

TRANSPORTATION PLAN

This chapter addresses the following major topics:

- Major Roadways and Roadway Classifications
- Public Transportation
- Pedestrian Circulation
- Bicycle Mobility
- Railroads
- Airports

Major Roadways and Roadway Classifications

The areas in and around Salisbury are served by roads that fall into one of the following four functional classifications (Map 6.1):

1. **Expressway:** Expressways handle the highest levels of traffic volumes at the highest speeds (55 mph and above). An expressway is a multilane facility with access limited to interchanges which primarily serves to carry “through traffic” and to connect arterial roadways. Parking along expressways is prohibited. Interstate 78 is the only expressway in the Township.
2. **Arterial:** An arterial is typically a two- to four-lane facility that is subjected to high traffic volumes at medium to high speeds (40 mph to 55 mph). Arterials serve primarily to convey traffic to and from the expressway interchanges but can also interconnect other arterial or collector roadways. A moderate degree of access control is usually encouraged along arterials, and parking is usually prohibited. Arterials within the study area include PA 145 (South Pike Ave.), PA 29 (Cedar Crest Blvd.), S. 24th St, Lehigh St., W. Emmaus Ave., E. Emmaus Ave., and E. Susquehanna St.
3. **Collector:** A collector is a two-lane roadway that distributes traffic from the arterial roads amongst the individual areas served by the local road networks. Speeds are generally in the 30 mph to 40 mph range, and parking is usually permitted at least along one side of the roadway. Lindberg Ave. and Seidersville Rd are examples of collector roadways.

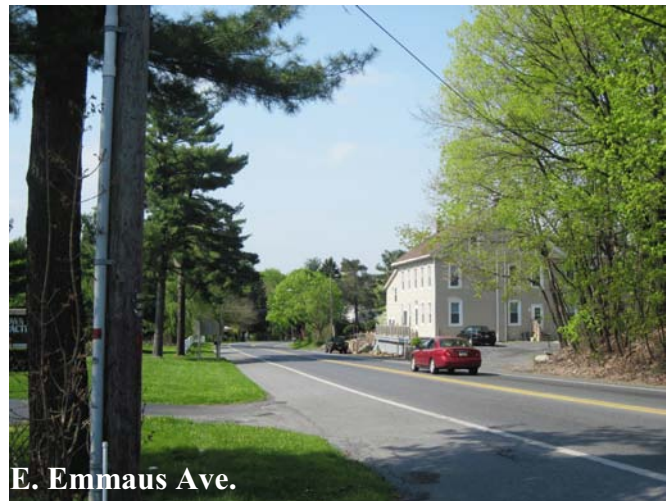
4. **Local:** Local roads provide direct access to individual residences as well as to the smaller commercial and institutional uses. The maximum permitted speed is typically 25 mph. Access to local roads is unlimited, and roadside parking is usually permitted wherever space allows.

Traffic counts conducted in 2008 show that the township has a high percentage of vehicles traveling along its roadways. Salisbury includes a major expressway that commuters who work in the New York metro area use daily. The Lehigh Valley Hospital is located at the intersection of I-78 and PA 29. In addition, Salisbury has arterials that connect the cities of Allentown and Bethlehem.

Average daily traffic counts range from 200 to 99,000. All roadways classified as arterial or expressway have over 10,000 average counts. The eight roadways which average over 10,000 counts are:

- I-78 / PA 309
- PA Route 29
- Lehigh Street
- W. Emmaus Avenue
- PA Route 145
- S. 24th Street
- E. Emmaus Avenue
- E. Susquehanna Street

The LVPC's *Lehigh Valley Traffic Safety Report 2004 to 2008*, identifies problematic corridors within Salisbury Township. According to the study, GIS mapping and analysis were done to identify multiple injury and high frequency crash corridors using all crash types over the analysis years to determine safety deficiencies on the roadway network. Multiple injury corridors are ones containing four or more fatal/major injury crashes per mile. South Pike Avenue is the only corridor in the township considered a multiple injury corridor. From the intersection of Seidersville Road and Emmaus Avenue



E. Emmaus Ave.

east, on each roadway, these two corridors are considered a high frequency corridor. High frequency corridors are defined as ones that contain crash rates greater than 2.5 times the statewide average rate for a class of roadway. Locations where both multiple injury and high frequency corridors overlap were given special consideration as candidates for high priority corridors to be further studied to determine crash contributing factors. Cedar Crest Boulevard from I-78 / PA 309 to Fish Hatchery Road is the only high priority corridor.

Salisbury Township Comprehensive Plan

MAP 6.1 Street Classification & Traffic Volumes

Class

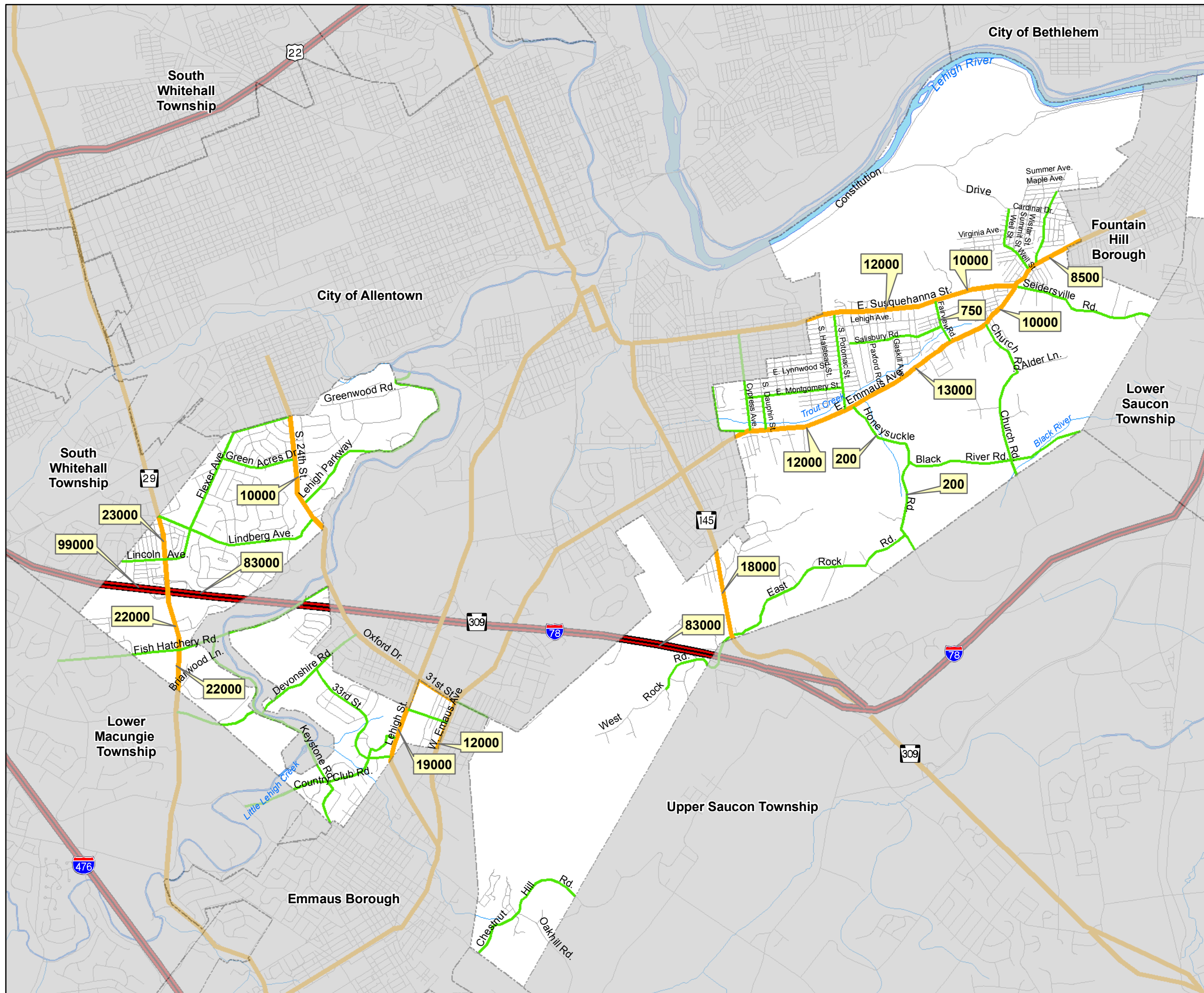
 Expressway

 Arterial

 Collector

All Other Streets Are
Local and Private Streets

 Traffic Volume, 2008



December 2011

Base Information Provided By:

Salisbury Zoning Ordinance, 1993
Lehigh Valley Planning Commission,
PennDOT, 2008.

0 3,250 6,500 Feet



Urban Research & Development Corporation
URDC 28 West Broad Street Bethlehem, Pennsylvania 18018 610-865-0701

Public Transportation

The Lehigh and Northampton Transportation Authority (LANTA) provides public transportation service for Salisbury residents (Map 6.2). LANTA provides bus service for the Lehigh Valley and provides senior citizen and handicap pickup transportation. In February 2010, LANTA completed a comprehensive plan update which recommended changes to scheduling, routes, and services.



In efforts to consolidate and refocus their efforts in the denser populations within the Lehigh Valley, LANTA is planning on redirecting and renaming its routes to implement their planning strategy. In Salisbury Township, LANTA's trunk corridor, a corridor which will be the highest level of service, is planned to extend along E. Susquehanna Street from Fountain Hill and the City of Bethlehem west into Emmaus Borough and the City of Allentown via Lehigh Street. Also, the Lehigh Valley Medical Center (Lehigh Valley Hospital Campus) is considered a major hub due to the number of jobs in the immediate area.

Below is a sample of LANTA'S future planning efforts:

- Better communication with municipal officials and planning agencies
- Bus shelter retrofitting
- Increased pedestrian infrastructure
- Transit friendly design (bus bump out)
- Increased density along trunk corridors / mixed-use land use practices
- Technology enhancements
- Informative way-finding systems

Pedestrian Circulation

Walking is a form of transportation that is becoming increasingly more popular. Salisbury has limited areas with connected sidewalks and pathways. Much of the township lacks sidewalks which make pedestrian circulation very dangerous. Areas do exist where sidewalks are located, such as along Susquehanna Street where commercial development is built closer to the roadways.

Residential connections to parks, commercial and educational areas that lack pedestrian connections throughout the township directly influences residents to rely more heavily on their vehicles. Many parts of Salisbury have local destinations within a half-mile radius of residential areas. These areas are prime locations to allow for pedestrian connections to promote a healthier lifestyle and reduce the township's residents reliance on the automobile.

Bicycle Mobility

Biking is an important and essential mode of transportation. The Lehigh Valley is experiencing an upswing in the development of regional trails and safe street improvements designed for bicycle mobility (Map 6.2). While other municipalities around the Lehigh Valley have begun developing and enhancing areas for bicycle mobility, Salisbury Township is falling behind.

Areas within the township for biking include Lehigh Mountain Park and South Mountain Park. Mountain biking is the largest activity within these two large recreational areas. Throughout the township there are no designated bike lanes or share the road signage and no designated trail systems connecting park, commercial, residential and/or educational areas. Connections to the Lehigh Parkway Trails in the City of Allentown and to the Southside Greenway in the City of Bethlehem are needed.



Photo provided from: bikevmb.com

It has been documented that bicyclists use Emmaus Avenue and Susquehanna Street as bicycle routes. These corridors do not have safety enhancements for biking but Emmaus Avenue has a large shoulder that possibly could be enhanced to include essential safety features.

There is a limited amount of installed bike racks throughout the township. Bicycle racks and designated parking areas are becoming a high priority for higher density areas, such as portions that are within Salisbury Township. Also, the inclusion of bike racks on LANTA buses allows residents to ride their bikes to designated bus stops and take their bikes with them to their next location.

Access Management

Lehigh Valley Planning Commission completed an Access Management Study for Salisbury Township in 2011. The study outlines recommendations to control traffic congestion on major roadways. Recommendations include using internal circulation within sites, limiting access to collector or local roads rather than arterial streets and driveway placements.

Salisbury Township Comprehensive Plan

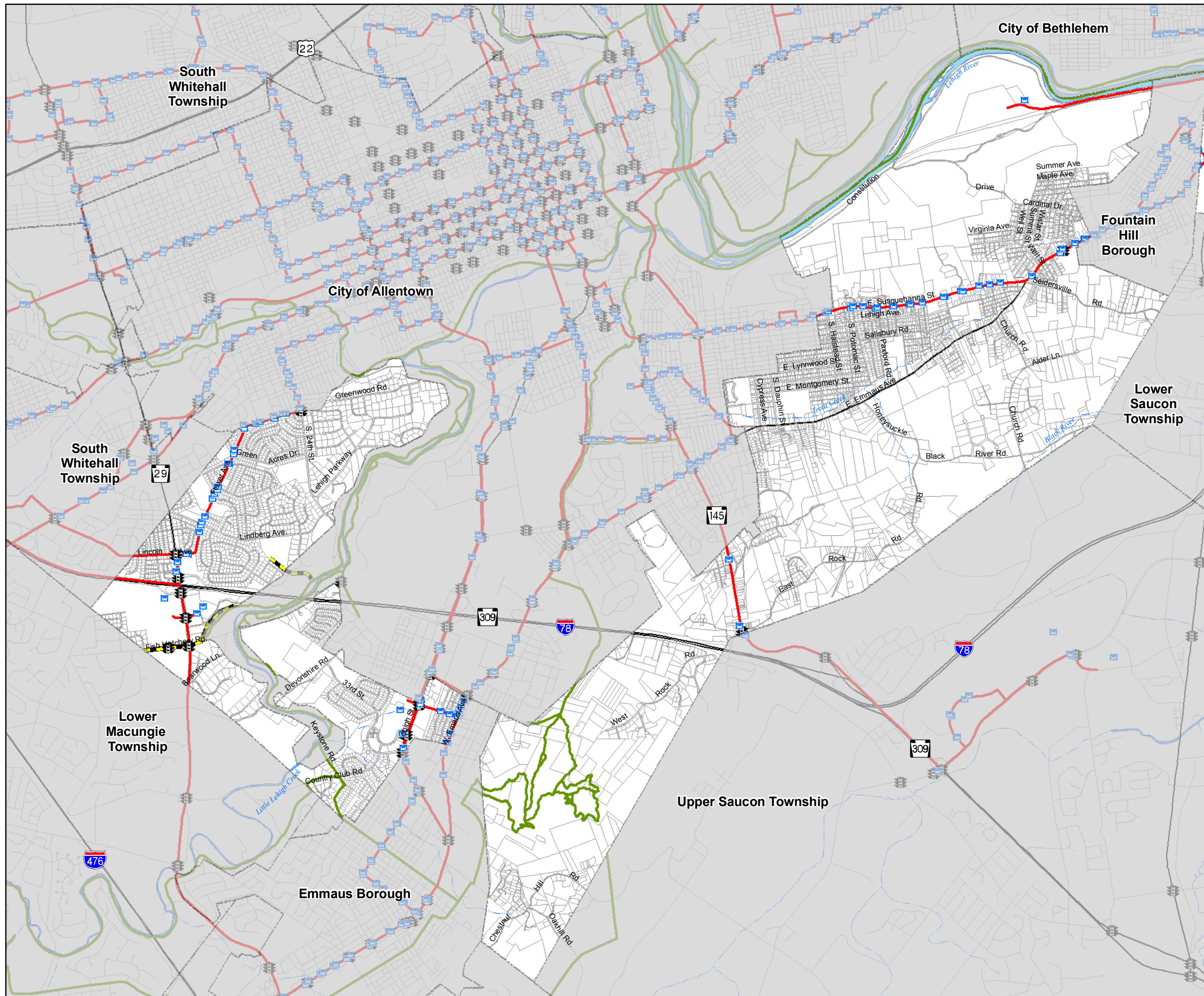
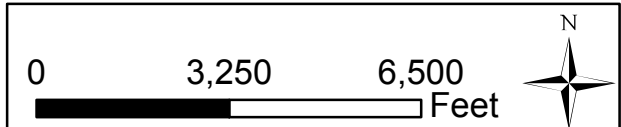
MAP 6.2 Transportation

-  Lanta Bus Stops
-  Traffic Signals
-  Lanta Bus Routes
-  Trails
-  Proposed Trail Link

December 2011

Base Information Provided By:

Lehigh Valley Planning Commission.



Railroads

Norfolk Southern owns and operates a freight rail line along the Lehigh River which connects to South Bethlehem. Another line runs through western Salisbury Township, south of Lehigh Street.

Airports

Airports do not exist in Salisbury Township, although the Queen City Airport is in close proximity. Queen City Airport is owned and operated by the Lehigh-Northampton Airport Authority and services small aircraft.

Transportation Goals

1. Make efficient and safe use of all transportation options.
2. Continue to maintain and update the road system.
3. Control access to new developments to further control congestion problems along highly traveled routes.
4. Create a highly-used trail network for bicycle and pedestrian usage.
5. Continue to enhance public transportation opportunities.

Transportation Recommendations

1. **Work with PennDOT to carry out projects and resolve traffic problems that involve State Roads.**

Salisbury Township should continue to work with PennDOT on state owned roadways. Routes 78, 309, 145 and 29, including Emmaus Avenue and Susquehanna Street traverse through Salisbury. These major arterial roadways need continuous maintenance and Salisbury should continue to work with PennDOT on issues pertaining to these roadways.

2. **Continue to address general road improvements.**

Salisbury Township should continue all road repair such as grading banks, resurfacing of the street and assessing traffic light signals should continue. The ongoing efforts help create a safe transportation network, while also halting problems before they become to large. Storm water issues should also be regularly completed to further enhance all transportation connections.

3. **Work to implement the LVPC Access Management Study goals and recommendations.**

The Lehigh Valley Planning Commission completed an Access Management Study in 2011. The strategies outlined in the study should be reviewed and implemented to better control and manage access along roadways. The following is an overview of the recommendations provided by LVPC:

- Sufficient stacking distance shall be provided to prevent blockage of internal circulation within the site.
 - Where it is found to be necessary, a raised channelization, consistent with PennDOT publication 12M. Design Manual Part II, may be required to restrict particular turning movements.
 - Limit access to collector or local roads rather than arterial streets.
 - Driveways along arterial roads shall be separated from the nearest intersection of the arterial road with a public road by 150 feet.
 - Private driveways on corner lots serving single-family detached dwellings shall be located at least 40 feet from the point of intersection of the nearest street right-of-way.
 - Record joint agreements between property owners when shared driveways and/or cross access are used.
 - For shopping center and office developments under the same ownership the development shall be served by an internal circulation network.
 - When the need for an acceleration, deceleration and/or left turn lane is demonstrated by an approved traffic study, the appropriate lanes shall be provided.
4. **Promote pedestrian and bicycle circulation through national and state design guidelines.**

Pedestrian improvements such as enhanced crosswalks, curb cuts and improved sidewalk conditions should be added throughout the township. Salisbury Township should create continuous walking paths through higher density areas, such as the area between Emmaus Avenue and Susquehanna Street. Salisbury Township School District schools, major parks and commercial activity are located within a quarter-mile radius of this entire area. Creating walkable, continuous sidewalk connections to-and-from residential homes will allow all residents safely walk to these destinations.





Examples of new design techniques to create safer pedestrian and bicycle connections within Salisbury Township include:

- Streets such as Emmaus Avenue can use shoulder lanes as bike lanes with new, effective signage and striping efforts. Buffered bike lanes may also be placed along this corridor, allowing for safer separations between motorists and bicyclists.
- Streets such as Susquehanna Street and Lindberg Avenue can create a designated bike lane or place a sharrow and share-the-road signage to inform motorists that the road is also acceptable for bicycling. In addition, creating pathways that also work as sidewalks are an effective way to create a multi-use path within residential areas.
- Rural roads such as East Rock Road, Honeysuckle Road and Church Road can provide signage to inform motorists that the road is also acceptable for bicycling.

In addition to the national and statewide publications, Salisbury Township can also refer to the Pedestrian & Bicyclist Safety Report completed for Lehigh and Northampton Counties by the Lehigh Valley Planning Commission in 2006. This report outlines major pedestrian/bicycle crashes, promotes safe development and engineering techniques, and provides goals and recommendations for municipalities.

5. **Study and implement traffic improvements at the intersection of Seidersville Road, Emmaus Avenue and Susquehanna Street.**



An enhanced, detailed study of the intersection should be studied and improved for vehicular, bicycle and pedestrian uses. With the new development in the City of Bethlehem, specifically the Sands Casino, the acknowledgment of LANTA creating a trunk route through this intersection and increased traffic between Route 22 and I-78, this east west connection should have a detailed study. Further studies should consider peak hour vehicular traffic, new land use and development potential, and bicycle and pedestrian traffic, at the minimum.

6. **Continue and include roadway design standards in the Subdivision and Land Development Ordinance.**

The Township's Subdivision and Land Development Ordinance (SALDO) is currently being updated. As part of that process, recommendations of the Lehigh Valley Planning Commission regarding access management are intended to be incorporated. Access management involves controlling the location and design of new roads and driveways onto through-roads in a manner that avoids traffic congestion and safety problems. For example, it is desirable to make it possible for a motorist to visit more than one adjacent business without having to re-enter a major road two or more times. Adjacent businesses can be encouraged to use a shared driveway that is located to maximize sight distances.

In addition, the road standards should be updated to minimize environmental impact. For example, consideration should be given to promoting vegetated areas in the middle of cul-de-sac turnarounds.

7. **Work to implement the goals and recommendations outlined in LANTA's comprehensive plan.**

LANTA completed their comprehensive plan 2011. This plan outlines their future endeavors and promotes cooperation with the municipalities within the Lehigh Valley. LANTA is planning on enhancing bus facilities, such as bus stop shelters, signage and restructuring and renaming their routes. Salisbury should continue to work with LANTA to incorporate good land use practices, promote safe, walkable neighborhoods and cooperate with LANTA's efforts in providing a safer, regional public transportation commitment.



8. **Study and implement a township-wide trail network.**

Trails that are currently located within the township are situated within the confines of South Mountain and Lehigh Mountains park areas. The City of Allentown's Lehigh Parkway, which connects to many neighborhoods in the western portion of Salisbury, has a prominent trail system. These existing trail systems create the base for an extensive, regional trail network



Salisbury should study a township-wide trail network to safely connect their parks, schools and other areas. The study will help produce safer routes for pedestrians and bicyclists while adding to the recreational opportunities for township residents. Local connections, such as Lindberg Park to Franco Park are trail connections that will create a better quality of life throughout the Township and surrounding communities. Connections should be addressed to create a local and regional trail network. Major regional connections, could include:

- Lindberg Park to Lehigh Parkway
- Lehigh Valley Hospital to Lehigh Parkway
- Lehigh Mountain to South Bethlehem Greenway

9. Promote the cooperation with private landowners to create easements for a trail system.

Pedestrian easements can be granted by private landowners to create a comprehensive trail network. A private landowner can provide a governmental or non-profit agency the rights to a portion of the his property for the creation of a trail. The State Trails Act greatly limits the liability of a property owner who allows free use of their property for a trail. In addition, the property owner may be eligible for federal tax deduction for the donation of land. This effort between a governmental or non-profit agency and private landowner has been very successful in throughout Pennsylvania.

10. Separate, to the extent possible, conflicting uses on the public street system in order to minimize safety problems. Give special attention to pedestrian and bicycle routes.

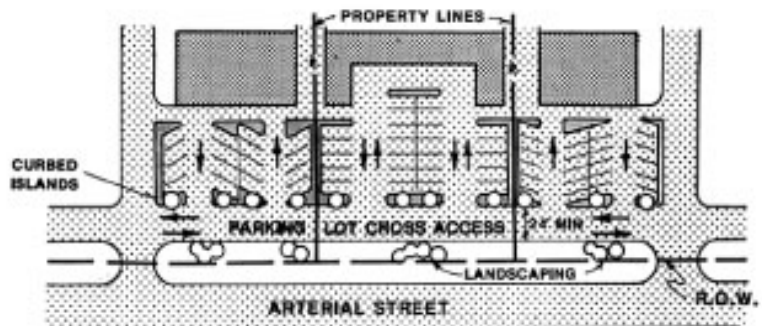
Areas of conflict can create areas known as choke points. Choke points are structures within the right-of-way path along sidewalks, walking paths or shoulders. These structures may include telephone poles, mailboxes, street signage and other permanent structures. In high pedestrian areas, all structures should be moved to allow for at least a four-foot to five-foot, unobstructed pathway.

11. Review new developments for adequacy of parking based upon need, the potential for joint use of parking facilities, opportunities to encourage ride-sharing, and spaces provided for bicycles.

As opportunities arise for businesses to share parking spaces, Salisbury Township should be proactive by assisting in the design and agreement options. The new Access Management Study, provided by the LVPC, outlines new literature that can be enhance this opportunity.

Ride-sharing or park-and-ride lots could be included into Salisbury Township along or near the Interstate 78 corridor. I-78 is a major corridor connecting residents of the Lehigh Valley to the New York/New Jersey metropolitan area. As residents use this corridor to travel for work or tourism, a ride-sharing park-and-ride would be an adequate use within this immediate area.

Salisbury should also include literature for the creation and placement of bicycle spaces in its zoning when new or re-development takes place. For example, a credit can be provided when a development places five bike spaces in return for one less vehicle parking space.



13. Continue to upgrade traffic signals as needed.

As traffic signals are upgraded in congested areas, consider installing: a) a system in which emergency vehicles can change a traffic signal to green in the direction they are headed, and b) backup power that allows a traffic signal to continue to operate during a power outage.

14. Continue to cooperate regarding a multi-municipal traffic improvement project to St. Lukes Hospital.

Salisbury Township has endorsed a plan to create a rear access from Riverside Drive to St. Lukes Hospital. This traffic improvement will provide alternative access to St. Lukes Hospital, benefitting Salisbury Township, Fountain Hill and the City of Bethlehem. Salisbury should continue to cooperate to move the project forward.