

Transportation Demand Management

Optimizing Transit Choice and Community Sustainability

2022-10-31

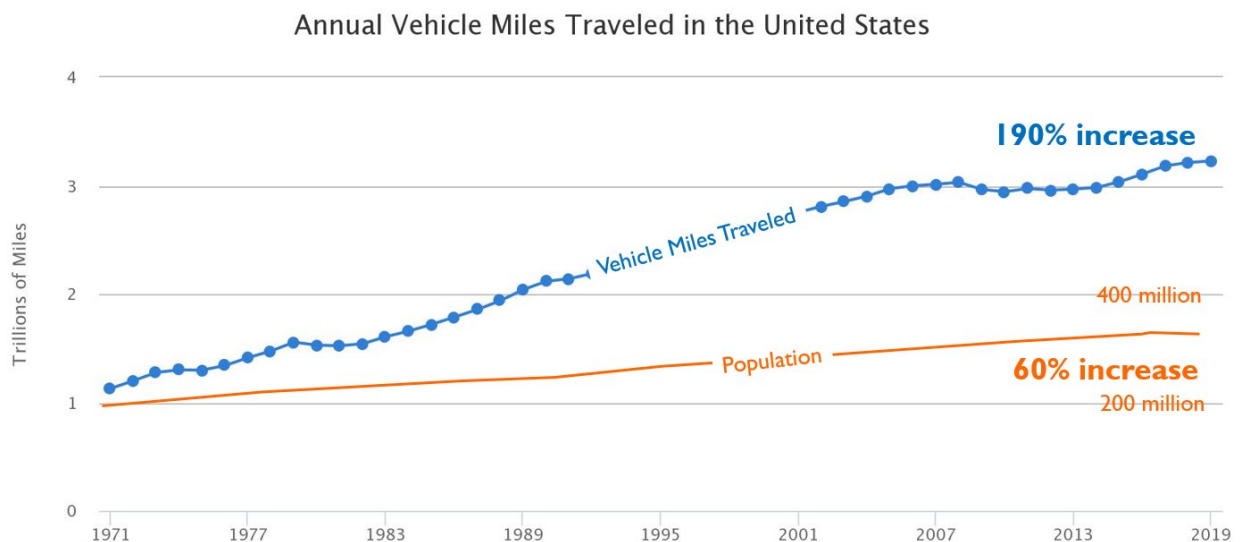
Imagine a community that is easy, safe, and environmentally friendly to get around. One where you can run an errand easily by grabbing your bike from a bike parking facility or from a nearby bike share. One in which your employer-provided bus pass or bike share membership gets you to work and to your favorite park across town. One where your elevator ride down from your office informs you when your next bus will arrive. One where you don't have to get stuck in traffic to access work, culture, cuisine and community so that you can truly enjoy all Madison has to offer.

The City of Madison is working to make this a reality through our new and improved Transportation Design Management (TDM) policy.

TDM is supported in the Imagine Madison Comprehensive Plan and the Madison Sustainability Plan. TDM is defined in the Madison General Ordinances as measures including “carpooling, vanpooling, public transit, bicycling, walking, telecommuting, and work schedules that reduce individual vehicle trips and promote alternatives to single occupant vehicle use especially at peak commuting times.”

The reason Madison first created TDM and continues to update and improve the program are clear:

1. Over the past five decades, auto use or Vehicle Miles Traveled (VMT) has grown at a rate three times greater than the population and challenges associated with that increase use have grown. TDM would work to reduce that VMT growth.



[1] Vehicle miles traveled. FRED. (2021, August). Retrieved August 2021, from <https://fred.stlouisfed.org/series/VMT>

[2] Bureau, U. S. C. (2021, August). Historical Population Change Data (1910-2020). Census.gov. Retrieved August 2021, from <https://www.census.gov/data/tables/time-series/dec/popchange-data-text.html>

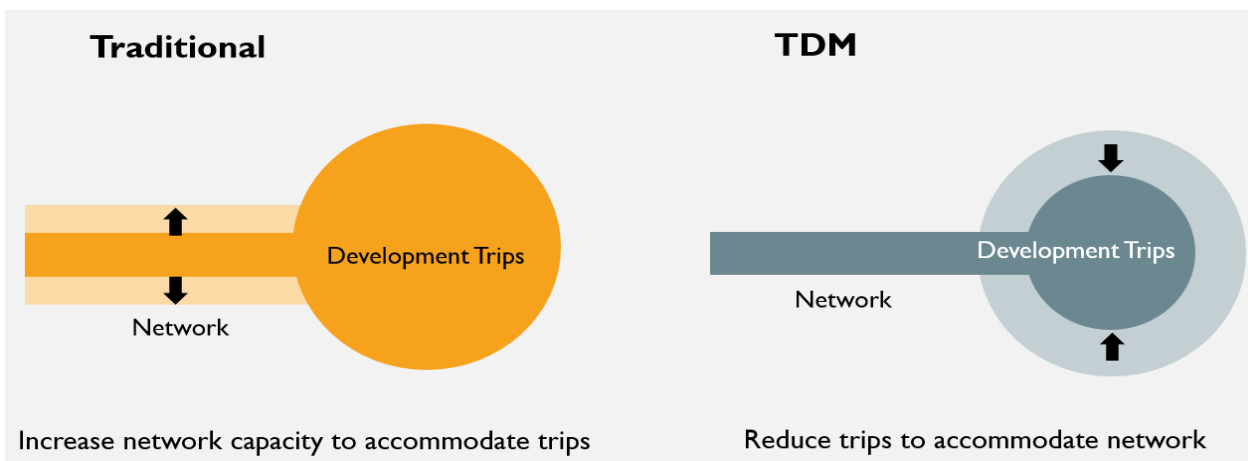
2. Physical factors such as lakes, parks, and neighborhood businesses, make Madison beautiful. Yet they make increasing capacity on streets difficult. We cannot add lanes to East Washington Ave, John Nolen

Drive, University Ave., and other streets. To accommodate business and community growth, we must find more ways to meet our transportation demands.

- Throughout the US, communities have traditionally taken a “Transportation Congestion Management Approach” - widening streets to accommodate development traffic. This has led to wider roadways that can degrade neighborhood character, are expensive to maintain, and are dangerous for cyclists and pedestrians. TDM flips the approach, incentivizing development to reduce the number of trips generated to fit within the existing transportation network.

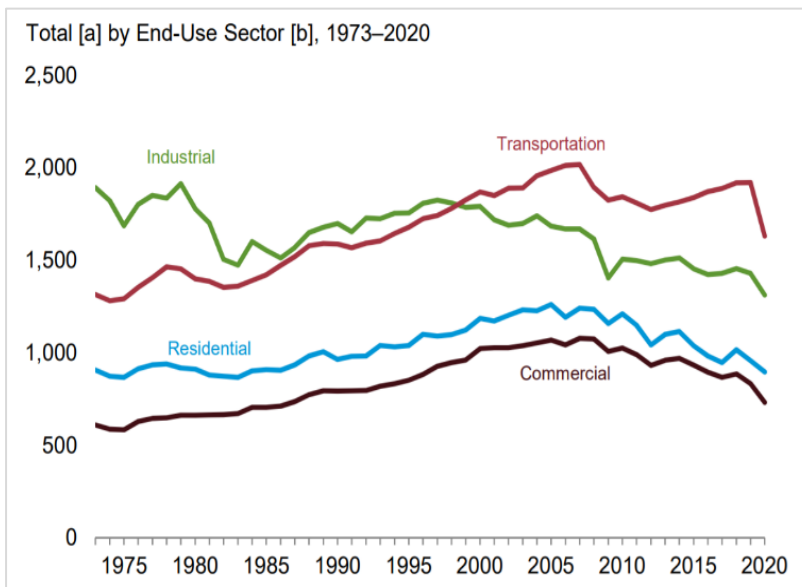


East Washington Ave during rush hour



Ways of addressing development trips

- One of the leading drivers of climate change is carbon dioxide emissions like those produce from automobiles. Since the early 2000s, transportation has become the largest source of emissions. We cannot address climate change without changing transportation – something TDM seeks to directly address. The consequences of climate change have been felt locally. On average we have experienced four additional inches of rain annually over the last 30 years when compared to the 20th Century. This can come unevenly, as was demonstrated in 2018 when the area experienced significant flooding.



Greenhouse gas emissions by sector
www.eia.gov/totalenergy/data/monthly/pdf/sec11.pdf



Madison flooding 2018

5. Madison has several land uses that require or may require TDM plans including: Employee Districts (MGO 28.082), Mixed Center Districts (MGO 28.066), Conditional Uses (MGO 28.183), and Retail Business Establishments (MGO 33.24). For years, application of these ordinances has been uneven and created an environment of uncertainty and confusion. This has been a detriment for developers, decision makers, and staff alike and led to costly project delays for high-quality developments.

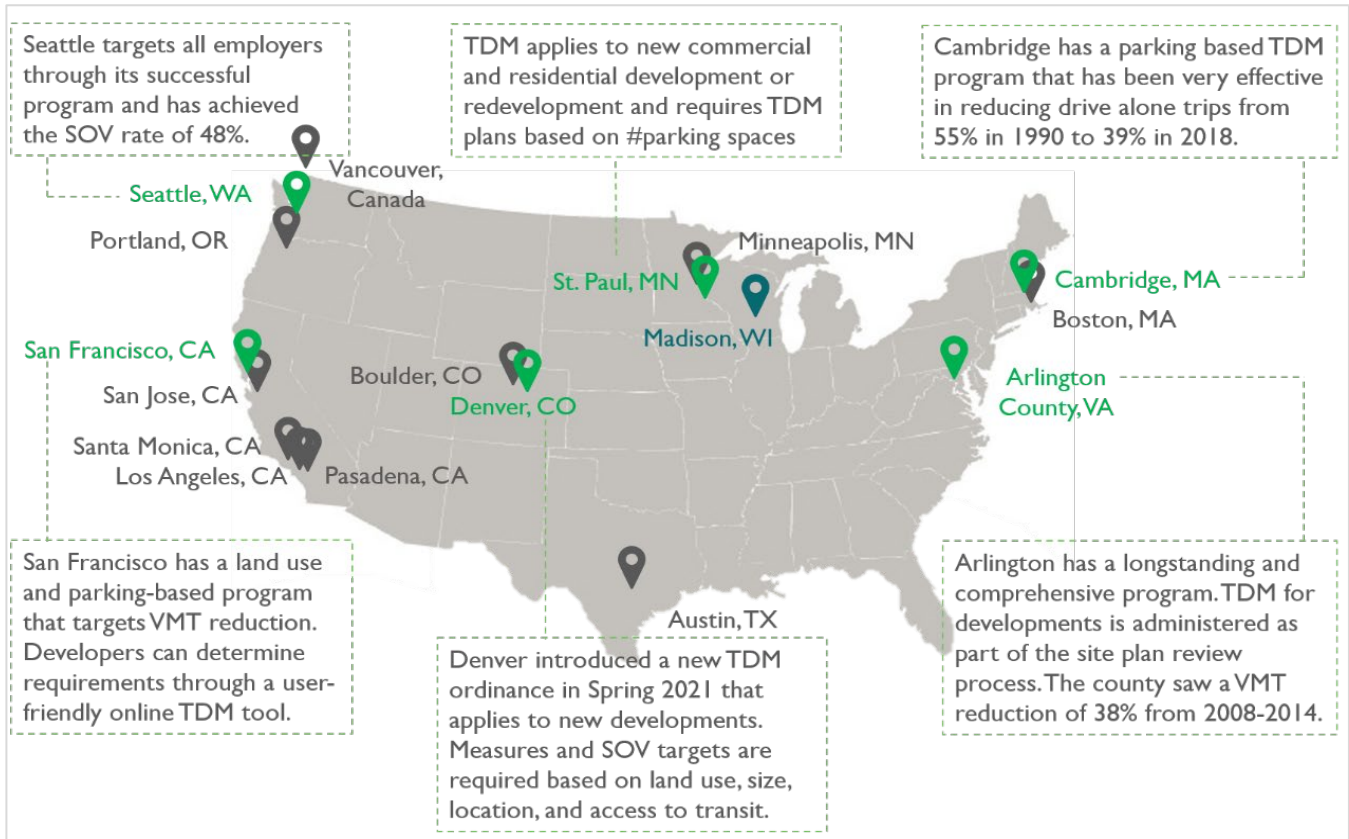
TDM is not new to Madison, but we now have the chance to improve it. Along the way we will create:

- **CONSISTENCY** – Uniform requirements across Madison with targets based on project size and proposed parking capacity.
- **CHOICE** – A menu with a range of TDM measures, from simply installing wayfinding signs to providing a land-use mix.
- **CLARITY** – Straightforward requirements and measure options through a simple online tool.
- **CONVENIENCE** – Streamlined approval process for new or expanded buildings that minimizes the need for external assistance.
- **COMMUNICATION** – Traffic-reducing elements of a project are summarized for the public and policymakers.

EVOLVING BEST PRACTICES

TDM programs have been effectively implemented in cities throughout the nation. One example is Arlington Virginia, which between 2008 and 2014 Arlington documented an average weekday reduction in SOV trips of eight percent with a resulting reduction in VMT of 38 percent county wide.





Madison has studied numerous plans throughout to country to inform its plan. These plans include cities of a variety of sizes and the best, most effective concepts from these programs have been incorporated into the City’s proposed program:



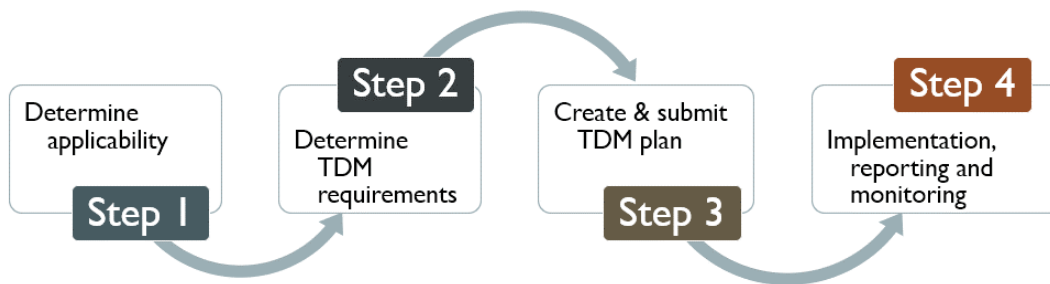
Examples of cities that have implemented TDM

MADISON'S TDM APPROACH

Madison will now be improving its program. Applicability of the program to a project is dependent upon a number of factors including land uses, development size, proposed parking and location.

 <p>Land use(s) Requirements and measures vary across residential and non-residential uses (employment, commercial, institutional).</p>	 <p>Development size Requirements are proportional to the development size, i.e., number of residential units or non-residential floor area.</p>	 <p>Proposed parking Requirements also depend on parking capacity. Higher parking ratios mean more TDM requirements.</p>	 <p>Location Proximity to transit service provides base points. Ability to implement measures influences TDM requirements.</p>
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Madison’s proposed TDM process can be broadly divided into four steps:



For all projects for which the program is applicable, the City has attempted to create a predictable, easy-to-use, staff-driven program that will be easy to participate. To this end, mitigation measure have been identified and an interactive tool put together that would identify TDM requirements based on the characteristics of the property and that would inform applicants of their compliance with the ordinance based upon the mitigation measures that they have selected.

This tool would be submitted to the City as certification of TDM ordinance compliance.

Specific projects may be exempt from the program based upon their size, use, and proposed parking.

IMPROVEMENTS TO THE MADISON PROGRAM

Throughout the program development process the City has collected stakeholder feedback. Captured in the memo *“Proposed Changes to the Draft TDM Program”*, [LINK](#) developer and stakeholder comments have resulted in over 30 changes that make the program more feasible, implementable, and easier to administer. The ordinance provides a mechanism for appeals and for program modifications through the Transportation Commission. Madison’s TDM program will make meaningful changes in transportation to address the congestion and climate challenges we face.

Some of these improvements include:

- Indoor Covered Bike Parking Near Entrance – allow for indoor covered bike parking to be near any building entrance, rather than just main entrance
- Bike Lockers or Secure Storage Room - reduce emphasis on lockers. Removed requirement for specific number of storage lockers, changed to suggestion.
- Bicycle Maintenance Facilities – removed requirement for lubricants, changed to suggestion.
- Clothes Lockers and Showers – Adjusted language to allow to lockers, showers, or both. Increased value of measure to provide 2 points for both lockers and showers, or one point for either lockers or showers alone.
- Shared Fleet of Bikes – removed requirement for number of bicycles in shared fleet, changed mandate to recommendation.
- Complimentary Bikeshare Membership or Passes - clarified language to specify that passes are only required to be distributed to employees that wish to obtain one.
- Shared Fleet of Vehicles – adjust definition for clarity based on stakeholder feedback.
- Emergency Ride Home Program – adjusted definition for clarity and to deemphasize Greater Madison MPO.
- Subsidize Monthly Transit Passes OR daily passes and Complimentary Transit Passes – adjust language to ensure it is clear that passes are only offered to employees/residents that want them.