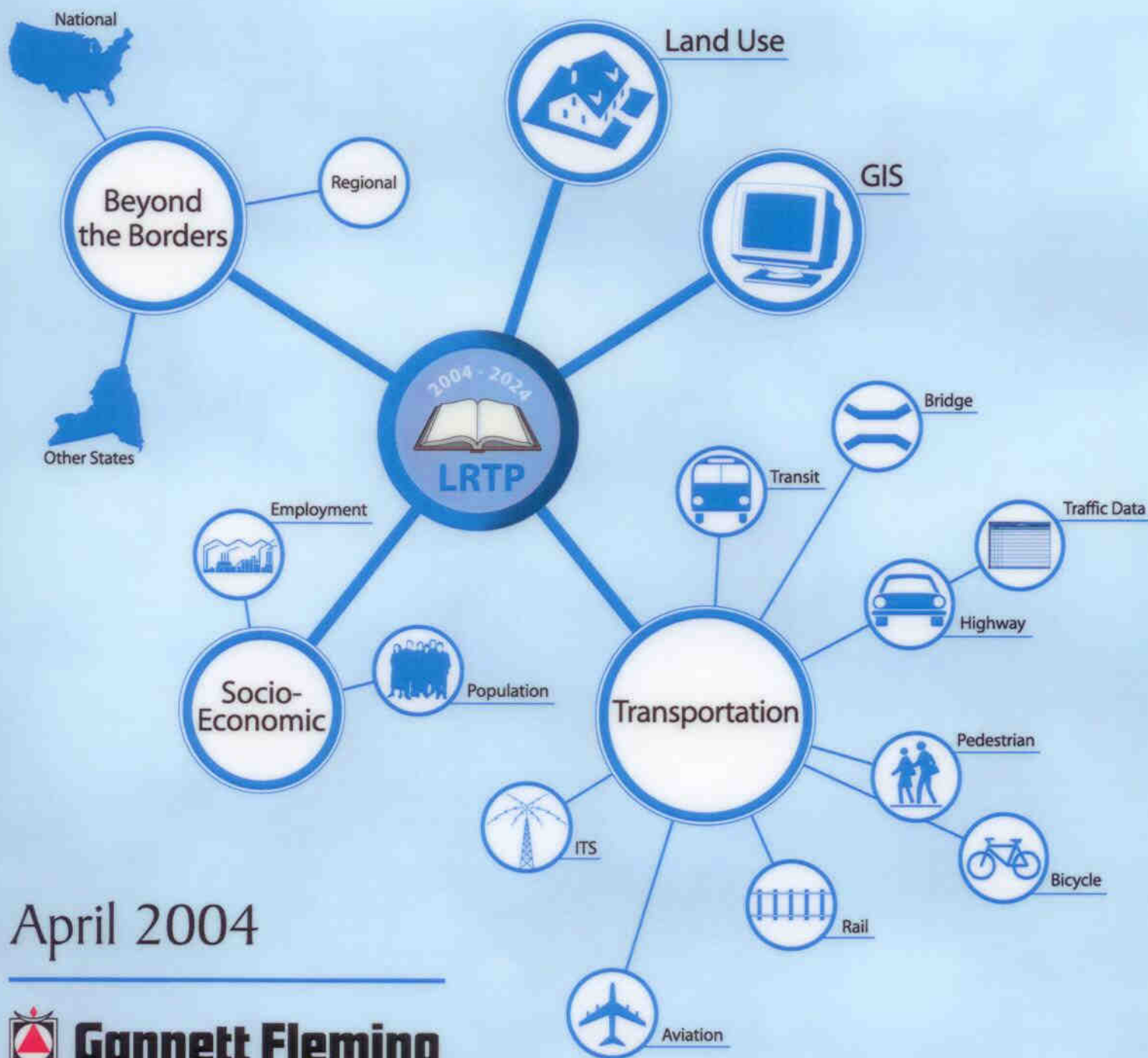


Northern Tier

Regional Planning and Development Commission

LONG RANGE TRANSPORTATION PLAN



April 2004



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Northern Tier Long Range Transportation Plan

Purpose and Overview

In January 2000, the Pennsylvania Department of Transportation (PENNDOT) unveiled PennPlan, its current long-range transportation plan for 2000 - 2025. The new plan represented a significant break from previous Department efforts in that it took a *corridors-based approach* to transportation planning. As part of the planning effort, PENNDOT identified 28 corridors of statewide significance, including three in the Northern Tier planning region, in order to analyze significant trends, issues and opportunities for future consideration in regional and statewide transportation planning and programming.

Through the development of Corridor Profiles, which examined issues across several planning areas, including transportation, socio-economic and environmental, the plan combined the hard data available at the federal and state level with important issues and perspectives from local transportation users and providers. The PennPlan profiles were developed to be dynamic, allowing for updates of data and new analysis as conditions change.

In October 2002, the Northern Tier Regional Planning and Development Commission (NTRPDC) followed PENNDOT's lead and began developing its own long-range plan using the PennPlan model. This direction was also consistent with federal policy which strongly promotes the need for and value of long range transportation planning. NTRPDC, under the auspices of the Rural Transportation Advisory Committee (RTAC) identified 15 corridors of regional significance as shown in Table 1.

**Table 1: Corridors of Regional Significance
NORTHERN TIER**

Corridor Name	Centered On	Length (Miles)
PA Route 6 Heritage	US 6	157
Endless Mountains	US 11/ I-81	27
Williamson Road	US 15	37
North Branch	US 220	73
Williamsport & Elmira	PA 14	43
County Seat Connector	PA 29	67
Cowanisque	PA 49	29
North Sullivan	PA 87	54
Owego Turnpike	PA 167	30
Lackawanna	PA 171	39
Philip P. Bliss	PA 187	46
Central Tioga	PA 287	36
Elmira Connector	PA 328	14
PB&E	PA 414	62
Bluestone	PA 706	34

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The municipalities directly served by the primary roadway defined the corridors. Thus, the North Branch Corridor would include not only US 220, but also other transportation facilities such as PA 199, Norfolk Southern, related Endless Mountains Transportation Authority (EMTA) routes and the Bradford County Airport. Three of these corridors, the PA Route 6 Heritage, the Endless Mountains and Williamson Road are covered at a more strategic level as part of PennPlan.

Background & Methodology

In the winter of 1999, NTRPDC conducted a series of focus group sessions as part of an overall comprehensive public involvement and outreach opportunity for residents, business owners, and transportation providers in the region to express their transportation concerns. One session was held in each county and participants were asked to address three issues: maintenance and rehabilitation of the present highway system, new construction needs, and issues related to other modes of transportation.

Complementing the focus group input were the results of a survey that covered a variety of issues and was administered to 6,854 people. Nine hundred and thirty-two (or 14 percent) responded to the survey. Together, the survey and focus group constitute the primary means by which the plan identified existing conditions and public perceptions within the region. Public involvement is the hallmark of 21st century transportation planning and this two-prong effort reflected an intensive outreach with the region's public and stakeholders.

In addition, a comprehensive data collection process was undertaken that included transportation-related indicators from the Census Bureau and PENNDOT management systems. The results of planning studies that had recently been completed in the region were also consolidated into this LRP document, including the regional Bicycle and Pedestrian Transportation Plan (2000), Appalachian Regional Commission Keystone Opportunity Zone Study (2001) and the U.S. 15 travel origin-destination analysis by District 2-0 (2002). Other source studies include the Bradford County Airport Layout Plan, Grand Canyon Airport Action Plan and The Feasibility of Rail Options in Susquehanna County. A number of county and multi-municipal comprehensive plans were also being developed concurrent with this plan and were considered.

Finally, NTRPDC conducted key person interviews with transportation officials at the federal, state and regional level, as well as with the primary transportation providers from across the region. These individuals included:

- Rich Farr, Endless Mountains Transit Authority (EMTA)
- Wayne Fedora, FHWA
- Steve Gayle, Binghamton ,NY MPO
- Karen Graber, EMTA
- Greg Heffner, Steuben County, NY



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- Fred LaVancher, US 15 Coalition
- Harry Lindsay, Lackawanna County Planning Commission
- Larry Malski, PA Rail Freight Advisory Committee
- Vivian McCarty, Endless Mountains Visitors Bureau
- Adrian Merolli, Luzerne County Planning Commission
- Charles O'Hara, Proctor & Gamble
- Jay Schessell, Elmira MPO
- William Shafer, Norfolk Southern Railroad
- Tony Ventello, Central Bradford Progress Authority
- Jerry Walls, Williamsport MPO
- Mary Worthington, Grand Canyon Airport; Wellsboro & Corning RR
- Joe Zudrusky, Towanda-Monroeton Shippers Lifeline.

Regional transportation stakeholder forums were held in each county during May 2003 to update/affirm and validate the public involvement sessions held in 1999. Meeting attendees were given the opportunity to raise new issues or concerns as they related to the development of this LRP, as well as to review a draft "profile excerpt". One important result from these meetings was the development of a candidate list of projects, which subsequently was presented to each of the Northern Tier county planning commissions for their review and prioritization. This list was then forwarded to PENNDOT Districts 3-0 and 4-0 for review. The Districts indicated how the projects in question would most likely be addressed--under routine maintenance activities or the TIP planning and programming process. The complete list appears on page 66.

The members of the NTRPDC's Rural Transportation Advisory Committee (RTAC) provided input and guidance throughout the planning process.

Trends, Issues & Opportunities

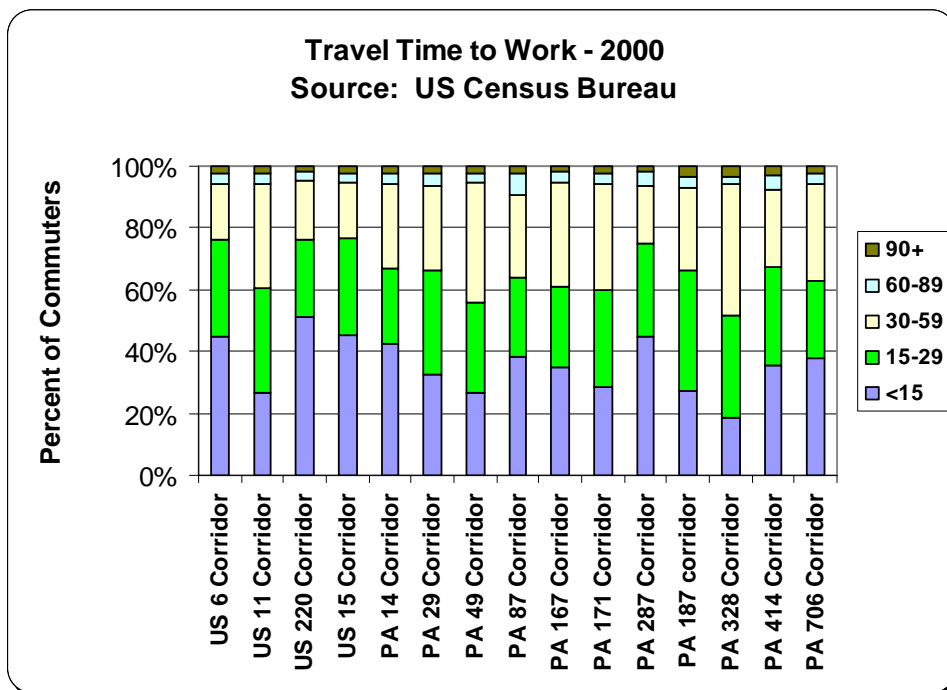
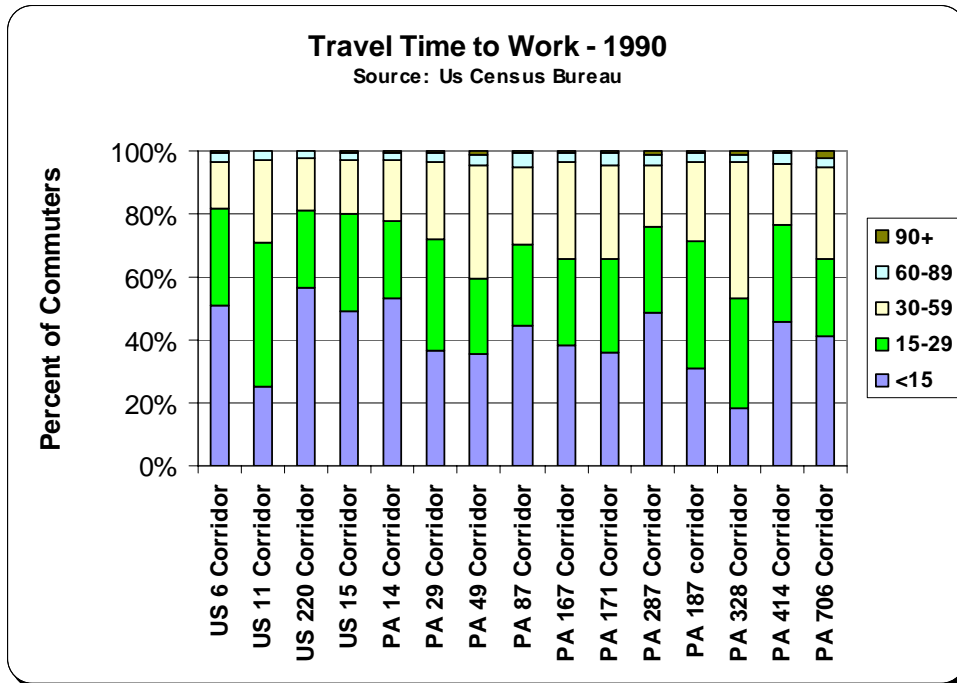
The Northern Tier is Pennsylvania's most rural transportation planning region. At 3,954.7 square miles, the five-county region is more than twice the size of the state of Delaware, yet it had a 2000 population of only 181,008 persons. The Northern Tier contains 8.8 percent of the Commonwealth's land area, yet only 1½ percent of its residents. Like so many areas of rural Appalachia, the Northern Tier has many unique transportation planning issues to address, including:

- **A rural and dispersed population with no large employment or commercial centers** - The region is comprised mainly of rural townships and boroughs under 3,000 in population. The largest municipality in the region, Sayre Borough, is a regional commercial center serving the needs of northern Bradford County residents and portions of New York's Southern Tier. The Northern Tier's regional population density is 46 people per square mile, versus 274 per square mile in Pennsylvania. The decentralized nature of the region's population increases the per unit cost of



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shipping raw materials and finished goods, as well as longer “windshield time” or driving time, for journey to work and shopping trips. The following graphs underscore this trend by corridor.





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- **Many major employment destinations are outside of the region, including Elmira, Binghamton, Williamsport and Scranton/Wilkes-Barre** - The importance of transportation connections to employment centers outside of the five-county region figures prominently in the Northern Tier’s transportation planning. Commuters are traveling longer distances to work than ever, as longer driving times are becoming more and more common and employment opportunities shift to larger urban centers outside of the Northern Tier. From a formal planning perspective, the 2000 Census redefined the urbanized area of Binghamton, NY to now include a “finger” extending as far south as New Milford Borough. This change signifies the special relationship Susquehanna County has as a bedroom county with surrounding metropolitan areas.

Among the five Northern Tier counties, Susquehanna County, in fact exports the highest percentage of its workers to other counties for employment, at 52 percent. Neighboring Wyoming exports 49 percent, mostly to Lackawanna and Luzerne Counties. Nearly a quarter of Susquehanna County’s workers travel to New York State for jobs, while Bradford and Tioga Counties send 12 percent into neighboring New York counties.

According to data from the 2000 Census, the Northern Tier exports approximately 23,000 workers, or just over a quarter of its workforce to destinations outside of the region, as Table 2 attests. Table 3 shows the most popular destinations *within* the region.

Table 2: Commuter Destinations by County (1990, 2000)
NORTHERN TIER REGION

County	Northern Tier Residents Place of Work		Numeric Change, 1990-2000	Percent Change, 1990-2000
	1990	2000		
1. BRADFORD	21,002	22,157	1,155	5.5
2. TIOGA	13,160	13,960	800	6.0
3. SUSQUEHANNA	8,835	9,336	501	5.7
4. WYOMING	8,677	8,672	-5	(0.0)
5. BROOME, NY	4,939	4,593	-346	(7.0)
6. LACKAWANNA	4,670	5,612	942	20.2
7. CHEMUNG, NY	2,828	3,264	436	15.4
8. LUZERNE	1,932	2,491	559	28.9
9. SULLIVAN	1,818	1,988	170	9.4
10. TIOGA, NY	1,308	1,442	134	10.2
11. STEUBEN, NY	1,201	1,307	106	8.8
12. LYCOMING	720	937	217	30.1
13. POTTER	229	330	101	44.1

Source: U.S. Census Bureau Municipal Commutation Flows, 1990, 2000. Laborforce Market Area Commuting and Migration Patterns, Workforce Institute and Resource Center, Rural Services Institute, Mansfield University, 1993



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- The region's growth nodes are in rural areas, away from established boroughs, which hosts the majority of the region's employers. - A comparison of Table 3 with those shown in Table 4 and Table 5 reveals that the region's fastest-growing municipalities are in rural and suburban townships, separate from the boroughs where a majority of the region's jobs are located.

**Table 3: Commuter Destinations (1990, 2000)
NORTHERN TIER REGION**

Municipality	Workers	
	1990	2000
1. WELLSBORO	4,678	4,600
2. TOWANDA	3,552	4,012
3. SAYRE	3,999	3,576
4. MONTROSE	2,415	2,510
5. TUNKHANNOCK	3,645	2,277
6. MANSFIELD	2,140	2,244
7. MEHOOPANY TWP	2,571	2,163
8. TUNKHANNOCK TWP	75	1,740
9. BURLINGTON TWP	59	1,524
10. TROY BOROUGH	2,376	1,482
11. BLOSSBURG	1,163	1,455

Source: U.S. Census Bureau Municipal Commutation Flows, 1990, 2000.

**Table 4: Fastest Growing Municipalities by Percent Increase, 1990-2000
NORTHERN TIER REGION**

Municipality	County	2000 Population	# Increase	Percent Increase
1. WARD TWP	Tioga	128	73	132.7
2. NEW MILFORD	Susquehanna	1,859	906	95.1
3. LAPORTE TWP	Sullivan	373	160	75.1
4. STANDING STONE	Bradford	596	160	36.7
5. LAWRENCEVILLE	Tioga	627	146	30.4
6. ARARAT TWP	Susquehanna	531	111	26.4
7. CLINTON TWP	Wyoming	1,343	280	26.3
8. WELLS TWP	Bradford	1,278	260	25.5
9. FRANKLIN TWP	Bradford	698	141	25.3
10. ARMENIA TWP	Bradford	166	32	23.9
NORTHERN TIER		181,008	4,355	2.5

Source: U.S. Census Bureau



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**Table 5: Fastest-Growing Municipalities by Total Number
NORTHERN TIER REGION**

Municipality	County	2000 Population	# Increase	Percent Increase
1. NEW MILFORD	Susquehanna	1,859	906	95.1
2. ATHENS TWP	Bradford	5,058	303	6.4
3. CLINTON TWP	Wyoming	1,343	280	26.3
4. CHARLESTON TWP	Tioga	3,233	276	9.3
5. WELLS TWP	Bradford	1,278	260	25.5
6. LENOX TWP	Susquehanna	1,832	251	15.9
7. TROY BORO	Bradford	1,508	246	19.5
8. CHERRY TWP	Susquehanna	1,718	237	16.0
9. CLIFFORD TWP	Tioga	2,381	234	10.9
10. LAWRENCE TWP	Tioga	1,721	202	13.3
NORTHERN TIER		181,008	4,355	2.5

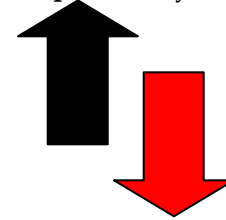
Source: U.S. Census Bureau

- **Boroughs continue to lose population to adjoining suburbs and rural townships** – Table 6 demonstrates how the region’s population has migrated from the traditional boroughs to outlying townships.

For example, in 1950, 9 of the 10 largest municipalities in the region were boroughs, including such places as Forest City and Susquehanna Depot. Sayre Borough has remained the region’s largest municipality throughout the second half of the 20th Century, while the suburban townships of Athens and Tunkhannock added enough people to become among the region’s largest municipalities by 1980.

Regional Population Change 1990-2000

Townships Grew by 6,397...



...while **Boroughs** Declined
by 1,066 persons

The automobile age, coupled with post-war suburbanization and the improvement of the highway network has raised the prominence of these traditionally rural townships. Business location patterns have also generally shifted location decisions and job growth outside the traditional core central business district. These macro-level trends have tremendous implications for the delivery of transportation services by PENNDOT and others. In some cases, larger suburban townships now surround small urban cores such as Tunkhannock and Athens. Table 6 shows how the composition of the region’s largest municipalities has changed over the past 50 years.

From a transportation perspective, these trends should also be measured against the largest employment centers in the region, which are still predominantly boroughs (see Table 3).

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**Table 6: Most Populated Municipalities (by rank order)
NORTHERN TIER REGION**

	1950	1960	1970	1980	1990	2000
1	Sayre	Sayre	Sayre	Sayre	Sayre	Sayre
2	Athens	Athens	Towanda	Athens Twp	Athens Twp	Athens Twp
3	Wellsboro	Wellsboro	Athens	Tunkhannock Twp	Tunkhannock Twp	Tunkhannock Twp
4	Towanda	Towanda	Mansfield	Wellsboro	Mansfield	Athens
5	Forest City	Athens Twp	Athens Twp	Athens	Athens	Mansfield
6	Mansfield	Mansfield	Wellsboro	Towanda	Wellsboro	Wellsboro
7	Susq Dep	Forest City	Charleston	Mansfield	Towanda	Charleston
8	Elkland	Susq Depot	Forest City	Delmar Twp	Delmar Twp	Towanda
9	Athens Twp	Montrose	Susq Depot	Charleston	Charleston	Delmar Twp
10	Tunkhannock	Tunkhannock	Tunkhannock	Bridgewater	Bridgewater	Clifford Twp

Source: U.S. Census Bureau

- The reauthorization of TEA-21** - The reauthorization of the federal TEA-21 legislation, coupled with the Commonwealth's new gubernatorial administration will likely mean changing funding levels, as well as emphasize different program areas and requirements. While changes at the federal level were speculative at the time of this plan's development, the Northern Tier must be responsive to changes at both the state and federal levels in order to align it for the best opportunities to secure funding for needed projects. As of April 2004, the federal legislation reauthorization is expected to be delayed anywhere from 6 to 12 months.
- The region's placement within the greater Appalachian region** - The Northern Tier's location within the greater Appalachian region places it within the purview of the Appalachian Regional Development Commission (ARC). Congress created the organization in 1965 for the purpose of promoting economic development within the 13-state Appalachian region, including the Northern Tier. The region has been a beneficiary of this relationship with ARC through the receipt of funds under ARC's intermodal transportation and Industrial Access road programs, as well as its Appalachian Development Highway System (ADHS) program. The Northern Tier has two such ADHS corridors: Corridor U (US 15) and Corridor T (NY 17). ARC's Industrial Access program has already served such manufacturers as Canton Manufacturing and Leprino Foods, with the potential for more.
- The expansion of the US 15 and NY 17 corridors into limited access highways.** The upgrade of these two corridors should have tremendous beneficial impacts for both Pennsylvania and New York. US 15 will ultimately become I-99 when it is completed, and NY 17 will become part of I-86, the Southern Tier Expressway. The opening of these two roadways constitute the single largest capital improvement being advanced by the two states in the Northern Tier area, and will have major ramifications for



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both states upon their completion. The two projects will do much to open up an isolated area of Pennsylvania and New York, as well as encourage through movements between the Mid-Atlantic states and Canada. For now, I-99 is the only “two-digit” interstate in the nation that does not have a direct interchange with another interstate; however, this will change as “missing links” are closed, most notably with the construction of a \$100 million stack interchange of US 15 with NY 17 at Painted Post, NY.

- **Rugged terrain, with steep grades and mountain passes** - During the public involvement process, many cited the need for truck-climbing lanes at locations throughout the region. These concerns were expressed mainly in relation to US 6 and US 220 as the region’s primary east-west and north-south routes, respectively. On US 220, the need for truck-climbing lanes was cited at the Village of Laddsbury, Novasel Hill, Sonestown Mountain and north of Dushore in Sullivan County. On US 6, Armenia Mountain, Gobbler’s Knob and Sylvania Mountain were all cited as areas where truck-climbing lanes are needed. Such investments may be highly cost effective improvements to ensure high levels of mobility as traffic grows, especially truck traffic.
- **The need for system preservation** - The need to preserve the existing system has been a matter of necessity as well as policy. Even with more resources transportation needs will outstrip the resources available, resulting in a strong emphasis to maintain existing system performance.
- **Attainment and non-attainment status:** Air quality considerations must be made as part of the transportation planning process. As of the writing of this LRTP, two Northern Tier counties – Susquehanna and Wyoming – are currently in non-attainment for ozone. This designation requires the RPO’s TIPs to undergo air quality (or conformity) analyses to ensure that the projects collectively being proposed do not increase pollutant emissions. Examples of projects targeted at reducing emissions by managing travel demand and improving traffic flow include bicycle/pedestrian facilities, transit-related projects, traffic signal improvements and park and ride lots. The latter would especially provide benefits to the region, specifically for the inter-county commuting that occurs on I-81. NTRPDC has a standing Memorandum of Understanding (MOU) with the Lackawanna and Luzerne MPOs to monitor congestion and air quality for Wyoming and Susquehanna Counties.
- **Increasing ratio of registered automobiles to licensed drivers** – Table 7 shows the dramatic increase in the number of available vehicles vis a vis population in the Northern Tier. The absolute growth in available vehicles outnumbered that of population by nearly 4 to 1 during the 1990s. The ratio of population to available vehicles dropped from 1.6 in 1990 to 1.4 by the year 2000. This increase is a significant transportation trend. Most households have more drivers, more vehicles,



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and more trips resulting in increased demand for transportation facilities and congested conditions in some locations.

**Table 7: Population and Vehicles
NORTHERN TIER**

AREA	1990		2000		1990-2000	
	Pop	Autos	Pop	Autos	% Pop Change	%Auto Change
BRADFORD	60,967	37,808	62,761	43,099	2.9	14.0
SULLIVAN	6,104	3,724	6,556	4,849	7.4	30.0
SUSQUEHANNA	40,380	25,937	42,238	29,943	4.6	15.4
TIOGA	41,126	24,867	41,373	28,459	0.6	14.4
WYOMING	28,076	18,086	28,080	20,237	0.0	11.9
NORTHERN TIER	176,653	110,422	181,008	126,587	2.5	14.6

Source: Census Transportation Planning Package (CTPP), 1990, 2000

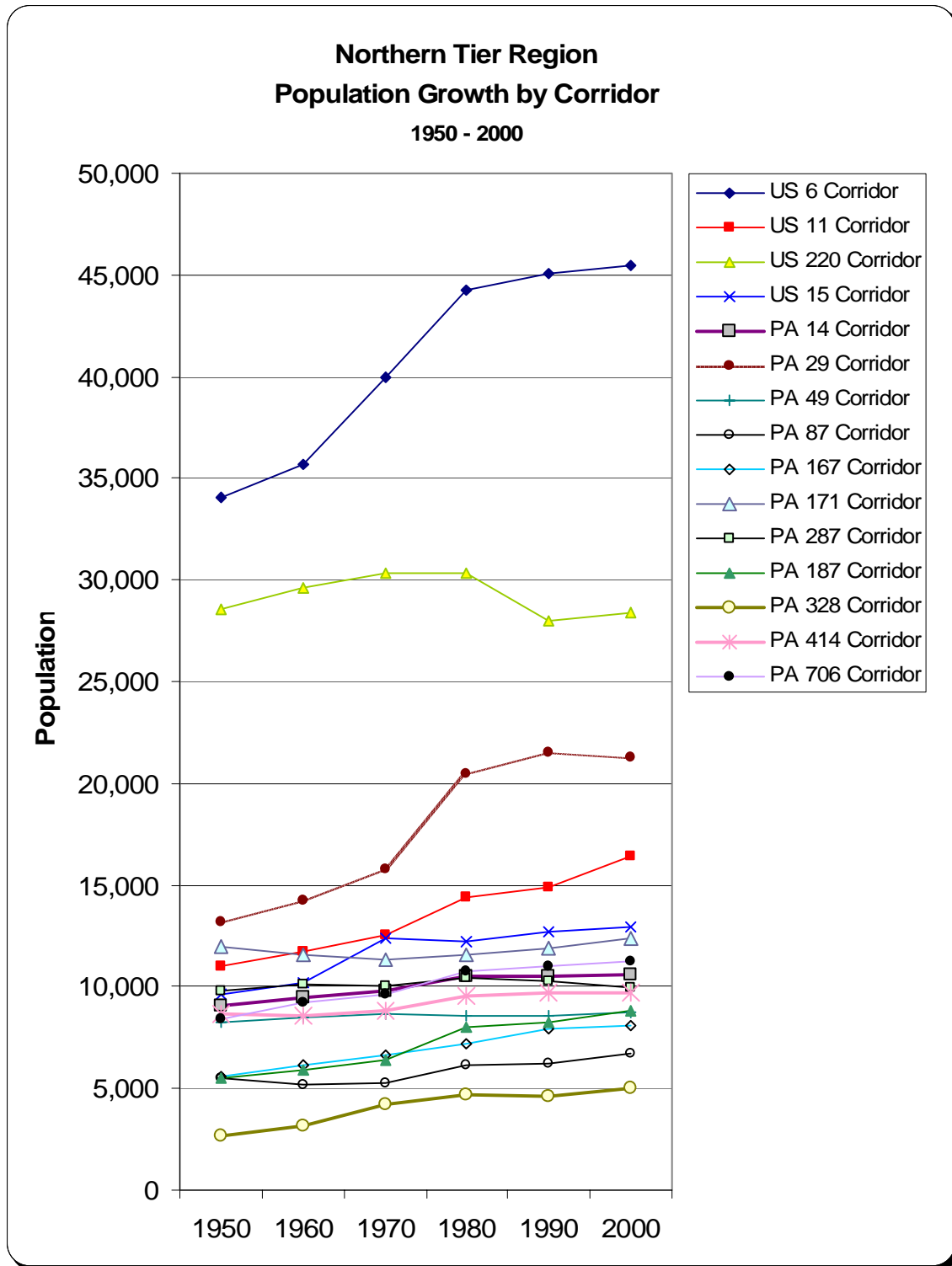
Socio-demographic Patterns & Trends

The primary purpose of this section is to provide an inventory of existing conditions within the region with respect to socio-demographic information and trends. The effects of these trends will have tremendous public policy implications for the Northern Tier. The decade of the 1990s saw several trends either emerge or continue in the Northern Tier from a demographic standpoint:

- The region's population is growing, albeit more slowly than the rest of the nation and Pennsylvania as a whole** - Since the region's population boom of the 1970s, the Northern Tier has experienced only modest population growth. Over the past decade, the region has added 4,355 people, for an overall growth rate of just 2 ½ percent, which is less than the modest state rate of 3.36 percent. As shown in the accompanying graph, the regional corridors with the greatest growth over the past 20 years have been primarily in Susquehanna County. In fact, the corridor with the greatest rate of growth was the Endless Mountains Corridor. Centered on US 11, population in this corridor grew by over 10 percent during the 1990s. Table 4 and Table 5 show which municipalities are experiencing the greatest growth. Many of the fastest-growing municipalities (such as the townships of Athens, Lenox and Wells) are on the region's fringe, close to the metropolitan areas outside the region.

Population growth in some municipalities can mask declines in others. There are only three corridors in the region where the entire corridor is experiencing declines in population. These include the corridors centered on PA 414, PA 29, and PA 287, which, since 1990, has experienced the region's biggest decline, at 3.7 percent.

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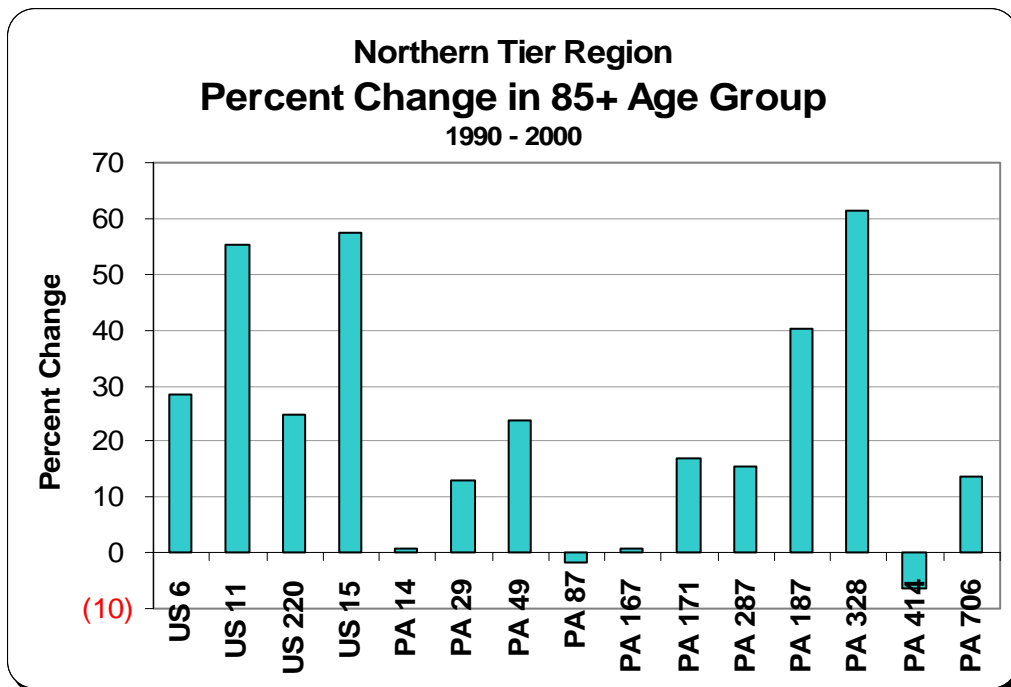


Source: U.S. Census Bureau



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- **Population Change by County** - The five counties of the Northern Tier constitute some of the state's largest counties in area, yet smallest in population. Sullivan County, despite a 7.4 percent rate of growth during the 1990s still ranks 65th among Pennsylvania's 67 counties in total population, while Wyoming ranks 60th and Tioga 55th. During the 1990s, Susquehanna County added the most people (1,858) while population change in Tioga and Wyoming Counties was minimal.
- **The composition of the region's population is aging at a tremendous rate** - The fastest-growing age group in Pennsylvania is those aged 85-plus. It will be important for transportation planners and regional decision-makers to focus not only on the "elderly frail", but the 60-plus populations as well. In years to come, they will constitute the majority of people using the region's transportation system, mixing with tourists and over the road (OTR) traffic. An aging population also speaks to the need for improved intermodalism, where changes are made to the transportation environment rather than changes in people's physical abilities. Public transportation and pedestrian facilities are two components of the transportation system that will need renewed focus.

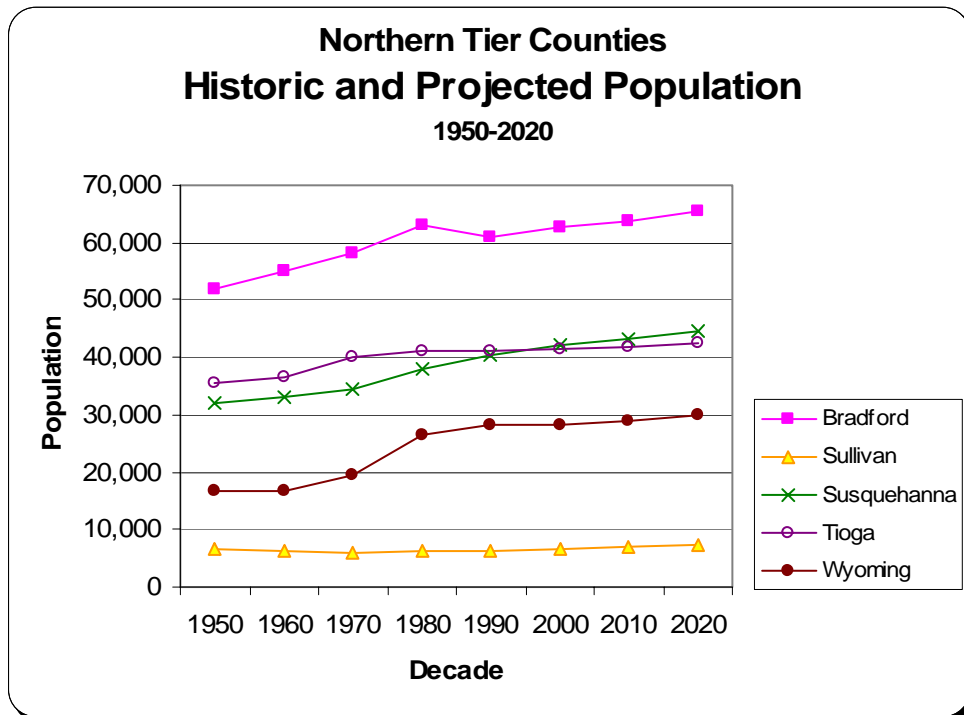


To re-emphasize this critical demographic trend, the region's overall population grew by 2 ½ percent during the 1990s, while the 65-plus populations grew by 8 percent. The numbers of those over age 85 grew by an astonishing 25 percent.



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- Over the next two decades, analysts expect the region's rate of population growth to be low, behind even that of Pennsylvania. The slow rate of population growth the region experienced during the 1990s is expected to continue over the next twenty to twenty-five years, at rates much lower than state and national trends. Over the next 20 years, Pennsylvania has been forecasted to increase at a rate of 7 percent while in the Northern Tier it has been estimated to increase by less than 5 percent. Within the region, Sullivan County is expected to have the region's highest average annual rate of increase, expanding by just over 12 percent (or 800 persons) between 2000 and 2020. Forecasters expect Tioga to experience the lowest rate of increase over the same period, at just 2½ percent. The region should have an estimated 2020 population of 189,550, an increase of 8,660 persons over 2000 levels. Most of this increase is expected to occur in Bradford (2,760) and Susquehanna (2,320) Counties.

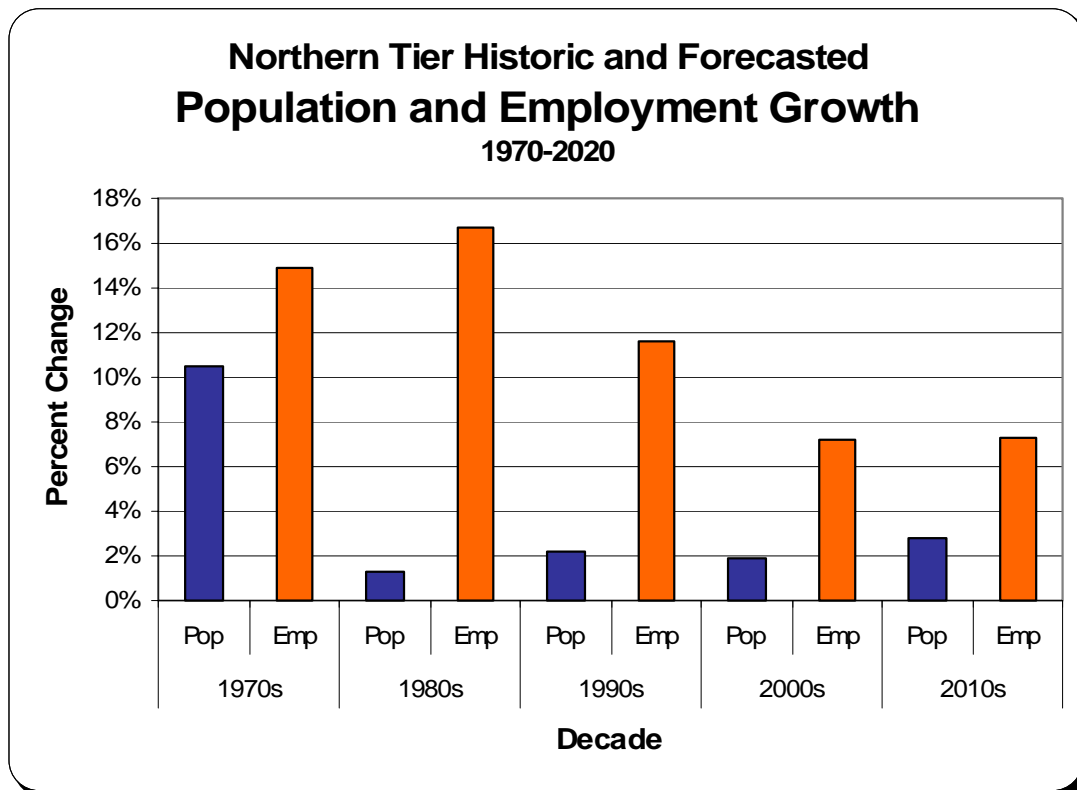


Source: U.S. Census Bureau; Woods & Poole

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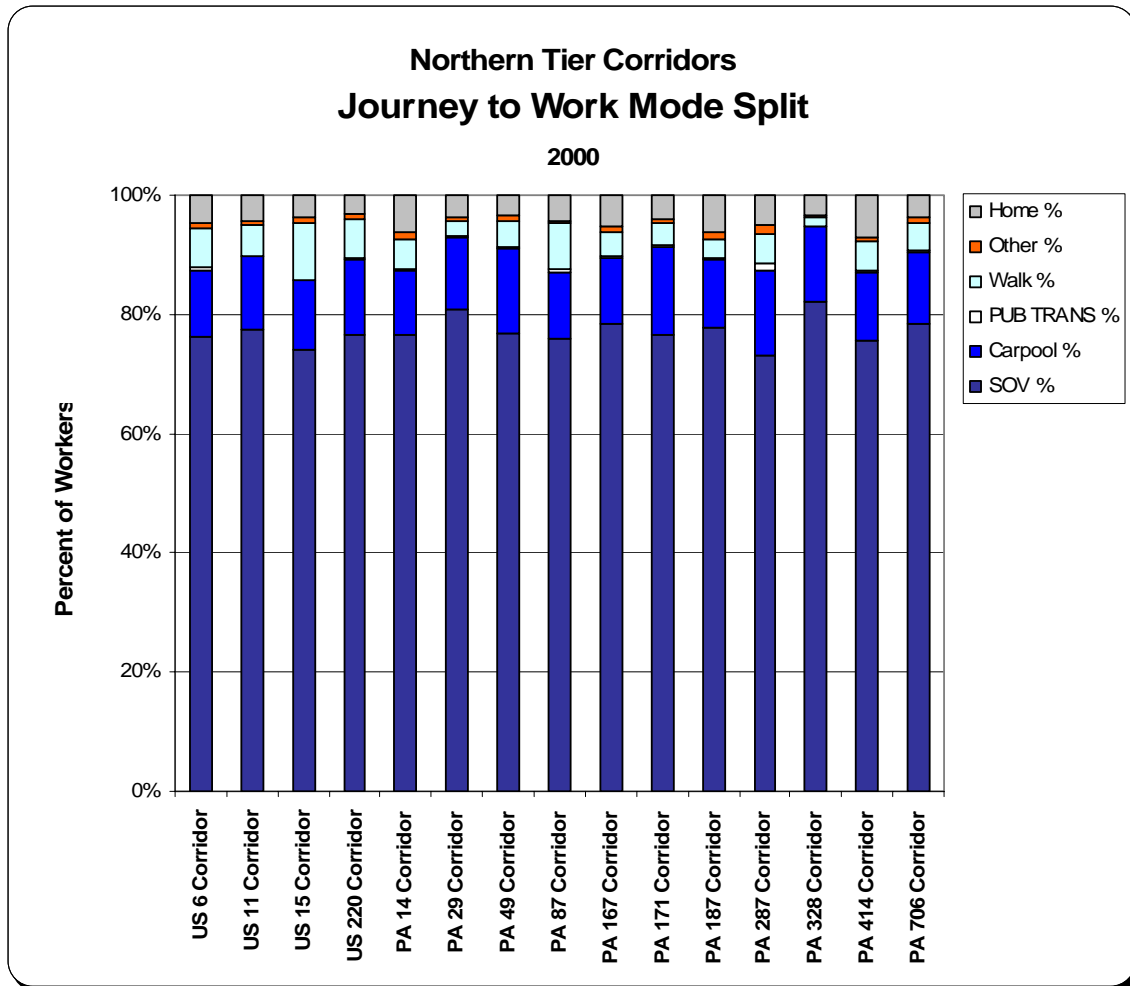
- Employment growth rates will continue to outpace population growth.** The region added approximately 8,770 new jobs during the 1990s for a rate of 11.6 percent, significantly higher than population increase (2½ percent). Analysts expect this trend to continue over the next two decades, when job growth in the region will be just slightly less than the state rate of 17 percent. As it did during the 1990s, Tioga County is again expected to lead the region in the rate of job creation between now and the year 2020, with over 21 percent (or 4,240 new jobs). Bradford is expected to add the greatest number, with 4,270 of the region's 12,710 new jobs. This can translate into more work related trips and time of day trip making dispersion reflecting second and part time jobs.



Source: U.S. Census; Woods & Poole

- More people are traveling to work via Single Occupant Vehicles than ever before.** Over three quarters of all commuters in the region arrive at work via single occupant vehicle, or SOV. Only the corridors centered on US 15 and PA 287 have less than 75 percent of workers traveling in SOVs, while the corridors centered on PA 29 and 328 have over 80 percent of their commuters traveling to work alone. As a region, the percentage of people driving to work alone increased from 71.7 percent in 1990 to 77.5 percent in 2000. The accompanying chart illustrates the mode split by corridor according to 2000 Census Data.

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Source: U.S. Census Bureau

- The role of transportation in the tourism industry** – As the region’s second-largest economic sector, tourism plays a key role in the Northern Tier’s economy. Transportation can do much to either strengthen or detract from tourism promotion efforts in the Northern Tier. With a brand new **Welcome Center** opening in Tioga Township, Tioga County on the US 15 Corridor, tourism promotion will now broaden with the planned construction of another Welcome Center on southbound I-81 by the Great Bend interchange. The Great Bend Welcome Center would effectively replace an existing rest area further south by the Lenoxville interchange. The Lenoxville site functions as both a rest area and a Welcome Center, but tourist volume has overwhelmed the site, which was not originally intended to function as a Welcome Center. A new center at the Great Bend location would capture southbound tourists from New York before they leave Susquehanna County entirely. An additional Visitor Information Center has also been suggested for southern Sullivan County (Muncy Valley) to capture northbound traffic headed for Eagle’s Mere, World’s End and other outdoor attractions. Others include locations at Ansonia and the Marie Antoinette overlook.

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Signage is also a key transportation - tourism interface. Currently, the issue is being addressed in the development of a strategic marketing plan for the Endless Mountains Tourist Promotion Agency. Way finding signage is needed particularly for remote tourist destinations such as the French Asylum, Old Mill Village and Troy Farm Museum.

A third key issue area involves the difficulty of **motor coach traffic in negotiating the downtown areas**. Towanda is a particular concern as there is no direct connection from US 6 westbound to the US 220 bypass. As an example, the Tunkhannock bypass has removed through movements from local and tourist traffic, and has done much to improve walkability, safety, and tourist promotion in that borough.

- **The role of short line railroads in freight movement** - Short lines are important freight carriers that connect businesses to larger railroad lines and better markets. While the Class 1s of Norfolk Southern and CP Rail both serve the extreme eastern portion of the region in Susquehanna County, the region also boasts several short lines, including the appropriately-named Towanda Monroeton Shippers Lifeline, the Wellsboro & Corning Railroad (WCOR) and the Reading, Blue Mountain & Northern. The customer-service oriented short lines are valuable assets to the local industries on which rural communities like Wellsboro and Monroe Borough depend. In the Northern Tier, the short lines keep rural businesses and industries connected to the national system and preserve development opportunities for the region's rural communities.

“Shippers and communities served by short lines that cannot handle the heavier cars efficiently will be cut off from the national network.”
– Richard Timmons,
American Short Line and
Regional Railroad
Association

However, the short lines - as entities that inherited underperforming Class 1 branch lines - are experiencing a gap in revenue and level of investment needed. The advent of the 286,000 pound railcar has made the problem more immediate. At the time of this Plan's writing, the American Short Line and Regional Railroad Association is launching a comprehensive national data study that will highlight short lines' contribution to the transportation system and their impact on issues such as highway congestion, job creation and environmental protection. Short line and regional railroads can be expected to be more important to economic development in the years ahead with the general increase in freight traffic and the specific increase in Intermodal freight using rail-truck transfer. Furthermore, the region should work with the railroads and the local government units to help preserve land adjacent to rail lines for future rail served development (that often offers higher paying employment as well).

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- **The evolution of the Northern Tier Local Development District as a Rural Planning Organization (RPO) within PENNDOT’s transportation planning framework** - The Northern Tier currently serves as PENNDOT’s primary “planning partner” for rural transportation planning, project prioritization and funding for state and/or federally funded projects. PENNDOT interfaces with the Northern Tier in the development of its Long Range Transportation Plan and in the development of local and county priorities. Funding allocations for state and/or federally funded projects are still generally made by PENNDOT Central Office but the Northern Tier has input and authority over how the funds are used within the 5-county Northern Tier transportation planning region. As of the 2000 Census, the Binghamton urbanized area boundary now extends southward into Susquehanna County, introducing a need for more formal cooperation and collaboration for NTRPDC with its northern counterpart. Users of this plan must recognize the significance of this point. The RPO will continue to have a greater role in the determination of regional transportation direction setting and resource allocation. This makes the implementation of this plan more important as well as future updates to reflect changing conditions and opportunities.

Federal Planning Factors

Current federal transportation law provides an important framework for transportation. At a policy level, TEA-21, like its predecessor ISTEA, places greater emphasis on transportation plans that satisfy key planning issues relative to transportation’s role with economic development/trade, quality of life, congestion reduction and other key concerns at a national level.

NTRPDC endorses the federal planning factors and incorporates them into this plan using the following tables as a self-audit that the LRP has satisfied these important criteria. The planning factors are listed below, along with a summary of how this plan addresses each. The reader should note that each factor relates to areas of importance not only nationally but to the Northern Tier region as well.

Federal Planning Factor #1 - Economic Viability

NTRPDC Related Planning Considerations Overview - As a rural area our region sees multimodal transportation as a key to promoting economic development, it is especially important that our region remain connected to key markets.

Action Strategies:

- Target transportation improvements to serve Keystone Opportunity Zones and other existing economic generators. To the greatest extent possible involve private sector partners in this process to leverage employment retention and expansion.
- Continue to monitor interest in the region’s KOZ sites with respect to private sector interest and potential redevelopment options.

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- Advance transportation projects that take advantage of Brownfield reuse and other similar opportunities.
- Continue working closely with key industry clusters like Blue Stone manufacturers to ensure that their transportation needs are being met.
- Advance improvements to regional airports in support of goods movement and general/corporate aviation service.
- Monitor changes in Class 1 Railroad service.
- Upgrade any bridges that pose as bottlenecks to regional shipping needs.
- Support the financial backing of short lines; including regional advocacy for proposed Rail Freight and Capital Assistance Grants before the State Transportation Commission, the General Assembly, and PENNDOT.
- Use *TeamPA* interview output as one means of determining regional shipper needs and requirements. *TeamPA* data includes employer transportation issues and needs.
- Use the new Welcome Center in Tioga for tourism and related economic development efforts – support the development of new Visitor Information Centers in the I-81 and US 220 (Muncy Valley) corridors as needed.

Federal Planning Factor #2 – Safety And Security

NTRPDC Related Planning Considerations Overview - Working with PENNDOT, the RPO will continue to consider safety and security as primary planning factors in all planning and programming activity. It will also remain as a focal point for current and future public involvement activity.

Action Strategies:

- Consider PENNDOT Crash data and trends in TIP and LRP development and updates.
- Increase police enforcement in corridors where high speeds have been documented, such as PA 29 and US 220 through Ulster Township.
- Expansion of regional bicycle-pedestrian committee activities through “Walkable Audits” and other planning techniques to assist NTRPDC in the identification of improved bike-ped improvements including maintenance related (e.g., shoulder paving and clearing). Update a Bicycle-Pedestrian action plan for the region with the PENNDOT District Bike-Ped Coordinator and stakeholders.
- Continue to monitor all security related planning guidance from Homeland Security, FEMA, FHWA, PENNDOT, and PEMA.
- Participate in District ITS planning activity.

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Federal Planning Factor #3 – Accessibility And Mobility Options For People And Freight

NTRPDC Related Planning Considerations Overview - These are factors that are core to this LRP and to ongoing planning activity.

Action Strategies:

- Remain in active leadership roles in state rail freight and aviation advisory committees. Strive to host a future RFAC annual conference in a Northern Tier venue to showcase the region’s rail assets and directions.
- Consider opportunities to expand participation in Persons with Disabilities Statewide Expansion Program.
- Consider the establishment of an RPO Goods Movement task force with the active involvement of regional shippers and carriers.
- Identify areas in the region where other intermodal facilities are needed or could be constructed.
- Continue to promote the adoption of KOZ transportation related recommendations including the development of intermodal rail-truck transfer facilities and support infrastructure.

Federal Planning Factor #4 – Environment, Energy Conservation And Quality Of Life

NTRPDC Related Planning Considerations Overview - Through this plan, NTRPDC strongly supports further improvements to all modes of transportation in the region that will serve to make our system more efficient and environmentally compatible. The Quality of Life of the Northern Tier counties is one of the greatest assets that we seek to preserve.

Action Strategies:

- Promote the development of Greenways Corridors and Trails.
- Promote use of transit and car-pooling as practicable.
- Increase participation in PENNDOT preliminary engineering/ environmental studies to further bolster key environmental consideration of transportation alternatives.
- Monitor PENNDOT resource opportunities and guidance related to traffic calming and other statewide efforts aimed at community preservation and quality of life.
- Expand planning commission’s skills and use of emerging transportation and land use techniques.

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- Encourage corridor municipalities to enact stricter sign regulations as a way of mitigating visual blight.
- Encourage major regional employers to get involved in carpool promotion and in such programs as the Welfare to Work initiative with EMTA.
- Advance strategies and access state programs and technical resources focused on downtown development and redevelopment.

Federal Planning Factor #5 – Transportation Connectivity

NTRPDC Related Planning Considerations Overview: NTRPDC promotes the use of all modes in a seamless fashion for the effective transportation of people and goods.

Action Strategies:

- Continue the process to identify any key system disconnects or barriers – physical, regulatory, institutional.
- Focus on needed access and other improvements to the National Highway System and other corridors designated in this Plan.
- Seek funding for development of Intermodal freight transfer facilities.
- Provide for improved bike parking and storage in our downtown communities and at tourism attractions.
- Work with regional airports and railroads to identify connectivity issues on a regular basis.
- Expand marketing efforts of EMTA, especially by working with regional employers as partners – making them aware, for example, of transit benefits to employers.
- Continue to coordinate with NYSDOT on ongoing improvements to US 15 and the need for bi-state collaboration and cooperation, particularly as it relates to issues as the potential relocation of Bliss Road and other issues.
- Continue to coordinate with NYSDOT and FHWA on forthcoming designation of portions of NY 17 as I-86.
- Coordinate with PENNDOT regarding the potential placement of US 11 on the BicyclePA network, as well as ongoing efforts with BicyclePA Route J on PA 14.
- Coordinate with EMTA on planning issues related to their service area.

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Federal Planning Factor #6 – System Management And Operation

NTRPDC Related Planning Considerations Overview - This will largely be a focus in the areas of monitoring state and national trends and determining applicable areas for the RPO.

Action Strategies:

- Participate as beneficial in District Intelligent Transportation System (ITS) activity.
- Monitor growth of rail freight volumes, particularly on the strategic CP-Rail line through Susquehanna County and the need for additional passing sidings and signalization.
- Continue to advocate funding assistance through the Rail Freight Assistance Program and the capital budget for the region's shortline railroads.
- Monitor traffic patterns on US 6 through Towanda after the River Street extension project is completed and its effect on signal timing patterns in adjacent municipalities.
- Continue to coordinate with NYSDOT on its future plans for NY 328 as an ARC corridor.
- Monitor the status and utility of the region's existing networks as they relate to the National Highway System, Federal Aid System, functional class and others.
- Consider the development of a Bridge Management System for the region's local bridges.
- With PENNDOT, perform a comprehensive analysis of the Highway Performance Monitoring System (HPMS) input.
- Conduct Major Investment Analyses and Cost-Benefit studies as needed on major capital projects.
- Encourage the Department of Environmental Protection (DEP) to install additional air quality monitoring stations for improved quantitative data in determining air quality conformity.
- Promote increased participation in the transportation planning process by minority and low-income groups by inviting them to public meetings at appropriate locations.
- Expand on NTRPDC's current website to include additional transportation-related information, including RTAC meeting notices and summaries.
- Use PennPlan Corridor Profiles as a system-planning tool.

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Federal Planning Factor #7 – System Preservation

NTRPDC Related Planning Considerations Overview - The limited state of resources mandates this as a continued major focus.

Action Strategies:

- Continue to provide input to PENNDOT on regional maintenance and betterment needs.
- Monitor our freight rail network to ensure needed long-term capacity and current operability.
- Work with the new Susquehanna County Rail Authority.
- Continue to plan for airport improvements in relation to new statewide airport system plan.

Existing Modal Conditions

The purpose of this section is to describe the state of Northern Tier transportation by mode. As such, it serves as an assessment of existing conditions, or a baseline from which to plan for future needs.

Aviation

Aviation services figure more and more prominently with the globalization of the world's economy as well as the demanding time-mobility needs of businesses using general aviation. The onset of several factors over the past decade, including new trade agreements, the fall of the Communist bloc and the unification of Europe, have seen major increases in trade as our world becomes smaller. Corporate ties have also become global, placing increasing demands on transportation, and particularly aviation services in corporate travel and in the transport of high-value, time-sensitive cargo.



There are three significant public use airports that currently serve the Northern Tier: the Bradford County Airport in Towanda Township, Bradford County; Grand Canyon Airport in Tioga County; and Tunkhannock's Skyhaven Airport. A fourth airport, Blue Swan in Athens Township, has been closed. Major airports immediately outside of the region include Binghamton, Elmira, Wilkes-Barre/Scranton International, and Williamsport Regional. A discussion of these facilities follows.

Bradford County Airport

The airport is located in Towanda Township and is part of the Central Bradford County Enterprise Zone. It is owned and operated by the Bradford County Airport Authority and is located near the junction of US 220 and US 6 and is also adjacent to the Towanda-Monroeton Shippers Lifeline. Aircraft operations average 50 per day generally comprising of approximately 82 percent local general aviation, approximately 18 percent transient general aviation, and less than one percent military operations. The airport is currently building a 12,500 square foot maintenance hangar/terminal building. The



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\$500,000 facility will include an area for the maintenance and storage of aircraft, a fixed-base operator's office, office space for the airport manager, classrooms, and a reception area for charter flights. Other major capital improvements recently added to the airport include a lengthening of the north/south runway from 3,000 to 4,300 x 75 feet.

Problems the airport is currently facing include:

- A long-term issue includes TR 457, which used to provide a direct connection to US 220 but now encroaches onto the runway and airfield. The roadway ultimately needs to be relocated parallel to the runway, which would potentially open more property for landside development. As such, multiple funding sources may be available for this improvement – potentially including a mix of aviation, highway, and site development programs.
- A potential 700 foot runway extension and full parallel taxiway needs to be constructed in order for the County to be able to compete for FAA funds. The extra 700 feet would provide extra capacity to serve area industries. Five thousand feet is a standard, which generally allows for accommodation of business aircraft, including corporate jets.
- A separate area is needed for the parking of larger, corporate aircraft. The Bradford County airport can currently park planes cheaper than at other airports in the region, such as Elmira.
- The airport is overwhelmed with maintenance requirements. The \$250,000 grant awarded from the Governor's Office in February 2003 will do much to alleviate this.
- An airport Business Plan is needed to direct decision-making and capital spending.
- A KOZ designation is needed at the airport in order to provide for tax-free incentives for investment. The Authority has been pursuing potential Foreign Trade Zone status for duty-free goods. The airport is already located within the Central Bradford County Enterprise Zone.

Grand Canyon Airport

In operation since 1940, this Tioga County facility is one of the principal airports in the region, with 14 based aircraft*. Current annual aircraft operations are comprised mainly of local and itinerant general aviation operations. An estimated 8,100 local general aviation, 1,058 itinerant general aviation, 68 air taxi operations, and 48 military operations comprise the airport's annual operations. The general aviation facility is used by businesses for fuel, repair and air taxi services, and also supports recreational and pleasure flying. (The seasonal nature of the airport's use is evident as demand spikes during the summer months of July and August.) The airport is able to accommodate small aircraft with wingspans less than 49 feet.

* The number of based aircraft at the airport has declined from a decade high of 19 in 1994-95 and has remained constant at 14 over the past five years. Based aircraft is an important component in determining existing and future airport activity.



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All of the airport’s major facilities, including runway, apron and terminal facilities, have been rated as being in “good” condition, meaning that the condition of these facilities are presumed to be adequate throughout the next five years. An exception includes the airport’s 7,200 square foot, 6-unit T-hangar, which is rated as being in “poor” condition, indicating that it is not adequate for its intended use at the present time.

In 1995, the state evaluated the potential for improvements at the airport by having a master plan prepared. From that plan, the airport’s runway was extended from 2,200 to 3,600 feet in 1996, and additional hangers, terminal building and equipment storage buildings were built. Snow removal equipment was also purchased. Lights were also added to the runway so pilots could make night operations.

At one point, the airport was the sole remaining airport owned by the state. From that, Wellsboro and Delmar Township agreed to form the Grand Canyon Airport Authority, which took ownership of the airport on September 25, 2001.

The airport is served by PA 362 and SR 3029 (Dexter Road), both relatively narrow country roads. If any commercial development were to take place adjacent to the airport, these roadways would need to be improved, according to Tioga County economic development officials.

For a general aviation facility, Wellsboro is a marginal airport in its ability to break even. A major challenge for the airport will be raising the local match needed when grants are awarded. Wellsboro has also had difficulty in getting an FBO to stay. Airport officials cite the difficulty in fund raising for small, rural airports, and not many area industries are using it. There is rare use of freight movement at the airport, freight movement typically involving some medical or transport use. Medical helicopters have used it despite the availability of a helicopter pad just south of Wellsboro. The airport does serve some tourist traffic as well with charter flights over the PA Grand Canyon. Table 8 provides an overview of the Federal Aviation Administration’s recent (2001) Terminal Area Forecast for the years 1991 through 2015.

**Table 8: FAA Terminal Area Forecast
GRAND CANYON AIRPORT—Wellsboro PA**

YEAR	Annual Operations				Total	Based Aircraft
	Itinerant GA	Local GA	Air Taxi	Military		
1991	1,500	3,000	100	0	4,600	18
1995	1,570	2,850	100	0	4,520	19
2000	1,260	2,280	80	0	3,620	14
2003	1,260	2,280	80	0	3,620	14
2005	1,260	2,280	80	0	3,620	14
2010	1,260	2,280	80	0	3,620	14

Source: FAA (2001); Grand Canyon Airport

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Skyhaven Airport

This airport is located just one mile south of Tunkhannock. The airport features an asphalt runway nearly 2,000 feet in length which accommodates the local general aviation needs of the area. The airport has 27 base aircraft, the majority of which are single engine airplanes. Aircraft operations average 36/day.

Blue Swan Airport

The Blue Swan airport – located in Athens Township but owned by Sayre Borough – has been closed. As part of this closing, the borough has agreed to pay for the removal of the facility’s fuel farm to be relocated at the Bradford County Airport in exchange for the Bureau of Aviation relieving the borough of a \$355,000 grant obligation. The airport featured a 2,900’ turf runway and leased space for several aircraft. Plans for the airport originally included paving the runway in converting the facility into a business class airport. The site will now likely be developed for industrial uses.

Wilkes-Barre/Scranton International Airport

Wilkes-Barre/Scranton International Airport is the principal provider of air passenger and cargo service. It is a scheduled service airport, hosting 65 base aircraft and 102,789 annual operations. Area business and corporations utilize the airport’s scheduled and general aviation to transport employees and ship and receive products and supplies, especially just-in-time and perishable goods. Area employers rely upon daily airline services for cargo, small package and freight forwarding services. The airport is also used for pilot training and tourism purposes that support hunting, camping and fishing opportunities.

Located in Luzerne County (a portion of the runway extends into Lackawanna County), the airport has access to four major interstate highways, as well as rail access. Four major air carriers serve the airport, including:

- US Airways Express
- United Express
- Delta Connection
- Continental Connection

Eight cargo companies also operate at the airport. Major improvements are being made to this commercial facility including a new 641 space parking garage. The airport is positioning for more regional jet usage which could expand commercial air service, a benefit to the larger region.

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**Table 9: Air Cargo Trends, 1995-99
WILKES-BARRE/SCRANTON INTERNATIONAL AIRPORT**

Airport	Tonnage					% Change
	1995	1996	1997	1998	1999	95-99
WB/SCRANTON INT'L	2647	2546	2394	2479	2691	1.7%

Source: Bureau of Aviation System Plan

Air cargo trends have been very flat at the airport since 1995, with just a 1.7 percent increase between that year and 1999. This contrasts with the nearly 20 percent increase at Pennsylvania's other major airports over the same time period.

The table below shows that the percentage of inbound freight at the airport was 44.1 percent of total tonnage shipped. This percentage is among the lowest of Pennsylvania's airports, exceeded only by DuBois-Jefferson, at 41 percent. For comparative purposes, the state average is 50.2 percent. Also, a majority (84.3 percent) of air cargo moves in dedicated cargo planes at Wilkes-Barre/Scranton International, compared to 73 percent statewide.

**Table 10: Inbound and Outbound Passenger Belly Vs. All Cargo Airplanes, 1999
WILKES-BARRE/SCRANTON INTERNATIONAL AIRPORT**

Airport	Inbound		Outbound		% Belly	% Inbound
	Passenger Belly	All Cargo	Passenger Belly	All Cargo		
WB/SCRANTON INT'L	93	1095	330	1173	15.7%	44.1%

Source: Bureau of Aviation

Elmira-Corning Regional Airport

The airport successfully secured an additional carrier, Continental Airlines, in addition to existing service by US Airways and Northwest. The additional carrier adds more competition to the air passenger industry by increasing access to the greater Elmira area for business and leisure travelers and by making fares more competitive. The new Continental service links area air passengers with major Continental hubs in Cleveland and Albany. Chemung County is also interested in bringing Delta Airlines, which began flying regional jet service between Binghamton and its Cincinnati hub in January 2003. The airport has a runway length of 7,000 feet.

Greater Binghamton Airport/Edwin A. Link Field

This Broome County airport, located in the Town of Maine, is located just seven miles north of the future I-86 corridor and has four of the six largest carriers in the nation. It has a runway length of 7,100 feet. The Binghamton MPOs "Transportation Tomorrow: 2025" Transportation Plan cites the MPO's ongoing concern with improvements to the airport

"There's no region our size in the country that has as much air service as we do." –
Broome County Executive Jeffrey Kraham

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terminal, as well as prospective infrastructure improvements in the guise of water and sewer service. The airport is linked to NY 17 by Airport Road (CR 69), which begins as a four lane, median-divided highway before becoming a two-lane rural road. One of the objectives under the “personal mobility” goals as outlined in the plan include improving roadway access to the airport as a way of presenting a well-defined community gateway to those arriving by air.

A specific action item in the plan in fact lists “the enhancement of mobility and safety in the airport corridor” as one of its primary actions for implementation as well as for its economic development potential. The airport corridor has several large undeveloped parcels that could conceivably be developed as industrial concerns after the County runs planned water and sewer service lines northward beyond the airport to the county landfill.

Bicycle/Pedestrian

The NTRPDC’s Rural Transportation Advisory Committee and Full Commission in 2001 adopted the Northern Tier Bicycle and Pedestrian Transportation Plan. As part of the plan’s development, a series of meetings was held throughout the region during spring and summer of 2000 to gain a better sense of community desires. Action plans were then developed for each of the counties, based in part on the public comment received. A summary of the public’s recommended project suggestions and associated action plans for the highest priority projects (by county) follows in Table 11.



Table 11: Northern Tier Bicycle/Pedestrian Action Plan
NORTHERN TIER

County	Action Items (by priority)
BRADFORD	<ol style="list-style-type: none"> 1. Development of off-road trail mapping 2. Development of off-road trail systems/greenways 3. Shoulder improvements on PA 414 between Canton and Monroeton
SULLIVAN	<ol style="list-style-type: none"> 1. Berm widening from Laporte to World’s End S.P. 2. Berm widening on PA 154 from World’s End to Forksville Borough 3. Berm widening on PA 42 from Eagles Mere to Laporte Borough, and SR 3009 and SR 3002 (Allegheny Avenue)
SUSQUEHANNA	<ol style="list-style-type: none"> 1. Better pedestrian connectivity in the county’s boroughs 2. Improved shoulders on US 11 throughout the county; inclusion in statewide Bicycle PA network 3. Address bicycle/pedestrian concerns in all PENNDOT maintenance/betterment activities, where feasible

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County	Action Items (by priority)
TIOGA	<ol style="list-style-type: none"> 1. Develop rail/trail between Blossburg and Mansfield 2. Extend Lamb's Creek trail from Mansfield to Tioga and on to NY state line. 3. Better bicycle/pedestrian access from Hills Creek S.P. to Tioga-Hammond Lakes N.R.A. to Leonard Harrison S.P.(Grand Canyon of Pennsylvania)
WYOMING	<ol style="list-style-type: none"> 1. Better bicycle/pedestrian access from Tunkhannock to Lake Carey and Lake Winola 2. Regional mapping provided at tourist promotion agencies showing alternate routes 3. Implementation of the Iroquis Trail Feasibility Study findings

Source: Northern Tier Regional Planning and Development Commission public involvement meetings, spring/summer 2000.

Though public input was collected at the county level, it is easy to see from the table above where consensus emerges on a regional level regarding bicycle/pedestrian-planning needs:

- Shoulder improvements for roadway-based linkages of the regional bicycle/pedestrian network;
- off-road trail development, and
- the provision of improved pedestrian facilities within the region's more relatively densely populated boroughs.

In addition to a county-by-county action plan was the identification of a regional bicycle and pedestrian network. The network - which includes both roadway-based and non-roadway-based facilities - was identified to alert PENNDOT maintenance forces as to the need to accommodate bicycle and pedestrian modes on these routes when they become subjects of Betterment projects or rehabilitation. A map of the region's bicycle/pedestrian network is available in the appendix.

In 2001, PENNDOT designated and signed 6 cross-state bicycle routes, referred to as "BicyclePA". The six BicyclePA routes use existing public roads and some rail trails to guide bicyclists through the state. The routes are designed for competent road bicyclists who may undertake a long distance cycle touring trip. Not all BicyclePA routes will have perfect shoulders or be entirely free of truck traffic. They are designed to accommodate the "Type A" bicyclist under the FHWA definition.

Three of the original 6 **BicyclePA routes** traverse the Northern Tier and include:

- **Route G**, a north-south route through Tioga County generally following PA 287
- **Route L**, a north-south route through Susquehanna County generally following PA 171, and



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- **Route Y**, an east-west route following US 6 through Wyoming, Bradford and Tioga Counties.
- A **“Route J”** is currently in conceptual form, and is expected to utilize the following routes through Bradford County upon its eventual designation:
 - PA 14 Tioga County line to PA 414, Canton, 4.57 miles
 - PA 414 PA 14 North junction to US 220, 21.99 miles
 - US 220 PA 414 junction to SR 2027 (Bus. US 220), 1.68 miles
 - SR 2027 US 220 to US 6, Towanda, 1.80 miles
 - US 6 SR 2027 to SR 1041, 1.79 miles
 - SR 1041 US 6 to SR 1043, 0.74 miles
 - SR 1043 SR 1041 to SR 1056, E. Athens, 12.04 miles
 - SR 1056 SR 1043 to PA 199, Athens, 0.60 miles
 - PA 199 SR 1056 to NY line, S. Waverly, 3.09 miles

Since the days of the Intermodal Surface Transportation Efficiency Act (ISTEA) a decade ago, the Transportation Enhancement Program has been successful in funding “non-traditional” transportation projects such as those for bicyclists and pedestrians. PENNDOT gives guidance with regard to the 12 areas or categories whereby projects can compete for TE funds:

- Provision of Facilities for Pedestrians and Bicyclists
- Provision of Safety and Educational Activities for Pedestrians and Bicyclists
- Acquisition of Scenic Easements and Scenic or Historic Sites
- Scenic or Historic Highway Programs
- Landscaping or Other Scenic Beautification
- Historic Preservation
- Rehabilitation and Operation of Historic Transportation Buildings, Structures or Facilities
- Preservation of Abandoned Railway Corridors
- Control and Removal of Outdoor Advertising
- Archeological Planning and Research
- Environmental Mitigation of Runoff Pollution and Provision of Wildlife Connectivity
- Establishment of Transportation Museums.

The Enhancement Program is one that is expected to continue under the reauthorization of TEA-21.

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Roadway Networks

The region's highway network constitutes the backbone of its overall transportation system, as the region's residents and its businesses are dependent on the regional highway network.



Although largely outside of the Northern Tier planning region, the pending development and designation of NY 17 into I-86 constitutes one of the largest transportation planning concerns of any mode, freight or passenger. The route is currently designated as an interstate from Erie, PA all the way to the Steuben/Chemung County border. This 177-mile segment was designated as I-86 in December 1999, with more segments to follow until it reaches its eastern terminus at I-87 in Orange County, NY. This constitutes 204 miles.

As early as 1955, when the original Interstate Highway System was being planned and developed, New York State and regional officials have had a vision of making NY 17 as the region's primary east-west interstate. The corridor subsequently would become a four-lane highway during the 1960s but did not even receive interstate status as late as 1991, when the federal Intermodal Surface Transportation Efficiency Act (ISTEA) was passed into law. By 1998, when ISTEA's successor was passed into law, TEA-21 recognized I-86 as High Priority Corridor 36. Over the past 40 years, the corridor between Binghamton, NY and Erie has been developed as Corridor T of the ARC's Appalachian Development Highway System and designated as the "Southern Tier Expressway." By 2007, NY 17 is expected to be designated as an interstate through Chemung, Tioga and Broome Counties.

Networks

In 1990, the Pennsylvania General Assembly acted to identify a Timber, Natural Resources, Agricultural and Tourism Transportation Network across Pennsylvania. The Act gave PENNDOT and its planning partners the power to designate certain secondary highways, which serve sites of significant timber, natural resource, agricultural or tourism business activity as part of a so-called "Agri-Access Network."

PENNDOT and NTRPDC should also continue to monitor whether a secondary highway provides essential access between sites of significant timber, tourism or agricultural activity and roads comprising the Agri-Access and Priority Commercial Networks. Other considerations include whether there are certain highway or bridge obstructions impeding a secondary highway from serving sites of significant timber, tourism or agricultural activity. PENNDOT in turn is charged with the responsibility to identify and report to the Governor and the General Assembly (for inclusion in a capital budget highway or bridge bill) capital projects to repair, rebuild and improve the network.

The State Transportation Commission (STC) in determines the projects that comprise the Commonwealth's 12-year transportation plan and its biennial updates. Priorities are given to capital projects to repair, rebuild and improve the network, provided that funds



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are available to finance those projects from the Timber, Natural Resources, Agricultural and Tourism Restricted Account within the Motor License Fund. Table 12 shows the region's priority corridors and their placement among the various networks used by NTRPDC in its long range planning.

The Plan's Network System Map (available in the appendix) should be referred to for more detail and for a graphical interpretation of these regional networks.

**Table 12: Corridor Networks
NORTHERN TIER PRIORITY CORRIDORS**

CORRIDOR	NHS	I-CAN	PCN	AAN	Main Export Route	S'dy Export Route	Bike/Ped
I-81	■		■		■		
US 6	■		□		■		■
US 11	■		■			■	■
US 15			■		■		□
US 220	□		■		■		□
PA 14			■			■	■
PA 29				■		■	■
PA 49			■	□		■	
PA 87			□			■	□
PA 167				■			
PA 171				■		■	■
PA 187				■		■	■
PA 287			■			■	■
PA 328		■		■			
PA 414		□		■		■	□
PA 706		□	□	■		■	■

Key: ■ On network; □ Partially on network

In December 1995, ISTEA mandated the identification of a National Highway System network (NHS) which constitutes the nation's spine of highways of national significance. This network currently constitutes approximately 160,000 miles nationwide. According to the FHWA, the NHS represents only 4 percent of the nation's roads, yet carries 40 percent of all its roadway traffic. (In the Northern Tier, the percentages are 2.6 and 27 percent, respectively.) Moreover, FHWA estimates that the network carries three quarters of all heavy truck traffic, and 90 percent of tourist traffic. The designation of the NHS encourages states like Pennsylvania to invest more heavily on their maintenance and improvement. A map of the NHS in the Northern Tier is available in the Plan appendix.

NHS Definition
The National Highway System shall consist of interconnected urban and rural principal arterials and highways (including toll facilities) which serve major population centers, international border crossings, ports, airports, public transportation facilities, other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel. All routes on the Interstate System are a part of the National Highway System.



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In the Northern Tier, the NHS consists of US 6, US 11, US 15, and US 220 north of US 6. There are no NHS routes in Sullivan County, one of two counties in Pennsylvania where this condition prevails. Table 13 below describes the mileages and daily vehicle miles of travel by county.

**Table 13: National Highway System Mileage and Driver Vehicle Miles Traveled (DVMT)
NORTHERN TIER**

County	NHS		Total	
	Mileage	DVMT	Mileage	DVMT
BRADFORD	65.3	43,381	2,491.7	1,475,400
SULLIVAN	0	0	615.9	260,301
SUSQUEHANNA	27.2	657,936	1,874.3	1,568,672
TIOGA	78.9	597,923	1,929.5	1,494,137
WYOMING	27.9	224,480	753.2	793,690
NORTHERN TIER	199.3	1,523,720	7,664.6	5,592,200
PENNSYLVANIA			119,380.9	280,776,845

Source: PENNDOT (2001)

In addition to the NHS, USDOT's **Federal Aid Highway System** is also a network of highways that receive federal funding assistance. In the Northern Tier, these highways include all 15 priority corridors, with the exception of PA 167 north of Montrose.

The region has a relatively high number of roadway mileage, but a correspondingly low amount of federal aid mileage. The Federal Aid System is further divided into a functional classification scheme. A map of the Federal Aid System as it relates to the Northern Tier is available in the appendix.

Throughout the Northern Tier region and Pennsylvania, planners have identified a functional classification scheme to guide planning for highway improvements. A map of functional classification of highways in the Northern Tier is available in the appendix. The hierarchy of classifications (from highest to lowest) includes principal arterials, minor arterials, collectors, and locally classified roadways (not shown). This system should continue to be used by federal, state, regional, county and municipal planners and officials in planning highway improvements.

Bridges

Local bridge rehabilitation and replacement has grown to become a critical need in the Northern Tier. As an example, during the development of the 2003-2006 TIP, local municipalities requested a total of 76 projects, 62 percent of which were local municipal or county-related bridge projects.





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According to a recent TRIP analysis of the National Bridge Inventory, approximately 26 percent of Pennsylvania’s rural bridges are structurally deficient¹, while an additional 18 percent are functionally obsolete². The Northern Tier has a lower percentage of functionally obsolete bridges compared to its counterparts, although in such counties as Susquehanna and Wyoming, the percentages of structurally deficient bridges are unusually high. Wyoming County in fact has the region’s highest percentage of structurally deficient bridges, at 36 percent – the seventh-highest such rate in the Commonwealth.

The region’s number of functionally obsolete bridges compares favorably statewide, as the region has approximately 8 percent rated as functionally obsolete, compared to 18 percent statewide. Functionally obsolete bridges include those structures that have inadequate width or vertical clearance for the associated highway system...a “choke point.” In some cases, a bridge may become functionally obsolete simply due to highway improvements on the adjoining approaches, such as lane additions or widening of approaching roads. In other cases, a bridge may be classified as functionally obsolete through an upward redefinition of desired standards.

Functionally obsolete bridges are not necessarily hazardous as they can still be structurally sound.

Table 14 and Table 15 below provide more detail on the region’s existing bridge conditions.

**Table 14: Bridges: Existing Conditions (>20 ft.+)
NORTHERN TIER**

AREA	Number of Bridges	Structurally Deficient	Percent Structurally Deficient	Functionally Obsolete	Percent Functionally Obsolete	Total Deficient	Percent Deficient
BRADFORD	393	101	26%	32	8%	133	34%
SULLIVAN	115	28	24%	11	10%	39	34%
SUSQUEHANNA	264	85	32%	21	8%	106	40%
TIOGA	397	77	19%	34	9%	111	28%
WYOMING	137	50	36%	9	7%	59	43%
NORTHERN TIER	1,306	341	26%	107	8%	448	34%
PENNSYLVANIA	22,174	5,543	25%	3,991	18%	9,534	43%

Source: FHWA National Bridge Inventory, June 2002

¹ Structurally deficient refers to bridges that have identified structural weaknesses or inadequate waterway.

² Functionally obsolete bridges have either inadequate deck geometry (e.g., too narrow), is improperly aligned with the roadway, has insufficient vertical clearance, or has inadequate load-carrying capacity.



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Table 15 specifically shows the region’s most deficient bridges by high (10,000-plus AADT) volume.

**Table 15: Bridges: Deficient High Volume Bridges*
NORTHERN TIER**

COUNTY	Roadway	Feature Crossed	Location	Year Built	AADT	Length
SUSQUEHANNA	I-81 NB	Trowbridge Creek	Great Bend Twp	1961	13,180	24.7
SUSQUEHANNA	I-81 SB	East Branch Tunkhannock Cr	Lenox Twp	1961	11,518	202.4
SUSQUEHANNA	I-81 NB	East Branch Tunkhannock Cr	Lenox Twp	1961	11,441	202.4
SUSQUEHANNA	I-81 NB	Tunkhannock Cr	Lenox Twp	1961	10,591	53.9
SUSQUEHANNA	I-81 SB	Tunkhannock Cr	Lenox Twp	1961	10,674	53.9
TIOGA	US 15	Harts Creek	Lawrence Twp	1942	12,588	7.0

Source: FHWA National Bridge Inventory, June 2002

In response to the region’s growing bridge needs, NTRPDC has proposed that a Field View Team, comprised of PENNDOT District personnel, NTRPDC personnel and county/municipal personnel visit each critical local bridge. This Field View Team would build upon the inspection engineering reports and offer technical assistance and educational instruction to local municipal officials at the site. Pertinent data will be collected on the structure as well as from the municipal officials regarding priority and funding streams. This data would then be compiled and formulated into a Regional Local Bridge Critical Replacement and Rehabilitation Strategic Plan. The resultant plan would then be used to establish TIP/TYP projects.

A second step would involve the establishment of a regional local bridge contract management program. NTRPDC has proposed establishing a regional local bridge contract management program similar in nature to that of Bradford County. NTRPDC would work with the local municipal and county officials in every aspect of the project, preliminary engineering, design, bidding, contract negotiations, contract award, contract management and project close out. This process has worked successfully at the county level in expediting bridge replacement and rehabilitation projects and should be as successful at the regional level.

Rail Freight

The nation’s rail system has been evolving since its beginnings 175 years ago. The past decade has witnessed dramatic changes in the railroad industry in Pennsylvania through consolidation and merger, institution of doublestack service and containerization.



* Bridges carrying volumes in excess of 10,000. All structures shown carry two lanes each.



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Pennsylvania has more operating railroads (69) than any other state in the nation. In the Northern Tier, there are five, including the big Class 1 carriers of Norfolk Southern and CP Rail, as well as three short lines (the Wellsboro & Corning Railroad in Tioga County, the Towanda-Monroeton Shippers Lifeline in Bradford County, and the Reading, Blue Mountain & Northern Railroad Company in Wyoming County). An additional carrier, the New York, Susquehanna & Western Railway Corporation (NYS&W), operates in northern Susquehanna County, yet has no Pennsylvania customers. A description of each of these rail freight carriers is documented in more detail in this section.

As shown in Table 16, there are freight rail lines in every Northern Tier county except Sullivan (one of two counties in Pennsylvania without rail access). The table gives the reader a sense of the magnitude of traffic volumes, as expressed in million gross tons (MGT). CP Rail's lines through Susquehanna County carry the heaviest volumes of rail freight traffic, while the others are in danger of being downgraded. All of the region's rail lines are able to accommodate 286,000 pound gross weight rail cars, which is the new industry standard.

Table 16: Traffic Density, Rail Car Capability & Number of Bridges
NORTHERN TIER RAIL LINES

Railroad	Limits	Length	Line Name	MGT	286K Ready	Bridges
CPRail	NY State line - Scranton - Sunbury	127	Freight main line	13.2	Yes	101
NS	Susquehanna - Port Jervis	42	Southern Tier line	4.4	Yes	26
NS	Sayre - Mehoopany	60	Lehigh Secondary	0.8	Yes	34
TMSLL	Towanda - Monroeton	6	Switching and terminal	<1	Yes	2
RB&N	Lehighton - Tunkhannock	93	Lehigh Line	<1	Yes	42
WCOR	Wellsboro	35	Main	<1	Yes	41

Source: 2003 PA State Rail Plan

Norfolk Southern

Norfolk Southern is a major Class 1 carrier in the Northern Tier with lines in Bradford, Susquehanna and Wyoming Counties. NS has three principal routes it uses in the Northern Tier, including:

- **The former Lehigh Valley line** - This route runs from Waverly, NY through Sayre and Towanda to Mehoopany. In NS terminology, this line is a tactical one in that it serves as a "surplus" main line or branch line with a limited amount of local freight. As a tactical line, it is dependent on local freight for its viability, and

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recent tonnage trends have not been favorable. For example, there are 60 miles of line between Athens and Mehoopany. Between these two points there are limited numbers of local freight cars being picked up. Towanda is the biggest contributor on the line, with 382 cars in 2001, followed by Wyalusing with 79 cars, and Presswood with 40. A smaller number of cars are picked up at Laceyville and Wysox. NS picked up 61 carloads of business from the Towanda-Monroeton Shippers Lifeline in 2001 at Towanda Junction. For context, there were a total of 4,000 cars/year out of Mehoopany. NS is reviewing the future of the line, which may be downgraded. The future of this line north of Athens and south of Mehoopany is not as suspect.

South of Mehoopany, the line is owned by the Reading, Blue Mountain and Northern short line.

- **Binghamton to Port Jarvis** – This line runs through a portion of Susquehanna County through Susquehanna Depot and Lanesboro. There are no local businesses served on this line, which also has extended trackage rights to the New York, Susquehanna & Western, a short line operator. NS is currently reviewing the potential of downgrading this line and removing its signal system. There are no plans for abandoning this line at this time.
- **Scranton to Binghamton** – The most important line to NS is actually owned by CP Rail, although NS has trackage rights on it. The CP Rail line (nee D&H) runs between Scranton and Binghamton and is NS' primary route between Harrisburg and New England. NS has no local rights, using the line strictly as an overhead line. Business has been increasing to the extent where CP Rail constructed a new siding at Clarks Summit, to which NS (and Pennsylvania's Rail Freight Assistance Program) contributed to the costs of that improvement. The future of the former D&H line appears very favorable to NS, as they are currently running one through train a day each direction in addition to what CP Rail is running.

Although physically outside of the Northern Tier region, developments on NS' Southern Tier line also impact Northern Tier businesses and shipping patterns. NS made a recent decision to concentrate its freight flows onto the Southern Tier line between Binghamton and Buffalo. NS originally had two main lines connecting Harrisburg and Buffalo, neither of which carried a substantial amount of traffic. Since CP Rail already had trackage rights on the Binghamton to Buffalo line, NS decided to concentrate its freight onto CP's track. This complicated arrangement between the two Class 1's has allowed NS to shift its freight (an extra pair of trains) from the Buffalo to Lock Haven line onto the Southern Tier line. The line is slightly longer, but there are more businesses to serve. NS has since downgraded the line between Buffalo to Lock Haven rather than abandoning it. As a result, all of NS' Buffalo-bound traffic now utilizes the Southern Tier line.



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CPRail

Of all the rail lines in the Northern Tier, CP Rail's line through Susquehanna County is arguably the most important. In fact, rail freight analysts believe the line is one of the top one or two north-south lines in the northeastern United States. CP Rail bought the line from the D&H in 1991 and traffic on the line is currently higher than it has been at any point over the past 20 years. In spite of this, the operation of the line is suspect as it may be leased to a regional railroad. Traffic on the line is funneled in all directions from the corridor. From Binghamton freight moves west to Buffalo and Toronto as well as north towards New England and Montreal. To the south, rail traffic heads to Allentown and Harrisburg as well as southern New Jersey. CP Rail also connects with CSX in Philadelphia.

Wellsboro & Corning Railroad

The **Wellsboro & Corning Railroad** in Tioga County was purchased in 1993 from Conrail after the rail giant announced it was planning to shut the line down. At the time there were three major industries utilizing the 35-mile line, including Osram (formerly GTE) Sylvania, Borden Foods in Wellsboro and Cornell Brothers Agway in Middlebury Center. The three firms combined represent approximately 450 jobs. The County contracted with an operator, which continues to serve these three primary industries along with several other smaller shippers along the line. The WCRR is operated as part of the North Shore & Affiliated group of railroads.

The operator has also contracted with the Tioga Central Railroad in order to provide passenger excursion service on the line, which has had a significant impact on the tourism industry locally. Passenger excursions began in 1992 and typically operate on weekends when freight isn't moving although during times of additional runs (as during the fall foliage season) the excursions must defer to freight movement. Ridership has grown from approximately 10,000 at its inception to over 20,000 during the 2002 season. The company's equipment includes three locomotives and a half dozen passenger cars.

Financial assistance is of critical importance to the W&C Railroad, as it wouldn't survive without it. Of the line's 35 miles, 11 are located in New York State, which hinders funding assistance through such sources as Pennsylvania's Rail Freight Assistance Program. This program is critical to the future of the line although the RFAP budget has been cut in half in recent years from \$8.5 million to just \$4.25 million in assistance annually.

The line connects with both NS and CP Rail at the Gang Mills Yard near Painted Post, NY. This connection to two major Class 1 carriers has benefited local shippers with competitive rates.

The line has a number of at-grade crossings, yet no major incidents have been reported. The carrier reports having more problems with vandalism and trespassing (ATV traffic, etc.). There are a number of crossings on the line that merit signalization, due to train



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speed. Again, dependence on outside sources (public investment) is needed to fund these types of improvements, which are typically cost prohibitive for small railroads such as WCRR.

Table 17: WCRR Annual Carload Counts

Year	Cars
2002	746
2001	613
2000	641
1999	750
1998	708

Source: Wellsboro & Corning Railroad Co.

Towanda-Monroeton Shippers Lifeline, Inc.

The **Towanda-Monroeton Shippers' Lifeline, Inc.** (nee Lehigh Valley, Conrail) is a 5.6-mile shortline carrying grain and fertilizer from the NS line in Towanda to businesses in central Bradford County. Growmark and Shaffer's Feed Mill in Monroeton are the line's biggest customers, generating annual traffic of approximately 145 cars annually. Rail service is provided three days per week during ten months of the year and six days a week the balance of the year. A majority of freight on the line is being shipped to (as opposed to *from*) Monroeton. Line operators estimate that approximately 85 percent of the mill's freight is received by rail, adding to its competitiveness. The rail line is a vital part of the businesses' transportation operations.

After a 1975 flood destroyed the line (and the Lehigh Valley went out of business), the Commonwealth of Pennsylvania rebuilt the line, which was then operated locally by private concerns. The line originally ran south of Monroeton through Dushore and Sullivan County to its eventual terminus in Wilkes-Barre. That portion of the line however was abandoned in 1981-82. The railroad historically received \$4,000 annually in state operating assistance up until 2001. The railroad presently receives no funding assistance from the state.

Reading, Blue Mountain & Northern Railroad

The Reading, Blue Mountain & Northern began as a 12-mile line that today serves businesses and industry everywhere between Reading and Scranton all the way north into Mehoopany. The railroad today operates a total of 266 route miles on 16 different lines in eastern Pennsylvania.

Most importantly to the Northern Tier, the railroad became an exclusive carrier for Proctor & Gamble's Mehoopany plant for more than 4,000 annual carloads of pulp board. The rail carrier is also being used by NS to carry traffic between Buffalo and Harrisburg.

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Public Transportation

The Endless Mountains Transportation Authority (EMTA) is the region's primary provider of public transportation. PENNDOT's Bureau of Public Transportation classifies EMTA as a Class 4 provider, which essentially means EMTA provides service in a non-urbanized area and is eligible to receive funding under 5311. EMTA is also a Class 5 for its Rural Shared Ride Program.



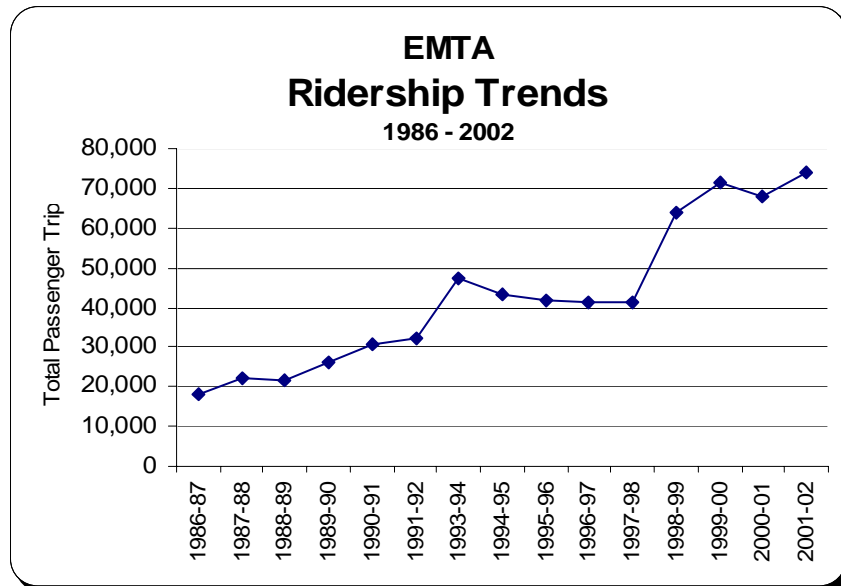
Since its origin in 1980, EMTA has grown into one of the largest and most diversified public transportation providers in rural Pennsylvania by offering a variety of services: the Medical Assistance Transportation Program (MATP), federal and state funded fixed route services as well as a variety of other, locally funded transportation services that are targeted at specific user groups.

The Authority has 46 revenue vehicles. Shared ride buses are white and green while fixed route buses are blue and run on a set schedule. EMTA recognizes that it will never be considered as a first choice for commuters in the region, as distances are too far (or "great"), headways are too long, and the lack of congestion and availability of free parking all conspire to make the single occupant vehicle the first choice for commuters in the region. Also, area employers have not demonstrated a willingness to subsidize EMTA services to encourage their employees to ride the bus. In spite of this, Authority officials believe that its Blue Buses could eventually be considered and function as the "second family car." Seniors constitute the bulk of EMTA's ridership.

The Authority is experiencing its fastest-growing ridership increases in Tioga County, due in part to the success of the Mountie Express. The Mansfield "Mountie Express" primarily serves the students and faculty of Mansfield University. This service is also available to the general public for a nominal fare. There has been an increase in the number of people utilizing the buses' bicycle racks, particularly by students commuting from Wellsboro to the university in Mansfield.

EMTA's ridership overall has more than doubled over the past decade, from 32,443 in 1992 to 73,928 today. Since 1996, it has grown by 77 percent. No other Class 4 provider in Pennsylvania even comes close to matching these rates of increase. EMTA is one of three Class 4 providers statewide that have been registering increases in ridership over the past four years. EMTA covers Bradford, Tioga and Sullivan Counties, with a transfer center in Towanda.

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Source: Pennsylvania Bureau of Public Transportation, Rural and Small Urban Program Statistical Report

In July 2002 the Authority began offering deviated fixed-route service, where buses deviate from the route for a distance not to exceed three quarters of a mile. There are four such deviated fixed-route runs, radiating outward from Towanda. These are:

- Towanda to Wyalusing
- Towanda to Tioga
- Towanda to Dushore, and
- Towanda to NE Bradford County.

The Authority is considering offering a fifth run between Gillett and Troy.

EMTA has good relationships with its counterparts in Chemung and Tioga Counties in New York – EMTA currently provides fixed route service to the Chemung County system. On Tuesdays and Fridays, EMTA also provides service south to the Lycoming Mall.

A topic of heightened concern for the Authority in the aftermath of September 11 is that of safety and security. Transportation is an obvious target for terrorist attacks, and the Authority has taken several measures to increase safety and security. One way has been by separating revenue vehicles from employee parking. Vehicles will be separated under watch of video surveillance cameras. All EMTA vehicles have panic buttons that override the system so dispatchers know when there is an issue on board. EMTA also has an AVL (Automatic Vehicle Location) system to track the locations of its vehicles. Text messaging is also available via the AVL system.

Providing public transportation service in a region that averages only 46 people per square mile is but one of the challenges facing EMTA. The agency's Five Year Plan



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(1999) directs the Authority towards focusing its development in three key areas, including:

- Expanding system efficiencies to keep levels of service up to standards while living within the reality of constrained financial resources and the challenge of developing new sources of revenue
- Controlled development of new services in order to attract new ridership
- Maintenance of existing fixed assets as well as the acquisition of new equipment to replace unserviceable vehicles both in maintaining existing services and allowing for future growth.

The Authority sees its major future needs over the next 15-20 years as being that of new capital and vehicle replacement. Currently, operating funds for fixed route service have not been keeping pace with expenses. EMTA has dedicated funding for capital it's allowed to use 50 percent for operating. A few years ago, EMTA was using 10 percent, but that has increased to the maximum of 50 percent with worker's compensation, liability and health insurance costs.

Other major projects and needs expressed by EMTA include:

- Promoting interregional transportation fixed route and demand responsive services.
- Becoming a ticket sales agent for Capitol Trailways. This issue is more significant in Mansfield with the borough's student population. Trailways' Mansfield stop is two miles outside of town away from the college. Complicating matters is the lack of available taxi service between the school and the Trailways stop. A protected passenger waiting area is also a need.
- Encouraging more employers to become involved with the Welfare to Work program
- Easing congestion in Towanda through the development of a park and ride lot in Wysox. Other possible park and ride locations include Green's Landing or Athens Township. Many commuters are currently parking at the former Ames Department store parking lot in Sayre. Another possible Sayre location would be the downtown train station.
- Beginning commuter service in future years from Tioga County to Williamsport.
- Expanding service to Tunkhannock.
- Developing an intermodal stop as part of the development in South Waverly. The stop could potentially be a Greyhound stop on one of EMTA's fixed routes.
- There is \$33,000 a year available for Susquehanna County transit through the Broome County/Binghamton MPO. A feasibility study for implementing fixed route service there could be a possibility.



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Table 18 shows the details of the Authority's current 5 Year Plan.

**Table 18: 5 Year Plan (\$000s)
ENDLESS MOUNTAINS TRANSPORTATION AUTHORITY**

FISCAL YEAR	Project Description	Total Cost
2003/04	Ops/Maintenance Facility	413
	Modify Equipment Facility	168
	Radios	20
	Facility Modifications	210
	Light Duty Buses	290
	Service/Admin Vehicles	100
	Upgrade communication lines	10
	4 Accessible vans	151
	2 accessible transit buses/1 van	157
	2004/05	Maintenance equipment
Light duty buses		172
Communication equipment		85
Facility modifications		109
2005/06	Heavy duty buses	520
	Seal/stripe parking	7
	Maintenance equipment	7
	Computer/office equipment	5
2006/07	Light duty buses	80
2007/08	Maintenance Equipment	5
	Computer/office equipment	5
GRAND TOTAL		\$ 2,521

Source: EMTA, 2003

Intercity Bus

The region also has several providers of intercity bus transportation, including Capitol Trailways and Woodward Bus Service. Capitol Trailways provides scheduled bus service between Scranton and Elmira, NY via Wyalusing, Towanda and Sayre. Woodward Bus Service provides school bus service and is in the process of obtaining a license to provide paratransit services. Sharaton Bus Service, Inc. of Wyalusing offers various single and multiple day tours and excursions.

Issues related to intercity bus service in the region include:

- Trailways runs between Elmira and Binghamton, with no stops in between in Waverly. Greyhound is the parent company.
- There is a Trailways stop in Mansfield at the Wal-Mart located three miles south of town. The stop is out of walking distance for students at Mansfield University

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students, who must take an EMTA bus to make the transfer. Parking is a major issue for a downtown Mansfield Trailways stop.

Other Transportation Concerns

Access Management

NTRPDC and PENNDOT recognize the importance of balancing the needs of property owners who require access, and highway travelers who need mobility and freedom of movement.

There are currently areas throughout the Northern Tier where access management has been raised as an issue that needs to be addressed. A prime example among these includes the intersection of US 11 and PA 92 in Nicholson Borough. NTRPDC can encourage its member counties to promote the concept of access management through the implementation of several approaches discussed below.

Improved access management in the region accomplishes two main LRP objectives, that of preserving the regional highway network's capacity as well as its safety. As such, NTRPDC and PENNDOT need to balance the needs of property owners who require access, and highway travelers who need mobility and freedom of movement. This is the definition of good access management: Providing access to land while preserving the flow of traffic on the adjacent highway network.

Implementation of an access management program along the region's corridors will help preserve their capacity while managing the overall number of potential conflict points by reducing the number of driveway access points and providing driveway connections between properties along the corridor. Multiple driveways and points of access along an arterial can be a negative factor in maintaining safety through the introduction of potential points of conflicting movements along a roadway. PENNDOT manages the creation of highway access points through its Highway Occupancy Permit Program. The region's municipalities however can also play a major role in improving access management through the policy actions described in the following sections.

Cross Access Drives

Many of the major traffic generators within the region - such as retail office and highway commercial uses - are not connected by a service drive or sidewalk, making "one-stop shopping" an impossibility for consumers. The township should continue to support the implementation of a landscaping ordinance including a provision to provide for the creation of cross access drives and easements, particularly in commercial development areas. These driveways and easements would reduce traffic on major thoroughfares and offer improved safety. Adjacent businesses with complementary services would also benefit from improved circulation between sites. Owners of new development would then need to record an easement on the deed, allowing joint use and access, as well as a

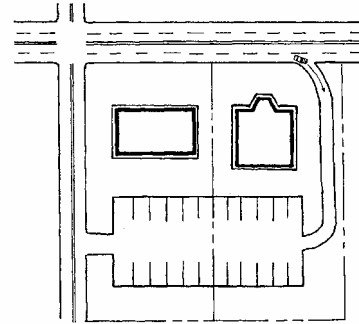
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maintenance agreement, outlining maintenance responsibilities. Access points should be planned for adjacent parcels as site plans are submitted to encourage joint driveways.

Shared Parking Areas

The region and its member counties should encourage their member municipalities in revising their zoning ordinances (if existing) to allow for shared parking areas, particularly when it can be demonstrated that peak demand periods would not occur at the same distinct time periods, i.e. church and restaurant, etc.



Driveway Spacing

Municipalities in the region should include in their subdivision ordinance a driveway spacing requirement of at least 500 feet for roads that serve as arterials. This would provide a safe distance between driveways and limit the overall number of access points preserving capacity and reducing congestion.

Congestion Management

Congestion in the Northern Tier may not be the issue it is in other parts of Pennsylvania, yet it is a topic of concern to some degree in particular areas of the region.

During its development of the management systems in the mid-1990s, NTRPDC developed a regional Congestion Management System (CMS) which identified several corridors with requisite data collection, analysis and a determination of needs for each. The corridors included:

- US 6 through Towanda Borough,
- PA 14 through Canton Township (north of Canton Borough),
- US 220 through Ulster Township,
- US 15 through Liberty Township, and
- US 6 through Tunkhannock Borough.

Since PENNDOT introduced the management systems, planning for the Congestion Management System has become optional, yet PENNDOT has continued planning in this area through the October 2000 introduction of the Congested Corridor Improvement Program. PENNDOT set aside \$4.6 million over a three year period to fund the development of improvement plans and study costs associated with selected corridors (of which there were 14 statewide). The goal of the program was to obtain a 20 percent reduction in peak hour travel time on an improved transportation corridor.

As part of this program, NTRPDC in January 2001 identified two “Early Action Corridors’ within the region for additional planning and analysis. These areas include



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US 220 through Athens and Ulster Townships in Bradford County, and PA 29 through Wyoming County’s Eaton Township. For the 2003-04 program, NTRPDC re-submitted US 220, as well as a new corridor, US 11/PA 171 in Great Bend.

Environmental Justice

Environmental Justice (EJ) within the arena of transportation planning involves the consideration of programs, policies and activities that may have a disproportionately high effect on both minority and low-income populations.

One of the purposes of this LRTP is to provide NTRPDC and its affiliated PENNDOT districts with updated socio-demographic information on the residential, employment and transportation patterns of minority and low-income populations.

Overall, the region is racially homogenous, with less than 2 percent (or 3,462) reportedly non-white persons. Of this number, fully one-third are Hispanic, the region’s largest minority group. Racial minorities are defined by the following:

- **Black** - a person having origins in any of the black racial groups of Africa
- **Hispanic**- a person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race
- **Asian** - a person having origins in any of the original peoples of the Far East, southeast Asia or the Indian subcontinent.
- **American Indian and Alaskan Native** - a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition
- **Native Hawaiian or Other Pacific Islander** - a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Table 19 shows more detail of racial populations in the region by county, while Table 20 shows regional population by income. Readers should refer to the corridor profiles for even more detailed information at the municipal level.

**Table 19: Population by Racial Composition (2000)
NORTHERN TIER**

LOCATION	Total	White	Black	Hispanic	Indian	Asian	Other
BRADFORD	62,761	61,471	251	398	193	285	125
SULLIVAN	6,556	6,266	144	72	50	10	30
SUSQUEHANNA	42,238	41,621	128	285	63	92	79
TIOGA	41,373	40,589	250	214	96	124	60
WYOMING	28,080	27,598	149	187	47	77	43
NORTHERN TIER	181,008	177,545	922	1,156	449	588	337

Source: U.S. Census



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Given the racially homogenous nature of the Northern Tier, most issues related to Environmental Justice will likely involve that of low-income populations. The 2000 definition of “low income” includes:

- A household at or below the Department of Health and Human Services poverty guidelines of \$18,100 for a family of four (2000).
- Any readily identifiable group of low income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers, or Native Americans) who would be similarly affected by a proposed FHWA program, policy or activity.

Table 20: Population by Income (1999)
NORTHERN TIER

LOCATION	House holds	< \$10	\$10-14,999	\$15-24,999	\$25-34,999	\$35-49,999	\$50,000 Plus
BRADFORD	24,427	2,416	1,936	3,925	3,921	4,724	7,505
SULLIVAN	2,667	294	277	522	408	449	717
SUSQUEHANNA	16,543	1,672	1,447	2,840	2,625	3,086	4,873
TIOGA	15,942	1,721	1,466	2,912	2,595	2,965	4,283
WYOMING	10,822	1,036	864	1,667	1,631	1,949	3,675
NORTHERN TIER	70,401	7,139	5,990	11,866	11,180	13,173	21,053

Source: U.S. Census

A map of the distribution of low income households by municipality throughout the Northern Tier is available in the appendix.

Projects that proceed to advanced planning stages such as Environmental Assessments (EAs) or Environmental Impact Statements (EISs) more fully document any resultant adverse impacts a proposed project would have on minority and low income populations. However, federal policy dictates that environmental justice be considered at all stages of transportation planning, from conceptual stages to post-construction operations and maintenance.

The NTRPDC supports the intent of EJ by involving all members of the public in the transportation decision-making process. NTRPDC regularly sends written meeting notices to all local libraries and newspapers of general circulation. Written notices are also sent to those who provide either written or oral comment. The locations of the Commission’s RTAC meetings are also rotated around the region for equity in meeting travel. On an agency-wide basis, the Commission also periodically publishes a newsletter which reports to some extent on transportation issues. As a strategic document, this LRTP recognizes the importance of Environmental Justice and offers policies as to how minority and low income populations can equally share the burdens and benefits of transportation investment decisions.

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Intelligent Transportation Systems (ITS)

Intelligent Transportation System strategies can be used to increase the efficiency and capacity of the highway network apart from costly capital projects. Much of the basis of ITS deals with the provision of real-time information to the motorist. A common component of such an ITS system includes the placement of Variable Message Signing (VMS) at key locations (typically on limited access highways such as I-81 and US 15) as incident management measures or to warn motorists of weather or roadway conditions as a safety precaution.



Federal policy currently requires that all states have an ITS architecture (or a plan for design and construction) established by April 2005 in order to use federal funds for ITS projects. PENNDOT has been working with NTRPDC and its counterpart agencies in developing a regional ITS architecture, which generally follows the boundaries of PENNDOT's existing engineering districts. Thus, Bradford, Sullivan and Tioga Counties are covered under District 3-0, while Susquehanna and Wyoming are addressed by District 4-0. NTRPDC will continue to ensure that ITS issues in the region are coordinated, incorporating input from various stakeholders such as PENNDOT, its ITS consultant and regional modal operators. Future TIP projects in the Northern Tier may begin incorporating ITS elements as part of the overall project once a regional ITS architecture has been established.

Beyond The Borders

The Long Range Plan recognizes the importance of looking beyond the Northern Tier for issues that may affect transportation patterns in the region. The following section summarizes some of the major trends and issues immediately outside the region that could impact Northern Tier transportation. Highlights include:

- The region exports a significant number of workers outside of the region. Susquehanna sends over 4,000 workers into Broome County, NY while Wyoming exports over 5,000 of its workers to the Lackawanna/Luzerne metropolitan areas.
- Truck traffic is increasing on I-81 and will impact Susquehanna County's I-81 interchanges, many of which are already substandard.
- Lackawanna County's population declined by 5,747, or 2.6 percent during the 1990s. Susquehanna County's low land values and taxes have spurred residential development from people moving out of the greater Scranton area.
- On US 15, projects at Steam Valley in Lycoming County and at the interchange with US 220/I-180 must eventually be completed in order to bring the corridor to interstate status.
- Elmira's new Southern Arterial has in effect given that part of New York increased access to the Pennsylvania (Northern Tier) market.
- The Southern Tier Expressway is expected to be designated as an interstate as far east as the Delaware (NY) county line by 2007.



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Binghamton

The Binghamton Metropolitan area is a major importer of employees from the Northern Tier, particularly Susquehanna County. Estimates from the 2000 Census put the total number of workers commuting to Binghamton/Broome County at over 4,000, or roughly 22 percent of all its workers. An additional 560 from Bradford County also commute to destinations in Broome County.

As with other Southern Tier counties, the development of NY 17 into I-86 is a key issue and a significant driving force in transportation. At present, there is a small segment just east of Binghamton that is about to be designated but there are significant issues for the remaining segments. At the NY 17/I-81 interchange for example there is an unacceptable curve. Known locally as Prospect Curve, the engineering improvements needed there are just one in a string of expensive, spot improvements needed throughout the corridor between Binghamton and the Hudson Valley. The Prospect Curve project is currently the largest in the Binghamton MPO planning region.

Being driven by the I-86 work in Broome County is the development of a regional ITS architecture. Begun in September 2002, the initiative is something that Broome County will be coordinating on with PENNDOT and the Northern Tier.

A recent development affecting the relationship between the Northern Tier and Broome County has been the recent change in the MPO boundary, which has now been extended into Susquehanna County. The Census Bureau redefined the rules for Urbanized Area Boundaries, which now sees Binghamton's boundary extending down US 11 as far south as New Milford. The change has come about more due to changes in rules than in population trends.

With the change, Binghamton has now become a bi-state MPO and has approached PENNDOT for PL (planning) funds. In New York state, TIPs cover 5 years (as opposed to 4 in Pennsylvania) and are also updated on a biennial basis on odd-numbered years. This planning process will also involve coordination between the MPO and the Northern Tier RPO in Pennsylvania.

Elmira

During the 1950s, the City of Elmira's population peaked at 49,700. It has since fallen to its present day estimate of 30,417 (2002). Chemung County likewise peaked in 1970 at 101,537 but has since declined to 91,070. Closures of steel and woolen mills, coupled with natural disaster, made Elmira by 1985 the nation's sixth most-economically-distressed area. These trends are mirrored by other upstate New York communities such as Buffalo and Utica. However, despite decades of population loss and employment decline, the City of Elmira remains a center for employment and commercial opportunity not only for Chemung County, but areas of northern Tioga (Pa.) and Bradford Counties as well.



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Throughout the 1990s, Chemung County has been adding jobs with the expansion of major employers such as Toshiba, Thomas and Bettes and Corning Consumer Products. Employment in the county increased from 39,500 in 1993 to 43,900 in 1998. Outside of Elmira, the Towns of Big Flats and Horseheads have also become major commercial centers in their own right. Growth in the Big Flats area in particular has been described by planners as “spectacular.”

Major transportation initiatives in the county include the improvement of NY 17 to interstate standards, particularly through the area of Horseheads. The elimination of at-grade intersections in the Town of Big Flats would allow for the designation of NY 17 as I-86 from East Corning to NY 14 in Horseheads. Another potential project involves the construction of a full access interchange at Kahler Road that would enhance regional access to the Airport and Corporate Park.

A primary transportation goal of the area is the reconstruction or realignment of the Southern Tier Expressway to bypass the heavily commercialized section of the Village of Horseheads. The area’s high level of congestion and the high accidents rates on this portion of NY 17 combine to make the improvements to the facility a very important priority for both NYSDOT and the local community.

A recent highway project with more immediate impact on the Northern Tier has been the recent completion of the 3-mile Southern Arterial through Southport towards Bradford County. The facility also serves a new Civic Center. The new arterial draws truckers from off other roadways and has been attracting new commercial development with new supermarkets and shopping centers with Wegemans and Topps. The new roadway has given Chemung County business increased access to the Pennsylvania market.

Tourism is also important to Chemung County’s economy. Major tourist attractions in the county include the National Soaring Museum, National Warplane Museum, Woodlawn National Cemetery, and various attractions related to Mark Twain. Chemung County also participates in joint marketing with Finger Lakes Wine Country, which draws tens of thousands of visitors annually.

Scranton/Wilkes-Barre

Planners at the Scranton and Wilkes-Barre MPOs agree that the biggest transportation impact to the Northern Tier from Lackawanna and Luzerne Counties comes from the increase of truck traffic on I-81. Issues along the interstate have developed to the point to that a new advocacy group “Focus 81” has been formed. Current plans call for I-81 to be widened between Clarks Summit and the PA 29 interchange. Congestion is particularly an issue in the area surrounding Clarks Summit.

The Northern Tier’s urban neighbors to the south are major employers of workers in both Susquehanna and Wyoming Counties. Wyoming, in fact, exports 5,082 workers (or 40 percent of its workforce) to Lackawanna and Luzerne County, while Susquehanna



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sends 2,952, or 16 percent. During the 1990s, the two urban counties saw their collective populations decline by nearly 15,000 persons, many of which relocated to points in southern Susquehanna and northeastern Lackawanna County. Susquehanna County's low land values and favorable tax rates have been attributed to some of the growth in that portion of the Northern Tier.

A Northern Tier project which has been a benefit to the urban region has been the construction of the Tunkhannock bypass. The new bypass has largely eliminated the practice of traffic "cutting through" PA 29 to PA 309 from Tunkhannock to I-81. As such, congestion is not as much of an issue in the Back Mountain area anymore.

On the US 6 corridor, there have been initiatives to increase tourism with the scenic bypass designation. The MPOs have submitted proposed legislation for this designation, which would see US 6 between I-81 and BUS 6 in Carbondale at the Wayne/Lackawanna County line.

Steuben County, NY

As with most of New York's Southern Tier counties, the development of NY 17 into I-86 ranks as one of the most significant transportation developments in this county immediately north of Tioga County.

The modernization of US 15 into I-99 is also increasing mobility for Steuben County residents in accessing such points as Williamsport. Planners also expect the new I-99 to draw more volumes of traffic destined for Rochester and Buffalo by drawing traffic off of I-81 and other strategic routes. Steuben County officials agree that the interstate designation for I-86 will be good from an economic perspective. The Southern Tier Expressway has been designated as I-86 as far east as the Chemung County line. NYSDOT has increased the posted speed limit on portions of the roadway between Elmira and Binghamton, which further lends the perception of the roadway being an interstate, even though it hasn't yet received the formal designation.

A significant concern for the area involves the 5-mile portion of US 15 (which is still a two lane roadway) between Presho and the Pennsylvania state line and how improvements will be funded. With emphasis on completing NY 17 as I-86, there is some concern that needed improvements to US 15 might languish. The corridor is an ARC corridor and is eligible for federal funds from that agency.

As a non-MPO area, Steuben County has taken interest in some efforts in the Empire State in creating Rural Planning Organizations (RPOs), similar to what has been done in Pennsylvania. The Southern Tier Central would be a good test case, as two of its three counties (Steuben and Schuyler) are not currently MPOs. Steuben does participate in a standing coordination committee which has its focus on transportation matters. The purpose of the nascent committee is to provide information and feedback to the Department of Transportation similar to an MPO function. NYSDOT has representation on the committee from the Hornell office and is a voting member. New York has not yet



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endorsed the concept of RPOs throughout the state, although there's currently good communication between the counties and NYSDOT's regional offices. The coordination committee is looking at implementing study priorities and in providing assistance on grant applications in the future.

Steuben County has had its share of challenging economic conditions, with the layoff of thousands of employees from the Corning plant. Corning has decided though that the company town will remain their world headquarters indefinitely. Area employers such as Corning and Dresser-Rand are still some of the area's most significant (5,700 and 780 employees, respectively), followed by others such as Polly-O Dairy Products (475), Austin Inc. and Phillips Lighting (640). A new catalytic converter plant adjacent to US 15 is also expected to draw workers from the Northern Tier. Major commercial development near the I-86/US 15 interchange has also recently provided consumers with more retail options with new stores such as Lowe's, Wal-Mart and Applebees.

Tourism in the county is also an important focus. After New York City and the Niagara Falls area, the Corning area was at one time one of the largest tourist areas in the state. Tourism is still important, as measured by the recent \$50 million in upgrades to the Corning Museum of Glass, as well as NYSDOT's plans to construct a welcome center on US 15 once it is modernized to a four-lane facility.

Williamsport

The Williamsport area shares several north-south transportation corridors with the Northern Tier that are of importance to both planning regions. Prime among these includes the modernization of US 15 into eventual I-99. This corridor is arguably the most significant relationship the Williamsport area has with the Northern Tier. At present, the improvement of the corridor's southbound lanes through Steam Valley has been estimated at \$50-60 million. South of Steam Valley, the corridor's interchange with I-180 and US 220 must eventually be improved in order to bring US 15 to eventual interstate status.

With the exception of US 15, the Williamsport MPO does not have any other major capacity adding projects in its TIP. No major projects have been programmed on roadways shared with the Northern Tier such as US 220 and PA 14. As a matter of policy, the MPO has been focusing instead on safety and maintenance-related projects.

One shared concern between the two planning regions has been the presence of truck traffic in the Pine Creek Valley (PA 414) through Tioga and Lycoming Counties. The County does not want to see truck traffic in this corridor, nor activities that generate truck traffic. The Pine Creek Rail Trail is a "world class" facility and is expected to generate even more tourist traffic. The trail serves Little Pine State Park, as well as a number of public and private camping areas.

South of the Pine Creek Trail, Lycoming County is developing the Susquehanna River Trail to connect from that facility at Jersey Shore to the Union County river trail. The



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project will enable the county to connect to the Licking Creek bikeway, which serves 5 municipalities. One park and ride project the MPO has been looking at includes the headway for the trail at the Jersey Shore interchange. The park and ride could fulfill its primary function during the weekdays, then serve as parking for recreational use on the weekends.

PA 14 between Lycoming County and Canton/Troy is a commuter corridor and is perceived as a faster, safer transportation corridor between Sayre and Williamsport. BicyclePA Route J is under development along the corridor as one of several cross-state touring routes that PENNDOT has identified.

The Williamsport Regional Airport has a number of initiatives under way to increase its efficiency and competitiveness. The number of enplanements at the airport was as high as 53,000 as recently as 1997 but has since declined dramatically to a present day total of 31,000. The Authority concedes it has been losing market share to trips being taken by automobile within a day's drive. USAirways is the airport's sole carrier. The Authority has been working to extend the airport's runway to 7,700 feet in order to accommodate an expected increase in overall air cargo. Efforts though have been limited by an FAA regulation that determines whether runways are meritorious candidates for extension. So far, the Authority has been unable to meet the FAA threshold of 500 critical aircraft operations using the new runway.

Although not corridor related, another project which could generate traffic from the Northern Tier includes the planned revitalization of the Williamsport Central Business District. Current plans call for a 6,000-seat multi-purpose arena and conference center. The regional draw of the center would be for the events and entertainment venues planned, one of which includes a cinema complex. The recent (1999) trade and transfer center has already done much to aid in Williamsport's efforts at downtown revitalization. A parking deck and more amenities for public transportation users are planned.

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Financial Plan

Federal guidelines require that State and MPO long range transportation plans and TIPs be fiscally constrained, demonstrating the likelihood that funds will be available to cover all planned projects over the ensuing 20 years. While this requirement does not formally extend to RPO long range plans, Pennsylvania's Rural Planning Organizations (including the Northern Tier) have signed memorandums of understanding with PENNDOT (*see text box, right*) which elevate their importance in transportation planning. Fiscal constraint, moreover, provides the platform from which to communicate priorities and is therefore a highly beneficial planning mechanism for any regional agency. The Northern Tier must consider funding needs over the 20-year planning horizon of its LRTP, and develop a financial plan that identifies funding sources for needed investments, including the maintenance and operation of the existing transportation system.

The development of the LRTP occurred as the region's 2005 Transportation Improvement Program (TIP) was being developed. The TIP, or first four year period of the LRTP includes all regionally significant transportation projects which involve FHWA or FTA funding or approval.

The long-range transportation plan must include a financial section with an estimate of the level of funding that will be needed over the life of the plan, and how the MPO can reasonably expect to fund the projects included in the plan, including anticipated revenues from FHWA and FTA, state government, regional or local sources, the private sector, and user charges.

A financial plan could assume that the amount of available federal funding will remain constant over the first four years of the plan (the TIP), and then escalate at a rate equal to inflation or the Consumer Price Index (CPI). A number of planning assumptions were made in developing future funding projections for the Northern Tier planning region:

- Only regular base funds were used to project future funds. Discretionary (or "spike") funds, legislative earmarks, special appropriations and similar revenue sources and funding streams are uncertain and unpredictable, and thus were not considered.

It shall be the duty and the responsibility of the NTRPDC to implement the policies and objectives of the transportation planning and programming process, with due regard to the requirements and recommendations of its represented agencies of government, in order to accomplish and maintain the region's eligibility for federal transportation funds.

Those duties and responsibilities shall include: Preparing, periodically updating and adopting, or amending, a Long Range Transportation Plan and a Transportation Improvement Program for the Northern Tier Region. Actions taken with respect to these two documents shall be consistent with policies, procedures, and financial guidance developed by the DEPARTMENT in a coordinated and cooperative manner with its planning partners throughout the Commonwealth of Pennsylvania. - *selected language from MOU between PENNDOT and NTRPDC.*

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- All revenues are projected based on actual historic trends. No assumptions were made regarding pending state or federal (TEA-21 reauthorization) legislation.
- The LRTP assumes that the reauthorization of TEA-21 will take place, and that Pennsylvania will continue to be a "5 percent state," with the Commonwealth receiving approximately 5 percent from the Highway Trust Fund. The LRTP takes the most conservative numbers coming out of the reauthorization discussion (the Administration's \$256 Billion/6 years nationwide) and makes a rational determination as to what the Northern Tier's share would be.
- The Northern Tier has in recent years received 2.66 percent of Pennsylvania's total. Between federal fiscal years 2001 and 2008, total revenue will have declined by an annual average of 1.5 percent. This average rate is assumed to carry forward through 2024. Inflation is expected to further erode the buying power of Northern Tier's transportation dollar by an average of 2.5 percent annually.
- Because the Commonwealth tends to increase highway and bridge funding through the Motor License Fund on approximately an every 7 year basis, it can be assumed for conservative estimating purposes that there will be two increases in the Motor License Fund over the planning horizon. An average percentage increase of 7 percent is assumed for each of the two increases.
- All costs are in current (2004) dollars. Projected revenues are adjusted such that the relative purchasing power over time can be compared to these costs.
- Most candidate project costs were estimated using past experience or "best guess" figures. Operation and Maintenance costs were estimated to be \$3,150 per mile for annual winter maintenance, 15-year surface maintenance, and 30-year repaving cycles combined as per the state Transportation Advisory Committee's August 2003 funding study, "Future Investment Strategy in Pennsylvania's Transportation Program."
- Finally, it can be assumed that the region will continue to receive funding for airports, rail freight, public transit and bicycle/pedestrian modes. Because this first ever Corridor based LRTP does include numerous non-highway projects, it is recommended that NTRPDC and PENNDOT review the non-highway recommended projects and jointly develop a reasonable estimate of which projects may be likely for placement in future programs. This composite estimate could then be added as a non-highway amendment to the LRTP.

Pennsylvania presently receives 5 percent of all revenue from the national Highway Trust Fund. Using the most conservative reauthorization estimate available (the Administration's \$256 Billion proposal over the 6 year life of the law) would allocate to



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Pennsylvania an estimated \$2.13 Billion a year. PENNDOT's financial guidance* over the life of the 2005 TIP provides an estimated 2.66 percent of Pennsylvania's total to the Northern Tier. One approach would be to apply this factor to the federal total available, which would yield approximately \$56,747,000 per federal fiscal year to the Northern Tier.

Projected funds for the Northern Tier were derived based on data from PENNDOT financial guidance documentation, as shown in Table 21, below.

Table 21: Total Highway/Bridge Base Funding Allocation - (\$000s)
NORTHERN TIER

FUNDING TYPE	FFY 01	FFY 02	FFY 03	FFY 04	FFY 05	FFY 06	FFY 07	FFY 08
FEDERAL HWY	18,088	18,364	18,937	18,803	16,680	16,682	16,682	16,682
STATE HWY	10,801	11,261	7,282	7,282	7,251	7,112	7,107	7,107
FEDERAL BRIDGE	7,972	8,115	8,483	8,483	8,000	8,000	8,000	8,000
STATE BRIDGE	2,767	2,814	2,635	2,635	2,719	2,719	2,719	2,719
CMAQ			372	372	181	181	181	181
RAIL			146	146	124	124	124	124
ENHANCEMENTS			530	530	504	504	504	504
TOTAL	39,628	40,553	38,384	38,384	35,458	35,322	35,316	35,316
PERCENT OF PA	3.01	3.01	2.99	2.99	2.66	2.66	2.66	2.66

Source: PENNDOT Financial Guidance

Table 22 shows the breakdown of total expected funding available over the life of the LRTP, including the TIP, Years 5-12 and Years 13-20.

Table 22: Revenue Estimates - (\$000s)
NORTHERN TIER

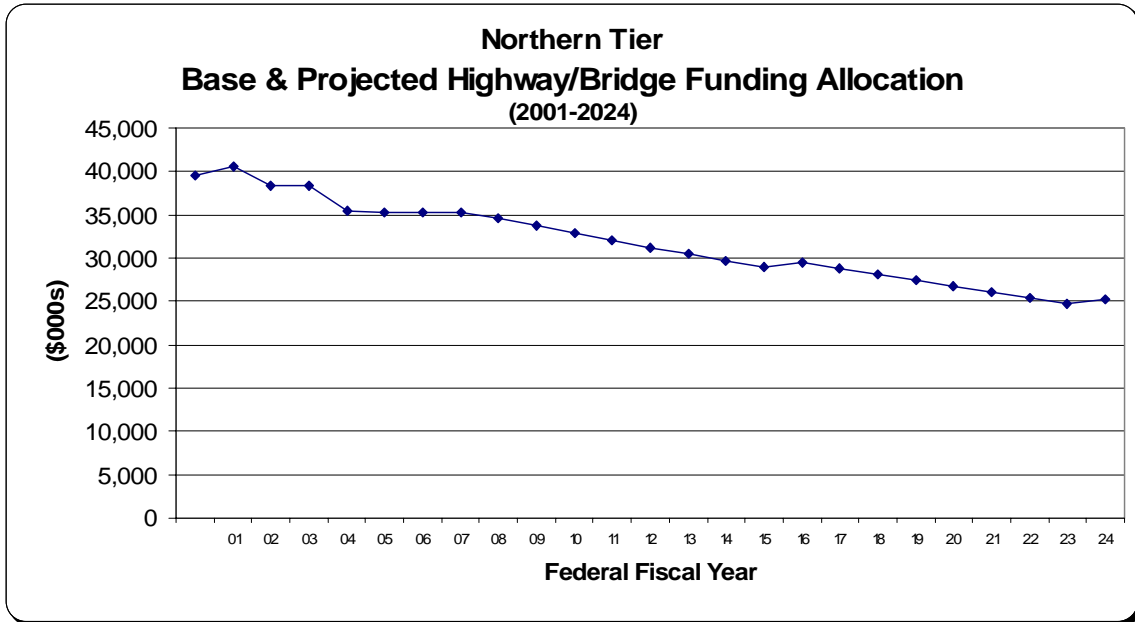
PERIOD	TIP FFY 2005-2008	MID RANGE FFY 2009-2016	LONG RANGE FFY 2017-2024	TOTAL FFY 2005-2024
AMOUNT	\$209,724	\$253,593	\$ 241,973	\$701,602

Source: PENNDOT Financial Guidance and Gannett Fleming estimates

The transportation projects of the Northern Tier's 2004-2024 Long Range Transportation Plan (2005 TIP inclusive) are included in 11x17" foldouts at the end of the LRTP and are valued at over half a billion dollars.

* The state's financial guidance is based on a formula agreed upon by the Financial Work Group of Pennsylvania's planning partners. Elements of the formula include the region's population, land miles of highway, and vehicle miles of travel. For the most recent TIP update, this formula calculates 2.66 percent of Pennsylvania's total federal funds to be allocated to the Northern Tier. This proportion is assumed to be constant through 2024.

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Source: PENNDOT Financial Guidance and Gannett Fleming estimates

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County Categorized Candidate Process/Projects

The following tables outline the results of a prioritization process that utilized the review of the region’s county planning commission members. Draft candidate projects were developed from the corridor profiles and presented to respective county planning commission members for their input. Commission members were asked to review the draft candidate project listings for their county and indicate as to whether the project should be a TIP project (completed within the next four years), a medium-term project (within the next 5-12 years) or a long-term project (13-20 years). Members were asked to broadly assume that if the projects had to be completed over a 20-year time frame, how would they be best prioritized, recognizing that not all projects can be funded in the short-term. Even a cursory review of the following tables give the reader a sense of the magnitude of bridge replacement needs in the region, especially in Bradford County. A summary of the prioritization of candidate projects follows and are also included in the 11x17" fold outs at the end of the LRTP.

**Table 23: Prioritized Candidate Projects and Recommended Time Period
BRADFORD COUNTY**

Highway	Mun.	Description	Year		
			1-4	5-12	12+
US 220	Athens	Intersection imp. Wolcott Hollow	x		
US 220	Athens	Signalize at SR 4018	x		
US 220	New Albany	Climbing lane	x		
US 220	Various	Widen to 4 lanes – N. Towanda to PA 199	x		
US 220	Ulster	Traffic signal & roadway imp at SR 4014	x		
PA 187	Wilmot	Resurface	x		
PA 706	Wyalusing	Highway relocation	x		
SR 1022	Ulster	Bridge replacement	x		
T-382	Albany	County br #2 replacement	x		
T-552	Burlington	County br #6 replacement	x		
T-821	Athens	Bridge replacement – Tom Taylor	x		
T-829	Athens	Bridge replacement – Meadowlark Road bridge	x		
T-845	Litchfield	Bridge replacement	x		
T-857	Springfield	Bridge replacement	x		
T-864	Athens	Bridge replacement - Paconowski	x		
Keystone/ Pitney	South Waverly	Install traffic signal	x		
	Various	Express bus btw Troy & Elmira	x		
US 6	Columbia	Climbing lane at Sylvania Mt.		x	
US 6	N Towanda	Turning lane and lower speed limit		x	
US 6	Wysox	Signal synchronization		x	

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Highway	Mun.	Description	Year		
			1-4	5-12	12+
PA 14	Canton	Highway recon		x	
PA 14	South Creek	Bridge replacement at T-878		x	
PA 187	Various	Replace post and cable guide rail		x	
PA 414	Various	Shoulder widening		x	
SR 1029	Wysox	Intersection improvements		x	
SR 1043	Sheshequin	Roadway improvements		x	
SR 1072	S Waverly	Relocation/ turnback of roadway		x	
SR 3005	Canton	Bridge replacement		x	
T-361	Granville	Bridge replacement		x	
T-377	Albany	Bridge replacement		x	
T-402	Monroe	Bridge replacement county br #22		x	
T-430	Terry	Bridge replacement, bridge #2		x	
T-435		Bridge replacement		x	
T-545	N Towanda	Bridge replacement county br #32		x	
T-547	Burlington	Bridge replacement		x	
T-623	Smithfield	Bridge replacement		x	
T-730	Sheshequin	Bridge replacement county br #26		x	
T-757	Wells	Highway improvement		x	
T-874	Athens	Bridge replacement, Monroe Rd br		x	
T-876	Athens	Bridge replacement, Miller Rd br		x	
T-937	Athens	Bridge replacement		x	
Ballard St	Troy Boro	Bridge replacement		x	
Eureka Dr	Troy Boro	Bridge replacement		x	
Pine Grove	N Towanda	Bridge replacement		x	
Willow St	Troy Boro	Bridge replacement		x	
	Various	Susquehanna Greenway planning		x	
US 220	Towanda B	Plank Rd connection to H.S.			x
US 220	Ulster	Traffic signal and roadway impr			x
PA 14	Various	Passing lanes south of Canton			x
PA 14	Various	Passing lanes north of Troy			x
PA 467	Pike	Highway recon			x
SR 1030	Pike	Highway recon			x
SR 4001	Smithfield	Relocate highway - sight distance			x
T-422	Wilmont	Bridge replacement county br #39			x
T-687 Snyder	Sheshequin	Bridge replacement			x
N/A	Athens Twp	Access road Mill's Pride to I-86			x
N/A	Various	Passenger rail btw Towanda/Sayre			x

Northern Tier Long Range Transportation Plan



**Table 24: Prioritized Candidate Projects and Recommended Time Period
SULLIVAN COUNTY**

Highway	Mun.	Description	Year		
			1-4	5-12	12+
US 220	Davidson	Widen Sonestown/ Muncy Valley; Beech Glen/ co line	x		
US 220	Laporte	Climbing lane, Ringdale to Lost Lake	x		
US 220	Cherry	Climbing lane, PA 87/ SR 4024	x		
PA 487	Cherry	Access imp to KOEZ site	x		
SR 3009	Various	Widening	x		
T-346	Elkland	Bridge replacement	x		
US 220	Various	Passing lane Sonestown Mt. SB		x	
US 220	Cherry	Climbing lane, Dushore to county line		x	
PA 42	Davidson	Widen to county line		x	
PA 87	Dushore	Reconstruct intersection @ PA 487			x
PA 154	Various	Bicycle trail, World's End to Forksville			x

**Table 25: Prioritized Candidate Projects and Recommended Time Period
SUSQUEHANNA COUNTY**

Highway	Mun.	Description	Year		
			1-4	5-12	12+
US 11		Signalize intersection with SR 1010	x		
US 11	Great Bend	Center turn lane from Hallstead	x		
PA 29	Bridgewater	Passing lanes north of Montrose	x		
PA 29	Various	Sinkholes north of Montrose	x		
PA 171		Widen and resurface to SOLIDA site	x		
PA 267	Choconut	Improve sight distance at T-768	x		
PA 267	Choconut	Improve sight distance at SR 4007	x		
SR 1021	Susquehanna	Widen street	x		
SR 1029	Great Bend	Drainage and runoff control	x		
T-356	Springville	Bridge replacement, county br #38	x		
T-400	Lathrop	Bridge replacement bridge #1	x		
Church	New Milford	Bridge replacement	x		
I-81	Great Bend	Construct park and ride at US 11		x	
US 11		Enhance bulk terminal at N. Milford		x	
PA 92	Susquehanna	Building demolition, safety impr		x	
PA 167	Choconut	Intersection improvement at SR 4002		x	
PA 167	Various	Improve sub-base and widen		x	
PA 171		Intersection imp at Matco Electronics		x	
PA 706		Passing lane at Summit Hill		x	
PA 374	Herrick	Bicycle lane		x	
SR 1009	Harmony	Trail from Stevens Point/ Lanesboro		x	
SR 2096	Hop Bottom	Widen berm width		x	
	Great Bend	Incorporate b/p fac on RR bridge		x	

Northern Tier Long Range Transportation Plan



**Table 26: Prioritized Candidate Projects and Recommended Time Period
TIOGA COUNTY**

Highway	Mun.	Description	Year		
			1-4	5-12	12+
PA 414	Morris	Intersection impr at Hoytville	Xx		X
PA 414	Morris	Bridge replacement over Babb Creek		xX	X
PA 49	Various	Passing lanes	X	X	X
PA 414	Morris	Straighten S-curve	Xx		
PA 287	Delmar	Intersection impr at Antrim	Xxx		
PA 362	Delmar	Roadway impr to Grand Canyon Air		xX	X
US 15	Lawrence	Park and ride at PA 49		X	X
US 6	Charleston	Center turn lane extension	Xx		X
Various	Various	Wellsboro traffic circulation study	Xx	X	
T-657	Farmington	Bridge replacement	X		X
T-402	Deerfield	Bridge replacement	X		X
T-483	Delmar	Bridge replacement	X	X	
T-431	Ward	Bridge replacement		Xx	
PA 49	Elkland Boro	Bridge painting	X	X	X
T-329	Union	Bridge replacement		x	X
T-669	Tioga	Bridge replacement		Xx	

**Table 27: Prioritized Candidate Projects and Recommended Time Period
WYOMING COUNTY**

Highway	Mun.	Description	Year		
			1-4	5-12	12+
PA 29	Eaton	Center turning lane	x		
PA 29	Eaton	Copper Mine Hill turning lanes	x		
PA 29	Monroe	Intersection turning lanes at PA 309	x		
PA 29	Monroe	Bridge replacement	x		
PA 107	Clinton	Widening/reconstruction	x		
PA 309	Monroe	Intersection turning lanes at SR 2018	x		
PA 309	Monroe	Intersection turning lanes at SR 2002	x		
SR 4015	Mehoopany	Mehoopany Ridge Road	x		
T-337	Monroe	Bridge replacement	x		
T-416	Various	Bridge replacement, county br #7	x		
US 6	Clinton	Interchange imp., turning radius		x	
US 6	Tunkhannock	Turning lanes west of Tunkhannock		x	
US 11	Nicholson	Intersection improvement at PA 92		x	
PA 29	Eaton	Intersection impr - Sugar Hollow Rd		x	
PA 29	Eaton	Sidewalks on east side of roadway		x	
PA 87	Various	Resurface		x	
PA 87		Turning lanes at P&G		x	

Northern Tier Long Range Transportation Plan



Highway	Mun.	Description	Year		
			1-4	5-12	12+
SR 2001	Monroe	Bridge replacement		x	
T-337	Noxen	Bridge replacement, twp br #2		x	
T-327	Noxen	Bridge replacement, twp br #1		x	
US 6	Tunkhannock	Intersection improvement at PA 92			x
US 6	Clinton	Intersection improvement at SR 2012			x
SR 1009	Lemon	Seasonal gross weight restriction			x
T-366	Falls	Bridge replacement			x

Conclusion - Implementation

The Northern Tier LRTP development process is best characterized by:

- Broad-based participation
- Innovative ways of examining our transportation network with a focus on multimodal Corridors
- The identification of bona fide improvement needs.

Regional leaders from both the public and private sectors now have the large opportunity and responsibility to implement this plan. This conclusion offers several key considerations in doing so:

1. Broadly communicate the Plan's contents and recommendations, explaining what is at stake and the importance of the same broad based support and advocacy in implementation as was demonstrated in the Plan's development. Consider distributing a periodic plan implementation report card or one-page fact sheet/update.
2. Monitor project implementation and periodically report on progress being made in advancing improvements that are consistent with the Plan's directions.
3. Work with PENNDOT to raise awareness of the Plan's directions in regards to the Department's associated programs including aviation, rail freight, highway and bridge construction/maintenance, public transit, and bike-ped.
4. Continue to dialogue with PENNDOT central office planning staff and district planning in relation to emerging statewide and regional planning directions and initiatives.
5. Communicate the multimodal aspects of the plan with the RFAC, Aviation Advisory Committee and others to showcase how these modes are central to the regional planning process.
6. Regularly assess program development, TIP, etc. in relation to the extent to which it starts with the LRTP as the initial focal point for resource prioritization and allocation.

Northern Tier Long Range Transportation Plan

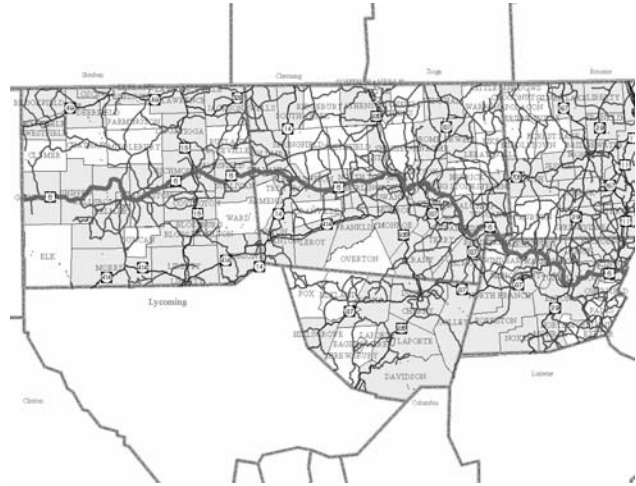


7. Work with stakeholders and the public on the wide range of special initiatives related to the many issues covered in the LRTP.
8. Consider alternative approaches towards prioritizing future TIP and LRTP projects. For example, a project ranking criteria matrix could be employed to better ensure consistency between the mix of projects and investments of the TIP and LRTP and the goals and policies of the RPO and its member counties.

THE PA ROUTE 6 HERITAGE CORRIDOR

The PA Route 6 Heritage Corridor

The PA Route 6 Heritage Corridor is 156.5 miles in length and is the longest of the 15 priority Northern Tier corridors. As the region's longest corridor, it directly serves more municipalities (31) than any other across three counties and their respective county seats. Congress has designated the corridor as part of the National Highway System (NHS). It is part of the longest transcontinental highway in the nation. BicyclePA Route Y essentially follows US 6 throughout the state.



CORRIDOR PROFILE ►



Wyoming

Factoryville
Clinton Twp
Tunkhannock Twp
Tunkhannock
Washington Twp
Meshoppen Twp
Meshoppen
Braintrim Twp
Laceyville

Bradford

Tuscarora Twp
Wyalusing Twp
Wyalusing
Standing Stone Twp
Wysox Twp
Towanda
North Towanda Twp
Burlington Twp
Burlington
West Burlington
Troy Twp
Troy
Columbia Twp
Sylvania

Tioga

Sullivan Twp
Richmond Twp
Mansfield
Charleston Twp
Wellsboro
Delmar Twp
Shippen Twp
Gaines Twp

PENNDOT has functionally classified US 6 as a rural principal arterial, while NTRPDC has classified the roadway as an export area main route as well as part of its Priority Commercial Network. For statewide planning, the corridor is recognized as part of PENNDOT's Grand Army of the Republic, so named by then Governor Duff in 1948 to honor Union veterans of the Civil War.

In addition to US 6, other major transportation facilities in the corridor include the region's three airports, as well as three shortline railroads. Portions of the corridor are also used by the EMTA in providing public transportation services. The corridor contains many of the region's biggest attractions, including the Pennsylvania Grand Canyon, W&C Railroad, Bradford Basket Company and French Azilum, to name a few.

The most significant recent change in the corridor has been the 2001 opening of the Tunkhannock Bypass.



Key Findings

The PA Route 6 Heritage Corridor - as the Northern Tier's largest - contains some of the region's most significant transportation facilities (e.g., US 6, three airports, Norfolk Southern, three shortline railroads, etc.) and communities. Its role as an historic and tourist-related corridor also underscores its importance to a variety of uses, from freight movement to tourist traffic. The corridor also provides a direct connection to the largest urban area immediately outside of the Northern Tier in Scranton. A strategic plan has been completed for the corridor and may be obtained at www.paroute6.com/heritage_reports.htm.

Key Trends and Issues in the PA Route 6 Heritage Corridor include:

- At nearly 157 miles in length, the PA Route 6 Heritage Corridor is one of the most important corridors in the region for long range planning. Major employment and residential areas, coupled with major educational facilities in Mansfield, Towanda and Factoryville fill the corridor.
- BicyclePA Route Y is one of the original six cross-state bicycle routes as developed and signed by PENNDOT in 2001. The route primarily follows US 6 from Gaines Township to Factoryville before following PA 107 past Lake Sheridan. The route is designed to accommodate the cross-state bicyclist. (The Iroquios Trail also lies within the corridor in Tunkhannock Borough and Township, as does the Pine Creek Trail in western Tioga County. Both of these trails will eventually have connections to BicyclePA Route Y.)
- Norfolk Southern operates a tactical rail line serving industries along the corridor between Towanda and Mehoopany. The former Lehigh Valley line is dependent on local freight for its viability, which has not been strong. The Class 1 giant picks up cars at several corridor locations, including Towanda, Wyalusing and Presswood. NS is reviewing its options for the line, which may include downgrading it in favor of its more heavily used CP Rail line, over which it holds trackage rights through Susquehanna County. The region must be ready at all times to address any changes in rail line ownership, operations or other status changes.
- The corridor also links all three of the region's main airports, including the Grand Canyon, Bradford County and Skyhaven Airports. These general aviation facilities are struggling, particularly with maintenance requirements at Bradford County and fund raising at Grand Canyon.
- After the completion of the Tunkhannock Bypass in 2001, the largest capital improvement underway in the corridor currently is the River Street extension project through Towanda Borough and North Towanda Township. Corridor bypasses have also been suggested around both Towanda and Wellsboro to separate truck and recreational vehicle traffic from local traffic.
- PENNDOT and other planning concerns in the corridor must be careful to balance the corridor's scenic driving ethos with the accommodation of truck traffic. Stakeholders have repeated their desire to see US 6 remain as a scenic corridor with respect to both traffic speeds, roadway design and highway signage, with east-west limited access movements being accommodated by either I-80 or I-86.
- Traffic congestion is not expected to be a concern in the corridor through the year 2025, according to forecasts based on PENNDOT HPMS data.



Public Input

The Northern Tier's public involvement efforts in 1999 raised many issues among transportation stakeholders in the PA Route 6 Heritage Corridor. Key among these include:

- PENNDOT “advisory” signing (e.g., “High DUI areas”, “Aggressive Drivers”-type signing along the corridor is viewed by some to be out of character for the Corridor in general.
- The intersection of US 6 with PA 87 is poor. The intersection needs better signs in light of the accidents that have occurred there.
- Repaving of US 6 between Troy and Towanda was a good improvement.
- Turning lanes are needed west of Tunkhannock.
- A climbing lane is needed on Armenia Mountain.
- Speed limits on US 6 should be no higher than 50 mph in rural areas and a maximum of 35 mph in the boroughs.
- Heavy truck traffic is a problem and needs to be removed from Troy and Towanda.
- In Tioga County, US 6 should retain its rural beauty and character, while working on such problem areas as Shumway Hill and a bypass around Wellsboro and Wellsboro Junction. Wellsboro Junction, in fact, has been the site of many fatalities. Wellsboro businesses should note that a bypass affected Mansfield in the short-term, but not in the long-term.
- Shumway Hill Road needs a traffic signal because motorists are using it to get to Wendy's, the prison, Trucklite, county human service agencies and the Weis Market.
- PENNDOT needs to look at the effect of the Tunkhannock Bypass on local traffic patterns.
- The intersection of US 6 and Lake Sheridan Road needs to be improved.
- Traffic signals between Towanda and Wysox need to be synchronized.
- A passing lane is needed at Sylvania Mountain in Bradford County.
- Adequate shoulders for bicyclists are needed.
- The intersection at Wellsboro Junction needs be relocated and reconstructed away from the creek with some length added to allow trucks to make the turn safely.
- In Bradford County, Mt. Pisgah State Park should be made more accessible to residents and visitors through additional signage and improved road access.
- The Grand Canyon Airport has not been marketed properly, although it has tremendous potential.



Sample signing on US 6



- There has been linear commercial growth east of Troy. Another area conducive to growth is that between Troy and Sylvania.
- A PENNDOT cinder pile greets visitors to Troy from the east.

Traffic Volumes

Largely a two lane highway, US 6 is not designed to serve high speed through traffic, but is used as a heritage corridor, providing access to places of interest along its route as well as providing access to local traffic. As one of PENNDOT’s 28 PennPlan corridors, US 6 has undergone analysis at the state level with respect to both historic and project traffic volumes.

Each PennPlan Corridor is divided into ‘Super-segments’ which represent the distance between junctions with other roadways on the National Highway System or where the corridor crosses a county line.

Levels of Service (LOS) is a measure of roadway capacity and is an indication of how easily traffic will move through the corridor. An LOS analysis was done for each super segment in the corridor. The charts provided below illustrate historical and projected LOS for key super segments. Historical data is given for years 1993 to 2000 and was used to project service for 2010 and 2025.

LOS categories are divided into three segments, A-D, E, and F. A-D indicates that traffic on the roadway is above capacity, and free-flowing. A road is nearing capacity and becoming more congested at LOS E. At LOS F, the road is at or over capacity, and a sign that the roadway is overcrowded.

Table 1: Level of Service Definitions

LOS	Capacity	Volume/Capacity Ratio
A-D	Above Capacity	0 -.89
E	Nearing Capacity	.90 - .99
F	At/Over Capacity	≥ 1

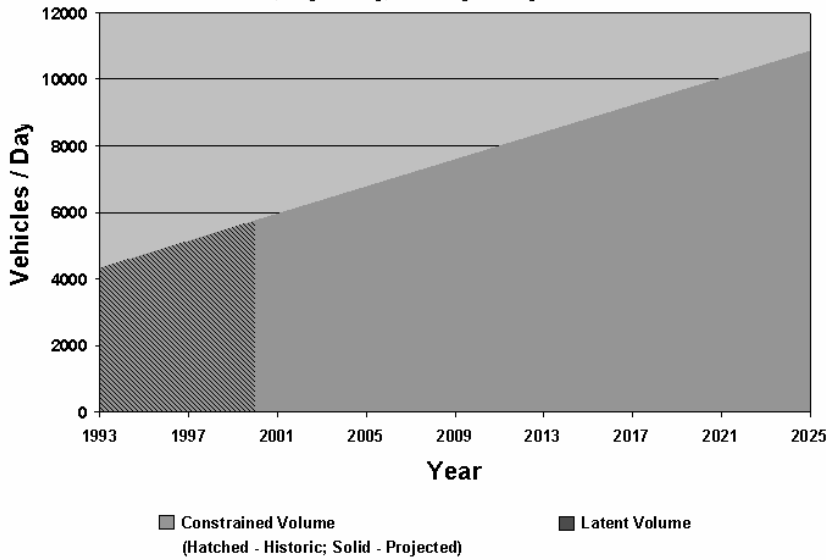
TRENDS

Traffic projection data show that all five US 6 Supersegments are expected to be operating at acceptable levels of service (i.e. congestion-free) through the year 2025. The following three figures show various traffic volumes for three such corridor Supersegments, one from each county.



Historic and Projected Traffic Volumes

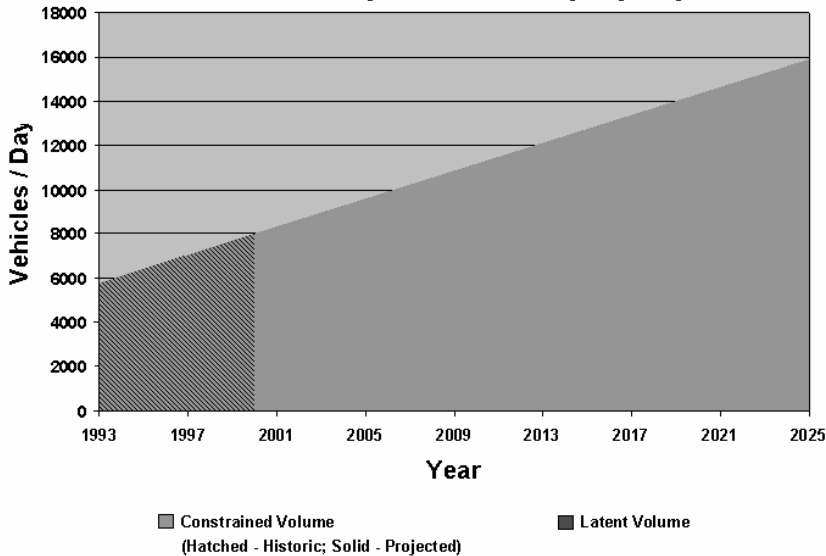
US Route 6, Tioga County, From Tioga County Line to US Route 15



Traffic data forecasts based on information from PENNDOT's HPMS data indicate that congestion will not be a factor in the corridor through the year 2025.

Historic and Projected Traffic Volumes

US Route 6, Bradford County, From US Route 220 to Wyoming County Line



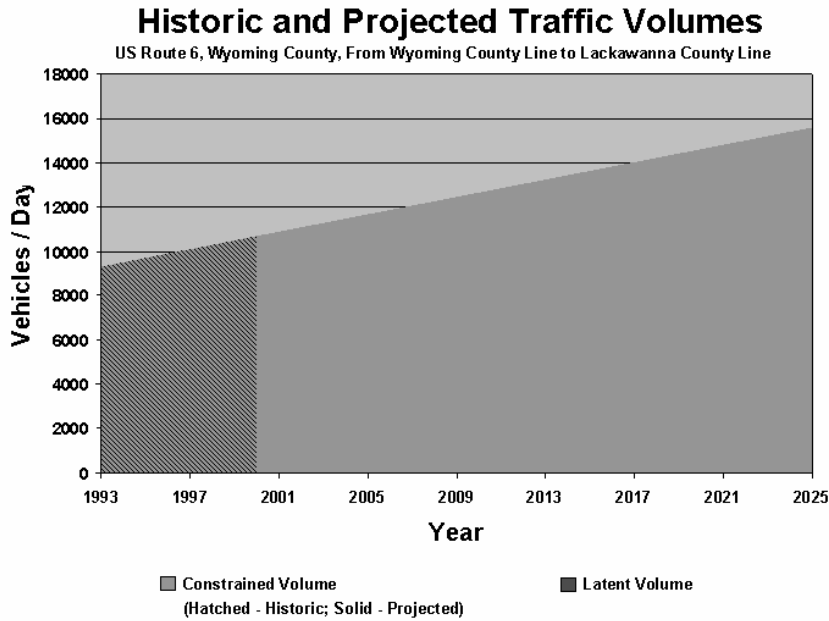


Table 2 shows the change in traffic volumes historically for selected years in the PA Route 6 Heritage Corridor.

**Table 2: Annual Average Daily Traffic
PA ROUTE 6 HERITAGE CORRIDOR**

LOCATION	1993	1997	2000
WELLSBORO	6,920	8,779	11,505
MANSFIELD	4,322	4,352	5,027
SYLVANIA	3,514	3,781	2,770
BURLINGTON	2,821	3,173	3,300
TOWANDA	7,668	8,779	10,917
WYALUSING	4,334	4,664	6,578
LACEYVILLE	3,985	4,866	4,742
MESHOPPEN	5,130	7,358	7,827
TUNKHANNOCK	12,825	14,019	14,980
FACTORYVILLE	7,056	7,919	5,889

Source: NTRPDC GIS, 2003.

Journey to Work Trip Statistics (Mode Split and Travel Time)

Many of the transportation-related trends in the corridor are masked, given the sheer size of the corridor in relation to the rest of the region. However, a few interesting exceptions to the data are as follows:

- Average commuter travel times range from a low of 14.1 minutes in Mansfield Borough to a high of 32.8 minutes in Braintrim Township.
- Charleston Township is one of the most auto-dependent municipalities in the region, with 85.7 percent driving alone to work.



- The highest percentage of carpoolers in the Corridor is in the extreme western Tioga County, in Gaines Township, at 18.7 percent.
- Of the 1,328 commuters in the Corridor who walk to work, 35 percent are from Mansfield Borough.
- Delmar Township had the greatest number of people working from home (94), while Sullivan Township in Tioga County had the greatest percentage (10.4). Braintrim Township and Meshoppen Borough were the only two corridor municipalities not reporting anyone as working from home.
- Only 86 corridor residents in the 2000 Census reported using public transportation as a means of getting to work. Over half of these (45) were from Wellsboro Borough, while an additional 11 were from Sullivan Township. On the PA Route 6 Heritage Corridor, EMTA currently provides service between Wellsboro and Mansfield, and between Troy and Towanda.

**Table 3: Mode Split (in %) - 2000
PA ROUTE 6 HERITAGE CORRIDOR**

LOCATION	Workers 16+	SOV	Carpool	Walk	Work at Home	Mean Travel Time (Min.)
TUNKHANNOCK	811	85.3	6.3	4.2	3.8	17.9
WYALUSING	229	81.2	6.1	10.0	2.2	23.5
TOWANDA	1,365	76.4	8.1	10.0	4.2	16.2
TROY	578	77.2	10.6	6.1	5.4	20.6
MANSFIELD	1,400	55.6	8.4	32.7	2.0	14.1
WELLSBORO	1,378	68.2	14.2	8.5	3.8	16.0
CORRIDOR	20,192	76.2	11.2	6.6	4.8	--
NORTHERN TIER	79,103	77.5	12.0	4.7	4.6	--

Travel times to work in the corridor have generally increased over the past decade, yet are still lower than regional averages. This may be attributed to the corridor’s many employment centers as a net importer of employees (see Table 7 for more information). Table 4 and Table 5 show how journey to work travel times have increased in the corridor over the past decade.

- Most people in the corridor still travel less than 15 minutes to work, a rate that has dropped from 51 percent in 1990 to just 45 percent in 2000.
- In 1990, there were only 147 people in the corridor traveling longer than 90 minutes to work. By 2000, that total had climbed to 399, or a 171 percent increase.
- Seven corridor municipalities have over half of their commuting population traveling less than 15 minutes to work. These include Wellsboro (66.6), Mansfield (66.4), North Towanda (58.6), Towanda Borough (56.6), Meshoppen Borough (52.1), Troy Borough (51) and Troy Township (50.3). Many of these communities have large percentages of institutional populations.
- Conversely, there are 6 municipalities that have more than 3 percent of their populations traveling longer than 90 minutes to work. These communities include Tuscarora Township (4.3), Gaines Township (4.7), Wyalusing Borough (4.9), Wyalusing Township (5.2), Braintrim Township (5.9) and West Burlington Township (7.2).



**Table 4: Travel Time to Work (in minutes) - 2000
US 6 CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
TUNKHANNOCK	48.5	31.4	15.6	3.8	0.6
WYALUSING	45.5	34.8	10.3	4.5	4.9
TOWANDA	56.6	26.0	15.5	1.4	0.5
TROY	51.0	15.4	28.3	3.7	1.6
MANSFIELD	66.4	22.6	5.8	3.3	2.0
WELLSBORO	66.6	17.9	8.4	5.5	1.5
CORRIDOR	44.9	31.1	18.1	3.8	2.1
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 5: Travel Time To Work (in minutes) – 1990
US 6 CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
TUNKHANNOCK	56.2	23.9	16.9	2.2	0.8
WYALUSING	53.0	21.2	23.4	2.5	0.0
TOWANDA	72.6	17.9	7.9	1.2	0.5
TROY	67.8	12.5	17.5	1.7	0.4
MANSFIELD	72.8	19.2	6.8	1.3	0.0
WELLSBORO	71.5	16.7	9.8	1.7	0.2
CORRIDOR	51.0	30.8	14.9	2.6	0.8
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Vehicles Available per Household

Corresponding to households' dependence on the automobile is the availability of vehicles per household. Corridor averages are generally in line with regional rates. The bullets below and Table 6 describe the variations of vehicle availability within the PA Route 6 Heritage Corridor.

- Census data indicate that there are 6.3 percent of corridor households without access to a vehicle. Four municipalities in the corridor have rates more than twice that high: Troy Borough (12.9), Wyalusing Borough (13.3), Tunkhannock Borough (15.9) and North Towanda Township (16.4). The North Towanda Township figure is the highest such percentage in the corridor and the fourth-highest throughout the entire Northern Tier. Laceyville and Meshoppen Borough also have rates in excess of 10 percent.
- The rural townships of Clinton and Burlington have the corridor's highest percentage of households with access to three or more vehicles, at 28.4 percent.
- Of the 17 municipalities in the corridor that have more than 20 percent of their households with access to more than three



Sylvania



vehicles, all but two (Burlington and Sylvania) are rural townships.

- North Towanda Township reports 16.4 percent of households without access to a vehicle, the highest such percentage in the Corridor and fourth-highest throughout the entire Northern Tier.
- Most Corridor municipalities reported having a majority of households as having access to just two vehicles. Five communities however recorded the greatest percentages of one-vehicle households, those being: Burlington Borough (36.5), Wellsboro (45.9), Mansfield (46.3), Towanda Borough (46.9) and Gaines Township (47.3).

**Table 6: Vehicles Available Per Household (in %) – 2000
PA ROUTE 6 HERITAGE CORRIDOR, Selected Municipalities**

LOCATION	None	One	Two	Three or More
TUNKHANNOCK	15.9	34.4	38.6	11.0
WYALUSING	13.3	38.8	38.8	9.1
TOWANDA	8.8	46.9	36.7	7.7
TROY	12.9	39.8	34.1	13.3
MANSFIELD	9.7	46.3	28.8	15.2
WELLSBORO	8.0	45.9	35.7	10.4
US 6 CORRIDOR	6.3	34.4	41.2	18.1
NORTHERN TIER	6.3	32.7	42.1	18.9

Commutation Patterns

Commutation data from the 1990 Census show various statistics with regard to journey to work trips. This data shows that the PA Route 6 Heritage Corridor laborshed is generally centered on the main employment centers of Wellsboro, Tunkhannock, Mansfield and Towanda. A relatively small percentage need to commute to destinations out of state for employment.

The following additional analysis for the corridor can be drawn from the 2000 Census data, including:

- Nearly 16 percent of corridor workers commute to destinations outside of the Northern Tier, including 3 percent who commute to the state of New York.
- The employment breakdown by counties within the Northern Tier is as follows:
 - 34.9 percent in Tioga County,
 - 30.0 percent in Bradford County,
 - 18.3 percent in Wyoming County,
 - 0.68 percent in Susquehanna County, and
 - 0.22 percent in Sullivan County.
- Nearly 30 percent work in the same municipality in which they reside. Wellsboro Borough leads the corridor in this regard, at 73.3 percent, followed by Mansfield Borough, at 58.7 percent.
- Braintrim Township has only 2 percent of its population working within the municipality of residence. This is the lowest such percentage of any corridor municipality.



- Of the small number (46) that commutes to destinations in Sullivan County, 65 percent work in Dushore Borough.

Table 7 shows the top ten destinations for commuters in the PA Route 6 Heritage Corridor. These ten encompass over 60 percent of all work destinations for those living in the corridor.

**Table 7: Top Commuter Destinations, 1990 & 2000
PA ROUTE 6 HERITAGE CORRIDOR**

Location	Percentage Share	
	1990	2000
1. WELLSBORO	17.5	16.2
2. MANSFIELD	8.2	7.9
3. TOWANDA	7.9	7.7
4. LACKAWANNA COUNTY	0.3	6.2
5. TUNKHANNOCK	10.2	5.0
6. TUNKHANNOCK TWP	0.4	4.8
7. TROY	7.2	3.8
8. MEHOOPANY TWP	5.1	3.8
9. RICHMOND TWP	2.7	2.8
10. BURLINGTON TWP	0.2	2.6

Source: U.S. Census Bureau, PA State Data Center (1990, 2000)

Population Trends

Given the large numbers of municipalities involved, variations in population growth are masked from one end of the corridor to another. Still, the corridor experienced a population increase of nearly one percent, less than half the regional rate of 2 ½ percent. Population has increased steadily every decade over the past 50 years to a present day total of 45,494 persons. Population grew the most during the 1960s and 70s (12 and 10.6 percent, respectively), but has slowed considerably since 1980. Other population-related trends in the corridor include:

- Tunkhannock Township continues to be the largest municipality in the corridor, as it has since overtaking Mansfield Borough during the 1970s. Mansfield and Wellsboro are other large municipalities, while Charleston Township has moved past Towanda to become the corridor’s fourth-largest municipality.
- Four of the top six growing municipalities are in Bradford County, and all are rural townships with the exception of Troy Borough.
- Standing Stone Township in east-central Bradford County grew by 36.7 percent to 596 persons, while Wyoming’s Clinton Township followed at 26.3 percent.
- The corridor’s biggest population losers were also in Bradford County and included Burlington Borough (28.6 percent) and Wyalusing Borough (17.8 percent).
- The corridor’s Bradford County municipalities had a net gain of 436; Tioga County municipalities had a net gain of 160 persons, while Wyoming had a net loss of 184, led by a decrease of 340 persons in Tunkhannock Borough.
- Towanda (-218) and Factoryville (-166) were the corridor’s other big losers of population over the past decade.

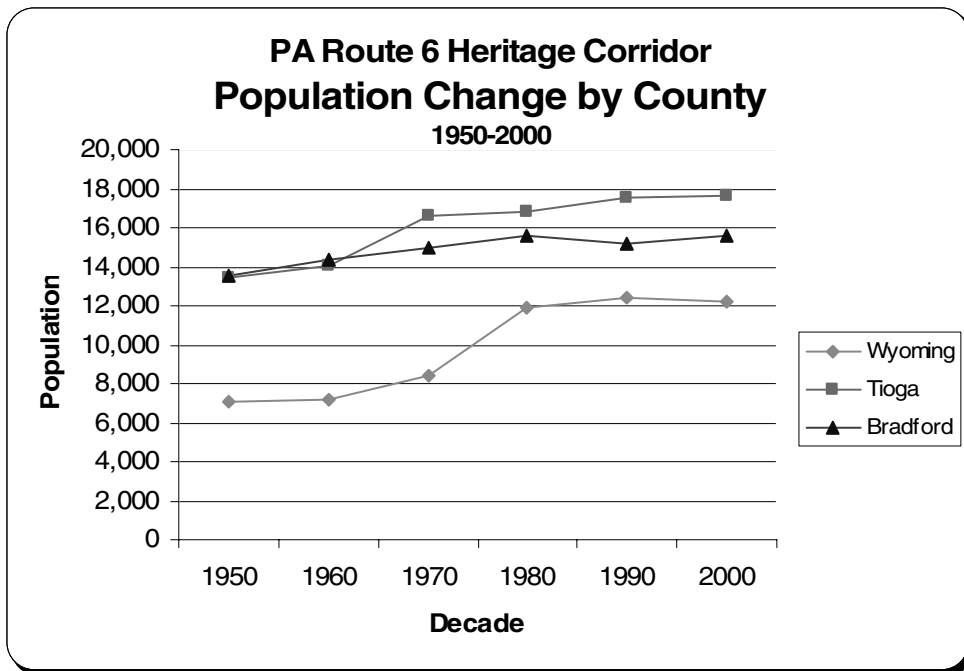


- Troy and Meshoppen were the only two boroughs in the corridor to increase in population during the 1990s.

Table 8 shows the population trends of major corridor communities against corridor and regional averages.

**Table 8: Population Trends
US 6 CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
TUNKHANNOCK	2,251	2,144	2,251	1,911	(15.5)
WYALUSING	723	716	686	564	(17.8)
TOWANDA	4,224	3,526	3,242	3,024	(6.7)
TROY	1,315	1,381	1,262	1,508	19.5
MANSFIELD	4,114	3,322	3,538	3,411	(3.6)
WELLSBORO	4,003	3,805	3,430	3,328	(3.0)
CORRIDOR	39,977	44,249	45,082	45,494	0.9
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5



Age Group Distribution

While population growth in the corridor is less than half of the region’s rate, the *composition* of the corridor’s population has been changing. The fastest-growing age group in the corridor over the past decade has been the 45-54 group, which grew by 34 percent. Probably the most dramatic difference between the corridor and region demographically has been the increase in the 55-64 age group compared to regional averages (17.5 percent versus 0.8 percent). The corridor’s elderly population is also growing, albeit at rates below the regional average. The



elderly frail population (age 85-plus) grew by nearly 29 percent, led by increases in West Burlington and Tunkhannock Townships.

**Table 9: Percent Increase by Age Group - 1990-2000
US 6 CORRIDOR**

LOCATION	Total	45-54	55-64	65-74	75-84	85+
TUNKHANNOCK	(15.5)	45.6	0.6	(34.7)	(19.8)	(35.7)
WYALUSING	(17.8)	6.0	(4.3)	4.2	(7.4)	(17.4)
TOWANDA	(6.7)	32.1	(23.6)	(11.7)	4.7	55.3
TROY	19.5	77.9	25.0	(21.9)	40.4	39.4
MANSFIELD	(3.6)	33.0	(2.8)	(15.1)	(16.2)	71.4
WELLSBORO	(3.0)	24.9	7.5	(30.0)	8.52	11.0
CORRIDOR	45,494	34.0	17.5	(5.3)	16.4	28.6
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Over the past decade, median age increased in all but 2 of the corridor’s 31 municipalities. The exceptions to this trend included Burlington Borough and Meshoppen Borough. Eleven municipalities have median ages of 40 or more, including three that have median ages in excess of 45 (West Burlington Twp, Gaines Township and North Towanda Township. In fact, three of the region’s oldest municipalities are in this Corridor, and include North Towanda Township (48.8), Gaines Township (47.7) and West Burlington Township (45.7). Median age increased the most in West Burlington Township (10.5) followed by Gaines Township (7.7) and Tuscarora Township (7.3).

**Table 10: Median Age, 1990 – 2000
US 6 CORRIDOR**

LOCATION	1990	2000
TUNKHANNOCK	38.9	41.0
WYALUSING	38.9	45.0
TOWANDA	34.5	37.8
TROY	37.1	40.6
MANSFIELD	21.3	21.8
WELLSBORO	42.1	44.2

Racial Composition

The racial composition of the PA Route 6 Heritage Corridor is slightly more diverse than the region overall. An assessment of concentrations of minority populations throughout the Northern Tier is an important consideration from an environmental justice standpoint as major transportation projects must take into consideration the potential for disproportionate impact on both minority and low-income populations. Table 11 provides an overview of the corridor’s racial composition, while the following bullets describe some anomalies within the corridor:

- Hispanics comprise the corridor’s largest minority population, at 361 persons.
- The Corridor has a greater percentage of minority populations than the region as a whole.



- Towanda Borough has the corridor’s highest number of Asian (36) and Hispanic (36) populations. Wysox Township has the highest Indian population (12). Mansfield Borough has the highest Black population, at 142.
- All of Sylvania Borough residents are white, while Factoryville Borough has the corridor’s highest percentage of minority population, at 6 percent.

**Table 11: Racial Composition – (in %)
PA ROUTE 6 HERITAGE CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
TUNKHANNOCK	1,911	99.2	0.2	0.6	0.2	0.2	0.1
WYALUSING	564	98.4	0.4	1.1	0.9	0.0	0.0
TOWANDA	3,024	96.4	0.9	1.2	0.4	1.2	0.1
TROY	1,508	98.3	0.3	0.7	0.1	0.7	1.2
MANSFIELD	3,411	93.3	4.2	1.0	0.3	0.8	0.4
WELLSBORO	3,328	98.1	0.4	0.6	0.2	0.9	0.2
CORRIDOR	45,494	97.6	0.7	0.8	0.3	0.5	0.2
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Income

Given its large size (31 municipalities), 1999 average annual household income levels in the Corridor closely align with those found throughout the Northern Tier region although a slightly higher percentage have average annual incomes higher than \$75,000. A few anomalies that stand out in the corridor include:

- A majority of corridor households have a per capita income of less than \$25,000 a year. There are five municipalities within the corridor that have more than 45 percent of all households with per capita income less than \$25,000. These include:
 - Meshoppen Borough (45.2 percent);
 - Laceyville Borough (45.5 percent);
 - Troy Borough (47.2 percent);
 - Gaines Township (47.5 percent); and
 - Mansfield Borough (48.1 percent).
- There are 103 households in the corridor with per capita income in excess of \$200,000. Wellsboro Borough leads the list, with 14 households, followed by Wysox Township and Tunkhannock Borough, with 10 a piece.
- Only 6.1 percent of corridor households have a per capita income greater than \$100,000. Standing Stone Township (the fastest-growing municipality in Bradford County over the past decade) has the highest percentage of these households, with 28.2 percent of all households. It is followed by two other Bradford County municipalities: Burlington and Sylvania Boroughs, both with over 20 percent of all households.
- Meshoppen Borough and Laceyville Borough were the only two corridor municipalities with average annual household incomes in excess of \$40,000. The boroughs of Wyalusing, Factoryville, Mansfield and Troy all had among the corridor’s lowest average annual household incomes, at less than \$28,000 each.



- Meshoppen Borough’s average annual household income (1999) of \$45,234 ranks as the second-highest in the Northern Tier, behind only Silver Lake Township.

**Table 12: Per Capita Income - 2000
PA ROUTE 6 HERITAGE CORRIDOR**

Location	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
TUNKHANNOCK	838	40.7	25.4	15.5	10.6	7.8
WYALUSING	264	39.8	34.1	15.9	2.7	7.6
TOWANDA	1,278	34.5	36.2	18.0	6.4	4.9
TROY	587	47.2	26.6	13.3	8.2	4.8
MANSFIELD	938	48.1	28.7	12.4	5.8	5.1
WELLSBORO	1,468	43.9	29.1	14.6	6.4	6.1
CORRIDOR	17,259	35.9	32.5	18.0	7.5	6.1
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. As already mentioned, the corridor is home to major employment centers in the boroughs of Wellsboro, Mansfield, Troy, Towanda and Wyalusing. Mehoopany Township and the suburban townships of Towanda and Richmond are also large employment centers.

Table 13, Table 14 and Table 15 describe some of the corridor’s economic and labor force conditions.

- Of the 60 people in the Armed Forces in the Northern Tier, only 8 are from the PA Route 6 Heritage Corridor – 5 from Tunkhannock Borough and 3 in West Burlington Township.
- Employment and unemployment rates for the corridor are similar to those at the regional level. Unemployment rates for three municipalities however, were in double digits: Troy Borough, Gaines Township and Mansfield Borough. Unemployment rates were lowest in Wyalusing, at less than 1 percent.
- For employment by Industry, the Agricultural, Forestry and Fishing segment is strongest in the rural Bradford County townships of Columbia and Tuscarora, where the rates are three times the corridor average.
- Construction jobs are the highest in Clinton and Shippen Townships, where employment rates are in double digits.
- In spite of the corridor’s strong manufacturing base, that industry does not employ the largest percentage of corridor employees. That distinction goes to the Education employment sector. The corridor municipalities with the highest percentage of the workforce employed in the “Education industry” include the college towns of Mansfield and Factoryville, but Towanda, Wellsboro and Troy as well.



- Nine of the corridor’s top ten manufacturing municipalities are in Bradford County and include:
 - West Burlington Township (27.1);
 - Burlington Township (28.1);
 - Wyalusing Township (29.9);
 - Wysox Township (30.1);
 - Tuscarora Township (30.3);
 - Gaines Township (30.3);
 - Wyalusing Borough (30.6);
 - North Towanda Township (32.4);
 - Burlington Borough (33.7); and
 - Standing Stone Township (34.2).

**Table 13: Civilian Labor Force Characteristics – (2000)
PA ROUTE 6 HERITAGE CORRIDOR**

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
TUNKHANNOCK	1,550	43.5	56.5	94.7	5.3	0.6
WYALUSING	448	47.1	52.9	99.2	0.8	0.0
TOWANDA	2,367	39.8	60.2	96.8	3.2	0.0
TROY	1,246	37.6	62.4	76.1	23.9	0.0
MANSFIELD	2,957	42.0	58.0	87.6	12.4	0.0
WELLSBORO	2,726	46.3	53.7	95.0	5.0	0.0
CORRIDOR	36,186	39.5	60.5	94.4	5.6	0.1
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 14: Employment by Occupation - (2000)
PA ROUTE 6 HERITAGE CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
TUNKHANNOCK	824	39.8	18.9	19.1	0.0	8.1	14.1
WYALUSING	235	28.5	13.2	23.0	1.7	6.0	27.7
TOWANDA	1,380	36.0	12.2	23.0	0.9	5.1	22.7
TROY	591	32.3	16.8	17.3	1.7	8.6	23.4
MANSFIELD	1,502	31.7	23.0	32.5	0.9	4.3	7.6
WELLSBORO	1,390	39.4	15.3	24.0	0.9	6.7	13.7
CORRIDOR	20,635	29.1	15.7	23.2	1.6	9.0	21.4
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3



**Table 15: Employment by Industry by Place of Residence - (2000)
PA ROUTE 6 HERITAGE CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
TUNKHANNOCK	824	1.0	1.6	13.8	1.9	8.4	5.8	1.9	6.9	10.8	26.5	6.1	6.1	9.2
WYALUSING	235	6.0	3.8	30.6	3.0	12.3	0.9	4.7	5.1	1.7	20.4	4.3	5.1	2.1
TOWANDA	1,380	0.0	2.0	25.4	0.9	12.0	3.6	3.2	3.8	7.0	28.0	4.5	4.9	4.6
TROY	591	1.9	5.1	20.3	2.4	5.9	4.9	3.2	3.6	4.1	31.8	8.3	4.9	3.7
MANSFIELD	1,502	0.4	2.5	6.7	1.3	10.2	3.1	7.0	3.3	2.4	38.1	16.8	3.1	5.2
WELLSBORO	1,390	0.9	6.3	14.5	0.4	13.3	1.7	1.7	6.8	5.2	36.9	3.2	3.1	6.1
CORRIDOR	20,635	4.6	5.3	20.7	2.3	12.0	5.2	2.5	3.8	5.0	23.3	7.2	4.1	4.0
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

There are a number of Highway Restoration projects programmed for the corridor, totaling approximately \$24,300,000. One of the largest capital projects in the corridor includes the construction of the River Street extension project in Towanda. The project will extend existing River Street north to Patterson Boulevard in North Towanda. The extension (to be called the John B. Merrill Parkway) will serve to make River Street a scenic travel route, which will alleviate traffic congestion on York and Main streets in the borough. The new route is not meant to be a truck or bus route, but will function as a reliever for local traffic flows, especially during shift changes. The project will also include an 8-foot wide paved walking trail from Wysox to North Towanda and is expected to be completed in November 2004.

A number of other projects related to non-motorized modes in the corridor include countywide shoulder improvements in Wyoming County, as well as a \$1.3 million Transportation Enhancement project on the Pine Creek Trail from Wellsboro Junction to the Village of Ansonia in western Tioga County.

Table 16 below highlights all the major projects on the current Transportation Improvement Program programmed for the corridor. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.



**Table 16: 2003 TIP Projects
PA ROUTE 6 HERITAGE CORRIDOR**

Municipality	Project/Description	Year				Total
		03	04	05	06	
GAINES TWP	Reconstruct	200				\$200
DELMAR & SHIPPEN TWP	Pine Creek trail enhancement		1,300			\$1,300
WELLSBORO	Box culvert			375		\$375
WEST BURLINGTON N. TOWANDA	Sugar Creek bridge repl					\$60
TOWANDA	US 220 underpass recon			1,000		\$1,000
TOWANDA	River Bridge SR 6006	7,710				\$7,710
WYSOX	Resurface 2.8 miles	690				\$690
STANDING STONE	Resurface 2.0 miles			1,000		
STANDING STONE	Recon to 24ft, curve widen 1.1 miles	150	250	3,000		\$3,400
WYALUSING TWP	Patch and overlay 4.2-mi		2,000			\$2,000
WYALUSING BORO	Improve to Taylor Packing		533	200		\$733
TUSCARORA	2.5 mile overlay bettermnt	1,240				\$1,240
BRAINTRIM	Tuscarora Creek br repl			150	50	\$200
MESHOPPEN TWP	Resurfacing		2,800			\$2,800
MESHOPPEN TWP	SR 4015 slide restoration		1,000			\$1,000
WYOMING COUNTYWIDE	Bike route shoulder impr	600				\$600

Source: PENNDOT District 3-0 and 4-0

Corridor Action Plan

In spite of the recent improvements that have taken place within the corridor, more work needs to be accomplished. This section notes some of the perceptions of transportation stakeholders that need to be addressed in the corridor, from additional bypasses to traffic-related issues at intersections and shoulder improvement needs.

TIOGA COUNTY

- Transportation stakeholders have identified areas where passing lanes/truck climbing lanes are desired in the corridor, including as Armenia/Sylvania Mountain and at Gobbler's Knob. A recently completed two-lane realignment at Armenia Mountain did not include a truck climbing lane.
- The issue of bottlenecks in the area of Wellsboro Borough has been raised as an issue, with the possibility of a bypass even being raised. The borough is currently the largest municipality in the Northern Tier without a bypass or limited access facility to separate trucks from local traffic.



- The issue of a Wellsboro bypass may eventually need to be revisited to gauge public reaction, interest and need as a medium-term initiative. Some grass roots efforts will need to be made in this area although PENNDOT believes most of the traffic in Wellsboro is not through traffic. Wellsboro is in fact the single largest commuter destination of any Northern Tier municipality, according to information from the 1990 U.S. Census.
- Safety aspects of truck traffic through Wellsboro should be considered as part of any bypass debate or study. Synchronization of traffic signals and the possible removal of key parking meters may need to take place in order to improve truck turning movements at different locations in the borough.
- Signing for crosswalks through Wellsboro has been raised by community officials as a need, in addition to improved enforcement.
- Stakeholders have pointed to the need for intersection improvements along US 6 at several locations, including Shumway Hill Road and Wellsboro Junction.
 - The Shumway Hill Road intersection in particular may potentially need to be signalized. PENNDOT has indicated that a study had been performed at that intersection. An extension of the center turn lane west of Wellsboro is a possibility. A reduction in the speed limit through this portion of the corridor immediately east of Wellsboro may also need to be considered as more short-term growth is expected.

BRADFORD COUNTY

- The River Street improvement currently underway in Towanda Borough will have a significant impact on traffic patterns in the borough and in surrounding areas. The new road will essentially create a new main street and will be viewed as a Main Street bypass. District 3-0's Traffic Unit should continue to monitor flows through the borough and surrounding townships in response to the changes the River Street improvement will bring. The borough should consider how to use the new improvement as a way of focusing on the river, its use and recreational aspects.
- The issue of heavy truck traffic in the areas of Troy and Towanda Boroughs has also been raised as a concern. In Towanda Borough in particular, there is no direct connection for truckers and recreational vehicle drivers to get directly from Wysox to US 6 westbound without driving through Towanda. The new River Street extension project is not expected to completely address this problem.
- From a traffic standpoint, the synchronization of the traffic signals along the commercial strip between Towanda and Wysox has been raised. The District's Traffic Unit should continue to monitor conditions at this location. Synchronization will be especially important through the commercial strip between Towanda and Wysox in the wake of the River Street improvement.
- Mt. Pisgah State Park should be made more accessible to residents and visitors through additional signage and road access.
- A PENNDOT-owned corridor eyesore that has been identified by area transportation stakeholders includes a cinder pile east of Troy Borough.



WYOMING COUNTY

- Turning lanes are needed west of Tunkhannock.
- Stakeholders have pointed to the need for intersection improvements along US 6 at several locations, including PA 29, PA 92, PA 87, Lithia Valley Road (SR 2012) and Lake Sheridan Road. The intersection of US 6 with PA 92 in particular does not perform well, especially when there are events scheduled at Lazy Brook Park.
- The effects of the Tunkhannock bypass on local traffic patterns has been raised as an issue for PENNDOT to continue to monitor. County transportation stakeholders have also observed extreme congestion problems at the end of the US 6 bypass with PA 87, particularly during inclement weather.
- In Factoryville, there have been persistent settlement problems, particularly west of the intersection of US 6 and PA 107.
- US 6 has geometric deficiencies with US 11 as the turning radius is not adequate for tractor trailers.

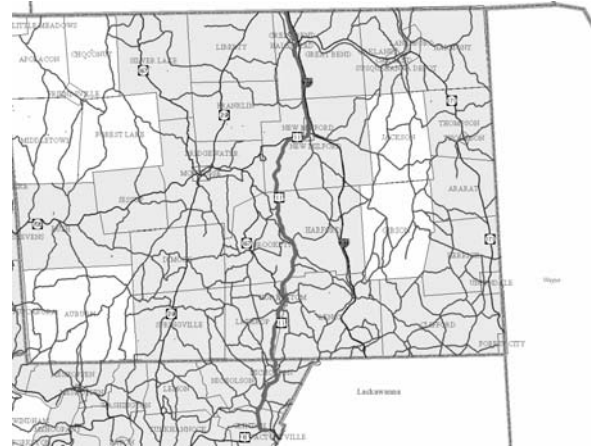
CORRIDOR-WIDE

- Two of the corridor's airports – Bradford County and Grand Canyon – are important transportation assets that need ongoing state investment and assistance. In Tioga County, the Grand Canyon Airport needs to be upgraded with a new FBO hanger and runways, along with better marketing. The Bradford County airport has recently had its runway extended and won a state grant to construct a new maintenance hanger and terminal building. The Bradford County airport is strategically located within an enterprise zone and adjacent to US 6, US 220 and the Towanda – Monroeton Shippers Lifeline. Additional initiatives at Bradford County need to be advanced, including a 700-foot runway extension, KOZ designation, business plan development, and a fuel farm, to name just a few.
- In addition to the shoulder improvements already programmed for the Wyoming County portion of the corridor, PENNDOT should continue to monitor the need for ongoing shoulder improvements (e.g., paving, surfacing, widening, striping, etc.) throughout this important BicyclePA Route cross-state corridor.
- Additionally, the issue of PENNDOT “advisory” signing (e.g., “High DUI areas”, “Aggressive Drivers”-type signing along the corridor is viewed by some to be out of character for the Corridor in general. Any criticism of the signs however needs to be balanced with safety.

THE ENDLESS MOUNTAINS CORRIDOR

The Endless Mountains Corridor

The Endless Mountains Corridor is approximately 27 miles in length, running between Binghamton and Scranton through east-central Susquehanna County. It directly serves 12 municipalities and is one of the region's three major north-south routes. The Corridor is centered on I-81 and U.S. 11, two of the corridor's major transportation assets even though the completion of I-81 between Scranton and New York State in 1962 effectively replaced U.S. 11 for long distance travel. I-81 has 6 interchanges in Susquehanna County.



CORRIDOR PROFILE ►



Susquehanna
Great Bend Twp
Great Bend
Hallstead
New Milford Twp
New Milford
Harford Twp
Brooklyn Twp
Hop Bottom
Lathrop Twp
Lenox Twp
Wyoming
Clinton Twp
Nicholson
Factoryville



PENNDOT has functionally classified U.S. 11 as a Rural Major Collector while I-81 is considered a Rural Principle Arterial Interstate. NTRPDC has placed both roadways on its Primary Commercial Network. I-81 is an export area main route, with U.S. 11 being a secondary route. In statewide long-range planning, the corridor is recognized as part of PENNDOT's Lumber Heritage Corridor. U.S. 11 is also known as the Lackawanna Trail between Scranton and the New York State line.

CP Rail's line (nee D&H) between Scranton and New England also traverses the corridor. The rail line is arguably one of the most important north-south rail corridors in the eastern U.S. Passenger rail service is presently not available in the corridor, although area rail authorities are working on restoring service between Scranton and New York City. Engineering and design work is underway and authorities are optimistic that service would be in place by 2006.

North of the border, I-81 connects with I-88 to Albany, as well as the Southern Tier Expressway (future I-86) to Binghamton and Elmira. To the south, the Corridor provides a link to the Turnpike's Northeast Extension, as well as I-84 to New York City.

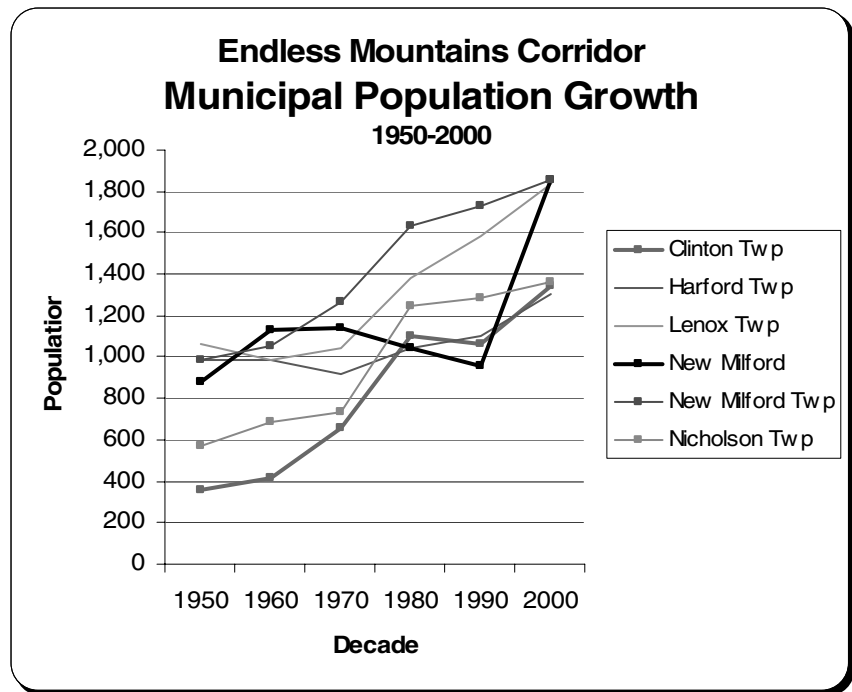
The Wilkes-Barre/Scranton International Airport is also 30 miles south of the Susquehanna County line.



Key Findings

Serving both motor carrier and rail freight, the Endless Mountains Corridor is a major corridor for goods movement between Northeast Pennsylvania and New England. Class 1 railroad representatives describe the corridor literally as a “funnel” between Pennsylvania and the New England states and Canada. Traffic on the line is busier than it’s been in over 20 years, according to railroad officials. The line is seeing much NAFTA-related freight from Canada. The line carries everything, from NS unit coal trains to NS and CP Rail intermodal trains. CP Rail handles the bulk of intermodal trains from Toronto to Philadelphia, where CP intersects with CSX.

The attractiveness of the corridor as a bedroom community is also becoming more widely known, as population growth continues to stem from the urban exodus* from Scranton and Binghamton into Susquehanna County. The ties to these urban areas is so significant, the federal government has designated the northern portion of the corridor as part of the Binghamton Metropolitan Planning area (south to New Milford). The ongoing work in bringing the Southern Tier Expressway to interstate status between Binghamton and the Hudson Valley also underscores the importance of planning for this most strategic of all the Northern Tier corridors.



Other Key Trends and Issues in the Endless Mountains Corridor include:

- U.S. 11 is considered to be Susquehanna County’s top transportation priority, a finding from transportation stakeholder meetings conducted by NTRPDC.
- I-81 is expected to have sufficient capacity through the year 2025, according to information from PENNDOT’s HPMS database.
- The two largest employment destinations for corridor commuters are outside of Susquehanna County. The county is one of four in Pennsylvania that exports a majority of its workforce.

* The populations of the Scranton and Binghamton MSAs declined by 13,690 and 12,177, respectively, during the 1990s.



- The corridor is growing at a rate five times the state and regional rates. New Milford Township added more people during the 1990s than any other municipality in the Northern Tier.
- The construction of a new sewer line along US 11 from New Milford to Great Bend will increase development pressure and travel demand.
- PENNDOT has programmed over \$9 million in transportation improvement projects in the corridor. Nearly all of them are bridge replacements.
- The improvement of the U.S. 15 (future I-99) corridor in Tioga County may have an effect on traffic volumes in the future in the Endless Mountains Corridor. PENNDOT is spending more money on the Lumber Heritage Corridor (nearly \$100 million over the next four years) than any other Northern Tier Corridor. The investment will eventually serve to bring that corridor to interstate status, linking I-80 to the south with I-86 in New York and bringing markets in Canada and the mid-Atlantic closer together.
- A new Welcome Center is planned for the corridor, replacing a rest area which has been functioning as a welcome center for a number of years. The Welcome Center is expected to be a tremendous resource for the tourism industry for the entire region, including the greater Scranton/Wilkes-Barre area.

Public Input

During NTRPDC's public involvement efforts in 1999, Susquehanna County transportation stakeholders identified the U.S. 11 roadway as the county's top transportation priority. Other issues in the Endless Mountains corridor that were raised, include:

- US 11 is a top priority for Susquehanna County focus group participants, along with PA 706. Rail freight service could be improved for present and potential future industry with potential new sidings at Salida and New Milford.
- New bridges are needed in several areas, including Hallstead, Great Bend and at New Milford. The Hallstead Bridge needs another traffic signal as well.
- The rest stops on I-81 are too far apart and are non-existent in many areas.
- There seems to be constant construction on I-81.
- There are currently too many large trailers on U.S. 11.

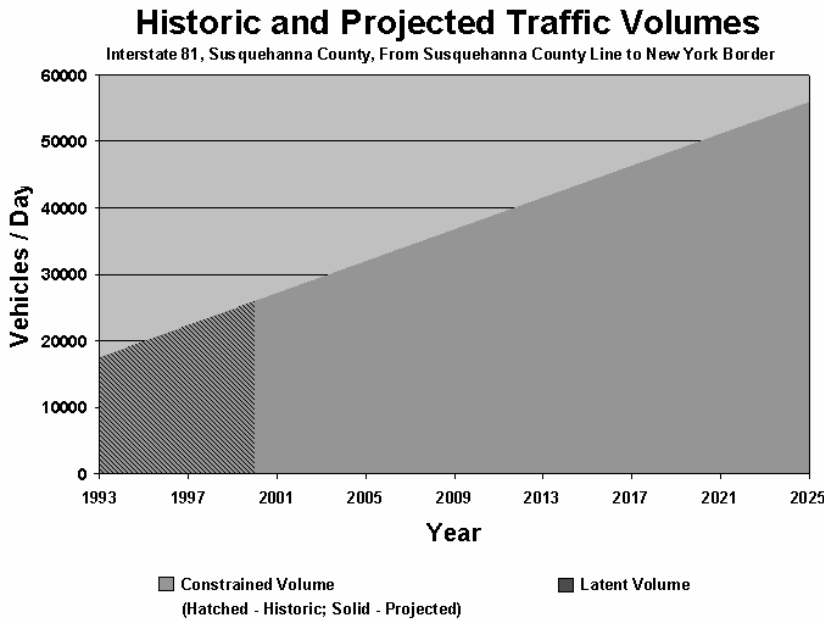
Traffic Volumes

No Northern Tier corridor carries more traffic than the Endless Mountains. As previously mentioned, the corridor is significant from both a statewide and regional scale.

As part of the development of its own long range plan (PennPlan), PENNDOT divided the corridor into "Super-segments" which coincide with the roadway's junctions with other roadways on the National Highway System (NHS) or where the corridor crosses a county line. Only I-81 was included as part of the traffic analysis for the purposes of statewide planning. The roadway is analyzed as one Supersegment for the portion between the Lackawanna and Broome County lines.



Also as part of PennPlan’s development, a level of service (LOS) analysis was performed for each so-called “Super-segment” on I-81. The chart below illustrates historical and projected LOS for key super segments. Historical data is given for years 1993 to 2000 and was used to project service for 2010 and 2025. The analysis indicates that I-81 in Susquehanna County carries approximately 25,000 vehicles per day. Trucks represent approximately 38 percent of the traffic stream. By 2010, traffic is anticipated to increase to over 38,000 vehicles a day. Congestion is not anticipated to become an issue in the corridor through the year 2025.



According to information from PENNDOT’s HPMS, the corridor should operate free of congestion through the year 2025.

Table 1 shows the changes in traffic volumes historically for selected years in the Endless Mountains (US 11) Corridor.

**Table 1: Annual Average Daily Traffic
ENDLESS MOUNTAINS CORRIDOR**

LOCATION	1993	1997	2000
GREAT BEND	3,638	3,976	2,622
HALLSTEAD	6,307	5,307	5,662
NEW MILFORD	5,865	5,813	5,979
HOP BOTTOM	1,178	1,447	1,238
NICHOLSON	2,302	1,447	2,138

Journey to Work Trip Statistics (Mode Split and Travel Time)

Modes used for journey to work trips are very similar to regional trends. Nearly 90 percent of corridor commuters rely on the private automobile as a means of getting to work – 77.6 percent of these drive alone. These numbers are slightly higher than regional averages.



The following points and Table 2 highlight key journey to work trip statistics from the 2000 Census:

- Harford Township in the center of the corridor has the highest use of the single occupant vehicle (SOV), at 84 percent. Nicholson Borough has the least use of SOV journey to work travel, at only 74 percent. The borough leads all corridor municipalities in the percentage of carpooling, at 19 percent, just ahead of Hallstead Borough with 17 percent.
- Of the 342 persons in the corridor who walk to work, nearly 40 percent (136) are from Factoryville. This represents over 22 percent of all journey to work trips and is the highest such incidence in the corridor. The boroughs of New Milford and Hop Bottom and rank second and third respectively, at just over 7 percent each.
- The percentage of people in the corridor who work at home is slightly lower than regional averages. However, Brooklyn Township recorded nearly 10 percent of its workers age 16-plus as working at home. This is the highest such percentage in the corridor.

**Table 2: Mode Split (in %) - 2000
ENDLESS MOUNTAINS CORRIDOR**

LOCATION	Workers 16+	SOV	Carpool	Walk	Work at Home	Mean Travel Time (Min.)
HALLSTEAD	539	75.1	16.9	4.8	2.4	20.2
NEW MILFORD BOROUGH	390	77.4	10.0	7.2	4.9	24.2
NEW MILFORD TOWNSHIP	811	79.3	12.1	3.8	4.1	28.6
HOP BOTTOM	157	75.2	13.4	7.0	4.5	28.2
LENOX	915	75.6	9.5	5.8	6.9	26.5
NICHOLSON	284	73.6	19.0	3.5	2.5	28.7
FACTORYVILLE	602	65.1	7.6	22.6	4.3	19.5
CORRIDOR	6,573	77.6	12.2	5.2	4.4	--
NORTHERN TIER	79,103	77.5	12.0	4.7	4.6	--

In 1990, a majority of commuters (53 percent) in the Endless Mountains Corridor traveled between 15-29 minutes to get to work. Over the past ten years, that percentage has fallen to where an equal percentage now travel between 30 and 59 minutes to work. The number of people traveling longer than 90 minutes over the past decade increased by large measures, corresponding in a drop in the percentage of people who require less than 15 minutes to get to work. Table 3 and Table 4 and the bullets below show how journey to work travel times have increased in the corridor over the past decade.

- The percentage of people requiring more than 90 minutes to get to work increased from 16 to 142 persons, or 788 percent. Great Bend Borough leads all corridor municipalities in this regard with 3.5 percent of all commuters traveling longer than an hour and a half to work.



- Hop Bottom Borough is one of 11 Northern Tier municipalities with no one traveling longer than 90 minutes to work, according to information from the 2000 Census.
- The corridor generally has fewer people traveling less than 15 minutes to work than it did 10 years ago. Two exceptions are Factoryville and Hop Bottom, where the percentage increased. Two municipalities – Harford Township and Nicholson Borough – experienced significant decreases.

**Table 3: Travel Time to Work (in minutes) - 2000
ENDLESS MOUNTAINS CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
HALLSTEAD	32.5	42.8	22.4	1.5	0.8
NEW MILFORD BOROUGH	31.3	31.0	34.0	1.6	2.2
NEW MILFORD TOWNSHIP	22.6	31.5	39.6	3.6	2.7
HOP BOTTOM	22.7	24.0	44.7	8.7	0.0
LENOX	26.3	26.2	41.2	4.7	1.5
NICHOLSON	15.9	31.0	49.1	1.4	2.5
FACTORYVILLE	45.5	30.7	17.9	3.6	2.3
CORRIDOR	26.5	34.0	34.0	3.4	2.1
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes) – 1990
ENDLESS MOUNTAINS CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
HALLSTEAD	26.1	66.2	23.9	1.0	0.0
NEW MILFORD BOROUGH	34.0	43.5	31.3	5.0	0.0
NEW MILFORD TOWNSHIP	24.2	48.0	40.8	1.9	0.0
HOP BOTTOM	19.5	52.8	30.1	9.8	0.0
LENOX	30.8	48.0	32.0	4.1	0.5
NICHOLSON	31.8	45.4	34.0	4.3	1.2
FACTORYVILLE	40.2	48.8	21.3	1.6	0.6
CORRIDOR	29.2	53.3	31.0	3.0	0.3
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Vehicles Available per Household

Rates of vehicle ownership in the corridor parallel the regional experience. Table 5 shows the vehicle availability for selected Corridor municipalities while the following bullets highlight items of interest found in the data:

- Hallstead and Great Bend Boroughs have the highest percentages of households without access to a vehicle, at 10.3 and 17.3 percent, respectively



- In Hallstead, Great Bend and Factoryville, the majority of households have access to only one vehicle.
- Lenox, Clinton and Brooklyn Townships have the corridor’s highest percentage of households with access to three or more vehicles, 27 percent each.

**Table 5: Vehicles Available Per Household (in %) – 2000
ENDLESS MOUNTAINS CORRIDOR, Selected Municipalities**

LOCATION	None	One	Two	Three or More
HALLSTEAD	10.3	38.3	37.3	14.1
NEW MILFORD BOROUGH	5.4	38.5	43.1	13.0
NEW MILFORD TOWNSHIP	2.9	28.0	48.8	20.3
HOP BOTTOM	9.6	31.1	38.5	20.7
LENOX	5.1	29.3	38.0	27.6
NICHOLSON	7.7	31.1	50.5	10.6
FACTORYVILLE	6.2	37.3	37.3	19.2
CORRIDOR	6.2	31.5	42.3	20.0
NORTHERN TIER	6.3	32.7	42.1	18.9

Commutation Patterns

Susquehanna County – given its location between two metropolitan areas – is influenced by its labor market ties with the Scranton and Binghamton areas. The county is a large exporter of employees, with nearly half commuting outside the county for employment, and that trend is increasing (the percentage of workers leaving Susquehanna County for work increased from 42.3 percent in 1990 to over 50 percent in 2000). Susquehanna County is one of only four such counties in Pennsylvania where more people commuter to another county than stay within the county of residence for employment. Majorities of those leaving Susquehanna County are for employment destinations in Broome County (read: Binghamton, NY) and in Lackawanna.

The 2000 Census identified the following points with regard to corridor commutation patterns:

- New Milford Borough is the largest employment destination within the corridor.
- Less than 15 percent of corridor commuters work within their municipality of residence. New Milford Borough leads the corridor in this regard, at 28 percent. Only 4 percent of Clinton Township residents work within their municipality of residence.
- Approximately one third of corridor residents are employed within the corridor.
- Approximately half are employed somewhere within Susquehanna County.

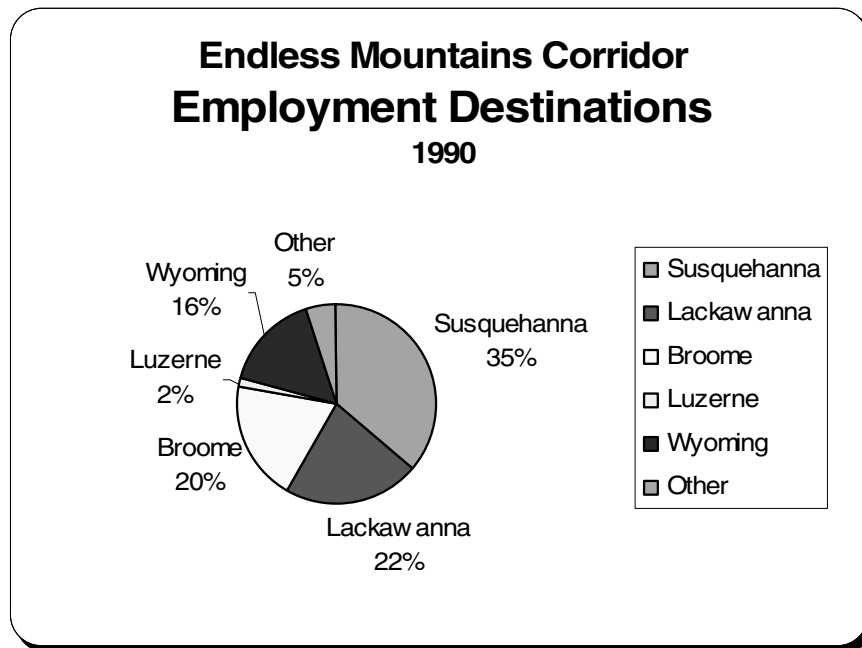
Table 6 shows the top ten destinations for commuters in the Endless Mountains Corridor. These ten encompass approximately three quarters of all work destinations for those living in the corridor.



Table 6: Top Commuter Destinations – 1990, 2000
ENDLESS MOUNTAINS CORRIDOR

Location	Percentage Share	
	1990	2000
1. LACKAWANNA COUNTY	22.0	25.3
2. BROOME COUNTY, NY	19.8	17.6
3. NEW MILFORD BOROUGH	9.3	6.8
4. HALLSTEAD BOROUGH	5.2	5.9
5. HARFORD TOWNSHIP	5.6	5.1
6. MONTROSE BOROUGH	4.9	4.8
7. FACTORYVILLE BOROUGH	3.0	3.3
8. TUNKHANNOCK BOROUGH	2.9	2.4
9. NICHOLSON TOWNSHIP	--	2.2
10. MEHOOPANY TOWNSHIP	3.1	2.0

Source: U.S. Census Bureau, PA State Data Center, 1990, 2000.



Population Trends

The Endless Mountains Corridor has sustained steady growth over the past 50 years. The 2000 Census in fact recorded an all time population high for the corridor, at 16,435 persons. Corridor growth over the past decade has been in double digits, far exceeding that of the region’s growth rate of 2 ½ percent. Since 1990, the corridor has experienced a population increase of 1,540 new persons, with most of this growth stemming from increases in New Milford (906), Clinton Township (280), and Lenox Township (251). New Milford Borough and Lenox Township in fact



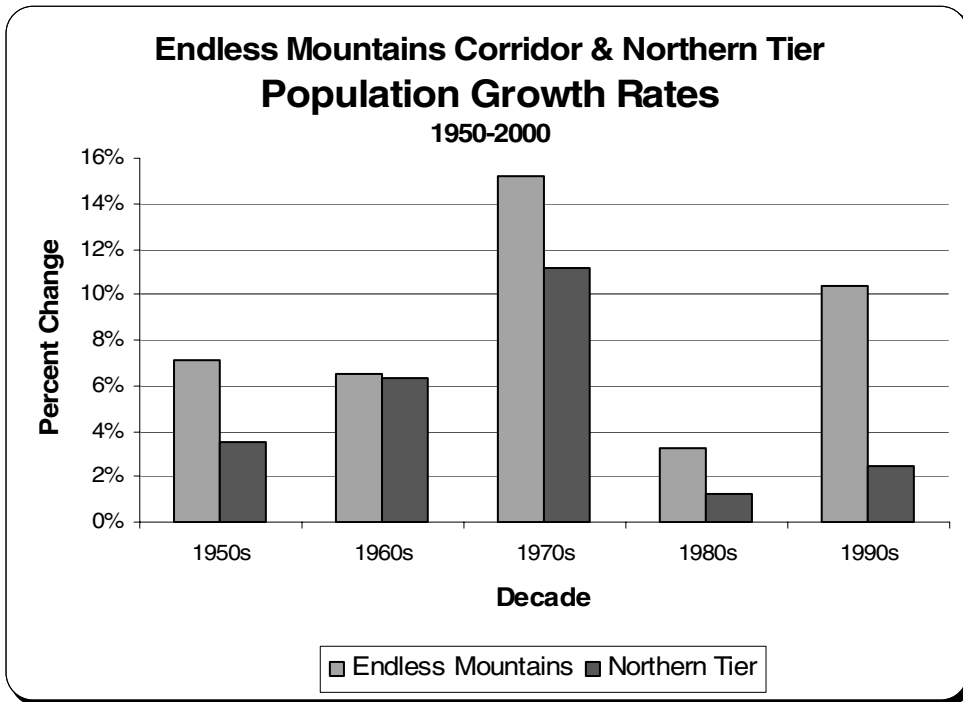
ranked first and sixth respectively in the region in numeric population increase over the past decade. All three municipalities are located with easy access to the Scranton metropolitan area.

After New Milford, the corridor’s remaining five boroughs all lost population during the past 10 years – the only municipalities to do so. The biggest losers were the Wyoming County boroughs of Factoryville (down 166) and Nicholson (144).

Table 7 shows the population trends of major corridor communities against corridor and regional averages.

**Table 7: Population Trends
ENDLESS MOUNTAINS CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
HALLSTEAD	1,447	1,280	1,274	1,216	(4.6)
NEW MILFORD BOROUGH	1,143	1,040	953	1,859	95.1
NEW MILFORD TOWNSHIP	1,266	1,637	1,731	1,854	7.1
HOP BOTTOM	430	405	345	333	(3.5)
LENOX	1,045	1,382	1581	1,832	15.9
NICHOLSON	877	945	857	713	(16.8)
FACTORYVILLE	922	924	1,310	1,144	(12.7)
CORRIDOR	12,517	14,421	14,895	16,435	10.3
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5



Age Group Distribution

While population growth in the corridor has been significantly higher than the regional rate, the corridor is also outperforming the region in growth rates for certain age groups of the overall population, particularly the 55-64 and 85-plus age groups. Increases among the 55-64 age group were especially acute in Lenox and Clinton Townships.

In the 85-plus category, gains were registered in all but two municipalities. New Milford Borough, Clinton Townships led all corridor municipalities percentage-wise even though the actual numbers were quite small.

Table 8 highlights growth among different age groups within selected corridor municipalities.

Table 8: Percent Increase by Age Group - 1990-2000
ENDLESS MOUNTAINS CORRIDOR

LOCATION	Total	45-54	55-64	65-74	75-84	85+
HALLSTEAD	(4.6)	7.6	(7.2)	(7.3)	22.0	70.0
NEW MILFORD BOROUGH	95.1	(2.7)	10.5	(23.5)	(34.3)	220.0
NEW MILFORD TOWNSHIP	7.1	31.9	21.3	11.8	(1.5)	26.1
HOP BOTTOM	(3.5)	36.1	52.2	(55.2)	46.1	133.3
LENOX	15.9	50.6	74.8	7.9	(7.0)	71.4
NICHOLSON	(16.8)	(1.2)	1.3	(33.7)	(36.4)	30.8
FACTORYVILLE	(12.7)	75.6	(28.2)	(16.9)	(5.6)	9.1
CORRIDOR	16,435	30.1	27.0	(7.0)	11.9	55.2
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0



Median Age

Median age is another indicator of the Corridor’s aging demographic. Median age increased in every corridor municipality over the past 10 years, ranging from an increase of 1.1 years in Nicholson Borough to a high of 6 years in Great Bend Township. The corridor’s top four municipalities registering the greatest increases in median age also experienced net gains in overall population growth. These included the townships of Great Bend, Lenox, Brooklyn and Nicholson.

The four corridor municipalities with the youngest median age are all in Wyoming County, led by Factoryville Borough, which had a median age of only 24.1. The college town’s median age is slightly higher than Mansfield Borough’s, which recorded a median age of 21.8.

**Table 9: Median Age, 1990 – 2000
ENDLESS MOUNTAINS CORRIDOR**

LOCATION	1990	2000
HALLSTEAD	34.4	39.1
NEW MILFORD BOROUGH	33.8	38.2
NEW MILFORD TOWNSHIP	34.5	38.2
HOP BOTTOM	34.1	38.1
LENOX	33.0	38.8
NICHOLSON	36.0	37.1
FACTORYVILLE	20.7	24.1

Racial Composition

The racial composition of the Endless Mountains Corridor is almost identical to the Northern Tier’s. An assessment of concentrations of minority populations throughout the Northern Tier is an important consideration from an environmental justice standpoint as major transportation projects must take into consideration the potential for disproportionate impact on both minority and low-income populations.

Table 10 provides an overview of the corridor’s racial composition, while the following bullets describe some anomalies within the corridor:

- Blacks comprise the corridor’s largest minority population, followed closely by Hispanics. There are 101 Blacks in the corridor, compared to 95 Hispanics. Over a third of all corridor Blacks and 20 percent of Hispanics are in Factoryville Borough.
- The Corridor has a greater percentage of Black and Asian populations than the region as a whole.
- While Factoryville is the corridor’s most racially diverse community, Lenox Township is the most homogenous, at 99.3 percent White.



**Table 10: Racial Composition – (in %)
ENDLESS MOUNTAINS CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
HALLSTEAD	1,216	98.4	0.7	0.2	0.2	0.4	0.1
NEW MILFORD BOROUGH	878	98.7	0.8	0.1	0.2	0.1	0.1
NEW MILFORD TOWNSHIP	1,859	98.0	0.6	1.3	0.1	0.2	0.3
HOP BOTTOM	333	96.1	2.4	0.3	0.3	0.0	0.3
LENOX	1,832	99.3	0.2	0.4	0.2	0.2	0.1
NICHOLSON	713	98.9	0.1	0.1	0.7	0.1	0.0
FACTORYVILLE	1,144	94.0	3.3	1.8	0.3	1.3	0.3
CORRIDOR	15,459	98.1	0.7	0.6	0.2	0.3	0.2
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Income

Average per capita incomes in Endless Mountain Corridor households generally align with those of the region overall, although there are, however, a few anomalies that stand out in the corridor:

- Hallstead and Great Bend Boroughs have the corridor’s greatest percentage of households with annual per capita incomes under \$25,000, each with over 45 percent of their households. Even the college town of Factoryville registered only 38 percent of all households with less than \$25,000 annual per capita income.
- Factoryville had the corridor’s greatest percentage of households with per capita incomes greater than \$100,000, at 8.2 percent. Growing areas such as Lenox and Clinton Townships followed at 7.6 and 7.5 percent, respectively.
- There are no households in Great Bend or Nicholson Boroughs with annual per capita incomes in excess of \$150,000.
- Clinton Township had the corridor’s highest average annual per capita income in 2000, at \$45,234. Great Bend Borough had the lowest, at \$27,708. Clinton Township ranked second throughout the Northern Tier in per capita income, behind only Silver Lake Township (\$48,062).

Table 11 shows the income breakdown for three municipalities in the Endless Mountains Corridor against corridor and regional averages.



**Table 11: Per Capita Income - 2000
ENDLESS MOUNTAINS CORRIDOR**

Location	House holds	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
HALLSTEAD	509	45.0	33.6	15.5	3.7	2.2
NEW MILFORD BOROUGH	363	38.3	43.8	10.7	4.7	2.5
NEW MILFORD TOWNSHIP	722	37.8	31.6	19.3	7.1	4.3
HOP BOTTOM	131	37.4	37.4	15.3	6.1	3.8
LENOX TOWNSHIP	713	31.4	33.7	20.3	7.0	7.6
NICHOLSON	281	38.4	34.2	18.5	4.6	4.3
FACTORYVILLE	342	37.7	27.2	17.1	7.6	8.2
CORRIDOR	6,015	36.1	34.3	18.9	6.0	4.7
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major employers in the corridor include Hallstead’s Matco Electronics, which employs approximately 400, and Envirocycle, also in Hallstead with 120 employees. Other corridor employers of note include Keystone Junior College (425 employees), State Aggregates in Lenoxville and NC Stauffer & Sons in Factoryville.

Table 12, Table 13 and Table 14 describe some of the corridor’s economic and labor force conditions.

- The corridor’s unemployment rate is slightly lower than the regional rate. Unemployment rates range from 2.6 percent in Brooklyn Township to a high of nearly 10 percent in Nicholson Borough.
- Corridor employment by occupation is similar to regional averages, with the notable exception of employment in Farming, Fishing and Forestry, which is half the regional rate.
- The Wholesale Trade and Arts & Entertainment industries are more important in the Endless Mountains Corridor than elsewhere in the Northern Tier.
- Manufacturing is the largest employer of residents in Great Bend Borough/Township, New Milford Borough/Township, Hallstead, Harford and Nicholson.
- A majority of Hop Bottom residents are employed in the Retail Trade industry. At 26 percent, this is by far the highest percentage in the corridor and over twice the corridor average.
- The greatest number of people employed in the Arts & Entertainment industry reside primarily in the boroughs of New Milford and Great Bend.



- The Education and Health industries employ the majority of residents in Brooklyn and Clinton Townships, as well as Nicholson Township and Factoryville Borough.

Table 12: Civilian Labor Force Characteristics – (2000)
ENDLESS MOUNTAINS CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
HALLSTEAD	933	38.5	61.5	95.6	4.4	0.0
NEW MILFORD BOROUGH	674	38.0	62.0	95.7	4.3	0.5
NEW MILFORD TOWNSHIP	1,412	39.9	60.1	96.7	3.3	0.0
HOP BOTTOM	270	38.9	61.1	96.4	3.6	0.0
LENOX	1,422	30.3	69.7	94.7	5.3	0.3
NICHOLSON	532	40.0	60.0	90.2	9.8	1.3
FACTORYVILLE	941	32.3	67.7	96.1	3.9	0.0
CORRIDOR	12,023	36.4	63.6	95.1	4.9	0.2
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

Table 13: Employment by Occupation - (2000)
ENDLESS MOUNTAINS CORRIDOR

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
HALLSTEAD	549	16.8	16.6	24.2	0.4	11.8	30.2
NEW MILFORD BOROUGH	398	23.1	19.3	24.9	0.5	10.8	21.4
NEW MILFORD TOWNSHIP	821	26.2	15.0	17.5	1.6	12.7	27.0
HOP BOTTOM	159	21.4	14.5	25.8	0.0	11.3	27.0
LENOX	936	23.2	13.0	24.4	1.7	15.8	21.9
NICHOLSON	284	26.1	18.3	20.1	0.0	16.2	19.4
FACTORYVILLE	612	27.8	25.5	28.4	0.0	7.0	11.3
CORRIDOR	7,260	24.1	16.4	23.3	0.9	12.9	22.4
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3



**Table 14: Employment by Industry by Place of Residence - (2000)
ENDLESS MOUNTAINS CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
HALLSTEAD	549	1.6	4.7	26.2	4.6	13.8	5.3	3.6	5.5	4.6	15.1	7.7	4.4	2.9
NEW MILFORD BOROUGH	398	5.0	4.0	18.8	3.3	13.3	7.8	1.8	3.8	5.3	13.6	13.3	9.0	1.0
NEW MILFORD TOWNSHIP	821	8.5	5.5	24.5	6.8	8.0	5.5	3.5	2.4	5.5	17.1	6.1	5.0	1.6
HOP BOTTOM	159	11.3	8.2	18.9	2.5	26.4	4.4	1.9	3.8	5.0	9.4	1.9	6.3	0.0
LENOX	936	7.4	10.1	16.9	5.0	13.4	7.9	1.6	3.6	4.1	17.2	6.5	3.8	2.5
NICHOLSON	284	4.2	9.9	22.2	3.9	6.3	6.7	1.4	4.6	6.0	21.8	4.9	5.6	2.5
FACTORYVILLE	612	0.7	2.5	11.3	1.5	13.9	4.4	3.9	6.4	9.2	29.4	8.8	6.2	2.0
CORRIDOR	6,579	5.4	6.7	20.1	4.3	11.8	6.0	2.4	3.8	5.0	18.7	8.0	5.2	2.7
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3



2003 Transportation Improvement Program (TIP)

PENNDOT has programmed over a dozen projects on the region's 2003 Transportation Improvement Program (TIP) totaling over \$9.02 million dollars. Projects shown may not necessarily be for construction during the first four-year period, as is the case with the New Milford Railroad bridge and several others.

Table 15 below highlights the programmed projects. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year. Projects are shown from north to south.

Table 15: 2003 TIP Projects (\$000s)
ENDLESS MOUNTAINS CORRIDOR

Municipality	Project/Description	Year				Total
		03	04	05	06	
GREAT BEND TOWNSHIP	Construct Tourist Info Center	1,900				\$1,900
GREAT BEND TOWNSHIP	SR 1029 – Randolph Road bridge repair	1,250				\$1,250
GREAT BEND TOWNSHIP	SR 1029 – Randolph Road bridge replacement			150	50	\$200
GREAT BEND TOWNSHIP	SR 1037 – DuBois Creek bridge replacement				700	\$700
NEW MILFORD TOWNSHIP	SR 1012 – Salt Lick Creek bridge replacement			150	50	\$200
NEW MILFORD BOROUGH	SR 1016 – New Milford RR Bridge replacement		40			\$40
NEW MILFORD BOROUGH	SR 1016 – Salt Lick Creek bridge replacement			150	50	\$200
NEW MILFORD TOWNSHIP	SR 2061 – Tinley Lake Road bridge replacement			150	50	\$200
HARFORD TOWNSHIP	PA 547 – Nine Partners Creek bridge replacement	800				\$800
HARFORD TOWNSHIP	PA 547 – Leslie Creek bridge replacement				700	\$700
LENOX TOWNSHIP	Install signal at PA 92 and SR 106	250				\$250
LENOX TOWNSHIP	SR 2039 – Millard Creek Bridge replacement			150	50	\$200
NICHOLSON TOWNSHIP	SR 1015 – Fieldbrook Creek bridge replacement	760				\$760
NICHOLSON TOWNSHIP	Tunkhannock Creek bridge replacement		1,220			\$1,220
CLINTON TOWNSHIP	SR 2012 – Lithia Valley Creek bridge replacement			150	50	\$200
CLINTON TOWNSHIP	SR 2012 – South Tunkhannock Creek br			150	50	\$200

Source: PENNDOT District 4-0



Corridor Action Plan

Like most of Susquehanna County, the Endless Mountains Corridor is continuing to evolve as a bedroom community for the Scranton and Binghamton urban areas. The other significant trend not necessarily evident in the Census data is the growth in goods movement (particularly rail freight) through the corridor. The following are suggested draft actions to be considered in the corridor:

- I-81 has 6 interchanges in Susquehanna County. All of the associated interchange ramps need to be brought up to current standards. The Gibson exit in particular is becoming a problem. Additionally, the Great Bend/Hallstead interchange was not designed to accommodate the level of traffic it is currently experiencing.
- There are problems from time to time when I-81 is shut down or closed due to an accident or inclement weather. During these times, an ITS system would be helpful in routing drivers onto alternative routes, such as US 11.
- In Lenox Township southbound on I-81, there is an s-curve where numerous accidents have occurred.
- The railroad bridge in Great Bend has been programmed on the 2003 TIP. There is a need to incorporate pedestrian facilities as part of the design of the new structure.
- The intersection of US 11 and PA 107 with US 6 needs to be addressed. Geometric deficiencies at US 11 have turning radii that are substandard for tractor trailers.
- A signal may be needed at the intersection of US 11 with the Lackawanna Trail - SR 1010 (Tunnel Hill Road) in Clinton Township.
- The intersection of US 11 with PA 92 in Nicholson needs improvement with respect to access management and turning radii for trucks.
- The rail structures along PA 107 in Wyoming County need to be improved.
- Residents in northern Susquehanna County would like to eventually see a 3-lane roadway between Hallstead and Great Bend; however, there are problems related to obtaining the necessary property rights in order to close driveways along the roadway. Plans have been submitted to create a center turn lane in the area. There is new development taking place along this portion of the corridor, particularly near the intersection with PA 171.
- There has been some discussion with the construction of a park and ride facilities in the Great Bend area to eliminate the potential for parked cars under the I-81 bridges.
- There has also been some interest expressed for some type of fixed route transit service between New Milford and the Hallstead/Great Bend area, according to county transportation stakeholders.
- The growth in through rail freight traffic on the CP Rail line will dictate the need for capacity-adding improvements, specifically through Susquehanna County. CP Rail and NS have recently added passing sidings to the south near Dalton; however, more are needed on the 30-mile segment of the line between Binghamton and New Milford. The addition of passing sidings, as well as signalization of that portion of the corridor will do much to improve the line's capacity by allowing for shorter headways and greater density of traffic.



- Related to rail freight is the need to enhance the bulk terminal capabilities at New Milford. Some minor investment should be considered for paving, lighting and fencing to make the facility more attractive to new business, in addition to helping local traffic.
 - If the rail facilities in New Milford are improved, the I-81/US 11/PA 492 intersections will worsen. The intersection with PA 848 is also currently poor.
- Area tourist promotion agencies should use the new Welcome Center in promoting tourist attractions in Susquehanna County and throughout the Northern Tier. Economic development interests should also consider ways to connect with Welcome Center users.
- The pending designation of NY Route 17 to interstate status of I-86 in Chemung and Tioga Counties dictates that municipalities along the corridor prepare for this designation and the improvement it will bring to transportation in the Northern Tier. Good connections to an improved roadway network will serve to reduce the area's isolation from the major market areas of Binghamton and Elmira, NY.
- The attractiveness of the corridor – indeed Susquehanna County – for residential development should increase as Baby Boomers move into their retirement years and continue to move into areas such as Harford, Clinton and Lenox Townships. These rapidly growing townships should consider the need for developing and implementing land use ordinances to guide anticipated growth and development and avoid some of the unwanted effects that high accessibility can create.
- Stakeholders have indicated a desire for new bridges in several areas, including at Hallstead, Great Bend and at New Milford. The development of this plan should address whether these needs have already been met by the implementation of the 2003 TIP.
- The region's bicycle/pedestrian plan recommended improved pedestrian connectivity in the county's boroughs, which in this case would include Hallstead, Great Bend, New Milford and Hop Bottom. The borough planning commissions (if existing) should each conduct "walkable audits" of their communities to determine where there are deficiencies and how they can be funded and improved.
- The region's bicycle/pedestrian plan also identified U.S. 11 as a potential candidate for inclusion as part of Pennsylvania's statewide "BicyclePA" network of cross-state bicycle routes. NTRPDC would need to work with the state's bicycle and pedestrian coordinator in identifying the steps necessary for consideration of U.S. 11's inclusion in this nascent bike/ped network.

THE WILLIAMSON ROAD CORRIDOR

The Williamson Road Corridor

The Williamson Road Corridor is 36.8 miles in length and is the third-longest high priority corridor through the Northern Tier. It directly serves 9 Tioga County municipalities and is one of the region’s three major north-south routes. The Corridor is centered on US 15, the major transportation facility. Major communities in the corridor include Lawrenceville, Mansfield, Blossburg and Liberty Borough. In 1995, Congress designated the corridor as part of the National Highway System, or NHS. PENNDOT has functionally classified US 15 as a rural principal arterial, while the Northern Tier’s Rural Transportation Advisory Committee has classified the roadway as being part of the Primary Commercial network, as well as an export area main route.



CORRIDOR PROFILE ▶



Tioga

- Lawrenceville
- Lawrence Twp
- Tioga Twp
- Bloss Twp
- Blossburg
- Covington Twp
- Liberty Twp
- Mansfield
- Richmond Twp



In statewide corridor planning, the corridor is recognized as part of PENNDOT’s Lumber Heritage Corridor. The corridor is on the region’s bicycle/pedestrian network between Lawrenceville and Blossburg Boroughs as well as the state BicyclePA network between Lawrenceville and Tioga. The Corridor traverses Tioga State Forest as well as Army Corps properties in Tioga and Lawrence Townships.

US 15 travels north to Rochester, NY although the U.S. designation ends at Painted Post, NY. Between Interstates 80 and 86, US 15 has both four-lane limited access sections, and two-lane sections with at-grade intersections. In 1987, PENNDOT opened a “Super 2” expressway around Mansfield. The entire corridor through will eventually become a four-lane expressway and become designated as I-99.

South of the Northern Tier region, US 15 will eventually become part of the I-99 Corridor through Lycoming County before joining the “Susquehanna Thruway” south to Harrisburg.

The Endless Mountains Transportation Authority has three runs in the Williamson Road Corridor, serving Lawrenceville, Tioga, Mansfield, Covington and Blossburg. Corridor residents living Mansfield and north also have access to service to the Arnot Mall through EMTA. EMTA also maintains and operates a bus maintenance facility in the area.



EMTA's Mountie Express is an important service that provides students and faculty of Mansfield University with fare free service throughout the university campus and downtown Mansfield. The shuttle service also provides transportation to commercial areas south of the borough and on Fridays, there is an evening run to Wellsboro.

Intercity bus service is also available via Trailways at Tioga Junction and Mansfield.

Key Findings

The improvement of the US 15 roadway to interstate status is possibly the single most significant transportation project currently in Tioga County, if not the Northern Tier. During NTRPDC's 1999 round of transportation stakeholder meetings, attendees expressed the fact that "PENNDOT is improving our roadways in dramatic terms." Nowhere have improvements been as dramatic as in the Williamson Road Corridor, where tens of millions have been invested in bringing the US 15 roadway up to interstate status. The completion of this north-south route will provide Northern Tier residents with increased mobility between major metropolitan areas while separating local traffic from through movements as freight moves between Canada and the mid-Atlantic states. Its role as a vital link to the I-86 Corridor in New York also underscores its interstate importance and the need to plan for future transportation and intermodal connectivity.

Key Trends and Issues in the Williamson Road Corridor include:

- PENNDOT is spending more money on the Williamson Road Corridor (nearly \$100 million over the next four years) than any other Northern Tier Corridor. The investment will eventually serve to bring the corridor to interstate status, linking I-80 to the south with I-86 in New York and bringing markets in Canada and the mid-Atlantic closer together.
- The corridor functions as a major north-south trade route, as evidenced by the results of a recent origin-destination survey that found considerably higher levels of through traffic (32 percent) than on competing corridors such as US 219 in North Central Pennsylvania.
- There are several groups interested in extending a bicycle and walking trail down into the Mill Creek area from Mansfield. It could be designed to descend the hill and tie into some of the walking areas at the dam and overlook area between the two dams. (Presently, this area is barricaded.) The construction of an environmental education center in the Mill Creek area is also being explored.
- The Mansfield area has been Tioga County's "hot spot" in recent years in terms of commercial land development. The borough - now the county's largest municipality - has experienced a tremendous amount of development on Business 15 as a result of



improvements to the corridor from Wal-Mart south to the PA 660 bridge. There is also a new commercial plaza just south of Mansfield across from the fire hall.

- As part of the modernization of the US 15 Corridor, PENNDOT has constructed and opened a new Welcome Center in Tioga Township. The 10,000 square foot Welcome Center - which opened April 24, 2003 - will be a tremendous resource for the Northern Tier's tourism industry. The new center is accessible to southbound traffic only and its location will directly benefit US 6 as well as US 15. The new Welcome Center should become a focal point for tourism development, not just for the Northern Tier but the entire Commonwealth. (PENNDOT is now completing a Welcome Center/Rest Area Strategic Plan. Efforts to continue to maximize the role of the Welcome Center as a media for regional promotion should be advanced.)
- Outside of the immediate corridor, the general Wellsboro area is expected to benefit from the US 15 improvements by making Hills Creek State Park and the Pennsylvania Grand Canyon more accessible to tourist related and recreational travelers.
- A larger concern, also outside of the corridor, includes the corridor improvement schedule on the New York side south of Presho. Studies for the relocation of US 15 from the PA/NYS Line at Lawrenceville to the existing four lane, limited-access expressway at Presho, NY, are being conducted in conjunction with the PA portion of the US 15/I-99 Corridor from north of Tioga to Lawrenceville. At this time, NYS does not have funding in place to cover completion of the construction of a four lane, limited-access expressway from the PA/NYS Line to Presho; therefore, no projection of completion is currently available.
- In response to the anticipated changes that the improved US 15 roadway will bring, there are currently two multi-municipal comprehensive plans being developed:
 - The Lower Tioga River Valley Regional Planning Commission involves members from the municipalities of Lawrenceville and Tioga Boroughs, as well as Tioga and Lawrence Townships. The communities adopted a joint comprehensive plan in March 2004. The development of a joint zoning ordinance is also a possibility.
 - A second joint comprehensive plan involves the municipalities of Mansfield Borough, Richmond Township and Covington Township.

Each plan represents an excellent opportunity to establish a desired land use vision and direction, including economic development strategies.

- There is currently an intercity bus stop (Trailways) in Mansfield at the Wal-Mart located three miles south of town. Mansfield University students cannot walk there, and must take an EMTA bus. Downtown parking is an issue for intercity bus service in Mansfield.
- EMTA plans to start a commuter service in the future from Tioga County to Williamsport.
- The presence of Mansfield University in the corridor impacts corridor statistics on journey to work modes, travel times, age group distribution, and economic sector activity. The borough itself and its immediate environs have been a growth spot in Tioga County, particularly south of the borough.

- Signage, particularly large billboards, is an issue along the corridor, most notably the large signs in the Blossburg area that do not advertise Tioga County enterprises.



Public Input

The Northern Tier's public involvement efforts in 1999 raised several issues among transportation stakeholders in the Williamson Road Corridor. Key among these include needed safety improvements at US 15's intersection with PA 287*, and the coordination with New York Department of Transportation (NYSDOT) on ongoing improvements to the roadway north of the state line. The Tioga County focus group also noted the importance of US 15 to economic development efforts related to tourism, farming and manufacturing.



Traffic Volumes

As already mentioned, the US 15 roadway is included as one of PENNDOT's 28 corridors of statewide significance. As part of the development of its own long range plan (PennPlan), PENNDOT divided the US 15 Corridor into "Super-segments" which coincide with the roadway's junctions with other roadways on the National Highway System (NHS) or where the corridor crosses a county line.

Also as part of PennPlan's development, a level of service (LOS) analysis was performed for each so-called "Super-segment" in the US 15 Corridor. The charts below illustrate historical and projected LOS for key super segments. Historical data is given for years 1993 to 2000 and was used to project service for 2010 and 2025.

As shown in Table 1, LOS categories are divided into three segments, A-D, E, and F. A-D indicates that traffic on the roadway is above capacity, and free-flowing. A road is nearing capacity and becoming more congested at LOS E. At LOS F, the road is at or over capacity, and a sign that the roadway is overcrowded.

Table 1: Level of Service Definitions

LOS	Capacity	Volume/Capacity Ratio
A-D	Above Capacity	0 - .89
E	Nearing Capacity	.90 - .99
F	At/Over Capacity	≥ 1

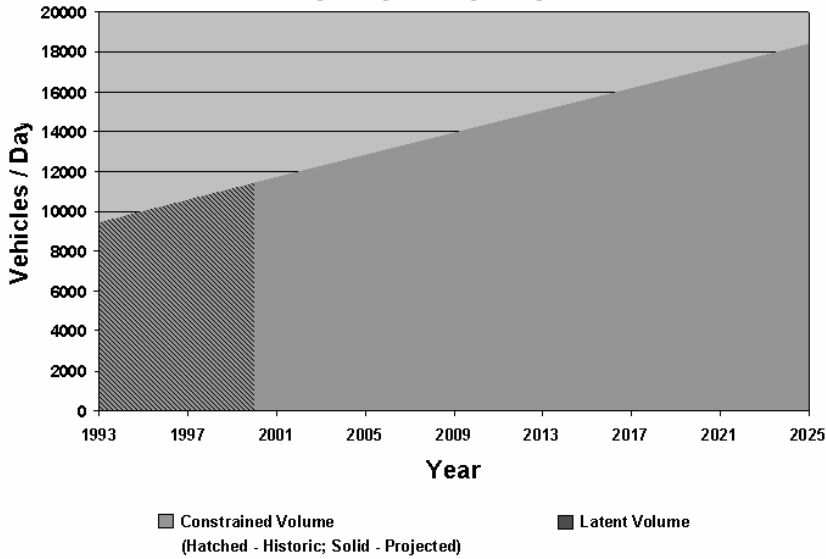
US 15 in Tioga County generally carries 12,800 vehicles per day. Trucks represent 23.5 percent of the traffic stream. By 2010, traffic volumes will increase to 34,000 vehicles per day, an annual increase of 16.5 percent. Congestion is not anticipated to become an issue on US 15 through the year 2025.

* This situation has been addressed since these comments were issued in 1999.



Historic and Projected Traffic Volumes

US Route 15, Tioga County, From Tioga County Line to US Route 6



According to information from PENNDOT's HPMS, the corridor should operate free of congestion through the year 2025.

Historic and Projected Traffic Volumes

US Route 15, Tioga County, From US Route 6 to New York Border

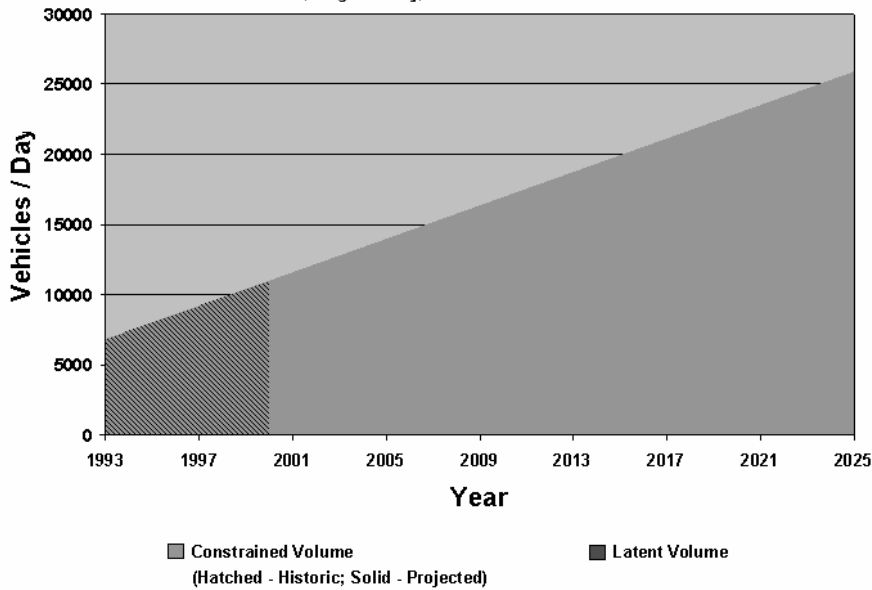


Table 2 shows the change in traffic volumes historically for selected years in the Williamson Road Corridor.



**Table 2: Annual Average Daily Traffic
WILLIAMSON ROAD CORRIDOR**

LOCATION	1993	1997	2000
LAWRENCEVILLE	7,497	8,318	12,090
BLOSSBURG	9,769	10,512	12,973

In November 2002, PENNDOT conducted an origin destination study on US 15 at the intersection with PA 49. The project was done as part of a larger effort to determine north-south freight flows on US 219 and competing corridors such as I-79 and US 15. The study results showed that both the northbound and southbound sites on US 15 have a higher portion of through trucks as opposed to local trucks.* Of the through traffic, 70 and 73 percent of northbound trucks and autos respectively have O-D pairs that can also be accessed through the US 219 corridor. For southbound movements, those percentages drop to 36 and 24 percent. Overall, the O-D study concluded that there are considerably higher levels of through traffic on US 15 (32 percent) as opposed to US 219 (18 percent).

Table 3 and

Table 4 below provide more information on the findings.

**Table 3: US 15 Corridor NB Origin Destination Data
WILLIAMSON ROAD CORRIDOR**

Vehicle Type	Trip Purpose				Trip Frequency				
	Commuter	Business	Personal	3+ times/week	1-2 times/week	1-4 times/mo.	<1 mo	<1 yr	
AUTO, LOCAL	No. 394	108	110	176	215	55	54	37	28
	%	27.4	27.9	44.7	55.3	14.1	13.9	9.5	7.2
AUTO, THRU	No. 72	1	25	46	1	5	16	18	27
	%	1.4	34.7	63.9	1.5	7.5	23.9	26.9	40.3
TRUCK, LOCAL	No. 59	2	56	1	34	11	8	3	3
	%	3.4	94.9	1.7	57.6	18.6	13.6	5.1	5.1
TRUCK, THRU	No. 67	0	66	1	19	21	13	5	8
	%	0.0	98.5	1.5	28.8	31.8	19.7	7.6	12.1

Source: PENNDOT O/D Study, November 2002

* A "through" trip was deemed to be any trip that originated on or south of I-80 and on or north of I-86, and vice versa.



**Table 4: US 15 SB Origin Destination Data
WILLIAMSON ROAD CORRIDOR**

Vehicle Type	Trip Purpose			Trip Frequency					
	Commute	Business	Personal	3+ times/week	1-2 times/week	1-4 times/mo.	<1 mo	<1 yr	
AUTO, LOCAL	No. 254	57	66	131	112	41	42	37	21
	%	22.4	26.0	51.6	44.3	16.2	16.6	14.6	8.3
AUTO, THRU	No. 146	2	57	87	5	16	20	49	56
	%	1.4	39.0	59.6	3.4	11.0	13.7	33.6	38.4
TRUCK, LOCAL	No. 36	0	35	1	18	4	9	4	1
	%	0.0	97.2	2.8	50.0	11.1	25.0	11.1	2.8
TRUCK, THRU	No. 68	0	63	4	17	16	14	10	11
	%	0.0	92.6	5.9	25.0	23.5	20.6	14.7	16.2

Source: PENNDOT O/D Study, November 2002

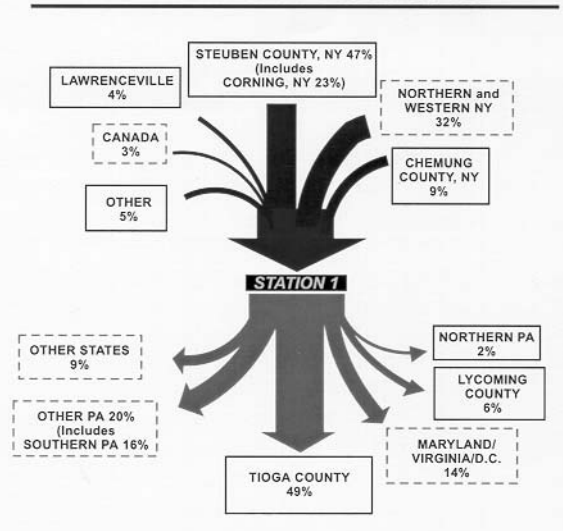
A similar origin-destination survey was conducted in August 1996 as part of the planning work for the modernization of US 15. The study then found that the percentage of through truck traffic was higher than that of automobile traffic. This finding corroborated the anecdotal evidence provided by both local residents and trucking firms that US 15 was a popular route for interstate freight transportation.

**Journey to Work Trip Statistics
(Mode Split and Travel Time)**

Given the decentralized development patterns and employment destinations in the Northern Tier, it is understandable that commuters rely on the private automobile. Over 89 percent of commuters in the region use on the automobile as a means of getting to work – 77 ½ percent of these drive alone. These numbers are nearly identical in the Williamson Road Corridor, where 85.7 percent rely on the private automobile.

Key journey to work trip statistics from the 2000 Census are explained in the following bullets and in Table 5:

Origins and Destinations of Southbound Automobiles on U.S. Route 15





- The percentage of people in the corridor who walk to work is twice as high as the regional average. This is due to the student population at Mansfield, where the percentage of people walking to work is nearly one third. Mansfield has more people walking to work than any other municipality in the Northern Tier. The boroughs of Blossburg and Lawrenceville follow at 8.8 and 5 percent, respectively.
- Covington Township is the most auto-dependent municipality in the corridor, with 95.3 percent relying on the private automobile. This includes 86.6 percent who drive alone.
- Use of carpooling is the highest in the more remote municipalities of Tioga Township (19 percent) and Bloss Township (18 percent).
- Despite the availability of EMTA service in the corridor, only 9 people reported to the Census as using that mode of transportation to work. These responses were all from either Lawrenceville or Blossburg Borough.
- The percentage of people in the corridor who work from home is slightly lower than regional averages. However, Liberty Township recorded 10.7 percent of its workers age 16-plus as working from home. This is the highest such percentage in the corridor and is the fourth-highest rate found throughout the Northern Tier.

**Table 5: Mode Split (in %) - 2000
WILLIAMSON ROAD CORRIDOR**

LOCATION	Workers 16+	SOV	Carpool	Walk	Work at Home	Mean Travel Time (Min.)
LAWRENCEVILLE	262	75.2	13.4	5.0	4.6	21.9
MANSFIELD	1,400	55.6	8.4	32.7	2.0	14.1
BLOSSBURG	599	78.6	9.5	8.8	1.5	22.7
CORRIDOR	5,772	74.0	11.7	9.5	3.8	--
NORTHERN TIER	79,103	77.5	12.0	4.7	4.6	--

Commuters in the Williamson Road Corridor generally have shorter travel times to work than their counterparts across the Northern Tier. Almost half of corridor commuters travel less than 15 minutes to work, compared to the regional average of just 34 percent. Again, the presence of Mansfield University can be seen at work here.

Table 6 and Table 7 and the bullets below show how journey to work travel times have increased in the corridor over the past decade.

- The percentage of people requiring more than 90 minutes to get to work increased from 25 to 123 persons, or 472 percent. Liberty Township has a corridor leading 6.3 percent of its commuters in this category.
- The percentage of corridor commuters traveling longer than an hour to work increased by 220 percent between 1990 and 2000. Every single corridor municipality had more people requiring longer than an hour to get to work in 2000 than in 1990.
- Blossburg Borough and Liberty Township have the corridor's highest percentage of people taking longer than an hour to get to work, at 8.6 and 8.4 percent, respectively.

- Conversely, nearly 16 percent of Blossburg Borough residents travel less than 5 minutes to get to work, the second-highest percentage in the corridor, behind only Mansfield, at 18 percent.



**Table 6: Travel Time to Work (in minutes) - 2000
WILLIAMSON ROAD CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
BLOSSBURG	46.9	30.5	13.9	3.9	4.7
MANSFIELD	66.4	22.6	5.8	3.3	2.0
LAWRENCEVILLE	22.4	50.4	24.4	2.0	0.8
CORRIDOR	45.3	31.7	17.9	2.8	2.3
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 7: Travel Time To Work (in minutes) – 1990
WILLIAMSON ROAD CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
BLOSSBURG	60.0	26.3	10.4	2.2	1.0
MANSFIELD	72.8	19.2	6.8	1.3	0.0
LAWRENCEVILLE	19.1	44.7	34.6	1.1	0.5
CORRIDOR	46.4	28.8	16.5	2.0	0.5
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Vehicles Available per Household

Rates of vehicle ownership in the corridor parallel the regional experience. Table 8 shows the vehicle availability for selected Corridor municipalities while the following bullets highlight items of interest found in the data:

- Blossburg Borough has the corridor's highest rate of people without access to a car - higher even than Mansfield Borough - at 11.2 percent versus 9.7 percent.
- Over a quarter of Bloss and Tioga Township residents have access to three or more vehicles - the highest percentage in the corridor. These municipalities are also the same ones with the corridor's highest carpooling rates.
- Most corridor municipalities reported having a majority of two-vehicle households. In three municipalities however, the majority have access to only one vehicle. These include the boroughs of Blossburg (40.1 percent), Lawrenceville (43.7 percent), and Mansfield (46.3 percent).

**Table 8: Vehicles Available Per Household (in %) – 2000
WILLIAMSON ROAD CORRIDOR, Selected Municipalities**

LOCATION	None	One	Two	Three or More
BLOSSBURG	11.2	40.1	36.1	12.6
MANSFIELD	9.7	46.3	28.8	15.2
LAWRENCEVILLE	6.5	43.7	34.2	15.6



CORRIDOR	6.8	34.6	39.6	19.0
NORTHERN TIER	6.3	32.7	42.1	18.9

Commutation Patterns

Employment options in the Williamson Road Corridor are primarily centered on one of three municipalities, including Mansfield, Blossburg and Wellsboro. An additional 13 percent follow the corridor north to jobs in New York State, primarily in Steuben County.

The following additional analysis can be drawn from the Census data, including:

- Just over 80 percent work at destinations in Tioga County.
- Only 2 percent of corridor commuters travel to Bradford County for employment. A majority of these (40 percent) are destined for Troy.
- During the 1990s, the estimated number of corridor workers commuting to Lycoming County more than tripled, from 70 to 233.
- Corridor workers are commuting to a greater number of destinations for employment compared to 10 years ago. In 1990, 37 percent of corridor workers were employed within the municipality of residence. By 2000, that percentage had dropped to just 29 percent. Mansfield still has the highest proportion, at 59 percent, followed by Blossburg, at 42 percent.

Table 9 shows the top ten destinations for commuters in the Williamson Road Corridor between 1990 and 2000. These ten encompass over 86 percent of all work destinations for those living in the corridor.

Table 9: Top Commuter Destinations – 1990, 2000
WILLIAMSON ROAD CORRIDOR

Location	Percentage Share	
	1990	2000
1. MANSFIELD	30.5	25.0
2. BLOSSBURG	14.1	12.6
3. WELLSBORO	12.7	12.3
4. RICHMOND TWP	9.2	8.4
5. STEUBEN COUNTY, NY	7.4	7.9
6. CHEMUNG COUNTY, NY	4.6	4.9
7. LYCOMING COUNTY	1.5	4.0
8. TIOGA TWP	3.2	3.5
9. LAWRENCEVILLE	3.1	2.8
10. LIBERTY	2.2	2.5
10. COVINGTON TWP	0.3	2.5

Source: U.S. Census Bureau, PA State Data Center, 1990, 2000



Population Trends

After recording a 22 percent increase during the 1960s, population growth in the corridor has remained relatively stable. During the 1990s, the corridor registered a population gain of 309 people for a gain of just 2.4 percent. This is roughly similar to the 2.5 percent increase experienced over the entire region. Lawrenceville Borough recorded the corridor's largest population increase, at 30.4 percent with the addition of 146 persons. Lawrence Township added the most people however, with an increase of 202 persons. Mansfield dropped by 3.6 percent but still remained the largest municipality in Tioga County. (Mansfield University in Mansfield also has a student enrollment of approximately 3,100.) Areas that lost population over the past decade are primarily in the southern part of the corridor and include Bloss Township, Blossburg Borough, Liberty Township and Tioga Township.

Table 10 shows the population trends of major corridor communities against corridor and regional averages.

**Table 10: Population Trends
WILLIAMSON ROAD CORRIDOR**

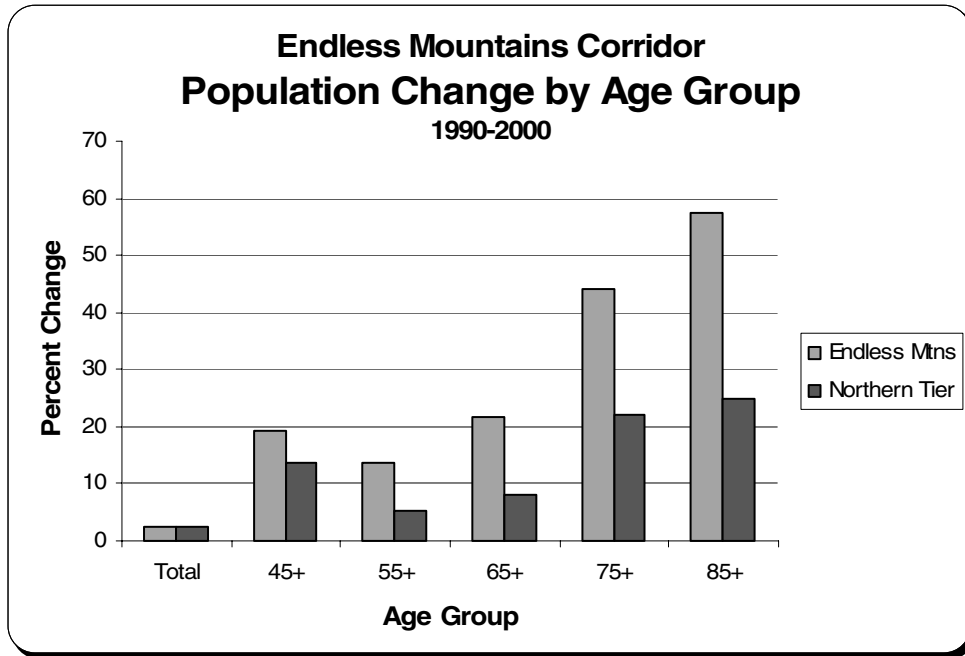
LOCATION	1970	1980	1990	2000	% CHANGE 90-00
LAWRENCEVILLE	605	327	481	627	30.4
MANSFIELD	4,114	3,322	3,583	3,411	(3.6)
BLOSSBURG	1,753	1,757	1,571	1,480	(5.8)
CORRIDOR	12,373	12,243	12,669	12,978	2.4
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

Age Group Distribution

While population growth in the corridor is slightly less than the region's rate, the composition of the corridor's population has been aging dramatically. The corridor's 55-plus population has been growing at rates much greater than the region as a whole (13.6 percent versus 5.2 percent).



Mansfield Borough is an exception to this, as the borough’s 55-plus population actually *declined*



by 6.4 percent. There are 3,378 people in the Northern Tier over age 85; 159 of these (4.7 percent) are in the Williamson Road Corridor. While the 75-85 age group had the greatest rate of increase, the 45-54 age group added the most numbers, with 385 new persons.

The figure above and Table 11 highlight growth among different age groups within the corridor. Growth among the corridor’s older age groups is increasing at greater rates than throughout the region. The figure above also speaks to the population decline among younger age groups.

**Table 11: Percent Increase by Age Group - 1990-2000
WILLIAMSON ROAD CORRIDOR**

LOCATION	Total	45-54	55-64	65-74	75-84	85+
LAWRENCEVILLE	30.4	89.2	29.3	55.0	104.3	1,000*
MANSFIELD	(3.6)	33.0	(2.8)	(15.1)	(16.2)	71.4
BLOSSBURG	(5.8)	(1.1)	(4.8)	(26.5)	80.5	37.5
CORRIDOR	2.4	30.6	2.9	8.5	41.1	57.4
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Median age is another indicator of the Corridor’s aging demographic. All 9 corridor municipalities experienced increases in median age during the 1990s. Liberty Township had the highest recorded median age, at 42.6, while Mansfield Borough, with its large student population, had the lowest, at 21.8. Corridor municipalities with the greatest increase in median

* from 1 to 11

age over the past decade (Bloss Township and Liberty Township) are also the same ones that have experienced the greatest population decrease, highlighting the loss of young people in those two communities.



**Table 12: Median Age, 1990 – 2000
WILLIAMSON ROAD CORRIDOR**

LOCATION	1990	2000
LAWRENCEVILLE	31.5	37.0
MANSFIELD	21.3	21.8
BLOSSBURG	37.8	41.2

Racial Composition

The racial composition of the Williamson Road Corridor to a large extent mirrors the percentages from across the Northern Tier. An assessment of concentrations of minority populations throughout the Northern Tier is an important consideration from an environmental justice standpoint as major transportation projects must take into consideration the potential for disproportionate impact on both minority and low-income populations. Table 13 provides an overview of the corridor's racial composition, while the following bullets describe some anomalies within the corridor:

- Hispanics comprise the corridor's largest minority population, with a corridor population of 76. Almost half of these are in Mansfield Borough.
- There are 163 Blacks in the corridor, 87 percent of which are also in Mansfield Borough.
- The Corridor has a greater percentage of Black and Asian populations than the region as a whole.
- Bloss Township is 100 percent white, the only corridor municipality where that condition exists.

**Table 13: Racial Composition – (in %)
WILLIAMSON ROAD CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
BLOSSBURG	1,480	99.1	0.3	0.5	0.1	0.1	0.1
MANSFIELD	3,411	93.3	4.2	1.0	0.3	0.8	0.4
LAWRENCEVILLE	627	99.2	0.3	0.5	0.2	0.3	0.0
CORRIDOR	12,978	97.3	1.3	0.6	0.2	0.4	0.2
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Income

Average incomes in Endless Mountain Corridor households generally aligns with that of the region overall, although there are, however, a few anomalies that stand out in the corridor:



- Mansfield Borough, given its college town status, has the corridor's highest percentage of households making less than \$25,000 a year (48.1 percent) as well as the highest percentage earning over \$100,000, at 5.1 percent.
- There were no households from Bloss Township in 2000 who reported an annual income in excess of \$100,000.
- Richmond Township had the corridor's highest average annual household income in 2000, at \$38,393. Mansfield Borough had the lowest, at \$27,500.

Table 14 shows the income breakdown for three municipalities in the Williamson Road Corridor against corridor and regional averages.

Table 14: Per Capita Income - 2000
WILLIAMSON ROAD CORRIDOR

Location	House holds	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
BLOSSBURG	651	43.2	31.0	17.2	5.4	3.2
MANSFIELD	938	48.1	28.7	12.4	5.8	5.1
LAWRENCEVILLE	269	39.4	33.1	17.1	7.8	2.6
CORRIDOR	4,751	37.2	34.6	17.0	7.3	3.9
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major economic developments in the corridor have included the May 1997 arrival of Ward Manufacturing which located an automated casting plant in Lawrence Township, employing approximately 400. The 300,000 square foot facility in Lawrence Township plant added to Ward's existing presence in the corridor with its facility in Blossburg, where there are approximately 800 jobs available. Ward Manufacturing, in fact, is the largest employer in Tioga County. Mansfield University is also a major employer in the corridor and region, as is Corning Glass in Corning, NY. The glass maker in this Steuben County town employs approximately 4,600.

Table 15, Table 16 and Table 17 describe some of the corridor's economic and labor force conditions.

- There are only 5 persons in the Armed Forces from the corridor, as of the 2000 Census.
- The corridor's unemployment rate is only slightly higher than the regional rate.
- Corridor employment by industry also roughly mirrors regional trends, with the exception of employment in Agriculture, which is 3.0 percentage points lower than the region, and Arts & Entertainment, which is 3.1 percentage points higher.
- The presence of Ward Manufacturing can be seen in the percentage of corridor workers employed in occupations related to Production, Transportation and Material Moving. This occupation employs 47 percent of corridor workers, nearly double the regional rate.

In Lawrence Township, the percentage is 71 percent and in Bloss Township it involves 81 percent.



- Mansfield Borough workers fill primarily Management, Sales, and Service sector jobs .

Table 15: Civilian Labor Force Characteristics – (2000)
WILLIAMSON ROAD CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
BLOSSBURG	1,145	43.5	56.5	95.4	4.3	0.2
MANSFIELD	2,957	42.0	58.0	87.6	12.4	0.0
LAWRENCEVILLE	491	40.7	59.3	94.8	5.2	0.0
CORRIDOR	10,486	38.7	61.3	93.3	6.6	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1



**Table 16: Employment by Occupation - (2000)
WILLIAMSON ROAD CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
BLOSSBURG	617	22.2	14.3	20.9	1.6	9.6	62.6
MANSFIELD	1,502	31.7	23.0	32.5	0.9	4.3	15.1
LAWRENCEVILLE	276	26.1	16.7	28.6	0.0	8.0	41.1
CORRIDOR	5,997	24.8	16.2	24.8	1.3	9.2	47.0
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

**Table 17: Employment by Industry by Place of Residence - (2000)
WILLIAMSON ROAD CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
BLOSSBURG	617	2.3	5.5	28.4	1.3	11.5	7.0	1.1	5.3	4.5	23.0	5.7	3.1	1.3
MANSFIELD	1,502	0.4	2.5	6.7	1.3	10.2	3.1	7.0	3.3	2.4	38.1	16.8	3.1	5.2
LAWRENCEVILLE	276	0.7	2.2	32.6	0.7	17.4	5.4	0.7	1.4	9.1	15.6	6.5	4.3	3.3
CORRIDOR	5,997	2.8	5.0	21.7	2.1	13.2	5.8	2.5	2.8	3.5	24.4	9.0	3.7	3.5
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

There are 28 projects programmed on the 2003 TIP for Tioga County. Eleven of these lie within the Williamson Road Corridor. The 11 projects constitute nearly \$100 million in investment, by far the single largest total for any corridor in the Northern Tier. Improvements to the corridor are highlighted by section G20 of the roadway, which will see the development of a 2-mile, 4-lane divided highway between Tioga and Tioga Junction.

Table 18 below highlights the tremendous amount of investment PENNDOT has programmed for the Williamson Road Corridor. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.



**Table 18: 2003 TIP Projects (\$000s)
WILLIAMSON ROAD CORRIDOR**



Municipality	Project/Description	Year				Total
		03	04	05	06	
COVINGTON	PA 660 6.1 mi overlay	800				\$800
LAWRENCE	Structure over PA 49	2,600				\$2,600
MANSFIELD	US 6 slide repair	690				\$690
MANSFIELD	US 6 resurface 5.2 mi			1,800		\$1,800
VARIOUS	US 15 add lane Mansfield to Tioga	884				\$884
VARIOUS	SR 6015 sec. 20A		6,000			\$6,000
VARIOUS	SR 6015 sec. 52A	6,300				\$6,300
VARIOUS	SR 6015 sec. 52B 4.2 mi		8,700			\$8,700
VARIOUS	SR 6015 sec. G20	3,300				\$3,300
VARIOUS	SR 6015 sec. D52 0.5 mi		16,000			\$16,000
VARIOUS	SR 6015 sec. G20 1.9 mi	2,250	44,750			\$47,000
TOTAL		14,224	78,050	1,800	0	\$94,074

Source: PENNDOT District 3-0

Corridor Action Plan

- PENNDOT and the area's elected officials should continue to monitor NYSDOT's plans for the US 15 corridor between Corning and the state line. While the state has programmed the construction of a \$100 million, full-speed stack interchange with I-86, no funding has been programmed for improvements to the corridor south of Presho.
- The Tioga County Planning Commission and NTRPDC should continue to be actively involved in the two multi-municipal comprehensive plans taking form in the middle of the corridor. Potential recommendations from these two plans should have a large role in shaping land use in the corridor over the next two decades.
- The pending designation of NY Route 17 to interstate status of I-86 in Chemung and Tioga Counties dictates that municipalities along the corridor prepare for this designation and the improvement it will bring to transportation in the Northern Tier. Good connections to an improved roadway network will serve to reduce the area's isolation from the major market areas of Binghamton and Elmira, NY.



A southerly view of US 15 from Presho, NY



- A park and ride facility at Lawrenceville for those commuting to New York should eventually be considered.
- Pedestrian facilities are important in a borough like Mansfield, where a corridor-leading 32.7 percent walk to work. The Borough should work with NTRPDC and the PENNDOT District 3-0 Bicycle Pedestrian Coordinator in planning and prioritizing pedestrian improvements.
- Billboards can be a form of visual blight, particularly the current signs in the Blossburg area. Local municipalities should consider addressing this issue as community comprehensive plans are being revised and updated.
- The difficulty of Mansfield University students attempting to take advantage of intercity bus service is an important intermodal issue that should be addressed by university officials and NTRPDC, as necessary.



Pennsylvania's newest Welcome Center

- Area tourist promotion agencies should use the new Welcome Center in promoting tourist attractions in Tioga County and throughout the Northern Tier. Economic development interests should also consider ways to “connect” with Welcome Center users.
 - Northbound access to the new welcome center is a problem as traffic must loop around using the PA 287 interchange. This is not a practical issue for this LRP but is something that should be noted for now.

The North Branch Corridor

The North Branch Corridor is 73 miles in length and is the second-longest high priority corridor through the Northern Tier. It directly serves 17 municipalities and is one of the region's three major north-south routes. The Corridor is centered on US 220, the major transportation facility. Major communities in the corridor include Dushore, Athens and Sayre and the county seats of Laporte and Towanda. It provides an important link between the Williamsport and Elmira, NY metropolitan areas. Congress has designated the segment between US 6 and NY 17 as part of the National Highway System. In statewide corridor planning, the corridor is recognized as part of PENNDOT's Lumber Heritage Corridor.



CORRIDOR PROFILE ►



- Bradford**
- Sayre
- Athens
- South Waverly
- Athens Twp
- Ulster Twp
- N. Towanda Twp
- Towanda
- Towanda Twp
- Monroe Twp
- Monroeton
- Albany Twp
- New Albany
- Sullivan**
- Cherry Twp
- Dushore
- Laporte Twp
- Laporte
- Davidson Twp

PENNDOT has functionally classified US 220 as a rural minor arterial, while the Northern Tier's Rural Transportation Advisory Committee has classified the roadway as being part of its Priority Commercial network. The corridor is a major route on the Endless Mountains Transportation Authority's network. The 5.6-mile Towanda-Monroeton Shippers Lifeline is an important local rail line, as is the former Lehigh Valley line (Norfolk Southern) serving industries in the corridor in central Bradford County.

The US 220 corridor has two limited access bypasses that were constructed in 1973-75 around Towanda and Athens/Sayre. Business 220 provides access to the Bradford County Airport in Towanda while the main roadway directly serves two of the region's Keystone Opportunity Zone sites in Sayre and Cherry Township. The Corridor traverses State Game Land #13 in Davidson and Laporte Townships in Sullivan County. Wyoming and Tioga State Forests are also located in the Corridor.

South of the Northern Tier region, US 220 will eventually become part of the I-99 Corridor between I-80 in Williamsport and the Pennsylvania Turnpike in Bedford.



Key Findings

The North Branch Corridor - as one the Northern Tier's largest - contains some of the region's most significant transportation facilities (e.g., US 220, Bradford County Airport, Towanda-Monroeton Shippers Lifeline, etc.). It is a north-south pipeline for Bradford and Sullivan Counties. Its role as a vital link to the future I-86 Corridor in New York also underscores its key importance and the need to plan for future transportation and intermodal connectivity.

Key Trends and Issues in the North Branch Corridor include:

- At 73 miles in length, the North Branch Corridor is one of the most important corridors in the region for long range planning. Major employment and residential areas, coupled with major transportation facilities have large implications towards planning for the movement of people and goods. The future of the corridor must be considered in the context of how well it connects people and jobs (such as the two KOZs in the corridor) as well as the public's need to access a major east-west roadway in NY Route 17. These are important issues that this LRP must address.
- The long distances that commuters must travel to work, coupled with the region's dependence on truck shipments, dictate that roadway improvements such as truck climbing lanes be considered in the corridor. Corridor stakeholders have identified several spot improvements that should be considered in this regard.
- The corridor's largest growth rate occurred back in the 1950s. Since that time, population growth has lagged behind the overall region. The corridor's fastest-growing (Laporte Township, Cherry Township) and fastest-declining (Laporte Borough, Dushore Borough) municipalities are in Sullivan County.
- The availability of safe bicycle and pedestrian facilities will be important not only for recreational purposes, but in journey to work trips as well. Sayre and Laporte have unusually high percentages – as high as three times the regional average - of people who walk to work.
- In spite of being in a region that is reliant on the private automobile for transport, many in the corridor do not have access to cars. Dushore and Sayre have averages twice the regional average of those without access to a car.
- The corridor's laborshed is generally centered on the Sayre/Towanda areas. The greater Sayre area is the only area in the Northern Tier that is a net importer of employees from New York State.
- The composition of the corridor's population is aging at a dramatic rate, which introduces implications for the accommodation of serving the transportation needs of a rural and elderly population.
- Household income levels within the corridor closely aligns with those of the region as a whole.



Laddsburg, looking south



Public Input

The Northern Tier's public involvement efforts in 1999 raised several issues among transportation stakeholders in the corridor. Key among these includes the perception for an upgraded US 220 between Towanda and the New York border. While the two bypasses around Towanda and Athens/Sayre did much to reduce truck traffic through those communities, stakeholders believe more work is needed in the corridor, particularly between Towanda and Sayre. Specific problem



Sayre Bypass

areas in this portion of the corridor include:

- Direct access from the US 220 bypass in Towanda to the Towanda Area Senior High School.
 - Both the Towanda School District and Towanda Borough Council are in favor of a project that would provide a link between US 220 and immediately west of the school, near Plank Road. Proponents agree that such a link would ease traffic congestion in Towanda. A planned \$28 ½ million school consolidation would concentrate even more traffic on the campus as other school district facilities are shut down.
- The at-grade crossing at PA 199 in Athens Township.
- Possible need for a traffic signal at US 220's intersection with Wolcott Hollow Road in the Village of Green's Landing, Athens Township.

Other options were offered for the northern segment of the corridor, including:

- Make US 220 a four-lane facility between Towanda and Sayre
- Widen existing US 220
- Construct a bypass around the Village of Ulster
- Lower speed limits, particularly through the Village of Ulster.



Ulster

For the southern portion of the corridor,

stakeholders pointed to a need for additional truck climbing lanes at several locations, including the north side of Sonestown Mountain, Laddsborg, Novasel Hill and north of Dushore in Cherry Township. Sullivan County stakeholders identified needs for passing lanes, wider shoulders and improved drainage north of Dushore in Cherry Township, and better signage near the Village of Laddsborg in Albany Township. In Davidson Township in the Village of Muncy Valley, a new visitor's center has been proposed as the corridor effectively

serves as a gateway into the Endless Mountains Tourism Region from Williamsport and points south.



A portion of US 220 from Towanda south to the Lycoming County line is part of the Northern Tier's Bicycle and Pedestrian Network. As such, the region's Rural Transportation Advisory Committee has prioritized the roadway for shoulder improvements during routine Betterment or reconstruction projects. The corridor provides connections with roadway-based corridors such as BicyclePA Route Y (which primarily follows US 6) and off-road trails through the Wyoming State Forest in Laporte Township.

There are 4 Keystone Opportunity Zones within the Northern Tier – two lie within the North Branch Corridor, one each in Bradford and Sullivan County. In Sullivan County, the Endless Mountains Industrial Complex is a 12-acre "KOEZ"* site in Cherry Township. The complex is just 2 miles east of US 220 via SR 1006 Birch Creek Road and was the former home of an Endicott Johnson shoe factory that closed in 1989. The site is currently being used as a business incubator with leased space to 3 small start-up businesses. An October 2001 report listed on-site circulation improvements between PA 487 and the site's parking lot and freight docks as needed improvements. Specifics include improved site distance onto PA 487, which would include roadside grading and potential utility relocation. The site has no access to other modes of transportation and thus the existing and future shippers at the site are heavily reliant on motor carrier modes of shipping. There are currently no TIP projects programmed.

A second KOZ site includes the Northern Bradford Authority site in Sayre Borough. The Borough and Authority envision a multiuse plan for the KOZ site for the development of commercial office space on the south side of a 25-acre site that fronts Thomas Avenue and its associated residential neighborhoods. The Thomas Avenue area of Sayre is one of the borough's more depressed neighborhoods and the Authority hopes that the KOZ site will help to generate reinvestment in the community through job creation. An intermodal transfer facility for bulk commodities such as stone and salt and an extension of GE Railcar's operation have both been discussed as development options for the site. Recommendations from a recent (January 2004) intermodal transportation feasibility and investment analysis for the site propose ongoing marketing of the site as a rail-served facility.

The site's current access has been deemed to be adequate for existing users of adjacent sites. A new facility (such as a warehouse or business incubator) may increase both auto and truck traffic and should be monitored for potential transportation improvement needs accordingly. Lower intensity forms of intermodal use would in turn generate fewer trucks and the resultant need for costly infrastructure upgrades. Other recommendations include the installation of a switch on the Norfolk Southern Railroad to provide rail access to both the KOZ site and GE Railcar. From a public transportation perspective, it has been recommended that EMTA coordinate with Authority and Sayre Borough officials on the availability of service between the site and low-income neighborhoods of the Valley.

* Keystone Opportunity Expansion Zone (KOEZ) programs are designed to stimulate economic growth by attracting industries to areas which are designated to be free from all state and local taxes for a period of up to 12 (twelve) years. They are designated by local communities and approved by the state and consist of a partnership between each community and region among state and local taxing bodies, school districts, economic development agencies and community-based organizations.



Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years in the US 220 Corridor.

**Table 1: Annual Average Daily Traffic
NORTH BRANCH CORRIDOR**

LOCATION	1993	1997	2000
SOUTH WAVERLY	9,692	10,128	8,784
ATHENS	10,814	12,216	12,710
TOWANDA	2,509	6,792	7,635
MONROE	3,018	3,526	4,174
NEW ALBANY	3,018	3,303	4,174
DUSHORE	3,123	2,960	3,304
LAPORTE	1,638	3,303	2,485

Source: NTRPDC GIS, 2003.

Journey to Work Trip Statistics (Mode Split and Travel Time)

Given the decentralized development patterns and employment destinations in the Northern Tier, it is understandable that commuters rely on the private automobile. Over 89 percent of commuters in the region use on the automobile as a means of getting to work – 77 ½ percent of these drive alone. These numbers are nearly identical in the corridor. Average commuter travel times range from a low of 15.2 minutes in North Towanda Township to a high of 27 minutes in Davidson Township.

Key journey to work trip statistics from the 2000 Census are explained in the following bullets:

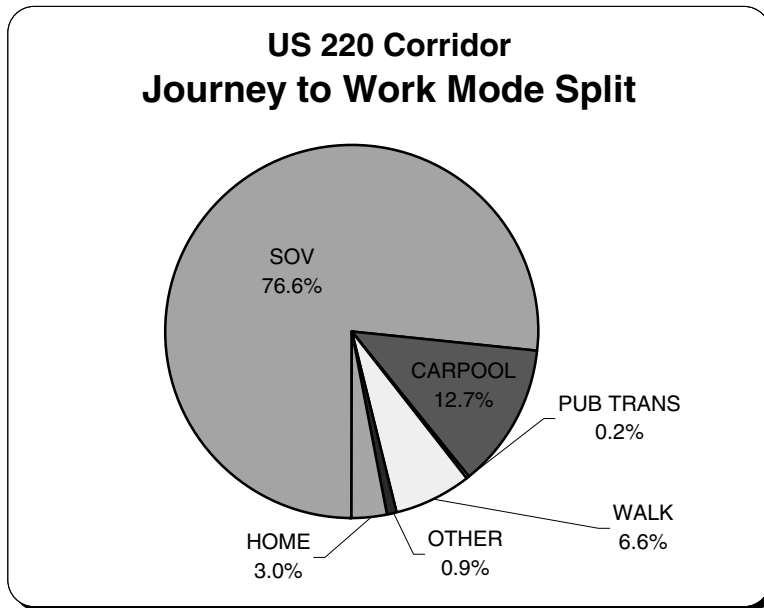
- Athens Township is one of the most auto-dependent municipalities in the region, with 84 percent driving alone to work.
- Nearly half (48 percent) of all the Corridor commuters who carpool are in Sayre and Athens Borough/Township. The highest percentage of carpoolers in the Corridor are in Laporte Township, at 19.4 percent.
- Of the 803 commuters in the Corridor who walk to work, 64 percent are from Sayre and Towanda Boroughs.
- Towanda Borough had the greatest number of people working from home (58), while Monroe Township had the greatest percentage (7 percent). Sayre and New Albany Boroughs ranked last in the percentage of work at home employees among Corridor municipalities, at less than 1 percent each.
- Endless Mountains Transit Authority's longest fixed route (26 miles) is in the North Branch Corridor. Routes 10, 15, 40, 50 all serve the corridor, yet only 26 people in the corridor reported in the 2000 Census as using public transportation as a means of getting to work. Most of these (9) were in Athens Township.



**Table 2: Mode Split (in %) - 2000
NORTH BRANCH CORRIDOR**

LOCATION	Workers 16+	SOV	Carpool	Walk	Work at Home	Mean Travel Time (Min.)
LAPORTE	104	76.0	3.8	17.3	2.9	23.1
DUSHORE	289	72.0	12.0	10.7	5.2	24.0
TOWANDA	1,365	76.4	8.1	10.0	4.2	16.2
ATHENS TWP	2,100	84.3	10.9	1.2	2.0	21.3
SAYRE	2,572	70.4	12.6	14.7	1.0	15.5
CORRIDOR	12,204	76.6	12.7	6.6	3.0	--
NORTHERN TIER	79,103	77.5	12.0	4.7	4.6	--

**Figure 1: Journey to Work Mode Split – 2000
NORTH BRANCH CORRIDOR**



With major employment centers in the greater Sayre and Towanda areas, the North Branch Corridor has just over half of its employees commuting less than 15 minutes to work. This is high compared to the regional average of only 34 percent, although the number has been declining since 1990. Table 3 and Table 4 show how journey to work travel times have increased in the corridor over the past decade.

- The number of people in the corridor traveling less than 10 minutes to work declined from 4,465 to 3,592, or 20 percent.
- In 1990, there were only 30 people in the corridor traveling longer than 90 minutes to work. By 2000, that total had increased to 177, or a 490 percent increase.
- Four Sullivan County municipalities have over 9 percent of their commuters traveling longer than an hour to work: Cherry, Dushore, Laporte Borough and Laporte Township.
- Nearly a quarter of Laporte Borough commuters travel less than 5 minutes to work – the highest such percentage in the corridor.



- Towanda Borough has less than 2 percent of its workforce commuting over an hour to work, the third-lowest percentage in the Northern Tier.

Table 3: Travel Time to Work (in minutes) - 2000
NORTH BRANCH CORRIDOR

LOCATION	< 15	15-29	30-59	60-89	90+
LAPORTE	48.5	15.8	24.8	10.0	1.0
DUSHORE	42.0	24.5	24.5	6.9	2.2
TOWANDA	56.6	26.0	15.5	1.4	0.5
ATHENS TWP	45.2	31.9	17.4	3.3	2.3
SAYRE	64.6	14.6	18.5	2.0	0.3
CORRIDOR	51.2	25.2	19.0	3.0	1.5
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

Table 4: Travel Time To Work (in minutes) – 1990
NORTH BRANCH CORRIDOR

LOCATION	< 15	15-29	30-59	60-89	90+
LAPORTE	52.1	25.5	17.0	5.3	0.0
DUSHORE	52.2	21.0	24.3	2.5	0.0
TOWANDA	72.6	18.0	7.9	1.2	0.5
ATHENS TWP	52.2	28.2	18.5	1.1	0.0
SAYRE	72.1	13.5	13.5	0.9	0.0
CORRIDOR	56.6	24.6	16.7	1.7	0.3
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Vehicles Available per Household

Corresponding to households' dependence on the automobile is the availability of vehicles per household. Table 5 shows the vehicle availability for selected Corridor municipalities.

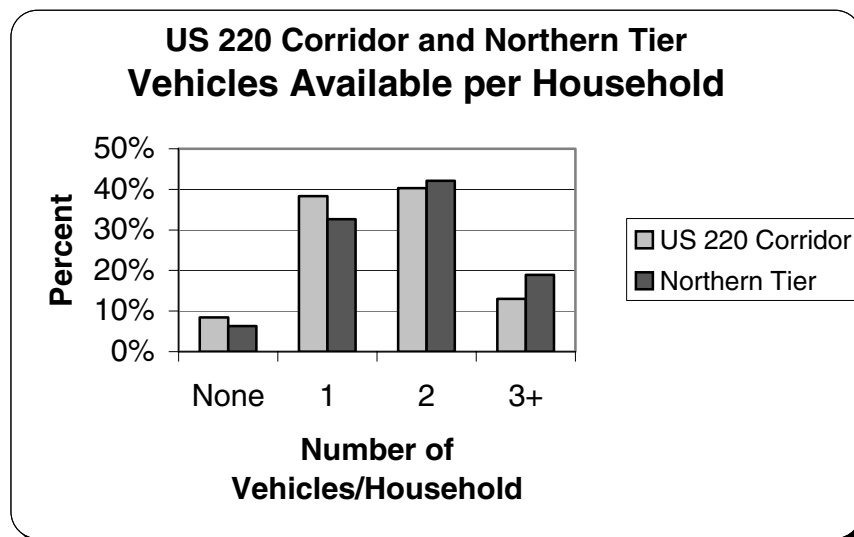
- While almost 19 percent of Northern Tier households have three or more vehicles, only 13 percent of Corridor households do.
- Four municipalities have over 10 percent of their households with no car: North Towanda Township, Dushore, Athens and Sayre.
- North Towanda Township reports 16.4 percent of households without access to a vehicle, the highest such percentage in the Corridor and fourth-highest throughout the entire Northern Tier.
- Nearly 30 percent of households in Laporte Borough have access to three or more vehicles, the highest such percentage in the Corridor.
- Most Corridor municipalities reported having a majority of households as being two-vehicle households. Four communities recorded the greatest percentages of one-vehicle households, those being: Athens, Dushore, Towanda and Sayre boroughs.



**Table 5: Vehicles Available Per Household (in %) – 2000
NORTH BRANCH CORRIDOR, Selected Municipalities**

LOCATION	None	One	Two	Three or More
LAPORTE	4.5	28.1	38.2	29.2
DUSHORE	12.9	42.9	33.4	10.9
TOWANDA	8.8	46.9	36.7	7.7
ATHENS	13.1	44.0	31.9	11.0
SAYRE	13.3	45.2	34.7	6.8
CORRIDOR	8.4	38.3	40.3	13.0
NORTHERN TIER	6.3	32.7	42.1	18.9

**Figure 2: Vehicles Available Per Household – 2000
NORTH BRANCH CORRIDOR**



Commutation Patterns

Commutation data from the 2000 U.S. Census show various statistics with regard to journey to work trips. This data shows that the US 220 laborshed is generally centered on the main employment centers of Sayre and Towanda Boroughs and their surrounding environs, even though Bradford County overall is a net exporter of employees. This area of the region especially offers a prime example of where county and state lines are irrelevant to the commuting patterns of workers. For example, a 1993 study by Mansfield University’s Rural Services Institute found that the only minor civil divisions (Towns) in New York that export more than 10 percent of their workforces to Pennsylvania include Barton in Tioga County and Chemung in Chemung County. These towns are located immediately north of the Sayre/Athens area and are part of its laborshed.

The following additional analysis can be drawn from the Census data, including:

- Nearly three quarters are employed at destinations in Bradford County.



- Only 8 percent of corridor employees travel to Sullivan County for work.
- Dushore Borough is the largest Sullivan County destination for corridor employees, with 42 percent of all county employment.
- Nearly 13 percent of corridor employees commute to destinations out of state for jobs in Tioga, Broome and Chemung Counties.
- Nearly 30 percent work in the same municipality in which they reside.

Table 6 shows the top ten destinations for commuters in the North Branch Corridor. These ten encompass over 80 percent of all work destinations for those living in the corridor.

Table 6: Top Commuter Destinations, 1990, 2000
NORTH BRANCH CORRIDOR

Location	Percentage Share	
	1990	2000
1. SAYRE BOROUGH	28.6	22.2
2. TOWANDA BOROUGH	14.8	15.6
3. ATHENS BOROUGH	9.4	7.1
4. TIOGA COUNTY NY	6.4	6.3
5. CHEMUNG COUNTY NY	4.4	5.7
6. ATHENS TOWNSHIP	1.5	4.9
7. BURLINGTON TOWNSHIP	0.0	4.9
8. DUSHORE BOROUGH	3.4	3.6
9. LAPORTE BOROUGH	1.9	2.0
10. WYSOX TOWNSHIP	1.9	1.9
11. BROOME COUNTY, NY	1.8	1.8
12. LYCOMING COUNTY	1.6	1.5

Source: U.S. Census Bureau, PA State Data Center, 1990, 2000.

Population Trends

Population growth in the North Branch Corridor has been flat over the past 50 years, decreasing by only 585 persons, representing a 2 percent decrease between 1950 and 2000. This contrasts with the 24 percent increase across the entire Northern Tier region for the same time period. The Corridor grew by only 376 persons over the past decade - a negligible 1.3 percent increase. The Corridor directly serves four of the seven largest municipalities in the Northern Tier, including the largest two, Sayre Borough and Athens Township. Athens Township grew by 120 percent in the 30 years after the post war to become the second-largest municipality in the Northern Tier.

The fastest-growing municipalities in the Corridor however are in Sullivan County, and include the Townships of Laporte (up 75 percent since 1990), and Cherry (up 16 percent). Sayre was the only borough in the Corridor to see an increase in population over the past decade.

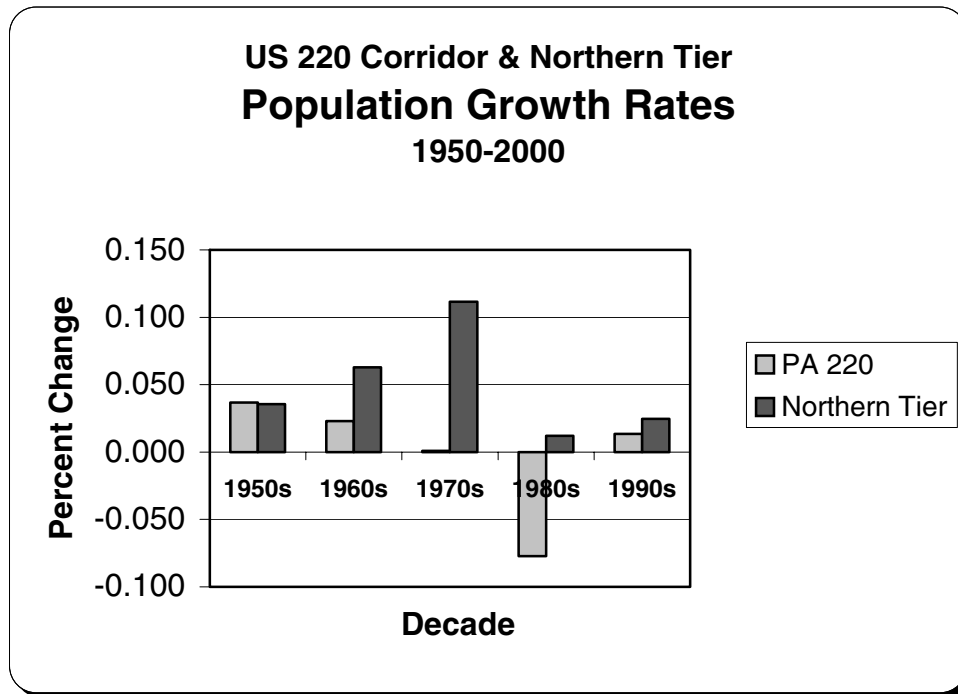
Municipalities recording the largest population losses since 1990 included the Sullivan County boroughs of Laporte (down 11.6 percent) and Dushore (down 10.2 percent). Table 7 shows the population trends of major corridor communities against corridor and regional averages.



**Table 7: Population Trends
NORTH BRANCH CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
LAPORTE	207	230	328	290	(11.6)
DUSHORE	718	692	738	663	(10.2)
TOWANDA	4,224	3,526	3,242	3,024	(6.7)
ATHENS TWP	4,007	4,994	4,755	5,058	6.3
SAYRE	7,473	6,951	5,791	5,813	0.4
CORRIDOR	30,324	30,352	28,007	28,383	1.3
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

**Figure 3: Population Growth Rates, 1950-2000
NORTH BRANCH CORRIDOR**



Age Group Distribution

While population growth in the corridor is less than half of the region’s rate, the *composition* of the corridor’s population has been aging dramatically. One municipality in the corridor serves a microcosm of this phenomenon. Laporte Borough – the oldest municipality in the region – experienced an overall population decline of nearly 12 percent since 1990, yet its population aged 85+ grew by over a quarter. Athens Township saw its elderly population grow by over 90 percent for the same period. There are 3,378 people in the Northern Tier over age 85; 654 of these (19 percent) are in the North Branch Corridor.



**Table 8: Percent Increase by Age Group - 1990-2000
NORTH BRANCH CORRIDOR**

LOCATION	Total	45-54	55-64	65-74	75-84	85+
LAPORTE	(11.6)	100	(7.1)	(7.3)	10.8	26.1
DUSHORE	(10.2)	30.2	(15.6)	(19.5)	(1.4)	(13.0)
TOWANDA	(6.7)	32.0	(23.6)	(11.7)	10.8	55.3
ATHENS TWP	6.3	23.1	30.7	7.1	25.9	90.5
SAYRE	0.4	40.3	(12.4)	(26.1)	8.6	39.4
CORRIDOR	1.3	34.0	8.2	(7.3)	10.8	26.1
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Median age is another indicator of the Corridor's aging demographic. Sixteen of the 17 Corridor municipalities registered increases in median age over the past 10 years, the lone exception being Laporte Borough. The Sullivan county seat saw its median age decline from 64 to 58.7 – still the highest such figure in the Northern Tier. In fact, three of the region's oldest municipalities are in this Corridor, and include Laporte Borough (58.7), North Towanda Township (48.8) and Laporte Township (46.2).

**Table 9: Median Age, 1990 – 2000
NORTH BRANCH CORRIDOR**

LOCATION	1990	2000
LAPORTE	64.0	58.7
DUSHORE	38.1	42.2
TOWANDA	34.5	37.8
ATHENS TWP	35.5	39.5
SAYRE	37.2	38.9

Racial Composition

The racial composition of the corridor to a large extent mirrors the percentages from across the Northern Tier. An assessment of concentrations of minority populations throughout the Northern Tier is an important consideration from an environmental justice standpoint as major transportation projects must take into consideration the potential for disproportionate impact on both minority and low-income populations. Table 10 provides an overview of the corridor's racial composition, while the following bullets describe some anomalies within the corridor:

- Hispanics comprise the corridor's largest minority population.
- The Corridor has a greater percentage of Hispanic, Asian and Indian populations than the region as a whole. Over 37 percent of all Asians in the region reside in the North Branch Corridor as opposed to 26 percent of those of Indian ancestry.
- There are 200 Hispanics and 134 Blacks in the Corridor. These populations are centered on the Sayre/Towanda Borough areas.



- All but three of New Albany Borough's residents are white, the highest municipal percentage of white population in the Corridor.

Table 10: Racial Composition – (in %)
NORTH BRANCH CORRIDOR

Location	Total	White	Black	Hispanic	Indian	Asian	Other
LAPORTE	290	99.0	0.00	0.00	0.69	0.00	0.00
DUSHORE	663	97.7	0.15	0.15	1.21	0.00	0.00
TOWANDA	3,024	96.3	0.86	1.20	0.36	1.19	0.13
ATHENS TWP	5,058	96.9	0.40	0.67	0.16	0.16	0.32
SAYRE	5,813	96.9	0.62	0.71	0.17	0.17	0.15
CORRIDOR	28,383	97.4	0.47	0.70	0.42	0.42	0.16
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Income

Given its size (17 municipalities), 1999 average annual household income levels in the Corridor closely align with those found throughout the Northern Tier region. There are, however, a few anomalies that stand out in the corridor:

- The corridor has four municipalities where more than 10 percent of households make more than \$100,000 a year: North Towanda Twp, Monroe Twp, Laporte Borough and South Waverly Borough.
- Sayre Borough had the most households (45) making more than \$200,000 a year, but Laporte Borough had the greatest percentage, at 3½.
- The Sullivan County seat of Laporte Borough had the corridor's highest average annual household income, at \$43,750, while Dushore Borough had the lowest, at \$26,635. Laporte Borough has the fourth-highest average annual household income in the region.
- North Towanda Township had the corridor's greatest percentage of households making more than \$100,000 a year (11.6), as well as the most making less than \$10,000 a year, at 18 percent.

Table 11: Per Capita Income - 2000
NORTH BRANCH CORRIDOR

Location	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
LAPORTE	86	30.2	30.2	18.6	10.5	10.4
DUSHORE	335	47.5	26.0	15.5	7.5	3.6
TOWANDA	1,278	34.5	36.2	18.0	6.4	4.9
ATHENS TWP	1,981	30.8	32.6	17.5	10.8	8.3
SAYRE	2,535	36.7	36.8	15.6	7.1	3.7
CORRIDOR	11,355	35.3	34.4	17.2	7.0	6.0
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1



Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Aside from the KOZ sites already mentioned, major economic developments in the corridor have included the 1999 arrival of Mill's Pride, a factory in Athens Township employing approximately 300 people. Another major employer, Leprino Foods, recently invested \$25 million in a plant expansion. There are currently 200 jobs available at Leprino's South Waverly plant. The Corridor is also home to the largest employer in Bradford County – Guthrie Healthcare System. Guthrie has 2,730 employees and has added jobs to its payroll in recent years. It is also in the middle of an extensive construction and renovation project in Sayre. The Corridor also directly serves Laporte's The Highlands, which with over 100 employees is one of the largest employers in Sullivan County. Dushore's Kauffman Footwear Corporation, a boot maker, moved to Canada in 1997, eliminating 250 jobs from the community.

Table 12, 13 and 14 describe some of the corridor's economic conditions.

- Over 15 percent of the region's labor force resides in the North Branch Corridor.
- Of the 60 people in the Armed Forces in the Northern Tier, 11 are from the corridor with 9 coming from Athens Borough.
- Employment and unemployment rates for the corridor are similar to those at the regional level.
- Table 14 shows the importance of the Public Administration and Arts & Entertainment employment sectors to Laporte Borough residents, as opposed to the manufacturing and agricultural sector. Agricultural sector employment in the corridor overall is much lower than regional averages.
- The Education employment sector is stronger in the North Branch Corridor than the region as a whole.

Table 12: Civilian Labor Force Characteristics – (2000)
NORTH BRANCH CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
LAPORTE	245	52.2	47.8	91.5	8.5	0.0
DUSHORE	558	42.5	57.5	91.3	8.7	0.0
TOWANDA	2,367	39.8	60.2	96.8	3.2	0.0
ATHENS TWP	3,851	41.1	58.9	95.4	4.6	0.0
SAYRE	4,546	38.3	61.7	94.9	5.1	0.0
CORRIDOR	22,279	40.7	59.3	94.4	5.5	0.1
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1



Table 13: Employment by Occupation - (2000)
NORTH BRANCH CORRIDOR

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
LAPORTE	107	33.6	25.2	25.2	0.9	3.7	11.2
DUSHORE	293	24.2	17.1	22.2	1.7	14.7	20.1
TOWANDA	1,380	36.0	12.2	23.0	0.9	5.1	22.7
ATHENS TWP	2,165	36.9	12.3	19.9	0.4	10.4	20.1
SAYRE	2,661	31.6	15.9	21.2	0.6	5.0	25.7
CORRIDOR	12,463	29.8	15.5	20.6	0.8	8.9	24.4
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

Table 14: Employment by Industry by Place of Residence - (2000)
NORTH BRANCH CORRIDOR

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment Other	Public Administration	
LAPORTE	107	0	8.4	6.5	0.9	11.2	1.9	0	1.9	6.5	34.6	9.4	5.6	13.8
DUSHORE	293	3.4	8.5	20.5	3.4	11.3	3.1	2.1	5.1	4.1	18.8	5.5	10.0	4.4
TOWANDA	1,380	0	2.0	25.4	0.9	12.0	3.6	3.2	3.9	7.0	28.0	4.5	4.9	4.6
ATHENS TWP	2,165	2.5	5.2	21.3	3.1	9.8	5.3	1.4	3.7	4.3	33.6	4.2	3.1	2.4
SAYRE	2,661	0.9	1.8	26.9	2.6	12.0	4.0	1.7	1.9	3.5	34.8	5.0	3.7	1.2
CORRIDOR	12,463	2.1	4.7	25.7	2.0	12.0	3.8	1.7	2.9	4.2	28.1	5.0	4.7	3.1
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

There are a number of Highway Restoration projects programmed for the North Branch Corridor, totaling over \$30 million. One of the largest capital projects in the corridor includes the \$15 million construction of the River Street extension project in Towanda. The project will extend existing River Street north to Patterson Boulevard in North Towanda. The extension (to be called the John B. Merrill Parkway) will serve to make River Street a scenic travel route, which will alleviate traffic congestion on York and Main streets in the borough. The new route is not meant to be a truck or bus route, but will function as a reliever for local traffic flows, especially during shift changes. The project will also include an 8-foot wide paved walking trail from Wysox to North Towanda and is expected to be completed in November 2004.



Other large projects include Susquehanna River bridge replacements at Ulster Township and Athens Borough. Table 15 below highlights all the major projects on the current Transportation Improvement Program programmed for the corridor. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.

**Table 15: 2003 TIP Projects
NORTH BRANCH CORRIDOR**


Municipality	Project/Description	Year				Total
		03	04	05	06	
ATHENS BORO	SR 1056 Susq Bridge	870	3,500	2,900		\$7,270
CHERRY TWP	US 220 Reconstruction	300		330		\$630
DAVIDSON TWP	US 220 Restoration			450		
SAYRE/ATHENS	Bypass patching	1,250				\$1,250
TOWANDA	Bypass resurfacing		2,320			
TOWANDA	River Street Extension	6,711	1,000			\$7,711
ULSTER TWP	SR 1022 Bridge replace	755	645	700	11,250	\$13,350

Source: PENNDOT District 3-0

Corridor Action Plan

- PENNDOT should coordinate with the STC, Bradford County Commissioners, economic development authorities, planners and the public on the need for making US 220 a four lane facility between Towanda and New York State. Regional sponsors should continue to present this “need” and any of its changing dimensions to the State Transportation Commission (STC) in future program update hearings.
- PENNDOT should coordinate with Ulster Township Supervisors and related stakeholders on the short-term need for lower speed limits through the Village of Ulster.
- The portion of the US 220 roadway between the intersections of PA 199 and Wolcott Hollow Road should be studied with respect to accident history, site distance problems, and access management issues.
- The pending designation of NY Route 17 to interstate status of I-86 in Chemung and Tioga Counties dictates that municipalities along the corridor, especially those in the Valley, prepare for this designation and the improvement it will bring to transportation in the Northern Tier. Communities in the Valley in particular have benefited in the past by favorable geography, and good connections to an improved roadway network will serve to reduce the Valley’s isolation from the major market areas of Binghamton and Elmira, NY. As such, PENNDOT should consider the feasibility of constructing a new interchange and park and ride lot in the Wildwood area with the future I-86. This improvement would accomplish several objectives, including,
 - Aiding commuters by encouraging carpooling
 - Alleviating truck traffic in Sayre Borough
 - Directing traffic directly to the Lehigh Industrial Site.



- Providing a potential location for employer-sponsored van pools.
 - Ensure adequate access between US 220 and the Endless Mountains Industrial Complex (KOEZ site) in Cherry Township, Sullivan County. PENNDOT maintenance personnel and/or District managers should visit the site to determine whether the existing deficiencies should be handled through the TIP or maintenance activities.
 - Install a rail switch to provide rail access between the Sayre KOZ site and the Norfolk Southern Railroad.
 - EMTA should coordinate with the Northern Bradford Authority and Sayre Borough officials on the provision of public transportation as the Sayre KOZ site is industrially developed.
 - The provision and availability of EMTA service in Sullivan County needs to be better marketed. Stakeholders believe it is something that appears to be experiencing growing use.
 - PENNDOT should consider the accommodation of bicycle and pedestrian modes during rehab/betterment projects on US 220 given its placement on the Northern Tier's bicycle and pedestrian network. Efforts to maintain safe sidewalks and crossings should be emphasized in communities with a high percentage of pedestrian commuters such as in Dushore, Towanda and Sayre Boroughs.
 - PENNDOT should coordinate with Towanda Borough and school district officials on the potential construction of a connector road between the US 220 bypass and the Towanda high school complex. This effort should ideally be initiated only after the River Street extension project has been completed and traffic has reached equilibrium.
 - PENNDOT should evaluate and consider the need for truck climbing lanes on US 220 at the following locations: Novasel Hill, north of Dushore Borough, the Village of Laddsburg in Albany Township, and on the north side of Sonestown Mountain. The latter two locations were identified as high priorities during transportation stakeholder focus group meetings in both Bradford and Sullivan Counties.
- 

Sonestown
- Additionally, US 220 may need to be widened between Sonestown and Muncy Valley in order to accommodate wider loads, particularly manufactured housing. There is a large housing manufacturer in Muncy Township that regularly ships on the corridor.
 - A park and ride facility is being planned for South Waverly Borough near Leprino. The new lot will primarily serve Leprino, although a TEA-21 trail project will be located there as well.

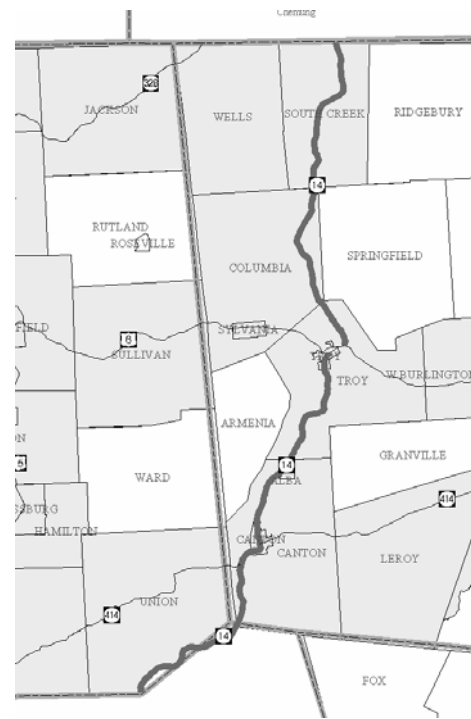


- The promotion and development of a Visitor's Center at Muncy Valley in Davidson Township should be undertaken only after other planned visitors centers in the region are completed.
- EMTA has noted that it was considering the possibility of using the Ithaca to Sayre to Towanda line for commuter traffic, by running a conversion railroad transit car along the line.
- During 2004, the Bradford County Office of Planning & Grants will be developing a countywide Open Space, Greenways, and Outdoor Recreation plan. The resources available in the North Branch Corridor should be used as a starting point in developing a network of trails and supporting infrastructure across the county.
- Several planning organizations such as NTRPDC, PENNDOT, NYSDOT, Athens Township and the Central Bradford Progress Authority should coordinate regarding the sale of the Blue Swan Airport and the site's ground transportation needs should the site be redeveloped by commercial or industrial interests.

THE W&E CORRIDOR

The W&E Corridor

The Williamsport & Elmira (W&E) Corridor is 42.9 miles in length and directly serves 8 Northern Tier municipalities, most of them in Bradford County. The Corridor is centered on PA 14, the corridor's major roadway facility. PA 154 is the other signed state route in the corridor. PA 14 also provides connections to other state routes such as US 6 and PA 514. Major communities in the corridor include the boroughs of Canton and Troy. The Corridor provides an important link between the Williamsport and Elmira, NY metropolitan areas and is a major commuter route between Bradford County and these areas. PENNDOT has functionally classified PA 14 as a Rural Minor Arterial while the Northern Tier's Rural Transportation Advisory Committee has classified the roadway as being part of its Primary Commercial Network and an export area secondary route. Portions of the corridor are also on the region's bicycle/pedestrian network. Segments of a new Bicycle PA route (J) will include PA 14 between the Tioga County line and PA 14's junction with PA 414 in Canton Borough.



CORRIDOR PROFILE ►



Bradford

South Creek Twp
Columbia Twp
Troy
Troy Twp
Alba
Canton Twp
Canton
Tioga
Union Twp

PA 14 is characterized as a two-lane highway with some climbing lanes and generally has posted speed limits of 55 mph. State Game Land #123 in South Creek Township and Troy's Alparon Park are the major natural and recreational areas in the corridor. Other important natural features in the corridor include Cases Glen, Fallbrook Road hiking trail and the Glen near Fallbrook. The state and county parks at Mt. Pisgah are also important features immediately outside of the corridor.

South of Tioga County, the corridor traverses Tiadaghton State Forest in Lycoming County on its way to US 15 towards Williamsport. North of Bradford County, PA 14 becomes Pennsylvania Avenue into downtown Elmira, NY.

This corridor was once traversed by the Pennsylvania Railroad, with coal and lumber moving between Williamsport and Elmira. Today, the railbed has reverted to original landowners.



Key Findings

The W&E Corridor is an important rural arterial for the communities along western Bradford County. The corridor is a major commuter link between Bradford County residents and employers in Elmira and Williamsport. It provides an important north-south alternate to US 220 to the east and US 15 to the west. In fact, the character and role of the corridor should evolve as US 15 eventually becomes I-99.

Key Trends and Issues in the W&E Corridor include:

- The future of the corridor must be planned both with the coming designation of I-99 as well as the changes in trip patterns it will bring. PA 14 already functions as a commuter corridor (nearly three quarters of South Creek Township residents commute to Chemung County for employment).
- The long distances that commuters travel to work, coupled with the region's dependence on motor carrier modes of shipping, dictate that roadway improvements such as truck climbing lanes be considered in the corridor. Corridor stakeholders have identified several spot improvements north of Troy and south of Canton that should be considered in this regard.
- The corridor's largest growth rate occurred during the 1970s, when it experienced a growth rate of over 7 percent. Since that time, population growth has lagged behind the overall region. Troy Borough (19.5 percent) and Columbia Township (7.9 percent) are the corridor's fastest-growing municipalities.
- The corridor has a greater percentage of people working from home than regional averages.
- With a majority of corridor commuters driving to Canton and Troy for employment, corridor commuters generally enjoy shorter journey to work travel times, with 45 percent traveling less than 15 minutes to work. Roughly one tenth travel to Elmira, but a large majority of these workers are from South Creek Township.
- Corridor population growth has been flat over the past 20 years.
- The corridor's racial composition is even more homogeneous than the Northern Tier, with 98.6 percent reported white.
- Household income levels within the PA 14 Corridor are generally lower than the region as a whole.
- Nearly one third of Canton Borough residents are employed in some kind of manufacturing activity, the highest rate in the corridor and higher than the regional average of 23 percent.
- At the time of the 2000 Census, Troy Borough had the region's second-highest unemployment rate.

Public Input

The Northern Tier's public involvement efforts in 1999 raised several issues among transportation stakeholders in the W&E Corridor. Given PA 14's role as a commuter corridor, the need for passing lanes between Troy and the New York border and south of Canton were raised by transportation stakeholders. Too many commuters are taking risks in passing slow



moving trucks during their commute. There is also some concern that more truckers are using the corridor to avoid the scales on U.S. 15, although a weigh station has been constructed in Canton. From a mobility standpoint, it has been expressed that the PA 14 Corridor provides for quicker travel times between Williamsport and northern Bradford County (as opposed to using U.S. 220). The need for alternate truck routes around Troy Borough has also been expressed. Residents in South Creek and Ridgebury Townships have voiced a desire for public transportation from Elmira. Chemung Transportation buses currently run to Wellsburg, NY but not into Pennsylvania. Opportunities for extension of service south into Bentley Creek have been voiced.

Efforts are currently underway for multi-municipal comprehensive plans in the corridor, including the municipalities of Troy Borough and Troy Township, as well as Canton Borough, Canton Township and Granville Township. Residents have witnessed positive changes within their portion of the corridor over the last 10-15 years, including a new lumber mill, veneer plant and basket plant. Major beneficial transportation changes over that same time period include the introduction of EMTA's Blue Buses and improvements at the intersection of U.S. 6 and PA 14. Residents are concerned, however, with the loss of commercial strength downtown and the corresponding development of strip retail along the corridor. Residents have voiced concern that the Troy area in particular is close enough to urban areas to attract new residents/commuters.

The eventual improvement and designation of U.S. 15 to interstate status will also impact the W&E Corridor. Area residents are already concerned about the role such communities as Canton and Troy will play as future bedroom communities between Elmira, Williamsport, Mansfield and Towanda. Information from Commuter Trends in Table 6 would appear to support this concern.

A portion of the W&E Corridor is included as part of the Northern Tier's Bicycle and Pedestrian Network. As such, the region's Rural Transportation Advisory Committee has prioritized the roadway for shoulder improvements during routine Betterment or reconstruction projects. The corridor provides connections with roadway-based corridors such as BicyclePA Route Y (which primarily follows U.S. 6). Furthermore, PENNDOT is planning a new BicyclePA Route (J), which will use a 4 ½ - mile portion of PA 14 between Canton and Lycoming County.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years in the PA 14 Corridor.

**Table 1: Annual Average Daily Traffic
W&E CORRIDOR**

LOCATION	1993	1997	2000
TROY	5,302	5,706	5,788
ALBA	4,137	4,399	4,384
CANTON	5,173	5,396	5,287

Journey to Work Trip Statistics - Mode Split and Travel Time



Given the decentralized development patterns and employment destinations in the Northern Tier, it is understandable that commuters have a reliance on the private automobile. Over 89 percent of commuters in the region rely on the automobile as a means of getting to work – 77 ½ percent of these drive alone. These numbers are nearly identical in the W&E Corridor. Average commuter travel times range from a low of 20.6 minutes in Troy Borough to a high of 27 minutes in South Creek Township.

Some journey to work trip statistics from the 2000 Census is as follows:

- Over 87 percent of Corridor commuters rely on a car to get to work, and nearly 77 percent drive alone. These numbers are nearly identical to percentages across the Northern Tier. Among corridor commuters, those from Alba Borough are most dependent on the single occupant vehicle, with over 80 percent using this mode of transportation.
- The highest percentage of carpoolers in the Corridor are also in Alba, at nearly 15 percent. There are no commuters from Alba who walk to work.
- Of the 234 commuters in the Corridor who walk to work, 68 are from Canton Borough. Canton Borough ranks 14th in the Northern Tier in the percentage of people to walk to work.
- All the corridor municipalities have a greater percentage of people working from home than the regional average of 4.6 percent. Canton Township had the greatest number of people working from home (58), while Columbia Township had the greatest percentage (9.2 percent). Columbia ranks 12th in the region in the percentage of people working from home.
- Only 8 people in the corridor reported using public transportation as a means of getting to work.
- EMTA Route 20 serves the residents of the W&E Corridor with runs between Canton, Troy and Towanda, using PA 14 and U.S. 6. Customers pay \$2 for a one-way ticket between Troy and Canton.

**Table 2: Mode Split (in %) - 2000
W&E CORRIDOR**

LOCATION	Workers 16+	SOV	Carpool	Walk	Work at Home	Mean Travel Time (Min.)
SOUTH CREEK	547	76.1	12.0	2.7	6.6	26.9
TROY	578	77.2	10.6	6.1	5.4	20.6
ALBA	81	80.2	14.8	0.0	4.9	23.9
CANTON	706	72.1	12.3	9.6	5.1	22.4
CORRIDOR	4,587	76.5	10.9	5.1	6.3	--
NORTHERN TIER	79,103	77.5	12.0	4.7	4.6	--

With over half of corridor employees commuting to Troy or Canton for work, it is no surprise that the corridor has nearly 45 percent of its commuters traveling less than 15 minutes to work. This rate is over 10 percentage points higher than the regional average, although the rate has



been declining since 1990. Table 3 and Table 4 show how journey to work travel times have increased in the corridor over the past decade.

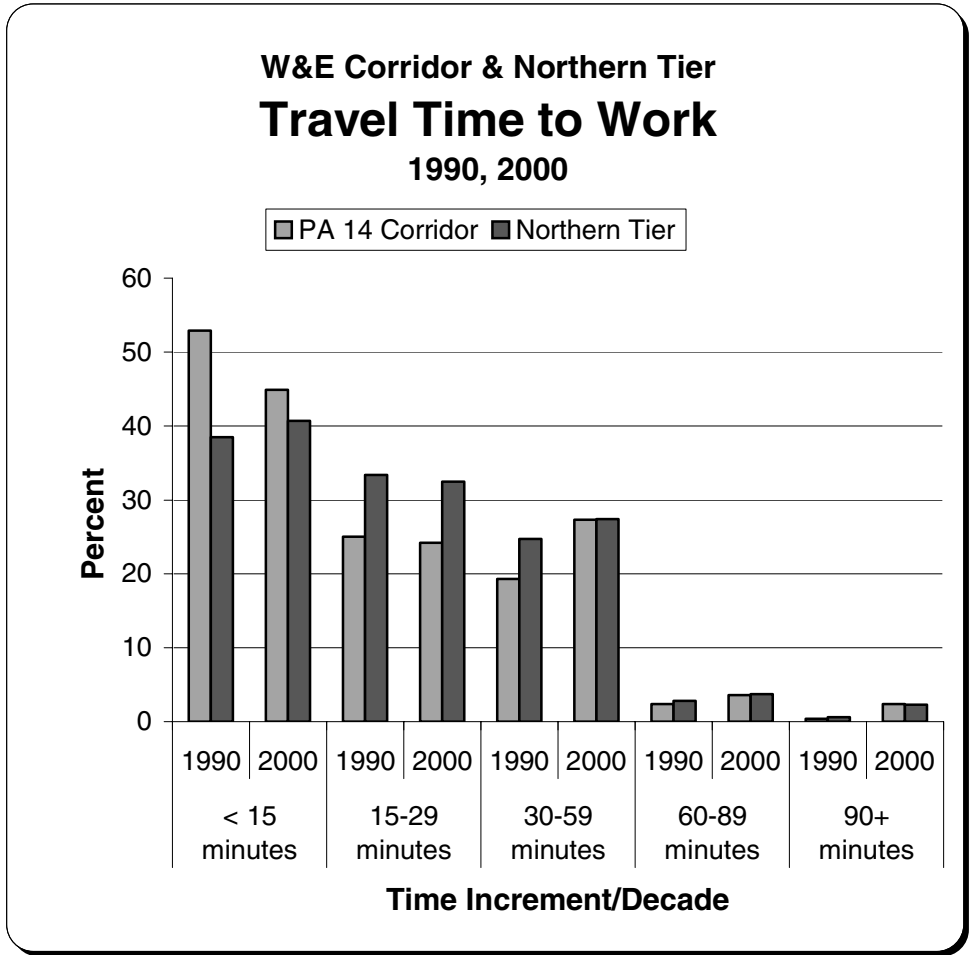
- The number of people in the corridor traveling less than 15 minutes to work declined from 2,142 to 1,931, or 10 percent.
- In 1990, there were only 18 people in the corridor traveling longer than 90 minutes to work. By 2000, that total had increased to 104, or a 477 percent increase.
- In 2000 Canton Borough had 9 percent of its commuters traveling longer than an hour to work, the highest such percentage in the corridor.
- Only 15 percent of South Creek Township residents traveled less than 15 minutes to work compared to the corridor average of 45 percent. This reflects the lack of employment opportunities in the immediate area compared to the Troy and Canton areas.

**Table 3: Travel Time to Work (in minutes) - 2000
W&E CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
SOUTH CREEK	15.3	40.9	38.9	2.3	2.5
TROY	51.0	15.4	28.3	3.7	1.6
ALBA	48.1	14.3	35.1	2.6	0
CANTON	47.6	17.9	26.6	5.5	2.4
CORRIDOR	44.9	24.2	27.3	3.6	2.4
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes) – 1990
W&E CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
SOUTH CREEK	20	45.6	32.5	1.1	0.9
TROY	67.8	12.5	17.5	1.7	0.4
ALBA	66.1	23.7	10.2	0.0	0.0
CANTON	63.1	18.9	13.5	3.8	0.6
CORRIDOR	52.9	25.0	19.3	2.4	0.4
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6



Vehicles Available per Household

Corresponding to households' dependence on the automobile is the availability of vehicles per household.

Table 5 shows the vehicle availability for selected Corridor municipalities.

- Twenty percent of W&E Corridor households have access to three or more vehicles, slightly higher than the regional average of 18.9 percent.
- Canton and Troy rank 7th and 12th respectively in the Northern Tier in the percentage of residents without access to a car. Over 15 percent of residents in Canton Borough do not have access to a car, more than double the regional percentage.
- Nearly 29 percent of Alba Borough residents have access to three or more cars, the highest such percentage in the corridor. This underscores a municipality where no one walks to work and jobs are located elsewhere, making the private automobile a vital necessity.



**Table 5: Vehicles Available Per Household (in %) – 2000
W&E CORRIDOR, Selected Municipalities**

LOCATION	None	One	Two	Three or More
SOUTH CREEK	2.9	35.7	39.7	21.7
TROY	12.9	39.8	34.1	13.3
ALBA	2.5	30.0	38.8	28.8
CANTON	15.3	39.6	31.1	14.0
CORRIDOR	7.3	33.3	39.5	19.9
NORTHERN TIER	6.3	32.7	42.1	18.9

Commutation Patterns

Attesting to its role as a major commuter corridor, Table 6 shows the top destinations for corridor commuters. Nearly two-thirds work at destinations in Canton, Troy and the greater Elmira area, with destinations in Lycoming County coming a distant seventh. The remainder works in various places throughout the Northern Tier, mainly in Towanda and townships surrounding Troy and Canton Boroughs.

The following additional analysis can be drawn from the Census data, including:

- Nearly three quarters are employed at destinations in Bradford County.
- Only 7 percent of W&E Corridor employees travel to Tioga County for work.
- Nearly 12 percent of corridor employees commute to destinations out of state for jobs, mainly in Chemung County.
- Nearly 30 percent of the corridor's 4,587 employees work in the same municipality in which they reside.

Table 6 shows the top ten destinations for commuters in the W&E Corridor while Table 7 shows the influence of the respective Chemung and Lycoming County labor markets.

**Table 6: Top Commuter Destinations – 1990, 2000
W&E CORRIDOR**

Location	Percentage Share	
	1990	2000
1. TROY BOROUGH	30.8	17.5
2. CANTON BOROUGH	23.2	14.4
3. CHEMUNG COUNTY, NY	11.1	10.8
4. CANTON TOWNSHIP	2.8	7.3
5. TOWANDA BOROUGH	3.6	5.3
6. TROY TOWNSHIP	2.4	4.1
7. LYCOMING COUNTY	3.3	3.5
8. COLUMBIA TOWNSHIP	3.1	2.9
9. BURLINGTON TOWNSHIP	0.2	2.1
10. SOUTH CREEK TOWNSHIP	2.4	2.0

Source: U.S. Census Bureau, PA State Data Center, 1990, 2000.



**Table 7: Commuters To Chemung and Lycoming Counties (percent), 2000
W&E CORRIDOR**

Location	Commute to Chemung, NY (Elmira)	Commute to Lycoming, PA (Williamsport)
SOUTH CREEK TWP	54.1	0.0
TROY TWP	5.1	0.5
TROY	8.5	0.7
ALBA	9.9	0.0
CANTON TWP	1.6	6.6
CANTON	2.0	3.4
UNION TWP	1.6	13.8

Source: PA State Data Center, 2000.

Population Trends

Population growth in the W&E Corridor has been flat over the past 50 years, increasing by only 1,567 persons, representing a 17.4 percent increase between 1950 and 2000. This contrasts with the 24 percent increase across the entire Northern Tier region for the same time period. The Corridor grew by only 67 persons over the past decade - a negligible 0.6 percent increase. The townships of Canton and Troy were the only two townships in the corridor to lose population over the past decade, along with Canton Borough.

Troy Borough was the only corridor community to see substantial growth. It added 246 persons during the 1990s for a growth rate of nearly 20 percent. During the 1990s, Troy Borough added 246 residents to its population, the third-highest numeric increase in Bradford County. Columbia Township and Alba Borough also saw population increases during the past decade. Table 8 shows the population trends of major corridor communities against corridor and regional averages.

**Table 8: Population Trends
W&E CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
SOUTH CREEK	1,114	1,345	1,229	1,261	2.6
TROY	1,315	1,381	1,262	1,508	19.5
ALBA	184	222	170	186	9.4
CANTON	2,037	1,959	1,966	1,807	(8.1)
CORRIDOR	9,800	10,505	10,531	10,598	0.6
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

Age Group Distribution

While population growth in the corridor has remained constant over the past 30 years, the composition of the corridor's population has been aging dramatically. Some general conclusions that can be drawn from the Census data include:



- Against corridor and regional trends, Canton Borough experienced a nearly 20 percent decline in the number of people over age 85.
- Columbia Township in particular experienced an 85-plus growth rate of 214 percent, the highest in the corridor.
- The corridor's 65-plus age demographic grew by over 7 percent during the 1990s.
- The corridor experienced an unusually high increase of persons in the 55-64 age group, growing from 937 to 1,096 persons for a 17 percent rate of increase, compared to 0.8 percent across the region.

Table 9: Percent Increase by Age Group - 1990-2000
W&E CORRIDOR

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
SOUTH CREEK	2.6	24.7	11.7	7.4	25.5	6.3
TROY	19.5	77.9	25.0	(21.9)	40.4	39.4
ALBA	9.4	40.9	13.3	18.2	28.6	0.0
CANTON	(8.1)	21.0	(22.5)	(12.0)	8.3	(19.6)
CORRIDOR	0.6	23.0	17.0	(7.9)	29.3	23.4
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Median age is another indicator of the Corridor's aging demographic. All but one of the corridor municipalities registered increases in median age over the past 10 years (Alba Borough being the lone exception). Alba's median age declined slightly from 36.5 to 35.6 and is the lowest in the W&E Corridor. Troy Township has the highest median age, at 41.1.

Table 10: Median Age, 1990 – 2000
W&E CORRIDOR

LOCATION	1990	2000
SOUTH CREEK	34.8	38.5
TROY	37.1	40.6
ALBA	36.5	35.6
CANTON	34.6	36.5

Racial Composition

The racial composition of the W&E Corridor to a large extent mirrors the percentages from across the Northern Tier. An assessment of concentrations of minority populations throughout the Northern Tier is an important consideration from an environmental justice standpoint as major transportation projects must take into consideration the potential for disproportionate impact on both minority and low-income populations. Table 11 provides an overview of the corridor's racial composition, while the following bullets describe some anomalies within the corridor:

- The W&E Corridor is even more racially homogeneous than the region as a whole. Of the nearly 11,000 people living in the corridor, only 150 are not white.



- A majority of minorities are from Troy Borough (31), South Creek Township (28) and Canton Township (26).
- Hispanics comprise the largest minority population in the corridor, at 0.54 percent.
- All but nine of Union Township's residents are white, the highest municipal percentage of white population (99.1 percent) in the Corridor.

Table 11: Racial Composition – (in %)
W&E CORRIDOR

Location	Total	White	Black	Hispanic	Indian	Asian	Other
SOUTH CREEK	1,261	98.9	0.56	1.43	0.16	0.00	0.00
TROY	1,508	98.3	0.27	0.66	0.13	0.73	0.27
ALBA	186	94.1	3.76	2.15	0.00	0.00	2.15
CANTON	1,807	98.4	0.53	0.34	0.10	0.10	0.19
CORRIDOR	10,598	98.6	0.38	0.54	0.14	0.16	0.24
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Source: U.S. Census Bureau (2000)

Income

Corridor income is slightly lower than incomes across the region. A majority of W&E Corridor households (nearly 38 percent) had annual incomes less than \$25,000. Other statistics from the Census data include:

- Troy Township has the most households (8) making more than \$200,000 a year, and also enjoys the corridor's highest median household income, at \$36,133.
- Alba Borough has the lowest median household income in the corridor, at \$26,250.
- The boroughs of Alba, Canton and Troy all have over 45 percent of their populations earning less than \$25,000 a year, the highest such percentages in the corridor.

Table 12: Per Capita Income - 2000
W&E CORRIDOR

Location	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
SOUTH CREEK	487	37.4	37.4	19.1	4.3	1.8
TROY	587	47.2	26.6	13.3	8.2	4.8
ALBA	69	46.4	37.7	15.9	0.0	0.0
CANTON	766	45.6	33.0	14.4	5.7	1.3
CORRIDOR	4084	37.8	35.2	17.5	6.0	3.5
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry. Major economic development concerns in the corridor include Paper Magic Group, Inc. and Parker Pneumatic in the Canton area and Larimer & Norton north of Troy. Attempts to

establish a business incubator in Canton have been unsuccessful. Three major feed mills in Bradford County are also located in the Canton and Troy areas.



Table 13, Table 14 and Table 15 describe some of the corridor's economic conditions.

- A majority of corridor residents (24.1 percent) are employed within the Manufacturing sector of the economy.
- As an occupation, Agriculture is more important in the W&E Corridor than it is elsewhere in the region, constituting 8.8 percent of corridor employment (as opposed to just 5.8 percent region wide).
- As an occupation, the percentage of corridor residents engaged in the Farming, Fishing and Forestry Sector is double the regional rate, at 3.7 percent.
- Of the 60 people from the Northern Tier in the Armed Forces, none are from the W&E Corridor.
- Employment and unemployment rates for the corridor are similar to those at the regional level. An exception includes Troy Borough, which, at 23.9 percent, had the second-highest unemployment rate in the entire Northern Tier, behind Colley Township in Sullivan County.

**Table 13: Civilian Labor Force Characteristics – (2000)
W&E CORRIDOR**

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
SOUTH CREEK	973	37.1	62.9	91.2	8.8	0.0
TROY	1246	37.6	62.4	76.1	23.9	0.0
ALBA	132	34.8	65.2	100.0	0.0	0.0
CANTON	1386	44.1	55.9	96.0	4.0	0.0
CORRIDOR	8247	38.1	61.9	91.8	8.2	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 14: Employment by Occupation - (2000)
W&E CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
SOUTH CREEK	558	21.5	14.5	25.4	1.8	13.1	23.7
TROY	591	32.3	16.8	17.3	1.7	8.6	23.4
ALBA	86	12.8	18.6	26.7	3.5	15.1	23.3
CANTON	744	28.9	14.5	19.8	0.8	6.7	29.3
CORRIDOR	4,684	26.7	14.3	19.4	3.7	9.2	26.7
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3



Table 15: Employment by Industry by Place of Residence - (2000)
W&E CORRIDOR

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
SOUTH CREEK	558	7.0	6.6	22.6	3.2	12.4	7.9	0.9	4.7	3.9	17.4	5.2	5.9	2.3
TROY	591	1.9	5.1	20.3	2.4	5.9	4.9	3.2	3.6	4.1	31.8	8.3	4.9	3.7
ALBA	86	5.8	15.1	17.4	5.8	7.0	5.8	0.0	2.3	4.7	22.1	5.8	2.3	5.8
CANTON	744	2.0	4.8	30.5	1.9	9.8	3.6	3.9	2.7	3.2	23.3	3.2	8.3	2.7
CORRIDOR	4684	8.8	5.2	24.1	2.8	10.2	5.6	1.6	3.5	3.4	21.6	5.1	5.3	2.8
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

PENNDOT has programmed nearly \$4.7 million in investments in the W&E Corridor. These investments are centered on four projects, consisting of two bridge replacements, an SR reconstruction project, and a highway restoration project of PA 14 at Grover Corner in Canton Township. The work at Grover Corner will address the horizontal alignment of PA 14 and will require \$1.76 million over the next four years to complete. This is the largest project in the corridor. Table 16 provides more detail on these four projects. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.

Table 16: 2003 TIP Projects
W&E CORRIDOR

Municipality	Project/Description	Year				Total
		03	04	05	06	
CANTON	Mill Creek Bridge	\$452				\$452
CANTON	Center St (SR 3027) Recon		\$920			\$920
CANTON TWP	Grover Corner	\$300		\$360	\$1,100	\$1,760
TROY TWP	Sugar Creek Bridge	\$520	\$1,040			\$1,560

Source: PENNDOT District 3-0

Additionally, PENNDOT has paving work scheduled for the summer of 2003 through Union Township in Tioga County.

Corridor Action Plan

Based on the transportation stakeholder input, key person interview and background data, the following bullets are offered as draft objectives for the W&E Corridor:



- Given the corridor's role as a connector between Bradford County and the metropolitan employment centers of Williamsport and Elmira, passing lanes should be constructed north of Troy and south of Canton Borough.
- NTRPDC and the Bradford County Office of Planning & Grants should continue to monitor the progress of the Troy Borough- Troy Township—Granville Township Joint Comprehensive Plan and its transportation-related recommendations. Each office should provide input for the comprehensive plan from a transportation, development, and regional/countywide perspective.
- Alternate truck routes around Troy Borough should be considered.
- Extension of public transportation service from Chemung County south should be explored.
- Canton and Troy Boroughs and their surrounding townships should plan for ongoing suburban development with emphasis on access management and the economic vitality of the two downtown areas.
- Coordination will be needed with PENNDOT's Bureau of Highway Safety & Traffic Engineering as it moves forward on signing BicyclePA Route J through the corridor.

**THE COUNTY SEAT
CONNECTOR CORRIDOR**

The County Seat Connector Corridor

The County Seat Connector Corridor is an important north-south corridor through west central Susquehanna County. The 67-mile corridor is centered on PA 29, which directly serves 12 municipalities including the county seats of Montrose and Tunkhannock. The PA 29 roadway provides connections to U.S. 6, PA 167 and PA 706. Just 4 miles north of the state line, PA 29 provides access to Conklin and Binghamton. South of the corridor, PA 29 and PA 309 provide access into Wilkes-Barre. The corridor is often used as an alternate to taking US 6 to I-81 or the Turnpike.



CORRIDOR PROFILE ▶



Bradford

- Liberty Twp
- Franklin Twp
- Bridgewater Twp
- Montrose
- Dimock Twp
- Springville Twp

Wyoming

- Lemon Twp
- Tunkhannock Twp
- Tunkhannock
- Eaton Twp
- Monroe Twp
- Noxen Twp



PENNDOT has functionally classified PA 29 in two distinct segments. The southern segment (south of Montrose) is considered a Rural Minor Arterial while the northern leg is a Rural Major Collector. NTRPDC has classified the Susquehanna County portion of the corridor as part of its Agricultural Access planning network. It is also considered as one of the region's export area secondary routes. The roadway is also part of NTRPDC's Congested Corridor Improvement Program, through Tunkhannock Borough and Eaton Township.

Skyhaven Airport, one of three aviation facilities in the region, is located in Eaton Township just south of Tunkhannock. Additionally, the Reading, Blue Mountain & Northern shortline railroad bisects the corridor as it parallels the Susquehanna River.

The corridor connects two county seats and includes the third-largest municipality in the region – Tunkhannock Township. Salt Spring State Park is a significant recreational area in the northern portion of the corridor in Franklin Township, and Lake Carey in Wyoming County. County Seat Connector Creek, a potential Scenic River, runs through portions of the corridor.

One of the Northern Tier's four Keystone Opportunity Zones (KOZ), the Siltex Site, is also located in the corridor in Lemon Township.



Key Findings

The County Seat Connector Corridor, and particularly PA 29, is a north-south corridor serving the ground transportation needs of the rural communities in west central Susquehanna County. PA 29 is an important transportation facility in connecting these rural areas with U.S. 6 and employment in the greater Tunkhannock and Montrose areas as well as the urban areas of Binghamton and Wilkes-Barre.

One of the Northern Tier's Keystone Opportunity Zone (KOZ) locations, the 15-acre Siltex Site, is located in Lemon Township. The site was the former home of Shepp's Cheese Factory. The state provided federally-funded Community Development Block Grant money in 1998 to demolish the former Siltex Site, which has since been vacant. The site is the only such KOZ area in Wyoming County and faces significant transportation challenges. The site's lack of rail, coupled with its distance from larger, principal arterials such as I-81 or even U.S. 6 and U.S. 11 add to potential transportation costs. The geometry and width of PA 29 also poses as a deterrent in the development of the site. As a result, the site has registered little to no private investment or interest with respect to economic development. The site is presently being used as an ad hoc yard waste dump site.

NTRPDC's 2000 Bicycle and Pedestrian Plan also highlights two proposed projects for the corridor, the first one involving improved bicycle and pedestrian access from Tunkhannock Borough to Lake Carey (and Winola, outside the corridor in Overfield Township). A second includes the implementation of the Iroquois Trail Feasibility Study findings in Tunkhannock. The project includes the design of a 10-mile greenway along Tunkhannock Creek. DCNR in April 2000 provided \$50,000 to design a walking/biking trail network to interconnect recreation and historic sites in the greater Tunkhannock area.

Other Key Trends and Issues in the County Seat Connector Corridor include:

- The corridor is part of the region's Congested Corridor Improvement Program. Since the development of Wal-Mart approximately ten years ago, commercial development has increased in the corridor. Proctor and Gamble's recent expansion has also introduced an increase in truck traffic in the corridor immediately south of Tunkhannock. A variety of traffic-related improvements have been recommended, and are highlighted in the Action Plan section of this profile.
- A new feed mill south of Montrose will increase heavy truck traffic in the corridor.
- PA 29 has a low (good) International Roughness Rating, indicating a better than average riding surface.
- Corridor households are even more dependent on the private automobile than the region as a whole. There is no public transportation service (other than taxi service, e.g., AJ Taxi, etc.) provided anywhere in either Wyoming or Susquehanna Counties.
- The county seats of Montrose and Tunkhannock are the two largest destinations of corridor commuters. Mehoopany Township ranks third.



- The two boroughs also led the corridor in population loss, with a collective population decline of 658 persons.
- Tunkhannock Township – the corridor’s (and county’s) largest municipality – employs only 3 percent of its own residents, the lowest rate in the corridor.*
- Corridor population is getting older, as median age increased in all but two corridor municipalities.
- PENNDOT has over \$5 million in improvements programmed for the corridor – focused mainly on bridge replacements.

Public Input

During NTRPDC’s 1999 round of transportation stakeholder meetings, there were several comments raised specific to the County Seat Connector Corridor or regarding the PA 29 roadway.

- Stakeholders report that congestion in general in the corridor is getting worse, especially with the lack of turning lanes south of Tunkhannock.
- In Wyoming County, respondents listed safety improvements needed in the corridor between the Cross Valley Expressway and the Beaumont area. The desire for turning lanes was also expressed on Copper Mine Hill on PA 29 and at PA 309 where the highway narrows from three lanes down to two.
- High speeds have been observed in the corridor, with one traffic study revealing that the average speed was between 65 and 70 miles per hour.
- The potential of having PA 309 upgraded to a U.S. Route designation should be explored as a way of bringing additional improvement dollars to specific corridor projects. These designations are regulated by AASHTO and approved by FHWA.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years and communities in the County Seat Connector Corridor.

**Table 1: Annual Average Daily Traffic
COUNTY SEAT CONNECTOR CORRIDOR**

LOCATION	1993	1997	2000
MONTROSE	10,336	8,060	10,986
TUNKHANNOCK BORO	6,803	6,772	6,778

* 1990 data



Mode Split

Nearly 93 percent of corridor commuters rely on the private automobile as a means of getting to work. This is nearly three and a half percentage points higher than the regional average. Some variations within regional averages are described in the following bullets and in Table 2, below:

- Oddly, the municipality with the greatest dependence on the private automobile is Tunkhannock Borough, with 85.3 percent of all commuters using this mode.
- The rate of carpooling in rural Noxen Township is almost twice as high as the regional average.
- According to the 2000 Census, 33 people in the corridor reported using public transportation as a means to work. Most of these (12) were in Eaton Township.
- Montrose and Bridgewater Borough had the corridor’s greatest percentage of people walking to work, at 5.7 and 4.3 percent, respectively.
- The Susquehanna County townships of Dimock and Franklin had the corridor’s greatest percentage of people working at home, with over 6 percent each. Monroe Township and Montrose Borough each had less than 1 percent working from home.

**Table 2: Mode Split (in %) – 2000
COUNTY SEAT CONNECTOR CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
LIBERTY	82.7	13.7	0.0	2.0	1.7
MONTROSE	76.8	15.2	0.0	5.7	0.7
DIMOCK	79.8	10.5	0.0	2.2	6.6
TUNKHANNOCK BOROUGH	85.3	6.3	0.0	4.2	3.8
NOXEN	74.3	19.9	1.1	0.3	3.9
CORRIDOR	80.9	11.9	0.4	2.6	3.6
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6

Travel Time to Work

Journey to work travel times are increasing in the County Seat Connector Corridor and are keeping pace with changes been recorded across the Northern Tier. The following points describe some of the more interesting highlights of the data for corridor municipalities:

- Mean travel times to work in the corridor range from a low of less than 18 minutes each in Tunkhannock and Montrose Boroughs, to a high of 34 minutes in Noxen Township.
- Between 1990 and 2000, the number of corridor commuters traveling longer than an hour to get to work rose from 299 to 567 for an increase of 89 percent, which is small compared to other Northern Tier corridors. All 12 corridor municipalities have more people driving over an hour to work in 2000 than in 1990.



- Tunkhannock Borough and Monroe Township have the Northern Tier’s highest total number of people traveling longer than 90 minutes to work, at 55 and 51 respectively.
- Monroe and Noxen Townships have the highest percentages of people traveling longer than an hour to get to work, at over 10 percent each.
- Liberty Township, given its proximity to metropolitan Binghamton, has less than 2 percent of its residents traveling more than an hour. Moreover, the township was the only corridor municipality over the past decade to register gains in the percentages of people traveling less than 15 minutes to work.

Table 3 and Table 4 show how journey to work travel times have increased in the corridor over the past decade.

**Table 3: Travel Time to Work (in minutes by percent) – 2000
COUNTY SEAT CONNECTOR CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
LIBERTY	19.5	46.4	32.2	1.0	0.8
MONTROSE	59.4	12.6	25.1	2.4	0.6
DIMOCK	26.8	38.5	26.1	6.4	2.3
TUNKHANNOCK BOROUGH	48.5	31.4	15.6	3.8	0.6
NOXEN	5.5	43.7	40.2	6.9	3.7
CORRIDOR	32.4	33.8	27.5	3.8	2.5
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes by percent) – 1990
COUNTY SEAT CONNECTOR CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
LIBERTY	12.3	50.0	35.9	1.2	0.7
MONTROSE	66.0	12.4	20.6	0.8	0.3
DIMOCK	35.4	33.6	26.1	6.4	2.3
TUNKHANNOCK BOROUGH	56.2	23.9	16.9	2.2	0.8
NOXEN	15.4	34.3	41.9	7.9	0.6
CORRIDOR	36.8	34.9	25.0	2.5	0.8
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

Just over a quarter of all corridor commuters commute to jobs in the county seats of Montrose and Tunkhannock for employment. The P&G plant in Mehoopany Township is also a large draw for commuters. Three counties from outside of the region, Luzerne, Broome and Lackawanna, are also major destinations for corridor commuters.

Outside of Montrose and Tunkhannock Boroughs, the corridor’s municipalities employ just small percentages of their own residents. In fact, 6 of the 11 corridor municipalities have less



than 10 percent of residents employed within the municipality of residence. Montrose Borough leads the corridor in this regard, at 57 percent (down from its 1990 level of 67 percent), with Tunkhannock a distant second, at 51 percent. Townships such as Eaton, Lemon, Monroe and Franklin export nearly all their residents to jobs outside of the municipality.

The following additional analysis can be drawn from the Census data, including:

- Wyoming County is the largest destination for County Seat Connector Corridor commuters, with just over 36 percent of all journey to work destinations. Susquehanna County ranks second, at 27 percent.
- Just over 8.6 percent commute to employment destinations in New York, primarily in Broome County.
- Less than 1 percent of corridor commuters head to jobs in Bradford County (mainly in Towanda and Wyalusing).
- Montrose Borough has replaced Tunkhannock Borough as the most popular destination for corridor workers.
- Only 22 percent of corridor commuters work within their municipality of residence.

Approximately 83 percent of Corridor residents work in one of the top ten employment destinations as shown in Table 5.

Table 5: Top Commuter Destinations – 1990, 2000
COUNTY SEAT CONNECTOR CORRIDOR

Municipality	Percentage Share	
	1990	2000
1. MONTROSE BOROUGH	15.2	15.0
2. LUZERNE COUNTY	10.1	13.7
3. TUNKHANNOCK BOROUGH	23.3	12.4
4. TUNKHANNOCK TOWNSHIP	0.7	10.9
5. LACKAWANNA COUNTY	7.9	9.1
6. BROOME COUNTY, NY	9.3	8.2
7. MEHOOPANY TOWNSHIP	11.5	7.7
8. BRIDGEWATER TOWNSHIP	3.9	2.5
9. DIMOCK TOWNSHIP	1.9	2.0
10. SPRINGVILLE TOWNSHIP	2.5	1.5

Source: U.S. Census Bureau, 1990, 2000.

Vehicles Available per Household

Corridor household accessibility to a vehicle is roughly similar to patterns registered across the region. While Table 6 shows the percentage breakdown by selected municipalities, the following bullet points highlight other details of the data available:



- The largest percentages of households without access to any vehicle are found in the boroughs of Tunkhannock (16 percent) and Montrose (21 percent).
- In Montrose Borough and Noxen Township, a majority are one-car households only (39.1 percent and 36.2 percent, respectively).
- Corridor households with access to three or more vehicles are most rare in Montrose Borough, consisting of less than 7 percent of all households.
- Noxen Township has the corridor’s highest percentage of households with access to three or more vehicles, at 23 percent.

Table 6: Vehicles Available Per Household (in %) – 2000
COUNTY SEAT CONNECTOR CORRIDOR

LOCATION	NONE	ONE	TWO	THREE OR MORE
LIBERTY	3.0	28.7	45.8	22.6
MONTROSE	20.9	39.1	33.3	6.7
DIMOCK	3.5	31.2	42.7	22.7
TUNKHANNOCK BOROUGH	15.9	34.4	38.6	11.0
NOXEN	9.3	36.2	31.5	23.0
CORRIDOR	6.8	31.1	43.5	18.6
NORTHERN TIER	6.3	32.7	42.1	18.9

Population Trends

After expanding by nearly a third during the 1970s, population growth in the corridor slowed over the next 20 years before finally declining slightly during the 1990s. Corridor population reached an all time high of 21,498 in 1990 before declining slightly before the 2000 Census. This growth pattern is against regional trends, which has experienced slight gains over the past decade. Population loss in the corridor is led by steep declines in the two boroughs (Montrose and Tunkhannock). Tunkhannock in fact lost 340 persons, or 15 percent of its 1990 population. Lemon and Tunkhannock Township also lost population, as did Liberty Township (the only Susquehanna County corridor municipality to do so).

The corridor’s biggest growth area in the past decade has been in Bridgewater and Dimock Townships, which collectively added 472 persons.

Table 7 shows the total population figures for selected municipalities in the corridor. A summary of this data is as follows:

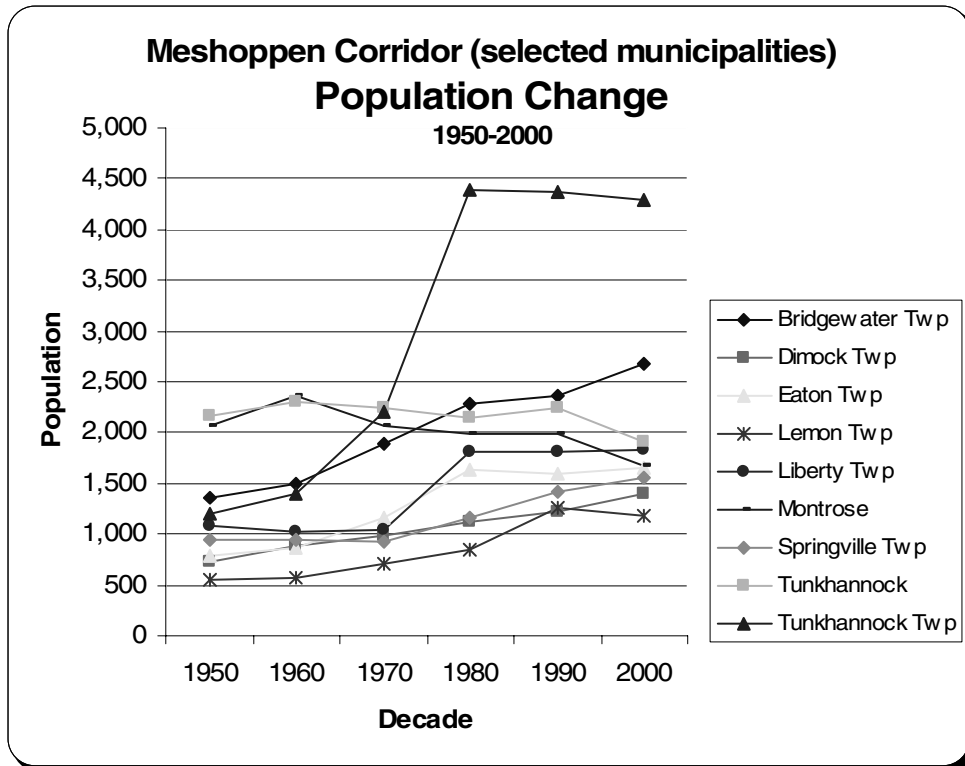
- The corridor’s Tunkhannock Borough and Montrose Borough ranked # 1 and # 2 respectively in total population loss between 1990 and 2000. Tunkhannock’s population declined by 340 persons, while Montrose dropped by 318. Tunkhannock’s rate of decrease was also the highest for any municipality in the Northern Tier. Even suburban Tunkhannock Township registered a slight loss in population.



- Corridor municipalities on the Susquehanna County side of the corridor grew by 2.4 percent, while the Wyoming County corridor municipalities collectively declined by 3.3 percent.

Table 7: Population Trends
COUNTY SEAT CONNECTOR CORRIDOR

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
LIBERTY	1,051	1,284	1,353	1,266	(6.4)
MONTROSE	2,058	1,980	1,982	1,664	(16.0)
DIMOCK	983	1,120	1,226	1,398	14.0
TUNKHANNOCK BOROUGH	2,251	2,144	2,251	1,911	(15.1)
NOXEN	822	1048	944	951	0.7
CORRIDOR	15,764	20,472	21,498	21,318	(0.8)
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5





Age Group Distribution

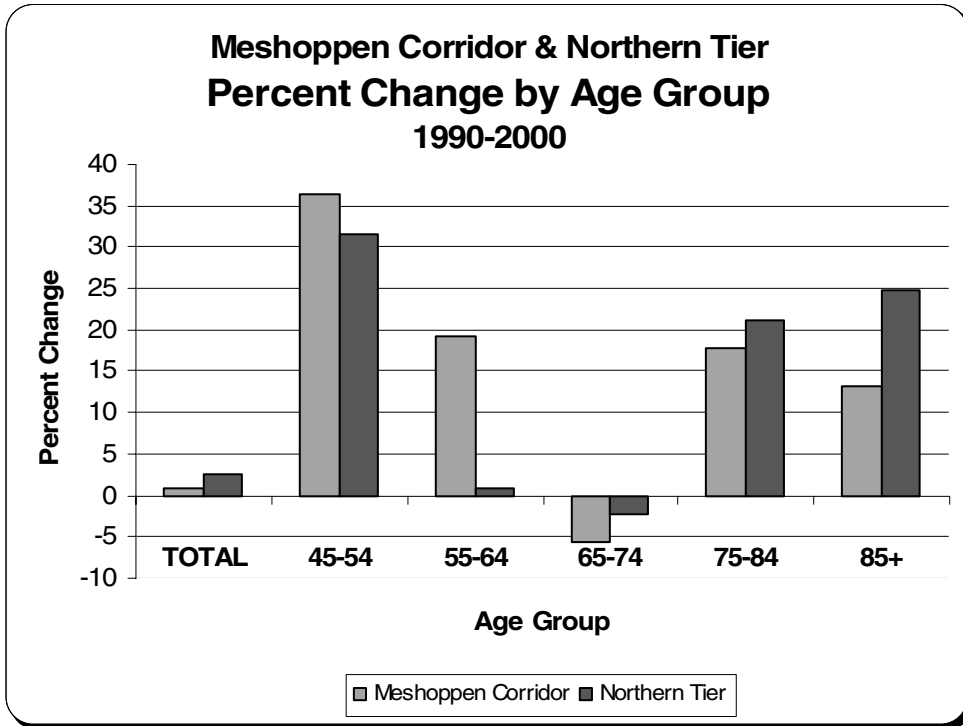
Shifts within the corridor’s population composition between 1990 and 2000 indicate that numbers of elderly population are increasing even as overall population is decreasing, albeit at only half the rate being experienced across the region. For example, since 1990, the corridor’s population growth rate among those age 65-plus was only 4 percent, compared to 8 percent regionally.

Table 8 provides more detail on the age group distribution within the corridor and selected municipalities.

- The corridor’s population age 65-plus increased 4 percent from 3,195 to 3,323, while the 75-plus age group increased 16.6 percent from 1,389 to 1,619. These rates of increase are lower than the regional rate (8 and 22 percent, respectively).
- The population of the corridor’s age 65-74 age group actually *declined* 5.6 percent, indicative of those born during the Great Depression years of 1926 to 1935.

Table 8: Percent Increase by Age Group – 1990, 2000
COUNTY SEAT CONNECTOR CORRIDOR

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
LIBERTY	(6.4)	34.2	52.4	18.9	(11.9)	(7.7)
MONTROSE	(16.0)	2.1	(22.3)	(31.2)	(4.9)	(46.5)
DIMOCK	14.0	48.0	11.6	18.6	13.3	40.0
TUNKHANNOCK BOROUGH	(15.1)	45.6	0.6	(34.7)	(19.8)	(35.7)
NOXEN	0.7	40.6	(4.1)	(8.4)	(33.3)	(35.3)
CORRIDOR	(0.8)	36.3	19.2	(5.6)	17.7	13.1
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0



Median Age

With the exception of Montrose Borough and Noxen Township, median age increased in every corridor municipality between 1990 and 2000. Residents in Bridgewater Township had the corridor’s highest median age at 41.5 while Noxen Township had the lowest, at 36. in 1990 (37.3) and grew by 7.5 years over the past 10 years to a new corridor high of 44.8 – also one of the highest in the Northern Tier.

Tunkhannock Township’s loss of 73 persons during the 1990s, coupled with the corridor’s greatest increase in median age (6.7 years) indicates a graying population and a loss of young people in the community.

Table 9 provides detail for selected corridor municipalities.

Table 9: Median Age, 1990 – 2000
COUNTY SEAT CONNECTOR CORRIDOR

LOCATION	1990	2000
LIBERTY	33.4	39.0
MONTROSE	39.7	38.8
DIMOCK	33.4	36.8
TUNKHANNOCK BOROUGH	38.9	41.0
NOXEN	36.9	36.0



Racial Composition

There are only 307 minorities in the County Seat Connector Corridor, according to the 2000 U.S. Census. The greatest percentage of minorities can be found in Bridgewater Township, at 2.2 percent. There are 105 Hispanics, which make up the largest minority group in the corridor. Tunkhannock Township has the corridor’s greatest percentage of Hispanics, while Bridgewater Township has the corridor’s greatest percentage of Blacks (18 out of 74), the corridor’s second-largest minority group. Overall, the corridor is more racially homogeneous than the region as a whole. The most racially homogeneous municipality in the corridor is Tunkhannock Borough, which is 99.2 percent White. Table 10 provides more information on racial composition within the corridor against regional averages.

Table 10: Racial Composition – (in %)
COUNTY SEAT CONNECTOR CORRIDOR

Location	Total	White	Black	Hispanic	Indian	Asian	Other
NOXEN	951	98.2	0.4	0.1	0.2	0.0	0.1
TUNKHANNOCK BOROUGH	1,911	99.2	0.2	0.6	0.2	0.2	0.2
DIMOCK	1,398	98.6	0.4	0.4	0.0	0.1	0.3
MONTROSE	1,664	98.9	0.5	0.3	0.0	0.1	0.1
LIBERTY	1,266	98.3	0.2	0.2	0.2	0.0	0.0
CORRIDOR	21,318	98.6	0.3	0.5	0.1	0.2	0.2
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Per Capita Income

Corridor per capita income averages closely align with regional averages, although corridor households do have a slightly greater percentage of households earning more than \$50,000 a year than the region as a whole. Most households have an annual per capita income of less than \$25,000. All corridor municipalities had average annual per capita incomes greater than \$30,000, with Montrose having the lowest, at \$30,200 and Tunkhannock Township households with the highest, at \$38,974. There are 488 corridor households that make more than \$100,000 a year, including 52 that earn more than \$200,000 a year. Tunkhannock Borough has the corridor’s highest percentage of households with per capita incomes in excess of \$100,000, at 7.8 percent.

Table 11 below provides more information concerning per capita income in the County Seat Connector Corridor.



Table 11: Per Capita Income (2000)
COUNTY SEAT CONNECTOR CORRIDOR

LOCATION	Households	< \$25,000	\$25- 50,000	\$50- 75,000	\$75- 100,000	\$100,000+
NOXEN	384	41.1	34.6	14.8	4.9	4.4
TUNKHANNOCK BOROUGH	838	40.7	25.4	15.5	10.6	7.8
DIMOCK	514	36.8	31.7	22.6	2.9	6.0
MONTROSE	730	44.5	26.7	15.6	7.3	5.9
LIBERTY	478	34.9	35.4	19.7	6.9	3.1
CORRIDOR	8,447	34.3	33.3	18.9	7.8	5.8
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major employers in the corridor are primarily based in Montrose and Tunkhannock, and include Endless Mountains Health Systems (145 employees), Hinds Oil Company (45 employees), and Tyler Memorial Hospital (320 employees), St. Michaels and Campos Express and Leasing, to name a few. The Procter & Gamble plant in Mehoopany Township is also a major employer of corridor residents, as evidenced by Table 5. Table 12,

Table 13 and Table 14 describe some of the corridor’s economic and labor force conditions.

- Employment rates in the corridor are one percentage point higher than the regional rate. Dimock Township had the corridor’s lowest unemployment rate, at 1.2 percent, while Lemon and Monroe Township had the highest, at over 7 percent each.
- Percentages of employment by industry are consistent with rates and averages from across the region.
- There are 11 persons from the corridor in the Armed Forces. These are from Tunkhannock Borough and Liberty Township.
- Springville Township had the corridor’s highest percentage of persons employed in the Agriculture, Forestry and Fishing industry, at nearly 13 percent.
- Nearly 15 percent of all Eaton Township workers are employed in Retail Trade – the highest such percentage in the corridor.
- The county seat of Tunkhannock has over 9 percent of its workers employed in Public Administration. This is the highest rate in the corridor and is nearly triple the regional average.



**Table 12: Civilian Labor Force Characteristics – (2000)
COUNTY SEAT CONNECTOR CORRIDOR**

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
NOXEN	736	48.4	51.6	95.8	4.2	0.0
TUNKHANNOCK BOROUGH	1,550	43.5	56.5	94.7	5.3	0.6
DIMOCK	1,051	37.4	62.6	98.8	1.2	0.0
MONTROSE	1,301	43.0	57.0	94.1	5.9	0.0
LIBERTY	992	34.9	65.1	95.6	4.4	0.9
CORRIDOR	16,751	40.0	60.0	95.5	4.5	0.1
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 13: Employment by Occupation - (2000)
COUNTY SEAT CONNECTOR CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
NOXEN	364	23.9	11.8	16.2	0.5	22.0	25.5
TUNKHANNOCK BOROUGH	824	39.8	18.9	19.1	0.0	8.1	14.2
DIMOCK	650	30.9	12.0	18.3	1.8	11.2	25.7
MONTROSE	697	40.7	8.5	28.8	0.4	4.7	16.8
LIBERTY	612	21.6	13.1	22.2	1.6	13.2	28.3
CORRIDOR	9,591	28.6	13.3	22.8	1.4	12.7	21.3
N. TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3



**Table 14: Employment by Industry by Place of Residence - (2000)
COUNTY SEAT CONNECTOR CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
NOXEN	364	0.5	18.1	20.9	5.2	6.6	6.9	2.5	2.7	4.9	19.8	5.5	4.7	1.6
TUNKHANNOCK BOROUGH	824	1.0	1.6	13.8	1.9	8.4	5.8	1.9	6.9	10.8	26.5	6.1	6.1	9.2
DIMOCK	650	12.3	6.6	22.5	2.9	7.1	7.4	3.1	2.5	6.3	21.1	3.2	3.5	1.5
MONTROSE	697	3.3	5.3	16.4	2.2	12.3	2.2	3.9	6.7	6.7	24.4	3.9	5.6	7.2
LIBERTY	612	7.8	6.2	20.3	7.4	6.7	6.0	2.8	3.9	4.9	17.8	7.4	6.2	2.6
CORRIDOR	9,591	5.2	7.7	19.0	2.9	11.7	5.3	3.2	4.4	6.7	18.9	6.1	5.1	3.9
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

PENNDOT has programmed \$5.35 million in improvements in the County Seat Connector Corridor, according to data from the 2003 Transportation Improvement Program (TIP). A majority of projects are centered on bridge replacements in Noxen and Monroe Townships. It should be noted that activity for one of the Noxen Township bridges (0.2 miles east of SR 3002/Stull Wilson Road) is limited to design only, with construction planned for the second four-year period.

There are four projects in Susquehanna County, three of which involve replacing local bridges - critical links in the corridor's overall transportation system. Table 15 below highlights the programmed TIP projects. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year. Projects are shown from north to south.

**Table 15: 2003 TIP Projects
COUNTY SEAT CONNECTOR CORRIDOR**

Municipality	Project/Description	Year				Total
		03	04	05	06	
LIBERTY	Bailey Road Bridge repl		20			\$20
LIBERTY	Mill Road Bridge repl		110			\$110
LIBERTY	Howard Hill Bridge repl		120			\$120
MONTROSE	PA 706 reconstruct				500	\$500

Municipality	Project/Description	Year				Total
		03	04	05	06	
EATON	Sugar Hollow Cr br repl			150	50	\$200
MONROE	Bowman's Creek br repl		1,920			\$1,920
MONROE	PA 309 resurface 2.5 miles	1,200				\$1,200
NOXEN	Bowman's Creek br repl		1,080			\$1,080
NOXEN	Bowman's Creek br repl			150	50	\$200

Source: PENNDOT District 3-0

Corridor Action Plan

This section outlines some suggested draft actions, based on the results of public involvement, data collection efforts from county and multi-municipal comprehensive plans, and the Census data.

- As part of PA 29's placement on the Congested Corridor Improvement Program, the following recommendations have been made for the segment in Tunkhannock Borough and Eaton Township:
 - A center left turn lane is recommended between the Wal-Mart driveway and the Susquehanna River Bridge.
 - Variable Message Signs (VMS) have also been recommended for PA 29 northbound prior to the US 6 By-Pass, and PA 6 eastbound at Mile Hill.
 - A sidewalk has also been recommended on the east side of PA 29 from the existing sidewalk on the river bridge to the Wal-Mart driveway. This will provide a pedestrian corridor through the commercial development along PA 29, as well as provide greater connectivity to the forthcoming Iroquois Trail and Riverside Park in Tunkhannock Borough.
- The following actions should be implemented, under the auspices of the region's 2000 Bicycle and Pedestrian Transportation Plan:
 - Completion of missing links of Bridgewater Township Rail/Trail from Montrose Borough to the Village of Alford
 - Better bicycle/pedestrian access between Tunkhannock Borough and Lake Carey
 - Better connectivity of pedestrian facilities in Susquehanna County boroughs
 - Shoulder widening on PA 92 is needed between Tunkhannock Borough and the residential developments of Highfields and Rivercrest, as well as Lake Winola.
 - NTRPDC and the Wyoming County Planning Commission should communicate funding needs relative to the Iroquois Trail Feasibility Study before appropriate state agencies and local trusts.



- A rail/trail link is proposed between Tunkhannock Borough and the Village of Noxen and eventually to Wilkes-Barre.
- The NTRPDC, along with TeamPA and the Wyoming County Chamber should continue to monitor the situation at the Siltex Site with respect to private sector interest and potential redevelopment options.
- There are no passing lanes on PA 29 between Montrose and the New York state line. This portion of the roadway is not adequately designed to handle the volume of logging and stone trucks that use it.
- In Montrose, the intersection of PA 29 with PA 167 and PA 706 has problems with high speed traffic and access management. There is a need for a third lane, with improved control of ingress/egress.
- According to county transportation stakeholders, there is significant settlement of the road surface occurring just south of the state line in Liberty Township.
- In Wyoming County stakeholders have asked for safety improvements in the corridor between the Cross Valley Expressway and the Beaumont area of Monroe Township. An interest in turning lanes was also expressed on Copper Mine Hill on PA 29 and at PA 309 where the highway narrows from three lanes down to two.
- High speeds have been observed in the corridor, with one traffic study concluding that the average speed was between 65 and 70 miles per hour. A greater presence and stricter enforcement by the Pennsylvania State Police may need to be requested for some portions of the corridor.
- The potential of having PA 309 upgraded to a U.S. Route designation should be explored as a way of bringing additional improvement dollars to specific corridor projects.
- Eaton Township has recommended that the southern portion of the corridor of PA 29 be upgraded to a higher functional classification which would better reflect the growing volumes on the roadway.
- A desire has also been expressed for a new traffic signal at the intersection of Frear Hill Road and PA 29 in response to an increase in traffic volumes.
- The intersection of PA 29 at Sugar Hollow Road (SR 3003) is a present safety concern with vertical curvature and lack of turning lanes.

The Cowanesque Corridor

The Cowanesque Corridor is 28.7 miles in length and directly serves 9 municipalities across northern Tioga County. The Corridor is centered on PA 49, the corridor's major roadway facility. Other signed state routes in the corridor include PA 249 and PA 349. Major communities in the corridor include the boroughs of Lawrenceville, Elkland, Knoxville and Westfield. PENNDOT has functionally classified PA 49 as a Rural Minor Arterial while the Northern Tier's Rural Transportation Advisory Committee has classified the roadway as being part of its Primary Commercial Network and an export area secondary route.



CORRIDOR PROFILE ►



Tioga
 Lawrenceville
 Lawrence Twp
 Nelson Twp
 Elkland
 Osceola Twp
 Deerfield Twp
 Knoxville
 Westfield Twp
 Westfield

West of Tioga County, the corridor connects with US 6 in western Potter County at Coudersport. The corridor's eastern terminus is with US 15 in Lawrenceville Borough. PA 49 is characterized as a two-lane highway and generally has posted speed limits of 55 mph.

EMTA's Route 45 provides corridor residents with public transportation services between Westfield and Lawrenceville with connections to Wellsboro and Mansfield. For users of intercity bus, both Greyhound and Susquehanna Trailways have an Elmira to Williamsport run with a stop in Tioga Junction, Lawrence Township.

Major natural resources in the corridor are the Cowanesque River and Lake, from which the corridor derives its name.

Since December 1995, the municipalities along the corridor have been designated as part of an enterprise zone, one of 51 across the Commonwealth of Pennsylvania. The enterprise zone is one of the longest and most rural such zones in the Commonwealth. The designation currently will remain in effect until June 2004.



Key Findings

The Cowanesque Corridor is an important rural arterial for the communities and industries along northern Tioga County.

Key Trends and Issues in the Cowanesque Corridor include:

- Most issues raised by transportation stakeholders during NTRPDC's 1999 round of public meetings involve improving freight movement from the corridor's shippers through the corridor to US 15 in Lawrenceville Borough. Among these issues include winter maintenance and the creation of "flyby" lanes to pass left turning traffic in the corridor.
- Bliss Road is a major access route to recreation facilities on the northern side of Lake Cowanesque.
- The Cowanesque Dam is a major feature in the corridor. Completed in 1979, the project was completed by the U.S. Army Corps of Engineers as a flood control project, the side benefits of which include a new recreational lake for fishing and swimming. Power companies also use the water made available.
- As part of the work on US 15 in bringing it to interstate status (as I-99), PA 49 will eventually have a diamond interchange with the new interstate. The township and borough will pay half the cost of lighting the interchange until it eventually becomes part of the I-99 system. The new interchange will relieve the congestion currently being experienced at the current intersection of PA 49 with US 15 in Lawrenceville Borough. The areas adjacent to the new interchange are generally considered to be among the area's most developable land, with excellent transportation access and availability of water and sewer services. There are 13 acres of commercially zoned land and 20 of residential north of PA 49 in Lawrence Township.
- Journey to work travel times in the corridor are generally higher than those of the region overall, a reflection of its rural character.
- There are generally fewer vehicles available per household in the corridor compared to regional averages.
- Journey to work destinations are fairly evenly distributed throughout the corridor, although Steuben County, NY is the single largest destination. Westfield and Elkland Boroughs are important employment centers.
- Corridor population growth has been flat over the past 50 years, a trend that continued through the 1990s. Growth in the corridor is slower than state and regional rates.
- The corridor's population is aging at a greater rate than regional averages.





- The corridor is very racially homogeneous, with 115 people (out of a total population of 8,736) not white.
- Income levels are generally lower in the Cowanesque Corridor than elsewhere in the Northern Tier.
- Manufacturing is an important aspect of the corridor, as it has been designated as an enterprise zone and includes many of Tioga County's major manufacturers, including its biggest, Ward Manufacturing. Manufacturing in fact represents 35.7 percent of all corridor employment, compared to 23 percent throughout the Northern Tier.
- Major transportation projects that have been programmed for the corridor mainly include highway restoration and resurfacing projects on PA 49 in the Elkland and Knoxville areas.

Public Input

Transportation stakeholders who participated in the Northern Tier's public involvement efforts in 1999 raised the following issues of concern in the Cowanesque Corridor:

- PA 49 sometimes is not plowed very well and sometimes it doesn't look plowed at all.
- There's no signal for traffic in Osceola.
- In Elkland, the steel arch truss bridge across the Cowanesque River is in need of major attention. Local stakeholders have already brought this need to the attention of both PENNDOT and the State Transportation Commission (STC).
- There are many trucks originating from Elkland heading east on PA 49 to US 15. As such, there are several intersections along the corridor that need "flyby" lanes for left hand turns. The roadway would in turn need to be widened in those particular intersections.



Planners and economic development officials in Tioga County view the Cowanesque Corridor as an "economic development tool" that should be the county's next big focus after improvements to US 15 are completed. As part of US 15's improvement, the Cowanesque Corridor will have a new interchange with US 15 in Lawrence Township. The corridor contains a considerable level of industry dependent on the PA 49 roadway for commuting and goods movement. The corridor has already been designated as an enterprise zone between Westfield and Lawrenceville. The Tioga County Development Corp. was responsible for securing the enterprise zone designation. Given the corridor's industrial role, and its future interchange with US 15/I-99, it is a corridor that will demand some attention from county and regional planners, economic development and elected officials.



Highlighting the corridor's industrial role includes a brief synopsis of some of the largest employers in the county, including:

- In Westfield, the **EH Hall/Westfield Tanning Company** is one of the last remaining sole leather tanning companies in the industry. It employs approximately 200 employees. Also in Westfield is **ElectriCord Manufacturing Company**, which manufactures power cords for Apple computers as well as other appliances.



ElectriCord employs approximately 220 and generates a considerable amount of activity in the borough. A medical plastics molding operation operates out of Westfield as well.

- In Elkland, **Metamora Products Corp.** is a plastics molding company for shutters and vinyl siding, employing approximately 250.
- And in Lawrence Township, **Ward Manufacturing Corp.**, opened in May 1997, employing 400. Combined with the plant in Blossburg, Ward employs 1,200 overall.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years in the Cowanesque Corridor.

**Table 1: Annual Average Daily Traffic
COWANESQUE CORRIDOR**

LOCATION	1993	1997	2000
WESTFIELD	4,356	4,686	4,753
KNOXVILLE	3,201	3,445	4,702
ELKLAND	5,044	6,231	5,616
LAWRENCEVILLE	2,972	3,239	3,434

Source: NTRPDC GIS, 2003.



Journey to Work Trip Statistics - Mode Split and Travel Time

Commuter patterns in the Cowanesque Corridor are generally in line with those of regional trends, with some aberrations. Commuters in the Cowanesque Corridor are slightly more dependent on the private automobile as a means of getting to work than their counterparts across the Northern Tier. This is due mainly to a higher participation in carpooling in the corridor (14 percent) than elsewhere. Average commuter travel times range from a low of 22 minutes in Lawrenceville Borough to a high of 29.6 minutes in Osceola Township. In 2000, the Tioga County average was 23.1 minutes.

Some additional journey to work trip statistics from the 2000 Census is as follows:

- At 83 percent, Lawrence Township has the corridor's highest incidence of people driving alone to work.
- Only 8 percent of Deerfield Township workers carpool – the lowest such percentage in the corridor and one of the lowest in the entire region.
- In spite of EMTA's Route 45, only 9 people reported having used public transportation as a means of getting to work. Five of these were from Lawrenceville Borough.
- Westfield Borough by far had the corridor's highest incidence of people walking to their place of employment, at 14.4 percent. This is the sixth-highest such percentage found throughout the Northern Tier.

**Table 2: Mode Split (in %) - 2000
COWANESQUE CORRIDOR**

LOCATION	Workers 16+	SOV	Carpool	Walk	Work at Home	Mean Travel Time (Min.)
LAWRENCEVILLE	262	75.2	13.4	5.0	4.6	21.9
ELKLAND	647	78.1	15.9	3.1	2.5	25.7
KNOXVILLE	259	74.9	17.4	6.6	0.8	29.4
WESTFIELD	450	68.9	12.4	14.4	3.3	22.3
COWANESQUE CORRIDOR	3,119	77.0	14.0	4.5	3.5	--
NORTHERN TIER	79,103	77.5	12.0	4.7	4.6	--

Despite having major employers within the corridor, particularly in Westfield and Elkland, a majority of commuters still travel between 30-60 minutes on their journey to work, just as it was ten years ago. The percentage of corridor commuters traveling less than 15 minutes declined from over 35 percent to just 27 percent of all corridor commuters. The number of people traveling over 90 minutes to work increased in the corridor, and, at 2.6 percent, is higher than the regional rate. Table 3 and Table 4 show how journey to work travel times have changed in the corridor over the past decade.

Other corridor statistic from Census data include:



- The number of people in the corridor traveling less than 15 minutes to work declined from 1,128 to 1,059, or 6 percent. Only 14 percent in Knoxville Borough commuted less than 15 minutes to work, while Westfield Borough had the highest percentage, at 47 percent.
- In 1990, there were only 29 people in the corridor traveling longer than 90 minutes to work. By 2000, that total had increased to 102, or a 252 percent increase. Over 5 percent of Westfield Township residents travel longer than 90 minutes – the highest such percentage in the corridor.

**Table 3: Travel Time to Work (in minutes) - 2000
COWANESQUE CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
LAWRENCEVILLE	22.4	50.4	24.4	2.0	0.8
ELKLAND	29.0	21.9	46.1	2.1	1.0
KNOXVILLE	14.1	31.4	46.4	3.9	4.1
WESTFIELD	46.9	22.3	25.1	3.7	2.1
COWANESQUE CORRIDOR	27.0	28.8	38.7	2.9	2.6
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes) – 1990
COWANESQUE CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
LAWRENCEVILLE	19.1	44.7	34.6	1.1	0.5
ELKLAND	38.6	17.3	41.5	2.0	0.7
KNOXVILLE	41.1	21.7	31.4	4.3	1.6
WESTFIELD	51.0	15.7	24.3	8.9	0.0
COWANESQUE CORRIDOR	35.5	24.1	35.6	3.8	0.9
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Vehicles Available per Household

Households in the Cowanesque Corridor tend not to be as reliant on the automobile as their counterparts elsewhere in the Northern Tier. The percentages of households with two or fewer cars is less than regional rates, while the rate for no- and one-car households is higher. Table 5 shows the vehicle availability for selected Corridor municipalities.

- Only 15.4 percent of Cowanesque Corridor households have access to three or more vehicles, slightly lower than the regional average of 18.9 percent.
- Elkland and Westfield rank 6th and 8th respectively in the Northern Tier in the percentage of residents without access to a car. Over 15.3 percent of Elkland Borough residents do not have access to a car, more than double the regional percentage.



Westfield Borough also recorded high percentages of people without access to an automobile (14.2 percent). This may be due to the presence of housing complexes for the elderly.

- Nearly 20 percent of households in Lawrence, Westfield and Nelson Townships have access to three or more automobiles, the highest percentage in the corridor.

**Table 5: Vehicles Available Per Household (in %) – 2000
COWANESQUE CORRIDOR, Selected Municipalities**

LOCATION	None	One	Two	Three or More
LAWRENCEVILLE	6.5	43.7	34.2	15.6
ELKLAND	15.3	38.0	34.5	12.2
KNOXVILLE	2.0	47.1	32.8	18.0
WESTFIELD	14.2	39.2	37.4	9.1
COWANESQUE CORRIDOR	8.2	35.8	40.6	15.4
NORTHERN TIER	6.3	32.7	42.1	18.9

Commutation Patterns

Employment destinations for Cowanesque Corridor residents are fairly evenly distributed across a variety of locations. Leading the list is Steuben County, NY, which includes over 21 percent of all employment destinations for those living in the corridor. Given the employment options in the corridor, only 27 percent commuted to destinations in Steuben and Chemung Counties, NY, compared to 52 percent in another northern corridor (PA 328). Westfield and Elkland Boroughs lead the list of employment destinations within the corridor proper.

The following additional analysis can be drawn from the Census data, including:

- Approximately 18 percent are employed within their municipality of residence. This statistic applies to over 45 percent of Westfield Borough workers.
- Over 62 percent are employed at destinations in Tioga County – a drop of two percentage points since 1990.
- Nearly 30 percent of corridor employees commute to destinations out of state for jobs, mainly in Steuben County. This is an increase of 3 percentage points from the level recorded in 1990.
- The percentage of people commuting to Potter County doubled during the 1990s, from 2 to 4.1 percent.

Table 6 shows the top ten destinations for commuters in the Cowanesque Corridor.



**Table 6: Top Commuter Destinations – 1990, 2000
COWANESQUE CORRIDOR**

Location	Percentage Share	
	1990	2000
1. STEUBEN COUNTY, NY	21.1	22.3
2. WESTFIELD BOROUGH	17.3	11.9
3. ELKLAND BOROUGH	12.8	11.4
4. WELLSBORO	10.3	10.0
5. CHEMUNG COUNTY, NY	5.8	7.2
6. LAWRENCEVILLE	4.5	5.8
7. POTTER COUNTY	2.0	4.1
8. TIOGA TOWNSHIP	2.5	2.7
9. BROOKFIELD TOWNSHIP	0.0	2.7
10. MANSFIELD BOROUGH	2.4	2.2

Source: U.S. Census Bureau, PA State Data Center, 1990, 2000.

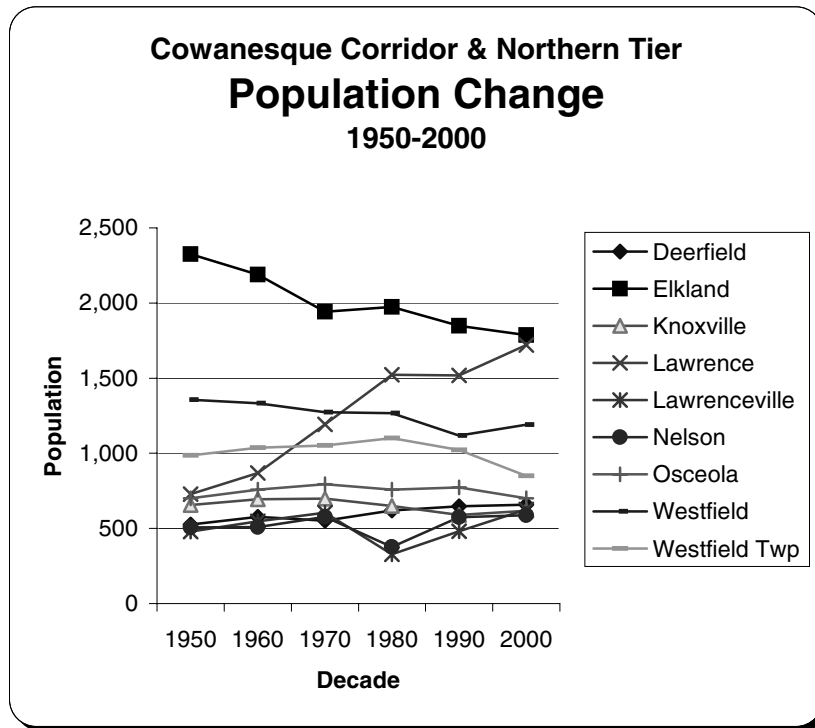
Population Trends

Total population change within the Cowanesque Corridor has remained steady over the past half century. The corridor's population has increased by just 472 persons since 1950, with over half of that growth occurring during the 1950s alone. This contrasts with the 24 percent increase across the entire Northern Tier region for the same time period. Corridor growth during the 1990s also lagged behind the region. Two municipalities – Elkland Borough and Westfield Township – actually lost population since the 1990 census, with the township falling by over 16 percent. The greatest gainer over the past decade has been Lawrenceville Borough, at over 30 percent. Lawrenceville Borough was Tioga County's second-fastest growing municipality during the 1990s, behind only Ward Township. Despite the corridor's slow growth overall, it still exceeded Tioga County's growth rate of 0.6 percent over the past ten years.

While Lawrenceville Borough had the greatest *rate* increase, Lawrence Township had the greatest *numeric* increase, with 202 additional persons from 1990 to 2000. Only Charleston Township added more people in Tioga County in the 1990s. Table 7 shows the population trends of major corridor communities against corridor and regional averages.

**Table 7: Population Trends
COWANESQUE CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
LAWRENCEVILLE	605	327	481	627	30.4
ELKLAND	1,942	1,974	1,849	1,786	(3.4)
KNOXVILLE	698	650	589	617	4.8
WESTFIELD	1,273	1,268	1,119	1,190	6.3
COWANESQUE CORRIDOR	8,685	8,596	8,573	8,736	1.9
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5



Age Group Distribution

As in other areas throughout the Northern Tier, the composition of the corridor’s population has been aging rapidly, and especially so in comparison to regional averages. Some general conclusions that can be drawn from the Census data include:

- Most corridor municipalities saw their 85-plus populations grow at a rate in excess of the region in general. Westfield Township was the corridor’s lone exception, with its 85-plus population declining by half over the past decade.
- Lawrenceville Borough’s 85-plus population increased from 1 to 11 for a 1000 percent increase, the highest in the corridor.
- The corridor’s 65-plus age demographic grew by slightly over 10 percent during the 1990s.

**Table 8: Percent Increase by Age Group - 1990-2000
COWANESQUE CORRIDOR**

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
LAWRENCEVILLE	30.4	89.2	29.3	55.0	104.3	1,000.0
ELKLAND	(3.4)	12.6	0.5	(28.7)	17.3	4.8
KNOXVILLE	4.8	50.0	(19.7)	(4.5)	(12.5)	171.4
WESTFIELD	6.3	19.6	(0.9)	(0.9)	(12.1)	(2.9)
COWANESQUE CORRIDOR	1.9	16.7	3.4	7.6	10.3	23.7
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Median age is another indicator of the Corridor's aging demographic. All but one of the corridor municipalities registered increases in median age over the past 10 years (Knoxville Borough being the lone exception). Knoxville's 36.4's median age declined slightly from 36.9 and is the lowest in the Cowanesque Corridor. Westfield Township has the highest median age, at 41.7. Median age in Tioga County in 2000 was 38.5, an increase of the 1990 level of 34.2.

**Table 9: Median Age, 1990 – 2000
COWANESQUE CORRIDOR**

LOCATION	1990	2000
LAWRENCEVILLE	31.5	37
ELKLAND	37.9	39.2
KNOXVILLE	36.9	36.4
WESTFIELD	37.9	38.8

Racial Composition

The racial composition of the Cowanesque Corridor is even more homogeneous than the Northern Tier as a whole. An assessment of concentrations of minority populations throughout the Northern Tier is an important consideration from an environmental justice standpoint as major transportation projects must take into consideration the potential for disproportionate impact on both minority and low-income populations. Table 10 provides an overview of the corridor's racial composition, while the following bullets describe some anomalies within the corridor:

- Only 115 people in the Cowanesque Corridor are not white, out of a total population of 8,736.
- African-Americans are the largest minority group in the corridor, with 43 persons. Most African Americans in the corridor are from Elkland (17) and Westfield (12) Boroughs.
- There are 39 Hispanics in the corridor, 15 of which are in Elkland Borough.
- All but two of Knoxville Borough's residents are white, the highest municipal percentage of white population in the Corridor.

**Table 10: Racial Composition – (in %)
COWANESQUE CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
LAWRENCEVILLE	627	99.2	0.3	0.5	0.2	0.3	0.0
ELKLAND	1,786	98.3	1.0	0.8	0.2	0.0	0.1
KNOXVILLE	617	99.7	0.0	0.3	0.2	0.0	0.0
WESTFIELD	1,190	97.6	1.0	0.6	0.3	0.3	0.3
COWANESQUE CORRIDOR	8,736	98.7	0.5	0.4	0.1	0.1	0.1
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Source: U.S. Census Bureau (2000)

Income

Households in the Cowanesque Corridor generally earn less than their counterparts elsewhere throughout the Northern Tier. In fact, a majority of corridor households (nearly 40 percent) have a per capita annual income of less than \$25,000. Several other facts regarding corridor income from the Census data are as follows:

- Nearly 5 percent of Knoxville Borough households (28) have an average annual income in excess of \$100,000 a year. No other corridor municipality has near that many.
- Lawrence Township had the corridor's highest median household income, at \$35,926. Elkland Borough had the lowest, at \$26,034.
- Nearly half of the households in Elkland and Westfield Boroughs earn less than \$25,000 a year.

**Table 11: Per Capita Income - 2000
COWANESQUE CORRIDOR**

Location	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
LAWRENCEVILLE	269	39.4	33.1	17.1	7.8	2.6
ELKLAND	763	47.2	30.1	15.9	3.1	3.7
KNOXVILLE	248	37.5	38.7	16.5	2.4	4.8
WESTFIELD	497	46.3	37.2	10.5	4.4	1.6
COWANESQUE CORRIDOR	3,487	39.6	36.7	16.1	5.2	2.4
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry. Major economic development concerns in the corridor include the aforementioned ElectriCord Manufacturing Company, Inc., Metamora Products Corp. (or TAPCO), Westfield Tanning Company, and Ward Manufacturing, Inc. in Lawrence Township. Ward Manufacturing, in fact, is the largest employer in Tioga County with approximately 1,200 employees.

Table 12, Table 13 and Table 14 describe some of the corridor's economic conditions with respect to labor force and key industry clusters.

- Nearly a third of corridor residents are employed in the Production/Transportation and Material Moving sector of the economy.
- Manufacturing represents one of the most important sectors of the corridor's economy, with 35.7 percent of all corridor employment. This compares to just 23 percent across the Northern Tier.
- Of the 60 people in the Armed Forces in the Northern Tier, only 6 are from the Cowanesque Corridor, with 4 coming from Elkland Borough.

- The corridor has a smaller percentage of its population participating in the labor force than the regional rate.

**Table 12: Civilian Labor Force Characteristics – (2000)
COWANESQUE CORRIDOR**

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
LAWRENCEVILLE	491	40.7	59.3	94.8	3.1	0.0
ELKLAND	1,406	48.2	51.8	90.2	5.0	0.3
KNOXVILLE	484	43.4	56.6	96.4	2.1	0.0
WESTFIELD	921	47.8	52.2	95.8	2.2	0.0
COWANESQUE CORRIDOR	6,812	43.8	56.2	93.1	3.9	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 13: Employment by Occupation - (2000)
COWANESQUE CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
LAWRENCEVILLE	276	26.1	16.7	28.6	0.0	8.0	20.7
ELKLAND	654	19.6	11.3	20.6	1.2	11.6	35.6
KNOXVILLE	264	17.0	18.9	16.7	0.8	14.0	32.6
WESTFIELD	461	23.9	17.4	16.3	1.3	8.7	32.5
COWANESQUE CORRIDOR	3,558	21.4	13.7	18.9	1.0	12.1	32.9
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

**Table 14: Employment by Industry by Place of Residence - (2000)
COWANESQUE CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt Educational	Arts & Entertainment	Other	Public Administration	
													Public Administration	
LAWRENCEVILLE	276	0.7	2.2	32.6	0.7	17.4	5.4	0.7	1.4	9.1	15.6	6.5	4.3	3.3
ELKLAND	654	0.6	5.4	42.7	0.0	10.6	3.8	2.8	2.9	4.3	16.2	2.6	6.1	2.1
KNOXVILLE	264	2.7	7.2	36.7	0.8	8.3	5.7	2.3	3.0	1.5	14.0	10.2	5.3	2.3
WESTFIELD	461	2.4	4.1	38.6	0.4	7.4	5.9	1.7	2.8	2.4	18.4	6.5	6.3	3.0
COWANESQUE CORRIDOR	3,558	3.2	6.1	35.7	1.0	21.6	5.9	1.7	2.7	4.1	16.4	4.4	4.6	2.4
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3



2003 Transportation Improvement Program (TIP)

PENNDOT has programmed over \$4.75 million in investments in the Cowanesque Corridor. These investments are centered on five projects, consisting of three highway restoration projects and some bridge work on a four-digit SR, on Addison Road in Elkland Borough. The largest projects in the corridor include a Betterment project in Elkland Borough and a resurfacing of PA 49 in Knoxville. Table 15 provides more detail on these four projects. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.



**Table 15: 2003 TIP Projects
COWANESQUE CORRIDOR**

Municipality	Project/Description	Year				Total
		03	04	05	06	
ELKLAND	Trib Cowanesque River		375			\$375
KNOXVILLE	SR 49 Resurface 4.8 miles	1,708				\$1,708
OSCEOLA	Red House Bridge replace		575			\$575
ELKLAND	SR 49 Resurface 1.4 miles			1,652		\$1,652
ELKLAND	SR 4023 Camp Brook Br		100	40	402	\$542

Source: PENNDOT District 3-0



Corridor Action Plan

Draft Objectives for the Cowanesque Corridor include:

- The Northern Tier Regional Planning and Development Commission, with assistance from the Tioga County Development Corp., should examine the need to identify areas where passing lanes are warranted to pass motorists making left hand turns. Truck traffic between the corridor's industries and US 15/I-99 will be a freight movement concern now and into the future.
- Bliss Road in New York State is a narrow town road that does not match the road's design standard on the Pennsylvania side. This is a state issue that should be highlighted to the attention of both state DOTs and is possibly an issue that could be addressed as part of the US 15 modernization through Lawrenceville.
- Given the corridor's role as a manufacturing center, EMTA should consider unmet demand for public transportation services among communities along the corridor. Residents consider EMTA service to be too limited while what is available needs to be better marketed.
- PENNDOT should work with NTRPDC, Tioga County and Elkland Borough on the appearance of the steel truss bridge that spans the Cowanesque River.
- Park and ride lot development or designation/signing should be considered in the corridor, given the percentages of people who commute to Steuben and Chemung Counties (nearly 27 percent) for employment.
- Tioga County and the Tioga County Development Corp. (as the manager of the corridor enterprise zone) should monitor land use planning efforts currently underway for the area near the proposed interchange of PA 49 with US 15. The development around this future interchange will be key, as it may affect the vitality of corridor downtowns, especially Lawrenceville.
- The new interchange represents an opportunity to demonstrate good community character as opposed to developing to resemble "cookie cutter" development indicative of most interchanges across the country. An economic development strategy for the interchange area should be considered with target industries, marketing and incentives considered.
- The other interchange in the region (US 15 at PA 267) does not have the infrastructure presently available at PA 49 and also lies in a floodplain. These facts combine to make development pressure at the future PA 49 interchange all the more likely.

THE NORTH SULLIVAN CORRIDOR

The North Sullivan Corridor

The North Sullivan Corridor connects the residential communities of northern Sullivan County with the employment opportunities of Mehoopany Township in Wyoming County. PA 87 is the corridor's primary transportation facility, linking Forksville, Dushore and Mehoopany. PA 87 also provides connections to PA 154, PA 487, US 220 and US 6. A tactical rail line of Norfolk Southern's is tangent to the corridor's eastern terminus at Mehoopany. EMTA service is available in Dushore with connections to Towanda and the Lycoming Mall.



CORRIDOR PROFILE ►



Wyoming

Washington Twp
Mehoopany Twp
Forkston Twp
North Branch Twp

Sullivan

Colley Twp
Cherry Twp
Dushore
Forks Twp
Forksville
Elkland Twp
Hills Grove Twp

PENNDOT has functionally classified PA 87 as a Rural Minor Arterial. The roadway also appears on the Northern Tier's Primary Commercial Network (through Sullivan County only) as well as one of its export area secondary routes.

PA 87 is also on the region's bicycle and pedestrian network between Forksville and the Lycoming County line. A segment of SR 3001 in Forkston Township is also on the network between PA 87 south to the state game lands. PA 154 is an important connector route between Forksville and Laporte while Double Run Road (SR 3009) has been a major bicycle/pedestrian priority within Sullivan County. PA 487 is also on the regional bicycle/pedestrian network south of Dushore to the Lycoming County line.

Wyoming State Forest is the main natural feature in the corridor, in addition to state game lands in Colley and North Branch Townships.



Key Findings

The North Sullivan Corridor, and particularly PA 87, is a major east-west corridor serving the ground transportation needs of the rural communities in northern Sullivan and western Wyoming Counties. In such an isolated area of the state, PA 87 is an important transportation facility in connecting rural areas with employment in Dushore and Mehoopany.

Key Trends and Issues in the North Sullivan Corridor include:

- Corridor residents are dependent on the private automobile. Public transportation service is available only in Dushore Borough, with scheduled runs to Towanda and the Lycoming Mall.
- Given their remote location, residents in the corridor are driving long distances to work. One municipality, North Branch Township, has an average travel time to work of 46 minutes, the highest among municipalities in the Northern Tier's priority corridors.
- Nearly half of all corridor commuters travel to destinations in Mehoopany Township, Dushore Borough or Tunkhannock Borough for employment.
- While a majority of corridor households have access to two or more vehicles, in Dushore, at least 10 percent of households have no access to a vehicle whatsoever.
- The corridor's population is growing, although most of the growth is taking place in Wyoming County.
- The corridor's population is aging, although the percentage of those age 85-plus has actually declined over the past 10 years, against state and regional trends. Median age has also increased in 9 of the corridor's 10 municipalities.
- Per capita income in the corridor is similar to regional rates.
- The corridor is not as homogeneous as the Northern Tier as a whole, with Colley Township being 21 percent Black and 7.6 percent Hispanic.
- Farming, Fishing & Forestry employs corridor residents at a rate nearly six times higher than the state rate.
- Just north of the corridor, Fox Township in Sullivan County has been a leader in subdivision activity, yet has not experienced a corresponding increase in population (the township expanded by just 52 persons during the 1990s). This signals a growth in seasonal homes that may one day become homes for the retired.
- For bicyclists, the PA 87 roadway provides an excellent east-west route between Williamsport and Mehoopany. Topography is generally favorable to bicyclists as well, as it is one of the few roadways in Sullivan County that isn't a continuous hill.
- Procter & Gamble in Mehoopany Township is the largest employer in the corridor and the largest in Wyoming County. In the summer of 2001 Procter & Gamble erected a 1.7 million square foot warehouse close to their paper products manufacturing operation. Larger than 35 football fields, the warehouse is owned by a real estate trust and is managed by Excel Logistics. (P&G had originally been contracting out its warehousing operations.) Excel provides on-site management of the warehouse, which operates 24 hours a day and is located just four miles southwest of the P&G Mehoopany Paper Plant. The distribution center handles truckloads of paper products including toilet tissue, paper towels, paper napkins, and baby care products. The arrangement P&G has



in Mehoopany follows a national trend of leasing warehousing facilities, where a real estate trust owns the real estate and a logistics firm manages the distribution center.

- Procter & Gamble recently announced it will invest \$350 million to expand its tissue and towel production capacity by adding two new paper machines and associated equipment conversions to the Mehoopany plant. The expansion will create 350 new jobs in the region. According to Procter & Gamble, its sales volume of tissue in the USA has risen by 30 percent over the past five years.
- Three of the six major lumbering operations in Sullivan County are located off of PA 87.



Public Input

During NTRPDC’s 1999 round of transportation stakeholder meetings, only one comment was raised that has direct applicability to the North Sullivan Corridor. The comment involved the need for turning lanes on PA 87 by the Procter & Gamble facility.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years and communities in the North Sullivan Corridor.

**Table 1: Annual Average Daily Traffic
NORTH SULLIVAN CORRIDOR**

LOCATION	1993	1997	2000
DUSHORE	1,351	1,203	1,310
FORKSVILLE	781	840	1,122

Source: NTRPDC GIS, 2003.

Mode Split

Corridor-wide, the journey to work mode split in the North Central Corridor is very similar to trends being experienced across the Northern Tier. Some exceptions to regional patterns are described in the following bullets and in Table 2 below.

- Dushore and Forksville, the corridor’s only two boroughs, naturally have higher percentages of people walking to work than the remaining townships in the corridor. The boroughs’ rates of people walking to work are over twice as high as the regional average. Forks and Hillsgrove Townships also have relatively large percentages of their populations walking to work (10.2 percent).
- Colley Township has nearly as many people walking to work as it does with those driving alone. Only 43 ½ percent of commuters in Colley Township drive alone to work versus nearly 39 percent who walk. An additional 7 percent work at home, the highest rate in the corridor.



- Although EMTA provides public transportation service to Dushore in the corridor, only 13 persons reported using public transportation as a means of getting to work. These were from Mehoopany Twp (5), Cherry Twp (5), and Forks Township (3).
- Hillsgrove Township has the highest incidence of people carpooling to work, at 22 percent while Cherry Township was next, at 16.4 percent.

**Table 2: Mode Split (in %) – 2000
NORTH SULLIVAN CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
WASHINGTON	82.2	6.9	0.0	4.3	6.7
NORTH BRANCH	83.9	12.9	0.0	3.2	0.0
DUSHORE	72.0	12.1	0.0	10.7	5.2
FORKSVILLE	78.8	3.8	0.0	11.5	5.8
CORRIDOR	75.8	11.4	0.5	7.7	4.3
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6

Travel Time to Work

Journey to work travel times are increasing in the North Sullivan Corridor, as they are throughout most of the Northern Tier. Communities in the North Sullivan Corridor are more isolated than most from employment opportunities. To underscore this, Forkston and North Branch Townships rank third and fourth in the region in the percentage of people traveling longer than an hour to get to work (16.8 and 16.1 percent, respectively). A third - Mehoopany Township - ranked 15th, at 12.1 percent. Mean travel times to work in the corridor range from a low of 16.8 minutes in Colley Township to a high of 46 minutes in North Branch Township. North Branch Township's mean travel time to work of 46 minutes is by far the highest in the Northern Tier among its priority corridors. The Township also leads the region in the percentage of its commuters who require longer than 90 minutes to get to work, at 13 percent.

The percentage of people traveling less than 15 minutes to work actually declined from 44 to 38 percent, while the percentage of those who travel 15-29 minutes stayed relatively the same. There were increases in all categories for those traveling in excess of 30 minutes. A majority of corridor commuters still travel less than 15 minutes to work, at rates just slightly higher than the regional rate of 34 percent. Table 3 and Table 4 show how journey to work travel times have increased in the corridor over the past decade.

**Table 3: Travel Time to Work (in minutes by percent) – 2000
NORTH SULLIVAN CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
WASHINGTON TWP	43.6	27.9	21.9	5.7	0.9
NORTH BRANCH TWP	9.7	25.8	48.4	3.2	12.9
DUSHORE	42.0	24.5	24.5	6.9	2.2
FORKSVILLE	42.9	32.7	16.3	4.1	4.1
CORRIDOR	38.3	25.7	26.7	7.1	2.1
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3



**Table 4: Travel Time To Work (in minutes by percent) – 1990
NORTH SULLIVAN CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
WASHINGTON TWP	58.9	20.4	16.9	3.7	0.0
NORTH BRANCH TWP	9.6	49.4	25.3	9.6	6.0
DUSHORE	52.2	21.0	24.3	2.5	0.0
FORKSVILLE	39.1	39.1	15.6	6.3	0.0
CORRIDOR	44.3	25.8	24.7	4.6	0.6
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

Throughout the Northern Tier, Mehoopany Township ranks as one of the largest destinations for commuters. In the North Sullivan Corridor, it ranks second only to Dushore Borough as a corridor employment destination. Commutation data from the 2000 U.S. Census show that only 21 percent of corridor commuters are actually employed within their municipality of residence. The following additional analysis can be drawn from this data, including:



Dushore

- Forksville Borough had the corridor’s highest percentage of people working within their municipality of residence, at 55.8 percent. Dushore Borough and Colley Township also had nearly half of their own workers employed within the municipality.
- Forkston and North Branch Townships have only a handful of workers employed within the home municipality.
- A roughly equal number of corridor residents work in Sullivan and Wyoming Counties. (Approximately 35.3 percent work in Sullivan County while 35.6 percent work in Wyoming.) Only 9.4 percent work in Bradford while 1.4 percent commute to Susquehanna County.
- Approximately 8.6 percent commute to the Lackawanna-Luzerne metropolitan area for employment. This is a slight increase over 1990 rates.

Over 70 percent of Corridor residents work in one of the top ten employment destinations as shown in Table 5.



**Table 5: Top Commuter Destinations, 1990, 2000
NORTH SULLIVAN CORRIDOR**

Municipality	Percentage Share	
	1990	2000
1. DUSHORE BOROUGH	14.7	16.6
2. MEHOOPANY TOWNSHIP	17.6	13.5
3. TUNKHANNOCK BOROUGH	14.3	9.2
4. TUNKHANNOCK TOWNSHIP	0.0	5.9
5. COLLEY TOWNSHIP	3.7	5.0
6. LAPORTE BOROUGH	5.2	4.9
7. LUZERNE COUNTY	2.9	4.8
8. LACKAWANNA COUNTY	4.8	3.8
9. LYCOMING COUNTY	3.1	3.5
10. CHERRY TOWNSHIP	6.4	3.1

Source: U.S. Census Bureau, 1990, 2000.

Vehicles Available per Household

The number of vehicles available per household in the corridor roughly parallels the regional experience. While Table 6 shows the percentage breakdown by municipality, the following bullet points highlight other details of the data available:

- A majority (39.2 percent) of households in the corridor are two-car households.
- Dushore Borough and Forks Township have over 10 percent of their households without access to a vehicle, the highest such percentages in the corridor.
- Mehoopany Township has 26.3 percent of its households with access to three or more vehicles. Washington Township is next, at 22.2 percent.
- In Dushore Borough and Colley Township, a majority of households have access to only one vehicle. Only 11 percent of Dushore Borough households have access to three or more vehicles, the lowest percentage found anywhere in the corridor.

**Table 6: Vehicles Available Per Household (in %) – 2000
NORTH SULLIVAN CORRIDOR**

LOCATION	NONE	ONE	TWO	THREE OR MORE
WASHINGTON TWP	4.3	36.6	36.8	22.2
NORTH BRANCH TWP	3.7	22.0	54.9	19.5
DUSHORE	12.9	42.9	33.4	10.9
FORKSVILLE	7.1	24.3	54.3	14.3
CORRIDOR	6.0	35.4	39.2	19.4
NORTHERN TIER	6.3	32.7	42.1	18.9

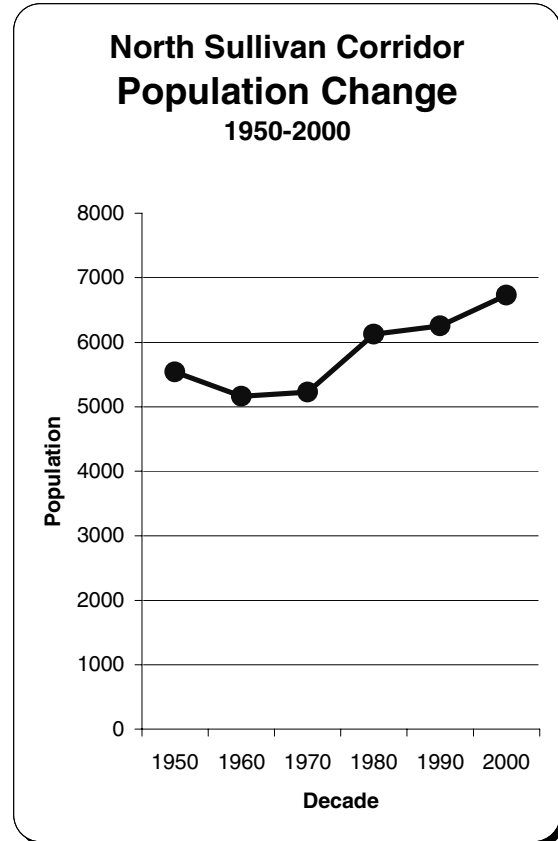


Population Trends

Population in the North Sullivan Corridor is growing, and is being led by two municipalities, specifically Washington and Mehoopany Townships in Wyoming County. The corridor’s strongest growth period occurred back in the 1970s, when population grew by 17.2 percent. Population has been increasing every decade in the corridor since the 1960s, reaching a total of 6,729 by the 2000 Census.

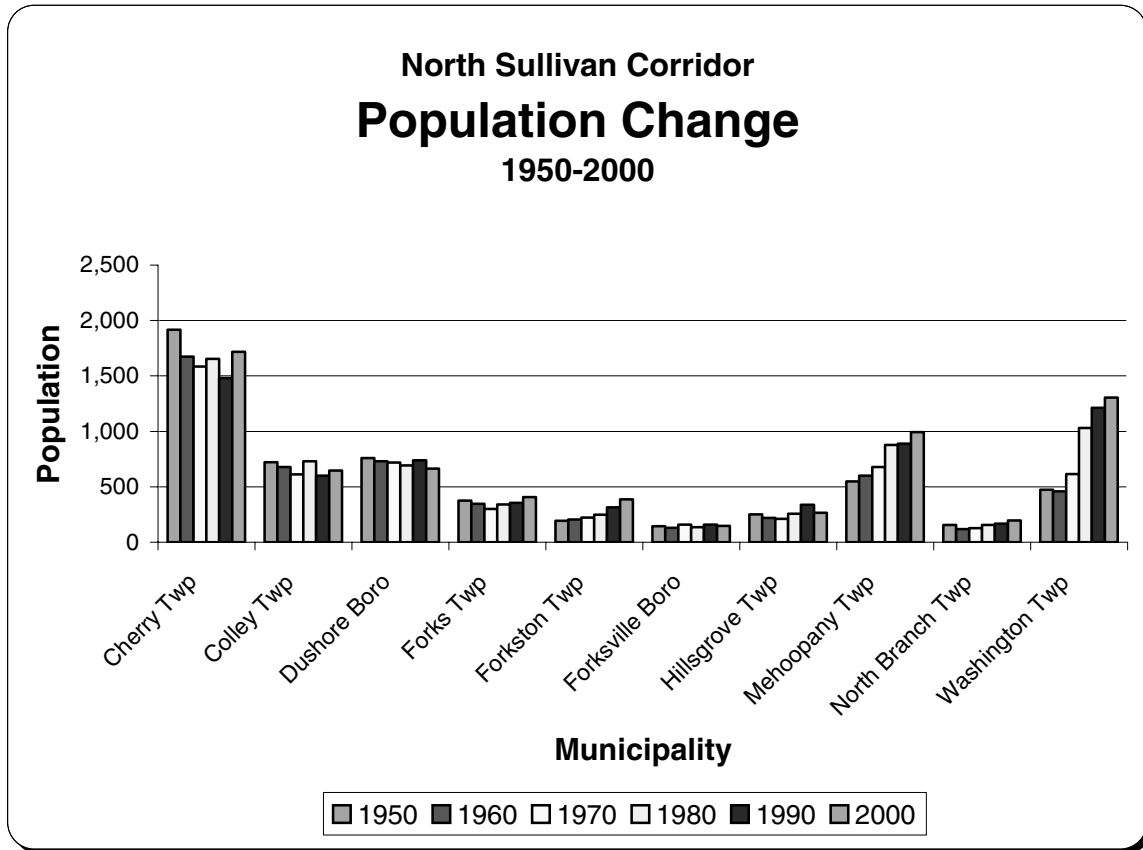
Since the 1990 Census, corridor population has grown by 7.6 percent – more than triple the regional rate. Only three municipalities have lost population over the past decade. These include the Sullivan County communities of Dushore, Hillsgrove Township, and Forksville Borough. Table 7 shows the total population figures for the main municipalities in the corridor. A summary of this data is as follows:

- Of the 474 new residents that moved into the corridor during the past decade, 300, or 63 percent, were in Wyoming County. Most of the growth in Sullivan County’s portion of the corridor was in Cherry Township, the corridor’s largest municipality, which added 237 persons for a growth rate of 16 percent. Over the past decade, no Sullivan County municipality added more people than Cherry Township.
- Hillsgrove Township, at the extreme western portion of the corridor, suffered the corridor’s greatest population decline, at 21.4 percent. Hillsgrove lost 21.4 percent of its population – the greatest decrease not only in the North Sullivan Corridor but throughout Sullivan County as well.



**Table 7: Population Trends
NORTH SULLIVAN CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
WASHINGTON TWP	617	1,031	1,212	1,308	7.8
NORTH BRANCH TWP	126	156	168	197	17.3
DUSHORE	718	692	738	663	(10.2)
FORKSVILLE	158	137	160	147	(8.1)
CORRIDOR	5,226	6,127	6,255	6,729	7.6
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5



Age Group Distribution

The corridor’s population decline can be directly related to the exodus of its young people. While overall corridor population growth is over three times the regional rate, its rates of growth among older age groups also outstrip regional rates. One anomaly however, is the decrease in population among the 85-plus age group, which goes against regional trends. The corridor’s population growth rate among those age 65-plus was 9.7 percent, compared to just 8 percent regionally. Table 8 provides more detail on the age group distribution within the corridor and selected municipalities.

- The corridor’s population age 85-plus dropped from 107 to 105 for a loss of nearly 2 percent. This decrease is far below the regional average growth rate of 25 percent for this age group.
- Hillsgrove Township saw the greatest decrease in the 85-plus segment of its population, from 24 to 8 persons. Hillsgrove also registered the biggest population decrease for those ages 65-plus, at minus 55 percent.
- Conversely, Hillsgrove Township led all corridor municipalities in the growth of its age 45-54 population, at 126 percent. Neighboring Forks Township also posted strong gains along this group, at 87 percent while Cherry added 73 percent.



Table 8: Percent Increase by Age Group – 1990, 2000
NORTH SULLIVAN Corridor

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
WASHINGTON	7.8	56.5	21.4	39.3	7.41	16.7
NORTH BRANCH	17.3	70.8	19.0	61.1	80.0	66.7
DUSHORE	(10.2)	30.2	(15.6)	(24.2)	(1.39)	(13.0)
FORKSVILLE	(8.1)	35.7	23.8	63.2	22.2	(100.0)
CORRIDOR	7.6	53.2	10.2	8.0	15.5	(1.9)
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

All but one municipality in the corridor registered increases in median age. Hillsgrove Township was the lone exception, decreasing from 47 to 43.8. Forksville Borough experienced the corridor's greatest increase in median age, from 30.4 to 43.5. This increase came during a decade where the borough lost just over 8 percent of its population, showing the loss of its young people. The median age increase of 13.2 years was also the highest recorded in the Northern Tier.

Forks Township also registered a large increase in median age, from 37.3 to 45.4 for an increase of 8.1 years. The township's median age ranks as the eighth-highest in the Northern Tier. Table 9 provides detail for selected corridor municipalities.

Table 9: Median Age, 1990 – 2000
NORTH SULLIVAN CORRIDOR

LOCATION	1990	2000
WASHINGTON	30.8	35.6
NORTH BRANCH	37.3	44.8
DUSHORE	38.1	42.2
FORKSVILLE	30.4	43.5

Racial Composition

There are 289 minorities in the North Sullivan Corridor, according to information from the 2000 U.S. Census. African Americans constitute the corridor's largest minority population, with 139 residents, over 97 percent of which reside in Colley Township. There are 91 Hispanics in the corridor, 54 percent of which are also located in Colley Township. The most homogeneous municipality in the corridor is Forks Township, where all but two of its 407 residents are white.

Table 10 provides more information on racial composition within the corridor against regional averages.



Table 10: Racial Composition – (in %)
NORTH SULLIVAN CORRIDOR

Location	Total	White	Black	Hispanic	Indian	Asian	Other
WASHINGTON	1,306	98.3	0.0	1.0	0.1	0.0	0.2
NORTH BRANCH	197	97.5	1.0	2.0	1.5	0.0	0.0
DUSHORE	663	97.7	0.2	0.2	1.2	0.0	0.0
FORKSVILLE	147	95.2	0.0	0.0	4.8	0.0	0.0
CORRIDOR	6,729	95.7	2.1	1.4	0.6	0.1	0.5
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Per Capita Income

Reflecting regional averages, most households in the corridor earn less than \$25,000 a year. Median household income (1999) in the corridor ranges from a low of \$23,542 in Colley Township to a high of \$40,655 in Mehoopany Township. There are 140 corridor households that make more than \$100,000 a year, including 16 that earn more than \$200,000 a year.

Table 11 and the bullet points below provide more information concerning per capita income in the North Sullivan Corridor.

- Over 5.2 percent of corridor households (140) make more than \$100,000 a year. Mehoopany Township has the greatest percentage of > \$100,000 households, at 8.7 percent.
- Colley Township has the corridor's highest percentage of households making less than \$25,000 annually, at 52 percent.

Table 11: Per Capita Income (2000)
NORTH SULLIVAN CORRIDOR

LOCATION	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
WASHINGTON	487	33.3	34.5	16.4	9.4	6.4
NORTH BRANCH	79	41.8	32.9	13.9	8.9	2.5
DUSHORE	335	47.5	26.0	15.5	7.5	3.6
FORKSVILLE	73	41.1	38.4	9.6	11.0	0.0
CORRIDOR	2,697	38.6	33.1	15.2	8.0	5.2
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major economic concerns in the corridor include: the Endless Mountains Industrial Complex in Cherry Township and the Proctor & Gamble Paper Products Company in Mehoopany Township. The corridor also has major lumbering operations, three of which have actual road frontage on the roadway. To the north of the corridor in Estella, L&H Lumber is also a major employer just outside of the corridor proper. Table 12,

Table 13 and Table 14 describe some of the corridor's economic and labor force conditions.



- Unemployment rates in the corridor are three and a half percentage points higher than in the region overall.
- There are only two people in the corridor in the Armed Forces, both from Forkston Township.
- Farming, Fishing and Forestry employ higher percentages of corridor residents than throughout the region.
- The corridor employs a higher percentage of workers in the Farming, Fishing & Forestry and Construction, Extraction and Maintenance sectors than regional averages. In fact the rate of corridor residents employed in Farming, Fishing & Forestry is nearly six times higher than the state rate.
- A majority of corridor residents are employed by manufacturing interests, with 21.6 percent of all employment. Education ranked second in the corridor, at 18.8 percent.
- North Branch Township led all corridor municipalities in the percentage of people employed in manufacturing occupations, at 32.8 percent. Forksville Borough ranked last, at just 3 ½ percent.
- Education, Health and Social Services ranked the highest in Colley Township, with 33 percent of all employment.

Table 12: Civilian Labor Force Characteristics – (2000)
NORTH SULLIVAN CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
WASHINGTON	967	35.6	64.4	95.7	4.3	0.0
NORTH BRANCH	141	51.8	48.2	94.1	5.9	0.0
DUSHORE	558	42.5	57.5	91.3	8.7	0.0
FORKSVILLE	130	46.2	53.8	81.4	18.6	0.0
CORRIDOR	5,419	41.4	58.6	91.2	8.7	0.1
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1



**Table 13: Employment by Occupation - (2000)
NORTH SULLIVAN CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
WASHINGTON	596	25.8	16.6	20.5	3.5	11.7	21.8
NORTH BRANCH	64	29.7	9.4	26.6	0.0	28.1	6.3
DUSHORE	293	24.2	17.1	22.2	1.7	14.7	20.1
FORKSVILLE	57	24.6	19.3	19.3	1.8	17.5	17.5
CORRIDOR	2,839	22.2	16.5	21.0	2.7	14.4	23.2
N. TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

**Table 14: Employment by Industry by Place of Residence - (2000)
NORTH SULLIVAN CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt Educational	Arts & Entertainment Other	Public Administration		
WASHINGTON	596	9.4	6.4	21.8	1.5	10.4	9.2	2.2	4.0	2.5	16.3	7.7	4.0	4.5
NORTH BRANCH	64	3.1	20.3	32.8	3.1	0.0	3.1	0.0	9.4	0.0	12.5	3.1	3.1	9.4
DUSHORE	293	3.4	8.5	20.5	3.4	11.3	3.1	2.0	5.1	4.1	18.8	5.5	9.9	4.4
FORKSVILLE	57	5.3	12.3	3.5	7.0	3.5	21.1	0.0	3.5	0.0	26.3	3.5	14.0	0.0
CORRIDOR	2,893	6.5	7.6	21.6	2.9	9.9	5.8	1.6	3.5	4.3	18.8	6.9	5.7	4.9
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

PENNDOT has \$4.36 million in projects programmed in the 2003 TIP for the North Sullivan Corridor. Heading the list are two widening and resurfacing projects on PA 87 west of Forksville. Combined, the two projects will see 6.1 miles worth of improvement to PA 87 in the western end of the corridor. State bridges will also be replaced over Stoney Run and Lopez Creek on PA 87 and SR 1004, respectively. In Forkston Township, the Mehoopany Creek Bridge will be removed and replaced with a continuous I-Beam bridge with improvements also being made to the guide rail and approaches. Actual construction work on the structure is expected to be programmed in the second four-year period of PENNDOT's Twelve Year Program. Table 15 below highlights the programmed highway restoration project. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.



**Table 15: 2003 TIP Projects
PA 328 CORRIDOR**

87

Municipality	Project/Description	Year				Total
		03	04	05	06	
CHERRY	Lick Creek Bridge	155		500		\$655
COLLEY	Lopez Creek Bridge repl			100		\$100
DUSHORE	PA 487 resurface 1.1 mi	380				\$380
DUSHORE	Center St Bridge	620				\$620
FORKSTON	Mehoopany Creek brdge			50		\$50
HILLSGROVE/FORKS	Widen & resurface			1,400		\$1,400
HILLSGROVE/FORKS	PA 87 widen/resurface		1,160			\$1,160

Source: PENNDOT District 3-0

Corridor Action Plan

This section outlines some suggested draft actions, based on the results of public involvement, data collection efforts from county and multi-municipal comprehensive plans, and the Census data.

- Transportation stakeholder focus group meeting participants have highlighted the need for turning lanes on PA 87 at Procter and Gamble as well as at the Washington Park residential development.
- Mehoopany Ridge Road (SR 4015) is used as a short cut by P&G employees between PA 87 and the plant. The narrow roadway features a sheer cliff on one side with no room for driver error.
- There are maintenance issues with the deck of River Bridge.
- Although not on the region's bicycle/pedestrian network, the road surface and shoulders on PA 87 in Wyoming County have been noted as being in poor condition. PENNDOT's annual Betterment Program is developed using public and legislative input, as well as the Department's Pavement Management System. The Northern Tier Regional Planning Commission should work with the PENNDOT County Maintenance Manager in including a shoulder paving/widening for PA 87 on the Betterment Program or through routine maintenance work programs. NTRPDC should seek placement of the proposed project on the region's 2005 TIP if it cannot be addressed more quickly through the Department's Betterment Program and/or routine maintenance activities.



Mehoopany Ridge Road

THE OWEGO TURNPIKE CORRIDOR

The Owego Turnpike Corridor

The Owego Turnpike travels southeast to northwest through central Susquehanna County from Hop Bottom Borough to the New York State Line. The 29.8-mile corridor is centered on PA 167, which is a major truck route between central Susquehanna County and I-81. The corridor is composed of 6 municipalities – four townships and two boroughs. The corridor is also tangent to CP Rail’s line (former D&H) at Lathrop Township.



CORRIDOR PROFILE ►



Susquehanna
 Silver Lake Twp
 Bridgewater Twp
 Montrose
 Brooklyn Twp
 Lathrop Twp
 Hop Bottom

The PA 167 roadway provides connections to US 11 in Hop Bottom Borough in the south, and eventually to NY Route 17 in the north. PENNDOT has classified PA 167 north of Montrose Borough as a Rural Minor Collector. The segment that follows PA 706 from Tiffany Corners through Montrose is a Minor Arterial, while south of Tiffany Corners, it is classified as a Rural Major Collector. NTRPDC has designated the roadway as part of its Agricultural Access Network. PA 167 has a poor International Roughness Index (IRI) rating of 196 – the second worst among the Northern Tier’s priority corridors. Only PA 187 has a worse rating.

One of the corridor’s main natural features is the Hop Bottom Creek, which PA 167 follows north until it joins PA 706. At this juncture, the two roadways head west and follow the same alignment through Montrose Borough. On the west side of the borough, PA167 turns north again through Bridgewater and Silver Creek Townships. Salt Spring State Park is located just outside of the corridor in Franklin Township. Throughout the region are numerous lakes and ponds, including Silver Lake and Quaker Lake.

The Endless Mountains Riding Trail, which is one of two “Rail-Trails” in Susquehanna County, follows an abandoned rail line from the village of Alford on US 11 in Harford Township north and west to the Borough of Montrose.



Key Findings

Key Trends and Issues in the Owego Turnpike Corridor include:

- The corridor has the second worst International Roughness Index (IRI) rating for any Northern Tier priority corridor.
- Corridor journey to work travel times have increased over the past decade.
- Montrose is the top destination for journey for corridor journey to work trips
- Over the past decade, population increases in both Bridgewater and Silver Lake Townships were offset by a 16 percent loss in Montrose Borough and a 3.5 percent loss in Hop Bottom Borough. Overall, the corridor has grown by only 2.7 percent since 1990.
- There are 203 corridor households that make more than \$100,000 a year, including 33 that earn more than \$200,000 a year. Silver Lake Township has the corridor's highest percentage of households with per capita incomes in excess of \$100,000, with almost 12 percent.
- Silver Lake Township has the Northern Tier's highest per capita income, at \$48,062.
- Over 30 percent of the workers in the corridor have Management and Related Professional Occupations. Another 24 percent have Sales and Office Occupations.

Public Input

During NTRPDC's 1999 round of transportation stakeholder meetings, there were no comments raised regarding the Owego Turnpike Corridor in general, or the PA 167 roadway in particular.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years and communities in the Owego Turnpike Corridor.

**Table 1: Annual Average Daily Traffic
OWEGO TURNPIKE CORRIDOR**

LOCATION	1993	1997	2000
MONTROSE	1,465	2,268	2,400
HOP BOTTOM	2,637	2,624	2,568

Source: NTRPDC GIS, 2003.

Mode Split

Just over 78 percent of commuters in the corridor travel to work alone (Single Occupancy Vehicle/SOV). This is in keeping with regional trends, as are the percentages of commuters traveling by other means. Table 2 provides more details about mode split for select municipalities in the corridor, as well as for the Northern Tier Region. The following points provide additional information.

- Lathrop and Silver Lake Townships have the highest percentage of SOV commuters in the corridor at 80.6 and 82.6 percent respectively.



- Bridgewater Township has the highest *number* of commuters walking to work – 53, but Montrose Borough has the highest *percentage* of its commuters walking – 5.7 percent (39 people).
- Only 2 people in the corridor reported using public transportation as a means of getting to work. Both were in Bridgewater Township.
- Montrose Borough has a greater percentage of workers who carpool (15 percent) than in any other municipality in the corridor.

**Table 2: Mode Split (in %) – 2000
OWEGO TURNPIKE CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
SILVER LAKE TWP	82.6	6.2	0.0	1.9	8.5
MONTROSE	76.8	15.2	0.0	5.7	0.7
HOP BOTTOM	75.2	13.4	0.0	7.0	4.5
CORRIDOR	78.5	11.1	0.1	4.1	5.2
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6

Travel Time to Work

Journey to work travel times are generally increasing in the Northern Tier, including within the Owego Corridor. According to 2000 Census data, over 60 percent of commuters in the corridor still travel less than thirty minutes to their place of work. Table 3 and Table 4 and the following points show how journey to work travel times have changed in the corridor over the past decade:

- Mean travel times to work in the corridor range from a low of 17.2 minutes in Montrose Borough to a high of 33.9 minutes in Lathrop Township.
- In 1990, there were 20 corridor commuters that traveled longer than 90 minutes to work. By 2000, this number had more than doubled to 54.
- Montrose Borough has the corridor's greatest percentage of people traveling less than 15 minutes to work, almost 60 percent. Bridgewater Township comes in second, at 49 percent.
- The percentage of people in the corridor traveling less than 15 minutes to work actually declined from 39 to 35 percent.
- There were increases in all categories for those traveling in excess of 30 minutes and particularly for those who travel longer than an hour.



**Table 3: Travel Time to Work (in minutes by percent) – 2000
OWEGO TURNPIKE CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
SILVER LAKE TWP	10.9	50.8	34.1	3.0	1.2
MONTROSE	59.4	12.6	25.1	2.4	0.6
HOP BOTTOM	22.7	24.0	44.7	8.7	0.0
CORRIDOR	35.0	26.3	33.3	3.8	1.6
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

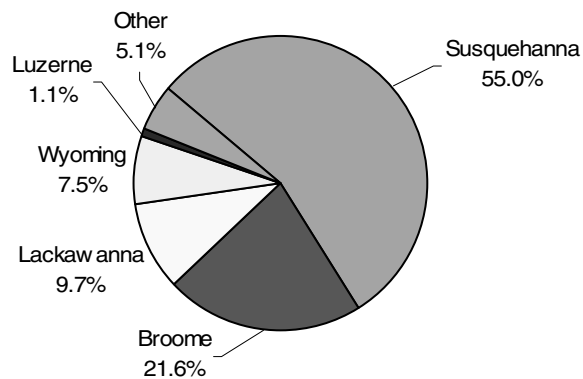
**Table 4: Travel Time To Work (in minutes by percent) – 1990
OWEGO TURNPIKE CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
SILVER LAKE TWP	7.7	65.3	25.1	1.8	1.1
MONTROSE	66.0	12.4	21.4	0.8	0.3
HOP BOTTOM	19.5	40.7	30.1	9.8	0.0
CORRIDOR	39.4	28.5	31.3	3.1	0.6
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

Almost half of workers in the corridor are employed within the corridor's municipalities. In fact, the county seat of Montrose Borough is the top commuter destination in the corridor, attracting 34.3 percent of all corridor commuters. The next most popular destination, attracting just over a quarter of all commuters in the corridor, is Broome County, New York. Other key findings from the Census' commutation pattern data include:

Owego Turnpike Employment Destinations 2000



- Only 21 percent of corridor workers are employed within their municipality of residence. Montrose is the only net importer of workers in the corridor. The county seat employs the highest percentage of its residents (57 percent). This is a decline of ten percentage points from 1990 rates. Lathrop Township employs only 5 percent of its own residents. The remaining corridor municipalities all employ between 10 and 20 percent of their own residents.
- Approximately 55 percent of corridor workers are employed at destinations within Susquehanna County. Only 7.5 percent commute to Wyoming County.



Nearly 80 percent of Corridor residents work in one of the top ten employment destinations as shown in Table 5.

Table 5: Top Commuter Destinations – 1990, 2000
OWEGO TURNPIKE CORRIDOR

Municipality	Percentage Share	
	1990	2000
1. MONTROSE BOROUGH	34.3	30.1
2. BROOME COUNTY, NY	25.1	21.6
3. LACKAWANNA COUNTY	7.4	9.7
4. BRIDGEWATER TOWNSHIP	7.9	4.8
5. SILVER LAKE TOWNSHIP	2.4	3.8
6. HARFORD TOWNSHIP	1.9	2.3
7. MEHOOPANY TOWNSHIP	1.8	2.2
8. CLIFFORD TOWNSHIP	0.3	1.7
9. HOP BOTTOM BOROUGH	1.8	1.6
10. HALLSTEAD	0.5	1.4

Source: U.S. Census Bureau, 1990, 2000

Vehicles Available per Household

Table 6 shows the percentage breakdown concerning the number of vehicles available by selected municipalities; the following bullet points highlight other details of the data available:

- A majority (61.5 percent) of households in the corridor have two or more vehicles available.
- Montrose Borough has the corridor's highest percentage of people without access to any car, at 20.9 percent.
- Brooklyn and Lathrop Townships have the highest percentages of households with access to three or more vehicles, at 27.4 and 25.5 percent respectively.

Table 6: Vehicles Available Per Household (in %) – 2000
OWEGO TURNPIKE CORRIDOR

LOCATION	NONE	ONE	TWO	THREE OR MORE
SILVER LAKE TWP	1.1	20.0	54.2	24.8
MONTROSE	20.9	39.1	33.3	6.7
HOP BOTTOM	9.6	31.1	38.5	20.7
CORRIDOR	7.5	30.6	43.6	18.3
NORTHERN TIER	6.3	32.7	42.1	18.9



Population Trends

Population growth in the Owego Turnpike Corridor has been growing over the past half century, although the rate of growth has slowed after a nearly 10 percent increase during the 1980s. Increases in Silver Lake Township were offset by declines in Montrose and in Hop Bottom Borough. The following graphic provides a comparison of growth rates in the corridor for the past 50 years.

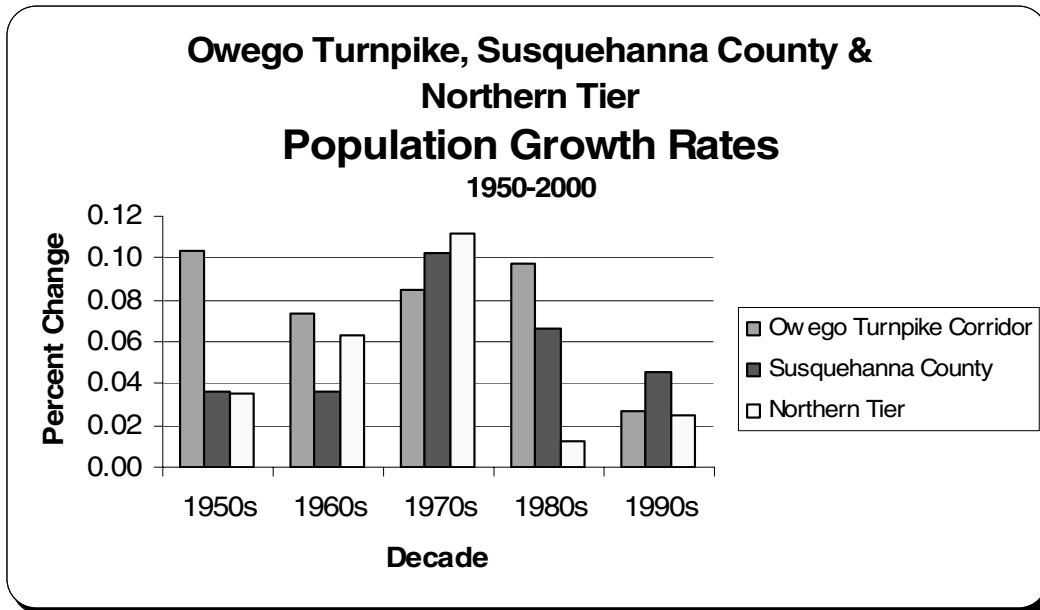


Table 7 shows the total population figures for selected municipalities in the corridor.

**Table 7: Population Trends
OWEGO TURNPIKE CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
SILVER LAKE TWP	899	1,073	1,542	1,729	12.1
MONTROSE	2,058	1,980	1,982	1,664	(16.0)
HOP BOTTOM	430	405	345	333	(3.5)
CORRIDOR	6,640	7,205	7,904	8,118	2.7
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

Age Group Distribution

While the overall corridor population growth is very similar to the regional rate, its rates of growth among older age groups are consistent with some, but not all of the regional rates for these groups. The corridor’s population growth rate for the 45-54 year old age group and the 74-84 year old age group were very similar, but this was not the case in the other groups.



Table 8 provides more detail on the age group distribution within the corridor and selected municipalities.

- The corridor's population age 55-64 grew significantly over the past ten years. Lathrop Township saw the largest increase at 62.3 percent.
- Montrose Borough saw significant declines in all but the 45-54 year old age group.
- Bridgewater Township had the corridor's biggest growth rate among 45-54 year olds, at 45.5 percent during the 1990s.

**Table 8: Percent Increase by Age Group – 1990, 2000
OWEGO TURNPIKE CORRIDOR**

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
SILVER LAKE TWP	12.1	36.4	47.2	32.2	6.9	8.3
MONTROSE	(16.0)	2.1	(22.3)	(31.2)	(4.9)	(46.5)
HOP BOTTOM	(3.5)	36.1	52.2	(55.2)	46.2	133.3
CORRIDOR	8,118	31.3	17.3	(10.6)	25.9	0.7
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Median age increased in all but one of the corridor's municipalities between 1990 and 2000. Only Montrose Borough's median age decreased. Residents in Bridgewater Township had the corridor's highest median age in 2000 (41.5). Silver Lake Township's median age saw the greatest increase – 6 years. The municipality recording the lowest median age in 2000 was Hop Bottom Borough, at 38.1 years.

Table 9 provides detail for selected corridor municipalities.

**Table 9: Median Age, 1990 – 2000
OWEGO TURNPIKE CORRIDOR**

LOCATION	1990	2000
SILVER LAKE TWP	33	39.1
MONTROSE	39.7	38.8
HOP BOTTOM	34.1	38.1

Racial Composition

According to the 2000 U.S. Census, there are only 125 residents in the corridor that identify themselves as minorities. Blacks and Hispanics constitute the corridor's largest minority groups with 39 residents identifying with each category for a total of 78. Of these, 33 reside in Bridgewater Township. The following table provides additional information regarding the racial composition of the corridor's population.



**Table 10: Racial Composition – (in %)
OWEGO TURNPIKE CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
SILVER LAKE TWP	1,729	98.1	0.2	0.8	0.5	0.1	0.2
MONTROSE	1,664	98.9	0.5	0.3	0.0	0.1	0.1
HOP BOTTOM	333	96.1	2.4	0.3	0.3	0.0	0.3
CORRIDOR	8,118	98.3	0.5	0.5	0.2	0.1	0.2
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Per Capita Income

The Corridor's per capita income averages align closely with regional averages, although corridor households do have a slightly greater percentage of households earning more than \$75,000 a year. Most households (67.1 percent) have an annual per capita income of between \$25-50,000. Montrose Borough had the corridor's lowest average annual household income, at \$30,200, while Silver Lake Township had the highest, at \$48,062. There are 203 corridor households that make more than \$100,000 a year, including 33 that earn more than \$200,000 a year. Silver Lake Township has the corridor's highest percentage of households with per capita incomes in excess of \$100,000, almost 12 percent. Table 11 and the bullet points below provide more information concerning per capita income in the Owego Turnpike Corridor.

- Silver Lake Township's per capita income of over \$48,000 is the highest in the Northern Tier region.
- Montrose Borough has the corridor's highest percentage of households making less than \$25,000 annually, at nearly 45 percent, or more than 11 percentage points higher than the corridor average.

**Table 11: Per Capita Income (2000)
OWEGO TURNPIKE CORRIDOR**

LOCATION	Households	< \$25,000	\$25- 50,000	\$50- 75,000	\$75- 100,000	\$100,000+
SILVER LAKE TWP	627	19.9	32.5	26.3	9.4	11.8
MONTROSE	730	44.5	26.7	15.6	7.3	5.9
HOP BOTTOM	131	37.4	37.4	15.3	6.1	3.8
CORRIDOR	3,225	33.7	33.4	18.0	8.5	6.3
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

Table 12, Table 13 and Table 14 provide some insight into the economic composition of the corridor, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major employers in the Corridor include Montrose Area Schools, the Endless Mountains Health Systems, and the Trehab Center, Inc. in Montrose.



- Employment rates in the corridor are slightly higher than those in the region overall, at 96.0 percent. Unemployment rates in the corridor vary from a low of 1.6 percent in Lathrop Township to a high of 6 percent in Montrose Borough.
- There are reportedly no persons from the corridor in the Armed Forces.
- Over 30 percent of the workers in the corridor have Management and Related Professional Occupations. Another 24 percent have Sales and Office Occupations.
- Almost 20 percent of the workers in the corridor are employed by Educational, Health and Social Services type industries; manufacturing-type industries employ just over 18 percent.
- Brooklyn Township has a significant percentage – 16.7 of its workers - in the Agricultural, Forestry, Fishing, Hunting, and Mining industries.
- Retail Trade employment is highest in Hop Bottom Borough, at 26.4 percent.

**Table 12: Civilian Labor Force Characteristics – (2000)
OWEGO TURNPIKE CORRIDOR**

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
SILVER LAKE TWP	1,311	32.0	68.0	95.9	4.1	0.0
MONTROSE	1,301	43.0	57.0	94.1	5.9	0.0
HOP BOTTOM	270	38.9	61.1	96.4	3.6	0.0
CORRIDOR	6,349	39.1	60.9	96.0	4.0	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 13: Employment by Occupation - (2000)
OWEGO TURNPIKE CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
SILVER LAKE TWP	855	33.7	13.0	24.4	1.2	9.2	18.5
MONTROSE	697	40.7	8.5	28.8	0.4	4.7	16.8
HOP BOTTOM	159	21.4	14.5	25.8	0.0	11.3	27.0
CORRIDOR	3,714	32.1	11.9	24.2	1.4	10.7	19.6
N. TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3



**Table 14: Employment by Industry by Place of Residence - (2000)
OWEGO TURNPIKE CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
SILVER LAKE TWP	855	5.6	9.0	18.1	3.5	11.6	4.9	1.6	4.2	8.5	20.6	5.8	3.9	2.6
MONTROSE	697	3.3	5.3	16.4	2.2	12.3	2.2	3.9	6.7	6.7	24.4	3.9	5.6	7.2
HOP BOTTOM	159	11.3	8.2	18.9	2.5	26.4	4.4	1.9	3.8	5.0	9.4	1.9	6.3	0.0
CORRIDOR	3,714	7.3	7.9	18.3	2.7	13.0	4.0	2.1	4.8	6.2	19.6	4.4	5.1	4.5
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

PENNDOT has one project programmed affecting the Owego Turnpike Corridor. In 2006, PENNDOT will reconstruct and improve the roadway geometry of PA 167/706 east of Montrose to Tiffany Corners. The project will cost \$500,000 and will also include drainage improvements, new signage, and wider shoulders.

Corridor Action Plan

This section outlines some suggested draft actions, based on the results of public involvement, data collection efforts from county and multi-municipal comprehensive plans, and the Census data.

- There is a need to widen PA 167; additionally, the roadway lacks an adequate sub base.
- County transportation stakeholders have indicated a need for more way finding signage along the corridor for both north and southbound movement.
- The region's bicycle/pedestrian plan recommended improved pedestrian connectivity in the county's boroughs, which in this case would include Montrose and Hop Bottom. The borough planning commissions (if existing) should each conduct "walkable audits" of their communities to determine where there are deficiencies and how they can be funded and improved.
- The bicycle/pedestrian plan also recommended the completion of missing links of Bridgewater Township Rail/Trail between Montrose Borough and the Village of Alford.
- PA 167 has one of the worst IRI ratings in the region. The Northern Tier Regional Planning & Development Commission should work with the PENNDOT County Maintenance Manager to include a resurfacing project(s) for PA 167 on the Betterment Program or through routine maintenance work programs.

THE LACKAWANNA CORRIDOR

The Lackawanna Corridor

The Lackawanna Corridor runs north/south along the extreme eastern border of Susquehanna County. The 38.5-mile corridor is centered on PA 171, which directly serves 13 municipalities – six boroughs and seven townships. The PA 171 roadway provides connections to Interstate 81 at its northern terminus in Great Bend and to US 6 at its southern terminus in Carbondale in Lackawanna County. PENNDOT has functionally classified the PA 171 roadway as a Minor Arterial while NTRPDC has made the roadway part of its Agricultural Access Network.



CORRIDOR PROFILE ►



Susquehanna
Great Bend Twp
Oakland Twp
Oakland
Susquehanna Depot
Lanesboro
Harmony Twp
Thompson Twp
Thompson
Ararat Twp
Herrick Twp
Union Dale
Clifford Twp
Forest City

The corridor roughly parallels Norfolk Southern's Southern Tier rail line from Lanesboro to Great Bend. A shortline operator, the New York, Susquehanna & Western Railway Company, has trackage rights on this line although it serves no Pennsylvania customers.

The corridor's main natural features include the East and West Branches of the Lackawanna River, Stillwater and Comfort Lakes, and the Susquehanna River. There are numerous other lakes, ponds and streams along the length of the corridor.

There are two bicycle routes in the corridor: the D&H Rail Trail roughly parallels PA 171 from Forest City to Thompson Borough where it turns east along the Starucca Creek to Stevens Point in Harmony Township. BicyclePA Route L follows PA 171 north from Forest City to Thompson where it then follows the Road to Starrucca (SR 1005) east into Wayne County.

The corridor is also home to one of the Northern Tier's four Keystone Opportunity Zones (KOZ). The 26-acre SOLIDA industrial park fronts on PA 171 and is located just 7 miles east of I-81.



Key Findings

This easternmost Northern Tier corridor traverses 6 boroughs over its 36 mile length. The corridor also hosts two major bicycle routes, the D&H Rail Trail and the roadway-based BicyclePA Route L along PA 171 (south of Thompson Borough). These two important facts raise the importance of planning for the needs of bicycle and pedestrian modes of travel through the corridor, while acknowledging the corridor's role as a commuter corridor connecting these rural populations to the jobs available in the greater Scranton and Binghamton areas. Other key findings in the corridor include:

- The Church of the Latter Day Saints is purchasing more land near the existing Mormon monument for the development of a visitor's center and hotel. The property is located eight miles east of PA 171's intersection with US 11.
- The Rail Trail Association has purchased the northern seven miles of the D&H trail; however, no construction will take place until after the association has been reimbursed.
- There are plans to reconstruct the first part of a trail from Lackawanna County to Herrick. As part of the project, a before and after construction study/survey will be conducted. ATV's are no longer permitted on the trail.
- The corridor has some of the highest carpooling rates in the Northern Tier. Eight municipalities have rates that exceed the Northern Tier regional rate of 12 percent.
- Nine of the thirteen municipalities in the corridor have a mean travel time to work of less than 30 minutes.
- The top two corridor journey-to-work destinations are Lackawanna County and Broome County, New York.
- Population growth in the Lackawanna Corridor has consistently been lower than county and regional rates dating back into the 1950s, although since 1990 growth rates were much closer to county and regional rates. Current growth in the area is being led mainly by two municipalities, Ararat Township and Union Dale Borough, both of which grew by over 20 percent over the past 10 years.
- Over 70 percent of the corridor's residents are employed in three occupational categories: Management & Related Professional (25.5 percent), Production, Transportation, & Material Moving (24 percent), and Sales & Office (22.8 percent).
- There are seven projects programmed in the Lackawanna Corridor, according to data from the Northern Tier's 2003 Transportation Improvement Program (TIP). Four of the seven are bridge replacements.

Public Input

During NTRPDC's 1999 round of transportation stakeholder meetings, participants acknowledged that the southeastern portion of the county is growing rapidly and that tourism is playing a greater role than ever in the local economy. Comments specific to the Lackawanna Corridor were as follows:

- A connection could be made at the northern end of the present D&H rail trail in Stevens Point, across SR 1009 to PA 171 in Lanesboro. The trail could be built right alongside the existing rail bed along the river and into Great Bend. From there the trail could utilize the shoulder of US 11, connecting communities and giving bicyclists access to these



areas. The right-of-way along existing rail lines could potentially be developed as part of an east-west trail.

- The intersection at the Pump & Pantry and Matco Electronics is very dangerous and should be addressed.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years and communities in the Lackawanna Corridor.

**Table 1: Annual Average Daily Traffic
LACKAWANNA CORRIDOR**

LOCATION	1993	1997	2000
LANESBORO	2,067	2,258	2,098
OAKLAND	3,381	3,695	4,003
SUSQ DEPOT	7,384	6,632	7,018
THOMPSON	990	1,082	1,396
UNIONDALE	1,914	2,744	2,903
FOREST CITY	2,100	2,744	2,903

Source: NTRPDC, 2003.

Mode Split

The percentage of commuters in the corridor who rely on the private automobile is very close to regional averages although the use of carpooling is three percentage points higher. Some variations within regional averages are described in the following points and in Table 2, below:

- Forest City Borough had the corridor's greatest percentage of residents walking to work (9.2 percent), followed by Ararat Township (8.8) and Thompson Township (7.0).
- Herrick Township had the corridor's highest percentage of commuters dependent on the single occupant vehicle, at 85 percent, while Thompson Borough had the lowest dependency, at 66.7 percent.
- Only 18 people reported using public transportation as a means of getting to work. A majority of these (6) were in Herrick Township.
- Carpooling rates in the corridor ranged from a high of 21.8 percent in Oakland Borough to a low of 6.9 percent in Union Dale Borough. Eight municipalities have rates that exceed the Northern Tier regional rate of 12 percent.
- Thompson Township has the highest percentage of persons working at home - 10.5 percent, over twice the regional average.

**Table 2: Mode Split (in %) – 2000
LACKAWANNA CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
OAKLAND	68.9	21.8	0.0	3.6	5.4
THOMPSON	66.7	20.9	0.0	2.3	6.2
HERRICK	85.0	6.6	2.1	1.4	3.5
FOREST CITY	70.6	18.8	0.0	9.2	1.0
CORRIDOR	76.4	14.8	0.3	3.8	3.9
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6



Travel Time to Work

Journey to work travel times are increasing in the Lackawanna Corridor, as they are throughout most of the Northern Tier. This is due, in part, to the fact that many communities in the corridor are relatively isolated from employment centers.

Mean travel times to work in the corridor range from a low of 19.3 minutes in Oakland Borough to a high of 35.1 minutes in Thompson Borough. Nine of the thirteen municipalities in the corridor have mean travel times of less than 30 minutes.

In 1990, there were 27 corridor commuters traveling longer than 90 minutes to work, a figure that more than tripled by 2000 to 114 commuters. Most of these (38) were in Clifford Township.

Lanesboro has the corridor's greatest percentage of people traveling less than 15 minutes to work, at 53 percent. Forest City Borough ranks second in this regard, at 50 percent. Over the past 10 years, the percentage of people in the corridor who travel less than 15 minutes to work declined from 36.3 to 28.6 percent. There were increases in all other categories with the exception of the 60 –89 minute category, which decreased by 0.4 percent, against regional trends. Table 3 and Table 4 show how journey to work travel times have changed in the corridor over the past decade.

**Table 3: Travel Time to Work (in minutes by percent) – 2000
LACKAWANNA CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
OAKLAND	50.9	16.6	30.2	1.1	1.1
THOMPSON	14.0	35.5	31.4	13.2	5.8
HERRICK	22.8	27.5	41.3	4.7	3.6
FOREST CITY	34.4	29.3	34.4	1.0	0.9
CORRIDOR	28.6	31.0	34.3	3.6	2.3
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes by percent) – 1990
LACKAWANNA CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
OAKLAND	37.1	19.3	41.7	1.9	0.0
THOMPSON	9.0	36.0	43.2	11.7	0.0
HERRICK	38.7	22.7	28.2	9.9	0.6
FOREST CITY	50.1	28.9	17.6	3.4	0.0
CORRIDOR	36.3	29.6	29.5	4.0	0.6
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

According to information from the 2000 U.S. Census, the corridor is a net exporter of employees, with only 22.2 percent of all corridor commuters working in corridor municipalities. Lackawanna County and Broome County, New York share the distinction of being the top destinations of corridor commuters with nearly half of all corridor commuters. Susquehanna



Depot is the largest destination within the corridor itself. The following additional analysis can be drawn from the Census data, including:

- Seventeen of the 20 twenty commuter destinations of corridor residents are in Susquehanna County.
- Over a quarter of Forest City Borough residents work within the municipality, which is the highest percentage of any of the 13 municipalities in the corridor. Thompson Township is second at 22.7 percent.
- Nearly 22 percent commute to employment destinations in New York.

Approximately 81 percent of Corridor residents work in one of the top ten employment destinations as shown in Table 5.

**Table 5: Top Commuter Destinations – 1990, 2000
LACKAWANNA CORRIDOR**

Municipality	Percentage Share	
	1990	2000
1. LACKAWANNA COUNTY	21.3	25.8
2. BROOME COUNTY, NY	21.3	20.7
3. SUSQUEHANNA DEPOT	11.1	8.5
4. FOREST CITY	10.5	6.4
5. HALLSTEAD	5.1	6.0
6. CLIFFORD	4.3	3.1
7. MONTROSE	2.0	2.9
8. NEW MILFORD BOROUGH	1.5	2.5
9. GREAT BEND TOWNSHIP		2.4
10. UNION DALE	1.8	2.2

Source: U.S. Census Bureau, 1990, 2000.

Vehicles Available per Household

The number of vehicles available per household varies greatly throughout the corridor. While Table 6 shows the percentage breakdown by selected municipalities, the following points highlight other details of the data:

- Lanesboro has the highest percentage of households without access to a vehicle at 21.8 percent. Forest City Borough ranks second at 16.7 percent.
- Herrick and Thompson Townships have the highest percentage of two-vehicle households, at 52.5 and 57.4 percent respectively.
- Interestingly, Oakland Borough has the corridor's highest percentage of households with access to three or more vehicles, at 22.9 percent.



**Table 6: Vehicles Available Per Household (in %) – 2000
LACKAWANNA CORRIDOR**

LOCATION	NONE	ONE	TWO	THREE OR MORE
OAKLAND	2.6	31.6	42.9	22.9
THOMPSON	12.1	35.3	39.7	12.9
HERRICK	1.9	29.3	52.5	16.2
FOREST CITY	16.7	42.0	30.6	10.6
CORRIDOR	8.7	35.7	39.8	15.8
NORTHERN TIER	6.3	32.7	42.1	18.9

Population Trends

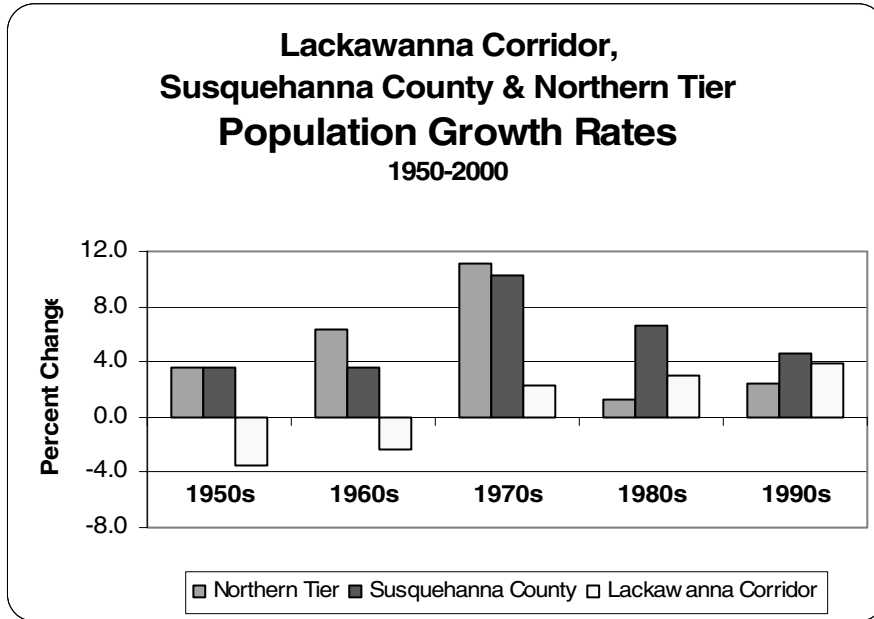
Population growth in the Lackawanna Corridor has consistently been lower than county and regional rates dating back into the 1950s. However, during the 1990s, the corridor's population growth has been far closer to these rates. Current growth in the area is being led mainly by two municipalities, Ararat Township and Union Dale Borough, both of which grew by over 20 percent during the 1990s. Clifford Township also experienced significant growth of just over 10 percent.

Three of the corridor's Boroughs saw declines in their populations: Lanesboro (-10.8 percent), Susquehanna Depot (-4.0 percent), and Oakland Borough (-3.0 percent). Over the past 50 years, Great Bend Township has experienced the most growth in the corridor – over 120 percent, while Forest City Borough saw the greatest decline - 40 percent.

The following graph provides a comparison of the Regional, County, and Corridor growth rates over the past 50 years. Note that during the 1950s and 1960s, the Lackawanna Corridor actually saw a decline in population, contrary to both County and Regional trends. Growth rates in the Lackawanna Corridor have increased every decade over the past 50 years.

Table 7 shows the total population figures for selected municipalities in the corridor. A summary of this and additional corridor data follows:

- Herrick Township's growth rate of 6.4 percent is exceeded by four municipalities within the corridor: Ararat Township (26.4 percent), Union Dale Borough (21.5 percent), Thompson Township (17.6 percent), and Clifford Township (10.9 percent).
- Lanesboro and Susquehanna Depot are the only municipalities that experienced a loss in population between 1990 and 2000.



**Table 7: Population Trends
LACKAWANNA CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
OAKLAND	817	734	641	622	(3.0)
THOMPSON	307	303	291	299	2.7
HERRICK	436	457	563	599	6.4
FOREST CITY	2,322	1,924	1,846	1,855	0.5
CORRIDOR	11,302	11,566	11,909	12,371	3.9
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

Age Group Distribution

Not only is the population growing in the corridor, it is also aging. Corridor-wide, there have been significant increases in the 45-54, 55-64, 75-84, and the 85+ age groups. Only the 65-74 age group experienced a decline (most likely due to the Great Depression years of 1926-1935). However, there is a tremendous diversity of age group growth rates among the individual municipalities.

Table 8 provides more detail on the age group distribution within the corridor and selected municipalities. Some additional points are noted below.

- Lanesboro actually saw a decline in all groups over age 64.
- Four municipalities experienced over 100 percent increases in their 85+ age groups: Forest City Borough (194 percent), Great Bend Township (158 percent), Union Dale Borough (167 percent), and Susquehanna Depot (104 percent).



- Ararat Township experienced the most significant increase in the 45-54 year old age group – almost 116 percent.

**Table 8: Percent Increase by Age Group – 1990, 2000
LACKAWANNA CORRIDOR**

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
OAKLAND	622	44.4	(6.9)	7.1	0.0	(71.4)
THOMPSON	299	50.0	12.0	(20.7)	0.0	(28.6)
HERRICK	599	88.2	(17.3)	23.1	48.2	25.0
FOREST CITY	1,855	8.4	(17.2)	(29.5)	3.98	194.4
CORRIDOR	12,371	40.9	11.8	(12.7)	11.2	17.1
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

During the 1990s, median age increased in all but three corridor municipalities, the boroughs of Lanesboro, Oakland, and Union Dale. Forest City Borough has the corridor's highest median age at 45.6, followed by Herrick Township (43.7), while Oakland Borough has the lowest median age at 33. Table 9 provides detail for selected corridor municipalities.

**Table 9: Median Age, 1990 – 2000
LACKAWANNA CORRIDOR**

LOCATION	1990	2000
OAKLAND	33.5	33.0
THOMPSON	33.8	36.3
HERRICK	34.1	43.7
FOREST CITY	45.5	45.6

Racial Composition

According to the 2000 U.S. Census there are only 237 people in the corridor who are not considered white. Of these, there are 120 residents who identify themselves as Hispanic, 48 who identify themselves as Asian, and 24 who consider themselves Black. The most racially homogeneous municipality in the corridor is Forest City, where 99.5 percent of residents are White. Table 10 provides more information on the racial composition of a few select corridor municipalities, compared with the corridor and regional averages.

**Table 10: Racial Composition – (in %)
LACKAWANNA CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
OAKLAND	622	97.7	0.2	0.2	0.5	0.8	0.0
THOMPSON	299	96.3	0.0	0.3	0.3	0.0	0.0
HERRICK	599	97.3	0.5	1.0	1.0	0.5	0.0
FOREST CITY	1,855	99.5	0.1	0.6	0.2	0.1	0.1
CORRIDOR	12,371	98.5	0.2	1.0	0.2	0.4	0.2
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19



Per Capita Income

The Corridor's per capita income averages are closely aligned with regional averages, although corridor households do have a slightly greater percentage of households earning less than \$25,000 per year. Almost 75 percent of the corridor's households earn less than \$50,000 per year. Table 11 and the points below provide more information concerning per capita income in the Lackawanna Corridor.

- Less than 5 percent of the corridor's households earn more than \$100,000 per year. Harmony Township has the greatest percentage of households with these earnings – almost 9 percent.
- Thompson Borough has the corridor's highest percentage of households making less than \$25,000 annually, at just over 48 percent. Forest City Borough is second at almost 46 percent.
- Oakland Township has the highest percentage of households that fall within the \$50 – 75,000 range: 22 percent. Clifford and Ararat Townships follow with just over 20 percent each.

Table 11: Per Capita Income (2000)
LACKAWANNA CORRIDOR

LOCATION	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
OAKLAND	228	35.5	39.9	13.6	11.0	0.0
THOMPSON	116	48.3	37.1	7.8	1.7	5.2
HERRICK	264	37.5	30.3	13.6	10.2	8.3
FOREST CITY	793	45.9	34.0	12.4	3.8	3.9
CORRIDOR	4,973	38.5	34.0	16.0	5.7	4.6
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

Table 12, Table 13 and Table 14 provide information concerning a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry for the corridor and selected municipalities. The largest employer in the County, the Barnes Kasson Hospital, is located in Susquehanna Depot and employs approximately 400 people. The three school districts that are within the corridor are also among the County's top ten employers. The following provides some additional insight into the corridor's general economic picture.

- Employment rates in the corridor are closely aligned with those in the Northern Tier Region. Unemployment ranged from a low of 2.6 percent in Brooklyn Township to a high of 9.8 in Nicholson Borough.
- There are reportedly no persons from the corridor in the Armed Forces.



- Over 70 percent of the corridor's residents are employed in three types of occupations: Management & Related Professional (25.5 percent), Production, Transportation, & Material Moving (24 percent), and Sales & Office (22.8 percent).
- By industry, Educational, Health and Services employ the greatest number of residents – 22.4 percent, followed by Manufacturing at 20.7 percent. Retail Trade is a distant third at 11.7 percent.
- Among corridor municipalities, Susquehanna Depot has the greatest number of residents in the Educational industrial category, at nearly 33 percent. Union Dale Borough has the greatest in the Manufacturing industrial category at 30.7 percent.
- Retail Trade employment is highest in Forest City Borough at 18 percent.

Table 12: Civilian Labor Force Characteristics – (2000)
LACKAWANNA CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
OAKLAND	485	40.6	59.4	97.9	2.1	0.0
THOMPSON	239	42.7	57.3	95.6	4.4	0.0
HERRICK	479	35.5	64.5	95.5	4.5	0.0
FOREST CITY	1,539	51.3	48.7	94.0	6.0	0.0
CORRIDOR	8,409	42.1	57.9	95.2	4.8	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

Table 13: Employment by Occupation - (2000)
LACKAWANNA CORRIDOR

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
OAKLAND	282	20.6	17.0	19.9	0.7	12.1	29.8
THOMPSON	131	21.4	19.8	14.5	0.0	9.9	34.4
HERRICK	295	34.9	13.2	21.0	0.0	6.8	24.1
FOREST CITY	705	19.7	15.3	32.9	0.6	9.9	21.6
CORRIDOR	5,294	25.5	15.1	22.8	0.9	11.7	24.0
N. TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3



**Table 14: Employment by Industry by Place of Residence - (2000)
LACKAWANNA CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
OAKLAND	282	5.0	6.7	21.6	11.7	9.9	5.0	1.1	3.9	4.3	19.9	6.0	4.3	0.7
THOMPSON	131	4.6	6.9	24.4	11.5	10.7	0.8	0.0	0.0	8.4	17.6	7.6	6.1	1.5
HERRICK	295	3.7	7.8	19.7	4.7	12.9	8.1	1.4	2.7	5.4	19.0	4.7	2.0	7.8
FOREST CITY	705	5.1	6.8	21.3	5.0	18.0	1.6	3.4	5.5	5.0	18.3	3.8	2.1	4.1
CORRIDOR	5,294	5.2	7.3	20.7	5.2	11.7	4.9	2.0	3.4	4.5	22.4	5.5	3.8	3.4
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

There are seven projects totaling over \$3.36 million programmed in the Lackawanna Corridor, according to data from the Northern Tier's 2003 Transportation Improvement Program (TIP). Four of the seven are bridge replacements. Table 15 below highlights the programmed TIP projects. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year. Projects are shown from north to south.

**Table 15: 2003 TIP Projects
LACKAWANNA CORRIDOR**

Municipality	Project/Description	Year				Total
		03	04	05	06	
SUSQUEHANNA DEPOT	Improve intersection @ SR 92 and PA 171	300				\$300
SUSQUEHANNA DEPOT	PA 171 – Drinker's Creek Bridge replacement		100			\$100
LANESBORO	Main St. improvements	700				\$700
HARMONY	SR 1009 – Starrucca Creek Bridge replacement			150	50	\$200
HARMONY	SR1011 – Hemlock Creek Bridge replacement	500				\$500
HERRICK	PA 371 – Lackawanna River Bridge replacement	756				\$756
FOREST CITY	PA 247 – Line Restoration Drainage	805				\$805

Source: PENNDOT District 4-0



Corridor Action Plan

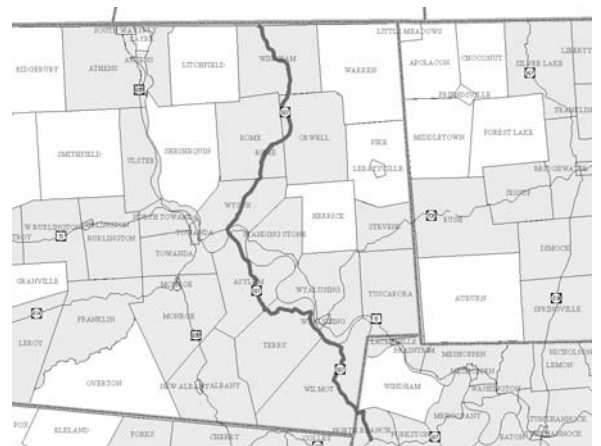
This section outlines some suggested draft actions, based on the results of public involvement, data collected from county and multi-municipal comprehensive plans, and the Census data.

- NTRPDC's KOZ study of 2001 identified several transportation projects related to improving the accessibility of the SOLIDA KOZ site. Trucks routes both east and west on PA 171 cannot presently accommodate the level of truck traffic that could be generated if the site were developed to its full potential:
 - "If PA 171 is ultimately selected for improvement, the road should be widened and resurfaced to improve truck flow and access to the SOLIDA site. Where possible, curves and steep grades should be removed to improve sight distance, mobility, and safety. Although this improvement will benefit the KOZ site, its benefits have regional appeal and should be considered with or without the successful development of the KOZ site."
- Stakeholders have also cited the need for safety improvements at the intersection of the Pump & Pantry and Matco Electronics. PENNDOT District 4-0 should evaluate this need that has been expressed for these improvements.
- The Lackawanna Corridor includes numerous boroughs. A primary recommendation in the Northern Tier's Bicycle/Pedestrian plan is to improve the pedestrian connectivity of the county's boroughs, in this case, Great Bend, Hallstead, Oakland, Lanesboro, Susquehanna Depot, Thompson, Uniondale and Forest City. The borough planning commissions (if existing) should each conduct "walkable audits" of their communities to determine where there are deficiencies and how they can be funded and improved. PENNDOT's District Bicycle/Pedestrian Coordinator can provide technical advice and information resources.
- NTRPDC should continue to monitor the status of Norfolk Southern's Southern Tier line, which enters the corridor in Great Bend Township and runs through five corridor municipalities en route to Port Jervis. The line currently receives little to no local traffic and will eventually be downgraded (read: less spent on maintenance). The line has an existing signal system which may be removed. A shortline operator (the New York, Susquehanna & Western Railway Company) currently has trackage rights over the line. The NYSW has no customers in Pennsylvania.
- Transportation stakeholders have suggested that a connection could be made at the northern end of the present D&H rail trail in Stevens Point, across SR 1009 to PA 171 in Lanesboro. The trail could be built right alongside the existing rail bed along the river and into Great Bend. From there the trail could utilize the shoulder of US 11, connecting communities and giving bicyclists access to these areas. The right-of-way along existing rail lines could potentially be developed as part of an east-west trail.
- Officials in Susquehanna Depot Borough have cited the need for a widening of West Main Street between Fourth Avenue and Center Lane. The need is due to expansion of area industries, most notably Endless Mountains Stone.

THE PHILIP P. BLISS CORRIDOR

The Philip P. Bliss Corridor

The Philip P. Bliss Corridor is the main north-south corridor through eastern Bradford County. The 46-mile corridor is centered on PA 187, which directly serves 9 municipalities – all of them rural townships with the exception of Rome Borough. The PA 187 roadway provides connections to PA 87 in Wyoming County, US 6 and NY 17 in Tioga County, New York. The corridor is used as an alternate to US 220 between Wyalusing and Binghamton.



CORRIDOR PROFILE ►



Bradford
Windham Twp
Orwell Twp
Rome Twp
Rome
Wysox Twp
Asylum Twp
Terry Twp
Wilmot Twp
Wyoming
North Branch Twp

PENNDOT has functionally classified the PA 187 roadway as a Rural Minor Arterial while NTRPDC has made the roadway part of its Agricultural Access Network as far south as the Wyoming County line. The corridor bisects Norfolk Southern's former Lehigh Valley line at Wysox. Since July 2002, EMTA has provided deviated fixed route service in the corridor between Towanda and Rome.

PA 187 has a poor International Roughness Index (IRI) rating of 216 – the worst in the region among the Northern Tier's priority corridors.

The corridor's main natural features include Wysox Creek and the Susquehanna River, which it largely parallels through southeastern Bradford County. In Asylum Township, the corridor passes by the French Asylum, a plot which was originally intended to be the exile home of Marie Antoinette.

The corridor is named after the nineteenth century evangelist and hymnwriter who was born in Rome in 1838 and lived and taught in the Rome area until moving to Chicago in 1864. He is buried in the Rome Cemetery after his untimely death in 1876.



Key Findings

The Philip P. Bliss Corridor, and particularly PA 187, is a north-south corridor serving the ground transportation needs of the rural communities in eastern Bradford County. In such an isolated area of the region, PA 187 is an important transportation facility in connecting these rural areas with U.S. 6 and employment in the greater Towanda and Wyalusing areas.

Key Trends and Issues in the Philip P. Bliss Corridor include:

- The corridor has the worst International Roughness Index (IRI) rating for any Northern Tier priority corridor.
- Less than 15 percent of corridor residents work within the corridor. Most corridor residents are employed within the Towanda – Wyalusing areas and other townships immediately outside of the corridor.
- The corridor is growing at a rate that is nearly three times the regional rate. North Branch Township was the corridor’s fastest-growing municipality over the past ten years, at 17.1 percent, ranking it third in the rate of population growth in Wyoming County. Rome Borough was the only corridor municipality to have any significant population loss. Growth in Rome Township during the 1990s made it the corridor’s second-most populous municipality, after Wysox Township.
- The corridor’s 45-plus population is growing at rates higher than the regional rate.
- Agriculture and Manufacturing are the two of the most important industries in the corridor.
- EMTA initiated deviated fixed route service in the corridor between Towanda and Rome. Ridership to date has not been encouraging.

Public Input

During NTRPDC’s 1999 round of transportation stakeholder meetings, there were no comments raised specific to the Philip P. Bliss Corridor or regarding the PA 187 roadway.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for PA 187 in Rome Borough.

**Table 1: Annual Average Daily Traffic
PHILIP P. BLISS CORRIDOR**

LOCATION	1993	1997	2000
ROME BOROUGH	1,265	1,362	2,521

Mode Split

The percentage of commuters in the corridor who rely on the private automobile is nearly identical to regional trends. Some variations within regional averages are described in the following bullets and in Table 2, below:



- Three corridor townships (Orwell, Rome and Wysox) have higher percentages of people walking to work than Rome Borough, the only borough in the corridor. Wysox Township had the corridor’s greatest number of people walking to work (32).
- Terry Township had the corridor’s highest percentage of commuters dependent on the single occupant vehicle, at 85.2 percent. Orwell had the lowest dependency, at 70 percent.
- Only 11 people reported using public transportation as a means of getting to work. A majority of these (5) were in Rome Township.
- Rome Borough has the corridor’s highest incidence of people carpooling to work, at 16.3 percent while Orwell Township was next, at 13.3 percent.
- There were 244 persons who were reported as “working from home”. None was from North Branch Township. Orwell Township had the highest percentage of people working from home, at 10.1 percent.

**Table 2: Mode Split (in %) – 2000
PHILIP P. BLISS CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
ROME BOROUGH	73.8	16.3	0.0	3.5	6.4
WYSOX TOWNSHIP	80.1	12.0	0.0	3.8	3.6
TERRY TOWNSHIP	85.2	8.1	0.0	1.2	5.3
NORTH BRANCH TOWNSHIP	83.9	12.9	0.0	3.2	0.0
CORRIDOR	77.7	11.5	0.3	3.2	6.2
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6

Travel Time to Work

Journey to work travel times are increasing in the Philip P. Bliss Corridor, as they are throughout most of the Northern Tier. Communities in the corridor are more isolated than most from employment opportunities. As an example, North Branch Township ranks fourth in the region in the percentage of people traveling longer than an hour to get to work (16.1 percent).

Mean travel times to work in the corridor range from a low of 20.7 minutes in Wysox Township to a high of 46 minutes in North Branch Township. North Branch Township’s mean travel time to work of 46 minutes is by far the highest in the Northern Tier among its priority corridors.

In 1990, corridor commuters traveling longer than 90 minutes to work numbered at 12, a figure that has since grown to 120. Most of this number is in Wilmont (22) and Wysox (20) Townships.

Wysox Township has the corridor’s greatest percentage of people traveling less than 15 minutes to work, at nearly 50 percent. Terry Township ranks as a distant second in this regard, at 30 percent. The percentage of people traveling less than 15 minutes to work in the corridor overall actually declined from 30.8 to 27.4 percent, while the percentage of those who travel 15-29 minutes declined by two percentage points. There were increases in all categories for those traveling in excess of 30 minutes and particularly for those who travel longer than an hour.



Table 3 and Table 4 show how journey to work travel times have increased in the corridor over the past decade.

**Table 3: Travel Time to Work (in minutes by percent) – 2000
PHILIP P. BLISS CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
ROME BOROUGH	14.9	54.7	26.7	1.2	2.5
WYSOX TOWNSHIP	48.9	30.4	15.2	3.0	2.4
TERRY TOWNSHIP	30.0	31.5	27.8	6.3	4.4
NORTH BRANCH TOWNSHIP	9.7	25.8	48.4	3.2	12.9
CORRIDOR	27.4	38.7	26.8	3.8	3.3
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes by percent) – 1990
PHILIP P. BLISS CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
ROME BOROUGH	20.8	52.4	23.8	3.0	0.0
WYSOX TOWNSHIP	53.3	35.0	9.2	2.4	0.0
TERRY TOWNSHIP	31.9	35.1	31.2	1.8	0.0
NORTH BRANCH TOWNSHIP	9.6	49.4	25.3	9.6	6.0
CORRIDOR	30.8	40.7	25.2	2.9	0.4
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

The corridor is a net exporter of employees, with a majority of corridor commuters traveling to employment opportunities within the Towanda–Wyalusing axis. The four municipalities within this area constitute nearly 54 percent of all corridor commuter destinations, according to information from the 2000 U.S. Census. Wysox Township is the largest destination within the corridor, followed by Rome Township. The following additional analysis can be drawn from this data, including:

- Approximately 23 percent of corridor workers are employed within the corridor. This is an increase from the 1990 rate of 15 percent. None of the workers in North Branch Township reports working within their home municipality.
- Just over 24 percent of Wysox Township residents work within the municipality. However low, this is still the highest percentage of any of the nine municipalities in the corridor.
- 8 out of 10 corridor residents work somewhere within Bradford County. An additional 7 percent work in Wyoming County.
- Just over 8 percent commute to employment destinations in New York, primarily in Tioga (165) and Broome (103) Counties.

Nearly 70 percent of Corridor residents work in one of the top ten employment destinations as shown in Table 5.



**Table 5: Top Commuter Destinations, 1990, 2000
PHILIP P. BLISS CORRIDOR**

Municipality	Percentage Share	
	1990	2000
1. TOWANDA BOROUGH	22.0	17.6
2. WYSOX TOWNSHIP	8.8	9.5
3. BURLINGTON TOWNSHIP	.05	8.8
4. WYALUSING BOROUGH	10.9	6.8
5. ROME TOWNSHIP	1.0	6.2
6. WYALUSING TOWNSHIP	*	6.2
7. TIOGA COUNTY, NY	4.9	4.2
8. SAYRE BOROUGH	3.9	4.0
9. MEHOOPANY TOWNSHIP	3.3	3.5
10. BROOME COUNTY, NY	3.0	2.6

Source: U.S. Census Bureau, 1990, 2000.

Vehicles Available per Household

On average, households in the corridor have a greater number of vehicles available per household than the corridor as a whole. While Table 6 shows the percentage breakdown by selected municipalities, the following bullet points highlight other details of the data available:

- A majority (47.3 percent) of households in the corridor are two-car households.
- In Rome Borough, a majority of households have access to only one car (38.2 percent). This is the only municipality where this situation prevails.
- Interestingly, Rome Township has the corridor's highest percentage of people without access to any car, at 7.3 percent.
- Wilmont and Asylum Townships have the highest percentages of households with access to three or more vehicles, at over 23 percent each.

**Table 6: Vehicles Available Per Household (in %) – 2000
PHILIP P. BLISS CORRIDOR**

LOCATION	NONE	ONE	TWO	THREE OR MORE
ROME BOROUGH	6.4	38.2	35.0	20.4
WYSOX TOWNSHIP	5.8	31.3	43.5	19.4
TERRY TOWNSHIP	3.0	26.9	49.2	20.9
NORTH BRANCH TOWNSHIP	3.7	22.0	54.9	19.5
CORRIDOR	4.8	25.7	47.3	22.2
NORTHERN TIER	6.3	32.7	42.1	18.9

* No data, incomplete



Population Trends

Population growth in the Philip P. Bliss Corridor has consistently been higher than county and regional rates dating back even into the 1950s. The corridor’s growth during the 1990s for example was nearly triple the regional rate. The corridor’s population growth is being led mainly by two municipalities, specifically North Branch and Rome Township, both of which grew by over 17 percent during the 1990s. Only two corridor municipalities, Rome Borough and Orwell Township, lost population. The corridor’s strongest growth period occurred during the 1970s, when total population grew by nearly a quarter. Total population has been increasing every decade in the corridor since the 1950s, reaching an all time high of 8,843 by the 2000 Census. Over that 50 year period, Wysox Township has exhibited the greatest amount of population growth as a suburban township to Towanda. Despite the high rate of growth, North Branch Township remains the corridor’s smallest municipality (197 persons) while Wysox Township remains its largest, at 1,763.

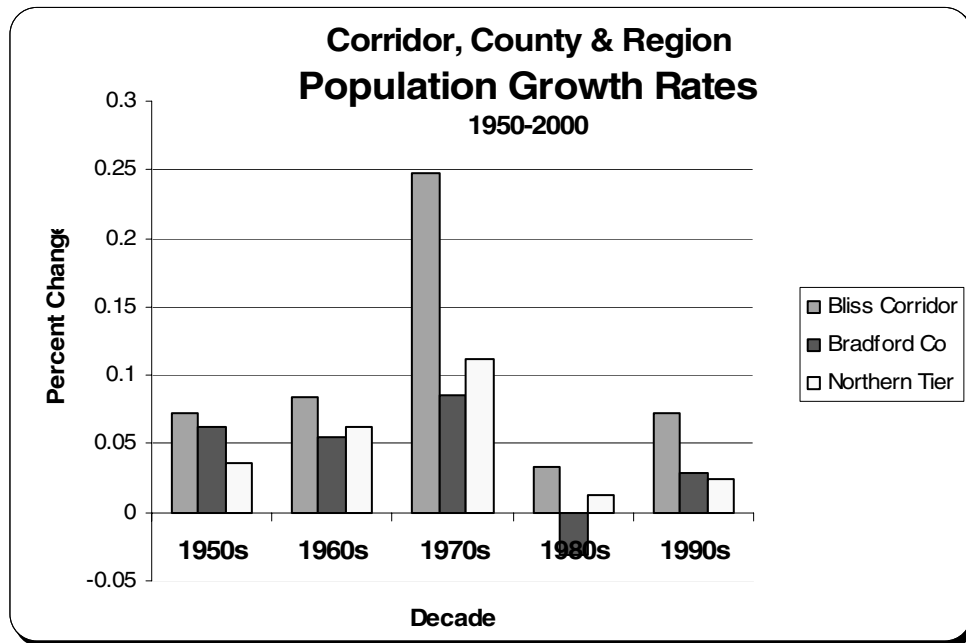


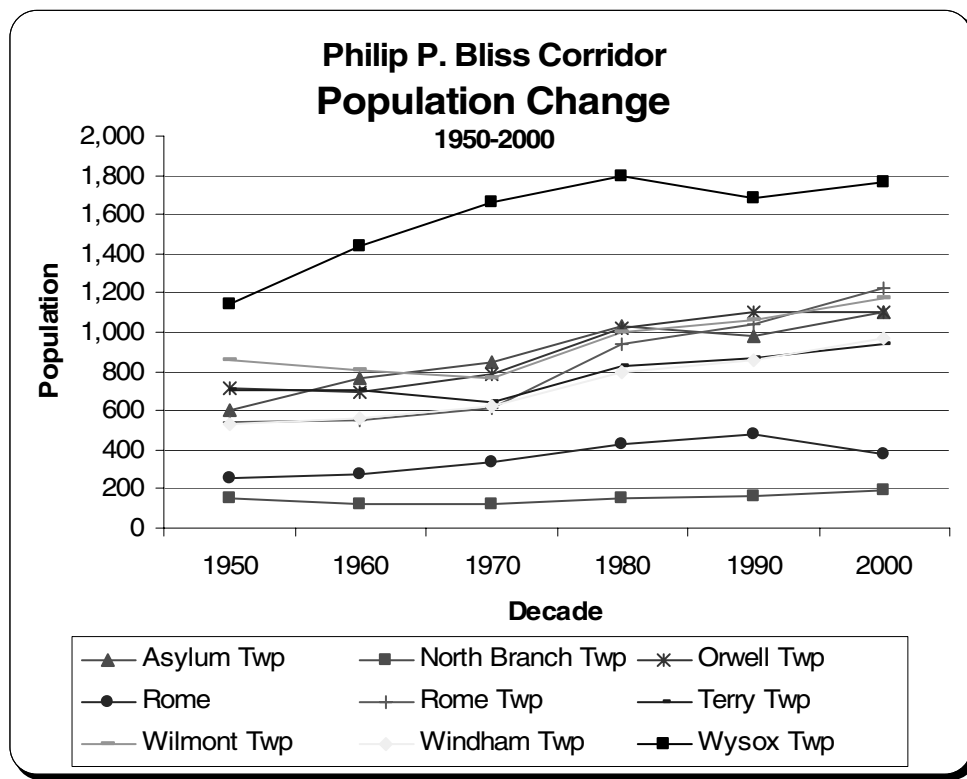
Table 7 shows the total population figures for selected municipalities in the corridor. A summary of this data is as follows:

- North Branch’s growth rate during the 1990s (17.1 percent) ranked as the third-highest in Wyoming County. Rome Township’s growth ranked it eighth in Bradford County.
- Rome Borough’s loss of 19.6 percent was the second highest in Bradford County and third-highest among the municipalities in the Northern Tier’s priority corridors.
- Of the 594 new residents in the corridor during the past decade, nearly 30 percent of the growth occurred in Rome Township, with a corridor leading 178 new residents. Wilmont followed at 120, then Asylum at 116.



**Table 7: Population Trends
PHILIP P. BLISS CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
ROME BOROUGH	338	426	475	382	(19.6)
WYSOX TOWNSHIP	1,666	1,796	1,685	1,763	4.6
TERRY TOWNSHIP	645	823	871	942	8.2
NORTH BRANCH TOWNSHIP	126	156	168	197	17.3
CORRIDOR	6,396	7,981	8,249	8,843	7.2
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5



Age Group Distribution

While the overall corridor population growth is just under three times the regional rate, its rates of growth among older age groups far outstrip regional rates. The corridor’s population growth rate among those age 65-plus was 30.5 percent, compared to just 8 percent regionally. Absolute numbers are smaller in a rural corridor such as this however, which will seem to exaggerate rates among some age groups.

Table 8 provides more detail on the age group distribution within the corridor and selected municipalities.



- The corridor’s population age 65-plus increased from 959 to 1,251, while the 75-plus age group increased from 353 to 503 for an increase of 42.5 percent. These rates of increase are far higher than the regional rate.
- Rome Borough was the only corridor municipality to experience population declines among its older populations although it was also one of two municipalities to register overall population decreases.
- Rome Township had the corridor’s biggest growth rate among 45-54 year olds, at 90 percent during the 1990s.

**Table 8: Percent Increase by Age Group – 1990, 2000
PHILIP P. BLISS CORRIDOR**

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
ROME BOROUGH	(19.6)	(11.1)	46.2	(53.5)	(35.1)	133.3
WYSOX TOWNSHIP	4.6	25.7	7.4	42.4	35.4	42.1
TERRY TOWNSHIP	8.2	47.2	23.8	4.3	77.3	100.0
NORTH BRANCH	17.3	70.8	19.0	157.1	80.0	66.7
CORRIDOR	7.2	39.1	26.3	23.6	43.1	40.3
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Median age increased in every single corridor municipality between 1990 and 2000. Residents in North Branch Township had the corridor’s highest median age in 1990 (37.3) and grew by 7.5 years over the past 10 years to a new corridor high of 44.8 – also one of the highest in the Northern Tier.

Despite suffering the corridor’s greatest decline in population, Rome Borough registered the smallest increase in median age (2.9) over the past decade, and still has the corridor’s lowest median age, at just 33.

Table 9 provides detail for selected corridor municipalities.

**Table 9: Median Age, 1990 – 2000
PHILIP P. BLISS CORRIDOR**

LOCATION	1990	2000
ROME BOROUGH	30.1	33.0
WYSOX TOWNSHIP	33.8	39.6
TERRY TOWNSHIP	32.9	38.8
NORTH BRANCH	37.3	44.8

Racial Composition

There are only 171 minorities in the Philip P. Bliss Corridor, according to the 2000 U.S. Census. Hispanics constitute the corridor’s largest minority population, with 65 residents. The corridor has a greater percentage of those of Indian ancestry than the region as a whole. There are 37 persons in the corridor who identify themselves as Indian. Nearly a third of the corridor’s Indian population reside in Wysox Township. The most racially homogeneous municipality in



the corridor is Orwell Township, where all but nine of its 1,097 residents are white. Table 10 provides more information on racial composition within the corridor against regional averages.

**Table 10: Racial Composition – (in %)
PHILIP P. BLISS CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
ROME BOROUGH	382	99.0	0.0	0.0	0.5	0.3	0.0
WYSOX TOWNSHIP	1,763	97.2	0.2	1.0	0.7	0.6	0.5
TERRY TOWNSHIP	942	97.2	0.2	1.5	0.5	0.3	1.3
NORTH BRANCH	197	97.5	1.0	2.0	1.5	0.0	0.0
CORRIDOR	8,843	98.1	0.2	0.7	0.4	0.3	0.3
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Per Capita Income

Corridor per capita income averages closely align with regional averages, although corridor households do have a slightly greater percentage of households earning more than \$75,000 a year. Most households have an annual per capita income of between \$25-50,000. Rome Borough had the corridor’s lowest average annual household income, at \$26,417, while Terry Township had the highest, at \$37,614. There are 144 corridor households that make more than \$100,000 a year, including 15 that earn more than \$200,000 a year. Wysox Township has the corridor’s highest percentage of households with per capita incomes in excess of \$100,000, with nearly one tenth of all households. Table 11 and the bullet points below provide more information concerning per capita income in the Philip P. Bliss Corridor.

- Over 5.4 percent of corridor households (144) make more than \$100,000 a year. Wysox Township has the greatest percentage of > \$100,000 households, at 9.8 percent.
- Rome Borough has the corridor’s highest percentage of households making less than \$25,000 annually, at nearly 45 percent, or more than 11 percentage points higher than the corridor average.

**Table 11: Per Capita Income (2000)
PHILIP P. BLISS CORRIDOR**

LOCATION	Households	< \$25,000	\$25- 50,000	\$50- 75,000	\$75- 100,000	\$100,000+
ROME BOROUGH	161	44.7	35.4	13.0	0.0	6.8
WYSOX TOWNSHIP	738	30.4	34.0	17.6	8.3	9.8
TERRY TOWNSHIP	359	30.1	31.2	24.0	11.4	3.3
NORTH BRANCH	79	41.8	32.9	13.9	8.9	2.5
CORRIDOR	2,681	33.2	35.0	18.3	8.2	5.4
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1



Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major economic concerns in the corridor include CraftMaster Manufacturing (a 550-employee door and door molding business) in Wysox Township and the Taylor Packing Co. beef processing facility in Wyalusing, where there are 1,100 employees. (Taylor was acquired by Excel Corporation in February 2002. The Wyalusing facility provides raw material for Excel’s case-ready meats plant in Hazelton, which opened in January 2002. The Taylor plant is a leading producer of premium wholesale beef products, including coarse ground and case-ready ground beef blends.) There are also several manufacturing plants immediately outside of the corridor in Towanda including Osram Sylvania and DuPont. Table 12, Table 13 and Table 14 describe some of the corridor’s economic and labor force conditions.

- Employment rates in the corridor are slightly higher than those in the region overall, at 95.2 percent.
- There are reportedly no persons from the corridor in the Armed Forces.
- The corridor exhibits a higher percentage of persons working in Farming, Fishing and Forestry occupations than the region in general as well as at rates over 6 times higher than the state rate.
- By industry, a greater percentage of corridor employees are involved in the Agriculture and Manufacturing industry than their counterparts elsewhere in the region. Terry Township had the highest percentage of its people working in Manufacturing, at 37.2 percent, while Wilmont had the highest percentage (11.7) of people working in the Agriculture industry, followed by Orwell (10.7) and Rome Township (10.0).
- Among corridor municipalities North Branch has the greatest percentage of its residents employed in Construction (20.3 percent).
- Retail Trade employment is highest in Rome Borough, at 17.7 percent.

**Table 12: Civilian Labor Force Characteristics – (2000)
PHILIP P. BLISS CORRIDOR**

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
ROME BOROUGH	296	36.5	63.5	96.3	3.7	0.0
WYSOX TOWNSHIP	1,423	36.9	63.1	96.1	3.9	0.0
TERRY TOWNSHIP	755	37.1	62.9	95.6	4.4	0.0
NORTH BRANCH	141	51.8	48.2	94.1	5.9	0.0
CORRIDOR	5,450	39.5	60.5	95.2	4.8	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1



**Table 13: Employment by Occupation - (2000)
PHILIP P. BLISS CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
ROME BOROUGH	181	17.7	18.8	17.1	2.2	4.4	39.8
WYSOX TOWNSHIP	863	27.0	13.9	22.7	1.6	10.9	23.9
TERRY TOWNSHIP	454	18.5	11.5	20.3	3.3	10.4	36.1
NORTH BRANCH	64	29.7	9.4	26.6	0.0	28.1	6.3
CORRIDOR	4,002	24.8	11.2	20.6	3.1	12.5	27.8
N. TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

**Table 14: Employment by Industry by Place of Residence - (2000)
PHILIP P. BLISS CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt Educational	Arts & Entertainment Other	Public Administration		
ROME BOROUGH	181	6.6	1.1	31.5	3.3	17.7	1.7	2.8	1.1	6.1	14.4	3.9	7.7	2.2
WYSOX TOWNSHIP	863	6.0	3.7	30.1	2.9	14.9	4.9	1.7	3.2	3.5	16.3	6.5	2.7	3.5
TERRY TOWNSHIP	454	7.7	6.2	37.2	1.1	6.8	7.3	2.2	5.1	1.8	17.8	2.9	1.8	2.2
NORTH BRANCH	64	3.1	20.3	32.8	3.1	0.0	3.1	0.0	9.4	0.0	12.5	3.1	3.1	9.4
CORRIDOR	4,002	8.8	6.0	29.7	1.8	11.2	5.2	1.3	3.1	3.4	17.4	5.2	3.9	2.9
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

There are no projects programmed in the Philip P. Bliss Corridor, according to data from the 2003 Transportation Improvement Program (TIP).

Corridor Action Plan

This section outlines some suggested draft actions, based on the results of public involvement, data collection efforts from county and multi-municipal comprehensive plans, and the Census data.

- Projects are needed to replace the existing post and cable guide rails found throughout the corridor.

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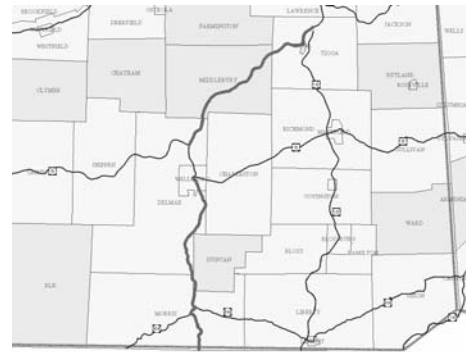
- A project to address a 90 degree turn in Asylum Township has been programmed.
- Bicycle advocates have noted to NTRPDC that the road surface of PA 187 is in poor condition, particularly the southern third of the roadway south of the Village of Terrytown. The route is otherwise a good through route for bicyclists, as it has favorable topography and lower volumes than PA 14. The roadway's poor surface condition however has led at least one area bicycling advocate to judge PA 187 as "the worst major road in [Bradford] County."
- PA 187 has the highest IRI rating in the region. The Northern Tier Regional Planning Commission should work with the PENNDOT County Maintenance Manager to include a resurfacing project(s) for PA 187 on the Betterment Program or through routine maintenance work programs.
- The Wyalusing Rainbow Bridge (SR 2010) is an important connection for corridor commuters accessing employment and shopping opportunities in Wyalusing Borough and Township. The presence of a major regional employer such as Taylor Packing heightens the importance of this critical link.



THE CENTRAL TIOGA CORRIDOR

The Central Tioga Corridor

The Central Tioga Corridor is 36 miles in length and is a major north-south route, directly serving 7 municipalities in central Tioga County. Wellsboro, the county seat, and Tioga Borough are the major communities in the corridor. The corridor's main roadway facility includes PA 287, a rural minor arterial. The Northern Tier's Rural Transportation Advisory Committee has classified the roadway as being part of its Primary Commercial network, as well as an export area secondary route. In statewide corridor planning parlance, the corridor is included as part of PENNDOT's Lumber Heritage Corridor.



CORRIDOR PROFILE ►



Tioga
Tioga Twp
Tioga
Middlebury Twp
Delmar Twp
Wellsboro
Duncan Twp
Morris Twp

The county's only short line railroad (Wellsboro & Corning) operates within the general confines of the corridor between Wellsboro Junction in Delmar Township north to Norfolk Southern's Gang Mills Yard near Painted Post, NY. The Grand Canyon Airport is located in both Shippen and Delmar Townships. EMTA provides public transportation service through Wellsboro and Middlebury Townships as part of its Route 45.

PA 287 is characterized as a two-lane highway and generally has posted speed limits of 55 mph. The segments in the Corridor have a mean IRI rating of 113.

With the W&C Railroad excursion, Ski Sawmill and wineries*, the corridor is generally a recreational and tourist route, a function which should be accented with the completion of US 15 to interstate status. The corridor includes portions of the Tioga State Forest and the Hammond Lake Reservoir. There are several large state game lands in the corridor, in Delmar, Morris and Middlebury Townships. There are also hunting and fishing camps along the tributaries to Pine Creek, and the corridor provides connections to the rail trail in Blackwell.

South of the Northern Tier region, PA 287 runs 25 miles to its junction with US 220 (future I-99 Corridor) east of Jersey Shore.

* Ski Sawmill and wineries are located in neighboring Lycoming County and influence corridor travel.

Key Findings

The fortunes of the Central Tioga Corridor are directly associated with Wellsboro Borough. As the corridor's commercial and economic center, the vibrancy of the Tioga County seat has a large impact on surrounding communities. The presence of two key transportation facilities in Wellsboro, the W&C Railroad and the Grand Canyon Airport, also raise the importance of this community as a transportation hub not only for the corridor, but the entire county. Wellsboro Borough is the corridor's largest employment center. It has the corridor's lowest percentage of people driving alone to work (68.2 percent), the greatest percentage of people traveling less than 15 minutes to work (67 percent), the shortest average travel time to work (16 minutes), the greatest number of people using public transportation (45), the highest percentage of people working within their municipality of residence (80 percent) and is the destination of over 66 percent of all corridor commuters.

Other Key Trends and Issues in the PA 287 Corridor include:

- The presence of the W&C Railroad shortline is vital to the shipping interests of several major employers in the corridor. The railroad is also a major asset for future economic development. The railroad is currently completing a 5-year plan of its own.
- With Wellsboro nearby, corridor commuters generally have shorter commute times than the rest of the region.
- Most corridor households have access to two or more cars.
- Only 8 percent commute to New York for employment.
- Population has been decreasing in every single municipality in the corridor. The corridor lost nearly 4 percent of its population since 1990, compared to a county gain of 0.6 percent and regional gain of 2.5 percent.
- Population growth has remained stagnant over the past half century. Growth in the region is exceeding growth in the Central Tioga Corridor.
- The corridor's 85-plus age group is the fastest-growing segment of population. Median age is also increasing; every corridor municipality registered increases in median age with the exception of Tioga Borough, which decreased slightly.
- The corridor is more racially homogenous than the region overall.
- Household incomes and employment characteristics are generally similar to rates at the regional level.
- The region's 2003 TIP has two corridor projects programmed, valued at a total of \$438,000. Both projects involve relatively minor bridge replacements.



Public Input

PA 287 has seen improvements south of Wellsboro where the roadway was widened and paved. Tree removal along the right of way has also been a positive factor in terms of improving safety (snow and ice melt off the roadway) and sight distance. PENNDOT has made improvements north of Wellsboro as well with a bridge improvement at Middlebury Center.



The village had a functionally obsolete bridge (too narrow) with a poor line of vision. Changes there have aided local companies such as Deitrick's Milk products with their truckers pulling out onto PA 287.

NTRPDC staff conducted focus group meetings in 1999 with transportation stakeholders to gauge what transportation issues exist within Tioga County. The following bullets describe some of the highlights of that discussion as they relate to transportation issues within the Central Tioga Corridor:

- Weight limitations on PA 287 hinder the transport of inbound raw material and outbound finished product movement.
- The PA 287 roadway has problematic horizontal curvature that affects truckers in the Antrim area.
- A separate, yet related issue is that of out of state trash importation through the corridor to the Antrim Landfill in Duncan Township. Much of this traffic originates in New York/New Jersey and comes west on I-80, north on US 15, then west on PA 414 before heading north on PA 287 to the Antrim landfill. The trash haulers have become a major maintenance issue with heavy damage being sustained by the roadway as well as a safety issue with reported accidents with school buses. The importation of solid waste in general into the corridor is an overall concern to county transportation stakeholders both within and outside the Northern Tier planning region. Antrim receives very little to no local solid waste.



- The operator of the Antrim landfill - Phoenix Resources – has worked with PENNDOT in addressing the truck traffic issue, as there had been serious problems early on with speeding and accidents with school buses. The involvement of a state representative and the Pennsylvania State Police has helped, as well with restrictions being placed upon the operator as well as its drivers. Tioga County officials see improvement of the situation with the conduct of the company's drivers and the actual physical improvement of the roadway where the truckers pull out onto PA 287.



- GROW owns a short line between area businesses and Norfolk Southern’s yard in Gang Mills, NY. The Wellsboro & Corning Railroad is solely dependent on financial assistance from such state funded sources as the Rail Freight Assistance Program and Capital Budget. RFAP funding amounts have been cut in half in recent years. In addition to the funding cuts to the rail freight program, Pennsylvania dollars are not eligible to be used on the New York portion of the rail corridor to Gang Mills. The rail line bridges are said to be in poor condition and the increased size of freight cars (143 tons/car) only adds to the problem. The W&CRR line is a vital one that keeps area shipping costs down. The lack of this rail line would bring a financial loss to those shippers who depend on the economy of rail freight to keep shipping (overhead) costs down. The local line is marginal at best and has had problems securing funding for maintenance. There has been a request for a siding for a new plant just north of the corridor in Lawrenceville.
- PA 362, a relatively narrow country road, directly serves the Grand Canyon Airport. If any commercial development were to take place adjacent to the airport, the roadway would have to be addressed, according to Tioga County economic development officials.

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years on the PA 287 roadway through Wellsboro.

**Table 1: Annual Average Daily Traffic
CENTRAL TIOGA CORRIDOR**

LOCATION	1993	1997	2000
WELLSBORO	3,119	4,039	4,245

Source: NTRPDC GIS, 2003.

Journey to Work Trip Statistics (Mode Split and Travel Time)

Given the decentralized development patterns and employment destinations in the Northern Tier, it is understandable that commuters rely on the private automobile. Over 89 percent of commuters in the region use on the automobile as a means of getting to work – 77 ½ percent of these drive alone. These numbers are nearly identical in the Central Tioga Corridor.

Key journey to work trip statistics from the 2000 Census are explained in the following bullets:

- Wellsboro is the largest employment center in the corridor. As such, it has the lowest percentage of persons driving solo to work (68.2 percent). Underscoring its role as a major employment destination, Wellsboro residents also enjoy the corridor’s shortest mean travel time to work, at just 16 minutes.
- Morris Township’s numbers deviate substantially from corridor and regional averages. For a rural township, Morris has exceptionally low percentages of people dependent on the single occupant vehicle (69 percent), high percentages of people walking to work (over 10 percent, more than double the regional average), and a significant number of people working from home (8.6 percent, nearly double the regional average).



- Endless Mountains Transit Authority's Route 45 serves the Central Tioga Corridor. Yet during the 2000 Census, only 47 people in the corridor reported using public transportation as a means of getting to work. Most of these (45) were in Wellsboro Borough.

Table 2: Mode Split (in %) - 2000
CENTRAL TIOGA CORRIDOR

LOCATION	Workers 16+	SOV	Carpool	Walk	Work at Home	Mean Travel Time (Min.)
TIOGA	280	80.0	14.3	3.2	1.8	25.7
MIDDLEBURY	569	79.3	10.9	3.9	4.6	24.7
WELLSBORO	1,378	68.2	14.2	8.5	3.8	16.0
MORRIS	232	68.9	10.3	10.3	8.6	25.3
CT CORRIDOR	4,261	73.0	14.4	5.0	5.1	--
NORTHERN TIER	79,103	77.5	12.0	4.7	4.6	--

Commuters in the Central Tioga Corridor generally are traveling longer distances to work than what they were 10 years ago, yet still enjoy shorter travel times to work than commuters in the region as a whole. With Wellsboro as a major employment destination, a majority of corridor commuters travel less than 15 minutes to work. Table 3 and

Table 4 show how journey to work travel times, while still short compared to regional averages, have been increasing over the past decade. Other noteworthy points from the data include:

- The number of people in the corridor traveling less than 15 minutes to work declined by a very small margin – just 23 persons or 1.2 percent of the corridor total.
- Exactly two-thirds of Wellsboro Borough residents travel less than 15 minutes to work, the highest such percentage in the corridor. Among Northern Tier municipalities, only Eagles Mere Borough has a higher percentage of people (70 percent) commuting 15 minutes or less to work. The Tioga County average is only 36 percent.
- In 1990, there were only 47 people in the corridor traveling longer than 90 minutes to work. By 2000, that total had increased to 77, or a 64 percent increase.

Table 3: Travel Time to Work (in minutes) - 2000
CENTRAL TIOGA CORRIDOR

LOCATION	< 15	15-29	30-59	60-89	90+
TIOGA	26.5	30.5	38.9	2.2	1.8
MIDDLEBURY	27.8	46.0	17.3	5.9	2.9
WELLSBORO	66.6	17.9	8.4	5.5	1.5
MORRIS	23.6	42.0	28.3	5.2	0.9
CT CORRIDOR	44.8	30.3	18.4	4.5	1.9
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

Table 4: Travel Time To Work (in minutes) – 1990
CENTRAL TIOGA CORRIDOR

LOCATION	< 15	15-29	30-59	60-89	90+
TIOGA	20.9	24.1	48.2	5.1	1.6
MIDDLEBURY	23.0	52.5	20.6	3.7	0.2
WELLSBORO	71.5	16.7	9.8	1.7	0.2
MORRIS	20.3	40.5	34.4	4.0	0.9
CT CORRIDOR	48.5	27.2	19.5	3.6	1.2
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Vehicles Available per Household

The average number of vehicles available per household in the Central Tioga Corridor is very similar to regional averages, with some variation throughout the corridor. These variations are highlighted in the following bullets:

- A majority of corridor households have access to two vehicles (40.3 percent).
- There are 11½ percent of Tioga Borough residents without access to a car, an average almost twice as high as the regional average.
- A majority of Tioga and Wellsboro Borough residents had access to only one vehicle.
- Conversely, only 1 percent of Middlebury Township residents do not have access to a vehicle, while nearly a quarter of its households have access to three or more.

Table 5 below shows the vehicle availability for selected Corridor municipalities.

Table 5: Vehicles Available Per Household (in %) – 2000
CENTRAL TIOGA CORRIDOR, Selected Municipalities

LOCATION	None	One	Two	Three or More
TIOGA	11.5	45.5	27.5	15.6
MIDDLEBURY	1.0	29.4	45.7	23.9
WELLSBORO	8.0	45.9	35.7	10.4
MORRIS	8.9	25.5	44.9	20.6
CT CORRIDOR	5.7	35.4	40.3	18.6
NORTHERN TIER	6.3	32.7	42.1	18.9

Commutation Patterns

Commutation pattern data from the 2000 U.S. Census show that an overwhelming majority of corridor commuters (nearly 53 percent) travel to Wellsboro for employment.

The following additional analysis can be drawn from the Census data, including:



- Over 85 percent are employed at destinations somewhere in Tioga County.
- Wellsboro Borough has the corridor’s highest percentage of people working in their municipality of residence - over 73 percent. This is not only the highest such percentage in the corridor but throughout the entire Northern Tier. (For context, Eagles Mere is second in the region at 72 percent, with Mansfield third at 59 percent.)
- Nearly 8 percent travel to destinations in New York for work, primarily in Steuben and Chemung Counties.
- Over 33 percent of corridor employees work in the same municipality in which they reside.

Table 6 shows the top ten destinations for commuters in the PA 287 Corridor. These ten encompass over 82 percent of all work destinations for those living in the corridor.

Table 6: Top Commuter Destinations – 1990, 2000
CENTRAL TIOGA CORRIDOR

Location	Percentage Share	
	1990	2000
1. WELLSBORO	61.0	52.5
2. MANSFIELD	4.2	5.7
3. STEUBEN COUNTY, NY	4.5	4.2
4. BLOSSBURG	2.0	4.0
5. MIDDLEBURY	2.9	3.5
6. CHEMUNG COUNTY, NY	3.2	3.4
7. DELMAR	2.5	2.9
8. LAWRENCEVILLE	0.6	2.3
9. RICHMOND	1.7	2.1
10. LYCOMING COUNTY, PA	1.8	1.9

Source: U.S. Census Bureau, PA State Data Center, 1990, 2000

Population Trends

Every single municipality in the Central Tioga Corridor lost population during the 1990s, and for the first time since the 1950s, corridor population has dropped below 10,000. Population loss over the past decade averaged nearly 4 percent, led by a 14 percent drop in Delmar Township, the corridor’s smallest municipality.

The corridor decreased by 384 persons over the past decade, with most of the decline being attributed to losses in Delmar Township (155) and Wellsboro Borough (102). Wellsboro, once the third-largest municipality in the Northern Tier, now ranks sixth, behind the neighboring Tioga County community of Mansfield. Population in Tioga County overall increased by only 247 persons for a low rate of increase of 0.6 percent during the 1990s. Over the past 50 years, population in the corridor has grown by only 1.4 percent, compared to the regional average of 24 percent. Table 7 shows the population trends of major corridor communities against corridor and regional averages.

**Table 7: Population Trends
CENTRAL TIOGA CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
TIOGA	624	613	638	622	(2.5)
MIDDLEBURY	1,036	1,301	1,244	1,221	(1.8)
WELLSBORO	4,003	3,805	3,430	3,328	(3.0)
MORRIS	654	656	675	646	(4.3)
CT CORRIDOR	10,012	10,441	10,302	9,918	(3.7)
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

Age Group Distribution

While total population in the corridor has been decreasing over the past 20 years, several age groups have been increasing in number, particularly in the 75-plus age group. Indeed, the fastest-growing age groups in the corridor are the 45-54 group, yet population growth among these age groups still lags behind regional rates. In Middlebury Township, growth in the “frail elderly”, or 85-plus age group, expanded by nearly 86 percent, a rate more than three times the regional average.

**Table 8: Percent Increase by Age Group - 1990-2000
CENTRAL TIOGA CORRIDOR**

LOCATION	Total	45-54	55-64	65-74	75-84	85+
TIOGA	(2.5)	(5.4)	(25.0)	(23.3)	21.7	60.0
MIDDLEBURY	(1.8)	6.41	24.6	6.8	30.0	85.7
WELLSBORO	(3.0)	24.9	7.5	(30.0)	8.5	11.0
MORRIS	(4.3)	12.7	6.7	2.6	45.5	0.0
CT CORRIDOR	(3.7)	26.0	1.9	(15.4)	13.4	15.3
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

Median age is another indicator of the Corridor’s aging demographic. Several of the corridor’s municipalities saw increases in their median age, including Wellsboro Borough, which, at 44.2, has among the highest median ages in the Northern Tier. Every municipality in the corridor registered increases in median age over the past decade, with the exception of Tioga Borough, which declined only slightly, from 32 to 31.8. Tioga Borough by far has the lowest median age in the corridor.

**Table 9: Median Age, 1990 – 2000
CENTRAL TIOGA CORRIDOR**

LOCATION	1990	2000
TIOGA	32.0	31.8
MIDDLEBURY	33.3	39.1
WELLSBORO	42.1	44.2
MORRIS	37.3	43.4

Racial Composition

The racial composition of the Central Tioga Corridor to a large extent mirrors the percentages from across the Northern Tier. An assessment of concentrations of minority populations throughout the Northern Tier is an important consideration from an environmental justice standpoint as major transportation projects must take into consideration the potential for disproportionate impact on both minority and low-income populations. Table 10 provides an overview of the corridor's racial composition, while the following bullets describe some anomalies within the corridor:

- Hispanics comprise the corridor's largest minority population.
- The Corridor has a greater percentage of Hispanic and Asian populations than the region as a whole. The number of Asians in the corridor is miniscule, yet is still more than double the regional average of total population.
- Conversely, the percentage of African Americans in the corridor is less than half the regional average. The corridor's little African American population is centered on the boroughs of Wellsboro and Tioga.
- Tioga Borough has the corridor's highest proportion of white population, at 99 percent.

Table 10: Racial Composition – (in %)
CENTRAL TIOGA CORRIDOR

Location	Total	White	Black	Hispanic	Indian	Asian	Other
TIOGA	622	99.0	0.3	.03	0.3	0.0	0.5
MIDDLEBURY	1,221	98.4	0.0	0.8	0.1	0.2	1.3
WELLSBORO	3,328	98.1	0.4	0.6	0.2	0.9	0.2
MORRIS	646	98.6	0.2	0.3	0.5	0.3	0.0
CT CORRIDOR	9,918	98.3	0.2	0.7	0.2	0.6	0.3
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Income

Average annual household income levels in the corridor closely align with those found throughout the Northern Tier. There are, however, a few anomalies that stand out in the corridor, as noted below:

- Delmar Township had the corridor's highest average annual household income in 1999, at \$34,712, while Tioga Borough had the lowest, at \$27,404. Delmar had the fifth-highest average annual household income in the county. The county average was \$32,020.
- Middlebury Township and Wellsboro Borough residents had the corridor's greatest percentage of households making more than \$100,000 a year (6.1 percent).

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Table 11: Per Capita Income - 2000
CENTRAL TIOGA CORRIDOR

Location	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
TIOGA	263	45.3	33.8	12.6	4.9	3.4
MIDDLEBURY	479	36.3	36.7	16.5	4.4	6.1
WELLSBORO	1,468	43.9	29.1	14.6	6.4	6.1
MORRIS	242	44.2	33.1	14.5	4.1	4.1
CT CORRIDOR	3,991	39.9	32.5	16.2	5.9	5.5
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major economic concerns in the corridor include Osram Sylvania and Borden Foods in Wellsboro and Northern Tier Fabricators and Tyoga Container in Tioga.

Table 12, Table 13 and Table 14 describe some of the corridor's economic and labor force conditions.

- There were no corridor residents reportedly in the Armed Forces at the time of the census.
- Employment and unemployment rates for the corridor are similar to those at the regional level.
- Table 14 shows the importance of the Agricultural sector in Morris Township (10.7 percent, or nearly double the regional average). Farming, Fishing and Forestry are also Morris Township's strong suits, with employment in that sector twice the regional average.
- Given Wellsboro's role as a regional center for finance and culture, its economic strengths appear in the Finance, Insurance and Real Estate sectors, as well as in Education, Public Administration and Arts and Entertainment. Most of the corridor's management and professional-related jobs are also found in Wellsboro.
- Tioga Borough's strongest sector is manufacturing, with over a third of all employment for borough residents.

Table 12: Civilian Labor Force Characteristics – (2000)
CENTRAL TIOGA CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
TIOGA	479	36.1	63.9	92.5	7.5	0.0
MIDDLEBURY	977	36.6	63.4	94.3	5.7	0.0
WELLSBORO	2,726	46.3	53.7	95.0	5.0	0.0
MORRIS	515	50.3	49.7	91.4	8.6	0.0
CT CORRIDOR	7,873	41.7	58.3	94.7	5.3	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 13: Employment by Occupation - (2000)
CENTRAL TIOGA CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
TIOGA	283	19.8	21.2	18.7	1.1	10.6	28.6
MIDDLEBURY	584	20.2	17.0	24.5	2.7	13.2	22.4
WELLSBORO	1,390	39.4	15.3	24.0	0.9	6.7	13.7
MORRIS	234	25.2	19.7	12.0	4.7	8.5	29.9
CT CORRIDOR	4,344	28.9	16.6	21.7	1.5	9.6	21.6
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

**Table 14: Employment by Industry by Place of Residence - (2000)
CENTRAL TIOGA CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt	Educational	Arts & Entertainment	Other	Public Administration
TIOGA	283	1.4	4.6	35.3	1.1	18.0	1.1	3.2	2.1	2.8	17.0	7.4	3.2	2.8
MIDDLEBURY	584	4.6	10.4	19.0	2.9	14.6	6.3	1.4	3.8	5.8	15.4	8.6	4.6	2.6
WELLSBORO	1,390	0.9	6.3	14.5	0.4	13.3	1.7	1.7	6.8	5.2	36.9	3.2	3.1	6.1
MORRIS	234	10.7	5.6	18.8	1.3	7.7	4.3	0.0	0.0	3.4	13.7	16.2	7.3	11.1
CT CORRIDOR	4,344	4.1	6.8	19.7	1.6	13.4	3.9	1.8	4.1	4.7	25.2	6.4	3.7	4.6
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

Table 15 below highlights both of the projects programmed in the 2003 Transportation Improvement Program for the corridor. Neither project is directly related to PA 287, the corridor's primary roadway facility. The Morris Township project involves the replacement of the Stoney Fork Creek Bridge over Stoney Fork Creek in Stoney Fork State Park. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.



**Table 15: 2003 TIP Projects
CENTRAL TIOGA CORRIDOR**

Municipality	Project/Description	Year				Total
		03	04	05	06	
MORRIS	Stoney Fork Creek Bridge		63			\$63
WELLSBORO	Wellsboro Box culvert			375		\$375

Source: PENNDOT District 3-0

Corridor Action Plan

- The matter of weight limitations on PA 287 has been raised as a constraint in the corridor for goods movement. The Tioga County Chamber and/or Development Corp. should look further into this issue among the county’s business community to see specifically where these transportation “pinch points” occur. PENNDOT should be informed as to the nature and related extent of weight detours and the industry impacts.
- The curvature of PA 287 in the Antrim area has been raised as a concern affecting truckers – particularly solid waste truck haulers - in the southern portion of the corridor. PENNDOT is working with the landfill operator on this situation.
- NTRPDC should continue to coordinate with the operators of the Grand Canyon Airport regarding roadway improvements to and from the facility, particularly on PA 362. Aviation and highway funding sources should be considered.
- The Wellsboro & Corning Railroad is sorely dependent on financial assistance from such state funded sources as the Rail Freight Assistance Program and Capital Budget. While the RFAP funding program suffered a 50 percent cut in funding between 2000 and 2001, state disbursements from the Capital Budget have remained largely the same, at approximately \$10 million a year. Maintenance needs on the W&C line are critical, particularly with increased size and weight of rail cars. The NTRPDC and GROW should continue to advocate RFAP and Capital Budget grant funding, as well as carry the W&C’s funding needs to the state’s congressional delegation as it engages in the debate over the Reauthorization of TEA-21 in the fall of 2003.



THE ELMIRA CONNECTOR CORRIDOR

The Elmira Connector Corridor

At just 13.5 miles, the Elmira Connector Corridor is the shortest of the 15 corridors of regional significance in the Northern Tier. The Corridor is centered on PA 328, which traverses just three rural municipalities, Wells Township in Bradford County, and Jackson and Lawrence Townships in Tioga County. The Village of Millerton is the only relative population center of note in the Corridor.



CORRIDOR PROFILE ▶



Bradford
Wells Twp
Tioga
Jackson Twp
Lawrence Twp

Despite its short length, the corridor provides an important link between US 15 and the Elmira, NY metropolitan area. PA 328 has an IRI rating of 67. It is part of NTRPDC's I-CAN and Agricultural Access networks. PENNDOT has functionally classified PA 328 as a rural minor arterial.

PA 328 was originally part of the Appalachian Regional Commission's Appalachian Development Highway System (Corridor U) before ARC transferred the mileage from PA 328 to US 15 between Tioga Junction and the New York State line. This was done at PENNDOT's request in order to gain access to the availability of federal ARC funding for the completion of the US 15 Corridor to an interstate standard highway.

The corridor is characterized as two-lane highway and generally has posted speed limits of 55 mph.

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Background

Despite its length, the Elmira Connector Corridor is an important one in light of its strategic location between Tioga County and the Elmira, NY metropolitan area. Tioga County exports nearly one quarter of its employees to destinations outside of the county, 27 percent of these (6.2 percent overall) are headed to jobs in Chemung County. For employees living in the Elmira Connector Corridor, that percentage rises to over 40 percent. In addition to its role as a major commuter corridor, it also naturally provides a link to the metro area's sports and cultural attractions such as the Clemens Center - a 1,600 seat performing arts center - as well as the new \$8.6 million Arena (Coach USA Center). The Clemens Center alone attracts over 100,000 guests each year.

After PA 328 crosses Seely Creek in Wells Township, the roadway becomes NY Route 328 and continues on for a distance of 13 ½ miles to Elmira. The City of Elmira has also just completed the Southern Arterial through Southport using ARC funds. The Clemens Center Parkway was extended south through the Town of Southport, making Elmira more accessible to Northern Tier residents in northern Bradford and northeastern Tioga County. The New York portion of the corridor also is seeing new commercial development, with new supermarkets and shopping centers with stores like Wegmans and Topps.



To New York and Chemung County officials, the Elmira Connector Corridor is just as important as the US 15 Corridor. The state is concerned with the loss of the ARC designation from the Pennsylvania side of the corridor and what that portends for the northern side of the state line.



Key Findings

The Elmira Connector Corridor – while being the Northern Tier’s shortest priority corridor – is an important link between US 15 in Tioga County and the greater Elmira metropolitan area.

Key Trends and Issues in the Elmira Connector Corridor include:

- The percent of people who work from home is less than the regional average. Corridor commuters are generally more dependent on the single occupant vehicle and carpool at a greater rate than others in the Northern Tier overall.
- The number of people driving longer than 90 minutes to work more than tripled between 1990 and 2000.
- A majority of corridor commuters’ journey to work trip length averages between 30 and 60 minutes, whereas most across the Northern Tier travel less than 15 minutes to work. Over half of corridor residents are employed in New York state; only 12 percent are employed within the corridor.
- During the 1990s, Wells Township was the second-fastest growing municipality in Bradford County. The township is currently working on a comprehensive plan and is confronting CAFOs (Concentrated Animal Feeding Operations) as one of its main issues.
- During the 1990s, the corridor’s population growth rate among those over age 55 was 37 percent, compared to just 5.2 percent regionally.
- Median age in Jackson Township is nearly 40, one of the highest levels in the region.
- The corridor population is 99 percent white.
- The percentage of corridor residents employed in the farming, fishing and forestry sector is over 5 times the state rate.
- A majority of corridor residents are employed by manufacturing firms. Lawrence Township leads the corridor, at 32.2 percent.

Public Input

No public comments were raised regarding PA 328 during the Northern Tier’s round of public input meetings in 1999. The development of this plan should seek input from transportation stakeholders as to potential improvement needs that may be necessary over the life of this LRP.

Traffic Volumes

Table 1 shows current traffic volumes along PA 328 in the Elmira Connector Corridor.

**Table 1: Annual Average Daily Traffic
ELMIRA CONNECTOR CORRIDOR**

LOCATION	2000
LAWRENCE TWP	1,095
JACKSON TWP	1,588
WELLS TWP	3,095

Source: NTRPDC GIS.

Mode Split

As elsewhere in the Northern Tier, Corridor commuters are dependent on the private automobile for travel to and from work. Nearly 95 percent of Corridor commuters rely on a car to get to work, and 82 percent drive alone. These numbers are slightly higher in comparison to percentages across the Northern Tier. Wells Township ranks ninth in the region in the percentage of people traveling alone to work, at 84.4 percent. Use of public transportation for commuting purposes is very low. The Chemung County Transit System currently does not provide service in the corridor. Table 2 provides more information on mode split within the corridor.

**Table 2: Mode Split (in %) – 2000
ELMIRA CONNECTOR CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
JACKSON TWP	79.8	14.1	0.2	2.0	3.4
LAWRENCE TWP	82.8	13.5	--	1.4	2.0
WELLS TWP	84.4	9.8	--	0.8	4.7
CORRIDOR	82.0	12.8	--	1.5	3.3
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6

Travel Time to Work

Table 3 and Table 4 show how journey to work travel times have increased in the corridor over the past decade.

- Over 4 percent of commuters in Jackson Township travel longer than 90 minutes to work, a percentage nearly twice as high as the regional average.
- Between 1990 and 2000, the total number of people in the corridor driving longer than 90 minutes to work more than tripled from 20 to 67.
- Mean travel time to work in the corridor varies from 26.7 minutes in Lawrence Township to 33.2 minutes in Jackson Township, the eighth-highest in the Northern Tier.

**Table 3: Travel Time to Work (in minutes by percent) – 2000
ELMIRA CONNECTOR CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
JACKSON TWP	14.1	31.4	46.4	3.9	4.1
LAWRENCE TWP	28.9	34.4	32.8	1.4	2.5
WELLS TWP	12.6	34.4	47.8	2.6	2.6
CORRIDOR	18.8	33.1	42.1	2.7	3.2
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes by percent) – 1990
ELMIRA CONNECTOR CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
JACKSON TWP	16.3	31.6	49.2	1.6	1.1
LAWRENCE TWP	26.3	29.5	41.8	0.8	1.6
WELLS TWP	8.1	52.0	34.5	5.4	--
CORRIDOR	18.0	35.0	43.8	2.1	1.2
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

Commutation data from the 2000 U.S. Census show various statistics with regard to journey to work trips. Given the corridor's proximity to the state line, a majority of corridor residents commute to locations in Chemung and Steuben Counties, New York for employment. The following additional analysis can be drawn from this data, including:

- Only 10 percent of corridor residents are actually employed within the corridor. This is a decline of 4 percentage points from the 1990 rate.
- Over 54 percent of corridor residents commute to destinations in New York State.
- One-third work in Tioga County; 8.8 percent in Bradford County.

Over 84 percent of Corridor residents work in one of the top employment destinations, as shown in Table 5.

Table 5: Top Commuter Destinations – 1990, 2000
ELMIRA CONNECTOR CORRIDOR

Municipality	Percentage Share	
	1990	2000
1. CHEMUNG COUNTY, NY	41.0	39.6
2. STEUBEN COUNTY, NY	12.0	13.6
3. JACKSON TWP	9.2	7.1
4. LAWRENCEVILLE	5.3	5.6
5. WELLSBORO	4.3	4.7
6. TIOGA TOWNSHIP	0.0	3.4
7. MANSFIELD	2.5	3.1
8. SOUTH CREEK TWP	2.1	2.7
9. TIOGA BOROUGH	4.3	2.5
10. WELLS TWP	2.4	1.9

Source: PA State Data Center, 1990, 2000.

Vehicles Available per Household

Corresponding to households' dependence on the automobile is the availability of vehicles per household. Corridor households have access to private automobiles for their transportation needs. Table 6 shows the percentage breakdown by municipality.

- A majority of corridor households (46.3 percent) are two-car families.
- While almost 19 percent of Northern Tier households have **three** or more vehicles, nearly 22 percent of Elmira Connector Corridor households do. For households with **two** or more vehicles, those numbers jump to 61 and 68 percent, respectively.
- Jackson Township's percentage of 25 ½ percent of three car families is the highest in the Elmira Connector Corridor.
- Wells Township ranks thirteenth in the region in the percentage of two-car families.

Table 6: Vehicles Available Per Household (in %) – 2000
ELMIRA CONNECTOR CORRIDOR

LOCATION	NONE	ONE	TWO	THREE OR MORE
JACKSON TWP	4.0	27.8	42.7	25.5
LAWRENCE TWP	4.3	29.2	47.3	19.3
WELLS TWP	5.6	24.7	50.9	18.8
CORRIDOR	4.5	27.5	46.3	21.7
NORTHERN TIER	6.3	32.7	42.1	18.9

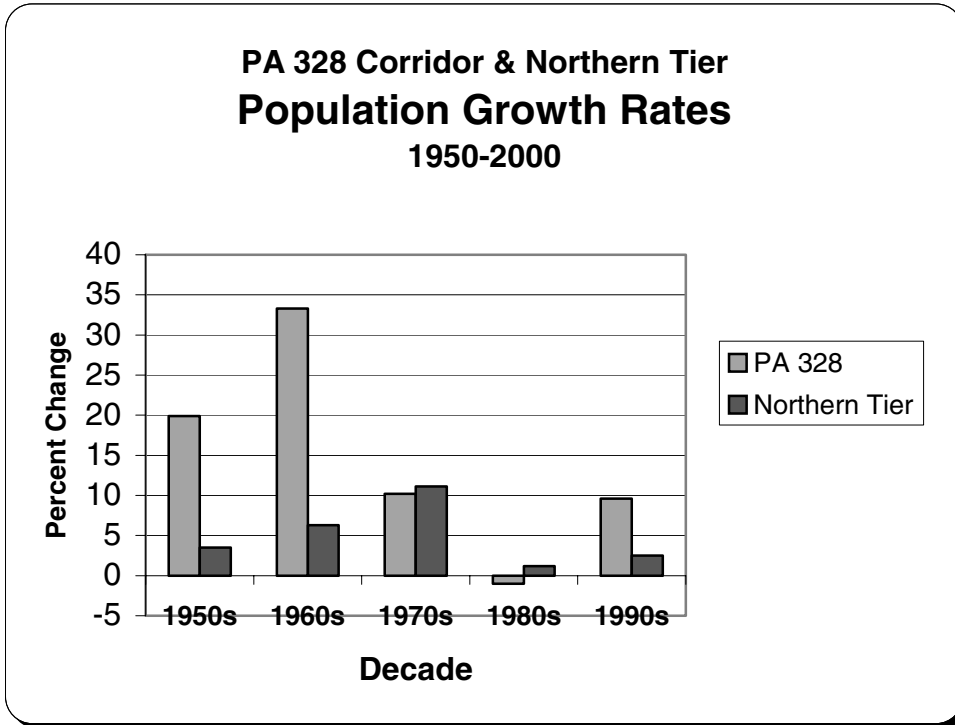
Population Trends

Population in the PA 328 Corridor has nearly doubled since 1950 with a growth rate of 91 percent, or 2,416 people. Most of this growth occurred during the 1960s, when the corridor grew by over 33 percent. Growth was flat during the 1980s but has since grown by almost 10 percent, in comparison to a regional average of just 2 ½ percent. Table 7 shows the total population figures for the three municipalities in the Elmira Connector Corridor. A summary of this data is as follows:

- Population in the corridor is growing at a rate four times faster than the region.
- The townships at the ends of the corridor – Lawrence and Wells – have experienced heavy population growth while Jackson Township’s population has roughly stayed the same over the past three decades.
- During the 1990s, Wells Township was the second-fastest growing municipality in Bradford County while adding 260 residents for a growth rate of 25 ½ percent. The township’s growth during that decade ranked it eighth throughout the Northern Tier. Only Standing Stone Township grew at a faster rate in Bradford County.

Table 7: Population Trends
ELMIRA CONNECTOR CORRIDOR

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
JACKSON TWP	2,023	2,051	2,072	2,054	--
LAWRENCE TWP	1,192	1,592	1,519	1,721	13.3
WELLS TWP	1,004	1,080	1,018	1,278	25.5
CORRIDOR	4,219	4,653	4,609	5,053	9.6
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

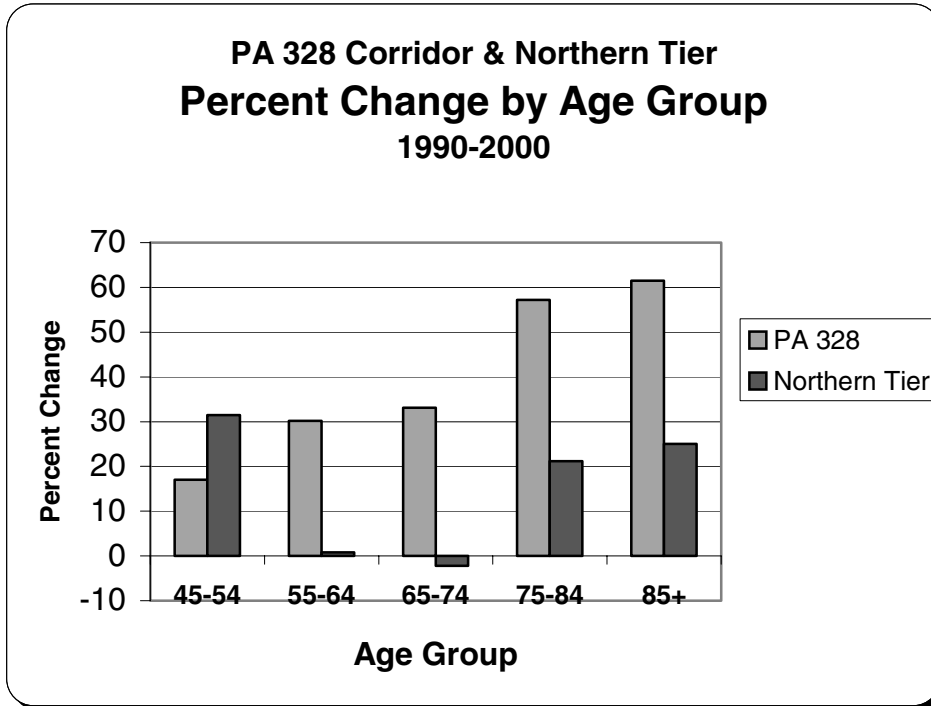


Age Group Distribution

Coupled with the rapid population growth that’s being experienced in the corridor is the age of its population. Wells Township in particular has experienced notable increases in the 45-54 age group, and leads all corridor municipalities in growth in the 75-plus age group. Its numbers of people over age 75 more than doubled from 38 to 85 over the past decade. The corridor’s population growth rate among those age 55-plus was 37 percent, compared to just 5.2 percent regionally. There are 3,378 people in the Northern Tier over age 85; 63 of these are in the Elmira Connector Corridor.

**Table 8: Percent Increase by Age Group – 1990, 2000
ELMIRA CONNECTOR CORRIDOR**

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
JACKSON TWP	--	19.9	33.0	28.5	22.1	56.5
LAWRENCE TWP	13.3	(1.4)	20.9	51.5	64.4	62.5
WELLS TWP	25.5	41.7	41.9	16.5	136.6	75.0
328 CORRIDOR	9.6	17.0	30.2	33.1	57.2	61.5
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0



Median Age

Median age is another indicator of the Corridor’s aging demographic. All three of the corridor’s municipalities registered increases in median age over the past 10 years, led by Jackson Township, which rose from 32.4 to 39.5 – an increase of over 7 years. Jackson ranked eighth in the Northern Tier in median age increase. Table 9 provides detail for all three municipalities in the corridor.

**Table 9: Median Age, 1990 – 2000
ELMIRA CONNECTOR CORRIDOR**

LOCATION	1990	2000
JACKSON TWP	32.4	39.5
LAWRENCE TWP	34.4	38.2
WELLS TWP	33.4	38.6

Racial Composition

There are 46 minorities in the 328 Corridor, according to information from the 2000 U.S. Census. Hispanics constitute the largest minority population, with 14 residents scattered throughout the three municipalities. There are 9 African Americans in the corridor. Wells and Lawrence Townships rank third and fifth respectively in the Northern Tier in their percentage of white population.

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**Table 10: Racial Composition
ELMIRA CONNECTOR CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
JACKSON TWP	2,054	98.6	0.29	0.29	0.10	0.10	0.05
LAWRENCE TWP	1,721	99.4	0.29	0.17	0	0	0
WELLS TWP	1,278	99.5	0	0.23	0.16	0	0
CORRIDOR	5,058	99.0	0.18	0.28	0.08	0.04	0.02
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Per Capita Income

Median household income (1999) ranges from a low of \$33,643 in Jackson Township to a high of \$36,420 in Wells Township. There are 67 corridor households that make more than \$100,000 a year, including 9 that earn more than \$200,000 a year. Nearly half of the corridor's \$100,000-plus income group are from Wells Township.

**Table 11: Per Capita Income (2000)
ELMIRA CONNECTOR CORRIDOR**

LOCATION	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
JACKSON TWP	778	35.5	37.7	19.5	4.8	2.6
LAWRENCE TWP	658	28.6	46.2	18.1	4.7	2.4
WELLS TWP	457	26.9	43.1	20.4	2.8	6.8
CORRIDOR	1,893	31.0	41.9	19.2	4.3	3.5
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. The following tables (and the bullets below) highlight some of the corridor's economic conditions.

- Labor force characteristics in the corridor largely mirror those of the region overall.
- The percentage of corridor residents employed in the farming, fishing and forestry sector is over 5 times the state rate.
- A majority of corridor residents are employed by manufacturing interests. Lawrence Township leads the corridor, at 32.2 percent.

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Table 12: Civilian Labor Force Characteristics – (2000)
ELMIRA CONNECTOR CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
JACKSON TWP	1,614	37.6	62.4	92.1	7.9	0.0
LAWRENCE TWP	1,325	38.6	61.4	93.5	6.5	0.0
WELLS TWP	968	36.9	63.0	91.2	8.8	0.0
CORRIDOR	3,907	37.8	62.3	92.3	7.7	0.0
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

Table 13: Employment by Occupation - (2000)
ELMIRA CONNECTOR CORRIDOR

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
JACKSON TWP	928	24.5	15.9	19.1	2.8	11.0	26.7
LAWRENCE TWP	761	19.2	16.4	16.6	0.3	11.7	35.9
WELLS TWP	556	20.3	9.9	524.8	5.0	16.9	23.0
CORRIDOR	2,245	21.6	14.6	19.6	2.5	12.7	28.9
NORTHERN TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

Table 14: Employment by Industry by Place of Residence - (2000)
ELMIRA CONNECTOR CORRIDOR

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt Educational	Arts & Entertainment Other	Public Administration		
JACKSON TWP	928	5.5	5.0	25.8	4.2	11.9	5.0	2.4	3.1	3.6	20.7	4.1	5.4	3.6
LAWRENCE TWP	761	1.6	5.5	32.2	2.2	14.1	5.1	1.4	2.1	4.3	20.6	5.7	3.3	1.8
WELLS TWP	556	6.3	7.9	22.5	2.5	11.9	5.2	2.3	3.4	3.4	24.5	2.9	4.3	2.9
CORRIDOR	2245	4.4	5.9	27.1	3.1	12.6	5.1	2.0	2.9	3.8	21.6	4.3	4.4	2.8
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

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2003 Transportation Improvement Program (TIP)

PENNDOT has just one project programmed as part of the 2003 TIP for the PA 328 Corridor. Table 15 below highlights the programmed highway restoration project. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year.

**Table 15: 2003 TIP Projects
ELMIRA CONNECTOR CORRIDOR**

Municipality	Project/Description	Year				Total
		03	04	05	06	
LAWRENCE	Mutton Lane Creek Box		450			\$450

Source: PENNDOT District 3-0

Additionally, some work is taking place on the Trobridge Curve with new pavement markings. This has been a high accident cluster site just west of the intersection of PA 328 with PA 549.

Corridor Action Plan

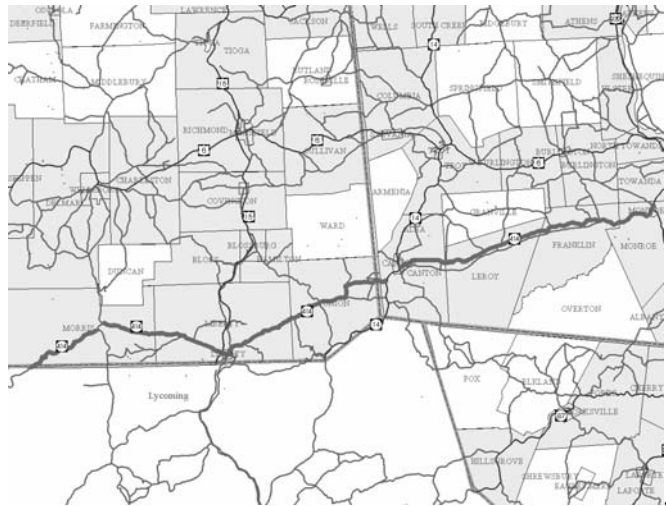
Highlighting the potential future changes to the Elmira Connector corridor is the pending improvement of U.S. 15 to interstate status and the change that designation will augur for northern Tioga and Bradford Counties. The increase in traffic on the ARC corridor could see an increase in both passenger and freight flows on the PA 328 corridor for traffic destined for Elmira and other Chemung County destinations. Although PA 328 is no longer included in the Appalachian Regional Commission's ADHS (Appalachian Development Highway System), the New York portion of the corridor remains on the federal network. Ongoing development and improvements on the New York side of the border, along with changes in traffic and freight flows on U.S. 15/I-99 should continue to be monitored by county and regional planners and decision-makers. Other issues include:

- NTRPDC should continue to dialogue with PENNDOT regarding any new PA 328 issues, needs or changes brought about by an improved U.S. 15 or NY Route 328.
- Several bridges have been replaced in this corridor but there are still some in need of replacement due to width issues. One bridge at the state line just east of the intersection of PA 328 and PA 549 is narrow and a candidate for replacement.

THE PB&E CORRIDOR

The PB&E Corridor

The NTRPDC has defined the PE&E Corridor* as those municipalities located on the southern border of both Bradford and Tioga Counties. The corridor is 61.8 miles in length and includes 10 municipalities between Monroeton Borough and Morris Township. The east-west corridor is centered on PA 414, the corridor's primary transportation facility. The major boroughs in the corridor include Monroeton, Liberty and Canton, the largest. The Towanda Monroeton Shippers Lifeline, a 6-mile shortline, is located tangent to the corridor's eastern terminus in Monroeton.



CORRIDOR PROFILE ►



Bradford
Monroeton
Monroe Twp
Franklin Twp
Leroy Twp
Canton Twp
Canton Boro
Tioga
Union Twp
Liberty Twp
Liberty Boro
Morris Twp

PENNDOT has functionally classified PA 414 as a rural minor arterial. Additionally, NTRPDC has identified the PA 414 roadway on several of its planning networks, including the I-CAN (between Monroeton and Canton), and Agri-Access Network. The segment between Canton and Monroeton is also on the region's Bicycle/Pedestrian network. The roadway is also classified as one of the region's export area secondary routes.

PA 414 has an IRI rating of 165, one of the poorest such ratings among the Northern Tier's priority corridors.

The corridor has potential to be considered as part of a scenic byway. Major natural features in the corridor include large acreages of state game lands, Sunfish Pond, Holcomb Pond and Tioga State Forest.

Portions of the PA 414 roadway are also used during the annual bicycle race known as the "Tour de Shunk."

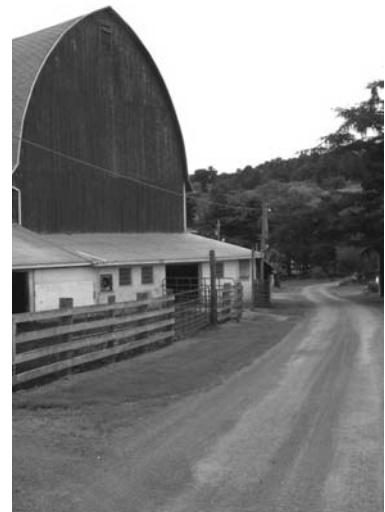
* Named after the defunct Pittsburgh, Binghamton & Erie Railroad, which was to run between Canton and Monroeton.

Key Findings

The PB&E Corridor is one that serves many purposes. The rural minor arterial is part of several Northern Tier planning networks such as the Agricultural Access and I-CAN networks, as well as its bicycle/pedestrian network. The corridor's identification on so many networks underscores its importance to the various types of trip types it must accommodate, including tourist, freight movement, agricultural-related uses, solid waste haulers, and non-motorized with bicycles and buggies.

Key Trends and Issues in the PB&E Corridor include:

- The corridor's main roadway, PA 414, has a poor International Roughness Index rating of 165, one of the lowest such ratings among the region's priority corridors. Stakeholders note the segments west of Franklindale are in especially poor condition.
- Most corridor commuters travel to job opportunities in Canton and Towanda for employment.
- After 30 years of slow but steady growth, corridor population declined slightly during the 1990s.
- Agriculture and Manufacturing are two of the most important economic sectors in the corridor. A majority of corridor residents in fact are employed in manufacturing.
- There are no major projects programmed on PENNDOT's 2003 TIP within the corridor.
- The Towanda School district is preparing to consolidate. The school in Powell will most likely be closed as a result.
- In Franklin Township, the Amish population is increasing, with corresponding concerns over buggies on the highway (particularly PA 414) and related safety issues. This has been more of an issue in the eastern side of the corridor, in Bradford County.
- PA 414 could potentially be a candidate under the Scenic Byways Program, as the corridor has excellent scenic qualities. Lycoming County is currently working through its comprehensive planning process to get this designation for its portion of the PA 414 corridor. The roadway is the site of the annual "Tour de Shunk" bicycle race.
- There are major trends on PA 414 west of U.S. 15 in Liberty Township with respect to significant growth in truck traffic. Much of this is being generated by the transport of solid waste from New York and New Jersey to the landfill at Antrim (approximately 300 trucks per day). Another generator of truck traffic includes large CAFO's with Hatfield Packing as an example. The Village of Nauvoo in Liberty Township also has CAFO operations surrounding it. This growing concentration of such operations – which is an increasing trend – brings a noticeable increase in the transport of feed and animals. Manure is also hauled from these farms to others locations controlled by lease.



Nauvoo

414

- A significant beyond the borders issue related to the PB&E Corridor includes PA 414 south of Tioga County. This area, known as Pine Creek Valley, is a pristine valley that includes a world class rail trail known as the Pine Creek Rail Trail. Communities in this scenic valley in northwestern Lycoming County do not want to see an increase in truck traffic nor activities that generate truck traffic. It's a pristine area and the state has even helped to purchase mobile home parks in flood plain areas. The area is expected to generate more in the way of tourist visitor traffic and the mix of tourists with heavy truck traffic is potentially conflicting with the eco-tourism types of businesses in the corridor. Little Pine State Park is also located in the corridor, as well as several public and private camping areas. The Pine Creek rail-trail is considered one of the top 10 rail trails in the world.

Public Input

Transportation stakeholders raised several comments and concerns regarding the PB&E Corridor during NTRPDC's 1999 round of public meetings. The following bullets highlight the meeting discussions with respect to this corridor:

- The PA 414 roadway west of Franklindale is in poor condition.
- The roadway between Liberty and Morris needs to be widened or rebuilt to two additional lanes to safely handle the traffic it now has and will have. There are dangerous garbage hauling trucks on PA 414 to the Antrim landfill, and too many trucks in general in the Franklindale area. The PA 414 roadway suffers from substandard shoulders.
- Tioga County focus group participants expressed concern with the increase in truck traffic due to out of state trash imports on PA 414, which are posing safety concerns and causing major road damage. Federal legislation needs to be pursued to solve this problem.
- Passing lanes are needed most of all on PA 414, due to aggressive coal-rig drivers.
- Sunfish Pond should be made more accessible to

residents and visitors through additional signage and road access.

- Bad curves need to be taken out on PA 414 on the way to Blackwell.
- There are bridge limitations at Blackwell.
- Southside Road in Leroy Township is an SR (3008), yet it has no delineation of road markings.



Blackwell

Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years and communities in the PB&E Corridor.

**Table 1: Annual Average Daily Traffic
PB&E CORRIDOR**

LOCATION	1993	1997	2000
MONROE	2,770	3,250	4,074
CANTON	5,102	5,490	5,530
LIBERTY	58	325	482

Source: NTRPDC GIS, 2003.

Mode Split

The breakdown of how people from the PB&E Corridor get to work is very similar to regional patterns. Slightly over three quarters drive to work alone, while an additional 12 percent carpool. The corridor's most significant transportation/employment note is that 7 percent work from home. Leroy and Liberty Townships for example, have over 10 percent of their workforce working from home. Only 13 people in the corridor rely on public transportation as a means of getting to work – with 5 each from Franklin and Monroe Township. Canton Borough and Morris Township both have 10 percent of their commuters walking to work. Table 2 provides more information on mode split within the corridor.

**Table 2: Mode Split (in %) – 2000
PB&E CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
MONROETON	76.7	15.7	0.0	3.8	3.8
CANTON	72.1	12.3	0.0	9.6	5.1
LIBERTY	74.5	9.8	2.9	5.9	6.9
CORRIDOR	75.6	11.6	0.3	4.8	7.0
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6

Travel Time to Work

The percentage of people traveling less than 15 minutes to work has decreased dramatically over the past 10 years in the PB&E Corridor. A majority of corridor commuters travel less than 15 minutes to work, at rates just slightly higher than the regional rate of 34 percent. Given its proximity to employment opportunities in Towanda and Canton, Monroeton Borough has the corridor's shortest average travel time to work (20.5 minutes). On the opposite end of the corridor, Liberty Borough had the longest (30.1 minutes). Table 3 and Table 4 show how journey to work travel times have increased in the corridor over the past decade.

- The percentage of people requiring less than 15 minutes to get to work declined in every municipality except one (Morris Township) over the past ten years.

- Canton Borough has the corridor's greatest percentage of people who live less than 15 minutes from their work, at nearly 48 percent. This percentage stood at 63.1 percent in 1990. Liberty Borough experienced similar declines.
- Between 1990 and 2000, the total number of people in the corridor driving longer than 90 minutes to work more than quadrupled from 23 to 105.
- Mean travel time to work in the corridor varies from a low of 20.5 minutes in Monroeton Borough to a high of 30.1 minutes in Liberty Borough.

**Table 3: Travel Time to Work (in minutes by percent) – 2000
PB&E CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
MONROETON	43.2	30.8	18.5	6.2	1.3
CANTON	47.6	17.9	26.6	5.5	2.4
LIBERTY	31.6	21.1	38.9	2.1	6.3
CORRIDOR	35.7	32.0	24.9	4.7	2.7
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes by percent) – 1990
PB&E CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
MONROETON	43.8	40.9	11.9	3.4	0.0
CANTON	63.1	18.9	13.5	3.8	0.6
LIBERTY	48.2	14.5	34.9	2.4	0.0
CORRIDOR	45.6	30.9	19.8	3.1	0.6
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

Commutation data from the 2000 U.S. Census show that the PB&E Corridor is a net exporter of employees, as only 37 percent are actually employed within the corridor. This is an increase of 14 percentage points from the 1990 Census. Within the corridor proper, Canton Borough is by far the main destination for corridor commuters. Other major employment destinations for corridor commuters include the greater Towanda area and Troy Borough. The New York market is not as strong, as only 2.2 percent commute to jobs in the Empire State. This figure has remained constant throughout the 1990s.

The following additional analysis can be drawn from this data, including:

- Twenty four percent are employed within the same municipality of residence. As may be expected, Canton Borough had the corridor's highest municipal population working within the place of residence, at 46 percent. Only 8 percent of Monroe Township residents worked within their municipality. This is the lowest percentage in the corridor.

- Nearly 64 percent commute to destinations somewhere within Bradford County for employment, 20.6 percent in Tioga County, 7.8 in Lycoming and 1.6 each in Sullivan and Chemung, NY.

Nearly 70 percent of Corridor residents work in one of the top ten employment destinations, as shown in Table 5, below:

**Table 5: Top Commuter Destinations, 1990, 2000
PB&E CORRIDOR**

Municipality	Percentage Share	
	1990	2000
1. CANTON BOROUGH	26.4	16.2
2. TOWANDA BOROUGH	9.4	11.8
3. CANTON TOWNSHIP	3.1	8.3
4. LYCOMING COUNTY	5.9	7.8
5. BURLINGTON TOWNSHIP	0.2	5.9
6. BLOSSBURG BOROUGH	3.0	5.7
7. TROY BOROUGH	7.3	5.3
8. LIBERTY TOWNSHIP	1.3	3.2
9. WELLSBORO	1.9	3.2
10. MONROETON	3.8	2.3

Source: U.S. Census Bureau, 1990, 2000.

Vehicles Available per Household

The number of vehicles available per household in the corridor roughly parallels the regional experience. While Table 6 shows the percentage breakdown by municipality, the following bullet points highlight other details of the data available:

- Over 15 percent of Canton Borough residents do not have access to a vehicle, the highest such percentage in the corridor.
- A majority of corridor households (42.1 percent) are two-car families. This percentage is identical to the regional average.
- Union Township had the corridor's highest percentage of households with three or more cars, at 27½ percent. Only 13 percent of Monroeton Borough households had access to three or more vehicles, the lowest such rate in the corridor.

**Table 6: Vehicles Available Per Household (in %) – 2000
PB&E CORRIDOR**

LOCATION	NONE	ONE	TWO	THREE OR MORE
MONROETON	4.9	32.0	50.2	12.8
CANTON	15.3	39.6	31.1	14.0
LIBERTY	7.3	28.0	43.9	20.7
CORRIDOR	6.8	30.7	42.1	20.4
NORTHERN TIER	6.3	32.7	42.1	18.9

Population Trends

The corridor's strongest growth period occurred back in the 1970s, when population grew by over 7 ½ percent. Population then peaked in 1990 at 9,742 and has since fallen by one half of a percent. Bradford County grew by nearly 3 percent over the same time period. Of the 10 municipalities in the corridor, five lost population and five experienced growth. Table 7 shows the total population figures for the main municipalities in the corridor. A summary of this data is as follows:

- The corridor's population is declining, with gains in Franklin Township and Liberty Borough being offset by losses in Liberty Township and Canton Borough.
- Of the five corridor municipalities that registered population gains over the past decade, only Franklin Township and Liberty Borough scored significant increases.



PA 414 at Liberty Borough

Franklin Township grew at a rate of 25.3 percent to become the third-fastest-growing municipality in Bradford County.

- The townships at the ends of the corridor – Lawrence and Wells – have experienced heavy population growth while Jackson Township's population has roughly stayed the same over the past three decades.

**Table 7: Population Trends
PB&E CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
MONROETON	627	627	540	514	(4.8)
CANTON	2,037	1,959	1,966	1,807	(8.1)
LIBERTY	235	220	199	230	15.6
CORRIDOR	8,859	9,533	9,742	9,690	(0.5)
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5

Age Group

Distribution

The corridor's population decline can be directly related to the exodus of its young people. Although overall corridor population has declined over the past decade, there have been healthy increases in its population age 45-plus. Liberty Borough has seen the most growth in this regard. One corridor demographic trend that goes against the regional trend includes the decline of "elderly frail" population, or those age 85-plus. Those numbers declined slightly from 143 persons in 1990 to just 134. However, the corridor's population growth rate among those age 65-plus was slightly over 10 percent, compared to just 8 percent regionally.

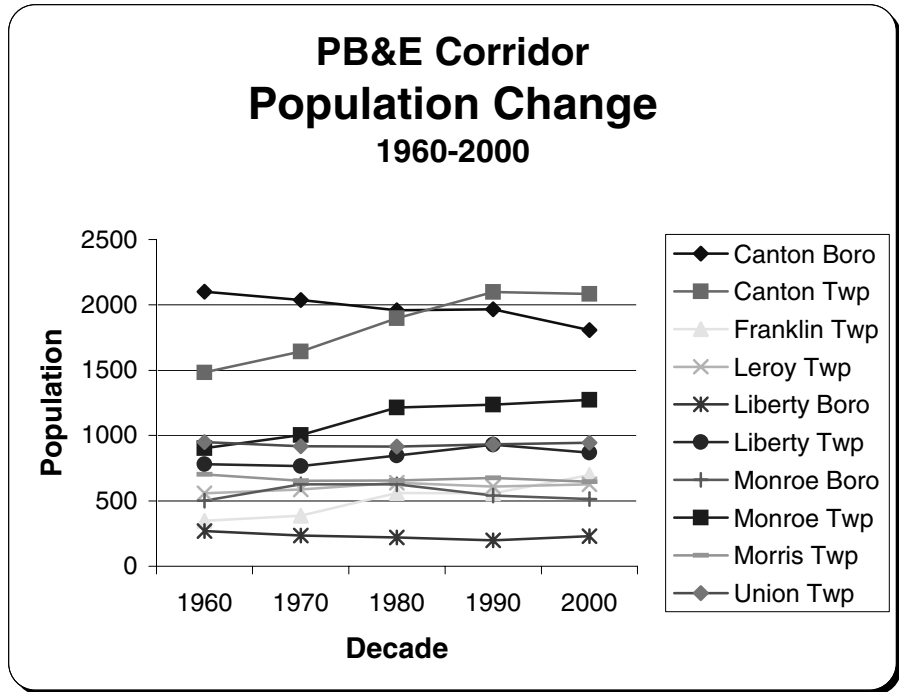


Table 8 provides more detail on the corridor and selected municipalities.

**Table 8: Percent Increase by Age Group – 1990, 2000
PB&E Corridor**

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
MONROETON	(4.8)	(19.5)	47.9	(14.6)	10.3	25.0
CANTON	(8.1)	21.0	(22.5)	(13.6)	8.3	(19.6)
LIBERTY	15.6	50.0	20.0	0.0	50.0	37.5
CORRIDOR	(0.5)	19.9	14.8	2.7	30.8	(6.3)
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0

Median Age

All but one municipality in the corridor registered increases in median age. Liberty Borough, the second-fastest growing municipality in the corridor was the lone exception, decreasing from 36.1 to 31.5. The borough in fact has the corridor's lowest municipal median age. Liberty Township lost nearly 7 percent of its population over the past decade and also experienced the corridor's greatest increase in median age, to 42.6. The township ranked tenth in the region in median age increase between 1990 and 2000.

Table 9 provides detail for three corridor municipalities.

**Table 9: Median Age, 1990 – 2000
PB&E CORRIDOR**

LOCATION	1990	2000
MONROETON	37.4	39.5
CANTON	34.6	36.5
LIBERTY	36.1	31.5

Racial Composition

There are 130 minorities in the PB&E Corridor, according to information from the 2000 U.S. Census. Hispanics constitute the largest minority population, with 27 residents scattered throughout the ten municipalities. There are 23 African Americans and 21 Indians in the corridor. Half of all corridor African Americans are in Canton Township, while a majority of Indians (9) are in Monroe Township. All but 3 Liberty Township residents are white, consisting of 99.7 percent of all population in the municipality. Table 10 provides more information on racial composition within the corridor against regional averages.

**Table 10: Racial Composition – (in %)
PB&E CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
MONROETON	514	97.1	0.4	0.6	0.4	0.0	0.6
CANTON	1,807	98.7	0.3	0.3	0.1	0.1	0.1
LIBERTY	228	99.1	0.0	0.9	0.0	0.0	0.0
CORRIDOR	9,690	98.7	0.2	0.3	0.2	0.1	0.1
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Per Capita Income

Most households in the corridor earn between \$25-50,000 a year. Median household income (1999) in the corridor ranges from a low of \$26,848 in Canton Borough to a high of \$39,219 in Liberty Borough. There are 131 corridor households that make more than \$100,000 a year, including 14 that earn more than \$200,000 a year.

Table 11 and the bullet points below provide more information concerning per capita income in the PB&E Corridor.

- Three and a half percent of all corridor households (131) make more than \$100,000 a year. Monroeeton Borough has the greatest percentage of > \$100,000 households, at 10.4 percent.
- Liberty Borough has the ninth- highest median household income in the Northern Tier while Canton Borough has among the region's lowest.

Table 11: Per Capita Income (2000)
PB&E CORRIDOR

LOCATION	Households	< \$25,000	\$25-50,000	\$50-75,000	\$75-100,000	\$100,000+
MONROETON	193	26.9	39.9	20.2	2.6	10.4
CANTON	766	45.6	33.0	14.4	5.7	1.3
LIBERTY	77	24.7	40.3	24.7	2.6	7.8
CORRIDOR	3,703	36.4	36.6	17.9	5.5	3.5
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Major economic concerns in the corridor include Wayne Feeds in Monroeton and a series of manufacturing concerns in the Canton area: Paper Magic and Parker Pneumatic. Efforts at establishing a business incubator in Canton Borough have been unsuccessful. Additionally, the Ward Manufacturing plant is located just outside the corridor in Blossburg Borough and is a major employment destination for corridor commuters.

Table 12, Table 13 and Table 14 describes some of the corridor's economic and labor force conditions.

- Labor force characteristics in the corridor are nearly identical to the region overall.
- There are only two people in the corridor in the Armed Forces, both from Monroeton Borough.
- Agricultural and Manufacturing are important economic sectors in the corridor, employing corridor residents at rates in excess of those found throughout the region.
- The percentage of corridor residents employed in the farming, fishing and forestry sector is one and a half times the regional rate and more than 6 times the state rate.
- A majority of corridor residents are employed by manufacturing interests. Monroe Township leads the corridor in this regard, at 39.1 percent.

Table 12: Civilian Labor Force Characteristics – (2000)
PB&E CORRIDOR

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
MONROETON	387	33.1	66.9	92.6	7.3	0.1
CANTON	1,386	44.1	55.9	96.0	4.0	0.0
LIBERTY	165	35.2	64.8	95.3	4.7	0.0
CORRIDOR	7,485	39.9	60.1	94.3	5.6	0.1
NORTHERN TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 13: Employment by Occupation - (2000)
PB&E CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
MONROETON	238	32.8	14.7	18.9	0.8	8.8	23.9
CANTON	744	28.9	14.5	19.8	0.8	6.7	29.3
LIBERTY	418	29.7	11.0	22.7	4.1	10.8	21.8
CORRIDOR	4,241	25.4	13.9	18.8	2.9	9.8	29.3
N. TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3

**Table 14: Employment by Industry by Place of Residence - (2000)
PB&E CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt Educational	Arts & Entertainment Other	Public Administration		
MONROETON	238	2.5	5.9	23.9	0.8	9.7	3.8	0.8	2.9	5.0	30.3	4.6	3.8	5.9
CANTON	744	2.0	4.8	30.5	1.9	9.8	3.6	3.9	2.7	3.2	23.3	3.2	8.3	2.7
LIBERTY	418	9.8	5.9	15.7	2.9	13.7	2.0	3.9	2.0	3.9	27.5	6.9	4.9	1.0
CORRIDOR	4,241	8.5	5.7	27.6	2.0	10.4	5.3	1.3	3.2	3.7	19.1	4.3	5.5	3.4
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

There are currently no projects programmed on the 2003 TIP for the PB&E Corridor.

Corridor Action Plan

This section outlines some suggested draft actions, based on the results of public involvement, data collection efforts from county and multi-municipal comprehensive plans, and the Census data.

- Improving PA 414 west of Morris should be weighed against the use of the roadway by trucks through a pristine area that is promoted as a prime tourist area. Key areas include bridge limitations and problems with horizontal curvature at Blackwell.
- New signing has helped with some of the horizontal curvature problems near Blackwell although the curve still needs to be straightened. Some of the truck traffic in the corridor comes as a result of driver error or from being lost.

- The region's Bicycle/Pedestrian Plan identified a series of project recommendations on a county by county basis. One of the Plan's priority recommendations was shoulder improvements on PA 414 between Canton and Monroeton. PENNDOT's annual Betterment Program is developed using public and legislative input, as well as the Department's Pavement Management System. The Northern Tier Regional Planning Commission should work with the PENNDOT County Maintenance Manager to include a shoulder paving/widening for PA 414 on the Betterment Program or through routine maintenance work programs. NTRPDC should seek placement of the proposed project on the region's 2005 TIP if it cannot be addressed more quickly through the Department's Betterment Program and/or routine maintenance activities.
- The intersection of PA 414 with SR 3014 at Hoytville with its curve and "Y" intersection has experienced some traffic flow conflicts.

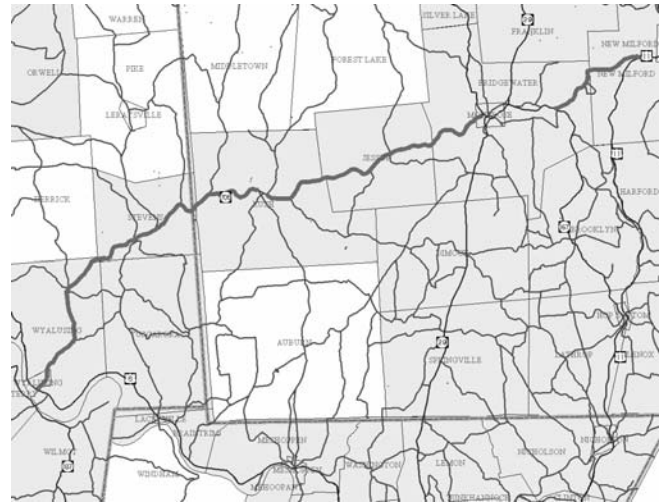


- Area bicyclists have ranked the roadway surface of PA 414 as poor, particularly around the Canton area and from West Franklin to Franklindale. West of Morris the roadway takes on the character of a township road, in terms of roadway surface. The Bradford County portion of the roadway is a good one for bicyclists overall as traffic volumes are not that high and topography is quite level. The corridor is a good alternative to U.S. 6, although it would bypass one of the best (scenic) sections of U.S. 6, according to area bicyclists.
- The accessibility and visibility of Sunfish Pond in Leroy Township from PA 414 has been raised as important issues for the state and township to address.
- PENNDOT should investigate the lack of roadway markings on Southside Road (SR 3008), which runs parallel to PA 414 in Leroy Township.
- There are two bridges in the corridor that are currently closed.

THE BLUESTONE CORRIDOR

The Bluestone Corridor

The Bluestone Corridor is the main east-west corridor through western Susquehanna and eastern Bradford County. The 34-mile corridor is centered on PA 706, which directly serves 9 municipalities including the Susquehanna County seat of Montrose. The corridor is centered on PA 706, which provides connections to many roadways, including US 6, PA 409, PA 467, PA 858, PA 267, PA 167 and PA 29 before terminating at US 11 in New Milford Township. The roadway was once one of the shortest U.S.-signed routes in Pennsylvania and was signed as US 106 until it was decommissioned in 1972.



CORRIDOR PROFILE ►



Susquehanna

New Milford
New Milford Twp
Bridgewater Twp
Montrose
Jessup Twp
Rush Twp

Bradford

Stevens Twp
Wyalusing Twp
Wyalusing

PENNDOT has functionally classified the PA 706 roadway as a Rural Minor Arterial while NTRPDC has put different segments of the roadway on its various planning networks.

Between Wyalusing and the Susquehanna County line, the corridor is on the Industrial – Commercial Access Network while the portion east of Rushville is on the Priority Commercial Network. The entire corridor is on the Agricultural Access Network as well as the region's export area secondary route. At New Milford, the corridor bisects CP Rail's former D&H line between Scranton and New England.

The corridor's main natural feature includes the Wyalusing Creek, which it parallels through most of the western portion of the corridor.



Key Findings

The Bluestone Corridor, and particularly PA 706, is an east-west corridor serving the ground transportation needs of the rural communities in eastern Bradford County and western Susquehanna County. The PA 706 roadway is an important connector between these rural areas and the jobs available mainly at its eastern and western termini. The western portion of the PA 706 roadway has recently been resurfaced and is considered one of the best roads in Bradford County.

Key Trends and Issues in the Bluestone Corridor include:

- After US 11, transportation stakeholders in Susquehanna County see PA 706 as the county's second-highest transportation priority. Many see the need for the corridor to be further developed as Susquehanna County's primary east-west route. As such, PENNDOT has nearly \$10 million in improvements programmed for the corridor, ranging from multiple bridge replacements over Wyalusing Creek to major reconstruction of segments of the PA 706 roadway.
- Montrose Borough leads all corridor municipalities across a number of planning indicators, including:
 - Greatest percentage of carpoolers (15.2 percent)
 - Smallest percentage of those who walk to work (0.7 percent)
 - Highest percentage of people requiring less than 15 minutes to commute to work, at 59.4 percent
 - the highest percentage of its own residents are employed within the municipality (67.2 percent)
 - The borough is the corridor's top destination for employment
 - Has the highest percentage of corridor households without access to a vehicle (21 percent)
 - Lost the greatest number of people during the 1990s, at 318.
 - Had the corridor's greatest percentage decline in population age 65-plus (25 percent).
 - The greatest percentage of households making less than \$25,000 annually (44.5 percent). In addition, one-third of all corridor households with per capita incomes greater than \$200,000 are in the borough.
 - The Susquehanna County seat also leads all corridor municipalities in the percentage of its residents employed in Finance, Insurance and Real Estate (6.7 percent), Public Administration (7.2) and Health and Education (24.4).
- A new feed mill south of Montrose will generate additional heavy truck traffic on PA 706. Additionally, a new Price Chopper located just east of Montrose may bring additional development and travel demand.
- Regional bicycle advocates agree that the corridor is "one of the few good connectors" into Susquehanna County. It is preferable to travel on PA 706 than on US 6 east of Wyalusing.



- Traffic congestion related to the Taylor Packing plant in Wyalusing has also been raised as a problem that needs to be addressed. PENNDOT has programmed a Wyalusing bypass to address this. The PA 706 roadway is heavily used by Taylor Packing.



Public Input

Transportation stakeholders in Susquehanna County say they view the PA 706 roadway as “Susquehanna County’s second-highest transportation priority,” following only US 11. As such, respondents want to see the roadway receive the attention a major east-west highway deserves. As one respondent said, “Susquehanna County is supported by logging, stone quarries and tourism. PENNDOT needs to be able to accommodate the changes that are taking place within these different industries [e.g., larger milk tankers (from 2 ton to 22 ton), double trailers, etc.] and the need to improve and widen roads to accommodate these trucks. Roads need to be able to support the county’s farming industry and to make areas accessible for farmers.”

During NTRPDC’s 1999 round of transportation stakeholder meetings, there several comments raised specific to the Bluestone Corridor or the PA 706 roadway. Comments included:

- There are many accidents in Montrose area near the Ames and ABC Supermarket.
- Fatalities on PA 706 are an issue.



- There is much congestion in Wyalusing and safety hazards there and at the Taylor Packing plant. The road needs to be relocated by the plant. Susquehanna] county lacks an adequate, east-west highway. The PA 706 Corridor needs to be developed as the county's primary east-west route. Specific problem areas in the corridor include:
 - The corridor has many curves and is too narrow to accommodate 102" wide trucks.
 - Passing lanes are needed in the corridor, particularly at Summit Hill.
 - The intersection at the Village of Rush has been an issue.
 - Between Montrose and Fairdale is a 90-degree corner that is out sloped with wetlands on the inside of the curve. The presence of these wetlands in part has prevented improvements from being made.



Traffic Volumes

Table 1 shows the change in traffic volumes historically for selected years and communities in the Bluestone Corridor.



**Table 1: Annual Average Daily Traffic
BLUESTONE CORRIDOR**

LOCATION	1993	1997	2000
MONTROSE	7,173	6,426	10,695
WYALUSING	1,624	1,773	4,513

Source: NTRPDC GIS, 2003.

Mode Split

The percentage of commuters in the corridor who rely on the private automobile is slightly higher than regional averages (90.5 percent versus 89.5 percent). Some variations within regional averages are described in the following bullets and in Table 2, below:

- Only 14 people reported using public transportation as a means of getting to work.
- The corridor municipality with the greatest percentage of carpoolers is Montrose Borough, at 15.2 percent.
- One in ten Wyalusing Borough commuters walk to work. This is the highest rate in the corridor. The Bradford County borough also has the corridor's highest percentage of people who drive alone (81.2 percent) and the lowest percentage who carpool (6.1 percent).
- Most all corridor municipalities average between 4-5 percent of workers working from home. Oddly, Wyalusing and Montrose Boroughs had the smallest percentage of such employees in the corridor, at 2.2 and 0.7 percent, respectively.

**Table 2: Mode Split (in %) – 2000
BLUESTONE CORRIDOR**

LOCATION	SOV	CARPOOL	TRANSIT	WALK	WORK AT HOME
NEW MILFORD BOROUGH	77.4	10.0	0.0	7.2	4.9
MONTROSE	76.8	15.2	0.0	5.37	0.7
RUSH TOWNSHIP	78.1	14.5	0.0	2.2	5.1
WYALUSING BOROUGH	81.2	6.1	0.0	10.0	2.2
CORRIDOR	78.2	12.3	0.3	4.6	3.8
NORTHERN TIER	77.5	12.0	0.3	4.7	4.6

Travel Time to Work

Journey to work travel times are increasing in the Bluestone Corridor, as they are throughout most of the Northern Tier. Mean travel times to work in the corridor range from a low of 17.2 minutes in Montrose Borough to a high of 31.1 minutes in Jessup Township.

The corridor has commuters from every municipality traveling longer than 90 minutes to work. In 1990, there were four municipalities that didn't have any. Between the two censuses, the number of corridor commuters traveling longer than 90 minutes to work grew from 17 to 114.



In New Milford Township, for example, the number grew from 0 to 21. Wyalusing Township has the corridor's highest percentage of people traveling longer than 90 minutes to work, at 5.2 percent.

As may be expected, Montrose Borough has the highest percentage of people requiring less than 15 minutes to get to work, at 59.4 percent. At 48.8 percent, neighboring Bridgewater Township ranks second, just ahead of Wyalusing Borough, with 45.5 percent. Table 3 and Table 4 show how journey to work travel times have changed in the corridor over the past decade.

**Table 3: Travel Time to Work (in minutes by percent) – 2000
BLUESTONE CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
NEW MILFORD BOROUGH	31.3	31.0	34.0	1.6	2.2
MONTROSE	59.4	12.6	25.1	2.4	0.6
RUSH TOWNSHIP	20.0	33.1	42.4	2.1	2.3
WYALUSING BOROUGH	45.5	34.8	10.3	4.5	4.9
CORRIDOR	37.6	25.2	31.3	3.5	2.4
NORTHERN TIER	34.0	32.5	27.4	3.7	2.3

**Table 4: Travel Time To Work (in minutes by percent) – 1990
BLUESTONE CORRIDOR**

LOCATION	< 15	15-29	30-59	60-89	90+
NEW MILFORD BOROUGH	34.0	32.1	31.3	5.0	2.0
MONTROSE	66.0	14.5	20.6	0.8	0.5
RUSH TOWNSHIP	20.7	31.8	37.4	5.7	2.6
WYALUSING BOROUGH	53.0	30.4	23.4	2.5	3.4
CORRIDOR	41.6	24.7	29.5	2.8	2.5
NORTHERN TIER	38.5	33.4	24.7	2.8	0.6

Commutation Patterns

A majority of corridor residents work at one of the corridor's endpoints (Montrose/Wyalusing) with the majority of these commuting to Montrose for employment, according to information from the 2000 U.S. Census. The following additional analysis can be drawn from this commutation pattern data, including:

- Not only is Montrose the corridor's top destination for employment, but over two thirds of Montrose Borough residents work within the municipality of residence. This is the highest rate in the corridor, which averages only 27 percent working within the municipality of residence. Wyalusing Borough is the only other municipality to have over half, at 56 percent.



- Jessup Township has a corridor-low of 6 percent of its residents working within the municipality of residence.
- Broome County, NY continues to be the corridor’s second-largest attractor of corridor commuters, at 15.1 percent.
- Susquehanna County is the corridor’s leading destination for employment, at 53.3 percent of all corridor workers. Only 17.7 percent work at destinations in Bradford County while 5.3 percent work in Wyoming County.

Approximately 69 percent of Corridor residents work in one of the top ten employment destinations as shown in Table 5. This is a drop of 7 percentage points from 1990 levels.

Table 5: Top Commuter Destinations, 1990, 2000
BLUESTONE CORRIDOR

Municipality	Percentage Share	
	1990	2000
1. MONTROSE	28.3	25.4
2. BROOME COUNTY, NY	16.4	15.1
3. NEW MILFORD BOROUGH	6.7	6.0
4. WYALUSING TOWNSHIP	0.0	5.7
5. LACKAWANNA COUNTY	2.3	5.0
6. BRIDGEWATER TOWNSHIP	5.8	3.9
7. MEHOOPANY TOWNSHIP	2.4	3.7
8. WYALUSING BOROUGH	5.1	3.0
9. HALLSTEAD	1.6	2.6
10. RUSH TOWNSHIP	2.3	2.1

Source: U.S. Census Bureau, 1990, 2000.

Vehicles Available per Household

On average, households in the corridor have fewer vehicles available per household than the corridor as a whole. While

Table 6 shows the percentage breakdown by selected municipalities, the following bullet points highlight other details of the data available:

- Nearly 21 percent of Montrose Borough households do not have access to a vehicle. This is the highest percentage not only in the corridor but throughout the Northern Tier.
- A majority of households in Montrose and Wyalusing Boroughs have access to only one vehicle. These are the only corridor municipalities where this situation prevails.
- Rural Jessup Township has the corridor’s highest percentage of households with access to three or more vehicles, at 26 percent. Wyalusing Township ranks second in this regard, at 21 percent.

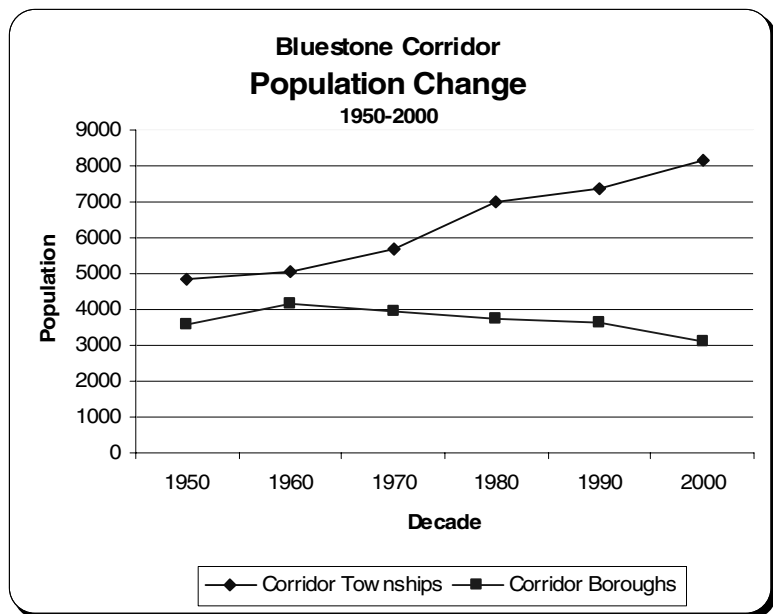


**Table 6: Vehicles Available Per Household (in %) – 2000
BLUESTONE CORRIDOR**

LOCATION	NONE	ONE	TWO	THREE OR MORE
NEW MILFORD BOROUGH	5.4	38.5	43.1	13.0
MONTROSE	20.9	39.1	33.3	6.7
RUSH TOWNSHIP	4.1	33.0	42.9	20.0
WYALUSING BOROUGH	13.3	38.8	38.8	9.1
CORRIDOR	7.7	33.0	43.2	16.2
NORTHERN TIER	6.3	32.7	42.1	18.9

Population Trends

Over the past decade, population growth rates in the Bluestone Corridor have been identical to those of the Northern Tier region, at just 2 ½ percent. Corridor population has grown every decade over the past half century and is now at an all-time high of 11,242. The three Bradford County corridor municipalities broke even over the past decade, while growth in Susquehanna County’s Jessup, Rush and Bridgewater townships was offset by losses in Montrose and New Milford Boroughs that were nearly equally as large. Since the early 1970s, Bridgewater Township has been the corridor’s largest municipality. During the 1990s, New Milford Township grew by 7.4 percent to replace Montrose Borough as the corridor’s second-largest municipality.



All three of the corridor’s boroughs lost population during the 1990s. With a drop of 318 persons, Montrose had the corridor’s largest population decline, while Wyalusing Borough had the greatest population rate of decrease, at nearly 18 percent. The corridor’s biggest growth area was in the Bridgewater-Jessup-Rush Township axis. All three townships are in the county’s top ten for population growth over the past decade.

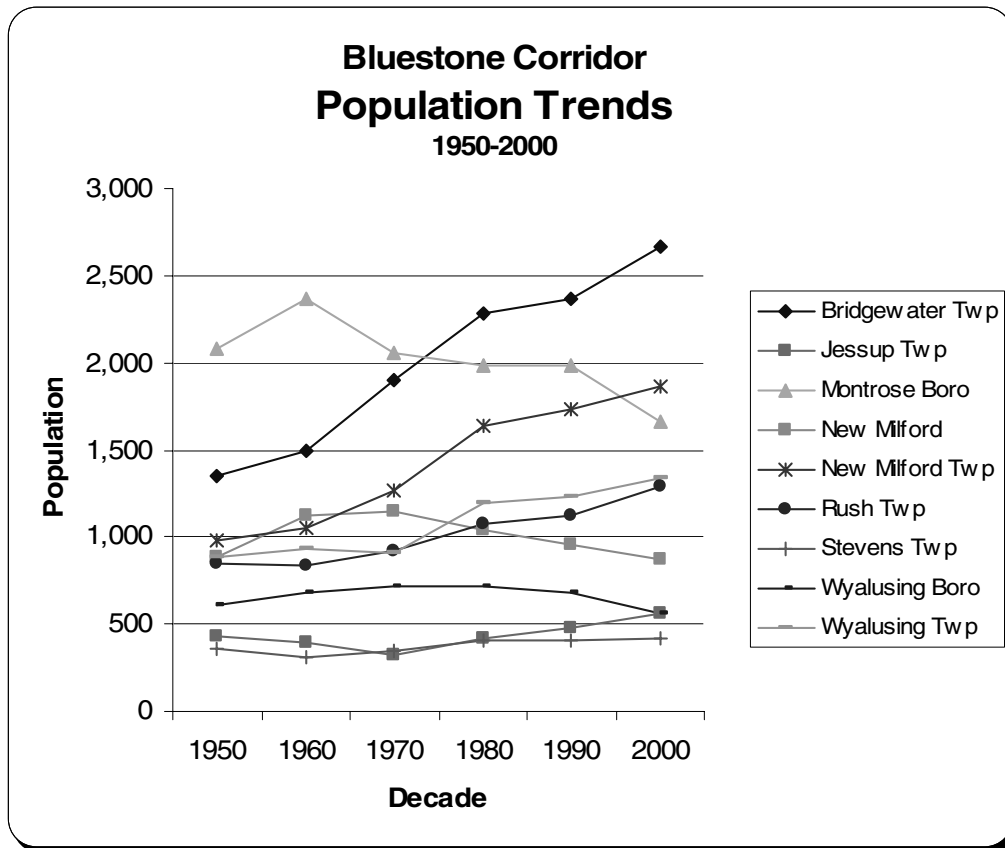
Growth in rural Stevens Township held steady during the 1990s, at 3.2 percent. It remains the corridor’s smallest municipality, at just 414 persons.

Table 7 shows the total population figures for selected municipalities in the corridor.



**Table 7: Population Trends
BLUESTONE CORRIDOR**

LOCATION	1970	1980	1990	2000	% CHANGE 90-00
NEW MILFORD	1,143	1,040	953	878	(7.9)
MONTROSE	2,058	1,980	1,982	1,664	(16.0)
RUSH TOWNSHIP	925	1,079	1,126	1,290	14.6
WYALUSING BORO	723	716	686	564	(17.8)
CORRIDOR	9,596	10,758	10,965	11,242	2.5
NORTHERN TIER	157,040	174,550	176,653	181,008	2.5



Age Group Distribution

While the overall corridor population growth is similar to regional rates, there are some variations within the different age groups. Rates of increase among older age groups (such as those 75-plus) are actually lower than regional rates. The largest difference between the corridor and the region is the large rate of increase among those age 55-64 in the corridor (22 versus 0.8 percent). Absolute numbers are smaller in a rural corridor such as this however, which will

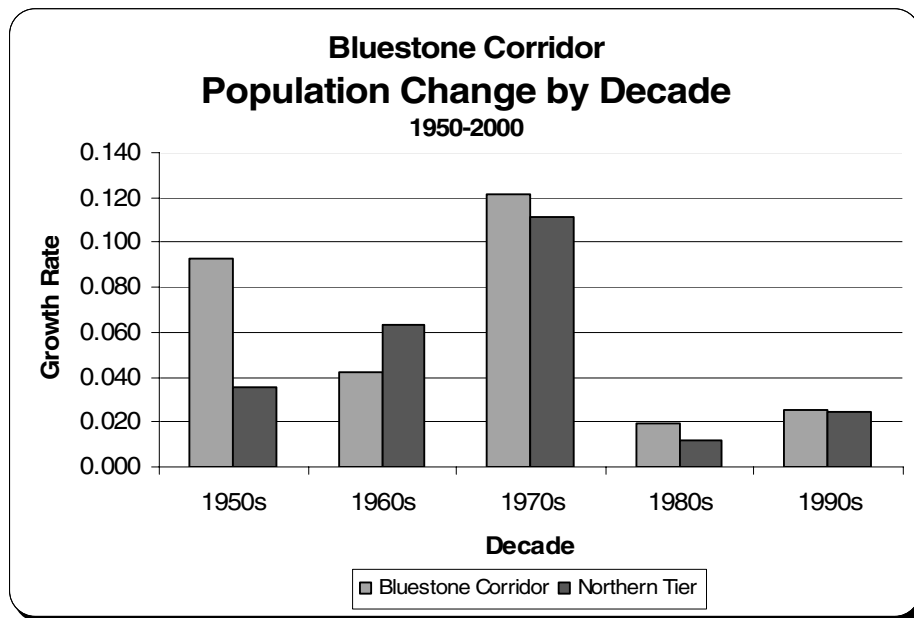


seem to exaggerate rates among some age groups. Table 8 provides more detail on the age group distribution within the corridor and selected municipalities.

- New Milford Borough saw its 45-64 population more than double over the past decade, from 186 to 482.
- The corridor’s population age 65-plus increased from 1794 to 1,986, while the 75-plus age group increased from 782 to 920 for an increase of 17.6 percent. Despite the increase, these rates are still lower than the regional rate.
- Coupled with its overall population decreases, Montrose Borough also had the corridor’s greatest decline (25 percent) in population among older age groups (65-plus).

Table 8: Percent Increase by Age Group – 1990, 2000
BLUESTONE CORRIDOR

LOCATION	TOTAL	45-54	55-64	65-74	75-84	85+
NEW MILFORD BOROUGH	(7.9)	151.8	169.7	67.1	0.0	240.0
MONTROSE	(16.0)	2.1	(22.3)	(31.2)	(4.9)	(46.5)
RUSH TOWNSHIP	(14.6)	46.8	12.3	9.2	24.4	70.0
WYALUSING BOROUGH	(17.8)	6.0	(4.3)	4.2	7.4	(17.4)
CORRIDOR	2.5	41.1	22.1	5.3	19.0	13.6
NORTHERN TIER	2.5	31.5	0.8	(2.2)	21.1	25.0



Median Age

During the 1990s, median age increased in every single corridor municipality with the exception of Montrose Borough. Stevens Township has the corridor’s highest



median age, at 43.3, while New Milford Borough had the lowest, at 36.2. Median age grew the most, however, in the western end of the corridor, particularly in Wyalusing Borough where the average age of borough residents grew by 6.1 years over the past decade.

Table 9 provides detail for selected corridor municipalities.

**Table 9: Median Age, 1990 – 2000
BLUESTONE CORRIDOR**

LOCATION	1990	2000
NEW MILFORD BOROUGH	33.8	36.2
MONTROSE	39.7	38.8
RUSH TOWNSHIP	33.6	38.0
WYALUSING BOROUGH	38.9	45.0

Racial Composition

The Bluestone Corridor is nearly as racially homogeneous as the Northern Tier. The corridor has a total of 225 minorities, a majority of which are Hispanic. According to the 2000 U.S. Census, Hispanics number 79, just ahead of Blacks, at 58. The corridor has a slightly greater percentage of Hispanics than the region as a whole. Nearly one third of all corridor Blacks reside in Bridgewater Township, while Hispanics are evenly scattered throughout although the greatest concentration is in New Milford Township. The most racially homogeneous municipality in the corridor is Montrose Borough, where all but 19 of its 1,664 residents are white. Table 10 provides more information on racial composition within the corridor against regional averages.

**Table 10: Racial Composition – (in %)
BLUESTONE CORRIDOR**

Location	Total	White	Black	Hispanic	Indian	Asian	Other
NEW MILFORD BOROUGH	878	98.7	0.8	0.1	0.2	0.1	0.1
MONTROSE	1,664	98.9	0.5	0.3	0.0	0.1	0.1
RUSH TOWNSHIP	1,290	98.7	0.2	0.7	0.1	0.2	0.3
WYALUSING BOROUGH	564	98.4	0.4	1.1	0.9	0.0	0.0
CORRIDOR	11,242	98.0	0.5	0.7	0.2	0.1	0.2
NORTHERN TIER	181,008	98.1	0.51	0.64	0.25	0.25	0.19

Per Capita Income

Corridor per capita income averages closely align with regional averages, although corridor households do have a slightly greater percentage of households earning more than \$75,000 a year. Most households have an annual per capita income of less than \$25,000. Montrose



Borough had the corridor’s lowest average annual household income, at \$30,200, while Jessup Township had the highest, at \$38,542. There are 233 corridor households that make more than \$100,000 a year, including 38 that earn more than \$200,000 a year. Wyalusing Township has the corridor’s highest percentage of households with per capita incomes in excess of \$100,000, with 8.3 percent. Table 11 and the bullet points below provide more information concerning per capita income in the Bluestone Corridor.

- Montrose Borough has the corridor’s greatest percentage of households with per capita incomes less than \$25,000, at 44 ½ percent; Jessup had the lowest, at 25.4 percent.
- Of the corridor households (38) with per capita income in excess of \$200,000, over a third are in Montrose Borough.

**Table 11: Per Capita Income (2000)
BLUESTONE CORRIDOR**

LOCATION	Households	< \$25,000	\$25- 50,000	\$50- 75,000	\$75- 100,000	\$100,000+
NEW MILFORD BOROUGH	363	38.3	43.8	10.7	4.7	2.5
MONTROSE	730	44.5	26.7	15.6	7.3	5.9
RUSH TOWNSHIP	501	35.5	37.3	18.2	5.4	3.6
WYALUSING BOROUGH	264	39.8	34.1	15.9	2.7	7.6
CORRIDOR	4,514	36.5	33.9	17.3	7.2	5.2
NORTHERN TIER	70,401	35.5	34.6	18.1	6.7	5.1

Economic

Major employers in the corridor include: Taylor Packing and Arrow United Industries in Wyalusing, with approximately 1,126 and 125 employees, respectively. The beef processing plant is the largest employer in the corridor. In Susquehanna County, large employers include Donald Dean & Sons (with approximately 160 employees) in addition to various school districts and health care providers.

The next three tables demonstrate the composition of the corridor across a variety of economic factors, including labor force characteristics, employment by occupation, and employment by industry by place of residence. Table 12, Table 13 and Table 14 describe some of the corridor’s economic and labor force conditions.

- Employment rates in the corridor are nearly one and a half percentage points higher than the region.
- There are only two persons reportedly in the Armed Forces. Both are from New Milford Borough.
- The Agriculture Sector consists of 8.4 percent of corridor resident employment. This figure is 2.6 percentage points higher than the regional average.



- The corridor’s highest percentage of employees in Agriculture, Forestry and Fishing are in Rush Township, at 17 ½ percent of all employment. Stevens and Jessup’s employment in this sector is also in double digits.
- Over one third of workers from Stevens Township are employed in Manufacturing. This is the highest such percentage in the corridor.
- Suburban Bridgewater Township leads the corridor in the percentage of workers employed in retail trade, at 14.2 percent.
- Montrose Borough, as a county seat and center for education and health services, leads the corridor in the percentage of its workers employed in Finance, Insurance and Real Estate, Public Administration and Health and Education.
- New Milford Borough leads the corridor in the percentage of its residents employed in Arts and Entertainment, at 13.3 percent against a corridor average of only 4.8 percent.

**Table 12: Civilian Labor Force Characteristics – (2000)
BLUESTONE CORRIDOR**

Location	Total	Not in Labor Force	Labor Force	Civilian Labor Force		In Armed Forces
				Employed	Unemployed	
NEW MILFORD BOROUGH	674	38.0	62.0	95.7	4.3	0.5
MONTROSE	1,301	43.0	57.0	94.1	5.9	0.0
RUSH	979	41.1	58.9	96.0	4.0	0.0
WYALUSING BOROUGH	448	47.1	52.9	99.2	0.8	0.0
CORRIDOR	8,768	40.6	59.4	96.0	4.0	0.0
N. TIER	141,768	39.6	60.4	94.6	5.3	0.1

**Table 13: Employment by Occupation - (2000)
BLUESTONE CORRIDOR**

Municipality	Total	Mgmt./ Professional & Related	Service	Sales/ Office	Farming, Fishing & Forestry	Construction, Extraction & Maintenance	Production/ Transportation & Material Moving
NEW MILFORD BOROUGH	398	23.1	19.3	24.9	0.5	10.8	21.4
MONTROSE	697	40.7	8.5	28.8	0.4	4.7	16.8
RUSH	554	22.2	10.3	20.8	6.5	14.8	25.5
WYALUSING BOROUGH	235	28.5	13.2	23.0	1.7	6.0	27.7
CORRIDOR	5,002	28.8	12.6	22.6	2.1	10.6	23.4
N. TIER	80,901	26.5	14.6	21.7	1.8	11.3	24.2
PA	5,653,500	32.6	14.8	27.0	0.47	8.9	16.3



**Table 14: Employment by Industry by Place of Residence - (2000)
BLUESTONE CORRIDOR**

Municipality	Total	Agricultural	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Information	FIRE	Professional, Scientific, Mgmt Educational	Arts & Entertainment	Other	Public Administration	
NEW MILFORD BOROUGH	398	5.0	4.0	18.8	3.3	13.3	7.8	1.8	3.8	5.3	13.6	13.3	9.0	1.0
MONTROSE	697	3.3	5.3	16.4	2.2	12.3	2.2	3.9	6.7	6.7	24.4	3.9	5.6	7.2
RUSH	554	17.5	8.1	20.6	1.8	10.5	4.7	1.4	4.7	4.3	15.0	3.4	5.8	2.2
WYALUSING BOROUGH	235	6.0	3.8	30.6	3.0	12.3	0.9	4.7	5.1	1.7	20.4	4.3	5.1	2.1
CORRIDOR	5,002	8.4	6.2	22.2	3.2	11.3	4.7	2.8	4.1	5.3	17.8	4.8	5.7	3.6
NORTHERN TIER	80,901	5.8	6.7	22.9	2.7	11.6	5.3	2.0	3.5	4.6	21.0	5.9	4.6	3.3

2003 Transportation Improvement Program (TIP)

PENNDOT has programmed \$9.6 million in projects in the Bluestone Corridor, according to information from NTRPDC's 2003 Transportation Improvement Program. Much of the work in the corridor is centered on bridge replacements and reconstruction of the existing PA 706 roadway. Topping the list is a \$2.75 million bridge replacement in the Village of Camptown in Wyalusing Township. There, a one-lane bridge will be replaced with a 2-lane structure. The corridor's other major investment in Bradford County is in Wyalusing Borough, which will see improvements to PA 706 from the Borough to Taylor Packing (actual construction work is expected to occur during the second four-year period of PENNDOT's Twelve Year Program as construction costs have not yet been programmed).

In Susquehanna County, there are other bridge replacements programmed, as well as a series of reconstruction and restoration projects between Fairdale and US 11. These projects will improve PA 706's roadway geometry, guide rails and pavement markings. The shoulders will also be widened to 6-feet. Table 15 below highlights the programmed highway restoration project. All costs are shown in thousands and include design, right-of-way acquisition and construction costs inclusive by federal fiscal year. Projects are shown from west to east.



**Table 15: 2003 TIP Projects
BLUESTONE CORRIDOR**

Municipality	Project/Description	Year				Total
		03	04	05	06	
VARIOUS	PA 706 imp. - 1 ½ mi		533	200		\$733
WYALUSING TWP	Camp Town br widen	2,750				\$2,750
STEVENS	Wyalusing Cr br		1,350			\$1,350
RUSH	Wyalusing Cr br PA 858			150	50	\$200
RUSH	Wyalusing Cr br SR 3033			150	50	\$200
RUSH	PA 706 recon			100		\$100
RUSH	PA 706/SR 3023 int reconstruction	1,000				\$1,000
RUSH	PA 706/SR 3023 int reconstruction	1,000				\$1,000
JESSUP	Wyalusing Cr br SR 3027			150	50	\$200
JESSUP/ BRIDGEWATER	PA 706 reconstruct	775				\$775
BRIDGEWATER/ MONTROSE	PA 706 reconstruct				500	\$500
BRIDGEWATER/ NEW MILFORD TWP	PA 706 reconstruct	200	75	25	500	\$800

Source: PENNDOT District 3-0 and 4-0

Corridor Action Plan

This section outlines some suggested draft actions, based on the results of public involvement, data collection efforts from county and multi-municipal comprehensive plans, and the Census data.

- PENNDOT and NTRPDC should continue to monitor the development and maintenance of PA 706 as the main east-west highway through Susquehanna County as it handles various types of traffic, including: commuter traffic to Wyalusing and Montrose, cross-county bicyclist travel and freight movement. In the near-term, the two organizations should consider the need for a passing lane at Summit Hill even as major reconstruction projects on the corridor are underway.
- Public transportation's best opportunity for success in the county according to transportation stakeholders would be in providing transportation to low-income workers to either of Deans manufacturing plants in Montrose.
- Bicycle advocates in recent years have advocated resurfacing PA 706. NTRPDC should continue to work with regional and area bicyclist groups and organizations to determine if the TIP projects already programmed would satisfy comments raised earlier, specifically through the 1999 transportation stakeholders outreach forum and the region's 2000 bicycle/pedestrian transportation plan.



- The region's bicycle and pedestrian plan lists the need for improved pedestrian connectivity in all Susquehanna County's boroughs, including Montrose. Completion of the missing links of the Bridgewater Township Rail/Trail from Montrose to the Village of Alford is also mentioned as a priority in the regional plan.
- There is presently no public transit service available in the corridor (EMTA does not provide service in the entirety of Susquehanna County). The lack of fixed route runs in Susquehanna County is an issue that should be addressed between NTRPDC and EMTA. Demonstration money should be secured for a feasibility study from PENNDOT's Bureau of Public Transportation to administer such a study. If funding could be approved, the authority could begin looking initially at fixed route service in the corridor before moving into other services, such as demand responsive.