

2020 Metropolitan Council UPWP

TAC Planning
July 11, 2019



Unified Planning Work Program

- Outlines planning priorities facing the region
- Describes our transportation and transportation-related air quality planning activities
- Identifies the products that will be produced in 2020
- Serves as an application for federal funding

Unified Planning Work Program

- Describes our transportation planning:
 - Budget
 - Planning activities
 - Studies
- Lists funding source(s) for each task
- Based upon federal Consolidated Planning Grant (CPG) funds and local funding sources
- Participants include:
 - Metropolitan Council
 - MnDOT
 - Transit Providers
 - Minnesota Pollution Control Agency
 - Metropolitan Airports Commission

Unified Planning Work Program

- Organized by six major categories:
 1. Planning and Programming Process
 2. Modal System Planning
 3. Long Range System Planning
 4. Travel Forecasting and Model Development
 5. Short Range Planning and Performance Monitoring
 6. Non-CPG (Locally-Funded) Planning Activities (Aviation Planning and RALF)

Unified Planning Work Program

- Planning and Programming Processes
 - Task A-1: Planning Program Process Support
 - Task A-2: TIP Development and Management
 - Task A-3: Regional Solicitation

Unified Planning Work Program

- Modal System Planning
 - B-1: Highway System Planning
 - B-2: Freight Planning
 - B-3: Transit Planning
 - B-4: Bike/Ped Planning
 - B-5 Participation in Corridor Studies and Work Led by Regional Partners

Unified Planning Work Program

- Long Range System Planning
 - C-1: Transportation Policy Plan
 - C-2: Land Use Planning
 - C-3: Environmental Justice and Equity
 - C-4: Air Quality and Climate Change Planning
 - C-5: Transportation Finance
 - C-6: Automated, Connected, and Electric Vehicles

Unified Planning Work Program

- Travel Forecasting and Model Development
 - D-1: Travel Research and Behavior
 - D-2: Travel Model Development and Forecasting

Unified Planning Work Program

- Short Range Planning and Performance Monitoring
 - E-1: Congestion Management Process
 - E-2: Transportation System Performance Monitoring and Data Collection

Unified Planning Work Program

- Non-CPG Planning Activities
 - F-1: Right of Way Acquisition Loan Fund
 - F-2: Aviation Transportation Planning

Unified Planning Work Program

Task	Task Title	Staff Weeks 2020	Salary Cost	Consultant Cost	Overhead & Expenses	Total Cost	UPWP Federal (CPG)	Local Match (20%)	Other Federal	Local Overmatch	Local MAC	Total	Percent Local
A	Planning and Programming Process	325	\$776,094	\$0	\$1,006,329	\$1,782,423	\$1,182,330	\$295,582	\$0	\$304,511	\$0	\$1,782,423	34%
B	Modal System Planning	374	\$834,034	\$680,000	\$1,156,504	\$2,670,538	\$1,771,441	\$442,860	\$0	\$456,237	\$0	\$2,670,538	34%
C	Long Range System Planning	141	\$366,364	\$30,000	\$436,592	\$832,956	\$552,522	\$138,131	\$0	\$142,303	\$0	\$832,956	34%
D	Research and Travel Forecasting	143	\$317,341	\$310,000	\$442,785	\$1,070,125	\$709,843	\$177,461	\$0	\$182,821	\$0	\$1,070,125	34%
E	Short Range Planning and Monitoring	127	\$337,988	\$125,000	\$391,694	\$854,682	\$566,934	\$141,733	\$0	\$146,015	\$0	\$854,682	34%
Eligible for Federal Funding		1,109	\$2,631,820	\$1,145,000	\$3,433,904	\$7,210,725	\$4,783,070	\$1,195,768	\$0	\$1,231,887	\$0	\$7,210,725	34%
F-1	RALF	6	\$16,062	\$0	\$1,861	\$17,923	\$0	\$17,923	\$0	\$0	\$0	\$17,923	100%
F-2	Aviation Transportation Planning	49	\$105,093	\$0	\$15,042	\$120,135	\$0	\$11,135	\$0	\$0	\$109,000	\$120,135	100%
Not Eligible for Federal Funding		55	\$121,155	\$0	\$16,903	\$138,058	\$0	\$29,058	\$0	\$0	\$109,000	\$138,058	100%
Total Planning Budget		1,164	\$2,752,975	\$1,145,000	\$3,450,807	\$7,348,783	\$4,783,070	\$1,224,826	\$0	\$1,231,887	\$109,000	\$7,348,783	100%
Task	Task Title	Staff Weeks 2020	Salary Cost	Consultant Cost	Overhead & Expenses	Total Cost	UPWP Federal	Local Met C	Other Federal	Other Local	Local MAC	Total	Percent Local
D	Travel Behavior Inventory Program			\$1,958,702		\$1,958,702	\$0	\$561,462	\$1,397,240	\$0	\$0	\$1,958,702	40%



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Roadway Right-Sizing Study

Goal:

- Prioritize mobility investments on congested non-Freeway Principal Arterials and A-Minor Arterials, with a focus on two to four-lane expansion projects.

Timing:

- Develop scope of work and issue RFP (Fall 2019)
- Consultant study (2020/early 2021)
- Incorporate into scoring for 2022 Regional Solicitation and next update of the TPP (Strategic Capacity Investments, Regional Mobility)

Twin Cities Mobility Needs Analysis

Goal:

- Using a performance-based approach, provide MnDOT with a Twin Cities mobility need number to be incorporated into the next Minnesota State Highway Investment Plan (MnSHIP) Update.

Timing:

- Develop scope of work with MnDOT Central Office and Metro District (Fall 2019)
- Consultant study (2020)
- MnDOT work on MnSHIP (2021-2022)

Mobility Needs Analysis - Potential Tasks

1. Complete Peer Review-how do our congestion and investment levels compare to our peer metro areas?
2. What are the negative effects of congestion on the Twin Cities?
3. Update the 2040 Transportation Policy Plan's Increased Revenue Scenario
4. Reaffirm the region's overall approach to congestion
5. Define and identify the region's mobility need through agreed-upon performance measures and targets
6. Model results at different investment levels

Regional Pedestrian Safety Action Plan

Goal:

- Use systemic crash data analysis to guide recommendations for effective investments and actions to address pedestrian safety in the region.

Timing:

- Develop scope of work with regional partners (Early fall 2019)
- Consultant study (2020 through early 2021)
- Implementation in 2022 Regional Solicitation & next TPP

Pedestrian Safety Action Plan - Potential Tasks

1. Involve stakeholders in guiding the analysis and plan
2. Conduct systemic crash data analysis to identify characteristics & systemic risk factors
3. Identify potential countermeasures and program recommendations
4. Identify potential application in the Regional Solicitation for prioritizing projects

RBTN Facility & Corridor Spacing Guidelines

Goal:

- Study spacing for planned RBTN corridors and alignments and current bikeway facility treatment status to develop regional guidelines for facility treatments and spacing

Timing:

- Develop scope of work (Late 2019-Q1 2020)
- Consultant study (Late 2020 - 2021)
- Incorporate in next TPP

Potential Tasks

1. Review spacing of all planned RBTN corridors and alignments
2. Review current bikeway facility treatment status for a sample of the RBTN within context of roadway functional classification and current bicycle facility design guidance
3. Identify regional sub-areas
4. Develop regional guidelines for spacing and facility treatments

Peer Region Research and Literature Scan on Vehicle Electrification

Goal:

- Lead peer region research and scenario planning study to investigate potential impacts of regional fleet electrification focusing on land use impacts, electrification system and other system level changes that would need to occur to support electrification of a substantial portion of the regional fleet

Timing:

- Develop scope of work Fall 2019
- Consultant study and internal work 2020

Potential Tasks

1. Complete Peer Review – Have other regions completed studies of how vehicle electrification might be implemented?
2. Literature Scan - What exists in literature or research work conducted by energy companies regarding how electrification could take place at the regional system level
3. Scenario Identification – What are the possible scenarios and timelines under which vehicle electrification might take place? What are the benefits and impacts of each scenario? What is the likelihood of each scenario?
4. Thrive MSP 2040 Update – How should the identified scenarios be included or considered in the update to Thrive MSP 2040 (Regional Development Guide)

Peer Region Research and Literature Scan

Goal:

- Placeholder Study for peer region research on emerging metropolitan issues and innovative planning techniques being conducted in metro areas nationally

Potential Tasks:

- Identify emerging issues and innovative work in other metro areas
- Determine applicability to our region and priority for deeper investigation/analysis
- Develop Scope of Work

Collaboration with University of Minnesota

- Transitways Impact Research Program:
 - The Transitway Impacts Research Program (TIRP) answers questions about the economic, travel, and community impacts of transitway corridors in the Twin Cities Metropolitan Area. Funding collaboration with counties, cities, and MnDOT.
- Accessibility Observatory Pooled Fund and Local Analysis
 - Implement a measurement of accessibility to jobs across the entire U.S. Each pooled-fund partner will have direct digital access to detailed accessibility datasets. In addition, annual reports will summarize patterns and trends in accessibility across the country.

Collaboration with National Peers and Partners

AMPO: ActivitySim Consortium

- The mission of the ActivitySim project is to create and maintain advanced, open-source, activity-based travel behavior modeling software based on best software development practices for distribution at no charge to the public. The ActivitySim project is led by a consortium of Metropolitan Planning Organizations (MPOs) and other transportation planning agencies, which provides technical direction and resources to support project development.

Zephyr Foundation

- The mission of Zephyr is to advance rigorous transportation and land use decision-making for the public good by advocating for and supporting improved travel analysis and facilitating its implementation. The Foundation's goals are to advance the field through flexible and efficient support, education, guidance, encouragement, and incubation in support of the Mission

Model Implementation

Tourcast Software Upgrades

- Improve the Tourcast software, which is the backbone of the current travel demand model. Tasks include improving model run times, changing file structure to use more updated file formats, and simplifying the scenario management to allow for better integration with scripting workflow and better reproducibility of scenarios.

ActivitySim Local Initial Implementation

- Locally implement and estimate the ActivitySim travel demand model based on TBI data. This implementation will follow similar implementations in the Atlanta and Detroit regions, and will benefit from their experience. This will lay the foundation for the next generation travel demand model in this region.

Model Implementation

Regional STOPS transitway model consolidation

- Implement the FTA Simplified Trips on Project modeling software on a regional scale. This will provide the ability to coordinate different corridor-level STOPS projects more effectively, as well as to more easily respond to transit way forecast requests.

CityCast:

- Subscription to cloud-based travel forecasting platform based on national data. The goal is to provide access to alternate travel forecasting tools, a check of current methods, and to provide a faster access to forecasts for smaller projects.

Documentation of CMP Corridor Analysis Methodology

Goal:

- Develop detailed documentation of Congestion Management Process corridor analysis methodology for use by Metropolitan Council, MnDOT, Counties, and Cities in future corridor analyses in a consistent manner.

Timing:

- Develop scope of work (Fall 2019)
- Consultant study (2020)

Potential Tasks

1. Review corridor analysis methodology used in Congestion Management Process Plan.
2. Refine and document steps to duplicate corridor analysis methodology.
3. Define implementation procedure to ensure consistent application of methodology.
4. Release documented methodology to partner stakeholders.

Transportation System Performance Dashboard

Goal:

- Develop data dashboard which presents information on the status of the region's transportation system in an easily understood, coherent fashion.
- Timing:
- Develop scope of work (Fall 2019)
- Consultant study (2020)

Performance Dashboard - Potential Tasks

1. Design Dashboard structure.
2. Identify desired data elements and collect necessary data.
3. Provide data elements to consultant.
4. Develop Dashboard and implement through Metropolitan Council website.