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# Winston-Salem Metropolitan Planning Organization

**FINAL REPORT**  
**March 01, 2017**



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## Executive Summary

### Purpose

Pursuant to 23 U.S.C. 134(i)(5) and 49 U.S.C. 1607, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) must certify jointly the metropolitan transportation planning process in Transportation Management Areas (TMAs) at least once every four years. According to the 2010 Census, the Winston-Salem MPO had a population of 359,857 and therefore is subject to a planning certification review. The last certification review was conducted in November 2012, and the Report is dated January 30, 2013.

### Methodology

The review consisted of a desk review, an on-site review that was conducted Tuesday, November 15, 2016, and a public comment meeting held between 5:00 and 7:00p.m. on the same day. In addition to the formal review, routine oversight, such as attendance at meetings, day-to-day interactions, review of work products, and working with the MPO on past certification review recommendations and corrective actions provide a major source of information upon which to base the certification findings. After the on-site review is completed a report is written to document the findings.

### Statement of Finding

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) find that the transportation planning process substantially meets Federal requirements and jointly certify the planning process. The review identified one commendation and five recommendations.

## Previous Findings

### Update on the Corrective Actions from the 2012 Certification Review

1. The MPO must demonstrate fiscal constraint of the TIP. *This corrective action has been satisfied and no longer applies.*
2. As recommended in the 2004 certification review and the 2008 certification review, the MPO has yet to conduct any quantitative analyses in an effort to assess and ensure that the benefits and burdens of its transportation projects and services are equitably distributed. This is despite the future initiative noted in the MPO's 2008 Environmental Justice Plan, which states that a future initiative of the MPO will be to "Perform travel time studies to determine if there are any inequities for major destinations such as the hospital or key shopping area." Although the MPO has conducted qualitative analyses, the MPO must conduct quantitative analyses to ensure that its transportation system does not disproportionately burden minority and low income populations and does not disproportionately benefit non-minority and low income populations. *This corrective action has been satisfied and no longer applies.*



## **Update on the Recommendations from the 2012 Certification Report**

1. It is recommended that the NCDOT provide to the MPO estimates of Federal and State funds available for the metropolitan area on a timely basis for the development of the TIP and financial plan. *This recommendation has been satisfied and no longer applies.*
2. It is recommended that performance measures be included in the Public Involvement Policy (PPP) to help determine its effectiveness. *This recommendation has been satisfied and no longer applies.*
3. It was noted that the mapping for each of the various EJ populations used different thresholds to depict the distribution of each particular population. While these thresholds (which appear to be determined by default based on the mapping software) may be helpful for internal analysis, they can be a bit misleading visually to the public. This is due to the use of very small thresholds for certain populations, which therefore make those populations look much larger than their actual size in comparison to other populations. The review team suggested that the MPO specifically select thresholds that visually provide a better comparative picture of each EJ population. *This recommendation has been satisfied and no longer applies.*
4. It is recommended that the MPO continue to advance its plan to use measured data such as travel time and travel speeds in place of modeled/estimated measures such as Level of Service (LOS) and Volume to Capacity ratio (V/C) to measure congestion. *This recommendation has been satisfied and no longer applies.*
5. It is recommended that the MPO produce biennial evaluation reports as stated in the Congestion Management Process. *This recommendation has been satisfied and no longer applies.*
6. It is recommended that the MPO coordinate with the FHWA on future updates to the Congestion Management Process. *This recommendation has been satisfied and no longer applies.*

## **Current Findings**

The Federal Review team identified no corrective actions, and the following commendations and recommendations:

### Commendations:

- The MPO is commended for its extensive use of public involvement techniques.

### Recommendations:

- It is recommended that the MPO incorporate the two newest planning factors into the next MTP update.
- It is recommended that the MPO develop plans and a timetable for expanding incorporation of performance measures into the overall planning process.
- It is recommended that operators of freight be invited to join the TCC.



- It is recommended that the MPO work to more fully involve the freight community in the planning process.
- It is recommended that the MPO update their CMP prior to the next certification review, and time the update such that it can incorporate the applicable performance measures published in the final rule.

### **Certification**

The Winston-Salem Metropolitan Planning Organization's (WSMPO) planning process is certified for four years from the date of this Report.

## **Team Members/Participants**

### **Team Members**

Bill Marley, Community Planner, FHWA  
Joe Geigle, Congestion Management Engineer, FHWA  
Tajsha LaShore, Community Planner, FTA  
Lynise DeVance, Civil Rights Program Manager, FHWA

### **Participants**

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Matthew Burczyk, WSDOT  
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Jeff Fansler, WSDOT  
Art Barnes, WSTA  
Scott Rhine, PART  
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## **Introduction**

### **Purpose**

Pursuant to 23 U.S.C. 134(i)(5) and 49 U.S.C. 1607, the FHWA and FTA are required to jointly review and evaluate the transportation planning process for urbanized areas over 200,000 in population at least every four years. The Certification Review process helps to ensure that the planning requirements of 23 U.S.C. 134 and 49 U.S.C. 5303 are being satisfactorily achieved and that Federally funded highway and transit projects resulting from that process can be implemented. The certification review is also the appropriate time to ensure an MPO's compliance with other Federal regulations and official guidance pertinent to the transportation planning process, such as the Clean Air Act as amended, Title VI of the of the Civil Rights Act of 1964, and requirements pursuant to the Environmental Justice (EJ) Executive Order (EO 12898).



## **Scope**

The Federally required transportation planning certification review is an assessment of the transportation planning processes and products conducted by all partners charged with continually, cooperatively, and comprehensively carrying out the transportation planning process required in 23 U.S.C. 134 and 49 5303 on a daily basis, and how they meet the Federal requirements.

## **Methodology**

The review consisted of a desk review, and an on-site review followed by a public comment session conducted on November 15, 2016. In addition to the formal review, routine oversight, such as attendance at meetings, day-to-day interactions, review of work products, and working with the MPO on past certification review recommendations provide a major source of information upon which to base the certification findings. After the on-site review is complete and all comments have been reviewed, a report is prepared to document the findings.

## **Certification Report**

For each topic reviewed at the on-site review, this report will document the regulatory basis, current status, and findings.

**Regulatory Basis** – Defines where information regarding each planning topic can be found in the Code of Federal Regulations (CFR) and/or the United States Code – the “Planning Regulations” and background information on the planning topic.

**Current Status** – Defines what the Transportation Management Area (TMA) is currently doing in regards to each planning topic.

**Findings** – Statements of fact that define the conditions found during the review, which provide the primary basis for determining the corrective actions, recommendations, and/or commendations, if any, for each planning topic. Because many planning topics are interlinked, but may have been reviewed as separate topics, some findings may reference other documents or requirements than the one being covered. Findings of the planning process include:

**Commendation** – A process or practice that demonstrates innovative, highly effective, well-thought-out procedures for implementing the planning requirements. Elements addressing items that have frequently posed problems nationwide could be cited as commendations. Also, significant improvements and/or resolution of past findings may warrant a commendation.

**Recommendation** – Addresses technical improvements to processes and procedures, that while somewhat less substantial and not regulatory, are still significant enough that FHWA and FTA are hopeful that State and local officials will take action. The expected outcome is change that would improve the process, though there is no Federal mandate, and failure to respond could, but will not necessarily result in a more restrictive certification.



**Corrective Action** – Indicates a serious situation that fails to meet one or more requirements of the transportation planning statutes and regulations, thus seriously impacting the outcome of the overall process. The expected outcome is a change that brings the metropolitan planning process into compliance with a planning statute or regulation; failure to respond will likely result in a more restrictive certification.

## General Comments

The Winston-Salem Metropolitan Planning Organization (MPO) staff shared several comments about their experiences conducting the transportation planning process, including: 1) coordination with the North Carolina Department of Transportation's (NCDOT) Planning and Program Development (PPD) Branch is good, although the MPO is a bit anxious over recent PPD staff losses; 2) some concern was shared regarding the Congestion Mitigation and Air Quality (CMAQ) and Surface Transportation Program Direct Attributable (STP-DA) programs in that it can be difficult to fully follow NCDOT's process; and 3) concerns over delayed promulgation of some Rulemaking and guidance.

## Air Quality and Travel Demand Modeling

**Regulation: 23 CFR 450.322(l)**: In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the Environmental Protection Agency (EPA) transportation conformity regulations (40 CFR part 93).

**Regulation: 23 CFR 450.322(e)**: The MPO, the State(s), and the public transportation operator(s) shall validate data utilized in preparing other existing modal plans for providing input to the transportation plan.

### **Current Status**

The Winston-Salem MPO is in compliance with all National Ambient Air Quality Standards (NAAQS). The requirement to demonstrate Transportation Conformity for the MTP and TIP is no longer required for this area.

## Transit Planning

**Regulatory Basis: 49 USC 5303**: It is in the interest of the United States, including its economic interest, to foster the development and revitalization of public transportation systems, in acquiring, constructing, supervising, or inspecting equipment or a facility for use in public transportation, and to encourage and promote the safe and efficient management, operation, and development of surface transportation systems 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 through metropolitan and statewide transportation planning processes.



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### **Current Status**

Two public transit organizations operate within the MPO planning boundaries. The first is the Winston-Salem Transit Authority (WSTA). The fixed-route division services Winston-Salem proper. However, the demand-response (paratransit) division services all of Forsyth County. The Piedmont Authority for Regional Transportation (PART) either provides transportation to or has plans to provide transportation to the following municipalities: Winston-Salem, King, Kernersville, and Clemmons.

The Winston-Salem Transit Authority was created in 1972 and is managed by Veolia Transportation. Policy is formulated by an eight member board of directors appointed by the Mayor and City Council. The Authority consists of four major departments tasked with specific functions. An administrative staff oversees these departments. The departments are fixed-route operations, Trans-Aid operations (paratransit), Mobility Management (reservations and information) and vehicle maintenance. Total employees number about 170. Fixed-route services are confined to Winston-Salem proper while the paratransit division covers Forsyth County and is responsible for compliance with Americans with Disabilities (ADA) mandates. WSTA currently has 57 fixed-route vehicles, 37 paratransit vehicles, and 14 service vehicles.

PART Express: PART Express is the regional bus system connecting the major cities of the Piedmont and brings people from the outlying counties into the urban areas. PART Express bus service is provided by contract. The contractor is responsible for operations to include drivers, supervisors, PART Hub staff, and maintenance. Twelve PART Express routes and six shuttle routes are offered during weekdays with one route running on the weekend. PART vehicles drive 38,792 revenue miles per year. There are 28 Park & Ride lots scattered across the Piedmont Triad. PART served 511,137 passenger trips in Fiscal Year (FY) 2015 and reduced Vehicle Miles Traveled (VMT) by 11,245,041 miles. There are currently 36 vehicles in the PART fleet. All vehicles are wheelchair accessible except the Dodge Sprinters and all vehicles also have bike racks.

### **Planning/Coordination**

The City of Winston-Salem retains a full-time planner that is specifically assigned to the transit authority and is responsible for transit interface including grants management, TIP and STIP submission, transit planning, attending transit staff meetings, and representing transit authority interests at Technical Coordinating Committee (TCC) and Transportation Advisory Committee (TAC) meetings. Transit representatives from both PART and WSTA are active participants in the MPO planning process. Transit planning goals and objectives are inherent in MPO goals and objectives.

PART works with four MPOs and states that Winston Salem is an exceptional MPO. Coordination between the transit operators and the NCDOT Planning Branch is also very good. They involve them on all planning levels – TIP/STIP, UPWP, LRTP, etc. Moreover, PART is very involved and takes the lead on multiple partnerships and regional projects related to transit planning, congestion management along regionally significant highway corridors, and impacts of growth and development on mobility and the transportation network. Transit is truly included in the Winston Salem MPO planning process.



### **Issues/Struggles**

The lack of sufficient long-range funding, which limits the ability to plan for long-range projects; disproportionate dedication of funds to highway projects; and lack of commitment to public transit on the part of major employers are some of the issues and struggles for transit planning. Competition for limited funds is also an issue. However, the MPO recognizes that roadway and transit planning are complimentary and intertwined. This commitment is evident in the dedication of considerable funds for transit vehicle acquisition in recent and future years.

There was also discussion regarding transferred funds (flex) and concerns with the process. Transit operators would like for this process to be tracked and more seamless between the MPO, NCDOT, and the Federal agencies.

STI (Strategic Transportation Investments) in the state of North Carolina was also mentioned. PART and WSTA select their projects. However, they may rank high, but there are no dollars associated with the projects; that is not good for transit.

### **Transit Representation on the MPO Board**

The MPO board does have a transit representative; she is a female from WSTA. The MPO says that she has diversified the board and the addition will continue to have a positive effect on the board.

## **Metropolitan Transportation Plan (MTP)/Planning Factors**

**Regulatory Basis: 23 CFR 450.322 and 306:** Development of a transportation plan addressing no less than a 20-year planning horizon. The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. The metropolitan transportation planning process shall be 3C, and provide for consideration and implementation of projects, strategies, and services that will address the planning factors.

**Regulatory Basis: 23 CFR 450.322:** TMAs shall develop a Congestion Management Program (CMP) to address congestion through a process that provides for safe and efficient integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy of new and existing transportation facilities.

### **Current Status**

The MTP covers a 20-year planning horizon and is coordinated with the Triad Regional Demand Model for purposes of Air Quality Conformity, and to assess the major highway and regionally significant corridors for the movement of people and goods. The Freight Plan and Congestion Management Processes plan within the document are coordinated with the fiscally constrained network of projects. All regionally significant projects are identified based on the guidance provided by NCDOT and FHWA.



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The MTP is supported by a comprehensive and inclusive public involvement effort. The public involvement process complies with both Title VI and the Executive Order on Environmental Justice. Public involvement is held during the draft and final review phases of the TIP and in conjunction with the MTP update. Public outreach occurs prior to beginning the update of the MTP and again during the draft review. Meetings are held in locations that are easily accessible to all populations.

The MTP is based on reasonably expected financial resources over the life of the MTP and identifies funding mechanisms where a shortfall exists. The MTP uses the best available data from NCDOT projections based on the STIP and other State funding sources. Federal allocations are included in the projections and direct allocations to the MPO are accounted for in the projects. The MPO tries to anticipate funding that may be available through new programs such as the Mobility Fund or other public/private opportunities. Local projects are constrained by the availability of municipal bond referendums or other developer participation.

The MTP is linked to land use plans within the region so as to support its goals. Each area plan contains a transportation section, which draws its data from the MTP, CTP, and other transportation planning documents. The MPO works very closely with Forsyth County and other municipal agencies to coordinate the goals and objectives of the MTP into the road, transit, bicycle, and pedestrian projects associated with both public and private projects.

Strategies have been developed to implement provisions of the MTP, and implementation priorities have been established. The projects listed in the MTP have been coordinated with NCDOT and each municipality to ensure implementation. General policies and recommendations are developed in conjunction with the City-County Planning Board and the municipalities to be consistent with community goals. Continuous coordination with the MPO partners is essential to maintain consistent planning documents. The STP-DA process has been a particularly successful program to implement active transportation modes and assist in meeting the transit needs of the MPO.

The MTP identifies long and short term strategies and actions that lead to the development of the region's multimodal transportation system, including with regard to the following:

- **Projected Demand:** The MPO relies on the State Demographer for data that is fed into the travel demand model, and uses the City-County Planning Board and previous socioeconomic data allocation as base year conditions with professional judgment by Planning staff on the land use conditions and comprehensive planning assumptions.
- **Congestion Management Strategies:** The initial Congestion Management Processes Plan was developed for the 2008 MTP and has been evaluated and modified to acknowledge new technologies and congestion management efforts by the NCDOT Division 9.
- **Pedestrian Walkway and Bicycle Transportation Facilities:** Extensive work by the MPO has been completed to document existing facilities and to develop short and long range implementation plans for creating a strong and well-linked bicycle and pedestrian network. Area and municipal plans have been evaluated and prioritized to accomplish the projects listed in the MTP and CTP. The Comprehensive Bicycle Master Plan and the Sidewalk and Greenway Plan update have all strengthened the coordination with private development implementation as well as coordinating funding through local,



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- State, and Federal sources.
- Design Concept and Scope of all Existing and Proposed Major Transportation Facilities: Through the Comprehensive Transportation Plan (CTP), developed as an unconstrained multi-modal transportation plan by State Statute, all transportation facilities have been identified with an appropriate cross-section based on the new Complete Streets designs approved by NCDOT. This assists in both establishing needed right-of-way through the development process, and assuring that privately built facilities meet future needs.
- Transportation, Socioeconomic, Environmental, and Financial Impacts of the Overall Plan: The MPO has always made a commitment to provide planning assistance and locally assigned STP-DA funds to the entire network within the planning area and takes into consideration the municipal, geographic, and socioeconomic needs of the community.
- Development Objectives, Housing Strategies, Environmental Plans, and the Area's Overall Goals and Objectives: The MPO works closely with the planning agencies within the planning area, and all projects are a jointly considered effort, including working with their adjacent MPO partners and regional transportation providers.
- Transportation Enhancements: With the adoption of the Comprehensive Streets policy by the NCDOT Board of Transportation (BOT) and the incorporation of bicycle and pedestrian accommodation in road cross-sections, all projects other than freeways now have a multi-modal cross-section. There is still work to be completed to incorporate bicycle, pedestrian, and transit elements in the projects being constructed by NCDOT on the urban fringe of the MPO.

The MPO provides for the maintenance and preservation of the Federally-supported, existing, and future transportation system. NCDOT has developed funding schedules for pavement rehabilitation and bridge construction to maintain a safe and functioning system. The CMAQ project to overhaul the MPO traffic signal system should assist in making the best use of the existing network through more predictable travel through the system and management of incidents and peak hour congestion. Allocation of STP-DA funds for problem intersection improvements will add needed capacity to problem areas when financial issues are present.

The MTP is financially constrained by time horizon based on the best available information about future funding from Federal, State, and local sources.

Each product of the MPO transportation planning process (UPWP, MTP, TIP, CMP, etc.) is developed through a Comprehensive, Cooperative, and Continuing (3C) planning process. The MPO, State, and transit operators all contribute to the development of the products by providing feedback and useful information.

The State played an important role in the development of the State Implementation Plan (SIP). NCDOT, in cooperation with the North Carolina Department of Environment and Natural Resources (NCDENR), the Forsyth County Office of Environmental Assistance and Protection (FCOEAP), and the Winston-Salem Department of Transportation (WSDOT), completed an air quality conformity analysis and determination for both the 2040 MTP and the Fiscal Year 2016-2025 TIP. The report demonstrates that the fiscally constrained 2040 MTP for the urban area eliminates or reduces violations of the National Ambient Air Quality Standards (NAAQS) and accomplishes the intent of the North Carolina SIP. Based on the documented regional



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emissions budget test, and compliance with other requirements for conformity, the MTP conforms to the purpose of the North Carolina SIP.

The planning factors are considered in the MTP, UPWP, TIP, and corridor studies. The factors are used to identify projects and are part of the criteria used to rank them for inclusion in the MTP, UPWP, and TIP. Planning studies use the planning factors in alternative development analyses. It is recommended that the MPO incorporate the two newest planning factors into the next MTP update.

All projects for Single Occupancy Vehicle (SOV) capacity expansion projects, for which federal funds are programmed, are supported by a CMP that is valid, operational, and periodically evaluated. The CMP includes analysis of Interstate highways, freeways, expressways, and other principal arterials in the urban area, and is updated biennially.

Environmental Justice (EJ) deficiencies are considered in the MTP. As part of the MTP update, the MPO updated its demographic profile, based on the 2010 Census data, which identifies and maps all minority and low income populations by Traffic Analysis Zone (TAZ). This profile also includes overlays of projects dating from 2008 to those projected in 2035. Additionally, the identification of Limited English Proficiency (LEP) populations is now being included in the demographic profile collection process. The EJ demographic profile thresholds have been adjusted to provide a better comparative visual for professional and public interpretation, as noted in the previous certification as an area to improve. The MPO has a Title VI and EJ Plan in place, which was developed in 2008. The Plan includes a mission and policy statement as well as compliance and planning process goals. The language in the Plan states how the MPO will ensure that Title VI and EJ considerations are incorporated in all of the MPO's planning processes and products, including the MTP update, UPWP, and TIP.

The MPO has developed procedures for coordinating metropolitan and statewide planning, and the results of this coordination are manifested in the products of the planning process. Both the MPO and NCDOT are partners in several agreements, which assist in the coordination of metropolitan and statewide planning in the products of the planning process. These agreements contain procedures for a number of items, including submission of required quarterly and annual reports, a Memorandum of Understanding (MOU), review and delivery of the TIP and amendments, and travel demand modeling.

There is consistency between metropolitan transportation planning activities and related planning activities. The City of Winston-Salem and NCDOT work collaboratively in developing safety goals, objectives, performance measures, and strategies for the urbanized area. The City's Police Department, Forsyth County Sheriff's Office, Emergency Management Department, town managers, local agencies, etc. are also involved. These agencies meet regularly and as needed to discuss a variety of issues and concerns regarding safety, security, and transportation. The MPO follows the Strategic Highway Safety Plan (SHSP) closely, as funding can be provided through the TIP. Safety is also considered in determining which projects will be included in the MTP and TIP. NCDOT has funds specifically set aside for making safety improvements along roadways, including guardrails, rumble strips, better pavement markings and signs, etc. Highway Safety Improvement Program (HSIP) projects located within the MPO are included in the TIP. Most of these projects come from NCDOT



and are routinely included in the TIP when project requests are taken.

The products of the metropolitan planning process are consistent with regional Intelligent Transportation Systems (ITS) architecture. The 2040 MTP includes a section on ITS strategies with compliance with the Triad Regional ITS Deployment Plan. All proposed ITS elements are reviewed by NCDOT and FHWA for compliance and consistency with the regional ITS architecture plan prior to implementation.

Asset management principles and techniques are incorporated into the planning process. Roadway and bridge assets are evaluated by NCDOT and the City of Winston-Salem on a regular interval. Ratings such as pavement condition and bridge sufficiency are used in identifying needs for revitalization projects.

Freight shippers and transit users are provided the opportunity to comment on the MTP, TIP, and other MPO products. Private enterprises, including private transit providers, also have the opportunity to participate in the planning process. The MPO usually contacts those freight shippers and transit providers to encourage those groups to participate in the planning process for plans, projects, programs, and services. MPO staff also attend regularly scheduled meetings conducted by transit providers in order to provide updates pertaining to the MTP, TIP, and other MPO products.

The MPO's plans and timetable for expanding incorporation of performance measures into the overall planning process, including how this will be supported by UPWP tasks for monitoring progress towards achieving targets, have not yet been determined. It is recommended that the MPO develop plans and a timetable for expanding incorporation of performance measures into the overall planning process.

Non-motorized modes of travel such as bicycle and pedestrian are analyzed and addressed extensively in the MTP and throughout the transportation planning process. The 2040 MTP includes an extensive Bicycle and Pedestrian Section. The CTP includes bikeways, sidewalks, and greenways. The MPO also designates a percentage of federal funding at the MPO level for bicycle and pedestrian projects. They seek to incorporate bicycle and pedestrian improvements into all TIP projects. The TAC adopted a complete streets policy in March 2013.

In coordination with, and even outside of the "traditional" transportation planning process, issues related to "smart growth," context-sensitive solutions, "green" infrastructure, "complete streets," transit-oriented development, etc. are considered, advanced, and supported through the MPO, State DOT, transit operators, local jurisdictions, and other organizations in the MPO region. Most of the aforementioned concepts are included in the Legacy 2030 Update, the adopted comprehensive plan covering most of the Winston-Salem MPO area and adopted by all jurisdictions in Forsyth County. The Legacy 2030 Update themes of Fiscal Responsibility and Sustainable Growth and Livable Design together form the MPO's "smart growth" efforts. The State of North Carolina adopted a complete streets policy in 2009 and is currently working to implement the policy. The Legacy Update includes a recommendation supporting complete street policy and design. The TAC adopted a complete streets policy in March 2013. The Legacy 2030 Update includes many recommendations related to transit/pedestrian-oriented



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development. They chose to add “pedestrian” to the term to make it more relevant locally. They have modified their regulations, but have had only minor success in getting local projects to be developed in a transit/pedestrian-oriented manner. As the economy improves and the pace of development increases, they hope to see more transit/pedestrian-oriented developments. The MPO, the City of Winston-Salem, and Forsyth County have all adopted the Greenway Plan Update and the Winston-Salem Parks and Open Space Plan. The Winston-Salem/Forsyth County Greenway Planner served on the Green Infrastructure Working Group of Piedmont Tomorrow, the regional sustainable communities planning project.

Jurisdictions within the MPO have addressed climate change mitigation and greenhouse gas (GHG) emission reduction in goals and plans. The City of Winston-Salem adopted a resolution supporting the US Conference of Mayors’ Climate Protection Agreement in May 2007. The City adopted a Greenhouse Gas Inventory and Local Action Plan to Reduce Emissions in July 2008. The MPO also participates in the Statewide Interagency Consultation Meeting (SICM), initiated under the Clean Air Act to ensure local conformity to the National Ambient Air Quality Standards.

The MPO has strong, ongoing relationships and consultation efforts with many local and regional agencies working on land use planning, environmental protection, and historic preservation. These agencies include, but are not limited to, the Forsyth County Historic Resources Commission, the Forsyth County Office of Environmental Assistance and Protection, and the Piedmont Triad Regional Council. The MPO has formal consultation agreements with PART and with City-County Planning.

For the development of the 2040 MTP, adopted and approved in 2015, the MPO built upon the resource consultation process used in development of past long range plans. As part of their consultation process, resource agencies are contacted during development of the plan and later when a draft plan is available. Comments and recommendations from the resource agencies are incorporated into the plan. For the 2040 MTP, all consultations and comments

were summarized and are documented in the MTP and included in full in the Appendix. For the 2040 MTP, resource agencies were contacted in June 2015 to update contact data and mapping information. The list of contact agencies had originally been developed in consultation with PART and other Triad MPOs for prior long range plans. The agencies were contacted again in July 2015 when the draft plan was available, and given 30 days to provide comments. The 2040 Plan includes mapping of projects and environmental factors, and a table with impact areas and potential mitigation measures, as recommend by the resource agencies. Input and comments from resource agencies are used as criteria to assess which activities may have the greatest potential to restore, improve, and maintain the environment.

Information and data have been assembled regarding the location and condition of environmental features that might be affected by proposals outlined in the MTP. Using mapping and data provided or recommended by the resource agencies, the MPO compiled four environmental factors maps showing transportation projects and relevant factors. The two prior long range plans contained only three environmental factors maps (Natural, Cultural, and Agricultural); however, due to the increase in data layers recommended by resource



agencies during the consultation process, the Natural Factors map was divided into two maps - a Hydrology map and a Land Management & Wildlife map. The Agricultural Factors map shows farmland preservation properties, voluntary agricultural districts, and farmland viability levels. The Hydrology factors map depicts rivers, streams, 303D-listed streams, lakes/ponds, floodplains, wetlands, State-mandated water supply watersheds, EEP targeted watersheds, and the Jordan and Randleman riparian buffers. The Land Management & Wildlife map depicts Natural Heritage Areas and element occurrences, Relative Conservation Values, Trust Conservation Properties, land managed for conservation and open space, conservation tax credit properties, hazardous waste sites, and active permitted landfills. The Cultural Factors map depicts parks, schools, and historic resources.

The MPO has worked with resource agencies to define potential mitigation measures that may be needed on a system-wide basis, as opposed to a project level basis, through its resource agency consultation process. The MTP includes a multi-page table with mitigation measures by impact area. As part of the consultation process, resource agencies are asked to provide input, including reviewing the proposed mitigation measures in the MTP and recommending additional mitigation measures that may be needed. During the MTP 2040 resource agency consultation process, the most detailed comments came from the Environmental Protection Agency (EPA) Region 4 National Environmental Policy Act (NEPA) Program Office/NC Field Office and the NC Wildlife Commission. Based on their comments, the mitigation measures in the MTP were extensively updated.

### **Recommendations**

- It is recommended that the MPO incorporate the two newest planning factors into the next MTP update.
- It is recommended that the MPO develop plans and a timetable for expanding incorporation of performance measures into the overall planning process.

## **Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP)**

**Regulatory Basis: 23 CFR 450.324:** The MPO shall cooperatively develop a TIP that is consistent with the MTP and is financially constrained. The TIP must cover at least a four-year horizon and be updated at least every four years. Additionally, the TIP must list all projects in sufficient detail outlined in the regulations, reflect public involvement, and identify the criteria for prioritizing projects.

### **Current Status**

The MPO avails itself of the opportunity to group projects in the TIP based upon funding source. For example, STP-DA funded projects are typically listed in the TIP as a lump-sum, while CMAQ products are recorded by line item.



The TIP project selection process is coordinated with the State and transit operators. The MPO provides a prioritized list of projects to the NCDOT with relevant local data for inclusion in the Strategic Prioritization of Transportation (SPOT) process. The draft STIP is released and the MPO provides a local version of the document for public review using familiar language and street names. Both the NCDOT and the MPO provide opportunities for the public to make comments on the draft STIP and TIP, and public hearings are held. The final STIP is released. Other than adjustments to funding and minor time changes, the TIP matches the STIP.

The MPO follows the guidelines of the SPOT process and submits projects that are listed in the MTP for funding. Point assignments are based on joint consideration of the MPO and NCDOT Division 9 to maximize the potential for projects to be included in the TIP. The allocation of STP-DA funds is completed exclusively through the MPO with placeholder TIP assignments and amendments to the TIP as needed for the project types such as greenways, bicycle and pedestrian facilities, intersections or small roadway projects, and transit and enhancement projects.

The TIP serves as a management tool for implementing the MTP with regard to policies, investment choices, and priorities identified in the MTP. Ideally, the STIP would match the time horizons established by the MPO; however, funding priorities of the NCDOT are subject to change such as new emphasis on bridge and pavement rehabilitation or the allocation of urban loop funds and reprioritization at the State level, plus the general lack of funds for sub-regional projects, means that many local projects slip into later horizons with each successive STIP. There is a new commitment by NCDOT to provide a higher degree of certainty on projects within the first five years of the STIP.

The TIP contains all regionally significant transportation projects regardless of funding source, cost estimates, project phase and implementation status, the amount of federal funds proposed to be obligated during each program year, and proposed sources of federal and non-federal funds.

Public involvement is incorporated in the TIP development process, and has occasionally affected the content of the TIP. When the MPO produced a new Needs Report as a submission to NCDOT for project incorporation into the STIP, there was public involvement in the process. The MPO has not added any new projects that are not already included in the MTP for several STIP cycles. For projects that are incorporated in the STP-DA project list, a public call for projects and work with the individual municipalities is ongoing and extensive prior to project evaluation and prioritization.

The MPO receives the list of annual obligations for projects from the NCDOT Program Development Branch, including all of the annual obligations of both federal and state dollars by project, project stage, date of action, and funding source. The information is contained in spreadsheet after the end of the fiscal year. The obligated funds list is included in the Draft TIP and released for public review. The final TIP is then produced and published. The MPO modifies the list to make it more readable for the general public by identifying projects by common street names rather than State route numbers. Additional information is also



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provided on projects and funding keys. In years in which the obligated funds listing is produced without the TIP, the list is provided for public review and posted on the MPO website. The annual listing is made available to the public in a notebook, which is placed in all public libraries, municipal buildings, NCDOT Division 9, and on the MPO website. To date, no specific public comments have been received on the obligated funds listing. The method for comparing the projects in the annual listing to the TIP involves including the obligated funds document with the TIP, including all of the applicable years since the previous TIP. On in-between years, it is located on the same webpage and within the existing document on file in the public review locations.

## **Financial Planning**

The financial plan is basically a comparison of existing funding streams with projected needs. The statutory language specifically requires that the financial plan indicate the resources from public and private sources that are reasonably expected to be made available to carry out the MTP. The MPO's financial plan complies with federal law by:

- Demonstrating how the STIP can be implemented;
- Identifying any innovative financing techniques to provide funds for the projects, programs, and strategies in the MTP; and
- Identifying other transportation projects that would be implemented if additional funds were available.

Assumptions as to the availability of non-federal funds are made without forecasting. New funding sources are identified as innovative funding techniques without strategies to secure them.

The revenue forecasting approach is cooperative among the MPO, NCDOT, transit operators, and local jurisdictions. The STIP and TIP contain the most financial assumptions and recommendations that are included in the MTP. Other financial assumptions and recommendations from the municipalities are then incorporated and blended in with the overall financial plan for a relatively complete picture of planned revenues and expenditures. Assumptions and data sources for each revenue source (federal, state, local, and other) are documented in the financial plan. The financial plan contains several important sections including:

- The various funding sources for transportation,
- A review of the historical trends for funding in the urban area,
- A summary of the federal and state funds in the draft STIP, and
- The urban area's projected transportation revenues through the 2040 horizon year.

Federal, state, local, and private revenues are forecasted primarily in large spreadsheets and tables with text explaining the assumptions and data sources for each revenue source. Project cost estimates are derived by engineers and are consistent among the implementing agencies. There are documented cooperative procedures as well as charts, tables, and narrative that describe the current fiscal constraint demonstration. A set of financial assumptions and calculations are established that guide the general approach to forecasting future revenues. These assumptions and calculations are open, transparent, and available to the public.



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The MPO has seen NCDOT link operations and maintenance costs to asset management systems and the CMP. The City of Winston-Salem has also programmed additional funding to support measures implemented from the CMP. An example of this is additional funding for contractual services for traffic surveillance camera software maintenance, and fiber optic cable maintenance and repair.

The TIP provides specific information on revenue source by program year for all available federal and state funds. The description of the project(s), the total cost of the project, previous expenditures, fiscal years those funds are programmed to be used, and the source(s) of funds are all included. The financial plans of the TIP are consistent with those of the MTP. The MTP utilizes the TIP as a basis for developing the financial plan assumptions and calculations. The MPO consults with various NCDOT departments and divisions and the City's Engineering and Public Works staff to ensure the TIP financial plan is consistent with the STIP.

Generally, an amount of 10-20% is used for contingencies when estimating a project's total estimated cost. Updates to project estimates may occur during the long range planning and programming process when the scope of the project changes significantly or a significant change in the project delivery date is anticipated. Adequate levels of operation and maintenance are typically determined by the implementing agency, which is usually NCDOT or the municipality.

Levels of service or ratings of facility condition expected for a given funding level are communicated to the public on an as needed basis, but are often discussed during the budget evaluation season. The public is typically informed via city council public meetings and hearings. Fiscal constraint is ensured when amending the MTP and TIP through NCDOT, who provides the financial estimates on cost and available funds. NCDOT also developed criteria by which it can be determined whether a project change warrants a formal amendment or an administrative modification. The TIP contains no projects funded through advance construction.

The financial plan is made available to the public through its inclusion as an element in the overall MTP, and thus is included in the regular public participation process.

## **Metropolitan Planning Area Boundary/Agreements and Contracts/Organizational Structure**

**Regulatory Basis: 23 CFR 450.312(a):** The boundaries of a metropolitan planning area (MPA) shall be determined by agreement between the MPO and the Governor. At a minimum, the MPA boundaries shall encompass the entire existing urbanized area (as defined by the Bureau of the Census) plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan.



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### **Current Status**

The metropolitan planning area boundary, based on the 2010 US Census, was adopted by the MPO on January 17, 2013. Currently, no areas are under consideration for inclusion in an expanded MPO. As part of the Federal certification review in late 2012, the FTA and the FHWA directed the MPO to add the local transit agency, WSTA, as a voting member of the MPO's policy making body, the TAC. This was completed on September 19, 2013. On April 3, 2013, the Public Transportation Division of the NCDOT requested that their representative on the TCC be changed from a voting member to an advisory, non-voting member.

The MPO was designated a TMA in 2000. After the 2010 Census, they worked with of area other MPOs in the region to define boundaries based on the defined urbanized area and the interests jurisdictions. No changes in the designation are being considered at this time.

As a result of the 2000 US Census, portions of the Winston-Salem Urbanized Area (UZA) crossed into western Guilford County for the first time. The Winston-Salem and Greensboro MPOs met and agreed on a new Metropolitan Area Boundary (MAB) map that kept the entire UZAs within each MPO. There was no transfer of planning responsibilities and no Memorandum of Agreement (MOA) at that time. The NCDOT Statewide Planning Branch simply reviewed the new MAB map and gave it their approval. With the new 2010 US Census, the Winston-Salem UZA expanded farther into Guilford County taking in very small portions of the Town of Oak Ridge. In 2012, the Winston-Salem and Greensboro MPOs developed and informally agreed on a new MAB map. The MPOs also agreed that the Winston-Salem MPO would not encroach into Guilford County and remain entirely within Forsyth County. The Greensboro UZA did not expand into Forsyth County and thus was not an issue. An MOA between the Winston-Salem MPO and the Greensboro MPO to formally approve the transfer of planning responsibility and authority of the portion of the Winston-Salem UZA located within the Guilford County limits was created.

As a result of the 2000 US Census, portions of the Winston-Salem UZA went into northern Davidson County for the first time. The Winston-Salem and High Point MPOs met and agreed on a new MAB map that kept the entire UZAs within each MPO. There was no transfer of planning responsibilities and no MOA at that time. The NCDOT Statewide Planning Branch simply reviewed the new MAB map and gave their approval.

With the 2010 US Census, the Winston-Salem UZA expanded farther south into Davidson County taking in the community of Welcome and most of the City of Lexington along the US 52 Corridor. In 2012, the Winston-Salem, High Point, and Cabarrus-Rowan MPOs developed and informally agreed on a new MAB map subject to the approval of the City of

Lexington, the Davidson County Commission, and the NCDOT. Those approvals were received and a new MAB for each MPO has been established. The MPOs agreed that the Winston-Salem MPO would only take in some additional area north of Welcome over to the Yadkin River, while the High Pont MPO would expand greatly to take in Welcome, the entire City of Lexington, and the entire rest of Davidson County to the west and south, including the small portion of the Cabarrus-Rowan UZA. A MOA between the Winston-Salem MPO and the High Point MPO to formally approve the transfer of the planning



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responsibility and authority of the portion of the Winston-Salem UZA located within Davidson County was created.

The MPO conducts its planning process and develops the required plans and documents as it is required to do in all of its agreements. Existing agreements conform to regulatory requirements and accurately represent the 3C planning process. Roles and responsibilities are defined for the development of the MTP, the TIP, the UPWP, corridor studies, and other major project studies primarily through the adopted Prospectus, UPWP, and MOU as agreed to by various agencies. The MPO conducts its planning process and develops the required plans and documents as it is required to do in those agreements. Performance measures and targets are determined and evaluated within the scope of those required within the agreement.

An MOU establishes a combination system of voting for the TAC. Generally, the TAC operates on a one person, one vote system. However, any voting member may invoke the weighted voting system established in the MOU on any vote. As required by the MOU, a weighted voting schedule is adopted as part of the TAC by-laws. Weighted votes are apportioned based on population as of the most recent decennial census with a minimum of one (1) vote per voting member. The NCDOT BOT member has been assigned five (5) votes, and the WSTA Board member has 2 votes. These votes were taken from the City of Winston-Salem, the jurisdiction with the largest population. The TCC operates on a one person, one vote system at all times.

A quorum is required for the transaction of all business of the TAC, including conducting meetings or hearings, participation in deliberations, or voting upon or otherwise transacting the public business. A quorum consists of fifty-one percent (51%) of the voting members of the TAC, plus as many additional members as may be required to ensure that fifty-one percent (51%) of the total weighted votes are present. Currently, at least 11 of the 20 members, representing at least 51 of 100 votes, must be present to establish a quorum.

The policy board of the MPO is the TAC. Per the MOU, signed by all member jurisdictions, the State of North Carolina, and WSTA, the TAC includes voting members and non-voting, advisory members. The MOU was revised in 2013, effective January 2014, to add a representative from the WSTA Board as a full voting member of the TAC, with 2 weighted votes. The WSTA Director was added as a member of the TCC.



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Voting membership on the policy board is as follows:

- Three (3) elected officials from the City of Winston-Salem, one of whom shall be the Mayor;
- Two (2) elected officials from the Forsyth County Board of Commissioners;
- One (1) elected official from each of the following municipalities:
  - Town of Bethania
  - Town of Bermuda Run
  - Village of Clemmons
  - Town of Kernersville
  - City of King
  - Town of Lewisville
  - Town of Midway
  - Town of Rural Hall
  - Village of Tobaccoville
  - Town of Walkertown
  - Town of Wallburg
  - Municipalities joining the MPO by becoming party to the agreement and granted voting membership by the TAC;
- One (1) elected official from each of the following counties:
  - Davidson
  - Davie
  - Stokes
  - One (1) member of the NCDOT BOT
  - One (1) member of the Board of Directors of WSTA

The TAC also includes advisory, non-voting members, who represent agencies with an interest in transportation planning for the MPO area. Non-voting, advisory members include:

- The Chairman of the City-County Planning Board (CCPB);
- The Division Administrator of the FHWA or his designee;
- The Chairman of the Forsyth County Airport Commission;
- The Transportation Planning Coordinator of the CCPB, who shall also serve as the TAC Secretary

The MOU designates a TCC to advise the TAC. Per the MOU, the TCC includes a representative, or his/her designee from each of the following units of government:

- Deputy County Manager, Forsyth County
- Director, Forsyth County Environmental Affairs Department
- Assistant City Manager for Public Works, City of Winston-Salem
- Director of Transportation, City of Winston-Salem WSDOT
- Community Planner, FHWA North Carolina Division
- Urban Area Coordinator Transportation Planning Engineer, NCDOT TPB
- Ninth Division Engineer, NCDOT



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- Director, City-County Planning Board
- Planning Development Coordinator, WSDOT
- Transportation Planning Coordinator, CCPB
- The Manager from each of the following municipalities:
  - Bermuda Run
  - Bethania
  - Clemmons
  - Kernersville
  - King
  - Lewisville
  - Midway
  - Rural Hall
  - Tobaccoville
  - Walkertown
  - Wallburg
  - Municipalities added to the MPO
- The Manager from each of the following counties:
  - Davidson
  - Davie
  - Stokes
- Director, PART
- Director, WSTA
- Planner, Northwest Piedmont Rural Planning Organization (RPO)

The MOU allows for the appointment to the TCC of representatives of major modes of transportation (i.e., trucking firms, railroads, intercity bus, taxi companies, etc.). Currently, the following representatives serve on the TCC:

- Director of the Smith-Reynolds Airport

Freight operators are not represented on either the TAC or TCC, but could be invited to be on the TCC based on provisions of the MOU. It is recommended that operators of freight be invited to join the TCC.

### **Recommendations:**

- It is recommended that operators of freight be invited to join the TCC.



## **Regional Coordination – Regional and Environmental Agencies**

**Regulatory Basis: 23 CFR 450.316(b)(c)(d)(e):** The MPO should develop and document consultation procedures that outline how and when during the development of MTPs and TIPs, the MPO will consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including state and local planned growth, economic development, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities, as well the MPO should also include Indian Tribal Governments, and Federal Public Lands, if applicable.

### **Current Status**

The consultation process for the MTP with the environmental and resource agencies was developed after a FHWA workshop, which was held in 2007 to assist MPOs and NCDOT understand the expectations of the consultation process. The MPO worked with their adjacent MPO partners and PART to hold a regional workshop to identify resources and strategies for notification and consultation with local, State, and Federal agencies. The 2008 MTP was the first effort to develop a comprehensive list of agencies and resource groups, to locate data, and to create an overlay mapping system to compare MPO projects to identify natural, cultural, and agricultural resources, as well as hazardous conditions. The regional partners work together to share information and mapping.

Opportunities are provided for agency consultation at key decision points in the planning and programming (TIP) phases of transportation planning decision-making. The local Forsyth County Environmental Protection and Community Assistance agency, Historic Properties and Resource Commissions, the North Carolina Division of Air Quality, EPA, and all agencies that are consulted during Environmental Assessments (EAs) and NEPA projects are involved during the planning and development of MPO projects.

Agencies are informed by email and personal phone calls when documents are in the draft or review stage or the agencies are part of the MPO continuous consultation and notification process through the bimonthly TCC and TAC packets.

The MPO's consultation process provides for the consideration and responsiveness to input received. All comments on the draft 2040 MTP received from resource agencies during the consultation process were considered. Comments were summarized in the plan and included in their entirety in the Appendix. MPO staff responded to all agencies that provided comments in an email with general information about how their comments would be used. All consultations, including MPO staff responses to comments, are documented in the Appendix.



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The consultation in the metropolitan transportation process is coordinated with the statewide consultation process to enhance public consideration of issues, plans, and programs. The Statewide Interagency Consultation Meetings (SICM) as well as the TIP and MTP specific Interagency Consultation meetings held monthly during plan development and review, are well coordinated at the Federal, State, regional, and MPO levels. This process has been very successful in creating a team effort in working through Air Quality Conformity requirements. The MTP coordination on other natural and cultural resources is accomplished during the preliminary and draft reviews of the document.

The MPO employs visualization techniques to assist agencies in understanding the transportation plan elements. For the 2040 MTP, the MPO used mapping and data provided or recommended by the resource agencies to compile four environmental factors maps. These maps depict the proposed transportation projects by horizon years overlaid on relevant environmental and cultural factors.

The MPO maintains a list of agencies with names and addresses contacted, including agencies responsible for natural resources, land use, economic development, environmental protection, etc. The list had originally been developed in consultation with PART and other adjacent MPOs for prior long range plans. The list was updated in 2015, used as part of the resource agency consultation process, and included in the Appendix of the 2040 MTP.

Evidence of plans, maps, and data obtained from agencies contacted and records of comparisons to the MTP and TIP are provided. All consultations and comments received during the resource agency consultation process for the 2040 MTP were summarized in the Plan and included in their entirety in the Appendix.

## **Congestion Management Process (CMP)/Intelligent Transportation Systems (ITS)/Management and Operations (M&O)**

**Regulatory Basis: 23 CFR 450.320:** TMA's shall develop a CMP to address congestion through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities.

### **Current Status**

The MPO's CMP follows the 8-Step approach. The CMP was last updated in 2009 and is also reevaluated during the MTP update process. The development of the original CMP was a joint effort with NCDOT and other municipalities within the urban area. Since the main congestion issues facing the urban area lie within the City of Winston-Salem on NCDOT roadways, the coordination has been limited to those two entities and the public transportation providers in the latest update.

Consideration is given to examining traffic congestion conditions and problems on a regional basis since construction work, crashes, and other incidents along the Interstate highways, other freeways and expressways, and other major roads linking the entire Piedmont Triad in Greensboro and High Point may have impacts on congestion levels within the Winston-Salem



MPO boundary, and vice versa.

The major congestion issue in the Winston-Salem urban area is vehicular; therefore, the main data source for the CMP is traffic counts. The first step in data collection is the Average Annual Daily Trips (AADTs) values provided by NCDOT. If the AADT value and the corresponding V/C ratio show a segment or corridor is congested, additional data collection is called for in the CMP if the segment or corridor contains signalized intersections. In this case, turning movement counts at signalized intersections and travel time/speed studies would be conducted to verify there is an issue on the segment, or to show that level of service values and travel times and speeds are acceptable. This data collection and analysis allows for the evaluation of projects and proposed improvements as they are completed during the biennial report process.

A Task Force agreed that the CMP should only analyze streets and highways defined as Principal Arterials or higher by the urban area's Federal Functional Classification system maps provided by NCDOT. Thus, the analysis includes all of the Interstate highways, Freeways and Expressways, and Other Principal Arterials in the urban area.

The CMP has influenced the construction and implementation of non-single occupancy vehicle (SOV) projects by engaging the regional and local transit providers in goal-setting and planning in an effort to both expand public transportation options and services, and to reduce travel demand (the intent of expanding public transportation).

The effectiveness of the CMP is evaluated during each biennial report as the progress toward goals is measured, deficient segment data is updated with the latest information, the effectiveness of proposed projects and congestion management strategies is reviewed, and future initiatives are pursued. As the projects are completed, the biennial report will include information about the project completion and an evaluation of the segment based on the latest data to determine if the CMP strategies were successful following the project's completion.

It has been a number of years since the CMP was formally updated. On April 22, 2016, the FHWA published in the Federal Register a Notice of Proposed Rulemaking (NPRM) to propose national performance management measure regulations to assess the performance of the National Highway System (NHS), Freight Movement on the Interstate System, and the CMAQ Program, as required by the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST). The comment period for the period closed on August 20, 2016, and the FHWA is currently working to address comments received and publish a final rule. It is recommended that the MPO update their CMP prior to the next certification review and time the update such that it can incorporate the applicable performance measures published in the final rule.

In accordance with 23 CFR 940, all federally funded ITS projects must be identified in the Regional ITS Architecture/ITS Strategic Deployment plan prior to federal authorization, and shall complete a Systems Engineering Analysis.



The operation of the transit network is a clear focus of attention. Public transportation is a vital element of the total transportation services provided within the MPO. Not only does public transportation provide options to senior citizens, those without vehicles, and those who are physically or economically disadvantaged, but it is an efficient, low cost, high capacity means of moving people through a densely traveled corridor.

Multimodal approaches such as coordinated signal/use pre-emption systems, dedicated busway considerations, and Bus/Rapid Transit projects are included and evaluated as part of the MPO's M&O strategy. The MTP and TIP do not currently include a documented methodology for assessing the costs associated with maintaining and operating the existing Federal-Aid transportation system; however, the MPO works with NCDOT and the City of Winston-Salem's engineering and streets departments to assess the costs associated with it. Revenue availability is always a factor that is considered.

CMP performance measures are tracked and evaluated to ensure strategies are implemented effectively and are accounted for throughout the planning process. The current performance measures in the CMP are Volume to Capacity (V/C) ratio and Level of Service (LOS). These performance measures provide a generalized analysis of the urban area's roadway segments and allow for further data collection and analysis, if needed. The goals and objectives of the CMP were derived from the goals within the MTP to effectively move vehicular traffic, expand public transportation, and reduce travel demand. The V/C ration and LOS values provide a benchmark on how effectively vehicular traffic is moving on the network. The evaluation of segments on the biennial basis tracks if the objectives in the CMP have been successful in reducing travel demand and shifting vehicular traffic to the public transportation system.

### **Recommendations**

- It is recommended that the MPO update their CMP prior to the next certification review, and time the update such that it can incorporate the applicable performance measures published in the final rule.

## **Unified Planning Work Program (UPWP)/Self-Certification**

**Regulatory Basis: 23 CFR 450.308 and 23 CFR 420.111:** sets forth requirements for each MPO, in cooperation with the State and public transportation operators, to develop a Unified Planning Work Program (UPWP) that documents planning activities, products, funding, roles and responsibilities, and a timeline for the completion of each activity.



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**Regulatory Basis: 23 CFR 450.314(a):** The MPO, the State(s), and the providers of public transportation shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in a written agreement among the MPO, the State(s), and the providers of public transportation serving the MPA. To the extent possible, a single agreement between all responsible parties should be developed. The written agreement(s) shall include specific provisions for the development of financial plans that support the metropolitan transportation plan (see 23 CFR 450.324) and the metropolitan TIP (see 23 CFR 450.326), and development of the annual listing of obligated projects (see 23 CFR 450.334).

**Regulatory Basis: 23 CFR 450.314(d):** In nonattainment or maintenance areas, if the MPO is not the designated agency for air quality planning under Section 174 of the Clean Air Act (42 U.S.C. 7504), there shall be a written agreement between the MPO and the designated air quality planning agency describing their respective roles and responsibilities for air quality related transportation planning.

**Regulatory Basis: 23 CFR 450.334:** No later than 90 calendar days following the end of the program year, the State, public transportation operator(s), and the MPO shall cooperatively develop and publish a listing of projects (including investments in pedestrian walkways and bicycle transportation facilities) for which funds under 23 U.S.C or 49 U.S.C. Chapter 53 were obligated in the preceding program year.

### **Current Status**

The MPO develops their UPWP annually. The process begins in January and the UPWP is adopted in May. The UPWP is considered a good planning tool and provides a framework by which planning is accomplished in the MPO.

The UPWP provides a strategic view of and a strategic direction for metropolitan area planning activities. Activities are typically included in the required narrative text for each task that describes the planning priorities facing the metropolitan area. The activities in the UPWP also relate to the goals and priorities identified in the MTP via the Prospectus, which guides the MPO to have the UPWP relate to the goals and priorities identified in the MTP. The UPWP provides for the development of performance measures that relate to the MTP's goals and objectives primarily through the CMP.

In the current UPWP, the PL, FTA Section 5303 transit planning funds, and supplemental STP-DA planning funds are budgeted according to the work that has been planned or required during the year, projects being requested by the members of the MPO, and as directed by the TCC and TAC. Close to 100% of the PL and Section 5303 funds have been spent. Specialized projects utilizing STP-DA funds are still in various stages of development and thus have not yet been completely spent.

The State and public transit agencies, as members of the MPO, are encouraged to be involved in the development of the annual UPWP. Members of freight, non-motorized transportation, bicycle, pedestrians, and other modal interests are also informed of and encouraged to participate in the development of the annual UPWP through their involvement in the MPO's



various subcommittees.

UPWP activities are developed, selected, and prioritized with the input from members of the MPO. Staff identifies, selects, and prioritizes the work tasks that need to be and can be accomplished in the UPWP.

The UPWP provides funding for the professional development of the MPO staff through the city budget process following the city's policies and procedures for funding of the professional development of the MPO staff.

According to NCDOT's latest figures, there are some PL funds remaining in the MPO's account, primarily through increases at the federal level or the reapportionment of Planning (PL) funds that have not been spent by other MPOs in the State. All of the Section 5303 transit planning funds have been spent since they do not roll over from year to year. The MPO has done a good job of planning for and utilizing the federal planning funds to carry out the planning process and maintain its operations. They are more concerned about the potential loss of future transportation planning funds, should cutbacks occur.

Planning activities are tracked and their status is reported to interested parties. The major work accomplishments from previous years are included in the narrative describing the work to be accomplished in the future. Additionally, the MPO staff creates quarterly newsletters, providing interested parties updates on projects, upcoming events, and other important news regarding the MPO as it may relate to the UPWP.

Required UPWP planning elements, priorities, and activities are developed, selected, and prioritized with the input of the MPO member jurisdictions. Staff identifies, selects, and prioritizes the work tasks in the UPWP that need to be and can be accomplished. Planning priorities facing the metropolitan area, and all metropolitan transportation activities anticipated within the timeframe (one or two years), are typically included in the required narrative text for each work task. Any established goals, activities, and benchmarks will be identified and included within the UPWP.

The MPO provides direct oversight for planning projects undertaken by local governments. The MPO is very proactive in developing the UPWP and in what tasks are being undertaken for any given year. The MPO has an unobligated planning fund balance, and monitors work program tasks and outcomes to ensure they are adequately meeting Federal regulations as well as meeting the expectations of the region.

NCDOT provides a checklist of topics and issues to the MPO to consider for self-certifying the planning process. The checklist of topics and issues is then addressed in narrative form and provided to the MPO for their review and consideration. The self-certification of the planning process is then provided to NCDOT, FHWA, and FTA for their purposes. The transit authority, NCDOT, and others are provided an opportunity to review and comment on the answers given in the checklist during the development of the draft and final UPWPs. The criteria established for the self-certification are included in the form of the checklist provided by NCDOT. The public is provided an opportunity at every MPO meeting to comment on the self-certification



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and any other transportation-related topics. The self-certification process is documented via the checklist of topics and issues addressed in narrative form and provided to the MPO for their review and consideration. All of the major laws that govern transportation planning are identified at the very beginning of the self-certification process and provided to the MPO policy board. The self-certification is provided to the federal agencies as part of the UPWP package of materials.

The MPO annually self certifies their planning process when they are developing their UPWP. The staff provides the TCC and TAC with the necessary documentation to certify they are meeting the Federal planning requirements.

The FHWA has not experienced any concerns regarding the development of the UPWP. The MPO is meeting all applicable Federal requirements pertaining to the UPWP.

## **Freight**

**Regulation: 23 CFR 450.316(a):** The MPO shall develop and use a documented participation plan and define a process for providing citizens and affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transport, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

**Regulation: 23 CFR 450.316(b):** In developing MTPs and TIPs, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including State and local planned growth, economic development, environmental protection, airport operations, or freight movement) or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, MTPs and TIPs shall be developed with due consideration of other related planning activities within the metropolitan area...

### **Current Status**

The MPO's Public Participation Policy (PPP) provides reasonable opportunities for freight providers and shippers to give their input into the development of the MTP and TIP. The involvement of the freight community is an ongoing process, but the MPO does not believe it is at a point where it can say that it is a sustained, collaborative effort. It is recommended that the MPO work to more fully involve the freight community in the planning process.

The MPO considers and evaluates land use and freight-oriented development within its metropolitan planning boundary. Outreach and feedback from participants in the freight community is gathered through a number of processes and meetings, including 1) area plan development, 2) involvement with groups and local institutions of higher learning such as Forsyth Tech; 3) public meetings; and 4) other forms of outreach. Throughout the TIP and MPO transportation planning process, numerous opportunities are made for public participation,



including 1) community meetings, as needed; 2) project meetings; and 3) public hearings during regularly scheduled TAC meetings.

The MPO considers and evaluates land use and freight-oriented developments with the MPA through site plan evaluation and area plan processes. Freight-related corridors are not given extra weight as part of the MPO TIP and MTP prioritization and projects selection process, and the term “freight corridor” has not been defined for transportation planning purposes. The MPO does not currently have a process in place to collect traffic data and monitor the system performance and reliability of the regional transportation system with regard to major freight movements; however, the Piedmont Triad Regional Model Team is formulating a plan to do so.

### **Recommendations:**

- It is recommended that the MPO work to more fully involve the freight community in the planning process.

## **Safety/Security**

### **Regulations:**

**23 CFR 450.306:** The metropolitan transportation planning process provides for consideration and implementation of projects, strategies, and services that will increase the safety of the transportation system for motorized and non-motorized users.

**23 CFR 450.306(h):** The metropolitan transportation planning process should be consistent with the Statewide Highway Safety Plan (SHSP), and other transit safety and security planning and review processes, plans, and programs, as appropriate.

**23 CFR 450.322(h):** This encourages the inclusion of a safety element in the MTP.

**23 U.S.C. 148:** This introduced a mandate for Strategic Highway Safety Plans.

**23 CFR 450.306(a)(3):** This states that the metropolitan transportation planning process shall increase the security of the transportation system for motorized and non-motorized users.

**23 CFR 450.322(h):** The MTP should include emergency relief and disaster preparedness plans and strategies and policies that support homeland security and safeguard the personal security of all motorized and non-motorized users.

### **Current Status**

The safety planning factor is considered in the MPO’s planning process and is applied in a number of ways, including 1) as an element of evaluation for street and highway project selection, 2) for traffic calming efforts in neighborhoods, and 3) through the City’s Annual Intersection Safety Report, which identifies and documents efforts to improve the worst intersections.



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The process for developing safety goals, objectives, performance measures, and strategies for the MPA is a collaborative process between the City of Winston-Salem and NCDOT. The safety goals and objectives for the MPA are consistent with the State Highway Safety Plan (SHSP). The MPO follows the SHSP process as closely as funding can be provided through the TIP.

The MPO collects safety data from other sources, including all crash data available from NCDOT as well as from the City's Police Department. The data collected involves not only normal vehicular crash data but also those involving bicyclists and pedestrians.

Safety impacts of potential transportation projects are evaluated by estimating reductions in vehicle crashes and their severity. Safety is a component in examining projects for inclusion in the MTP and TIP. NCDOT also has funds specifically set aside for making safety improvements along roadways such as guardrails, rumble strips, enhanced lighting, turn lanes, and better pavement markings and signs.

The MPO does not currently account for any natural emergencies. Plans have been developed for evacuation of transportation-disadvantaged populations such as the elderly, low-income, and disabled. The MPO and local and state emergency management agencies coordinate evacuation efforts based upon the particular emergency.

## **Public Participation Plan**

**Regulatory Basis: 23 CFR 450.316(a):** The MPO shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

### **Current Status**

The public involvement program, named the Public Participation Policy (PPP), was developed in conjunction with the 2008 MTP and was reviewed by municipal, State, and Federal partners as well as stakeholder groups identified through years of public involvement on plans and projects. The PPP was updated during the spring of 2012 to include recommendations for the certification review process and to make the document more user-friendly.

The effectiveness of the PPP is routinely evaluated. Methods and venues that are successful continue to be a part of the MPO's ongoing public outreach while activities that generate low turnouts have been minimized. The MPO has found that going where the community is at public functions or events, rather than holding meetings in libraries or town halls, is a more successful way to gather public input. The MPO keeps a record of meeting attendance and takes comments on flip charts or one-on-one to improve in participation and to assist with any limited English or literacy difficulties. Additionally, new methods of reaching the public and



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underserved populations are brainstormed during each major plan update and involvement period. Feedback on how participants heard about the meeting and the success of the location, time, or materials is obtained from the comments taken through public meetings or on-line comments and surveys. Website hits for pertinent pages are gathered to ascertain how much traffic the online documents receive. As a part of the PPP, a review of the document comes every three years prior to the update of the MTP.

Opportunities are provided for public involvement at key decision points in the planning, programming, and project development phases of transportation decision-making. Public comments are always taken on the existing plan prior to beginning the update, and during the public comment period once the draft is available for review. Public meetings are held and a semi-annual newsletter is broadcast to stakeholders and all members of the public that have participated in either transportation or planning public involvement activities. There is a public comment period at the beginning of each TCC and TAC meeting. All agendas and minutes of the TCC and TAC meetings are posted on the MPO website and mailed to stakeholder groups and the press. The public and interested parties receive feedback on the proposals and questions they put forward in a number of ways including:

- Acknowledged with a written or emailed receipt message for comments submitted in writing, via email, U.S. mail, or through Internet forms;
- Responded to as appropriate, which could include a direct communication to the commenter or a response in the revised document;
- Documented and presented to the MPO's TCC and TAC, in summary form or verbatim, before a vote is taken to adopt the plan or document in question; and
- Included in summary form or verbatim with final documents, if sufficiently significant

The PPP contributes to the identification of the needs of those traditionally underserved by existing transportation systems, including low-income and minority households. Public involvement events are specifically scheduled for a full day at the WSTA transit center and the Public Health Department. Organizations representing low-income and minority populations are consulted when developing the PPP and providing continuing public involvement on projects located in minority, Limited English Proficiency (LEP), and low-income areas.

Public involvement in the metropolitan transportation planning process is coordinated with the statewide public involvement process to enhance public consideration of issues, plans, and programs. As much as possible, the MPO highlights any statewide plans, programs, and workshops that are available to the public. The MPO staff attends all statewide events within a reasonable distance. Information about the statewide programs of importance to the public, such as the 2040 State Transportation Plan and the Governor's Highway Safety program, are included in the Appendixes of the MTP document and noted in the text.

Opportunities for participation in the public involvement process are also provided to traffic, ridesharing, parking, transportation safety and enforcement agencies, airport authorities, appropriate private transportation providers, and city officials. WSTA and PART are partners in developing the MTP and TIP. Public involvement is specifically held at the WSTA transit center during operating hours to engage the WSTA and PART riders as well as clients using intercity bus services. Valuable feedback on transit service and other issues related to the network are obtained during these events. The TCC members of the airport commission are



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provided an opportunity to review and assist in the development of the MTP and TIP. Private transportation providers are accounted for in the MTP, and the municipal staff that monitors for-hire transportation services participates in plan development. City and municipal officials are consulted at all phases of MTP and TIP development.

Opportunities for participation in the public involvement process are also provided to State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation. When updating the MTP, the State and local agencies are notified to update contact information and give preliminary information on the upcoming draft plan review. The draft plan is distributed to all consultation agencies either by hard copy or with a link to the MPO website, based on their desires. The agencies are asked to comment during the public involvement period. Follow-up inquiries are made by the MPO liaison in the City-County Planning Board to ensure that the agency has had an opportunity to review and comment on the plan. Individual projects have more specific and ongoing review of the environmental documents generally handled through the State or local municipal government managing the project.

The MPO presents information on planning procedures and products, including the MTP and TIP, by using a variety of methods, depending on the audience, venue, and available resources. For general information, the MPO uses its website as a primary means of disseminating information, creating specific pages for planning purposes, such as the MTP and the NCDOT Prioritization process. To promote planning processes and public meetings, the MPO sends emails, places newspaper advertisements, prepares and disseminates a newsletter (Moving Times), and posts information on the City's website and the MPO website. The MPO maintains email lists developed over time that include 1) elected officials from member jurisdictions, 2) community members that asked to receive information, 3) the media, and 4) past meeting attendees and commenters. For the 2040 MTP, the MPO used internet pop up advertisements, in both English and Spanish, to promote the planning process and public meetings.

The MPO uses printed maps, power point presentations, and videos at public input meetings. Where internet is available at public meetings, the MPO also uses computer or mobile SMART Board to link to on-line resources, including the tax database to show properties in relation to beltway and other project alignments. The MPO often holds public information meetings in atypical locations to go where the people are to involve those who might not otherwise attend a meeting. Recent locations include: 1) the Winston-Salem Transportation Center, 2) on transit bus routes, 3) the Forsyth County Health Department, 4) local farmers markets, 5) the Honey Bee Festival, and 6) the Lewisville Corn Hole Tournament. The MPO also tags on to or "piggy-backs" with other meetings such as small area plan meetings coordinated by the City Planning Department.

For policy board meetings, the MPO sends hard copy agenda packets and plans to the TCC and TAC members and to staff and citizens who have requested them. All agenda items are also posted on the MPO's website and links are provided in meeting announcement emails. Over the last few years, the MPO has taken steps to provide more visual information in the agenda packets, particularly maps, for all projects. At the meetings, the MPO staff presents information verbally, supported by graphics, generally in power point presentations, but



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occasionally in display maps or video presentations. To reduce hard copy production of materials, particularly the plans and agenda materials sent to TCC and TAC members and the public, the MPO offers its agenda materials and plans in digital format. Prior to TAC meetings, the MPO sends out a meeting announcement and link to the on-line materials. A number of citizens and staff members take advantage of this link to review the agenda and materials of interest. Very few TAC members use this format, preferring hard copies of materials.

In addition to providing information in tables and lists, the MPO provides maps, photos, cross sections, flowcharts, and other graphics to communicate and display information. Examples of extensive use of graphics can be found in MPO-funded studies, including the Wake Forest Bike, Pedestrian, and Transit Study; the Winston-Salem Urban Circular Study; and the WSTA Bus Stop and Shelter Improvements Study. The MPO is also exploring the use of interactive maps with Geographic Information Systems (GIS) functionalities for CTP, TIP, and STIP prioritization and information dissemination.

The MPO's website is extensive and includes administrative information such as rosters, agendas, minutes, by-laws, maps, plans (viewing and downloads), transportation study and project information, and links to websites, videos, and events. The MPO also creates special pages for specific planning processes such as the MTP development and NCDOT Prioritization process. The website is updated as needed, but at least on a weekly basis. All plans, maps, and other visuals can be downloaded from the website. MPO staff will also provide materials on diskette, other media, or in hard copy format upon request.

The MPO has used a variety of creative and innovative methods to present and disseminate information including the following:

**Ad tone:** As transportation planning can be perceived as dry, the MPO has used light-hearted or tongue-in-cheek ads to get attention. Ads have included eye-catching graphics, cartoons, and humor, including making fun of transportation acronyms.

**Innovative ad media:** Typically, public meetings and processes are advertised in local newspapers, but the MPO has used alternate media. In 2012, for the 2035 MTP, the MPO ran a video ad (making fun of transportation acronyms) at movie theaters in Winston-Salem. The ad also ran on the City of Winston-Salem's television station, WSTV13. In 2015, the MPO used internet pop up ads in both English and Spanish to promote the 2040 MTP planning process and public meetings.

**Graphics:** The MPO uses graphics, including photographs, conceptual sketches and renderings, enhanced maps, and charts extensively in plan documents and presentations and also in its newsletter, *Moving Times*, and on agenda book covers. The MPO uses graphics to assist decision-makers. For the Salem Creek Connector project, they had graphics prepared to help the Mayor's Design Review Committee make choices for pedestrian and street-level lighting, street prints, and noise wall colors and textures. The Business 40 Streetscape Design Plan included extensive graphics, including many conceptual sketches to help citizens and decision makers visualize proposed enhancements, such as the multiuse path, retaining walls, and decorative elements on bridges.

**Videos:** The City Marketing and Communications Department produced a 3-minute video



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that included MPO staff discussing interesting and important aspects of the draft plan. The video ran on the City's television station and was available on the City's YouTube channel.

**3D Video Simulation:** The most sophisticated (and expensive) visualization method the MPO has used is 3D video simulation. In 2012, the MPO worked with the Creative Corridors Coalition (CCC), a community-based nonprofit organization created to influence the design and implementation of roadway infrastructure projects in and around the downtown area. The MPO provided funding to the CCC to assist them in developing a variety of visualization methods including graphic images, a physical model, and a video on the CCC's proposed "Twin Arches" bridge over US 52. The video helped decision-makers and the community visualize the Twin Arches, which is now under construction as part of the Salem Creek Connector Project.

In 2014, the MPO funded a Business 40 Streetscape Design Plan, a comprehensive and detailed streetscape design to be used in the Design-Build procurement for the Business 40 roadway improvement project. The plan includes extensive graphics depicting the aesthetic recommendations for areas adjacent to the highway right-of-way, including a multi-use bicycle and pedestrian path linking downtown, the Strollway, the BB&T Ballpark pedestrian bridge, Wake Forest University Medical Center, and Winston-Salem State University area. A five-minute video with 3D video simulation was also created. The video is available on the

City's website and on YouTube. As with the Twin Arches Bridge, the graphics and the video were essential in helping the community and decision-makers visualize the impact of the enhancements and to support funding for their implementation.

### **Commendations**

- The MPO is commended for its extensive use of public involvement techniques.

## **Title VI and Environmental Justice**

**Regulatory Basis: 23 CFR 450.316(a):** The MPO shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representative of private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

**Legislative Basis: Title VI of the Civil Rights Act of 1964:** No person in the United States shall, on the grounds of race, color or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

**Environmental Justice Executive Order 12898:** Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.



### **Current Status**

Minority and low-income (MLI) populations are defined according to DOT Order 5610.2 and FHWA Order 6640.23 standards. Census and American Community Survey (ACS) statistics were used to identify these groups. Personal knowledge is used to cross-check demographic data in the verification process; however, it is discouraged as the primary source of data due to the fluidity of employment. Consideration has not yet been given to minority business communities; however, this is being explored as part of an effort to update and improve the MPO's Title VI program.

Past, current, and future projects have been plotted and can be found in Chapter 7 of the 2040 MTP. A system analysis of benefits and burdens has been conducted, but not comparing MLI areas to non-MLI areas. Currently there are no planned projects that will potentially negatively impact MLI areas and no MLI areas that will be denied the benefits of planned projects. No quantitative analysis has been developed to measure benefits and burdens (RECOMMENDATION); however, formal goals and policies addressing EJ within the planning process have been adopted and can be found in the MTP.

Environmental Justice (EJ) is considered during the modeling and planning performed in support of MTP development as well as during overall MTP development. As part of the last MTP update, the MPO updated its demographic profile, based on 2010 Census data, which identifies and maps all MLI populations by Traffic Analysis Zone (TAZ). This profile also includes overlays of projects dating from 2008 to those projected in 2035. Additionally, the identification of Limited English Proficiency (LEP) populations is now being included in the demographic profile collection process. The EJ demographic profile thresholds have been adjusted to provide a better comparative visual for professional and public interpretation, as noted in the previous certification, as an area to improve. The MPO has a Title VI and EJ Plan in place, which was developed in 2008. The Plan includes a mission and policy statement, compliance, and planning process goals. The language included in the Plan states how the MPO will ensure that Title VI and EJ considerations are incorporated in all of the MPO's planning processes and products, including the MTP update, UPWP, and the TIP.

In order to seek to identify the needs of MLI populations, the planning process provides a 'Public Participation Policy', which aids in the development of outreach initiatives. The MPO does not have a history of Title VI or EJ complaints.

Numerous strategies are used to engage MLI populations, including:

- Spider Digital
- Public notices (newspaper ad or website notification) inviting comments at the beginning of a review period
- Local access cable television station
- MPO website
- Press releases to media outlets
- Public meetings
- Documents containing maps, photos, renderings, or other visualization tools



The least successful technique has been movie theater advertisements. Spider Digital is a full-service interactive media agency based in the Greensboro/High Point/Winston-Salem area. They are experts at reaching consumers online in meaningful ways.

In addition, documents are available for public review at various locations, including:

- Municipal and county government offices
- WSDOT office
- NCDOT Division 9 office
- WSTA and PART offices
- Public libraries
  - Forsyth County
  - North Davidson County
  - Davie County
  - King library

A four-factor LEP analysis has not been conducted; however, there are specific strategies in place to reach Hispanic communities and other LEP populations, which are identified within the LEP Plan, adopted in March 2014. Other efforts made to engage in dialogue with MLI/LEP communities include partnerships with other groups and the MPO's open door policy, which allows for continuous communication, and citizen advisory committees and focus groups. Real and perceived barriers for participation by MLI/LEP populations and disabled individuals is continuously being monitored and addressed. General barriers observed include understanding their options and accessibility, cost, and language.

The advertisements for the 2040 MTP garnered a large amount of activity. Over a three-week period, the campaign delivered over 779,000 impressions and 8,409 clicks engaging the two ethnic communities targeted. The African-American community engaged through clicks six times more than the Hispanic community. On Facebook, both impressions and clicks exceeded the estimates by significant numbers. Facebook actual clicks were 5.5 times the estimate, with 4,582 clicks delivered. The display campaign was strong as well, delivering almost twice the number of impressions estimated, 218,290 estimated, and 456,784 delivered. Clicks from the display campaign totaled 548 in number and represented 63% of the estimated 873 clicks.



## **Appendix A:**

### **Team Members/Participants**

#### **Team Members**

Bill Marley, Community Planner, FHWA  
Joe Geigle, Congestion Management Engineer, FHWA  
Tajsha LaShore, Community Planner, FTA  
Lynise DeVance, Civil Rights Program Manager, FHWA

#### **Participants**

Lynise DeVance, FHWA, Civil Rights Specialist  
Toneq McCullough, WSDOT  
Fredrick Haith, WSDOT  
Connie James, WSDOT  
Brenda King, WSDOT  
Byron Brown, WSDOT  
Matthew Burczyk, WSDOT  
Kelly Garvin, WSDOT  
Jeff Fansler, WSDOT  
Art Barnes, WSTA  
Scott Rhine, PART  
Margaret Bessette, CCPB



## **Appendix B:**

### **Summary List of Current Review Findings**

#### Commendations:

- The MPO is commended for its extensive use of public involvement techniques.

#### Recommendations:

- It is recommended that the MPO incorporate the two newest planning factors into the next MTP update.
- It is recommended that the MPO develop plans and a timetable for expanding incorporation of performance measures into the overall planning process.
- It is recommended that operators of freight be invited to join the TCC.
- It is recommended that the MPO update their CMP prior to the next certification review, and time the update such that it can incorporate the applicable performance measures published in the final rule.
- It is recommended that the MPO work to more fully involve the freight community in the planning process.



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## Appendix C

### Certification Review Agenda

Introduction and Purpose of Certification Review	9:00	(10 min)
General Comments and Feedback Regarding the Planning Process	9:10	(15 min)
FAST Act Overview (freight specific)	9:25	(15 min)
Study Organization	9:40	(15 min)
<ul style="list-style-type: none"><li>• Agreements and Contracts</li><li>• Other</li></ul>		
Public Transit	9:55	(45 min)
<ul style="list-style-type: none"><li>• Safety and Security</li><li>• Other</li></ul>		
Break	10:40	(15 min)
Travel Demand Models	10:55	(20 min)
Air Quality	11:15	(10 min)
Intelligent Transportation Systems (ITS)	11:25	(20 min)
<ul style="list-style-type: none"><li>• Management and Operations</li><li>• Congestion Management Process</li><li>• Safety and Security</li></ul>		
Lunch	11:45	(75 min)
Metropolitan Transportation Plan (MTP)	1:00	(45 min)
<ul style="list-style-type: none"><li>• Environmental Mitigation</li><li>• Financial Planning</li><li>• Bicycle &amp; Pedestrian</li><li>• Freight</li><li>• Livability/Sustainable Communities</li></ul>		
TIP	1:45	(30 min)
<ul style="list-style-type: none"><li>• Approval</li><li>• Amendments</li><li>• Project Selection</li><li>• Financial Planning</li></ul>		
Planning Factors	2:15	(20 min)
Self-Certification	2:35	(5 min)
Break	2:40	(15 min)
Public Involvement and Outreach	2:55	(60 min)
<ul style="list-style-type: none"><li>• Title VI and Related Requirements</li><li>• Visualization (Mapping)</li></ul>		
FHWA/FTA Review Team Meeting	3:55	(20 min)
Presentation of Preliminary Findings	4:15	(15 min)
Adjourn	4:30	
Public Meeting	5:00 – 7:00	



## Appendix D

### Public Meeting Notice

#### **PUBLIC OPINION SOUGHT on Area Transportation Planning & Procedures**

The Federal Highway Administration, the Federal Transit Administration and the Environmental Protection Agency want your opinion on whether transportation planning here is continuing, cooperative and comprehensive.

It's part of a periodic certification of transportation planning and procedures in Winston-Salem, Forsyth County, and the surrounding area, including King, Bermuda Run, and portions of Davie, Davidson and Stokes counties.

If you live in these areas, we encourage you to attend a public meeting from 5 p.m. - 7 p.m., Tuesday, Nov. 15, 2016 in the Stuart Municipal Building, 100 E. First St., in Winston-Salem.

You may also submit written comments by 5 p.m. Friday, Dec 9, 2016.

**By mail:** Fredrick Haith, City of  
Winston-Salem, DOT  
P.O. Box 2511, Winston-  
Salem, NC 27102

**By e-mail:** [fredrickh@cityofws.org](mailto:fredrickh@cityofws.org)  
Public notice of public participation activities and time established for public review of and comments on the TIP will satisfy the program of projects (POP) requirements.

Persons needing special provisions to attend the meeting should contact Fredrick Haith at the address listed above at least 48 hours in advance. For more information call 336-747-6869

**WS: October 31, 2016**



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## **Appendix E:**

### **Public Review Meeting Comments**

A public meeting was held from 5:00 and 7:00 p.m. on Tuesday, November 15, 2016. Several members of the public appeared and provided input into the transportation planning process.

One participant commented on the relationship between transportation and health and specifically mentioned Safe Routes to School, Compete Streets, bicycles, pedestrians, and transit. She stated that she appreciates the MPO staff.

One participant suggested that holding knowledge-sharing events to explain how the transportation planning process works would benefit the public.

Two participants were self-described “bike fans” and commented on the Rails to Trails program, and specifically a Clemmons to downtown Winston-Salem bicycle and pedestrian facility.

In addition, the following comments were received:



**From:** Amy Easter [mailto:amy@beersngears.com]  
**Sent:** Wednesday, November 23, 2016 8:39 PM  
**To:** Fredrick Haith  
**Cc:** Matthew Burczyk; Jake Easter  
**Subject:** Comments for 2016 Winston-Salem MPO Certification

Hi Fredrick,

Please see below comments for submission to Federal Agencies for the 2016 MPO Certification along with attachments and please reply to this message to confirm receipt. Thanks!!

---

FHA, FTA and EPA,

I am a resident of Winston-Salem, North Carolina and I would like to submit the following comments regarding the 2016 Winston-Salem, NC MPO certification review.

I am a strong advocate for bicycling as a mode of transportation and I am involved in local efforts to expand and enhance our current network of greenways, on-street facilities and other necessary infrastructure, improve legislation, educate the public and promote cycling as a viable transportation option for all residents.

Overall, I am pleased with the Winston-Salem MPO and our transportation planning as it relates to bicycling transportation. I feel that it is because of the talent, creativity and dedication of many members of the MPO that Winston-Salem is becoming more bike friendly. I have seen many improvements in the local infrastructure; including increased on-street facilities, support of large/long term projects like the multi-use path along Business 40, updates to local policy and continued efforts to educate and enforce safe driving and riding. I am hopeful that this progress will continue.

I think the 2040 Metro Transportation Plan Bicycle & Pedestrian Element is comprehensive and it's goals and objectives acknowledge and address areas of opportunity for the MPO. If this plan is truly embraced and supported by City Staff and Elected officials it will be effective in improving our cycling infrastructure and promoting increased ridership.

While I applaud the progress of our MPO, I would also like to suggest the following actions:

- Continue to increase public involvement in planning process.
  - Greater promotion of public input sessions
  - A variety of ways citizens can stay up-to-date on projects proposed/planned/under construction and submit their questions and feedback (i.e City website, social media, interactive apps and external partners)



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- Provide educational material to citizens on the staff/departments, planning/approval/funding/monitoring processes and timelines that affect transportation planning so citizens understand and can more effectively engage in the process
- Promote cycling as a way to mitigate negative impacts of our growing city
  - Investigate how cycling can address issues of traffic congestion, increased road maintenance and parking demands from automobiles, air pollution, urban sprawl, and equitable access to transportation.
  - Collaborate with citizens, businesses, universities and other organizations to develop and implement strategies that promote cycling.
- Ensure planning includes post-implementation maintenance and enforcement of bicycle facilities
  - As more bicycle facilities are implemented it is critical that all facilities are properly maintained year-round (i.e. greenways are swept frequently to avoid danger and damage to cyclists/bicycles, pavement is repaired as needed and greenway signage is accurate and in place, bike racks remain secured, snow is plowed from bike paths and routes)
  - Additional funds may be required to effectually maintain said facilities and expenses should be incorporated in the budget planning.
  - Enforcement of safe and lawful use of bike facilities is also necessary. Education and enforcement needs to be a key focus of the MPO and City Staff (i.e. ticket motorists parked illegally in bike lanes and improper passing of cyclists, educate cyclists on rights and responsibility on the road)
- Empower MPO staff to effectively implement the goals and objectives established in the 2040 Metro Transportation Plan
  - Provide education and development opportunities to all MPO members and key stakeholders that expose them to exemplary transportation planning and promote creative problem solving and community engagement techniques that can be implemented in the Winston-Salem MPO (i.e. travel to cities with best-in-class bicycle infrastructure, collaborate with bicycle advocacy organizations like League of American Bicycles or People for Bikes, encourage professional training and attendance at active transportation conferences)
  - Consider adding additional staff, in addition to the City's mandatory Bike and Pedestrian Coordinator, to dedicate resources and expertise to transportation for the cycling segment.



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In conclusion, my experience participating in the local transportation planning process has been positive and I feel the Winston-Salem MPO is continuing, cooperative and comprehensive. With additional focus on the areas I have suggested above I think the MPO could be even more effective in fulfilling its vision of providing a "safe and effective system of bicycle facilities that links together existing resources and destinations, supports alternatives to automobile travel, increases recreation opportunities, and advances the community's mobility, health, and quality of life."

Please also see attached articles for your reference and consideration.

Thank you,

**Amy Easter**

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