2024 Annual Operation Report

March 14, 2025

MADISON DEPARTMENT

OF TRANSPORTATION

Contents

2024 MADISON TRANSPORTATION TRENDS

TRAFFIC

Traffic volumes within the city and going towards the center are generally less than what was experienced pre-Covid (2019). Figures 1 and 2 illustrates daily traffic volumes on several city streets taking from the City's Centracs signal software (Figure 1). This is likely due to two factors.

1. An increase in remote work and its effect on arterials leading to central employment districts.

2. The addition of the flex lane on the Beltline, which reduced congestion and captured an additional 20,000 vpd. (See figure 3). Beltline volumes are currently up 6.5% from 2019.

These two factors have had a lasting effect on traffic/travel pattern with reduced work trips and more direction to the Beltline. The John Nolen Drive reconstruction scheduled for late 2025/2026 will have additional effects and may reduce some of the current Beltline redirection.

VMT nationally has recovered and continues to grow. Figure 4 uses data obtained from Federal Reserve statistics and shows that VMT in October 2024 was 103 percent of that experienced in 2019 (Figure 4).

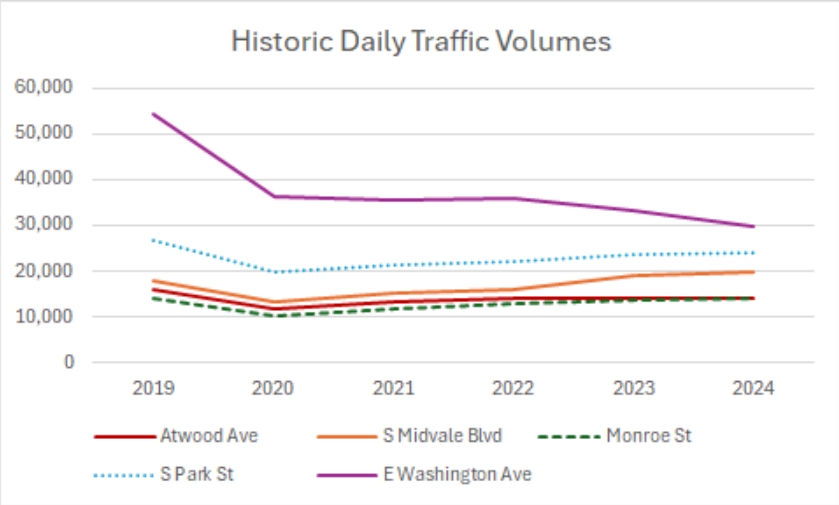

Figure 1 Historic Daily Traffic Volumes on Local Streets

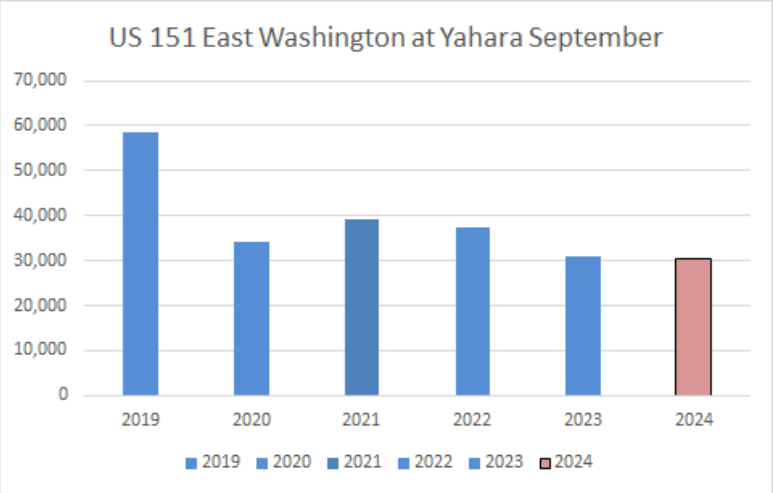

Figure 2 East Washington Daily Traffic Volumes

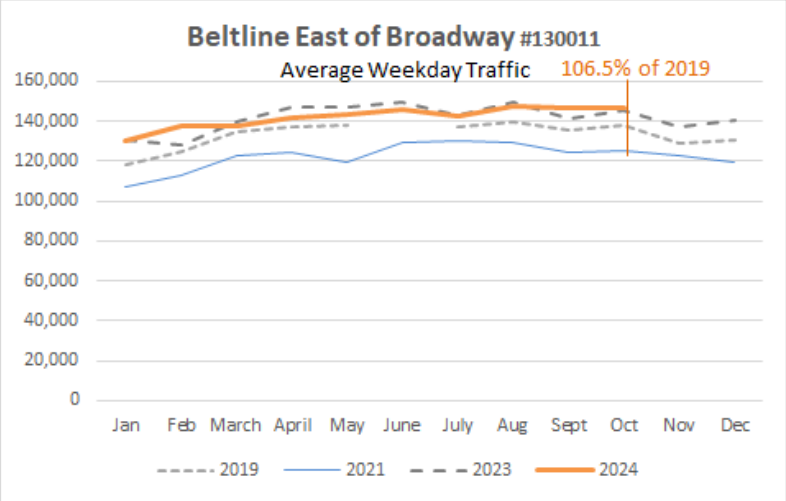

Figure 3 Madison Beltline Daily Traffic Volumes

The Greater Madison MPO developed a methodology for measuring VMT within the City limits using Streetlight probe data. Figure 5 illustrates their preliminary results Vehicle Miles Traveled in the City of Madison using April as the comparison month for 2022 through 2024. Because of collection technology changes, this data is not available for years prior to 2022. The graphic shows that there was a 1.9% increase in VMT between 2023 and 2022, there was a much greater increase of 11% between 2024 and 2023.

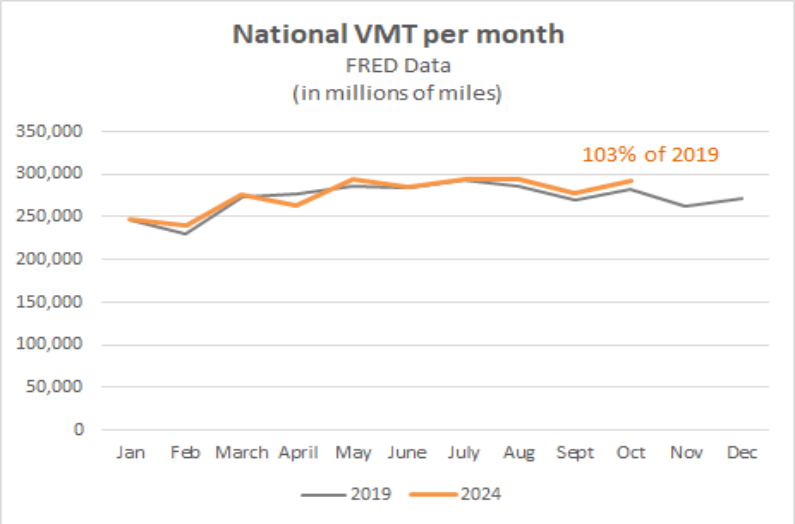

Figure 4 National VMT Growth

Dane County VMT provided from WisDOT, is not available for 2024, but is for years prior. This VMT uses a fully different methodology based on fuel sales, fleet mpg averages, and other data, shows that VMT is exceeding 2019 levels (Figure 6). It also shows full year 2023 VMT is about 3% above 2022 levels.

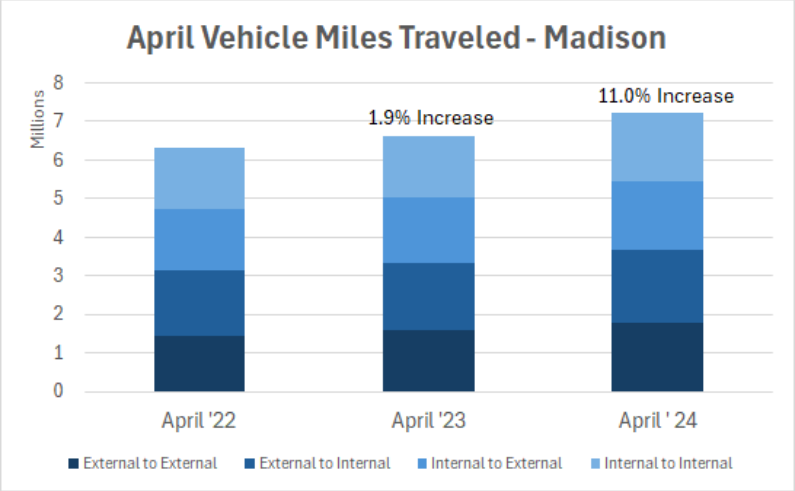

Figure 5 Madison VMT

Madison's Vision Zero Action plan has Expanding and Supporting Alternatives to Driving as an action item, with a goal of reducing VMT by 15% by 2050. Both Madison's and Dane County's trends are running counter to this goal.

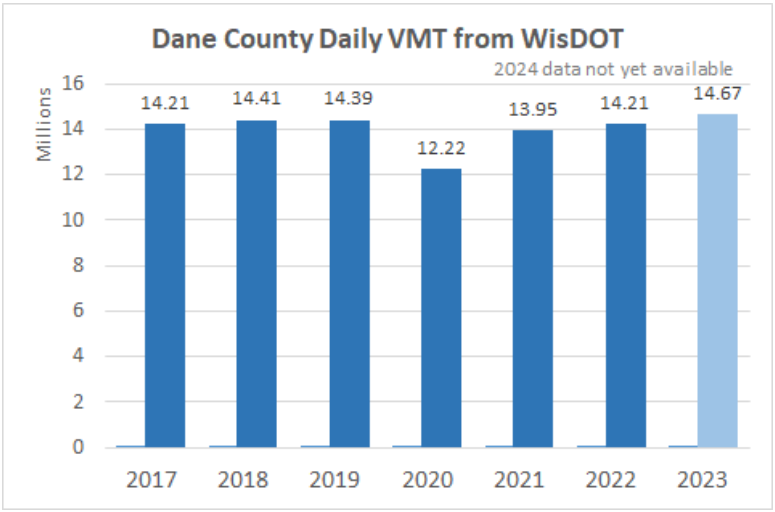

Figure 6 Dane County VMT

Bicycle traffic in 2024 is consistent with post pandemic levels yet continues to be less than 2019 levels. Figure 7 shows bicycle counts taken by the Eco-counters. Note that the locations covered by these counters are bicycle commuter routes. This might suggest that telework has decreased bicycle commuting just as it has for motor vehicle trips. It also may not be indicative of non-commuter-oriented bicycle traffic.

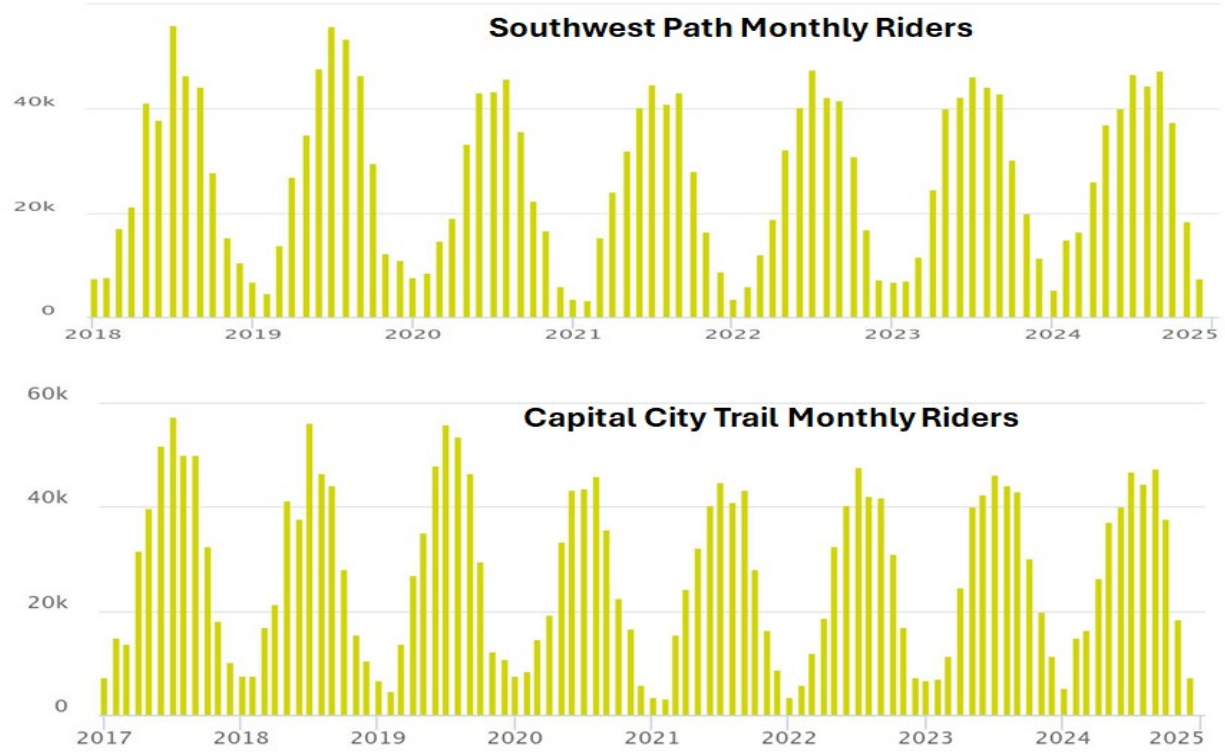

Figure 7 Bicycle Counts

Safety – 2024 saw a reduction in fatal crashes and fatalities. If all roads are considered, there were 11 fatal crashes and 11 fatalities. If fatal crashes and fatalities are removed roadways not within Madison's jurisdiction (Beltline, Interstate, etc). there were only 5 fatal crashes causing 5 fatalities (including County roadways). Figure 8 shows fatality and fatality crash trends on All Road, and on Roads excluding State Roads. A 5-year rolling avereage is shown on both graphs to help moderate the yearly variation. The rolling average did not change much because 2019, also a year with fewer fatalities, dropped out of

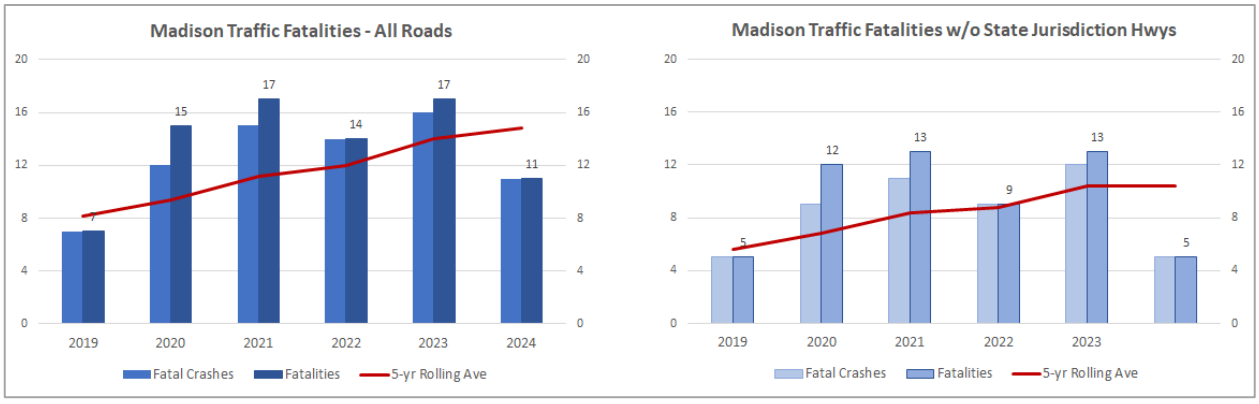

Figure 8 Madison Fatalities

the 5-year span. Due to statistical significance[1], it is premature to start claiming victory in safety, yet the trend is going in the correct direction.

TRANSIT

Capital Investments

Metro Transit had the greatest amount of change in 2024. The agency launched East-West Bus Rapid Transit, opened a new satellite facility, transitioned to a new fare system, started using new articulated buses with an electric propulsion system, and changed its technology system. With an investment of $194 million, (~75% federally funded), the E-W BRT is the single largest project the City has ever undertaken. The 15-mile system will provide a transit infrastructure that will serve Madison residents for decades.

Figure 9 E-W BRT Ribbon Cutting

Ridership

In past years this annual report has compared October ridership for the previous 5 years. The amount of change in both fare systems, BRT launch, and the technology prevents this comparison. Not all buses were equipped with the new technology, the previous fare boxes became unreliable in counting passengers, and residents were still getting used to the new fare medium associated with the BRT.

Figure 10 E-W BRT Station

[1] https://assets.publishing.service.gov.uk/media/60d0590c8fa8f57ce8c462ad/testing-for-statistically-significant-changes.pdf

As of November, all of metro's buses have been equipped with automatic passenger counters (APCs). The APCs still need certification by FTA this spring/summer, but we have confidence in their results. The following table compares November and December ridership for 2022 (pre network redesign), 2023 (post network redesign) and 2024 (post BRT launch). Route A approaches a 20% increase in ridership, with the system gaining a 10% increase.

Figure 11 New Hanson Road Satellite Facility

	Route A	Systemwide
Nov-23	147,077	954,427
Dec-23	112,266	738,922
2023 Nov-Dec Total	259,343	1,693,349
*Nov-24	164,611	1,014,013
*Dec-24	142,680	843,985
*2024 Nov-Dec Total	307,291	1,857,998
% Change from Nov-Dec 2023	+18%	+10%

Figure 12 November and December Ridership Comparison

February 2025 figures show even more promising results. The following table illustrates the 2024 and 2025 ridership by route, with most routes seeing increased ridership, particularly the BRT A and the C routes.

Route	2024	2025 (APC)	2024 Vs 2025 % Difference
A (BRT)	136,356	165,971	22%
B (BRT)	89,613	93,537	4%
C	103,372	119,696	16%
D	111,621	121,028	8%
E	19,628	23,311	19%
F	33,686	34,765	3%
G	30,461	34,404	13%
H	23,098	24,792	7%
J	15,372	18,161	18%
L	4,650	5,986	29%
O	13,567	16,464	21%
P	3,262	3,668	12%
R	26,911	25,410	-6%
S	1,244	1,606	29%

Route	2024	2025 (APC)	2024 Vs 2025 % Difference
W	914	1,746	91%
28	35,836	53,919	50%
38	34,090	43,383	27%
55	3,737	3,898	4%
65	6,664	7,175	8%
75	11,465	12,326	8%
80	203,513	282,076	39%
81	779	4,635	495%
82	18,550	19,573	6%
84	28,551	20,685	-28%
60-64	42,644	46,187	8%
Unknown	19,740		
Grand Total	**1,019,324**	**1,184,402**	**16%**

Figure 13 February 2025 Ridership Comparison

Again, this year it is difficult to compare full year ridership with other transit agencies because of the changes in our farebox system and bus equipment. If one looks at the 2023 National Transit Database for the 852 Directly Operated Bus Systems, Metro Transit is

- In the top 6% for passengers per revenue hour, having an average 25 passengers per revenue hour.
- In the best 10% for cost per passenger.
- In the top 5% in number of rides given.

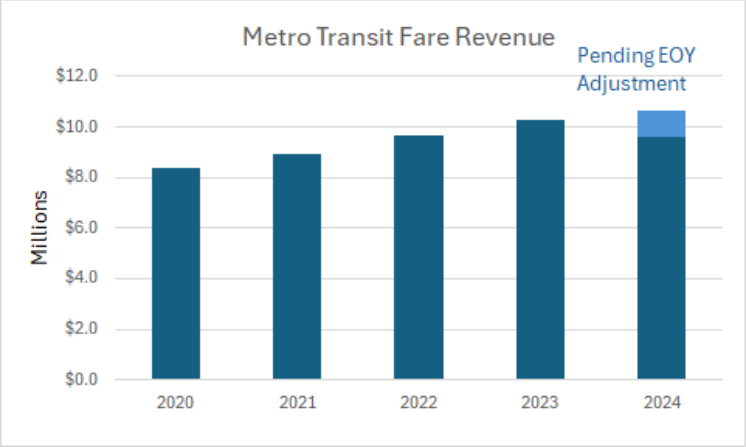

Figure 14 Metro Fare Revenue

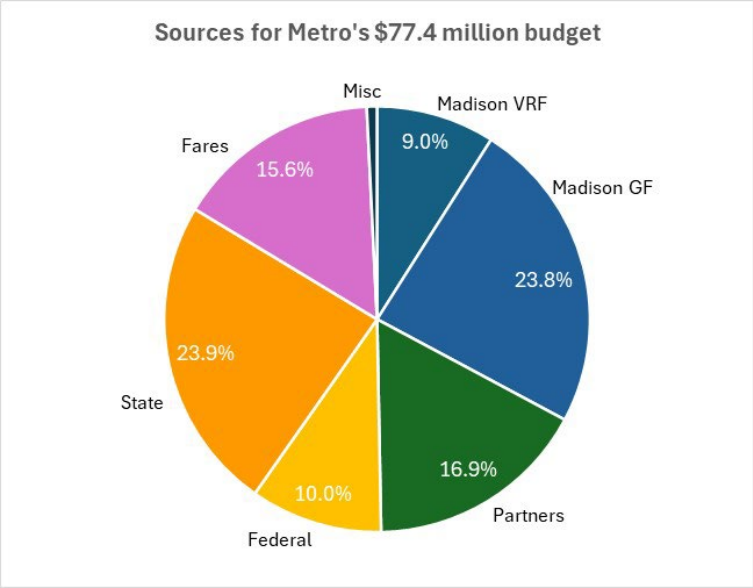

Figure 15 Metro Transit 2025 Budget Sources

Revenue

The post-Covid revenue trends are difficult to analyze because funding sources associated with pandemic relief varied considerably across the 5-year period. However, revenue growth has been consistent (see Figure 14).

The 2025 operating budget is more normal in that it contains state and federal contributions characteristic of pre-Covid levels (see Figure 15). Note that Madison's contribution is slightly larger as previous monies are reimbursed.

Equity and Fairness

One goal of the network redesign was to reduce trip duration and the number of transfers experienced by certain portions of the population. In 2023 the Greater Madison MPO and Metro Transit sponsored an on-board survey to understand how conditions have changed since the last on-board survey conducted in 2015. The 2023 survey results are still preliminary, and because the questions asked were slightly different there is not an exact one to one correspondence.

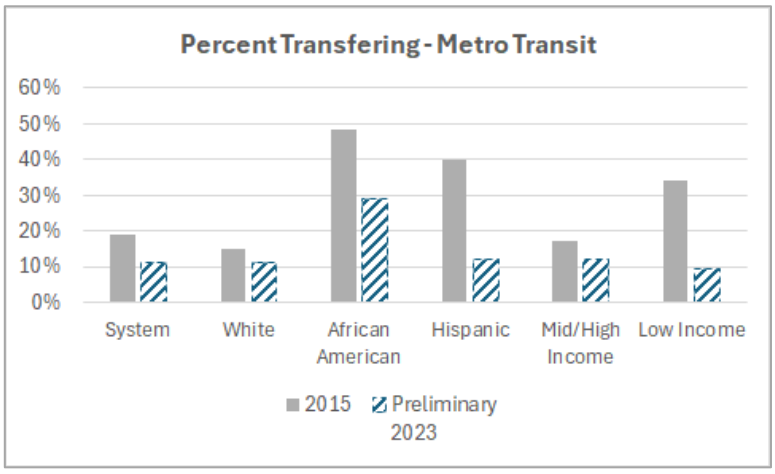

Figure 16 Transfer Rates

However, the preliminary results generally show that the number of transfers with the network redesign is down substantially across all demographic groups. Despite this, transfers among African Americans still is higher than with other groups.

The Transit Network Redesign provided more high frequency transit routes, defined as service every 15 minutes. High frequency transit routes allow greater flexibility in trip planning, and greater reliability in trip experience. The following graphic illustrates the high frequency transit network prior and post Network Redesign. The graphic also describes the demographic numbers of those served by the 2018 and 2023 transit networks.

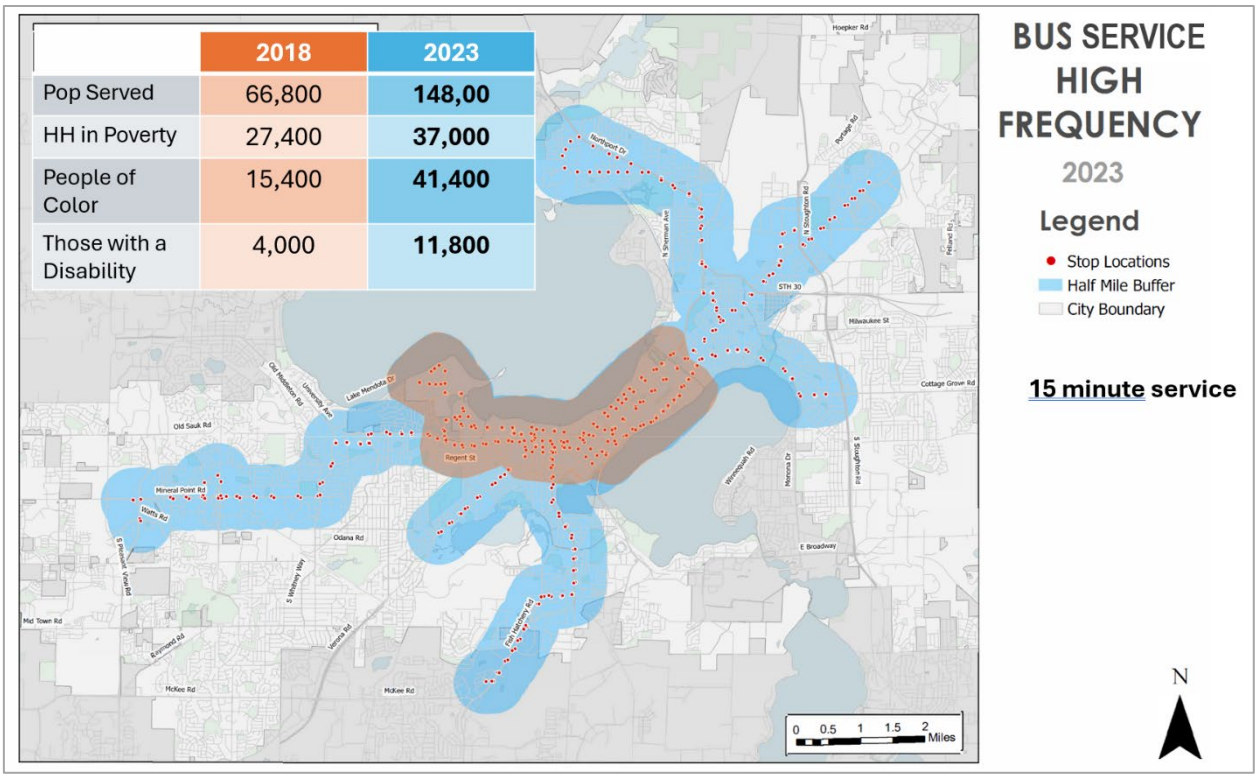

Figure 17 Population within High Frequency Transit

PARKING

2024 was an eventful year as the Lake Street garage was completely demolished and essentially rebuilt in 13 months. As Phase 2 begins, it will add 8 floors of housing above the garage. The planned opening of the garage and the Intercity Bus terminal located within it is set for the summer of 2026.

Figure 18 Lake St Garage

The Parking Enforcement Officers were officially relocated from Police Districts to a centrally located facility in the former Town of Madison building. This co-location of all PEOs enables them to coordinate activities and responsibilities more effectively.

Figure 19 compares the average September occupancy from 2019 with those of 2023 and 2024, covering the hours from 10 am to 2 pm. There are a few anomalies in the graphic between 2023 and 2024, which could result from a different data collection method implemented in 2024 and varying personnel gathering the data. Alternatively, it could indicate a trend. Notable characteristics of this graphic include:

- Despite the State Street Campus (SSCa) garage having only half of its spaces available (due to construction), mid-day occupancy remained essentially the same.
- The Overture garage experienced a significant drop in occupancy during the weekdays.
- Capitol Square North recorded a decline in occupancy on both weekdays and weekends.
- The Wilson St garage observed an increase in occupancy during the weekends.

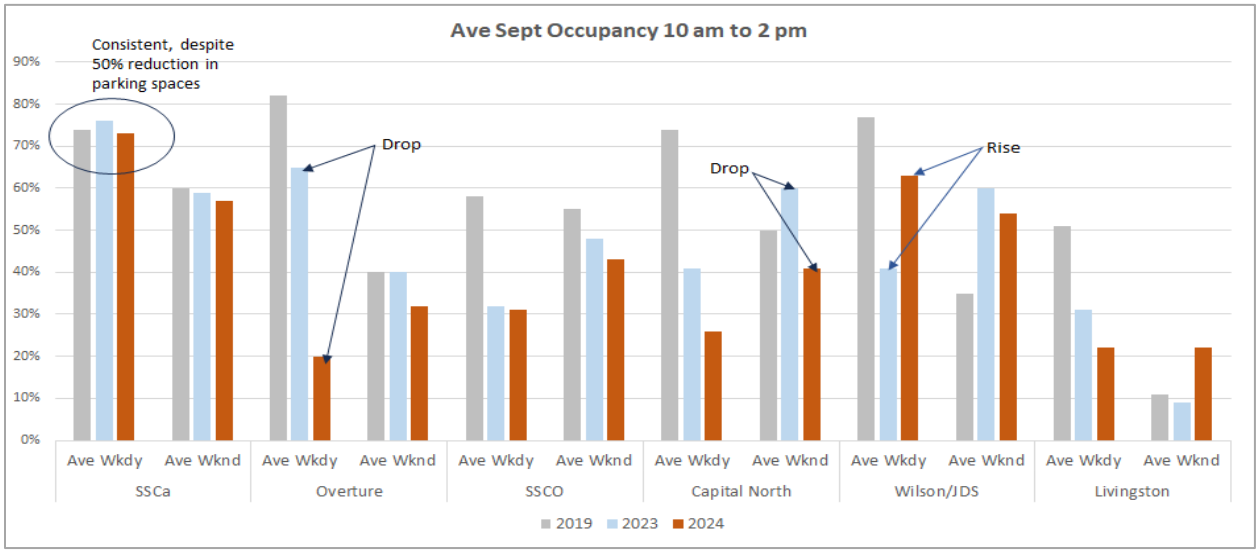

Figure 19 Mid-day Occupancy by Garage

Figure 20 illustrates the revenue generated by the facility. This information complements the occupancy data. Specifically:

- Mid-day activity at the State Street Campus Garage remains normal despite ongoing construction, yet overall revenue has declined due to limited space during peak events.
- Wilson St Garage is experiencing consistent growth.
- Most other garages and on-street meters have seen significant growth since the pandemic.
- Revenue from lots has increased notably.

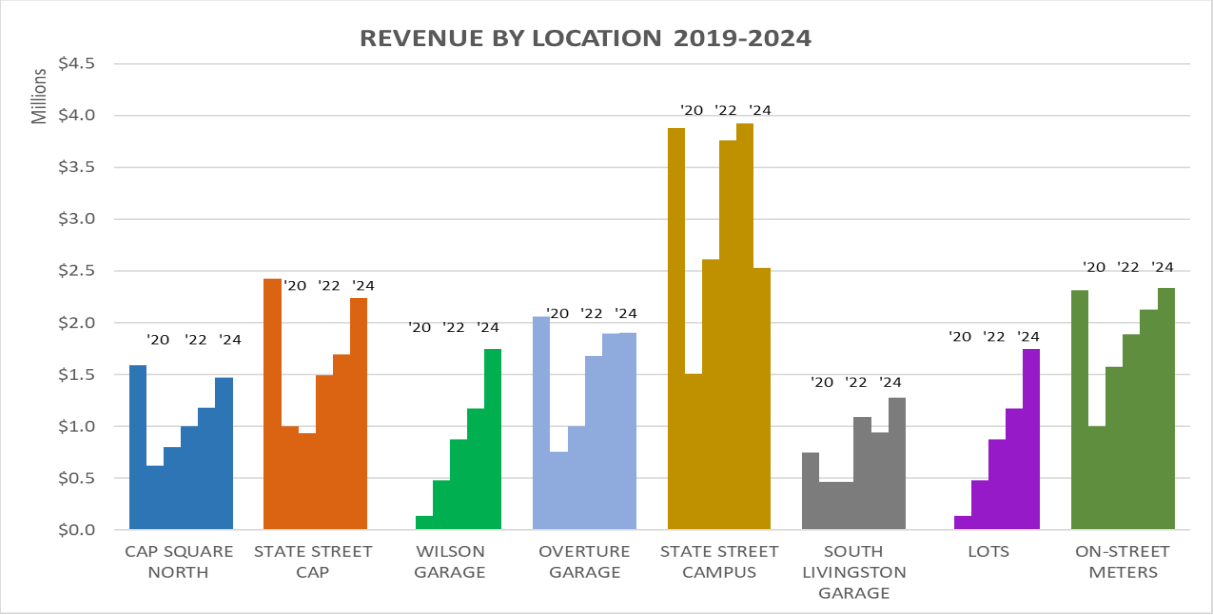

Figure 20 Parking Revenue by Location

Figure 21 illustrates parking revenue by year and source, excluding gains or losses from asset sales. Although not reaching pre-pandemic levels, garage and meter revenues have continued to rise. This counters last year's expectation that revenues would decline due to the Lake Street garage being taken out of service.

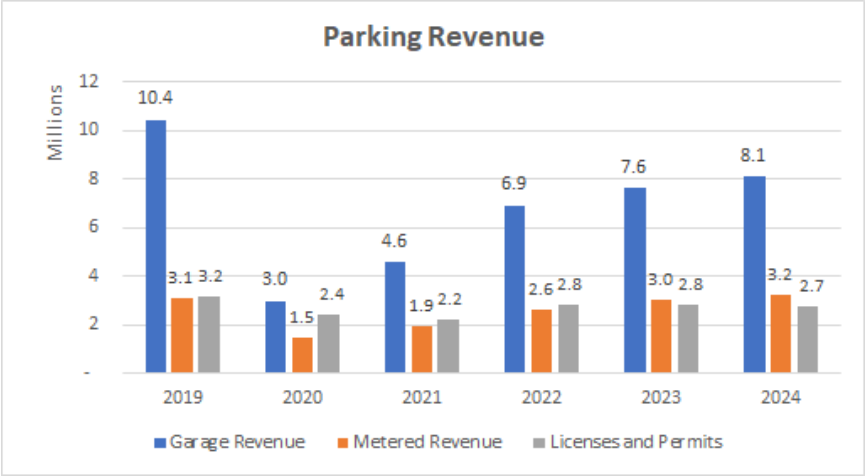

Figure 21 Parking Revenue by Year

Figure 22 illustrates the Net Parking Revenue, which accounts for expenses. Note that the figures for 2019 and 2020 do not fully reflect the Parking Enforcement Expenses, estimated at around $3 million per year. In 2024, the Parking Division generated approximately $1.5 million in reserves, which is less than what was generated before the pandemic, but still on the rise. This growth is notable despite the loss of half of the spaces in the most profitable parking garage. In 2025, the Parking Division will start servicing some of the debt incurred from bonds related to the Lake Street Garage reconstruction. This debt service is expected to be around $1 million per year.

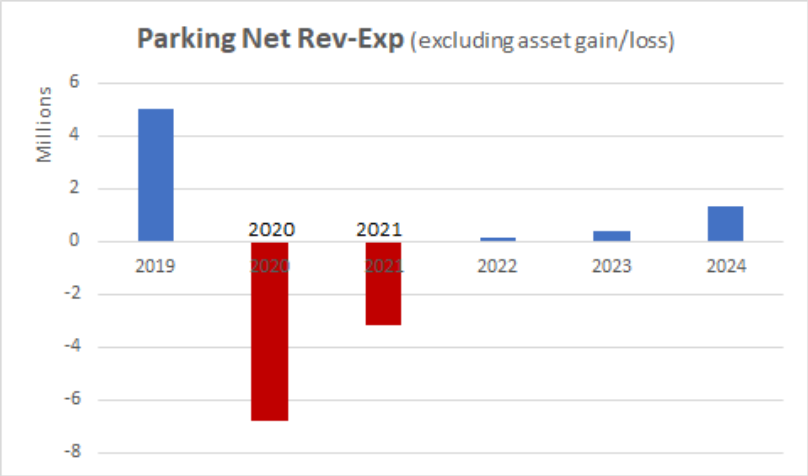

Figure 22 Parking Net Revenue and Expense

Figure 23 shows the expenses and citation revenue generated by Parking Enforcement Officers (PEOs). Keep in mind that the primary goal of parking enforcement is compliance, not revenue generation. PEOs assist in keeping our streets and pathways clear for transportation purposes.

Figure 23 Parking Enforcement Costs vs Citation Revenue

Citation revenue is directed to the General Fund and not the Parking Fund. Citation revenue continues to exceed enforcement costs.

FEDERAL FUNDING

Madison has been fortunate to capture significant federal funding for capital projects over the past four years. While it is early in this presidential administration, it is likely that federal funding for capital projects will be reduced. This may mean some projects will experience delays.

WISDOT PROJECT COORDINATION

WisDOT has had three major study projects in the Madison area, illustrated by Figure 23 which involved considerable interaction by Madison staff. They include the Interstate I-39/90/94 project, the North Stoughton Road project, and the South Stoughton Road project. The I-39/90/94 and North Stoughton Road projects both released environmental documents in 2024 and were recommended for funding by the state Transportation Projects Commission.

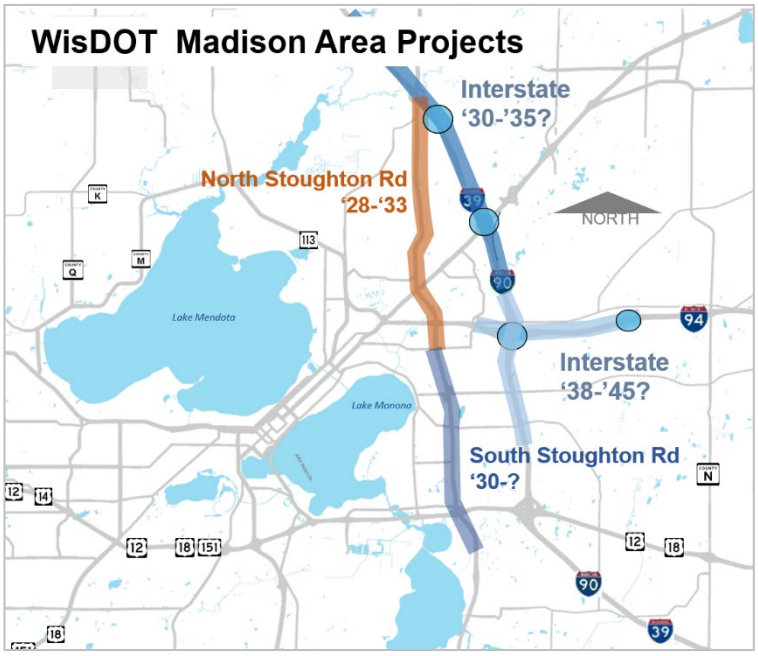

Figure 24 WisDOT Studies and Projects

The I-39/90/94 project includes both good and challenging features for Madison residents. That being said, WisDOT has been extremely collaborative with City staff in listening to concerns and incorporating requested features. Some of the main characteristics of the project include:

- Greatly expanded typical section for the freeway, particularly between Highway 30 and US 151.
- Fully reconstructed multi-level system interchanges at US 151 and Highway 30 (Badger) interchanges.
- A generous allocation of noise walls throughout the corridor.
- New pedestrian bicycle crossings of the freeway alongside US 151 and near Diloreto Ave.
- The opportunity for two new interchanges, one at Hoepker Rd and one at an extension of Milwaukee Rd. This is contingent upon a cost sharing agreement with the City of Madison.

The North Stoughton Road project also includes both good and challenging features for Madison residents. Some of the main characteristics of the project include:

- A shared use path on the east side of Stoughton Rd from Highway 30 north to Pierstorff Street.
- A pedestrian/bicycle bridge crossing Stoughton Road south of the Highway 30 eastbound on and off-ramps, subject to a cost sharing agreement with the City of Madison.
- An expanded at-grade intersection at East Washington and Stoughton Rd.
- An expanded at-grade intersection at Commercial Ave and Stoughton Rd.
- A pedestrian/bicycle bridge crossing East Washington Rd at Stoughton Rd., subject to a cost sharing agreement with the City of Madison.

The South Stoughton Road project is still in the alternative development phase, with an environmental document likely in 2025 and 2026.

2024 GENERAL TRANSPORTATION EFFORTS

While the Transportation Department is composed of Traffic Engineering, Metro Transit, and Parking, there are a couple of initiatives of Transportation staff that did not fit squarely under one of the divisions. Some of these efforts are major accomplishments for Transportation policy within the City of Madison.

East-West BRT

The East-West BRT was launched in September 2024. It was the largest capital project ever undertaken by Madison, and there was significant effort by multiple city agencies. Metro transit staff took the lead role in transitioning a project to a system serving residents.

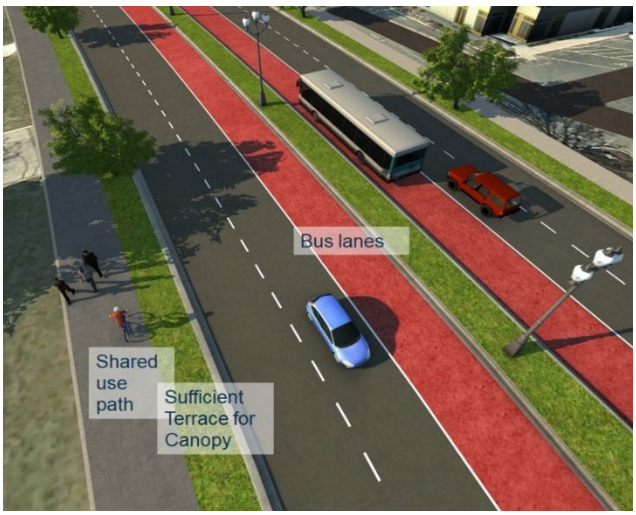

Figure 25 N-S BRT Park Street Concepts

North-South BRT

Transportation and Metro staff worked to finalize and adopt a Locally Preferred Alternative (LPA). This required quite a bit of effort in that it occurred in the middle of East-West BRT construction. The project was recommended by the FTA for $118 million in Small Starts funding. It is unclear whether and how that funding will materialize with the new administration. Staff are looking at incremental implementation that might be able to occur without federal funding.

Potential Infrastructure Charge

As state law limits the levy the City of Madison can charge in property taxes, Madison has explored funding mechanisms for maintaining our street and traffic infrastructure. One methodology would be focused on allocating costs according to household and car usage of our system. While not implemented, we have an understanding of the mechanics and options for funding maintainance our transportation system in the future if needed.

Figure 26 Amtrak Progress Meeting January 2024

Passenger Rail

Madison continues to pursue the restoration of passenger rail to the City. The study is progressing at a slower pace to match the status of the state and federal efforts. Currently we have a draft report that screens alternative locations and identifies several locations that have the best possibility for success.

2024 TRAFFIC ENGINEERING EFFORTS

Traffic Engineering continued maintaining the City's transportation network while advancing key initiatives. This involves considerable amount of coordination. There were over 5879 workorders produced – many of which were direct responses to requests from our residents and businesses.

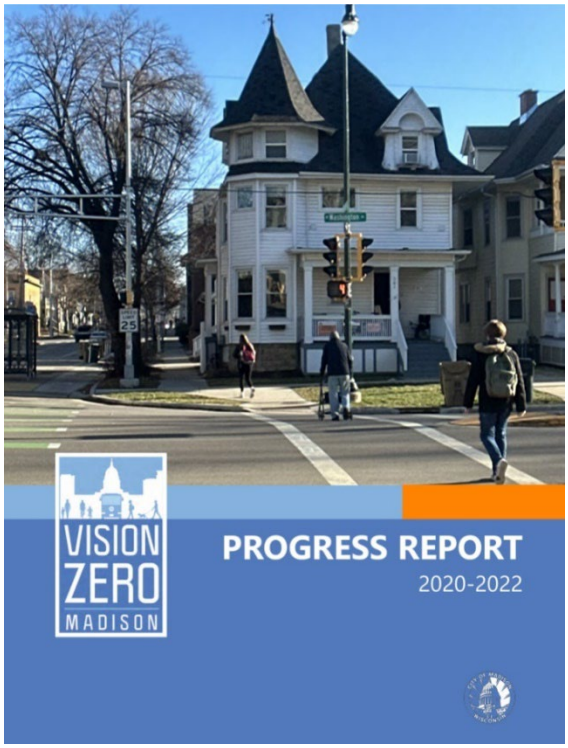

Figure 27 Vision Zero Progress Report

Vision Zero and VZ Action Plan

In March 2024 the Vision Zero Progress Report was released. This provides a tracking mechanism for how effective our infrastructure investments are.

Bike and Pedestrian Projects

In partnership with Engineering, 2024 saw a marked increase in bike network projects, which includes the separated cycle track along Mineral Point Road as part of E-W BRT project as well as other paths, providing almost 4 miles of fully protected facilities. Together with bike lanes, 6.15 miles of bike facilities were installed. There were another 31 bicycle and pedestrian related projects installed at various locations throughout the City. The criteria used for selecting Safe Streets Madison projects includes an equity component, which gives projects which lie within the Greater Madison MPO Tier 1 or 2 Environmental Justice Areas a greater score. The areas are available on their website.

Figure 28 2024 Bike Network Projects

Street/Area	Location	Facility Type	Mileage
Arboretum Entrance	McCaffrety Dr to Manitou Way	Path	0.05
Autumn Ridge Path	Milwauke St to Ziegler Rd	Path	0.5
Dempsey Rd	Maher Ave to Cottage Grove Rd	Path	0.3
Hammersley Rd	Southwest Path to Gilbert Rd	Path	0.7
Mineral Point Rd Path	Whitney Way to Beltline	Path	2.5
W Lakeside St	Gilson St to Rowell St	Cycletrack	0.05
Wilson St	S Carroll St to S Pinckney St	Cycletrack	0.2
N Segoe Rd	Regent to Sheboygan	Protected Bike Lanes	0.3
Lien Rd	E Washington to Thierer Rd	Protected Bike Lane?	0.3
Doty St	MLK Blvd to King St	Buffered Bike Lanes	0.1
Sheboygan Ave	Whitney Way to N Segoe Rd	Buffered Bike Lanes	0.4
Maple Grove Dr	McKee Rd to Putnam Dr	Bike Lanes	0.5
Drake St	Randall Ave to Orchard St	Bike Lanes	0.1
Valley View Rd	Loan Oak to Reddan	Bike Lanes	0.2
Rowell St & Van Deusen St	Lakeside to Sayle St	Bike Boulevard	0.5
			6.15

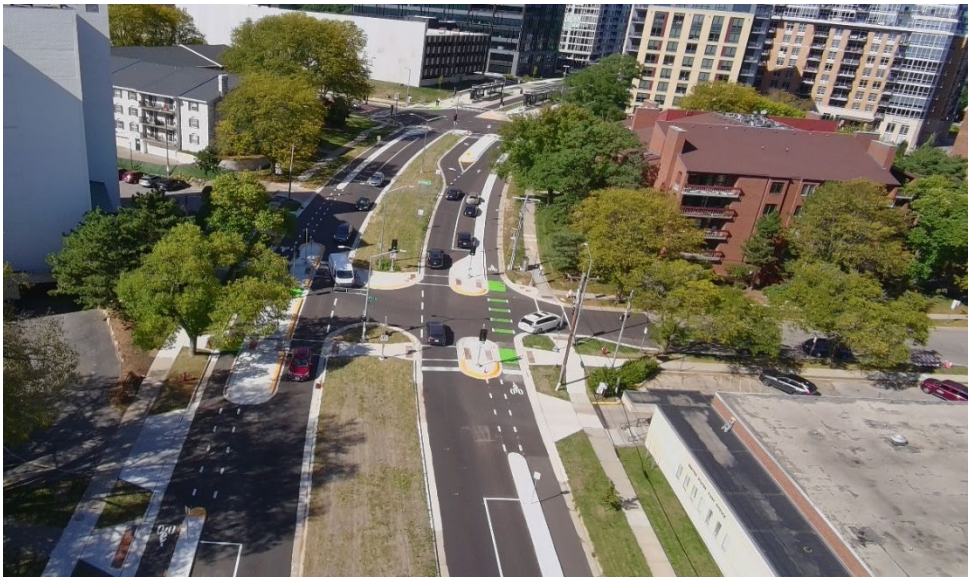

Figure 29 Segoe Road

Figure 30 Bike Ped - Other Improvements

Street/Area	Location	Improvement Type
Baldwin St	Mifflin, Wilson	Four way stop
Beltline Off Ramps	Mineral Pt Rd Path	Green Crossing
Capital City Path	S Livingston St, S Paterson St, S Brearly St,	Green Crossing
Capital City Path	Dempsey Rd, Cottage Grove Rd	Green marking
Capital City Path	Nob Hill	Green marking
Demetral Path	N 2nd St	Green Crossing
Donald Dr	Sandburg Elementary	New midblock crossing with bumpouts
Drake St	At Orchard St	Island
Drake St	Vilas Zoo (Campbell St)	Speed Humps
Great Gray Dr	Near Snowy Owl Ln	Islands, Continental Crosswalks
Meadowlark Dr	Near Flint, Agate and Retana (Kennedy Elementary)	Speed Humps
Milky Way	Near Apollo Way, Lydawds Ln	Speed Humps
Monroe St	At N Randall St	Green marking
Moorland Rd	Near Dunwoody (Southside Elem Crossing Guard)	Island, Continental Crosswalk
Muir Field Lane	At Cimmarron Trl	Islands
N Fourth St	E Johnson to E Wahsington	Speed Humps
N Randall St	Dayton, Engineering Dr, University Ave	Green Markings
Odana Rd	Parman Terr/Gately	Temp RRFB
Odana Rd	Research Park Blvd to past Odana Rd	Islands in Turn Lane
Regent St	At Brooks St	RRFB
School Rd	3900-4000 Blocks (Mendota Elementary)	Speed Humps
Snowly Owl Lane	At Great Gray Dr	Island
Southwest Path	N Randall St	Green Crossing
Southwest Path	Carling Dr	Green Crossing
Tennyson Ln	N Sherman, Whitman, Packers	Continental Crosswalks
Tompkins Dr	1000-1200 Blocks (Henderson Elementary)	Speed Humps
Traceway Dr	Near Leopold Park	Speed Humps
W Beltline Off Ramps	S Whitney Way	Green Crossing
W Dayton St	Orchard, Charter, Mills, Lake	Green Markings
Whitney Way	To West Towne Path	Green crossing
Whintey Way	South Hill Dr	RRFB

Following two successful pilot projects that were well received by residents, Madison initiated the 20 is Plenty citywide rollout in neighborhoods, with signs being installed in November and December. This initiative will be fully implemented by the end of 2025. There were also 9 different speed limit reduction projects on major roads, totally 8.7 miles.

Figure 31 20 is Plenty Logo

Speed Limit Reductions			
Street	**Location**	**Mileage**	**New Speed**
Zeier Rd	E Washington to Lien Rd	0.7	30 mph
Thierer Rd	E Washington to Lien Rd	0.2	30 mph
Lien Rd	E Washington to Thompson	0.9	30 mph
Sycamore Ave	Walsh to Thompson	0.7	30 mph
Pflaum Rd/Agriculture Dr	Stoughton Rd to Femrite	1.5	30 mph
Campus Dr		1.3	35 mph
Regent St	Midvale Blvd to Whitney Way	0.9	25 mph
Sheboygan Ave	Segoe Rd to Whitney Way	0.5	25 mph
S High Point Rd	Mineral Point Rd to Midtown	2	30 mph
		8.7	

The Traffic Engineering Division continued to have success on federal grants. Major awards include a $6.3 million Safe Streets and Roads for All (SS4A) Implementation grant, three Carbon Reduction Program (CRP) grants totaling $6.2 million, and a $5 million Advanced Transportation Technology and Innovation (ATTAIN) grant with an additional $1.3 million State funding commitment. The status of these grants is uncertain, and the Department is monitoring developments on the federal scene

METRO TRANSIT 2024 EFFORTS

Metro Transit saw one of the most accomplished and most tiring years in decades. The staff moved mountains to get key initiatives moved forward. Any of one of these would have been sufficient for a year, and yet they accomplished all of them.

- The completion of the 15 mile E-W BRT, the largest project Madison has ever undertaken, as well as the subsequent launch of the system.
- The opening of the new Hanson Road satellite facility, a storage facility needed for at least a decade.
- The Phase 3a renovation of the Ingersoll Bus Barn
- The delivery, staff training, and implementation of 63 electric articulated buses.
- The installation and implementation of two separate electric charging systems.
- The installation and implementation of new bus tracking technology.
- The implementation of a new fare system.

The Fast Fare system has equity benefits. It makes it easier for those with special reduced fares (seniors, low income, etc.) to maintain their status without visiting a metro outlet to replace their fare cards.

Figure 32 New Bus Charger for Batterie Electric Buses

Figure 33 New Fare System

Figure 34 New Satellite Facility

PARKING 2024 EFFORTS

State Street Campus Garage Mixed Use Development

The reconstruction of the State St Campus Garage (Lake St) began in earnest in early 2024. Within one year the old garage was demolished and new one constructed. Once the housing component is completed in the summer of 2026, this project will also house an inter-city bus terminal and provide more student housing.

Figure 35 Demolition of State St Campus Garage Began in January 2024

Figure 36 Picture of State Street Campus Garage Construction

Parking Rates

In 2024, the Parking Division implemented several rate increases at its off-street facilities, including hourly, monthly, and event rates. Before this change, the last rate increase occurred in 2018.

Rate increases are necessary to maintain consistent parking prices while other prices have risen 25 percent (CPI 2018-2024). Parking recognizes that higher costs can negatively affect various groups, particularly those with limited income. Staff is continually working to find solutions that provide access and parking options at a range of price points.

The Parking Division plans to review rates annually to assess whether adjustments are necessary based on occupancy levels, demand, and operating expenses. Funds generated from these facilities are allocated to the Parking Division's reserves to meet revenue needs that support the system, future improvements, new facilities, and managing system demand.