April 17, 2019

Executive Summary

Regional Solicitation Before & After Study

The *Metropolitan Council Before &After Study* included two primary tasks:

- **Peer Review:** Conduct a peer review of Metropolitan Planning Organizations (MPOs) to assess their approaches used for soliciting and selecting projects for federal transportation funds.
- **Before & After Analysis:** Document the regional benefits of recently constructed projects that were awarded Regional Solicitation or Highway Safety Improvement Program (HSIP) funding.

Peer Review Summary

Ten MPOs were contacted to help illustrate examples of how different MPOs distribute their federal transportation funding and to identify best practices. Findings from the peer review are intended to spark conversations about future policy decisions, regarding the Metropolitan Council's Regional Solicitation process. The MPOs selected for the peer review include:

- North Carolina Capital Area Metropolitan Planning Organization (NC CAMPO): Raleigh, NC
- Denver Regional Council of Governments (DRCOG): Denver, CO
- Metro Portland: Portland, OR
- Metropolitan Transportation Commission (MTC): San Francisco, CA
- Southeast Michigan Council of Governments (SEMCOG): Detroit, MI
- New York Metropolitan Transportation Commission (NYMTC): New York, NY
- North Central Texas Council of Governments (NCTCOG): Dallas, TX
- East-West Gateway Council of Governments (EWG COG): St. Louis, MO
- Baltimore Metropolitan Council (BALTOMETRO): Baltimore, MD
- Puget Sound Regional Council (PSRC): Seattle, WA

Peer Review Findings

Historically, MPOs have used a "call-for-proposals" approach like the Regional Solicitation to solicit projects that are eligible for federal transportation funds. However, findings from the peer review suggest many of the MPOs have modified their federal funding solicitation processes (referred to as the Regional Solicitation in this region) to address priorities identified in their regional policy plans or long-range transportation plans (referred to as the Transportation Policy Plan, or TPP, in this region). The study has identified three common approaches used by the MPOs in selecting projects for federal transportation funds:

1. **Long-Range Transportation Approach**: In this approach, a larger emphasis is placed on projects that have been identified in the MPO's long-range transportation plans. In most cases, these plans have gone through an extensive process to determine regional needs based on a number of factors (e.g., congestion, safety, and multimodal goals). The end result is a program of transportation investment priorities that have been vetted through a public engagement and approval process.

   The list of priorities in the long-range transportation plan is used to inform the allocation of federal transportation funds. The allocation of funds is typically reviewed by a scoring committee or a formal review committee. In some cases (e.g., Dallas), a pot of funding is reserved for smaller projects through a separate solicitation process.

2. **Geographical Distribution Approach:** Several MPOs use a funding formula that allocates federal transportation funds to sub-regions or priority areas. In general, the sub-regions are responsible for developing a list of priority projects for consideration. The sub-regions are encouraged to work together with the MPO to prioritize the list of projects that best serve their regional needs. It is important to recognize there are potential hurdles at the state and federal level in using a "geographical distribution" approach in the allocation of federal transportation funds. The MPOs that have embraced this approach have typically passed special legislation that directly links investments to priority areas or goals.

3. **Traditional Approach**: Portland and Baltimore use a "call for proposals" process similar to the Metropolitan Council's process. Projects that are selected for funding are still closely linked to regional goals and priorities identified in their regional policy plans or long-range transportation plans.

Other items of note discovered as part of the peer review include:

- Nine out of 10 MPOs do not cap the amount of funding that can be requested for a project. The remaining MPO, Denver, has set their maximum request amount at $20 million.
- In general, the MPOs are funding larger-scale projects that provide a greater regional benefit.
- At other MPOs, a greater emphasis has been placed on projects that are linked to regional benefits that improve air quality and economic development initiatives.
- The peer review did not discover any studies being done to report the "before-&-after" results of a transportation project that has received federal funds.
- Most MPOs do not have any connected and automated vehicle (CAV) projects funded at this time.

Before & After Analysis Summary

The purpose of this task was to document the regional benefits achieved through projects funded through the Regional Solicitation or Highway Safety Improvement Program (HSIP). This task was achieved by using a performance-based approach that evaluates the before and after conditions associated with a built project.

Before & After Condition Findings

Projects chosen for this evaluation were based on available data sets to assess their before and after conditions and came mostly from the 2007, 2009, and 2011 funding cycles. Many of the projects funded as part of the 2014 Regional Solicitation are still being implemented or are too early after their built date to evaluate the after condition.

This executive summary is intended to capture some of key takeaways from this study. The methodology and data sets used to determine the findings below are documented in the final report.

1. Highway Safety Improvement Program

- The following benefit was observed for the 2007 and 2009 projects:
  - 100 percent reduction in fatal crashes (five to zero)
  - 97 percent reduction in incapacitating injury crashes
    - 30 down to one
  - 68 percent reduction in non-incapacitating injury crashes
    - 85 down to 27
  - 69 percent reduction in possible injury crashes
    - 144 down to 45
- The following benefit was observed for the 2011 projects:
  - No fatal crashes observed in before or after analysis.
  - 63 percent reduction in incapacitating injury crashes
    - Three down to one
  - 100 percent reduction in non-incapacitating injury crashes
    - Six down to zero
  - 83 percent reduction in possible injury crashes
    - 23 down to four

2. Roadway Congestion

- The following benefits were observed for the 2007, 2009, and 2011 projects:
  - Total delay was reduced for six of the 13 applications with an average overall delay reduction of 55 percent. The other projects had some delay reduction for specific movements in the intersection or no improvement at all.

3. Roadway Safety

- The following benefit was observed for the 2007, 2009, and 2011 projects:
  - Ten of the 19 projects experienced a reduction in overall crashes

4. Transit

- The following benefit was observed for the 2007, 2009, 2011, and 2014 projects:
  - Total new ridership of 1.5 million (16 projects). This does not include new ridership associated with the Green Line or Blue Line.

5. Bicycle and Pedestrian Safety

- The following benefit was observed for the 2007, 2009, 2011 and 2014 projects:
  - Pedestrian and bicycle crashes have been reduced within a quarter-mile buffer of the built projects.

6. Regional Bicycle Transportation Network (RBTN) Contribution

- The following benefit was observed for the 2007, 2009, 2011 and 2014 projects:
  - Fifty-five of the approximately 73 miles of bikeway facilities (75%) have contributed to the RBTN.
  - The Roadway Expansion and Roadway Reconstruction/Modernization application categories have helped build 19 miles of bikeway facilities. Approximately seven of the 19 miles (37%) were part of the RBTN.

7. Pedestrian/Bicycle Connections Achieved

- The following benefit was observed for the 2007, 2009, 2011 and 2014 projects:
  - Twenty of the 58 pedestrian or bicycle projects (34%) have provided a direct or indirect connection to a major job or activity center.
  - Ten of the 58 projects (17%) provided a direct or indirect connection to areas of concentrated poverty greater than 50 percent residents of color.
  - Fifteen of the 58 projects (26%) provided a direct or indirect connection to areas of concentrated poverty.
  - Twenty of the 58 pedestrian and bicycle projects (34%) have provided a direct or indirect connection to areas of poverty or populations of color that are higher than the regional average.