

1. Introduction to the 2035 Transportation Plan Update

Executive Summary/Key Points

- The Metropolitan Planning Organization (MPO) Long Range Transportation Plan:
 - Is multimodal to meet the needs of all transportation modes,
 - Plans for the MPOs transportation facilities and services to a 20 year horizon,
 - Is financially responsible and fiscally constrained,
 - Meets Air Quality Conformity standards with our 2035 Transportation network.
- The MPO adheres to 8 planning factors established by federal law.
- The MPO transportation vision and objectives, policies and action agenda were cooperatively developed with our land use and planning partners.
- The MPO long range planning public involvement process is continuous and meets the goals of the Public Participation Policy adopted July 2012.

Table References

Table 1.2.1 Comparison of CTPs and LRTPs

1.1 Overview and Purpose

The planning of transportation has a long history in the Winston-Salem Urban Area. A wide variety of transportation facilities and services have been developed through the years from the early wagon and wooden plank roads to the development of railroad and trolley car lines to Smith Reynolds Airport, the birthplace of Piedmont Airlines, to the multimodal transportation center in downtown and, now, to the future rebuilding of the original Interstate 40 through Winston-Salem to meet the spirit of the Creative Corridor Coalition Visionary Master Plan. The legacy of planning and building important transportation facilities for our community continues.

What will our community be like in the year 2035? More importantly, how will we grow and what transportation facilities and services will be needed to serve our citizens and the thousands of people who will visit or pass through our community each day? Over 200 years ago, the Moravians laid out our initial communities. It is our responsibility to plan for the investments in roads, transit services, bicycle and pedestrian facilities and other transportation activities and services to match the growth expected in the into the future. The Winston-Salem Urban Area 2035 Transportation Plan Update (Plan) is this guiding document.

In this Plan you will find an overview of the Winston-Salem Urban Area Metropolitan Planning Organization (MPO), including Forsyth County, portions of Davidson, Davie and Stokes Counties as well as all the cities, towns and villages with in the Metropolitan Area Boundary (MAB), as well as the regional coordination of transportation in the Piedmont Triad. The Plan includes the MPO vision, policies and actions that guide our transportation programs and projects. The recommendations for roadways, public and private transportation, bicycle and pedestrian facilities are factored into the financial plan and the draft Air Quality Conformity Determination Report. Planning for safety, freight, congestion, and protection of the human and natural environment are integral to our process.

1.2 What is the Plan?

The Winston-Salem Urban Area 2035 Transportation Plan Update (Plan) is a federally mandated document that must adhere to specific requirements. The Plan must have a vision that meets our community goals, it must provide for all transportation modes, it must have a minimum twenty year planning horizon, and it must be financially constrained where projected revenues meet the costs of the transportation facilities we have planned. The Winston-Salem Urban Area Plan has been developed as a piece of a larger regional plan for the Piedmont Triad Area, in coordination with the Piedmont Authority for Regional Transportation (PART) and the Metropolitan Planning Organizations for Greensboro, High Point and Burlington-Graham urban areas.

Metropolitan areas in North Carolina prepare two distinct, but related transportation plans:

- 1. Comprehensive Transportation Plans (CTPs)** shows all the existing and new and expanded major roads, transit services, bicycle and pedestrian facilities and related transportation activities that meet the growth and mobility needs as far out into the future as can be envisioned. The CTP is a State requirement and provides the MPO vision of future needs that ties into the North Carolina statewide long range plan - **NCDOT From Policy to Projects - 2040 Plan** found in the Appendix.
- 2. Long-Range Transportation Plans (LRTPs)** is a subset of the CTP and shows the new and expanded roads, transit services, bicycle and pedestrian facilities and related transportation activities that will meet federal air quality standards and can be funded and built by the year 2035.

This document addresses only the Long Range Transportation Plan. The following **Table 1.2.1** summarizes the important features and differences between the two plans.

Table 1.2.1 Comparison of CTPs and LRTPs

Plan	Winston-Salem Urban Area MPO 2035 Transportation Plan Update	Winston-Salem Urban Area MPO Comprehensive Transportation Plan
Area Covered	Forsyth and portions of Davidson, Davie and Stokes Counties	Same
Who requires the plan	Federal Government	State Government
Planning Horizon	2035	No Set Year
Fiscal Constraint	Yes	No
Must meet Air Quality Conformity Standards	Yes	No

The Winston-Salem Urban Area consists of two counties that have air quality issues with the pollutants carbon monoxide (CO) and particulate matter (PM 2.5). Forsyth County is considered in maintenance for CO and Davidson County has been designated as non-attainment for PM 2.5 by the United States Environmental Protection Agency. In 1990, the Clean Air Act Amendments tied transportation funding to air quality goals. Due to the air quality issues within the MPO, the Street and Highway portion of the Plan must meet Air Quality Conformity by meeting established pollutant budgets defined by the North Carolina Division of Air Quality and developed for each planning horizon year period. A more detailed discussion of the process and the Air Quality Conformity Determination is provided in the draft document in Chapter 8. The Plan has been developed in coordination with the draft Air Quality Conformity Analysis Report and Conformity Determination and the Fiscal Year 2012-2018 Metropolitan Transportation Improvement Program (MTIP).

Given the limited financial resources at the federal, State and local levels, the rapidly increasing costs of fuel and construction materials, the heightened air quality standards, and the desire by the citizens in the Winston-Salem Urban Area to maintain a high quality of life, the emphasis of the Plan is to provide a better balance of transportation facilities, programs and services that will serve the urban area's future travel needs.

1.3 Eight Planning Factors

Under the provisions of SAFETEA-LU, all Metropolitan Planning Organizations (MPOs) are required to consider eight (8) broad planning factors in the development of multimodal transportation plans and programs. SAFETEA-LU requires that “the metropolitan transportation planning process for a metropolitan area...shall provide for consideration of projects and strategies that will...” accomplish the following objectives. Each of the 8 planning factors is addressed individually below:

1. SUPPORT THE ECONOMIC VITALITY OF THE METROPOLITAN AREA, ESPECIALLY BY ENABLING GLOBAL COMPETITIVENESS, PRODUCTIVITY AND EFFICIENCY.

The Winston-Salem Urban Area MPO has worked with the North Carolina Department of Transportation (NCDOT) and other State and federal agencies for many years on a variety of transportation projects to support the economic vitality of the area.

The most important project for the urban area is the creation of a regional transportation system for the Piedmont Triad. The Piedmont Authority for Regional Transportation (PART) continues to develop a regional transportation system (highways, vanpools, regional bus, park-and-ride lots, passenger rail lines, etc.) that will link the Winston-Salem Urban Area with the cities of Greensboro, High Point and Burlington-Graham; Guilford County, the Piedmont Triad International Airport (PTIA), and the outlying communities and counties in the region. For example, PART runs Express Bus Service that provides efficient transportation for hundreds of daily commuters from Piedmont Triad cities to the PTIA. This kind of service, along with the other modes of transportation being developed, helps make the Winston-Salem Urban Area very attractive for large businesses and industries like FedEx to locate, and aids in the overall economic vitality of the urban area.

Another important project to the Urban Area is the completion of the Interstate 74 highway. The proposed freeway will provide a direct connection from the industrialized regions of the upper Midwest and Canada to the coastal areas of North and South Carolina. The Urban Area's economy will benefit from the highway with increased tourism and enhanced transportation for people and goods. The Northern Beltway Eastern Section (Interstate 74), from US 52 to US 311, is an important section of the highway that is being planned now and is proposed to be under construction by 2013.

Other transportation projects contained in this plan also will aid the movement of people and goods and enhance the economic vitality of the area. For example, improvements to US 52 and Business 40 (US 421) are geared to improving access into downtown Winston-Salem and will continue to help the revitalization of the Fourth Street corridor and the planned housing and office development throughout the downtown area. Also, the proposed Salem Creek Connector will provide direct access from US 52 to the large campus of the Piedmont Triad Research Park (a medical and business technology park) that is currently under construction. Up to 30,000 medical and technology jobs are anticipated to be generated in the park, further enhancing the revitalization and growth of the downtown core. This type of development will give the Winston-Salem Urban Area a strong position in the global marketplace.

2. INCREASE THE SAFETY OF THE TRANSPORTATION SYSTEM FOR MOTORIZED AND NON-MOTORIZED USERS.

The Winston-Salem Urban Area is strongly committed to increasing the safety of the transportation system for motorized and non-motorized users as shown in the following examples. Since 1987, the City of Winston-Salem Department of Transportation (WSDOT) has produced an annual Safety Improvement Report to identify locations in the City of Winston-Salem where the transportation system (primarily street intersections) needs improvements. Studies are conducted on each of the hazardous locations to develop the appropriate solutions. Follow-up studies are also conducted to monitor the progress of the implemented solution. The NCDOT also conducts similar safety improvement studies on streets and intersections in the remainder of the Urban Area.

Improved safety of the transportation system also helps to reduce congestion. The Safety Improvement Programs are included as an important on-going strategy in the Congestion Management Processes (CMP) Plan later in this document.

In addition to the Safety Improvement Programs, other steps are taken to ensure that safety is considered. The MPO considers safety as one of the most important factors in analyzing and selecting projects for funding and implementation. In the biennial prioritization process projects are evaluated and ranked using NCDOT's accident history data as an indicator of a safety deficiency. An analysis of pedestrian and bicycle accidents was conducted in 2012, and is described in the Bicycle and Pedestrian Element. Proposed development plans are reviewed with an eye towards improving safety, and sites are checked for existing crash patterns. Developers may be asked to complete work that will help mitigate crash problems.

The Urban Area also supports the implementation of a number of other projects to ensure the safety of its users including: the construction of median guardrails on all freeways in the urban area, replacement of deficient bridges and structures, a safe and convenient multimodal transportation center in downtown Winston-Salem, and the construction of sidewalks, pedestrian bridges, greenways and other facilities for the safe movement of bicyclists and pedestrians.

3. INCREASE THE SECURITY OF THE TRANSPORTATION SYSTEM FOR MOTORIZED AND NON-MOTORIZED USERS.

With regard to security, the WSDOT is a member of Forsyth County's Homeland Security Domestic Preparedness Task Force, representing the interests of all the public works agencies within the county and has helped in the preparation of various vaccination plans for pandemic diseases for the entire urban area and is available to complete other planning and traffic operations work.

The Winston-Salem Transit Authority (WSTA), which operates the City's mass transit system participates in local efforts to improve security. WSTA is part of Forsyth County's emergency service plan and will provide transportation on an as-needed basis if an incident occurs. WSTA also is a member of Forsyth County's Homeland Security Domestic Preparedness Task Force. WSTA management, in conjunction with the City of Winston-Salem Police Department, has developed plans to evacuate the downtown Transportation Center in the case of a threats, emergencies or incidents. The Police Department and WSTA are working on plans to deal with incidents on individual buses. Finally, WSTA continues to study other options to increase the security of its system and for its patrons.

4. INCREASE THE ACCESSIBILITY AND MOBILITY OPTIONS AVAILABLE TO PEOPLE AND FOR FREIGHT.

Increasing the accessibility and mobility options available to people and for freight is one of the most important objectives to the Winston-Salem Urban Area. Our options are substantially enhanced by the transportation planning process and system improvements proposed in this plan. This will come about in two ways: better land use and transportation planning and providing the necessary resources to enhance the existing transportation system. Through better land use and transportation planning, land use policies will need to be established to support transit usage, walking and bicycling, and reduce our dependency on the automobile. More compact development patterns at activity centers and along transit corridors will make the transit system more economically self-sustaining. In the neighborhoods, transit-oriented design emphasizing a mix of uses and easy pedestrian access to shopping and services will lessen the need to drive.

The Urban Area has been active in planning for and providing safe and efficient freight distribution routes. Understanding the relationship between urban goods movement and land use planning has improved the Urban Area's ability to plan for new road facilities and improve existing streets and highways, replace deficient bridges in a timely manner, make necessary railroad crossing improvements, and route vehicles to minimize impacts in residential neighborhoods.

While the automobile continues to be a major means of travel in the Urban Area, the provision of sufficient financial resources to increase the availability of convenient and affordable public transportation including buses, vanpools and rail will be critical for travel between neighborhoods, retail and employment centers, and will assist to reduce congestion on the streets and highways.

5. PROTECT AND ENHANCE THE ENVIRONMENT, PROMOTE ENERGY CONSERVATION, IMPROVE THE QUALITY OF LIFE AND PROMOTE CONSISTENCY BETWEEN TRANSPORTATION IMPROVEMENTS AND STATE AND LOCAL PLANNED GROWTH AND ECONOMIC DEVELOPMENT PATTERNS.

For decades, the Winston-Salem Urban Area has supported efforts to protect and enhance the human and natural environment, promote energy conservation, and improve the quality of life for citizens.

An early example of this commitment was made in the mid-1950's when the City of Winston-Salem, working with NCDOT, designed and built a bypass around the core of Old Salem. The road project enabled the area to divert large volumes of trucks and other vehicles off of Main Street (at the time this was US 52), providing an opportunity to protect the historical and cultural significance of the area. A similar road project, the Bethabara Park Boulevard, achieved many of the same results in and around the historic Bethabara Park area.

A comprehensive transportation and land use study has been completed for the Town of Bethania - a designated National Historic Landmark. Recommendations for short-range improvements can be implemented while Bethania and the surrounding neighborhoods work toward solving long-range traffic problems. Staff continues to be active in neighborhood traffic planning and the implementation of traffic calming measures to address a variety of traffic conditions throughout the urban area.

On a project by project basis, the Urban Area has supported the provisions of the National Environmental Policy Act of 1969 (NEPA), which require a full environmental review of federally funded transportation projects, particularly streets and highways. NEPA has been successful locally by involving the general public in the planning process to determine the impacts of transportation facilities to the man-made and natural environments.

The Urban Area also has been a leader in North Carolina for its energy conservation and contingency planning. In 1983, the Urban Area hired a consultant to develop an "Energy Conservation /Contingency Plan". The purpose of the plan was to provide a framework for implementing an organized program of strategies to conserve energy and manage the impacts of an energy shortage should one develop. An important consideration in developing the plan was for the overall program to be both politically and economically feasible. The plan focused on two basic functions: identification and analysis of transportation strategies to conserve fuel on a daily basis and provision of step-by-step guidance on actions to be taken in the event of an energy supply shortage. Many of the strategies toward conserving fuel on a daily basis were implemented. For example, park and shuttle lots were built on the northern and western edges of downtown Winston-Salem to encourage transit usage and minimize automobile travel. Working with PART, additional park-and-ride lots will be studied in other locations around the Urban Area for the regional transit system.

The Urban Area has also been working with the NCDOT in protecting wetland areas by purchasing tracts of land that have wetland characteristics. This land-banking approach has served well to protect wetlands for future generations. Also, the Urban Area continues to develop the computerized traffic signal system which was installed and became operational in 1998. The current signal system for the City of Winston-Salem controls 375 signals, of which 318 are coordinated across 47 individual zones. To reduce communication failure rates, the central signal system software was updated in 2011. WSDOT continues to troubleshoot communication failures on the copper communication lines until the more reliable fiber-optic network is installed under the Signal System Upgrade project (C-5224). Design of this project is fully underway. Phase A of the construction is scheduled to be let in May 2013 and Phase B to be let in July 2013.

6. THE INTEGRATION AND CONNECTIVITY OF THE TRANSPORTATION SYSTEM, ACROSS AND BETWEEN MODES, FOR PEOPLE AND FREIGHT.

The Winston-Salem Urban Area has developed and supported many programs and projects that enhance the integration and connectivity of the transportation system, across and between modes, for both people and freight. The best example was the completion of the multi-modal transportation center in downtown Winston-Salem in 1997. The facility provides a central transfer point for citizens using WSTA's regular-route buses in Winston-Salem, PART's Express buses which provide a regular-route connection to Greensboro, High Point, the Piedmont Triad International Airport (PTIA), and numerous commercial areas and business parks near to NC 68 in Guilford County.

The multi-modal transportation center also links WSTA and PART bus services with citizens using Greyhound/Trailways, taxis and other for-hire vehicles, bicyclists and pedestrians, and those citizens utilizing the PART AMTRAK Connector to High Point's renovated railroad station. In the future, streetcars, trolleys and a possible light-rail line connecting with the multi-modal transportation center will enhance the mobility options for citizens in the Urban Area.

The multi-modal transportation center is also home to WSTA's Mobility Manager office. The office uses a variety of computer and satellite technologies to determine the most efficient route for Trans-Aid vehicles and other WSTA buses to use. The Mobility Manager project has greatly enhanced the mobility and accessibility of citizens using the entire transit system and will continue to improve through the years as the new system is expanded and fully implemented. As mentioned in planning factor 4, the Urban Area has been active in planning and providing for the safe and efficient movement of freight. Improvements to US 52 and Business 40 (US 421), completion of the Northern Beltway (Eastern Section) (Interstate 74), and programmed bridge and railroad crossing replacements will also improve freight movement in the area.

7. PROMOTE EFFICIENT SYSTEM MANAGEMENT AND OPERATION.

As mentioned above, the Winston-Salem Urban Area strongly supports the efficient management and operation of the overall transportation system, whether it is WSTA's Mobility Manager project or the City of Winston-Salem's computerized traffic signal system. Changeable message signs are used to alert drivers of congestion, accidents, or other traffic problems on the highway system and to direct drivers away from the problem areas.

The City of Winston-Salem and the NCDOT both own and operate traffic surveillance camera systems, share the video information and coordinate the operation of the cameras, changeable message signs, and traffic signals to assure that traffic is managed seamlessly for the traveling public. Given the scarcity of financial resources, it is imperative all modes of the transportation system are operated and maintained in an efficient and effective way.

8. EMPHASIZE THE PRESERVATION OF THE EXISTING TRANSPORTATION SYSTEM.

There is a growing realization that preservation of the existing transportation system in the Winston-Salem Urban Area is extremely important for the safe and efficient movement of people and goods. While new roads, highways, sidewalks, greenways and other transportation facilities are badly needed, proper maintenance the existing system is just as important, if not more so. To illustrate this point, the Urban Area has had the dubious distinction the last several years of having one of the worst bridges in the state, the Business 40 (US 421) bridge over Liberty Street in downtown Winston-Salem. A plan is being developed to replace this bridge and several others along this corridor in the next few years, but its completion will be difficult and costly.

NCDOT has led the way in trying to address a massive backlog of deficient roads, bridges, and highway facilities in the Urban Area. A significant amount of State and federal funds have been spent in the last 10-15 years to replace deficient bridges and provide better bridge decks on US 52 and Business 40 (US 421), rehabilitate and resurface numerous miles of freeways, expressways and other

major roads on the State system, and make other critical improvements at freeway interchanges and major intersections to improve lighting, signage, guardrails, etc. as needed.

In 2003, NCDOT began its NC Moving Ahead! Program to invest up to \$700 million statewide to address three critical areas – maintenance, modernization and public transportation across North Carolina. The two-year program which ended in the Summer of 2005, increased the highway maintenance and preservation budget by nearly 45% and allowed NCDOT to resurface and rehabilitate highways across the state in rural and urban areas. NCDOT also increased highway modernization by 25% through improvements such as widening lanes and shoulders, building turn lanes, improving intersections, replacing substandard bridges and upgrading traffic signal systems across the state. Approximately \$40 million of NC Moving Ahead! funds were programmed for Division 9, of which over \$12,422,100 were used on projects within the Winston-Salem Urban Area MPO boundary. These projects helped to reduce some of the massive backlog of maintenance and modernization projects needed in the Urban Area, but still much more is needed to get caught up.

The State of North Carolina also provides Powell Bill funds to qualified municipalities each year to be expended only for the purposes of maintaining, repairing, constructing, reconstructing or widening local streets that are the responsibilities of the municipalities. Construction and repair of sidewalks are also eligible for use of Powell Bill funds. The Winston-Salem Urban Area MPO will continue to work with NCDOT to provide sufficient funding to maintain and preserve the existing street and highways facilities, and other transportation infrastructure within the Urban Area.

1.4 Transportation Vision and Objectives, Policies, and Action Agenda

Winston-Salem Urban Area Transportation Vision

The Winston-Salem Urban Area Metropolitan Planning Organization shall provide a balanced and sustainable multimodal transportation system that links highways, transit, greenways, bikeways and sidewalks into a seamless network that provides choices for people's travel needs.

Objectives, Policies and Action Agenda

The following objectives, policies and action agenda items have been developed in cooperation with the *2030 Legacy Update* and will guide the implementation of 2035 Transportation Plan Update.

Land-Use and Transportation Coordination

Objective: Promote integrated development patterns and transportation networks that work together to support mixed-use, pedestrian-friendly communities and active modes of transportation. Land use and transportation decisions should be consistent and mutually reinforce each other.

Policies

- Encourage local jurisdictions to adopt plans and approve developments that make efficient use of our transportation resources and make transit, walking, and biking viable transportation options.
- Encourage transportation planners and providers to utilize the *Legacy 2030 Update* and the adopted plans of other MPO jurisdictions when updating transportation plans and implementing projects and services.
- Invest in transportation projects that further the land use goals of *Legacy* and other adopted land use plans.
- Assure that WSDOT and NCDOT staff participate in long range planning efforts, zoning ordinance revisions and the development review process to better enable coordination between land use and transportation planning.
- Encourage local jurisdictions and NCDOT to adopt and apply comprehensive access management policies/programs to minimize the number of driveways along thoroughfares and arterials to reduce vehicular conflicts, increase pedestrian safety, and maintain/improve roadway capacity.
- Encourage local jurisdictions to review Traffic Impact Study (TIS) standards and to consider whether to expand when a TIS is required for public and private projects and to require analysis of multimodal transportation impacts.

Action Agenda

- Continue to have transportation plans reviewed by the City-County Planning Board to ensure that these plans support land use objectives and maximize the potential for transit and other active modes of transportation.
- Review CTP road classifications to assure consistency between transportation function and land use goals.

Integrated Multimodal Transportation Network

Objective: Develop a high-quality, fully-integrated, multimodal transportation network that provides transportation options that meet the short and long term transportation needs of the residents and businesses in the Winston-Salem Urban Area.

Policies

- Complete key elements of the road network that will enhance manufacturing and logistics strengths, contribute to further development of our economic base, and lessen congestion on existing streets and highways.
- Promote and develop an integrated, multimodal transportation network that offers safe and attractive choices among modes including sidewalks, bikeways, greenways, public transportation, roadways, railways and aviation.
- Assure that new public and private developments include a multimodal transportation network that provides connections to adjacent land uses and transportation facilities.
- Plan and develop the transportation network and individual transportation facilities in a manner consistent with adopted land use plans and sensitive to the human and natural environmental context.
- Consider the impact on both vehicular and pedestrian access and connectivity when evaluating the closure of a street, bridge or other public right-of-way.

Action Agenda

- Work to fund and implement road projects of regional and area-wide significance.
- Develop and adopt corridor maps for new roads proposed in the CTP.
- Identify and eliminate gaps in the roadway system to increase connectivity, reduce travel distances, improve access, and to provide mobility options for vehicles, transit, bicycles and pedestrians.

Street and Highway Network

Objective: Design streets and highways that are safe and efficient for motor vehicle drivers while accommodating transit users, pedestrians and bicyclists and limiting negative environmental impacts.

Policies

- Ensure that new roadway projects and major reconstruction projects provide safe, convenient and attractive accommodations for all users including pedestrians, bicyclists, transit riders and motorists.
- Create livable, people-oriented streets by integrating appropriate traffic management principles into new and existing streets.
- Slow motor vehicle speeds throughout the city through traffic calming and proper roadway design.
- Encourage sustainable roadway design and construction best practices to reduce stormwater runoff, maintain and enhance vegetation and minimize environmental impacts.
- Design roadways and bridges to be community assets, serving to connect communities and to enhance the visual appearance of the built environment.
- Use context-sensitive approaches to locate and design transportation facilities to be consistent with adjacent land uses, preserve natural features, protect historic and cultural resources and enhance community appearance.
- Limit the use of undivided multilane streets and utilize raised or landscaped medians to improve safety and capacity while providing opportunities for pedestrian refuge and landscaping.
- Prioritize the safety and needs of pedestrians, bicyclists and transit users over the convenience of motorists.

Action Agenda

- Adopt a Complete Streets policy and develop Complete Streets guidelines.

- Work with municipalities and stakeholders to review and revise street standards to make streets more multi-modal, livable and sustainable.
- Consider the safety of all users when evaluating road and intersection improvement projects.
- Prepare corridor studies with design guidelines that focus on coordination with land use, access management, transit and bicycle accommodation, pedestrian safety features such as sidewalks with planting strips wide enough to allow for landscaping and stormwater recharge, and safe crossings at intersections, highway ramps and over bridges.
- Consider road diets on streets with excessive road width, lanes, and travel speeds using available right-of-way for landscaping, bicycle, transit and pedestrian facilities.
- Continue and enhance traffic management programs that increase safety and livability especially in sensitive areas around schools, parks and institutions.

Bicycle & Pedestrian Transportation

Objective: Create a safe and effective bikeway/sidewalk/greenway network that is integral to the transportation system, links together resources and destinations, provides an alternative to automobile travel, increases recreational opportunities, and advances healthy lifestyles and quality of life.

Policies

- Consider bicycle and pedestrian transportation at every level of community planning, including development review, community development, recreation, school siting, and transit.
- Enhance pedestrian and bicycle circulation throughout the community by constructing innovative facilities that comply with current design standards.
- Ensure adequate funding for construction and maintenance of bicycle and pedestrian facilities.
- Accommodate pedestrians and cyclists in all road, bridge, and intersection improvement construction projects, as well as resurfacing projects.
- Add bike lanes to roadways by restriping underused right-of-way or center turns lanes and, where feasible, convert unused or abandoned railroad corridors for bicycle, pedestrian and multiuse paths.
- Support programs to educate residents about their transportation choices and to educate them about how to use those options safely.
- Encourage provision of bicycle support facilities, such as bicycle parking and personal showers and lockers for new and existing office developments and employment centers to encourage bicycling as transportation.
- Provide sidewalks that are safe and appealing to pedestrians of all ages and abilities by including features, such as tree canopies, sidewalk terraces, pedestrian signals, crosswalks, and refuge islands.

Action Agenda

- Implement a complete streets policy at the MPO level to ensure that all users are considered in all roadway projects.
- Update and implement the existing bicycle and pedestrian plans and fund projects based on a priority ranking system.
- Amend the UDO to help create walkable and bikeable mixed-use neighborhoods that offer a full complement of bicycle and pedestrian accommodations.
- Develop a comprehensive active transportation plan that integrates bicycle, pedestrian, and greenway components.
- Provide or require the construction of sidewalks, bicycle facilities, multi-use paths, and greenways consistent with the cross-sections established in the CTP.
- Prioritize candidate sidewalks projects based on the benefit they provide to the community in terms of pedestrian transportation.
- Reserve, obtain, or acquire right-of-way or easements for proposed bikeways, sidewalks, multiuse paths, and greenways if facilities are not required to be constructed as part of the development approval process.
- Undertake walkability and bikeability audits to identify deficiencies and target areas for improvements.
- Work with major employers and institutions to develop plans to improve facilities and increase active transportation.

Public Transportation

Objective: Enhance and expand public transportation into a system of buses, vanpools, car pools and special population transit services that is efficient, convenient, safe and cost-effective. Increase transit use through service enhancement, improved pedestrian and bicycle linkages, and transit supportive development patterns.

Policies

- Promote and support quality transit and paratransit services to enhance mobility options for all residents and visitors especially those with special needs including senior citizens, the disabled, and transit-dependent persons.
- Encourage expansion of existing transit to provide service on Sundays and to high-growth areas that are not currently serviced by transit.
- Locate governmental services and health facilities where they can be served by public transportation.
- Encourage transit system routes and land use development patterns that support transit use and help to make transit convenient and cost effective.
- Connect people and transit by prioritizing sidewalk and bicycle infrastructure investments adjacent to transit routes.
- Encourage increased public transit ridership by offering Internet access and other conveniences and amenities.
- Investigate alternative public transportation opportunities such as the urban circulator for the downtown to promote housing and employment investments while increasing urban vitality.

Action Agenda

- Review and coordinate the existing public transportation service in relation to land use goals and expand the system to connect the transit hubs with activity centers, town centers, major employers and venues along identified Growth Corridors.
- Equip WSTA buses and major transit stops with Internet service, charging stations and other safety and comfort amenities.
- Implement the recommendations of the Regional Transit Development Plan including PART Express Corridors, Transit Emphasis Corridors, local route extensions, and the urban circulator.
- Consider reconfiguring bus transit service to maximize interconnectivity to these new services and expand into underserved areas.
- Update and implement the Human Services Transportation Coordination Plan to improve transportation services for persons with disabilities, older adults and lower income persons.
- Study the feasibility and effectiveness of establishing satellite transit hubs at key locations.
- Establish park and ride lots at key locations along Growth Corridors, Activity Centers and outlying municipalities.
- Continue to require transit stops and shelters, as appropriate, through the site plan review process.
- Explore the proper spacing of transit stops and improve bus stop and shelter amenities.
- Work with the communities and institutions to substitute event shuttle services where feasible to allow for reduced parking requirements.

Regional Coordination and Cooperation

Objective: Create a strong multi-modal regional transportation system that provides regional mobility, encourages economic development, promotes sustainable growth patterns and preserves the natural and built environments of the region.

Policies

- Continue to work with regional planning partners and transportation agencies to coordinate transportation planning, operations, and funding priorities for roads, transit, commuter rail, and other transportation modes.
- Support the Piedmont Authority for Regional Transportation (PART) in providing transit service and demand management programs in the Triad region.

- Work with regional organizations and other jurisdictions on collaborative land use and transportation planning efforts.
- Support regional planning and sustainability efforts, such as the Piedmont Triad Sustainable Communities Planning Project.
- Coordinate roadway improvement projects to support regional transit service.
- Work with regional partners to develop multi-jurisdictional greenways and bikeways.

Action Agenda

- Implement PART's Regional Transit Development Plan, including the Bus Rapid Transit (BRT) Gold Routes which is to serve as commuter rail precursor.
- Implement PART's Piedmont Triad Regional Seamless Mobility Study to consolidate, coordinate and improve communication among the transit systems in the Triad.

Commuter Rail Transportation

Objective: Support policies and development patterns to make establishment of a regional commuter rail system feasible in the future.

Policies

- Encourage land use development patterns compatible with a regional rail system including mixed use, higher density and transit/pedestrian oriented design.
- Ensure that land use policies support increased density along potential commuter rail corridors and around potential rail stations.
- Preserve existing rail lines and rights-of-ways for future regional and local rail service or for interim or permanent pedestrian and bicycle use.

Action Agenda

- Implement growth management plans to create the type and density of development needed to support commuter rail.
- Implement PART's Regional Transit Development Plan including the Bus Rapid Transit Gold Route to serve as a commuter rail precursor.
- Update the commuter rail study and consider a wide range of potential corridors including existing rail lines and major road rights-of-way.

Freight Transportation

Objective: Provide a safe and efficient freight transportation system that improves existing levels of freight access and mobility, supports the region's economic wellbeing and minimizes negative impacts on sensitive land uses and the environment.

Policies

- Consider freight movement as a priority in roadway planning, infrastructure investment and land use decision making.
- Consider access to freight terminals, warehouses and other industrial uses in land use decision making. Direct transportation investment to improve access to existing such facilities.
- Support efforts to improve freight movement to and around Smith Reynolds Airport and the Piedmont Triad International Airport.

Action Agenda

- Identify the transportation link between freight and economic development opportunities.
- Engage the freight community in the planning process, particularly in the development of the transportation plan and TIP.
- Define the term "freight corridor" for transportation planning purposes.
- Identify short- and long-term freight-related needs or projects pertaining to major freight corridor studies.
- Develop a process to effectively evaluate, monitor, and implement freight-related strategies and specific improvements to sustain or enhance system performance within freight corridors.
- Develop a process to collect traffic data and monitor the system performance and reliability of the regional transportation system with regard to major freight movements (e.g., travel time, speed, delay time, etc.).
- Develop freight planning performance measures in order to document, monitor, and evaluate freight-related system-level reliability goals or other established performance level goals.

- Continued investments within the vicinity of PTIA as outlined in the Airport Area Plan, CTP and Collector Street Plan.
- Coordinate needed improvements to meet the advancements of the PTIA logistical hub, and proposed PTI Air Logistics Hub and Piedmont Triad Aerotropolis.
- Implementation of an Intermodal Management System.
- Coordinate with NCDOT on the development of future rail improvements.
- Closely coordinate area roadway planning with freight objectives, including access and mobility in the context of other community planning objectives.

Air Transportation

Objective: Support efforts to improve air service, promote economic development and provide transportation access to Smith Reynolds Airport and the Piedmont Triad International Airport (PTIA).

Policies

- Consider passenger and freight access to Smith Reynolds and PTIA as part of the transportation planning process and transportation investment decisions.
- Support Smith Reynolds Airport in its efforts to adopt and implement an updated master plan.

Regional Travel Demand Model

Objective: Develop and use a regional travel demand model that not only serves to meet State/federal requirements, but also provides useful information for land use and transportation planning in the urban area.

Action Agenda

- Continue to work cooperative with PART and other Triad MPOs on the Triad Regional Demand Model and the Air Quality Conformity Determination.
- Revise the Triad Regional Travel Demand Model to be more useful and responsive for testing land use and transportation alternatives (a.k.a. scenario planning) and for small area studies.
- Comprehensively update socio-economic data to be used in the Triad Regional Demand Model using update-to-date socio-economic data and the growth and development recommendations of adopted land use plans of area jurisdictions.

Congestion Management, Safety and Travel Demand Reduction

Objective: Establish policies and programs to improve the efficiency of the roadway network, reduce congestion and pollutant emissions, increase safety, and reduce vehicle miles traveled (VMT) and single-occupancy vehicle use.

Policies

- Institute new technologies and management strategies to move vehicular traffic more effectively and efficiently.
- Monitor system safety and analyze crash data for both spot improvements and future needs.
- Support PART in providing demand management programs, including transit, ridesharing, vanpooling, and awareness programs such as Triad Commute Challenge.
- Encourage employers to reduce travel demand by providing transit subsidies, bicycle facilities, alternative work schedules, ridesharing, telecommuting and work-at-home programs, and preferential parking for carpools and vanpools.
- Promote telecommuting and assure that land use regulations do not inhibit it.

Action Agenda

- By 2015, fully upgrade the City of Winston-Salem signal system.
- By 2017, implement a system to collect volume and turning movement count data and retime coordinated signal systems and corridors on a biennial basis.
- In the process of collecting crash data and summaries, coordinate the identification of deficient locations and the determination of potential strategies and improvements with NCDOT on an annual basis. Review locations with high vehicular crashes involving pedestrians and bicyclists to identify needed improvements.
- Encourage businesses to work with PART and WSTA on transit incentives and develop strategies to encourage active transportation modes.

- In the short term, expand PART service to neighboring counties and WSTA service to northwestern Winston-Salem and add additional circulation bus service.
- In the next two to ten years, implement the recommendations of the Piedmont Triad Seamless Mobility Study to enhance connectivity among transit services.
- Increase service levels throughout the region with a dedicated source of federal funds for public transportation, implementation of weekend service, and increased participation and involvement on the PART and WSTA boards and committees.
- Develop the Triad Intermodal Transportation Center complex.
- By 2015, install approximately 15 miles of bicycle lanes and on-road bicycle facilities to increase the option for alternative modes of transportation.

Transportation Funding

Objective: Ensure adequate long-term funding for maintenance and construction of all modes of transportation facilities.

Policies

- Ensure adequate funding for construction and maintenance of all modes of transportation.
- Aggressively seek State and federal funds for local transportation projects. Leverage State and federal grant funds to supplement local resources whenever possible.
- Consider a wide range of standard and innovative funding sources for transportation funding, including bond issues, assessments and fees-in-lieu, taxes, toll roads, and public/private partnerships.
- Ensure that transportation infrastructure investments are equitably distributed throughout the MPO.

Action Agenda

- Develop funding strategies for maintenance of existing and construction of new transportation facilities.
- Seek State enabling legislation, as necessary, to expand transportation funding sources.
- Require developers to provide right-of-way, make improvements, construct facilities, or provide fees-in-lieu to help alleviate the traffic impacts of their projects.
- Make greater use of the mass transit tax portion of the property tax to pay for increased transit service.
- Consider seeking voter approval of a ½ cent sales tax to fund regional transit service expansion as allowed by the NC General Assembly.
- Pursue State and federal sources and innovative financing options to assist in funding transit infrastructure investments.

Transportation Planning Process

Objective: Support an open, inclusive and participatory transportation planning process.

Policies

- Ensure that transportation planning and decision-making is an open, collaborative process that includes citizens and local, State, and federal governments.

Action Agenda

- Follow the Public Participation Policy adopted by the MPO to bring a broad cross-section of the public into transportation policy, planning and investment decision-making processes.

Human and Natural Environment and Transportation

Objective: Develop a transportation system that respects and enhances the human and natural environment.

Policies

- Identify and address the needs of minority and low-income populations in making transportation decisions.
- Develop land use and transportation plans and projects that improve air quality.
- Design transportation facilities to be consistent with adjacent land uses, preserve natural features, protect historic and cultural resources, and enhance community appearance.

Action Agenda

- Implement the recommendations of the Environmental Justice (EJ) Plan.
- Follow the consultation procedures and the mitigation strategies established in the Consultation and Environmental Analysis and Mitigation Plan.
- Use Context Sensitive approaches for all transportation projects to involve stakeholders, minimize impacts to neighborhoods, historic resources, and sensitive natural areas, conserve energy resources, reduce greenhouse gas emissions and limit air pollution.

Healthy, Active Transportation

Objective: Support development patterns and transportation networks that promote healthy lifestyles and increase active transportation options.

Policies

- Consider the potential positive and negative impacts of new transportation projects on health and equity prior to approval.
- Ensure that affordable transportation services are available to and from health and other community facilities, especially for the elderly, special needs, minority and low-income groups.
- Promote land use patterns and street connectivity that allow children to be more self-sufficient.
- Collaborate with community organizations to help remove barriers to mobility and access to public and private facilities and services.

Action Agenda

- Identify neighborhoods/areas with active living (walking, biking and transit) deficiencies and prioritize improvements for these areas.
- Collaborate with transit service providers to serve people who are transit-dependent by improving connections to job opportunities, health facilities, healthy food outlets and recreation facilities

Environmental Justice

Objective: Identify and address the needs of minority and low-income (MLI) populations in making transportation decisions.

Policies

- Enhance the MPO's analytical capabilities to ensure that the long-range transportation plan and the Transportation Improvement Program (TIP) comply with Title VI.
- Identify residential, employment, and transportation patterns of MLI populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed.
- Evaluate and improve, where necessary, public involvement processes to eliminate participation barriers and engage MLI populations in transportation decision making.

Action Agenda

- Implement the recommendations of the Environmental Justice (EJ) Plan of the 2035 Transportation Plan Update.

1.5 Long Range Transportation Plan Public Involvement Process

The Winston-Salem Urban Area Metropolitan Planning Organization (MPO) began public review of the existing 2035 Transportation Plan (LRTP) and Public Participation Policy in May of 2012 in conjunction with the Winston-Salem/Forsyth County 2030 Legacy Comprehensive Plan Update. An MPO newsletter announcing the various documents for review and the seven public involvement meetings was mailed and e-mailed to neighborhood associations, churches, various minority and civic groups or organizations, as well as individuals through the Legacy or area planning process or transportation related businesses. An announcement was placed in all local newspapers serving the Winston-Salem Urban Area MPO asking citizens to comment on the existing document, which was available in all Public Libraries, Town Halls, City/County Planning Board, and Winston-Salem Department of Transportation (WSDOT). The plans and maps for review included the 2035 Transportation Plan and updated 2035 Street and Highway project list, the Public Participation Policy

Are the TPU and the MTIP ready?

Yep. The PTRM and the AQCDR, too.



You don't have to talk like a transportation planner to give us your thoughts on how to improve our highway, bike and transit systems.

Just read the Draft 2035 Transportation Plan Update. Then tell us what you think. But do it by Dec. 21.

Transportation planners are also seeking comments on the Draft Air Quality Conformity Determination Report.

You can review the documents and meet with staff at these locations:

- **Nov. 17**, 8 to 10 a.m., Dixie Classic Fairgrounds Farmers' Market 27th and 28th streets, Winston-Salem
- **Nov. 19**, 4 to 8 p.m., Miller Park Community Center 400 Leisure Lane, Winston-Salem
- **Nov. 20**, 6 to 7 p.m., Clemmons Village Hall 3715 Clemmons Rd., Clemmons
- **Nov. 26**, 4 to 8 p.m., Hanes Hosiery Community Center 501 Reynolds Blvd., Winston-Salem
- **Nov. 27**, 10 a.m. to 3 p.m., Stuart Municipal Building 100 E. First St., Winston-Salem
- **Nov. 28**, 10 a.m. to 3 p.m., Forsyth County Public Health Dept. 799 N. Highland Ave., Winston-Salem*
- **Nov. 29**, 3 to 6 p.m., Clark Campbell Trans. Center 100 W. Fifth St., Winston-Salem*
- **Dec. 1**, 11 a.m. to 4 p.m., Hanes Mall 3320 Silas Creek Pkwy, Winston-Salem*
- **Dec. 4**, 10 a.m. to 1 p.m., Forsyth Co. Gov. Center 201 N. Chestnut St., Winston-Salem
- **Dec. 8**, 11 a.m. to 4 p.m., Marketplace Mall 2101 Peters Creek Pkwy, Winston-Salem*
- **Dec. 10**, 7 p.m., Presentations to Kernersville Planning Board 134 E. Mountain St., Kernersville and Rural Hall Town Council, 423 Bethania Rural Hall Rd., Rural Hall
- **Dec. 13**, Meeting begins at 4:30 p.m. Presentation to City-County Planning Board, 5th Floor Meeting Room, Stuart Municipal Bldg.

*Spanish language translation available at these meetings.

Drafts are available online at www.DOT.CityofWS.org, and copies will be placed Nov. 15 through Dec. 21 at all town halls and public libraries in the urban area; at the N.C. Dept. of Transportation offices, 375 Silas Creek Pkwy; and at Suite 307 in the Stuart Municipal Building.

Give your thoughts directly to DOT staff or send your comments by Dec. 21 by mail to Fred Haith, Winston-Salem Dept. of Transportation, P.O. Box 2511, Winston-Salem, NC 27102; by fax to (336) 748-3370; or by e-mail to fredrickh@cityofws.org.

The Winston-Salem Urban Area Metropolitan Planning Organization (MPO) does not exclude participation or discriminate in any program or activity receiving Federal assistance on the grounds of race, color, national origin, sex, age, or disability. Any person who believes they have been aggrieved by an unlawful discriminatory practice regarding the Winston-Salem Urban Area MPO programs has a right to file a formal complaint with Angela Carmon, City Attorney, City of Winston-Salem, P.O. Box 2511, 27102, within one hundred and eighty (180) days following the date of the alleged discrimination occurrence.



Update and a call for roadway, transit, bicycle and pedestrian projects. The Draft 2035 Transportation Plan Update mapping and contact list was sent to all State and Federal environmental agencies for preliminary regional review. A full discussion of the environmental consultation is in the Environmental section of the document and Appendix. The MPO Newsletter, the advertisement published in all local newspapers and a summary of the meeting comments are in the Appendix. The Winston-Salem DOT and City/County Planning Board staff reviewed each section of the existing LRTP and all information including each transportation mode was updated to reflect the changes that have occurred since the 2035 LRTP was adopted in January 2009.

The Interagency Consultation Partners for Air Quality Conformity worked through the spring and summer to meet conformity for the region with the 2035 LRTPs. The FY 2012-2018 MTIPs were evaluated with the draft 2035 Transportation Plan Update project lists and the MPO addressed all comments from the Interagency partners. The NCDOT conducted an air quality conformity analysis and determination in August 2012. The 2012–2018 MTIP was found conforming with the draft 2035 Transportation Plan Update and a public comment review period on the documents was held from November 15th to December 21st, 2012 with public involvement meetings being held throughout the MPO during the months of November and December.

On November 15, 2012, this final Draft 2035 Transportation Plan Update document was distributed to each library and Town Hall in the MPO, NCDOT Division 9 offices, and members of the TCC and TAC for public review. In addition, the document was available on the City of Winston-Salem website: dot.cityofws.org. The adjacent announcement was placed in the local newspapers for the Winston-Salem Urban Area. The 2035 Transportation Plan Update and three transportation issues were the focus of Winston-Salem TV13 spots broadcast throughout the months of November, December. Also, a new outreach will be a 30 second video spot advertising the 2035 Transportation Plan Update to be aired in all local movie theaters before each movie show time. An MPO Newsletter in English and Spanish, at the end of this chapter, was mailed and e-mailed to announce the availability of the 2035 Transportation Plan Update for public review and to notify the public of meeting dates, times and locations.

During the public review period, 13 day/evening meetings was held throughout the MPO at the Dixie Classic Fair Farmer's Market, Winston-Salem City

Hall, Clemmons, Rural Hall and Kernersville Town Halls, two community recreation centers, the Clark Campbell Transportation Center, the Forsyth County Government Center and Public Health Department Building as well as Marketplace and Hanes Malls. In addition, a Spanish language translation was available at four meeting sites, the Transportation Center, the Public Health Department and the Marketplace and Hanes Mall meetings. A Spanish language hotline notice was published on the cover of the document and was available throughout the public review period.

The Draft LRTP document and the public comments were presented to the Winston-Salem Urban Area MPO on January 17, 2013 for their approval by January 31, 2013. Federal approval of the 2035 Transportation Plan Update was received by March 6, 2013 preventing a lapse in transportation conformity.

2035 Transportation Plan Update & Air Quality Conformity Analysis Report - Public Comments and Responses

**Comments are in black.
Responses are in red.**

**David Greenawalt, Ph.D.
November 15, 2012**

The 2035 transportation plan poorly addresses multiple transportation needs for the west-central portion of Forsyth County. This area of the county has witnessed and continues to see high growth and the current infrastructure is being outmoded at a rapid rate. To not see the needs of this region of the county addressed is a significant oversight and needs to be corrected. Specifically, critical needs that remain unaddressed included the following corridors:

- Robinhood Rd from the Silas Creek Interchange to the Shattalon Dr Intersection
- Robinhood Rd from the Shattalon Dr Intersection to the Olivet Church Road Intersection
- Yadkinville Rd from the Reynolda Rd Intersection to the Transou Rd Intersection
- Olivet Church Rd from the Yadkinville Road Intersection to the Robinhood Rd Intersection
- Meadowlark Drive from the Robinhood Rd Intersection to the Country Club Rd Intersection
- Country Club Road from the Peace Haven Road intersection to west of the Styers Ferry Rd Intersection
- Styers Ferry Rd from the County Club Intersection to the US 421 Interchange
- The Silas Creek Parkway-York Rd Interchange
- The Jonestown Rd-US 421-Interstate 40 Interchange

My recommendations for these needs are as follows:

- Robinhood Road from the Silas Creek interchange to the Shattalon Drive intersection
 - Rebuild the Robinhood Road interchange to utilize a single point urban interchange (SPUI) design. The newly constructed bridge could occur just north of the current interchange so as not to interrupt current traffic patterns.
 - The section from Silas Creek to the beginning of the shopping area will be reconstructed as a boulevard with a grassy median, with turning lanes where needed
 - The section from Norman Road to Shattalon Drive will be widened to a boulevard with a grassy median
- Robinhood Road from the Shattalon Drive intersection to the Olivet Church Road intersection
 - This section will be widened to a boulevard with a grassy median
- Yadkinville Road from the Reynolda Road intersection to the Transou Road intersection
 - This section will be widened from two lanes to three lanes
- Olivet Church Road from the Yadkinville Road intersection to the Robinhood Road intersection
 - This section will be widened from two lanes to three lanes
- Meadowlark Drive from the Robinhood Road intersection to the Country Club Road intersection

- This section will, at minimum be widened from two lanes to three lanes
- Feasibility studies will be conducted to explore widening this section to a four lane boulevard, with grassy median that would be realigned to link directly with Styers Ferry Road
- Country Club Road from the Peace Haven Road intersection to west of the Styers Ferry Road intersection
 - This section will be widened to a four lane boulevard with a grassy median
 - The section between Meadowlark Drive and Styers Ferry Road will be a five lane road, with a center turn lane
- Styers Ferry Road from the County Club intersection to the US 421 interchange
 - This section would be widened to a four lane boulevard, with grassy median
 - Feasibility studies would be conducted to explore linking directly to Meadowlark Drive
- The Silas Creek Parkway-York Road interchange
 - The signal based intersection of Silas Creek Parkway and York Road will be reconstructed into an interchange
 - York Road will become a bridge over Silas Creek Parkway
 - The elimination of this intersection will reduce congestion and improve safety on Silas Creek Parkway
- The Jonestown Road-US 421 bridge
 - Jonestown Road will be reconstructed as an eight lane bridge (two travel lanes in either direction and two turn lanes in either direction); pedestrian and bicycle capability will be added
- US 421-Interstate 40 interchange (near Jonestown Road)
 - The problem is that traffic entering from Jonestown Road is trying to merge onto the highway while traffic on US 421 is trying to exit onto Interstate 40. This leads to a dangerous area where traffic is cutting in and out.
 - The solution is to limit access from Jonestown Road – they can be permitted to merge onto the Interstate 40 exit ramp, but to get onto US 421 they need a bridge that takes them over the I-40 traffic

The future cross-sections recommended for the roads in the western part of the county are addressed in our Comprehensive Transportation Plan (CTP) which is our fiscally unconstrained long range plan. We use the cross-sections developed for each thoroughfare in the CTP as a guide for scoping future road project improvements and for requesting right-of-way donation or turn lane construction with development projects that come before the City-County Planning Board.

Many of the intersections noted have been reviewed for safety and congestion improvements and a few have received funding with federal Surface Transportation Program – Direct Attributable (STP-DA) funds. These projects do not show up specifically in the project lists and maps for the fiscally constrained 2035 Plan but are included within the Exempt project lists located at the end of the Street and Highway Element of the document under the Transportation Improvement Program (TIP) code as U-4742 – Intersection Improvements at Various Locations with the Metropolitan Planning Organization (MPO) area. I've attached a copy of our recent newsletter and on page 3 you will find two new projects that are receiving STP-DA funding for improvements on Yadkinville Road and Country Club Road.

Over the past twenty years, the Northern Beltway Western Section has been a major project planned for the western part of Forsyth County to provide a continuous north-south connector and relief for the radial surface roads, but it now has been pushed to the 2035 timeframe for funding and construction. Much of the peak hour congestion in this area is due to the development that has occurred over this same time period. We continue to evaluate problem intersections for improvements, but the funds for many of the widening/interchange projects you noted do not appear to be in our current financial planning future.

Robinhood Road from the Silas Creek Interchange to the Shattalon Drive Intersection

The Winston-Salem Department of Transportation (WSDOT) is not aware of any operational issues at this interchange other than the ramp from Robinhood Road onto SB Silas Creek Parkway. ROW constraints and the high cost of the ROW needed to address the length of the on-ramp have precluded action up to this point by the North Carolina Department of Transportation (NCDOT).

The 2012 Comprehensive Transportation Plan (CTP) calls for a 4-lane divided facility with a wide outside lane and sidewalks as the 2035 future cross-section. The WSDOT recently retimed the signals to coordinate traffic flows in the AM and PM peak hours. The signal retiming has improved operational efficiency and reduced delay.

Robinhood Road from the Shattalon Drive intersection to the Olivet Church Road Intersection

The 2012 CTP calls for a 4-lane divided facility with a wide outside lane and sidewalks as the 2035 future cross-section.

Yadkinville Road from the Reynolda Road Intersection to the Transou Road Intersection

The 2012 CTP calls for a 3-lane facility with a center two-way left turn lane, wide outside lane, and sidewalks as the 2035 future cross-section. The WSDOT is not aware of any operational issues on this segment.

Olivet Church Road from the Yadkinville Road Intersection to the Robinhood Road Intersection

The 2012 CTP calls for a 3-lane facility with a center two-way left turn lane, wide outside lane, and sidewalks as the 2035 future cross-section. The WSDOT is not aware of any operational issues on this segment.

Meadowlark Drive from the Robinhood Road Intersection to the Country Club Road Intersection

The 2012 CTP calls for a 3-lane facility with a center two-way left turn lane, wide outside lane, and sidewalks as the 2035 future cross-section.

Country Club Road from the Peace Haven Road Intersection to West of the Styers Ferry Road Intersection

The 2012 CTP calls for a 3-lane facility with a center two-way left turn lane, wide outside lane, and sidewalks as the 2035 future cross-section.

Styers Ferry Road from the County Club Intersection to the US 421 Interchange

The 2012 CTP calls for a 3-lane facility with a center two-way left turn lane, wide outside lane, and sidewalks as the 2035 future cross-section.

The Silas Creek Parkway-York Road Interchange

This signalized intersection has been a known congestion issue for some time. In fact, it is what triggers the two segments of Silas Creek Parkway to the north and to the south to have a high V/C ratio in the recent Biennial Report for the Congestion Management Process. There are significant ROW constraints at this intersection, and the proposed improvement to an interchange, while it would address the congestion on Silas Creek Parkway, would be difficult to construct with the adjacent land uses and their proximity to the intersection.

The Jonestown Road-US 421 Bridge

This bridge is not currently targeted for replacement. While the intersections are congested, the WSDOT recently retimed the signals to improve the operational efficiency. Due to the constraints on the bridge, WSDOT and NCDOT will continue to monitor this area closely for any operational issues.

US 421-Interstate 40 interchange (near Jonestown Road)

The weaving of traffic in this area has been noted since NCDOT constructed I-40 and this interchange was created. While the solution proposed would be ideal (limit access from Jonestown Road/permitted to merge onto the Interstate 40 exit ramp/bridge over the I-40), there is currently no funding programmed to analyze an alternative configuration or a new structure at this location.

Western Section of the Winston-Salem Beltway

Congestion issues noted in the western and northwestern areas of Winston-Salem and the urban area are planned to be addressed through the western section of the Winston-Salem beltway. Although currently not funded in the State's Transportation Improvement Program, the 2035 planning analysis still calls for this new freeway to be in place. When the Environmental Assessment for the beltway was updated to include an analysis of improvements to existing roadways as mentioned above as an alternative to the beltway, it was determined that the impacts to businesses and residents required to widen and add capacity to roadways such as Robinhood and Country Club would be more significant than those to construct the new beltway. The beltway, once constructed, would be a relief to the existing network by providing a route to US 421, I-40, University Parkway, and US 52 that bypasses the residential and commercial areas along those routes. Traffic that currently utilizes those roadways to access those highways and major routes would use the beltway instead. That is why the 2035 planning documents do not recommend any projects along these roadways since the focus, for now, is the construction of the beltway.

Dixie Classic Fairgrounds Farmer's Market November 15, 2012

- The MPO needs more sidewalks
The MPO uses federal funds to build sidewalks in a number of communities.
- The Muddy Creek Greenway needs to be longer
The recently-adopted Greenway Plan recommends extending the Muddy Creek Greenway to the north and south.
- I support the Motor Road Extension project
- When will the Northern Beltway (West) around Bethania be built?
Based on NCDOT's new Urban Loop Acceleration Plan, the department is speeding up the purchase of property and the start of construction for a portion of the eastern section that stretches from U.S. 421/Business 40 to U.S. 158. This portion was previously unfunded and had no set schedules. The new plan allows right-of-way acquisition to begin in 2012 and construction to start in 2015. The remaining portions (Eastern and Western) remain unfunded and have no set schedules.
- Extend the Bethabara Greenway (around Brookridge retirement community) to WFU and Reynolda Rd
The City of Winston-Salem is partnering with WFU to study the feasibility of bicycle and pedestrian improvements to and from campus, including nearby greenways, like Bethabara Greenway.
- Thank you for the sidewalk on Reynolda Rd from Valley Rd
- When is my sidewalk coming on Kirklees Rd?
The Kirklees sidewalk project requires federal funding and, therefore, requires more time and effort to manage. Construction is tentatively scheduled for the fall of 2013.
- Frequent, circulator buses downtown are needed
There are two considerations with respect to instituting new service. The first is the expense associated with new service and the second is the demand and (or) potential for ridership. It is generally accepted that a successful downtown circulator requires a ten to fifteen minute frequency. At minimum, this would require two buses on the route for at least ten hours per day. The WSTA experimented with a downtown circulator with a ten minute frequency during lunch hours some years ago and did not realize success. At this point, we do not anticipate instituting a downtown circulator.
- How can I tell if a property is in the path of the Northern Beltway?

Mr. Tony Houser, PE (Project Engineer, NCDOT, 919-250-4016) or Fredrick Haith (Transportation Engineer, WSDOT, 336-747-6869) should be contacted regarding Property Impact Questions.

- Northern Beltway: When will my property on Reynolda Rd be purchased?
Mr. Tony Houser, PE (Project Engineer, NCDOT, 919-250-4016) should be contacted regarding Property Impact Questions.
- Thank you for the pedestrian crossing signals at Stratford/Oakwood and Stratford/Mid-town Café
- Will there ever be a crosswalk at Five Points (Stratford Rd/1st/Miller St/Country Club Rd)?
The complicated traffic patterns and lane configurations at Five Points require more than just the installation of crosswalks to improve the pedestrian environment. The whole intersection and signal system should be examined to make a comprehensive improvement for pedestrians.
- Miller St is in need of sidewalk
Sidewalk on Miller Street has been proposed as part of the Cloverdale Avenue pedestrian improvement project. We are waiting for funding to design and construct the project.
- Every time we repave a road, bike lanes should be installed
Every time a road is resurfaced in Winston-Salem, staff examines the possibility of adding bicycle facilities. If the roadway is wide enough, we can often reallocate the space to include bicycle facilities. If the roadway is narrow there is little we can do to add bicycle facilities, because it is prohibitively expensive to widen the street.
- Sidewalk on NC 150 and Hickory Tree to Walmart
We will evaluate that segment and add it to our list of possible projects.
- Bridges need to have sidewalk
NCDOT and MPO staff review all bridge projects for the inclusion of bicycle and pedestrian facilities, including greenways under the bridges. Unfortunately, the only time to add bicycle and pedestrian facilities to a bridge is when it is constructed.
- Pedestrian crossing needed at Polo and Reynolda Rd
The WSDOT will evaluate that crossing for possible crosswalks and pedestrian signals.
- WSTA Route 16 needs more shelters and stops
WSTA has identified approximately \$30,000 to be dedicated to new shelters for this fiscal year. WSTA normally follows a process that identifies stops that generate the highest ridership and places stops at those locations. However, WSTA plans to reduce the number of stops by eliminating those with little or no ridership. This will allow buses to travel further or better maintain schedules.
- I enjoy my sidewalks, bike paths, greenways, parks, farms... and I wish that for everyone, especially inner city

**Miller Park Community Center
November 19, 2012**

- WSDOT Staff present / No comments received

**Clemmons Village Hall
November 20, 2012**

- WSDOT Staff present / No comments received

Anonymous
November 20, 2012

- We wait for buses in all kinds of weather (sometimes up to 45 minutes). Benches and shelters needed.
WSTA has identified approximately \$30,000 to be dedicated to new shelters for this fiscal year. WSTA normally follows a process that identifies stops that generate the highest ridership and places stops at those locations. However, WSTA plans to reduce the number of stops by eliminating those with little or no ridership. This will allow buses to travel further or better maintain schedules.

Mark R. Davidson, A.A.E.
Airport Director
Airport Commission of Forsyth County
November 21, 2012

- The Airport Commission of Forsyth County is attempting to move forward and develop Smith Reynolds Airport.
- It seems to me that Section 4.2.1 in the Transportation Plan, tends to dwell on the past and how the Airport isn't what it used to be.
- We are embracing the current role of the Airport and I would hope the plan would too.
- I have made some recommended deletions to the plan and if you think more language needs to be added, you can use some or parts of the Smith Reynolds Airport Master Plan.
Section 4.2.1 of the Transportation Plan was updated based on Mr. Davidson's recommended deletions and additional information.

Hanes Hosiery Community Center
November 26, 2012

- WSDOT Staff present / No comments received

Stuart Municipal Building
November 27, 2012

- Urban Circulator is not needed in Winston-Salem (Costly/Low ridership/Obsolete)
The vision for Winston-Salem and Forsyth County to grow smarter and better by managing future development was established by the Legacy Comprehensive Plan. This vision includes a more balanced, sustainable transportation system, concern for the environment balanced with economic development, and strengthening of downtown as a community focal point.

Winston-Salem is now comparing the merits of streetcars and buses to identify the best way to shape the community by enhancing economic competitiveness and increasing mobility options as part of the overall effort to grow smarter and better by managing future development.
- More separated bike paths
The Greenway Plan is the first step in creating a full network of separated bicycle paths.
- Long-term bike parking at transit hubs
The WSDOT will evaluate the possibilities.
- More public transportation (Better visibility/Better facilities/Most bus stops are inadequate)
WSTA is currently conducting an analysis of its routing structure.
- Slower residential speed limits (More enforcement)
The Winston-Salem Department of Transportation (WSDOT) frequently receives questions about speed limits and requests for changes in speed limits. Speed limits are intended to

designate a "safe speed". Speed limit changes are most effective when accompanied by changes in roadway characteristics, such as sight distance and lane width.

- Better maintenance of sidewalks/crosswalks
It is the responsibility of the adjacent property owner to maintain the sidewalk and ensure that it is clear of ice/snow, vegetation, and obstructions. The City is responsible for fixing cracked or broken sidewalk and painting crosswalks. If there are specific locations needing repairs, please contact us and we will investigate.
- Better enforcement of pedestrian rules/safety (less jaywalking/cars should stop at crosswalks)
The WSDOT works with the WS Police Department to educate drivers, walkers, and cyclists about their rights and responsibilities while on the road.
- Urban Circulator is needed in Winston-Salem (Connect to neighborhood roads)
The City of Winston-Salem is considering the possibility of implementing an urban circulator, possibly a streetcar or enhanced bus service, connecting Downtown and surrounding neighborhoods to each other and the region.
- I would love to live in a city with public facilities similar to Portland, OR and Charlotte, NC
- Make Winston-Salem a destination; a place to be not a place to drive by

**Forsyth County Public Health Department
November 28, 2012**

- More sidewalks in the Southside area
Please contact the WSDOT about specific areas needing sidewalk and we will evaluate.
- More greenways (Built quicker)
The Greenway Plan outlines our strategy for building sidewalks for the next 15 years. The federal funding we use to construct greenways is invaluable to our efforts, but it does come with strings attached. The associated requirements result in a very long process from design to construction.
- Sidewalk needed on Stratford Rd and light rail on the adjacent RR line
The WSDOT will evaluate Stratford Road for sidewalk.
- Bike lanes and signage needed on Red Bank Rd and Memorial Industrial School Rd
The WSDOT will evaluate those roads for bicycle facilities. Both roads appear to be narrow two-lane roads, which would have to be widened to install bicycle lanes.

**Clark Campbell Transportation Center
November 29, 2012**

- Expand transit to Walkertown, Kernersville, Clemmons, and Rural Hall (X14)
The expansion of service to these communities requires the identification of funds to underwrite the service. WSTA is willing to work with these communities to identify funding sources.
- Need full color current transit maps to handout (X8)
WSTA is increasingly reliant on the internet and electronic media to provide route information. Maps can be found on WSTA's website. Additionally, WSTA will soon provide real-time bus information that can be accessed by both smart phones and computers. WSTA currently distributes schedules containing basic maps for each route.
- More efficient Routes
WSTA is conducting a Comprehensive Operations Analysis that will increase route efficiency. The target date is July 1, 2013.
- Sunday Service needed (X32)
City officials are currently investigating options for underwriting Sunday service.

- No fare increases
WSTA has no current plans to increase fares.
- Expanded Saturday service needed
WSTA has no current plans to significantly increase Saturday service.
- Keep buses running 24/7 (X18)
This suggestion would require an enormous investment and could not be justified by the potential for additional ridership.
- Keep buses running 24/7 on weekends only (X2)
This suggestion would require an enormous investment and could not be justified by the potential for additional ridership.
- Clean the transit center
WSTA contracts with the city Property Maintenance Department for this service.
- Transit staff need an attitude adjustment
Transit staff receives ongoing customer service training.
- More buses on the hospital routes (Very crowded)
Current bus capacity is sufficient to transport passenger load albeit some passenger may be required to stand.
- Sunday service even if it means higher fares (We need to get to work)
City officials are currently investigating options for underwriting Sunday service.
- Friendlier drivers
Drivers are frequently instructed regarding customer service. However, WSTA acknowledges that it receives this comment at an unacceptable level and will therefore increase the frequency of customer service instruction for its drivers.
- Hybrid bus seats are too small
The size of bus seats are consistent throughout WSTA's fleet and are standard for the industry. However, the "low floor" configuration of the hybrid bus results in a reduction of seating capacity from 35 (in the older buses) to 32 in the hybrids. Nevertheless, the low-floor bus is still sufficient to accommodate peak service passenger loads.
- Reroute WSTA route #11 night to match route #10 onto Hanes Mill Rd
WSTA is currently conducting an analysis of its routing structure.

**Anonymous
November 29, 2012**

- Benches and shelters needed: We wait for buses in all kinds of weather, sometimes up to 45 minutes
WSTA has set aside funds for benches and shelters. However, the funds are somewhat limited (\$30,000). Upon completion of a Comprehensive Operations Analysis, we will select locations for installation based on the volume of passengers. This should occur before the fall of 2013.

**Hanes Mall
December 1, 2012**

- Traffic signal progression needs adjustment in CBD

The current signal system for the City of Winston-Salem controls 375 signals, of which 318 are coordinated across 47 individual zones. To reduce communication failure rates, the central signal system software was updated in 2011. WSDOT continues to troubleshoot communication failures on the copper communication lines until the more reliable fiber-optic network is installed under the Signal System Upgrade project (C-5224). Design of this project is fully underway. Phase A of the construction is scheduled to be let in May 2013 and Phase B to be let in July 2013.

- Light Rail needed (At least Kernersville to Hanes Mall)
PART has administered a passenger rail / Bus Rapid Transit (BRT) study for the region. The Alternative Analysis, is assessing the potential for commuter rail and/or BRT service in the Triad. This study is a continuation of the Triad Major Investment Study that has study results shown below in this section on Mass Transit Planning. The current Alternatives Analysis will produce a recommended investment strategy to implement a fixed guideway mass transit system. Pending the identification of a regional funding source, additional studies on environmental impacts, preliminary engineering, and final design will follow.
- Love Trans-Aid (Wonderful people)
- Aesthetic improvements needed to US52/Akron Interchange

**Forsyth County Government Center
December 4, 2012**

- WSDOT Staff present / No comments received

**Marketplace Mall
December 8, 2012**

- More bus shelters
WSTA has identified approximately \$30,000 to be dedicated to new shelters for this fiscal year. WSTA normally follows a process that identifies stops that generate the highest ridership and places stops at those locations. However, WSTA plans to reduce the number of stops by eliminating those with little or no ridership. This will allow buses to travel further or better maintain schedules.
- We need Sunday Service
City officials are currently investigating options for underwriting Sunday service.
- Sidewalk needed on Mountainview Rd
Mountainview Road will be evaluated for sidewalk.
- Peterscreek Parkway should remain unchanged

**Rural Hall Town Council
December 10, 2012**

- WSDOT Staff present / No comments received

**Kernersville Planning Board
December 10, 2012**

- WSDOT Staff present / No comments received

Amy Euliss
Environmental Senior Specialist
NC Dept. of Environment and Natural Resources
December 10, 2012

- Please add the Jordan and Randleman buffers to your environmental features map
The Jordan and Randleman buffers were added to the environmental features map.

City-County Planning Board
December 13, 2012

- WSDOT Staff present / No comments received

Wendy K. Mailey
Director of Government Affairs
Greater Winston-Salem Chamber of Commerce
December 19, 2012

- Overall the job done on this plan is outstanding. The effort and detail that has gone into this report is tremendous.
- Interstate 74 remains our top legislative priority. With the Northern Beltway from US 421/I-40 Bus to US 158 as an accelerated loop project with right of way in progress. We now shift our focus to secure funding and initiation on the next section of the loop from US 158 to US 311.
- The focus on multimodal is a concept that the chamber is in favor of and plans to support for the expansion of our transportation network and connectivity
- Facing a \$310M deficit for all street and highway projects planned is a major issue and shows that there is a real math problem with transportation funding. In reading the document it is noted that a ½ cents sales tax to fund regional transit service expansion is in consideration to be brought to the voters. It has been suggested that an amendment to the MTF be made to allow local government jurisdictions to use the ½ cents sales tax as revenue for all transportation projects be pursued at the General Assembly. There needs to be a discussion about how to proceed with this sales tax option and also when to begin to educate voters on how this tax can benefit the infrastructure needs of our community.
- When talking about alternative funding there is a hard push being made to have the future I-74 and US52 Corridors in the Triad as part of a designated Primary Freight Network under the provisions of MAP-21. This would provide an opportunity to leverage and complement existing resources to accelerate remaining portions of the I-74 project in the Triad Region. I have attached a letter sent to Secretary Conti and his response. It would be beneficial to the community to push this issue in order to make the revised TIFIA program dollars something that WSMPO pursues.
- There were several questions asked in relationship to PART and the operation of WSTA by 2015. Overall people are concerned about funding being that there have been so many issues with PART along the lines of funding. How will this work in more detail and where does the funding come from?
From the Piedmont Triad Seamless Mobility Plan and the Regional Transit Development Plan: ... financial resources will continue to be hard to provide for WSTA and the other transit systems in the Triad. These plans recommend that a possible consolidation of services under one management organization could provide the most efficient and economical way of continuing a basic level of transit service for all of its riders. Winston-Salem Transit Authority would continue as a transit provider but the management of the operations would be the same as the others – GTA, Hi-Tran, and PART.

Patrick A. Reagan
Monitoring and Mobile Sources Program Manager
Forsyth County Office of Environmental Assistance and Protection
December 20, 2012

- The draft plan is very comprehensive and organized
- We request this Office be identified as the Forsyth County Office of Environmental Assistance and Protection (FCOEAP) in the Plan to accurately reflect this agency's participation
The Air Quality Conformity Analysis and Determination Report was changed to reflect the correct name of the department as the Forsyth County Office of Environmental Assistance and Protection (FCOEAP).
- Although the budget comparisons and mobile source impacts appear accurate, we would like to see more local participation in this process from the local air quality agency
The Interagency Partners will discuss responsibilities for future Air Quality Conformity Analysis and Determination processes for the Piedmont Triad region.
- This Office is adequately equipped to run a mobile source emissions analysis and project specific air quality impact analysis while maintaining a local focus on development, economics, and the environment. While EAP agrees with NCDAQ's analysis and computer modeling outputs, similar results could have been obtained from this Office collaborating with the local municipalities, DOTs, and PART. This also ensures all local officials are updated about the process and have even more awareness of the impacts on the community.
- Overall, we concur with the findings in the 2035 Transportation Plan and commend all the partnering agencies who worked to complete this task

Appendix References

Documents

NCDOT From Policy to Projects - 2040 Plan August 2012

NCDOT From Policy to Projects - 2040 Plan Appendices August 2012

Winston-Salem Urban Area MPO Comprehensive Transportation Plan adopted May 17, 2012

Public Participation Policy adopted July 19, 2012

Draft Air Quality Conformity Appendices A – M

Environmental Consultation with Resource Agencies and Agency Contact List

Public Comments from the joint review of the 2035 Transportation Plan and 2030 Legacy Update
Moving Times Newsletter – May 2012