Highest Priority Performance Measures for the TPP

The following list of measures are the highest priority performance measures as identified by modal working groups. These groups consist of staff from the Met Council, MnDOT, cities, counties, advocacy groups, and private sector organizations. The measures are grouped by the goals of the Transportation Policy Plan (TPP). Measures highlighted in red were identified by the Policymaker Ad Hoc Working Group which is composed of members from the Metropolitan Council Transportation Committee, the Transportation Advisory Board (TAB), and the Counties Transit Improvement Board (CTIB).

A. Transportation System Stewardship

Roadway Pavement Condition

- Description: Measures pavement condition on the Principal and A-Minor Arterial roadway system. Federal legislation requires measuring pavement condition on the Principal Arterial roadway system.
- Current Value (2013): On Interstates, 60.9% in good condition, 1.5% in poor condition; On non-Interstate Principal Arterials, 59.5% in good condition, 2.2% in poor condition
    - Data Source: MnDOT

Bridge Condition

- Description: Measures the percent of deck area on good or poor condition bridges. This measure covers bridges on the Principal and A-Minor Arterial system. The measure is weighted by size of bridge (deck area) instead of by number of bridges. Federal legislation requires measuring bridge condition on the Principal Arterial system.
- Current Value (2014): For Principal Arterial bridges, 53.2% in good condition, 2.5% in poor condition; For non-Principal Arterial bridges, 61.5% in good condition, 2.5% in poor condition
    - Data Source: MnDOT

MnPASS Reliability

- Description: Measures the percent of time a MnPASS lane is operating at 45 mph or greater
- Current value: Has not been calculated
    - Data Source: MnDOT

State of Good Repair - Transit

- Description: This is a required federal measure for transit
- Current Value: Has not been calculated
    - Data Source: Transit Providers

Runway Pavement Condition

- Description: Measures the pavement condition for all airport runways in the region. The methodology is similar to the highway pavement measure.
- Current Value (2014): Value Range: 41-60 (Average), 61-80 (Good), 81-100 (Great). St. Paul Downtown Airport – Average, Flying Cloud Airport – Good, Anoka Blaine Airport – Good
    - Data Source: MnDOT, Metropolitan Airports Commission

Transit Farebox Recovery

- Description: Measures the percent of transit operating expenses covered by fare revenue
- Current Value (2011): 27.9%
    - Data Source: Transit Providers

Recommendation: This metric should continue to be tracked in the Transportation System Performance Evaluation, but not be a part of the performance measures in the Transportation Policy Plan. This is primarily due to the degree of difficulty in trying to forecast farebox recovery in future years. But there is also a concern that policy direction on farebox recovery is unclear. While it is certainly to be desired that farebox recovery increases, increases in the fare rate to achieve farebox recovery increases can have unintended consequences (such as ridership decline).

B. Safety and Security

Number of Fatalities and Fatality Rate

- Description: Measures the number of traffic fatalities for all modes of transportation and fatality rate for automobile and transit related fatalities. Fatality rate is calculated by dividing the number of traffic fatalities by vehicle miles travelled. This is a required federal measure. Both measures are reported as five year rolling averages and as single year values.
- Current Value (2008-2012): 115 traffic fatalities per year; 0.42 traffic fatalities per 100 million VMT
    - Data Source: MnDOT, Transit Providers

Recommendation: Include this data in the TPP performance measures.

Number of Serious Injuries and Serious Injury Rate

- Description: Measures the number of serious traffic injuries for all modes and serious injury rate for automobile and transit related fatalities. Serious injury rate is calculated by dividing the number of traffic fatalities by vehicle miles travelled. This is a required federal measure. Both measures are reported as five year rolling averages and as single year values.
- Current Value (2008-2012): 491 serious injuries per year; 1.79 serious injuries per 100 million VMT
    - Data Source: MnDOT, Transit Providers

Recommendation: Include this data in the TPP performance measures.

Bicycle/Pedestrian Crashes

- Description: Measures all reported crashes involving a bicyclist or pedestrian
- Current Value: Has not been calculated
    - Data Source: MnDOT

C. Access to Destinations

Mode Share/Mode Participation Rate

- Description: Mode share measures the percent of all trips taken via bicycling, walking, or transit. Mode participation rate measures the percent of all people who use transit, bike, or walk on a typical day. These measures were presented as one to the modal groups. Most groups preferred using both measures.

- Current Value (2010):
    - Mode Share: Bike (1.6%), Pedestrian (6.1%), Transit (2.5%)
    - Mode Participation Rate: Bike (2.9%), Pedestrian (12.2%), Transit (5.4%)
- Data Source: Travel Behavior Inventory (TBI)

Job Accessibility

- Description: Measures the number of jobs accessible to the average worker via driving, walking, transit, or MnPASS. The time threshold has not been determined and may be different for different modes. The examples below show the number of jobs accessible in 30 minutes.

Recommendation: Job accessibility via MnPASS (HOV and tolled SOV) versus general purpose lane travel can be assessed through the use of the regional travel demand model. The more specific data provided by the University of Minnesota's Accessibility Observatory relies on data from a third party. The U of Mn has been asked if the granularity of the data source could assess MnPASS travel times, but a response has not been received as of this point in time. To maintain comparability between the various modes, it is recommended that modeled MnPASS travel time not be included in this measure. Should the Accessibility Observatory respond that the data source could be used to identify MnPASS travel times and the resulting accessibility the consistency between the modes would be maintained and the measure expanded to include MnPASS.

- Current Value:
    - 2014: In 30 minutes, 6,063 jobs are accessible to the average worker via walking (0.4% of total jobs)
    - 2014: In 30 minutes, 17,651 jobs are accessible to the average worker via transit (1% of total jobs)
    - 2010: In 30 minutes, 1.51 million jobs are accessible to the average worker via car (96% of total jobs)
    - Job accessibility by MnPASS has not been calculated yet
- Data Source: University of Minnesota's Accessibility Observatory

Reliability Index

- Description: Measures the amount of travel time that should be planned for a trip to be late only once a month (1/20 days). A value of 2.00 means that 40 minutes should be planned for a 20-minute trip in light traffic. This will be measured for both automobiles and trucks.
- Current Value (2014): 2.72 for automobiles; Truck reliability index has not been calculated
    - Data Source: Texas Transportation Institute

Annual Hours of Delay

- Description: Measures the average amount of travel delay for peak period auto commuters
- Current Value (2014): 47 hours of delay per peak period auto commuter per year
    - Data Source: Texas Transportation Institute, Metropolitan Council

Average Commute Time

- Description: Measures the average commute time for motorists and transit users

- Current Value (2014): 25.3 minutes for motorists
    - Data Source: American Community Survey

Recommendation: Include this data in the TPP performance measures.

MnPASS Usage

- Description: Measures the number of people who use a MnPASS lane. This measure includes MnPASS toll payers, carpoolers, and bus riders in the MnPASS lane.
- Current Value: Has not been calculated
    - Data Source: MnDOT, Metropolitan Council

Transit Ridership

- Description: Measures the annual number of transit trips
- Current Value (2014): 97.7 million annual trips on transit
    - Data Source: Transit Providers

Regional Bicycle Transportation Network (RBTN) Implementation

- Description: Measures the number of miles and/or percentage of the RBTN that have been completed. The RBTN was established in the 2040 TPP and sets the region's priorities for bicycle planning and investment.
- Current Value: Has not been calculated
    - Data Source: Metropolitan Council

Average Aircraft Delay at MSP

- Description: Measures the average aircraft delay at MSP compared to scheduled departure times
- Current Value (2014): 4.5 minutes
    - Data Source: Metropolitan Airports Commission

Transit On-Time Performance

- Description: Measures the percent of transit trips that are within five minutes of scheduled departure times
- Current Value: Has not been calculated
    - Data Source: Transit Providers

Recommendation: Do not include on-time performance in the TPP performance measures. The definition and application of measuring transit on-time performance varies widely across transit providers and service types, making a consistent systemwide metric difficult. The transit modal work team also previously dismissed this measure because it often relates more to the quality of schedule planning than the quality of the service itself.

D. Competitive Economy

Cost per Passenger at MSP Airport

- Description: Measures the cost per passenger that airlines pay to Metropolitan Airports Commission to use the MSP airport

- Current Value (2014): $6.81 per passenger
    - Data Source: Metropolitan Airports Commission

Key Truck Corridors that are 10-ton

- Description: Measures the percent of regional key truck corridors that are built to support 10-ton weight for freight vehicles. Key truck corridors will be identified as part of the Regional Truck Highway Corridor Study being led by the Met Council.
- Current Value: Has not been calculated
    - MnDOT, Counties

Truck Travel Time Index

- Description: Measures the ratio between average travel time and uncongested truck travel time
- Current Value: Has not been calculated

Population with Access to High-Frequency Transit Service

- Description: Measures the percent of people who live within half-a-mile of high frequency transit service
- Current Value (2010): 12% of residents (328,000 people) live within half-a-mile of high frequency transit service
    - Data Source: Metro Transit, Metropolitan Council

Cost of Transportation

- Description: Measures the cost of transportation as a percent of income for a typical household
- Current Value: 19% of household income
    - Data Source: Center for Neighborhood Technology

Recommendation: This metric should be included in the Transportation System Performance Evaluation, but not in the TPP as it cannot be forecast. The geographic scale that should be tracked is the MPO and the specific measures should be the Percent of Income on Transportation Costs, Annual Transportation Cost, and Annual Vehicle Miles Traveled per Household. The current values for these items reported by CNT are as follows:

Percent of Income on Transportation Costs:	**19%**
Annual Transportation Cost:	**$12,818**
Annual Vehicle Miles Traveled per Household:	**21,163**

E. Healthy Environment

Greenhouse Gas and Criteria Pollutant Emissions

- Description: Measures the amount of carbon monoxide, oxides of nitrogen, sulfur dioxide, volatile organic compounds, PM2.5 and CO2 emissions
- Forecasted Value (2040 Average daily emissions): Carbon monoxide-102 tons; oxides of nitrogen-8.2 tons; sulfur dioxide-0.2 tons; volatile organic compounds-2.6 tons; PM 2.5-0.3 tons; Greenhouse gas (CO2 Equivalent)-22,245.9 tons
    - Data Source: Met Council's Regional Transportation Model

Bicycle/Pedestrian Miles Traveled

- Description: Measures the miles traveled by bicycle or walking
- Current Value (2010): 725,000 bicycle miles travelled per day; pedestrian miles travelled have not yet been calculated
    - Data Source: Travel Behavior Inventory (TBI)

Solar Power Generated at Transit Facilities

- Description: Measures the energy generated from solar power arrays at transit facilities
- Current Value: Has not been calculated
    - Data Source: Transit Providers

Recommendation: This is an operations and provider-specific concern and consideration that can be tracked by transit providers but does not currently factor into regional transit planning policy. This concept could be explored with the next update to the Transportation Policy Plan. If this is added to the TPP in the next update, this metric should be tracked in the Transportation System Performance Evaluation.

Recycling Options at Transit Stops/Stations

- Description: Measures the percent of transit stops/stations that have recycling available
- Current Value: Has not been calculated
    - Data Source: Transit Providers

Recommendation: This is an operations and provider-specific concern and consideration that can be tracked by transit providers but does not currently factor into regional transit planning policy. This concept could be explored with the next update to the Transportation Policy Plan. If this is added to the TPP in the next update, this metric should be tracked in the Transportation System Performance Evaluation.

F. Leveraging Transportation Investments to Guide Land Use

Acres of riverfront/rail-accessible industrial land

- Description: Measures the change in acres of riverfront or rail-accessible industrial land. The methodology on how to calculate this measure has not been finalized.
- Current Value: Has not been calculated
    - Data Source: Metropolitan Council

Job and Population Growth near High Frequency Transit Service

- Description: Measures the percent of forecasted job and population growth within half-a-mile of high frequency transit
- Current Value (2010-2040): 49% of regional forecasted job growth near high-frequency transit; 14% of regional forecasted population growth near high-frequency transit
    - Data Source: Metro Transit, Metropolitan Council

Transit Supportive Comprehensive Plans

- Description: Measures the number of communities with comprehensive plans that have transit oriented development or transit-supportive land use policies. Met Council staff will consult with Metro Cities so see if they are open to having this measure.

- Current Value: Has not been calculated

Recommendation: This was originally considered by the transit modal work team but ultimately eliminated because of the onerous nature of creating the measure versus the perceived value. However, given policy maker support for the concept, this measure could be explored but will likely take several cycles of data collection and review to finalize a consistent methodology of review for comprehensive plans. Council staff have also contacted Metro Cities to gauge their support or opposition to such a measure. Provided they are supportive, Council staff will work on developing the process and methodology for this type of measure.