

CHAPTER 11

Transportation

The primary purpose of this chapter is to present information concerning the existing transportation system in Cumberland County. Emphasis will be placed on the responsibilities of the County government with respect to transportation facility and service planning, programming, improvement and maintenance. Highway conditions and concerns are emphasized but, other transportation modes including bus, rail, air and non-motorized transportation are also discussed and evaluated.

Introduction

The County's role in planning, improving and operating the transportation system encompasses the following:

- Developing and maintaining a County Comprehensive Plan;
- Operating the Cumberland County Transportation Department and its paratransit services;
- Maintaining/improving County bridges;
- Funding a portion of Capital Area Transit's (CAT) operating and capital budget;
- Planning/programming work for federally-aided transportation improvements through involvement with the Harrisburg Area Transportation Study (HATS);
- Reviewing/approving subdivision and land development plans and commenting on new and revised municipal zoning and subdivision ordinances and comprehensive plans, which in many cases will have an impact on the existing transportation system;
- Participating in the Susquehanna Area Regional Airport Authority; and,
- Supporting the Cumberland County Transportation Authority.

The Cumberland County Transportation Authority was formed in 1990 by the County to conduct studies, develop plans, and implement projects that will meet the present and future transportation needs of the citizens and businesses of the County. Since its incorporation, it has been involved in various aspects of the transportation system including the development of a Strategic Plan and the future of the Carlisle Airport.

The highway system is emphasized in the transportation elements of the Comprehensive Plan. County bridges and roadways with a functional classification of collector or arterial are discussed and evaluated. The minor street system is discussed where federal or state funded projects impact maintenance and development because these roadways are primarily a municipal responsibility. The functional classification system that is presented is based on the HATS functional classification system.

Cumberland County has an extensive transportation system due to its proximity to Harrisburg, its relative location within Pennsylvania, the northeastern United States, and the intersections of several major state and federal roadways. The County is served by Interstate 81, Interstate 83, US 11, US 15, PA 581 and the Pennsylvania Turnpike (I-76). These highways link the County with other areas in the Tri-County Region, as well as other regions within and outside of Pennsylvania. A subsystem of

minor arterial highways, many of which are Pennsylvania traffic routes, serve intra-region and intra-County travel.

Cumberland County highways serve a variety of travel needs including long-distance "through" travel, commuter traffic, goods movement and recreational travel. "Through" travel is significant and mainly occurs on the Turnpike, Interstates and U.S. Traffic Routes. Commuting trips occur on all classifications of roadways and are a principal cause of congestion problems during peak commuting periods (7 to 9 A.M. and 3 to 6 P.M.) These peak hour congestion problems are the worst in certain areas of the Harrisburg Urbanized Area¹, but are also significant in the Carlisle and Shippensburg areas. Congestion during peak commuting periods will get worse in Cumberland County and the Tri-County Region as both residential and business uses develop and expand. Goods movement is considerable on the County's arterial highways and will continue to increase as growth occurs. In fact, the US Department of Transportation has projected that within the northeastern United States freight movements across all modes (truck, rail, and air) will increase 79% by 2020. Congestion and safety issues will continue to be significant. Recreational travel is also significant in Cumberland County throughout the year because of the many historical, recreational, and entertainment attractions within the region.

The most recent decennial census data illustrates some of the work-related transportation characteristics within the county. The 2000 Census data indicated there were 105,860 workers 16 years and older living in Cumberland County. Out of this total, 82.1% of those workers drive by car alone to get to their jobs, compared to 78.5% of workers in Dauphin County and 77.8% of workers in Perry County. Another 9.7% of Cumberland County workers either carpooled or used public transit to get to work, compared to 14.6% of workers in Dauphin County and 15.7% of workers in Perry County. Finally, 4.2% of Cumberland County workers walk to work, which was a higher percentage than in Dauphin County (3.4% of workers) or Perry County (2.2% of workers). The mean travel time to work in the county is relatively low at 20.5 minutes; this figure was lower than in Dauphin County (21.1 minutes) and Perry County (34.7 minutes), as well as lower than the Pennsylvania and United States averages.

Planned and Programmed Transportation Improvements

The Harrisburg Area Transportation Study (HATS) is the federally designated Metropolitan Planning Organization for the Harrisburg area. The organization develops transportation plans and improvement programs for the region. HATS is comprised of federal, state, and local agencies, including officials from Cumberland, Dauphin, and Perry counties, Harrisburg, and Capital Area Transit. The HATS area encompasses 105 municipalities in four counties. The area includes all of Cumberland, Dauphin, and Perry counties and includes Palmyra Borough and North Londonderry Township in Lebanon County.

Both HATS and the Pennsylvania Department of Transportation (PennDOT) rely on various

¹ An urbanized area, as defined by the U.S. Census Bureau for the 2000 Census, is a densely settled area that has a census population of at least 50,000. The Harrisburg Urbanized Area includes all of Camp Hill, Lemoyne, Mechanicsburg, New Cumberland, Shiremanstown, and Wormleysburg, and portions of East Pennsboro Township, Hampden Township, Lower Allen Township, Silver Spring Township, and Upper Allen Township.

transportation planning documents to determine which highways and other transportation projects have the greatest need to be improved. The primary documents HATS uses are the 12-year Transportation Plan, and the 20-year Long-Range Transportation Plan (LRTP).

The 12-year Transportation Plan is a document prepared by PennDOT with HATS input. The first four-year period of the 12-year Plan is identified as the Transportation Improvement Program (TIP). Projects on the TIP are programmed improvements and funding has been allocated. The 4-year TIP is a document prepared by PennDOT with input from a variety of agencies. Municipalities suggest most projects, ensuring people most affected by problematic highway or transit issues have some say in trying to resolve it. Both the county and regional planning commissions then review the submitted projects, and their recommendations are submitted to HATS for final approval. The project improvements completed can take a variety of forms, ranging small-scale safety improvements to large-scale road reconstruction. Almost all projects on the TIP are programmed for multiple phases, which include preliminary engineering, final design, utilities, right-of-way, and construction. In most cases the pre-construction phases are required to ensure that project construction is as efficient as possible. Some projects placed on the TIP will not have obvious, construction-related improvements completed during the 4-year TIP period, instead construction improvements will be implemented in the next round of the TIP. Though the TIP is a 4-year document, it is updated every two years, ensuring better planning flexibility and allowing new projects to be placed onto the TIP more quickly.

Projects not placed on the first four years of the 12-Year Transportation Plan are those projected to be important projects in the years to come. The 12-year Plan is updated every two years. The current version of both the TIP and 12-year Plan were most recently adopted in October 2002. The next version of both documents will be officially adopted in October 2004.

In 1999, HATS produced and adopted the 1999-2020 Long Range Transportation Plan (LRTP), outlining the kinds of improvements needed in the Harrisburg region in the long term. The plan is the basis on which major highway and transit projects are selected for various improvements. Unlike long range transportation plans a generation ago (1950's to 1970's), the projects and goals identified in the current LRTP focus more on maintaining and upgrading the existing transportation system, rather than expanding the transportation system. HATS completed a minor update of the 20-year plan in early 2001. The next major update of the plan is scheduled to be completed by late 2003 or early 2004.

Projects identified as having deficiencies and needing to be upgraded are submitted for the 12-Year Transportation Plan and those with the highest priority are listed on the TIP. Deficiencies/projects, identified by PennDOT, are discussed in the following categories: congestion, safety, maintenance, bridges, Intelligent Transportation Systems (ITS), and transportation enhancements.

Congestion

Capacity deficiencies normally relate to the need for a new facility, relocation of an existing facility, the need to widen existing facilities, or the need to install or update traffic control devices such as traffic signals. With the completion of the Interstate System and rising improvement costs and

limited financial resources, the number of new facility projects that can be programmed for improvements in Cumberland County and throughout the state are limited.

In Cumberland County, the New Kingstown Bypass is the only major relocation project proposed during the first four years of the current Twelve Year Program. Also, there are a number of major widening and interchange projects on the current Twelve Year Program. These projects include widening and interchange improvements on US 15 & PA 581 from Zimmerman Drive to I-83, a new interchange at PA 581 and St. John's Church Road, I-81/PA 465 (Exit 44) interchange improvements, I-81/PA 74/PA 641 interchange improvements, PA 174 widening from U.S. Route 11 to I-81s, and an interchange modification at the US 15/Lisburn Road intersection.

Many of the congestion reduction projects on the current Twelve Year Program are Safety and Mobility Initiative (SAMI) projects. PennDOT initiated the SAMI Program in the early 1990's to address safety and traffic flow deficiencies. Most of the SAMI projects in Cumberland County involve traffic signal or intersection improvements. SAMI projects can receive between 80% and 100% federal funding, with the remaining required funding coming from the state.

Safety

The safety of the transportation system is a principal concern of HATS and PennDOT. A number of safety (SAMI) projects are on the current 2003 Program. PennDOT District 8-0 has a Traffic Unit to determine which portions of the transportation network need to be upgraded for safety. This unit includes a Safety Engineer who, with staff, monitors accident data, makes remedial recommendations, and reviews other roadway improvement project designs to ensure safety issues are addressed.² Safety projects can include but are not limited to geometric, signing, pavement marking, guide rail, pavement/shoulder widening, skid resistance and traffic control improvements.

PennDOT has a very structured approach to identifying and addressing safety problems. PennDOT first reviews computerized accident data that identifies safety priority locations. The worst locations are studied each year and if a cost beneficial solution is available, a project report is prepared and a project is recommended for programming. The safety unit also reviews pedestrian routes, fatal accidents and the location of utility poles and guardrails.

Maintenance

Another primary concern of both HATS and PennDOT is the maintenance of the transportation system. A goal of the Commonwealth and HATS is that 80% of roadway and bridge improvement funds should be spent on maintaining the system. Maintenance deficiencies/improvements include resurfacing and restoration-type projects. Many of the improvements are made under PennDOT's Betterment Program. A number of maintenance projects can be found in the 2003 Program.

PennDOT, as with the Safety Improvement process, has a well-defined and structured annual process of identifying and programming Betterment projects. The identification of Betterment projects

²The entire Tri-County Region is part of PennDOT's District 8-0.

begins with recommendations from citizens, planning commissions, legislators and Metropolitan Planning Organizations like HATS. A computerized pavement analysis system (STAMPP) is also used to identify Betterment candidates. If a project suggestion has merit, as determined by PennDOT County Maintenance Office personnel, it goes into a future project file. The District Office compiles an annual Betterment candidate list using the future project candidate file and suggestions by the District's Bridge, Traffic and Safety Units. The District field views the list of candidate projects and develops a shorter list of projects that will undergo detailed scoping.

A "Scoping Team" then field views the shortened list of candidates and begins to detail the scope and cost of each project. A project selection team then reviews available funds and project needs to develop the final annual listing of Betterment projects.

Funding of the Betterment Program is about \$15 million annually and is one-third federally funded with the remainder coming from state funds. The legislature allocates Betterment funds by County and the PennDOT County Maintenance Office budget comes off the top of this allocation. The remaining money is then used to complete resurfacing/restoration-type projects.

Bridges

Bridge rehabilitations or replacements are expensive and often utilize federal, state and municipal funding for their improvement. One of the principal criteria for federal funding eligibility is that the bridge's span must be at least 20 feet. Recognizing that bridge reconstruction and replacement is one of our most important transportation needs, the state legislature has approved ten Bridge Bills since the early 1980's, with the most recent bill passed in 1999. The Bills list the bridges to be improved and provide authorization for PennDOT to work on them. In order for the bridgework to be funded, however, they must be placed on the Twelve Year Program. The bridges that HATS and PennDOT are involved with are both on and off the federal-aid system and include municipal as well as state-owned structures.

One of Cumberland County's important transportation responsibilities is the ownership and maintenance of 27 bridges. From July 2001 to June 2002, the county received \$310,821.04 in liquid fuels payments from the Commonwealth to assist with the maintenance of its bridges. These bridges are listed in Table 11.1.

Closed and weight limit posted bridges in Cumberland County are listed in Table 11.2.

**TABLE 11.1
COUNTY BRIDGES**

| <u>Number</u> | <u>Bridge Name</u> | <u>Type</u> | <u>Road Name or Number</u> | <u>Crossed</u> | <u>Municipality</u> |
|---------------|--------------------------------|------------------|----------------------------|-----------------|---------------------|
| C-1 | Bridge Rd. | P/S Concrete | Bridge Rd. | Condoquinet | E. Pennsboro |
| C-2 | Orr's | P/S Concrete | Orrs Bridge Rd. | Condoquinet | Hampden |
| C-6 | Sample | P/S Concrete | Samples Bridge Rd. | Condoquinet | Silver Spring |
| C-9 | Bernheisel | P/S Concrete | T574 | Condoquinet | Middlesex |
| C-11 | Wolf | Truss | T508 | Condoquinet | Middlesex |
| C-15 | Hays | P/S Concrete | T484 | Condoquinet | N. Middleton |
| C-16 | Hertzler | Truss | T427 | Condoquinet | L. Frankford |
| C-17 | Burgner | P/S Concrete | T457 | Condoquinet | L. Frankford |
| C-19 | Stanton | P/S Concrete | T448 | Condoquinet | L. Frankford |
| C-21 | Graham | P/S Concrete | T409 | Condoquinet | U. Frankford |
| C-26 | Ramp | Covered | T374 | Condoquinet | Hopewell |
| F-1** | T-311 | Concrete T-Beam | T311 | Middle Spring | Southampton |
| F-2** | T-364 | P/S Concrete | T364 | Laughlin Run | Hopewell |
| Y-2* | Etters | Truss | Green Lane Dr. | Yellow Breeches | Lower Allen |
| Y-4* | Miller | Stone Arch | Limekiln Rd. | Yellow Breeches | Lower Allen |
| Y-6* | Old Forge | Truss | Sheepsford Rd. | Yellow Breeches | Lower Allen |
| Y-7* | McCormick | Concrete Arch | T918 | Yellow Breeches | Upper Allen |
| Y-9* | Bishop | Truss | Bishop Rd. | Yellow Breeches | Upper Allen |
| Y-10* | Gilbert | Truss | Bishop Rd. | Yellow Breeches | Upper Allen |
| Y-11* | Grantham | P/S Concrete | T912 | Yellow Breeches | Upper Allen |
| Y-14 | Leidigh | P/S Concrete | T545 | Yellow Breeches | Monroe |
| Y-15 | Boiling Springs | Stone Arch | T538 | Yellow Breeches | S. Middleton |
| Y-17 | Kunkle | Plate Girder | T518 | Yellow Breeches | S. Middleton |
| Y-18 | Craighead | Truss | T520 | Yellow Breeches | S. Middleton |
| Y-20 | Roush | P/S Concrete | T470 | Rail Road | Dickinson |
| Y-22 | Enck | Concrete Slab | T462 | Yellow Breeches | Dickinson |
| R-1 | Messiah College access Road | Steel Plate Road | | Railroad Tracks | Upper Allen |

Notes: 18 fully owned county bridges; 9 jointly owned
 * = Joint ownership with York County
 ** = Joint ownership with Franklin County

**TABLE 11.2
POSTED AND CLOSED BRIDGES BY MUNICIPALITY
CUMBERLAND COUNTY – 2003**

| <u>Municipality</u> | <u>Road/Bridge Name</u> | <u>Feature Crossed</u> | <u>Owner</u> | <u>Weight Limit</u> | | <u>Length</u> |
|---------------------|---------------------------|------------------------|----------------------|---------------------|--------------|---------------|
| | | | | <u>Single</u> | <u>Comb.</u> | |
| Cooke | Woodrow Rd. | Mountain Creek | DEP-Forestry-01 | 07 | 14 | 24 |
| Dickinson | Encks Mill Rd. (T-462) | Yellow Breeches Creek | Cumberland County | 08 | | 40 |
| Dickinson | SR 3021 – Burnt Hse Rd. | Yellow Breeches Creek | PennDOT | 15 | 25 | 114 |
| East Pennsboro | Magaro Rd. | Conodoguinet Cr. trib. | East Pennsboro Twp. | 25 | | 24 |
| Hampden | Orr’s Bridge Rd. (T-618) | Conodoguinet Creek | Cumberland County | 35 | 40 | 315 |
| Hopewell | Ramp Br. (Cvrd Br. Rd.) | Conodoguinet Creek | Cumberland County | 03 | | 115 |
| Lower Allen | Green Lane Dr. | Yellow Breeches Creek | Cumberland County | 08 | | 133 |
| L Frkfrd/W Penn | Creek Rd. (T-427) | Conodoguinet Creek | Cumberland County | 08 | | 218 |
| Lower Mifflin | Campground Rd. | Doubling Gap Run | DEP Parks 6304 | 28 | 39 | 24 |
| Lower Mifflin | Creekview Rd. (T-399) | Doubling Gap Creek | Lower Mifflin Twp. | 26 | 34 | 35 |
| Lower Mifflin | Harvey Rd. (T-415) | Doubling Gap Creek | Lower Mifflin Twp. | 18 | 33 | 29 |
| Lower Mifflin | Pipeline Rd. (T-413) | Doubling Gap Creek | Lower Mifflin Twp. | 10 | | 22 |
| Middlesex | Mill Rd. (T-501) | LeTort Spring Run | Middlesex Twp. | 05 | | 27 |
| Middlesex | Shady Lane (T-510) | LeTort Spring Run | Middlesex Twp. | 10 | 16 | 28 |
| Middlesex | Wolf Bridge Rd. (T-508) | Conodoguinet Creek | Cumberland County | 10 | | 192 |
| Monroe | SR 1007 – Locust Pt. Rd. | Yellow Breeches Creek | PennDOT | 10 | 15 | 117 |
| Monroe | SR 2011 – Wms Gr. Rd. | Dogwood Run | PennDOT | 32 | 40 | 20 |
| Mt. Holly Springs | East Pine St. | Mountain Creek | Mt. Holly Springs | 30 | | 75 |
| South Middleton | Boil. Spr. Br. (Mtn. Rd.) | Yellow Breeches Creek | Cumberland County | 30 | | 104 |
| South Middleton | Craighead Br. (Zion Rd.) | Yellow Breeches Creek | Cumberland County | 10 | | 134 |
| South Middleton | Kunkle Br. (P-Burg Rd.) | Yellow Breeches Creek | Cumberland County | 14 | 25 | 103 |
| South Middleton | Ladnor Rd. (T-575) | Mountain Creek | South Middleton Twp. | 04 | | 50 |
| Silver Spring | Beechcliff Dr. (T-606) | Brenizer Run | Silver Spring Twp. | 33 | 40 | 26 |
| Silver Spring | Sample’s Bridge Rd. | Conodoguinet Creek | Cumberland County | 36 | 40 | 252 |
| Silver Spring | Village Rd. (T-582) | Hogestown Run | Silver Spring Twp. | 30 | | 36 |
| Upper Allen | Bishop Rd. (T-612) | Yellow Breeches Creek | York/Cumberland Co. | 10 | | 134 |
| Upper Allen | McCormick Rd. (T-626) | Yellow Breeches Creek | York/Cumberland Co. | 10 | | 131 |
| Upper Mifflin | Bridge Water Rd. (T-387) | Three Sq. Hollow Run | Upper Mifflin Twp. | 07 | | 36 |
| Upper Mifflin | Leshner Rd. (T-365) | Three Sq. Hollow Run | Upper Mifflin Twp. | 10 | | 24 |
| Upper Mifflin | SR 4007 – Mountain Rd. | Three Sq. Hollow Cr. | PennDOT | 34 | 40 | 47 |
| N Nwtn/W Penn | SR 3007 – Big Spring Rd. | Big Spring Creek | PennDOT | closed | | 36 |
| Shippensburg B. | West Garfield St. | Middle Spring Creek | Shippensburg Boro | closed | | 27 |

Source: PennDOT – 2003.

Intelligent Transportation Systems

In 1999, HATS adopted a comprehensive Intelligent Transportation System (ITS) plan with the goal of improving traffic flow in the Harrisburg area in the future. ITS technologies allow more efficient traffic flow both by informing drivers where traffic congestion is occurring at a given moment and also by making both the vehicles and roads people drive on “smarter” through detection technologies. Three primary ITS technologies were outlined in the ITS plan; they are variable message signs (VMS), closed-circuit television cameras (CCTV), and highway advisory radio (HAR). Some of these technologies have already been implemented. In Cumberland County, portable VMS have been installed in various locations in the county, particularly on the Capital Beltway. A permanent VMS is also being installed on northbound I-81 approaching the Enola/Marysville exit as part of the improvements associated with the I-81 reconstruction project in Dauphin County. A HAR signal is also located at the Carlisle Pike/PA 581 interchange (frequency 1610 AM); this signal broadcasts traffic information when congestion is expected on nearby roads. A more advanced version of HAR will be used in the future providing travelers with near real-time traffic information.

In addition to the technologies outlined in the ITS plan, other technologies have also already been implemented in Cumberland County. The most notable example is the truck rollover signs located on southbound I-83 at the I-83/PA 581 interchange, which inform drivers if they are driving too fast approaching the tight curve in that area. Traffic signal sensors have also been installed near many traffic signals in the county, allowing traffic to move more smoothly through various intersections.

Transportation Enhancements

Transportation enhancements (TE) are a group of projects born out of the 1991 federal transportation legislation - ISTEA (Intermodal Surface Transportation Efficiency Act). Enhancements continue to be a funding category of projects in ISTEA's successor, TEA-21. The intent behind TE funding is to set aside funding for “non-traditional” surface transportation projects that would not receive funding under the regular TIP program, such as bicycle/pedestrian trails, railroad station restoration, or transportation museums, among other eligible categories.

Various projects in Cumberland County have received TE funding over the last few years. Examples of funded projects include the Cumberland Valley Rail-Trail between Shippensburg Township and Newville Borough, the Fielding Belt Trail in South Middleton Township, the Great Road (Market Street) Interpretative History project in Camp Hill Borough, and the Hampden Township Bicycle/Walking Trail.

Highways

Functional Classification

PennDOT and the Harrisburg Area Transportation Study (HATS) have been classifying area highways for planning and funding purposes since 1965. It is important that planners be aware of a

functional classification scheme when considering highway improvements and land use planning in the County. The functional classification of highways range from principal arterials to local roadways as shown in Figure 11.1. Table 11.3 shows the most recent highway mileage by functional classification for each of the Capital Region’s three counties for comparative purposes, while Table 11.4 describes highway mileage by owner.

**TABLE 11.3
HIGHWAY FUNCTIONAL CLASSIFICATION MILEAGE
TRI-COUNTY REGION - 2001**

| Functional Classification | <u>Cumberland</u> | <u>Dauphin</u> | <u>Perry</u> |
|------------------------------|-------------------|----------------|--------------|
| Arterial | 133.8 | 134.8 | 43.2 |
| Minor Arterial | 112.9 | 174.9 | 79.3 |
| Collector | 309.8 | 277.7 | 166.6 |
| Local | <u>1,328.0</u> | <u>1,278.6</u> | <u>796.6</u> |
| Total | 1,884.5 | 1,866.7 | 1,085.7 |

Source: PennDOT.

Table 11.5 identifies characteristics of Arterial, Collector and Local highways. Many of the roadways shown on the maps with classifications of collector or higher are state highways, however, there are some locally owned roads with collector or higher classifications.

Traffic Volumes

Figure 11.2 contains 2001 estimated Annual Average Daily Traffic (AADT) volumes for state highways in the Harrisburg Region. Many major roads in the county experience very high AADT’s that at times put a strain on the existing highway network and create congestion. In particular, portions of Interstate 81, Interstate 83, US 11/15, and PA 581 all experience over 50,000 AADT. Also, there are four bridges connecting the West Shore Area with the City of Harrisburg (I-81/George Wade Bridge, I-83/South Bridge, the Harvey Taylor Bridge, and the Market Street Bridge) and combined these four bridges carry roughly 208,000 vehicles per day between Cumberland County and Dauphin County. The I-83/South Bridge alone experiences an AADT of 103,000 vehicles per day, while the I-81/George Wade Bridge carries another 59,000 AADT.

Aside from the very high volume four and six lane limited access facilities, some of the two, three and four lane unlimited access roadways carry significant traffic volumes. A number of two-lane roadways carry volumes of over 15,000 AADT and include: PA 114 in Silver Spring Township and Mechanicsburg, Main (PA 641) and Simpson Streets in Mechanicsburg; Simpson Ferry Road in Lower Allen Township and Hampden Township, Sporting Hill Road in Hampden Township, Bridge Street in New Cumberland, Market Street in Lemoyne, Hanover Street in Carlisle, Walnut Bottom Road in Shippensburg Township, and King Street (US 11) in Shippensburg Borough. The Carlisle Pike, Camp Hill Bypass and U.S. 11/15 in East Pennsboro Township are the highest volume three and four-lane non-limited access roadways in the County.

Highway Mileage and Travel

Table 11.4 identifies highway mileage by owner in each of the Capitol Region's three counties for comparison purposes. Daily Vehicle Miles of Travel (DVMT) are also shown in the table and are a good indicator of the overall level of travel on the highway system.

**TABLE 11.4
HIGHWAY MILEAGE AND DVMT BY OWNERSHIP
TRI-COUNTY REGION - 2001**

| <u>Mileage by Ownership</u> | <u>Cumberland</u> | <u>Dauphin</u> | <u>Perry</u> |
|---------------------------------|-------------------|----------------|--------------|
| State | 556.1 | 557.8 | 419.5 |
| Other | 76.6 | 16.5 | 64.5 |
| Turnpike | 37.8 | 12.9 | 0.0 |
| Municipal | <u>1,214.0</u> | <u>1,277.8</u> | <u>601.8</u> |
| Total | 1,884.5 | 1,866.0 | 1,085.8 |
| DVMT | 7,269,664 | 8,166,979 | 1,533,272 |

Source: PennDOT.

Major Traffic Generators

Cumberland County contains a wide variety of traffic generators serving a number of different needs and populations. The most significant generators are within the Harrisburg Urbanized Area and the Carlisle and Shippensburg areas. The vehicle trips generated by these facilities vary in the kinds of vehicles (autos/trucks) and trip types (commuting, business, shopping, etc.). Some of the generators are individual businesses or facilities, while others are areas of numerous activities such as office parks or retail areas (shopping districts, malls and highway commercial strips).

In the County, some of the largest individual traffic generators include the Navy Inventory Control Point in Hampden Township (which generates over 20 thousand vehicle trips a day), Defense Distribution Region East facility (York County), East Pennsboro Office Area, Shippensburg University, and various shopping malls. Trucking distribution and warehousing facilities near I-81, US 11, and the Pennsylvania Turnpike generate significant volumes of truck traffic. The largest generator of out-of-County trips is Harrisburg's Capital Complex and central business district.

**TABLE 11.5
FUNCTIONAL CLASSIFICATION INFORMATION**

| | Arterial | Collector | Local |
|---------------------------|---|--|--|
| Sub-Classifications | <ul style="list-style-type: none"> ● Limited Access/Interstate ● Other Principal Arterials ● Minor Arterials | <ul style="list-style-type: none"> ● Major ● Minor | |
| Mobility vs. Access | Mobility of utmost importance equal importance | Mobility and land access of importance | Land access of utmost |
| Trip Distance | Typically used for longer trips (inter and intra-state, inter-region & longer intra-region & intra-county trips) | Short to medium distance intra-regional trips & for accessing arterial and local systems | Typically used for short trips and for accessing higher order systems |
| Traffic Volumes | Highest volume roadways; moderate to high volumes on most arterials | Moderate volumes in general | Low volume roadways |
| Design Features | Limited, partial and unlimited access controls; widest right-of-ways, cartways and shoulders; often 3 or 4 lane facilities | No access controls; moderate to minimum right-of-way, cartway and shoulder widths; often 2 lane facilities | No access controls; Minimum right-of-way, cartway and shoulder widths; often 2 lane facilities |
| Speeds | Typically 45-65 mph | Typically 35-45 mph | Typically 25 mph |
| Through/Local Travel | Minimal interference to through travel; local travel discouraged especially on limited access roads | Balanced through and local travel | Through travel discouraged; local travel encouraged |
| Relation to Other Systems | Most important connections with other arterials and collectors usually via grade separated interchanges or signalized intersections | Connects with Arterials and Locals: <ul style="list-style-type: none"> ● Collector/Arterial intersections often signalized ● Collector/Local intersections often stop controlled | Primarily connects with other locals and collectors <ul style="list-style-type: none"> ● Most intersections of locals with other roadways are stop controlled |

Source: Tri-County Regional Planning Commission.

Special Highway Networks

The National Highway System (NHS) is critical to the nation's mobility, economy, and defense (Figure 11.4). It was approved by Congress in December of 1995, as a provision of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). Criteria for selecting routes for the NHS included:

- provisions for interstate and international commerce
- national defense needs
- enhanced economic vitality and international competitiveness
- the provision of transportation services to all parts of the nation, and
- response to changing population and travel patterns

A significant proportion of Transportation Equity Act for the 21st Century (TEA-21, the 1998 successor to ISTEA) highway improvement funding is set-aside for the NHS. Key roadways that connect the NHS arterials with major defense and intermodal facilities (Lucknow and Rutherford Freight Yards, Harrisburg Transportation Center, etc.) were also made part of the NHS.

In addition to the National Highway System, PennDOT also designates Truck Access Routes for oversized trucks as required by Federal Surface Transportation Assistance Act of 1982. Approval of Truck Access Routes is a continuing process and PennDOT maintains up-to-date listings of approved routes.

Highway Design Standards

The best guide for developing and evaluating design standards for local roads and streets is PennDOT's Publication 70M: "Guidelines for Design of Local Roads and Streets", published on September 29, 2000.

Public Transportation

Capital Area Transit (CAT)

The Cumberland-Dauphin-Harrisburg Transit Authority, more commonly known as Capital Area Transit (CAT) was formed in 1973 to provide local bus service to the residents of the Harrisburg area. CAT currently has a fleet of 65 buses and two trolleys that serve the Harrisburg area and parts of 26 surrounding municipalities. Twenty-seven local routes and three express routes are currently operated. In Fiscal Year 2002, CAT carried almost 2.2 million passengers, down from four million in FY 1987. Approximately 20% of riders are from Cumberland County.

Downtown Harrisburg is the hub of the CAT system, which serves eastern Cumberland County with 13 routes (Figure 11.3). The routes extend as far west as Carlisle (the Route C series) and Mechanicsburg (the Route M series). In addition to the fixed route service centered in Harrisburg, CAT also provides administrative support for the Raider Regional Transit service in Shippensburg.

This service, operated by Wolf Bus Lines, runs Monday through Saturday during the University School Year and runs Tuesdays and Thursdays during modified schedule, non-school year periods, and serves both Shippensburg University and the surrounding community.

Within CAT's service area in Cumberland County, there is an approximate population of 80 thousand persons, which represents about 38% of the County's population.

One of Cumberland County's transportation responsibilities is the funding of a share of CAT's operations. In 2003 the County budgeted \$229,888.00 in support of CAT's operations. This contribution subsidized CAT's operations in Cumberland County by approximately .52 cents per County rider. Dauphin County and the City of Harrisburg are the other local supporters of CAT. A long term funding agreement for mass transit service is currently being considered by the supporters of CAT. The agreement would require Cumberland County to contribute an annual amount of \$218,888.00 for several years. In return, CAT would provide enhanced mass transit services for County residents.

CAT serves eight park and ride facilities in the County. These free parking areas primarily serve commuters who work in downtown Harrisburg and attract those who want to avoid paying significant daily fees for downtown parking.

People who use CAT buses can pay for a single one-way ride, buy multi-ride passes, or buy a monthly pass. In 2003, the single, one-way fares cost \$1.50 (Zone 1), \$1.85 (Zone 2), or \$2.20 (Zone 3). All bus stop locations within Cumberland County are within Zone 1, with the exception of stops on Route C – Carlisle, which includes the area west of PA 114. Stops in these locations are either in Zone 2 or Zone 3. Eleven and 25-ride tickets are available, which provide a discount from the normal one-way bus fare. Monthly passes are also available, and allow riders who purchase a pass to take an unlimited number of rides during a given month. The cost of the monthly passes ranges from \$40 in Zone 1 to \$60 in Zone 3. There are also a number of programs CAT sponsors to help boost and encourage transit ridership. They include Transitchek, a senior citizen program, Special Efforts Transportation, and a guaranteed ride home program, the last of which is based upon an employer paying for their employees' monthly CAT bus pass. Transit surveys in the past have indicated that Cumberland County bus riders would like the system to better serve some trips from one community to another within the County, along with longer hours of service. CAT is reviewing areas of need and opportunities to provide trips between communities.

Regional Commuter Rail Service

In recent years CAT has also examined the viability of introducing commuter rail service in the Harrisburg area. The first proposed rail line, called *CORRIDORone*, would run from Carlisle to Lancaster through Harrisburg (Figures 11.3 and 11.4). *CORRIDORtwo* was also identified and would link York, Hershey, and Lebanon. If ridership on *CORRIDORone* demonstrates a use of the rail service, future requests could be made to expand the regional service with *CORRIDORtwo*. CAT unveiled the Modern Transit Partnership (MTP) in July 1997. The MTP is a non-profit organization created to raise local funds and promote public awareness of regional rail and its benefits. Modern Transit Partnership's mission statement is to support and promote public

transportation, with the ultimate goal of bringing commuter rail service to the region.

In July 1998, CAT began a Transportation Investment Study (TIS), which examined existing and projected transportation problems and identified alternatives. Regional rail was selected as the local preferred alternative to congestion. This project is identified as *CORRIDORone*, the 54-mile corridor linking Harrisburg with Carlisle and Lancaster.

Upon completion of Transitional Analysis in July 2002, a Minimum Operating Segment (MOS) was identified from East Mechanicsburg to Lancaster via Harrisburg. This initial 41-mile segment is the first phase of *CORRIDORone* and the extension to Carlisle is phase two. After approval by the CAT Board the transitional analysis was submitted to the Federal Transit Administration (FTA) for funding and the project was included on the Transportation Improvement Program.

In 2003, CAT chose a consultant and moved into Preliminary Engineering and Environmental Services. CAT expects *CORRIDORone* to begin service in late 2005.

Paratransit and Taxi

Cumberland County Transportation Department (CCTD) provides shared-ride paratransit service to the residents of Cumberland County. The service is supplied Monday through Friday, from 8:00 AM to 4:30 PM, provided that notification is given for a ride prior to 12 PM the previous day. CCTD operates thirty-two vehicles (vans), and most are equipped to accommodate wheelchairs. Forty-five percent (45%) of the system's riders are non-disabled elderly, while the other 54% of the riders are either physically or mentally handicapped, or require some sort of medical assistance. Funding for the rides comes from a variety of sources, including PennDOT, via the Pennsylvania State Lottery Fund, the Cumberland County Office of Aging, the Cumberland/Perry Mental Health Retardation program, and the Pennsylvania Department of Public Welfare.

Transportation is provided to and from all points within the County and to medical destinations outside of the County, including Hershey Medical Center and Chambersburg Hospital. The most recent information available indicates CCTD provided approximately 525 one-way trips per weekday, and a total of 135,298 one-way rides between July 2001 and June 2002.

There are also several taxicab and limousine service providers who offer service to Cumberland County residents. The providers supply transportation to many points both within and outside of Cumberland County. Service is available 24 hours a day and can be used by contacting a provider. Cost rates are established through PUC regulations and vary by time and length of trip.

Intercity Bus Services

Two intercity bus companies provide service within Cumberland County, connecting the county to other areas within and outside Pennsylvania. Capitol Area Trailways provides daily service (one bus per day in each direction) between Harrisburg and Hagerstown, stopping at three locations within the county. Two of the stops are in the Carlisle area, one at the Pilot Travel Plaza just east of the I-

76/US 11 interchange, the other on US 11 on the Dickinson College campus. In the Shippensburg area, Capitol Area Trailways stops at J&J Computers, located on US 11 in downtown Shippensburg.

Only two of the three county stops have on-site ticket service available; the Dickinson College stop is a “flag stop”, meaning buses will not stop at the bus stop location unless someone indicates he/she wants to get on or get off the bus. Greyhound also provides intercity bus service to the county, stopping in the Carlisle area at the Pilot Travel Plaza on selected Harrisburg to Pittsburgh routes (two buses per day in each direction).

In addition to the bus stations/stops within Cumberland County, there is a major intercity bus station in downtown Harrisburg. Located at the Harrisburg Transportation Center, the station serves as a hub for Greyhound, Capitol Area Trailways, and Fullington Trailways. Between the three intercity bus providers, Harrisburg receives direct service with no required transfers to and from large markets such as Philadelphia, New York, Baltimore, Washington, and Pittsburgh, and also receives service to and from smaller markets such as York, Lancaster, Lebanon, Reading, Allentown/Bethlehem/Easton, Pottsville, Hazleton, Scranton/Wilkes-Barre, Sunbury, Williamsport, Lewistown, State College, Chambersburg, and Hagerstown.

Passenger Rail Services

Though Cumberland County does not currently receive interregional rail service, the national passenger railroad Amtrak does provide service to the Harrisburg area. Amtrak serves the Harrisburg area with two train stops, one in Middletown, the other at the Harrisburg Transportation Center in downtown Harrisburg. Harrisburg is the western terminus for Amtrak’s Keystone Corridor trains, which provide extensive weekday and weekend service between Harrisburg, Lancaster, Philadelphia, and New York. Amtrak runs nine weekday and four weekend Keystone Corridor trains in each direction between Harrisburg and Philadelphia’s 30th Street Station; most of these trains also provide service to and from New York’s Penn Station. In both Philadelphia and New York, passengers can transfer from the Keystone Corridor trains to other trains that run along Amtrak’s Northeast Corridor. Amtrak provides its most extensive national service in this section of the country, running dozens of trains each day between Boston and Washington, DC and various locations in between.

Most Keystone Corridor trains also stop at the Middletown station, currently located near the intersection of Union and Mill Streets in Middletown. By the middle of the 2000’s decade, the Middletown station will be moved westward to a location next to PA Route 230 just north of the Harrisburg International Airport. It is expected this station will promote increased intermodal transportation between Amtrak, CAT, and Harrisburg International Airport (HIA) after it opens. CAT’s *CORRIDORone* will also utilize this station when it starts operation, allowing Cumberland County riders to access HIA via passenger rail.

In addition to the Keystone Corridor trains, Harrisburg also receives service from two other trains in the Amtrak system, the Pennsylvanian and the Three Rivers. Each train makes one daily stop in each direction at the Harrisburg Transportation Center. The Pennsylvanian runs between Pittsburgh and New York, while the Three Rivers provides service between New York and Chicago. These two trains augment the service provided by the Keystone Corridor trains between Harrisburg,

Philadelphia, and New York, while also providing the only passenger rail service between Harrisburg, Altoona, Johnstown, Pittsburgh, and Chicago. None of the Pennsylvania or Three Rivers trains currently stop at the Middletown station.

In recent years, ridership totals on the Keystone Corridor trains have steadily increased as more people have gained an understanding of the positive benefits of passenger rail travel. To help improve service on the corridor, Amtrak is planning to upgrade the trackage along the corridor between Harrisburg and Philadelphia by 2004. The track upgrades will allow Amtrak to replace the existing Keystone trains with its higher quality Acela Regional trains, which can travel at higher speeds and provide a smoother ride than existing trains. When introduced on the Keystone Corridor, it is expected the new trains will cut travel time between Harrisburg and Philadelphia by 25%, from 2 hours to roughly 1 hour, 30 minutes.

Amtrak currently receives federal subsidies to help it operate, but the amount of subsidies it receives may not be sufficient for the railroad to continue operations. If Amtrak cannot continue its operations, it is unclear what will happen to the passenger rail operator or to its routes. Amtrak owns the rail right-of-way for some of its routes, including the critical Northeast Corridor and the Keystone Corridor between Harrisburg and Philadelphia. At least portions of the Amtrak system will remain in operation but it is uncertain who will operate those portions of the system. PennDOT currently partially subsidizes the operation of the Keystone Corridor trains, which may help support the continued use of that corridor.

Aviation

Two major airports, Harrisburg International Airport (HIA) in Lower Swatara Township, Dauphin County and Capital City Airport (CCA) in Fairview Township, York County, serve the Tri-County Region. HIA is south central Pennsylvania's primary passenger and air freight facility, while CCA provides general aviation services. Since January 2, 1998, both HIA and CCA have been owned and operated by the Susquehanna Area Regional Airport Authority (SARAA).

Harrisburg International Airport is currently Pennsylvania's third largest commercial airport in terms of passenger enplanements (the number of passengers who fly from a given airport). Located about 1.5 miles west of Middletown Borough, Dauphin County, HIA is situated on an approximately 800-acre site adjacent to the Susquehanna River. Most major U.S. airline carriers or their subsidiary regional carriers serve the airport. Carriers providing service include American, Continental, Delta, Northwest, United, and US Airways. One Canadian airline, Air Ontario, also provides international flights between Harrisburg and Toronto, Canada. HIA functions as a spoke in the typical airline hub and spoke network. Flights arriving to and departing from HIA usually fly between Harrisburg and one of the airline's hub airports/cities (such as USAirways flying between Harrisburg and both Philadelphia and Pittsburgh, or United Airlines flying between Harrisburg and both Chicago O'Hare and Washington Dulles). Passengers can then connect with other national and international flights at those hub airports to fly to other locations.

The airport has a single, concrete runway, 9501 feet long and 200 feet wide. Air traffic is controlled by an FAA air traffic control tower, which is attended 24 hours a day. HIA also has a U.S. Customs

facility to handle international activity. In the mid-1990's, improvements to HIA included a rehabilitation of the runway, the installation of a de-icing facility, and expansion of the terminal. More recently in early 2002, SARA announced they are planning on building a new, expanded terminal to replace the existing terminal, constructed in 1986. The new terminal will function in a more efficient manner than the existing terminal, allowing passengers to access their flight gates more quickly. The new terminal will also be connected via walkways to the proposed HIA Rail Station, which will be located just north of the airport.

Located in Fairview Township, York County, Capital City Airport functions as a reliever airport for Harrisburg International Airport. The airport is designed to handle excess aviation operations that would overburden or create safety hazards at HIA. Unlike HIA, CCA has two runways. The primary runway is 5001 feet long and 150 feet wide, while the secondary runway is 3925 feet long and 100 feet wide. CCA handles many of the private corporate and charter aviation operations that occur in the Harrisburg area. Aircraft maintenance services and flight instruction classes are available at CCA. A master plan for CCA was prepared, outlining the goals for the airport until 2020.

Cumberland County contains two public use airports located near Carlisle and Shippensburg. The Carlisle Airport is more heavily used. It is a privately owned facility located southeast of the borough of Carlisle. The airport has a single paved runway that is 4030 feet long and 40 feet wide. Carlisle Airport serves many corporate and general aviation operations. Airplane and helicopter flight instruction are also available at the airport. The Cumberland County Transportation Authority has attempted in recent years to become more involved with the airport, trying to increase the benefits the airport brings to the Carlisle area and Cumberland County.

The other public use airport in Cumberland County is the Shippensburg Airport, located about three miles east of Shippensburg Borough in Southampton Township. Shippensburg Airport is privately owned, but unlike Carlisle Airport, Shippensburg Airport has an unpaved grass surface runway. The runway is 2300 feet long and 170 feet wide. Shippensburg Airport has only very limited aircraft services available on site.

Intermodal Facilities and Planning

Freight Rail Services

Norfolk Southern (NS) provides extensive service within Cumberland County. It is one of the country's six national-level Class I rail freight operators, with three active rail lines that combined have approximately 70 miles of rail right-of-way within the county. The Harrisburg area is a major hub within the NS system. Two of the three active lines are significant rail lines within the NS system, connecting the Harrisburg region to other parts of the country.

The most prominent rail line, the Enola Line, runs north/south in eastern Cumberland County, adjacent to the Susquehanna River. It provides connections both to the west, in Pittsburgh and Chicago, and also to the north, in Buffalo. This line is multi-tracked (i.e. contains multiple rail lines), allowing a high volume of movement along the line. The Enola Yard is a major rail yard and is located along the line in Cumberland County. The yard is a major sorting hub for various materials

being shipped by rail along the line.

Another prominent line, known as the Lurgan Branch, runs southwestward through the Cumberland Valley paralleling Interstate 81 to the highway's south. The Lurgan Branch connects the Rutherford Intermodal Yard, just east of Harrisburg, with cities to the south such as Hagerstown, Roanoke, and Atlanta. The Lurgan Branch is a significant rail line within the NS system, but it is a single-tracked line. Trains traveling in opposite directions must use rail sidings (a location where a rail line is briefly double-tracked for capacity and maintenance purposes) in order to pass another train.

The third NS line within Cumberland County is a localized rail line, called the Shippensburg Secondary. It runs between Harrisburg and Carlisle and is connected to the Enola Line. Many local manufacturers along the line ship products to and from the Enola Yard for sorting and shipping purposes. At one time the Shippensburg Secondary ran parallel to the Lurgan Branch from Harrisburg to Hagerstown. However, west of Carlisle the rail line has now been abandoned. Various recreational uses, including bike/pedestrian trails, have been constructed in the rail right-of-way. The Shippensburg Secondary is the corridor proposed for Capital Area Transit's *CORRIDOR*one commuter rail line.

Although not contained within Cumberland County, NS does have two major intermodal yards within the Harrisburg area. These nodes impact freight traveling patterns within the county and the region. The Rutherford Intermodal Yard is located in Swatara Township, Dauphin County and the Lucknow Intermodal Yard is located in the city of Harrisburg. These two yards make Harrisburg one of Norfolk Southern's three major intermodal hubs. Chicago and Atlanta are the other two.

A considerable amount of rail traffic from the Rutherford Yard travels along the Lurgan Branch between Harrisburg and Hagerstown. Much of the traffic enroute to the Lehigh Valley, New York area, and Philadelphia area also uses this hub as well. The Lucknow Yard is a major hub for east/west traffic. Tracks running north from the yard connect up with the Enola Line north of Harrisburg, allowing traffic from the Lucknow Yard to access places such as Pittsburgh and Chicago. The yard also is connected with Northeast Corridor freight lines via track running between Harrisburg and Perryville, MD.

In addition to the rail freight service provided by Norfolk Southern, the Gettysburg Railroad is another much smaller railroad that provides regional service within the county. This privately owned railroad provides freight and tourist service between Mount Holly Springs and Gettysburg.

Intermodal Facilities Inventory

In the mid 1990's, HATS inventoried the existing intermodal facilities within the Harrisburg area. The focus of the inventory was to not only identify major intermodal facilities within the area but also to identify the connector roads from each facility to the National Highway System. HATS continues to focus on improving the roadway and pedestrian accessibility of these facilities. There were eleven facilities identified, their names and locations are listed below:

- Harrisburg Transportation Center – City of Harrisburg, Dauphin County

- CAT Transfer Center – City of Harrisburg, Dauphin County
- US 11 Truck Terminals – Middlesex Township/Carlisle Area, Cumberland County
- Lucknow Intermodal Yard – City of Harrisburg, Dauphin County
- Rutherford Intermodal Yard – Swatara Township, Dauphin County
- Harrisburg International Airport – Lower Swatara Township, Dauphin County
- Capital City Airport – Fairview Township, York County
- Carlisle Airport – South Middleton Township, Cumberland County
- Millersburg Ferry – Millersburg Borough, Dauphin County and Buffalo Township, Perry County
- Defense Distribution Region East (DDRE) – Fairview Township, York County
- Naval Inventory Control Point (NAVICP) – Hampden Township, Cumberland County
- US Army War College, Carlisle Barracks – North Middleton Township and Carlisle Borough, Cumberland County

To see where each of the intermodal facilities is located (with the exception of the multi-site US 11 Truck Terminals), please refer to Figure 11.4.

Bicycle/Pedestrian

Although not as prominent as other modes of travel, bicycle and pedestrian modes make up an important part of the county’s transportation system. People walk and ride for work-related, general transportation, and recreational purposes. Both bicycle and pedestrian transportation concerns need to be taken seriously and adequately addressed. Bicycle/Pedestrian routes and facilities are shown in Figure 11.5.

HATS implemented a Bicycle/Pedestrian Transportation Plan in February 2001. The plan was an amendment to the 1999-2020 Transportation Plan. It replaced the 1997 HATS Bicycle/Pedestrian Transportation Plan. The 2001 plan identifies a short list of specific, “achievable” projects/goals that are visible in nature, are regional in scope and promote significant positive impacts.

There were four projects/goals identified in the 2001 plan, all of which are located in Cumberland County. The projects/goals include improving connectivity between Harrisburg and the West Shore, administering a bicycle/pedestrian study for the West Shore, improving the roadway shoulders on PA 641 between Carlisle and Camp Hill, and studying multimodal transportation connections between greenways in the Cumberland County Greenway Plan. To improve connectivity between Harrisburg and the West Shore, the Peoples Bridge Coalition was established to organize support for restoring the western span of the Walnut Street Bridge. This pedestrian bridge was severely damaged during a flood in 1996.

In addition to the specific projects/goals mentioned in the plan, there are also a number of general improvements that can be done to enhance bicycle and pedestrian transportation in the county. Some of these general improvements include widening roadway shoulders on many roads, improving roadway sight distance where applicable, and implementing traffic calming measures where appropriate. Some of these improvements can be implemented as part of regular Transportation Improvement Program (TIP) highway projects.

There are a number of funding sources that can be used to help fund bicycle/pedestrian projects. The most significant funding source, the Transportation Enhancements (TE) Program, is dedicated to helping fund “non-traditional” surface transportation projects, including bicycle/pedestrian projects.

Relevant HATS/PennDOT Studies

HATS Transportation Plan 1999 (Bike/Pedestrian Element – 2001)

HATS Congestion Management System – 1995 (scheduled to be updated by 12/31/02)

Harrisburg Intelligent Transportation System Early Deployment Study – 1998-99

CAT Short Range Transit Plan – Annual Updates

CORRIDOR*one* Transportation Investment Study - 2002

Cumberland/Perry County Safety and Congestion Management Study – 2002

Interstate 81 Exit 44 (formerly Exit 12) Congestion Management Study – 2000

Third/Market Street Lemoyne Congestion Management System Study – 1996