

**TRANSPORTATION PLAN****INTRODUCTION**

Perry County's transportation network has had a large impact on the cultural, economic, and social characteristics of the County and will continue to in the future. It is important that the transportation network support the existing community infrastructure already in place, and that it facilitate the kind of development that enhances, rather than detracts from, the County's character. Perry County has a significant variety of development patterns, ranging from moderate-density suburban development in parts of the southeastern and south central portions of the County to rural, very low-density development in the northern and western parts of the County. The transportation network must fit the kind of development that exists in a given location. Overall, Perry County's existing transportation network fits the character of the different parts of the County, but continued planning must ensure that this is still the case in the future.

Perry County contains a number of different transportation modes that serve the County's residents, workers, and visitors in a variety of different ways. The County's well-developed highway network supports significant private car and tractor-trailer traffic, the most important transportation modes in the county, and easily allows people to get to where they want or need to go. This highway network carries people to a variety of destinations within the County, to other nearby destinations such as Harrisburg, and to major regional destinations as well, such as Philadelphia, Baltimore, MD, Washington, DC, Pittsburgh, and New York, NY. Major highways, such as U.S. Route 11/15 and U.S. Route 22/322, have helped make Perry County a gateway between the more populated, higher-density Harrisburg area and the East Coast, and the more rural and mountainous central Pennsylvania portion of Appalachia. However, these roads comprise only a small percentage of the overall highway network in the county. Other state and municipal roads, while not as important for transportation in a regional sense, still play an important role for regional and local transportation. The region's highways not only support private car and tractor-trailer traffic but support public transit as well.

Non-highway modes also play a major role in the County's transportation system. Freight rail services provided by Norfolk Southern make the County significant in the regional and national freight rail system. Passenger rail services, currently provided by Amtrak in Harrisburg, provide greater modal flexibility for people taking regional and inter-regional trips. Aviation services, provided at multiple airports located outside the County, allow people to travel for commercial, business, and general purposes. Finally, bicycle/pedestrian transportation plays an important role, both for non-motorized transportation and recreational purposes.

Perry County's location along major corridors for multiple modes of transportation, especially highway and rail goods movement and distribution, makes it an important component in the regional and national transportation network. It is critical that the County's existing transportation infrastructure be sufficiently maintained and improved to allow the County to continue to play an important role in the regional and national transportation network. Efforts should be made, to insert Perry County officials into inter-agency discussions and decision-

making processes affecting the transportation modes most prominent in the County, especially highway and rail goods movement and distribution. Care should be taken to ensure a proper balance is met between national and regional transportation needs and local community interests. Only if the proper balance is met will Perry County continue to serve as an important transportation network component while also functioning as a desirable and attractive community for its residents and workers.

All the modes mentioned above are examined in depth in this chapter. The sections presented here highlight the transportation-related challenges that the County faces, as well as the opportunities that exist for pursuing improvements for the existing transportation system.

### **HIGHWAY (CAR/TRUCK)**

Highway transportation is the most important mode of transportation in Perry County. Most of the people living within or traveling through the County use the County's extensive highway network. The County also occupies an important place in the region's highway network for a variety of reasons. At a local and regional level, Perry County's highways function as a northwestern gateway into the City of Harrisburg, a center for government, business, and industry in south central Pennsylvania. At a national level, the County's highways help provide a significant link between the East Coast/Mid-Atlantic region and the Eastern Great Lakes region; U.S. Route 11/15 and U.S. Route 22/322 are particularly important highways in a regional and national sense. Both U.S. Route 11/15 and U.S. Route 22/322 also connect to other regionally and nationally important roads in the Harrisburg area. The region's crossroads position has made it a prime location for a variety of transportation-related activities, especially as a center for the distribution of goods via tractor-trailers.

Highway transportation planning represents the most significant mode for transportation planning falling under the jurisdiction of the Harrisburg Area Transportation Study (HATS). Essentially all major highway projects in the Harrisburg area are funded through the HATS Transportation Improvement Program (TIP). The TIP is a four-year program in which federal and state funds are used to implement various improvements to highway and transit-based transportation systems. A well-organized planning process is critical from the start because overall there are a large number of necessary transportation improvement projects and a limited amount of funds to support them. HATS now ranks projects based on a variety of federal regulations and planning factors, as well as regional and local planning factors, to try to ensure the most important and viable projects receive funding. Perry County is represented on HATS, and therefore has a voice in trying to address the County and Region's transportation needs and issues (through voting to fund specific projects).

### **Highway Issues and Needs**

The County's highway network has a variety of needs and issues that must be addressed in order for the network to continue to work in an efficient manner. They include:

*Sprawl/dispersed land use:* Like many other places, Perry County continues to experience population stagnation in long developed core areas of the County and persistent growth in

previously less developed portions of the County. This kind of growth puts a strain on the County's existing infrastructure, including its transportation infrastructure, because more travelers are driving by car further distances, requiring that new or enlarged roads be constructed. The longer trip lengths also lead to more traffic congestion on a larger portion of the transportation network. Funding is usually limited to reconstructing or rehabilitating existing roads, so congestion issues often cannot be adequately addressed. Other transportation options, such as public transit use or bicycle/pedestrian use, are also discouraged by dispersed land uses.

*Lack of mixed-use development:* Much of the development that has occurred in recent years in Perry County has been segmented, with residential, commercial, and industrial development separate. Traditional town or village-like development has often been unintentionally discouraged in growing suburban and rural municipalities through the administration of local land use controls. Although non mixed-use development protects incompatible uses from one another, it also forces people to use their cars for a higher percentage of their trips and discourages non-automobile forms of transportation.

*Growing tractor-trailer traffic and car/truck mixing:* Although Perry County does not experience as high a volume of truck traffic as Cumberland and Dauphin Counties, it does experience considerable truck traffic, especially on U.S. Route 11/15 and U.S. Route 22/322. According to PennDOT Bureau of Planning and Research data, approximately 15,000 to 20,000 vehicles use either road per day, and roughly 20% of the traffic on U.S. Route 11/15 north of Duncannon and 15-20% of the traffic on U.S. Route 22/322 is truck traffic. Some of this truck traffic travels to and from locations within the county, but according to the South Central Pennsylvania Regional Goods Movement Study, most of the traffic is generated either by distribution-related development in the Harrisburg/Carlisle area or interregional traffic traveling between locations north or northwest of Perry County and locations along the U.S. Northeast Corridor. The higher number of trucks, combined with the higher passenger car volumes, creates significant car/truck mixing issues, especially in terms of safety and congestion.

*Poor road design and access management:* Many roads in Perry County have design aspects that are substandard, and create safety hazards and in some cases congestion because of their design. Low volume and/or rural roads in the County often have narrow or non-existent shoulders or have poor horizontal or vertical sight distance. These roads reduce safety for both automobile and non-automobile travelers. Some higher volume roads also have design issues, often related to poorly controlled access. Many intersections within the County, such as the PA Routes 34/PA 850 intersection in Shermans Dale and various intersections located within the County's larger boroughs, have stop sign controls rather than traffic signal controls. Non-signalized controls are often inadequate for higher-volume intersections, which are becoming more common in Perry County as population growth continues. Other roads, more specifically U.S. Route 11/15 north of Duncannon and U.S. Route 22/322 immediately west of the Clarks Ferry bridge (the latter of which is in Dauphin County but has a much greater impact on Perry County), are designed to handle high-speed traffic but also have many access points. Although both roads have dedicated turning lanes at these access points, the multiple access points combined with the high traffic speeds reduces the safety of the road.

In addition to the individual road design issues, there are also road network design issues. The road network issues are often tied to a lack of road redundancy, which reduces the number of roads drivers can use to reach their destinations and creates more congestion on the roads that are available. The lack of road redundancy can also hinder emergency response. The lack of adequate roads connecting southeastern Perry County with the Harrisburg area, due to natural and physical constraints, is one such example.

*Unsafe drivers:* Many passenger car and tractor-trailer motorists drive in an unsafe manner, creating a safety hazard for other people using the road. In many cases motorists are driving above the posted speed limit, even during high volume times, increasing the odds for a traffic accident. Some drivers also tailgate or follow other drivers too closely, not allowing them to react in time should those in front of them need to slow down.

## HIGHWAY RECOMMENDATIONS

The highway transportation issues/concerns listed above can be addressed by various County policies, allowing the County to take a leading role in improving its highway network. In some cases the County can partner with other entities, such as its municipalities, to achieve results that benefit everyone involved. Specific recommendations include:

1. ***Encourage in-fill development/discourage sprawl development:*** Perry County can meet this goal by working with its municipalities to ensure there is consistency between the County's planned growth areas and the municipalities' zoning and future land use maps. In cases where there is inconsistency, the County and municipality should work together to address the inconsistency and understand the consequences of allowing certain kinds of development in various locations. By encouraging in-fill development and discouraging entirely new development in inappropriate locations, the County will assist Capital Area Transit and other transit providers by allowing their systems to have the ability to reach a higher number of people, due to higher population density. Discouraging sprawl development will also help preserve the County's open space and farmland areas, an important natural resource for the County.
2. ***Encourage mixed-use development:*** Perry County can also meet this goal through working with its municipalities to create zoning areas that facilitate mixed land uses in close proximity to one another. Obviously incompatible uses should not be forced to be located next to one another, but many uses often discouraged from being located next to one another, such as smaller-scale commercial developments and residential developments, could be located in close proximity to one another. Allowing mixed-use, non-segmented development will allow people more transportation mode choices, such as walking, bicycling, or using public transit, to obtain many goods and services, rather than forcing people to always have to drive to purchase those goods and services.
3. ***Use information obtained in the South Central Pennsylvania Regional Goods Movement Study to address truck traffic-related concerns:*** The Regional Goods Movement Study, which included Perry County as part of the study area, provided significant, valuable information about goods movement patterns within the County and

the greater Harrisburg area. The data will allow the County to better plan where to locate both distribution-based and commercial/residential development and also to ensure the negative traffic impacts the two kinds of development have on each other are minimized. In planning for goods movement-related development, it must be understood that tractor-trailer and other large truck traffic, (critical to the timely and cost effective delivery of goods) will continue to increase in the future. The traffic itself is validation of a healthy economy. The Region's excellent relative location and highway network will continue to make it a target for distribution-based development.

Distribution centers usually locate in areas that are easily accessible to limited-access highways, are easily accessible to the markets they serve, and have compatible zoning, among other factors. Perry County has no control and limited influence over the first two factors listed, but along with its municipalities does have control over its land use regulations. Therefore, the County and its municipalities can determine where these centers should and should not be located. The County and its municipalities can also promote various kinds of commercial and residential development at locations where car/truck mixing can be minimized.

4. ***Improve poorly designed highways, intersections, and interchanges:*** Through its representation on HATS, Perry County can work to ensure these projects are included on the HATS TIP. In some cases, highway projects initiated by PennDOT to be included on the TIP might impact a portion of a road the County wants to have improved in some way (such as wider shoulders on a particular road) that is not initially included as part of the PennDOT project scope. The County should work with PennDOT through their mutual representation on the HATS Committees to ensure that proposed projects are undertaken and addressed in consideration of all PennDOT, County, and municipal transportation issues.

Perry County has already taken steps to address some of the major highway issues within the County. The County and thirteen (13) of its municipalities participated in the Cumberland/Perry Joint Task Force Study, which examined congestion, safety, and land use issues in southeastern Perry County and northeastern Cumberland County. The study identified the most critical areas of need within the counties and recommended various improvements in those areas. More specifically, PA Route 34 between Sunnyside Drive and Rambo Hill Road and US Route 11/15 between PA Route 274 and Interstate Highway 81 were identified as the highest need areas. Other portions of PA Route 34 and US Route 11/15, as well as portions of PA Route 274 and PA Route 849, were also identified as needing improvements. Perry County officials should work through HATS to ensure that at least the highest priority needs identified in the study get addressed.

5. ***Implement Intelligent Transportation Systems (ITS) technologies:*** ITS technologies are designed to make existing highways operate more efficiently. Some technologies have already been implemented in the HATS area. These technologies should be implemented in the future in Perry County to alleviate the need for high-cost, large-scale roadway improvements. Operational improvements such as traffic signal coordination, Variable Message Signs (VMS), and Highway Advisory Radio (HAR) can help make traffic flow

more smoothly and provide critical information to the public more quickly. Incident management improvements such as Closed-Circuit Television Cameras (CCTV) and Traffic Operations Centers (TOC) can help better monitor traffic, allowing quicker response to emergency or congestion-related incidents. Like other TIP projects, the County can ensure through its representation on HATS that ITS technologies are considered as a way to help alleviate transportation congestion.

6. ***Improved traffic law enforcement:*** Perry County officials should continue to work with state and local police to ensure that traffic laws are more strictly enforced, and unsafe drivers are more closely monitored. This will make highways safer for all drivers and could also reduce congestion by reducing the number of accidents.
7. ***Ensure locally initiated projects get on the TIP:*** Perry County officials should continue to work with its municipalities to get their input on potential TIP projects. To facilitate this, the County should educate municipalities as to what is required in a TIP application and planning process, including what HATS' role is, and in some cases, assist in preparing TIP project applications - particularly with municipalities that usually do not need transportation improvements. Municipal officials often have the best idea of what are the biggest transportation issues are within their borders, so allowing them to have a voice in addressing these problems will allow them more control over potential improvements (and allow County officials to get a better idea of what the local concerns are).

## TRANSIT

Public transit is a relatively minor transportation mode in Perry County, primarily due to the County's rural character and relatively low population. However, the County's existing transit system does provide an important service to some County residents and there may be a need to upgrade this system in the future, if the County's population grows. The primary transit service provided in the County is provided by the Perry County Transportation Authority (PCTA), which provides demand/response paratransit and welfare-to-work service throughout the County. Capital Area Transit (CAT), the primary fixed-route transit provider in the Harrisburg area, currently does not provide any service within Perry County, though it has provided service to Marysville in the past. Perry County residents have the opportunity to use CAT buses by using one of CAT's Park and Ride locations in Cumberland and Dauphin Counties. The Park and Rides allow riders to avoid paying downtown parking fees.

By contrast, some intercity bus service is provided within the County. Both Fullington Trailways and Greyhound provide service along the US Route 22/322 corridor between Harrisburg and Lewistown/State College. Fullington Trailways has stops in or near Millerstown, Newport, and Duncannon, while Greyhound provides partial service to Millerstown on one of its Harrisburg to State College routes. There is also potential for inter-city rail service within the County; Amtrak's Pennsylvanian and Three Rivers routes pass through Perry County, though neither route currently provides a stop within Perry County.

Like highway transportation planning, funding for local public transit planning (CAT and PCTA) largely falls under HATS' jurisdiction. Almost all CAT projects are funded through the HATS Transportation Improvement Program, and because transit funds are limited, it is important that a thorough planning process is followed to ensure CAT receives the most improvements it can receive. As with highway projects, HATS uses a variety of federal regulations and federal, regional, and local planning factors to objectively rank a project's importance to the Region. Perry County's representation on HATS better ensures that the County's transit needs will be met.

By contrast, most inter-city bus planning is either conducted privately by the bus company, or is coordinated between the state and the bus operator-with little HATS involvement. Most inter-city bus routes are inter-regional in nature, so local involvement is not as important for these operations. Amtrak is funded directly by federal allocation and the fares they receive for their operations, so again, there is little HATS involvement. Still, HATS and Perry County should maintain regular correspondence with these agencies and be aware of their operating needs.

### **Transit Issues and Needs**

The County's transit service has a number of needs and issues that need to be addressed to ensure it can continue to operate in an efficient manner. They include:

*Sprawl/dispersed land use:* Low-density land uses make it harder for a transit system to operate efficiently, because it means buses need to take longer routes on average to pick up the same number of people that could be picked up in a more densely populated area. Dispersed land uses also increase the likelihood that riders will need to walk, bike, or drive further to reach a bus stop. Both of these factors discourage many potential transit users.

*Lack of mixed-use development:* Segregated land uses separate different types of land uses (residential, commercial, industrial, etc.) from one another, limiting transportation options and increasing people's reliance on the private car while decreasing the effectiveness of public transit options. A related issue, non-downtown based jobs, particularly inhibits CAT's efficiency, as their hub-and-spoke designed system cannot meet the needs of most people whose jobs are not located in downtown Harrisburg or other traditional downtown communities.

*Lack of existing local CAT bus service within the County:* Though a large percentage of Perry County workers are employed outside the County, primarily in the Harrisburg area, and a portion of the county is within the Harrisburg Urbanized Area, the County currently does not receive any CAT bus service. Service to Marysville was discontinued in 2001 due to low ridership. Perry County will continue to grow in the future, but its lack of larger boroughs and accompanying commercial centers will mean that a majority of County residents will continue to work outside the County that could benefit from improved transit service.

*Poor connection to existing inter-city public transit service:* Perry County contains two (2) major transportation corridors (the Juniata River corridor and the Susquehanna River corridor) and both contain major inter-city public transit routes. However, some of these routes do not provide stops in Perry County. Within the Juniata River corridor, Amtrak's Pennsylvanian and

Three Rivers routes operate between Harrisburg and Lewistown but do not stop anywhere in the roughly 60-mile stretch between the two communities. Within the Susquehanna River corridor, Capitol Trailways operates one bus per day in each direction that travels between Harrisburg and Selinsgrove, but the buses do not stop anywhere in the approximately 50-mile distance between the two population centers. The lack of stops within or near Perry County inhibits the ability of County residents to use inter-city public transit.

### TRANSIT RECOMMENDATIONS

The transit issues/needs listed above can be addressed through various County policies. The County can also work with both its municipalities and area transit providers to better ensure that providers' systems operate in an efficient manner, benefiting those who live and/or work in the County. Specific recommendations include:

1. ***Encourage transit-oriented development:*** Perry County can work towards this goal by working with its municipalities to create higher density and mixed land uses, both of which are friendly to transit operations and could promote new or increased transit service. Higher density land uses allow more people to access transit in the same amount of area relative to low-density land uses. Perry County's rural nature will preclude extensive transit service, but focusing the County's development in or near the established boroughs will allow public transit to become a more viable option in those areas to transit operators.
2. ***Work with CAT and PCTA to reestablish local fixed-route transit service connection within Perry County:*** Capital Area Transit (CAT), the Perry County Transportation Authority (PCTA), Perry County officials, Perry County municipal officials, and the Harrisburg Area Transportation Study (HATS) should work together to identify service needs and funding sources to provide expanded public transportation services in Perry County. Although much of Perry County is rural in nature and cannot easily be served by local transit service, there are portions of the County relatively close to Harrisburg where CAT bus service may be feasible. More specifically, the areas in and near Marysville and Shermans Dale (Carroll Township) both have significant populations that are either growing or have relatively high density. In addition, many Perry County residents need to pass through one of these areas to get to their jobs in the Harrisburg area, potentially adding possible riders if Park and Ride lots are placed in these areas. The County can work with CAT to determine the feasibility of these routes and take steps to ensure the routes are viable over the long-term.
3. ***Promote the Susquehanna Regional Transportation Partnership (SRTP):*** The SRTP is a seven-county effort involving Perry, Cumberland, Dauphin, Adams, Lancaster, Lebanon, and York Counties that will provide transit and carpool information for commuters traveling between or within the counties via an interactive website. Commuters will have the opportunity to link between local transit providers, increasing their transportation options. Various chambers of commerce are also participating in this effort, which could facilitate greater transit use by the business community. The effort

should not only benefit urban and suburban area residents but also rural area residents by at least making them more aware about their transportation options. Perry County can support this effort through its participation on HATS and through its interaction with both CAT and the Harrisburg Regional Chamber of Commerce.

**4. *Work with inter-city public transit providers to improve service in Perry County:***

Unlike local public transit, routes providing inter-city public transit already pass through Perry County, though many of them do not stop in the County. The existence of these routes makes creating new stops in Perry County a relatively easy goal to attain, although the inter-city public transit providers may not want to create new stops for economic or logistical reasons. The County should attempt coordination with inter-city transit providers, especially Amtrak and Capitol Trailways, to implement service that stops within Perry County. Specific station locations that could be created include an Amtrak stop in the Newport area and a Capitol Trailways stop in the Liverpool area. Both of these stops could be located within the borough they serve, meaning service would be within walking distance for many residents. Both of these stops would also be a significant distance from other stops on Amtrak's and Capitol Trailways' systems, meaning the stations could not only serve local residents but also residents in much of Perry County as well as portions of nearby Juniata and Snyder Counties.

**5. *Encourage employers to provide transit subsidies:*** Many of the factors that have contributed to the decline in CAT bus use over the last fifteen (15) years, such as increased parking in downtown Harrisburg, cannot be changed by County policies. However, there are means by which the County can encourage transit use. One way is by working with employers within the County to provide transit subsidies, which would encourage public transit use. Many employers already sponsor TransitChek, a subsidy program that allows employees to buy CAT multi-ride or monthly passes at reduced rates. The County should encourage more employers to sponsor TransitChek, which could increase transit ridership. The County should also institute its own subsidy program, following whatever regulations it most prefers, and encourage employers to sponsor the program. Reduced rate or free transit rides would encourage transit ridership, and would also educate people about the benefits of public transit, making them more likely to use public transit in the future.

## **FREIGHT RAIL**

Freight rail is an important but often-overlooked transportation mode in Perry County. The County's location along a major freight rail line, and proximity to Harrisburg, a freight rail hub, makes it an important location for freight rail operations. Norfolk Southern, one of six (6) national Class I freight railroad operators in the country, owns and operates the County's only major rail line, the Pittsburgh Line, which is one of the most important lines in the entire Norfolk Southern system. In addition, just outside of the County, Norfolk Southern operates two intermodal yards, the Harrisburg (Lucknow) and Rutherford Intermodal Yards, and also operates an important rail yard, the Enola Rail Yard, which handles a significant amount of traffic that passes through Perry County. Freight rail traffic is projected to increase significantly in the

future, so this transportation mode will remain significant within the County in the years to come.

Unlike highway and transit planning, freight rail planning is conducted by the freight rail operators themselves (Norfolk Southern) and does not fall under either HATS or County jurisdiction. For that reason the County needs to take more of a supportive/advisory role in addressing freight rail needs and issues.

### **Freight Rail Issues and Needs**

Norfolk Southern's rail network within Perry County has a number of needs and issues that need to be addressed in order for the network to continue to operate in an efficient manner. The County can help provide support on these needs and issues. They include:

*Preserving rail right-of-ways:* Perry County has experienced increasing land development in recent years, and some of this land development has occurred near or adjacent to freight rail rights-of-way. Some kinds of development, especially residential development, are not appropriate near active freight rail lines for safety reasons. Many people living near rail lines do not take proper safety precautions and may venture out onto the rail lines even when trains are active, putting themselves into dangerous situations. In addition, it is possible that in the future, more rail line tracks will be added to the right-of-way, which would both increase rail traffic and perhaps bring the traffic closer to the development. Both of these factors would increase safety concerns for both Norfolk Southern and nearby residents.

*Upgrading safety at railroad crossings:* One of the primary goals Norfolk Southern has with its existing rail lines is to upgrade safety along the lines, especially at highway crossings. Many existing crossings either are not signalized, or have substandard signals in place. This creates a safety hazard at these crossings by not giving drivers sufficient warning that a train is approaching the intersection. Other at-grade crossings are being eliminated entirely, as highway or railroad overpasses are constructed to eliminate the safety hazard. Eliminating at-grade crossings improves safety.

*Encouraging more businesses to operate rail-based operations:* Perry County is near Harrisburg, one of the nation's centers for goods distribution, and many of the goods are moved by truck. Goods movement is expected to nearly double between 2000 and 2020 across all modes in the northeastern United States. HATS does not have the resources to widen highways to accommodate increased goods movements, so other ways to handle goods movements will need to be explored. One way to handle more goods is to shift some of the movements to rail. The existing rail network is also facing capacity issues in some locations, but also has the capacity for growth, especially for shipments where shipping by rail is economically competitive with shipping by truck (generally speaking, this break point occurs at a distance of somewhere between 500 and 800 miles). Obviously not all businesses are able to ship their products directly from their site, either because they are not adjacent to a rail line or because it isn't economically feasible, but for many companies the potential for rail-based shipments exists.

**FREIGHT RAIL RECOMMENDATIONS**

Though Norfolk Southern and other freight rail operators have ultimate control over almost all improvements that occur to the rail system, the County can still play an active role in helping the freight rail operators achieve their goal of having more efficient and safer operations. Specific recommendations include:

1. ***Promote appropriate land uses and zoning along rail corridors:*** Freight rail operations are usually noisy and sometimes dirty, and should not be located next to incompatible land uses such as residential or commercial development. However, in some cases in the past these incompatible land uses have been located adjacent to a rail right-of-way. To prevent this from happening in the future, the County and its municipalities should work together to ensure future land uses and zoning along rail corridors are “rail friendly.” Industrial uses, conservation uses (acting as a buffer between the rail line and other uses) and other compatible uses are just some of the types of development that should be planned for along freight rail corridors. Creating rail compatible land uses and zoning can also encourage businesses that can support rail operations to relocate along rail lines, which can potentially reduce the number of trucks on the road, improve traffic flow and spur economic development.
2. ***Promote improved safety at rail crossings:*** Though the county has little control over the rail crossing/signalization improvements Norfolk Southern and other freight rail operators implement, the County can still support freight rail operators by understanding their needs and helping to educate the general public about freight rail safety. People need to understand railroad signals are not fail safe, and do periodically malfunction. People also need to realize unsignalized crossings might still be active, and they need to take necessary precautions at these crossings. The County can support Norfolk Southern and freight rail operators in general by helping to educate the public about railroad safety issues. This education may reduce the incidence of rail crossing accidents. The County can also promote improved safety by financially supporting Norfolk Southern’s County safety improvements, either directly or through HATS, if and when appropriate.

**AVIATION**

Aviation represents a miniscule portion of the transportation modal network in Perry County, primarily because the County does not contain any public use airports. However, there are a number of public use airports near the County that provide service to County residents, so it is important that County officials are aware of airport benefits. Airports provide a variety of uses, including commercial aviation services (which occur only at a very small percentage of airports), business aviation services, general aviation services, and flight instruction. They also facilitate general safety by allowing emergency response personnel to reach accident victims and/or medical facilities more quickly than they often could by land alone. For these reasons, it is important Perry County be supportive of on-going airport improvements at nearby general aviation airports.

Aviation planning usually falls under the domain of whoever (or whatever entity) owns a particular airport. This is particularly true with smaller non-commercial airports, which are often privately owned by a single individual or a family. Perry County does not contain any public use airports, so it currently has no involvement with any public airport planning. However, Perry County officials should be supportive of efforts occurring at other nearby airports that indirectly benefit the County.

### **Aviation Issues and Needs**

The County has a number of aviation-related needs and issues that need to be addressed in order to allow County residents to benefit from the aviation system now and in the future. They include:

*Continued viability of Harrisburg International Airport:* HIA serves as a major gateway for businesses, tourists, and residents in Perry County and the entire Harrisburg region. Although trends began changing after the September 11, 2001 terrorist attacks, historically HIA has drawn in a lower percentage of passengers relative to its market area population than other airports in similar-sized markets, primarily because of higher fares compared to other nearby airports in larger markets (especially BWI – Baltimore/Washington International Airport and PHL – Philadelphia International Airport) and fewer markets served by non-stop direct flights compared to BWI and PHL. In order for HIA to continue to grow and become more economically viable, more Perry County businesses and residents need to use HIA for their commercial aviation needs rather than an out-of-area airport.

*Enhancing Perry County aviation services:* Though there are a number of public use airports serving Perry County residents, none of these airports are located in Perry County, making them relatively inconvenient to use. As the County's population continues to grow, the lack of a conveniently located public-use airport within the County will become more problematic and continue to restrict economic growth.

The Bureau of Aviation released its updated Statewide Airport System Plan (SASP) in early 2003 and identified areas within the state that may need greater general aviation service in the future, based on population densities and projected population growth. Perry County has higher population densities than most areas not served by limited use airports. Therefore, it may meet SASP requirements for recommendations for airport improvements. The central portion of the County, especially along the PA 274 corridor between Newport and Loysville, has some need for a new public use airport that meets at least the limited level of service classification. Such an airport would improve general aviation services, provide at least limited business aviation services, and provide a takeoff/landing location for airborne emergency response services.

### **AVIATION RECOMMENDATIONS**

Although Perry County officials do not have operational control over the public airports in nearby counties frequented by Perry County residents, they can still play an active role in preserving and improving aviation services at those airports. Specific recommendations include:

1. ***Encourage County residents to use Harrisburg International Airport:*** The Susquehanna Area Regional Airport Authority (SARAA), the owner and operator of HIA, has completed an upgrade to the airport's facilities, constructing a new, compact, user-friendly terminal, a new multimodal parking garage that will serve private cars, taxis, and local buses with enhanced services, and a new passenger rail station adjacent to the airport property that will serve both regional (Capital Area Transit's CORRIDORone) and interregional (Amtrak) rail passengers and allow them to reach the airport directly from the rail station. The airport has been enhanced with the recent improvements, making it a more attractive and convenient airport to use. The County should encourage its residents to use the airport and keep money within the Harrisburg area, which will indirectly benefit Perry County.
2. ***Explore the option of opening a public use airport in central Perry County:*** There are two options for creating a new public use airport. One option is to try to convince the owners of any existing private airport to allow their airport to be open for public service. The airport would need to meet Bureau of Aviation operating standards, including runway length and width, be relatively accessible from surrounding areas, and have airport-compatible zoning enacted around the airport. There are a few private airports in central Perry County that might currently meet public use airport operating standards or meet the standards with modest improvements. Those airports include: Thomas Field in Saville Township; Egolf Airport in Tyrone Township; and Shull's Airport in Spring Township. A fourth airport, Chestnut Hill Airport in Penn Township, lies outside the area of greatest need, but is located near Duncannon and relatively close to Newport, New Bloomfield, Marysville, and Shermans Dale. The other option is to find a flat, open tract with sufficient space and roadway access that could be converted to a public use airport. Such a new airport would also need to meet PennDOT guidelines. Accomplishing either option may be difficult, due to liability, safety, or area residents' concerns. Still, Perry County officials should support this goal by either working with the private airport landowner to ensure his/her facility would not be negatively impacted by opening it for public use or by buying a tract a land either directly or indirectly to use for aviation uses.

## **BICYCLE/PEDESTRIAN**

Bicycle/pedestrian transportation (often referred to as "bike/ped" transportation for the purposes of this chapter) is an important but usually overlooked transportation mode in Perry County. Everyone is a pedestrian at some time or another, so pedestrian transportation issues impact everyone. Many people also ride bicycles, even if it is only for recreational purposes, so bike transportation issues are significant to many people. Within Perry County there are essentially two different types of bike/ped routes, those located along highway shoulders and sidewalks, and dedicated bike/ped trails, which are often located along waterways, mountains, and other naturally preserved areas.

Unlike the other transportation modes discussed in this chapter, relatively little dedicated planning has been done for bike/ped transportation uses. Instead, bike/ped improvements have either been included within highway improvements or have been included as part of public or private recreational improvements. In many cases highway-based bike/ped improvements have

been overlooked or poorly addressed as part of highway projects, making it difficult for bicyclists and pedestrians to optimally use roadways for their transportation needs. The HATS Transportation Enhancements (TE) Program, a component of the biannual, federal and state-funded Transportation Improvement Program (TIP), is a program dedicated to funding non-traditional transportation projects, including bike/ped projects, and has enabled more recreationally-oriented bike/ped projects to receive funding and improve the County's bike/ped network.

### **Bicycle/Pedestrian Issues and Needs**

The County's bicycle/pedestrian network has a number of needs and issues that need to be addressed in order for the network to continue to operate in an efficient manner. They include:

*Narrow highway shoulders:* Bicyclists and/or pedestrians often use shoulders for transportation or recreational purposes. However, many state and township roads in Perry County have substandard shoulder widths. Bike/ped users often consider these roads unsafe, due to high motor traffic volumes or speeds and/or poor vertical or horizontal sight distances. As a result, bike/ped use is discouraged and motorized traffic is increased, which further discourages bike/ped use along these roads.

Narrow shoulders can also create a safety hazard whenever motorists experience car troubles and need to stop along the road, both for drivers (who can't get their vehicles entirely off the road and are in closer proximity to passing traffic) and for bicyclists and pedestrians (who need to get around the stalled vehicle by driving/walking further into the road). This situation can be especially dangerous in high traffic volume locations.

*Lack of dedicated bike lanes and/or sidewalks in some locations:* Dedicated bike lanes and/or sidewalks facilitate both bicycle and pedestrian transportation, especially in higher density borough or suburban areas. However, many borough and suburban areas do not have bike lanes or sidewalks. Furthermore, some of these locations without dedicated bike/ped facilities also have narrow roadway shoulders, further inhibiting bike/ped transportation. The lack of dedicated bicycle (bike lanes) and pedestrian (sidewalks) facilities discourages bike/ped use and encourages a greater volume of motorized transportation.

*Sprawl/dispersed land use:* Lower density and non-mixed land use suburban development discourages bike/ped transportation by making it impractical for people to bicycle or walk/run for transportation-related purposes, such as a quick stop at the grocery store, because of the greater distance required for travel. Sprawl development also hinders bike/ped users by encouraging motorized traffic, which increases the volume and sometimes speed of vehicles using the road. The increased volume and speed of cars and trucks using the road reduces safety for bike/ped users.

**BICYCLE/PEDESTRIAN RECOMMENDATIONS**

Perry County officials, both through representation on HATS and through coordination with municipalities, can play an active role in improving and encouraging bike/ped transportation in the County. Specific recommendations include:

1. ***Incorporate bike/ped improvements into the transportation planning process:*** HATS included a Bicycle/Pedestrian Plan in both the 2004 and 2007 editions of its Regional Transportation Plan and both specific projects in the plan should be strongly considered for inclusion on the TIP. The County should encourage municipalities to strengthen their comprehensive plans and subdivision and land development ordinances to ensure bicyclists and pedestrians are properly accommodated on the road network.
2. ***Encourage mixed-use zoning and “traditional” community development:*** As stated above, sprawling, non-mixed land uses discourage bike/ped use by making it inconvenient for bicyclists and pedestrians to get to desired locations, both in terms of distance required for travel and safety. By contrast, mixed land uses/zoning, similar to that found in “traditional” town or village-like community development, encourage bike/ped transportation by placing different types of land uses closer together, which makes it easier for bicyclists and pedestrians to travel to various destinations. Traditional community development also discourages high traffic speeds, increasing the safety of bike/ped transportation. Mixed-use zoning not only encourages increased bike/ped transportation, it also discourages increased motor vehicle traffic, reducing congestion on the area’s roadways. Perry County officials should promote traditional community development by determining planned growth areas, which would experience denser, mixed-use zoning in most areas, and also by working with municipalities to create larger mixed land use zones that could more easily accommodate bike/ped transportation.
3. ***Encourage development/preservation of bike/walking trails, rail trails, greenways, and open space:*** Preserving bike/walking trails, rail trails, greenways, and open space provides a number of benefits to both bike/ped users and County residents in general. Both types of trails and some greenways allow bike/ped users to travel for transportation or recreational reasons without encountering motorized traffic that reduces their safety. They also enable bicyclists and pedestrians to travel in an aesthetically pleasing, naturally preserved area. Finally, trails and greenways in general promote non-motorized transportation, which can help reduce traffic congestion. Trails and greenways also provide a number of non-transportation related benefits, including economic benefits (by functioning as a buffer and by creating a tourist attraction), social benefits (by providing access to historical and cultural features in the community), ecological benefits (by preserving open space and wildlife habitats), and recreation benefits (by promoting other types of outdoor recreational activities). County officials should promote development and preservation of trails and greenways by working with municipalities to preserve these environmentally important lands.

4. **Consider using county Liquid Fuels funds to finance certain bicycle and pedestrian improvements:** All Pennsylvania counties, including Perry County, receive state liquid fuels tax funding every year to help cover the cost of highway maintenance. The amount received is based on the population and road mileage within a county. These funds are used for a variety of transportation-related purposes, and augment the liquid fuels tax funding received by all Pennsylvania municipalities to implement municipal transportation improvements. Obviously, the County has many transportation priorities that require funding from the County's liquid fuels tax allocation, but it is possible some county priority bike/ped improvements that meet the liquid fuels tax funding criteria could be financed using the County's liquid fuels allocation. Much like federally funded TIP projects, the bike/ped improvements funded (such as improved highway shoulders) could be part of larger-scale highway improvements implemented. Using this funding source could help the County achieve its bike/ped improvements. County officials should keep this in mind when considering possible sources of funding for County bike/ped improvements.

### TRANSPORTATION ACTION PLAN

#### T GOAL 1. Provide for an efficiently safe highway system in Perry County.

**T Objective 1.A.** Increase the understanding of the link between land use and transportation.

- **T Strategy 1.A.1.** Encourage in-fill development within core communities.
- **T Strategy 1.A.2.** Research highway-based goods movement and distribution.
- **T Strategy 1.A.3.** Focus growth in the direction of already developed Perry County areas where community facilities and services exist to support the added service needs.
- **T Strategy 1.A.4.** Promote ride sharing.
- **T Strategy 1.A.5.** Encourage the sharing of common access for commercial establishments in densely developed areas.
- **T Strategy 1.A.6.** Ensure potential roadway rights-of-ways connecting existing or future developments to one another are preserved.

**T Objective 1.B.** Ensure that highway safety covers all levels of Perry County's highway system.

- **T Strategy 1.B.1.** Work with municipal officials to see that all paved roads have painted centerlines.
- **T Strategy 1.B.2.** Continue to work with municipal officials and utility providers to ensure that utility poles are moved back from the edges of roads where they pose a safety hazard.

- **T Strategy 1.B.3.** Encourage additional posting of speed limits on roads.
- **T Strategy 1.B.4.** Encourage additional policing of speeds on Perry County's highway system.
- **T Strategy 1.B.5.** Encourage municipalities to look at traffic signalization or other traffic control measures at intersections where there have been accidents.
- **T Strategy 1.B.6.** Identify and inventory where road and shoulder widening, turning lanes, and safety improvements are needed on the County's highway system.
- **T Strategy 1.B.7.** Research the possibility of implementing Intelligent Transportation System (ITS) technology.

**T Objective 1.C.** Promote inter-agency and inter-municipal coordination.

- **T Strategy 1.C.1.** Ensure that all viable transportation-related projects in Perry County are addressed by the Harrisburg Area Transportation Study (HATS).
- **T Strategy 1.C.2.** Promote improvements of and for State and municipal Law enforcement.
- **T Strategy 1.C.3.** Ensure that projects initiated locally appear on the 12-year Plan.
- **T Strategy 1.C.4.** Ensure that viable projects placed on the 12-year Plan show a steady progression up to design and ultimately construction.
- **T Strategy 1.C.5.** Encourage municipalities to include local transportation initiatives in local comprehensive plans.
- **T Strategy 1.C.6.** Promote better coordination of highway occupancy permits between PennDOT and municipalities to reduce unnecessary access points.
- **T Strategy 1.C.7.** Strive for consistency in regional, County and municipal transportation planning.
- **T Strategy 1.C.8.** Assist in the design process of new transportation facilities and improvements to existing transportation facilities.

**T GOAL 2. Provide for a safe and efficient rail freight system in Perry County.**

**T Objective 2.A.** Increase understanding of the link between land use and rail freight transportation.

- **T Strategy 2.A.1.** Encourage Perry County manufacturing facilities specializing in non-time sensitive materials to ship and receive their goods via rail freight transportation.
- **T Strategy 2.A.2.** Ensure existing rail rights-of-ways are preserved and are not threatened or encroached upon by new developments being built.

**T Objective 2.B.** Ensure that rail freight safety covers the entire rail system through Perry County.

- **T Strategy 2.B.1.** Promote and endorse safety improvements of all at-grade crossings.
- **T Strategy 2.B.2.** Monitor changes in hazardous rail freight goods transported through the County.
- **T Strategy 2.B.3.** Identify key areas along the rail line that pose the greatest potential for ground water contamination.

**T GOAL 3. Provide for a safe and efficient bicycle/pedestrian system in Perry County.**

**T Objective 3.A.** Encourage improvements that provide for a safer means of pedestrian travel.

- **T Strategy 3.A.1.** Encourage and support improvements to crosswalks and sidewalks in downtown areas.
- **T Strategy 3.A.2.** Encourage sidewalk construction in residential developments that will be served by public utilities and/or meet a specified dwelling unit density.
- **T Strategy 3.A.3** Encourage sidewalk construction in areas where residential and commercial retail developments are within a specific distance of one another.
- **T Strategy 3.A.4** Consider the use of PennDOT liquid fuels funds to assist with pedestrian improvements.

**T Objective 3.B.** Increase understanding of the link between land use and pedestrian travel.

- **T Strategy 3.B.1.** Support developments that encourage pedestrian provide pedestrian connection to their communities.
- **T Strategy 3.B.2.** Encourage housing projects for the elderly and handicapped to locate within a reasonable distance of essential service providers.
- **T Strategy 3.B.3.** Inventory pedestrian facilities in downtowns.
- **T Strategy 3.B.4.** Support trail design for pedestrian utilization to separate this mode of travel from motorized transportation.
- **T Strategy 3.B.5.** Support local efforts to establish projects under the PennDOT Safe Streets Initiative.

**T Objective 3.C.** Encourage improvements that provide for a safer means of Bicycle travel.

- **T Strategy 3.C.1.** Support efforts to widen Perry County's highway system, especially in areas around schools and public recreation areas.

- **T Strategy 3.C.2.** Consider the use of PennDOT liquid fuels funds to assist with bicycle improvements.

**T Objective 3.D.** Increase understanding of the link between land use and bicycle travel.

- **T Strategy 3.D.1.** Support developments that encourage bicycle use to connect people with their communities.
- **T Strategy 3.D.2.** Support trail design for bicycle utilization to separate this mode of travel from motorized transportation.

**T GOAL 4. Provide for a safe and efficient public transportation system in Perry County.**

**T Objective 4.A.** Increase public transportation options in Perry County, particularly along the US 11/15 and PA 34 corridors.

- **T Strategy 4.A.1.** Increase intermodal opportunities for commuters.
- **T Strategy 4.A.2.** Promote services for special needs residents.
- **T Strategy 4.A.3.** Support the Perry County Transportation Authority (PCTA).
- **T Strategy 4.A.4.** Encourage transit oriented development.
- **T Strategy 4.A.5.** Encourage Capital Area Transit (CAT) to reestablish local transit service connection.
- **T Strategy 4.A.6.** Promote the Susquehanna Regional Transportation Partnership
- **T Strategy 4.A.7.** Encourage employers to provide transit subsidies

**T GOAL 5. Provide for a safe and efficient public aviation system in Perry County.**

**T Objective 5.A.** Strengthen the County’s aviation options and connections.

- **T Strategy 5.A.1.** Encourage Perry County Residents to use the Harrisburg International Airport.
- **T Strategy 5.A.2.** Explore the options of opening up a public use airport in Perry County.

**Implementation Timetable for Transportation Strategies**

<b>Transportation Strategies</b>	<b>Yr. 1</b>	<b>Yr. 2</b>	<b>Yr. 3</b>	<b>Yr. 4</b>	<b>Yr. 5</b>	<b>Yr. 6</b>	<b>Yr. 7</b>	<b>Yr. 8</b>	<b>Yr. 9</b>	<b>Yr. 10</b>
<b>T Strategy 1.A.1.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 1.A.2.</b>	I	C								
<b>T Strategy 1.A.3.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 1.A.4.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 1.A.5.</b>	X	X	X	X	X	X	X	X	X	X

Transportation Strategies (Continued)	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10
T Strategy 1.A.6.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.B.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.B.2.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.B.3.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.B.4.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.B.5.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.B.6.		I/C								
T Strategy 1.B.7.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.2.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.3.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.4.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.5.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.6.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.7.	X	X	X	X	X	X	X	X	X	X
T Strategy 1.C.8.	X	X	X	X	X	X	X	X	X	X
T Strategy 2.A.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 2.A.2.	X	X	X	X	X	X	X	X	X	X
T Strategy 2.B.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 2.B.2.	X	X	X	X	X	X	X	X	X	X
T Strategy 2.B.3.	I/C									
T Strategy 3.A.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.A.2.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.A.3.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.A.4.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.B.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.B.2.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.B.3.			I	C						
T Strategy 3.B.4.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.B.5.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.C.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.C.2.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.D.1.	X	X	X	X	X	X	X	X	X	X
T Strategy 3.D.2.	X	X	X	X	X	X	X	X	X	X

<b>Transportation Strategies (Continued)</b>	<b>Yr. 1</b>	<b>Yr. 2</b>	<b>Yr. 3</b>	<b>Yr. 4</b>	<b>Yr. 5</b>	<b>Yr. 6</b>	<b>Yr. 7</b>	<b>Yr. 8</b>	<b>Yr. 9</b>	<b>Yr. 10</b>
<b>T Strategy 4.A.1.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 4.A.2.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 4.A.3.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 4.A.4.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 4.A.5.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 4.A.6.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 4.A.7.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 5.A.1.</b>	X	X	X	X	X	X	X	X	X	X
<b>T Strategy 5.A.2.</b>	X	X	X	X	X	X	X	X	X	X

I = Initiate process  
 C = Complete process  
 X = Item to be covered