



CORRIDOR



**APPALACHIAN
REGIONAL
COMMISSION**

SOUTHEAST
INDUSTRIAL
DEVELOPMENT
ASSOCIATION

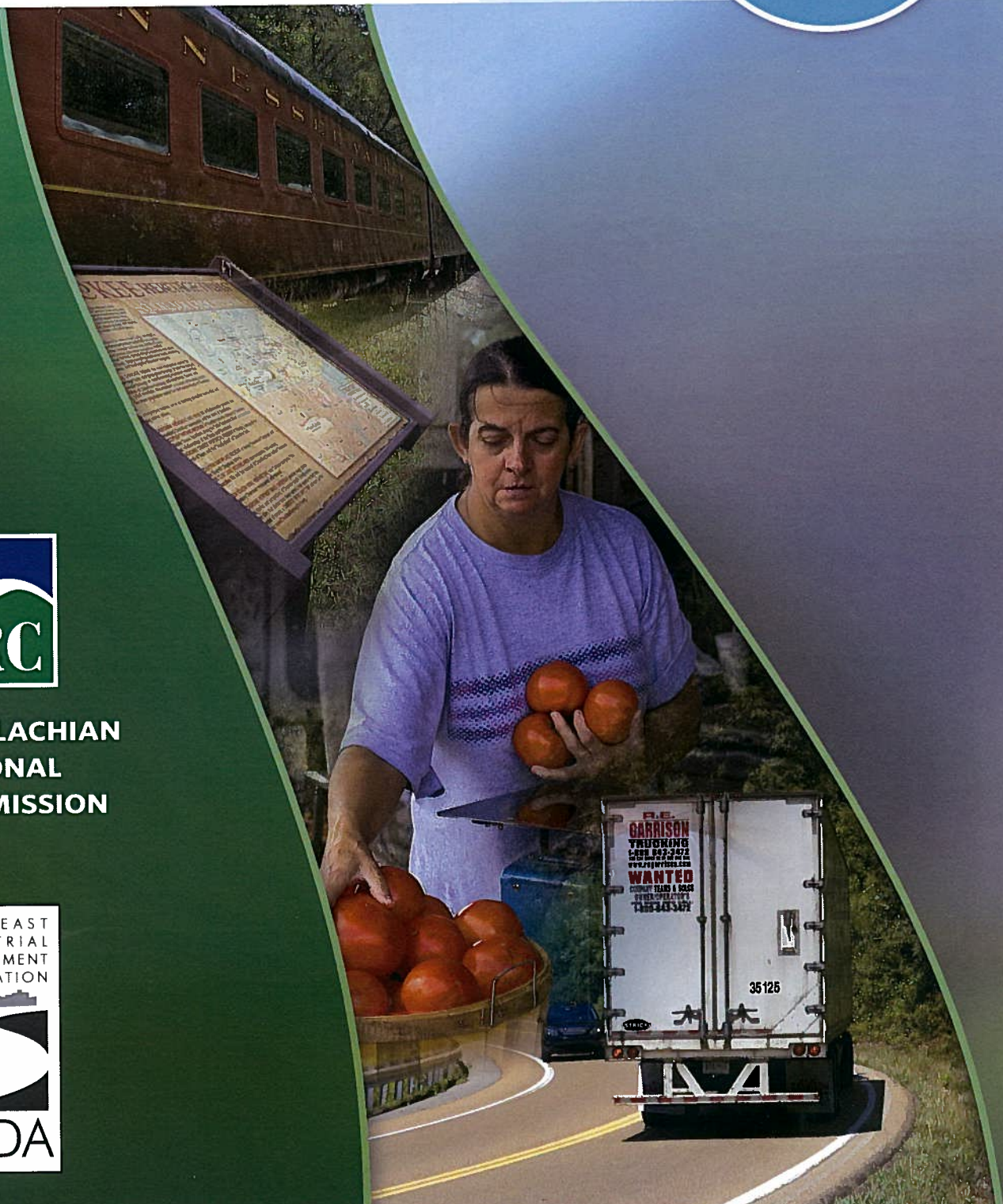




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Corridor K Economic Development and Transportation Study Final Report

I. Executive Summary

Globalization and new technologies continue to change economies around the world, redefining business priorities, challenging transportation networks of all kinds and creating new economic opportunities in places where we never imagined international business before. The manufacture of certain low-cost goods has shifted to locations outside of the United States to countries with low-cost labor and overhead. Those goods are then imported back to consumers in the U.S. In spite of this, manufacturing continues to be important to our economy. Sixty-one percent of all U.S. exports are manufactured goods double the number ten years ago.

The largest single regional source of U.S. imports comes from 14 countries in the Pacific Rim. Our second largest trading region is Canada and Mexico, while Europe ranks third; however, imports from Europe have increased 133% since 2005. While a significant volume of imported goods arrive at West Coast ports, Atlantic Coast ports have experienced dramatic increases in freight flows in recent years. Between 2003 and 2005 the Port of Savannah experienced a 34.1% increase in import growth and the Port of Charleston saw similar increases as well.

Businesses today depend upon transportation networks to move goods and people around the world as never before. We buy exotic fruits at our local market; companies receive supplies from international firms to produce their products; and bulk commodities like grain, lumber, coal, or oil move into and out of U.S. ports every day. We have come to expect constant access to goods from all around the world.

As the global economy changes, the needs of businesses in the Corridor K Region are being transformed. The dramatic growth of international trade has placed new competitive pressures on existing businesses in this region and has created new challenges as well as opportunities for emerging business sectors that are locating there. To compete in this



changing world economy means the communities in the Corridor K Region must **anticipate the needs of businesses and work in partnership** with them. To be successful in economic development today communities must engage in an on-going process of continuous improvement and collaboration with the business community to help create the most competitive business environment possible.

Study Conclusions

The Southeast Tennessee Development District retained Wilbur Smith Associates to conduct this economic development and transportation study of the Corridor K Region, in part to answer the question, “**Is there an economic development need for this corridor?**” The research in this study indicates that there is a clear economic development need for an improved east-west transportation corridor to serve this region. An analysis of the job attraction potential that could result from improved east-west highway connections that improved highway travel times, airport, rail, and port access, and expanded the labor market area estimates the creation of over **7,000 new jobs** in the region within five years. If the average salary for these jobs is just \$30,000 per year this would mean an annual influx of \$210 million in personal income for the region.

The study conclusions are based on our research and input from regional stakeholders, discussions with the Steering Committee and Economic Development Advisory Committee, existing business surveys, interviews, and eleven community stakeholder meetings.

1. **The Corridor K Region needs transportation improvements that will enhance the economic sustainability of the region.** While transportation alone is not a sufficient condition to cause economic development to occur, it is a crucial link to both sustainable existing businesses, to attracting new business opportunities to the Region, and to provide effective access to larger customer market areas in the future. For the Corridor K Region to have a competitive edge, it must build the infrastructure to sustain existing businesses, support entrepreneurial activities, and create an environment that is attractive to new business and industry.

2. **The transportation infrastructure must be enhanced to support tourism.** To improve the economic viability of tourism in the region the existing Hwy 64/74 must be improved to accommodate the needs of existing tourist related businesses and individuals including the Whitewater and Adventure Tourism Operators, hikers, rafters, and other users. Providing a safer route that will be a **destination** rather than a thru-road is important to building and enhancing tourism in the region. Additional tourism infrastructure is also needed to appeal to a wider visitor demographic, extend the tourism season, and promote more and longer overnight visits to the region.
3. **Better access to Atlantic coastal ports is important to businesses in the region.** Impacts of globalization have been more important to businesses in the Corridor K Region than expected, given the existing transportation limitations. In a recent transportation survey, fifty-eight percent of responding businesses in the region currently sell to national/international customers and fifty-one percent of businesses utilize components and materials from international suppliers. Forty-one percent of traded sector businesses in the region already use one or more ocean ports. Businesses want the flexibility to be served by multiple ports because of international customer locations and competitiveness requirements.
4. **The transportation needs to support and enhance tourism are very different from the transportation needs of other business sectors in the region.** Visitors see the road as a destination; businesses see the road as a safe and efficient means of moving goods and people. Visitors want to drive at a leisurely pace stopping to enjoy view sheds; business users want to reach their destination as quickly and as safely as possible. These two divergent sectors are very important to the Region's economic development. Accommodating the transportation needs of these two sectors may suggest strategies that separate these two users.
5. **Incidents and backups on US 64/74 create problems for the region's employers and communities.** Many of the region's employers rely on workers who travel US 64/74 daily. The reliability of this workforce is affected by traffic conditions on the existing highway as employees can be delayed by accidents, rock slides, and other chokepoints created by oversized vehicles and tourist traffic. These delays also cut communities off from emergency services, access to schools, and create added costs for businesses.

6. **Some businesses in the region will not survive without improved transportation connections.** Global competition mandates that businesses continually focus on driving down their costs and remain responsive to their customers. Transportation costs, effective access to market areas to rapidly respond to customer needs, and access to new markets for business growth are critical to the survival and sustainability of many businesses in the region.
7. **Many employers in the region are highly reliant on truck transportation and have higher than average expenditures for transportation to market areas east or west of the region.** Lack of direct east-west connections, existing roadway deficiencies, and safety concerns limit economic development opportunities in the region. Businesses face adverse cost and travel time issues as goods must travel to Atlanta or Knoxville to go east, and conversely businesses in western North Carolina utilize these routes to travel to locations to the west.
8. **Deficiencies identified in past safety audits have been addressed to the extent possible however the existing highway still has safety issues.** TDOT and NCDOT have promptly made improvements to the existing corridor in response to safety audits but are limited by topography, proximity to the rivers, and environmental concerns. Crashes and fatal accidents after these safety improvements have been completed suggest that additional traffic operational and safety improvements are still needed.
9. **Balancing economic prosperity and environmental stewardship is important to the people who live and work in the Region.** To enhance tourism and maintain the quality of life, “Green Highways”, eco-tourism, sustainable development, corridor overlays, and context sensitive solutions offer strategies that fit the ecological, economic, and transportation needs of the Region.
10. **Improved transportation facilities are needed based upon the impact of the existing transportation system on the economy of the region.** Fifty-five percent of the businesses participating in this study said there were barriers to growing their business in the region and the barriers most often cited were: transportation costs, lack of east-west connections, workforce availability and skills, and timeliness of deliveries.

11. **In order for economic growth to occur in the Corridor K Region transportation improvements are necessary primarily related to east-west connection to Atlantic coast ports.** Based upon our economic analysis, the completion of Corridor K could bring 3,700 jobs in targeted industrial and an additional 3,300 jobs in related business sectors across the region in a 5-year period. As international trade continues to expand, access to ports and other intermodal facilities will increase. 86% of the businesses participating in this study said that transportation would have an increasingly important role in their competitiveness in the future.

The global economy offers many new opportunities for businesses in the Region relative to exports and foreign investments. In 2006, over 18,406 companies in North Carolina, Georgia, and Tennessee exported goods from those states and over 79% of those exporting firms were small and medium-sized businesses. Foreign-controlled companies employed almost half a million people in the three-state region and represent a sizeable percentage of the total manufacturing employment in these states.

The Corridor K Region has excellent north-south highway connections and rail lines. These transportation corridors have been important to the region for many years. As business operations within the region continue to change because of international trade, new technologies, and other factors, existing companies must constantly focus on driving down their costs and improving their reliability and responsiveness to customers in order to compete. To retain and expand jobs in existing industries, the regional transportation system must meet the needs of businesses. A manufacturer of lightweight high-value products may tend to rely more on air transportation, while a manufacturer of heavy equipment will rely more on rail or port transportation. Many businesses rely on a combination of transportation modes and, except for those businesses located adjacent to an airport, ocean port, or rail facility, they rely on the highway as their primary link between their businesses and these other modes of transport.

In today's global marketplace the nature of competition has changed and will continue to evolve. For businesses in the Corridor K Region to effectively compete in the future, competitive advantages must be constantly monitored and assessed; improvements must be planned and implemented. Economic development in this global environment becomes the business of the entire community, the entire region. The economic development

challenges we face today are more complex. Innovative solutions require a collaborative process that validates and expands on the important links between economic development, transportation, education and training, environmental stewardship and other factors in order to support an economic future the region can be proud of.

Project Approach

International trade and new technologies are changing the way businesses compete and creating new economic opportunities in locations never before imagined. In today's global economy, business operations are continually changing, existing companies must constantly focus on cost factors and improving their responsiveness to customers in order to be successful.

As a result of international trade, telecommunication and other technologies the nature of competition continues to evolve. To survive and prosper in today's economy businesses in the Corridor K Region must effectively compete with businesses in other regions and other countries. The region's competitive advantages must be continually evaluated and critical improvements made that will allow businesses to be globally competitive. Transportation networks will play an increasingly critical role in business competitiveness. How can businesses in the Corridor K Region efficiently reach east coast ports: ship products to international customers; conduct business with major market areas to the east or west including Charlotte, Greenville, or Huntsville; or competitively utilize global suppliers? Transportation is also critical to the tourism industry in the region. According to a recent study conducted by the National Academy of Sciences, eighty percent of travel, tourism, and recreation occur on highways with driving being the most popular recreational activity for Americans.

To address these important economic development issues in the Corridor K Region, an approach was developed that focused on 1) identifying the sustainable economic development opportunities in the region; 2) understanding the transportation needs of key business sectors; 3) assessing the limitations of the existing east-west highway corridor to serve existing and emerging businesses; 4) clarifying challenges to global competitiveness presented by the lack of adequate transportation connections; and 5) evaluating the extent to which limited east-west transportation connections presents a barrier to job growth

within the region. To determine if there was an economic development need for Corridor K, and to identify the critical linkages between transportation and economic development, it was important to understand:

- The sustainable existing and emerging business sectors that were contributing to the region's economy and how those sectors in particular could benefit from improved transportation connections
- How the existing east-west connections could address these needs and how improved east-west connections could support both the existing and emerging business community, as well as the tourism industry
- The potential for job growth in sustainable existing business sectors and emerging targeted businesses that could result from improved transportation access

This approach did not begin with a defined set of transportation improvements and an analysis of the economic benefits resulting from those improvements. This approach began with an examination of the region's economic development, first through research and then by engaging the region's leadership in developing a strategic plan. Once the economic development strategies were defined, it was possible to determine the transportation needs of the sustainable existing and emerging business sectors in the region. Four key tasks were a part of this approach:

Task One: Assess the Region's economic development

Task Two: Evaluate the transportation needs of the sustainable existing and emerging businesses

Task Three: Assess the economic development opportunities from improved Transportation connectivity

Task Four: Engage the Region's leaders

It is not possible to consider economic development or transportation improvements in the Corridor K Region without discussing environmental concerns and issues as well. As part of this approach, environmental concerns were openly discussed and included in the strategic plan. A "Green Plan" meeting was held to focus specifically on environmental quality issues in the region and how the three crucial areas of economic prosperity, environmental quality, and transportation improvements could be effectively integrated in the process. This

approach encouraged stakeholders to think about balancing a range of concerns centered around the environment and the economy and how “thinking outside the box” might lead to optimal solutions for the region.

Task One: Assess the Region’s Economic Development

The first step in analyzing the region’s economic development potential required an assessment of the region’s strengths, weaknesses, competitive advantages and challenges relative to existing businesses, tourism and emerging business targets and entrepreneurial activities. Research conducted during this task included interviews with regional and state economic development officials, review of existing economic development plans and studies, assessment of relevant regional data and interviews with other key community and business leaders. Existing regional employment data, workforce training resources, and target market studies were also analyzed to identify sustainable business sectors in the region.

While economic development is reliant on transportation, we recognize that transportation infrastructure alone will not create the conditions necessary to support the growth of economic opportunities in the future. As a part of this study we looked at the availability of other key site selection factors in the region to assess the non-transportation factors important to retaining and attracting businesses to the region. Regional leadership was engaged in an intensive strategic planning process to identify strategic assets and areas for improvement used to evaluate sustainable and emerging business targets for the region.

Task Two: Evaluate the Transportation Needs of Sustainable Existing and Emerging Businesses

In this approach it was important to understand the transportation needs of the region’s existing and emerging businesses in order to consider their specific transportation requirements and how their transportation demands might change as the region becomes more engaged in the global marketplace. By understanding the region’s existent economic conditions and identifying the sustainable existing as well as emerging businesses, it was possible to assess the transportation needs of these business sectors and evaluate how well the existing transportation infrastructure could serve those needs now and in the future. An

“Existing Business Transportation Survey” was deployed and interviews were conducted with some of the region’s largest shippers and receivers along with other businesses in the region. Meetings with business leaders allowed them to discuss the evolving role that globalization plays in their businesses and how transportation infrastructure will impact their competitiveness now and in the future.

Tourism is also important in the Corridor K Region so meetings were also held with Tourism Agencies, the Whitewater Rafters Association and other tourism related businesses to understand how existing highway 64 affects their operations as well as the kind of improvements that would benefit tourism in the region in the future. Although it is only in the very preliminary planning phase, conceptual plans were reviewed for a “rustic lodge” proposed for the southeast Tennessee area of the Corridor K Region that would significantly enhance tourism opportunities in the region.

While evaluating the transportation needs of the sustainable business sectors, a dichotomy emerged relative to the transportation needs to support and enhance tourism and the transportation needs of other businesses in the region. The transportation needs of tourists differ dramatically from the needs of other businesses in the region. Visitors see “the drive” as part of the experience and the road as a destination; they want to enjoy view sheds, drive at a leisurely pace, learn about the history and heritage of the area and “experience” the region. Other business sectors in the region are focused on moving products and people as safely and efficiently as possible. Both of these business sectors are crucial to the region’s overall economic development and some of these sectors have very different transportation needs.

Task Three: Evaluate the Economic Development Opportunities from Improved Transportation Connectivity

The role of transportation in a region’s economic development must be assessed from several perspectives. Transportation plays a critical role in workforce access allowing companies to draw from a larger labor market area if there are safe and efficient transportation connections. Companies need to receive goods and materials and they need to be able to ship products to market and respond to their customers needs all of which



requires transportation connections. Transportation also plays an important role in the tourism industry allowing visitors safe access into a region.

As a part of this Economic Development and Transportation study for the Corridor K Region, an evaluation of benefits that could be generated from improved transportation connections in the region was conducted. Looking at existing industry trends and location factors economic development benefits that could occur as a result of increased transportation connectivity were analyzed. This study also evaluated the extent to which transportation connectivity and access presented a barrier to future job growth in the Corridor K target industries using the LEAP Tool, developed by Economic Development Research Group.

Task Four: Engage the Region’s Leaders

Task four was perhaps the most important element of this study. Residents in the Corridor K region know first hand the economic challenges and opportunities that they face, because they live with them everyday. The fourth task engaged leaders and stakeholders in an examination of the regional economic development issues and then moved to a discussion of the transportation infrastructure needed to support their economic future. This was not a “build it and they will come” approach; it was grounded in what is happening in the region today, how the global economy is changing the needs of business and what the people who live and work here need to do to have the kind of economic development they want and need in the future.

Throughout this process stakeholders expressed concerns about attracting young people back to the region after they finished college or keeping them here after graduation; residents wanted to preserve the best things about their quality of life; and they recognized the importance of respecting their natural environment. Actively engaging elected officials, business leaders, and community stakeholders in this process developed a foundation for creating a regional coalition focused on the region’s economic development future.

Corridor K Project Public Involvement

Throughout this study, people were encouraged to provide input into the strategic plan, asked to identify assets in the region that were important to them, and to express their concerns about the future of the area. People were worried attracting the kind of jobs that would bring young people back to the region. There were people who recently moved here who were upset about traffic congestion and the lack of development controls in the region. Many people were concerned about the environment and the quality of life within the Corridor K Region. Eleven meetings were held throughout the region to talk about obstacles to economic prosperity, the role that the global marketplace plays in the future of the area and how the environmental quality of the area could be protected.

In addition to the Corridor K Steering Committee and Economic Development Advisory Committee, additional stakeholders were added to the mailing list throughout the project. An initial Environmental Briefing meeting was held in Chattanooga in early February, 2007 to advise environmental stakeholders about the purpose of the study and the important role that environmental considerations would given throughout this process. A “Green Plan” meeting was held in October in Ducktown, TN to examine environmental assets, “green plan” strategies, sustainable development and other opportunities to enhance the environmental quality of the Corridor K Region.

A copy of the master stakeholder list can be found in the Appendix of this report.

The Corridor K Steering Committee

A Steering Committee for the Corridor K Regional Economic Development and Transportation Study was appointed by the Southeast Industrial Development Association, a multi-state economic development organization managed by the Southeast Tennessee Development District. The Steering Committee was established to guide this study and ultimately to provide a foundation for consensus regarding the final report. The Steering Committee representatives included elected officials from cities and counties in the Corridor K Region of Tennessee, North Carolina, and Georgia. The initial meeting was held in Chattanooga, TN in early February to begin the process of developing an economic

development strategy for the region that considered the long term opportunities and competitive advantages within the region.

Members of the Steering Committee are listed in the report Appendix.

The Corridor K Economic Development Advisory Committee

Economic Development professionals throughout the Corridor K Region served on the Economic Development Advisory Committee for this project. A formal invitation to participate was sent to primary economic development organizations in the region and the first meeting was held in February. The Economic Development Advisory Committee assisted in deploying the existing business transportation survey, arranging meetings with business leaders and provided invaluable insights on the competitive issues facing the businesses in their respective communities.

Members of the Economic Development Advisory Committee are listed in the report Appendix.

II. The Corridor K Region

History of the Corridor K Region

The history and heritage that has shaped the Corridor K Region dates back hundreds of years to a time when the old Cherokee Nation was interconnected by a network of trails and paths linking villages and settlements. During the 17th century, the Unicoi Path linked the Cherokee Overhill towns to other settlements in the region and to Atlantic coast towns. For generations, the people that have traveled this area have faced the challenges of geography, rivers and topography in their efforts to move about and through this region.

For many years the people and the economy of the Corridor K Region has been influenced by the connections that linked this area to other parts of the country. In the early 1800's an overland portage was developed that essentially linked the Ocoee River to the Conasauga River. Teams of oxen hauled carts with boats and goods over the 10 miles between the two rivers, creating what would be called today an intermodal connection. This portage reduced the travel distance to the Mobile Bay by approximately 1,000 miles.

The natural resources in the Corridor K Region prompted many early entrepreneurs to try and find an economical way to transport these goods. Copper ore, lumber, coal, marble, and other resources could be found in the region, however the challenge was transportation. Logging was the first industry in western North Carolina and logs were floated down rivers and streams to sawmills. Rafts, flatboats and canoes were used to bring in supplies. In 1847, copper ore from Ducktown was hauled on mule trains to Dalton, Georgia, the closest rail line at the time. This ore sample traveled a circuitous route to Boston where it was found to be of good quality. The problem remained how to manage the transportation.

Railroads came to the Corridor K Region in 1836 when the Hiwassee Railroad was chartered. This rail line was built near Calhoun and Riceville, and although their financial strength was not adequate to support additional construction, this line became part of another railroad, the East Tennessee and Georgia Railroad. Communities throughout the country wanted to attract the railroad to their town. The North Carolina Railroad reached Murphy from Marietta after the Civil War and the Southern railroad connected western North Carolina to

Asheville in 1819. The Corridor K Region wanted to bring the best modes of transportation to their towns but the challenge of building in this area given the rivers, topography, and geography proved daunting to a number of companies.

The Bald Mountain Loop was completed in 1898. The Tennessee Copper Company had purchased the copper mines in the Ducktown area that same year and began making improvements to the copper mining operations. The improved rail line allowed copper ore and other products to be moved efficiently and the Tennessee Copper Company was able to accomplish what many companies before them had failed to do, operate profitably.

The economic transformation of the Corridor K Region continued to evolve throughout the early 1900's. The Murphy Rail Branch was constructed between 1881 and 1894. Freight and passenger stations were constructed along the rail lines to facilitate the movement of people and goods through the region. The town of Etowah, Tennessee was built to accommodate the needs of the railroad providing housing for workers and a center for freight and the Waynesville train depot was constructed in the 1890's to serve the needs of passengers from the surrounding area.

Passenger service on the Old Line ended in the late 1960's as the expansion of the trucking industry and loss of older industries limited rail traffic in the region. The copper mining industry began to decline during this period, and by March, 2001, the last train left Copperhill, and CSX Railroad notified the community that they would abandon the line and potentially scrap the rail. The Murphy Branch in western North Carolina still plays an important role in the economy of the region serving several paper mills, and transporting sand, woodchips and liquefied petroleum gas to the region but there are no east-west rail lines serving the Corridor K Region today.

For generations, the economic prosperity of the Corridor K Region has been linked to transportation. As industries within the region have evolved in response to various economic factors the transportation needs of those businesses have changed and the modes of transportation serving the region have changed as well. From the days when mule trains and flatboats supplied the needs of the people in the region until today, people in this area have worked hard to move people and goods effectively and efficiently through the region which has been a challenging task at best.

The Corridor K Region 2007

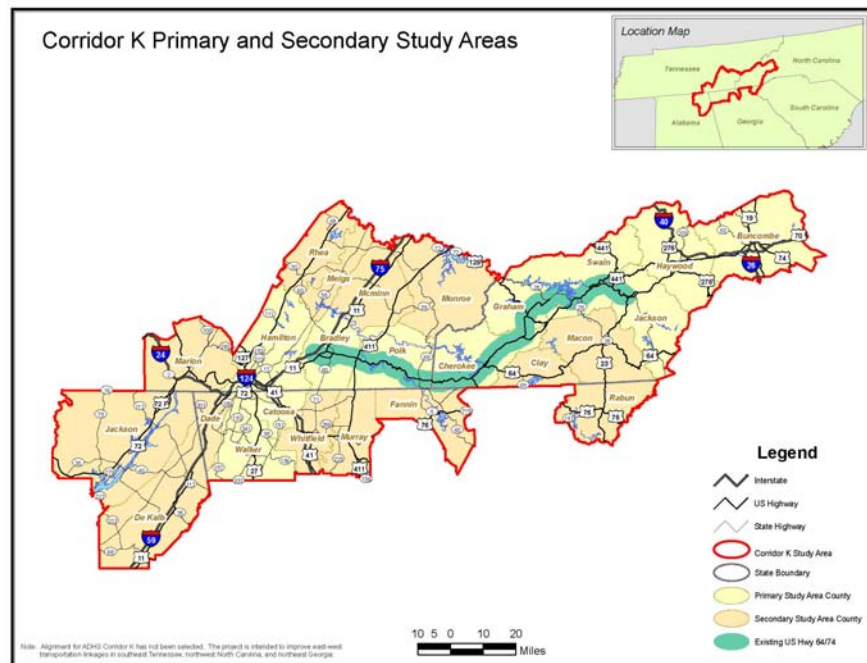
The Corridor K Region is characterized by rural areas anchored on the east by Asheville and to the west by Chattanooga and Cleveland, TN. As international trade changes economies around the world, the needs of existing businesses in the Corridor K Region are being transformed and new opportunities are emerging. In 2006, over 18,406 companies in North Carolina, Georgia, and Tennessee exported goods produced in those states to countries around the world and over 79% of those exporting firms were small and medium sized businesses. Foreign-owned businesses employ well over 500,000 people in this three-state region. Over 57% of the existing businesses participating in the Corridor K transportation survey have national and international customers and almost 50% purchase supplies and materials from international firms as well.

Economic prosperity has been achieved in some parts of the Corridor K Region however; there are still significant areas that suffer from limited employment opportunities, low family incomes, and constrained local tax revenues that affect the quality of schools, libraries, parks, and transportation services. The lack of east-west transportation connections impacts the region's economic development and creates a feeling of isolation when a rock slide or traffic accident cuts residents off from emergency services, access to schools and jobs, and creates added cost for businesses. The lack of east-west connections impacts businesses in the more prosperous communities as well. Interviews with larger shippers and carriers in the region found that while they have made accommodations to deal with the lack of east-west transportation connections they estimated that additionally incurred costs because of the alternate routings may be as high as 15% to 20%, a cost that will continually to affect the competitiveness of this region in the future.

Socio-economic Profile of the Corridor K Region

Corridor K is part of the Appalachian Development Highway System (ADHS) originally proposed by the Appalachian Regional Commission (ARC). This proposed corridor would link the metropolitan areas of Chattanooga, TN and Asheville, NC. The primary study area for this economic development and transportation report includes the Tennessee counties of Hamilton, Bradley, and Polk; the North Carolina counties of Buncombe, Cherokee, Graham,

Haywood, Jackson, and Swain, and the Georgia counties of Catoosa and Walker. A secondary study area was also defined that included twelve counties adjacent to the primary Corridor K Region that are closely tied economically, including:



Primary Study Area Counties

Tennessee

Bradley County
Hamilton County
Polk County

Georgia

Catoosa County
Walker County

North Carolina

Buncombe County
Cherokee County
Graham County
Haywood County
Jackson County
Swain County

Secondary Study Area Counties

Tennessee

Marion County
McMinn County
Meigs County
Monroe County
Rhea County

Georgia

Dade County
Fannin County
Murray County
Rabun County
Whitfield County

Alabama

DeKalb County
Jackson County

Population and Labor Market Characteristics

The overview that follows provides information on the baseline economic conditions within the Corridor K study area compared with the three states of Georgia, Tennessee and North Carolina.

In 2004, the Corridor K Region contained a population of nearly 1.2 million. Over the past fourteen years, population in the region has increased at a slower rate than the three states as a whole but the growth rate for the region is higher than the nation as a whole which grew at less than one percent per year during this period.

Population

	<u>1990</u>	<u>2000</u>	<u>2004</u>
Corridor K Region	1,163,596	1,347,224	1,399,925
3-State Total	17,984,038	21,925,049	23,351,895

(Source: US Census Bureau 1990 and 2000 Census with EDR-LEAP growth calculators)

Average Annual Growth Rate

	<u>1990-2000</u>	<u>2000-2004</u>
Corridor K Region	1.5%	1.0%
3-State Total	2.0%	1.6%

(Source: US Census Bureau 1990 and 2000 Census with EDR-LEAP growth calculators)

The percent of the population over the age of 25 with a bachelor's degree or higher is frequently used as an indicator of workforce skill level. In the Corridor K Region, 16.9 percent of the population over the age of 25 have received a bachelor's degree or higher compared to 22.5 percent of the population in the three state Region. If Buncombe and Hamilton Counties are excluded, only 12.4% of the population has a bachelor's degree of higher. The Corridor K Region workforce skill level is also lower than the national average of 27 percent.

The national three year average unemployment rate from 2001 – 2003 was 5.5% compared to a 6.2% average in North Carolina, a 5.1% average in Tennessee and a 4.6% average in Georgia. Unfortunately, unemployment in several of the Corridor K counties was significantly higher than the respective state averages, as shown below:



Three-Year Average Unemployment Rate 2001-2003

<u>County</u>	<u>Unemployment Rate</u>
Cherokee County, NC	8.9%
Graham County, NC	8.9%
Haywood County, NC	5.9%
Swain County, NC	8.7%
Polk County, TN	6.0%

According to the 2000 census 12.4% of the population of the United States lived below the poverty level compared to 13.5% in Tennessee, 12.3% in North Carolina, and 13% in Georgia. Based upon 2004 census estimates, poverty levels for many counties in the Corridor K Region exceed national and state averages as shown below:

2004 Estimates, Percent Population in Poverty

Buncombe County, NC	13.8%
Cherokee County, NC	15.1%
Graham County, NC	16.7%
Haywood County, NC	13.8%
Jackson County, NC	15.8%
Swain County, NC	15.4%
Catoosa County, GA	9.4%
Walker County, GA	12.5%
Bradley County, TN	13.9%
Hamilton County, TN	14.6%
Polk County, TN	15.1%

In 2006 per capita income in the United States grew by 6.3% to \$35,276. The table below shows the per capita income in each of the primary Corridor K counties during the same period and the percentage of the national per capita income

Bradley	\$28,631	79%	Polk	\$23,125	64%
Buncombe	\$30,789	85%	Swain	\$21,803	60%
Cherokee	\$21,726	60%	GA	\$31,891	
Graham	\$28,262	78%	NC	\$32,234	
Haywood	\$31,609	87%	TN	\$32,304	
Jackson	\$25,297	70%			

(Source: 2006 Woods & Poole data)



According to a recent Transportation Research Board study, 73 percent of all commuters work within their county of residence. A report, “The Toll of Rural Commuters in the U.S” prepared by the Population Reference Bureau found that about 30 percent of rural area residents commute more than 30 minutes one way to work each day. Rural residents in the Corridor K Region face many challenges relative to employment including finding a job with livable wages in reasonable proximity to their home, the rising cost of fuel and vehicle maintenance, and challenges related to child care when working some distance from home. Within the Corridor K Region, a significant number of workers commute each day out of their home county in many instances because of the lack of quality jobs in their county of residence.

Commuting Patterns in Corridor K Region

County of Residence	Percent Commuting Outside of County of Residence
Catoosa County, GA	73.2%
Walker County, GA	58.7%
Bradley County, TN	23.3%
Hamilton County, TN	9.0%
Polk County, TN	70.4%
Buncombe County, NC	11.0%
Cherokee County, NC	18.7%
Graham County, NC	24%
Haywood County, NC	27%
Jackson County, NC	26%
Swain County, NC	28%

Accidents, rock slides, slower tourist traffic, and oversize vehicles often delay workers traveling along the existing east-west corridors in the Corridor K Region. When employees are delayed it affects the entire operation of some smaller businesses and creates operational problems for larger businesses as well. The crash data contained in a later section of this report provides additional crash data for U.S. 64 and 74.

Corridor K Region Business and Employment

Many employers in the Corridor K Region are classified as non-traded business sectors. Non-traded businesses are primarily local or regional businesses including consumer services, health care, and retailing; the growth and prosperity of these businesses is driven by growth in the local or regional population. Traded business sectors sell their goods and services to customers outside the region or to non-local customers who come to the region essentially “importing” new income into the region. Economic prosperity can not be maintained by selling more inherently local services to people within the region although these businesses are very important to the quality of life in the region. The traded sector businesses in the Corridor K Region bring “new” money into the area by competing successfully against businesses in other regions and other countries. It is the growth and success of traded sector businesses that ultimately drives the entire regional economy.

The economic prosperity of the Corridor K Region depends upon the businesses and industries within the region and their requirements for labor, transportation, utilities, and other services. The following analysis identifies the existing industry mix and trends based on the following indicators:

- Top industries by total employment (2004)
- Top industries by relative employment concentration (2004)
- Industry trends by employment growth (1999-2004)
- Industry employment growth trends relative to national trends (2004)

Trends ratios or “shift-share” are indicators of relative industry trends in the local area while mix ratios or “location quotient” are indicators of relative industry concentration in the local area providing insights on the relative performance of industries in the area compared with similar areas and national averages. Data on the number of jobs in the 55 three-digit NAICS industries are used to measure the mix and trends within local industries in the Corridor K Region and the top industries are reported.



Top Industries by Total Employment in the Corridor K Region (2004)

NAICS	Industry	2004 Employment	% of Total	Mix Ratio
441-54	Retail Trade	100,224	2.6%	1.16
920	Government	97,684	12.3%	0.86
621-24	Health & Social Services	66,866	8.4%	1.00
721-22	Lodging, Eating, Drinking	59,309	7.5%	1.03
230	Construction	47,567	6.0%	0.87
541-51	Prof. Scientific, Tech Serv.	41,088	5.2%	0.79
561	Admn. & Support Services	35,448	4.5%	0.75
811-12	Repair & Maintenance	30,172	3.8%	1.12
314	Textile Product Mills	29,138	3.7%	8.52
481-87	Transportation	24,532	3.1%	1.20

Employment concentration is evaluated by *mix ratio* which is the ratio of the percent of employment in a given industry to the percent of employment in that industry in the three-state region (TN< GA< NC) as a whole. The table below shows the Corridor K Region industries with mix ratios above 1.10 percent, these are industries with at least ten percent higher employment than the same industry in the three-state region. The industry with the highest concentration, textile product mills and textile mills both employ a large number of people in the Corridor K Region. Several of the industries with significant employment concentrations are very vulnerable in today's global marketplace and are of particular concern to economic development officials in the region.

Top Industries by Employment Concentration in the Corridor K Region

NAICS	Industry	Mix Ratio	Employment
314	Textile Product Mills	8.52	29,138
316	Leather & Allied Products	3.92	743
315	Apparel Manufacturing	3.61	10,149
313	Textile Mills	2.57	16,245
335	Electric Equip., Appliances, etc.	2.44	9,739
322	Paper Manufacture	1.92	6,969



325	Chemical Manufacture	1.74	9,691
312	Beverage & Tobacco Products	1.49	2,161
524	Insurance Carriers & Related Activities	1.24	14,427
333	Machinery Manufacturing	1.23	6,373
481-87	Transportation	1.20	24,532
441-54	Retail Trade	1.16	100,224
811-12	Repair, Maintenance, Personal Serv.	1.12	30,172

(Source: IMPLAN with EDR-LEAP)

Total employment in the Corridor K Region grew at a slightly lower rate than in the three-state region as a whole and below the national average. The table below shows the industries in the Corridor K Region with the greatest employment growth between 1997 – 2004. The growth industries producing the most significant increases in terms of number of jobs include professional, scientific, and technical services; repair, maintenance, and personal services; also real estate.

Industry Trends by Employment Growth, 1997-2004

NAICS	Industry	1997	2004	Av. Annual % Growth
532	Rental & Leasing Services	2,507	6,334	14.2%
312	Beverage & Tobacco Products	1,255	2,616	11.1%
491-93	Mail, Package Delivery & Warehousing	6,548	12,676	9.9%
814	Private Households	4,348	8,286	9.7%
525	Funds, Trusts, & Other Financial Vehicles	305	563	9.1%
514	Internet & Data Process Services	349	624	8.6%
541-51	Professional Scientific, Technical, Services	25,797	41,088	6.9%
316	Leather & Allied Products	478	743	6.5%
811-12	Repair, Maintenance, & Personal Services	20,541	30,172	5.7%
531	Real Estate	11,196	15,844	5.1%
	All Industries –Corridor K	746,481	796,108	0.9%



NAICS	Industry	1997	2004	Av. Annual % Growth
	All Industries – 3-State Total	--	--	1.0%
	All Industries – U.S.	--	--	1.0%

(Source: IMPLAN with EDR-LEAP)

Trend ratio compares industry size and growth in one area to the nation as a whole. The table below shows those industries in the Corridor K Region with Trend Ratios of 1.1 or greater which suggests that they have a high proportion of employment in the region and rapid growth relative to the nation as a whole. Transportation, accommodations, eating and drinking, mail and package delivery, and warehousing are sectors with growth potential that are particularly reliant on transportation connections.

Trend Ratio (1997-2004)

NAICS	Industry	2004 Employ	Av. Annual Growth Rate			Trend Ratio
			Corridor K	3-State Total	U.S.	
521-23	Monetary, Financial, & Credit Activity	16,978	4.8%	2.8%	1.2%	4.0
514	Internet & Data Process Services	624	8.6%	8.1%	2.5%	3.4
532	Rental & Leasing Services	6,334	14.2%	5.1%	4.7%	3.0
481-87	Transportation Administrative & Support Services	24,532	4.4%	1.6%	1.5%	2.9
561	Mail, Package Delivery & Warehousing	35,448	1.3%	1.2%	0.6%	2.2
491-93	Repair, Maintenance & Personal Services	12,676	9.9%	5.9%	4.7%	2.1
811-12	Government Professional, Scientific & Technical Services	30,172	5.7%	3.9%	3.0%	1.9
920	Accommodations, Eating & Drinking	97,684	1.4%	1.2%	1.0%	1.5
541-51	Private Households	41,088	6.9%	6.2%	5.4%	1.3
721-22	Educational Services	59,309	3.1%	2.6%	2.3%	1.3
814		8,286	9.7%	7.6%	8.0%	1.2
611		6,394	1.2%	1.9%	1.0%	1.1

(Source: IMPLAN with EDR-LEAP)

Relative Cost Factors

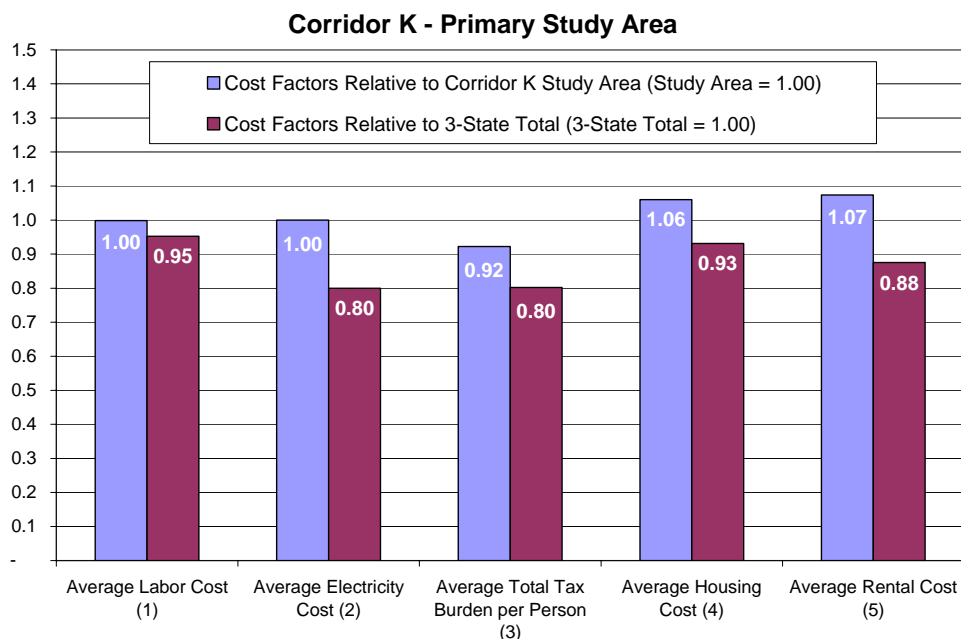
Other factors being equal, businesses locate where they can minimize their cost of operation. These factors include labor, housing, transportation, electrical power, and taxes. In the following analysis five indicators are used to evaluate differences in non-transportation costs throughout the corridor relative to the region as a whole:

- Average Labor Cost (per year in Retail)
- Average Electricity Cost (\$/kWh)
- Average Total Tax Burden per Person (\$ per year)
- Average Housing Cost (\$ for a single family home)
- Average Rental Cost (\$ per month)

The relative differences in labor costs is shown here using the retail sector as retail occupations are comparable across different areas. In contrast, manufacturing occupations vary depending upon the mix of manufacturing industries in a given area. The result is that areas that have high shares of employment in manufacturing industries requiring highly-specialized workers will reflect a higher overall labor cost than areas with more basic, low-cost manufacturing. Using retail wages avoids this distortion.

The figure on the following page shows several cost of living and business cost factors in the Corridor K Region relative to the three-state total. Cost factors are indexed so that values below 1.0 reflect a cost advantage for the Corridor K Region and those that exceed 1.0 reflect higher costs in the Corridor K Region when compared to the three-state total.

Relative Cost Factors for Corridor K Region and Three-State Total



Notes: (1) Average Labor Cost, \$ per year in retail; (2) Average Electricity Cost, \$/kWh; (3) Average Total Tax Burden per Person, \$ per year; (4) Average Housing Cost, \$ for a single family home; (5) Average Rental Cost, \$ per month (residential)
 (Source: IMPLAN with EDR-LEAP)

Tourism and the Corridor K Economy

Travel and tourism is the third-largest component of the U.S. GDP injecting over \$400 billion in revenue annually and employing more than six million people. It is one of the top three employers in 34 states. Based upon domestic travel expenditures the states of Georgia, North Carolina, and Tennessee rank second, third and fourth respectively relative to travel expenditures in the southern region of the US. Tourism is an important component of the Corridor K Region's economy and is particularly critical to the more rural counties in the region.

Many factors influence tourism expenditures in the Corridor K Region. The availability of a range of lodging and restaurant options, access to tourism services, the quality and diversity of attractions and tourism "products" that are of interest to a range of age groups and income levels; accessibility of the area on a safe and reliable transportation corridor; the

availability of marketing and advertising funds that increase public awareness and the brand identity of the region and opportunities within the region to work collaboratively to package attractions and activities that will appeal to a range of visitor markets and increase the number of overnight visitors to the region.

Current Tourism Expenditures and Local Tax Receipts

	Tourism Expenditures	Local Tax Receipts
Buncombe	\$645 M	\$20.7 M
Cherokee	\$34 M	\$2.19M
Graham	\$24M	\$1.66M
Haywood	\$111M	\$4.78M
Jackson	\$68M	\$5.6M
Swain	\$240M	\$5.3M
Bradley	\$90M	\$1.9M
Hamilton	\$601M	\$13.2M
Polk	\$16.89M	\$1.56M

(Source: TN Tourism Data 2004, NC Tourism Data 2006)

Eight-one percent of the tourism expenditures in the Corridor K Region occurred in just three counties: Buncombe County, NC; Swain County, NC; and Hamilton County, TN and 68% of the total tourism expenditures were made in Hamilton County and Buncombe County. The remaining Corridor K counties shared just over \$19.7 million in local tax receipts compared with almost \$35 million in local tax receipts from tourism expenditures in Hamilton County and Buncombe County.

As a part of the strategic planning process, tourism experts and regional stakeholders were asked to identify options to “grow” visitor revenues in the Corridor K Region. As an example, the Corridor K Region is recognized for its outdoor adventure assets. According to the Travel Industry Association of America, over 31 million adults engaged in adventure activities in the past five years including activities such as whitewater rafting and mountain biking. These travelers are more likely to be young, single, and employed when compared to all other U.S. adults (source: Adventure Travel Report TIAA). The region’s whitewater businesses are aggressively working to expand this market and have been successful in extending the season.

According to a study conducted by the National Geographic Traveler and the Travel Industry Association, the interest in eco-tourism is a strong growth area for the tourism industry in the future. A study of North American Ecotourism Markets found that:

- Travelers in ecotourism markets want a range of activities that are land and water based, with both active and passive elements
- The top ranked activities are casual walking, wildlife viewing and hiking/trekking
- While there is a continued need for modest accommodations, travelers are more likely to desire a range of accommodations including Inns, B & B's, luxury lodges, ranches as well as cabins and camping
- Ratings show wilderness, wildlife viewing, visiting parks and protected areas, walking/hiking and learning experiences as highly valued elements of the trip

There are opportunities to expand ecotourism activities in the Corridor K Region in the future. This opportunity reinforces the importance of balancing environmental stewardship and economic prosperity in this region within a context that will encourage the long term quality of development and preservation of environmental assets.

III. Economic Development in the Corridor K Region

Existing Business and Industry

In recent years a new economic challenge has daunted many Appalachian communities as some companies relocated manufacturing operations off-shore to remain competitive in the international marketplace. With a higher concentration of manufacturing jobs in the Appalachian region, seventeen percent of all jobs compared to eleven percent in the US as a whole, this transformation has had a more significant impact in this area of the country. Manufacturing employment in Appalachia was essentially flat from 1990 to 1998, however between 1998 and 2003, employment in manufacturing declined by eighteen percent in the Appalachian Region.

For the first time in our lifetime, manufacturing competitiveness is not leading to manufacturing job growth for 90% of the countries in the world including the US. Manufacturing jobs have declined but five out of six of those job losses were the result of productivity gains, primarily due to increased worker output and new technology. As competition increases, manufacturing firms are investing in technologies that allow them to increase production capacity and improve efficiency. Manufacturing firms will continue to make new location and expansion decisions although not at the same pace as they did in the past. A recent study by the University of Tennessee, “Looking for Opportunity in Tennessee’s Manufacturing Sector” finds that:

- Competitiveness of Tennessee’s manufacturers is affected by features of the local communities where their facilities are located. These local characteristics have a significant impact on the cost of doing business and ultimately on the productivity of business operation. Important factors affecting costs and competitiveness including public and private infrastructure including roads and highways, labor market conditions, technology, taxes and government services, and economic development incentives
- While jobs in the manufacturing sector are expected to gradually decline in the next decade manufacturing output will continue to increase. State manufacturing GDP is

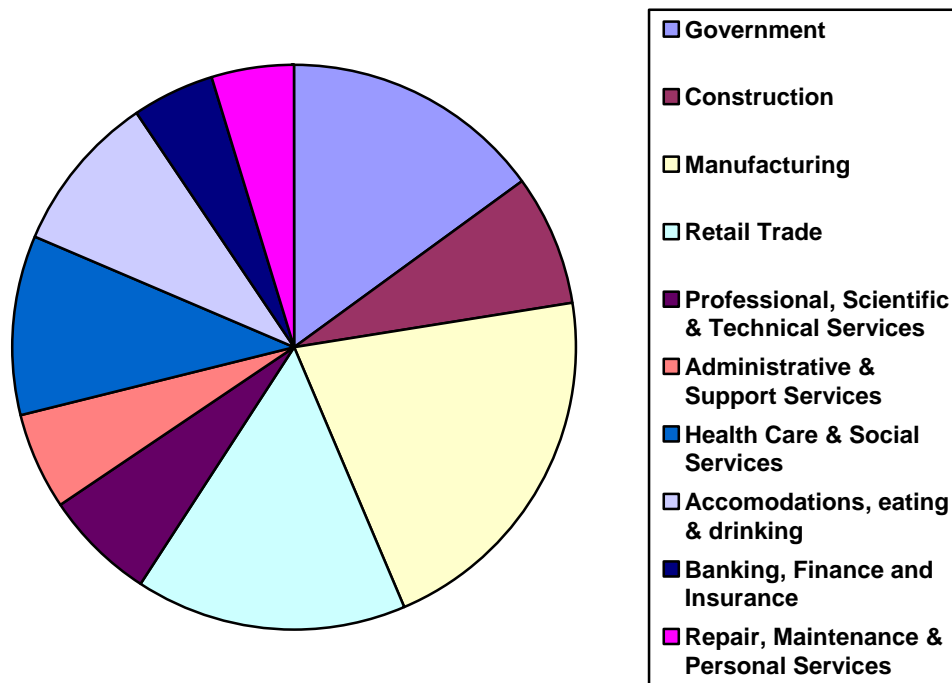


forecast to rise by 53.1 percent between 2006 – 2016, with only the apparel subsector experiencing a reduction in output by 2016. New technologies and better skilled workers will be instrumental to achieving this output growth.

The businesses in the Corridor K Region were traditionally centered around manufacturing activities and natural-resource based industries. In today's global economy, mass production whether assembling electronics, reading x-rays, sewing blue jeans or providing computer tech support can be done almost as easily and often more cost effectively outside the U.S. The Corridor K Region today possesses a number of competitive advantages for high value manufacturing, professional, and scientific services, machine manufacture, tourism, and other business sectors, economic diversification and sustaining existing businesses is absolutely vital to the future prosperity of the region.

The Corridor K Region includes the metropolitan areas of Chattanooga and Cleveland, Tennessee and Asheville, North Carolina. Within the region, these metropolitan communities continue to experience relatively stable economic growth while the more rural communities in the Corridor K Region are more dependent on vulnerable or seasonal business sectors including textiles, furniture, construction, and tourism. The employment mix in the Corridor K Region is balanced among manufacturing, retail trade and government and growth sectors include high-technology sectors such as telecommunications, professional and technical services and finance and insurance services.

Percentage of Total Employment within Corridor K Study Area



Major Employers in the Corridor K Region

Company	County	No. of Employees
Memorial Mission Hospital	Buncombe	1,000+
Buncombe Co. Bd. Of Education	Buncombe	1,000+
Ingles Markets Inc.	Buncombe	1,000+
The Grove Park Inn	Buncombe	1,000+
The Biltmore Co	Buncombe	500-999
Murphy Medical Center	Cherokee	500-999
Cherokee Co. Bd. Of Education	Cherokee	500-999
Freds	Cherokee	250-499
Indian Head Industries Inc	Cherokee	100-249
Sioux Tools	Cherokee	100-249
Stanley Furniture Co. Inc.	Graham	250-299
Graham Co Schools	Graham	100-249



Graham County	Graham	100-249
Fontana Village Inc.	Graham	100-249
Phillips & Jordan Inc.	Graham	100-249
Haywood Co Schools	Haywood	1,000+
Blue Ridge Paper Products	Haywood	1,000+
Haywood Regional Medical	Haywood	500-999
Haywood County	Haywood	500-999
Haywood Community College	Haywood	250-499
State of North Carolina	Jackson	1,000+
C J Harris Hospital	Jackson	500-999
Jackson County Schools	Jackson	500-999
Jackson County	Jackson	250-499
Excell Employment Services	Jackson	250-499
Eastern Band of the Cherokee	Swain	1,000+
Cherokee Boys Club Inc	Swain	250-499
Swain County Schools	Swain	250-499
Consolidated Metco Inc	Swain	250-499
Nantahala Outdoor Center Inc.	Swain	100-249
Hutcheson Medical Center	Catoosa	1,400
Catoosa County Schools	Catoosa	1,125
Shaw Industries	Catoosa	1,112
Wal-Mart Super Center	Catoosa	450
Candlewick Yarn	Catoosa	370
Roper Corp.	Walker	1,800
Hutcheson Medical Center	Walker	1,400
Walker County Schools	Walker	1,334
Shaw Industries Chickamauga	Walker	1,250
Shaw Industries Lafayette	Walker	494
Whirlpool Corporation	Bradley	2,000
Peyton's Southeastern Inc	Bradley	1,200
Masterfoods USA	Bradley	800
Cleveland Chair Company	Bradley	525
Duracell Global Business	Bradley	525
Blue Cross Blue Shield of TN	Hamilton	2,001+

City of Chattanooga	Hamilton	2,001+
Erlanger Health System	Hamilton	2,001+
Hamilton County Schools	Hamilton	2,001+
McKee Foods Corporation	Hamilton	2,001+
Copper Basin Medical Center	Polk	117
American Uniform	Polk	117
Roxanne Crystal Geyser	Polk	101
Conasauga Lumber Company	Polk	57
Remington Industries	Polk	30

Global competition will continue to increase and the Corridor K Region must be concerned about how they will sustain existing businesses in the region and attract the quality jobs that are needed to provide economic prosperity for the people who live here. To effectively compete in the future the regions competitive advantages must be continually monitored, challenges facing existing businesses must be assessed, and consideration given to improving the business environment. Economic development has become everyone's businesses, the local schools, DOT's, community colleges, permitting agencies, the banks, utility companies, the local governments, and transportation agencies.

Through the Corridor K Economic Development Strategic Planning process and review of a number of target industry and cluster studies conducted for the region, we identified sustainable existing businesses and emerging business sectors that regional economic development organizations are actively engaged in recruiting to the region. Those sectors are:

- Sustainable existing business sectors including:

Tourism and recreation
Distribution and Logistics
Finance and Insurance Services
Appliance Manufacturing
Food and Beverage Products
Transportation Equipment
Electrical Equipment and Electronics
Machinery Manufacturing
Fibers and Textiles
Health Care Services

Environmental Technologies

- Emerging business clusters including:

Advanced manufacturing and materials

Fabricated metal products and metal working

Industrial machinery

Agribusiness and specialty food processing

Health care

Information technology and instruments

Plastics

Arts and crafts

Business and Information Services

A number of factors affect the viability and competitiveness of businesses in the Corridor K Region and their ability to survive and hopefully prosper in the future. A Corporate Site Location survey is conducted annually and reported in the *Area Development Site and Facility Planning* magazine (the 21st survey was conducted in 2006). This survey is primarily conducted with Presidents, CEOs, Board Chairmen, VPs, and Corporate Officers to identify the types of new facilities their companies will be opening in the near future, the expanded or relocation of facilities, primary reasons for relocation, and the key site selection factors that are critical to their location or expansion decisions. The top site selection factors for 2006 were:

Site Selection Factors for Businesses

Ranking	Factor	2005	2006
1	Labor Costs	87.9	95.0
2	Highway accessibility	91.4	90.9
3	Corporate tax rate	85.0	90.8
4	State and local incentives	86.0	88.6
5	Availability of telecommunications	79.8	88.3
6	Tax exemptions	83.6	86.7
7	Occupancy or construction cost	83.7	85.5
8	Availability of skilled labor	87.2	85.1
9	Energy availability and cost	82.8	82.4

10	Availability of high-speed internet	85.7	82.1
11	Cost and availability of land	79.1	79.2

The top quality of life factors in the 2006 survey were:

Ranking	Factor	2005	2006
1	Low crime rate	67.8	70.8
2	Ratings of public schools	56.8	64.4
3	Housing costs	60.0	63.9
4	Health facilities	62.1	60.8
5	Housing availability	59.3	54.4

Business assets in the Region

In order to fully assess the ability of the Corridor K Region to effectively sustain existing businesses and attract new business and industry to the area, we reviewed the availability of several key site selection factors within the region. A number of significant economic development assets were identified in the region to support the continued growth of business operations in the area.

Within the Corridor K Region there are a number of colleges, universities, community colleges, and workforce skills training programs. These institutions offer a broad range of educational and training services to improve the skill base of the workforce in the region and provide upgrade training for employees as new technologies are introduced. These services include customized workforce training, targeted business research to assist a specific company or industry, and specialized curriculum to facilitate on-the-job training programs. Universities and Colleges in the Corridor K Region include:

University of North Carolina at Asheville

Western Carolina University at Cullowhee

Warren Wilson College

The University of Tennessee at Chattanooga

Lee University

Southern Adventist College

Tennessee Temple University

Community Colleges in the Corridor K Region provide outstanding workforce training programs throughout the region at the following facilities:

Chattanooga State Technical College

Cleveland State Community College

Tennessee Technology Center in Cleveland

Tri-County Community College

Haywood Community College

Southwestern Community College

Another key factor in the region's ability to attract new businesses to the region and support the expansion of existing companies is the availability of land that is suitable for business operations. A review of the Corridor K Region found 136 business parks and industrial sites that are currently available. In addition there are a number of business and industrial buildings available within the region ranging from a 300,000 square foot industrial warehouse in Cleveland to a 7,900 square foot building in Graham County. The following business parks represent a sample of the existing business sites available in the Corridor K Region:

Park or Site	County	Max. Acreage
Enterprise South Industrial Park	Hamilton, TN	1,600 acres
Waupaca Drive	Monroe, TN	1,717 acres
Blairsville Airport Regional Park	Union, GA	85 acres
Denso Drive	McMinn, TN	350 acres
Benton Pike	Bradley, TN	82 acres
Cumming Road	Hamilton, TN	145 acres
Clay Town Regional Park	Towns, GA	81 acres
Asheville Commerce Park	Buncombe, NC	208 acres
Beaverdam Industrial Park	Haywood, NC	78 acres
Bruce Green Property	Swain, NC	99.10 acres



Salmon Site	Cherokee, NC	50 acres
Copper Basin Industrial Park	Polk, TN	60 acres
Hidden Valley Park	Jackson, NC	29.7 acres

A range of business incentives are available to new and expanding businesses in Tennessee, North Carolina, and Georgia. Most companies that make a significant capital investment or plan to create a large number of jobs will ask communities for some form of incentives that could include workforce training services, tax abatements, or jobs tax credits. For most companies, these incentives are a mechanism to create equity between the initial start-up costs for various sites that are being considered.

The Corridor K Region has been successful in attracting and retaining businesses in the region. Each business evaluates site factors and other key selection issues based upon their specific operating costs and competitive issues. Based upon the existing business survey of the Corridor K Region, there are a number of regional strengths that businesses in this region identified including: location, quality of life, proximity to Interstate 75, good workforce, cost of living, and natural beauty.

Barriers to Business Growth in the Corridor K Region

In order to fully understand the barriers to business growth in the Corridor K Region, a web-based survey was deployed to existing businesses in the region. Economic Development agencies in Chattanooga, Cleveland, Athens, and Murphy were asked to identify traded sector and larger non-traded sector businesses in their region (traded sector businesses are those businesses that sell their goods and services to customers outside the region or to non-local customers who come to the region; non-traded sector businesses are regional or local businesses providing consumer services) to participate in the survey. A copy of the survey can be found in the Appendix.

One hundred and fourteen businesses participated in the Corridor K Existing Business Survey. These businesses collectively have a total of 27,797 employees and were located throughout the region. Fifty-five percent of the companies participating in the study stated there were barriers to growing their business in the Corridor K Region. The barriers identified most frequently were:

Higher transportation costs

Cost and time to get materials and parts

Difficulty getting products to national and international markets

Port access

Workforce Availability and skill

Lack of east-west transportation connections

Inadequate interstate interchanges

Cost to distribute products

Access to major roads

Sixty-three percent of the businesses participating in the Corridor K survey have national and international customers and four-five companies currently receive goods and materials at various east coast ports including: Savannah, Charleston, Norfolk, Jacksonville, Brunswick, New York-New Jersey, Wilmington, Miami, and Philadelphia. Many of these companies indicated that they receive goods at multiple ports and there are several companies in the region that receive shipments from west coast ports as well. Many businesses in the Corridor K Region are already actively engaged in international trade; however a number of companies indicated in interviews that there were significant challenges accessing port facilities from this region.

When asked about the region's greatest strengths for business companies focused on quality of life and quality of the workforce issues. Workforce availability and skills were identified as a weakness in the region by a number of companies so while companies appreciate the workforce they have there is concern about the size of the labor pool in the region. Businesses also consider the excellent north-south transportation rail and highway corridors as major business assets but identified the lack of east-west connections as a significant weakness and barrier to business growth.

When asked about gaps in the transportation system that pose a serious long term problem for businesses in the Corridor K Region the following were identified most often:

- Higher transportation and supply costs
- Limited access to ports
- Timeliness to receive materials and parts

- Employee travel times
- Accessibility to larger market areas and more customers
- Access to higher skilled employee pool
- Higher operation costs, wear & tear on equipment due to longer distances to many markets
- Missing opportunities that are not economically feasible at this time because of extended travel time to some locations for pickup and deliveries on current highway

Eighty-two percent of the businesses participating in the study said that a highway connecting southeast Tennessee and southwest North Carolina would benefit their business by:

- Reducing transportation costs
- Improving deliveries to customers and allowing for more responsiveness to customer needs
- Open doors for more distribution centers in some communities in the region
- Providing access to a larger pool of employees in the region
- Saving time and fuel costs
- Improved access to multiple east coast ports

Several companies who participated in the survey said:

“Our transportation needs have changes, we get supplies from international companies, we sell to a larger market area. It costs more to ship products to Greenville and trucks have to go to Atlanta—if I-285 is backed up that can take an extra 2 hours and our customers are waiting for our products during that time. We’d also like to receive supplies in several ports like our sister companies do but even though some ports are closer distance wise, it costs more because they have to go through Atlanta to get here.”

“Corridor K would absolutely help our business; this would allow us to expand production here rather than seeing the business growth result in a plant expansion in another facility where they don't have the difference in transportation costs.”



“The long-term effects of limited east/west transportation routes not only increases the price of goods/supplies shipped into our region, but also limits our commercial/industrial growth opportunities: two sectors of customers who provide our company the highest rate of return on investment. These limitations will constrain our company's ability to reduce customer rates over time, and will force overall higher prices for our customers.”

An analysis by industry and by county was conducted to identify opportunities in terms of jobs that could be gained if transportation barriers were removed. The table below contains those industries with potential attraction of 10 jobs or more. Again, the left-most columns present the industries with opportunities by NAICS and name. The next column indicates each county with the potential to add jobs if the “critical” or “important barrier is eliminated, while the remaining 7 right-most columns show potential attraction, secondary growth, new opportunities, 10-year baseline growth, and total potential for each sector.

As **Table A** shows, there are opportunities in manufacturing sectors; however, the majority of opportunities for those industries analyzed in this specific review are in the service sectors. The sectors presenting the greatest opportunities in this analysis include administrative and support services, health care and social services, and professional scientific and technical services. With the exception of Hamilton County, all counties in the Corridor K Region have transportation-related barriers to job growth to some extent. Those barriers include lack of access to workforce, lack of access to a commercial airport; based upon the “Existing Industry Transportation Survey,” other barriers include lack of access to east coast ports, limited cost effective access to larger market areas, and difficulty in providing responsive transportation services to meet customer demands.

This analysis captures economic development and job growth opportunities related to existing industries, local cost factors, and access. There may be additional opportunities associated with improved connections to Charlotte, Greenville/Spartanburg, Raleigh, Asheville, Chattanooga, and east coast ports and with the “auto alley” along Interstates 65, 75, and 85.

Table A. Opportunities

NAICS	Sector		Potential Attraction	Secondary Growth	New Opportunities	10-Year Baseline	Total Potential	Low Range	High Range
112	Animal Production	Bradley	16	8	25	454	479	350	607
		Haywood	12	6	18	139	157	18	296
		Walker	12	6	18	167	185	18	352
313	Textile Mills	Buncombe	28	7	35	0	35	35	39
322	Paper Manufacturing	Buncombe	16	7	23	122	145	23	267
325	Chemical Manufacturing	Bradley	23	8	32	147	179	32	327
	Nonmetallic Mineral Products								
327		Buncombe	28	11	40	0	40	40	40
336	Transportation Equipment	Bradley	13	0	13	0	13	13	15
		Buncombe	23	9	32	0	32	32	32
420	Wholesale Trade	Buncombe	54	14	67	0	67	67	67
		Catoosa	18	5	22	0	22	22	22
		Cherokee	16	4	21	0	21	21	21
		Haywood	14	4	18	0	18	18	18
		Jackson	22	6	27	65	92	27	156
		Walker	23	6	29	0	29	29	29
441-454	Retail Trade	Bradley	952	304	1,256	0	1,256	1,256	1,256
		Buncombe	3,106	991	4,097	0	4,097	4,097	4,097
		Graham	97	31	127	0	127	127	127
		Jackson	390	125	515	32	547	515	580
		Polk	53	0	53	13	66	53	88
		Swain	152	48	200	0	200	200	200
		Walker	297	0	297	0	297	297	345
481-487	Transportation	Bradley	68	25	93	63	156	93	219
		Buncombe	486	176	662	117	779	662	896
		Cherokee	19	7	25	4	30	25	34
		Haywood	18	7	25	23	48	48	48
		Jackson	65	24	89	13	102	89	115
		Polk	20	7	27	6	33	27	40
		Swain	14	5	19	2	22	19	24
		Walker	32	12	44	123	167	100	233
491-493	Mail, Package Delivery & Warehousing	Bradley	27	7	33	142	176	131	221
		Cherokee	18	5	23	19	42	29	55
		Haywood	15	4	19	69	88	71	106
		Jackson	41	10	51	159	211	168	253
		Swain	10	2	12	7	19	12	26
		Walker	14	4	18	41	59	18	101
511	Publishing Industries (except	Bradley	42	18	61	0	61	61	61
		Haywood	14	6	21	0	21	21	21
514	Internet & Data Process Services	Bradley	7	3	10	0	10	10	10
		Haywood	4	2	7	0	7	7	7
524	Insurance Carriers & Related Activities	Bradley	410	192	602	198	800	602	998
		Buncombe	417	195	612	0	612	612	612
		Catoosa	121	57	178	0	178	178	178
		Cherokee	13	6	19	0	19	19	19
		Graham	6	3	9	8	17	9	25
		Haywood	113	53	166	0	166	166	166
		Jackson	10	5	15	0	15	15	15
		Polk	8	4	11	9	20	11	29
		Swain	1	0	1	0	1	1	1
		Walker	89	42	131	0	131	131	131
532	Rental & Leasing Services	Bradley	28	12	40	70	110	54	166
		Buncombe	156	37	193	958	1,152	904	1,413
		Haywood	24	10	34	148	183	145	221
		Jackson	24	10	33	43	77	66	88
		Swain	11	5	16	20	36	31	41

Table A. Opportunities (Continued)

NAICS	Sector		Potential Attraction	Secondary Growth	New Opportunities	10-Year Baseline	Total Potential	Low Range	High Range
541-551	Professional Scientific, Technical, Services	Bradley	540	152	692	594	1,285	692	1,879
		Buncombe	1,055	0	1,055	6,466	7,522	6,340	8,852
		Catoosa	696	0	696	425	1,120	1,063	1,275
		Cherokee	61	0	61	503	564	472	664
		Graham	10	3	13	15	28	13	44
		Haywood	248	70	317	680	997	873	1,121
		Jackson	310	87	397	522	919	824	1,014
		Polk	10	3	13	15	28	13	43
		Swain	45	13	58	28	86	58	114
561	Administrative & Support Services	Walker	114	32	146	122	268	146	390
		Bradley	548	0	548	70	618	548	779
		Catoosa	476	69	545	216	762	579	988
		Cherokee	226	74	300	8	308	300	315
		Graham	58	0	58	10	67	65	79
		Haywood	238	78	316	19	335	316	355
		Jackson	65	0	65	519	584	127	1,053
		Polk	25	8	34	1	35	34	35
		Swain	47	16	63	2	65	63	68
562	Waste Mgmt & Remediation	Walker	171	56	227	14	242	227	256
		Buncombe	15	6	21	80	100	21	180
611	Educational Services	Buncombe	19	8	27	87	113	27	200
621-624	Health Care & Social Services	Buncombe	448	0	448	5,154	5,602	5,319	5,970
		Catoosa	183	0	183	658	841	730	987
		Cherokee	197	74	271	172	443	271	615
		Graham	26	10	36	26	62	40	85
		Haywood	233	12	245	430	675	545	844
		Jackson	291	9	300	368	668	498	888
		Polk	37	14	51	36	87	51	123
		Walker	110	42	151	379	530	421	639
813	Religious, Civic, Professional, Organizations	Buncombe	310	48	358	132	490	358	666
		Haywood	53	23	76	22	98	76	121
		Jackson	140	29	169	10	179	169	205
		Swain	144	63	207	10	217	207	228
		Walker	43	19	62	19	81	62	100

Source: EDR-LEAP.

Tourism in the Region

The metropolitan communities in the Corridor K Region have a diversified economic base with employment in manufacturing, professional and business services, financial activities, health services, and tourism. Most of the remaining Corridor K counties are heavily dependent upon public administration, education and health care, and tourism. In 2004 there was \$1,799,300,000 in visitor expenditures in the Corridor K Region generating almost \$57 million in local tax receipts. Tourism expenditures in the Corridor K Region increased by 1.7% in 2002-2003 and the area experienced a 2.8% increase in visitor expenditures in 2003-2004.

The Blue Ridge Heritage Area (includes Buncombe, Cherokee, Graham, Haywood, Jackson, and Swain Counties as well as 19 other western NC counties) has conducted a series of studies to assess the economic impacts and visitor demographics from tourism in their region. These studies have been conducted by Appalachian State University and Western Carolina University using various surveys and economic data from the 25 westernmost counties in North Carolina. The findings from these reports, while not directly applicable to the entire Corridor K Region, can offer valuable insights into visitor expectations that are important to the entire Corridor K Region.

In the Blue Ridge Heritage Area, almost 78% of the visitors stayed at least one night, with an average trip expenditure of \$747.07 compared to day visitors with an average expense of \$172.02. In an analysis of product preferences, the study found that the top three tourism products for females were craft activities, music activities, and Cherokee Nation sites; for males the top three products included outdoor recreation, festivals & special events, and visiting farms. For overnight visitors the top tourism products were music activities, craft activities, and outdoor recreation compared to day visitors where the top tourism products were visiting farms, Cherokee Nation sites, and festivals & special events. The most frequently reported primary activity for visitors to the Blue Ridge Heritage Area was scenic drives/Blue Ridge Parkway (32.16%) followed by outdoor recreation (24.69%).

A “National Visitor Use Monitoring Results” study completed in August 2003 for the Cherokee National Forest reported almost 2.5 million site visits annually to the forest. From that study 73% of Cherokee NF visitors were male, 36.1% were between the ages of 21 – 40 and only 7.1% were over the age of 61. The primary activities sites include fishing, hiking or walking, general relaxation, and hunting. A 2006 study of Polk County, TN tourism impacts found there were 205,724 Ocoee River users, 210,470 Hiwassee River users, 56,000 passengers on the Blue Ridge Scenic Railway, 309,157 visitors to the Ocoee Whitewater Center, and 4,800 visitors to the Ducktown Basin Museum.

The wide range of tourism expenditures for the various counties in the Corridor K Region reflect the current tourism infrastructure as well as the market and advertising budgets in these counties. Organizations including the Tennessee Overhill Association, Cherokee County Visitors Center, and the Cleveland-Bradley County Chamber of Commerce continue



to work to development additional attractions and expand the tourism infrastructure for the region.

Tourism Assets in the Region

The Corridor K Region includes a diverse collection of tourism assets from the Biltmore Estate in Asheville, the Harrah's Hotel and Casino in Cherokee, the Tennessee Aquarium in Chattanooga to whitewater rafting and rock climbing adventures and craft schools. The 2006 Blue Ridge Heritage Area Visitor Study identified activities engaged in by both day and overnight visitors and found the following:

<u>Primary Activity</u>	<u>Day Visitors</u>	<u>Overnight Visitors</u>
Historic Sites	11.95%	18.8%
Outdoor Recreation	25.9%	25.37%
Scenic Drive/Blue Ridge Parkway	32.75%	31.26%
Agricultural Activities	3.49%	1.21%
Cherokee Activities	1.74%	3.63%

Within the Corridor K Region there is a wealth of tourism assets that could attract a range of visitors to the region. The region is well known for its outdoor recreation assets that tend to attract a younger predominately male visitor. Other assets in the region could ultimately assist in expanding the tourism season in the region and appeal to a broader visitor market. The key to increasing the economic benefits of tourism to more counties in the Corridor K Region is to increase the number of overnight visitors by packaging a variety of attractions and experiences region wide. The assets outlined below represent a small example of the region's diverse tourism assets.

Outdoor Recreation Assets

Outdoor recreation assets include the challenging class IV rapids of the Ocoee River, site of the 1996 Atlanta Olympic Games. The Nantahala River with class II and III rapids also provide exciting rafting experiences. Local companies provide guided hikes, mountain biking, fishing treks, rock climbing and repelling, horseback riding, hang gliding and bird watching though

many of these activities can also be done without guides. There are four national parks and national forests in the Corridor K Region including the Chattahoochee and Oconee National Forests, Nantahala National Forest, Great Smoky Mountains National Park and the Cherokee National Forest as well as several state forests and state parks.

The natural resources of the Corridor K Region provide an outstanding opportunity for expanding eco-tourism in the region offering “experiential tourism” programs as well as outdoor adventures. The remediation of the Cooper Hill Mines creates the potential for an Environmental Education Center that could demonstrate the ability to effectively restore even the harshest affects of industrial pollution.

Historic & Cultural Heritage Assets

The Corridor K Region has a rich cultural heritage including old trade passages, Native American history, the remnants of the Industrial Revolution, as well as historic theaters and art galleries. The Cherokee Heritage Museum, Qualla Arts & Crafts Mutual, and “Unto These Hills” outdoor drama allow visitors to share the unique culture and history of the Eastern Band of the Cherokee Nation. The cultural, historic, and folk-life resources of this region have been preserved in the Historic District of Reliance, in beautiful downtown Murphy NC, the John C. Campbell Folk School, and the Museum of the Cherokee Indian. Other cultural heritage assets in the region include:

The Biltmore Estate
Hunter Museum of American Art
Fields of the Wood
Museum of North Carolina Handicrafts
Old Line Railroad
Groveswood Gallery

Eastern Band of the Cherokee Nation
Nancy Ward Grave
Junaluska Museum and Trail
Sequoyah Birthplace Museum
Unicoi Turnpike Trail
The Etowah Depot

Agri-Tourism Assets

Agri-tourism provides many of the communities in the Corridor K Region with an opportunity to share their agricultural heritage assets and preserve family farms. From the historic Hickory Nut Gap Farm in Buncombe County to the Mayfield Dairy in Athens, TN there are many unique opportunities in the region to enjoy local products and experience farm life. In this region there are “pick-your-own” farms, historic orchards, farmer’s markets and Christmas tree farms and nurseries. Opportunities exist to stay on a farm at several B & B’s in the region. Agri-tourism assets in the Corridor K Region include:

Yellow Branch Farm & Pottery
Sweetwater Valley Cheese
Delano Daylilies
Mercier Orchards
Jess Jenkins Cranberry Bog

Nesbitt Christmas Tree Farm
Savannah Oak Winery
Asheville Botanical Gardens
Benton’s Country Hams
Elk Mountain Nursery

Barriers to Tourism Growth in the Corridor K Region

Many of the Corridor K tourism assets have traditionally attracted day visitors or catered to very specialized interests such as whitewater rafters, bird watchers or mountain bikers. Most outdoor recreational activities are seasonal and while there have been successful efforts to extend the tourism season such as the sand hill crane tours, train rides and festivals visitor traffic declines significantly in the off-season.

A significant barrier to the growth of tourism in this region is the lack of funds to market and advertise the region and provide seed funds to improve existing tourism assets. The Three Corners Cultural Heritage Tourism effort and other tourism organizations including the Tennessee Overhill Association have developed a number of regional trails and tours increasing the number of visitors to the region.

Some counties in the region have limited lodging and restaurant options; however, the tourism infrastructure will grow as private industry begins to see the volume of visitors expand. Within the Corridor K region there are many unique resorts, bed & breakfasts,



cabins, and farm home lodging options and several four star restaurants and home-cooking cafes as well.

Although U.S. 64 is designated as a scenic byway, visitor traffic competes with logging trucks and other oversized vehicles on a narrow two-lane road. The existing road is a barrier to the growth of tourism in this region and a number of tourism organizations advise against travel on this road discouraging visitors from this corridor. By comparison, travelers on the Blue Ridge Parkway do not compete with truck traffic and this drive is rated as one of the top visitor attractions in Virginia and North Carolina generating millions of dollars in tourism revenues for the communities along the parkway. Although there are many beautiful scenic vistas on U.S. 64/74 the corridor lacks many features that would allow visitors to stop enjoy the environmental assets and scenery of this region.

IV. Economic Development and Transportation

The role of Transportation in Economic Development

Sufficiency of transportation connections are a growing concern to business leaders and economic developers throughout the Corridor K region. Increasing competition in the global marketplace, rising fuel costs, and traffic congestion in key metropolitan areas such as I-285 north of Atlanta and I-40 in Knoxville are beginning to put the squeeze on Corridor businesses. This presents a unique challenge for economic developers throughout the area as they seek to improve the standard of living through job retention, expansion, and diversifying employment options with higher-wage jobs.

This section of the report considers specific linkages between transportation and economic development by evaluating the potential for transportation improvements in the Corridor K Region to generate economic development benefits for the region. Building on earlier profiles of the region's economy, this section will characterize and quantify the economic development benefits in terms of job attraction that could occur as a result of increased transportation connectivity resulting from the proposed project.

Transportation connections are important to economic development because:

1. Workers need access to jobs and employers need access to workers
2. Manufacturers need to be able to receive raw materials and send finished products to market
3. Retailers need to be able to receive consumer goods and consumers need to be able to reach retail stores
4. Tourists and business travelers need access to regional attractions, lodging, and local businesses.

To retain and expand jobs in existing industries, as well as diversify the local economy by attracting new businesses, the regional transportation system must address those four needs. Naturally, each industry utilizes transportation modes differently. For example, a manufacturer of light weight high-value products may tend to rely more on truck or air transport, while a paper mill will rely more on rail and port transportation. Though the focus

of this analysis is on highway transportation, it indirectly addresses air, rail and port sensitivities as well. Most firms rely on a combination of transportation modes, and with the exception of firms located adjacent to an airport, seaport or rail facility, highways are a key link between businesses and these other modes.

This analysis is organized into the following sections

1. An overview of the Corridor K region and targeted industries
2. Transportation Reliant Industries – Insight from Transportation Satellite Accounts
3. Transportation barriers to job growth for Corridor K target industries
4. A conservative estimate of job growth potential that could result from the completion of Corridor K

Many of the communities in the Corridor K Study Area have participated in a comprehensive economic development planning processes that identified sustainable and emerging target industries. The purpose of this analysis is to determine how reliant Corridor K target industries are on highway transportation as well as the extent to which highway transportation presents a barrier to job growth. A complete list of targeted industries can be found in the strategic plan.

Corridor K Target Industry Reliance on Transportation

Transportation's role in economic development is multidimensional, and as such, no single measure tells the complete story. This analysis looks at the issue from several different perspectives, yielding a more complete picture of reliance on transportation connections within Corridor K.

Transportation Reliant Industries – Insight from Transportation Satellite Accounts

One measure of reliance on highway, air, rail, and port modes of transportation can be gleaned using data from the US Department of Transportation Bureau of Transportation Statistics Transportation Satellite Accounts (TSA). TSAs reflect the amount each industry spends on a given mode of transportation per dollar of output. Industries with higher than average expenditures on a given mode of transportation are more sensitive to changes in access to that mode, as it accounts for a greater portion of the industry's cost structure.

One caveat this measure only captures *expenditures* on transportation and therefore does not capture all aspects of an industry's reliance on a given mode of transportation. Specifically, it does not address reliance on pass-through traffic (such as tourists), consumer and workforce access, costs associated with incoming deliveries that are incurred by the sender, nor transportation costs for firms operating their own delivery fleets. Nonetheless, it is an important "first cut" measure to identify industries with relatively high reliance on a given mode of transportation. Other aspects of transportation reliance will be addressed in the next section.

The existing transportation system, under which current industry concentrations and trends developed, varies throughout the Corridor. Hamilton County, at the western end of the corridor, has very good highway connections in three directions, with access to air, rail intermodal, and a river port. Buncombe County, at the eastern end of the corridor, also has excellent highway connections in three directions, including access to the Port of Charleston. Conditions in the Corridor K region between these two counties vary widely. Some segments of U.S. 64/74 have been improved providing 4-lane semi-divided highway while other segments of this road provide only 2 lane undivided roadways, resulting in highly variable levels of service for businesses within the corridor needing access to businesses, customers, and employees elsewhere within the corridor and beyond, as well as regional airports, rail intermodal loading facilities and water ports. To appropriately evaluate the influence of transportation connectivity on industry performance in the context of these varied local transportation conditions, the Corridor was divided into three sub-regions: Hamilton County, Buncombe County, and the Corridor Interior (all other primary and secondary study area counties).

Table 1 presents transportation dependence in Corridor K target industries (at the 3-digit NAICS level). Dollar values of expenditures on transportation per dollar of value added were indexed such that 1.0 is average, 2.0 is two times higher than average, etcetera. As the table shows, most of the target industries in Corridor K have higher than average reliance on transportation.

It should be noted that the indexes for industries such as health care and social services; professional scientific and technical services; administrative and support services; and insurance carriers and related activities do not reflect the importance of workforce access

for these industries. Similarly, the indexes for accommodations, eating and drinking and amusement and recreation overlook the very important aspect of access for tourists. These special circumstances will be treated later in this analysis.

**Corridor K Target Industry Transportation Dependence Index
and Employment**

NAICS	Industry	Transportation Dependence Index ¹		Employment (2005)			
		Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
621-24	Health Care & Social Services	0.49	0.76	26,911	18,665	327	45,903
721-22	Accommodations, Eating & Drinking	0.72	0.76	25,429	19,513	115	45,057
541-51	Professional, Scientific, Technical	0.69	0.76	15,412	17,696	294	33,402
311	Food Products	2.51	2.01	3,354	7,334	20,196	30,884
561	Administrative & Support Services	0.71	0.95	14,881	13,960	1,190	30,031
325	Chemical Manufacturing	3.64	1.97	2,649	4,558	13,934	21,141
332	Fabricated Metal Products	1.10	0.94	2,835	3,766	8,194	14,795
524	Insurance Carriers & Related Activities	1.15	0.57	1,732	12,524	187	14,443
326	Plastics & Rubber Products	2.20	0.97	2,537	641	7,836	11,014
335	Electric Equipment, Appliances, etc.	1.34	1.33	6,338	653	986	7,977
333	Machinery Manufacturing	1.51	1.44	1,762	3,067	2,124	6,953
711-13	Amusement & Recreation	0.45	0.58	4,089	2,176	45	6,310
312	Beverage & Tobacco Products	1.40	1.18	373	498	2,304	3,175
111	Crop Production	0.53	2.42	2,764	158	160	3,082
115	Support for Agriculture & Forestry	0.34	1.53	529	65	2,354	2,948
562	Waste Management & Remediation	7.07	0.95	743	259	1,262	2,264
518	Internet & Data Process Services	0.97	1.17	46	407	376	829

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

The TSA transportation expenditures data shown above in Table 1 was analyzed with employment concentration and growth trends from LEAP. It was observed that industries generally fell into one of three categories:

- 1) Industries with above average reliance on transportation and above average concentration in Corridor K
- 2) Industries with above average reliance on transportation and below average concentration in Corridor K
- 3) Industries below average reliance on transportation and below average concentration in Corridor K

Industries in each category are discussed below with an explanation of what trends in the industry imply regarding dependence on transportation, and what existing trends and transportation dependence imply for the future growth of each industry.

Industries with Above Average Reliance on Transportation and Above Average Concentration in Corridor K

There are several reasons that industries may be both highly dependent on transportation and relatively large in the region despite transportation challenges, as each of the industries below demonstrate. However, increasing competition from abroad, rising fuel costs, and congestion delays may begin to stymie job attraction in these industries, or even begin to contribute to job losses.

Chemical Manufacturing (NAICS 325) Includes target industry Medicinal and Botanical Manufacturing (NAICS 325411). This industry is relatively large in Hamilton County and the interior of the Corridor, though not in Buncombe County. According to the Bureau of Labor Statistics, although output is expected to grow, wage and salary employment in the chemical manufacturing industry is projected to decline by 14 percent over the 2004-2014 time period.

A number of factors will influence employment in this sector including more efficient production processes, increased automation, company mergers and consolidation, increased foreign competition, and environmental health and safety concerns. There is however, an increasing demand for specialty chemicals and businesses that remain competitive must differentiate their products and produce specialty chemicals. Companies such as Alco Chemical and Sofix Corporation both located in Chattanooga have been

successful developing and producing specialty products. Though this sector gained jobs between 2000 and 2005 in Hamilton County, it shed jobs in the interior of the corridor.

Table 1. Overview of Chemical Manufacturing

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Chemical Manufacturing	3.64	1.97	2,649	4,558	327	7,534

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Plastics & Rubber Products (NAICS 326) Includes target industry “All other plastic manufacture” (NAICS 326199). This industry is relatively large in the interior of the Corridor, with smaller numbers in Hamilton County and Buncombe County. According to a target industry profile prepared by the Wadley-Donovan Group and the Chattanooga Chamber of Commerce, plastics manufacturing represents a viable target industry for this region building upon an existing plastics manufacturing base, including companies like WNA American Plastics and M & M Industries each of whom produce unique specialty plastic products including containers for biohazard wastes and pharmaceutical containers. Although employment is expected to decline over the next ten years primarily due to improved productivity companies that improve quality and control costs can by competitive. This business sector grew in the interior of Corridor K between 2000 and 2005, held steady in Buncombe County and lost jobs in Hamilton County.

Table 2. Overview of Plastics & Rubber Products

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Plastics & Rubber Products	2.20	0.97	2,537	641	327	3,505

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Electric Equipment & Appliances (NAICS 335). Includes targets Fiber Optic Cable Manufacture (NAICS 335921) and Household Appliance Manufacture (335211). This industry is relatively highly concentrated in the interior as well as Hamilton County.

This industry is declining nationally, and declined throughout Corridor K between 2000 and 2005. There may be more jobs for assemblers and fabricators in the electric equipment and appliance sectors as more components are fabricated in foreign countries and shipped to the U.S. for assembly and customization in the future.

Table 3. Overview of Electric Equipment & Appliances

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Electric Equipment & Appliances	1.34	1.33	6,338	653	2,354	9,345

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Waste Management & Remediation (NAICS 562). Includes target industry Remediation and other waste management services (NAICS 5629). Both the interior of the Corridor and Hamilton County have relatively high concentrations of employment in this industry, though the total number of jobs is small. Nationally, the industry grew at a rate of nearly 8 percent per year between 2005. Nonetheless, the industry shed jobs in both Hamilton and Buncombe Counties during the same period, growing only in the interior of the Corridor.

Table 4. Overview of Waste Management & Remediation

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Waste Management & Remediation	7.07	0.95	743	259	187	1,189

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Internet & Data Processing (NAICS 518). Includes target industry Data Processing (NAICS 5182). This industry has relatively high proportions of employment in both Buncombe and Hamilton Counties, but has only a handful of employees in the interior. The transportation index measure does show that the industry has above average reliance on air travel/cargo. However, it does not reflect the industry's dependence on highways for workforce access, the importance of which will be underscored later in this analysis.

Table 5. Overview of Internet & Data Processing

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Internet & Data Processing	0.97	1.17	46	407	160	613

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Food Products (NAICS 311). Includes target industry Food and beverage manufacture (NAICS 311330). This sector is relatively large only in Hamilton and Bradley Counties and includes companies such as McKee Foods, Masterfoods USA M & M Mars, and the manufacturer of "Moon Pies". The food and beverage manufacturing sector was identified as a primary target industry in a target industry study for Hamilton County in 2002. According to the Bureau of Labor Statistics, employment in this sector is expected to increase by 4 percent

over the 2004 – 2014 period. Job growth will be concentrated in food manufacturing although automation will affected employment growth in the future.

Table 6. Overview of Food Products

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Food Products	2.51	2.01	3,354	7,334	294	10,982

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Fabricated Metal Products (NAICS 332). Includes target industry Industrial Valve Manufacture (NAICS 332911). It is relatively large only in Hamilton, though employment in the rest of the corridor is not inconsequential. Though the industry is in decline nationally, it losing jobs at a slower rate in Hamilton, and actually grew between 2000 and 2005 in Buncombe County. A niche market tool manufacturing business exists in the Murphy, NC region. According to the Bureau of Labor Statistics, excellent job opportunities are projected for this sector, however foreign competition and automation will affect future job growth.

Table 7. Overview of Fabricated Metal Products

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Fabricated Metal Products	1.10	0.94	2,835	3,766	1,190	7,791

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Machinery Manufacturing (NAICS 333). Includes targets Construction Machinery Manufacture (NAICS 333120), Cutting Tools & Machine tool manufacture (NAICS 333515), Turbine & Turbine generator unit manufacture (NAICS 333611), Power drive hand tool manufacture (NAICS 333991). This industry is highly concentrated in Hamilton County, one of

the county's historically strong industries. Despite national job losses in this industry, employment in Hamilton held steady between 2000 and 2005.

Table 8. Overview of Machinery Manufacturing

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Machinery Manufacturing	1.51	1.44	1,762	3,067	2,124	6,953

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Insurance Carriers & Related Activities (NAICS 524). Includes targets Direct Health & medical insurance carriers (NAICS 524114) and Direct property and casualty insurance carriers (NAICS 524126). This industry employs large numbers in Hamilton County, while employment in the rest of the study area is relatively low. Between 2000 and 2005, the industry grew in Hamilton, despite a decline nationwide. The transportation index for this industry shows somewhat higher than average dependence on highway; however, this measure does not capture the industry's dependence on workforce access, which is also a function of highway connectivity. This dependence will be demonstrated later in this analysis.

Table 9. Overview of Insurance Carriers & Related Activities

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Insurance Carriers & Related Activities	1.15	0.57	1,732	12,524	986	15,242

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)



Industries with Above Average Reliance on Transportation and Below Average Concentration in Corridor K

The following industries have lower than average shares of employment, which can indicate room for expansion. However, like the industries already discussed, they are also highly reliant on transportation, which may have implications as economic developers try to foster employment growth in these industries.

Crop Production (NAICS 111) and Support for Agriculture and Forestry (NAICS 115). Crop Production (NAICS 111) includes targets Greenhouse, Nursery, Floriculture (NAICS 1113) and Non-citrus fruit and tree farming (NAICS 11133)). Support for Agriculture & Forestry (NAICS 115) includes target industry Forestry support activities (NAICS 115310). Both industries are primarily located in the interior of the Corridor, due to the urban and suburban nature of Hamilton and Buncombe Counties. In the interior of the Corridor, Crop Production represents an average share of employment, neither over nor underrepresented. However, between 2000 and 2005, the interior Corridor counties lost jobs in this industry at an average rate of 11.9% per year, more than twice the nationwide rate. In addition to relatively high dependence on air travel shown below, the crop production industry relies on workforce access, the significance of which will be illustrated later in this analysis.

Support for Agriculture & Forestry is fairly small, employing only 639 throughout the corridor, with the majority of this employment in the interior of the corridor. Though this industry is relatively small nationwide, it is notable that it accounts for a smaller proportion of total employment in the Corridor K region than it does in states that contain the corridor. The potential for additional specialty crops and agriculture production in the more rural Corridor K Counties offers opportunities within this region.

Table 10. Overview of Crop Production and Support for Agriculture and Forestry

	Transportation Dependence Index ¹		2005 Employment			
	Highway	Air	Interior	Hamilton County	Buncombe County	Corridor Total
Crop Production	0.53	2.42	2,746	158	376	3,280

	Transportation Dependence Index ¹		2005 Employment			
Support for Agriculture & Forestry	0.34	1.53	529	65	45	639

¹Expenditures on transportation per \$ of output, indexed to the average such that 1.0 = average expenditures per \$ of output on the given mode.

(Source: TSA and LEAP with IMPLAN employment data)

Industries with Below Average Expenditures on Transportation

The industries with lower than average Transportation Dependence Indexes are as follow:

- Administrative & Support Services
- Professional Scientific, Technical Services
- Accommodations, Eating & Drinking
- Amusement & Recreation
- Health Care & Social Services

Though the Transportation Dependence Indexes for these industries indicate that they spend lower than average amounts on highway and air transportation compared with other industries, it should not be inferred that these industries do not depend on highway and air access. On the contrary, these industries are heavily dependent on transportation connections in the following ways:

- The professional scientific and technical services and administrative and support services industries both require access to a large labor pool, a fact underscored by the large numbers they employ (more than 78,000 Corridor-wide). Transportation connections are a key factor in determining the size of the labor catchment area.
- The accommodations, eating and drinking and amusement and recreation industries depend on transportation connections to that bring visitors to their attractions, museums, activities, lodging, restaurants, and other tourism offerings.
- The health care and social services industry requires transportation connections that allow the population to access regional hospitals, health clinics, and social service.

Since the above aspects of transportation dependence are not captured in this index, therefore these industries will be evaluated by a more appropriate measure later in this analysis.

Transportation Barriers to Job Growth for Corridor K Target Industries

The previous section presented one measure of the extent to which Corridor K target industries are more or less sensitive to highway transportation relative to the average industry. However, as noted above, it does not capture all dimensions of business reliance on transportation access, and additional measures are needed to complete the picture. This section evaluates the extent to which transportation connectivity and access presents a barrier to future job growth in Corridor K target industries. This analysis was completed using LEAP which identifies numerous costs (labor, utilities, taxes, housing) and non-cost (broadband infrastructure, labor quality, and transport access) barriers to job growth by industry. Four of the factors LEAP evaluates are directly tied to transportation access:

- Workforce availability
- Access to a water port
- Access to a commercial airport
- Access to a freight rail intermodal facility

The analysis of barriers is based on the extent to which each industry relies on (1) key cost factors (labor, electricity, rental and ownership housing, and tax burden), (2) transportation access to labor markets, airports, sea ports and rail intermodal loading facilities, and (3) workforce characteristics (workforce skill level, size of labor market). The interior Corridor counties were compared to statewide conditions/trends/factors in Tennessee, North Carolina and Georgia, which best takes into consider the wide range in accessibility throughout the corridor. Hamilton County was compared to Knox County, Tennessee, as it is similar in size and economic vibrancy, but has excellent transportation in all four directions (versus three directions in Hamilton). Buncombe County was compared to Spartanburg County, South Carolina for the same reason. LEAP uses these comparisons to establish ratings of the adequacy of local conditions for each industry. The system then determines the extent to which each of the factors (cost, access, workforce) affects each county's observed industry mix and trend performance. The result is an identification of the unmet

performance gap remaining for each industry in the study Area counties, and an identification of which factors are holding back the area from fully closing that gap.

Factors are determined to be either “important” or “critical” barriers currently impeding growth in those economic sectors with employment growth potential. A factor is categorized as causing a “critical” barrier holding back business attraction if that factor plays a large role in the competitiveness of a specific industry and the Study Area’s barrier is large relative to the Comparison Area. A factor is categorized as “important” if: 1) that factor is of moderate importance for the competitiveness of a specific industry and 2) the Study Area county’s barrier is significant but not huge relative to the Comparison Area.

Table 13 presents the critical and important transportation barriers for Hamilton County, the interior of Corridor K, and Buncombe County. Barriers to workforce access are shown explicitly, which is particularly illuminating for industries such as professional scientific and technical services and administrative services which did not exhibit reliance on transportation by the previous cost-based measure. This table shows that transportation presents a critical or important barrier to job growth in nearly every target industry. The next section quantifies the number of jobs that could be gained throughout Corridor K if these barriers were resolved.

Table 11. Corridor K Transportation-Related Barriers to Job Growth, by Industry

		1 = Critical Barrier 2 = Important Barrier					
		Hamilton County		Interior		Buncombe County	
NAICS	Industry	Work- force Access	Hwy/Air/ Port/Rail	Work- force Access	Hwy/Air/ Port/Rail	Work- force Access	Hwy/Air/ Port/Rail
111	Crop Production	-	-	-	-	1	-
115	Support for Agriculture & Forestry	-	-	-	-	-	-
311	Food Products	-	1	-	1	1	1
312	Beverage & Tobacco Products	1	-	-	-	-	-
325	Chemical Manufacturing	-	1	-	1	1	1
326	Plastics & Rubber Products	-	1	-	-	1	1
332	Fabricated Metal Products	-	-	-	-	1	-
333	Machinery Manufacturing	-	-	-	-	1	-
335	Electric Equipment, Appliances, etc.	-	-	-	-	-	-
518	Internet & data process svcs	-	-	-	-	-	-
524	Insurance Carriers & Related Activities	-	-	1	-	1	-
541-51	Professional Scientific, Technical Services	1	-	2	2	-	-

		1 = Critical Barrier 2 = Important Barrier					
		Hamilton County		Interior		Buncombe County	
		Work- force Access	Hwy/Air/ Port/Rail	Work- force Access	Hwy/Air/ Port/Rail	Work- force Access	Hwy/Air/ Port/Rail
NAICS	Industry						
561	Administrative & Support Services	1	2	2	2	1	2
562	Waste Management & Remediation	1	2	-	-	1	2
621-24	Health Care & Social Services	1	2	1	2	1	2
711-13	Amusement & Recreation	1	-	-	1	-	-
721-22	Accommodations, Eating & Drinking	1	-	-	1	-	-

(Source: EDR-LEAP with employment data from IMPLAN, US Census, and ESRI)

Job Attraction Potential

In this section an estimate of the number of jobs that could be gained in the region as a result of an improved east-west highway connection such as Corridor K was developed. As the proposed facility type, level of service and alignment associated with this project have not been determined, this analysis is based conservatively on conceptual improvements to highway travel times, airport, rail intermodal and seaport facility access, and labor market catchment areas. The results are presented in Table 14. As the table shows, the completion of Corridor K could attract nearly 3,700 jobs within the targeted industry sectors and an additional 3,300 jobs in other industries across the region in a five year period. The largest gains would occur in the professional scientific and technical services industry (1,205 jobs), followed by significant gains in accommodations, eating and drinking (628 jobs) and administrative and support services (616 jobs). These are conservative estimates, and the actual design of the corridor will determine the number of jobs ultimately created.

Table 12. Job Attraction Potential of Corridor K

NAICS	Industry	Jobs Created/Attracted
111	Crop Production	33
115	Support for Agriculture & Forestry	12
311	Food Products	31
312	Beverage & Tobacco Products	20
325	Chemical Manufacturing	193
326	Plastics & Rubber Products	6
332	Fabricated Metal Products	59
333	Machinery Manufacturing	110
335	Electric Equipment, Appliances, etc.	2
518	Internet & Data Process Services	0
524	Insurance Carriers & Related Activities	131
541-51	Professional Scientific, Technical, Services	1,205
561	Administrative & Support Services	616
562	Waste Management & Remediation	55
621-24	Health Care & Social Services	453
711-13	Amusement & Recreation	130
721-22	Accommodations, Eating & Drinking	628
Sub-total – Jobs Created in Target Industries		3,684
Jobs Created in Non-target Industries		3,348
TOTAL		7,032

(Source: EDR-LEAP)

Though the gains above may seem small when compared to the total number of existing jobs in the region, depending on where in the corridor the jobs are created, they could make a very significant impact on local economies throughout the region. Furthermore, when the contribution to personal income is considered, the impact is more obvious. To illustrate, if the average salary for jobs gained was just \$30,000 per year, that would mean an annual influx of \$210 million in personal income.

Summary of Economic Development and Transportation Linkages

Regional economic development stakeholders have identified a variety of industries to target for future growth based on their current presence in the region, past growth trends and compatibility between industry needs and local characteristics. This analysis has shown that the majority of industries targeted for growth in Corridor K have a relatively high degree of reliance on transportation. Furthermore, it was demonstrated that transportation



access, including workforce access, is a significant or important barrier to job attraction in most target industries.

Finally, job attraction potential estimated by LEAP under a conservative, conceptual scenario totaled more than 7,000 jobs in all industries, of which nearly 3,700 would accrue to targeted industries.

It is worth noting that an industry need not be highly sensitive to transportation for it to be critical for businesses within that industry. Transportation is fundamentally important even to firms that are not above average in reliance on transportation. In recent years, fuel prices have increased at rates far outstripping inflation and many industries cannot pass this increasing cost on to customers. This has many companies tracking transportation expenditures very closely, looking for ways to cut costs. As these factors accelerate, the question at the firm level shifts from “is our business heavily reliant on transportation” to “what location provides the most competitive transportation access”. At the same time, other regions have made and are making significant improvements in their transportation linkages in order to provide the most competitive business environment possible for existing companies. The focus of this analysis was job creation; however, job attraction is an important consideration as well. Areas that have shown a commitment to improving transportation links and costs are becoming more attractive for relocation and expansion.

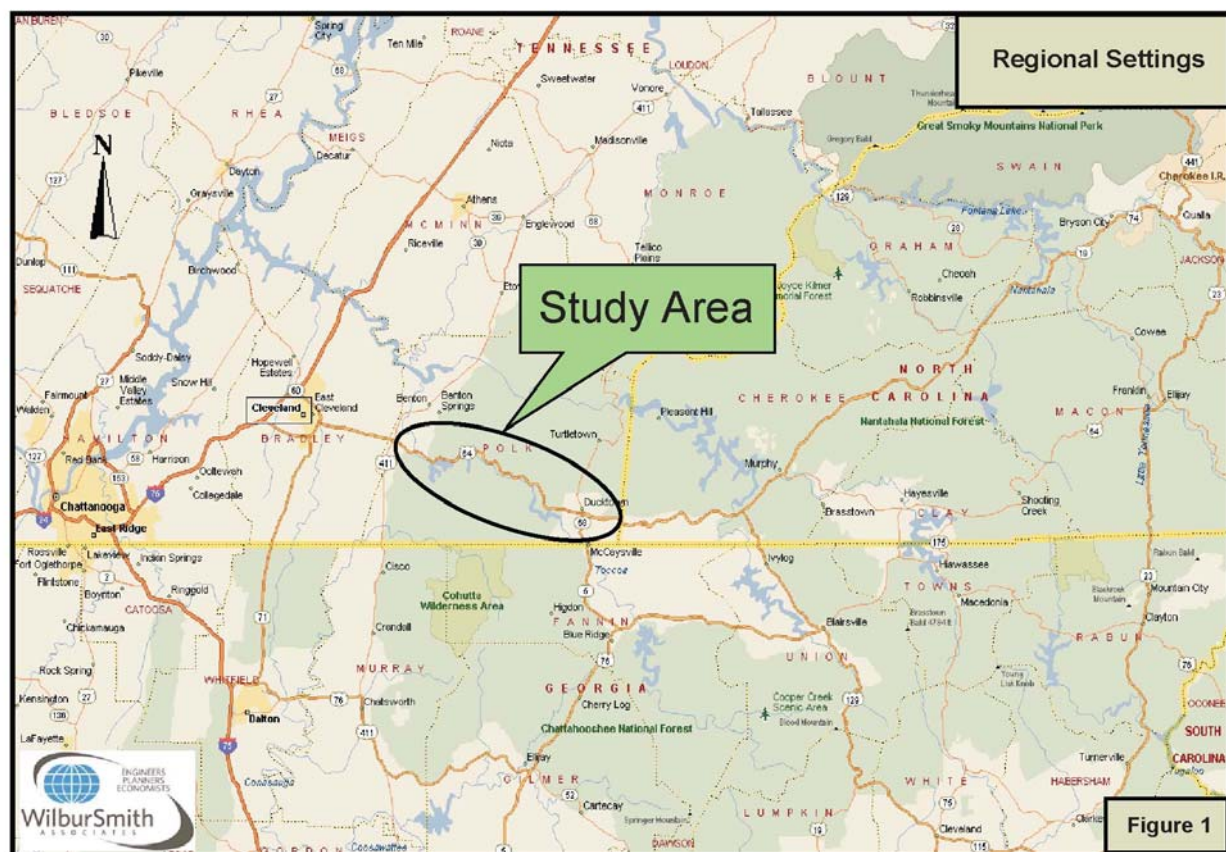
V. Existing Transportation Conditions in the Corridor K Region

The importance of transportation to the economic development of the Corridor K Region is clearly demonstrated in the analysis presented in the previous section of this report. In order to fully understand the current conditions affecting the economic development of this region, Wilbur Smith Associates conducted an analysis of the traffic conditions on U.S. 64 in Tennessee and U.S. 64/74 in North Carolina.

Polk County, Tennessee, US 64 Traffic Analysis

Study Area

The study area, as shown in **Figure 1**, consists of 23.3 miles of US-64 (State Route 40) within the Cherokee National Forest. The primary uses of US-64 are recreation, commuter, and



movement of goods. The Ocoee River/Lake system provides white water rafting that attracts many tourists. Heavy trucks hauling lumber to adjacent lumber mills also frequently use this route.

Data Collection

On Thursday, August 23rd, WSA personnel drove the “Corridor K” route from Cleveland TN to Dillsboro NC. Data such as no-passing zones, shoulder widths, laneage, speed limits, and signage were collected. Video taping was also performed for additional review. TDOT Region 2 provided additional data on roadway geometrics, TRIMS data and accident records.

Previous Studies

There were two previous studies performed in the Corridor K environs. A *Road Safety Audit Report* was conducted by the Tennessee Department of Transportation (TDOT) in 2006. Also a *Draft Environmental Impact Statement and Draft Section 4(f) Evaluation (EIS)* by a consulting firm for the U.S. Department of Transportation, Federal Highway Administration, and Tennessee Department of Transportation in 2003. The *Road Safety Audit Report* began at log mile (L.M.) 0.90 (Reynolds Bridge Rd.) and ended at L.M. 26.25 (SR 68 Underpass) and was separated into 18 L.M. segments. Analysis of the information determined all 18 segments exceeded the statewide average injury and/or fatal crash rate. General observations throughout the project area were made and listed in the report. Information on posted regulatory and warning signs as well as horizontal and vertical alignment was given on each site. A section on “Guidance” was provided with suggestions for improving traffic flow and safety.

The EIS reviews TDOT’s proposal to construct a 20.4 mile segment of Corridor K as part of the Appalachian Development Highway System (ADHS) in Polk County, Tennessee. The action would relocate and improve a section of US 64 (SR 70) to satisfy the design standards appropriate for a roadway on the ADHS and the National Truck Network. The purpose of the proposed action was five-fold:

- Improve/provide system linkages;
- Achieve appropriate design standards;

- Improve safety of vehicles and pedestrians;
- Reduce travel delays for through traffic; and,
- Promote the mission of the U.S. Forest Service (USFS) Scenic Byway Program.

According to the EIS, the road plan would be consistent with the current *Cherokee National Forest Land and Resource Management Plan* and the *Ocoee Scenic Byway Guidelines for Management and Interpretation*. The project has logical termini by connecting an existing four-lane section of US 64 on the eastern end and a proposed four-lane section on the western end.

The EIS also looked at two alternatives, the no-build and build alternatives. The build alternative had two possible alignments. The potential impact, both positive and negative, for the no-build and build alternative were discussed in detail. The environmental consequences were outlined with suggestions to minimize or mitigate these impacts.

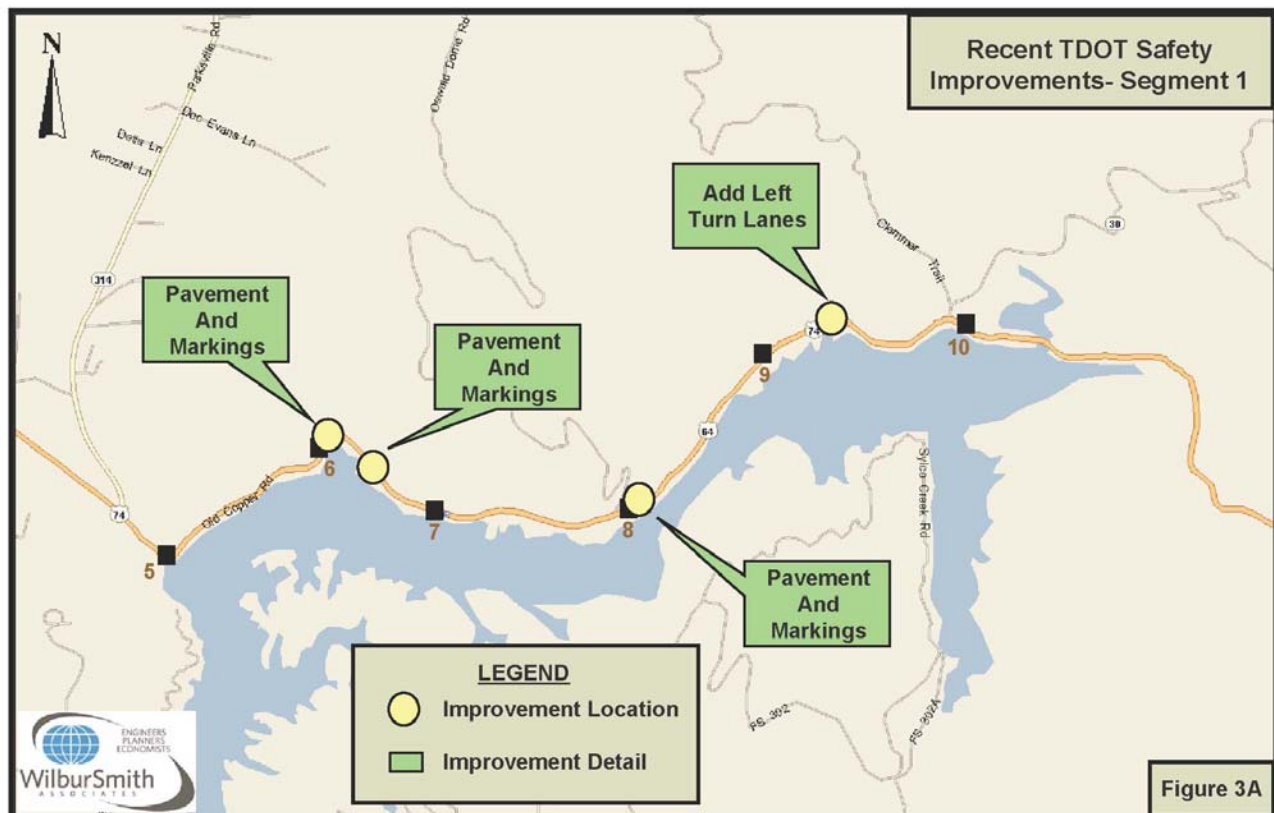
Road Characteristics

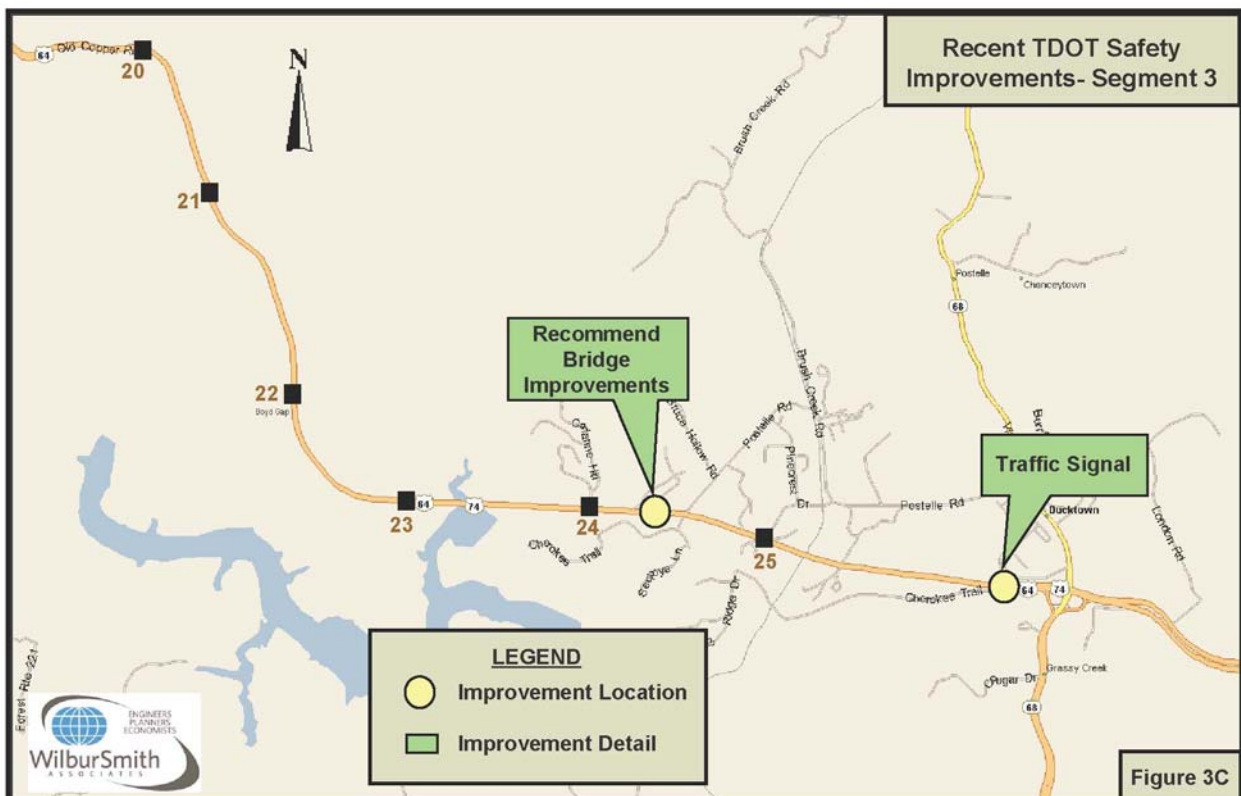
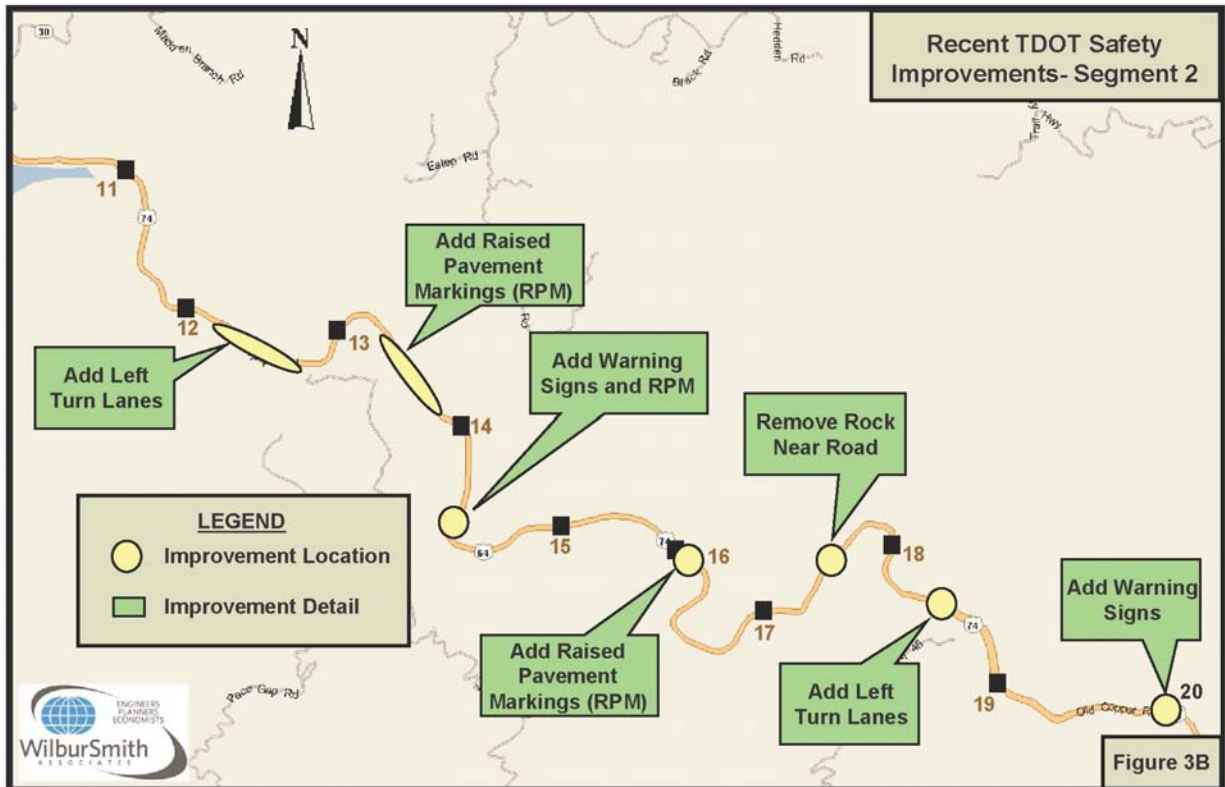
The roadway closely follows the Ocoee River/lake system with vertical rock cuts on the westbound side and drop-offs to the waterway on the eastbound side. **Figures 2A, 2B, and 2C (found in the Appendix)** show the roadway characteristics within the study area. Eighty percent of the roadway consists of only two lanes and fifteen percent two lanes with truck climbing lanes. The predominant speed limit is 45 miles per hour (mph) with a speed limit increase to 55 mph in some of the three and four-lane sections. US 64 climbs from an altitude of 871 feet to 1,583 feet within the Polk County limits. Roadway shoulders range from two to twelve feet, and in many areas where needed the most, shoulders are not wide enough for a guardrail to be put in place.

TDOT records suggest the overall 24 hour truck percentage is nine percent. Though many users and stakeholders perceive the percent trucks to be larger, on two lane roadways these trucks create a large portion of the delay. With less than five percent of the two lane sections having passing zones and only fifteen percent with truck climbing lanes, movement around the trucks is difficult to accomplish.

Recent Improvements by TDOT

Figures 3A, 3B, and 3C illustrate recent TDOT improvements to US 64 in Polk County. The majority of improvements are in accordance with the guidance section of the *Road Safety Audit Report*. These include pavement and marking improvements, additional signing and Raised Pavement Markings (RPM), addition of left turn lanes and removal of rock in the roadway vicinity. In addition, a traffic signal was recently installed and a recommendation for bridge improvements was proposed.





TDOT Region 2 Meeting

On October 4, 2007, WSA staff members met with representatives of the TDOT Region 2 office in Chattanooga. The meeting consisted of a conversation regarding the Corridor K project and the scope of work defined by WSA regarding traffic impacts and analysis on US 64 in Bradley and Polk counties. The *Road Safety Audit* was discussed to identify “hot spots” or high accident locations. TDOT representatives discussed roadway deficiencies and hazards along the corridor and comments received from area residents and stakeholders regarding safety concerns.

TDOT supplied WSA with additional roadway and geometric information and discussed roadway projects to begin within the next few months. TDOT also identified additional problems along the roadway corridor including:

- Deficiencies in the horizontal alignment;
- Lack of shoulders;
- Rock slides;
- Minimal sight distances around curves;
- Truck traffic;
- Accidents on routes could shut down road for long periods of time;
- Maintenance crews could shut down one lane traffic resulting in delays; and,
- Motorists address the needs for more guardrails, but where it is needed does not have adequate space for guardrail to be placed.

The corridor was identified as a necessary route for residents of Parksville and Ducktown. Residents of Ducktown believe that, if the corridor is closed for an extended period of time, they will be isolated or cut-off from medical services, hospitals, or other needs located in Chattanooga and Cleveland. Residents were also concerned with trucks that encroach on the opposite lane of travel in horizontal curves. The following photographs show signs TDOT has installed in response to these concerns.



Existing Daily Traffic Volumes

There are three TDOT permanent traffic count stations within the study environs. Station 34 is west of State Route 315 (SR 315), Station 35 is east of SR 315, and Station 45 is west of SR 68. These stations provided average annual daily traffic counts from 1985 through 2007. The 2007 daily traffic volumes generally range from 5,200 to 5,600 vehicles per day. Average yearly growth rates were determined to be three percent at Stations 34 and 35 and two percent at Station 45.

Hourly counts at these stations provided by TDOT were used to determine peak hour volumes and directional splits. Based on the three stations the directional distribution was determined to be 53/47 percent. This means that, during the AM peak, 53 percent of the traffic flows in the eastbound direction, and during the PM peak 53 percent flows in the westbound direction.

Existing Peak Hour Volumes

As stated previously, hourly counts from Stations 34, 35 and 45 were used to determine existing peak hour volumes and directional distributions. Since turning movement counts were unavailable for intersections on US 64 in the Cherokee National Forest, the existing peak hour directional volumes from these stations were used for capacity analysis. The AM peak hour and directional distribution volumes are shown in **Figures 4A (overall study area), 4B (west end), 4C (middle), and 4D (east end)**. These figures can be found in the Appendix.

Existing Capacity Analysis

The US 64 corridor from SR 314 to SR 68 was divided into different segments for capacity analysis. The segments were based on laneage, lane widths and shoulder widths. The corresponding peak volumes, both AM and PM, were used in the segments to determine Level of Service (LOS).

The majority of the corridor operated at LOS of E shown in **Figures 4A (overall study area), 4B (west end), 4C (middle), and 4D (east end)**. The two lane segments with truck climbing lanes in the up grade direction operated at LOS D and the four lane sections operated at LOS A. This emphasizes the impact the high truck percentage has on the two lane sections.

The PM peak hour conditions are shown in **Figure 5A (overall study area), 5B (west end), 5C (middle), and 5D (east end)**. These figures (found in the Appendix) also suggest the road operates at LOS E for the majority of the corridor. However, more of the two-lane segments with truck climbing lanes operate at an acceptable LOS D. The additional segments are small and operate at a very low efficiency level.

Future Peak Volumes

The historic and existing annual average daily trips (AADT) data from the aforementioned TDOT count stations were used to determine the average yearly growth rates. Stations 34 and 35 experienced average growth rates of three percent per year and, Station 45, two percent per year. These percentages were used to project year 2032 volumes, which generally range from 9,200 to 9,700 vehicles per day.

Future Capacity Analysis

The existing directional peak hour volumes were replaced with the projected 2032 volumes to analyze future capacity conditions. The existing roadway geometrics remained unchanged. For the year 2032 projections both the AM and PM peak hours operate at a poor LOS.

The AM peak hour operates primarily at LOS F are shown in **Figure 6A (overall study area), 6B (west end), 6C (middle), and 6D (east end)**. **These figures can be found in the Appendix.** However, some of the two-lane segments with truck climbing lanes still operate at LOS D. The four-lane segments continue to operate at LOS A.

During the PM peak hour most of the corridor operated at LOS F, as shown in **Figure 7A (overall study area), 7B (west end), 7C (middle), and 7D (east end)**. **These figures can be found in the Appendix.** Some portions of the two lane segments remained at LOS E and the four lane segments maintained a LOS of A. However, a portion of the two lane segments with truck climbing lanes experienced a LOS of F. As stated in the existing capacity analysis the high truck percentage produces a negative impact on capacity.

Summary of Capacity and Level of Service Results

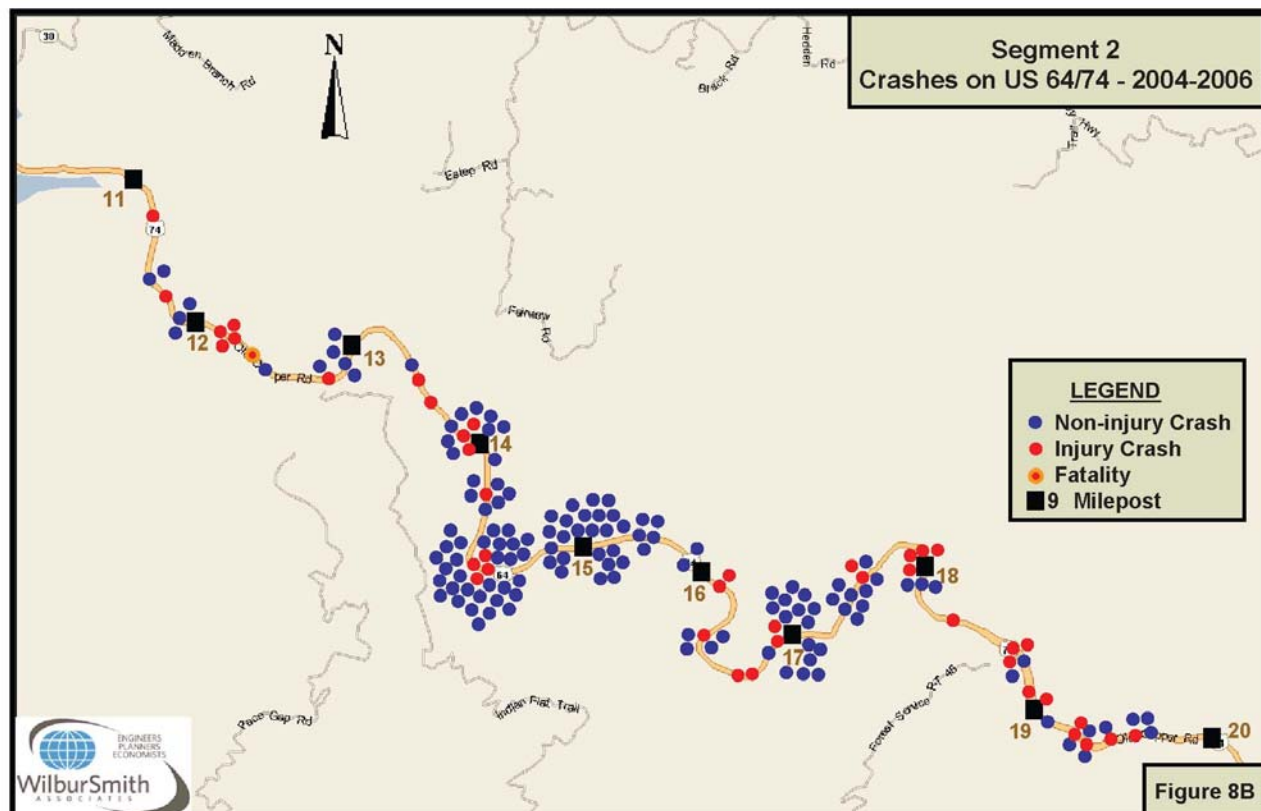
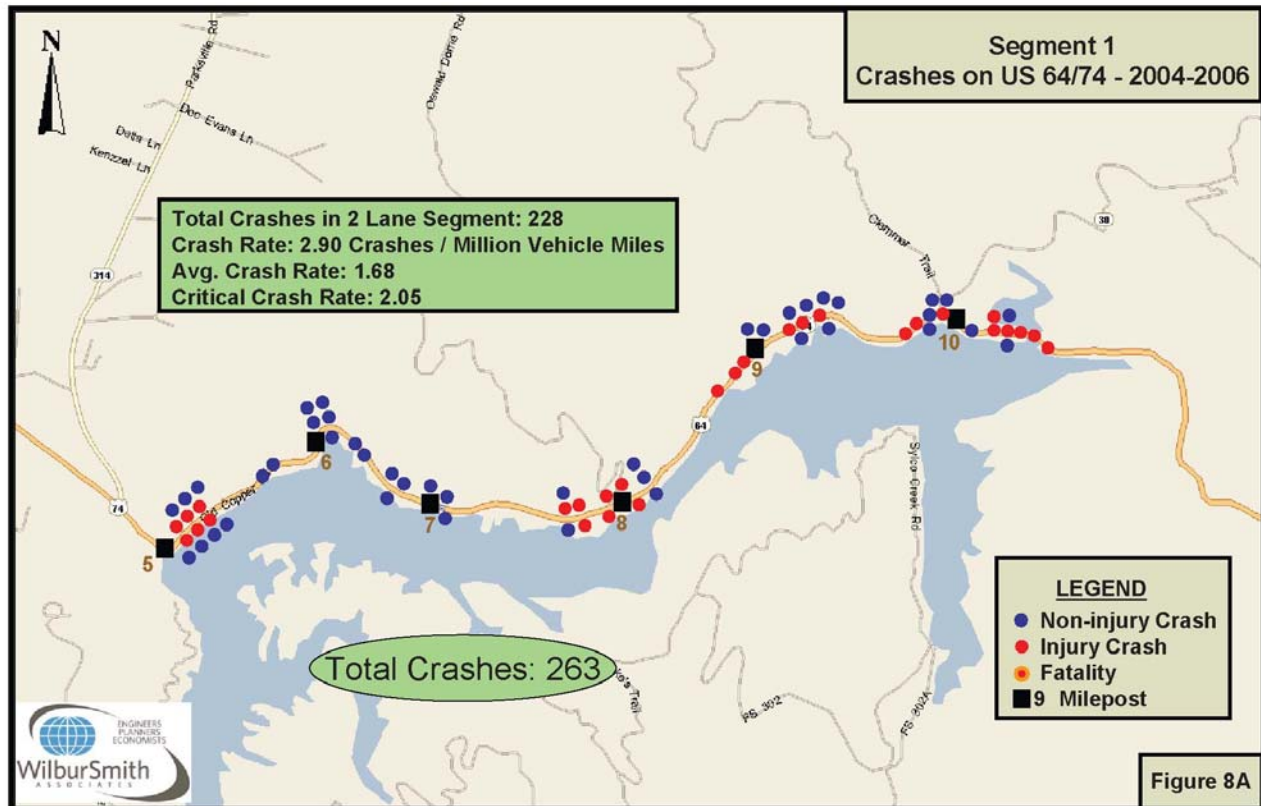
Evaluation of capacity analysis results for existing traffic volumes show that the two lane segments of the corridor, which comprise 85 percent of the total route in Polk County, operate at an unacceptable LOS because of traffic density, a high percentage of trucks, and a lack of passing zones. The two lane sections with truck climbing lanes operate at an acceptable LOS of D. The four lane sections operate at an acceptable LOS A.

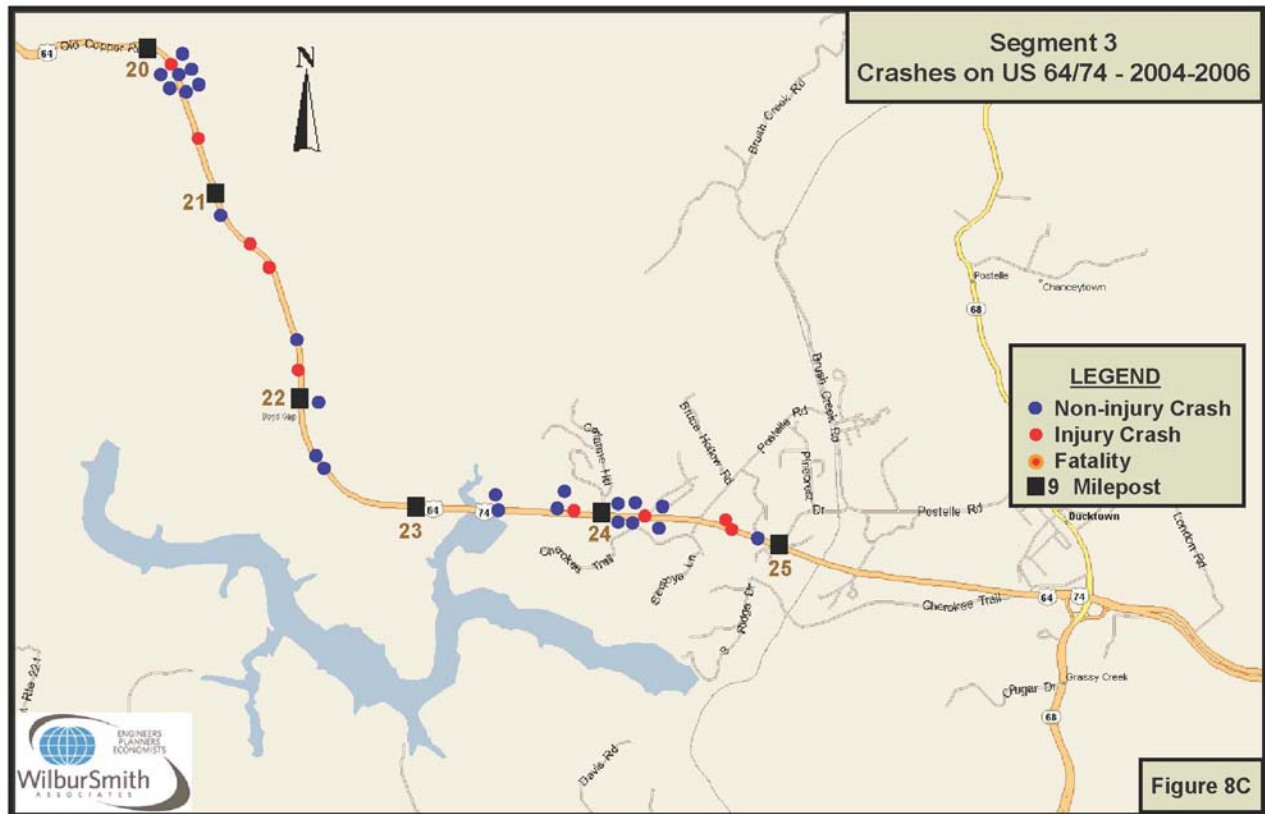
Capacity analysis results for the projected year 2032, as expected, are at an unacceptable LOS. Some of the two lane segments with truck climbing lanes fail in the 2032 analysis. The four lane sections remained at LOS A. However, it should be noted that the growth rates were based on average yearly growth rates and estimations for growth due to future economic development was not considered.

Overall, the capacity analysis results show that the two lane sections are inadequate to handle existing and future traffic volumes. In future conditions portions of the two lane segments with truck climbing lanes also will be inadequate to operate at acceptable LOS. The high percentage of commercial trucks that transport goods through the corridor have a very negative impact on capacity especially in two lane areas with no means of passing.

Crash Data- Number, Severity and Rates

Within the project limits there were 263 crashes from 2004 to 2006. As shown in **Figure 8A (west end), 8B (middle), and 8C (east end)** 228 of these were on two lane sections of roadway. The severity ranged from non-injury accidents to accidents with fatalities. There were only two fatalities recorded in the two year period. Sadly, just recently 3 more fatalities occurred in a single multiple vehicle event whereby a car crossed the centerline and crashed into another car.





TDOT has an established methodology of assessing the safety performance of roads that takes into consideration it's Crash Rate in millions of vehicle miles traveled and how that compares to other similar roadways and to the Critical Crash Rate. The Critical Crash Rate is a calculated value that if exceeded, would suggest that there are causative factors that contribute to many of the crashes. For example, in the case of US 64/74, the vertical and horizontal alignment and the lack of shoulders probably cause a substantial number of the crashes. The average Crash Rate for similar roadways in the State of Tennessee is 1.68 crashes per million vehicle miles. The Critical Crash Rate is 2.05 crashes per million vehicle miles. Because the actual Crash Rate for this roadway segment is 2.90, and it exceeds the Critical Crash Rate for similar roads, it can be concluded that crashes occur in a non-random fashion.

Crash Data Location

Crash locations are also shown in **Figure 8A (west end), 8B (middle), and 8C (east end)**. The majority of accidents occur in clusters at specific locations. There are areas of single crashes but they represent a very small percentage of the accident areas. The most problematic section of road is from approximately Log Mile 14 to Log Mile 18. Within this section, two large clusters of crashes occurred. Between Log Mile 14 and Log Mile 15 the roadway has a very sharp turn which large vehicles have difficulty in maneuvering. Drivers have expressed concerns because tractor-trailers must use both lanes to traverse the horizontal curve.

North Carolina Section-Corridor K

Background

Corridor K is a route on the Appalachian Development Highway System that starts at I-75 near Cleveland, Tennessee and ends near Dillsboro, North Carolina. Highway 64 runs along the Ocoee River serving motorists as the east-west connector between southeast Tennessee and southwest North Carolina. Although this transportation corridor provides a link for local, tourism and recreation (i.e., rafting and camping) traffic; it also serves a substantial amount of truck traffic that utilizes this narrow route for delivery of goods.

The North Carolina portion of the Corridor K segment is a length of approximately 80 miles that begins at the Tennessee state line near Ducktown, and meanders along US 64/74 through Andrews to NC SR 28 east of Almond, NC. A field investigation to examine the existing US 64/74 corridor was conducted by Wilbur Smith Associates on August 23, 2007 beginning at its intersection with Interstate 75 and ending in Dillsboro, North Carolina. The field survey assisted in the documentation of the existing roadway characteristics and the examination of deficiencies along the route. The initial screening of the North Carolina portion of the project will be discussed in this section of the report.

Objective

US 64/74 through North Carolina has various typical cross sections, some with an adequate number of lanes for the traffic volumes it accommodates, and others judged inadequate

given the surrounding conditions. Rolling and steep terrain contribute to the sections of Corridor K in North Carolina that are inadequate. Although there may be an adequate width for traffic in some areas, Corridor K still lacks a consistent typical section along the full route to provide safe and efficient driving conditions.

The objective of this report is to evaluate the existing US 64/74 roadway system in order to identify roadway deficiencies and to provide recommendations for safer and efficient travel for automobiles and trucks as well as pedestrians and tourists.

North Carolina Study Area

US 64, the study corridor, is also designated as SR 40 and US 74. The project begins at the North Carolina state line from Ducktown, Tennessee (Polk County). As shown in **Figure 1**, the approximate 23-mile study area runs along US 64/74 from the southwestern portion of North Carolina, meandering through cities such as Murphy, Andrews, and Bryson City and ending near Dillsboro, North Carolina.

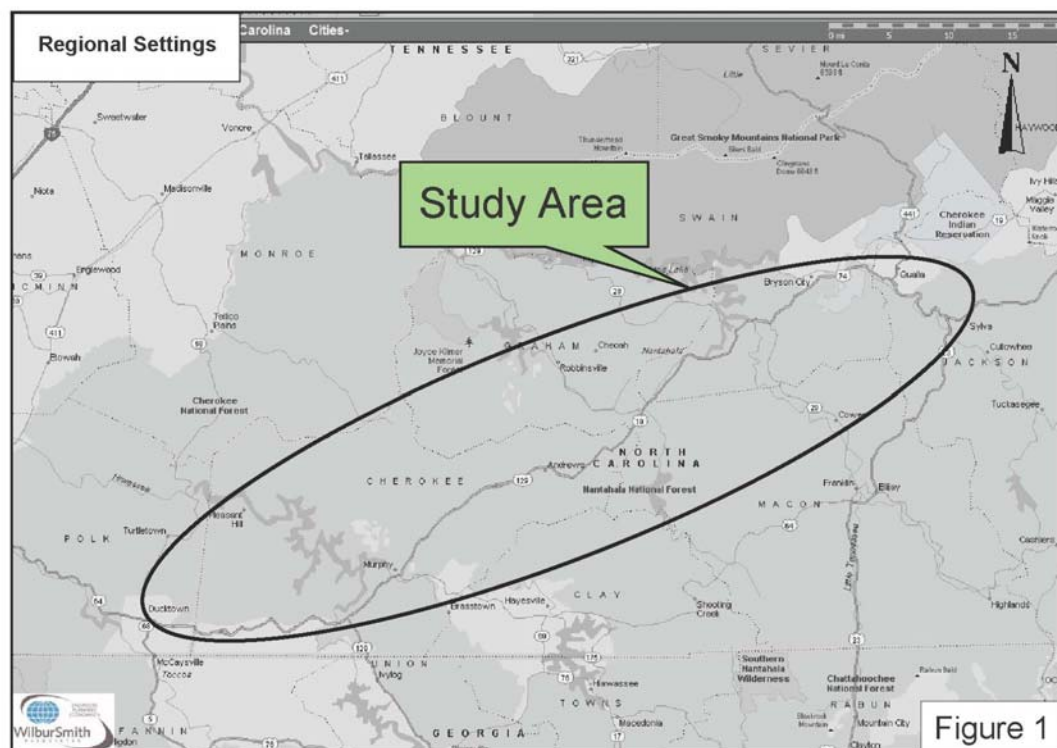
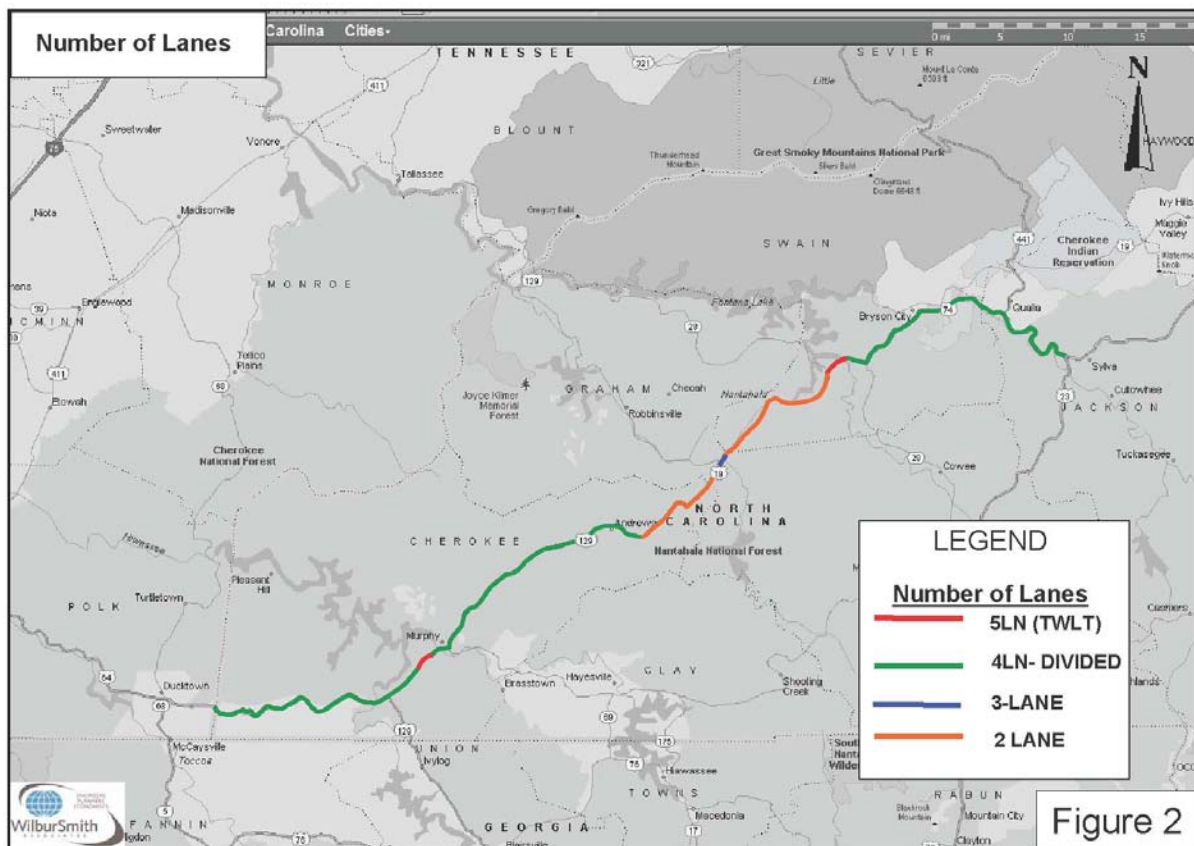


Figure 1

Road Characteristics

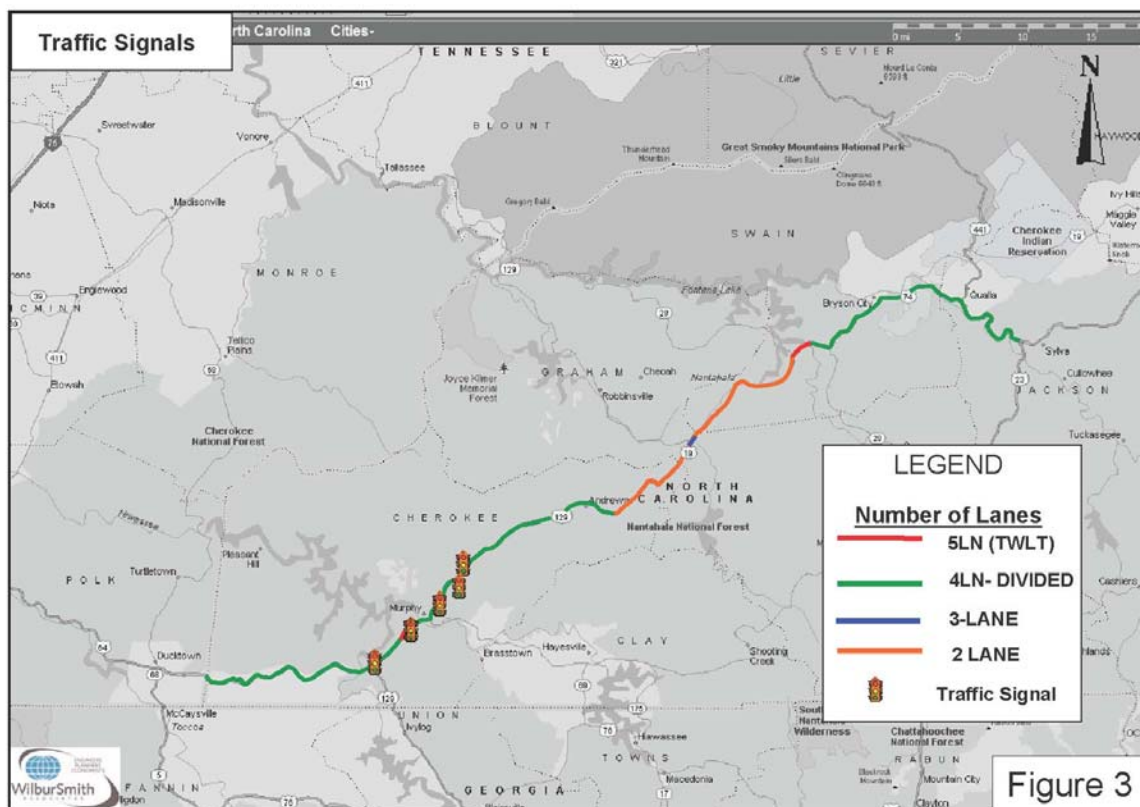
A majority of the US 64/74 corridor through North Carolina consists of a 4-lane divided roadway (see **Figure 2**). The posted speed limit is 55 mph but reduces to 45 mph or less upon entering some city limits and in other isolated areas that warrant slower speeds. Shoulder widths vary due to the terrain or lack of additional width along this roadway segment. A portion of the route going through downtown Murphy, North Carolina emerges into a five lane segment for approximately 500 feet to accommodate peak traffic periods and a high number of left turns in the downtown area. Another five-lane segment is located from SR 28 to the bridge crossing where the 4-lane section resumes.

As US 64/74 continues west from the Andrews Business District, a two-lane segment begins and the elevation of the roadway climbs by 743 feet. To accommodate the steep grade of 9 percent, a truck climbing lane is available for eastbound truck traffic at SR 1310. Within the two-lane segment are various tourist attractions including several whitewater rafting



businesses, lodging, and campgrounds. A bike lane is available for eastbound travel only for approximately 200 feet. With the high amount of tourists and pedestrian traffic the speed limit in this location varies from 50 mph to 35 mph near pedestrian crossings. This area is a very popular tourist destination for visitors to Nantahala River who engage in whitewater rafting or take a scenic train ride through the Nantahala Gorge.

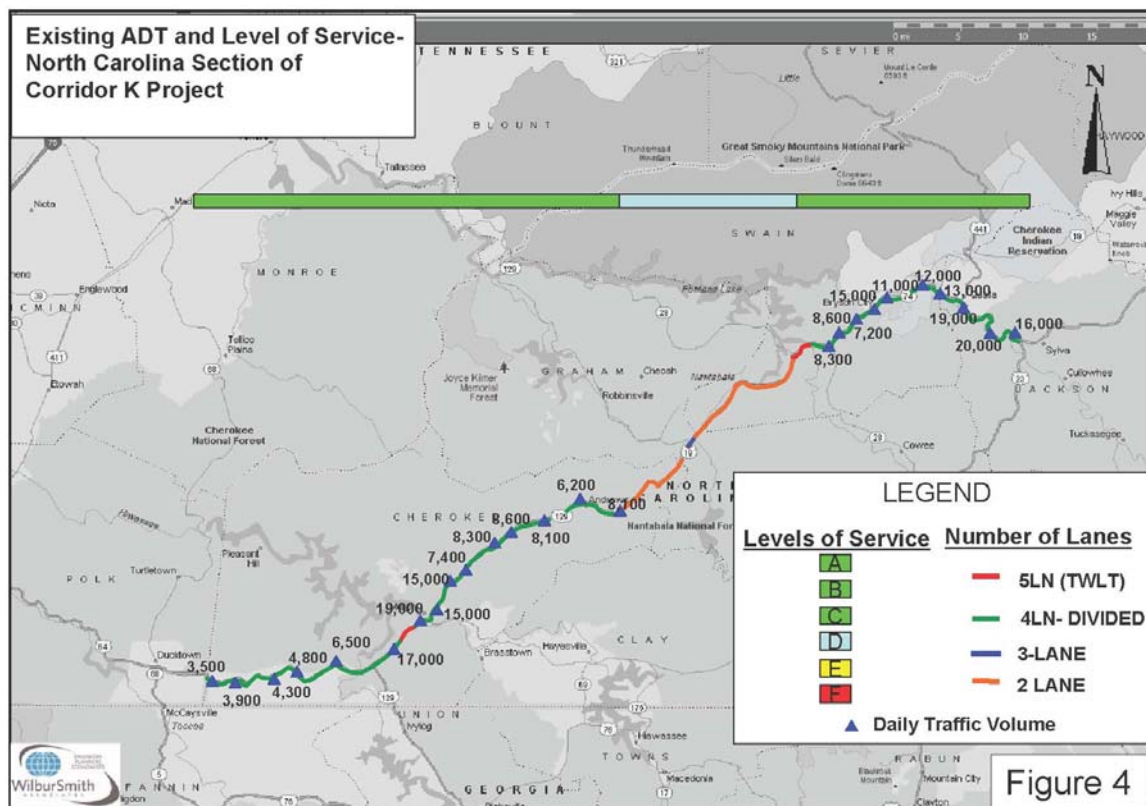
Traffic signals are located with the city limits of Murphy, Marble, and Andrews in order to facilitate safe and efficient movement of traffic through these busy downtown intersections as illustrated in **Figure 3**.



Existing Traffic and Levels of Service

Figure 4 reveals the daily traffic volumes along the US 64/74 route. The traffic volumes were obtained from the North Carolina Department of Transportation (NCDOT). Count data from NCDOT count stations were used to determine historical traffic growth trends along the corridor. As shown, the annual average daily traffic (AADT) volumes located near the

Tennessee-North Carolina border ranges from approximately 4,000 to 7,500 vehicles per day (vpd), whereas near the more populated business areas, traffic volumes range from 15,000-20,000 vpd.

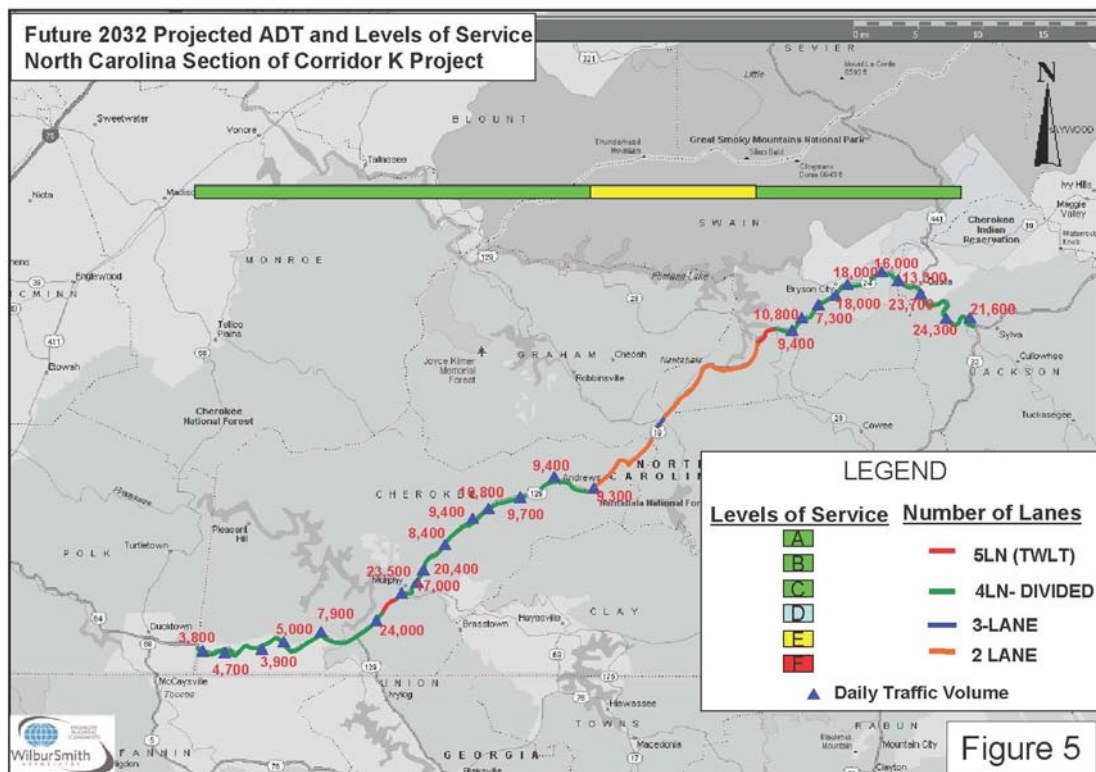


Based on a planning level ADT capacity analysis of the US 64/74 corridor, motorists experience an acceptable level of service (LOS) indicated by minimal or no congestion or delays along most of the four-lane portions of the corridor. Most motorists encounter some poor service levels within the two-lane sections of the corridor, where most recreational opportunities including camping, rafting and train excursions are located. During the peak recreational months, tourists and recreational vehicles are intermingled with the usual local and truck traffic resulting in increased delays along the corridor.

The historical traffic information was used to determine an average yearly growth rate. On average, a majority of the count stations showed a 1.0 percent – 2.0 percent increase in traffic growth. These percentages were used to project year 2032 traffic volumes.

Projected Year 2032 Traffic and Levels of Service

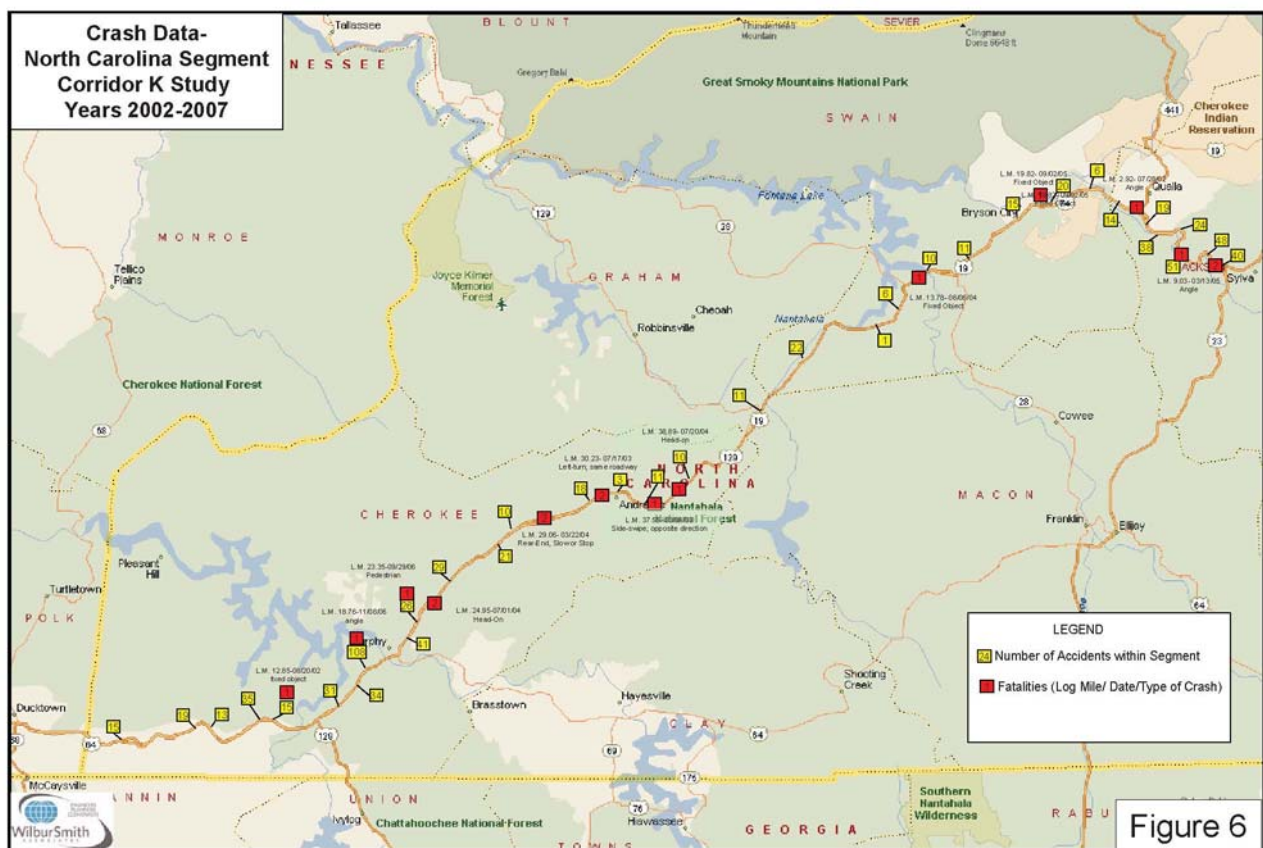
Figure 5 reveals the future traffic volumes and levels of service along the US 64/74 corridor. In the year 2032, motorists should anticipate the corridor to operate at acceptable levels with acceptable delays and levels of congestion, particularly in the four- and five-lane sections. However, expected delays and congestion (indicating a worse LOS E than exist today) are anticipated on the two lane segments, even with modest traffic growth based on historical trends. There is an abundance of tourist and recreational activities in these two



lane segments, so pedestrians and cyclists also suffer from the poor vertical and horizontal alignment within these areas.

Crash History

Figure 6 records traffic crash information obtained from the NCDOT for a five-year period (2002-2007) on the US 64/74 corridor. Within Cherokee County, from the Tennessee State Line to Macon County, 551 crashes occurred in the five year period with over 52 percent being property damage crashes and fatalities making up about 1.5 percent of the total. Within Macon County, from the Cherokee County to Swain County, 22 total crashes involved property damage were recorded, but no fatalities occurred within that section of the project corridor. In Swain County, from the Macon County line to the Jackson County line, 81 crashes occurred with two fatalities. Along the project corridor in Jackson County, from Swain County to US 23/US 441 in Dillsboro, 247 crashes occurred in a five-year period with 55



percent being property damage, 43 percent non-fatal injuries, and nearly 2 percent being fatal accidents.



Description of Deficiencies

The NCDOT has several programs or projects for roadway improvements along the US 64/74 corridor. A majority of the listed improvements include bridge rehabilitation projects, guardrail installation, and other safety improvements. The proposed Corridor K project is identified as a Transportation Improvement Projects (TIP) within Swain, Graham, and Cherokee counties and the proposal is a 4-lane divided facility primarily on new location. An access management/safety project has been identified as part of a programmed improvement on the study corridor. This project runs along US 74 in Jackson County. It calls for the removal of some median crossovers and converting some full movement crossovers to left movement only. It also calls for the installation of a median barrier.

Discussions with Transportation Officials

This report also consisted of interviews with NCDOT regional traffic engineers and county roadway superintendents representing the counties to which US 64/74 traverses.

VI. Corridor K Economic Development Strategic Plan

The Corridor K Planning Process

Successful economic development in the Corridor K Region is the result of continued commitment to improvement in the region including education, workforce training, health care, quality of life, utility infrastructure, community leadership, and transportation. A healthy, diversified economy in the Corridor K Region is essential to the well-being and quality of life for all of the people who live here. Without an economy that is competitive with other regions of the country and other parts of the world, employment opportunities will decline, poverty within the region will increase, and revenues that communities depend on to support education, cultural and environmental amenities, transportation networks, and other services will shrink.

The Corridor K region has many unique conditions that have influenced the economic development of this area. A significant percentage of the land within the region is in public ownership. While this property is a significant national and regional resource, it limits the capacity of some of the counties in the region to create a strong and diversified tax base and provide employment opportunities for residents. The topography and limited availability of public utilities in some areas of the region has constrained development as well.

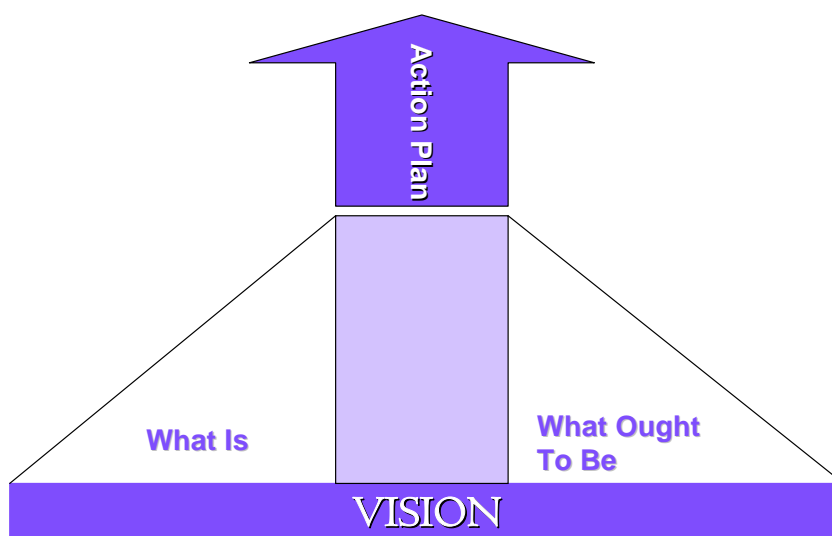
The transportation network in this region generally lacks safe and efficient east-west connections. Norfolk Southern and CSXT have class 1 rail service in the region providing north-south service but there are no operating east-west rail links in the region. The existing east-west highway connection, discussed in detail in an earlier section of this report, has been sited as a barrier to economic development in the region. As a result, some parts of the region continue to experience isolation; poverty rates are above national and state averages and many counties have average per capita incomes below the state average. Talented young people leave the region because of limited employment opportunities available for educated and skilled workers.

While outstanding progress has been made attracting new employers to the region and programs have been developed to help existing businesses, the economy of the Corridor K

Region is changing and globalization and new technologies have accelerated the rate of that change. Successfully competing for jobs and new investment in the future won't be accomplished by doing business as usual. Leaders in the public and private sectors must continue to work together to keep this region competitive, working across county and state lines to create a stronger and more prosperous economy for the future.

Although the nature of economic competition has changed, there are still important economic differences that give this region unique advantages to create an even stronger and more diversified economy in the future. The Corridor K Economic Development Strategy allowed local and region stakeholder to define those advantages and work together to develop strategies and actions necessary to achieve the region's economic vision.

Important Conditions of a Powerful Vision



If we can agree that there is a gap between “what is” and “what ought to be” then we can define the gap and create a workable plan of action

Summary of the Corridor K Region Economic Development Strategic Plan

The Corridor K Region includes eleven primary counties and twelve secondary counties in four states, each with unique advantages, challenges and goals for the future. All of these communities share a common desire to preserve their quality of life while providing

economic opportunities that will enable their children and grandchildren to live here in the future. The global marketplace sees this as one region, not a diverse group of communities but an economic region striving to grow a strong sustainable economy that supports jobs and wages creating widely shared prosperity.

This Strategic Plan identifies strategies for the continuing economic development of the Corridor K Region while carefully considering the need for environmental stewardship and preserving the quality of life in the region. Throughout all of the meetings on this project with citizens, elected officials, economic development professionals, environmental stakeholders and business leaders the importance of balancing economic prosperity, environmental stewardship, and maintaining the quality of life was clearly expressed. From those discussions the following Vision Statement was developed:

Vision Statement

Maintain a strong regional economy that balances the quality of our natural environment with a vibrant and prospering economic base in such a way that we preserve our cultural heritage; continue to respect our natural resources and our quality of life; and, foster a renewed reverence for our history while we encourage the growth of quality jobs, improved education, and new investment enabling our people to prosper.

Four core values define the goals for the future of this region:

Prosperity and Innovation – The Corridor K Region wants to continually improve incomes within the region by helping existing businesses to prosper, attracting new quality jobs and investment and fostering an environment where entrepreneurs and small businesses can thrive. We want to build the infrastructure that is necessary to increase per capita incomes and a strong community revenue base to provide important public services.

Place – The history, heritage, culture and natural beauty of the Corridor K Region is extraordinary. The region has worked hard to be good stewards of these assets and recognize the importance of continuing to implement environmentally friendly public policies in our business practices and our personal commitments. The region recognizes that



one of the assets that make our region special is the quality of life we enjoy and the natural environment that we share. Finding meaningful balance between the needs of our citizens and the resources of our region can be achieved by working together collaboratively.

Sustainability – The Corridor K Region wants to build businesses that prosper in the changing global economy, to maintain and enhance the livability of our region, to retain our talented and educated young people and workforce, and foster an even stronger commitment to training and education. We want to build the transportation, utility, and telecommunications infrastructure that is needed to support our economy and our quality of life to continue to enhance the regions livability. As we grow, we will do our best to reuse existing vacant buildings, make use of in-fill development opportunities, preserve housing options that are affordable to people who work and live in the region, and continue to promote the preservation of historic structures. We want to engage the people of the region in meaningful discussion on issues that will impact our future and build collaborative solution strategies to make the future better.

Collaboration – The Corridor K Region seeks to build long term collaborative working partnerships that cut across county boundaries, state lines, and other delineations to work together to improve our region while we work together to market all our assets and strategic advantages to enhance our economy. By coming together to identify the strengths and assets of our region we can enhance our economy, improve our infrastructure, foster innovation and creativity, and continue to respect and nurture our environment.

Goals and Action Strategies

The Goals and Action Plan were developed by synthesizing recent strategic planning efforts from the region and incorporating discussions with community stakeholders in meetings held throughout the Corridor K Region. By synthesizing the strategic plans completed throughout the region, we have identified strength and weaknesses as well as priorities and concerns expressed by a broad range of citizens, elected officials, educators, and other stakeholders. Several common themes have emerged:

- **A skilled and educated workforce is the region's most valuable economic development resource. Regional employers rely on workers who travel throughout the region each day. Safe and reliable transportation connections provide**

businesses access to a larger region labor market which is important to both existing businesses as well as new companies considering the Corridor K Region.

- Inadequate transportation connection cost the region's businesses time and money and significantly limit their access to new markets to enable their businesses to grow in the future. Some businesses in the region will not remain competitive without improved transportation connections.
- The region's quality of life and natural resources are valued assets. Retaining existing businesses, attracting new sustainable jobs, nurturing entrepreneurship and balancing economic prosperity and environmental stewardship are important to the people who live and work in the Region.
- Increasing per capita income and creating new jobs and private investment is absolutely necessary to eliminate poverty within the region and provide improved local and state tax revenues.
- Deficiencies on US 64/74 have been identified in past safety audits and have been addressed to the extent possible however safety concerns may still exist. Improvements to the existing corridor are limited by topography, proximity to the rivers and environmental concerns. Many businesses do not allow their vehicles to use this road and some tourism and travel organizations are reluctant to recommend it to visitors.
- Tourism is an important component of the region's future economy particularly in more rural communities. Transportation infrastructure should be enhanced to support tourism in the region. Providing a safe and reliable route that is a destination is important to expanding the tourism economy in the region.
- Better access to Atlantic coastal ports is important to businesses in the region as more companies utilize international suppliers and sell to international and national customers.
- The transportation needs of the tourism industry are different from the transportation needs of the region's other traded sector businesses. Both of these sectors are important to the region's economic development. Accommodating

these two transportation needs may suggest strategies that separate these two users.

- **The Corridor K Region needs transportation improvements that will enhance the economic sustainability of the region. While transportation alone is not a sufficient condition to cause economic development it is a crucial link to sustain existing businesses and attract new business opportunities to the region in the future.**

These initiatives, developed by the people who live and work here, address specific goals that were identified as important in creating a strong economy for the region. The region's future economic develop can provide widely shared prosperity for the people of the region.

Prosperity and Innovation Goals and Action Strategies

The economy of the Corridor K Region must develop to compete globally to create widely shared prosperity for the people and the businesses in the region by:

- Foster a strong entrepreneurial environment and promote innovation as an integral part of the region's future prosperity
- Build the transportation and utility infrastructure needed to support economic development and region's livability

Place Goals and Action Strategies

Cultivate quality communities and develop policies that lead to good land use decisions and development practices:

- Create meaningful balance between our economic vitality and the resources of our region

Sustainability Goals and Action Strategies

Provide quality education and workforce training

Collaboration Goals and Action Strategies

Pursue a regional economic development agenda that recognizes opportunities where to cooperate in order to enhance regional competitiveness:

- Brand the Corridor K Region



- Work together to develop a Corridor K Region Tourism Strategy that will increase tourism revenues throughout the region
- Collaborate to develop a “Green Tourism” program

VII. Balancing Environmental Stewardship and Economic Prosperity

The importance of balancing economic prosperity with environmental stewardship has been discussed frequently during the course of this study. In October, 2007 a “Green Plan” meeting was held in Cooper Hill, TN. Fifty stakeholders from throughout the region participated to identify and discuss important environmental asset in the Corridor k Region and discuss “green” strategies for the economic development strategic plan. A “Green Plan Meeting Survey” allowed stakeholders to record the regional assets that are important to them.

The green plan presentation from this meeting can be found on the Southeast Tennessee Development District website at: <http://www.sedev.org/www/docs/6.22/>

There are a number of tools for achieving “green” including context sensitive solutions, smart growth strategies, sustainable growth policies, and even ecotourism. “Green Highways” are an effort to leave the project area better than before through community partnering, environmental stewardship, and transportation network improvements in safety and functionality according to the Green Highways Initiative. From an economic development perspective, following green planning strategies for development in the Corridor K Region could improve the long term economic opportunities for the area. The use of overlay zones and other design standards could help to promote an improved quality of development in the area that is more consistent with the characteristics of the region.

Context Sensitive Solutions, or CSS, is an interdisciplinary approach to projects that involves all stakeholders in providing a facility, in this case a transportation corridor that fits its setting. It is an approach that leads to preserving and enhancing scenic, aesthetic, heritage, historic, community and environmental resources while improving or maintaining safety, mobility and infrastructure conditions. The CSS process is designed to create outcomes that:

- Solve problems that are agreed to by a range of stakeholders
- Promote safety for all users
- Meet or exceed the expectations of designers and stakeholders in a way that creates lasting value for the community, the environment, and the transportation system

- Make the best use of resources for everyone
- Are in harmony with the community, the environment, mobility, safety and values of the area

The Green Plan Survey was used in subsequent stakeholder meetings to allow other residents and businesses to record the assets that matter most to them. The heritage and historic assets most often cited in the survey include:

Ocoee Scenic River and Hiwassee River
Copper Basin Mining and Reclamation area
Cherokee National Forest
The Eastern Band of the Cherokee Nation
Old Line Railroad
Trail of Tears

The environmental assets that were most often cited in the survey include:

Ocoee River
Cherokee Forest
Hiwassee River
Cooper Basin Reforestation
Big & Little Frog Wilderness Area
Nantahala Forest
Great Smoky Mountains
Lake Fontana

When asked about favorite recreational activities within the Corridor K Region those responding to the survey most frequently included:

Hiking trails
Whitewater rafting
Trout fishing
Biking
Hunting

Bird watching

Boating

Stakeholders were asked to identify agri-business assets within the Corridor K Region that were important to them and might also be of interest to visitor to the area. The agri-business assets most often sited were:

Merciers Apple Orchard

John C. Campbell Folk School

Wineries

Delano Farmer's Market

Small farms

Corn Maze's

Darnell Farms

VIII. The Corridor K Region and the Appalachian Regional Commission

Those who never drove through the remote communities found throughout Appalachia fifty years ago never saw the dilapidated housing, inadequate healthcare facilities and extreme poverty that existed in the region at that time. Appalachia and the Corridor K Region were places of poverty and extreme isolation when the Appalachian Regional Commission was created in 1965 – as a result of the findings of a 1963 President’s Appalachian Regional Commission (PARC) – to develop programs to assist this region. Opportunities within the Corridor K Region and all of Appalachia were limited; per capita incomes were well below the national average of \$1900 in 1960 compared with an average per capita income in Appalachia of \$1400. Over 650,000 jobs in mining and agriculture were lost in the Appalachian region between 1950 and 1960. New manufacturing, construction and service jobs were being created in the region during this period but they did not off-set the loss of employment in the mining and agriculture sectors.

Many communities in the Appalachian Region and more specifically in the Corridor K Region lacked the infrastructure needed to support new employment opportunities in the early days of the Appalachian Regional Commission. As a result many of the manufacturing and service jobs that located in the Corridor K Region selected sites in the more metropolitan communities such as Chattanooga, Cleveland, and Asheville that had access to the necessary transportation infrastructure, utilities and the skilled force required for these new job opportunities.

While there are still areas of isolation and higher-than-average poverty within the Corridor K Region and in other parts of Appalachia today, the economy has improved significantly in the past fifty years. Infrastructure vital to the economic development of the region has been constructed in many areas as a result of the Appalachian Development Highway System.

These corridors have contributed to:

- \$4.89 billion in travel efficiencies from 1965 – 2025
- Increases in production within the region projected to reach \$2.9 billion by 2015
- 42,000 new jobs in the region by 2015



- Significant new competitive advantages in the ARC region leveraging new economic opportunities throughout the region valued at \$2.7 billion over the past fifty years

The Appalachian Regional Commission has invested in programs in addition to the Appalachian Development Highway System that has enhanced the economic development of the Corridor K Region and the other areas of Appalachia. ARC has invested funds to extend water and wastewater facilities, construct affordable housing, provide broadband communication and other telecommunication infrastructure and improve health care services. The Appalachian Regional Commission is also engaged in linking Appalachia to the global marketplace by integrating multiple transportation modes throughout the region.

ARC and ADHS continue to improve conditions throughout Appalachia. Corridor K was proposed as an ADHS corridor over 40 years ago to provide a connection to an improved transportation network that would support the economic development needs of the region. This study was conducted to determine if there is still an economic development need for this corridor. The results of this study shows that the need for improved east-west transportation connections is perhaps even greater today because of ever increasing globalization than it was 40 years ago when this corridor was first considered.

Appendix

Corridor K Region's Economic Development Strategic Plan

The Corridor K Region includes eleven primary counties and twelve secondary counties in four states, each with unique advantages, challenges and goals for the future. All of these communities share a common desire to preserve their quality of life while providing economic opportunities that will enable their children and grandchildren to live here in the future. The global marketplace sees this as one region, not a diverse group of communities but an economic region striving to grow a strong sustainable economy that supports jobs and wages creating widely shared prosperity.

This Strategic Plan identifies strategies for the continuing economic development of the Corridor K Region while carefully considering the need for environmental stewardship and preserving the quality of life in the region. Throughout all of the meetings on this project with citizens, elected officials, economic development professionals, environmental stakeholders and business leaders the importance of balancing economic prosperity, environmental stewardship and maintaining the quality of life was clearly expressed. From those discussions the following Vision Statement was developed:

Vision Statement

Maintain a strong regional economy that balances the quality of our natural environment with a vibrant and prospering economic base in such a way that we preserve our cultural heritage; continue to respect our natural resources and our quality of life; and foster a renewed reverence for our history while we encourage the growth of quality jobs, improved education, and new investment enabling our people to prosper.

Four core values capture the region's vision and goals define the future of our region:

Prosperity and Innovation – The Corridor K Region wants to continually improve incomes within the region by helping existing businesses to prosper, attracting new quality jobs and investment and fostering an environment where entrepreneurs and small businesses can thrive. We want to build the infrastructure that is necessary to increase per capita incomes and a strong community revenue base to provide important public services.

The Corridor K Region believes that innovation and technology are important to the future. We are committed to expanding the use of technologies in our communities, valuing creativity in arts and sciences, improving our education system, continually striving to find new ways to improve our communities and providing opportunities for life-long learning.

Place – The history, heritage, culture and natural beauty of the Corridor K Region is extraordinary. We have worked hard to be good stewards of these assets and recognize the importance of continuing to implement environmentally friendly public policies in our business practices and our personal commitments. We realize that one of the assets that make our region special is the quality of life we enjoy and the natural environment that we share. Finding meaningful balance between the needs of our citizens and the resources of our region can be achieved by working together collaboratively.

We want to promote the recreational and natural resources found in our region including those in the Cherokee National Forest, on the Nantahala River and in other areas in the region and enhance these assets for future generations. We want quality growth and quality communities in our region and need to develop standards and controls to insure that outcome.

Sustainability – In the Corridor K Region we want to build businesses that prosper in the changing global economy, to maintain and enhance the livability of our region, to retain our talented and educated young people and workforce and foster an even stronger commitment to training and education. We want to build the transportation, utility and telecommunications infrastructure that is needed to support our economy and our quality of life to continue to enhance the regions livability. As we grow, we will do our best to reuse existing vacant buildings, make use of in-fill development opportunities, preserve housing



options that are affordable to people who work and live in the region, and continue to promote the preservation of historic structures. We want to engage the people of the region in meaningful discussion on issues that will impact our future and build collaborative solution strategies to make the future better.

Collaboration – The Corridor K Region seeks to build long term collaborative working partnerships that cut across county boundaries, state lines and other delineations to work together to improve our region while we work together to market all our assets and strategic advantages to enhance our economy, coming together to identify the strengths and assets of our region we can enhance our economy, improve our infrastructure, foster innovation and creativity and continue to respect and nurture our environment.

Goals and Action Strategies

The Goals and Action Plan was developed from recent strategic planning efforts within the region and from discussions with community stakeholders in meetings held throughout the Corridor K Region. The earlier strategic plans that were synthesized as a part of this report also involved numerous public meetings. This plan is a collaborative “umbrella” under which all of the communities of the region can work together to enhance competitive advantages and address obstacles to the region’s future success. As a part of this plan information has been gathered from business and community leaders; meetings with the Corridor K Steering Committee and Economic Development Advisory Committee regional stakeholders, and the business community.

By synthesizing the strategic plans completed throughout the region, we have identified strength and weaknesses as well as priorities and concerns expressed by a broad range of citizens, elected officials, educators and other stakeholders. Several common themes have emerged:

- A skilled and educated workforce is the region’s most valuable economic development resource. Regional employers rely on workers who travel throughout the region each day. Safe and reliable transportation connections provide businesses access to a larger region labor market which is important to both existing businesses as well as new companies considering the Corridor K Region.



- Inadequate transportation connection cost the region's businesses time and money and significantly limit their access to new markets to enable their businesses to grow in the future. Some businesses in the region will not remain competitive without improved transportation connections.
- The region's quality of life and natural resources are valued assets. Retaining existing businesses, attracting new sustainable jobs, nurturing entrepreneurship and balancing economic prosperity and environmental stewardship are important to the people who live and work in the Region.
- Increasing per capita income and creating new jobs and private investment is absolutely necessary to eliminate poverty within the region and provide improved local and state tax revenues.
- Deficiencies on US 64/74 have been identified in past safety audits and have been addressed to the extent possible however safety concerns may still exist. Improvements to the existing corridor are limited by topography, proximity to the rivers and environmental concerns. Many businesses do not allow their vehicles to use this road and some tourism and travel organizations are reluctant to recommend it to visitors.
- Tourism is an important component of the region's future economy particularly in more rural communities. Transportation infrastructure should be enhanced to support tourism in the region. Providing a safe and reliable route that is a destination is important to expanding the tourism economy in the region.
- Better access to Atlantic coastal ports is important to businesses in the region as more companies utilize international suppliers and sell to international and national customers.
- The transportation needs of the tourism industry are different from the transportation needs of the region's other traded sector businesses. Both of these sectors are important to the region's economic development. Accommodating these two transportation needs may suggest strategies that separate these two users.

- The Corridor K Region needs transportation improvements that will enhance the economic sustainability of the region. While transportation alone is not a sufficient condition to cause economic development it is a crucial link to sustain existing businesses and attract new business opportunities to the region in the future.

These initiatives, developed by the people who live and work here, address specific goals that were identified as important in creating a strong economy for the region. The region's future economic develop can provide widely shared prosperity for the people of the region.

Prosperity and Innovation Goals and Action Strategies

The economy of the Corridor K Region must develop to compete globally to create widely shared prosperity for the people and the businesses in the region by:

- Continue to focus economic development efforts to sustain existing business sectors including:
 - Tourism and recreation*
 - Distribution and Logistics*
 - Finance and Insurance Services*
 - Appliance Manufacturing*
 - Food and Beverage Products*
 - Transportation Equipment*
 - Electrical Equipment and Electronics*
 - Machinery Manufacturing*
 - Fibers and Textiles*
 - Health Care Services*
 - Environmental Technologies*
- Focus additional economic development activities to build emerging business clusters including:
 - Advanced manufacturing and materials*
 - Fabricated metal products and metal working*
 - Industrial machinery*
 - Agribusiness and specialty food processing*
 - Health care*

Information technology and instruments

Plastics

Arts and crafts

Business and Information Services

- Enhance workforce training programs for business, develop strategically located business parks and construct the infrastructure necessary to support existing businesses and attract new economic opportunities to the region
- Assure there is a sufficient land supply to meet the needs of the region's economic development through the development of business and industrial parks and the identification of business land that should be preserved for the future
- Develop incentive programs to promote the reuse of existing industrial facilities, infill sites and other vacant buildings for economic development
- Build on the region's tourism assets to promote adventure tourism, heritage tourism, agri-tourism, eco-tourism and enrichment tourism. Develop a "Regional Attractions Plan" to promote regional tourism assets to increase the number of overnight visitors. Work together to address the limited availability of lodging, restaurants and other services for visitors within the region
- Develop a regional tourism marketing plan and find a way to fund it in order to promote the regional tourism assets
- Develop specific strategies to promote agri-business opportunities including farm-to-market activities, gourmet food processing, agro-tourism and related efforts

Foster a strong entrepreneurial environment and promote innovation as an integral part of the region's future prosperity

- Encourage continued funding and support of Entrepreneurial Education programs at community colleges, universities, development districts and community organizations



- Continue to link the region’s research and technology assets from the Centers of Excellence at Western Carolina University Center and the University of Tennessee Chattanooga with the region’s businesses
- Identify the research and innovation needs of existing and emerging industrial clusters and work with the research universities and organizations throughout the region to connect the needs of businesses with their research capabilities
- Link entrepreneurs with Small Business Development Centers, conduct a region-wide entrepreneurship awareness campaign and utilize SETDD services for low interest loans and grants to assist local entrepreneurs
- Utilize the existing fiber optic networks within the region to support the creation of new business opportunities and to attract entrepreneurs to the region

Build the transportation and utility infrastructure needed to support economic development and region’s livability

- Identify and work with DOT’s, counties and cities to build the regional transportation improvement projects that are important to the region’s business, industrial and tourism clusters
- Identify and pursue financing strategies to pay for critical transportation and utility infrastructure in the region
- Utilize Context Sensitive Design to design and build transportation improvements that “fit” the landscape when appropriate
- Build transportation projects that connect the region’s industrial and business clusters to markets and suppliers to enhance competitiveness and promote the growth of quality jobs
- Build transportation projects that link the region to multi-modal transportation infrastructure outside of the region including ports, airports, rail and highways to insure that the region’s business clusters can compete nationally and internationally

- Expand local, regional, state and federal funding for transportation infrastructure that supports economic development so the region can build the transportation infrastructure needed to support economic success
- Convene a private sector Business Transportation Committee to lead the regions efforts to advocate for transportation projects and funding that improve business competitiveness
- Ensure the development of scenic overlooks, signage, ped and bike trails and other facilities that will enhance the visitor's experience
- Evaluate opportunities to protect and enhance the use of existing rail lines to promote tourism and provide multi-modal transportation facilities

Place Goals and Action Strategies

Cultivate quality communities and develop policies that lead to good land use decisions and development practices

- Develop policies to promote and protect the availability of housing that is affordable to the people who live and work here
- Educate the public about the heritage and cultural opportunities and issues within the region in order to preserve and build upon the region's heritage
- Consider overlay zones and other tools to provide quality development controls for the region
- Develop policies and model development goals to insure quality growth for the future, consider the use of design standards and project overlay zones to protect quality development
- Conduct a public education program to help citizens learn about the values of comprehensive planning and land use policies
- Implement policies to ensure a sufficient land supply to support the region's economic development and enhance recreational opportunities
- Support development decisions that enhance the quality of development in the region and respect the natural environment



- Seek out innovative strategies to put policies in place leading to good land use outcomes and improved development practices
- Develop a regional network of bikeways and greenways
- Create utility corridors where natural gas and broadband infrastructure could be located in the future

Create meaningful balance between our economic vitality and the resources of our region

- Ensure that every training organization and educational institution provides training for skills needed by the region's businesses
- Work with Glenn Springs Holdings, Inc., the National Forest and National Park, Universities, the Oak Ridge National Laboratory, TVA and other partners to assess the environmental education assets in this region to determine the viability of developing an Environmental Education Center in the Corridor K Region
- Conduct a feasibility study for an Environmental Education Center within the Corridor K Region to provide a venue for others to see the use of transformational technologies in property reclamation, reverse supply networks, alternative energy resources, etc.
- Create a regional "Recreational Assets Inventory" to assist the region in identifying service gaps and promoting the diversity of recreational opportunities in the region

Sustainability Goals and Action Strategies

Provide quality education and workforce training

- Prepare the region's students to meet the workforce demands of the future in existing sustainable business clusters, emerging businesses and entrepreneurship by developing curriculum and programs linked to the regions business needs
- Seek additional funding to support the Region's Community Colleges, Technical Schools and other training and educational resources to support a high-quality workforce for the region

- Develop a “workforce clearinghouse” to link the business community to schools and community colleges and improve communication and collaboration among business and education institutions
- Continue to increase awareness of existing educational and workforce training resources within the region to ensure that citizens take advantage of life-long learning opportunities

Collaboration Goals and Action Strategies

Pursue a regional economic development agenda that recognizes opportunities where to cooperate in order to enhance regional competitiveness

- Convene a Corridor K Regional Economic Development Forum on an annual basis to identify projects and policies that are important to the regions economic success and develop action strategies as a region to support these projects
- Work with State and Federal elected officials representing the Corridor K Region to secure their assistance in implementing projects identified in the regional economic development forum

Brand the Corridor K Region

- Create an identify for the Corridor K Region that appeals to the people and businesses of the region and promotes the region’s unique location and assets
- Develop and fund a regional marketing plan to promote the tourism assets of the region including the natural resources, recreational opportunities, scenic beauty, historic and heritage assets, arts and culture and work together as a region to increase the number of visitors to the region

Work together to develop a Corridor K Region Tourism Strategy that will increase tourism revenues throughout the region

- Develop a Multi-state Tourism Assets Inventory identifying historic and heritage assets, adventure tourism assets, arts and cultural assets, entertainment venues, agri-tourism assets, eco-tourism assets and other destinations and attractions



- Develop and implement a “Lodging and Dining” development program to support the construction of appropriate lodging facilities similar to those found in other national forests and national parks around the U.S. (ex. Big Meadows Lodge in Shenandoah National Park, Tenaya Lodge at Yosemite, Hannagan Meadow Lodge in the Arizona in White Mountains National Forest, Skamania Lodge in the Columbia River Gorge National Scenic Area or the Lake Quinault Lodge in Olympic National Forest)
- Identify and promote the development of attractions and facilities that create a “year round” tourism industry for the region

Collaborate to develop a “Green Tourism” program

- Develop a “Green Tourism” program for the Corridor K Region to encourage tourism businesses and communities to protect the natural areas of the region and reduce their environmental impacts through the use of “Green Power”, eco-friendly products, the use of local products and produce and other initiative
- Identify additional “Green Tourism” strategies for the region and develop a public awareness program to promote the advantages of this program

Corridor K Targeted Industries

Tourism

Gambling	7132
Heritage Tourism	712120
Accommodations	721110 & 721120
Food Service	72110
Historic Sites	712120
Hotels except Casino Hotels	721110
Casino Hotels	721120

Manufacturing

Construction Machinery Manufacture	333120
Household appliance manufacture	335211
Machine Tool Metal Cutting Manufacture	333512
Special Die & Tool Manufacturing	333514
Industrial Valve Manufacture	332911
Cutting Tools & Machine tool manufacture	333515
Turbine & Turbine generator unit manuf.	333611
Power drive hand tool manufacture	333991
Food and beverage manufacture	311330, 31211, 311812, 311615
All other plastic manufacture	326199
Fiber Optic Cable Manufacture	335921

Life Sciences and Agribusiness

Medicinal and Botanical Manufacturing	325411
Greenhouse, Nursery, Floriculture	1113
Non-citrus fruit and tree farming	11133
Forestry support activities	115310

Health Care

Hospitals	622
Nursing and Residential Care	623
Medical & diagnostic labs	6215

Information Technology & Instruments

Call Centers	56142
Data Processing	5182
Plastics	326199



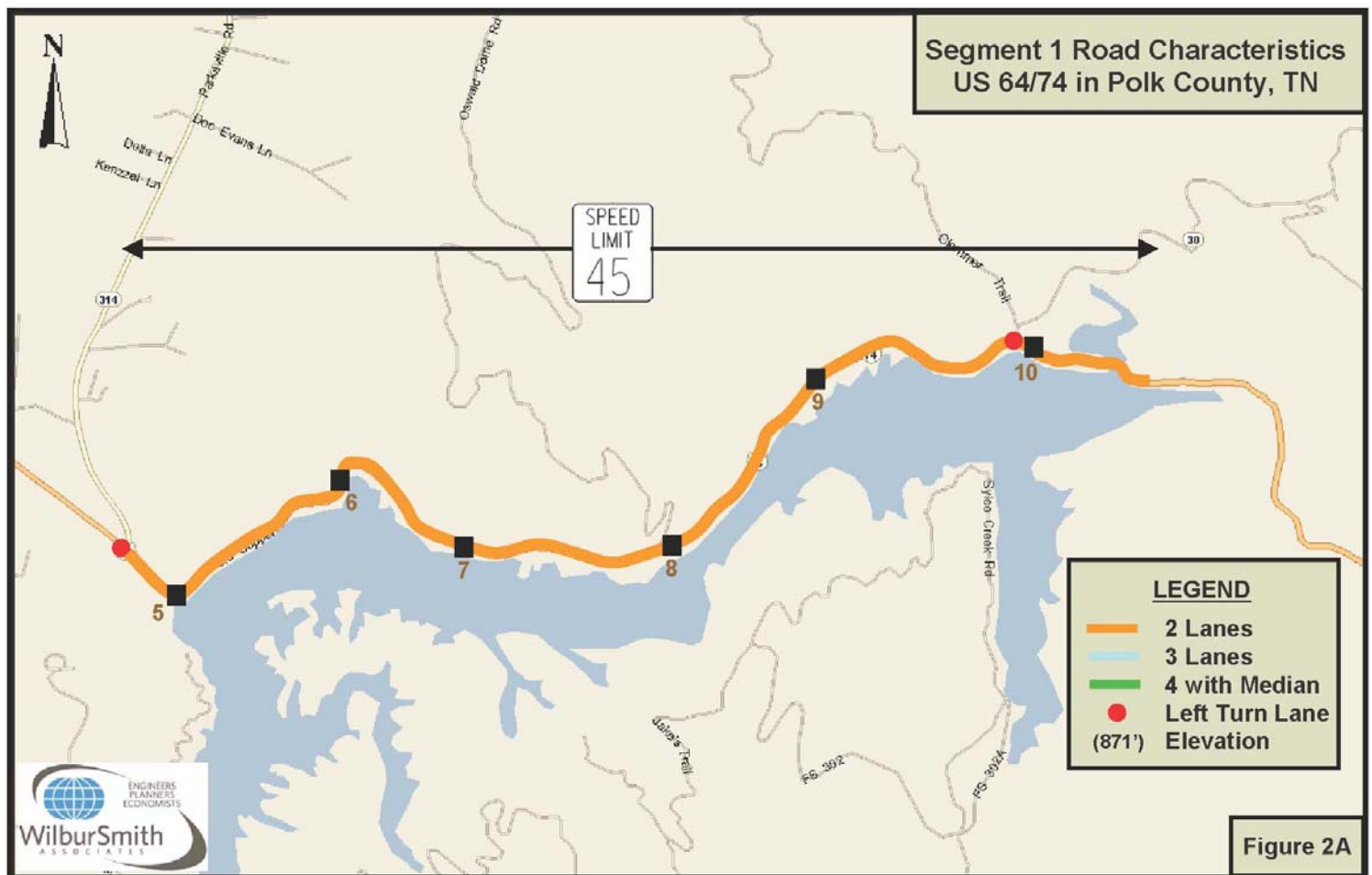
Finance and Insurance Services

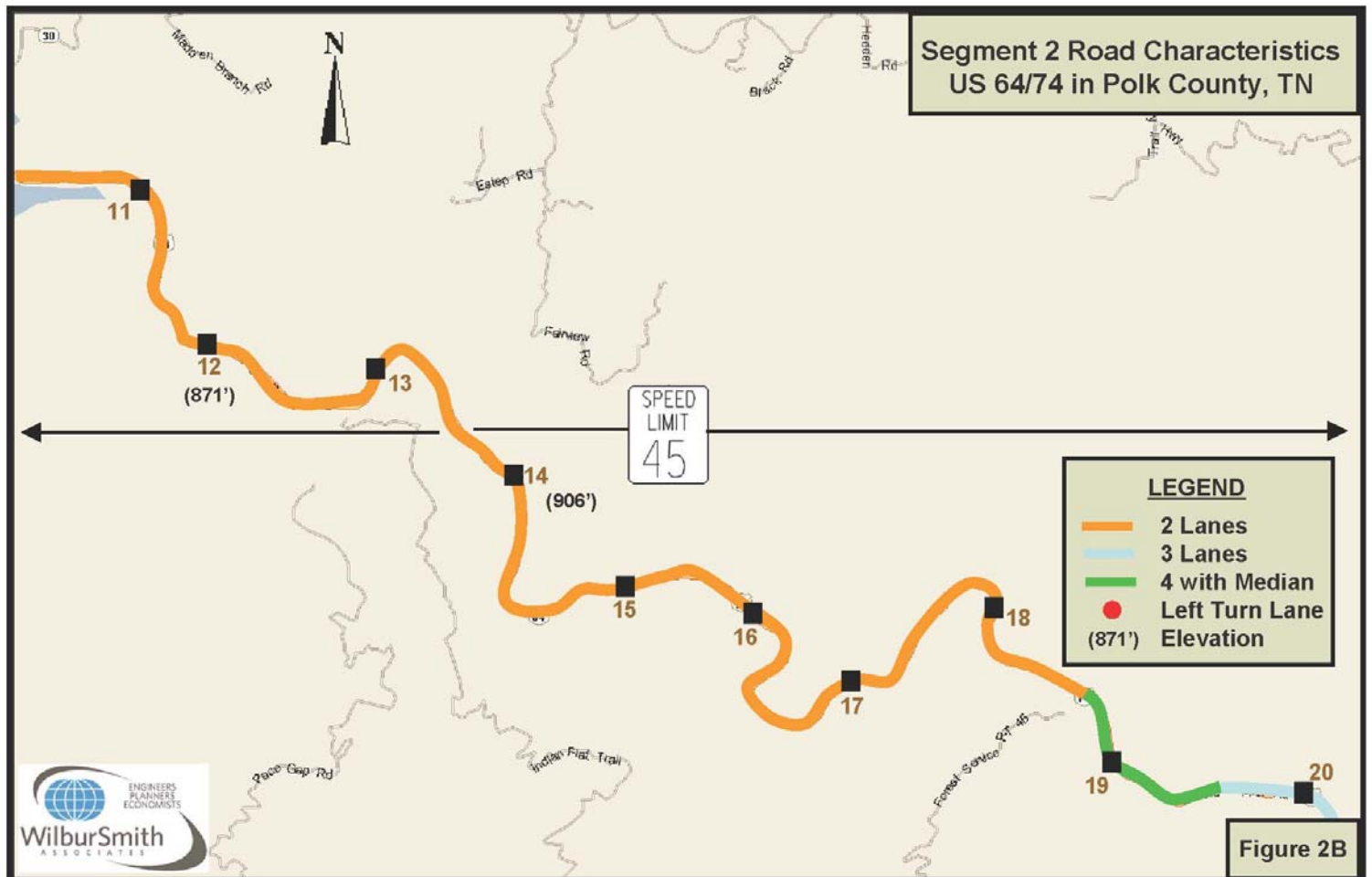
Direct Health & Medical insurance carriers	524114
Direct property and casualty insurance carriers	524126

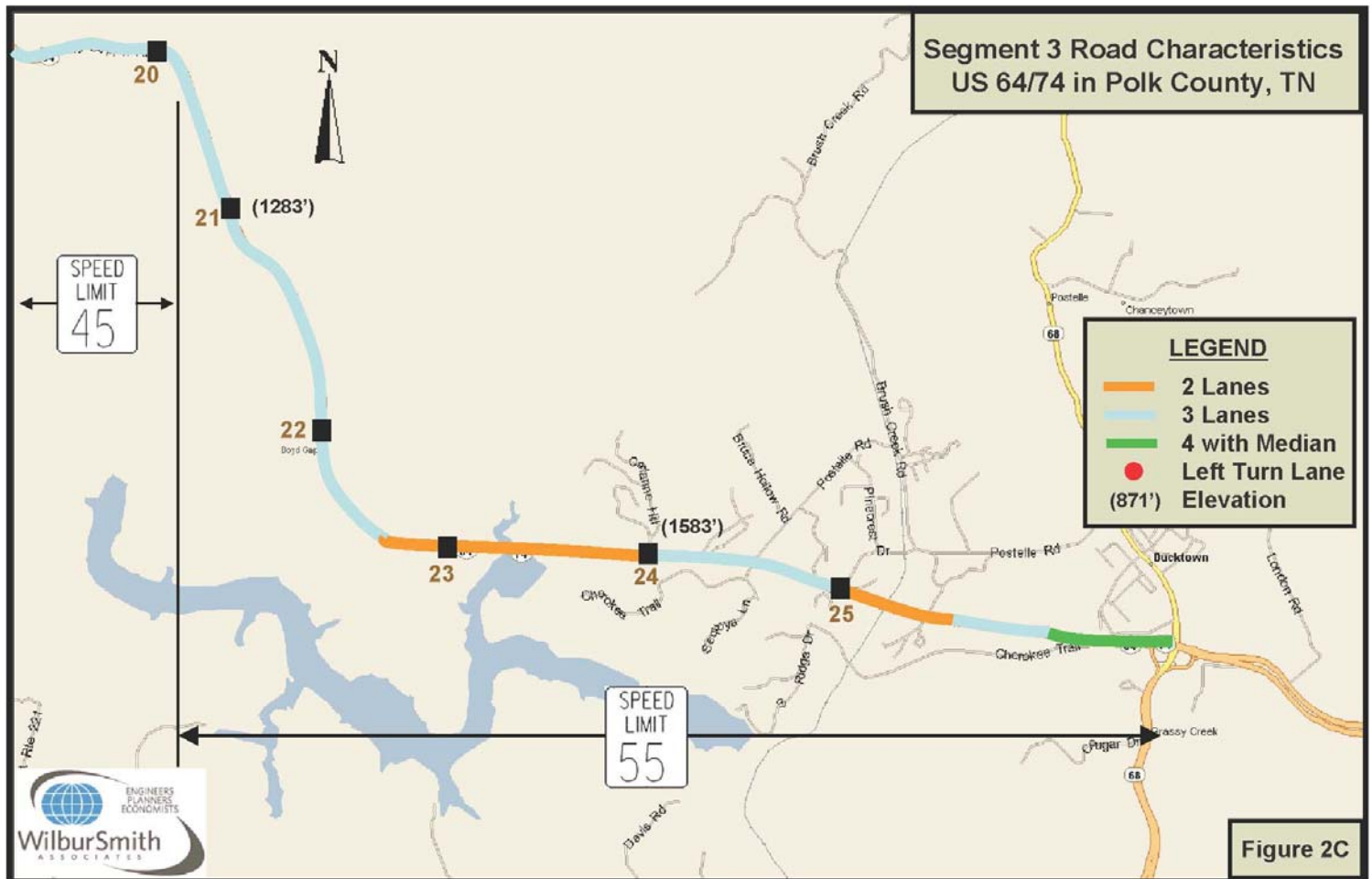
Environmental Science & Environmental Remediation

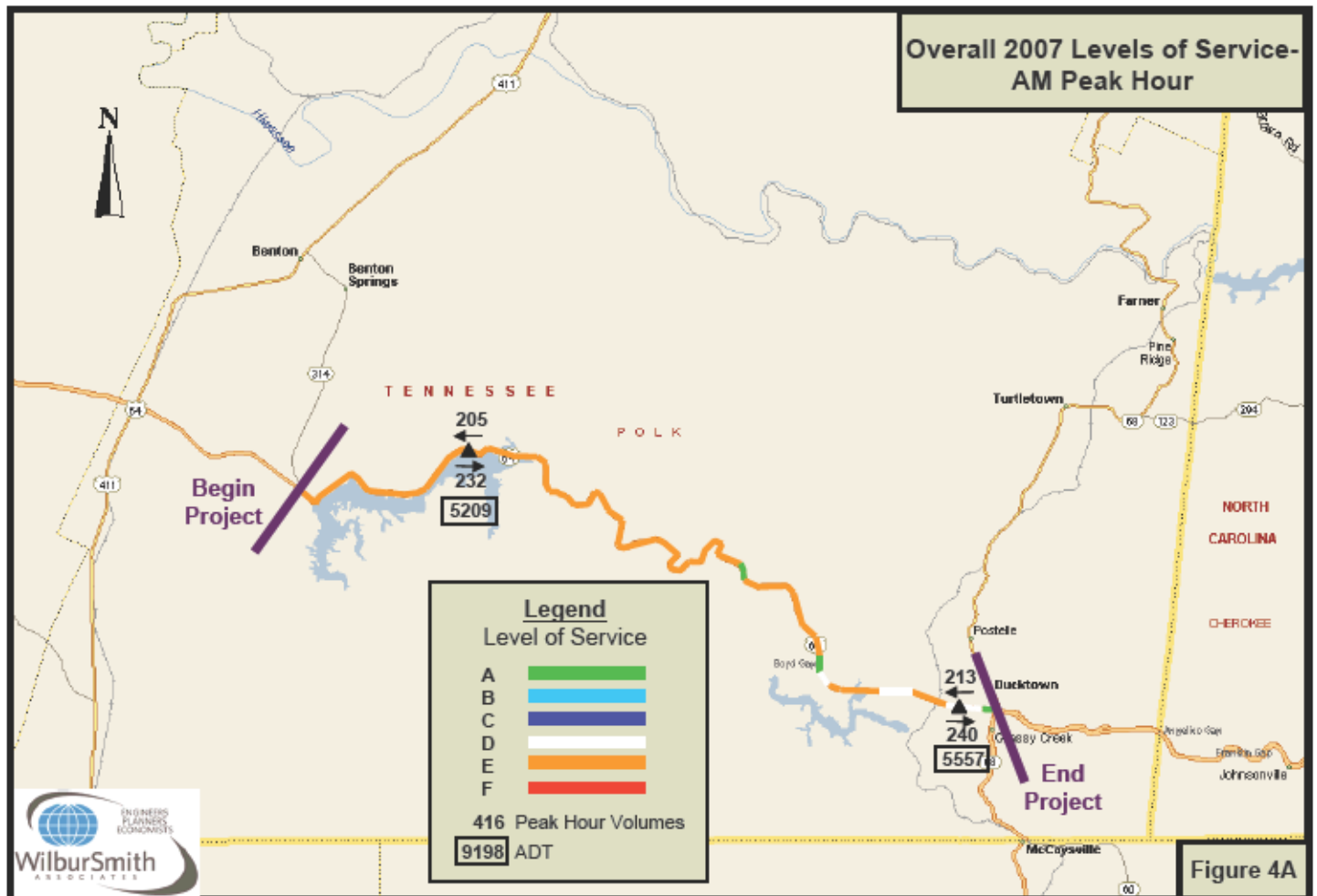
Scientific research	5471
Remediation and other waste management services	5629

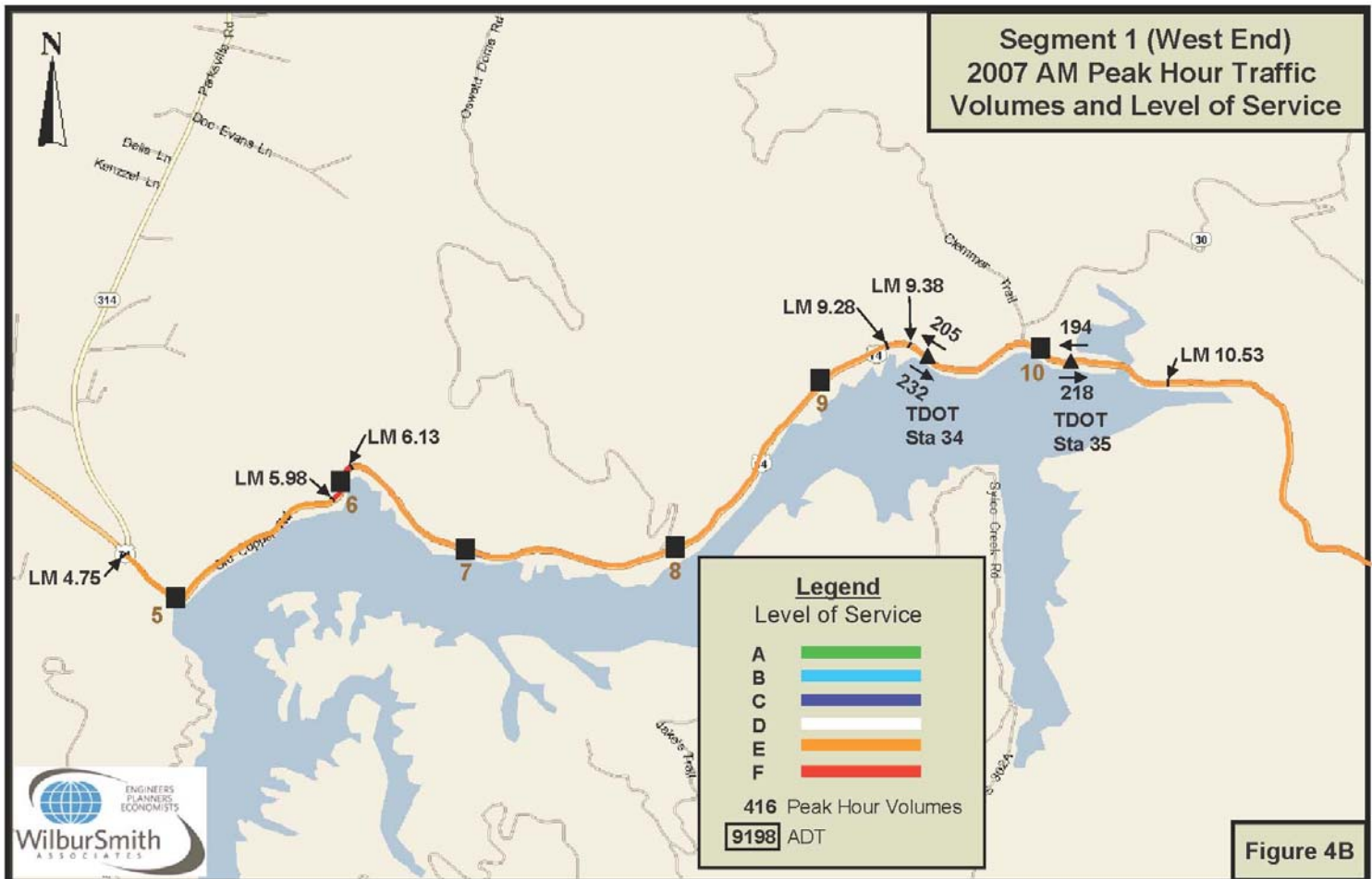
Additional Figures

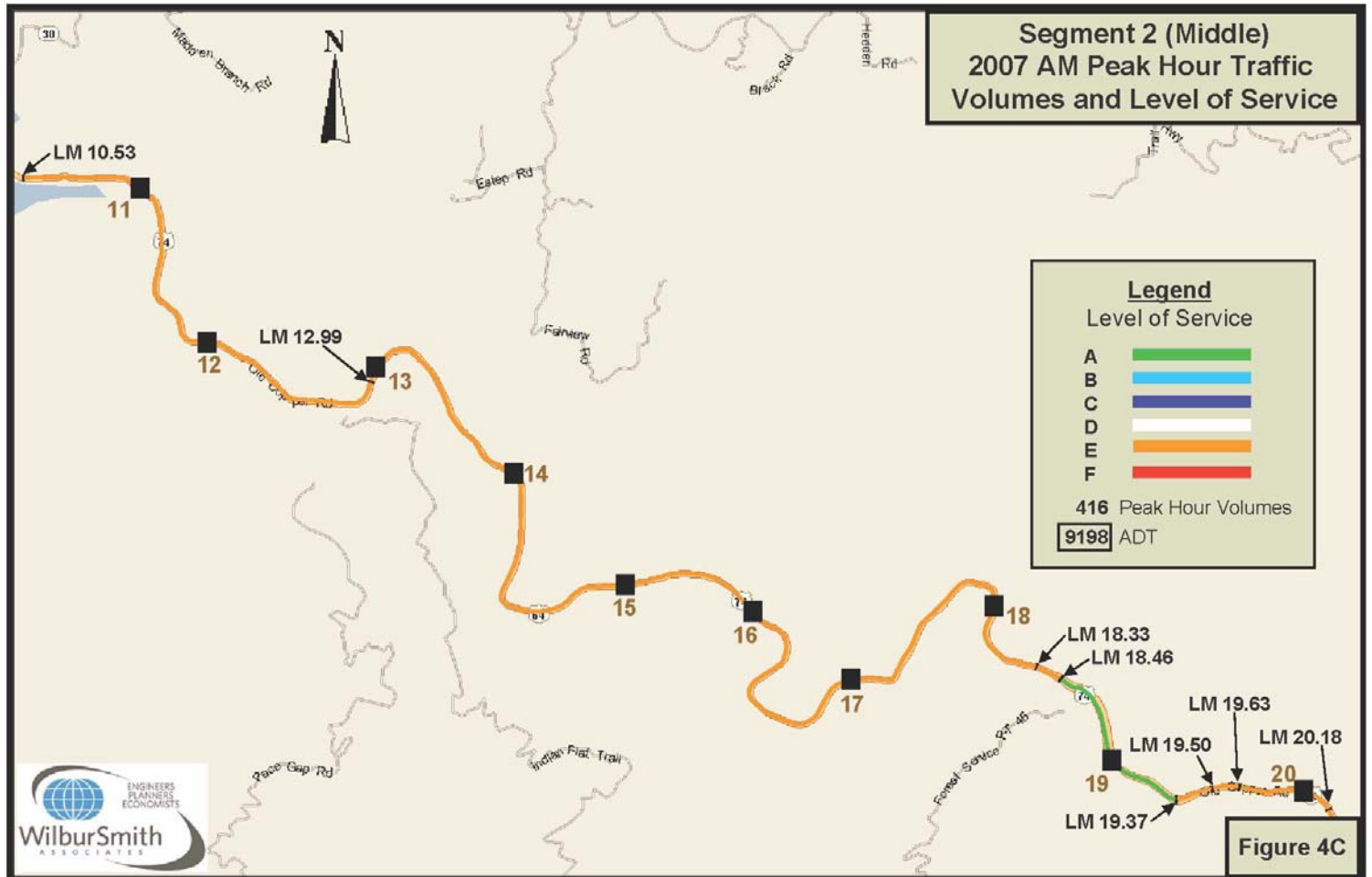




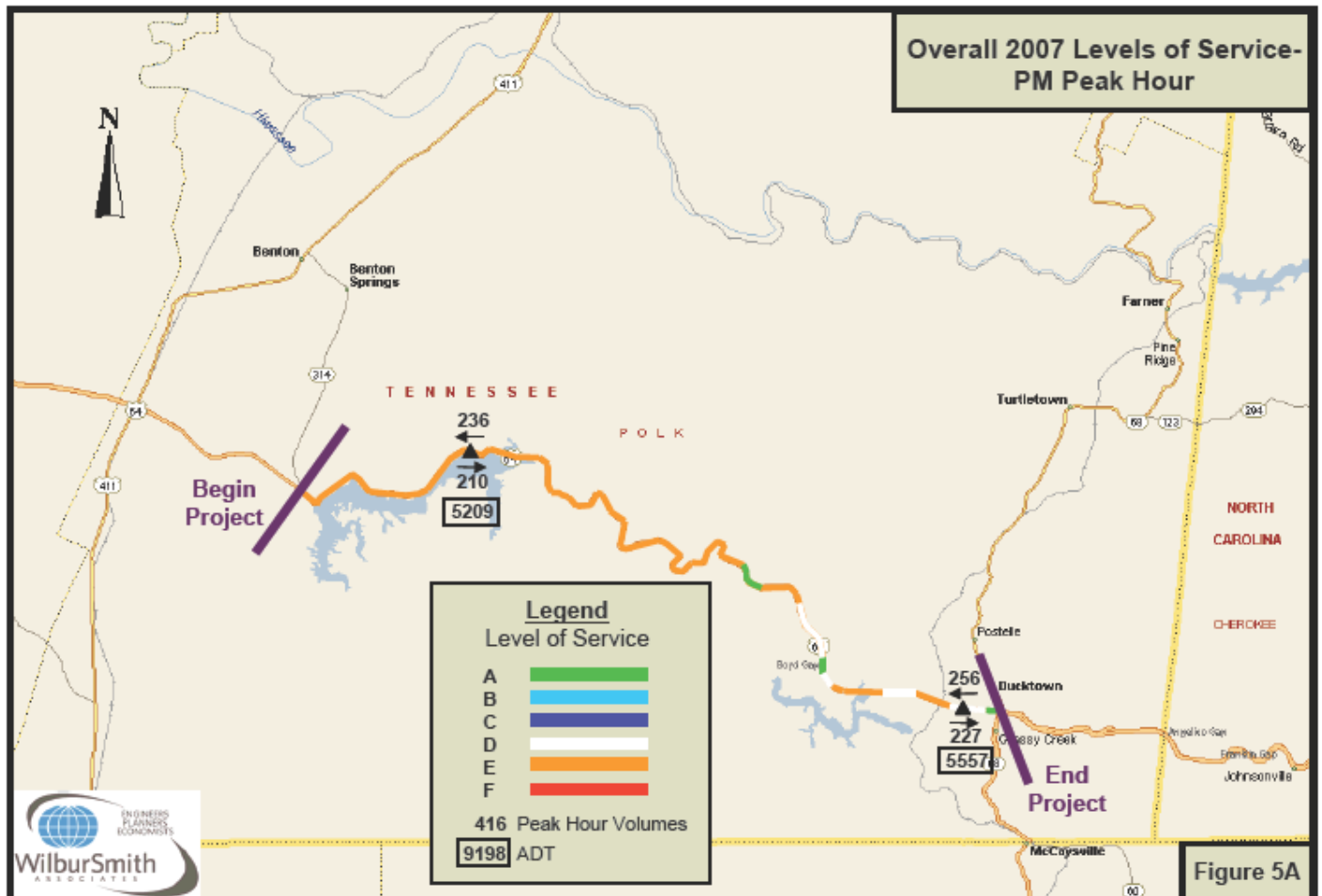


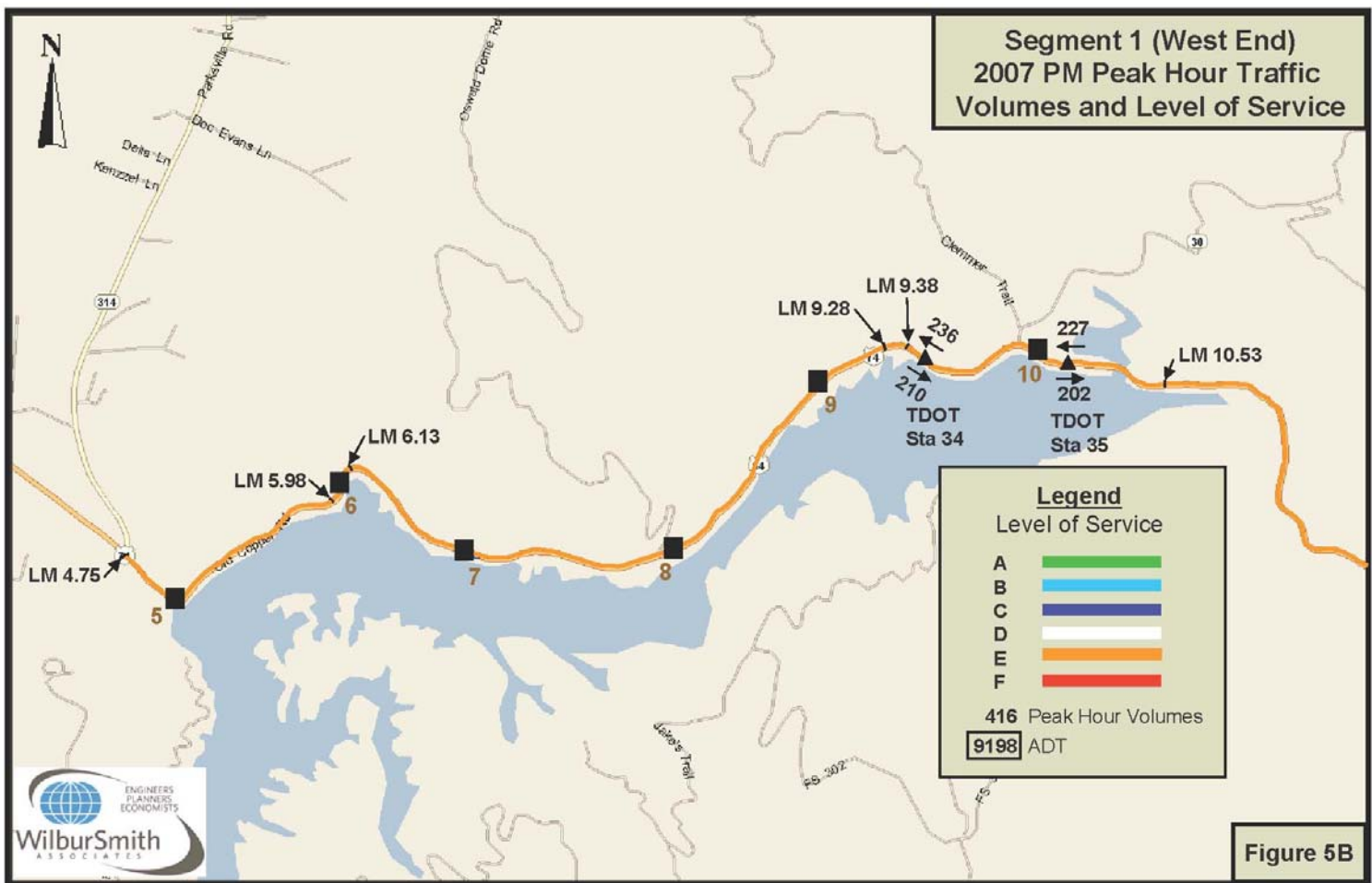


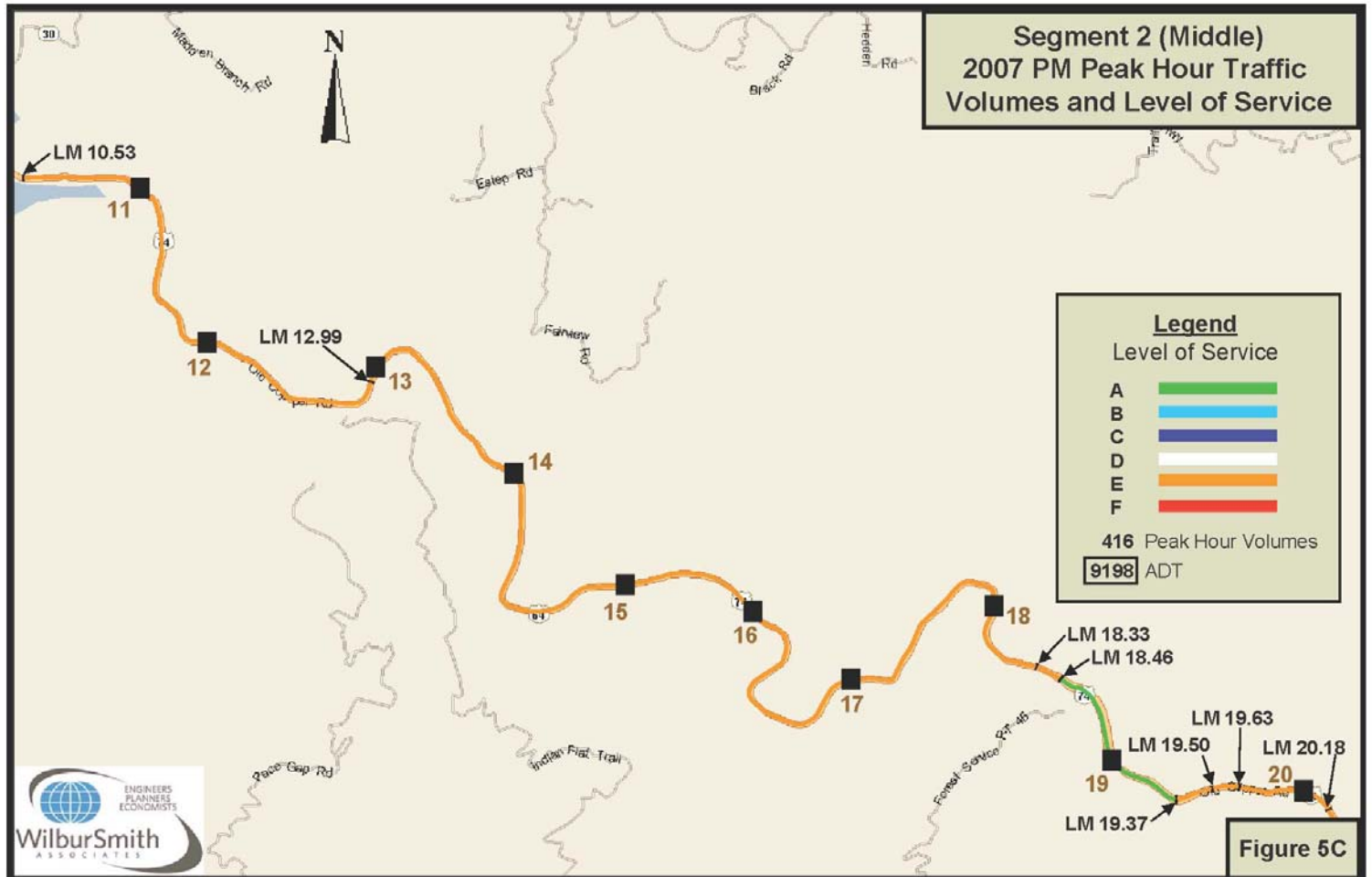


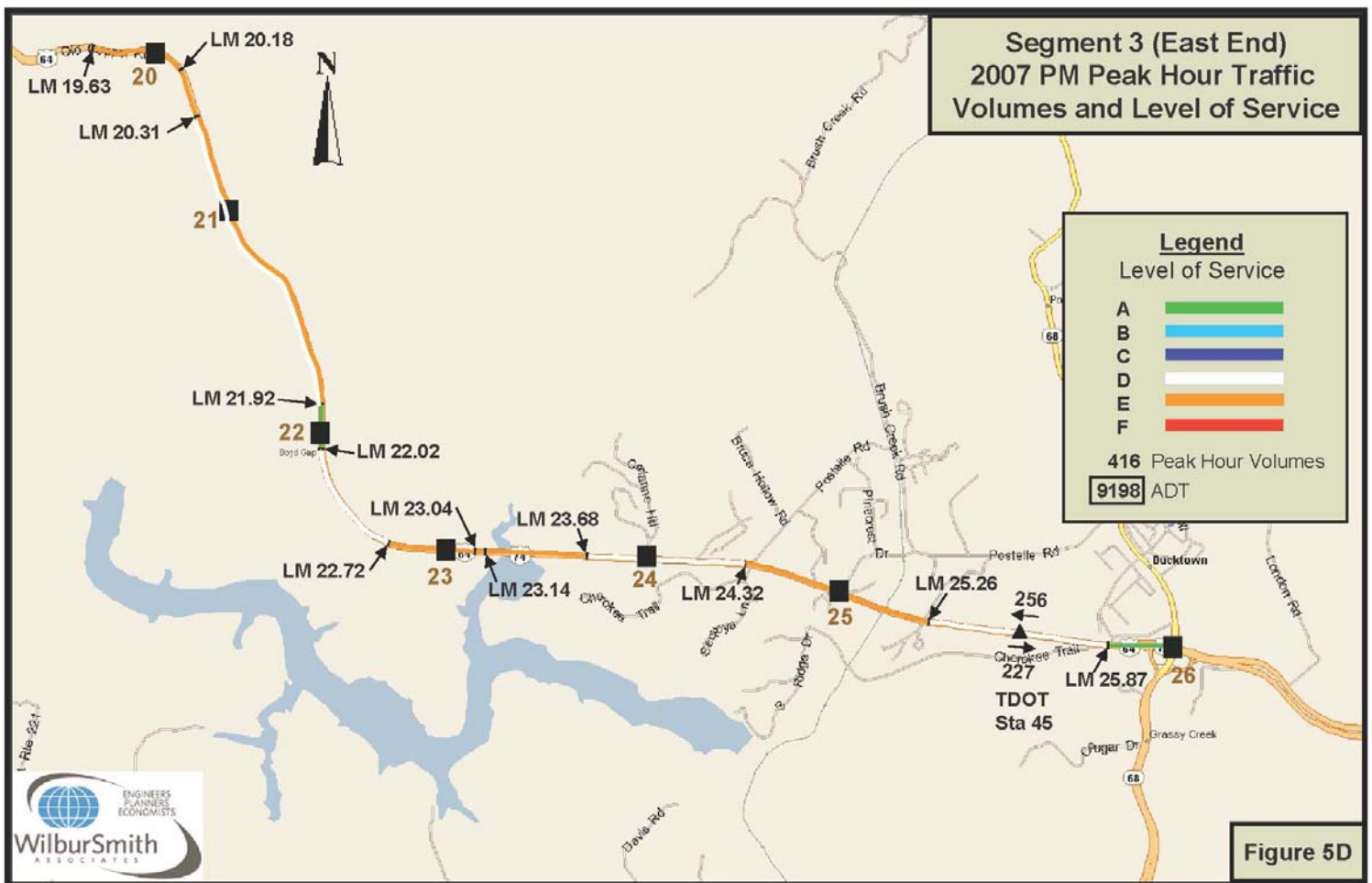


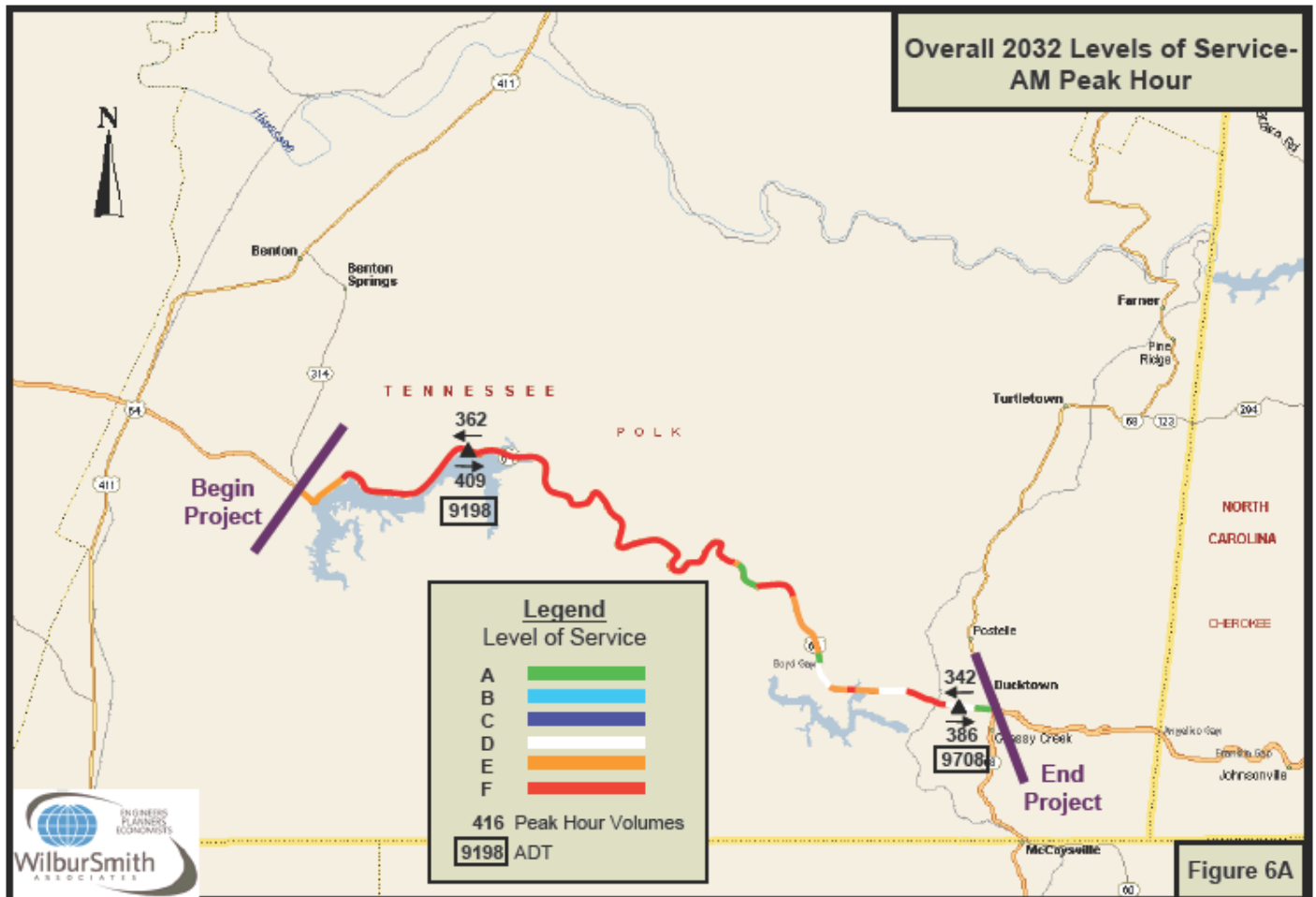


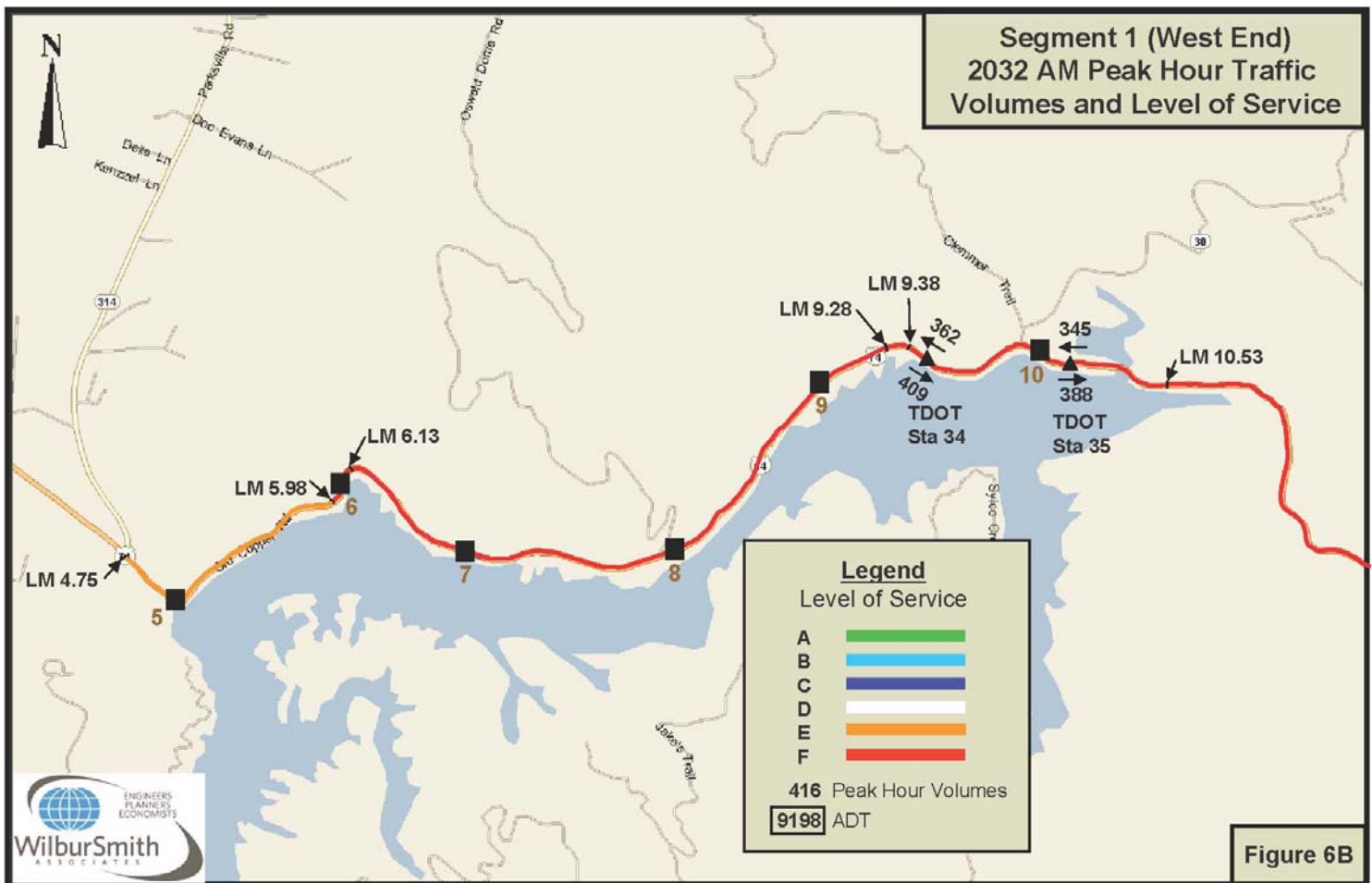


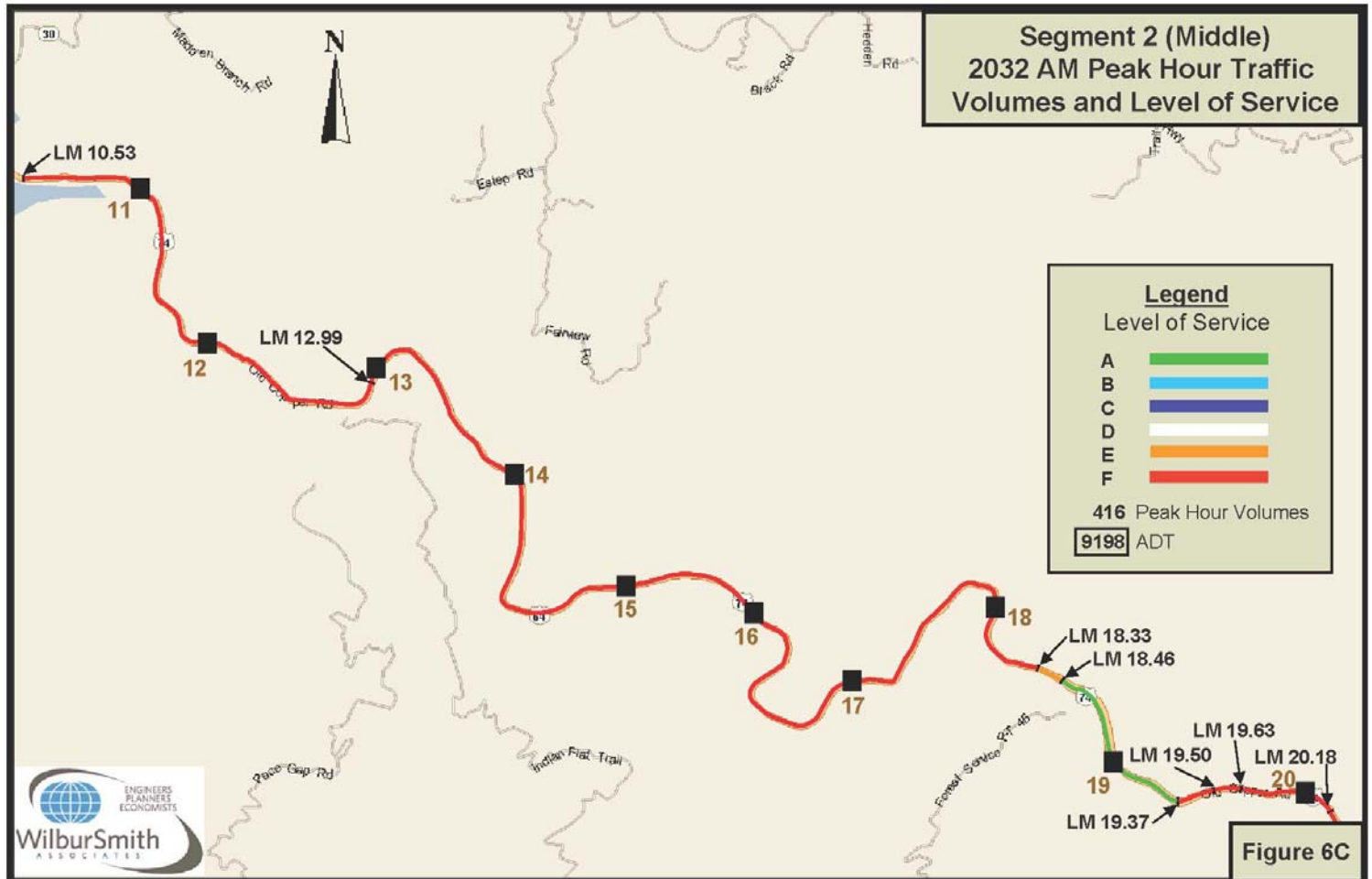


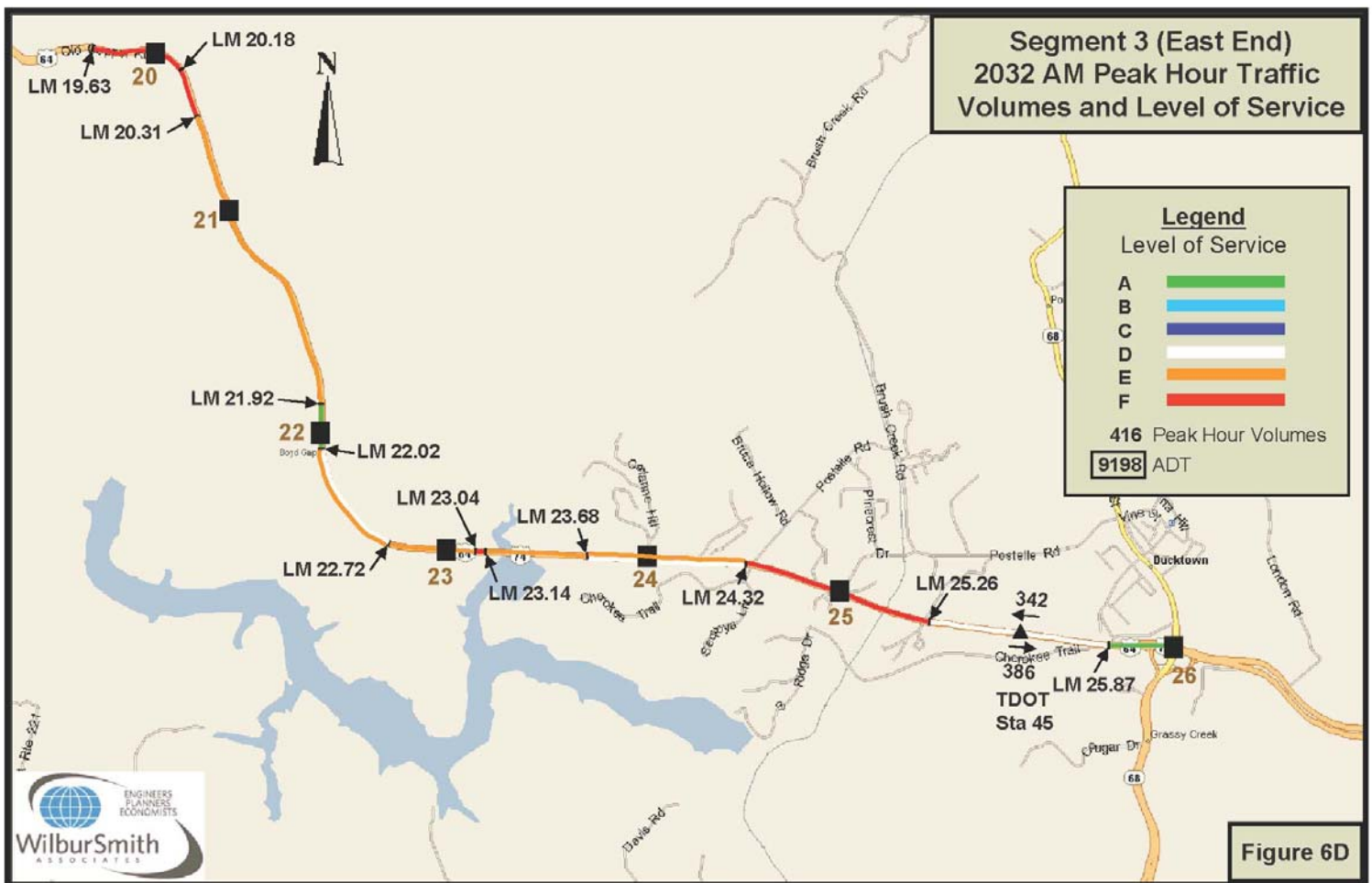


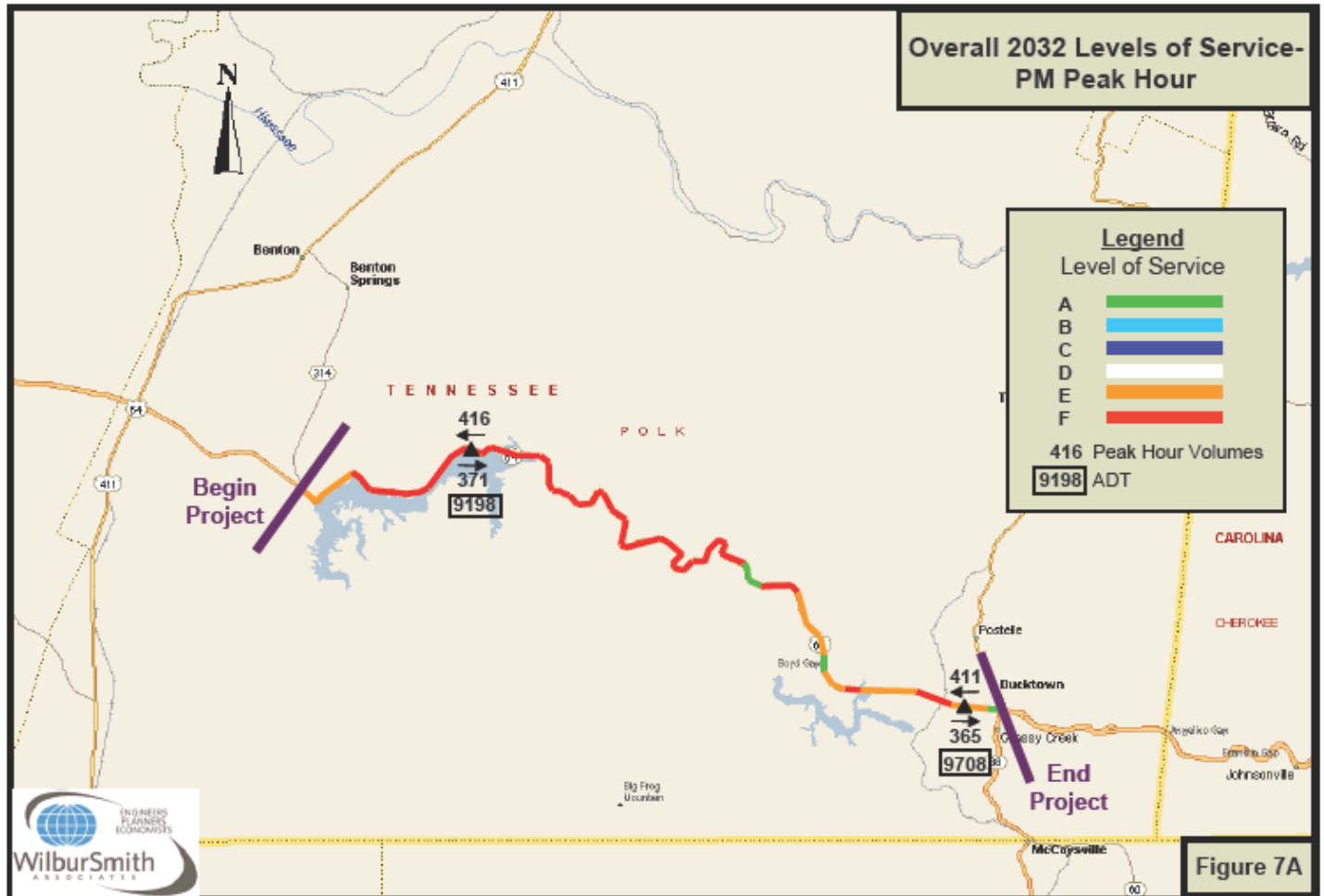


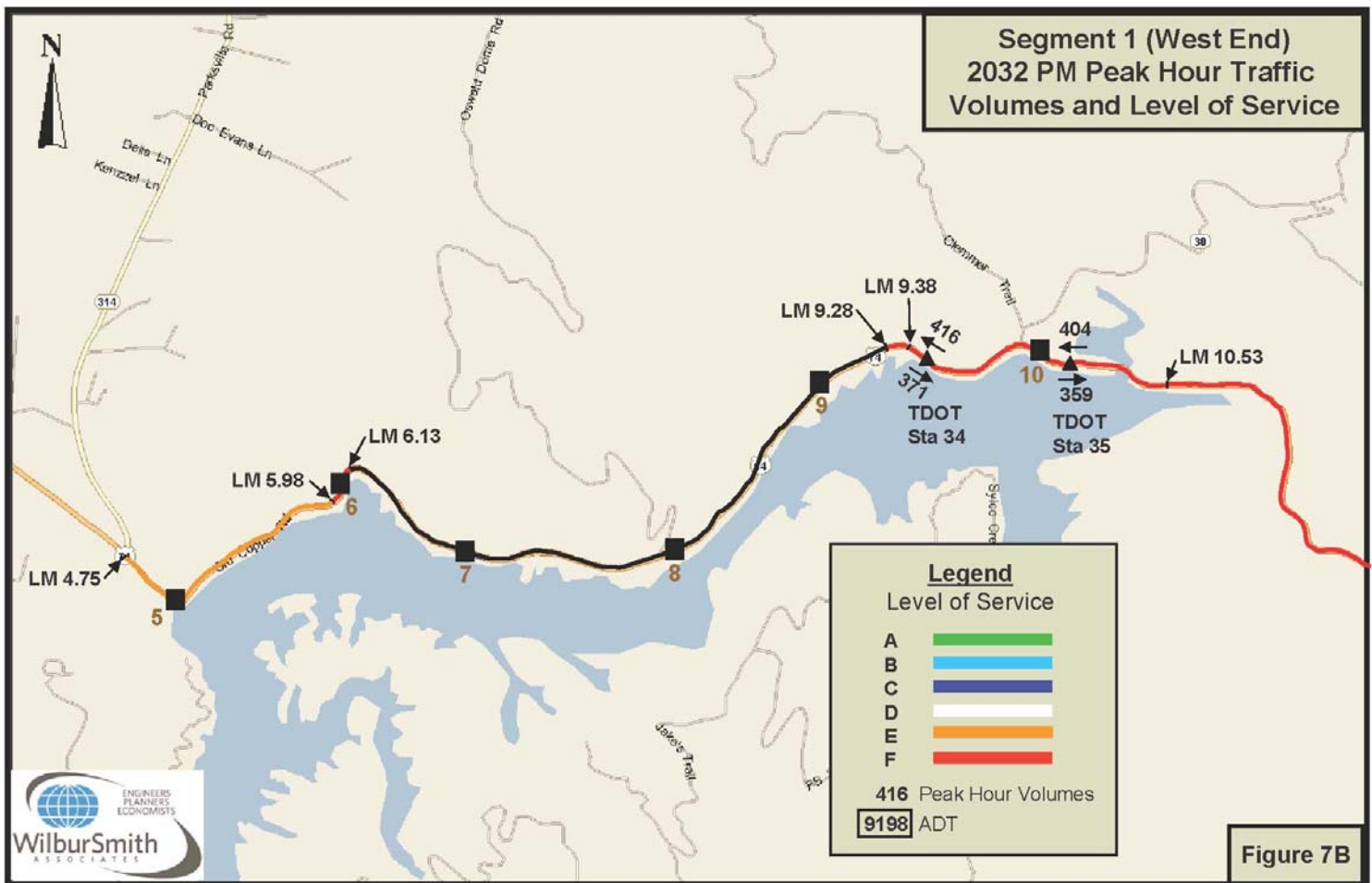


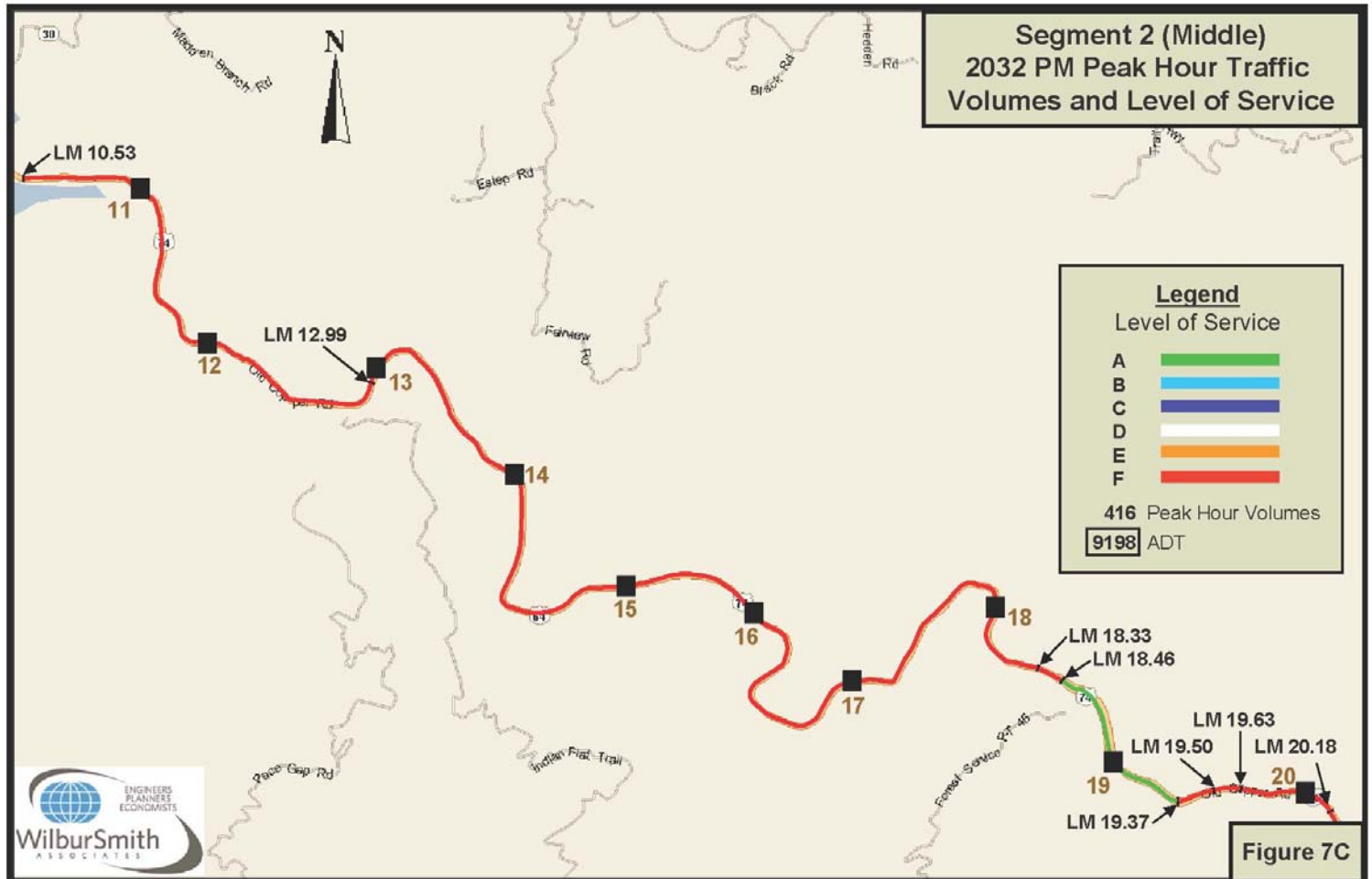


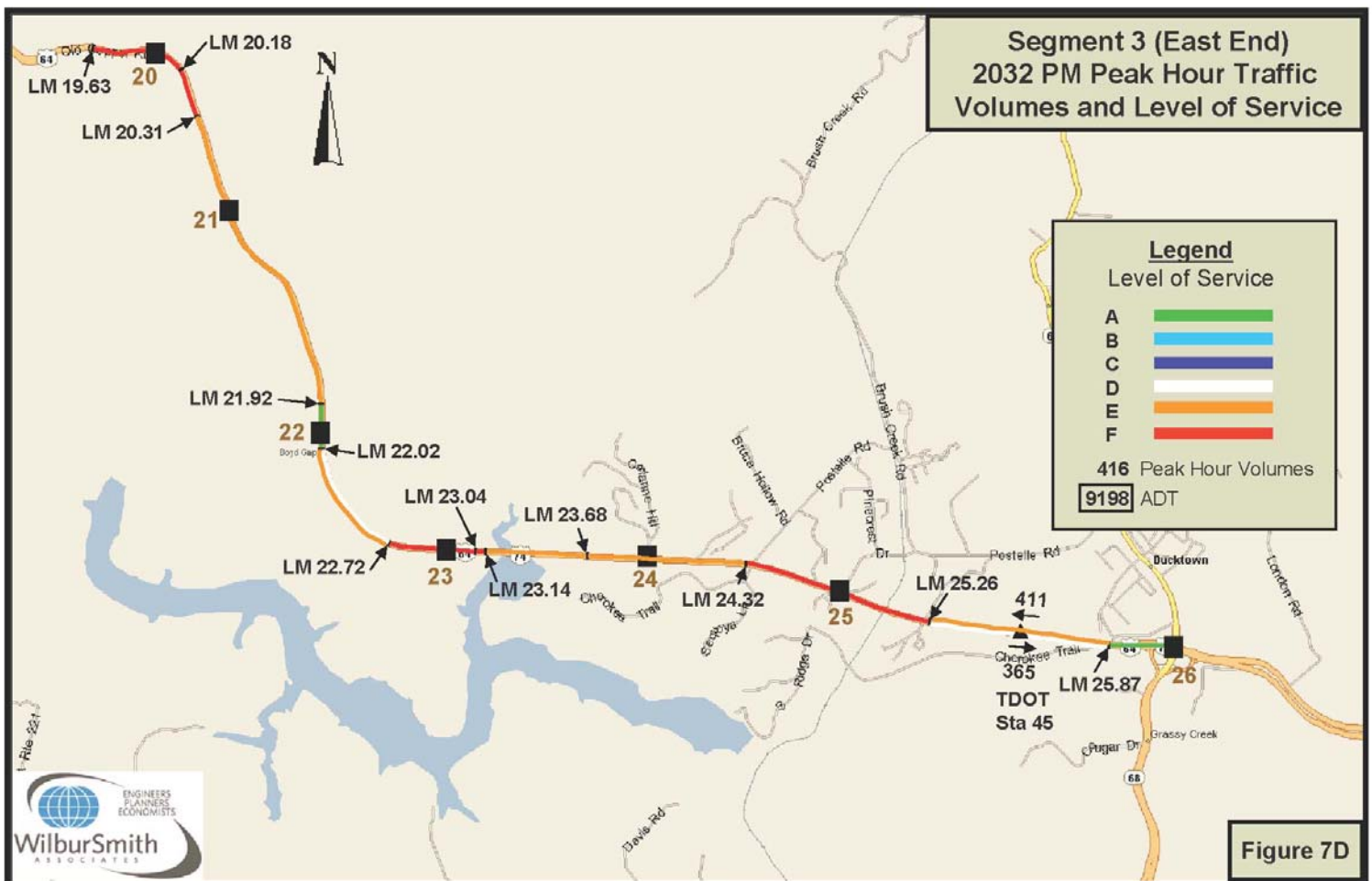














Members of the Corridor K Steering Committee

TITLE	FIRST NAME	LAST NAME	JOB TITLE
The Honorable	Sid	Holcomb	President, DeKalb County
The Honorable	James	Tidmore	Chairman
The Honorable	Bill	Clark	Council Chairman
The Honorable	Ben	Brandon	Dade Co. Exec.
The Honorable	Howell	Bruce, Jr.	Chairman
The Honorable	James	Welch	Commissioner
The Honorable	Eston	Melton	Chairman
The Honorable	Bebe	Heiskell	Commissioner
The Honorable	Brian	Anderson	Chairman
The Honorable	Nathan	Ramsey	Cherokee County Commissioner
The Honorable	Dana	Jones	Chairman
The Honorable	Stephen	Sellers	Chairman
The Honorable	Richard	Stewart	Chairman
The Honorable	Mark	Swanger	Chairman
The Honorable	Brian	McMahan	Chairman
The Honorable	Allan	Bryson	Chairman
The Honorable	Glenn	Jones	Chairman
The Honorable	Gregg	Ridley	Bledsoe County Mayor
The Honorable	D. Gary	Davis	Bradley County Mayor
The Honorable	LaDue	Bouldin	Grundy County Mayor
The Honorable	Ron	Littlefield	Mayor of Chattanooga
The Honorable	Claude	Ramsey	Hamilton County Mayor
The Honorable	Howell	Moss	Marion County Mayor
The Honorable	John	Gentry	McMinn County Mayor
The Honorable	Ken	Jones	Meigs County Mayor
The Honorable	J. Allan	Watson	Monroe County Mayor
The Honorable	Mike	Stinnett	Polk County Mayor
The Honorable	Billy Ray	Patton	Rhea County Executive
The Honorable	David	Barker	Sequatchie County Executive



Corridor K Economic Development Advisory Committee

TITLE	FIRST NAME	LAST NAME	POSITION	COMPANY
Mr.	Jimmy	Durham	Executive Director	DeKalb Co. EDA
Mr.	Dus	Rogers	President & CEO	Jackson Co. EDA
Ms.	Cynthia	Burns	Vice President	North Alabama Industrial Dev. Assn.
Mr.	Robert	Culver	Executive Director	TARCOG
Mr.	Del	Schafer	Special Projects Director	TARCOG
Mr.	Bill	Marshall	Economic Developer GEDA	
Ms.	Tammy	Cole		Catoosa County Chamber
Ms.	Martha	Eaker	President	Catoosa County Chamber
Mr.	J. Olney	Meadows		Catoosa County Dev. Authority
Mr.	Bob	Peck		Catoosa County Development Authority
Ms.	Dinah	Rowe	President	Chatsworth-Murray County Chamber
Mr.	John	Culpepper		Chickamauga Utilities
Mr.	David	Carroll	Executive Director	Dade Co. Chamber
Mr.	George	Woodward		Dalton/Whitfield Co. Chamber
		Coppock		
Ms.	Kristin	Gunia		Fannin County Economic Development
Mr.	Ron	Hutchins		North Georgia E.M.C.
Ms.	Allison	Crossen		North Georgia E.M.C.
Mr.	Ron	Hutchins		North Georgia E.M.C.
Ms.	Laura	Sparks		North Georgia E.M.C.
Dr.	Ray	Brooks	President	Northwestern Technical College
Ms.	Patty	Hart	Econ. Dev. Programs Instructor	Northwestern Technical College
Mr.	Al	Hutchison		Northwestern Technical College
Ms.	Stephanie	Watkins		NW GA Joint Development Authority
Mr.	Doug	Anderton		NW GA Joint Development Authority
Ms.	Rhonda	Lunsford	President	Rabun Co. Chamber
Mr.	Emory	Brock	CECd, Executive Director	Rabun Co. EDA
Mr.	David	Falls		Tri-State E.M.C.
Ms.	Stacy	Mauer		Walker County Chamber
Mr.	Richard	Lutovsky	President & CEO	Asheville Area Chamber of Commerce
			Vice President - Economic	
Mr.	Ray	Denny	Development	Asheville Area Chamber of Commerce
			Executive Director, Economic	
Mr.	Mike	McCarthy	Development	Asheville-Buncombe Technical
Ms.	Sandra	Kimball		Community
Mr.	Bill	Forsyth	Executive Director	Cherokee Co. Chamber
Ms.	Mary Ann	Hooper		Cherokee County EDA
				Clay Co. Chamber



TITLE	FIRST NAME	LAST NAME	POSITION	COMPANY
Mr.	David	Penland	Clay County Grants Coordinator	Clay County Commission
Mr.	Paul	Leek		Clay County Manager
Ms.	Linda	Harbuck	Executive Director	Franklin Chamber of Commerce
Ms.	Judy	Jones	Director of Travel & Tourism	Graham County Chamber
			Economic Development	
Ms.	Melody	Adams	Planner	Graham County Planning & ED
Ms.	CeCe	Hipps	Executive Director	Haywood County Chamber
Mr.	Mark	Clasby		Haywood County ED Commission
Ms.	Laura	Harison	Membership Coordinator	Highlands Chamber of Commerce
Ms.	Tamera	Crisp	Director, Planning & ED	Jackson Co. Planning & ED
			Chairman, Economic	
Mr.	Tom	McClure	Development	Jackson Co. Planning & ED
Mr.	Mark	West	Chairman	Macon County ED Commission
			Director, Economic	
			Development	
Mr.	Chris	Plate		Monroe Business & ED Center
Mr.	John	Carringer		Murphy Power
Mr.	Larry	Kernea		Murphy Power
Ms.	Patricia	Freeman	Western Regional Director	NC Community College System
Mr.	Bill	Gibson	Executive Director	Southwestern Commission
Mr.	Cecil	Groves	President	Southwestern Community College
Ms.	Gwen	Bushyhead	Director	Swain County Chamber
				Swain County Economic Dev.
Mr.	Ken	Mills	Administrator, Economic Dev.	Commission
Mr.	Norman	Oglesby	President	Tri-County Community College
Ms.	Anna	Ponder	Chancellor	University of NC at Asheville
Mr.	John	Bardo	Chancellor	Western Carolina University
Mr.	Rob	Preston		Athens Chamber of Commerce
Mr.	Trevor	Hamilton	VP, Econ. Dev.	Chattanooga Area Chamber
			Director of Existing Business	
			Development	
Mr.	J. Steven	Hiatt		Chattanooga Area Chamber
Ms.	Mattie	Moran		Chattanooga Area Chamber
Mr.	Tom Edd	Wilson		Chattanooga Area Chamber
Dr.	Dan	Throgmorton	Vice President	Chattanooga State Tech. Com. College
Mr.	John	Solsbee		City Manager of Etowah
Mr.	Frank	Welch		City of Dayton Electric Dept.
Mr.	Jerry	Bohannon	President & CEO	Cleveland Chamber of Commerce
Mr.	Gary	Farlow		Cleveland Chamber of Commerce
Mr.	John	Cantrell	Associate Professor	Cleveland State Community College
Mr.	Frank	McKenzie	Dean of Business & Technology	Cleveland State Community College
Mr.	Dennis	Daniel		Cleveland Utilities
Mr.	Rick	Lawson		Cleveland Utilities
No				
director at				
present				



TITLE	FIRST NAME	LAST NAME	POSITION	COMPANY
Mr.	Tom	Wheeler		Cleveland Utilities
Mr.	Randy	Morris	Director	Cleveland-Bradley Chamber
Ms.	Dana	Grissom		Dayton Chamber of Commerce
Ms.	Diana	Bullock		EPB
Ms.	Judy	Burnett	Mgr. Econ. Dev.	EPB
Mr.	Harold	DePriest		EPB
Mr.	Ron	Fugatt		EPB
Mr.	Durant	Tullock		Etowah Chamber
Mr.	Brian	Solsbee		Etowah Utilities
Mr.	Dan	Saieed		Hamilton County Government
Mr.	Brad	Carter		Marion Co. Partnership for Econ. Dev.
Ms.	Nancy	Raffo		Marion County Chamber
The Hon.	Howell	Moss		Mayor, Marion County
The Hon.	Ken	Jones		Mayor, Meigs County
Mr.	Jack	Hammontree	Exec. Vice President	McMinn County EDA
Ms.	Ronda	Tucker	President	Meigs Co.-Decatur Chamber
Mr.	Rob	Preston	CEO	Monroe County Chamber
Mr.	Shane	Burris		Monroe County Economic Development
Mr.	Raymond	Walker	Executive Director	Rhea Co. Economic & Tourism Council
Mr.	Mike	Partin		Sequachee Valley Electric Co-Op
Ms.	Wendy	Bearman		Spring City Chamber
Ms.	Linda	Caldwell		Tennessee Overhill
Ms.	Millie	Callaway	Business Dev. Consultant	TN Dept. Of Econ. & Com. Dev.
Mr.	Scott	Cooper	Business Dev. Consultant	TN Dept. Of Econ. & Com. Dev.
Mr.	Philip	Trauernicht		TN Dept. Of Econ. & Com. Dev.
Mr.	Steven	Moore	Econ. Dev. Specialist	TVA
Mr.	Cecil	Groves	President	Southwestern Community College
Mr.	John	Bardo	Chancellor	Western Carolina University



Corridor K Master Stakeholder List

North Carolina

TITLE	FIRST NAME	LAST NAME	POSITION	COMPANY
Mr.	Richard	Lutovsky	President & CEO	Asheville Area Chamber of Commerce
Mr.	Ray	Denny	Vice President - Economic Development	Asheville Area Chamber of Commerce
Mr.	Mike	McCarthy	Executive Director, Economic Development	Asheville-Buncombe Technical Community
Ms.	Sandra	Kimball		Cherokee Co. Chamber
Mr.	Bill	Forsyth	Executive Director	Cherokee County EDA
Ms.	Ann	Hooper		Clay Co. Chamber
Mr.	David	Penland	Clay County Grants Coordinator	Clay County Commission
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Mr.	Tom	McClure	Chairman, Economic Development	Jackson Co. Planning & ED
Mr.	Mark	West	Chairman	Macon County ED Commission
Mr.	Chris	Plate	Director, Economic Development	Monroe Business & ED Center
Mr.	John	Carringer		Murphy Power
Mr.	Larry	Kernea		Murphy Power
Ms.	Patricia	Freeman	Western Regional Director	NC Community College System
Mr.	Bill	Gibson	Executive Director	Southwestern Commission
Mr.	Cecil	Groves	President	Southwestern Community College
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Mr.	Norman	Oglesby	President	Tri-County Community College
Ms.	Anna	Ponder	Chancellor	University of NC at Asheville
Mr.	John	Bardo	Chancellor	Western Carolina University



Alabama, Georgia, Chattanooga (TN)

TITLE	FIRST NAME	LAST NAME	POSITION	COMPANY
Mr.	Jimmy	Durham	Executive Director	DeKalb Co. EDA
Mr.	Dus	Rogers	President & CEO	Jackson Co. EDA
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Ms.	Cynthia	Burns	Vice President	TARCOG
Mr.	Robert	Culver	Executive Director	TARCOG
Mr.	Del	Schafer	Special Projects Director	TARCOG
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				Catoosa County Development Authority
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Mr.	Ron	Hutchins		North Georgia E.M.C.
Ms.	Allison	Crossen		North Georgia E.M.C.
Mr.	Ron	Hutchins		North Georgia E.M.C.
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Dr.	Ray	Brooks	President	Northwestern Technical College
Ms.	Patty	Hart	Econ. Dev. Programs Instructor	Northwestern Technical College
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Ms.	Stephanie	Watkins		NW GA Joint Development Authority
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Ms.	Rhonda	Lunsford	President	Rabun Co. EDA
Mr.	Emory	Brock	CECd, Executive Director	Tri-State E.M.C.
Mr.	David	Falls		Walker County Chamber
Ms.	Stacy	Mauer		Chattanooga Area Chamber
Mr.	Trevor	Hamilton	VP, Econ. Dev.	
			Director of Existing Business Development	
Mr.	J. Steven	Hiatt		Chattanooga Area Chamber
Ms.	Mattie	Moran		Chattanooga Area Chamber
Mr.	Tom Edd	Wilson		Chattanooga Area Chamber
				Chattanooga State Tech. Com. College
Dr.	Dan	Throgmorton	Vice President	



Cleveland (TN) and others

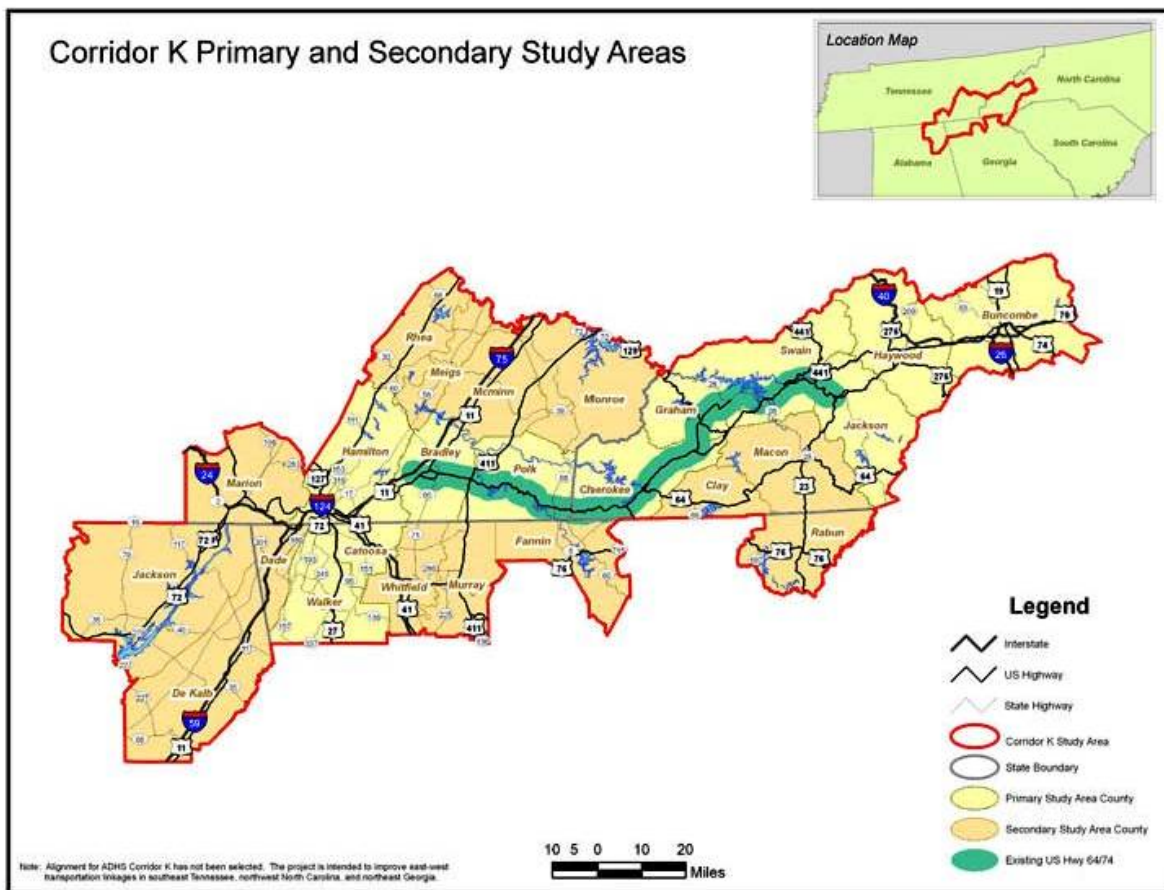
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Mr.	Frank	Welch		City of Dayton Electric Dept.
Mr.	Jerry	Bohannon	President & CEO	Cleveland Chamber of Commerce
Mr.	Gary	Farlow		Cleveland Chamber of Commerce
Mr.	John	Cantrell	Associate Professor Dean of Business & Technology	Cleveland State Community College
Mr.	Frank	McKenzie		Cleveland State Community College
Mr.	Dennis	Daniel		Cleveland Utilities
Mr.	Rick	Lawson		Cleveland Utilities
Mr.	Tom	Wheeler		Cleveland Utilities
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Mr.	Durant	Tullock		Etowah Chamber
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Mr.	Brad	Carter		Marion Co. Partnership for Econ. Dev.
Ms.	Nancy	Raffo		Marion County Chamber
The Hon.	Howell	Moss		Mayor, Marion County
The Hon.	Ken	Jones		Mayor, Meigs County
Mr.	Jack	Hammontree	Exec. Vice President	McMinn County EDA
Ms.	Ronda	Tucker	President	Meigs Co.-Decatur Chamber
Mr.	Rob	Preston	CEO	Monroe County Chamber
Mr.	Shane	Burris		Monroe County Economic Development
Mr.	Raymond	Walker	Executive Director	Rhea Co. Economic & Tourism Council
Mr.	Mike	Partin		Sequachee Valley Electric Co-Op
Ms.	Wendy	Bearman		Spring City Chamber
Mr.	Philip	Trauernicht		TN Dept. Of Econ. & Com. Dev.
Mr.	Rob	Preston		Athens Chamber of Commerce

Corridor K

Existing Business Transportation Survey

Corridor K is part of the Appalachian Development Highway System. Segments of this road have not been constructed yet however this corridor could significantly improve access for Southeast Tennessee, Southwestern North Carolina, and Northeast Georgia. The Appalachian Regional Commission (ARC) has funded a study to determine if there are economic development opportunities that could be realized if the transportation infrastructure in this region was improved.

Corridor K Primary and Secondary Study Areas



Existing businesses are a vital part of this region's economy. As a part of this study, the Chamber of Commerce in your community has been asked to identify businesses in their area that may use the existing east-west roadway infrastructure on a regular basis or businesses that might benefit from access to improved east-west roadway connections. By east-west connections we mean either traveling on existing Hwy 64/74, traveling north to I-40 or south to I-85 in order to go east or west. This survey is designed to understand how the existing east-west highway connections impact local businesses and how improvements to east-west highway connection might benefit local businesses in the future.

Your participation in this survey is very important to this study of the Corridor K region and the information you provide will be kept strictly confidential. Please feel free to add additional comments at the end of the survey in the space provided. We appreciate your time in completing this survey. If you have any questions about this survey, please call Melissa A. Ziegler with Wilbur Smith Associates at 865-963-4340. Thank you.

Existing Business Survey for Corridor K:

1. Where is your primary business location (e.g. Murphy, Chattanooga, Benton, etc)?

2. What is your primary business activity (e.g. manufacturing, services, sales, etc)?

3. When was your business established in your community(e.g. 1984)?

4. How many employees do you currently employee?

Full-time

Part-time

5. If you have part-time employees do they work year round or only during a certain season of the year? ☐ Year round ☐ Seasonal

If you have seasonal employees, which season is your busiest season?

☐ Spring - ☐ Summer - ☐ Fall - ☐ Winter

6. Are your customers primarily:

☐ Local ☐ Regional ☐ Statewide ☐ National ☐ International

7. Are your suppliers primarily:

- ☐ Local ☐ Regional ☐ Statewide ☐ National ☐ International

8. What economic factors would have a positive impact on your business?

(please add additional factors in the space provided below)

- ☐ Lower fuel costs
☐ Higher skilled workforce
☐ Better internet service
☐ Improved east-west highway connections
☐ Construction of Corridor K- Chattanooga to Asheville Parkway
☐ Lower shipping and distribution costs

Other factors:



9. What economic factors have a negative impact on your business?

(please add additional factors in the space provided below)

- ☐ High fuel costs
☐ Limited access to skilled workforce
☐ Lack of adequate internet service
☐ Poor existing east-west highway connections east of I-75
☐ Lack of a good highway connections to travel east or west of I-75
☐ High shipping and distribution costs

Other factors:



10. Have your sales increased, stayed the same, or decreased in the past three years?

- ☐ increased ☐ the same ☐ decreased

11. In your opinion, what are this region's greatest strengths as a place to do business?



12. In your opinion, what are this region's greatest weaknesses as a place to do business?

13. Are there any barriers to growing your businesses in this region?

☐ Yes ☐ No

If so, what are those barriers?

14. If you ever considered relocating, closing, or selling your business what would be the primary reasons for making that decision (please add additional reasons in the space provided below)?

- ☐ Changing marketing conditions
- ☐ Transportation costs
- ☐ Declining populations
- ☐ Lack of workers
- ☐ Limited highway access
- ☐ Environmental concerns
- ☐ Lease expires
- ☐ Retirement

Other factors:

15. Do the gaps in the existing transportation system east-west connections pose a serious long term problem for your business and if so, how does the lack of transportation connectivity affect your business today and in the future?

16. Would a new highway connecting southeast Tennessee and southwest North Carolina to interstate highway benefit your business?

☐ Yes ☐ No

If so, how could this road help your business?

17. Do you anticipate transportation costs to play an increased role in your businesses ability to compete in the future?

☐ Yes ☐ No

18. Do you currently receive materials that are delivered to east coast ports or do you ship finished products from east coast ports?

☐ Yes ☐ No

If so, which ports and what kind of products?

19. Is there anything else you would like to comment on in response to this survey?

Thank you for responding to this survey, your confidential information will be very helpful in our study of economic development and transportation in the Corridor K region.