

Chapter 9

TRANSPORTATION AND REGIONAL CONSIDERATIONS

TRANSPORTATION

Train, Bus and Auto

Chatham Township homes are a 35-minute drive or 45-minute train ride into midtown Manhattan. The New Jersey Transit train stops at the Chatham Borough station, a five or 10 minute drive from most Chatham Township homes, to provide commuter service on the Morristown Line, heading to the Hoboken Terminal and to Penn Station at 34th Street in New York City.

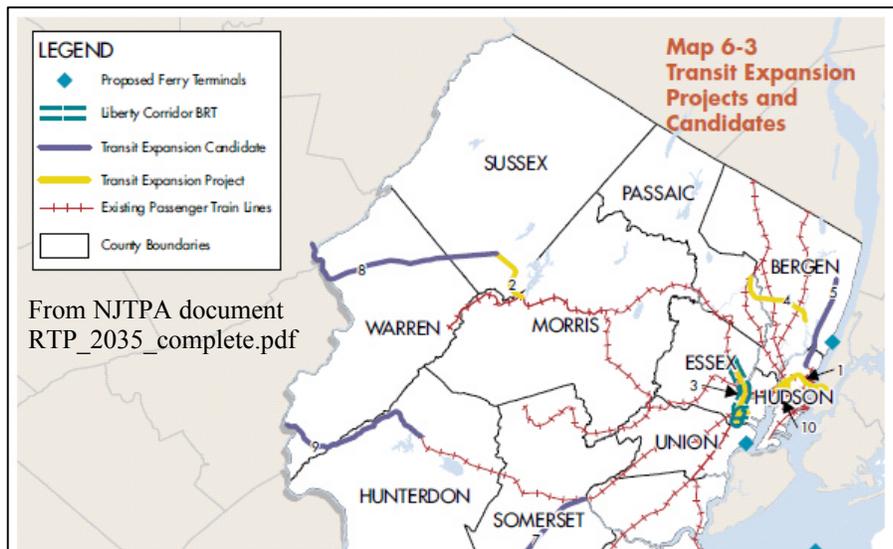
Lakeland Bus leaves from nearby Summit for a 40-minute one-way ride to Port Authority in midtown Manhattan.

Amtrak stops at Newark or Metropark in Edison, both are about 14 miles from Chatham Township. Newark Liberty International Airport is about 16 miles from Chatham Township.

Nearby local and interstate highways include Route 24 (Chatham Borough is Exit 7), Route 124/Main Street, Route 10 and Interstates 78 and 287.

Complete Streets

Chatham Township intends to participate in the New Jersey Department of Transportation Complete Streets program, which encourages alternate methods of transportation such as biking and walking. A Complete Street is defined as a way to provide safe access for all users by designing and constructing a comprehensive, integrated, connected multi-modal network of transportation options. Because of the increase in pedestrian and bicycle fatalities, the New Jersey Department of Transportation (NJDOT) has established a policy to provide safe and accessible accommodations for all users of existing and future pedestrian, bicycle and transit facilities. NJDOT will implement



its Complete Streets policy through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities within public rights of way that are federally or state funded, including projects processed or administered through the Department's Capital Program.

Transportation facilities are long-term investments to anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements:

- By providing connections to bicycling and walking trip generators.
- By providing safe and accessible accommodations for existing and future pedestrian, bicycle and transit facilities.
- By ensuring improvements comply with Title VI/Environmental Justice, Americans with Disabilities Act (ADA) and should complement the context of the surrounding community.
- By addressing the need for bicyclists and pedestrians to cross corridors as well as travel among them.

The Department strongly encourages the adoption of similar policies by regional and local jurisdictions that apply for funding through Local Aid Programs.

The benefits of Complete Streets are

- Improves safety for pedestrians, bicyclists, children, older citizens, non-drivers and the mobility challenged as well as those that cannot afford a car or those that choose to live car free.
- Provides connections to bicycling and walking trip generators such as employment, education, residential, recreation, retail centers and public facilities.
- Promotes healthy lifestyles and economic development.
- Creates more livable communities.
- Reduces traffic congestion and reliance on carbon fuels thereby reducing green house gas emissions.
- Makes fiscal sense by incorporating sidewalks, bike lanes, safe crossings and transit amenities into the initial design of a project sparing the expense of later retrofits.

Bikeways and Trails

Chatham Township is developing a walkway and bikeway plan. Quality of life relates to the ability to move safely about the Township using a variety of transportation modes, and the health benefits that come with an active lifestyle. The purpose of the walkway and bikeway plan is to enhance the quality of life in Chatham Township by promoting a comprehensive network of safe walkway and bikeway areas and the healthy lifestyles they promote. The plan evaluates current conditions and identifies areas in need of improvement or additional connections. Based on this assessment, the plan identifies a series of interconnected walkways and bikeways for safer and more efficient pedestrian and bicycling activity throughout the Township and to better connect the residents to Township parks, open space and community facilities and other activity centers.

Bike lanes have been striped on several roads. Storm sewers are being outfitted with bike-friendly grates. Many pedestrian street crossings have been designated with white stripes. A bike loop around the township and into the Great Swamp has been mapped.

REGIONAL CONSIDERATIONS

Benefits to residents from regional planning for transportation and from shared municipal services for dispatch, courts, police, health officers and schools and libraries are well known. All of these are being implemented by Chatham Township. Environmental effects also cross municipal boundaries.

Chatham Township's municipal boundaries bear little relationship to the physical relationship it shares with other municipalities in the region. The physical relationship of our towns is important because we share natural resources like the Great Swamp. We also share responsibility for the impact each town causes. These impacts are most commonly caused by zoning and development decisions which affect our physical resources. The water

resource is the resource of most concern in this region. It is a shared resource that is critical both as water supply, as quality of life, as open space, and as habitat for a large diversity of life.

Chatham Township's land use decisions can contribute to downstream flooding and water quality changes just as our upstream neighbors can affect the level of flooding and water quality for us. Chatham Township's land use decisions can affect the water supply for towns dependent on the Buried Valley Aquifer system for water supply. Chatham Township's land use decisions can affect air quality.

Great Swamp

Chatham Township is one of ten municipalities that share the 55.4 square mile watershed of the Great Swamp in the Upper Passaic River Basin. All precipitation that falls in the watershed flows through the municipalities and into the Great Swamp. Most of the Great Swamp is protected as a federal wildlife refuge. The U.S. Fish and Wildlife Service is actively pursuing a land acquisition program from willing homeowners to buy private lands of the swamp to be included in the refuge. The eastern most part of the refuge is the first Wilderness Area in the United States. This status gives it special protection from encroachment.

Streams

Two of the swamp's four major feeder streams flow through Chatham Township. Loantaka Brook originates in Morristown, flows through Morris, Harding, and Chatham Townships and into the Great Swamp. In the Great Swamp, the brook joins Great Brook and flows into Harding and Long Hill Townships before exiting into the Passaic River.

Black Brook receives stormwater drainage from part of Madison as well as Chatham Township. The brook had two major tributaries until a drainage ditch was built in the easterly side of the Great Swamp in the 1950s. This easterly ditch carries stormwater as well as wastewater effluent from the Tanglewood wastewater treatment plant for about two miles to Black Brook in the Great Swamp. From there Black Brook joins the Passaic River through Harding and Long Hill townships. Soon the Tanglewood treatment plant will discharge into the Passaic River and will no longer discharge effluent into the ditch.

Passaic River

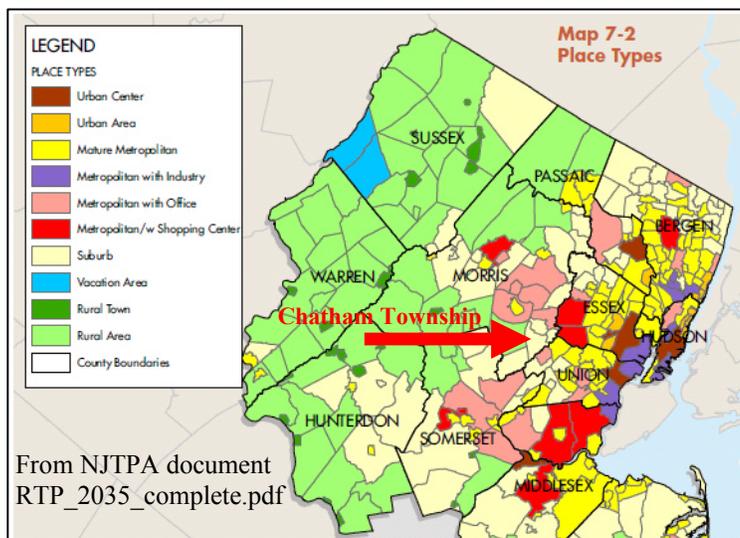
The Passaic River forms the southerly border of Chatham Township. On the opposite banks of the river, we share borders with Berkeley Heights, New Providence, and Summit.

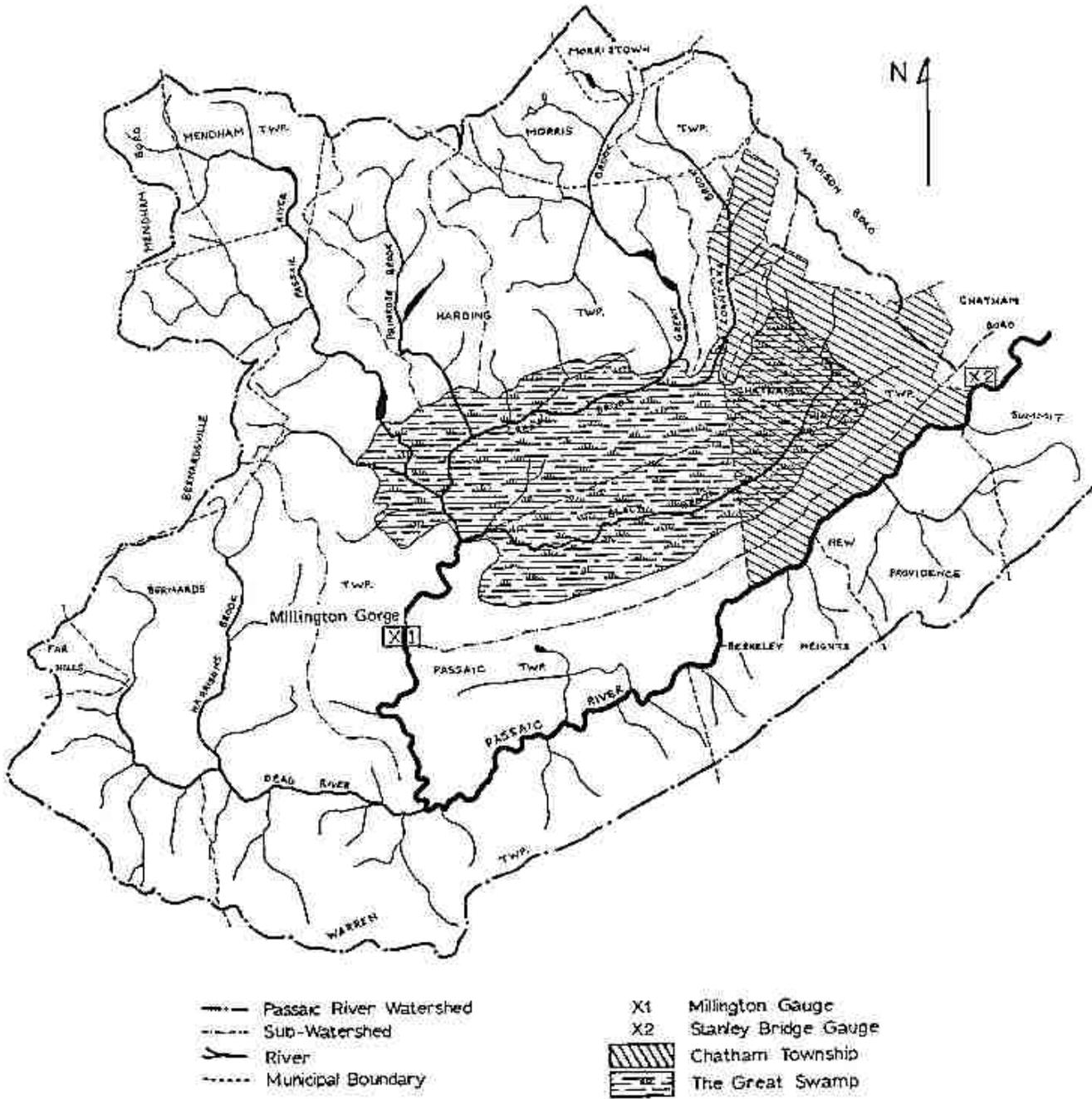
Geological

Chatham Township shares with Madison in being the terminus of the Wisconsin Glacier in this area. Part of that regional geological relationship carries over into the Township's being in the Buried Valley Aquifer system.

Chatham Township lies in the Buried Valley Aquifer recharge area and stream zone. The aquifer is designated as a Sole Source Aquifer by the U.S. EPA. The neighboring towns of Madison, Chatham Borough, and Florham Park rely solely on wells that draw from the Buried Valley Aquifer for their water supply.

The New Jersey Geological Survey identified a band of land running across northerly Chatham Township just beyond the terminus area of the Wisconsin glaciation as a prime recharge area for the Chatham Valley Buried Valley Aquifer, part of the Buried Valley Aquifer system.





Upper Passaic River Watershed

Source: Natural Resource Inventory, Chatham Township, 1974.

Topography

Long Hill is the remains of an ancient volcanic eruption that extends into Chatham Borough in the north and through Long Hill Township to the south. This ridge is the third ridge from the coastal plain, called the Third Watchung Range. It stopped the meltwaters of the glacier and was a critical element that caused the formation of Ancient Lake Passaic, the present day Great Swamp.

RECOMMENDATIONS

Because of Chatham Township's location almost surrounding the Wilderness Area of the Great Swamp National Wildlife Refuge, in the recharge area of the Buried Valley Aquifer and in the upper Passaic River basin, planning and development decisions have the potential to impact a large area beyond Chatham Township's borders. The potential impacts relate to open space and water resources and include:

- loss of open space that provides forested areas and groundwater recharge to the Buried Valley aquifer
- contamination of groundwater recharge to the Buried Valley Aquifer in already developed areas
- increased flooding due to stormwater runoff from increased development
- increased flooding due to loss of open space and loss of trees with their evapotranspiration function

To address these potential undesirable impacts, Chatham Township Environmental Commission recommends that Chatham Township:

- aggressively pursue preservation of privately owned open land through outright purchase or broad encouragement and acceptance of conservation easements
- include natural features that enhance stormwater control as a criteria for open space acquisition and approval of development applications
- classify lawn as impervious surface for purposes of stormwater runoff calculations (Najarian Study)
- institute an educational drive to promote preservation of mature trees and consider formation of a Shade Tree Commission
- enforce the requirement for a 50 foot riparian buffer

References

- North Jersey Transportation Planning Authority at http://www.njtpa.org/Plan/Subregion/Profiles/overview_morris.aspx.
- NJTPA transportation plan at http://www.njtpa.org/Plan/LRP2035/documents/RTP_2035_complete.pdf.
- NJDOT Complete Streets at <http://www.state.nj.us/transportation/eng/completestreets/faqs.shtm>.
- Walkway-Bikeway DRAFT plan w Comments 5-1-09.pdf by Banisch Associates (appended).
- Bikeway map in the Great Swamp at <http://www.nj.gov/transportation/commuter/bike/pdf/gswamp.pdf>.
- Chatham Township Natural Resources Inventory 1999.
- *A Status and Assessment Study of Stormwater Discharges Within the Great Swamp Watershed*, 1997, Tavit Najarian, Maser, Sosinski & Assoc.