

## **Transportation and Circulation**

A transportation network is made up of roads, rail lines, airports, bikeways, and pedestrian ways and provides access for the movement of people and goods within the region as well as within the municipality. Types and intensities of land use affect the transportation system, and transportation facilities affect the pattern, intensity, and rate of development within the municipality. This section provides an overview of the regional road network, as well as the local street classification, traffic and circulation issues, pedestrian and bikeway systems, public transportation services, and airport facilities in the township.

### **Regional Road Network**

Future land use and development will depend on the land use and transportation decisions of adjacent municipalities and the ability of the regional roads to carry future traffic volumes at a reasonable level of service. An efficient and accessible transportation network is one of the main factors people consider when relocating to a new area. Each regional road allows East Rockhill residents to more conveniently access jobs and services throughout the area.

The main regional roads in East Rockhill are Dublin Pike (S.R. 313), Ridge Road (S.R. 563), Fifth Street, and Mountain View Drive (S.R. 563). Traffic traveling into, through, or out of the township will likely use one of these four roads, as these are the main roads that connect with adjacent municipalities and the larger transportation network. Also influential on the growth and development of the township are regional roads in relatively close proximity. These include the Route 309 Bypass and the Northeast Extension of the Pennsylvania Turnpike to the west, Route 663 to the northwest, Route 113 to the south, and Route 611 to the east.

The Northeast Extension was a new stretch of the limited access toll road first constructed in the late 1930s. The Northeast Extension of the Pennsylvania Turnpike connects northeastern Pennsylvania with southeastern Pennsylvania. This highway effectively allowed the Pocono region to become the resort area that it is today. There are no plans to develop a new exit between the Lansdale and Quakertown; however, in 2003, a slip ramp was constructed at the Quakertown exit of the Northeast Extension that provides a way for motor vehicles and trucks to enter the turnpike from the adjacent planned industrial and commercial districts without entering Route 663 and compounding traffic congestion in the area.

### **Local Street Classification**

East Rockhill is a rural area that depends on its system of roads and streets for its transportation needs. There is a direct correlation between land uses and the local street network. The existing streets should be able to support the extent of development intended. Similarly, decisions to make improvements to roadways should be based in part on the intensity of development expected in an area to be served by the roadway. Decisions on future growth and development should take into consideration the adequacy of streets within and adjacent to the area intended for concentrated development. East

Rockhill's functional street classification is shown in Figure 12 and described in detail below:

**Arterial**—Arterial highways are designed to carry large volumes of traffic and to connect major business and employment centers. The classification includes highways that provide intracounty or intermunicipal traffic of substantial volumes where the average trip lengths are usually 5 miles or greater. Generally these highways should accommodate operating speeds of 35 to 55 miles per hour. Dublin Pike (Route 313) is the sole arterial in East Rockhill. Dublin Pike is a state-owned street that stretches for about 3.5 miles between Hilltown and Richland townships. The subdivision and land development ordinance requires that a minimum right-of-way and cartway widths for arterials be 100 feet and 34 feet, respectively.

The number and location of access points onto arterial streets should be strictly limited because the proliferation of turning movement at individual driveways to properties will degrade the function of an arterial. Access management techniques should be considered by the township to protect the function of arterial highways. Techniques such as reverse-frontage access roads, marginal access roads, or shared access driveways should be provided for properties fronting on arterial roads. New access points should be well spaced so that speeds on the arterial can be maintained.

The need for roadway improvements such as turning lanes, acceleration and deceleration lanes, shoulder improvements, and intersection improvements should be evaluated for all major developments. The potential exists for arterials to function as a regional on-road recreational linkage for bicyclist if conditions are favorable. For instance, Pennridge municipalities have proposed the installation of a bike lane along Route 313 (See discussion in the Transportation Improvements Program Projects section below).

**Collector**—This classification is intended to include those roads that connect local access streets to arterial highways. They may serve intracounty and intramunicipal traffic. They may serve as traffic corridors connecting residential areas with employment areas and shopping/service areas. Generally, these streets will accommodate operating speeds of between 35 and 45 miles per hour. Collector streets are classified as either major or minor collectors as follows:

**Major Collector**—The three major collectors in East Rockhill are Ridge Road, Fifth Street, and Mountain View Drive.

**Minor Collector**—The minor collectors in East Rockhill are Park Avenue, Old Bethlehem Pike, Callowhill Road, Rockhill Road, Three Mile Run Road, Branch Road, Blooming Glen Road, Schwenk Mill Road, Old Bethlehem Road, Sterner Mill Road, and Richlandtown Road.

The subdivision and land development ordinance requires a minimum right-of-way width for major and minor collectors of 80 feet and 60 feet, respectively. The minimum cartway width for both minor and major collectors is 34 feet. Ridge Road, Fifth Street, and Mountain View Drive are state owned and maintained while the remaining collector

streets are owned and maintained by the township. Many of the collector streets in the township are located in a rural setting and improvements should be considerate of the surrounding context. Cartway paving should be limited to only improvements necessary to maintain the safety of the road and lanes for turning, acceleration, and deceleration.

Recreational bicyclists and occasional pedestrians use many of the collector streets in the township. Future improvements should be designed to take into account the needs of the users and ensure their safety (See Pedestrian and Bikeway System subsection below).

**Local Access**—All other streets not classified as an arterial or collector are classified as local access streets. This classification is intended to include streets and roads that provide direct access to abutting land and connections to higher classes of roadways. Traffic volumes will be low and travel distances generally short. These streets and roads should be designed for operating speeds of 25 miles per hour or less. The subdivision and land development ordinance requires a minimum right-of-way width of 50 feet and cartway width of 28 feet. Local access streets are owned and maintained by the township. Through-traffic on local access streets should be discouraged. New local access streets should be designed to discourage fast-moving traffic and limit the amount of traffic generated by uses along the street. Traffic calming techniques and the design of local access to discourage through traffic should be explored in appropriate locations (see discussion below).

## **Traffic and Circulation Issues**

Several issues should be considered when examining the local transportation network in East Rockhill. The current zoning ordinance requires traffic impact studies for major developments to determine what improvements may be necessary.

One way to enhance pedestrian and bicyclist safety is through a technique known as traffic calming. Traffic calming uses physical and psychological changes to the roadway to reduce speeding and cut-through volumes, enhancing the safety of both pedestrians and bicyclists. Traffic calming measures (e.g., speed tables, raised or textured crosswalks, on-street parking, and raised median islands) can be used to accomplish these goals. In Pennsylvania, traffic calming measures can be constructed on local residential streets, collector streets with primarily residential uses, and arterials that serve as downtown or commercial areas (with posted speeds of 40 mph or less). The township must follow PennDOT's recommended study and approval process when traffic calming measures are proposed along a state road or when state, federal, or liquid fuels funds are to be used to fund such measures.

To address traffic speeds and pedestrian safety along Branch Road, Fifth Street, and Three Mile Run Road, township officials will work with PennDOT and the Pennridge Regional Police to evaluate possible speed limit restrictions and/or traffic calming measures deemed appropriate for each location.

East Rockhill's Industrial-1 and Industrial-2 districts are located within the regional transportation network, with easy access to the Route 309 Bypass to the southwest and

Dublin Pike (S.R. 313) to the northeast. However, the industrial districts take access from Ridge Road, a state road whose current condition may not be able to support increased heavy truck traffic. Township officials will work with PennDOT to provide the necessary improvements to Ridge Road, possibly as a multimunicipal planning effort with West Rockhill Township and Perkasio Borough. Funding options for the road improvements as part of this effort will also be explored.

A regional planning effort by the PA Route 313/663 Task Force has been underway for over a decade. In November of 1994, the task force published the *Transportation Improvements Plan—Route 313/663 Corridor, Bucks County, Pennsylvania*. There are many plan strategies and recommendations directed at reducing or minimizing traffic related impacts to this corridor. In East Rockhill, the plan contains several recommendations, with implementation responsibility assigned to either PennDOT or East Rockhill Township. These recommendations include:

- A beacon flashing yellow light at the intersection of Dublin Pike (S.R. 313) and Mountain View Drive (S.R. 563) (East Rockhill/PennDOT)
- Upgrade shoulders to allow vehicles to bypass left-turning vehicles to reduce congestion (East Rockhill)
- Improve shoulders at Fifth Street to allow through vehicles to bypass left-turning vehicles to reduce congestion and stripe to delineate travel lanes to better define intersection (PennDOT)
- Realign Sterner Mill road to eliminate the skewed intersection at Dublin Pike (East Rockhill)
- Improve access management by curbing driveways in the area of Route 563 (East Rockhill)
- Install curbing for access control along Fifth Street (East Rockhill)

Since the plan's completion over a decade ago there have been new developments and issues that should be addressed by the township. For instance, due to ongoing accidents at the intersection of routes 563 (Mountain View Drive) and 313 (Dublin Pike) as a result of motorists carelessly entering the intersection with oncoming traffic, township officials have discussed the possibility of adding a traffic light.

The *Transportation Improvements Plan* continues to be a working document and has provided a basis for ongoing discussions with municipalities located along the Route 313 corridor. East Rockhill will continue its participation and coordination to promote a regional solution to the problems and issues along the Route 313 corridor.

The historic Mood's Covered Bridge was destroyed by arson in June 2004. As a result, dialog ensued between residents and township officials regarding future traffic circulation issues and the ultimate design of the bridge (e.g., covered versus standard bridge design and one lane versus two lanes). The restoration of the covered bridge is still in the preliminary design phase but it has been decided that PennDOT will be responsible for its reconstruction using state and federal funds and Bucks County will assume ownership and maintenance responsibilities.

## Transportation Improvement Program Projects

The Bucks County Transportation Improvement Program (TIP) is an inventory of transportation-related improvements requested by municipalities, concerned citizens, transportation studies, and other sources. Each request for federal or state funding is reviewed by the staff of the Bucks County Planning Commission and added to the catalog of projects. The list is submitted to the Delaware Valley Regional Planning Commission (DVRPC) to be included as candidate projects for the regional TIP.

DVRPC, in conjunction with member government agencies, ranks and selects potential projects from candidate projects lists (i.e., county TIPs) submitted by member governments. Once approved by the Regional Transportation Committee and DVRPC Board, the regional TIP is then submitted to PennDOT to be included in the state TIP. The regional TIP is updated every two years, in coordination with PennDOT's Twelve Year Plan. The regional TIP lists all projects that intend to use federal or state funds for engineering, right-of-way costs, or construction costs.

East Rockhill has two separate projects on the 2003 TIP list, one located within the township and the other that is part of a multimunicipal planning effort. The following table lists the TIP projects for East Rockhill and projects in adjacent municipalities that may impact East Rockhill.

**Table 20. TIP List, East Rockhill and Adjacent Municipalities, 2003**

| Municipality  | Project   |
|---|---|
| <b>East Rockhill Township</b>   | <b>Hill Road Bridge Repair/Replacement</b><br>Location: Hill Road over Three Mile Run<br>Proposed Work: Bridge repair/replacement to accommodate flow, eliminate flooding, and remove weight restriction          |
| <b>East Rockhill, Bedminster, Hilltown, Richland townships and Dublin Borough</b> | <b>Route 313 Bike Lane</b><br>Location: Route 313 from Richland Township 7.5 miles to Dublin Borough<br>Proposed Work: Install striping and signage for bike lane along shoulder of Route 313                     |
| <b>Milford and Richland townships</b>   | <b>Portzer Road Bypass</b><br>Location: Route 309 to Route 663<br>Proposed Work: Realignment and improvement of Portzer Road/Pumping Station Road, including intersection improvements at Route 309 and Route 663 |
| <b>Hilltown Township</b>  | <b>Stone Arch Bridge Repair/Replacement</b><br>Location: Route 113 bridge over Morris Run, between Minsi Trail and Blooming Glen Road<br>Proposed Work: Bridge repair/replacement                                 |

The Hill Road Bridge repair/replacement project will provide much needed improvements to the existing infrastructure. The Route 313 bike lane will provide an important segment of the regional bike route that runs from the intersection of Mountain

View Road southeast through Dublin Borough, possibly all the way to Doylestown Borough. While there is no significant road improvements planned at this time, development pressures from adjacent municipalities will affect East Rockhill Township. If constructed, most of the proposed improvements should improve circulation and safety in those municipalities.

## **Pedestrian and Bikeway System**

Pedestrian and bicycle facilities are an important part of the transportation network that provide residents a nonmotorized means of travel for commuting and recreational purposes. When asked to identify recreational facilities and activities they would like to see improved or added to the township's park system, residents gave walking trails (82 percent) and bicycling facilities (57 percent) as the top two responses in the 2004 resident survey.

The Mervin C. Bryan Walking Path provides a two-mile linear park for multipurpose use intended to accommodate bicyclists, hikers, and joggers within the 46-acre stream corridor preservation area that extends along the East Branch of the Perkiomen Creek between East Callowhill and Schwenk Mill roads. The township plans on extending the path northwest along Blooming Glen Road and through their easement on the Pennridge High School site to Willard H. Markey Park. The proposed path extension will expand the township's trail network by providing a linkage to and from Markey Park that contains its own multipurpose trail system. There is a possibility of expanding the trail network to other points of interest in the township using designated greenways. In addition to preserving natural resources, greenways can be used to create safe, nonmotorized transportation routes to points of interest such as schools, commercial centers, residential developments, and recreational areas, creating a unified park system throughout East Rockhill and beyond. Recommended greenways routes within East Rockhill which are based in part upon the *Pennridge Area Greenway Plan*, incorporate streams, existing trails, floodplains, on-road bike routes, and off-road linkages.

Like many upper Bucks County communities, East Rockhill is a popular place for bicycle enthusiasts. As described above, municipalities in the Pennridge area plan to implement the Route 313 bike lane as part of the regional TIP. A bike lane is an established lane on the roadway for use by bicycles only. Bike lanes are designated with signage and striping. Bicycle routes, which are the least expensive option for creating on-road linkages, make use of the existing road surface. Along bicycle routes, bicyclists and pedestrians must share the road with vehicles. In addition, the township could require developers to provide a bike lane along roads where bike routes have been designated; much in the way developers are required to provide road improvements along roads where their development proposals are situated. No matter what the system employed, adequate route signing should always be provided to supply directional information to users of the system.

The Bucks County Planning Commission (BCPC) has been successful in working with municipalities and PennDOT in improving safety along bicycle routes. Wherever possible, PennDOT will reduce cartway widths to 11 feet by restriping the fog line

inward after road repaving or maintenance projects. This allows for an increase in shoulder width without the need to acquire additional right-of-way, thereby, improving safety for bicyclists on designated bike routes. Additionally, the use of “Share the Road” signs has been very successful in alerting motorists of the presence of bicyclists within the traffic stream, thus, increasing safety conditions for bicyclists using a bike route.

As part of an ongoing planning effort, township officials will continue to pursue the implementation of the designated greenway routes (as described in the Community Facilities section) including on-road and off-road linkages while ensuring these facilities are designed to provide adequate safety measures for its users.

### **Public Transportation Services**

Currently, there is no public transportation in East Rockhill since population densities are too low, and there are too few common origins or destinations to make public bus or van service feasible. However, the Bucks County Transportation Management Association (BCTMA), in which East Rockhill was recently inaugurated as a formal member, has completed a study concluding that sufficient ridership exists to support bus service in the tri-borough area of Quakertown, Perkasio, and Sellersville boroughs. While the bus route would not run through East Rockhill, residents will be able to drive a short distance to bus stops located along the tri-borough route. The BCTMA is currently securing grant funding for the Quakertown and Richland portion of the bus route and in 2005 will apply for funding for the Perkasio and Sellersville portion of the route. After a two-year trial period, if the bus route achieves its ridership goals, the route would receive permanent funding.

Township officials, in cooperation with will the BCTMA, will continue explore the feasibility of providing appropriate forms of public transportation to points of interest such as the Bucks County Community College and Nockamixon State Park.

The Bucks County Transport, Inc. is a private, nonprofit organization that provides ride-share opportunities primarily for senior citizens and those on welfare. There is a nominal fee to seniors, but welfare recipients are paid for in full. Their service area includes all of Bucks County but a proof of residency is required. Pick up and drop off is provided to essential and nonessential destinations such as doctor’s offices, hospitals, adult day care, and grocery stores for a nominal cost to residents.

### **Rail Restoration Study**

In 2000 the Bucks County Planning Commission commissioned a study of reopening the Quakertown/Stony Creek rail line to passenger service. The Quakertown/Stony Creek Rail Restoration Study was initiated to determine the viability of reactivation of passenger service for the Bethlehem Branch, which runs from Lansdale Borough in Montgomery County, through East Rockhill Township to the village of Shelly in Richland Township. In terms of operating ratio and performance measures, the restoration of passenger rail service over the Bethlehem Line appears to be both feasible and viable. There are significant capital costs, however, associated with these options,

which SEPTA, the counties, and the Commonwealth must consider and prioritize relative to the other competing financial needs in the region.

The Bucks County Transportation Management Association has taken the lead on this project to develop a business plan. The goal is to begin developing information needed to restart the line using a private corporation to run the line and employ a strategy that could be constructed in less time and result in less cost to taxpayers.

The restoration of rail service to the Bethlehem Branch would provide public transportation to the upper Bucks County area and could provide an important link between the Lehigh Valley and Philadelphia areas.

Township officials should coordinate with the Bucks County Transportation Management Association to continue to monitor the status of the project so that the township may take appropriate steps (e.g., rezoning, amending use provisions) in ensuring that needed associated facilities (e.g., park-and-ride facilities) could be provided.

### **Airport Facilities**

The Pennridge Airport is located north of Ridge Road between Tunnel and Schoolhouse roads. Although privately-owned, the airport facility has utilized state and federal grants and funding for maintenance and improvements, and, consequently, is subject to public funding restrictions and regulations. The recent reduction in the number of based aircraft and increase in based aircraft criteria for funding eligibility in the Airport Improvement Program (Federal Aviation Trust Fund) has resulted in the loss of federal eligibility. The airport has a paved runway 3,775 feet long, making it an important facility to aviation in the area. The Delaware Valley Regional Planning Commission (DVRPC) classifies the Pennridge Airport as a basic utility stage I airport. A utility stage 1 airport consists of approximately three quarters of the propeller planes under 12,500 pounds and serving areas of low air activity and small population. This classification is based upon an assessment of the types of aircraft using the airport and the types of facilities available there. DVRPC planning for the year 2025 indicate that the demand for aircraft services and facilities is not anticipated to exceed the capacity of the airport. Aircraft users are not expected to see excessive delays or be forced to use nearby airports, such as the Upper Bucks County Airport in Quakertown and The Central Bucks Airport in Doylestown.

In 2004, the Pennridge Airport at the direction of their own master plan (with the agreement from PennDOT) relocated an aircraft tie down area and there are future plans to build T hanger space. As part of this proposal, access is located off of Schoolhouse Road.

Currently, the zoning ordinance contains Airport Area Protection Standards for an overlay district that is intended to protect the surrounding properties from the obstruction (e.g., structure, growth, or other object that exceeds the established height limit) that has the potential for endangering life and property of users of the Pennridge Airport. The ordinance establishes airport zones and establishes maximum heights for structures and trees within each zone and identifies use restrictions related to electrical interference with

navigational signals or radio communications, lighting, or uses that would otherwise endanger or interfere with the operation of aircrafts using the airport.

There may be a need to reexamine the current Airport Area Protection Standards, since they do not, for example, address certain accessory uses. In order to provide additional regulations for airport uses, township officials may wish to amend the overlay district regulations or create a separate airport zoning district.

As an element of East Rockhill's transportation network, the Pennridge Airport provides personal and recreational use. But potential conflicts may occur with the surrounding residential land uses if the airport is used beyond its capacity or if airport regulations do not adequately address all accessory activities.

