

CHAPTER 5: CREATING THE SIP

A. Scope and Parameters

The SIP identifies projects ready for implementation between 2015 and 2030. Projects are grouped into three phases: Phase I (2015-2017), Phase II (2018-2020) and Phase III (2021-2030). The costs and resources needed for implementation are in 2015 operating dollars; capital investments associated with these service improvements will be factored separately into Metro Transit's capital improvement plans.

The SIP includes both new bus routes and improved service levels on existing routes. It also includes 11 Arterial BRT projects, since they also need to have operating funds identified prior to implementation. Arterial BRT projects are not evaluated using the SIP evaluation criteria since those projects were reviewed and prioritized in the *2012 Arterial Transitway Corridors Study*. The A Line on Snelling Avenue is not included in the SIP because operating funds for that project have already been secured.

Light rail, commuter rail and Highway BRT projects are not included in the SIP; expansion plans for those types of services are outlined in the Transportation Policy Plan. However, local bus service that makes connections with rail and Highway BRT stations for projects that have selected a locally preferred alternative are included in the SIP.

The SIP considers routing and scheduling improvements in Metro Transit's service area. Improvements to customer amenities, changes to the fare structure and projects in areas primarily served by Maple Grove Transit, Plymouth Metrolink, SouthWest Transit and Minnesota Valley Transit Authority are outside of the project scope.

B. Guiding Principles

The project workshops, survey feedback, outcomes listed in Thrive MSP 2040 and strategies in the new Transportation Policy Plan informed and validated these seven guiding principles:

- Maximize ridership growth
- Emphasize high-productivity, low-subsidy projects
- Provide faster travel time
- Enhance connectivity of transit system
- Support transit-friendly land use and design
- Expand service for off-peak and non-work trip purposes
- Improve transit equity

It is important to enhance mobility for residents in areas with the highest reliance upon transit. A Title VI Service Equity Analysis was performed to ensure that communities of color and low-income groups share the benefits of service expansion and avoid disparate impacts. More information about the Title VI work is in Chapter Eight.

C. Project Identification Methodology

Staff used three main sources of data to determine which specific improvements should be evaluated. First, feedback and suggestions from the survey were an important source of ideas. Mapping the survey origin-destination data (home and two to three most-traveled-to destinations) and matching those patterns against the current transit network helped planners determine where gaps exist and which markets are underserved.

In addition to suggestions for improvements from the survey, Metro Transit receives comments and requests daily through its Customer Relations department. Metro Transit received 1522 comments or suggestions regarding route planning and levels of service in 2014. This input was reviewed and incorporated it into the SIP as appropriate. In addition, suggestions from staff that interact with the public on a regular basis (operators, Transit Information Center representatives, planners and analysts) were included, along with data brought forth from Metro Transit Customer Surveys. Finally, feedback collected as part of other recent planning projects such as Thrive MSP 2040, the TPP, Corridors of Opportunity and sector studies (West Suburban Service Changes, Central Corridor Transit Service Study, Midtown Corridor Alternatives Analysis, Arterial Transitway Corridors Study and Nicollet-Central Alternatives Analysis) were also incorporated into the project.

Metro Transit staff distilled these ideas into specific bus route improvements, projected the resources needed to implement each improvement (i.e. service hours, peak buses), and estimated the new ridership each improvement could be expected to generate.

D. Evaluation Criteria

The guiding principles helped to determine the project's evaluation measures and how to weight them. Three main categories of evaluation measures – productivity, social equity and system connectivity – were determined to help review and prioritize specific service improvements. The direction the Council laid out in Thrive MSP 2040, strategies in the TPP and survey results shaped the evaluation measures and weightings. These criteria work together to emphasize productivity, ensure social equity and provide a cohesive, connected network throughout the region.

Appendix E shows detailed definitions of the evaluation factors by route type, as well as the thresholds for High, Medium and Low rankings.

1. Productivity

Productivity criteria demonstrate the ridership potential of service improvements using land use and density factors. They account for 50 percent of the total weight. There are six productivity-based measures:

- Existing Population (20 points): Number of people living within a quarter-mile of the route
- Existing Employment (10 points): Number of jobs per acre within a quarter-mile of the route
- Job Concentration Areas (10 points): Number of designated Thrive MSP 2040 Job Concentration Areas along a route

- Productivity per In-Service Hour (25 points): Number of boardings per in-service hour (first timepoint to last timepoint on the schedule)
- Subsidy per Passenger (20 points): Cost of each passenger’s trip not covered by fares
- Intersection Density (10 points): Number of intersections per route mile, which is representative of land use patterns, a grid street network and good level of pedestrian access

2. Social Equity

Social Equity criteria evaluate how well improvements serve people most reliant upon transit. They account for 25 percent of the total weight. There are five social-equity based measures:

- Jobs Paying Under \$40,000 Annually (20 points): Number of jobs paying less than \$40,000 a year within a quarter-mile of a route
- Service to Low-Income Populations (20 points): Comparison of the percentage of the population living within a quarter-mile of the route at or below the federal poverty line as compared to the regional average of 11.3 percent.
- Service to Persons of Color (20 points): Comparison of the percentage of the population living within a quarter-mile of the route considered persons of color as compared to the regional average of 27.7 percent.
- Service to Disabled Populations (20 points): Comparison of the percentage of the population living within a quarter-mile of the route considered disabled as compared to the regional average of 9.7 percent.
- Auto Availability (20 points): Comparison of the population age 16 or older without a vehicle within a quarter-mile of the route as compared to the regional average of 22 percent.

Auto ownership is related not only to income but also customers who chose to use transit instead of driving. Households with more people over the legal driving age of 16 than vehicles available are more likely to use transit.

3. System Connectivity

System Connectivity measures establish how well projects improve connections and service throughout the Metro Transit service area. They account for the final 25 percent of the total weight. There are five system connectivity-based measures:

- New Populations Served (20 points): Number of people served by a new route or route extension
- Key Destinations Served (15 points): Number of key destinations within a quarter-mile of a route. These landmarks are included in a database used by Transit Information Center representatives as the destinations most commonly requested by customers planning trips.
- Connecting Routes (15 points): Number of transit routes to which a service improvement connects, either at a transit center or on the street. Projects connecting with existing and/or future transitways and routes in the high frequency network are worth more points.
- Educational Institutions (10 points): Number of designated Thrive MSP 2040 Educational Institutions along a route

- Off-Peak, Span of Service or Reverse Commute Improvements (10 points): Projects providing additional off-peak (midday, evening or weekend) service, widens the span of service (trips starting earlier or ending later in the day) and/or includes reverse commute service

E. PROJECT SCORING

Based on the evaluation results, each proposed project was ranked High, Medium or Low. Projects earning at least 75 percent of the points were ranked High; those earning at least 55 percent were ranked Medium. The results of the initial screening were made available to the public in the Draft Service Improvement Plan as described in Chapter 4, Section C in this document. As a result of public input on the Draft SIP, 17 new projects were added and nine existing projects were modified and rescored.

The Final SIP evaluated 185 proposed bus service improvements in the Metro Transit Service Area. Of those, 50 projects are ranked High and 87 projects ranked Medium. These 137 improvements will have priority for implementation based on available resources. In addition to the 137 medium and high ranked bus service improvements, there are 11 unfunded arterial BRT lines included in the resource requirements of the prioritized SIP improvements.

Forty-eight projects scored Low. While not recommended for implementation at this time, these projects may be re-evaluated in future updates to the Service Improvement Plan to account for possible changes to the transit-supportive climate of surrounding land uses.