



TRANSPORTATION POLICY PLAN

Chapter 11: **Work Program** - Proposed Future Studies

2040





TRANSPORTATION POLICY PLAN

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Work Program



The Metropolitan Council will carry out or participate in many studies and plans over the next three years. This is not an exhaustive list of all work to be completed by the Council, but rather a list of projects that will contribute to the work of the Council and will likely require coordination among agencies. Several ongoing work items that are regularly conducted by the Council are not included here. The studies listed here will be used to gather additional information and perform further analysis to inform future revisions to this policy plan. The next scheduled update of the Transportation Policy Plan, as required by state and federal law, is due in 2018.

Highway Related Studies

Identify Regional Highway System Costs of Operation, Asset Preservation, and Other Spending

This is the first Transportation Policy Plan to identify the long-term costs for MnDOT of highway operations, safety, bicycle, and accessible pedestrian projects. The cost information in this plan is based on the findings in the *Minnesota State Highway Improvement Program* (MnSHIP) and the *2012 Highway System Operations Plan* (HSOP). It is also the first plan to identify revenues and spending on the local transportation system. In order to make more informed and appropriate decisions on highway investments, comprehensive and accurate information is needed on the existing system revenues and spending. The costs associated with all aspects of operating, maintaining and preserving the regional highway system needs to be identified and categorized. The Council in coordination with MnDOT and regional transportation partners, and building on previous work, will develop more refined costs and revenues to include in the next updates of MnSHIP and the Transportation Policy Plan. The emphasis of this work will be on the regional highway system including the principal arterials (NHS system) and A-minor arterials.

Arterial Traffic Management Center

Optimizing traffic flow on arterial roadways can be an effective strategy to alleviate congestion and reduce air quality emissions. Many metro areas have established an arterial traffic management center to oversee and coordinate operation of non-freeway principal arterials and minor arterials, similar to MnDOT's Regional Traffic Management Center, which oversees freeway operations in this metro area.

Minor arterials and non-freeway principal arterials come under the jurisdiction of many agencies, including MnDOT, counties and cities, an arrangement that complicates coordination of arterial traffic signals and safety across jurisdictions. Preliminary discussions have been held on the need for, and feasibility of, establishing such a center in this region. Work will be done to further assess the feasibility of such a center with the partners that operate the systems, as well as transit agencies and emergency providers that also have an interest in signal timing, including priority and preemption.

MnPASS System Plan Update

The *Metropolitan Highway System Investment Study* and *MnPASS 2* studies were completed just before the Council adopted the *2030 Transportation Policy Plan* in November 2010. The Transportation Policy Plan documented the tiered priority investments. In the process to update the 2040 plan, a number of MnPASS-related questions have been raised that deserve further study and discussion in the region. The Council and MnDOT will carry out an analysis intended to be the foundation for a revision of the *MnPASS System Plan*, with input from regional transportation partners. At this time, a few questions about the work being considered include the following:

- Are additional corridors feasible candidates for MnPASS?
- Which of the feasible corridors would require exceptions to Interstate design standards and for what reasons?
- Does the work done to date on express bus with transit advantages and highway bus rapid transit require modification of the MnPASS Plan or its application? Should MnPASS priorities be modified given the new *Thrive* policy direction and 2040 regional forecasts?

Principal Arterial Intersection Conversion Study

Freeways with grade-separated interchanges carry traffic faster and, in most cases, are safer than expressways, which are multi-lane highways with at-grade, signalized intersections. Many local agencies and other transportation stakeholders have expressed a desire and pursued state and federal funding to convert some expressway intersections to interchanges to increase the safety and mobility for all people and freight.

As a work program item for the future update of the *2040 Transportation Policy Plan*, the Metropolitan Council and MnDOT will work with regional highway partners to analyze all intersections on the non-freeway principal arterial system within the urban service area to identify and prioritize specific intersection conversion projects

This study proposes conducting an analysis of the non-freeway principal arterials in the region to identify and prioritize specific intersection conversion projects. Building on and incorporating the access study completed by MnDOT and its local partners for U.S. Hwy. 10, this ranking of importance of each highway intersection and/or highway segment will allow the region and its partners to form a common vision for the future and estimate a cost for these important highways. It will also allow the region to state its support for specific projects seeking funding from local, state, and federal sources – for example, the regional solicitation and potential state funding programs for interchange.

Important study considerations include:

- Consistency with the region's *Thrive MSP 2040* outcomes and policies
- Consistency with MnSHIP
- Consistency with local comprehensive plans
- Policies that need to be addressed in the Transportation Policy Plan
- Highway operational/safety issues, and
- Broad policy approaches such as lower-cost/high-benefit improvements and possible active traffic management applications.

Congestion Management and Safety Plan

The *Congestion Management and Safety Plan* (CMSP) process continued to advance during development and adoption of the *2030 Transportation Policy Plan* (adopted November 2010). The *2030 Transportation Policy Plan* discussed and listed examples of spot mobility improvements. While MnDOT has since published the results of the latest CMSP process, a number of CMSP-related questions arose during the process to update the *2040 Transportation Policy Plan* that deserve further study and discussion.

In addition to continuing to address and further develop many of the CMSP opportunity areas identified in this plan, MnDOT and the Metropolitan Council will continue to work with regional highway partners to update the Congestion Management and Safety Plan at least every four years and prior to updates to MnSHIP and the transportation plan.

Transit Related Studies

Further Defining the Process for Setting Transitway Priorities

This Transportation Policy Plan adds the framework of a two-step process for determining regional priorities for undesignated funding for transitway expansion in the plan. The framework will require detailed definition of the process for setting transitway priorities, implementation steps, factor weighting, measures, methodologies, and potential benchmarks. The Council will collaborate with key funding partners, including the Counties Transit Improvement Board, on this work and build on the work through federal criteria, the Program of Projects, and corridor studies.

Update of the Park-and-Ride Plan

The regional *2030 Park-and-Ride Plan* will need to be updated to reflect the substantial work that has been completed on the system and the possible changes to demand based on 2040 demographic forecasts. The update will look at the long-term needs for the park-and-ride system and identify general areas for expansion based on travel sheds or markets. This update will be coordinated with all transit providers in the region.

Update of the Regional Transitway Guidelines

The *Regional Transitway Guidelines* were completed in 2012 as a starting point for establishing consistency in project planning and delivery across multiple agencies. In developing this first version, it was acknowledged that additional updates may be needed to update the information or address new topics such as dedicated bus rapid transit or land use best practices. This update will be coordinated with relevant stakeholders.

Update of the Regional Service Improvement Plan

Every two years, regional transit providers will prepare a short-term service improvement plan that identifies their priorities for transit service expansion over the following two to four years. A regional committee will review and prioritize proposed transit expansion projects using the technical factors listed in “Transit Investment Direction and Plan.” The committee will recommend a *Regional Service Improvement Plan* for approval by the Metropolitan Council.

Bus Stop Facility Guidelines

Metro Transit will lead an effort to further define standards for bus stop amenities and improvement opportunities. This work will build off the detail available in [Appendix G](#) and include standards guiding investments in bus stop amenities, areas of specific investments, and approximate funding needs. The guidelines will not address larger stations such as light rail or bus rapid transit stations or major park-and-ride or transit center facilities. The focal point will be on the standalone bus stops that are located throughout the Metro Transit service area.

Modern Streetcar Regional Policy Discussion

The “Transit Investment Direction and Plan” acknowledges the emergence of modern streetcars as a mode under consideration in a number of corridors around the region. Modern streetcars are not included as a transitway mode because the region will need to have a dialogue on the role of streetcars in the transit system and potential funding options for the long-term investment in a system.

The Metropolitan Council will lead a dialogue with regional partners, including cities and counties, that will inform the *2040 Transportation Policy Plan* on how streetcars should be reflected in the plan. An introduction and list of policy questions related to modern streetcars is included in the “Transit Investment Direction and Plan.”

Land Use and Transportation

Update of the Guide for Transit-Oriented Development

The “Land Use and Local Planning” section of the *2040 Transportation Policy Plan* outlines key requirements and policy considerations for local governments when planning land use around the transit system. The Council will collaborate with local governments to update the more detailed technical guidance on transit-oriented development to reflect the latest best practices and policy considerations. This work will also include the consideration of ways to better measure total station activity in comprehensive and station-area plans in anticipation of future policy work. The *Guide for Transit-Oriented Development* was first developed in 2006.

Bicycle and Pedestrian Related Studies

Implementing Cycloplan for Updating the Regional Bicycle System Inventory

Cycloplan is an extension of the regional, online bicycle trip planning resource known as Cyclopath. It is designed for use by local agency planners to update the regional bicycle system inventory with data from city and county bicycle plans and newly constructed projects.

Metropolitan Council staff will work with local agencies and MnDOT to define a universal set of regional map attributes and will then make available this new online tool to local practitioners. This work will culminate with a revised and updated regional bicycle system map inventory to be published to the Council's web site for access by the general public.

Refining the Regional Bicycle Transportation Network

To further refine the Regional Bicycle Transportation Network (RBTN) established in this plan, the Council will work with local agencies and MnDOT to:

- Identify specific bikeway alignments within the broad corridors established in the regional network
- Using the definition for Critical Bicycle Transportation Links provided in this plan, identify specific locations of critical gaps and barriers to be overcome, and opportunities to improve or eliminate them, and adjust the RBTN alignments, as needed
- Identify segments of the RBTN that have existing bicycle facilities and include data on facility type by location

Freight Related Studies

Regional Industrial Lands Assessment

The Council will analyze existing land uses and zoning along the Mississippi River system and in major metro rail corridors to determine (1) the land and transportation needs of waterway and rail corridor-dependent industries and (2) the extent to which developable land for industrial/manufacturing uses may be threatened by non-industrial development. This information will then be used by local agencies in preparing their 2018 comprehensive plan updates.

Identify Truck/Highway Freight Needs

Although the roadways most heavily used by trucks are easily defined by heavy commercial truck counts collected by cities, counties, and MnDOT (see [Figure 1-7](#) of this plan), determining whether those truck flows are impacted by congestion or other issues, such as safety problems or tight turn radii, requires much more data collection and analysis. For instance, many of the Interstates are used by through trucks traveling in off peak hours, so those high truck volume routes may not be as impacted by congestion as local trucks which travel routes with lower total truck volume, but must travel during peak daytime hours when their customers are available to receive deliveries. Prior to the 2018 update of the plan, Council and MnDOT staff will continue to collect and analyze truck volumes collected by newer, evolving methods, such as cell phone tracking, to determine where highway improvements could most benefit trucks. Data from the Statewide Freight Plan update and Industrial Lands Inventory Study will also be analyzed to determine needs, for example, whether access improvements are needed to intermodal facilities in the region.

Aviation Related Studies

Evaluation of the Regional Aviation System

The 2009 aviation system technical report should be updated before the adoption of the next Transportation Policy Plan in 2018. The update will include an analysis of the system changes and improvements since 2009, system performance evaluation, and local and national system forecasts and trends. This study will also look at the impacts of the recent Long-Term Comprehensive Plans that will have been adopted by the Council for the regional aviation system. This study could be financed in part through a planning grant from the Federal Aviation Administration.

Performance Measures and Data-Related Studies

Identifying and Refining Goals, Objectives, Strategies and Performance Measures for Planning and Programming

Comments received from the public outreach process indicated that the plan goals, objectives and strategies, their inter-relationship, and the related performance measures needed further review.

A number of the potential performance measures identified in developing the *2040 Transportation Policy Plan* require further development and/or refinement before they can be used in this or future policy plans. Also, the performance measures set by the U.S. Department of Transportation (USDOT) are scheduled to be released in 2015. After the Minnesota Department of Transportation has set state targets for those measures, the Metropolitan Council will have approximately six months to set targets for the region.

Considering the issues involving performance measures, a work group should be established or identified to assist Council staff in:

- Reviewing the goals, objectives, strategies and performance measures used in this plan and developing suggestions for changes in the next plan
- Reviewing the relationship between the goals, objectives, strategies, and performance measures used in this plan and developing suggestions for changes in the next plan
- Reviewing the overall structure of the plan and developing suggestions for changes in the next plan
- Developing and selecting targets for the USDOT performance measures
- Developing additional or replacement local performance measures (In recommending performance measures, the work group will consider the availability of data and provide input on how the data is, or should, be obtained and analyzed)
- Determining method for measuring improvements in locally developed performance measures (targets versus trends)

Data Collection to Support Performance-Based Planning and Programming

This Transportation Policy Plan starts the work needed to prepare a performance-based regional transportation plan as required by MAP-21. The state and region will finalize the performance measures that will be used in the coming months. While existing data will be used to the extent possible, new and/or different data will be needed. This task recognizes the coordination and costs that will be involved in obtaining the needed data for the regional highway system. The Council will work with MnDOT, the counties and the cities to ensure the needed data is collected in the most cost effective manner. This work will begin soon since some data needs are now known. The Metropolitan Council *Performance Based Transportation Planning* study recommends that most performance measures be updated on an annual basis. The schedule for updating

data for all performance measures needs to be identified. Such a schedule should consider data availability, timing of data sources, lag time of data sources, etc. The format for reporting data and progress towards targets (once set) should also be developed. This does not replace the Transportation System Performance Evaluation that is prepared prior to each plan update, but supplements that document in intervening years.

2020 Travel Behavior Inventory

Every 10 years, in conjunction with the United States Census, the Metropolitan Council conducts a battery of surveys to find out where, how, when, how often, and why people in the region travel. The surveys are used to provide policymakers and researchers the most current data about travel in the region. They are also used to develop updates to the region's travel demand forecasting models, which are used to forecast traffic and transit ridership for all major projects. Data is collected through interviews and surveys.

Recent events with the economy, the housing market, and the price of fuel have shown that a survey once every 10 years may not capture data in an accurate and timely manner. The Council will evaluate the need for a more frequent TBI data collection schedule, along with the benefits and problems related to a more frequent effort. Nevertheless, planning for the next Travel Behavior Inventory, even if it is conducted in 2020, will need to begin in the 2018-2019 timeframe.

2015 Transit On-Board Survey

A random sample of transit system riders on bus, light rail transit, and commuter rail are given surveys to fill out describing their trip. This helps the region gather more detailed information about the travel patterns of transit users.

Safety Planning and Priorities in the Region

Significant safety planning has been done in the region through MnDOT's *Toward Zero Deaths* initiative and development of an updated statewide *Strategic Highway Safety Plan* that is expected to be adopted in the summer of 2014. MnDOT also partnered with each county in the state to develop County Road Safety Plans, which were recently completed for the counties in the Twin Cities region. To assist with the goal of improving safety for all users of the system in the region, the Council will review statewide and local safety plans, crash data, and other safety planning efforts to identify safety needs and priorities for all modes within the region, in coordination with other local partners.

CMAQ Performance Plan

MAP-21 established requirements for a Congestion Management/Air Quality performance plan (CMAQ), which applies to metropolitan planning organizations with a population of over one million in air-quality nonattainment or maintenance areas. The Council will work with MnDOT on this plan as well as their annual CMAQ report to the USDOT. Performance measures and target

setting for emissions and traffic congestion reduction for the CMAQ program will be established through rulemaking, which is tentatively scheduled for late 2015. Results from rulemaking are expected to include the following:

- Completion and updates expected biennially
- Baseline levels for traffic congestion and on-road mobile source emissions
- A progress report on achievements in reaching performance targets described in 23 U.S.C. 150(d)
- A description of the projects identified for CMAQ funding and a projection of how these projects will contribute to achieving the emission and traffic congestion reduction targets pursuant to 23 U.S.C. 150(d)
- A separate report assessing the progress of the projects under the previous plan in achieving the air quality and congestion targets of the previous plan
- Submission of this plan with the CMAQ annual report for that year, which is submitted by MnDOT

Strategies for Reducing Greenhouse Gas Emissions

A central issue of *Thrive MSP 2040* and the *2040 Transportation Policy Plan* is the reduction of greenhouse gases in line with state goals from the Next Generation Energy Act. A study is proposed that would, on a regional level, inventory sources of greenhouse gas emissions, identify direct and indirect transportation sources and suggest specific strategies that would be effective in reducing emissions long- and short- term. The study would look at existing transportation and land use strategies, as well as examine other local, regional, statewide, and national possibilities and help to define the role the region can take in advancing them.

Equity

Equity Analysis for Transportation

The Council's *Choice, Place and Opportunity: An Equity Assessment of the Twin Cities Region* (2014) analyzed the region and its investments to understand patterns of need and opportunities. To fully integrate equity into the transportation planning process, the Council will conduct additional analysis on transportation-related issues. Two potential areas for study are safety outcomes by race and income and spending on preservation and maintenance and condition of transportation facilities by race and income. To aid in using equity, including affordable housing, as a factor in setting priorities for transportation investments, the Council will also develop more robust methods of analyzing the benefits and impacts of these investments by race, ethnicity, and income.