

3.0 Detailed Corridor Analysis Summaries

This section provides three detailed corridor analysis summaries undertaken during the course of this study to provide real world context to the economic impact analysis, and help guide and validate the economic development assessments of completing the ADHS. The three corridor analyses are:

Corridor T in New York which stretches 250 miles between I-90, just east of Erie, Pennsylvania to Binghamton, New York;

Corridor V in Northwest Mississippi - the full corridor travels from South Pittsburgh, Tennessee through Northern Alabama and into Northwest Mississippi; and

Corridor H in West Virginia and Virginia which is approximately 150 miles between I-79, near Weston, West Virginia to I-81 in Strasburg, Virginia.

The analysis of each corridor is part of a broader effort to assess the economic impact of the completion of the ADHS. Specifically, the purpose of each case study was to develop an understanding of the economic effects of an area in which highway corridor have either been largely completed, or partially completed with significant segments still to construct. The detailed corridor analyses assessed the transportation and economic development issues as communicated through a series of interviews with local stakeholders in May and June 2007.

3.1 CORRIDOR T (NEW YORK) ANALYSIS SUMMARY

3.1.1 Background

The Appalachian Development Highway System-designated “Corridor T” stretches 250 miles between I-90, just east of Erie, Pennsylvania to Binghamton, New York (see Figure 3.1). Much of this segment, also known as the “Southern Tier Expressway,” has been upgraded from NY 17 to interstate status and is now designated as I-86. However, despite the change in designation, considerable portions of I-86 between Salamanca and Cuba, New York (32 miles) are still being constructed as of summer 2007, with only two lanes of traffic (one direction each way) in operation. These improvements, once completed (expected by October 2008), will provide trucks and other vehicles with close to a full interstate travel experience between Erie and Binghamton.¹⁴ A major intersection in Horseheads, north of Elmira, opened in June 2007, and is expected to bring major improvements in travel performance to the area. Small parts of NY 17 east of Binghamton also have been upgraded to interstate standards (and designated I-86).

Longer term, improvements (mostly grade separation projects) to NY 17 between Binghamton and I-87 in eastern New York (Orange County), will develop I-86 into a 380-mile interstate between Erie and New York City’s northern suburbs. With the possible exception of a handful of antiquated interchanges (grade separated, but not conforming to interstate standards), I-86 is expected to be completed by 2014. In addition to the upgrades already taking place on Corridor T, these downstream improvements will go a long way toward improving access to the New York City region and lower New England from Upstate New York.

The economic impacts analyzed in this case study focus on the upgrade of NY 17 to I-86 between Chautauqua County in the west and Broome County in the east. The study area also includes Cattaraugus, Allegany, Steuben, Chemung, and Tioga Counties. Together, these counties comprise an area known as the “Southern Tier.” Although the majority of the highway improvements are complete, it must be kept in mind that the full potential of Corridor T cannot be appraised completely until construction on several segments is completed.

¹⁴NY 17 between Elmira and Binghamton (55 miles) is mostly a four-lane, grade-separated highway. A small number of improvements are being planned to address curb cuts and substandard geometries that prevent the road from fully complying with interstate design standards.

3.1.2 Current Economic Transportation Conditions

The Southern Tier maintains economic assets in its skilled workforce, advanced technological capabilities, scenic landscape, fertile land, and a location between the Northeastern Megalopolis, stretching from Boston to Washington, D.C., and the Midwest industrial heartland. Despite these strengths, the Southern Tier has confronted economic headwinds for years, at least in part due to its long-term reliance on manufacturing. As manufacturers have shifted production from the Northeast and Midwest to lower cost locations, the Southern Tier has seen jobs leave and a prolonged out-migration of its population to regions possessing stronger employment growth. Today, with the combined strengths of the Southern Tier's technological base, centered on the advanced skill sets of its people and the cutting edge research taking place at its corporations and universities, the Southern Tier is now showing more economic resilience and is better situated for growth in the future. The recently completed and nearly completed improvements to the region's transportation infrastructure - namely the conversion of NY 17 into I 86 - is paramount to supporting the area's economic revitalization. The added ability to connect efficiently to large markets, both in terms of the movement of goods and the movement of people, is bringing renewed economic optimism to the Southern Tier. For example, regional leaders are promoting the region as a crossroads, well-connected economy, highlighting connections to I-81 and large surrounding markets.

The Southern Tier continues to have a significant manufacturing presence, with major producers of truck engines, furniture, helicopters, subway cars, glass, ceramics, avionics, electronics, dairy products, and fabricated metals. After years of job losses in manufacturing, many of the region's larger employers have recently made major investments in the region to accommodate expansion and to increase research and development activity. Corning, the largest company headquartered in the Southern Tier, saw job losses earlier this decade but has used innovation to develop a new stream of products that have succeeded in keeping the company at the forefront of the advanced materials technologies used in electronics, telecommunications, motor vehicles, and medical equipment. Recent expansions on the Southern Tier have been launched by large employers, including Cummins Engine, Corning, Alcas, Alstom, TTA, Lockheed-Martin, and BAE Systems (see Table 3.1 for size and industry information for these companies). The expansions by existing large employers have been complemented by companies, such as Sikorsky (helicopters), Vulcraft (structural steel), Best Buy (distribution) and Shop-Vac (industrial vacuums), choosing the Southern Tier for relocation.

Table 3.1 Major Employers in the Southern Tier

County	Company	Industry	Number of Employees
Chautauqua	Cummins Engine	Truck Engines	1,100
Chautauqua	Bush Industries	Furniture	1,000
Chautauqua	Valeo Engine Cooling	Truck Parts	300
Cattaraugus	Dresser Rand	Turbines, Compressors	2,200
Cattaraugus	Seneca Allegany Casino	Casino	1,200
Cattaraugus	Alcas	Cutlery	1,000
Allegany	ABB Air Preheater	Air Heaters/Oxidizers	620
Steuben	Corning, Inc.	Advanced Materials	4,800
Steuben	Dresser Rand	Oil Field Equipment	875
Steuben	Hon Furniture	Office Furniture	850
Steuben	Alstom	Subway Trains	1,275
Steuben	Mercury Aircraft	Metalwork, Pellet Stoves	800
Steuben	TTA	Subway Trains	1,000
Tioga	Lockheed-Martin	Aircraft and Avionics	4,250
Broome	BAE Systems	Aircraft Control Systems	1,250
Broome	Endicott Interconnect	Electronics	1,900
Broome	Maines Paper and Food	Food Distribution	1,500

Source: Information obtained through interviews with regional and local economic development officials.

Competitive Advantages of the Corridor Region

The Southern Tier combines quality of life attributes (lakes, waterways, culture, natural attractions) with historically strong school systems and a productive workforce. More than a century of manufacturing expertise has helped provide a strong work ethic and gives the region a range of skills needed by industry. While the labor force is highly skilled, it is lower cost compared with larger metropolitan areas. The region is advantageously positioned to access the Northeast, the industrial Midwest, and Ontario, the center of Canadian economic activity. The Southern Tier's location is particularly advantageous for the manufacturing, tourism, and distribution industries.

The Southern Tier also possesses world-class research in several high-technology fields, including ceramics and electronics, supported by corporations such as Corning, Inc., Lockheed-Martin, and Endicott Interconnect. Major universities, including Binghamton University (SUNY) and nearby Cornell University, also lead in innovation and supply the region with specialized skills, particularly in electronics and engineering. Several other institutions lining the Southern Corridor, including Jamestown Community College, Alfred University, and St. Bonaventure University also provide the region with skilled workers and advanced research capabilities (e.g., Alfred University in ceramics).

Competitive Disadvantages/Obstacles of the Corridor Region

Although the conversion of NY 17 to I-86 has helped improve mobility and the visibility of the Southern Tier, other transportation enhancements are needed to more fully leverage the interstate improvements. These include improved north-south highways, such as NY 60 and U.S. 219 to better reach I-90 and the Buffalo region, notably its airport. Air service is poor in the Southern Tier (low frequency and high fares at commercial airports in Jamestown, Elmira, and Binghamton), making access to larger airports such as Buffalo-Niagara all the more important. Numerous major companies as well as colleges and universities located on the I-86 Corridor have expressed a need for improved access to major airports to support their operations.

There also is a need to invest in the Southern Tier's infrastructure capacity, including cost-competitive local water and wastewater systems, natural gas and electric service, and broadband telecommunications. Numerous intersections on I-86 are not prepared to accommodate growth and the villages farther from the interstate often lack adequate infrastructure to compete. Prospective companies are looking for "shovel-ready" sites at intersections, but relatively few have infrastructure put in place. The region, in many instances, needs to develop plans to more fully capitalize on the I-86 improvements, including coordinated transportation planning with other modes (e.g., rail and intermodal), land use planning combined with infrastructure improvements to direct growth, and economic development packages to secure business investment.

The slow pace of population growth in the Southern Tier also is a concern. The primary contributor to the slow population growth is domestic out-migration – people leaving the region for other parts of the United States. This outflow has coincided with the long-term decline in manufacturing jobs and has pushed thousands of people to seek opportunities in faster-growing parts of the United States. In coming years, the lack of growth combined with an aging population raises concerns about the availability of a working age population – people that can supply businesses in the region with needed labor.

High taxes (property and income), high energy costs, and other expenses (unemployment insurance and workers compensation) in the State of New York make it more challenging for the Southern Tier to compete with Pennsylvania (and other locations) on the basis of cost, especially in attracting manufacturers. Economic incentives, including Empire State Development's "Empire Zone" program has proved instrumental to help counteract New York's high costs of doing business by providing tax breaks. Major companies in the Southern Tier have been beneficiaries of this program and have brought additional jobs into the region. This includes BAE Systems, which plans to consolidate a portion of its California operations in the Binghamton area. Until New York State's onerous structural costs (taxes and energy) are brought down to levels similar to competitor states, it will be important for these incentives to be maintained, particularly as the Southern Tier competes with other locations to attract and retain manufacturers.

3.1.3 Economic Impact of Corridor

Industry Opportunities

Tourism. The completion of I-86 will provide a new east-west corridor and travel alternative to I-90 and I-80. The increase in through-traffic can be tapped into as a tourism market and I-86 could be marketed (signage, marketing materials, information centers, travel plazas, etc.) as a corridor, similar to initiatives already in place for the New York Thruway (I-90). The increase in the end-to-end usage of I-86 is expected to spur travel to area attractions such as Chautauqua Institution (160,000 visitors per year), Peek'n Peak (400,000), Allegany State Park (1 million), Seneca Casino (over 1 million), the Holiday Valley/Ski areas (1.2 million), Corning Glass Museum (350,000), Finger Lake wineries and cultural attractions (e.g., Dr. Frank's Vinifera Wine Cellars in Hammondsport, one of 94 wineries in the Finger Lakes Region, has about 60,000 visitors annually) and Tioga Downs (opened mid-2006).

Manufacturing. The completion of I-86 allows for the development of industrial corridors in the Southern Tier. These include a ceramics/advanced materials corridor, going from Alfred to Corning, rail equipment and diesel engines from Jamestown to Elmira, and an aerospace corridor from Elmira to Binghamton. The aerospace cluster includes helicopter manufacturing in Owego and Elmira and simulators and avionics (aircraft control equipment) in Binghamton. Recently, the Lockheed Martin facility in Owego was awarded with a contract to build the presidential (U.S.) helicopter fleet. In order to improve production efficiencies for helicopters, Lockheed and other aerospace-related companies are seeking to source more products, such as precision machinery and fabricated metals, locally. Improvements on I-86/NY 17 are helping to support the growth of an aerospace cluster in the region as it allows for supplies to be shipped and delivered more quickly and with greater reliability.

Facilitating Trade and Market Access

Tourism and Community Development. The emergence of I-86 has helped to boost tourism in Western and Central New York. Visitors seek security and reliability when they travel and will choose to use interstates when possible. People prefer to drive on I-86 over state highways, and this has helped the resort areas in New York (e.g., Peek'n Peak, Lake Chautauqua, and the Finger Lakes). Additionally, I-86 has tied the Southern Tier together as a tourism region, allowing visitors to easily reach the diverse range of attractions, including lakes, waterways, viticulture, performing arts, and nature that stretch along the corridor.

As an example, the old NY 17 (now NY 352) in the Town of Corning, went through a densely settled downtown area, and was a choke-point for trucks and a blight for tourism-related traffic - conditions that fostered neither manufacturing nor tourism. Aware of imminent improvements to I-86 that would ease the flow of truck traffic by shifting them from downtown to the interstate, companies such as Corning Inc. have chosen to invest more intensively in towns like Corning and the

Southern Tier region. For Corning, this has included new plants and a \$50 million expansion to its glass museum, a major tourist draw. Coinciding with the development of I-86, the Town of Corning initiated substantial public-private investments to improve its downtown commercial core, turning it into an area that attracts workers, residents, and tourists. The attractive downtown helps to attract a new generation of workers that is much more attuned to the livability of a community. These types of highly educated workers choose where they want to live and Corning's downtown helps attract them to the region. These efforts, crucial to the vitality of the Southern Tier's technologically advanced companies, would not have succeeded and investments would not have been made without the relocating of NY 17 to I-86 and the removal of trucks from the downtown streets.

Manufacturing. The development of I-86 is considered a crucial factor behind the expansion of several major manufacturers along New York's Southern Tier. Cummins, a world-leading manufacturer of diesel engines, is expanding again after consolidating a division of its manufacturing operations at its Chautauqua County facility several years ago. Cummins is supplied entirely by truck (150 per day) and has a global supply chain. I-86 provides Cummins with a direct interstate link to Midwestern suppliers and the company's expansion in Chautauqua County would not have been as likely without the interstate improvements. Interstate access also was pivotal to Bush Industries, also in Chautauqua County, which returned furniture manufacturing jobs to the Southern Tier.

Corning Incorporated, a company focused on the research and production of advanced materials found in telecommunications and other uses, has invested \$100 million to manufacture state-of-the-art diesel exhaust treatment systems in Erwin, and has made additional investments in robotics. The company is research intensive and is undergoing a \$300 million expansion of its research facilities, a project that will bring an additional 300 scientists into the region. These new and expanded facilities are located in industrial parks on I-86 in the Corning-Elmira area.

Economic development officials believe these and other manufacturing investments would not have occurred without the I-86 upgrades. In fact, I-86's effect on the retention of manufacturing jobs was a main theme reiterated by Southern Tier economic development officials. Without I-86, it was believed that 25 to 40 percent of the large manufacturers in the region would have been lost and the potential for growth would have been effectively eliminated. The older roads in the Southern Tier are not reliable for shipping or receiving goods and do not work well for "just-in-time" (JIT) logistics strategies. I-86 now provides the roadway infrastructure and connectivity needed to compete in the United States and global economies.

Throughout the Southern Tier, numerous business expansions across a wide range of industries were fostered by proximity to I-86, including: tobacco, wood pallets, potato processing, robotics, ceramics, and artificial joints.

Distribution and Logistics. Corridor T's location between major Eastern and Midwestern markets has helped grow and attract several of the largest distribution companies in the United States, as well as the logistics operations of some of the country's best-known retailers. This includes the distribution of food products along the entire Eastern Seaboard and consumer electronics for the Northeast. Several of these companies have made very large investments in Southern Tier locations in recent years, underlining their commitment to remain in/expand within the region in the future. I-81, I-88, and NY 17/I-86 provide the Southern Tier with excellent access to major markets throughout the Northeast Corridor, the eastern part of the Midwest, and points south. I-86 is developing into a more viable east-west alternative, allowing truckers to save on I-90 tolls, a further enhancement for distributors operating from locations in the Southern Tier.

Ohio Logistics has recognized the advantages of the region and has located a distribution center in Painted Post, and is anticipating future growth with the completion of the I-86 improvements as well as the conversion of U.S. 15 to I-99, providing it with north-south interstate access, as well as east-west.

On the western segment of Corridor T, Kaman Industrial Technologies, a distributor of bearings, power transmission, electrical, fluid power, and motion control products, opened a new branch location in Olean. The company plans to serve both regional and national manufacturers from the location. Improvements to U.S. 219 and better access to the Buffalo market will help southwestern New York become more competitive as a distribution location.

The completion of improvements to NY 17 east of Binghamton as part of the NY 17 upgrade to interstate standards will further improve access to the New York City area and Southern New England while the conversion of U.S. 15 to I-99 in Pennsylvania will provide a new north-south route that will further enhance accessibility for the Southern Tier. Additionally, new interstates will add visibility to the region, making it more likely that other distributors will consider sites in the Southern Tier as prospective locations for expansion.

Connecting People to Jobs, Tourist Attractions, and Services

I-86 has improved connectivity to markets (labor force, suppliers) and business and non-business destinations outside the region. It also has improved commuting and other business travel within the region, benefiting businesses operating within the area. Improved mobility in the western part of the Southern Tier has helped attract delivery companies (e.g., FedEx), providing parcel delivery services that are crucial (and expected by businesses) to compete both domestically and worldwide.

Health services have become more accessible and major new healthcare facilities on the 285-mile corridor are being built on sites immediately adjacent to the interstate (e.g., in Steuben County). In a similar fashion, new libraries, also in Steuben County are being built on sites next to the I-86 corridor.

Educational institutions, likely due to improved access by students and teachers, are selecting locations adjacent to I-86 for expansions. Jamestown Community College's Olean branch recently expanded to a site near the highway and future plans call for another satellite campus close to I-86 in Belvidere.

I-86 serves two major tourist districts, the Lake Chautauqua/Allegany State Park area in Southwestern New York and the Finger Lakes region in Central New York – both popular for visitors and second homes. Lake Chautauqua, and its venerable Chautauqua Institution, has been a popular destination for well over a century. I-86 aids access to the institution from the Cleveland area, as well as from Central New York. The improved highway also has been a factor spurring a \$280 million investment at Peek'n Peak to convert the facility into a high-end year-round resort, combining ski, golf (including a PGA tour quality course), spas, new hotels, and a conference center. Nearby, the Village of Sherman, also on I-86, has received a grant to improve its Western-appearing downtown as a tourist draw, and the town of Mayville on the north shore of Lake Chautauqua has experienced a sharp increase in tourism-related development.

New hotels and restaurants are being built throughout the I-86 Corridor, both to accommodate tourists and increased through-traffic. A well-placed rest stop on I-86 with a view of Lake Chautauqua has become a popular spot for drivers, attracting 220,000 vehicles in 2006. Many of these people are headed for the Seneca Casino in Salamanca, and tourist information has helped raise the awareness of the region as a place to visit beyond the casino. Directly on I-86 frontage in Salamanca, the Seneca Casino has emerged as a leading tourist draw in Southwest New York. Cleveland is a key market for the region and I-86 is considered a lifeblood. In Central New York, the Finger Lakes Region is experiencing rapid growth as a tourist destination and I-86 is a key route for reaching the area from Cleveland, Philadelphia, Pittsburgh, and New York City – cities targeted by Finger Lakes' marketing efforts.

Overall Economic Development Impacts

The I-86 improvements help the region's employers by expanding the labor market. People can cover longer distances in less time and with greater reliability (less congestion, fewer unanticipated delays, and better snow removal) on I-86 than on state and local roadways. For large manufacturers, the ability to draw on a bigger, more diverse labor pool is an important competitive factor that helps to keep them in the Southern Tier. For example, I-86 has enabled Olean employers to attract workers from as far away as Hornell, helping to meet labor needs.

Distribution and logistics companies have recognized the advantages of locating on I-86 and further expansions are expected as I-86 and I-99 are completed, giving the Southern Tier an east-west and north-south interconnection. The completion of I-86 will improve access to Boston and New York, while I-99 in conjunction with I-390 and I-81 will provide interstate connections from the Southern Tier to Washington, Baltimore, the U.S. South, and the large Canadian markets. This future east-west and north-south interconnection already is being

marketed by Southern Tier economic development agencies even though I-99 will not be completed until 2010 or 2011.

Manufacturing companies, as previously discussed, also have been drawn to the I-86 corridor and more are expected as the interstate is completed. Industrial parks, such as the Airport Corporate Park in Elmira, offering access to both I-86 and Elmira-Corning Regional Airport, are helping to attract a more diverse manufacturing base (e.g., aircraft, steel, and pharmaceuticals) to the Southern Tier region. In Elmira, both Sikorsky, a manufacturer of helicopters, and Vulcraft, a maker of steel joists, required proximity to an interstate as a condition for expansion. Investments such as these are expected to not only bring economic growth to the region but also will help the Southern Tier weather economic downturns.

Jamestown, New York economic development officials describe I-86 as a boon to their area and pivotal for retaining its manufacturing jobs and manufacturing suppliers. Looking into the future, the city plans to redevelop its riverfront area into a major recreational attraction that would attract thousands of people on a yearly basis. The details of the project are being developed but it is clear that the prospects for such a proposal would be greatly reduced without the improved access that I-86 provides the city.

3.1.4 Other Issues and Stakeholder Comments

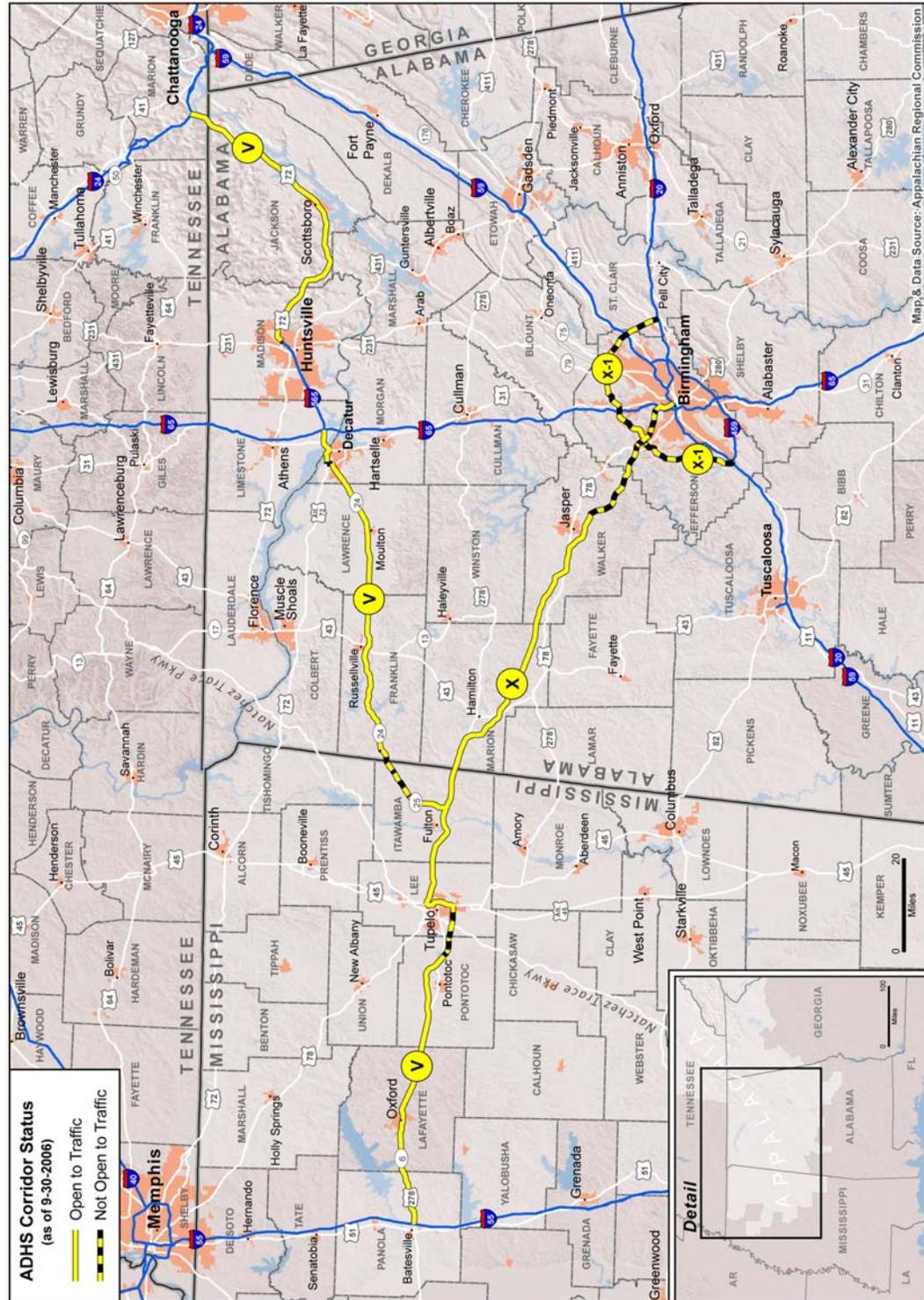
The towns and attractions nearby I-86 are trying to attract people from the highway, and are dependent on highway signage for marketing, but much of the through traffic is not aware of the recreational opportunities in the region. Through traffic on I-86 represents the most cost-effective way to market to potential visitors and higher traffic levels translate to more tourism dollars. However, it has proven very difficult and expensive to add signage to I-86. The area needs more signs showing how to obtain information (800-CALLNYS) and logo signs at exits pointing to area attractions and services. The logo signs are very expensive (\$10,000 or more per year) and the process to post a sign is slow.

3.2 CORRIDOR V (MISSISSIPPI) ANALYSIS SUMMARY

3.2.1 Background

Appalachian Corridor V stretches from South Pittsburgh, Tennessee through Northern Alabama and into Northwest Mississippi (see Figure 3.2). The area that was the focus for this case study, however, is the segment between Tupelo and Pontotoc, Mississippi. The upgrade of this part of the corridor from a rural two-lane road to a separated four-lane highway would provide a four-lane connection between I-55 to the west and U.S. 45 to the east. The current upgrade plan has the four-lane highway divert from the old path of Route 6 and connect to U.S. 45 Southwest of Tupelo.

Figure 3.2 Corridor V in Mississippi, Alabama, and Tennessee



Much of the economic development in the region was due to the partial completion of Corridor V according to local experts and stakeholders. The completion of the remaining 8.5 miles of this corridor segment is likely to spawn a renewed development effort in Lee and surrounding counties especially in light of the close proximity to Corridor X and the recent decision of the Toyota Corporation to locate a major manufacturing facility just North of Tupelo.

3.2.2 Current Economic and Transportation Conditions

The corridor expansion falls primarily within Lee and Pontotoc Counties in Northern Mississippi. Both of these counties have traditionally lagged behind overall growth in the U.S. economy but have seen improved economic conditions in recent years. As of April 2007, the unemployment rates in Lee and Pontotoc County were 5.8 and 6.1 percent, respectively. These rates were the lowest among the eight neighboring counties in Northeast Mississippi but still nearly two percentage points higher than the national average of 4.3 percent in the same month. Census data from 2000 indicate median household incomes of \$32,055 and \$36,165 in Pontotoc and Lee County, respectively, which was significantly below the average of \$41,994 for the entire United States in the same year. Population in Lee County grew from 65,575 in 1990 to 75,755 in 2000 according to Census data.

Lee County (and Tupelo, in particular) has established itself as the retail trade magnet for the surrounding counties. As of March 2007, total retail sales receipts in Lee County amounted to \$1.3 billion. A large regional mall is located north of the city and provides shopping opportunities for residents in nearby towns and counties. Access from the south is somewhat more difficult because of increased congestion on local roads.

The completion of Corridor X in Northern Mississippi and Alabama has made transportation easier and allowed for improved connectivity in the area. The corridor connects with U.S. 78 and combined will be renamed I-22 once all interstate requirements have been met. The new I-22 will further provide connectivity to Memphis and other Southern states, also providing direct benefits to Lee and Pontotoc Counties. However, one key area of concern for the area is the lack of connectivity between what will become I-22 and Corridor V. Route 15 which runs north-south from Pontotoc to North Albany is significantly congested during peak periods. One of the reasons is the location of the largest furniture manufacturer along this route. Safety is an additional concern according to local stakeholders due to the existence of several schools along the same route. Route 9 connecting with the future I-22 at Blue Springs, the site of the future Toyota plant, also is suffering from increasing congestion. According to local stakeholders, these two routes and their respective levels of traffic provide significant transportation problems for the region.

Major Employers and Trends

The case study area is traditionally known for its furniture manufacturing. Roughly one-third of total employment in Lee County is a result of manufacturing employment. As of January 2007, Lane Furniture Industries was the second largest employer in the region with 2,850 employees. Only the North Mississippi Medical Center located in Tupelo was a larger employer with 4,286 positions as shown in Table 3.2.

Table 3.2 Major Employers in Lee County

Companies	Number of Employees
North MS Medical Center	4,286
Lane Furniture Industries	2,850
Cooper Tire and Rubber	1,550
Tupelo Public Schools District	1,200
JESCO, Inc.	1,000
Wal-Mart, Sam's	979
MTD Products	950
Bancorp South	800
Lee County Schools	751
Super Sagless Corporation	720
Day-Brite Capri Omega	700
Tecumseh Products Company	670
HM Richards, Inc.	620
City of Tupelo	575
Berklene Corporation	400
Hancock Fabrics	400
Renasant Bank	390
Lee County	339
Alan Whit Furniture Company	300

Source: Community Development Foundation, Executive Profile, January 2007.

Furniture manufacturing, however, has gone through challenging times in recent years. Since 1994, one-third of all manufacturing jobs in this sector have been lost. Due to increased competition from China and other Southeast Asian countries, local companies had to lay off workers and generally downsize operations. Comprehensive furniture manufacturing has been replaced with assembly of products and production of higher value items. The shipping and importing of assembled furniture items is difficult because of their size. Hence, local firms have increasingly adopted the approach of importing segments and then assem-

bling items themselves. This is one of the reasons why the loss of jobs in this industry has been halted in recent years. In addition, consumers in the United States demand relatively short delivery times. The average currently is about 18 days after the receipt of the order according to local economic development and business experts. Production and shipment from competitors in China takes more time and, therefore, provides an advantage for local firms.

The main recent development shaping the economic profile of the region is the decision of the Toyota Corporation to locate a major assembly plant just north of Tupelo. Current estimates are that the first car may be produced in mid-summer 2009. The development of the plant is being completed in two phases. Phase 1 includes a total capital investment of \$1.3 billion and will create 2,000 plant-based and another 2,000 supplier jobs. Phase 2 is still being developed but current estimates are that the completion of this phase will likely double the Phase 1 investment and employment estimates.

Toyota will be manufacturing Highlander Sport Utility Vehicles at this site. This is the first time that Highlanders will be built in the United States and, therefore, it will require a new network of parts suppliers, ideally located in or near the region. Local economic development experts further estimate that in addition to the direct jobs, up to three jobs per one direct job will be created through indirect and induced multiplier effects. The siting of the Toyota plant is, therefore, a significant economic development change for the region with potentially very beneficial short- and long-term consequences.

Competitive Advantages of the Corridor Region

The Corridor region can be characterized by having several distinct advantages that may further facilitate economic development. Generally, the area has good school systems, including K-12 as well as higher education. Specifically, the University of Mississippi located in Oxford on Corridor V provides a large pool of graduates on an annual basis. In addition, the area also has several community colleges which allow students to obtain two-year associate degrees or more vocational education. This makes for a relatively skilled workforce and consequently an attractive pool of workers for current or future employers.

In addition, most companies in the study are non-unionized resulting in more competitive wage levels. These lower payroll costs combined with what has been perceived as high productivity due to good work ethic also are very attractive for employers.

The location of the corridor also may be advantageous to economic development. In addition to local factors, freight traffic is routed through the area via rail and the overall volume of rail and truck shipments will likely increase in the future according to local experts. Toyota's decision to manufacture cars in this area is evidence that industry leaders also have discovered the location advantages of Northeastern Mississippi and the connectivity to markets such as in Tennessee and Alabama.

Competitive Disadvantages/Obstacles of the Corridor Region

Local stakeholders have primarily identified transportation issues as the key obstacle for the corridor. In particular, Route 15 is now experiencing significant peak-hour congestion which has negatively affected freight and logistics of the large furniture manufacturers along this route. This has restricted the feasibility of North-South connections between the two highways in the eastern (I-55), and western (I-45) parts of the State.

The completion of Corridor X and the relocation of Corridor V, from north of Tupelo to south of the City adjacent to the Regional Medical Center have further exacerbated the problem. No direct connection between Corridors X and V is planned and with Toyota having located along Corridor X north of Tupelo, this may only further worsen the traffic volumes on Routes 15 and 9 which currently function as the connectors between these corridors. Also, with most retail trade and manufacturing located north of the city, areas to the south may have to catch up economically. An industrial park is being developed but the success of such a venture will directly depend on the completion of Corridor V.

3.2.3 Economic Impact of Corridor

The partial completion of the corridor prompted economic development along the old Route 6 all the way from Oxford to just west of Tupelo. This has created the need for additional retail trade establishments in the area. For example, a Wal-Mart Supercenter is located in Pontotoc County, just adjacent to Corridor V, and the retail store clearly makes use of the transportation infrastructure by attracting customers from a broad area, especially west of Lee County. Completion of the corridor is likely to continue this trend and some of the additional benefits of the completed corridor are described below.

Industry Opportunities

The completion of Corridor V is expected to have significant positive impacts for local industries. Whereas currently all freight truck traffic going east-west has to go west from Tupelo on the old Route 6 in order to ultimately reach four-lane roads, the completed corridor would allow freight movements through Tupelo. Routing traffic through the city currently is very limited because all through traffic needs to go through the downtown area in order to connect Corridor V with I-45.

The largest development opportunities may be south of Tupelo once the corridor is completed. The city has provided the infrastructure in the form of a developed industrial park and other available land. Planning has taken into consideration that the City's objective is to balance economic development on the northern side with direct job creation on the southern periphery. As a result of this planning effort, new automotive parts suppliers for the Toyota facility are expected to be attracted to the industrial land south of Tupelo.

The completed corridor also would benefit the existing industries, such as furniture manufacturers, because of the improved connections to markets to the east, plus I-45. Finally, the Regional Medical Center will gain access to a much wider service area and residents in counties beyond Lee and Pontotoc will be able to make use of high-quality medical services without incurring large travel costs.

Facilitating Trade and Market Access

Together with the completion of Corridor X, Corridor V serves an important purpose in the local transportation and distribution system. As a result of the improved highway, travel times from the west will be significantly lower. This applies to both the through traffic and traffic ending in Tupelo. Trade between the different areas of Lee County as well as the surrounding counties and the entire State will see improvements. For example, retail trade will benefit from improving access to areas west of Tupelo. At the present moment, the retail trade catchment area is primarily north and northwest of Tupelo. Retail outlets in Tupelo can attract shoppers from as far as Memphis according to some local stakeholders. However, only limited access exists from other directions. Since there is no good east-west connection, shoppers from the west, for example the Greater Oxford area, may prefer to travel north towards Memphis for their retail purchases.

In addition to any retail trade benefits, freight patterns and logistics also will be improved for regional and national markets. Much of the freight traffic originating at the Gulf Coast and heading towards Memphis (and points beyond) also is directed through Tupelo and currently has no other option but to take Corridor X up to Memphis. The completed Corridor V will provide an alternative to that route especially for trucks whose ultimate destination is not Memphis but rather points further North and West.

The completion of the corridor also will benefit the connectivity in regard to freight. Approximately 400 trucks each day enter and leave the Ashley furniture manufacturing plant. These trucks are in part limited by the incomplete corridor infrastructure and experience delay especially on Routes 15 and 9. A lot of the congestion in an around Tupelo is driven by these heavy volumes of freight movements. A completed Corridor V would allow all freight to avoid the downtown area and use the limited access highway to connect to other highways in the East or West.

However, local stakeholders have pointed out that expansion of Route 15 from a two- to a four-lane road is at least as important as completion of Corridor V. Especially now that the Toyota site has been chosen, a connection between Corridor V and X would bring immediate benefits according to local experts. Local stakeholders anticipate that the alternative of moving along a completed Corridor V east, then north on I-45 would be an inferior travel route.

Connecting People to Jobs, Tourist Attractions, and Services

The completion of Corridor V will significantly improve connectivity in the region. For example, commuters from western parts of the county or counties west of Lee County currently face a lengthy commute to Tupelo employers. With the opening of the corridor, travel times should fall and commuting to large employers in the area will become less congested. At the moment, workers from 11 different counties commute to the furniture manufacturing plant owned and operated by the Ashley Corporation. This is a sign that commuting behavior in the area has changed to the point where workers are willing to accept longer trips, partially due to a relatively scarcity of jobs and potentially higher wages in employment centers. Another contributing factor can be found in zoning practices. Much of the residential growth has been driven by land use policies such as increased numbers of subdivisions in Lee and Pontotoc County.

Improved corridor connectivity also will improve the access to services in the region. For example, the completed corridor will allow for better access to the businesses in downtown Tupelo. Being a center for economic activity in the region, Tupelo is home to businesses such as several financial institutions, office complexes, and the regional medical center. Hence, residents of the area will be able to access these businesses more easily via a completed Corridor V. The medical center is one of the largest rural hospitals in Mississippi. It serves both the immediate area and also population within a wider radius around Tupelo. The completed corridor will consequently allow a larger share of the regional population to take advantages of the services offered by the medical facility.

Tourism has not been identified as a significant issue by most stakeholders. The exception is the area around Oxford, on the western end of Corridor V. The local economy in Oxford is supported by both the University of Mississippi and tourism and the many small hotels and bed and breakfast establishments. Even though the completion of the corridor will improve east-west accessibility for visitors, it was pointed out that most tourists may actually reach Oxford via Memphis or the Gulf Coast and, therefore, depend primarily on the north-south corridor of I-55 to the west of Oxford.

Overall Economic Development Impacts

The overall expected economic impact is seen as very positive. A completed Corridor V will allow for better connections of freight trucks and employees to the employment and manufacturing centers in the area. Some of these centers are still in development and it will take several years for the full impact to be felt. In addition, there will be a significant benefit from improved transportation to retail trade locations.

However, the incremental impacts of the completion of the corridor will be difficult to measure because of the potentially simultaneous completion or expansion of the Toyota plant North of Tupelo. It is this aspect that will likely be the

driving force behind future economic growth and development in the Northeastern Mississippi region.

In order to stimulate economic growth and development opportunities, it seems essential that Corridor V is completed as soon as possible. There is much economic activity going on in the area and most of its success depends on the flexibility and efficiency of the local transportation system.

3.2.4 Other Issues and Stakeholder Comments

The stakeholders that were interviewed for this case study consisted of local elected officials and their respective staff, economic development professionals, transportation experts, as well as other experts in the field. Without exception, the importance of completion of the corridor was identified as a very high priority. However, the capacity of local roads, such as Route 15, was further identified as one of the key bottlenecks which could restrict economic growth opportunities in the future.

Mississippi Department of Transportation officials pointed out that due to the changed layout of Corridor V; there is now a lack of funding even if the capital improvements were funded as originally planned. Additional funds need to be included in the planning in order to allow for a complete four-lane segment of highway to be constructed South of Tupelo.

3.3 CORRIDOR H (WEST VIRGINIA) ANALYSIS SUMMARY

3.3.1 Background

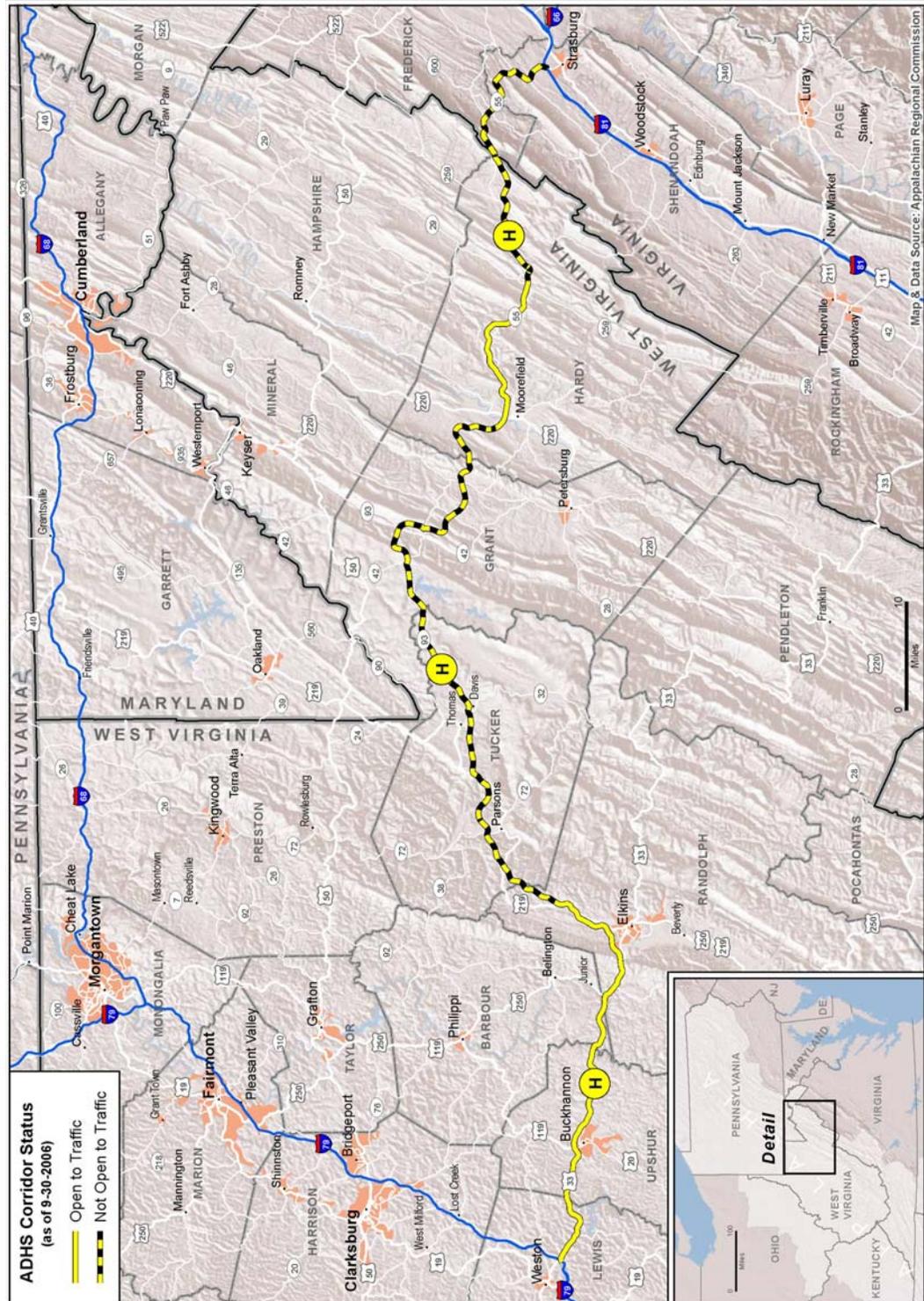
The ADHS-designated “Corridor H” is approximately 150 miles between I-79, near Weston, West Virginia to I-81 in Strasburg, Virginia (see Figure 3.3). Portions of this highway corridor have been completed but much remains to be built. Completed segments include:

The western portion of the Corridor (about 40 miles) from I-79 through Buckhannon to Elkins and north to Kerens; and

An approximately 20-mile segment in eastern West Virginia from Moorefield to Wardensville (with uncompleted segments to the east and west).

Significant work on this corridor remains, thus limiting the current effectiveness of completed segments. For example, the uncompleted segment from Kerens to Moorefield is necessary to more efficiently and cost-effectively ship products to eastern markets and seaports such as Baltimore and Norfolk. Furthermore, while the completed segment from Moorefield east to Wardensville substantially improves travel time and safety, the rural, mountainous two-lane highway that remains to the east (connecting to I-81 and Strasbourg in Virginia) limits the attractiveness of this route for freight and passenger travel.

Figure 3.3 Corridor H in West Virginia and Virginia



Feedback from all stakeholders in West Virginia indicates that the environmental review process has been completed for the remaining West Virginia segments and that the location of the highway corridor alignment is finalized.¹⁵ The constraining factor appears to be financial. The State is moving forward, but full funding and construction may take upwards of 10 to 12 years to complete. The segment from Moorefield west to Scherr currently is under construction. Less encouraging, funding and final plans to complete the Virginia section of Corridor H are still lacking for the critical connection to I-81, the nearby Inland Port, and I-66 connections east to the Washington, D.C. metro market.

The economic impacts analyzed in this case study focus on the anticipated benefits of completing the entire Corridor H. The study area for this case study is focused on the West Virginia counties along the corridor: Lewis, Upshur, Barbour, Randolph, Tucker, Grant, and Hardy counties. These counties comprise a combination of the Region VII and Region VIII planning and development councils. In fact, the top priority of the Regional VII Planning and Development Council in their Comprehensive Economic Development Strategy (CEDS) is completion of Corridor H and thus there is widespread support locally and regionally for this project. Although major segments of the highway corridor are incomplete, examples of economic development and industry success stories related to the existing segments of Corridor H are provided as indication of potential economic effects.

3.3.2 Current Economic and Transportation Conditions

Economic and demographic trends in Corridor H West Virginia counties are largely flat. Both employment and population are largely unchanged over the past five years, though the labor force has grown slightly and the unemployment rate has decreased. For a rural section of West Virginia, this is not bad news. Indeed, employment gains and retention in various service industries and selected manufacturing and natural resources industries are preventing overall declines that might be expected with traditional industries such as mining and agriculture that have experienced declining employment. Industries and initiatives with developmental potential include:

The wood products industry, with a mix of raw and finished goods is strong in the Corridor with the Appalachian hardwood forest providing in-demand wood resources. Many of the larger manufacturing and exporting businesses within the region are directly related to wood products, including Armstrong and American Woodmark (see Table 3.3).

¹⁵Current alignment is a northern route through Parsons, Davis, Bismarck, and Scherr before heading east to connect in Moorefield. Earlier Corridor H alignment plans called for a more southern route from Elkins east to Petersburg and then to Moorefield.

Table 3.3 Major Private Sector Employers in Corridor H

County	Company	Industry	Number of Employees ^a
Randolph	Armstrong Wood Products	Hardwood Products	950
Tucker	Kingsford	Charcoal	125
Upshur	Weyerhaeuser	Wood Products	
Upshur	Appalachian Forest Saw Mill	Wood Products	75
Lewis	Dominion	Energy	150
Lewis	Lynn Energy	Energy	153
Lewis	Viking Swimming Pools	Manufacturing	125
Tucker	Timberline Four Seasons Resort Management	Tourism	
Tucker	Canaan Valley Resort	Tourism/Ski	277 (Peak Season)
Randolph	Davis Memorial Hospital	Health Care	
Randolph	Colonial Millworks	Lumber	
Hardy	American Woodmark	Cabinet Making	300
Hardy	Fertig Cabinet Company	Cabinet Making	
Hardy	Pilgrim Pride Corporation	Food Processing (Poultry)	
Hardy	Conagra Poultry	Food Processing (Poultry)	

Source: Information obtained through interviews with regional and local economic development officials; the Region 8 PDC Comprehensive Economic Development Strategy 2004-2008; and Region VII PDC Annual Report FY 2006-2007 CEDS.

^a As available.

The cities and towns along the completed section of Corridor H from I-79 to Elkins are showing signs of economic vitality with new commercial investment, new housing starts, and positive employment trends. While some of the new investment is in industries not normally associated with growing the base economy (retail, hotels), the investments by national chains (Lowe’s, Hampton Inn, etc.) are an indicator of the economic prospects of the region.¹⁶

The poultry and other manufacturing industries near Moorefield have been able to offset other business departures with gains partly due to the completed section of Corridor H to the east.

Relatively new industrial parks are either under development, expansion, or being built in most Corridor H counties, as the region leverages completed sections of the Corridor or anticipates future growth opportunities by focusing on all-important “shovel ready” sites at industrial parks.

¹⁶This is especially relevant given the recent emphasis on attracting prison facilities which highlights how the Corridor region, as recently as 5 to 10 years ago was willing to recruit any industry that could help provide job opportunities.

The Corridor H towns and counties between Kerens and Moorefield remain largely rural but with the completion date of the entire Corridor stretching out, this very rural, isolated economy struggles to grow and retain its traditional industry strengths such as tourism (including two nearby ski resorts) and the coal industry. For example, the Canaan Valley Resort in Tucker County has recently been losing money and has an out-dated facility. At the same time, the State sees the economic benefit of that facility and is working with the resort on a major renovation project. The success of that renovation project, however, largely depends on the ability of the resort to attract more visitors from the booming, large Washington, D.C. metropolitan area, which continues to stretch westward. Thus, the completion of Corridor H will enhance these destination tourism businesses.

Another economic area that currently lags behind is the warehousing and distribution industry. Economic development officials note the lack of distribution centers or larger trucking companies along Corridor H, and are quick to point out that until the Corridor is completed and freight can move efficiently in the region, no significant gains in this industry are expected.

Competitive Advantages of the Corridor Region

Similar to other areas within Appalachia, Corridor H combines quality of life attributes (mountains, lakes, rivers, historic villages, and natural attractions) with relatively strong school systems and a productive workforce. A tradition of mining and manufacturing expertise has helped provide a strong work ethic and gives the region a range of skills needed by industry. While the labor force is relatively well-regarded by the private sector and economic development officials, it is still lower cost compared with larger metropolitan areas. It should be noted, however, that there is some concern of late about job-ready skills and work ethic of younger workers just out of high school, and some counties (e.g., Tucker) have such low population that it can be difficult to find enough quality workers.

The state's traditional energy industry, together with the more recent wind farm industry, help to keep energy costs reasonable. Other cost factors, such as land and buildings, also tend to be lower than average, though that has changed recently along the completed sections of Corridor H.

Perhaps the region's biggest competitive advantage currently is the Appalachian hardwood forest and the range of wood products industries located in the region. Many of these, including Armstrong, Coastal Lumber, and Appalachian Forest, produce highly sought wood products that are exported to a range of international destinations (Europe and Asia) in addition to other domestic destinations. The success, and in many cases growth, of these industries highlights the quality of their product given the tremendous transportation disadvantage faced by area industries due to a lack of efficient, safe, cost-effective transportation routes to access international markets.

Another major asset for the region, especially on the eastern half of the Corridor, is proximity to the Washington, D.C. metropolitan area. Already, housing growth (retirees and second homes) in Hardy and to some extent Grant County is occurring related to D.C. market proximity. The natural beauty of the area's mountain ranges and valleys combined with relatively low-housing costs and the ability to live close enough jobs and business opportunities to the east is increasingly appealing to homebuyers.

While the Corridor H region does not possess significant high-technology or research and development firms, the western part of the region has benefited from completion of Corridor H, which allows commuters the chance to access high-paying, high-skill jobs in the Clarksburg Federal laboratories and biometrics industry (north along I-79).

Competitive Disadvantages/Obstacles of the Corridor Region

Without a doubt, the lack of a completed Corridor H is the biggest impediment to broader economic growth throughout the region. While congestion in a traditional sense (traffic volumes) may not be a problem on the two-lane roads that travel east-west from Elkins to I-81 in Virginia, the windy, mountainous nature of those roads creates very slow driving conditions, especially for freight trucks (and the vehicles behind them). These limitations lead to increased transportation costs, reduced reliability, and longer distances when shipping via alternative routes:

Local lumber product companies estimate that it is three times more costly to ship their wood products to east coast ports (primarily Baltimore and Norfolk) than to ship the product from the port to Europe.

Avoiding the windy two-lane east-west roads to use I-79 and I-68 increases travel distance to east coast ports by over 300 miles.

Local wood products businesses consistently score poorly on customer service because of the unreliability of their shipments, tied to poor east-west connections.

Other competitive disadvantages include infrastructure capacity, particularly the availability of cost-competitive local water and wastewater systems, natural gas and electric service, and broadband telecommunications. Increasingly, economic development officials are developing "shovel-ready" sites near the Corridor, and working to provide sufficient water/sewer facilities.

Another concern is the relative lack of alternative modes of transportation for passenger and freight movement. In general, freight rail and air infrastructure and service levels are below average. The region, in particular near Buckhannon, is working to expand air transport facilities such as extending runways to allow for a broader range of private and commercial airplanes. Freight rail service is provided by CSX in parts of the Corridor H region, but is infrequent and not fully connected to east coast markets.

The Virginia Inland Port near the intersection of I-81 and I-66 is the most promising freight facility near the region, providing advanced logistics and customs services such that a shipment can flow seamlessly from the Inland Port to a ship via rail and containers. However, until Corridor H is completed, the benefits of the Inland Port largely are escaping the region's exporters (e.g., wood products industries note that at least 25 percent of their goods are exports).

A final competitive disadvantage is not specific to the region but is a West Virginia statewide issue, as multiple economic development officials note that the State has relatively high business taxes.

3.3.3 Economic Impact of Corridor

This section of the Corridor H summary is focused on the expected economic and industry benefits of completing the entire highway corridor.

Industry Opportunities

Manufacturing. The completion of Corridor H will provide immediate benefit to the region's manufacturing industries. With a projected 25-year stock of Appalachian hardwood forest, the various wood products firms should expect lower shipping costs and increased international export potential as the connections to east coast ports such as Norfolk will be greatly enhanced. The region is attempting to develop and recruit more value-added, downstream wood products firms, but the lack of east-west transportation hinders those opportunities. In addition, the Corridor region's other manufacturing industries, such as aluminum, the Kingsford charcoal company, and food products also should benefit significantly from Corridor H completion.

Tourism. Every section of completed Corridor H reduces travel time and increases travel safety for visitors to the region. In addition to numerous hiking, camping, and other natural attractions, the region's two major ski resorts – Canaan Valley and Timberline – stand to benefit greatly from Corridor H completion. The Canaan Valley Resort employs up to 275 people in peak season (February) and is Tucker County's largest private employer. The State recently agreed to partner with the resort for major renovations that will expand services, including a year-round conference center. Their business plan and the State's investment partnership explicitly incorporate Corridor H completion into their plans to attract increasing numbers of visitors from the D.C. market.

Retail and Services. While traditional economic development analysis focuses on "economic base" industries that export goods and services, recent investments in a mix of retail, service and hotel industries (Lowe's, Wal-Mart, Kmart, Arby's, Pizza Hut, Hampton Inn) along completed Corridor H segments from I-79 to Elkins represent a net economic gain for the region. These retail and services businesses benefit the region because they provide more accessible retail services to local residents and they support the positive population and economic trends in this region. These major chain investments may be representative of addi-

tional economic investment potential upon full completion of Corridor H. While not all areas and towns in the Corridor region are likely to see these kinds of developments, towns with some commercial base (like Kerens, Parsons, Elkins, and Moorefield) are likely to benefit.

Facilitating Trade and Market Access

Completion of Corridor H will directly improve market access and trade potential, especially those industries in the Corridor region that already participate heavily in international (and domestic) trade. The most likely direct effects include:

Greatly Reduced Shipping Costs for Inbound and Outbound Goods Movement - Current freight shipments face cost premiums due to: a) longer distances (especially when avoiding two-lane roads) and thus higher costs; 2) longer transport times (Armstrong estimates that the 48-mile stretch to Virginia can take 3 to 4.5 hours); and 3) unreliable delivery windows. Many of the region's firms need access to east coast ports like Baltimore and Norfolk and Corridor H will greatly improve access and reduce costs.

Connections to the Expanding Washington, D.C. Market Area - Whether it be tourists, commuters, or suppliers and buyers, Corridor H will greatly improve connections to the Washington, D.C. market and the generally affluent Virginia suburbs.

New Industry Opportunities - The lack of a completed Corridor H, while not the only restraining factor for economic development, is a major impediment to economic growth in industries such as distribution centers, or high-tech value added manufacturing and services. Without Corridor H completed, much of the region simply doesn't qualify for the early stage site location assessments for potential business expansions or relocations.

Along these lines, it is worth noting some of the current operations and transportation constraints faced by **Armstrong Wood Products**, by far the largest private sector employer in the Corridor region.¹⁷ Armstrong is located in Beverly, West Virginia, near Elkins and the eastern part of the completed Corridor H from I-79 traveling east. They are part of a national company with other facilities in nine other states and thus compete for future expansions and capital investment and must remain productive and profitable. They have grown rapidly from 68 employees in 1990 to 950 employees today with an average hourly wage of \$12.60 for production workers. They are now the largest producer of prefinished hardwood floors in North America, producing more than 1.5 million square feet of finished product per week.

¹⁷Much of the information in this section is derived from a presentation on Armstrong Wood Products provided and given by Donnie Staten (shipping manager).

Armstrong has significant inbound and outbound shipments. Incoming truck loads of lumber total 350 per week, with at least 50 percent from West Virginia suppliers and the remainder from 10 states and Canada. Armstrong ships 800 full or partial truckloads per month primarily to the Northeast U.S. and Canada via private carriers, with an additional 50 to 100 truckloads per week of by-product (sawdust) to Virginia (near I-81). Incredibly, total shipments for 2007 were estimated at over 10,000 compared to 1,700 in 1993 with total inbound and outbound shipments at approximately 25,000. Consistent with findings from other firms, Armstrong envisions significant shipping benefits from completion of Corridor H, including: 1) improved safety, especially in the winter; 2) reduced transit times, lower costs and improved customer service; 3) improved contract negotiations with private carriers and lumber suppliers; and 4) reduced consumption of fossil fuels as Armstrong currently pays fuel surcharges.

Connecting People to Jobs, Tourist Attractions, and Services

Economic development officials and private employers throughout the Corridor region noted that many workers commute a significant distance to jobs, and employers often recruit a labor force within a 60-mile radius. The completion of Corridor H will directly benefit the ability of employers to draw from a larger labor force and hopefully reduce turnover during the winter months among workers who commute longer distances.

Completing Corridor H also will provide significantly improved connections to the D.C. market area, which is a primary market for tourist attractions in the region. They also provide a growing share of new residential development for second homes and workers with flexible schedules/locations. Canaan Valley Resort noted that their visitors greatly appreciated the completed section of Corridor H to their east and the need to finish other sections to draw the number of visitors necessary to return to profitable operations.

Finally, major hospital facilities and specialized health care facilities are relatively sparse along the Corridor region (notably in Barbour County). A completed Corridor H will enhance access to facilities such as Davis Memorial Hospital in Elkins for both patients and the workforce.

Overall Economic Development Impacts

As noted previously, completion of Corridor H is consistently the top priority for local and regional economic development officials, and they tend to be optimistic about the likely positive economic benefits of the highway project. This is generally supported by direct input from private employers in the manufacturing and tourism industries. Completed segments, namely I-79 to Elkins and Kerens via Buckhannon, provide evidence of new private investment, higher traffic levels, and the development of “shovel-ready” industrial sites and new/expanded companies. A visit to the region and driving the existing windy, mountainous two-lane roads makes abundantly clear the transportation constraints voiced by various stakeholders. Completion of Corridor H will dramatically lower travel

times and provide access to east coast markets that is likely to aid in the retention and attraction of business activity.

At the same time, these encouraging future economic benefits need to be placed in context regarding the nature and conditions of the Corridor region's communities. Many sections of the Corridor region, namely in Grant and Tucker counties, appear unlikely to either want or have the capacity to significantly expand economic activity. Consequently, it is appropriate to temper future projections of economic development effects of completing Corridor H to those counties most likely to fully leverage this future asset.

3.3.4 Other Issues and Stakeholder Comments

While work continues on Corridor H to the west of Moorefield, local stakeholders expressed significant concern regarding the political and funding conditions necessary to complete the entire highway project. Consequently, most stakeholders are proceeding with their plans mindful of Corridor H but not dependent on the completed roadway. The concerns voiced by multiple respondents focused on:

The Virginia Section of Corridor H from the Border to I-81 – This stretch of roadway currently is a fairly windy, two-lane road with limited capacity, no passing lanes, and limited shoulders. Stakeholders note that this section of Corridor H does not appear to be a priority for Virginia and regularly is not included within the State's near-term program of funded or planned projects. A key to Corridor H full connectivity is reaching I-81 (a major north-south truck route) and the Virginia Inland Port, and until all sections are complete, large trucks will seek to avoid this two-lane facility.

The West Virginia Section from Kerens to Davis – Stakeholders note that this segment of Corridor H within national and state forest territory is likely to be the final segment completed within West Virginia. There are a number of expensive bridges and land grading projects that are needed to upgrade the existing highways, and stakeholders fear that it could take years to secure the funding and complete the engineering/construction of this section.