Met Council Regional Travel Demand Management Study Project Update

December 8, 2022



What Influences Travel Decisions?

Travel Supply

- The available infrastructure that supports travel and the capacity of that infrastructure:
 - Roads (number of lanes)
 - Transit (routes/frequency)
 - Bike and pedestrian infrastructure (lanes, trails, sidewalks)
 - Parking (including park and ride lots)
 - Vehicle availability (personal or shared vehicles)

Land Use

- How far apart are destinations?
 - Where people live
 - Where people work/attend school
 - Where people socialize
 - Where people shop

Travel Demand

- The considerations that impact how travelers might choose to use the infrastructure available:
 - Financial costs (gas, parking)
 - Travel time costs (real or perceived)
 - Time of day
 - Comfort/ease of use
 - Knowledge and information about supply (awareness about options)
 - Passenger and cargo needs



An 8-mile trip to the grocery store, example

Convenience Cost = Cargo/passenger needs, time of day, ease of use and scheduling

Comfort Cost = Warm, welcoming, safe and secure

Time Cost = Travel time and reliability

Trip Cost = Gas, transit fare, parking

Driving

Sunk Cost

Convenience Cost

Comfort Cost

Time Cost

Trip Cost

Bus

Convenience Cost

Comfort Cost

Time Cost

Trip Cost



What levers can we pull?

Travel Supply

- Build more roads, transit, bike and pedestrian infrastructure like bike lanes and sidewalks, and parking
- Operate more transit on existing roadways and create prioritization for high-density modes (e.g., transit-only bus lanes)

Land Use



Encourage development that reduces the need for certain trips and discourage development that requires more trips



Encourage development that is near sustainable, high-density transportation modes (e.g., transit)

Travel Demand



Improve information about travel conditions (real-time, personal)



Provide accurate and timely information about alternative modes



Manage pricing to encourage use of services that reduce congestion and discourage use services that increase congestion



Make high-density and sustainable modes more attractive and comfortable (e.g., timely and safe)



Background + Purpose of This Study

The Regional Travel Demand Management Study will provide Council staff and other stakeholders with deeper understanding of:

- The current state of practice for TDM in the region, nation, and internationally;
- The short-term and long-term opportunities and challenges ahead for TDM;
- How TDM can be better supported by the Council, its transportation/land use planning and implementation partners, and the private and non-profit sector.



Regional TDM Study Scope of Work

- Existing Conditions (Task 2) DRAFT COMPLETE
 - Review of Met Council, MnDOT, TMOs, local cities/counties, and employer plans and policies
- State of the Practice (Task 3) DRAFT COMPLETE
 - Review of peer regions around the country and best practices
- TDM Framework (Task 4) DRAFT UNDER REVIEW
 - Goals, Objectives, Potential Strategies
- Evaluation of Regional TDM Strategies (Task 5)
 - SWOT Analysis, Future Mobility Scenarios, and Strategy Prioritization
- Action Plan (Task 6)



Regional TDM Study Schedule

Period of Performance:

November 2021-May 2023

- Project Management Team Meeting
- Technical Advisory Group Meeting
- Workshops



Task	Key Activity	2021				2022											2023			
		Nov	Deo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dea	Jan	Feb	Mar	Apr	Ma
Project Kickoff				-	100		Ť	_			-	Ė				-			_	
Task 1 Project Management	Weekly Progress Meetings																			
	Project Management Team																			Т
	Technical Advisory Team						Æ							•				4		
	Engagement Strategy						T		T					Ţ		T		Ĭ		
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Task 2 Regional Existing Conditions Summary and Evaluation	Inventory Existing Conditions						Ì													
	Stakeholder Interviews																			
	Agency/Partner Outreach						П													
Task 3 State of the Practice Summary	TDM Best Practices Review						H													
	Expert/Peer Interviews	L												ļ						
Task 4 Develop Regional TDM Framework	TDM Strategies Review								+					ł						
	Outreach - Workshops										a							П		
	TDM Framework													1	A .					
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Task 5 Evaluation of Regional TDM Strategies	SWOT Analysis											•	$\overline{}$	_	_	7				
	Outreach - Workshops													7	1		•			
	Final Evaluation Memo																•			
Task 6 Action Plan	Draft Action Plan																			
	Final Action Plan																			

Task 1: Project Management

- Project oversight provided by:
 - Project Management Team
 - Staff from Met Council, Metro Transit, MnDOT, and TMOs
 - Meets 1-2 times/month
 - Technical Advisory Team
 - Representatives from Met Council, Metro Transit, MnDOT, TMOs, cities/counties, regional transit and mobility service providers
 - Five meetings across duration of study



Task 2: Existing Conditions — Inputs to Technical Memorandum

- Review of local plans, policies, and travel-related research
- Stakeholder group discussions
 - Transportation management organizations
 - Minnesota DOT
 - Metro Transit
 - Suburban transit agencies
 - Metropolitan Council
- Surveys of TDM practitioners at cities, counties, employers, and developers
- Traveler Behavior Inventory data
- Teleworking + COVID impacts studies



Task 2: Existing Conditions Key Findings

- Strong interest in sustainable transportation throughout region and many organizations have TDM-related goals and services
 - TDM mandates in Minneapolis, St. Paul, Bloomington, and Eden Prairie
 - Traffic impact analysis requirements and density bonuses for developments
 - Parking maximums and removal of parking minimum requirements
- Policies challenges to TDM include a lack of means for enforcing strategies or difficulty of promoting TDM strategies without legislative mandates or development regulations that support TDM
- Several organizations and programs offer incentives or participate in marketing campaigns to promote transit and active transportation modes including telework programs, commute ambassadors, reduced fare or subsidized transit programs, and commuter tax benefits
- Lack of:
 - Defined regional structure/defined roles
 - "One-stop-shop" with all options for travelers
 - Regional goals and objectives for TDM funding and services
 - Coordinated performance monitoring and evaluation



Task 3: State of the Practice Review — Topics covered in Technical Memorandum

TDM Service Delivery

- Structures for Management, Coordination, and Administration
- Funding

Policies and Legal Requirements

- Land Use Policies
- Trip Reduction and Vehicle Miles Traveled

Roadway Management

- TDM and Corridors/Districts
- Road Pricing and Tolls
- Cordon Area Congestion Pricing
- Curb Management
- Parking Management

Incentives, Marketing and Communications

- Reduced Fare Programs
- Gamification and Innovative Incentive Programs
- Marketing Campaigns



Policies and Legal Requirements:

Land Use Policies

- District-wide TDM Regulation (Boulder, Colorado)
 - Boulder Junction residents and employees receive several transportation benefits to limit impact of redevelopment.
- Development Policies (Alexandria, VA)
 - Developments exceeding a designated limit have to submit a special use permit application.

Boulder Districts with EcoPass (Boulder Transportation Connections)



Annual unlimited bus pass that can be purchased by employers or neighborhoods.

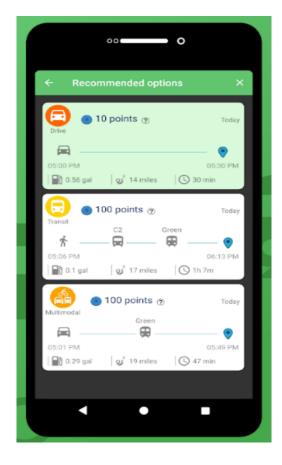




Incentives, Marketing and Communications: Gamification and Innovative Incentive Programs

- Pedal Ahead (San Diego, CA)
 - "Loan-to-own" e-bike program.
 - Participants who ride 1,800 miles/year for 2 years get to keep their bike for free.
- IncenTrip (Washington, DC Region)
 - Rewards users with points that can be redeemed for cash when using non-SOV modes during peak.

incenTrip screenshot (Google Play)





Task 3: State of the Practice – Peer Regions Best Practices

- TDM programs can be implemented uniformly across a region or more locally by local governments and organizations, but the most successful are funded, managed, and coordinated regionally, often through an independent brand, to communicate options to travelers consistently
- TDM regulations and development policies provide the "teeth" for residential and commercial development to consider TDM and offer options to tenants, customers, and employees that lead to reduced VMT
- Trip reduction and commuter benefits laws and ordinances provide the "teeth" for employers to participate and offer benefits to employees that lead to reduced VMT
- Innovative incentives programs and marketing campaigns provide the "carrot" for inform travelers about options and encourage them to participate by providing rewards or cash payments



Task 4: TDM Framework – Stakeholder Engagement

- Held two workshops in August 2022 to gather input from partner stakeholder organizations including MnDOT, cities, TMOs, nonprofits, and developers
- Opportunities and needs identified:
 - Focus on strategies that support both commute trips and non-commute essential trips
 - Increase availability and awareness of traveler options
 - Improve TDM program service delivery (to support both travelers and partner organizations)
- Barriers and challenges identified:
 - Perceived and real inadequate safety and security on transit and active transportation modes
 - Unaffordable travel options
 - Lack of accessibility of modes and trip information for certain user groups



Task 4: TDM Framework – Connections to 2040 Transportation Policy Plan (1)

TDM-Related Goals	TDM-Related Objectives					
Transportation System Stewardship	Operate the regional transportation system to efficiently and cost-effectively connect people and freight to destinations					
Access to Destinations	 Increase the availability of multimodal travel options, especially in congested highway corridors. Increase travel time reliability and predictability for travel on highway and transit systems. Increase the number and share of trips taken using carpools, transit, bicycling and walking. Improve the availability and quality of multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically under-represented populations. 					
Competitive Economy	 Improve multimodal access to regional job concentrations identified in Thrive MSP 2040. Invest in a multimodal transportation system to attract and retain businesses and residents. 					
Healthy and Equitable Communities	 Reduce transportation-related air emissions. Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities through the use of active transportation options. 					
Leveraging Transportation Investments to Guide Land Use	 Focus regional growth in areas that support the full range of multimodal travel. Encourage local land use design that integrates highways, streets, transit, walking, and bicycling. 					



Task 4: TDM Framework – Connections to 2040 Transportation Policy Plan (2)

2040 Transportation Policy Plan Goals and Objectives themes related to TDM:

- Be efficient and cost-effective with investments
- Make carpools, transit, bicycling and walking more available, attractive, and reliable so that people use them more and contribute less pollution/GHGs
- Prioritize historically under-represented populations
- Invest in transportation that connects people to jobs and attracts and retains residents and businesses
- Future growth and land use design will support and encourage multimodal travel

These are existing priorities and a necessary starting point, but TDM Study can identify new priorities moving into 2050 planning



Task 4: TDM Framework – Goals and Objectives

- **Goal 1:** Vehicle miles traveled (VMT) from single occupant vehicle trips are reduced because travelers view alternatives to SOV travel as attractive, reliable, safe, and easy to use.
- Goal 2: Regional and local transportation and land use policies and programs encourage demand for non-SOV travel.
- **Goal 3:** TDM programs, policies, and incentives are equitably focused and delivered.
- **Goal 4:** TDM programs and services are coordinated and delivered consistently throughout the region and by all TDM service providers and partners.



Task 4: TDM Framework – Goals and Objectives (1)

- **Goal 1:** Vehicle miles traveled (VMT) from single occupant vehicle trips are reduced because travelers view alternatives to SOV travel as attractive, reliable, safe, and easy to use.
 - Non-SOV transportation options feel inviting and safe for all users.
 - Trip planning information (including ridesharing/microtransit/paratransit, transfers) is highly visible, easy to access and understand.
 - Non-SOV transportation options are coordinated, connected, and easy to navigate.
 - Non-SOV transportation options are cost competitive.



Task 4: TDM Framework – Goals and Objectives (2)

- Goal 2: Regional and local transportation and land use policies and programs encourage demand for non-SOV travel.
 - TDM is effectively integrated in transportation and land development planning processes at early stages.
 - Government plans, policies, and investments prioritize development that is connected to high-quality bicycle, pedestrian, transit networks.
 - The private sector (employers and developers) is incentivized and equipped to improve the availability, attractiveness, and quality of non-SOV travel.
 - Partners, including law enforcement agencies, are involved in campaigns to help travelers feel safe and comfortable using non-SOV transportation modes



Task 4: TDM Framework – Goals and Objectives (3)

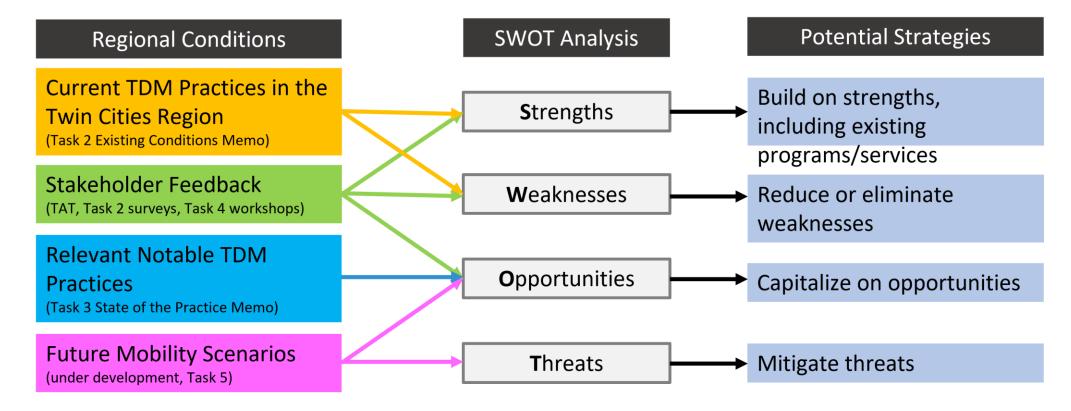
- Goal 3: TDM programs, policies, and incentives are equitably focused and delivered.
 - TDM programs and policies address needs of historically under-represented populations and vulnerable populations in an equitable manner.
 - TDM programs include outreach to underserved communities to understand and address needs
 - TDM programs and policies include off-peak and non-commute trips (essential trips).



Task 4: TDM Framework – Goals and Objectives (4)

- Goal 4: TDM programs and services are coordinated and delivered consistently throughout the region and by all TDM service providers and partners.
 - TDM Service providers and partners create consistent communications and expectations for TDM service users
 - TDM services are streamlined and consistently delivered regionally, but customized locally for different contexts (e.g., rural, suburban, and urban).
 - TDM programs and service performance are evaluated for effectiveness in meeting TDM goals and regularly monitored during implementation.
 - TDM program funding is effectively leveraged to reduce the need for investments in additional roadway capacity.

Task 5: Evaluating TDM Strategies – Strategy Development Approach





SWOT Analysis – Strengths

- The Twin Cities region has all the core elements of a TDM program (e.g., rideshare matching, vanpooling, outreach, marketing, promotions, public transportation), as well as TDM-supportive infrastructure and tools/services.
 - Metro Transit initiatives: pass programs, mobility hubs, and microtransit accessibility efforts
 - Additionally, suburban transit agencies, Transportation Management Organizations (TMOs), and some large employers also implement various TDM strategies
- There is significant **regional momentum**, interest, and support for TDM among implementing partners and stakeholders.
- The **Regional Solicitation process** helps prioritize funding for TDM and provides opportunities for smaller organizations to address gaps in regional network.
- Many local governments have TDM-related policies, plans, and ordinances in place, such as development requirements and ordinances, Complete Streets policies, comprehensive plans that include TDM-related goals and targets, and bicycle parking requirements.



SWOT Analysis – Weaknesses

- Lack of coordination on regional TDM goals and objectives, performance monitoring, organizational structure, reporting requirements, and land use vision/policies due to lack of TDM organizational structure.
- The Regional Solicitation process lacks **measurement of project success** and has **furthered the inconsistency of TDM services** across the region.
- The placement of Commuter Programs within Metro Transit impedes transparent, collaborative TDM decision-making due to Metro Transit's **organizational structure** and goals.
- There is a lack of shared understanding of TDM concepts and strategies among partners, agencies, and elected officials.
- **Policy challenges** include a lack of means to enforce TDM strategies and inadequate requirements for comprehensive plans and developers.
- **Funding challenges** include inability to generate revenue from transit services and a state-level focus on capital investments.
- Alternative transportation options are not always **convenient or viable** enough for travelers to switch to non-SOV modes.



SWOT Analysis – Opportunities

- Organizational structure improvements could include creating a unified regional outreach strategy, implementation council, and stakeholder advisory committee.
- Regional Solicitation could be leveraged to incentivize changing policies, incentives, and land use requirements
- There is opportunity to integrate TDM programs and services into the regional MaaS/MOD system (e.g., integrated payment for transit and vanpooling).
- There are significant opportunities to **expand TDM in the private sector** through employer-based services and development-based initiatives.
- Increased outreach, marketing, and informational strategies will increase awareness among travelers, employers, local governments, and elected officials.
- Changing travel may present new opportunities to encourage mode shift. patterns and new/expanded modes
 - Microtransit, on-demand services, vanpooling, and other existing modes can help reach new riders and overcome built environment challenges.



SWOT Analysis – Threats

- The region **lacks political champions** for TDM at all levels travelers, local governments, elected officials.
- Changing travel patterns may lead to increased driving.
- Emerging mobility options and private sector services (e.g., EVs, on-demand services, ride-hailing) can be **disruptive to public sector services** with long-term investments
- Constantly evolving technology is **elevating travelers' expectations**, including availability of real-time information and on-demand services, while further segmenting the market by age, income, and other characteristics.
- Emerging vehicle technologies (e.g., electric, autonomous) may lead to increased SOV trips and vehicle miles traveled.
- Funding for TDM efforts can fluctuate based on the economy and/or changing political priorities, causing challenges for sustaining consistent levels of service.



Task 5: Evaluating TDM Strategies — Future Mobility Scenario Considerations

Future of Work

- Increased/Decreased Telework
- Increased Hybrid Work Schedules

Transportation/Vehicle Technology

- Electric Vehicle Adoption, speed of overall vehicle fleet electrification
- Autonomous Vehicles
- Micromobility
- Carshare
- TNCs
- Private Vehicle Ownership (shortages, chip shortages, price increases, gas price increases)

Climate and Equity Policies

- Statewide VMT Reduction Measure (forthcoming)
- Local climate plans, goals and objectives
- Local and regional equity policies

Future Funding Availability

- VMT tax replacing gas tax
- Federal Infrastructure Bill

Economic Future and Pandemic recovery

- Commerce / E-Commerce Spending habits
- Inflation (IRA inflation reduction act)
- Jobs/Housing preferences
- Land use development
- Population growth/decline
- Transit ridership and funding recovery projections
- Public safety concerns (similar to what we heard in the workshops, and including bike/ped safety concerns, security and vulnerability feelings)



Potential Strategies Analysis

Characteristics

- ☐ Cost
 - (High, medium, low)
- □ VMT Reduction (High, medium, low)
- GHG Reduction
 (High, medium, low)
- ☐ Equity
 (High, medium, low)
- Barriers
 (High, medium, low)
- ☐ Timeline (Near, Mid, Long-term)

VMT reduced because alternatives

are attractive

- Non-SOV inviting/safe (Yes, no)
- Trip planning easy (Yes, no)
- ☐ Connected options (Yes, no)
- Affordable options (*Yes, no*)

Policies and

Goals and Objectives

programs encourage demand for non-SOV

☐ Planning integration (Yes, no)

travel

- Bike/ped/transit development (Yes, no)
- Private sector incentives (Yes, no)
- Partners involved (Yes, no)

Equitable programs, policies and incentives

- Addresses underrepresented groups (Yes, no)
- Outreach to underrepresented groups (Yes, no)
- ☐ Includes off-peak travel (Yes, no)

Programs and services are coordinated and delivered consistently

- Consistent communication /expectations
 - (Yes, no)
- ☐ Streamlined services (Yes, no)
- ☐ TDM performance measures align with goals
 - (Yes, no)
- Reduced need for more road capacity (Yes, no)



Examples of Strategies

- Establish a brand for regional TDM "umbrella" program with one branding that all TMOs include on their materials (make requirement of regional solicitation funds)
 - Establish regular working group meetings for TDM implementers (e.g., marketing)
- Develop telework/multimodal incentives/gamification program/application
- Establish regional E-Bike Loan to Own Program
- Establish a regional TDM ordinance aimed at commuter benefits and encourage consistent land-use oriented local TDM ordinances
- Establish a regional Transit Ambassadors Program



Upcoming Tasks and Next Steps

- Task 5: Evaluation of Regional TDM Strategies (Nov 2022-March 2023)
 - Future Mobilities Scenarios
 - SWOT Analysis
 - TDM Strategies
 - Equity Analysis
 - Workshop Planning
- Task 6: Action Plan (March 2023-May 2023)



Next Steps -Stakeholder Engagement

- Met Council has a separate engagement contract which will supplement workshops
 - Zan Associates will lead additional engagement throughout Fall 2022
 - Audience: traditionally underserved or less engaged user groups
 - Goal: collect feedback on the goals and objectives and potential TDM strategies beyond transportation-related organizations
- Workshop(s) #2 to be held January/February 2023
 - Audience: local governments, TMOs, employers, developers, nonprofits
 - Goal: collect feedback on strategies including prioritization and key players to implement

