NT Quick Facts

There are 166 municipalities in the 5 counties that we serve, with a total population of 181,008. Municipal populations range from a high of 5,813 (Sayre Borough) to 51 (Elk Township).

Our population density is 46 people/sq. mile, compared to the state’s 274 people/sq. mile.

The region has approximately 4,700 businesses.

Establishments range in size from the single entrepreneur to the 2,300 employees at Procter and Gamble.
Traditional Industry Clusters

Building and construction

Health care and social assistance

Diversified manufacturing

Lumber and wood products
Past Market Conditions

Historically, the region is:

• Slow to change, lagging behind state and national trends
• Steady economy
• Focus on agriculture and manufacturing
## Population

### Census Annual Population Data in Multiple Counties(s) for 2006

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradford County</td>
<td>62,471</td>
</tr>
<tr>
<td>Sullivan County</td>
<td>6,277</td>
</tr>
<tr>
<td>Susquehanna County</td>
<td>41,889</td>
</tr>
<tr>
<td>Tioga County</td>
<td>41,137</td>
</tr>
<tr>
<td>Wyoming County</td>
<td>28,093</td>
</tr>
<tr>
<td>Northern Tier Region</td>
<td><strong>179,867</strong></td>
</tr>
</tbody>
</table>

### Census Annual Population Data in Multiple Counties(s) for 1986

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Tier Region</td>
<td>1986</td>
<td>174,799</td>
</tr>
<tr>
<td></td>
<td>1996</td>
<td>181,091</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td><strong>179,867</strong></td>
</tr>
</tbody>
</table>

*Source: PA Dept of Labor and Industry*
Department of Environmental Protection
Bureau of Oil and Gas Management
Marcellus Shale Permits Issued & Wells Drilled
(January thru December - 2010)

Permits Issued – 3,314 / Wells Drilled – 1,454 *

Updated 01/25/2011

* As reported by Operators
Department of Environmental Protection
Bureau of Oil and Gas Management
Marcellus Shale Permits Issued & Wells Drilled
(January – March 2011)

Permits Issued – 856 / Wells Drilled - 399 *

Updated 04/06/2011
* As reported by Operators
<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Scenario</td>
<td>54</td>
<td>105</td>
<td>166</td>
<td>172</td>
<td>233</td>
<td>267</td>
</tr>
<tr>
<td>&quot;Likely&quot; Scenario</td>
<td>54</td>
<td>140</td>
<td>221</td>
<td>229</td>
<td>311</td>
<td>356</td>
</tr>
<tr>
<td>High Scenario</td>
<td>54</td>
<td>175</td>
<td>277</td>
<td>286</td>
<td>389</td>
<td>445</td>
</tr>
</tbody>
</table>

Figure 4: Projected Marcellus Shale Wells, Drilled Per Year 2009-2013
Penn College Workforce Needs Assessment
"Likely" Scenario Northern Tier WIB Region
Marcellus Shale Workforce Requirements By Phase

Figure 13: Workforce Requirements by Industry Phase, Northern Tier WIB Region
Unemployment Impact

Unemployment Rates:
NT vs. PA

Unemployment Rates:
NT vs. PA

Nov-09 Dec-09 Jan-10 Feb-10 Mar-10 Apr-10

NT WIA PA
Projected Job Growth?
Old Prediction

100 wells drilled per year = 1153 jobs per year over 10 years
Employment between April 2009 and 2010 increased by 2,500 for Bradford County and 900 for Tioga County. 4,100 employment openings region wide.

*Largest growth in the Commonwealth*
January 2008

Monthly Seasonally Adjusted Labor Force, Employment and Unemployment data in Multiple Counties(s) for January, 2008. To see the most recent profile data click on the area name.

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Civilian Labor Force</th>
<th>Employment</th>
<th>Unemployment</th>
<th>Unemployment Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradford County</td>
<td>30,600</td>
<td>29,200</td>
<td>1,400</td>
<td>4.7</td>
</tr>
<tr>
<td>Sullivan County</td>
<td>3,000</td>
<td>2,800</td>
<td>200</td>
<td>5</td>
</tr>
<tr>
<td>Susquehanna County</td>
<td>21,700</td>
<td>20,700</td>
<td>1,000</td>
<td>4.7</td>
</tr>
<tr>
<td>Tioga County</td>
<td>20,400</td>
<td>19,300</td>
<td>1,100</td>
<td>5.5</td>
</tr>
<tr>
<td>Wyoming County</td>
<td>14,500</td>
<td>13,700</td>
<td>800</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Source: PA Dept of Labor and Industry
January 2009

Monthly Seasonally Adjusted Labor Force, Employment and Unemployment data in Multiple Counties for January, 2009. To see the most recent profile data click on the area name.

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Civilian Labor Force</th>
<th>Employment</th>
<th>Unemployment</th>
<th>Unemployment Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradford County</td>
<td>31,400</td>
<td>29,000</td>
<td>2,300</td>
<td>7.5</td>
</tr>
<tr>
<td>Sullivan County</td>
<td>3,000</td>
<td>2,800</td>
<td>200</td>
<td>7.9</td>
</tr>
<tr>
<td>Susquehanna</td>
<td>22,000</td>
<td>20,300</td>
<td>1,700</td>
<td>7.7</td>
</tr>
<tr>
<td>County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tioga County</td>
<td>20,700</td>
<td>18,900</td>
<td>1,900</td>
<td>8.9</td>
</tr>
<tr>
<td>Wyoming County</td>
<td>14,500</td>
<td>13,500</td>
<td>1,100</td>
<td>7.4</td>
</tr>
</tbody>
</table>

*Source: PA Dept of Labor and Industry*
February 2011

Monthly Seasonally Adjusted Labor Force, Employment and Unemployment data in Multiple Counties(s) for February, 2011. To see the most recent profile data click on the area name.

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Civilian Labor Force</th>
<th>Employment</th>
<th>Unemployment</th>
<th>Unemployment Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradford County</td>
<td>33,400</td>
<td>31,700</td>
<td>1,700</td>
<td>5.1</td>
</tr>
<tr>
<td>Sullivan County</td>
<td>3,300</td>
<td>3,000</td>
<td>200</td>
<td>6.8</td>
</tr>
<tr>
<td>Susquehanna County</td>
<td>22,500</td>
<td>21,000</td>
<td>1,600</td>
<td>6.9</td>
</tr>
<tr>
<td>Tioga County</td>
<td>20,800</td>
<td>19,500</td>
<td>1,300</td>
<td>6.1</td>
</tr>
<tr>
<td>Wyoming County</td>
<td>14,500</td>
<td>13,100</td>
<td>1,400</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Source: PA Dept of Labor and Industry
PA CareerLink – Northern Tier

Source: Commonwealth Workforce Development System (CWDS) 4-8-11
Employer Services

61% Increase

PA CAREERLINK – Northern Tier

Q2 Q3 Q4 Q1 Total Q2 Q3 Q4 Q1 Total Total

PA CAREERLINK
BRADFORD/SULLIVAN COUNTIES

PA CAREERLINK TIOGA COUNTY

Total

2-Year
PA CareerLink – Northern Tier

- 79 companies related to the natural gas industry posting jobs on CWDS in the Northern Tier
- 216 postings
- 2305 job openings
- Job Fairs are being held onsite almost weekly
Bradford County

• Bradford County, at 5.1%, had the lowest unemployment rate in the Commonwealth in February.
Impact on local businesses

Services
Restaurants
Retail
Lodging
Fuel Suppliers
“Fit 4 Natural Gas”
Natural Gas Summit for Municipal Officials
Business to Business Natural Gas Expo
Land Use Control

Fewer than half of local Northern Tier governments have a municipal planning commission or a comprehensive plan.

Subdivision and land development ordinances are even less common.

This general lack of planning at a municipal level contributes to uncoordinated development, undesirable uses of land, and sprawl.
Local Municipality Challenges

• No uniform inventory of posted roads

• No inventory of posted bridges

• Traffic volume impacts unknown

• Oversized loads and coordination of permits when using local system
Impacts to Housing & Real Estate

• Supply vs. demand has doubled or even tripled rental prices and local residents cannot afford the increase

• Real estate property available for sale is at an all time low (subsurface rights are not included for those that are for sale)

• Appraisals of property have become difficult due to varying lease values
Transportation Impact

• Congestion
• Safety Concerns
• Heavy Hauling Permit Enforcement
• Uniform local Posting and Bonding/Permit Issuances
• Increases in traffic volume and truck traffic
“Traffic has increased on secondary roads from 150 vehicles a day to an additional 700 *trucks* per day”
Other Regional Impacts

• Municipalities challenged to manage more complex issues with less resources and expertise
• How to factor gas drilling in with long-term transportation plans?
  – Dynamics of operation
  – Changes in method of hauling water
  – Gathering lines and major pipelines
• Shale fracturing operations will continue long after drilling
• Other shale plays below Marcellus show promising opportunities