

## APPENDIX C: MHSIS GUIDING PRINCIPLES (PMT MEMORANDUM)

## Metropolitan Highway System Investment Study: Policy Direction and Guiding Principles

In 2008, Metro District and the Metropolitan Council completed the “Principal Arterial (PA) Study” to answer questions related to future mobility needs in the region. One of the key conclusions of the study was that “building our way out of congestion” is not a feasible approach and would cost at least \$40 billion.

The current Transportation Policy Plan (TPP) and Mn/DOT’s Metro District Investment Plans indicate the region will receive \$900 million over the next 20 years for mobility investments. Traditional project design standards and practices call for projects to be designed to eliminate congestion for a 20-year forecast horizon. The PA Study concluded that a lower-cost/high-benefit approach may be an effective way to address specific problems, and that pricing can help manage demand and provide an alternative to congestion in some corridors.

The policy direction recorded below is taken from the Council TPP and the Mn/DOT State Plan. These policies have provided the basis for the investment principles that have, and will continue to be used, to develop project recommendations for the MHSIS 50-year vision. They will also provide direction as the 50-year vision is refined and projects are prioritized to produce the 20-year fiscally-constrained plans.

These investment principles have been developed through close consultation between the Metropolitan Council and Mn/DOT. These principles are intended to change the approach to determining how projects are developed and where investments are made in the future.

### **Policy direction**

- There are, and will continue to be, fiscal constraints for Mn/DOT and the Council.
- Building our way out of congestion is not feasible; few if any projects should be undertaken with this objective.
- A balanced approach toward investments is needed, which includes:
  - Preservation
  - Safety
  - Mobility
    - Operational and Management Techniques, including ITS
    - Congestion Management Safety Projects
    - Strategic Capacity Enhancements
  - Regional & Community Improvement Projects (RCIP’s)
- Develop plans that result in a multimodal highway system.
- Strive to integrate CMSP projects with preservation projects.
  - When possible, integrate preservation elements into all system improvements
- Operational techniques, including pricing, provide effective tools to manage the highway facilities, manage demand and provide alternatives to congestion.

- Major projects will be reassessed to determine if the critical preservation, safety and mobility elements can be addressed with a lower-cost/high benefit solution.

### **Investment Principles**

- The projects on the vision map need to be refined and their priority established given the anticipated resources.
  - The design and scale of projects needs to be refined.
  - Right-of-way costs must be considered early in project development and prioritization.
  - The needs of existing development with new development must be balanced in project selection.
- Utilize the most cost-effective operational and management techniques to optimize system performance.
  - Management and ITS applications will be used to their fullest extent to improve mobility and relieve congestion before adding new capacity.
  - Upcoming CMSP projects will not preclude identified MHSIS projects, and MHSIS project will not preclude planned/future CMSP projects.
- Managed lanes are a higher priority for improvement than general purpose lanes.
  - There are many types of non-priced managed lanes.
  - Capacity/mobility projects that contain an element of management or pricing will receive priority
  - Projects that include a transit advantage will receive priority
- There are some areas where traditional capacity will not be added; this does not preclude management, operational and pricing solutions.
  - Management solutions (eg., pricing, Dynamic Shoulder Lanes, Priced Dynamic Shoulder Lanes, Intelligent Transportation Systems, Ramp Meters) are tools that can add capacity and increase mobility on the system without the need to add additional lanes.
- Needed segments of general purpose lanes can be converted to managed lanes.
  - It may be necessary in some situations to convert sections of general purpose lanes into managed lanes to maintain managed/priced lane continuity
  - This action may require legislative action.
- Highway improvements should enhance and support transit use where existing or planned express transit service exists.
- The conversion of right-side bus shoulders to left-side lanes may benefit transit and expand use to HOVs or those willing to pay.
- Design exceptions may be needed to accommodate an improvement or project within the existing right-of-way. Overall safety must be improved.

- Complete the six-lane beltway and unfinished connections to utilize existing and planned investments.
  - This has been a long standing policy with the Department and the Metropolitan Council.
  - Additional six-lane segments of the beltway may be managed lanes.
- Do not add inbound capacity outside the beltway that cannot be accommodated by projects or operational changes/strategies on, or within, the beltway.
  - Do not bring added demand into an area that cannot be accommodated by the existing system or with programmed improvements.
  - An option may be to add transit advantages or other managed outbound lanes.
  - Phased project implementation may be necessary to complete the 50-year vision.
- Manage access to IRC's or other Principal Arterials.
  - Reducing access points and/or signalized intersections will mean easier freeway conversion in the future; this does not preclude the addition of new signals for safety reasons.
- Conversion of expressways to freeways should occur, working from the inside of the region to the outside to avoid creating gaps.
  - Any conversion of an intersection to an interchange must be identified in the TPP and Metro District Investment plan.
- Two-mile interchange spacing outside the beltway, one-mile spacing on, or inside the beltway. This includes opportunity-driven removal and/or consolidation of interchanges recognizing:
  - Interchange spacing is important to maintain and/or improve traffic flow.
  - The interchange must connect with at least an A-Minor arterial
- Jurisdictional responsibility is yet to be determined for new principal arterials.
  - With regional growth extending further outward from the core, there is the desire for additional principal arterials outside the beltway.”
  - New principal arterials outside the beltway have been under consideration for some time.