



600 East Fourth Street
Charlotte, NC 28202
704-336-2205
www.mumpo.org

TO: TCC Members
FROM: Nicholas Landa
MUMPO Principal Planner
DATE: September 5, 2013

**SUBJECT: Technical Coordinating Committee (TCC) Agenda
September 2013 TCC Meeting—September 12, 2013**

The next TCC meeting is scheduled for **Thursday, September 12 at 10:00 AM** in the **Uptown Conference Room, on the 8th Floor** of the Charlotte-Mecklenburg Government Center (600 East Fourth Street). Attached is a copy of the agenda.

*Please note that the MPO is officially transitioning to the new **Charlotte Regional Transportation Planning Organization (CRTPO)** beginning in October 2013. Future correspondence for TCC-related matters will be provided under the new cover. MPO staff is currently in the process of updating the MPO website, and other associated materials, to reflect the new name and membership of the organization.*

Please call me at (704) 336-8309 if you have any questions.

MUMPO TCC

AGENDA

September 12, 2013

1. **Adoption of the Agenda** Danny Pleasant

2. **Consideration of August Meeting Minutes** Danny Pleasant
ACTION REQUESTED: Approve as presented, or with amendments.

3. **Transportation Improvement Program (TIP) Amendments**
 - a. **U-5511: NC 51, intersection improvements & superstreet design** (5 minutes) Ralph Messera
ACTION REQUESTED: Recommend that the MPO approve the requested TIP amendment, as presented.

BACKGROUND: See attached memorandum.

ATTACHMENTS: Memorandum; Amended TCSP Application

 - b. **US 21 & Catawba Avenue Roundabout** (5 minutes) Andrew Grant
ACTION REQUESTED: Recommend that the MPO approve the requested TIP amendment, as presented.

BACKGROUND: See attached memorandum.

ATTACHMENT: Memorandum

 - c. **LYNX Blue Line Extension (TIP #TE-4901)** (5 minutes) David McDonald
ACTION REQUESTED: Recommend that the MPO approve the requested TIP amendment, as presented.

BACKGROUND: See attached memorandum.

ATTACHMENTS: Memorandum; Draft TIP Amendment Resolution

4. **2040 Metropolitan Transportation Plan (MTP)** (20 minutes) Nicholas Landa
 - a. **Plan Update**
ACTION REQUESTED: FYI

BACKGROUND: An update on Plan progress will be provided.

 - b. **Roadway Project Ranking**
ACTION REQUESTED: Recommend that the MPO release the 2040 MTP draft fiscally constrained roadway project list for public comment.

BACKGROUND: The MPO has approved a roadway project ranking methodology, and has endorsed revenue assumptions for the 2040 MTP. Based on the approved ranking methodology and revenue assumptions, all candidate projects were scored and cost estimates were produced. Using that information, a draft fiscally constrained project list was developed. In addition, a workshop was held on September 5 with TCC and MPO members to review the draft fiscally constrained project list. Having received feedback from the TCC and MPO, it is now recommended that the draft project list be released for public review and comment.

ATTACHMENTS: Roadway Projects Funding Summary; Draft Fiscally Constrained Roadway Project List

c. October TCC Meeting Date

ACTION REQUESTED: Recommend that the TCC change the October TCC meeting date to Thursday, October 10, 2013.

BACKGROUND: The MPO has been in the process of updating its MTP for several months. In order to accommodate future action items related to the MTP update, the TCC is requested to move its regularly scheduled October meeting date back one week to October 10.

5. Strategic Transportation Investment/Strategic Mobility Formula (10 minutes) Nicholas Landa

ACTION REQUESTED: FYI

BACKGROUND: The Strategic Mobility Formula (SMF) – now referred to as the Strategic Transportation Investment (STI) – will require several actions by the MPO in the coming months. This item serves as a reminder about the next steps and schedule of anticipated STI-related action items.

6. CRAFT Resolution: Locally-Administered Projects (10 minutes) Robert Cook

ACTION REQUESTED: Recommend that the MPO adopt the attached resolution supporting implementation of quarterly meetings with NCDOT in order to improve coordination of locally-administered projects.

BACKGROUND: See attached memorandum.

ATTACHMENTS: Memorandum; Draft Resolution

7. MPO Planning Area Boundary Expansion (15 minutes) Robert Cook

ACTION REQUESTED: FYI

BACKGROUND: The following items will be discussed – 1) MOU adoption status; 2) TCC Bylaws changes; and 3) Agreements with adjacent MPOs to transfer planning responsibilities.

8. Unified Planning Work Program Process (10 minutes) Robert Cook

ACTION REQUESTED: FYI

BACKGROUND: Staff requested the J.S. Lane Company to examine current UPWP development procedures, and to recommend changes to improve both the process and the final document. A draft UPWP handbook has been prepared that will help explain and guide the UPWP process for staff, TCC members, MPO members and the public.

ATTACHMENTS: Draft Handbook

9. CONNECT Update (10 minutes) Jonathan Wells

ACTION REQUESTED: FYI

BACKGROUND: An update on the progress of the CONNECT our Future initiative will be provided, as well as information about upcoming CONNECT events.

10. Upcoming Issues

11. Adjourn

MECKLENBURG - UNION TECHNICAL COORDINATING COMMITTEE
Summary Meeting Minutes
Charlotte-Mecklenburg Government Center
Room 267
August 1, 2013

Voting Members: *TCC Chair* – Danny Pleasant (CDOT), *TCC Vice-Chair* – Joe Lesch (Union County), David Meachum (Charlotte Engineering & Property Management), Debra Campbell (C-M Planning), Eric Moore (LUESA-Air Quality), David McDonald (CATS), Louis Mitchell (NCDOT-Div. 10), Anil Panicker (NCDOT-TPB), Andrew Grant (Cornelius), Bill Coxe (Huntersville), Adam McLamb – alt for Scott Kaufhold (Indian Trail), Dana Clukey (Mint Hill), Shannon Martel (Stallings), Greg Mahar (Waxhaw), Jordan Cook (Weddington)

Staff: Robert Cook (MUMPO), Nick Landa (MUMPO), Stuart Basham (MUMPO), Andy Grzynski (CDOT), Norm Steinman (CDOT), John Rose (CATS), Jonathan Wells (C-M Planning), Elinor Hiltz (Iredell County), Matthew Todd (Iredell County), Neil Burke (Mooresville), Phil Collins (Statesville), Scott Cole (NCDOT), Pate Butler (NCDOT), David Keilson (NCDOT)

Guests: Bill Thunberg (LNTC), Todd Steiss (PB), Steve Blakley (Kimley-Horn), Page Hunter (HNTB), David Wiggins (Steele Creek Resident’s Association)

Danny Pleasant opened the meeting at 10:00 AM.

1. Adoption of the Agenda

Mr. Pleasant asked if any changes to the agenda are necessary. Hearing none, he asked for a motion to adopt the August TCC agenda. David Meachum made a motion to adopt the agenda. Bill Coxe seconded the motion. Upon being put to a vote, the motion passed unanimously.

2. Consideration of July Meeting Minutes

Mr. Pleasant asked if any changes to the minutes are necessary. Hearing none, he asked for a motion to approve the minutes. Mr. Coxe made a motion to approve the July TCC minutes. Mr. Meachum seconded the motion. Upon being put to a vote, the motion passed unanimously.

3. Transportation Improvement Program (TIP) Amendments

Presenter: Robert Cook

Summary/Action Requested:

Mr. Cook informed the TCC that two TIP amendments are being requested, as outlined [here](#). He noted that one of the amendments, to construct a roundabout at the intersection of Shopton and Beam roads (C-5533), is recommended to be delayed due to a lack of information. Upon discussion of the second proposed amendment – to construct a roundabout at the intersection of NC 51 and Matthews-Mint Hill Road – there was confusion about the intent of the amendment, so it was proposed that it also be delayed. No action was taken.

4. TIP Financial Plan

Presenter: Robert Cook

Summary/FYI:

Mr. Cook provided the TCC with an overview of the purpose and need for the TIP financial plan – notably that the State used to assist MPO's with the preparation of this plan, but that it will now be a MPO responsibility. He stated that the development of the plan will require the involvement of the MPO, CATS and NCDOT. Mr. Cook also noted that the plan is a federal requirement, so it is important to complete it as soon as possible. He indicated that there are some outstanding issues that will have to be dealt with, including how the plan will be impacted by the Strategic Mobility Formula, and determining whether the plan needs to cover the 4-year Federal TIP or the 7-year State TIP. Mr. Coxe asked if there is a deadline for plan completion, to which Mr. Cook responded that he is not aware of an official deadline but that the Federal Highway Administration had anticipated that it would be finished by now.

5. MPO Census-Related Activities

a. Planning Area Boundary Expansion – MOU Subcommittee

Presenter: Robert Cook

Summary/FYI:

Mr. Cook provided an update on the progress of the revised Memorandum of Understanding (MOU), informing the TCC that the MPO endorsed the MOU at its July meeting and set an effective date for the new MPO of October 1, 2013. He noted that there is a change to the population calculations in Iredell County which will need to be reflected in the MOU. It was also stated that several town boards have already scheduled the item to approve the MOU and become members of the MPO. Finally, Mr. Cook noted that staff will be available to provide presentations and answer questions, as necessary. Mr. Pleasant noted that some minor editing of the document is still necessary, which Mr. Coxe suggested could be a point of clarification to the town boards when the item is presented. Mr. Cook indicated that one of the next steps, following approval of the MOU, is to update the TCC Bylaws.

6. Unified Planning Work Program (UPWP) Process

Presenter: Robert Cook

Summary/FYI:

Mr. Cook reminded the TCC that Scott Lane, one of the MPO's on-call consultants, has been asked to evaluate the MPO's UPWP process and look for ways to improve it, including formalizing the process. He stated that there is not a lot of new information to report on this initiative, but he did briefly review the purpose and need of the initiative. Mr. Cook also indicated that he would like the TCC to recommend membership for a UPWP development workgroup at its September meeting.

7. I-77 HOT Lanes

Presenter: Bill Coxe, Town of Huntersville

Summary/FYI:

Mr. Coxe provided an update to the TCC about the progress of the I-77 HOT lanes project, as follows:

- Two public meetings for the project's Environmental Assessment (EA) were held on July 17 in Mooresville and July 18 in Charlotte, which were well attended;
- The deadline to officially submit comments on the EA is August 9, 2013;
- There was confusion about the access points to the HOT lanes at the public meetings, meaning more work on clarifying the access points is necessary;
- The I-77 Tech Team of the TCC intends to complete a list of comments to be sent prior to the August 9 NCDOT deadline; and
- The ramps are not addressed in the EA, of which the Griffith Street interchange is of particular concern due to its current tight configuration.

Louis Mitchell clarified that the schedule has changed slightly, and concessionaire submittals are anticipated to be due in January 2014. Norm Steinman reiterated the concerns of the I-77 Tech Team. Mr. Coxe noted that there is a noise wall issue that has recently been brought to the attention of several municipalities through which the I-77 corridor is located, and that additional time will be needed by those municipalities in order to provide the requested information to NCDOT. Mr. Mitchell announced that there is a meeting scheduled for tonight, August 1, to discuss the noise wall issues.

8. Strategic Mobility Formula (SMF)

Presenter: Nick Landa

Summary/FYI:

Mr. Landa provided information to the TCC via a Power Point presentation, the contents of which are incorporated into the minutes [here](#). He noted that this item will be taken with the next item on the agenda, regarding the 2040 Metropolitan Transportation Plan (MTP) development, since the SMF is linked to the revenue assumptions in the MTP. The following highlights Mr. Landa's talking points:

- The importance of completing specific tasks in the next couple of months was emphasized, because it will be necessary to stay on track to meet subsequent deadlines next year;
- An overview of the SMF was presented, outlining the three categories of projects eligible for funding, including the quantitative and local input criteria proposed to evaluate those projects;
- It was noted that the MPO will need to consider some policy decisions in order to use certain funds efficiently, specifically with regard to STP-Direct Attributable (DA) and Transportation Alternatives (TA) funding;
- A discussion followed about how the SMF will impact the MTP revenue assumptions, notably that the revenue assumptions endorsed by the MPO in May 2013 are based on the old transportation legislation and is based on historic trends from information provided by NCDOT;
- It was suggested that the MPO could continue to develop the MTP using the already endorsed assumptions, or it could consider the SMF and modify its assumptions, keeping in mind that there are still many unknowns associated with the new legislation;
- The potential funds available based on the SMF were provided;
- It was noted that the SMF applies to all eligible modes of transportation, not just roadways;
- A time line of next steps and key dates was provided, including that the MPO will be asked to either confirm or modify its 2040 MTP revenue assumptions at its August 21 meeting, and a workshop of the MPO and TCC is proposed for September 5 to further discuss the draft fiscally constrained project list for the 2040 MTP;

- Tasks completed related to the 2040 MTP candidate project ranking process were also provided, including that final project scoring is nearing completion, and that a series of transportation staff meetings will be held to present information and receive feedback; and
- It was again emphasized that the federal requirement for producing a final 2040 MTP, approved by the MPO, is March 2014 and that in order to meet that deadline project ranking needs to be complete by September 2013.

Mr. Lesch asked for clarification about revising the MTP revenue assumptions. Mr. Landa responded that even though revenue assumptions have already been endorsed for the MTP, a discussion is warranted about how the SMF could impact the previously endorsed MTP revenue assumptions now that it is officially the new transportation legislation for the State. Mr. Coxe reminded the TCC that the MTP is updated every four years, and by the time the next plan update is undertaken a lot more will be known about the impacts of the SMF. He also suggested that a discussion about how to allocate DA dollars could be part of the August 14 staff meeting discussion. Mr. Mitchell indicated that there has been some discussion at the Division and State level about how to allocate DA dollars, since they are exempt from the Regional Impacts category but not from the Division Needs category – which could have different implications for how those funds are allocated.

Mr. Landa concluded by noting that the action requested is to move the September TCC meeting from September 5 to September 12, in order to accommodate the proposed workshop.

Motion:

Mr. Coxe made a motion to move the regularly scheduled September TCC meeting back one week to Thursday, September 12, 2013. Mr. Lesch seconded the motion. The motion passed unanimously.

9. 2040 Metropolitan Transportation Plan (MTP)

Presenter: Nick Landa

Summary/FYI:

This item was taken with agenda item 8, due to the relationship between the two topics.

10. Upcoming Issues

No upcoming issues were announced.

11. Adjourn: The meeting was adjourned at 11:30 AM.



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TO: TCC Members
FROM: Robert W. Cook, AICP
MUMPO Secretary
DATE: September 5, 2013
SUBJECT: U-5511 TIP Amendment

REQUEST

The TCC is requested to recommend to the MPO that it amend the TIP as noted below.

BACKGROUND

NCDOT and the Town of Matthews received a Transportation, Community and System Preservation (TCSP) grant in 2011 to construct a roundabout at the intersection of NC 51 and Matthews-Mint Hill Road. The MPO amended the TIP in November 2011 to program the project for planning and engineering. The project has been modified since that time to eliminate the roundabout concept. The project will now consist of improvements to the intersection of Matthews-Mint Hill Road and NC 51 and convert a portion of NC 51 to a superstreet design. The current estimate is \$657,533: TCSP grant in the amount of \$526,027, plus the Town supplied 20% match of \$131,507.

The proposed action will amend the TIP to include the modified design and fund construction in FY 2014.

ATTACHMENTS

Amended TCSP application.

Transportation, Community, and System Preservation Program (TCSP)

PROGRAM FY 2011 GRANT APPLICATION

PART A. PROJECT INFORMATION

Project Title:	NC 51 Superstreet
Project Location (Include City/County, State):	NC Highway 51 near its intersection with Matthews-Mint Hill Road, located in Matthews/Mecklenburg County, North Carolina
State Priority (to be completed by State DOT):	
GRANTEE CONTACT INFORMATION	
Grantee Contact Name:	C.J. O'Neill, PE
Agency/Tribal Government:	Town of Matthews
Mailing Address (Street/P.O. Box):	1600 Tank Town Road
City, State, Zip code:	Matthews, NC 28105
Phone:	704.708.1242
Fax:	704.845.2488
E-Mail:	cjoneill@matthewsnc.gov
STATE DOT CONTACT INFORMATION	
State Contact Person:	Van Argabright
Phone:	919.707.4622
Fax:	919.733.3585
E-Mail:	vargabright@ncdot.gov
FHWA DIVISION OFFICE CONTACT INFORMATION	
Division Contact Person:	Bill Marley
Phone:	919.747.7028
Fax:	919.747.7030
E-Mail:	bill.marley@dot.gov

CONGRESSIONAL INFORMATION				
Congress Member:	The Honorable Robert Pittenger			
Congressional District No.:	9			
TCSP Program Funds:	\$526,027.00			
Matching Funds/In-kind Services Value:	\$131,506.75			
Matching Funds/In-kind Services Source:	\$0.00			
Total TCSP-Related Project Costs:	\$657,533.75			
TO BE COMPLETED BY THE FHWA DIVISION OFFICE				
State Administered?		Yes		No
Division Administered?		Yes		No
“Transfer” TCSP funding for Project Administration?		Yes		No
If yes, which Federal Agency				
Will the project be obligated by September 30, 2011?		Yes		No
Date grant application approved by FHWA Division Office				

Part B. Project Abstract

Federal Transportation, Community, and System Preservation funds will be used to install a superstreet and intersection improvements at a high-traffic intersection in the Town of Matthews, North Carolina. These improvements will increase traffic capacity and improve subsequent air quality issues, as well as safety on a commuter corridor that is also home to the Town’s only public high school.

Part C. Project Narrative

The Town of Matthews, North Carolina seeks \$526,027.00 from the FY 2011 Transportation, Community, and System Preservation Program to make improvements to the intersection of Matthews-Mint Hill Road and NC 51 and convert a portion of NC51 to a superstreet design. The Town of Matthews, with a population of 28,500, is a suburb of Charlotte, North Carolina, the largest city in the State. Many residents of Matthews and its neighboring town of Mint Hill commute to work in Charlotte using NC 51. Additionally, the entrance to Butler High School, the Town's only public high school with approximately 2,400 students and faculty, is situated 800 feet from the subject intersection. As a result, this corridor hosts heavy traffic throughout the day.

The Town of Matthews, working with the North Carolina Department of Transportation (NCDOT), is committed to improving the capacity and safety of this vicinity by upgrading the streets and intersection. The [Town of Matthews](#)¹ and NCDOT will commit to cooperatively fund the 20% match required by this grant. NCDOT will also provide engineering, contract oversight and administration.

On March 11, 2011, NCDOT completed an [evaluation of the intersection at Matthews-Mint Hill Road and NC 51](#)² and the immediate vicinity, which includes Butler High School. The evaluation concluded that, based on a safety and capacity analyses, a roundabout should be installed at the subject intersection. However, this evaluation did not take cost into consideration. The cost of a roundabout was estimated by NCDOT to be approximately \$1.4 million. At roughly half the cost, the superstreet and intersection improvements will increase the southbound NC51 approach to the intersection from a level of service (LOS) of E to an A and the westbound Matthews-Mint Hill Road approach from an F to a C, both in the PM peak hour.

This area is part of a transit-oriented development plan that focuses on efficient, cost-effective transportation infrastructure that maximizes safety and environmental preservation. The superstreet project is consistent with that plan. The Town is working with partners like Butler High School to ensure the safety of those traveling to and from the school, as well as other residents and visitors that use this corridor during peak hours.

Installing a superstreet and intersection improvements at the Matthews-Mint Hill/NC 51 addresses many livability principles. This superstreet design is an operational improvement to the corridor that enhances safety, provides access management to reduce traffic accidents, and reduces queuing and spillback that have a negative impact on the environment. By keeping traffic open and safely flowing, superstreets increase traffic capacity while saving vehicles from stopping at a traffic light. While stopped, a vehicle's exhaust emits more undesirable pollutants and gases into the atmosphere, and because superstreets often eliminate such stops and improve traffic flow, they also reduce vehicle emissions and fuel consumption.

¹ Resolution by the Matthews Town Board of Commissioners supporting this application.

² Evaluation by the North Carolina Department of Transportation.



This project also addresses “State of Good Repair” because the superstreet will minimize queuing and spillback that contribute to poor road conditions. In addition, a superstreet reduces long-term operational costs. With limited or no electrical costs and lower maintenance costs, operational savings from superstreets have been estimated at an average of \$5,000 per year compared to a signalized intersection.

The Town of Matthews has confirmed with NCDOT that this project can be commenced prior to the end of federal fiscal year 2014, and based on the project schedule provided below; this project can be completed in an expeditious manner with the infusion of federal funds. NCDOT will administer this project, and the Town is also working with endorsement of the [Mecklenburg-Union Metropolitan Planning Organization](#)³.

PROJECT SCHEDULE

	July 2013	Aug. 2013	Sept. 2013	Oct. 2013	Nov. 2013	Dec. 2013	Jan. 2014	Feb. 2014	Mar. 2014
Design of Superstreet									
Acquire Right-of-Way									
Review bids, award contract									
Project Construction									

	Apr. 2014	May 2014	June 2014	July 2014	Aug. 2014	Sept. 2014	Oct. 2014	Nov. 2014	Dec. 2014
Design of Superstreet									
Acquire Right-of-Way									
Review bids, award contract									
Project Construction									

Also, please see detailed [project estimate](#)⁴ and [concept plan](#)⁵ provided by NCDOT.

³ Support letter from Mecklenburg-Union Metropolitan Planning Organization.

⁴ Cost Estimate from NCDOT.

⁵ Concept Plan from NCDOT.

Part D. Project Eligibility

The Matthews-Mint Hill Road and NC 51 Superstreet project is located at the intersection of two Federal-aid highways. North Carolina State Highway 51 (Matthews Township Drive) is classified as a Principal Arterial (Other) and Matthews-Mint Hill Road is classified as a Minor Arterial.

For the reasons stated in the Project Narrative (Part C.), this project is an eligible use of Transportation, Community, and System Preservation Program funds. The superstreet will improve traffic capacity and safety on a heavily traveled commuter corridor that is also in the immediate vicinity of the Town's only public high school. In addition, this area is part of a transit-oriented development plan that focuses on efficient, cost-effective transportation infrastructure that maximizes safety and environmental preservation.



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TO: TCC Members
FROM: Robert W. Cook, AICP
MUMPO Secretary
DATE: September 5, 2013
SUBJECT: **US 21 & Catawba Avenue Roundabout TIP Amendment**

REQUEST

The TCC is requested to recommend to the MPO that it amend the TIP as noted below.

BACKGROUND

In July 2012, MUMPO awarded CMAQ funds to a project to construct a roundabout at the intersection of US 21 and Catawba Avenue in Cornelius. The awarded funds totaled \$2,006,000 for construction in FY 2016. NCDOT and town staffs have agreed to a design and are prepared to proceed with an amendment to formally program the project in the TIP.

The intersection is located approximately .25 miles from exit 28 on I-77, where construction is to begin soon on converting the existing diamond interchange to a diverging diamond interchange (DDI). That project is scheduled for completion in November 2014. Cornelius would like to better coordinate construction schedules, specifically, starting the roundabout at the time the DDI project is complete. Therefore, it wishes to advance the project so that planning, environmental, engineering and right of way work can start in FFY 14, thereby allowing construction to start immediately after the interchange project is complete.

The action requested is to recommend that the MPO amend the TIP by adding this project to FY14 and FY15. NCDOT has confirmed that it has the capacity to shift these CMAQ funds from FY16 to FY14/15.



MEMORANDUM

TO: Nicholas Landa

FROM: E. David McDonald, II, P.E. *E.D. McDonald II*

SUBJECT: LYNX BLE TIP Amendment for September 12 TCC Meeting

DATE: September 5, 2013

In order to encumber federal dollars through the FTA's Electronic Grant Management System (TEAM), CATS needs to amend the LYNX BLE Project, TIP # TE-4901, to accurately reflect the appropriated State and Federal matching funds for FY 13 and the anticipated funding for FY 14-22 in the State Transportation Improvement Program. This amendment makes these changes so that future grant applications can be submitted with the appropriate TIP information in place. The amendment reflects the funding partners (USDOT, State of North Carolina, City of Charlotte/Charlotte Area Transit System) and their previously agreed upon financial participation in the project. This amendment does not change the overall project cost nor the percentage of participation among the funding partners.

Existing TIP

Funds	Source	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
FNS	US	50,243	107,748	137,675	102,232	3,135
FNS	STAT	25,122	53,874	68,838	51,116	1,567
FNS	L	25,122	53,874	68,838	51,116	1,567

Modify TIP

Funds	Source	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
FNS	US	66,158	100,000	100,000	100,000	100,000
FNS	STAT	62,919	25,000	25,000	25,000	25,000
FNS	L	156,560	75,000	29,586	-	-

Funds	Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
FNS	US	74,235	-	-	-	-
FNS	STAT	25,000	25,000	25,000	25,000	16,328
FNS	L	-	-	-	-	-

If you have questions, please feel free to contact me at 704-336-6900.

RESOLUTION

**ADOPTING AN AMENDMENT TO THE MECKLENBURG-UNION URBAN AREA
METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR
FY2012-FY2018**

A motion was made by _____ and seconded by MPO Member _____ for the adoption of the resolution, and upon being put to a vote was duly adopted.

WHEREAS, the Mecklenburg-Union Metropolitan Planning Organization has approved the 2030 Corridor System Plan previously adopted by the Metropolitan Transit Commission; and

WHEREAS, the Mecklenburg-Union Metropolitan Planning Organization has reviewed the FY2012-2018 Transportation Improvement Program and found the need to amend it to be consistent with the 2030 Corridor System Plan; and

WHEREAS, in order to successfully apply for federal participation in the project the correct costs and corresponding years must be reflected in the state's Transportation Improvement Program; and

WHEREAS, the requested revision to TIP project TE-4901 (LYNX Blue Line Ext.) is as follows:

Existing TIP

Funds	Source	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
FNS	US	50,243	107,748	137,675	102,232	3,135
FNS	STAT	25,122	53,874	68,838	51,116	1,567
FNS	L	25,122	53,874	68,838	51,116	1,567

Modify TIP

Funds	Source	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
FNS	US	66,158	100,000	100,000	100,000	100,000
FNS	STAT	62,919	25,000	25,000	25,000	25,000
FNS	L	156,560	75,000	29,586	-	-

Funds	Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
FNS	US	74,235	-	-	-	-
FNS	STAT	25,000	25,000	25,000	25,000	16,328
FNS	L	-	-	-	-	-

WHEREAS, the proposed project is included in the conforming *2035 Long Range Transportation Plan* (which has a planning horizon year of 2035), and meets all the requirements in 23 CFR 450.

NOW THEREFORE BE IT RESOLVED by the Mecklenburg-Union Urban Area Metropolitan Planning Organization that the FY2012-FY2018 Metropolitan Transportation Improvement Program dated Dec. 16, 2011 for the Mecklenburg-Union Urban Area is amended as listed above on this the 18th day of September, 2013.

Signature of MPO Chairman

MPO Secretary Signature

Funding Category	Horizon Year	Available Funds (in Future Yr \$M)	Allocated Funds (in Future Yr \$M)	Remaining Funds (in Future Yr \$M)	No. of Projects Funded
Statewide	2025	983.1	970.6	12.5	11
	2030	581.7	580.9	0.8	2
	2040	1,351.3	1,349.8	1.5	4
	Total	2,916.1	2,901.3	14.8	17
Region E	2025	535.9	534.9	1.0	16
	2030	317.1	305.3	11.8	6
	2040	736.6	491.6	245.0	5
	Total	1,589.6	1,331.8	257.8	27
Region F	2025	72.3	70.4	1.9	4
	2030	42.8	42.0	0.8	1
	2040	99.4	82.9	16.5	1
	Total	214.5	195.3	19.2	6
Division 10	2025	235.3	233.5	1.8	14
	2030	139.2	140.1	-0.9	3
	2040	323.4	314.2	9.2	6
	Total	697.9	687.8	10.1	23
Division 12	2025	77.7	56.8	20.9	5
	2030	46.0	48.1	-2.1	1
	2040	106.8	111.0	-4.2	1
	Total	230.5	215.9	14.6	7
Grand Total		5,648.6	5,332.1	316.5	80

Note: Remaining funds are carried into subsequent Horizon Year to fund additional projects in Division 10 and Division 12

Statewide Mobility

Project Name	ID	Route Number	From	To	Jurisdictions	Improvement Type	Tier 1 Score	Tier II Score	Total Score	Project Cost (in 2012 \$M)	Project Cost (in Future Yr \$M)+++
Horizon Year 2025 (2016-2025)											
I-77 *	145	I-77	Woodlawn Rd (Exit 6)	I-277 (Belk Fwy) (Exit 9)	Charlotte	Widening (HOT)	165	15	180	\$ 212.1	\$ 313.9
I-77	143	I-77	I-277 (Belk Frwy) (Exit 9)	I-277 (Brookshire Fwy) (Exit 11)	Charlotte	Widening	160	15	175	\$ 20.3	\$ 30.0
Independence Blvd	136	US 74	Sharon Amity Rd	I-277 (Brookshire Fwy)	Charlotte	Widening (HOT)	128	34	162	\$ 15.0	\$ 22.2
I-277 (Belk Frwy)/I-77	132	I-277/I-77			Charlotte	Improve Existing Interchange	136	25	161	\$ 56.4	\$ 83.5
I-277 (Brookshire Frwy)/I-77	135	I-277/I-77			Charlotte	Improve Existing Interchange	133	19	152	\$ 17.7	\$ 26.2
I-485 *	138	I-485	I-77	Independence Blvd	Charlotte, Matthews & Pineville	Widening (HOT)	125	24	149	\$ 101.3	\$ 149.9
I-77/Gilead Rd	97	I-77			Huntersville	Improve Existing Interchange	112	33	145	\$ 10.4	\$ 15.4
Independence Blvd *	148	US 74	Conference Dr	Sardis Rd North	Charlotte	Widening (HOT)	116	26	142	\$ 86.6	\$ 128.2
I-77/W Plaza Dr	47	I-77/NC 150			Mooresville	Improve Existing Interchange	111	30	141	\$ 8.6	\$ 12.7
University City Blvd	175	NC 49	John Kirk Dr	I-485	Charlotte	Widening	112	22	134	\$ 25.3	\$ 37.4
Independence Blvd *	189	US 74	Sardis Rd North	I-485	Charlotte & Matthews	Widening (HOT)	100	22	122	\$ 102.1	\$ 151.1
Total Costs:										\$	970.6
Horizon Year 2030 (2026-2030)											
I-77 *	144	I-77	I-485 (Exit 1)	Woodlawn Rd (Exit 6)	Charlotte	Widening (HOT)	160	18	178	\$ 246.2	\$ 521.9
Roosevelt Blvd	266	US 74	Hanover Dr	Rocky River Rd (SR 1914/SR 1007)	Monroe	Widening	110	18	128	\$ 27.8	\$ 58.9
Total Costs:										\$	580.9
Horizon Year 2040 (2031-2040)											
I-277 (Brookshire Frwy)	134	I-277	I-77	Independence Blvd	Charlotte	Widening	150	18	168	\$ 101.6	\$ 283.5
I-77	72	I-77	West Catawba Ave (Exit 28)	NC 150 (Exit 36)	Cornelius & Mooresville	Widening	119	29	148	\$ 154.4	\$ 430.8
Garden Pkwy	125		I-485	Gaston County Line	Charlotte	New Location	114	33	147	\$ 205.4	\$ 573.1
University City Blvd	174	NC 49	N Tryon St (US 29)	John Kirk Dr	Charlotte	Widening	105	19	124	\$ 22.4	\$ 62.5
Total Costs:										\$	1,349.8

* Project cost reduced to account for anticipated managed lanes revenue

+++ Future Year costs are estimated by escalating 2012 costs as follows:

-For 2016 - 2025 timeframe - Project costs are escalated to year 2020

-For 2026 - 2030 timeframe - Project costs are escalated to year 2028

-For 2031 - 2040 timeframe - Project costs are escalated to year 2035

Project Name	ID	Route Number	From	To	Jurisdictions	Improvement Type	Tier 1 Score	Tier II Score	Total Score	Project Cost (in 2012 \$M)	Project Cost (in Future Yr \$M)+++
Horizon Year 2025 (2016-2025)											
NC 73	96	NC 73	Vance Rd Ext	West Catawba Ave (SR 5544)	Huntersville	Widening	142	31	173	\$ 10.7	\$ 25.3
Statesville Rd	78	US 21	Gilead Rd (SR 2136)	Holly Point Dr	Huntersville	Widening	122	25	147	\$ 22.6	\$ 33.4
Statesville Rd	70	US 21	Northcross Center Court	Westmoreland Rd (SR 2147)	Cornelius & Huntersville	Widening	119	28	147	\$ 23.6	\$ 34.9
Sam Furr Rd	81	NC 73	West Catawba Ave (SR 5544)	Northcross Dr (SR 2316)	Huntersville	Widening	125	20	145	\$ 29.2	\$ 43.2
Rea Rd/Marvin School Rd	247	NC 84	NC 16	Twelve Mile Creek Rd	Weddington	New Location	103	41	144	\$ 20.5	\$ 30.3
Statesville Rd	103	US 21	WT Harris Blvd (NC 24)	Gilead Rd (SR 2136)	Charlotte & Huntersville	Widening	112	31	143	\$ 48.5	\$ 71.8
Matthews-Mint Hill Rd	210	NC 51	Matthews Township Pkwy	Lawyers Rd	Matthews & Mint Hill	Widening	107	35	142	\$ 34.9	\$ 51.7
Steele Creek Rd	172	NC 160	Shopton Rd West	S Tryon St (NC 49)	Charlotte	Widening	112	27	139	\$ 39.4	\$ 58.3
Brookshire Blvd	113	NC 16	Idaho Dr	I-85	Charlotte	Widening	106	31	137	\$ 2.0	\$ 3.0
Harris Blvd	129	NC 24	Reames Rd	I-485	Charlotte	Widening	106	30	136	\$ 4.5	\$ 6.7
Steele Creek Rd	173	NC 160	S Tryon St (NC 49)	South Carolina State Line	Charlotte	Widening	108	25	133	\$ 24.9	\$ 36.9
Providence Rd S	249	NC 16	Rea Rd Ext	Cuthbertson Rd	Marvin, Waxhaw & Weddington	Widening	105	27	132	\$ 38.4	\$ 56.8
Old Statesville Rd	165	NC 115	Harris Blvd	I-485	Charlotte	Widening	106	25	131	\$ 20.1	\$ 29.7
Old Statesville Rd	71	NC 115	Washam Potts Rd (SR 2600)	Sam Furr Rd (NC 73)	Cornelius & Huntersville	Widening	103	25	128	\$ 25.3	\$ 37.4
South Tryon St	170	NC 49	I-77	Yorkmont Rd	Charlotte	Widening	95	32	127	\$ 4.9	\$ 7.3
Matthews Township Pkwy	198	NC 51	Sardis Rd	Monroe Rd/E John St	Matthews	Widening	107	19	126	\$ 5.5	\$ 8.1
Total Costs:										\$	534.9
Horizon Year 2030 (2026-2030)											
South Tryon St	169	NC 49	I-485	Steele Creek Rd	Charlotte	Widening	121	17	138	\$ 33.3	\$ 70.6
NC 73	95	NC 73	Lincoln County Line/Catawba River	Vance Rd Ext	Huntersville	Widening	104	25	129	\$ 43.7	\$ 93.5
Weddington Rd	244	NC 84	Twelve Mile Creek Rd	Waxhaw - Indian Trail Rd	Weddington & Wesley Chapel	Widening	101	28	129	\$ 18.7	\$ 39.6
Providence Rd S	253	NC 16	Cuthbertson Rd	Waxhaw Pkwy	Waxhaw	Widening	107	21	128	\$ 21.3	\$ 45.2
Harris Blvd	128	NC 24	University City Blvd (NC 49)	The Plaza	Charlotte	Widening	108	18	126	\$ 24.7	\$ 52.4
Brookshire Frwy	114	NC 16	I-77	Beatties Ford Rd	Charlotte	Widening	103	20	123	\$ 1.9	\$ 4.0
Total Costs:										\$	305.3
Horizon Year 2040 (2031-2040)											
Pineville-Matthews Rd	167	NC 51	I-485	Rea Rd	Charlotte & Pineville	Widening	130	18	148	\$ 63.7	\$ 177.7
I-277 (Belk Frwy) +	133	I-277	McDowell St	Independence Blvd (US 74)	Charlotte	Widening	115	15	130	\$ 58.2	\$ 162.4
Davidson-Concord Rd	74	NC 73	Davidson-Concord Rd (SR 2693)	Poplar Tent Rd (SR2424)	Davidson & Huntersville	Widening	100	24	124	\$ 22.0	\$ 61.4
Billy Graham Pkwy +	110		Josh Birmingham Pkwy	I-85	Charlotte	Widening	103	18	121	\$ 24.2	\$ 67.5
S Main St	58	NC 115	Washam Potts Rd	Potts St	Cornelius	Widening	98	22	120	\$ 8.1	\$ 22.6
Total Costs:										\$	491.6

+ Project moved from Statewide Funding Category

+++ Future Year costs are estimated by escalating 2012 costs as follows:

-For 2016 - 2025 timeframe - Project costs are escalated to year 2020

-For 2026 - 2030 timeframe - Project costs are escalated to year 2028

-For 2031 - 2040 timeframe - Project costs are escalated to year 2035

Project Name	ID	Route Number	From	To	Jurisdictions	Improvement Type	Tier 1 Score	Tier II Score	Total Score	Project Cost (in 2012 \$M)	Project Cost (in Future Yr \$M)+++
Horizon Year 2025 (2016-2025)											
River Hwy	26	NC 150	Waddell Rd (SR 1438)	Perth Rd (SR 1303)	Iredell County & Mooresville	Widening	135	37	172	\$ 11.4	\$ 16.9
Plaza Dr	45	NC 150	I-77 (Exit 36)	US 21	Mooresville	Widening	115	57	172	\$ 11.7	\$ 17.3
River Hwy/W Plaza Dr	44	NC 150	Ervin Rd (SR 1304)	I-77 (Exit 36)	Mooresville	Widening	116	55	171	\$ 9.2	\$ 13.6
River Hwy	43	NC 150	Perth Rd (SR 1303)	Ervin Rd (SR 1304)	Mooresville	Widening	116	39	155	\$ 15.3	\$ 22.6
										Total Costs:	\$ 70.4
Horizon Year 2030 (2026-2030)											
Wilkesboro Hwy	278	NC 115	I-40	Sullivan Farm Rd (SR 1929)	Statesville & Iredell County	Widening	111	28	139	\$ 19.8	\$ 42.0
										Total Costs:	\$ 42.0
Horizon Year 2040 (2031-2040)											
Oakridge Farm Hwy	27	NC 150	US 21	NC 801	Mooresville	Widening	122	19	141	\$ 29.7	\$ 82.9
										Total Costs:	\$ 82.9

+++ Future Year costs are estimated by escalating 2012 costs as follows:
 -For 2016 - 2025 timeframe - Project costs are escalated to year 2020
 -For 2026 - 2030 timeframe - Project costs are escalated to year 2028
 -For 2031 - 2040 timeframe - Project costs are escalated to year 2035

Project Name	ID	Route Number	From	To	Jurisdictions	Improvement Type	Tier 1 Score	Tier II Score	Total Score	Project Cost (in 2012 \$M)	Project Cost (in Future Yr \$M)+++
Horizon Year 2025 (2016-2025)											
South Trade St **	194	SR 3448	Fullwood Ln	Weddington Rd	Matthews	Widening	137	45	182	\$ 1.6	\$ 2.4
Old Monroe Rd	228	SR 1009	I-485	Waxhaw - Indian Trail Rd (SR 1008)	Indian Trail, Matthews & Stallings	Widening	152	24	176	\$ 30.7	\$ 45.4
Idlewild Rd	213	SR 1501	I-485	Stevens Mill Rd (SR 1524)	Matthews & Stallings	Widening	120	37	157	\$ 7.1	\$ 10.5
North Univ. Research Park Bridge	161		Louis Rose Pl	Doug Mayes Pl	Charlotte	New Location	119	33	152	\$ 6.3	\$ 9.3
East John St	199	SR 1010	Trade St	I-485	Matthews	Widening	132	18	150	\$ 12.5	\$ 18.5
Arequipa Dr/Northeast Pkwy	186		Margaret Wallace Rd	Sam Newell Rd	Charlotte & Matthews	New Location	116	30	146	\$ 12.5	\$ 18.5
Old Monroe Rd **	190	SR 1957	Waxhaw-Indian Trail Rd	Wesley Chapel Rd	Indian Trail	Widening	110	34	144	\$ 15.2	\$ 22.5
Krefeld Dr Ext	151		Krefeld Dr	Sardis Rd North	Charlotte	New Location	116	27	143	\$ 9.6	\$ 14.2
Airport Entrance Rd	107		Scott Futrell Dr	Wilkinson Blvd	Charlotte	New Location	103	36	139	\$ 7.7	\$ 11.4
Northeast Pkwy	193		Overcash Dr	Matthews-Mint Hill Rd	Matthews	New Location	100	33	133	\$ 5.3	\$ 7.8
Independence Pointe Pkwy	196		Matthews-Mint Hill Rd	Campus Ridge Rd	Matthews	New Location	100	31	131	\$ 16.3	\$ 24.1
Krefeld Dr/Independence Pointe Pkwy	188		Crownpoint Executive Dr	Sam Newell Rd	Charlotte & Matthews	New Location	100	29	129	\$ 9.6	\$ 14.2
Independence Pointe Pkwy	195		Sam Newell Rd	Matthews Township Pkwy (NC 51)	Matthews	New Location	100	28	128	\$ 19.0	\$ 28.1
Charlotte Ave	261	SR 1009	Seymour St	Dickerson Blvd (NC 200)	Monroe	Widening	101	25	126	\$ 4.4	\$ 6.5
										Total Costs:	\$ 233.5
Horizon Year 2030 (2026-2030)											
Mallard Creek Rd	152		Mallard Creek Church Rd	Breezewood Dr	Charlotte	Widening	125	25	150	\$ 21.6	\$ 45.8
Charlotte Ave	263	SR 1009	Concord Ave	Church St	Monroe	Widening	122	28	150	\$ 41.2	\$ 87.3
Lawyers Rd	218	SR 1004	I-485	Stevens Mill Rd (SR 1524)	Stallings	Widening	95	34	129	\$ 3.3	\$ 7.0
										Total Costs:	\$ 140.1
Horizon Year 2040 (2031-2040)											
Old Concord Rd	163		WT Harris Blvd East	University City Blvd	Charlotte	Widening	135	21	156	\$ 14.1	\$ 39.3
Catawba Ave	68	SR 5544	Jetton Rd	NC 73	Cornelius	Widening	108	35	143	\$ 24.2	\$ 67.5
Ballantyne Commons Pkwy	109		Annalexa Ln	Williams Pond Ln	Charlotte	Widening	119	23	142	\$ 17.9	\$ 49.9
Gilead Rd	76	SR 2136	Statesville Rd (US 21)	Old Statesville Rd (NC 115)	Huntersville	Widening	113	28	141	\$ 6.1	\$ 17.0
Idlewild Rd	237	SR 1501	Stevens Mill Rd	Faith Church Rd	Indian Trail & Hemby Bridge	Widening	112	28	140	\$ 48.0	\$ 133.9
Potters Rd	222	SR 1357	Old Monroe Rd	Pleasant Plains Rd	Stallings	Widening	96	30	126	\$ 2.3	\$ 6.4
										Total Costs:	\$ 314.2

** Project cost reduced to account for municipality share

+++ Future Year costs are estimated by escalating 2012 costs as follows:

- For 2016 - 2025 timeframe - Project costs are escalated to year 2020
- For 2026 - 2030 timeframe - Project costs are escalated to year 2028
- For 2031 - 2040 timeframe - Project costs are escalated to year 2035

Project Name	ID	Route Number	From	To	Jurisdictions	Improvement Type	Tier 1 Score	Tier II Score	Total Score	Project Cost (in 2012 \$M)	Project Cost (in Future Yr \$M)+++
Horizon Year 2025 (2016-2025)											
Midnight Ln/Oates Rd	50				Mooreville	New Grade Separation	107	48	155	\$ 9.6	\$ 14.2
Williamson Rd	51	SR 1109	Brawley School Rd (SR 1100)	NC 150	Mooreville	Widening	108	33	141	\$ 4.9	\$ 7.3
Brawley School Rd	46	SR 1100	Talbert Rd (SR 1116)	US 21	Mooreville	Widening	96	29	125	\$ 9.1	\$ 13.5
Eastside Dr	5		Salisbury Rd	East Broad St (SR 2321)	Statesville	Widening	97	23	120	\$ 7.5	\$ 11.1
Cornelius Rd/Mazeppa Rd	34		NC 115	US 21	Iredell County & Mooreville	New Location	92	--	--	\$ 7.3	\$ 10.8
										Total Costs:	\$ 56.8
Horizon Year 2030 (2026-2030)											
Main St/Shelton Ave ^	13	US 21/NC 115	Cedar Ln (SR 2005)	Moose Club Rd	Iredell County & Troutman	Widening	117	77	194	\$ 22.7	\$ 48.1
										Total Costs:	\$ 48.1
Horizon Year 2040 (2031-2040)											
Garner Bagnal Blvd ^	6	US 64/NC 90	I-40	I-77	Statesville	Widening	108	50	158	\$ 39.8	\$ 111.0
										Total Costs:	\$ 111.0

^ Project Moved from Region F Funding Category

-- Tier II scores were not calculated for Project 34. However, this project is funded using the unallocated Division 12 monies.

+++ Future Year costs are estimated by escalating 2012 costs as follows:

- For 2016 - 2025 timeframe - Project costs are escalated to year 2020
- For 2026 - 2030 timeframe - Project costs are escalated to year 2028
- For 2031 - 2040 timeframe - Project costs are escalated to year 2035



600 East Fourth Street
Charlotte, NC 28202
704-336-2205
www.mumpo.org

TO: TCC Members
FROM: Robert W. Cook, AICP
MUMPO Secretary
DATE: September 5, 2013
SUBJECT: **CRAFT Resolution: Locally-Administered Projects**

REQUEST

The TCC is requested to recommend to the MPO that it amend the TIP as noted below.

BACKGROUND

The Charlotte Regional Alliance for Transportation (CRAFT) is an association of the region's five transportation planning organizations.

CRAFT's Technical Committee met on July 23, 2013 and voted unanimously to recommend that the staff of each MPO and RPO recommend to its policy board that it adopt a resolution supporting the scheduling of quarterly meetings with the NC and SC transportation departments to ensure that locally-administered projects (LAP) are administered and implemented in full compliance with state and federal regulations.

MUMPO currently has 24 LAPs at various stages of implementation, including both capital and planning projects. These projects are supported by federal funds which carry with them a complex array of regulations which, if not carried out properly, could result in the loss of those funds and a substantial financial burden on a local or county government. Recently, the City of Gastonia was forced to return \$172,000 in federal funds related to a greenway project due to a failure to properly implement federal regulations. In addition, LAPs are affected by state rules and regulations. Regular face-to-face coordination, review, and status updates would assist county, municipal and NCDOT staff to ensure compliance with applicable laws, rules, and regulations.

The CRAFT group recommended that these meetings take place on the fourth Tuesday of each month in coordination with the currently established schedule of its Technical Committee.

ATTACHMENTS

Draft resolution.

Charlotte Regional Alliance For Transportation

A RESOLUTION TO IMPROVE OVERSIGHT, COORDINATION, AND EXECUTION OF LOCALLY-ADMINISTERED PROJECTS IN THE GREATER CHARLOTTE REGION

WHEREAS, the US Department of Transportation distributes funds to the North Carolina and South Carolina Departments of Transportation and to area transportation planning organizations for counties and municipalities to apply to implement locally-administered transportation projects; and

WHEREAS, funds directed to the CRAFT region for locally-administered projects total in excess of \$30 million annually; and

WHEREAS, the Federal Highway Administration and Federal Transit Administration has required that locally-administered Federally-funded transportation projects comply with all applicable Federal laws, rules, and regulations; and

WHEREAS, the two state departments of transportation are responsible for Federal compliance of phases of locally-administered projects; and

WHEREAS, there are currently no regularly-scheduled project review, oversight, or coordination meetings in the region; and

WHEREAS, regular face-to-face coordination, review, and status updates would assist both county and municipal staff, and NCDOT staff, in ensuring compliance with applicable laws, rules, and regulations; and

WHEREAS, CRAFT already meets quarterly and serves as an appropriate forum for such coordination between the state departments of transportation, transportation planning organizations, and local member governments.

NOW, THEREFORE BE IT RESOLVED that the _____ supports NCDOT and SCDOT participation in quarterly project update and review for locally-administered projects in the CRAFT region. A motion was made by _____ and seconded by _____ for the endorsement of the resolution, and upon being put to a vote was duly adopted, on this, the ____ day of _____, 2013.

CHARLOTTE REGIONAL TRANSPORTATION ORGANIZATION



DRAFT Unified Planning Work Program Handbook



Conducted as Task Order 2012-1 under MPO On-Call Service Agreement
J S Lane Company, LLC
9.2013



Tables of Contents

Glossary of Terms and Acronyms Used 3

A. Purpose and Scope..... 4

 Overview 4

 Successful Past Projects from the UPWP 4

B. UPWP Funding Resources 6

C. Local Requirements for Using UPWP Funds 7

 Why the MPO Sub-Allocates Funds to Its Member Agencies..... 7

 The Essentials of Applying for MPO Financing 7

D. UPWP Content and Development Schedule 8

 Summary 9

 Overview of Purpose and MPO 9

 List of Deliverables, by Major Task 9

 Performance Indicators 9

 How to Get Involved 9

 Introduction and Purpose of the UPWP..... 10

 What is the MPO?..... 10

 What is the UPWP? 11

 Funding Sources..... 11

 UPWP Review Committee 12

 Schedule for UPWP 13

E. Reviewing, Adopting and Amending the UPWP 15

Appendix A: Guide to Applying for and Managing UPWP Funds 16

Applying for MPO Funding 16

Appendix B: Prospectus Description of UPWP Work Tasks 21

Appendix C: UPWP Checklist (Federal Transit Administration) 32

Figure 1. CRTPO Planning Area Boundary 10

Figure 2. Relationship between Main Products of the MPO..... 11

Figure 3. UPWP Annual Development Process..... 13

Table 1. MPO-Financed Projects in Past Unified Planning Work Programs..... 5

Table 2. UPWP Content and Purpose of Content..... 8

Table 3. Project Solicitation Form (Information ONLY)..... 17

Table 4. Milestone Report Template (Information ONLY) 19



GLOSSARY OF TERMS AND ACRONYMS USED

CDOT – Charlotte Department of Transportation

CRTPO – Charlotte Regional Transportation Planning Organization (formerly MUMPO)

DBE – Disadvantaged Business Enterprise

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

HOV – High-Occupancy Vehicle (lanes or facility)

L RTP – Long-Range Transportation Plan document (note: same as MTP)

MPO – Metropolitan Planning Organization

MPO Board – The name of the CRTPO policy board that makes final policy actions brought before the MPO (note: in some other MPOs in North Carolina this body is referred to as “Transportation Advisory Committee”)

MTIP – Metropolitan Transportation Improvement Program document

MTP – Metropolitan Transportation Plan document

NCDOT – North Carolina Department of Transportation

PL 104(f) – Public Law 104 section (f) funds, used to support MPO activities

Project Applicant – A town or county entity that has provided CRTPO with an application for using the MPO’s funding to conduct a local planning project.

Project Milestone Form – An on-line form used by CRTPO to help manage and review the progress of projects funded in part by the CRTPO and one or more of its local members.

Project Solicitation Form – An on-line form used by CRTPO to evaluate proposals to use a sub-allocation of MPO-managed funds to local governments for the purpose of furthering local and regional planning objectives

Project Sponsor – A town or county entity that has been awarded CRTPO funding to conduct a local planning project.

Prospectus – A document that provides information on a MPO, including tasks eligible for reimbursement through the PL 104(f) and other state/federal funds

Section 5303 Funds – Funds derived from the Federal Transit Administration to be used to support activities related to transit planning

STP-DA – Surface Transportation Program – Direct Apportionment funding category

TCC – Technical Coordinating Committee

Technical Coordinating Committee (TCC) - A committee of government personnel within the local MPO which supports the TAC/MPO and is responsible for the general review, guidance, and coordination of the transportation planning process

UPWP Review Committee – An ad hoc group that meets approximately three times during the course of the development of the UPWP to review and provide recommendations on content, process, and suballocation of funds to local entities

TPB – Transportation Planning Branch of NCDOT

TCM – Transportation Control Measure

UPWP – Unified Planning Work Program

USC – United States Code



A. PURPOSE AND SCOPE

OVERVIEW

The Charlotte Regional Transportation Planning Organization (CRTPO), as authorized in federal legislation and code (23 USC §134; 49 USC §5303), is responsible for carrying out an inclusive and comprehensive transportation planning process that:

“...will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas, while minimizing transportation-related fuel consumption and air pollution...”

The Unified Planning Work Program (UPWP) is the instrument that is used to communicate how the comprehensive transportation planning process is to be specifically executed each year. The development of the UPWP is an opportunity for collaboration among transportation providers, MPO board members, the public, and the public to engage in a focused discussion about how to expend the resources available to the MPO in a meaningful manner. The UPWP document and process describes how funds are to be distributed and used among the MPO’s partners as well as by its own staff over the course of a fiscal year.

SUCCESSFUL PAST PROJECTS FROM THE UPWP

CRTPO has been the driving force behind many past planning and construction projects that are now reflected in the improved economies and transportation systems of its members. The popular Lynx passenger rail system, for example, benefited from years of prior work that included model development and public outreach as well as technical coordination financed in part by CRTPO. Roadway project expansions such as the Outer Loop around Charlotte have similarly been coordinated through the MPO planning process, often many years in advance of the actual ground-breaking for construction. The MPO has also been responsible for aiding local governments and the State Department of Transportation (NCDOT) in developing responsible private development, environmental and economic policies that minimize harm to neighborhoods and environmental resources while maximizing the use of major roadway and other transportation investments totaling hundreds of millions of dollars. There are many other specific examples of project and planning where the MPO and local government members have partnered to accomplish important tasks, as shown in [Table 1](#) on the next page.

Over \$1.35 million has been directly allocated to local governments just from this list of planning projects appearing in the UPWP since 2010. Members also receive direct technical and engineering support from the MPO staff, and the MPO provides coordination services on such issues as air quality conformity and project coordination throughout the planning and design phases of work.

How these funds are used and the process used to allocate them are the main subjects of the remainder of this document. We would encourage you to contact the CRTPO Director at your convenience to discuss the UPWP process and how your government can get engaged locally in regional transportation planning.

Contact:

Robert Cook
CRTPO
600 E. Fourth Street
Charlotte, NC 28202
704.336.2205
rwcook@ci.charlotte.nc.us





Table 1. MPO-Financed Projects in Past Unified Planning Work Programs

Fiscal Year	Description of Completed Work	Locality	MPO Funds (\$)
2010	Traffic Count Program Support; Develop Walkability Study and Method/Analysis Criteria for Ranking the Town's Future Sidewalk Needs	Cornelius	21,600
	Develop Transportation Element Of Comprehensive Plan	Davidson	25,000
	Traffic Count Program; Support to Environmental Studies On I-77 And NC 73 and Preliminary Corridor Analyses for Completion of the N.W. Huntersville Study; Support to TCC / CRTPO, Huntersville Transportation Advisory Committee Transportation Study; and Verhoeff Drive Extension	Huntersville	18,500
	Small Area Plan at I-485/Lawyers Road	Mint Hill	37,500
2011	Traffic Count Program; Planning For Zion Road Improvements; Staff Support To TCC	Cornelius	21,600
	Downtown Parking Study	Davidson	25,000
	Traffic Count Program; Pedestrian Plan At Future Transit Stations; Staff Time To Support TCC	Huntersville	23,800
	Local Transportation Plan	Indian Trail, Stallings, & Matthews	75,000
	Corridor Study For New Alignment Connecting US 601 South Of Monroe To Monroe Connector/Bypass	Monroe	22,560
	Intersection Analysis	Indian Trail	25,000
2012	Staff Support	Cornelius	1,600
	I-77/Exit 28 Traffic Engineering Analysis	Cornelius	25,000
	Traffic count; Pedestrian Planning; Connectivity Study; I-77/NC 73 Interchange Modification Environmental Analysis	Huntersville	28,000
	Red Line Greenway Trail	Mecklenburg	28,000
	US 74 Corridor Study	Union	100,000
	Local Transportation Plan (continued)	Stallings, Matthews	26,000
	Old Dowd Road/NSRR Grade Separation	Charlotte	76,000
	I-277 Loop Study	Charlotte	230,000
W.T. Harris/Brookshire Blvd. Classification Study	Charlotte	200,000	
2013	Develop Traffic Microsimulation Analysis Model	Cornelius	25,000
	Pedestrian Master Plan	Davidson	22,000
	Support to Technical Coordinating Committee	Huntersville	28,000
	Traffic Count Program	Indian Trail	24,000
	US 74 Corridor Study – Phase II	Union County	80,000
	Red Line Greenway Trail	Mecklenburg	80,000
2014	Downtown Multimodal Study	Huntersville	61,200
	Chestnut Parkway/CSXRR Grade Separation	Indian Trail	24,000



B. UPWP FUNDING RESOURCES

The following are descriptions of the primary funding sources available to the Charlotte Regional TPO and its partners for transportation planning-related activities. Although sources available for funding planning projects may look similar in their use, internal billing must be kept track of separately by CRTPO accounting staff.

- **Section 23 USC § 104(f) Metropolitan Planning** – Sometimes referred to as “PL 104” or “PL 104(f) funds, this is the primary resource provided through the federal government for metropolitan planning organizations. An important distinction of these funds is that they “roll over” to subsequent years if not all of the annual allocation is expended during the fiscal year. The funds are matched at a 20% rate by local governments in the metropolitan planning organization membership. Hence, if a local government is granted \$10,000 for a special project meeting the requirements stipulated by this document, the local government must provide a 20% matching amount in dollars or documented in-kind services equal to \$2,000. The total project cost in this example is \$12,000. A limitation of PL 104(f) funding is that it has serious restrictions on the types of projects that it can be used to finance, generally limited purely to planning activities leading up to conceptual or preliminary design.
- **Federal Highway Administration (FHWA) State Planning and Research** – SPR funds, as this category of funding is known, can be thought of as the state equivalent to PL 104(f) funds. NCDOT typically applies these funds towards model development and MPO coordination activities. Some projects of joint interest to the MPO and NCDOT may also be partially funded through this source. As with the PL 104(f) funds, a 20% match is required from the State or local governments.
- **Federal Transit Administration Section 5303 Grant** – As the name and source implies, Section 5303 funds are dedicated to activities related to transit planning and research. Again, the match formula is 80/20, with the State typically paying half the local match (10% of the total) and local governments (usually those housing public transit operators) providing the other half of the 20% match.
- **Surface Transportation Program–Direct Apportionment** – STP-DA funds have a greater range of potential uses, including full design and construction (generally not addressed in the UPWP), than the other sources of federal funding cited previously. STP-DA funds come from a state “set-aside” which the MPO can use to supplement the PL104(f) funds described previously, or use them outside of the UPWP process using a separate agreement. These projects can be independent of any other transportation project (requiring more oversight and expertise with federal funding and project management procedures) or incidental to another, existing transportation project already programmed in the Metropolitan Transportation Improvement Program (MTIP). There are many attendant requirements placed on these funds, described in *Programming and Implementing Projects Using STP-DA Funds* ([https://connect.ncdot.gov/projects/planning/TransPlanManuals/ProgrammingUsing%20STP-DA Funds.pdf](https://connect.ncdot.gov/projects/planning/TransPlanManuals/ProgrammingUsing%20STP-DA%20Funds.pdf)).
- **Local Funds and Matching Funds.** The previous federal sources listed above all require a matching amount from local and/or state government sources. The CRTPO also relies on the City of Charlotte to financially support the MPO through office space, administrative support, and technical staff expertise. The amounts of local funds vary from year-to-year and are budgeted through the Charlotte Department of Transportation and City of Charlotte annual budgeting process. It is important to note that one federal source of funding cannot be used to match another federal funding source listed here.

The next section describes basic local requirements for using the funds made available by the CRTPO. Appendix A describes these requirements in sufficient detail to enable the local government to prepare an application and understand requirements for managing the funds.



C. LOCAL REQUIREMENTS FOR USING UPWP FUNDS

WHY THE MPO SUB-ALLOCATES FUNDS TO ITS MEMBER AGENCIES

As discussed, local governments are not only eligible to participate in the regional planning process, they are actively encouraged to do so. By distributing a portion of the federal funds allocated to the CRTPO each year to the local government members for projects that share common themes with the regional planning objectives of the MPO, those objectives are realized faster and local governments receive a direct benefit from participating in the MPO planning process.

The MPO bears a large responsibility for the successful implementation of local projects financed by federal monies. The guidelines established by CRTPO are intended to help ensure that each project is both successful to the local community as well as to criteria established by regional (MPO), state, and federal entities. Generally, the requirements are not unlike other state grant opportunities, which have a process consisting of application, reporting, and invoicing tasks. If a private consulting firm or contracted individual is used as a part of the project, then all procurement guidelines for advertising, debarment, and equal opportunity must be followed. The CRTPO staff is available to help applicants and project managers navigate the funding process, although state and federal contacts may be necessary to answer specific questions.

THE ESSENTIALS OF APPLYING FOR MPO FINANCING

1. **Match Requirement.** In every case, there is a minimum local matching requirement of 20%. This local match can be provided in cash (preferred, and weighted more favorably in the evaluation of submitted projects) or as in-kind services. If in-kind services are used to offset the 20% matching requirement, then any person working on the project must maintain a timesheet clearly indicating when and how much time was spent on the project, and a description of the task work being performed. The 20% match is a minimum; additional matching amounts will be viewed favorably during project evaluation.
2. **Minimum Project Amount.** The minimum project amount is \$25,000 (the request for funding must be at least \$20,000 with a \$5,000 minimum local matching requirement as stipulated in Item Number 1, above). This floor amount is necessary to reflect the administrative costs incurred by the CRTPO staff to manage very small projects.
3. **Application Procedure.** Projects submitted for consideration must use the application procedure outlined in [Appendix A](#) and submitted prior to the deadline provided by the CRTPO.
4. **Furthering Regional Objectives.** All projects submitted must clearly demonstrate how they further the goals and objectives identified by the MPO.
5. **Identified Project Manager.** A project must have a person clearly designated as the project manager and contact person throughout the life of the project. This person, and anyone managing the project or its administration, must meet with CRTPO staff to review the project, milestones, invoicing procedures, and procurement procedures prior to starting the project. Any time or expenses incurred towards the project prior to this meeting is not considered an eligible expenditure.
6. **Reporting / Invoicing Requirements.** A quarterly status update must be submitted by the deadlines provided by the MPO staff (refer to Appendix A for details). This practice helps ensure that the technical and policy bodies of the MPO, as well as responsible state and federal authorities, are kept apprised of the progress of the project and its adherence to established milestones.

[Appendix A](#) contains specific instructions for how to apply and manage CRTPO planning funds. The next section addresses the content of the Unified Planning Work Program in general.



D. UPWP CONTENT AND DEVELOPMENT SCHEDULE

There is no specific formula for the content of the Unified Planning Work Program, although a number of elements are fairly common across the country, dictated by either the Federal Transit Administration or Federal Highway Administration:

- Series of funding sheets describing the use of transit section formula funds and their use;
- Acknowledgement of adoption of the UPWP; and
- A general funding table outlining the tasks and funding amounts by source described in the UPWP.

Beyond these core requirements, UPWP documentation varies quite widely from state to state, and even from MPO to MPO within the same state. Commonplace elements include a description of the UPWP development process; a description of the MPO and the relationship of the UPWP to its functions; descriptions of past accomplishments from previous year tasks; and more detailed descriptions of upcoming special projects to be undertaken in the current fiscal year. The specific content is also circumscribed by state-level policy and expectations, partially based on historical precedent. More recently, the focus on measuring performance generated by MAP-21 has created a new requirement to quantitatively evaluate the effectiveness of the MPO and the work program. [Table 2](#) is provided to help CRTPO in developing its future work program activities, and is based on a prior technical report that reviewed the UPWP documentation of CRTPO and other MPOs from around the country. Several sections have been created in the following pages that can be copied directly into the UPWP with minimal alterations from year-to-year; these items are marked with a checkmark (✓).

Table 2. UPWP Content and Purpose of Content

CONTENT	PURPOSE
Cover	<i>Indicates the date, agency, and contact information</i>
Summary	<i>Self-Explanatory</i>
● Overview of Purpose and MPO	✓ <i>Self-Explanatory</i>
● List of Deliverables, by Major Task	<i>Only the most important, irregular tasks; includes main funding table</i>
● Performance Indicators	✓ <i>On-time performance, amendments, milestones, etc.</i>
● How to Get Involved	✓ <i>Description of process and outreach, contacts</i>
Table of Contents	<i>Self-Explanatory</i>
Introduction & Purpose of UPWP	<i>Self-Explanatory</i>
● Description of the MPO	✓ <i>History and functions</i>
● What is the UPWP?	✓ <i>Role of the UPWP in the MPO planning process</i>
● Funding Sources	✓ <i>Same description of sources provided on page 5</i>
● Schedule for UPWP	✓ <i>Schedule (approximate); inputs and outputs</i>
Appendix: Required Information	<i>See below</i>
A.1 FTA Task Narrative Tables	<i>Prescribed by FTA</i>
A.2 FTA DBE Contracting Opportunities	<i>Prescribed format by FTA</i>
A.3 Resolution of Adoption by MPO	<i>Based on historical format/content</i>
A.4 Self-Certification Resolution by MPO	<i>Based on historical format/content</i>
A.5 Comments / Responses Received	<i>See below</i>
● Survey Instrument	<i>Randomized telephone survey</i>
● Comments on Document Received	<i>Comments from agencies, public, MPO members</i>
● MPO Responses to Comments	<i>MPO written response to categories of comments</i>

Note: the following pages are provided to suggest text for portions of the UPWP that remain fairly static from year to year. Modifications may be required if policies or conditions change.



SUMMARY

OVERVIEW OF PURPOSE AND MPO

The Charlotte Regional Transportation Planning Organization (CRTPO) is the federally designated metropolitan planning organization (MPO) for the urbanized area around the center city of Charlotte, North Carolina. The CRTPO is just one of nearly 500 MPOs across the country, and one of 18 in North Carolina, charged with carrying out a “continuing, comprehensive, and coordinated” transportation planning process in conjunction with state, federal and local transportation organizations including municipal and county governments, the North Carolina Department of Transportation (NCDOT), and public transportation operators. The Unified Planning Work Program (UPWP) is an annual document that describes the specific tasks to be undertaken by the MPO each fiscal year. This work description includes funding sources, responsible parties, and expected deliverables.

LIST OF DELIVERABLES, BY MAJOR TASK

[To be completed for each MAJOR deliverable]

PERFORMANCE INDICATORS

Federal law requires MPOs to describe their performance through the use of indicators for measuring the timeliness and productivity of the products and processes of the MPO. Good performance indicators don't overlap with each other, are understandable by the lay public, and use readily available data that tie directly to the objectives of the MPO. For the UPWP, the following performance indicators are used: timely adoption of the document, number of amendments in a fiscal year, milestones reached for special projects, and understanding/satisfaction with the MPO planning process.

HOW TO GET INVOLVED

All MPOs are required to be proactively engaged with their communities – planning in a vacuum leads to projects and programs that are hard, if not impossible, to implement across jurisdictional boundaries. The CRTPO provides people with several ways of engaging our planning process generally, and the UPWP development specifically:

- **Contact Us Directly.** The CRTPO staff is ready to answer questions and sit down with your group to discuss how the MPO works for you. We are located at 600 E. Fourth Street, 8th Floor, Charlotte, NC 28202-2853 (704-2205).
- **Visit our Website or Email Us Directly.** Use the contact form at <http://CRTPO.org/contact-form> to send us an email.
- **Attend a Board Meeting.** We provide opportunities for speakers at the MPO (policy) Board and Technical Coordinating Committee meetings. See <http://CRTPO.org/how-get-involved/meetings> for a schedule of our meetings and locations.
- **Surveys.** Our MPO conducts periodic surveys to gauge how our constituents perceive our work and the MPO. These surveys may be random or conducted through our web portal at <http://CRTPO.org> at irregular intervals – call or write us to learn more.
- **Request Us to Come Out and See Your Group.** We will be glad to arrange a time and location to meet with our public, and can provide presentation materials and staff to help answer your questions. Call or write us to set up a meeting.
- **Get on Our Mailing List.** The easiest way to know when something's about to happen is to get on our mailing list. Go to <http://CRTPO.org/how-get-involved/notify-me> to get us to send you alerts about upcoming events and board actions.
- **Read Our Newsletter.** Our Newsletter comes out periodically, and provides a quick summary of the current activities going on at the CRTPO. Go to our website at <http://CRTPO.org/resources/newsletter> to see past and current editions of the Newsletter.



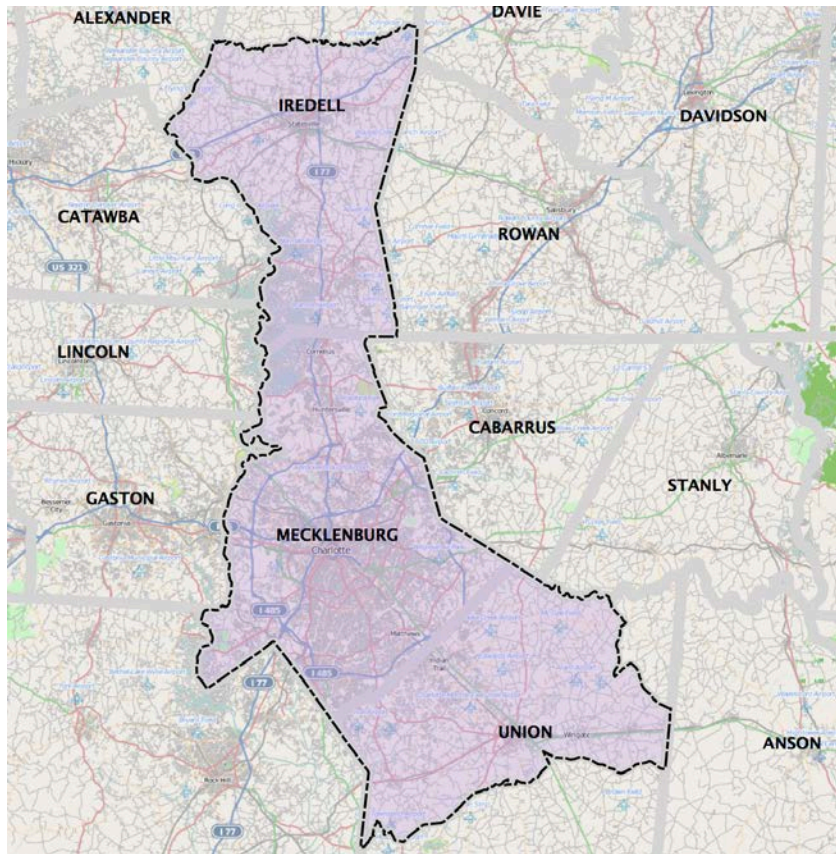
Additionally, the CRTPO is committed to holding special meetings to listen to comments on the draft UPWP, usually in the April or May time frame. Contact us or watch the events page of the CRTPO website to be aware of these opportunities. The UPWP is available via the internet site of CRTPO, or can be emailed or sent out as a hard copy.

INTRODUCTION AND PURPOSE OF THE UPWP

WHAT IS THE MPO?

The history of MPOs, and of CRTPO, is based on the premise that people and goods can and should travel without respect for political boundaries. The MPO is, however, comprised of those very political bodies - counties, municipalities large and small, and state government - that it is mandated to help organize.¹ This organization is important, since MPOs take the lead in assigning federal and state transportation dollars, albeit in cooperation with a number of local and state partners. The current planning area of CRTPO is shown below (Figure 1), stretching across three counties and serving nearly 1.3 million residents.

Figure 1. CRTPO Planning Area Boundary



CRTPO is comprised of three units: a policy board, a technical coordinating committee, and the supporting staff that works under the roof of the MPO center city, Charlotte. Federal and, to a lesser extent, state laws and policies heavily guide the functions of CRTPO, although there are variations among MPOs across the nation and even among the 18 MPOs in North Carolina. Among the most important responsibilities of the MPO are the development of a minimum 20-year long-range transportation plan (called the metropolitan transportation plan), a multi-year transportation improvement program in cooperation with the State, and a proactive public engagement process to make certain that people have the

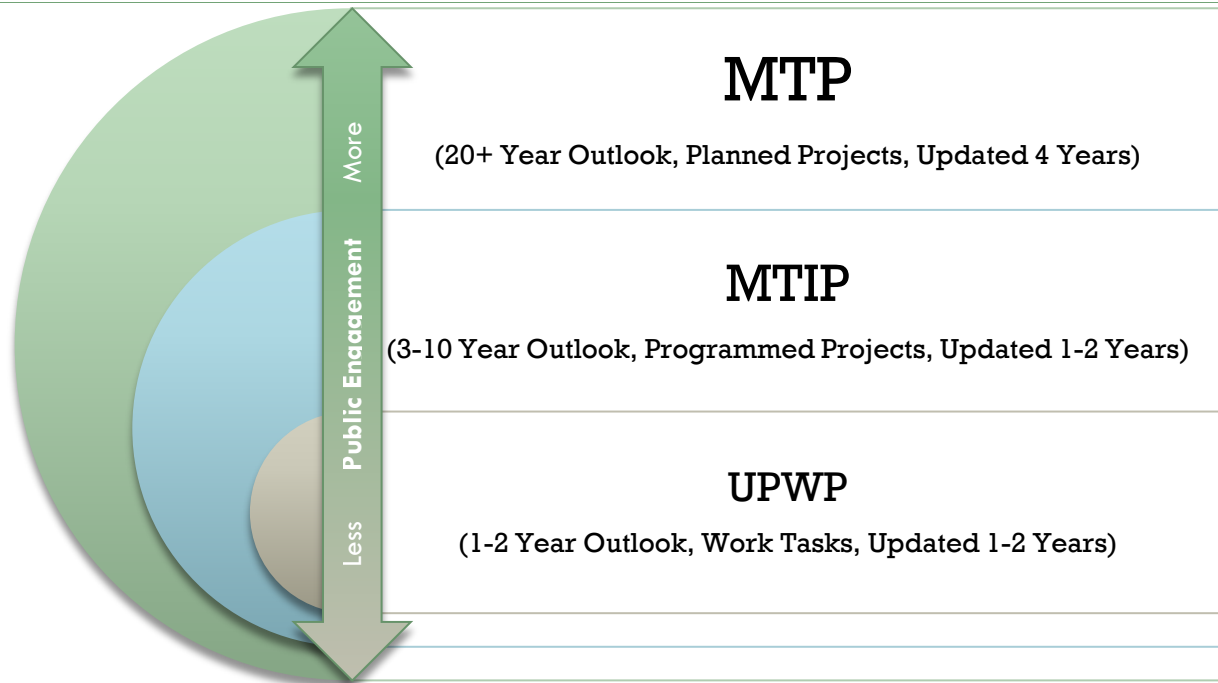
opportunity and are encouraged to engage the MPO in all of its decisions. At least every two years (currently annually) a work program is produced by the MPO that outlines its tasks and funding sources; federal laws terms this a Unified Planning Work Program, or UPWP. Figure 2 below illustrates the

¹ A history and contextual interpretation of metropolitan planning organizations generally can be found at http://www.njtpa.org/Pub/Report/hist_mpo/default.aspx. A description of CRTPO's own history is found at: http://www.CRTPO.org/PDFs/Resources/CRTPO_DelegateHandbook.pdf.



relationships between the main products delivered by the MPO, as well as the typical levels of public engagement that the MPO promotes for each product.

Figure 2. Relationship between Main Products of the MPO



WHAT IS THE UPWP?

The UPWP simply describes the specific tasks that CRTPO will do each fiscal year (July 1 through June 30) through its own staffing resources, private consulting assistance, in partnerships with other entities, or some combination of these. The UPWP must have a specific format and content with respect to federal transit formula funding, but the other parts of the work program are more flexible, even though funding amounts, sources, responsible parties, and deliverables are required to be shown. The line item descriptions are generally static, and held constant across all 18 MPOs in North Carolina. A separate Prospectus document defines these line item descriptions. Finally, the UPWP has to include a resolution indicating when it was adopted as well as a "self-certification" affidavit that the UPWP followed a responsible development process. More recently, the UPWP is required to describe and report performance measures that illustrate how well dollars and resources are being used (compared to what was envisioned in the previous years' work program).

FUNDING SOURCES

The following are descriptions of the primary funding sources available to the CRTPO and its partners for transportation planning-related activities. These funds are frequently matched at a rate of 10% to 20% with local funding from the MPO's member jurisdictions. Some projects that more narrowly benefit fewer jurisdictions may be matched solely by the beneficiary jurisdictions (frequently, these projects have been sought out through an application process to receive MPO-sourced financing from one or more of the following sources).

- **Section 23 USC § 104(f) Metropolitan Planning** – Sometimes referred to as “PL 104” or “PL 104(f) funds, this is the primary resource provided through the federal government for



metropolitan planning organizations like the CRTPO. A limitation of PL 104(f) funding is that it has restrictions on the types of projects that it can be used to finance, generally limited purely to planning activities leading up to conceptual or preliminary design. These funds are used to provide the salaries for staff, private consultants and other projects or programs that the MPO may wish to undertake directly.

- **Federal Highway Administration (FHWA) State Planning and Research** – SPR funds, as this category of funding is known, can be thought of as the state equivalent to PL 104(f) funds. NCDOT typically applies these funds towards model development and MPO coordination activities. Some projects of joint interest to the MPO and NCDOT may also be partially funded through this source.
- **Federal Transit Administration Section 5303 Grant** – As the name and source implies, Section 5303 funds are dedicated to activities related to transit planning and research. Route planning, surveying, and other transit-related activities are normally conducted with these funds.
- **Surface Transportation Program–Direct Apportionment** – STP-DA funds have a greater range of potential uses, including full design and construction, than the other sources of federal funding cited previously. STP-DA funds come from a state “set-aside” which the MPO can use to supplement the PL104(f) funds described previously, or use them outside of the UPWP process using a separate agreement. These projects can be independent of any other transportation project or incidental to another, existing transportation project already programmed in the Metropolitan Transportation Improvement Program (MTIP).
- **Local Funds and Matching Funds.** The previous federal sources listed above all require a matching amount from local government sources. The CRTPO also relies heavily on the City of Charlotte to financially support the MPO through office space, administrative support, and technical staff support. These amounts vary from year-to-year and are budgeted through the Charlotte Department of Transportation and City of Charlotte annual budgeting process.

UPWP REVIEW COMMITTEE

An ad hoc review committee will be formed at the outset of the UPWP update process (refer to the schedule on the following page). The specific charges of this committee are to (1) review the funding allocations for each task as recommended by the CRTPO staff; (2) decide on any process or content changes to the UPWP from the previous year; and (3) to review and conduct an evaluation of all local project applications submitted for consideration of UPWP funding. This committee provides recommendations to the Technical Coordinating Committee of the MPO, and is chaired and facilitated by the Director of the CRTPO staff or his designee. Approximately three meetings will be conducted to execute the charges of the UPWP Review Subcommittee. The composition of this Committee is listed below.

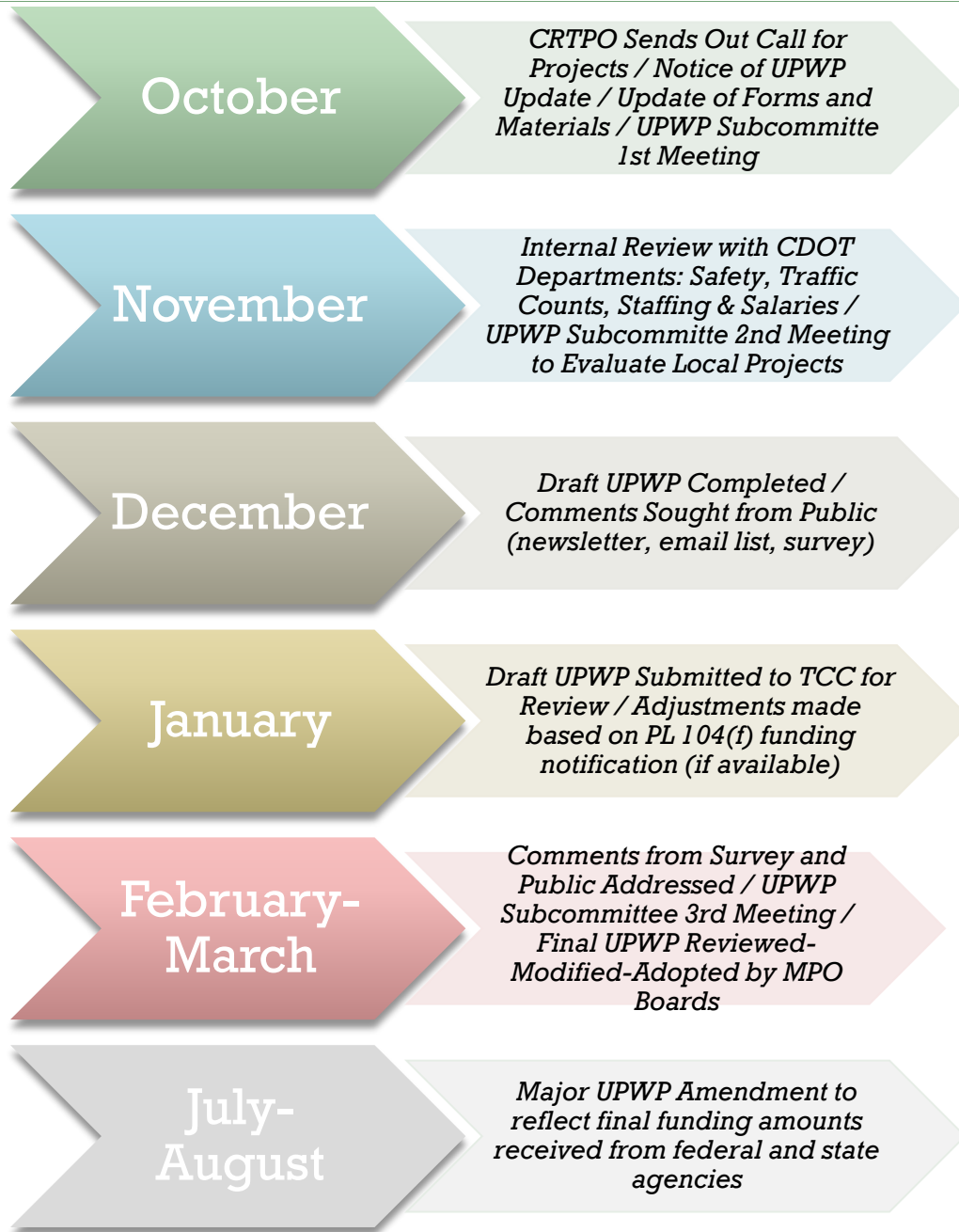
- CRTPO Director (Chair / Facilitation)
- CRTPO Staff (Notes and Research)
- Two Members (minimum) from TCC, one of which is a county representative and one of which represents a municipality of less than 100,000 population
- Charlotte Area Transit System Staff Person
- CDOT Staff Person
- CDOT / City of Charlotte Accounting Staff Person (ex-officio capacity)
- Two Members of the General Public representing business, environmental, alternative mode or other interests



SCHEDULE FOR UPWP

The development process for the UPWP is essentially an annual cycle now, although federal rules do allow for a two-year development cycle. The annual development cycle starts by the MPO staff notifying traditional partner agencies of the upcoming UPWP update (typically in the September or October time frame) and finishes when the CRTPO Board adopts the UPWP by resolution, usually in June. Figure 3 is a step-by-step process representing the approximate time of year when each step in the development of the UPWP is initiated or completed. Note that delays in one step of the process may delay the entire process or selected steps.

Figure 3. UPWP Annual Development Process





This schedule reflects the fact that the CRTPO is not always aware of the allocations of federal formula funding until after a fairly robust level of internal coordination is conducted to develop the tasks in the UPWP. At the major amendment conducted in July or August, the final amounts are known and any adjustments to the UPWP task descriptions or deliverables are scheduled and reviewed by the MPO staff and boards.

SAMPLE TEXT

[This marks the end of the sample UPWP content; additional material will need to be provided on an annual basis. The final section of the main body of this handbook deals specifically with the review, adoption and amendment process.]



E. REVIEWING, ADOPTING AND AMENDING THE UPWP

The Technical Coordinating Committee (TCC) and MPO Board have the responsibility of reviewing and approving the draft UPWP, with the TCC providing advice to the MPO Board concerning the UPWP's content and adoption recommendation. The first time the TCC reviews the draft UPWP is typically in January or February. The TCC provides comments back to MPO staff, as well as the *ad hoc* UPWP development committee, which meets approximately three times to review the draft and provide feedback at each stage of its development. Final adoption occurs typically in March or April by resolution of the MPO Board.

Often the funding amounts or even scope of work for one or more projects will change over the course of the federal year that the UPWP describes. If the project scope changes significantly to impact the deliverable or major milestone, or if the funding level impacts 100% of the budget line item or \$2,500 (whichever is less), then the UPWP will be brought before the TCC and MPO Board to review the proposed changes and adopt an amended UPWP. It is up to the CRTPO staff and boards to determine if it is necessary to conduct additional public engagement regarding the proposed amendments to the UPWP. Regardless, the public has the opportunity to speak at MPO meetings with respect to any proposed change advertised on the committee agenda.

The final three appendices describe specifically how to apply for funding from CRTPO; the most recent description of tasks based on the official Prospectus of the MPO; and a UPWP review checklist provided by the Federal Transit Administration (FTA).



APPENDIX A: GUIDE TO APPLYING FOR AND MANAGING UPWP FUNDS

The CRTPO realizes that enjoining local governments and other partners to participate in the planning process can effectively leverage its limited staff and financial resources. The CRTPO has a history of financially or otherwise supporting key planning projects with local MPO members, transit operators, and other partners in a continuing, coordinated, and cooperative planning process. The main objectives of this support are listed below, and are considered the keys to a successful request for funding.

1. *Cost Effectiveness.* Any financial support provided by CRTPO must be used for planning functions that have a lasting value to the public, minimizing waste and streamlining implementation of a future transportation or related project, program, or service. Projects that exceed the 20% required minimum local match to CRTPO/federal funds are viewed favorably during the CRTPO project evaluation process.
2. *Supports MPO Objectives.* As a regional organization comprised of local and state voting members, it is critical that the regional objectives are considered in the evaluation, selection, and implementation of any project supported by CRTPO. These objectives are stipulated most clearly in the Metropolitan Transportation Plan (MTP), and are replicated in the application process – any applicant wishing to work with MPO funding sources must be familiar with these objectives and how their individual project will relate to them. Projects that are supported by more than one government entity are viewed favorably during the CRTPO project evaluation process.
3. *Adherence to Federal and State Guidelines and Regulations.* Since the funds being administered by CRTPO are entirely derived from federal sources passed through the State and CRTPO (itself a federally designated entity), any funds passed through to a local grantee must be used in accordance with all applicable federal, state, and local rules, laws, and regulations. The CRTPO and other agency staff can assist with gaining a better understanding these rules, but the onus of applying those rules and regulation is on the grantee. This adherence includes meeting MPO deadlines for progress reports and invoicing. If all applicable rules are not met, then the MPO has the right to withhold reimbursement of funds until such time as the rules and regulations are deemed to be met by CRTPO, state, and federal representatives.

The following is provided as guidance to the potential applicant and eventual recipient of MPO funding for a planning project. However, speaking directly to your CRTPO staff is the best way to familiarize you with these requirements and the schedules for completing them. If your agency does not have a person that is familiar with federal rules and processing requirements, or has never worked with the MPO financing component in the past, you should anticipate 1-2 days (8-16 hours) of time over the course of the project to learn, apply and administer to federal rules and requirements.

APPLYING FOR MPO FUNDING

STEP ONE: Completing the On-Line Solicitation Form. To apply for MPO funding requires only step: the completion of the on-line solicitation form available at: <http://CRTPOLTAP.questionpro.com>. For the sake of convenience to the applicant, the solicitation form content is replicated in Table 3 on the following page; however, only on-line submittals will be accepted.



Table 3. Project Solicitation Form (Information ONLY)

1. Requesting Agency
2. Project Manager Name
3. Project Manager Telephone
4. Project Manager Email Address
5. Project Name
6. Project Location, Purpose and Need (note: email maps or supporting information to CRTPO staff)
7. What is the problem or issue that this project is intended to address?
8. Describe how your project meets the CRTPO objective to provide, manage and maintain a safe, efficient and sustainable transportation system for all modes, intended to serve all segments of the population.
9. Describe how your project meets the CRTPO objective to encourage walking, bicycling and transit options, integrated with motor vehicle transportation, by providing a transportation system that serves the public with mobility choices.
10. Describe how your project meets the CRTPO objective to provide a sustainable transportation system that improves the quality of life for residents, promotes healthy living and is sensitive to significant features of the natural and human environments.
11. Describe how your project meets the CRTPO objective to promote equitable transportation options for low income and minority neighborhoods, as well as the aging population.
12. Describe how your project meets the CRTPO objective to promote equitable transportation options for low income and minority neighborhoods, as well as the aging population.
13. Describe how your project meets the CRTPO objective to encourage regional collaboration and linkages between transportation and land use planning
14. Describe how your project meets the CRTPO objective to maximize travel and transportation opportunities for the movement of people and goods.
15. What is the total project cost (note: total project cost must be at least \$25,000 with a \$20,000 contribution by the CRTPO and minimum \$5,000 local match)?
16. How much matching funds will your agency provide to the project?
17. Please list each source of funds for this project and the total amount of contribution by each source.
18. What is the total amount of funds requested for your project?
19. What is the completion date of your project (how many months after initiation will the project be completed)?
20. Please describe the scope of work for the project, clearly identifying intermediate milestones and deliverables for completion of this project (e.g., (1) April - initial data collection completed).
21. Please describe both PAST public engagement measures that contributed to this project, including addressing Title VI populations for this project, as well as public engagement practices that will be included DURING the project.
22. Are you going to hire a private consultant as part of this project?
23. Has the project manager worked with CRTPO previously on another project that has received funding from CRTPO?
24. Has the project manager ever received any formal instruction on how to manage federally funded projects?



Note that questions numbered 1 through 6 provide key background information on the applicant and basic project information; questions numbered 7 through 13 should be used to carefully describe how the proposed project helps further MPO objectives; and the remainder of the questions provide additional detail about the project and project contact. The MPO is required to have a proactive public engagement stance; consider carefully how stakeholders, officials, and other segments of the public will be engaged during the project, and what engagement has happened previously.

STEP TWO: Request for Additional Information or Notification of Acceptance / Denial. Applicants will be notified if there are any additional questions about their application form or to clarify information provided. In the December time frame, the applicant will be notified of the acceptance or denial of the request, along with information to assess how to improve the project if it is denied.

STEP THREE: Development of the Project. The successful project sponsor will be required to (a) meet with the CRTPO staff (planning and account management) to review the project and further refine milestones for deliverable products and the project schedule; and (b) may be asked to provide additional information to satisfy federal or other funding requirements. It is during this stage that a project manager and their finance officer should attempt to gain a detailed understanding of the invoicing and processing requirements, which may be different depending on the source of funding and project type. The CRTPO may also recommend that the project sponsor review additional reporting materials or contact additional agency representatives prior to initiating the project. Once this step is complete, the CRTPO will provide a written Notice to Proceed to the Project Sponsor. No time is to be billed to the project prior to receiving this written Notice to Proceed.

STEP FOUR: Managing the Project (Milestone Reporting). The CRTPO will want to report to its technical and policy boards the status of the project on at least a quarterly basis. To facilitate project reporting, an on-line milestone reporting form has been created at: <http://milestone.questionpro.com>. Milestone reports (and invoices: see Step Five) must be completed on or before each deadline date.

NOTE THAT ALL PROJECTS ARE PREFERRED TO BEGIN AND END IN THE SAME FISCAL YEAR. Any extensions past June 30th should be coordinated with the CRTPO staff prior to project commencement or immediately upon becoming aware that the project may go past June 30th.

Milestone reports must be completed for any milestone if the project is started at any time within the appropriate quarter. As with the solicitation form, the following milestone report ([Table 4](#) on the next page) is provided for information purposes only; all reporting must be completed through the on-line form.



Table 4. Milestone Report Template (Information ONLY)

Thank you for submitting your quarterly report for CRTPOs Local Technical Assistance Program. Please provide relevant information for the current milestone period before the following deadlines:

- Quarter 1 (July 1 – September 30): October 15
- Quarter 2 (October 1 – December 31): January 15
- Quarter 3 (January 11 – March 31): April 15
- Quarter 4 (April 1 – June 30): July 15

Thank you for your prompt submittal; this information is used to inform our MPO boards as well as to ensure that we have information in a timely manner that allows us and you to get reimbursed for the work that has been completed on your project.

Project Name:

Person completing this survey (name, title, email address, telephone number):

Please tell us which quarter this report describes (choose one):

1. Quarter 1 (July - September)
2. Quarter 2 (October - December)
3. Quarter 3 (January - March)
4. Quarter 4 (April - June)

Please describe the work completed in this current reporting period. Be succinct and provide information on all products completed during this quarter.

Please describe the percent of progress made towards completing the milestones set out in the original / updated scope of work for your project (e.g., Milestone 1: Collect and format data - 80%)

At this time, do you anticipate requesting for an extension of the original time period necessary to complete this project?

1. Yes
2. No



STEP FIVE: Managing the Project (Invoicing).

Invoices must be submitted quarterly to Jayne Peterson (japeterson@ci.charlotte.nc.us). All invoices must be made on a quarterly basis, with the deadline for each invoice occurring on the previous business day of the following dates:

- Quarter 1 (July 1- September 30): October 15
- Quarter 2 (October 1-December 31): January 15
- Quarter 3 (January 11- March 31): April 15
- Quarter 4 (April 1-June 30): July 15

The total amount of reimbursement is 80% of what is spent by the local project sponsor or their consultants, not to exceed the amount awarded to the sponsor. For example: if the project sponsor is awarded \$80,000 for a planning project, then the sponsor must demonstrate spending \$100,000. If the sponsor spends less than their full grant apportionment then they will be reimbursed at 80% of the total amount spent. Any remaining funds become part of the MPO unobligated fund balance and are no longer eligible for use by the project sponsor after the final invoice has been accepted.

In order to provide reimbursement, the project sponsor must show how and when monies were spent. This demonstration takes three forms: receipts from vendors/consultants; timesheets from local project staff; and a required project milestone report to be submitted on-line (see Step Four) at the same time the quarterly invoice is submitted. Only 80% of the total expenditures will be reimbursed to the project sponsor. Allowable expenditures are listed on the NCDOT website (https://connect.ncdot.gov/projects/planning/TransPlanManuals/MPO_Allowable_Expenditures.pdf).

Generally, materials and supplies (e.g., computer equipment, software) must be directly related to the project; travel expenses, personnel time, and consulting expenditures should be cleared with CRTPO and, possibly, TPB staff prior to incurring the expense. Entertainment, fines, and lobbying are not eligible for reimbursement.

Dollars reimbursed to the project sponsor must be spent within the grant period specified in the original project scope of work. Projects must be completed by the end of the fiscal year (June 30); any project that requires an extension or an original schedule extending past this date should be coordinated with CRTPO staff as soon as possible.

Procurement of consultants must follow applicable state and federal guidelines, and all selected consultants must be registered with NCDOT and follow state and federal guidelines, including but not limited to the following:

- The Transportation Planning Branch (NCDOT) and CRTPO staff have the right and responsibility should they so choose to be a part of the consultant selection process.
- All consultants must be prequalified with NCDOT for the type of work being performed. Refer to <https://partner.ncdot.gov/VendorDirectory> for additional information on prequalified firms.
- Prior to any Request for Qualifications or Request for Proposals being issued in conjunction with the project, the project sponsor must provide the RFQ / RFP to the CRTPO for review and coordination with the Transportation Planning Branch, NCDOT.
- The CRTPO fully endorses and encourages the use of DBE, woman-owned enterprises, small businesses, and HUB-certified businesses in the procurement of planning-related services. The project sponsor should similarly reflect these preferences for qualified firms that fall into one or more of these categories.



APPENDIX B: DESCRIPTION OF UPWP WORK TASKS

The following is based on the most recently adopted Prospectus of the MPO, which provides task definitions and background information on public involvement, history, and other elements of the MPO. Only the task descriptions are cited in the following paragraphs; the complete Prospectus document can be reviewed on the CRTPO website. In instances where the Prospectus does not reflect the current conditions of the work being undertaken by CRTPO, the description has been changed to accurately reflect the work products of the metropolitan planning organization.

CONTINUING TRANSPORTATION PLANNING

The continuing transportation planning work tasks are described here. A number of conditions generally need to be continuously surveyed and compiled annually to determine whether previous projections are still valid or whether plan assumptions need to be changed.

Traffic Volume Counts

Annual Average Weekday Traffic (AAWT) will be estimated on a biennial schedule at specified locations on each segment of the principal arterial, minor arterial, and collector street systems inside the transportation study area. Traffic data will be collected on weekdays for a minimum of 48 hours. Axle counts will be converted to volume counts using adjustment ratios that account for multiple-axle vehicles. Volume counts will be seasonally adjusted and averaged to generate AAWT estimates. These estimates will be evaluated for temporal and spatial consistency. Factors for seasonal adjustment will be based on traffic data from permanent traffic monitoring stations located at typical settings throughout the urban area.

The Charlotte Department of Transportation (**CDOT**) is responsible for obtaining counts at specified locations on the City of Charlotte municipal street system and for furnishing the raw daily traffic counts, count information, and location maps to the Statewide Planning Branch the first week of November each scheduled collection year. The Statewide Planning Branch is responsible for obtaining counts at specified locations on other segments of the major street system, for updating the count location map biannually to reflect any changes made in the major street system, for preparing the Annual Average Daily Traffic Volume Map, and for sending this information to the MPO.

Special counts may be taken to support updates or validations of the travel model, or to support the CRTPO congestion monitoring system. These include counts at screen-line stations, external stations, major trip generators, and key intersections as needed. Traffic count types may include daily, hourly, vehicle classification, or turning movements.

Vehicle Miles of Travel (VMT)

Vehicle miles of travel are computed by multiplying the length of each link times the annual average daily traffic volume on that link. Vehicle miles of travel are tabulated annually by county and functional classification by the Transportation Planning Branch of NCDOT (TPB). These VMT estimates are used by North Carolina Department of Health and Natural Resources (NCDENR) Division of Air Quality (DAQ) for air quality monitoring. CRTPO may also choose to estimate VMT for the urban area on a regular basis.

Street System Changes

Records on improvements to the state highway system, whether planned, underway, or completed, are maintained by NCDOT. Each municipality should maintain similar records for its municipal street system.



The municipalities participating in the Powell Bill Program must certify municipal street mileage maintained annually.

An inventory of the geometrics and signalization of the existing major street system for the planning area should be maintained by the MPO. Periodically or as changes or additions to the major street system occur, the inventory may be updated. This inventory will need to be current when the travel model is periodically updated. Typically, this information is stored and updated in a Geographic Information System (GIS).

Traffic Accidents

North Carolina law requires that any traffic accident involving personal injury, fatality, and/or property damage in excess of \$1000.00 be reported in detail to the Division of Motor Vehicles (DMV) of the NCDOT. The DMV also receives a detailed report on any accident investigated by a law officer. Copies of all these reports are forwarded to the Traffic Safety Unit of the Division of Highways, where the information is summarized and stored. Annual analyses will compare each year's high accident locations to previous years' high accident locations.

The Traffic Safety Unit will provide the crash listing reports on request.

Transit System Data

Items to be considered are transit patronage, route changes, service miles, load factor, route ridership changes, boarding and alighting counts, headways, frequency, and service hours.

Dwelling Unit, Population, and Employment Changes

Changes in population and development across the service area will be identified and evaluated to determine necessary restructuring of transportation services to meet current and forecasted demand. Census data, local parcel, zoning, and tax data records; Employment Security Commission; and private vendors are acceptable sources of information for this purpose. This item may include the development and maintenance of a GIS database.

Air Travel

Data may be collected and analyzed to determine influence of local air travel on the area's transportation system and identify needs for additional services. Airport entrance traffic counts would help relate air travel to ground travel in future updates.

Vehicle Occupancy Rates (Counts)

Vehicle occupancy counts are collected as needed throughout the MPO. These counts will be used to comply with the Clean Air Act, validating the trip generation process of travel demand model development, and for other tasks.

Travel Time Studies

Peak and off-peak travel time studies may be conducted for those street segments that are included in the Congestion Management System. The travel time studies may be required during the travel model calibration phase as well.

GIS Analysis and Mapping

CDOT is responsible for the design, development and ongoing maintenance of a Geographic Information System for the collected data needed for the MPO. Tasks also include spatial data analyses of the CRTPO urban area for the preparation of the MTP and other issues/decisions that affect the CRTPO



planning area; preparation, maintenance, and distribution of the Comprehensive Transportation Plan; and other maps/data contained in the MTP.

Parking Inventory

Inventories of both on- and off-street parking supply, particularly in downtown areas, are maintained by CDOT. Periodic updates and inventories of other parking facilities in other areas will be performed as determined by the MPO through the development of the Unified Planning Work Program (UPWP).

Bicycle and Pedestrian Facilities Inventory

An inventory of significant municipal, state, and federal bicycle and pedestrian transportation facilities shall be maintained. These systems shall be incorporated in the MTP update and analyzed in conjunction with other transportation performance measures.

TRAVEL DEMAND MODEL

In order to update the MTP and perform air quality analysis, CRTPO must prepare a travel demand model for the area. This is a significant task to develop and maintain. Considerable effort is required to collect data to input into the model. Additionally, substantial time is dedicated to evaluating accuracy.

CRTPO is partnering with the Cabarrus - South Rowan MPO, the Gaston Urban Area MPO, the Rock Hill - Fort Mill Transportation Study, NCDOT, and SCDOT to develop a state of the practice regional travel demand model. A future model agreement (model specifications) details the structure of this model.

Collection of Base Year Data

Collection of the following variables for existing conditions, by traffic zone, is required: (1) population; (2) housing units; and (3) employment. It is expected that re-projection of travel patterns, including transit, would require a re-tabulation of these factors used in developing the travel models. A GIS database may be used to maintain housing and land use information. The MPO will normally be responsible for providing socioeconomic data in spreadsheet format to the CDOT model team.

Collection of Network Data

Collection of the following variables describing the existing street system is necessary to build a base network for the travel model: 1) posted speed limit; 2) width/lanes; 3) segment length; 4) traffic signal locations. These items are generally the standard parameters required, but others may be needed as models become more sophisticated. The network development process is included in this task item.

Travel Model Updates

Typically, travel models use the following steps:

- a. Trip Generation – This step generally involves analysis of actual and projected socio-economic data including, but not limited to, population, dwelling units, and employment. Based on these and other factors, an approximation of the number of trips generated by sub-area or zone can be determined.
- b. Trip Distribution – Using formulas based on the gravity model, an approximation of where the specific generated trips are beginning and ending is determined.
- c. Modal Split – This step is an analysis of mode chosen and factors that lead to those choices. Factors could include actual and perceived travel times, actual and perceived travel costs, as well as availability or convenience of certain modes.



- d. Trip Assignment - This step loads trips onto the network based on the paths selected for the origins and destinations from above. The effects of congestion and the somewhat random nature of travelers can be taken into account through loading techniques such as incremental restraint, equilibrium, stochastic or all-or-nothing assignments.
- e. Accuracy Checks – Checks involve comparing or calibrating mathematically generated data to actual field conditions. These typically involve screenline crossings to within 5% and link volumes to within 10% of ground counts.

Travel Surveys

These surveys may be implemented to attain such items as origins and destinations, travel behavior, transit ridership, commercial vehicle usage, workplace commuting, freight movement, etc. Therefore, these surveys may be home interviews, cordon O/Ds, and on-board transit to name a few.

New surveys will be conducted at such time as is necessary for the reevaluation of travel models. Because these surveys are very cost prohibitive, the survey responsibility and funding sources will be determined at the onset of the study.

Forecast of Data to Horizon Year

The travel models determine what planning data must be projected to a new design year. In general, the procedure will be to project population and socio-economic factors independently on an area wide basis, to cross check these projections and convert them to land use quantities if required, and to distribute the projected planning data to traffic zones on the basis of land capabilities, accessibility, and community goals as implemented through land use controls. CRTPO will provide the approved socioeconomic forecasts to the CDOT model team.

Forecasts of Future Travel Patterns

The forecast of future travel patterns will result from using the forecasted planning data as input to the travel forecast models. The models are sensitive to changes in trip generation, trip purpose, trip length, vehicle occupancy, travel mode, and patterns of daily travel. The forecast of travel patterns will include a review of these factors and comparison to community goals and objectives to determine if changes in assumptions are warranted.

Capacity Deficiency Analysis

A system planning level capacity deficiency analysis will be made to determine existing and projected street deficiencies. Link capacities will be calculated in accordance with procedures based on the latest edition of the Highway Capacity Manual, latest edition.

METROPOLITAN TRANSPORTATION PLAN (MTP)

Federal Law and USDOT's Metropolitan Planning Regulations require MPOs to have a MTP that is multi-modal, is financially constrained, has a minimum 20-year horizon, adheres to the MPO's adopted public involvement policy, has growth forecasts consistent with latest local land use plan, and is approved by the MPO. In air quality non-attainment and maintenance areas, the MTP must be updated and proven to conform with the State Implementation Plan (SIP) every four years (five years if there is no non-attainment within the MPO planning area boundary). The physical product of this MTP will be in one or more assembled documents containing all plan elements and will be the responsibility of the MPO.



Evaluation of the overall MTP should be undertaken at such time that the surveillance items indicate that travel or land development trends have begun to deviate significantly from forecasts or at such time that new data are required for facility design.

For non-attainment or maintenance areas, the MTP must conform to the intent of the State Implementation Plan (SIP). The MPO is responsible for the analysis of all elements of a multi-modal transportation plan to ensure that they conform to the intent of the State Implementation Plan. Specifically, any MTP regionally significant revisions must be analyzed for conformity with the SIP.

Many aspects of the transit plan cannot be separated completely from other elements of the MTP. High-Occupancy Vehicle (HOV) facilities, and even ridesharing and surface bus routes, may need to be addressed in both the transit and the Thoroughfare Plans. Since transit use depends heavily on land use characteristics and pedestrian accessibility, creating a "mode neutral" model and plan requires special attention to transportation/land use interactions. Realistic assumptions are needed concerning potential travel markets and the likely degree to which existing land use, travel behavior, and pricing policies can be influenced. All plans should be carefully analyzed for internal consistency, uncertainty, and sensitivity to assumptions and errors.

Federal legislation stresses eight planning factors that should be considered by the MPOs to guide the development of the MTP. They are:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase the accessibility and mobility of people and for freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation; and
8. Emphasize the preservation of the existing transportation system.

The TCC prepares recommendations for work required for plan reappraisal for review and approval by the CRTPO Board. The following work elements may be required depending upon the depth of the studies needed.

Community Goals and Objectives

In the evaluation of community goals and objectives, the MPO will formulate policies ensuring local goals and objectives are discerned and addressed during the development and implementation of the MTP.

Highway Element of the MTP

The Thoroughfare Plan (a subset of which is the highway element of the MTP) will be evaluated in terms of projected travel, capacity deficiencies, travel safety, physical conditions, costs, design, travel time, and possible disruption of people, businesses, neighborhoods, community facilities, and the environment. The evaluation will include an analysis of the MTP and the interrelationship between alternative travel modes.



Thoroughfare recommendations should include adequate right-of-way for improvements consistent with the Bicycle & Pedestrian Plan, Transit Plan and other intermodal connection facilities along logical corridors. If major deficiencies are found with the existing plan, alternative plans will be evaluated. It should be noted that any regionally significant Thoroughfare Plan revisions must be analyzed for conformity with the SIP in non-attainment/maintenance areas. Alternatives that may be considered include (1) a Do-Nothing Alternative, (2) Alternative Modes, (3) Travel Demand Management, and (4) Alternative Design: Types and Standards.

Transit Element of the MTP

Transit planning incorporates all vehicular modes other than trucks and the single occupant automobile, including (but not limited to) fixed-route bus service, ridesharing, fixed-guideway transit, and demand responsive transit. The transit plan describes existing transit service and unmet needs, and identifies any additional potential markets. New types, and areas of service may be recommended, supported by ridership forecasts and other analyses. Assumptions and implications related to land use, travel behavior, parking policies and other variables are clearly defined. Establishing objective measures of effectiveness is critical for evaluating transit alternatives. Measures of transit effectiveness include both the reduction of auto use and congestion, and the broadening of mobility options.

Bicycle and Pedestrian Element of MTP

A bikeway and pedestrian plan is an essential part of the multi-modal MTP for an urban area. The report entitled [Full Template for Bicycle and Pedestrian Plans](#), produced by the Division of Bicycle and Pedestrian Transportation, describes the essentials of this task. At a minimum, an update to the inventory of existing and proposed bicycle and pedestrian elements should be included in the MTP.

Airport/Air Travel Element of MTP

The Airport Master Plan may be coordinated with the MPO (where feasible), and be an element of the MTP. At a minimum, consideration of the ground-side transportation access should be considered as part of the MTP review and recommendations.

Collector Street Element of MTP

Collector street planning will be conducted as required to develop standards and preliminary locations for collector streets in advance of development. The objective of this planning activity is to ensure optimum traffic operations for the developing street system and transit accessibility to developing areas.

Rail Element of the MTP

Documentation of passenger rail plans is included in the MTP.

Freight Movement/Mobility Planning

As one of the MAP-21's eight planning factors, emphasis is placed on increasing accessibility and mobility options available to people and freight. Tasks included in this category may be a survey of freight carriers; recommendations for improving truck mobility or train/truck intermodal movements; and identifying acceptable truck routes.

Financial Planning

As required by MAP-21, the MTP must be fiscally constrained by comparing project costs against forecasted, reasonably foreseeable transportation funding amounts. Project cost estimates and revenue forecasts are required. Federal regulations allow flexibility in the methodologies used for analysis, but they must include estimates for maintenance / operations as well as construction. This item also covers



identifying new and alternative funding sources, including new taxing strategies, impact fees, and public-private partnerships.

CONTINUING PROGRAMS

Federal guidelines emphasize the need for continuous transportation planning. The following elements are procedures necessary to ensure effective operation and maintenance of planning needs for the MPO.

Congestion Management Strategies

The 3-C (continuing, coordinated, and comprehensive) Transportation Planning Process stresses efficient system management and operations. Planning for congestion management strategies such as these below are included in this item.

- a. Transportation Demand Management (TDM)
- b. Intelligent Transportation System (ITS)
- c. High Occupancy Vehicle lanes or priorities (HOV)
- d. Access Control and Management
- e. Traffic Operations Improvements, Incident Management
- f. Growth Management

This item covers the costs associated with planning for these items, coordination with public and private stakeholders, and marketing or public education.

Air Quality Planning/Conformity Analysis

The transportation sector is a key participant in the development and application of the State Implementation Plan (SIP) for air quality. MPOs have the responsibility to make a determination as to whether or not transportation plans, programs, and projects conform to the intent of the SIP. Tasks involved in this pursuit include, but are not limited to:

- a. Participation in interagency consultation process as part of SIP development and conformity determination development
- b. Providing assistance to NCDENR in developing and maintaining mobile source emission inventories,
- c. Participating in development of Transportation Control Measures (TCMs) for the SIP
- d. Implementation of TCMs as appropriate
- e. Performing analysis and approving conformity determination* as required.

**MPO must approve conformity determination*

Unified Planning Work Program

A Unified Planning Work Program (UPWP) will be prepared annually or bi-annually by the Lead Planning Agency in cooperation with other participating agencies and under the guidance of the Technical Coordinating Committee. The UPWP will present the proposed planning work program for the next year and review the recent accomplishments of the planning process. The UPWP will be cross-referenced to the Prospectus to minimize repetitive documentation. The UPWP will be reviewed and approved by the MPO, by the State and Regional intergovernmental review process, the North Carolina Department of Transportation, and Federal agencies providing planning funds for continuing transportation planning. These Federal planning funds are provided by FHWA (Section 104(f)) and FTA (Section 5303). Preparation of a Section 5303 Grant application is also required in addition to the UPWP to receive planning funds from FTA.



The MPO must certify their 3-C Transportation Planning Process annually as part of the UPWP adoption.

Transportation Improvement Program

The Metropolitan Transportation Improvement Program (MTIP) shall have two parts: (1) a metropolitan programming document which is coordinated with the State Transportation Improvement Program (STIP) and (2) a list of prioritized needs.

Prepared at least every four years, the local programming document shall be a short-range, multi-modal program which identifies transportation improvements recommended for advancement during the program period, identifies priorities, groups improvements into staging periods, includes estimated costs and revenues, and is fiscally constrained.

The MPO Priority Needs List is developed biennially to communicate the MPO's priorities regarding the funding schedule on already programmed projects, the acceleration of long term projects into the program, and the addition of new projects to the STIP. The List may include cost estimates, purpose and need statements, and other supporting materials. The Priority Needs List is a key step in cooperative TIP development between the MPO, the transit operator, and NCDOT.

ADMINISTRATION

The remaining sections are Civil Rights and Regulatory Compliance, Incidental Planning and Project Development, and Management and Operations. Agency responsibilities for administrative work tasks are given in the Prospectus.

Title VI

Provide update of Civil Rights statistics report for submittal to FTA to determine MPO compliance to civil rights provisions. Title VI states: The MPO shall comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (78 Stat. 252), 49 U.S.C. 2000D TO 2000-D-4; the Regulations of DOT issued thereafter in the Code of Federal Regulations (commonly and herein referred to as CFR) Title 49, Subtitle A, Part 21), and the assurance by the MPO pursuant thereto.

Environmental Justice

Executive Order (E. O.) 12898, Federal Actions to Address Environmental Justice in Minority Populations, requires all Federal agencies to identify and address Title VI and Environmental Justice requirements. Recipients of federal funds, including NCDOT and the MPOs, must assure compliance with these requirements. As mandated by the FHWA, planning activities should focus on complying with E. O. 12898 and the three basic principles of Environmental Justice as follows:

- a. ensure public involvement of low-income and minority groups in decision making;
- b. prevent disproportionately high and adverse impacts to low-income and minority groups resulting from decisions made; and
- c. assure low-income and minority groups receive a proportionate share of benefits resulting from decisions made.

Minority Business Enterprise Planning (MBE)

There is a continuing need to address the Minority Business Enterprise (MBE) as a part of the planning and programming phases of project development. Areas are encouraged to give full consideration to the potential services that could be provided by MBEs in the development of transit plans and programs, and



the provision of transit service. Transit properties with established MBE programs are encouraged to work with MPOs, utilizing transportation planning funds to update existing MBE programs as necessary.

Planning for the Elderly and Disabled

The Americans with Disabilities Act of 1990 (ADA) ensures that persons with disabilities enjoy access to the mainstream of American life. The ADA expands on the Section 504 program to comprehensively address mobility needs of persons with disabilities.

Joint FHWA and FTA regulations require that the urban transportation planning process include activities specifically emphasizing the planning, development, evaluation and reevaluation of transportation facilities and services for the elderly and disabled, consistent with ADA. This process should include an analysis of inventories of disabled persons, their locations, and special transportation services needed. These regulations emphasize estimation of travel needs through statistical analysis and a self-identification process.

Both thoroughfare and transit planning activities should focus on complying with the key provisions of the ADA, and include special efforts to plan transportation facilities and services that can be effectively utilized by persons with limited mobility, such as:

- a. Public transit authorities providing fixed route transit service must provide comparable level paratransit service to disabled individuals who cannot otherwise use the fixed route service;
- b. Transit authorities providing elderly and disabled oriented demand responsive service must also buy or lease accessible vehicles unless it can be demonstrated that the system provides a level of service to the disabled equivalent to that provided to the general public;
- c. New facilities built must be accessible and existing facilities with major alterations must be made accessible to the maximum extent feasible; and
- d. Planning for better mobility through such items as wheelchair curb cuts, longer pedestrian crosswalk times at certain intersections, and special parking spaces and rates for cars with one or more transportation disadvantaged occupant(s).

Safety/Drug Control Planning

MPOs may pass planning funds through to transit operators for use in performing safety audits and in the resultant development of safety/ security improvement and in alcohol/drug control planning, programming, and implementation. Attention should be given to the development of policies and planning for the proper safety related maintenance of transit vehicles, fire safety, substance abuse where it affects employee performance in critical safety related jobs, emergency preparedness to improve the capability to respond to transit accidents/incidents, security to reduce theft and vandalism of transit property and to counter potential politically motivated terrorism directed against transit users, facilities, and equipment.

Public Involvement

An effective public involvement process provides for an open exchange of information and ideas between the public and transportation decision-makers. The overall objective of an area's public involvement process is that it be proactive, provide complete information, timely public notice, full public access to key decisions, and opportunities for early and continuing involvement (23CFR450.212(a) and 450.316(b)(1)). It also provides mechanisms for the agency or agencies to solicit public comments and ideas, identify circumstances and impacts which may not have been known or anticipated by public agencies, and, by doing so, to build support among the public who are stakeholders in transportation investments which impact their communities.



Private Sector Participation

Federal regulations require that private operators be afforded the "maximum feasible opportunity" to participate in the planning and provision of local transportation services. The purpose of the private sector participation requirement is to give private operators the opportunity to initiate involvement. In an effort to more effectively address this requirement, the evaluation of private sector service alternatives has been incorporated into the transportation planning process.

The general criteria for making public/private service decisions may include but is not limited to:

- a. comparative cost of private versus public services in similar situations;
- b. perceived quality and reliability of service;
- c. local control of services;
- d. responsiveness and flexibility of operators; and
- e. private operator financial stability.

Assistance with regulations, identifying potential conflicts of interest, revenue estimates, and greater access to public-private partnerships are the responsibility of NCDOT and, to the extent practicable, CRTPO.

Transportation Alternatives Program (TAP)

This category of federal funding incorporates former pools of federal funding such as Transportation Enhancements, on- and off-road bicycle/pedestrian facilities, environmental mitigation, enhanced access to public transit, safe routes to school, and community improvement activities. MPO assistance is provided to applicants, review of applications, and preparing endorsements is included under this item. The MPO shall approve all proposed enhancement projects for inclusion in the Metropolitan Transportation Improvement Program (MTIP) prior to being forwarded to NCDOT for consideration of inclusion in the State Transportation Improvement Program (STIP).

Environmental Analysis and Pre-TIP Planning

The proposed Transportation Plan and selected alternative plans will be evaluated based on criteria established by the goals and objectives reevaluation study and impact on the environment. It is anticipated that the evaluation will be in the following areas: efficiency in serving travel demands; energy conservation; cost; and impact on the physical, social, and economic environment. The physical environmental evaluation will include air quality, water quality, soils and geology, wildlife and vegetation. The social environmental considerations will include housing and community cohesion, low-income and minority populations, noise, churches and educational facilities, parks and recreational facilities, historic sites, public health and safety, national defense, and aesthetics. Effects on business, employment and income, land development patterns, and public utilities will be studied as part of the economic environmental evaluation.

The TCC, Charlotte Department of Transportation, Transportation Planning Branch and resource agencies (e.g., NCDENR Division of Air Quality, Division of Water Quality; US Corps of Engineers; Fish and Wildlife Commission) will jointly recommend projects for Pre-TIP Planning. CRTPO will be kept informed concerning the results of these studies. Public review will be incorporated as part of the alternatives analysis.

Corridor Protection and Special Studies

Each municipality or county responsible for development review will coordinate development decisions with the MTP to ensure future transportation corridors are preserved. Additionally, as land use and area plans



are developed, specific studies of a local transportation network or corridor may be needed to determine the best integration of transportation and land use decisions.

The extent, responsibility, and cost for a corridor or sub-area study, which should be conducted within the work plan of the TCC, would be determined prior to its initiation.

Regional or Statewide Planning

Coordinate with state and federal agencies involved in transportation planning activities on the regional, state, and national levels. Examples of such activities include: Functional Reclassification of roads, designation of Urban Area Boundaries, National Highway System coordination, Highway Performance Monitoring System activities, and regional transit coordination.

Involvement could include, but is not limited to: collection and compilation of data; participation in related workshops, conferences, and meetings; and review and administrative approval or endorsement of documentation.

Management and Operations

The continuing transportation planning process requires considerable administrative time for attending quarterly committee meetings, preparing agendas and minutes to these meetings, training, preparing quarterly progress reports, documenting expenditures for the various planning work items, and filing for reimbursement of expenditures from the PL fund account and other Federal Funds.

It is also necessary to periodically review and update the Prospectus, Memorandum of Understanding, and other administrative agreements and procedures.

The daily operations require dissemination of planning information to the public or other organizations and coordination with NCDOT and other agencies.



APPENDIX C: UPWP CHECKLIST (FEDERAL TRANSIT ADMINISTRATION)

The following is a checklist of content and process regarding the development of the Unified Planning Work Program as provided by FTA. Although some of this information is realized in the content of the UPWP, some of the required information may be transmitted to FTA for review with a letter from the CRTPO staff.

- 1) *Planning activities should be programmed which support required actions emanating from a **minimum twenty-year horizon long range transportation plan (Metropolitan Transportation Plan)** which conforms to **Environmental Protection Agency air quality standards**; any goals and objectives stated in the UPWP should be reflect goals and objectives stated in the Plan;*
- 2) ***Description of each discreet task** (in simple narrative sentence(s). Note that not only “new” actions, but also “carry-over” actions listed in previous programming documents must be described, for each UPWP should be independent and comprehensive; new actions should be clearly differentiated from carry-over action; tasks that may be within the MPO’s charter, but will not be included in the current year planning should be excluded/deleted; the UPWP should not be constructed as a universal or perpetual document, but should be tailored each year;*
- 3) ***Amount of FTA planning funds** sought to support each planning action/task in the current FY; note that administrative costs including indirect overhead costs may be spread across tasks, and not listed as a separate task OR at the option of the author, an overhead rate applicable across the board to all activities may be indicated and the totals extended;*
- 4) ***FTA Program** (e.g. Section 5307 Urbanized Area Formula Program, Section 5303 Metropolitan Planning Program etc.) from which those funds will be drawn; when a specific task is proposed to be funded from more than one source, it is necessary to indicate FTA funding associated with each programmatic source;*
- 5) ***Cumulative amount of FTA** funds previously drawn to support each task during past fiscal years (ONLY for multi-year tasks which produce specific deliverables); note that amounts should be identified in terms of the year of federal allocation and year of expenditure;*
- 6) ***Product/Deliverable** that will be derived from the planning effort (e.g. study, model, UPWP, TIP, etc.); deliverables should be actual tangible products rather than indications of progress or expended efforts;*
- 7) ***Schedule indicating progress for multi-year tasks**, including date when FTA can expect completion of the planning action/task; here, we seek a **completion date** rather than an expression of the duration of time expected for completion (e.g. “the study will be completed by April 30, 2006” rather than “the study will require six months to complete”);*
- 8) ***Indication that FTA funds are being used efficiently** for the programmed tasks rather than being banked;*
- 9) ***Planning should be accomplished within the environment of robust public involvement** in compliance with the MPO Public Participation Plan (conforming to SAFETEA-LU requirements) endorsed through the Planning Certification Review process;*
- 10) *Specific reference should be made to current rather than obsolete reauthorization legislation such as SAFETEA-LU, ISTEA or TEA-21.*
- 11) ***Performance Measures** should be explicated according to parameters and timeframes expressed in MAP-21.*
- 12) ***Transit representation in voting membership of policy board** should be explicit according to parameters and timeframes expressed in MAP-21.*