



## CENTRE COUNTY COMPREHENSIVE PLAN UPDATE TRANSPORTATION ELEMENT - PART I EXECUTIVE SUMMARY

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## **INTRODUCTION**

The Transportation Element of the Centre County Comprehensive Plan is an assessment of the transportation facilities in the County. These facilities include not just the road network, but all forms of transportation including transit, rail, airports and bike and pedestrian facilities. It is important to consider the transportation network as an integrated multi-modal system. The existing conditions of the transportation network are described in this initial section of the Transportation Element (Part 1). The Transportation Element will be completed in the future after completion of the Travel Demand Model Analysis and Long Range Transportation Plan for Centre County.

Significant growth of residential, office and industrial development has occurred in the County – especially in the Centre Region area where Penn State University has served as a magnet for development. This growth is forecasted to continue. As a result, the need to identify transportation facilities that will accommodate this growth is a key part of the comprehensive planning process.

The Centre Region Metropolitan Planning Organization (CRMPO) is the agency responsible for coordinating transportation planning efforts in the geographic area covering Benner, College, Ferguson, Halfmoon, Harris, Patton and Spring Townships, as well as Bellefonte and State College Boroughs.

The CRMPO coordinates transportation issues with the following agencies: Centre County Planning Commission (CCPC), Centre Regional Planning Commission (CRPC), the Centre Area Transportation Authority (CATA), the Centre County Planning Office (CCPO), Centre Regional

Planning Agency (CRPA), and the Susquehanna Economic Development Association Council of Governments (SEDA-COG). These organizations work alongside the Pennsylvania Department of Transportation (PENNDOT) to identify and prioritize transportation improvement projects in Centre County.

## **TRANSPORTATION GOAL AND OBJECTIVES**

The goal of the Transportation Element is: “To provide a multi-modal transportation system, which includes air, bicycle, highway, pedestrian, public transportation, and rail facilities to maximize the efficient, safe, economical and convenient movement of people and goods while minimizing the adverse impact the system will have on natural and cultural resources, as well as people.”

## **ROAD NETWORK**

Pennsylvania is in a strategic position with important interstate roadways traversing the state and serving national and international trade routes. Centrally located within Pennsylvania, Centre County is about 90 miles northwest of Harrisburg. Transportation facilities serving the County are shown on Figure 1. This includes Interstate 80 and future Interstate 99; the Mt. Nittany Expressway; principal arterial highways such as US Route 322, US Route 220 and State Route 26; urban and rural major collector roadways such as State Route 504, Allen Street in State College Borough and other roads that serve as intra-county travel corridors; rural minor collectors which provide service to the smaller communities; and local roads that provide access to adjacent land uses and serve shorter trips. This network serves both the major regional traffic movements and local trips. Railroad lines and airports are also shown of Figure 1.

A major transportation initiative currently underway is the completion of Interstate 99 south to Blair County, which will provide improved access between Interstate 80 and the Pennsylvania Turnpike. Other major transportation studies and projects include Corridor O (US Route 322), the Western Inner Loop Connector in Ferguson Township from State Route 26 (West College Avenue) to North Atherton Street and the South Central Centre County Transportation Study (SCCCTS).

### **Traffic Volumes**

Centre County traffic has continued to grow, which is reflected in increasing congestion especially focused in the State College area. Traffic volumes on key roadways have increased significantly since 1965. Fueled by Penn State University and by the increasing number of residential, commercial, business and industrial enterprises, this growth has contributed to large increases in traffic on the major roads serving commuter traffic from Centre County and the surrounding counties.

Centre County's centralized location in Pennsylvania serves truck freight moving from the Atlantic coast to destinations in the Midwest and beyond. Nearly 50 percent of the commercial truck traffic in Pennsylvania is moving through the state to destinations outside of Pennsylvania<sup>1</sup>. Truck traffic has significantly increased on Interstate 80, which is a major national and international freight route from New Jersey to California. Figure 2 shows annual average daily traffic volumes on state maintained roads in Centre County.

### **Safety Considerations**

Crash data for Centre County from the years 1996 through 2000 was obtained from

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<sup>1</sup> USDOT, Bureau of Transportation Statistics, 1997.

the PENNDOT Crash Records System. In Pennsylvania, reportable crashes include those involving property damage, injuries, or fatalities. The data indicates that there were 2,785 crashes in 101 crash clusters recorded between 1996 and 2000. This data provides a broad picture of safety problem areas. Safety problem areas have been identified in other locations, including but not limited to: US Route 220 north of Marthas Furnace and State Routes 322, 144 and 45 east of State College.

As part of the on-going transportation planning efforts, safety problems not currently addressed through the Transportation Improvement Program should be further evaluated.

### **BRIDGES**

Bridges are important elements of the transportation network in Centre County. Within Centre County there are 59 local bridges and 365 State owned bridges. Through a regular system of bridge inspection, County bridges are scheduled for routine maintenance, rehabilitation or replacement.

### **PUBLIC TRANSPORTATION**

Reflecting the diverse nature of Centre County, there is more than one transit service and public transportation operator.

#### **Public Transit**

The Centre County Office of Transportation (CCOT) operates a demand responsive 'shared ride' service throughout Centre County. While the service is available to the general public, it is primarily oriented to senior citizens and disabled passengers. The CCOT also provides specially arranged transportation by contract rates. Paratransit service is available to any location within the boundaries of Centre County and selected locations outside of Centre County.

The Centre Area Transportation Authority (CATA) operates three types of public transportation services throughout the Centre Region and surrounding areas of Centre County. These include fixed-route bus service, demand responsive service and special services.

CATA also operates shuttle services during special events that include Penn State University home football games, and other events. CATA also operates a Ride Share program in Centre County that is a free ride matching service.

### **Intercity Bus Service**

Greyhound Lines and Fullington Trailways provide intercity bus service connecting Centre County with Harrisburg, Pittsburgh, Wilkes-Barre and DuBois, with primary community stops en route. While the current route services are limited, connections can be made to other destinations.

### **Park and Ride Facilities**

In State College, a park and ride program was implemented to provide inexpensive perimeter parking for downtown State College business employees. The program is run through a partnership between State College, CATA and Penn State. In addition, a park and ride facility is planned in Potter Township (Old Fort), and there is an informal park and ride facility at the Cold Spring Dam site in Philipsburg.

### **Public Transportation Plan**

A comprehensive study of the Public Transportation system is now underway as part of the Centre County Long Range Transportation Plan. This includes an assessment of the existing transportation services and opportunities for the future.

Various service alternatives will be evaluated and a recommended public

transportation plan will be developed. Proposals regarding the extent of the transit system and its coverage, the types of services offered, and the frequency of service, will be included in the Plan.

### **TRAVEL PATTERNS**

As indicated by the 2000 US Census, approximately 78 percent of Centre County workers drive alone or carpool, compared to 87 percent statewide. The second most common method of commuting to work within Centre County is by foot. Approximately 12 percent of the County workers walked to work in 2000, as compared to 4 percent statewide. Most of the non-motorized travel is related to Penn State University and downtown State College. The percentage of workers in Centre County who commute via bus (3.6%) is comparable to the statewide average.

In 2000, approximately 92 percent of Centre County residents work inside the County; about 40 percent of Centre County residents commute under 15 minutes to work. The mean travel time to work for Centre County residents in 2000 was 19.6 minutes, significantly less time than the statewide average of 25.2 minutes.

### **AIRPORTS**

Centre County, Pennsylvania has six public use aviation facilities: University Park Airport, Mid-State Airport, Bellefonte Airport, Centre Airpark, Penns Cave Airport and Ridge Soaring Gliderport. Three commercial carriers serve the University Park Airport and the other five airports are general aviation facilities.

University Park Airport is the seventh busiest commercial airport in Pennsylvania and the largest in Centre County. Between 1985 and 2001, the number of enplanements has increased 41 percent, from 46,709 to 113,597. Currently,

the airport accommodates almost 170 flights per day.

According to the *Draft University Park Airport Master Plan*,<sup>2</sup> improvements will be needed to handle the expected airport traffic over the twenty-year planning period from 2000 to 2020. During this period there is an expected 80 percent increase in the total passengers flying out of University Park.

Mid-State Airport is located five miles east of Philipsburg along State Route 504 in Rush Township. Two of the three Keystone Opportunity Zones in Centre County are located at the Mid-State Airport, including the Airport and the Black Moshannon Enterprise Center. Mid-State Airport is currently underutilized, given its significant facilities and runway structure. Land and infrastructure is available for future development in association with the airport facilities around the airport. Community leaders have discussed expansion of the airport for commercial freight operations. The remaining Centre County airports are described in the Transportation Element.

## **RAIL**

Norfolk Southern and the Nittany and Bald Eagle Railroad (NBER) are the two railroads that traverse Centre County. The NBER operates and provides freight service to the Centre County region. Norfolk Southern has trackage rights, but does not provide service to Centre County. Both railroads operate on the SEDA-COG Joint Rail Authority rail lines.

NBER forecasts an increase in tonnage from local businesses and the Norfolk Southern coal trains operating on trackage rights on the NBER main line. Future improvements include an upgrade to the

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<sup>2</sup> Draft University Park Airport Master Plan, Delta Airport Consultants, Inc., 2002.

NBER main line in 2003 and equipment and other branch line improvements.

There is no passenger rail intercity service in Centre County. Amtrak service through central Pennsylvania passes to the south of Centre County through Blair and Huntingdon Counties. The Bellefonte Historical Railroad promotes rail-fan tourism through ecotourism rail tours operating from Bellefonte.

PennPlan,<sup>3</sup> the 25-year Statewide Long Range Transportation Plan (2000-2025), identified a need for a passenger rail study to assess statewide intercity (not commuter) passenger rail services and possible expansion of passenger service into freight corridors.

Initial assessments have been conducted on a State College – Altoona – Pittsburgh corridor rail line, as well as a State College-Harrisburg corridor line. Future feasibility assessment of any corridors would require detailed evaluations to identify right-of-way, station locations, ridership, costs and benefits.<sup>4</sup>

## **Maglev**

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA 21) funded a study to examine the possible construction of a high-speed Maglev, a magnetically levitated train. Pittsburgh, Pennsylvania and Baltimore, Maryland were the only two metropolitan areas selected as possible locations for the Maglev project.

The proposed Pennsylvania High-Speed Maglev project is a 47-mile high-speed levitation transport system which would

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<sup>3</sup> PennPlan Moves!, Statewide Long Range Transportation Plan 2000-2025.

<sup>4</sup> Pennsylvania Statewide Passenger Rail Needs Assessment Technical Report, Technical Advisory Committee, December 2001.

operate from Pittsburgh International Airport to Greensburg with MAGport stations located at the Airport, Downtown Pittsburgh, Monroeville and Greensburg. Future service may link Pittsburgh to Philadelphia and include a stop in State College with ultimately a connection to the Northeast Corridor Amtrak line.

### **BICYCLE FACILITIES AND GREENWAYS**

The Centre Region has a number of bicycle off-road and on-road bicycle facilities, the Statewide Bicycle Route G, greenways and rail-trails facilities.

There are 15 existing off-road bikeway facilities in the Centre Region, totaling approximately 18 miles. In addition, there are approximately nine miles of proposed off-road bike facilities. There are almost four miles of on-road bicycle routes in the Centre Region.

Pennsylvania has five statewide bicycle routes which include both on-road facilities and trails. Over 200 miles of the statewide bicycle routes are fully signed, with another 800 miles slated for bike route designation in the near future. Route G is a north/ south statewide bicycle touring route from New York State to Maryland. It travels through Centre County.

### **Greenways**

The recently completed Nittany and Bald Eagle Valley Greenway Plan includes watershed corridors along Spring Creek, Buffalo Run, Logan Branch, and their tributaries. The purpose of the Nittany and Bald Eagle Valley Greenway Plan is to identify a network of trails and to protect the high quality waters of the Spring Creek and Bald Eagle watersheds. The Greenway Plan should be extended countywide as part of the current Centre County Comprehensive Plan update.

### **Rail-Trails**

A number of rail-trail facilities are in the early design and planning phases; for example, the Penns Creek Path has been constructed and is open to the public. Through the planning process, other trail projects should be identified to expand the County-wide network and funding should be sought to implement these planning efforts.

### **PENNPLAN**

In addition to identifying the need for a passenger rail line study, the PennPlan covers all modes of transportation and the interactions between these modes.

PennPlan lists 30 statewide objectives and outlines performance measures and targets for each. PennPlan also lists 28 corridors of 'statewide significance'. Three corridors cover sections of Centre County, including the Keystone Shortway Corridor along Interstate 80, the 28<sup>th</sup> Division Corridor along Route 22/322, and the Bald Eagle Corridor along US Route 220/322, State Route 26 and Interstate 99.

### **REGIONAL FREIGHT PERSPECTIVE**

A regional freight perspective report was prepared as part of the Centre County Comprehensive Plan Transportation Element to identify regional freight transportation trends and issues in Centre County.<sup>5</sup> Freight movement, especially truck freight is an important issue in Centre County, particularly given the growing levels of truck traffic through the County.

Freight demands are responding to three major shifts: a change from a national market to a global market, a shift from a manufacturing to a service-based economy, and movement from traditional manufacturing and warehouse system to a

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<sup>5</sup> Centre County Transportation Plan, Regional Freight Transportation Perspective, Orth-Rodgers & Associates, Inc., May 2003.

customer-dictated, just-in-time delivery system. Freight is expected to grow significantly over the next 20 years, especially international freight coming through ports and border crossings.

Pennsylvania's centralized keystone location with major trade routes traversing the state makes this fact inevitable. Interstate 80 and Interstate 76 are the primary east-west trade routes through Pennsylvania. Interstates 95, 81 and 79 and US Routes 15, 219 and 220 serve north/south traffic through Pennsylvania.

In Centre County, future completion of Interstate 99 and other planned transportation improvements, such as Corridor O, will also change local travel patterns within Centre County to the extent that they direct traffic to the new alignments.

It is not expected that significant changes in freight hauling routes will occur, unless other major actions (currently unknown) that may affect market logistics, port activity or regulatory policy take place. The major travel corridors will continue to serve long distance haulers that traverse Centre County. Interstate 80 currently serves as a key trade corridor. Other major roads will also continue to serve truck freight flows to the extent that they are more reliable, cost effective, and time effective routes, as determined by the truck operators or owners. Future changes in freight supply, logistics, new technology and other factors may, however, affect how freight is being moved.

## **CONCLUSIONS**

The Centre County Long Range Transportation Plan 2000-2030 is currently in process. Through this study, a state-of-the-art travel demand model is being developed that will assist in identifying highway transportation needs. This tool will also be used to evaluate alternative

solutions to problems. Crash data will also be used to identify safety problem areas.

The bicycle and greenways facilities, existing and planned, have been documented. Future recommendations may include looking at ways to further expand the bicycle and greenways system to increase mobility and to provide additional recreation choices. The municipal subdivision and land development ordinances should identify these systems and include provisions for bike facilities to provide local connections.

Other strategies will also be investigated to address transportation problems. For example, areas identified for future congestion may warrant an evaluation of alternative land use patterns and growth management tools to proactively address these problems. This may include coordination with future land use planning to create more sustainable development. Other planning tools such as access management controls and traffic impact assessments for major development projects should be considered to proactively address future transportation conditions.

Planning for airport expansion must consider future growth in air traffic and air freight service. Ensuring that the roadways will accommodate increasing traffic especially around University Park Airport is a consideration. Providing public transportation to the airport should be explored as well.

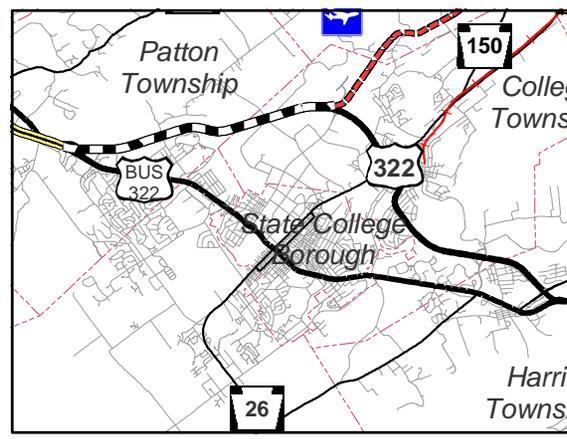
Rail planning has two primary components. Rail freight is expected to increase in the County and the system must continue to be maintained and expanded to serve future industry needs. Future passenger rail travel through the Maglev network has the opportunity to change commuting patterns between Pittsburgh and Harrisburg and can

significantly affect Centre County. The Maglev study process will need to be monitored to assess the effect on Centre County.

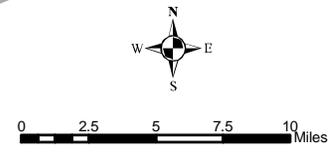
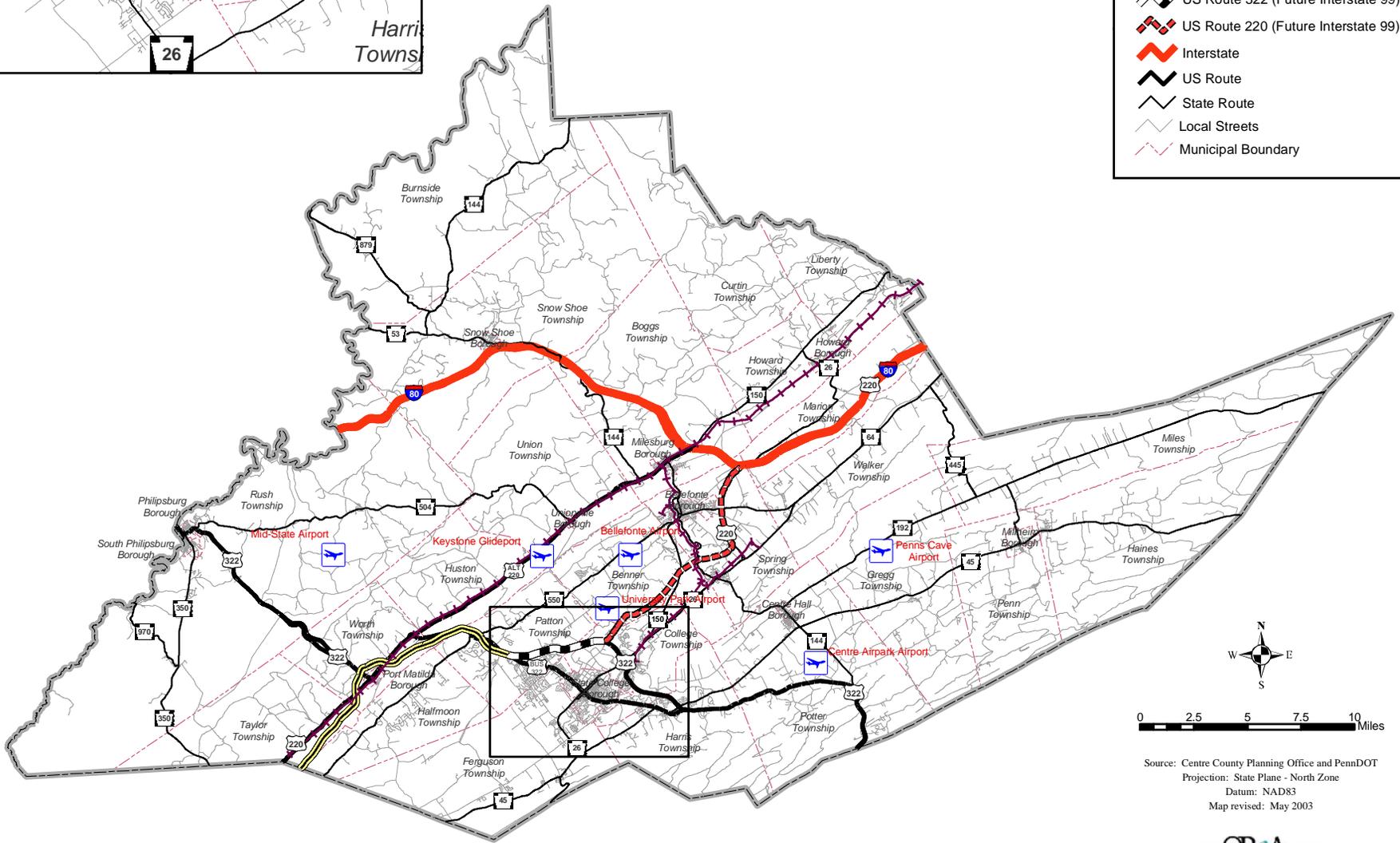
Freight movements through Centre County have been identified as a community concern. Truck traffic should continue to be monitored as the major transportation projects are completed.

An evaluation of the public transportation system is underway. The results will be incorporated into this Transportation Plan.

Figure 1  
**TRANSPORTATION FACILITIES**  
 Centre County, Pennsylvania



- Airports
- Active Railroad
- Interstate 99 (Under Construction)
- US Route 322 (Future Interstate 99)
- US Route 220 (Future Interstate 99)
- Interstate
- US Route
- State Route
- Local Streets
- Municipal Boundary



Source: Centre County Planning Office and PennDOT  
 Projection: State Plane - North Zone  
 Datum: NAD83  
 Map revised: May 2003

Figure 2

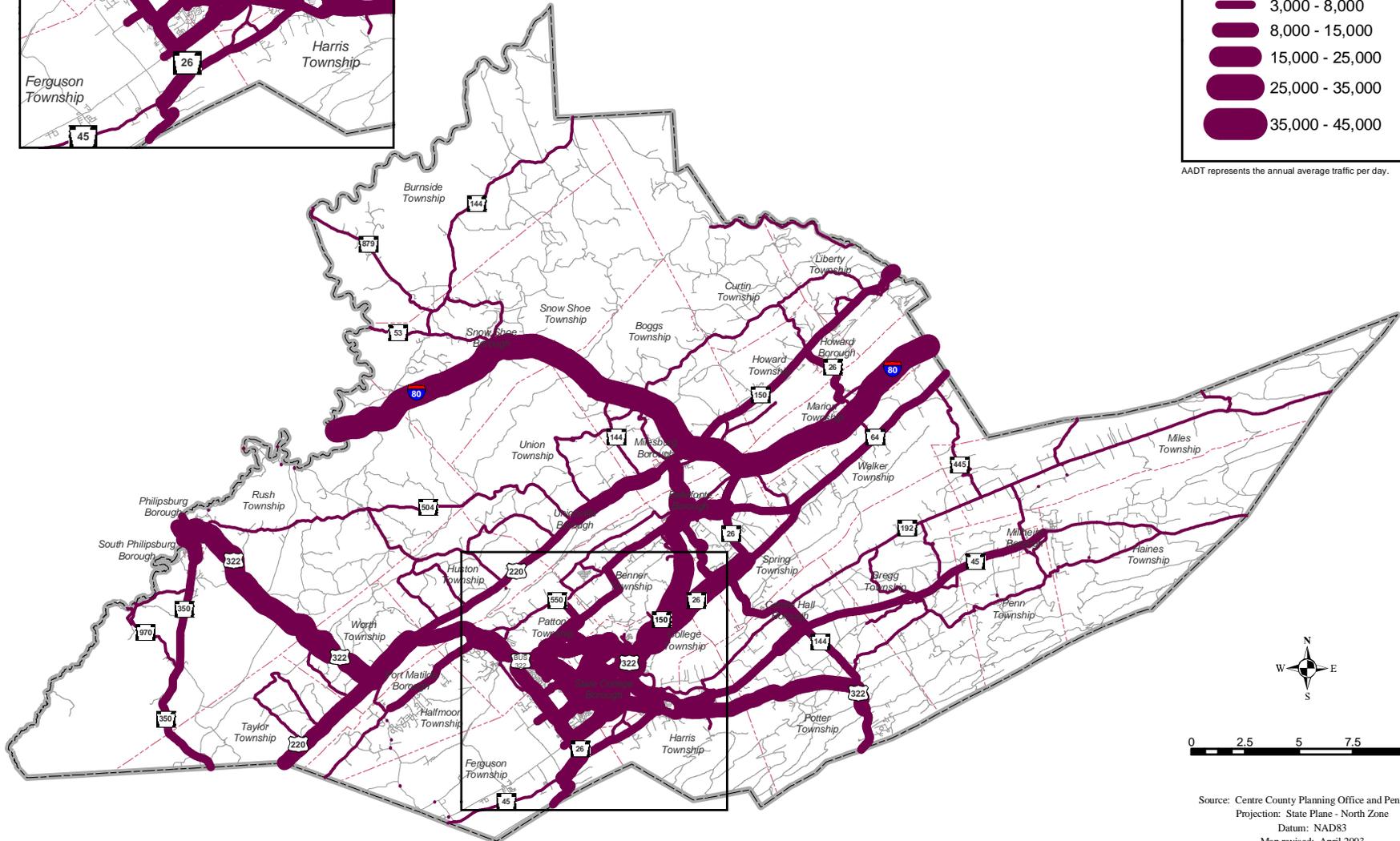
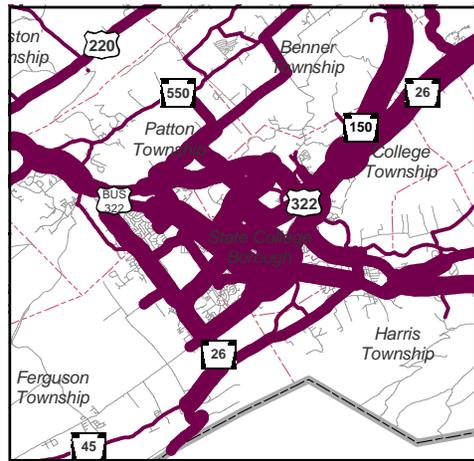
# TRAFFIC VOLUMES - 2000

Centre County, Pennsylvania

### Traffic Volumes - 2000

- 0 - 3,000
- 3,000 - 8,000
- 8,000 - 15,000
- 15,000 - 25,000
- 25,000 - 35,000
- 35,000 - 45,000

AADT represents the annual average traffic per day.



Source: Centre County Planning Office and PennDOT  
Projection: State Plane - North Zone  
Datum: NAD83  
Map revised: April 2003

VEHICLE COUNTS BASED ON PENNDOT YEAR 2000  
VEHICLE COUNTS ON STATE MAINTAINED ROADS ONLY

