planning horizon of the Group TAM Plan in 2022. The current TIP documents the contribution of projects toward achieving the National Performance Measure targets, including the TAM targets. The capital-related transit preservation projects programmed in the TIP were provided by transit operators based on their processes for monitoring the condition of their vehicles and facilities and prioritizing their maintenance and replacement (given the level of available funding). These projects indicate the transit capital priorities for each transit operator based on the estimated available funding. The \$212 million of funds programmed for implementing capital-related transit preservation projects (such as vehicle capitalized maintenance and replacement projects and facility repair and upgrade projects) within the period of the 2021-2024 TIP are expected to contribute to the continued achievement of the TAM targets. The current sources of funding for transit capital projects within Southeastern Wisconsin include FTA Section 5339 Bus and Bus Facilities Program Funding, FTA Section 5307/5340 Urbanized Area Formula Funding, FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program Funding, FTA Section 5311 Formula Grants for Rural Areas Program, FTA Section 5337 State of Good Repair Grants, Congestion Mitigation and Air Quality (CMAQ) Improvement Funding, Federal Highway Administration (FHWA) Surface Transportation Program-Milwaukee Urbanized Area (STP-M) funds, and local funding sources.

Transit operators in Southeastern Wisconsin are, and have been, making maximum use of all available FTA funds in order to maintain a state of good repair for revenue vehicles, equipment, and facilities. Since completion of the Group TAM Plan in 2018, revenue vehicle conditions have improved. Specifically, the number of buses exceeding the maximum age-based ULB decreased from 13 to six, and the number of cutaway buses exceeding the maximum age-based ULB remains at three. The recent vehicle market has presented challenges related to vehicle supply and cost, reducing the ability of transit operators to maintain an updated fleet. The percentage of equipment and facilities exceeding the age-based ULB or rated below a three on FTA's Transit Economic Requirements Model (TERM) scale, remained the same between 2018 and 2021. Transit operators would plan to replace or modernized transit facilities if funds were reasonably available. However, the funding required for all needed facility upgrades is not available at this time.

Table 5.1
Group TAM Plan Prioritized Transit Vehicle Assets

Asset Class ^a	Asset Number	Age (Years)	Vehicle Mileage ^b	Replacement Cost (\$) ^c	Applicable Age-Based Useful Life Benchmark (Years) ^d	Past Age Useful Life Benchmark	Applicable Mileage-Based Useful Life Benchmark (Miles) ^e	Past Mileage Useful Life Benchmark
Past Useful Benchmark – Years								
RYDE (City of Racine Transit System)								
(BU)	67	18	523,144	560,000	14	Yes	600,000	No
(BU)	68	18	494,639	560,000	14	Yes	600,000	No
(BU)	69	18	481,149	560,000	14	Yes	600,000	No
(BU)	70	18	538,018	560,000	14	Yes	600,000	No
(BU)	72	18	499,581	560,000	14	Yes	600,000	No
(BU)	75	18	522,721	560,000	14	Yes	600,000	No
(CU)	209	12	199,925	135,400	10	Yes	200,000	No
(CU)	211	12	202,827	135,400	10	Yes	200,000	Yes
(CU)	212	12	202,772	135,400	10	Yes	200,000	Yes
(NR)	600	12	17,317	60,000	8	Yes	N/A	N/A
(T)	500	12	7,375	26,000	8	Yes	N/A	N/A
(T)	300	25	85,361	80,000	8	Yes	N/A	N/A
City of Waukesha Metro Transit System								
(NR)	4	8	57,463	40,000	8	Yes	N/A	N/A
(NR)	5	11	61,798	32,000	8	Yes	N/A	N/A
(NR)	2	14	78,374	55,000	8	Yes	N/A	N/A
Past Useful Benchmark – Miles								
RYDE (City of Racine Transit System)								
(CU)	211	12	202,827	135,400	10	Yes	200,000	Yes
(CU)	212	12	202,772	135,400	10	Yes	200,000	Yes
Washington County Transit System								
(CU)	657	5	222,600	85,400	10	No	200,000	Yes
(CU)	658	5	232,081	85,400	10	No	200,000	Yes
(CU)	659	5	243,083	85,400	10	No	200,000	Yes
(CU)	672	4	208,830	85,400	10	No	200,000	Yes

Asset Class is defined as:

(BU) – Bus (CU) – Cutaway Bus
(MV) – Mini-Van (NR) – Non Revenue/Service Automobile
(T) – Service Truck

^b Odometer reading as of December 2021.

^c The replacement costs for buses are based on average actual bus purchases in the 2020 Public Transportation Vehicle Database published by the American Public Transportation Association. Costs will vary depending on equipment included in the bus build. The remaining vehicle costs were based on operator information and the Wisconsin Department of Transportation's Section 5310 Application Guidelines for Vehicle Capital, Appendix C, Anticipated Vehicle Descriptions and Costs for 2022.

^d Maximum useful life benchmarks set by FTA in the Default Useful Life Benchmark Cheat Sheet and the National Transit Database Policy Manual, Revenue Vehicle Default Useful Life Benchmarks.

^e Maximum mileage useful life benchmarks developed in coordination with the participating transit operators and based on local operating environments, historical maintenance records, and manufacturer guidelines.

Source: RYDE (City of Racine Transit System), Ozaukee County Transit System, Washington County Transit System, Waukesha Metro Transit, Waukesha County Transit System, Western Kenosha County Transit, Hartford City Taxi, City of West Bend Taxi Service, and SEWRPC

Table 5.2
Transit Capital Projects in the Transportation Improvement Program: 2021-2024

TIP Project Number	Project Summary	Funding Source ^a	Total Cost 2021 (\$)	Total Cost 2022 (\$)	Total Cost 2023 (\$)	Total Cost 2024 (\$)
Revenue Vehicles						
Hartford City Taxi Service						
224	Purchase of two replacement vehicles	FTA 5339	--	40,000	--	40,000
Ozaukee County Transit System						
200 ^b	Purchase of 5 replacements vehicles for each year for shared-ride taxi	FTS 5307, 5339	175,000	175,000	175,000	175,000
RYDE (City of Racine Transit System)						
357	Replace aging transit equipment as it wears out	FTA 5339	--	50,000	50,000	50,000
358	Purchase of 4 35-foot replacement buses	FTA 5339	1,944,700	--	--	--
359	Purchase of 3 paratransit vehicles	FTA 5339	--	180,000	--	--
360	Purchase of 9 buses	FTA 5339	3,137,000	--	--	--
364	Purchase 2 35-foot replacement buses	FTA 5339	--	--	997,300	--
Washington County Transit System						
217	Purchase 6 replacement vehicles each year (any combination of minibus cutaway or minivan side entry) for shared-ride taxi	FTA 5339 and FTA 5307	185,000	282,000	284,800	287,700
219	Purchase of 1 minibus with lift and 2 minivans with rams for shared-ride taxi	STP-M	129,000	--	--	--
City of Waukesha Metro Transit						
295	Purchase of 1 35-foot replacement bus	STP-M	460,000	--	--	--
299	Replacement of Administrative Staff Vehicle	FTA 5339	--	40,000	--	--
506	Purchase of 3 35-foot buses	FTA 5337 and FTA 5339	--	1,527,500	--	--
City of West Bend Taxi Service						
229	Purchase of 9 replacement vehicles (4 in 2022, 2 in 2023, and 3 in 2024)	FTA 5307	--	175,000	105,000	210,000
Western Kenosha County Transit						
318	Purchase replacement vehicles: 2 in 2021; 2 in 2022; 1 in 2023; and 1 in 2024	FTA 5310	120,000	123,600	63,700	66,100
321	GPS Live Feed link to provide real time data to users of Western Kenosha County Transit smartphone app	FTA 5311	--	18,000	--	--
322	Purchase and installation of 2 bus shelters	FTA 5311	--	--	15,000	--
Preventative Maintenance and Equipment						
Ozaukee County Transit System						
199	Capital cost of maintenance for 3rd party contract for buses and preventative maintenance for shared-ride taxi	FTA 5307	1,664,700	1,681,200	1,681,100	1,715,100
439	New routing and dispatch software for the shared-ride taxi	FTA 5307	160,000	--	--	--
RYDE (City of Racine Transit System)						
361	Replacement of security cameras at the Transit Center, bus garage, office, and on all buses and paratransit minibuses	FTA 5339	--	175,000	--	--
362	Replacement of destination signs on buses	FTA 5339	--	100,000	--	--
363	Reconstruction of dispatch offices, drivers room, and storage area to improve functionality and address ADA and structural issues	FTA 5339	--	1,875,000	--	--
365	Replacement of the shop area for the City of Racine Transit System	FTA 5339	--	1,875,000	--	--
366	Replacement of the transit facility apron and parking lot	FTA 5339	--	--	400,000	--
Washington County Transit System						
442	New routing and dispatch software for the shared-ride taxi	FTA 5307	160,000	--	--	--

Table continued on next page.

Table 5.2 (Continued)

TIP Project Number	Project Summary	Funding Source^a	Total Cost 2021 (\$)	Total Cost 2022 (\$)	Total Cost 2023 (\$)	Total Cost 2024 (\$)
Preventative Maintenance and Equipment (continued)						
City of Waukesha Metro Transit						
262	Replacement of the AVL software system	FTA 5339	225,000	--	--	--
263	Replacement fare collection equipment	FTA 5339	20,000	--	--	--
264	Rehabilitation of the interior of facilities	FTA 5339	--	35,000	--	--
265	Replacement of two sets of ADA doors at Transit Center	FTA 5339	--	--	50,000	--
266	Replacement of boiler at Admin/Maintenance facility	FTA 5339	--	--	--	10,000
267	Replacement of bus washer	FTA 5339	--	--	--	240,000
292	Capital maintenance	FTA 5307, 5337	--	--	435,200	262,300
293	Replacement of 3 bus shelters	FTA 5339	--	--	45,000	--
296	Tire lease	FTA 5307	36,000	36,000	36,000	36,000
297	Preventative maintenance	FTA 5307	589,000	589,000	589,000	589,000
298	Rehabilitation of fixed-route buses, such as engine and transmission rebuilds	FTA 5337	200,000	200,000	250,000	100,000
299	Replacement of administrative staff vehicle	FTA 5339	--	--	40,000	--
300	Replacement of mobile lifts	FTA 5339	--	50,000	--	--
525	Purchase of automatic passenger counters	FTA 5339	--	--	125,000	--
526	Passenger sign replacement at Waukesha Transit Center	FTA 5339	--	--	--	275,000
527	Purchase of scheduling software	FTA 5339	--	--	50,000	--
528	Replacement of a driver relief vehicle	FTA 5339	--	--	--	40,000
Waukesha County Transit						
524	Lighting upgrades at Park-Ride Lots	FTA 5330	--	--	125,000	--

Note: Source of funds is defined as:

FTA 5339: FTA Section 5339 Funds—Bus and Bus Facilities Formula Program

FTA 5307: FTA Section 5307 Funds—Urban Formula Program

FTA 5310: FTA Section 5310 Funds—Elderly and Person with Disabilities Program

FTA 5311: FTA Section 5311—Formula Grants for Rural Areas Program

FTA 5337: FTA Section 5337—State of Good Repair Grants

CMAQ: Congestion Mitigation and Air Quality Improvement Funds

STP-M: FHWA Surface Transportation Program-Milwaukee Urbanized Area funding

^a Total project costs include local funding.

^b Project is to be funded with \$60,000 in Federal Transit Administration - Bus and Bus Facilities Formula Program (FTA Section 5339), \$80,000 in Federal Transit Administration - Urban Area Formula Program (FTA Section 5307), and with local funds per year.

Source: A Transportation Improvement Program for Southeastern Wisconsin: 2021-2024, SEWRPC, December 2020. Includes amendments as of March 15, 2022

Despite the challenges of operating transit systems during the COVID-19 pandemic, transit operators continue to maximize the use of all available transit capital funds to maintain a state of good repair. Until recently, Federal funding has been below the historical average and State transit funding has not kept pace with inflation. In addition, the State limits the ability of local governments to replace these limited Federal and State funds with local property taxes through tax levy caps and prohibits the implementation of new revenue sources. Combined, these factors create additional challenges for the Region's transit operators as they attempt to achieve and maintain a state of good repair. More permanent Federal support provided in the Infrastructure Investment and Jobs Act will allow transit operators to continue to improve transit services and meet or exceed TAM performance targets.

5.1 CONCLUSION

This Group TAM Plan update, sponsored by the Southeastern Wisconsin Regional Planning Commission and prepared in close coordination with eight Tier II transit operators in Southeastern Wisconsin, documents the asset inventories, condition assessments, maintenance procedures, and prioritized assets as required in the TAM regulations set forth in 49 CFR part 625. As provided in the Group TAM Plan update, there are 15 revenue and non-revenue service vehicles in need of replacement, at a cost of approximately \$5.0 million in 2022. The Tier II transit operators represented in this Group TAM Plan continue making progress toward achieving the targets established for transit assets in Southeastern Wisconsin by making maximum use of all available FTA funds to maintain a state of good repair for revenue vehicles, equipment, and facilities. As a result, the TAM targets shown in Table 1.2 will remain unchanged at this time. Transit operators in Southeastern Wisconsin will continue to utilize every opportunity to maintain a state of good repair through on-going preventative maintenance procedures and tracking regular inspections of transit assets. In addition, the transit operators will continue to utilize useful life benchmarks to prioritize critical needs, apply for transit capital funding as appropriate, and include their transit funding priorities within the local Capital Improvement Programs and Regional TIP.

