

NOTICE OF PROPOSED GUIDANCE DOCUMENT

DTIM BTLRRH 82

Pursuant to Wis. Stat. s. 227.112, the Wisconsin Department of Transportation is hereby seeking comment on DTIM BTLRRH 82, 49 CFR Parts 625 and 630, a proposed guidance document.

PUBLIC COMMENTS AND DEADLINE FOR SUBMISSION

Comments may be submitted to the Wisconsin Department of Transportation for 21 days by:

1. Department's website: <https://appengine.egov.com/apps/wi/dot/guidance-docs?guidDocId=DTIMBTLRRH82>

2. Mailing written comments to:

Division of Transportation Investment Management
Wisconsin Department of Transportation
4822 Madison Yards Way
PO Box 7913
Madison, WI 53707- 7913

WEBSITE LOCATION OF FINAL GUIDANCE DOCUMENT

The final version of this guidance document will be posted at wisconsindot.gov to allow for ongoing comment.

AGENCY CONTACT

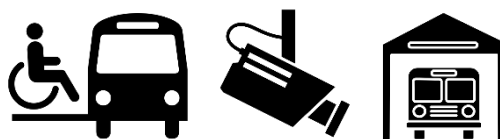
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Wisconsin Department of Transportation

Transit Asset Management Plan

October 2018 to 2022



INTRODUCTION

In accordance with 49 CFR Parts 625 and 630 for Transit Asset Management (TAM), the Wisconsin Department of Transportation (WisDOT), is the TAM sponsor for all Section 5311 Formula Grants for Rural Areas, Section 5310 Enhanced Mobility for Seniors and Individuals with Disabilities, and some Section 5307 Formula Grants for Urbanized Areas subrecipients (**Appendix 1-Subrecipient Opt-in List**).

This document represents WisDOT's Group TAM Plan for the state. The document includes WisDOT's methodology for setting the performance targets of all capital assets, and the strategies that will be used to track, maintain, and replace assets in the TAM inventory. This group plan also incorporates an asset inventory (**Appendix 2 – Asset Inventory**), asset condition assessments, funding prioritization, TAM financial requirements, and continuous improvement strategies for assets.

INITIAL INVENTORY ASSESSMENT

Establishing Preliminary TAM Targets

In the fall of 2016, WisDOT reviewed its inventory of Federal Transit Administration (FTA) funded vehicles, equipment, and facilities in its online grants management system, BlackCat. Using the criteria of "age," WisDOT established the initial TAM targets and reported them through the National Transit Database (NTD) in January 2017. These TAM targets are meant to be a basic indicator used in the overall TAM Plan to establish how many vehicles in each vehicle category are "allowed" to be over their useful life age without replacement.

For example, WisDOT has established a useful life for a minivan of four years before a subrecipient may ask for this vehicle to be replaced, but a minivan can run safely for seven years before it is needing replacement. The TAM target instructs group plan sponsors to set a percentage of vehicles in each vehicle category for which aging over the useful life standard is acceptable. So, if there were 100 minivans, and the group plan's TAM target for minivans was 50%, 50 of those vehicles would be over the age of four years.

While not all the vehicles, equipment, and facilities owned by subrecipients were included in this initial count, it provided WisDOT Transit staff a good sample of data to establish preliminary targets.

BlackCat Grants Management System

BlackCat, a web-based grants management system and database, is a vital tool to allow WisDOT to keep an ongoing inventory of its federally funded assets. The WisDOT Asset Manager enters all newly procured federally funded assets into the system and then subrecipients update age, mileage, condition, and other information about their assets periodically. This asset update coincides with the annual application for program funding. Once an asset is ready to be disposed, subrecipients request disposition of the asset through BlackCat and the documentation of the appropriate disposition process (i.e. open and fair) is kept with each record.

Part of the TAM plan and TAM target requirements is for group sponsors to collect and report on both federally funded and non-federally funded assets owned by subrecipients. WisDOT maintains its federally funded asset inventory located in BlackCat separate from the non-federally funded vehicles, equipment, and facilities inventory in order to facilitate responses to federal or state audits. Instead, to obtain a complete and robust asset inventory, WisDOT staff requested Excel inventory workbooks of each subrecipient with the most current asset list. This list was compared to the federally funded asset list in BlackCat and any required updates were made.

Federally funded assets will be updated on an ongoing basis, while non-federally funded assets will be requested every four years to coincide with each update to the TAM plan.

ASSET MANAGEMENT POLICY AND STRATEGY (decision support tools)

Outreach

WisDOT has kept local transit systems, and planning organizations in the state apprised of our work on the TAM plan and creating initial TAM targets. Original TAM targets set in 2017 were shared with the subrecipients and transit agencies, and their feedback was considered in setting the TAM targets in 2018. WisDOT also gathered additional metrics such as mileage, condition and maintenance records from subrecipients that will be used in the TAM plan to evaluate assets.

In early 2018, WisDOT staff presented the TAM targets and a draft TAM Plan at a WisDOT Planning Section meeting with representatives from the state Metropolitan Planning Organizations (MPOs) and Regional Planning Commissions (RPCs). WisDOT staff fielded questions from attendees and provided them with a PowerPoint presentation about the federal TAM initiative as well as a copy of the draft plan.

Opt-in and Opt-Out Letters

As WisDOT was collecting asset inventories from subrecipients, it also needed to document which organizations and agencies were covered through the group TAM Plan. Federal TAM rules require the state transportation department to be the group sponsor for all 5310 and 5311 subrecipients unless those subrecipients wanted to create or join another TAM plan.

In the spring of 2018, WisDOT reached out to all its 5310, 5311, and 5307 grantees and asked each organization/agency to sign and return an opt-in or opt-out letter. These letters were collected and organized to determine who would all be included in the group TAM plan. WisDOT will ask for opt-in and opt-out letter from all new transit entities and will ask current participants to confirm their continued participation in the group plan every four years.

Preparing Inventories for TAM Targets

Before comprehensive inventory information was collected from each subrecipient, WisDOT had to figure out how to collect asset data based on the new TAM reporting fields.

Typically, when assets are entered into the BlackCat system, they are categorized using the FTA activity line item (ALI) code and include a basic description of that asset. However, after examining the asset categories for TAM it became apparent that some items such as vehicle types would have to be re-categorized and combined into new groups to comply with the new reporting standards.

These categories were included in the inventory workbooks sent to the subrecipients to ensure that all assets would be reported and evaluated correctly. This also saved the staff time in “translating” the existing data into the TAM Target format.

Submission of TAM Targets into National Transit Database

Vehicles

The new vehicle categories in the TAM A-90 are listed below:

- AO – Automobile (*WisDOT has used this category for non-revenue vehicles such as trucks, suvs, maintenance vehicles, and sedans*)
- AB – Articulated Bus
- BR – Over-the-road Bus
- BU- Bus (*Heavy Duty Buses, various lengths and school buses*)
- CU- Cutaway Bus (*WisDOT considers these vehicles to be cutaway vehicles, primarily human services vehicles, of medium and large size*)
- DB – Double Decked Bus
- FB - Ferryboat
- MB – Minibus
- MV – Minivan (*may include some full-sized vans*)
- RT – Rubber-tire Vintage Trolley
- SB – School Bus
- SV – Sport Utility Vehicle
- TB – Trolleybus
- VN – Van

The Transit Asset Manager then combined all the subrecipient vehicle inventory workbooks into one master inventory document. The document was sorted by category and the initial results are summarized below:

Vehicle Type	Count as of 8/28/2018	Useful Life (years)	Those Beyond Useful Life as of 8/28/2018	Percent Beyond Useful life
AO - Automobile	77	4	17	20.27%
MN - Minivan	488	4	234	47.95%
BU - Bus	158	12	92	58.22%
CU - Cutaway	536	7	291	54.29%
MB - Minibus	98	7	55	56.12%
	1,357		689	

Based on these initial results almost all the TAM vehicle categories are operating with about 50 percent of their vehicles over the age of useful life as of August 2018.

The vehicle TAM Targets were then set using the results from this evaluation. Future vehicle TAM targets will be adjusted on an annual basis.

Facilities

WisDOT evaluated the condition of the facilities in its sponsored TAM plan using the remaining useful life standards outlined in FTA 5010.1E, page IV-24, 4.f (1) as a guide. Each facility has been given the useful life of 40 years.

The chart below shows the results of the WisDOT facility inventory:

Grantee	Condition	Remaining Useful Life	Age	Date	City	Description
Bad River Tribe of Wisconsin	Excellent	35	5	2013	Odanah	Administration, Maintenance, and Storage Facility
Bay Area Rural Transit Comm.	Excellent	35	5	2013	Ashland	Administration, Maintenance, and Storage Facility
City of Manitowoc	Excellent	35	5	2013	Manitowoc	Transfer facility
City of Rice Lake	Excellent	18	22	1996	Rice Lake	Maintenance Facility

City of Stevens Point	Excellent	35	5	2013	Stevens Point	Administration, Maintenance, and Storage Facility
County of Rusk	Good	17	23	1995	Ladysmith	Maintenance Facility
County of Sawyer	Excellent	35	5	2013	Hayward	Administration and Maintenance Facility
Menominee Indian Tribe	Excellent	32	8	2010	Keshena	Administration and Maintenance Facility
WisDOT/Transit	Excellent	29	11	2007	Milwaukee	Intermodal Station

Most of the transit facilities in WisDOT’s sponsored TAM Plan are relatively new and in excellent condition. None of the facilities are beyond their useful life of 40 years. WisDOT and its subrecipients set the TAM performance target for facilities to not exceed their useful life at 10%. Any new facilities will be added to the inventory upon completion and any condition changes will be made on an annual basis.

IMPLEMENTATION STRATEGY (investment prioritization)

Current Investment Prioritization

WisDOT prioritizes operating funding (this includes mobility management) above most capital requests as no transit system can function without staff, fuel, maintenance, supplies, and utilities. Many of the grant applications are for operating projects that directly support personnel and other costs that part of the daily activities of a transit system. WisDOT strives to ensure continuity in transit operations and the continuous delivery of transit service in Wisconsin.

In terms of capital grants, currently, WisDOT prioritizes funding asset replacement over expansion. Because of the high demand for vehicles statewide, the older and more deteriorated vehicles are considered for replacement before others during each annual award cycle. Even if vehicles meet their useful life or mileage standard, they are not guaranteed to be replaced because the overall need is too great.

Grantees sometimes use their operating budget to purchase replacement equipment such as radios or fare boxes, but there is typically a higher demand to support operating activities so this occurs infrequently.

Lastly, new facilities and vehicle expansion projects would be the lowest priority on the funding list. WisDOT does not receive construction requests as often as vehicle purchase requests, as vehicles are often a more critical need for a transit system.

1st	Operating of transit projects
2nd	Replacement Vehicles that are deteriorated or unsafe to use in service or have reached an age or mileage well over useful life standard
3rd	Replacement or needed vehicle equipment or facility equipment such as security cameras, fareboxes, or communication equipment
4th	Expansion vehicles for new routes or services
5th	New facilities or upgrading of a facility

KEY ASSET MANAGEMENT STRATEGY (investment prioritization)

Useful Life Benchmarks

In 2017 and 2018, WisDOT staff collected the additional information than was required for vehicles. The additional data categories other than age that were collected from each vehicle included:

- Mileage
- A narrative condition assessment (1= poor to 5 = excellent)
- Maintenance notes

These three factors, along with additional information provided by the subrecipient such as annual maintenance costs, will help WisDOT to not only make accurate TAM plan goals in the future, but to also assess vehicle replacement requests that come in at application time. For example, even though a vehicle may be past its federal useful life date, it still may be in "good" condition running "well" and therefore not need immediate replacement.

FINANCIAL IMPLICATIONS

Replacement Needs

Current funding requests from subrecipients to replace vehicles that are beyond useful life outweigh the grant opportunities WisDOT can award annually. To look at what future funding requirements may be, WisDOT predicted replacement needs and average annual vehicle awards per vehicle type during the life of the current TAM Plan. The following assumptions were made as part of this analysis:

- WisDOT would be able to continue to award the average number of vehicle types per year
- Average award counts were based on CY2017 and CY2018 deliveries

- Based on average number of awards per vehicle type per year, that number of vehicles were replaced in the inventory each year with that current year's model.
 - For example, in 2019 34 of the oldest minivans were replaced with 34 2019 year models to show the predicted replacement that would occur that year
- No additional vehicles were added to the current 2018 inventory

The charts below describe:

- How many vehicles in the inventory that are beyond their useful life per year
- How many vehicles would have to be replaced to maintain the 2018 TAM targets
- How many vehicles WisDOT typically awards per vehicle type per year
- The predicted shortfall in vehicles needed to be awarded versus needed to be awarded to maintain the 2018 TAM target

2019 Beyond Useful Life Predictions (as of 9/2018)

Type	Count in Inventory (9/2018)	Useful Life Standard	Number Beyond Useful Life (9/2019)	Percent Over Useful Life	2018 Target	Number of Vehicles Need to Replace in 2019 to Keep at Current Target	Total Avg. Delivered per year	2019 Predicted Shortfall of Vehicles Needing Replacement to Keep at 2018 Target
Automobile	78	4	65	83%	77%	5	0	5
Minivan	482	4	293	61%	53%	37	34	3
Bus	158	12	77	49%	44%	8	3.5	4.5
Cutaway	522	7	278	53%	47%	34	25	9
Minibus	121	7	48	40%	42%	-3	10.5	-13.5
	1,361		761			81	73	8

2020 Beyond Useful Life Predictions (as of 9/2018)

Type	Count in Inventory (9/2018)	Useful Life Standard	Number Beyond Useful Life (9/2020)	Percent Over Useful Life	2018 Target	Number of Vehicles Need to Replace in 2020 to Keep at Current Target	Total Avg. Delivered per year	2020 Predicted Shortfall of Vehicles Needing Replacement to Keep at 2018 Target
Automobile	78	4	69	88%	77%	9	0	9
Minivan	482	4	326	68%	53%	70	34	36
Bus	158	12	86	54%	44%	17	3.5	13.5
Cutaway	522	7	299	57%	47%	55	25	30
Minibus	121	7	53	44%	42%	2	10.5	-8.5
	1,361		833			153	73	80

2021 Beyond Useful Life Predictions (as of 9/2018)

Type	Count in Inventory (9/2018)	Useful Life Standard	Number Beyond Useful Life (9/2021)	Percent Over Useful Life	2018 Target	Number of Vehicles Need to Replace in 2021 to Keep at Current Target	Total Avg. Delivered per year	2021 Predicted Shortfall of Vehicles Needing Replacement to Keep at 2018 Target
Automobile	78	4	73	94%	77%	13	0	13
Minivan	482	4	328	68%	53%	72	34	38
Bus	158	12	87	55%	44%	18	3.5	14.5
Cutaway	522	7	322	62%	47%	78	25	53
Minibus	121	7	53	44%	42%	2	10.5	-8.5
	1,361		863			183	73	110

2022 Beyond Useful Life Predictions (as of 9/2018)

Type	Count in Inventory (9/2018)	Useful Life Standard	Number Beyond Useful Life (9/2022)	Percent Over Useful Life	2018 Target	Number of Vehicles Need to Replace in 2022 to Keep at Current Target	Total Avg. Delivered per year	2022 Predicted Shortfall of Vehicles Needing Replacement to Keep at 2018 Target
Automobile	78	4	77	99%	77%	17	0	17
Minivan	482	4	342	71%	53%	86	34	52
Bus	158	12	96	61%	44%	27	3.5	23.5
Cutaway	522	7	311	60%	47%	67	25	42
Minibus	121	7	47	39%	42%	-4	10.5	-14.5
	1,361		873			193	73	120

With each passing year, the gap between funding need and replacement need becomes wider to maintain the 2018 TAM target for each vehicle types, other than the “Minibus” category. On average, WisDOT can fund 73 vehicles per year, but as the fleet ages, more and more vehicles will need replacement each year.

Financial Costs of Replacement

Vehicles utilized in transit service are often purpose-built and include modifications to ensure they are accessible for individuals with disabilities. This makes transit vehicles costlier in relative terms. Transit systems in Wisconsin typically rely on federal capital grants to be able to replace transit vehicles. Subrecipients cover 20 percent of the local share of the vehicle, while federal grants pay for 80 percent of the total vehicle costs.

In taking data from the above tables to calculate the number of vehicles needed to be replaced per year per vehicle type and using 2018 vehicle price data, we can predict the cost to cover the cost of vehicle replacements per year. (Note that automobiles were not included in the table below due to the lack of funding in majority of WisDOT awards)

Total Costs to Meet 2018 TAM Target Goals Per Year								
	2019		2020		2021		2022	
	Federal Cost (80%)	Local Share (20%)	Federal Cost (80%)	Local Share (20%)	Federal Cost (80%)	Local Share (20%)	Federal Cost (80%)	Local Share (20%)
Minivans	\$1,088,288	\$272,072	\$2,058,924	\$514,731	\$2,058,924	\$514,731	\$2,058,924	\$514,731
Minibuses	\$450,895	\$112,724	\$450,895	\$112,724	\$450,895	\$112,724	\$450,895	\$112,724
Cutaways	\$2,115,834	\$528,958	\$3,422,672	\$855,668	\$4,853,971	\$1,213,493	\$4,169,437	\$1,042,359
Buses	\$2,420,814	\$605,203	\$5,144,229	\$1,286,057	\$5,446,830	\$1,361,708	\$8,170,246	\$2,042,561
TOTALS	\$6,075,831	\$1,518,958	\$11,076,720	\$2,769,180	\$12,810,621	\$3,202,655	\$14,849,502	\$3,712,375
	Total Federal Share 2019 - 2020				\$44,812,673			
	Total Local Share 2019- 2020				\$11,203,168			

Financial and Replacement Summary

There will be a growing financial gap from year to year associated with the number of vehicles needed to be replaced in order to meet the 2018 TAM targets and funding levels that are currently available. Additionally, vehicle prices continue to rise each year. Even if the TAM targets could be met with funding, it still leaves vehicles in the group plan operating over useful life.

WisDOT could also increase the useful life standards for each vehicle type to decrease the number of vehicles beyond useful life or increase the TAM target percentage. Neither of these options, however, alters the issue of an aging fleet.

CONTINUOUS IMPROVEMENT

Using Vehicles Beyond Useful Life

WisDOT attempts to replace the oldest and worn vehicles based on the useful life benchmarks established for the TAM Plan. WisDOT also encourages systems to continue to use vehicles beyond their set useful life if there are no safety concerns and the ongoing maintenance of the vehicle is not cost prohibitive.

Merely because a vehicle has met its useful life in age that it does not mean that it must need replacement at that time. In fact, transit systems are maintaining vehicles longer than their useful life requirement and, on average, vehicles are typically at or just beyond their useful life age. The table below outlines the average age of vehicles in the WisDOT inventory by each vehicle type:

Average Ages of Vehicle Types in 2018				
	Number	Total Age	Average Age	Useful Life Age
Auto	78	582	7.5	4
Minivan	482	2815	5.8	4
Minibus	121	772	6.4	7
Cutaway	522	3645	7.0	7
Bus	158	1804	11.4	12

WisDOT plans on working closely with subrecipients on how to prioritize their vehicles in need of replacement at the time of grant application, and working to share best practices on vehicle maintenance across agencies and organizations.

Efforts to Prolong Vehicle Life

WisDOT has implemented the following activities to help prolong the life of vehicles and other assets in the inventory.

On annual discretionary grant application evaluations, WisDOT has valued “coordination” and “need” as the two highest rated categories for subrecipients to earn points. This is to help subrecipients communicate their greatest need and how they are providing transportation in the most efficient way possible in their area.

WisDOT requires maintenance plans for all subrecipients with vehicles funded through federal grants. In these plans, each subrecipient indicates how they intend to take care of each vehicle type, how often it goes in for repair, preventive maintenance plans, and any ongoing repair issues. This plan assists both

WisDOT and subrecipients in keeping their vehicles well maintained and to provides quantitative evidence when vehicle needs replacement.

The Transit Section employs Asset Manager to keep track of all the vehicles that are federally, state, and locally funded as well as a Compliance Site Review Manager that visits subrecipients at their location of operation and ensures that they are maintaining their vehicles correctly.

In terms of acquiring new assets, the Transit Section Procurement Manager works with subrecipients on developing vehicle specifications for each vehicle type and to adjust the vehicle specifications to better meet the need of the day to day transit operations. Further, WisDOT has Human Service Vehicle and Heavy-Duty Bus contracts that allows subrecipients to purchase off and to certify that the vehicles meet all Wisconsin State and Federal vehicle requirements.

Lastly, the WisDOT staff regularly attend FTA training sessions in order to keep up with the latest safety rules and to find best practices from other states. The Transit Staff also coordinate with the Wisconsin State Patrol office to learn about any changes to state laws concerning bus and vehicle safety.

WisDOT subrecipients and staff are working diligently to improve the vehicles that are being funded with federal monies and to keep vehicles in service safely for as long as possible. WisDOT plans reach out to its subrecipients on an annual basis on setting the TAM Targets and every four years to update the TAM Plan. The department is receptive to new ideas that may assist in this TAM initiative and understand the value of keeping assets well-maintained.

OTHER INFORMATION

TAM Targets were entered into NTD on 1.25.2017.

TAM Plan information is stored internally on the W-Drive under W:\BTLR\TRANSIT\ADMIN OVERSIGHT\Asset Management\TAM - Transit Asset Management

Contacts:

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APPENDIX 1 – SUBRECIPIENT OPT-IN LIST

Abby Vans	City of Watertown	Endeavors Adult Development Center
Aging and Handicapped Transportation, Inc.	City of Waupaca	ESR
American Eagle Bethel Center	City of Waupun	Fond du Lac Area Transit
Aptiv	City of Wausau	Goodwill Industries
Arc of Fond du Lac, Inc.	City of Whitewater	Green Valley Enterprises
Ashland County Aging Unit, Inc.	City of Wisconsin Rapids	Handishop Industries, Inc.
Away We Go Transport, Inc.	Community Alternatives	Harry & Rose Samson Family Jewish Community Center
Barron Co. Developmental Services	Community Care	Headwaters, Inc.
BART	County of Adams	Hess Memorial Hospital, Inc
Beloit Transit	County of Barron	Highline Corp
Bethel Home	County of Buffalo	Hodan Community Services
Black River Industries	County of Columbia	Interfaith Caregivers of Washington County
BRIDGE for Community Life,	County of Crawford	KAC
Brooke Industries	County of Dodge	Lauri Jean Zach Center
Career Industries	County of Door	Lincoln County ARC, Inc.
Cerebral Palsy of Mideast WI	County of Dunn	LSS
Challenge Center, Inc.	County of Grant	Lutheran Homes of Oshkosh, Inc.
City of Baraboo	County of Green	Marinette Co. Committee on Aging
City of Beaver Dam	County of Iowa	Menominee Transit
City of Beloit	County of Jefferson	Mile Bluff
City of Berlin	County of Kenosha	Namekagon Transit
City of Black River Falls	County of Lafayette	New Hope Center
City of Chippewa Falls	County of Lincoln	New Horizons North
City of Edgerton	County of Manitowoc	North Central Health Care
City of Fort Atkinson	County of Marathon	ODC
City of Janesville	County of Marinette	Oneida Public Transit
City of La Crosse	County of Marquette	Opportunity Inc
City of Lake Mills	County of Outagamie	Portal Inc
City of Manitowoc	County of Ozaukee	RCS Empowers
City of Marshfield	County of Pepin	Red Cliff
City of Mauston	County of Richland	Richland Center
City of Merrill	County of Rock	Senior Connections

City of Monroe	County of Rusk	St. Coletta of Wisconsin, Inc.
City of New Richmond	County of Sauk	SW Opportunity Center
City of Onalaska	County of Sawyer	SWCAP
City of Platteville	County of Shawano	The Threshold
City of Port Washington	County of Sheboygan	Tomahawk Area Interfaith Volunteers
City of Portage	County of St. Croix	Tri-County Memorial Hospital
City of Prairie du Chien	County of Taylor	Tri-State Regional Ambulance
City of Reedsburg	County of Trempealeau	United Community Center
City of Rhinelander	County of Vernon	VARC
City of Rice Lake	County of Walworth	Ventures Unlimited, Inc.
City of Ripon	County of Waupaca	Village of Plover
City of River Falls	County of Wood	VIP Services, Inc.
City of Shawano	Covey	Wausara Industries
City of Stevens Point	Curative Connections	Wheels of Independence
City of Stoughton	Disability Services	
City of Sun Prairie	Diverse Options	
City of Tomah	East Shore Industries	
City of Viroqua	Eau Claire Transit	

APPENDIX 2 – ASSET INVENTORY

The inventory is available at the link below. It was updated on August 20th, 2018, and will be updated periodically.

<https://wisconsin.gov/Documents/doing-bus/local-gov/astnce-pgms/transit/tam-inventory.xlsx>