

TRANSPORTATION PLAN

The function of the transportation system is to provide for the movement of people and goods between places. The adequacy of this system is directly influenced by the type and size of the population growth and land development that occur along the network. As per Section 301.a.3 of the Pennsylvania Municipalities Planning Code requires that the transportation component of the Comprehensive Plan provide:

“A plan for movement of people and goods, which may include expressways, highways, local street systems, parking facilities, pedestrian and bikeway systems, public transit routes, terminals, airfields, port facilities, railroad facilities and other similar facilities or uses.”

An effective and efficient multi-modal transportation system is critical if North Whitehall Township is to continue to thrive as a desirable place to live and work. Transportation issues within the Township are a result of the continuous congestion along major traffic corridors, truck volumes accessing industrial areas within the Township, the lack of a comprehensive mass transit system and the need for a more pedestrian friendly transportation network.

Transportation access and traffic issues are a great concern to the residents of North Whitehall Township. To fully understand traffic issues within the Township we must analyze data, patterns and trends.

Transportation and Circulation

Proper land use planning is critical to prevent adverse effects on the transportation network due to improper development. Conversely, when transportation improvements are designed, it is important to address the needs of the general public, individual property owners, and neighborhoods. Where appropriate, transportation improvements should be designed as multiple-use facilities that provide for pedestrians, bicycles, public transit, and motor vehicles. As the Township maintains and upgrades its roads, a balance among parking needs, local vehicle movements, and emergency vehicle movements must be upheld.

Road System

Roadways are generally classified by its function. Each function class is based on the type of service the road provides to the vehicular movement. Accordingly, design standards are tied to function class, i.e. each class has a range of allowable lane widths, shoulder widths, curve radii, etc. The Federal Highway Administration (FHA) provides for four major road function classifications: interstates, arterials, collectors, and local roads.

- Interstates
 - Highest level of mobility
 - Highest speeds (usually between 55 and 75 mph)
 - Longest uninterrupted distance

- Arterials
 - Includes freeways, multi-lane highways, and other important roadways that supplement the interstate system
 - Generally, connect principal urbanized areas, cities, and industrial centers
 - Posted speed limits range between 50 and 70 mph
- Collectors
 - Connect local roads and streets with arterials
 - Balance mobility with land access
 - Posted speed limits range between 35 and 55 mph
- Local Roads
 - Limited mobility
 - Access to residential areas, businesses, farms, and other local areas
 - Posted speed limits range between 20 and 45 mph
 - Majority of roads in the U.S.

The Transportation Map includes the Township’s street hierarchy. Road classifications are as follows:

- Expressways (Interstates)
 - PA Turnpike (I-476)
- Major Arterials
 - Route 145
 - Route 309
 - Route 873
- Minor Arterials
 - Route 329
 - Mauch Chunk Road
 - Cedar Crest Boulevard
- Major Collectors
 - Kernsville Road
 - Sand Spring Road
 - Levans Road
 - Old Post Road
 - Old Packhouse Road
- Minor Collectors
 - Scheidys Road
 - Clearview Road
 - Rising Sun Road
 - Coffeetown Road
 - Shankweiler Road
 - Schneck Road

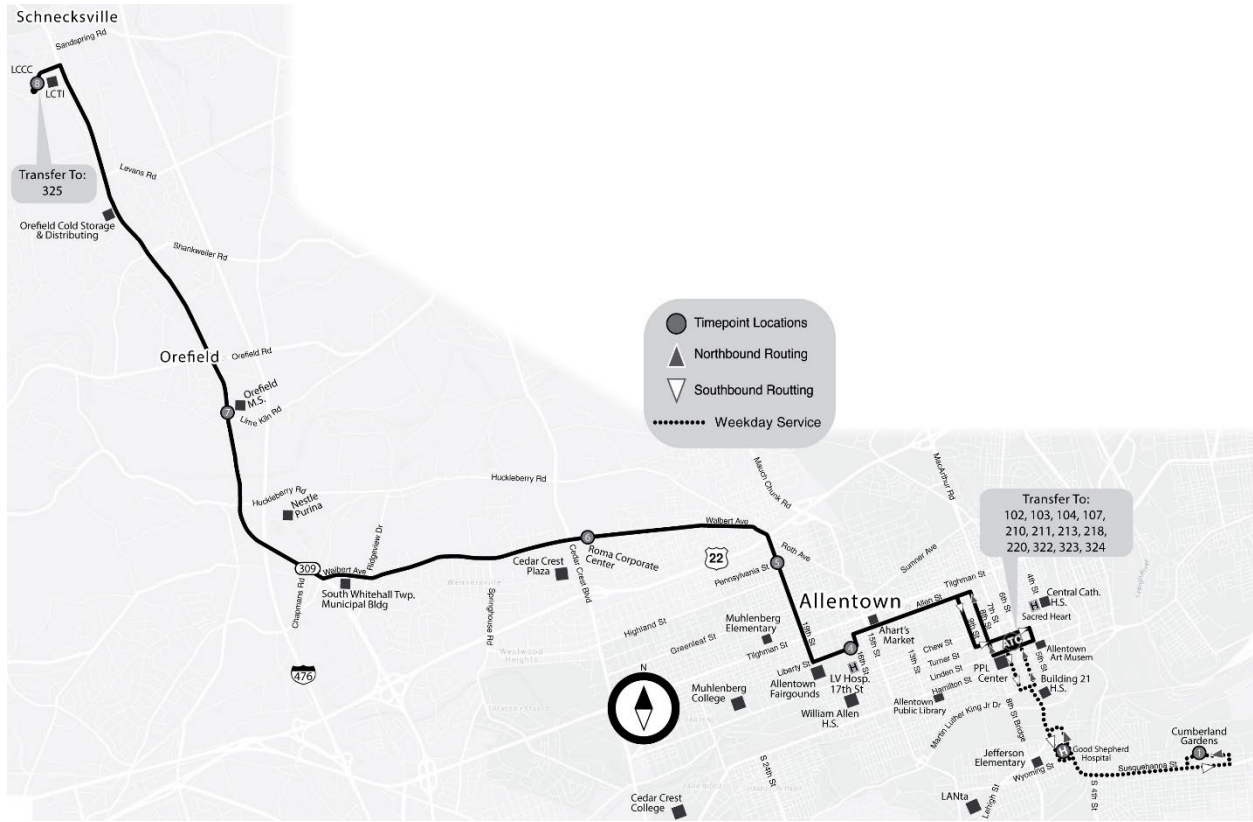
- Neffs-Laurys Road
- Coplay Creek Road
- Quarry Street
- Willow Street
- Local Roads
 - All other public roads

Many of the Township streets are local roads, owned by the Township and maintained by the Public Works Department (approximately 120 miles of roads). All of the arterials and a few of the collectors are owned and maintained by Pennsylvania Department of Transportation (PennDOT).

Public Transportation

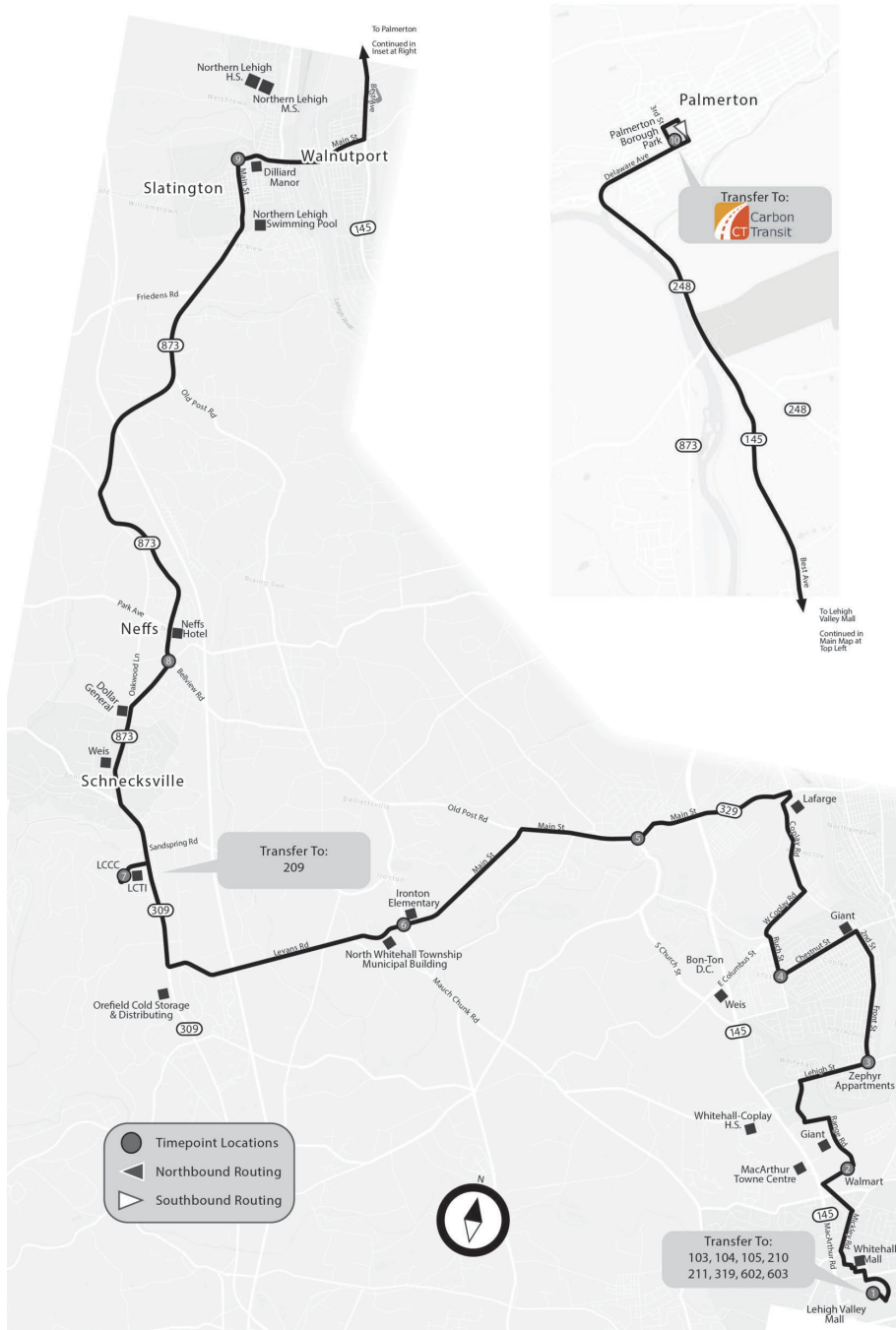
North Whitehall Township is served by LANTA bus service. The Lehigh and Northampton Transportation Authority (LANTA) is charged with operating a "public transportation system for public use in the metropolitan area consisting of the Counties of Lehigh and Northampton." LANTA operates the LANTaBus system, a network of 30 fixed bus routes throughout the Lehigh Valley providing daily, later evening, Saturday, and Sunday services. Two designated LANTaBus routes operate within North Whitehall Township: Route 209 and Route 325.

The Route 209 bus runs from Cumberland Gardens in Allentown to Lehigh Carbon Community College in Schnecksville with stops at Good Shepherd Hospital, the Allentown Transportation Center, Roma Office Center/Crest Plaza and Orefield Middle School.



LANTA Route 209

The Route 325 bus runs from Palmerton Borough Park to the Lehigh Valley Mall with stops at Slatington, Neffs National Bank on Route 873, Lehigh Carbon Community College in Schnecksville, Ironton Elementary, Egypt, Coplay, Hokendauqua and the Whitehall Shopping Center – Walmart.



LANTA Route 325

Pedestrian Circulation

Providing a walkable environment is essential to efficient ground transportation. Every trip begins and ends with walking. Walking remains the cheapest form of transportation, and a walkable community provides the most affordable transportation system any community can

plan, design, construct, and maintain. Due to the Township’s rural nature the availability of sidewalks throughout the Township is limited. The Township should amend the Subdivision and Land Development Ordinance to require the installation of sidewalks for all new developments.

There are several trails located in North Whitehall. The Trexler Nature Preserve has over 18-miles¹ of trails for various users. A portion of the Delaware and Lehigh National Heritage Corridor (D&L Trail) runs along the Lehigh River on the North Whitehall Township side. The Ironton Rail Trail is a 9.2-mile trail that connects North Whitehall to Coplay Borough and is considered a spur of the D&L Trail².

Transportation planning must maximize the interrelationship and coordination between all modes of travel to achieve an appropriate balance that serves all Township residents. This includes seeking ways to alleviate traffic congestion and improve travel times, planning for road improvements specifically those that may encourage mode-sharing, and identifying areas in need of connections.

Vehicular Traffic Count Data

Traffic count data collects vehicle volume on roadways and expresses the data as Annual Average Daily Traffic (AADT). AADT represents an estimate of all traffic during a 24-hour period at the location indicated for the year in which it was collected. Traffic information is critical in transportation decision making related to highway funding, traffic engineering, highway design, planning, programming, and air quality analysis. Table XX provides actual AADT data for several arterial and major collector roads in the Township.

Table XX: Traffic Counts for Road Segments, North Whitehall Township

Road Name	Location	Segment	Date	AADT
Route 145	600 ft north of Canterbury Dr	0290	August 2019	16,114 (truck volume 1,079)
Route 145	0.3 miles north of Second St	0260	August 2019	17,142 (truck volume 950)
Neffs Laurys Rd	725 ft east of Sparrow Ln	0210	August 2018	413 (truck volume 15)
Neffs Laurys Rd	200 ft west of Cider Press Rd	0140	June 2020*	2,123
Route 329	200 ft west of Old Post Rd	0030	July 2019	3,876 (truck volume 175)
Route 329	0.5 miles north of SR 1017	0070	July 2018	4,621
Levans Rd	400 ft north of Hill St	0060	July 2018	3,792
Route 309	0.4 miles north of Welby Rd	0390	June 2020*	5,054 (truck volume 366)
Route 873	Between Crestwood Dr and Washington St	0020	July 2020*	11,810 (truck volume 574)
Route 309	400 ft south of SR 873	0370	August 2018	20,714

¹ Discover Lehigh Valley. <https://www.discoverlehighvalley.com/listing/trexler-nature-preserve/2360/>

² Ironton Rail Trail. <https://www.irontonrailtrail.org/index.html>

				(truck volume 869)
Route 309	Between Old Packhouse Rd and Levans Rd	0350	September 2020*	20,030 (truck volume 1,208)
Shankweiler Rd	0.5 miles east of Coffeetown Rd	0040	June 2018	2,268
Coffeetown Rd	0.25 miles north of Shankweiler Rd	0020	April 2017	4,233
Kernsville Rd	100 ft northeast of Old Mile Hill Rd	0180	May 2019	6,488
Main St	800 ft south of Cedar Crest Blvd	0110	August 2017	9,553 (truck volume 376)

*Traffic volumes may be lower than normal due to the COVID-19 pandemic.

Source: PENNDOT Traffic Information Repository (TIRe)

Transportation Projects

The State Transportation Improvement Plan (STIP) and the TIP are the first four years of the Twelve-Year Program (TYP), which outline the multimodal transportation improvements spanning a four-year period. The STIP covers the entire state and includes 23 individual TIPs representing the Metropolitan and Rural Planning Organizations (MPO/RPO). The TIPs feed into the statewide STIP. Federal law requires TIPs to be updated at least every three years. The MPO for the Lehigh Valley region is the Lehigh Valley Planning Commission (LVPC). Transportation projects identified on the TIP are multi-modal; that is, they include bicycle, pedestrian, ITS, and freight related projects, as well as the more traditional highway and public transit projects.

There are currently several projects listed on the TIP within North Whitehall Township - the resurfacing of MacArthur Road from Grape Street to Route 329, the rehabilitation of historic Geiger’s Covered Bridge (currently underway), the replacement/rehabilitation of the Kernsville Road bridge over Jordan Creek, the resurfacing of Route 873 from segment 10 to segment 130 through North Whitehall Township, Washington Township and Slatington Borough, and the resurfacing of Route 309 from Walbert Avenue to Shankweiler Road.³

For a project to receive funding in the TIP it must align with the vision of FutureLV: The Regional Plan, and its 25-year Long-Range Transportation Plan (LRTP). The final list of Long-Range Transportation Plan projects was adopted by Lehigh Valley Transportation Study on October 2, 2019. The following projects in North Whitehall Township are listed on the Long-Range Transportation Plan:

- State Route 309 Resurface – includes pavement restoration from Walbert Avenue to Shankweiler Road, and reconstruction of Orefield Road and Route 309 intersection to accommodate truck turning movements and signal replacement. Classified as short range (2019-2022) and included as part of the TIP as noted above.
- State Route 309 Resurfacing – Sand Spring Road to State Route 100. Classified as long-range (2031-2045).
- State Route 145 Bridge Replacement – over Fells Creek. Classified as long range (2031-2045).
- Coffeetown Road Bridge Replacement – over Coplay Creek. Classified as long range (2031-2045).

³ LVPC. Transportation Improvement Program 2021-2024. <https://lvpc.org/2021-2024-tip.html>

Future LV: The Regional Plan acknowledges projects and programs submitted for consideration onto the Long-Range Transportation Plan which have not been included. This is due to the fiscal constraints of the long range plan. These projects and programs are categorized as unmet needs. Within North Whitehall Township the following are unmet needs:

- MacArthur Road (State Route 145) Betterment Project – from Center Street to Clearview Road.
- State Route 309 Betterment Project – from Chapmans Road to State Route 873/Main Street.
- State Route 309 Betterment Project – from State Route 873/Main Street to State Route 100.
- MacArthur Road (State Route 145) Betterment Project – from Clearview Road to Cove Road.
- Rex’s Covered Timber Bridge Rehabilitation – bridge carrying Jordan Road over the Jordan Creek.

Other potential projects to be recommended for the long range transportation plan include the widening of Coffeetown Bridge over Coplay Creek and intersection improvements at the juncture of Route 873, Route 329 and Neffs Laurys Road.

Throughout the Comprehensive Plan process there has been continuous concern vocalized regarding traffic along roads classified as arterials and collectors. Specifically, the ability of these roads to adequately accommodate truck volumes. The Township should consider pursuing a transportation study that includes an assessment of needs or a traffic impact analysis (Act 209) which permits the Township to collect impact fees to be used toward off-site improvements.

Alternative Transportation Options

Planning for public transit, pedestrian walkability, and bikeway systems is crucial for meeting the needs of the community and can potentially alleviate strain on the roadway system. LVPC adopted an active transportation plan, *Walk/Roll LV*, in May 2020⁴. Goals of this plan include:

- Safety and Accessibility – Reduce crashes and improve personal security for people who walk, roll, bicycle or use public transit. Eliminate barriers for people with disabilities. Provide supportive education, enforcement and public engagement programming.
- Convenience and Connectivity – Make it easier for people of all ages and abilities to get to where they want to go by walking, rolling, bicycling and using public transit.
- Seamless Multimodal Integration – Provide seamless integration between trails, sidewalks, roads and public transit.
- Regional Coordination – Foster regional coordination to improve pedestrian and bicycle conditions and develop a connected regional bicycle network.
- Culture – Make walking, rolling, bicycling and public transit use key elements of regional transportation.
- Equity – Provide equal access to high-quality, low-stress walking, rolling, bicycling and public transit networks for everyone in the Lehigh Valley.
- Air Quality and Climate – Improve air quality and mitigate the impact of the transportation system on climate change.

⁴ Lehigh Valley Planning Commission. *Walk/Roll LV: An Active Transportation Plan*. May 30, 2020. <https://lvpc.org/pdf/2020/WalkRoll/WalkRoll%20Reduced.pdf>

- Emerging Technologies – Leverage emerging technologies to increase the safety, comfort, and convenience of walking, rolling, bicycling and public transit use.

The Township does not have a current trail plan, and until an official plan is prepared, the regional active transportation plan should be incorporated as part of this Comprehensive Plan. According to *Walk/Roll LV*, there are significant gaps in sidewalk connections throughout the Township. To promote a more walkable community these gaps should be completed especially connecting residential neighborhoods to destinations, i.e. shopping, schools, parks, etc.

The long-range transportation plan also includes transit projects. There are no noted projects specific to North Whitehall Township. However, general transit projects that may impact the Township include:

- Transit vehicle maintenance and replacement
- Enhancements to bus/bus rapid transit
- Intelligent transportation systems and security

Transportation Implementation Strategies and Recommendations

- Prepare a transportation study/traffic impact analysis to assess current traffic concerns and recommend improvements.
- Compile listing of all existing truck route signage and determine the appropriateness of existing routes and need for additional truck signage.
- Maintain and improve streets to ensure the safety of residents, pedestrians, and motorists and the livability of neighborhoods while maintaining the connectivity of the Township's street pattern.
- Develop policies regarding traffic calming, including the participation of any neighborhood that could be affected by the addition of traffic calming measures.
- Work with LANTA to ensure that the public transportation needs of residents are being met.
- Improve the pedestrian circulation system through improvements to the sidewalk system and pedestrian crossings at street intersections.
- Identify gaps in the pedestrian/bicycling network and recommend specific improvements needed to fill these gaps in the system.
- Provide pedestrian and bike trail connections to schools, parks, community facilities, and public transportation hubs/stops.