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 multi-modal 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, in September 2003, PART began its 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 and Dell Computers 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 Winston-Salem Urban Area MPO considers safety as one of the most important factors in analyzing and selecting projects for funding and implementation. In the Urban Area’s biennial Transportation Needs Report, all proposed street and highway projects are evaluated and ranked using NCDOT’s accident history data as an indicator of a safety deficiency. The safety component in the Transportation Needs Report project evaluation process accounts for 20% of a project’s overall scoring. Proposed development plans also 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 county, replacement of deficient bridges and structures, a safe and convenient multi-modal 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. It has also 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 as necessary.

The Winston-Salem Transit Authority (WSTA), which operates the City’s mass transit system also 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 also 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 environment, promote energy conservation, and improve the quality of life for citizens living, working or visiting the area.

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 as the development of a regional transit system continues.

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 traffic signal system has significantly improved the flow of traffic on numerous major streets and highways and responds to traffic conditions on regional and interstate highways. However, it is time for a major upgrade to the system as new technologies emerge and the demand to move traffic more efficiently increases.

6. ENHANCE 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, 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 have 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 on or before October 1 of 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.