

Transportation Staff Meeting

May 4, 2011

2:00 PM

Room 601

AGENDA

1. NC Railroad Double Track Project (Gibbs)

Description: Project update.

2. Draft 2012 Unified Planning Work Program (Cook)

Description: The TCC will be asked to make a recommendation to the MPO on the draft FY 2012 UPWP at the May TCC meeting.

3. Complete Streets (Newsome)

Description: To follow-up the general discussion about complete streets at the April 20th meeting, this discussion will focus on specific components of complete streets. This series of discussions is in anticipation of NCDOT's upcoming release of their Draft Complete Streets Planning and Design Guidelines Framework.

Access number: 704-432-5484

Mecklenburg-Union Metropolitan Planning Organization

Task Descriptions

FY 12 Unified Planning Work Program

The following provides descriptions of the work proposed to be performed during Fiscal Year 2012.

II Continuing Transportation

II-1 Traffic Volume Counts

Funds allocated in this category will support collecting, processing, and analyzing traffic volume count data to support the travel demand model. Specifically, the following tasks will be conducted:

- 48 hour volume data will be collected at 550 – 700 model locations
- Vehicle occupancy studies for traffic entering CBD
- Turning movement count data at signalized intersections (used as a back check and additional layer of quality control for the model)
- Vehicle classification studies
- Travel time studies
- Pursuit of six permanent count station locations

Funding source: PL Funds: STP-DA supplement

II-4 Traffic Accidents

PL funds will be used to process and analyze police crash reports. The accident data will be used to analyze streets and intersections to support project development (long range projects and spot safety improvements).

Funding source: PL Funds: STP-DA supplement

II-6 Dwelling Unit, Population & Employment Changes

Funds in this category will support land development review and coordination activities.

Funding source: PL Funds: STP-DA supplement

II-9 Travel Time Studies

The funds will be used to update historical travel time data and dynamic route travel times. The data will be used to calculate average travel times and speeds along major corridors; to calibrate the modeled speeds; and to monitor congestion for MUMPO's CMP.

Funding sources: PL Funds: STP-DA supplement and Section 5303

II-10 GIS Analysis & Mapping

Funds in this category will be applied to completing

- updates and improvements to the transportation database; and
- updates to current land use information.

Funding source: PL Funds: STP-DA supplement

III Travel Demand Model

III-1 Collection of Base Year Data

Data including but not limited to population, households, mean income, employment, and school enrollment will be collected. This information is one of the primary inputs into the Metrolina Regional Travel Demand Model. Collection of this data is expected to be outsourced to a contractor. Sources for the data include, but are not limited to, the 2010 Census, InfoGroup, Dun & Bradstreet, and telephone surveys (to be outsourced to a contractor).

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Task Descriptions

FY 12 Unified Planning Work Program

Funding source: PL Funds

III-2 Collection of Network Data

Roadway network data and transit route data including but not limited to posted speed limits, number of lanes, traffic signal locations, route locations, headways, park and ride lot locations, and parking costs will be collected by staff.

Funding source: PL Funds

Vehicle classification counts will be collected by an outside contractor. Vehicle classification counts provide data necessary for model calibration and validation. Data provided includes number of vehicles by type and time of day as well as point location speed of each vehicle.

Funding source: PL Funds

III-3 Travel Model Updates

CATS & CDOT: Funds expended in this category will be devoted to the following annual model maintenance tasks: incorporate updated model data into the working model set; develop improved algorithms and scripts to enhance applications of the model; develop tools to produce a "user-friendly" model for end users and incorporate improvements resulting from the above; model documentation; provide training to NCDOT and SCDOT technical staff. Sub-tasks will be outlined in the FY12 Metrolina Regional Travel Demand Model Work Plan. Also, Consultant services will be used to continue refinements and improvements to the Transit Mode of the Travel Demand Model. Travel forecasts and ridership projections for use in updating the Transit Corridor System Plan and in general Transit System Planning will also be performed.

Funding source: PL Funds: STP-DA supplement & Section 5303 Funds

III-4 Travel Survey

A household travel survey will continue be conducted by an outside contractor during FY12. The objective of the data collection effort is to provide a statistically valid observation of the unique travel demand in the Metrolina Region for all modes of travel. This information will be the basis for the design, estimation, and calibration of a set of region-wide travel demand models used to project future demand for travel in the region. The survey gathers household- and person-level travel data, such as the number, length, and purpose of trips, as well as other trip details including mode of transportation and the time of day each trip.

Funding will also be used for additional technical services needed to aid in the:

- Development of the scope of services for the surveys, including but not limited to the household travel survey
- Analysis of survey data
- Updates to the trip generation program
- Updates to the trip distribution program

Funding sources: PL Funds & Section 5303 Funds

III-5 Forecast of Data to Horizon Years

Funding will be used to update the county level economic and demographic totals. This will provide needed information for verifying the aggregated TAZ level base year data

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Task Descriptions

FY 12 Unified Planning Work Program

and developing TAZ level future year projections. This task will be performed by an outside contractor.

Funding source: PL Funds

III-6 Forecasts of Future Travel Patterns

This task covers the various applications of the regional travel demand model including but not limited to traditional highway travel forecasts, managed lanes forecasts, and transit corridor forecasts.

State of the practice hardware and software are a necessity for this task. As such, funding for the following is also included:

- TransCAD maintenance fees for licenses-\$7,000
- TransModeler maintenance fees for licenses-\$3,000
- VISSIM maintenance fees for licenses-\$2,000

Sustainable hardware for the Metrolina Regional Travel Demand Model-\$4,000

Funding sources: PL Funds, PL Funds: STP-DA supplement & Section 5303 Funds

IV Long-Range Transportation Plan

IV-1 Community Goals & Objectives

Planned work:

- Extend the Mecklenburg County land use-transportation-emissions model into Union County and Mooresville/southern Iredell County
- Develop goals and objectives for the updated LRTP

Funding source: PL Funds: STP-DA supplement

IV-2 Highway Element

Work in this category will focus on:

- Assessing the effectiveness of the current roadway project ranking methodology
- If necessary, updating and/or preparing a new roadway project ranking methodology

Funding source: PL Funds

IV-3 Transit Element

CATS will continue to monitor and update the Transit Corridor System Plan including: evaluation of ridership forecasts, developing/refining financial projections, monitoring existing services and trends, and communicating to the public.

Funding source: 5303 Funds

IV-8 Freight Movement/Mobility Element

Efforts in this category will be directed to improving MUMPO's outreach to freight transportation providers. Additional resources may be needed if the region elects to pursue a freight planning study.

Funding source: PL Funds

IV-9 Financial Planning

Funding will support preliminary financial planning efforts.

Funding source: PL Funds

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Task Descriptions

FY 12 Unified Planning Work Program

V Continuing Programs

V-1 Congestion Management Strategies

MUMPO will begin work on an update to its congestion management process.

Funding source: PL Funds: STP-DA supplement

V-2 Air Quality/Conformity Analysis

MUMPO's planning area is classified as non-attainment for ozone and Mecklenburg County is classified as maintenance for carbon monoxide. Some of the potential tasks associated with the category are:

- Participation in interagency consultation process as part of SIP development and conformity determination development.
- Providing assistance to NCDENR in developing and maintaining mobile source emission inventories.
- Performing analysis and approving conformity determinations, at least one of which is anticipated during FY 12.
- Preparation of the air quality conformity determination report.

Funding source: PL Funds

V-3 Planning Work Program

Funds in this category will be used in the annual preparation of UPWP and the previous fiscal year's annual report.

Funding source: PL Funds

V-4 Transportation Improvement Program

Work associated with, but not limited to, completing work on the 2012-2018 TIP, processing amendments to the TIP and work with NCDOT's Strategic Prioritization of Transportation (SPOT) office.

Funding source: PL Funds & Section 5303 Funds

VI Administration

VI-2 Environmental Justice

MUMPO will continue to refine its plan to reach out to environmental justice communities through a series of efforts including, but not limited to, the following:

- Preparation of educational material explaining the transportation planning process
- Working with focus groups
- Development of a project impact evaluation methodology
- Development of a public outreach planning process manual

Funding for this work is allocated in task code VI-12, Management & Operations.

Funding source: PL Funds

VI-6 Public Involvement

MUMPO is committed to meaningful public participation in the regional transportation planning process and undertakes a variety of efforts each fiscal year that require outreach to the public. These efforts include, but are not limited to, the following:

- Long Range Transportation Plan (LRTP),
- Transportation Improvement Program (TIP)
- Unified Planning Work Program (UPWP)

Mecklenburg-Union Metropolitan Planning Organization

Task Descriptions

FY 12 Unified Planning Work Program

- Comprehensive Transportation Plan (CTP)
- Corridor studies
- Participation in public events sponsored by other agencies

Funding for this work is allocated in task code VI-12, Management & Operations.

Funding source: PL Funds

VI-9 Environmental Analysis & Pre-TIP Planning

Work in this category will focus on preparation of the Comprehensive Transportation Plan (CTP).

Funding for this work is allocated in task code VI-12, Management & Operations.

Funding source: PL Funds-STP-DA supplement

VI-10 Corridor Protection & Special Studies

Funds will support:

1. PL local transportation planning efforts:
 - Cornelius: \$1600 to support to TCC and Cornelius' Transportation Advisory Board.
 - Huntersville: \$28,000 to continue the Town's traffic count program, preparation of a pedestrian plan focused on future transit station areas, continuation of a connectivity study, work on a I-77/NC 73 interchange modification study and support of the MPO process.
 - Mecklenburg County: \$28,000 for the preparation of regional corridor bike lane/trail plan along the Red Line commuter rail corridor. Cornelius, Davidson, Huntersville and Charlotte are partners in this project.
 - Union County: \$80,000 for a US 74 corridor revitalization study. Stallings, Indian Trail and Monroe are partners in this project.
2. Various projects (performed in-house or by consultants) to define conceptual alignments of proposed Thoroughfare Plan roadway extensions or realignments
3. Assessment of urbanized area boundary changes on MUMPO
4. Other projects as recommended by the TCC

Funding sources: PL Funds: STP-DA supplement

VI-11 Regional or Statewide Planning

Funds will support:

- Continued coordination with regional MPO and RPO partners
- Activities associated with the Charlotte Regional Alliance for Transportation
- Activities associated with the NC Association of MPOs
- Implementation of recommendations of the Centralina COG regional transportation planning study.

Funding source: PL Funds

VI-12 Management & Operations

Work performed as outlined in the Prospectus:

- Attending MPO, TCC and Transportation Staff meetings
- Preparation of MPO and TCC agendas
- Preparation of MPO and TCC meeting minutes
- Updating MUMPO's website
- Overall management of the daily functions of MUMPO

Funding source: PL Funds & Section 5303 Funds

Mecklenburg-Union Urban Area
 FY 2012 Unified Planning Work Program
 Funding Sources and Projects

TASK CODE	TASK DESCRIPTION	SPR Highway		SEC. 104(f) PL Highway/Transit		SECTION 5303 Transit/Highway			STP-DA		LOCAL	TASK FUNDING SUMMARY			TOTAL
		NCDOT	FHWA	LOCAL	FHWA	LOCAL	NCDOT	FTA	LOCAL	FHWA	LOCAL	STATE	FEDERAL		
		20%	80%	20%	80%	10%	10%	80%	20%	80%					
II. CONTINUING TRANSPORTATION PLANNING															
II-1	Traffic Volume Counts	\$0	\$0	\$44,500	\$178,000	\$1,500	\$1,500	\$12,000	\$67,500	\$270,000	\$0	\$113,500	\$1,500	\$460,000	\$575,000
II-4	Traffic Accidents	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,500	\$70,000	\$0	\$17,500	\$0	\$70,000	\$87,500
II-6	Dwelling Unit, Population & Employment Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,500	\$50,000	\$0	\$12,500	\$0	\$50,000	\$62,500
II-9	Travel Time Studies	\$0	\$0	\$3,000	\$12,000	\$1,500	\$1,500	\$12,000	\$0	\$0	\$0	\$4,500	\$1,500	\$24,000	\$30,000
II-10	GIS Analysis & Mapping	\$0	\$0	\$41,500	\$166,000	\$0	\$0	\$0	\$0	\$0	\$0	\$41,500	\$0	\$166,000	\$207,500
II-12	Bicycle & Pedestrian Facilities Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
III. TRAVEL DEMAND MODEL															
III-1	Collection of Base Year Data	\$0	\$0	\$36,050	\$144,200	\$0	\$0	\$0	\$0	\$0	\$0	\$36,050	\$0	\$144,200	\$180,250
III-2	Collection of Network Data	\$0	\$0	\$7,000	\$28,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$0	\$28,000	\$35,000
III-3	Travel Model Updates	\$0	\$0	\$0	\$0	\$16,709	\$16,709	\$133,672	\$21,750	\$87,000	\$0	\$38,459	\$16,709	\$220,672	\$275,840
III-4	Travel Surveys	\$0	\$0	\$5,750	\$23,000	\$2,900	\$2,900	\$23,200	\$0	\$0	\$0	\$8,650	\$2,900	\$46,200	\$57,750
III-5	Forecast of Data to Horizon Years	\$0	\$0	\$4,000	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$16,000	\$20,000
III-6	Forecasts of Future Travel Patterns	\$0	\$0	\$13,500	\$54,000	\$3,750	\$3,750	\$30,000	\$0	\$0	\$0	\$17,250	\$3,750	\$84,000	\$105,000
IV. LONG-RANGE TRANSPORTATION PLANNING															
IV-1	Community Goals & Objectives	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,250	\$125,000	\$0	\$31,250	\$0	\$125,000	\$156,250
IV-2	Highway Element of LRTP	\$0	\$0	\$10,000	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$40,000	\$50,000
IV-3	Transit Element of LRTP	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$120,000	\$0	\$0	\$0	\$15,000	\$15,000	\$120,000	\$150,000
IV-7	Rail Element of LRTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
IV-8	Freight Movement/Mobility Element of LRTP	\$0	\$0	\$4,000	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$16,000	\$20,000
IV-9	Financial Planning	\$0	\$0	\$4,000	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$16,000	\$20,000
V. CONTINUING PROGRAMS															
V-1	Congestion Management Strategies	\$0	\$0	\$12,450	\$49,800	\$1,250	\$1,250	\$10,000	\$45,000	\$180,000	\$0	\$58,700	\$1,250	\$239,800	\$299,750
V-2	Air Quality/Conformity Analysis	\$0	\$0	\$2,500	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$0	\$10,000	\$12,500
V-3	Planning Work Program	\$0	\$0	\$1,250	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250	\$0	\$5,000	\$6,250
V-4	Transportation Improvement Program	\$0	\$0	\$8,700	\$34,800	\$1,250	\$1,250	\$10,000	\$0	\$0	\$0	\$9,950	\$1,250	\$44,800	\$56,000
VI. ADMINISTRATION															
VI-2	Environmental Justice	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VI-6	Public Involvement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VI-9	Environ. Analysis & Pre-TIP Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VI-10	Corridor Protection and Special Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,500	\$138,000	\$0	\$34,500	\$0	\$138,000	\$172,500
VI-11	Regional or Statewide Planning	\$0	\$0	\$2,500	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$0	\$10,000	\$12,500
VI-12	Management and Operations	\$0	\$0	\$37,500	\$150,000	\$2,103	\$2,103	\$16,824	\$0	\$0	\$0	\$39,603	\$2,103	\$166,824	\$208,530
TOTALS		\$0	\$0	\$181,250	\$725,000	\$43,212	\$43,212	\$345,696	\$200,000	\$800,000	\$0	\$424,462	\$43,212	\$1,870,696	\$2,338,370