

IN MOTION

MORRIS COUNTY'S TRANSPORTATION FUTURE

Technical Memorandum: Literature Review



1. Introduction

This Literature Review Technical Memorandum provides an examination of the various Municipal, County, and regional planning documents that influence or relate to Morris County's transportation network and which have relevance in the creation of the Morris County Circulation Element.

Plans for all 39 municipalities in Morris County were reviewed, including master plans, land use plans, bicycle and pedestrian plans, and transportation studies. The major recommendations, along with goals and objectives, were compiled for this document.

The County of Morris's plans and studies were also reviewed, including the 1998 Bicycle and Pedestrian Element of the Morris County Master Plan, the 1992 Morris County Circulation Element, 2013 NJ 124 Corridor Transit Access Improvement Study, the 2010 Exxon Redevelopment Study, the 2013 East Hanover Avenue Corridor Traffic Study, and the 2011 Morris County Freight Infrastructure and Land Use Analysis.

In addition to municipal and county plans, regional plans were reviewed. The North Jersey Transportation Planning Authority (NJTPA) conducted the following regional studies: The 2015 Together North Jersey Plan, the 2013 Regional Transportation Plan, the 2014 Morris/Warren County Rail Corridor Study, the 2013 Rail Freight Capacity and Needs Assessment to Year 2040, the 2040 Freight

Industrial Level Forecasts adopted in 2012, and the 2010 Northwest New Jersey Bus Study. This review also included the 2005 Morris Canal Greenway in Morris County Strategic Preservation Plan prepared by the Morris Land Conservancy and The Canal Society of New Jersey.

This comprehensive review of planning documents provides an important context for the assessment of transportation conditions in Morris County and will provide a framework for developing the goals, objectives, and recommendations of the Morris County Circulation Element.

2. County Plans and Studies

East Hanover Avenue Corridor Traffic Study

In July 2013, the East Hanover Avenue Corridor Traffic Study was completed with consultant services provided by NJDOT. East Hanover Avenue (County Route 650) is a major commuting arterial roadway running between US-202 and the NJ 24 eastbound on-ramp. The 2.4 mile corridor traverses Hanover Township, Morris Plains, and Morris Township.

The project was initiated to analyze existing congestion and future traffic growth along the corridor. The area had started, and continues, to experience redevelopment; the land uses transitioning from manufacturing and light industrial uses to retail. This redevelopment has contributed to the significant levels of roadway congestion.

The study evaluated the current roadway conditions (2011), which included trip generation, pedestrian and bicyclist activity, traffic volume, transit, speed runs, and crash data. A no-build scenario and an alternatives analysis were conducted for the 2015 and 2035 forecast years.

Three alternative scenarios were developed in order to evaluate the effectiveness of potential improvements on mitigating future traffic growth; each scenario was progressively more comprehensive. The following were the three alternatives :

- **Alternative Scenario 1** (Low-Level Improvements):
Maintain/improve existing vehicular, transit, and pedestrian infrastructure, and adjust signal timings.
 - **Cost: \$270,000**
- **Alternative Scenario 2** (Moderate Improvements): Provide some additional vehicular infrastructure, but only improve existing transit and pedestrian infrastructure.
 - **Cost: \$6,225,000**
- **Alternative Scenario 3** (Significant Improvements): Provide additional vehicular, pedestrian, and transit infrastructure.
 - **Cost: \$6,370,000 - \$11,100,000**

Instead of recommending one specific Alternative Scenario, the study ultimately recommended implementing various aspects of each scenario, balancing cost and feasibility. These improvements and phasing are identified in Table 2-1. The cost of the recommended improvements was estimated at \$3.0 million for construction and \$60,000 for right-of-way acquisition.

Table 2-1: East Hanover Avenue Corridor Traffic Study Implementation Schedule

Improvement	Alternative	Implementation Strategy	Timeline
Speedwell Ave Intersection	1	Coordinate with DOT to implement.	2013 – 2015
Martin Luther King Avenue/Horse Hill Road Intersection	2	Improvements to be coordinated with development of ShopRite and office building sites.	2013 – 2015
Monroe Street/County and Big Box Driveway	3	Additional sidewalks and two-way left-turn lane coordinated with development of former Berlex site.	2013 - 2015
Ridgedale Avenue	2	Improvements to be coordinated with development of former Berlex site.	2013 - 2015
Whippany Road	2	Coordinate with DOT to implement signal timing changes.	2013 - 2015
Pedestrian /Bicycle	3	Coordinate with developers and property owners along the Corridor. Phase 1: Martin Luther King Ave sidewalk extensions, south side of corridor between The American Road and Martin Luther King Ave. Phase 2: Construct the multi-use path.	Phase 1: 2013 – 2015 Phase 2: 2015 – 2017
Transit	3	Phase 1: ShopRite Center bus pull-outs and shelters. (Implement with development). Phase 2: Remaining bus pull-outs, shelters, and pads.	Phase 1: 2013 – 2015 Phase 2: 2015 - 2020
Trailblazing/ Streetscaping	3	Pursue with Phase 1 of Multi-Use Path.	2013 – 2015

Source: East Hanover Avenue Corridor Study Alternative Analysis Report, July 2013: Table 9

Exxon Redevelopment Regional Traffic Study

In October 2000, preliminary plans began to advance redevelopment of the vacant Exxon property, located on Park Avenue in Florham Park, into a mixed-use site with commercial and residential components. The site is situated in a suburban setting and is located among other office complexes and residential neighborhoods.

Morris County, in cooperation Florham Park Borough, Madison Borough, Morris Township, Hanover Township, Chatham Borough, and the Town of Morristown, contracted for a regional traffic study. The purpose of the study was to determine the impact and identify potential improvements for several intersections and roads due to the proposed redevelopment. The Borough of Florham Park and the site's developer each prepared traffic impact reports analyzing intersections in the immediate area around the site. The Exxon Redevelopment Regional Traffic Study examined a larger area to assess broader regional impacts.

Congestion in the vicinity of the site was already high at the time of analysis, without any added traffic from the site. The study had to address both existing and future traffic growth in the area. The regional study concluded that the expected redevelopment would impact roadway operations within the study area. The report provides a series of recommendations for intersection improvements in the study area, with general cost estimates, and identification of the agencies that would be responsible for implementation. Further, the report proposed general bicycle and pedestrian improvements,

commuter rail and bus service enhancements, train station improvements, and carpool and vanpool strategies.

Morris County Bicycle and Pedestrian Element

The 1998 Bicycle and Pedestrian Element of the Morris County Master Plan examined issues and opportunities related to bicycle and pedestrian travel within the County. The Element presents the County's bicycle and pedestrian goals and objectives, along with best practices. The plan also documented existing and proposed facilities, by municipality, for non-motorized transportation.

The following types of existing and proposed bicycle and pedestrian facilities were identified County-wide:

- Bicycle Lanes
- Multi-Use Paths
- Shared Roadways
- Sidewalks
- Walking Trails

The following goals of the Bicycle and Pedestrian Element will be considered for inclusion in the new Circulation Element:

- Establish a coordinated bicycle and pedestrian network.
- Develop planning policies and procedures that encourage opportunities for bicycling and walking.
- Develop a network of government and private interests that will foster bicycle and pedestrian facilities.

- Promote public awareness and acceptance of bicycling and walking as alternative modes of transportation.
- Create safe bicycle and pedestrian facilities.

Morris County Circulation Element

The 1992 Circulation Element of the County Master Plan was the first Circulation Element adopted by the Morris County Planning Board, which established the important link between transportation and land use.

The plan included a historical perspective of transportation, and described the organizational framework in which transportation planning in the County occurred. A comprehensive review of the transportation system including transit, roads, bridges, and bicycle and pedestrian facilities was presented in the Element. Factors affecting the County's transportation network and future decisions, such as land use patterns, and employment, population, and housing trends, were examined.

The plan provided a multi-faceted approach to address current and future challenges. The Element's policies included developing transportation demand management strategies, maintaining and improving infrastructure, and improving the accessibility and efficiency of the transportation system. Short and long term proposals for implementing each of the plan's 20 policies were presented.

Morris County Freight Infrastructure and Land Use Analysis

The 2011 *Morris County Freight Infrastructure and Land Use Analysis* examined supply chain operations in Morris County, including an investigation of existing and underutilized industrial land. The economic impact of freight on Morris County was analyzed, with particular focus on the three County-owned freight rail lines. The following key findings were identified:

- Manufacturing accounted for about 8.7% of the total employment base in Morris County, compared to 6.8% for the State of New Jersey and 7.4% for the greater New York City Metropolitan Statistical Area (MSA).
- Key manufacturing and warehouse/transportation industries produced a combined \$17.9 billion in direct economic output in Morris County; the chemical manufacturing industry provided the largest share of that total (\$16.1 billion). When indirect and induced output were added, these industry groups contributed to over \$25.2 billion in economic output in Morris County.
- From this economic output, over \$957 million was returned to state and local governments as tax revenue.
- Land costs for industrial development were high, due primarily to the limited supply of land either zoned or suitable for industrial uses. Industrial space near rail lines is more attractive when energy prices rise.

The following objectives were identified to guide Freight planning decisions:

1. Minimize expansion of highway capacity, to the extent possible.
2. Protect and enhance freight rail service on the three County-owned railroads as well as on the NJ TRANSIT, New York, Susquehanna & Western (NYS&W), and Morristown & Erie (M&E) rail lines.
3. Promote rail-oriented industrial development on existing or inactive rail rights-of-way, and protect intact abandoned rights-of-way, to the extent possible.
4. Enhance truck access to the major regional highway system in ways that minimize the impact to communities.
5. Address existing inefficiencies in the County's freight system in a cost-effective manner that minimizes community impacts and addresses quality-of-life issues.

The project resulted in the identification of four priority areas that were well suited for freight development because of their proximity to interstates and access to freight rail lines.

Areas identified for freight development included:

- A) Roxbury/Kenvil – Hercules and Petillo sites, US 46/Dell Avenue intersection
- B) Dover/Rockaway – Dover & Rockaway Railroad realignment
- C) East Hanover – Eden Mills site, Jefferson Road/NJ 10 intersection
- D) Rockaway/Denville – Green Pond Road/I-80 - Exit 37 interchange

Additionally, the study recommended several policies and County implementation actions that would enhance and protect the goods movement industry, and these are identified below.

- Support an initiative to address bridge clearances along the Morristown Line and Washington Secondary to accommodate Plate F (17'-0") rail cars.
- Actively participate in efforts at the state level to increase the rail car weight limit on NJ TRANSIT from 263,000 to 286,000 pounds.
- Document a truck route system in Morris County as an informational resource for industrial developers, trucking companies, and other interested parties to identify local and regional routes suitable for trucks of various sizes.
- Enhance the County's traffic model to include expanded industrial land uses.
- Promote rail-oriented industrial development on existing or inactive rail rights-of-way, and protect intact abandoned rights-of-way to the extent possible. Both of these are goals of the Highlands Regional Master Plan, which governs land use and future development for nearly 90% of the County's land area.
- Support local efforts to enhance capabilities related to planning and zoning for industrial sites by providing guidance to municipal governments. Minimize local impacts of truck traffic related to industrial and other commercial development.

A Municipal Guide for Freight Planning was developed and distributed to municipalities as a "best practices" guide for consideration when

planning and zoning for freight-related land uses. A "marketing plan" was also prepared that provided several action items to help the County develop through business partnerships and market industrial locations for development.

Morris County Master Plan: Future Land Use Element (1975)

The 1975 Land Use Element provides a framework for future land use planning in Morris County and was intended to be used as a guide for municipal planning. Municipalities, not counties, are legislatively enabled to zone in New Jersey. Therefore, the Element does not present or create land use regulations. Rather, the Element provides a strategy for regional, center-based growth over a 25-year period, out to 1990. Although the Element's time horizon has passed, this plan still reflects important land use goals.

The Land Use Element is based on two underlying principles:

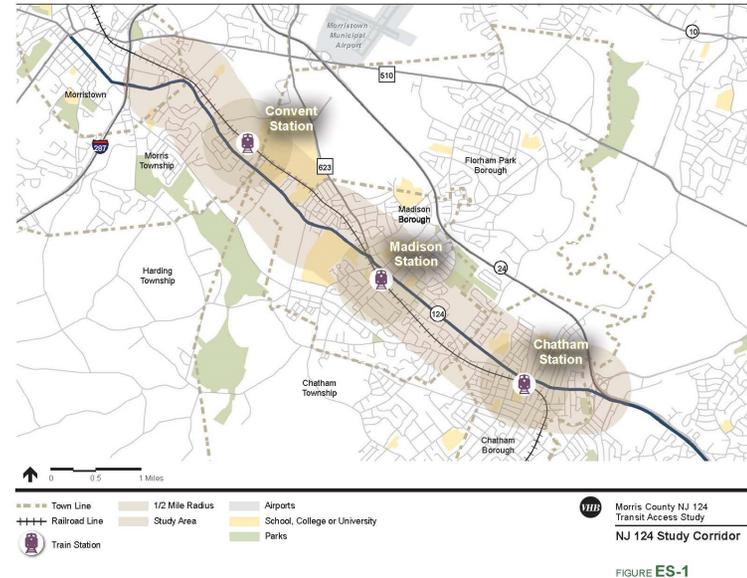
- 1) That all future development proceed only after careful analysis of environmental considerations, and within any limitations imposed by such an analysis, and
- 2) That future growth be clustered, in order to preserve open land, and to render utility services and public transportation feasible and economical.

NJ 124 Corridor Transit Access Improvement Study

The 2013 NJ 124 Corridor Transit Access Improvement Study examined transportation conditions in the NJ 124 corridor, which has three NJ TRANSIT Morris & Essex Line stations: Chatham, Madison, and Convent Station. Deficiencies in walk, bicycle, parking, and coordinated bus access to the stations were documented. Key findings from the study are identified below.

- The roadways (especially NJ 124) that are used to access the study area rail stations are congested due to a number of constraints.
- Pedestrian and bicycle accessibility to the stations are secondary to the automobile.
- Drivers typically arrive early on weekday mornings and park for extended periods of time at all three stations.
- Parking at Chatham and Madison Stations is very close to capacity; however, Convent Station has some excess parking capacity in its various lots.
- The existing bus service in the corridor cannot be consistently used to access the eastbound train in the morning (and vice versa in the evening) at the three stations.

- There are underutilized properties adjacent to all three train stations. Convent and Madison Stations have the highest potential for properties near the station to re-develop in a



transit-supportive manner (TOD-increased density and with mixed land uses).

- Commuters indicated that they would take the train more if access to the stations were improved.

The report also made a number of recommendations to improve access to these stations and mobility through the area. Corridor-wide suggestions included:

- Bicycle and pedestrian route mapping.

- Improved distribution of information about how to use and access the train stations including bicycle and pedestrian maps at stations and parking maps.
- Improved bicycle lane markings and pedestrian access maintenance.

More localized station-area suggestions included:

- Roadway and intersection improvements.
- Road safety improvements such as signage and striping.
- Bicycle and pedestrian infrastructure improvements such as mid-block pedestrian crossings and added bicycle lockers.
- Parking facility expansions.
- Implementation of shuttle bus routes.

3. Regional Plans and Studies

Northwest New Jersey Bus Study

In 2010, the NJTPA conducted a study which examined transit service in Morris County, Sussex County, western Passaic County, and northern Warren County. The study recommended a restructuring of the bus and shuttle network with schedule changes and route adjustments. Additional strategies were identified as follows:

- Increase coverage to emerging markets through new or extended routes.
- Increase service frequency and duration to meet current and future needs.
- Modify policies to reduce fares, simplify connections, and improve ridership.
- Implement improvements in passenger amenities.

The study also recommended the following improvements to Morris County's bus system:

- Strengthen transit service along major corridors.

- Improve connectivity through shuttles to rail stations, transit hubs, and employment centers.
- Coordinate private and local carrier services with NJ Transit's service area.
- Implement improvements to bus passenger facilities, improve amenities, and improve passenger comfort.

Morris Canal Greenway

The Morris Land Conservancy and the Canal Society of New Jersey developed the *Morris Canal Greenway in Morris County Strategic Preservation Plan* in 2005.¹ The development of this plan included participants from the Morris County Board of Chosen Freeholders, local municipalities, the Heritage Commission, the Park Commission, and the Division of Historic Preservation.

The Strategic Preservation Plan established goals for the development of the Greenway. The Plan identified priority locations for preservation, an action plan for implementation, potential funding sources, tools for preservation, and a conceptual plan for the Greenway through Morris County.

Goals identified in the plan were organized into four categories:

- A. Preservation
- B. Education
- C. Recreation
- D. Stewardship

Many recommendations of the 2005 Plan are included in municipal open space and master plans. Initiatives to restore the historic character and provide recreational opportunities along the Morris Canal Greenway are progressing.



Expanding on the 2005 Plan, The NJTPA has initiated the development of the Morris Canal Greenway across northern New Jersey between Phillipsburg and Jersey City. This coordinated effort by the NJTPA has led to the establishment of the Morris Canal Greenway Working Group and Executive Committee. The image above shows the path of the former Morris Canal through New Jersey.²

Elements of the Morris Canal Greenway initiative will be considered for inclusion in the Circulation Element.

Regional Freight Plans

The Morris County Freight Infrastructure and Land Use Analysis examined the impact and role of the goods movement industry on the County's transportation network, land use, and economy. The project was funded through a North Jersey Transportation Planning Authority Subregional Studies Program Grant. This study includes a comprehensive review of transportation infrastructure and operating conditions, documentation of land use policy, and issues associated with potential freight-oriented development.

An economic analysis of key industrial sectors and industrial customers on the three County-owned freight railroads was completed. Key sites for potential industrial development or redevelopment opportunities were identified in this report, along with policy and infrastructure recommendations to support current and future freight-related transportation needs in the County.

The *Municipal Guide for Freight Planning*, an informational publication, was developed in this study to be used by municipalities and other public agencies in planning efforts related to industrial land use and freight-oriented development.

The land use analysis examined the current conditions for industrial development in the County and an assessment of land uses to identify those areas that are most suitable for freight-oriented development.

The *Morris County Freight Infrastructure and Land Use Analysis* also examined the issue of the vertical height clearance constraints into Morris County via the Washington Secondary Line. The study discussed the lack of clearance at the South Main Street Bridge in

Phillipsburg, New Jersey, which prevents the region from receiving Plate F (17'0") box cars. The study also stated the need to identify other potential restrictions along the route including vertical constraints, as well as issues associated with New Jersey Transit's 263,000 pound weight limitation.

The recommendations of this study resulted in the NJTPA undertaking the *Morris/Warren County Rail Corridor Study*.³ This study further examined the infrastructure and operational improvements necessary to modernize the primary rail freight corridor helping it accommodate taller and heavier cars and generate future economic development.

The study identified a total of eight constraints that prevented businesses within Morris County from receiving Plate F cars or rail cars carrying the industry standard of 286,000 pounds of goods. Two of these constraints were related to vertical clearance; the South Main Street Bridge in Phillipsburg and an operational constraint due to NJ TRANSIT overhead catenary wires underneath the East Hanover Avenue Bridge in Morris Plains. Additionally, weight limitations were identified at six (6) locations along the Corridor. Railcars are restricted to 263K east of Hackettstown with three deficient bridges located in Hackettstown, one in Roxbury Township and two in Denville.

The study estimated that the capital cost of these improvements ranged from \$18 to \$30 million.⁴

The study also analyzed the potential economic impacts of such improvements, noting that the economic benefits would include the following:

- 3.3 million square feet of new rail-served industrial development
- 3,000 new direct jobs in Morris and Warren Counties
- 5,700 new jobs in New Jersey
- \$300 million in annual personal income
- \$1 billion in annual business activity
- \$51 million in annual state and local tax revenue
- \$85 million in annual Federal taxes

In 2013 the NJTPA completed the *Rail Freight Capacity and Needs Assessment to Year 2040*. The study assessed the current and year 2040 capacity of North Jersey's rail network along key corridors. While none of the corridors studied are located in Morris County, the study examined constraints along the Washington Secondary Line in Phillipsburg, Warren County. During the development of this study, public outreach identified freight issues, which warrants consideration for inclusion in the Circulation Element. Concerns and issues included:⁵

- Improving maintenance and safety of grade crossings
- Eliminating grade crossings
- Abating noise along rail corridors
- Improving rail height/weights limitations
- Eliminating encroachments
- Increasing business use of freight rail

Comprehensive Statewide Freight Plan

The New Jersey Department of Transportation developed a Comprehensive Statewide Freight Plan in 2007. It examined freight movement in the state by highlighting issues, trends, challenges, and opportunities. The plan also identified strategies and critical projects, which were divided into four categories:

- Capitalizing on freight to promote economic activity
- Addressing critical freight node issues
- Addressing critical freight corridor issues
- Conclusions and Next Steps

The plan primarily focused on major initiatives such as the Liberty Corridor and Portway Program, or facilities with major significance to goods movement such as the Port of Newark-Elizabeth and the Bayonne Bridge. There was one recommendation with direct impact to Morris County:

- Designate I-78, I-80, I-287, I-295, the New Jersey Turnpike, and Route 17 as priority freight corridors, and identify maintenance and capital projects within these corridors as high priority due to their implications on both freight and commuter travel.

Local Freight Planning

Freight transportation was not typically discussed in municipal master plans. One exception to this was in the Town of Parsippany-Troy Hills's 2005 *Circulation Element of the Master Plan*, which noted in its freight section that, "While goods movement is a vital part of the local economy, the vehicles used for goods movement are often incompatible with residential neighborhoods and bicycles and pedestrians. Accordingly, it is the objective of this Master Plan to contain non-local goods movement to the freeway and arterial road system."

Commodity Flow Data

In 2012, the NJTPA published the *2040 Freight Industry Level Forecasts*.⁶ This report provides no recommendations specific to Morris County. The study identified "freight drivers," or locations where freight originates from and/or is destined to based on their industrial codes. A forecasting model was developed based on these industrial codes to predict changes in the U.S. and Global economy, fuel prices, population, and employment. The study also identified the following trends for transportation and logistics:

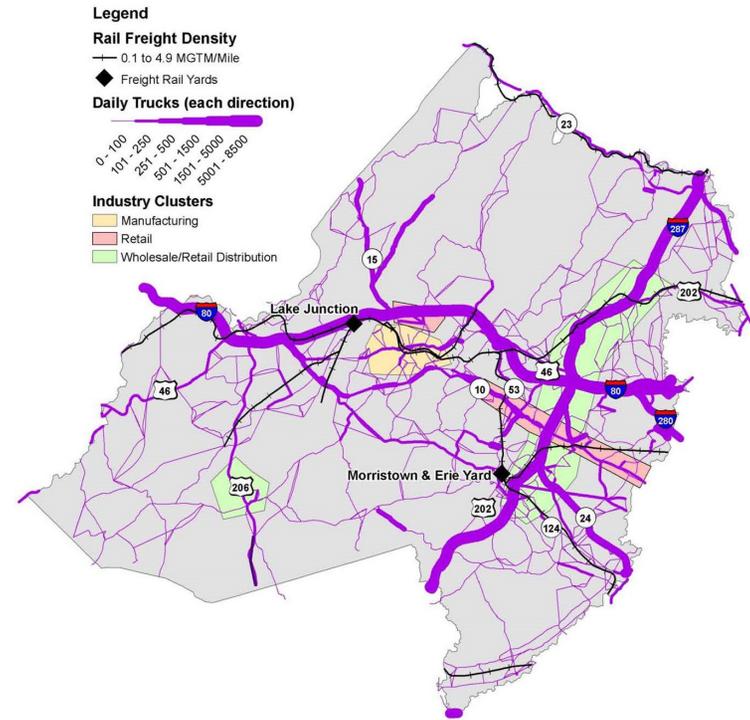
- Mode Shift between Truck and Rail, which is influenced by fuel prices, congestion, technology improvements, and driver availability.

- Global Supply Changes, which include impacts from the Panama Canal widening, the raising of the Bayonne Bridge, and competition from other ports.
- Rail System Improvements, which primarily address the intermodal rail terminal at Greenville Yard.
- Warehousing Logistics, which includes “freight sprawl,” or the development of new warehousing and distribution facilities further south along the New Jersey Turnpike and along I-80 and I-78 in eastern Pennsylvania. It also includes overseas warehousing, where products are distributed directly or by intermodal containers to retail outlets.

The report developed individual subregional freight profiles. Morris County's profile identifies corridors of interest and businesses that rely on the efficient movement of goods.

According to the profile, Morris County is home to approximately 580 warehousing/distribution or manufacturing facilities and 29% of the jobs in Morris County rely on freight transportation. In 2007, approximately 34.4 million tons of domestic freight moved into, out of, or through the County, with 95.5% of that tonnage moving by truck. Additionally, the profile provide maps of daily truck traffic and rail freight density through the County, shown in the following figure. As expected, most truck freight flows through the County via I-80, I-287, I-280, and NJ-24.

Commodity Truck and Rail Flows in Morris County, 2007
Sources: IHS Global Insight (2007), NJTPA Regional Transportation Model-Enhanced (NJRTM-E), I-95 Corridor Coalition Integrated Corridor Analysis Tool Rail Network, and Dun and Bradstreet (2010)



The profile also identified the origin and destination of the most freight tonnage in Morris County. Region Oil, located in Dover, is the top company for inbound and outbound tonnage. Other leading facilities of inbound and outbound tonnage are found in the following figure.

Top 5 Facilities by Inbound/Outbound Tonnage, 2007

Source: IHS Global Insight Freight Locator Database

COMPANY NAME	CITY	INBOUND TONS
REGION OIL	DOVER	1,965,827
GIVAUDAN FLAVORS CORP	BUDD LAKE	369,451
SAFILO USA INC	PARSIPPANY	295,068
MORETRENCH AMERICA CORP	ROCKAWAY	271,737
FEDEX NATIONAL LTL	PARSIPPANY	267,337

COMPANY NAME	CITY	OUTBOUND TONS
REGION OIL	DOVER	1,042,727
VANTAGE OIL	MOUNTAIN LAKES	770,684
KRAFT FOODS	EAST HANOVER	736,190
TRI State QUIKRETE	FLANDERS	491,819
LONG VALLEY LBR CO & SAWMILL	LONG VALLEY	196,624

The study projects a 24% increase in freight traffic by 2040. This will be driven largely by the growth of over 4 million tons, a 39% increase, in the Warehousing and Distribution Center sector, followed by an increase of 1.5 million tons from clay, concrete, glass, and stone products. Only nonmetallic minerals, except for fuels, are expected to experience a decline in the amount of freight tonnage flowing into or out of Morris County. This growth of freight traffic is expected to continue to move primarily by truck. Truck traffic is expected to increase by 25% on I-80 and I-287 from 2007 to 2040.

Regional Transportation Plan 2040

NJTPA's Regional Transportation Plan 2040 provides a vision for development of the transportation system through 2040 and serves as a transportation investment guide for Northern and Central New

Jersey. Under Federal law, Metropolitan Planning Organizations like the NJTPA are required to update their long range plans every four years as a condition to receive Federal transportation funding. Since some of this Federal funding is passed on to counties and local governments in the form of grants and planning assistance, projects and plans that are advanced through the NJTPA's planning process must be consistent with the goals of the Regional Transportation Plan.

Plan 2040 serves as a bridge between Plan 2035 and the next update, which will be prepared in 2017. Plan 2040 meets all Federal requirements for plan updates, including:

- The planning horizon is extended to 2040.
- Demographic data for the region is updated and incorporates the latest 2010 census information.
- The RTP updates information about transportation system condition and usage.
- The Project Index incorporates projects from the latest Transportation Improvement Program (TIP), as well as other projects of regional significance.
- The financial plan is fiscally constrained and uses reasonably anticipated revenue sources.
- The projects have been found to meet air quality standards, and an Air Quality Conformity Determination has been conducted.
- The plan reflects NJTPA's performance-based planning approach.
- The plan describes potential environmental mitigation activities.

- The plan continues NJTPA's commitment to identifying and addressing potential Environmental Justice (EJ) concerns.
- The plan incorporates input from a broad-based public outreach process.

In addition to the required elements listed above, Plan 2040 addresses the "planning factors" included in the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Federal law that governs MPO planning. Furthermore, this plan update carries forward the Regional Capital Investment Strategy (RCIS) from Plan 2035, first adopted by the NJTPA Board of Trustees in 2005. The RCIS consists of the following eight Investment Principles that guide project selection and provide policy and planning direction:

- Help Northern New Jersey Grow Wisely
- Make Travel Safer
- Fix It First
- Expand Public Transit
- Improve Roads but Add Few
- Move Freight More Efficiently
- Manage Incidents and Apply Transportation Technology
- Support Walking and Bicycling

partners. The Together North Jersey Plan was created through this grant's funding.

Together North Jersey was a planning initiative in the 13-county North Jersey Transportation Planning Authority region of New Jersey. Through open forums, Together North Jersey and its members created a plan that invests in the region's existing communities to make housing, jobs, educational, cultural, and recreational opportunities more easily accessible to most residents while reducing dependence on cars.

The Plan is both place-based and issue-based, and uses sustainability, transit system connectivity, and Transit-Oriented Development as the central framework for integrating plans, regulations, investments, and incentive programs at all levels of government to improve economic and environmental conditions.

Together North Jersey

In November 2011, the U.S. Department of Housing and Urban Development (HUD) awarded Together North Jersey a \$5 million Sustainable Communities Regional Planning Grant. The grant is matched with an additional \$5 million in leveraged funds from project

4. State Plans and Laws

State Planning Act & the State Development and Redevelopment Plan

The State Planning Act of 1985 created the New Jersey State Planning Commission and Office of State Planning. The State Planning Commission is responsible for preparing, adopting, and making revisions to the State Development and Redevelopment Plan (State Plan). This document establishes statewide planning objectives and identifies areas that are most appropriate for growth, limited growth, agriculture, open space conservation, preservation, and associated investments.

The current State Plan was adopted in 2001 and promotes statewide growth and preservation objectives primarily through the identification of five major planning areas: Metropolitan (PA1), Suburban (PA2), Fringe (PA3), Rural (PA4/4B), and Environmentally Sensitive (PA5/5B). The Plan encourages future development and redevelopment in the Metropolitan and Suburban planning areas. In the Fringe, Rural, and Environmentally Sensitive planning areas, the intent is to focus growth in designated centers. The Metropolitan and

Suburban planning areas and all designated State Plan Centers are identified as "Smart Growth Areas" where growth is encouraged.

The identification of these planning areas is intended to help coordinate and direct state programs and funding for smart growth initiatives, infrastructure improvements, and preservation in proper locations. Local involvement in State Plan development occurs through the process of "Cross-Acceptance" whereby state, local, and county governments compare and negotiate amendments to the State Plan Map, on which planning areas are identified.¹

Draft State Strategic Plan 2012

The State Planning Act requires that the State Planning Commission update and readopt the State Plan every three years. However, the 2001 State Development and Redevelopment Plan is still the current State Plan. Although a Preliminary Draft State Plan update was released in 2004, after an extensive and protracted "cross-acceptance" process, the resulting draft document was never adopted.

In 2011, the State created an entirely new draft "State Strategic Plan" with a final "Revised Draft" released in November 2012. After consideration, the State Planning Commission deferred adoption of the new State Strategic Plan pending further revision. As of October 2015, no additional revisions have been released, the draft State

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¹ The State Plan Policy Map has undergone amendments since its adoption in 2001.

Strategic Plan is not adopted and the 2001 State Development and Redevelopment Plan remains in effect.

If the November 2012 version of the draft State Strategic Plan were to be adopted in its current form, it would mark a significant departure from earlier State Plan proposals. The 2012 draft State Strategic Plan is considerably more concise than the existing State Plan, with a strong focus on economic development. It is designed less as a land-use regulatory tool and more as a strategic framework to help coordinate and channel public and private investments by state and local governments.

Instead of showing specific planning areas on a *map*, the 2012 draft State Strategic Plan defines state policy *criteria* for the identification of four major regional investment areas. It is the intent of the new Plan that state agencies prioritize support for infrastructure improvements and economic investment, in part, in coordination with these investment areas, which are defined as follows:

- **Priority Growth Investment Area (PGIA):** Areas where public and private investments that support more significant development and redevelopment are preferred.
- **Alternative Growth Investment Area (AGIA):** Areas with existing or planned infrastructure that will lead to development and redevelopment opportunities. State investments related to efficient development and redevelopment should be encouraged, but to a lesser extent than in PGIA's.
- **Priority Preservation Investment Area (PPIA):** Areas where investments that support land preservation, agricultural development and retention, historic preservation, environmental protection, and stewardship are preferred.

- **Limited Growth Investment Area (LGIA):** Areas without existing or planned infrastructure to support significant development or redevelopment. Large scale investment that will lead to additional development should not be prioritized in these areas

The 2012 draft State Strategic Plan would require state agencies, such as the Department of Environmental Protection, Department of Community Affairs, and Department of Transportation, to align internal State Agency Implementation Plans with the priority investment areas, whether they be oriented toward growth, limited growth, or preservation. Under the draft State Strategic Plan, local governments would no longer be required to undertake the Cross-Acceptance process to promote consistency between state, county, and local plans. Instead, vertical integration between the state, county, and local planning would be incentivized through the targeted use of state discretionary funding and improved coordination between state agencies in support of activities which promote state goals and objectives.

Highlands Water Protection and Planning Act

The Highlands Water Protection and Planning Act was signed into law in August of 2004 with the intent of protecting the drinking water supply generated within the over 800,000 acre New Jersey Highlands by limiting future development in the Highlands Region. As defined by the Act, the Highlands Region includes 88 municipalities located in seven northern and central New Jersey counties.

The Act divides the Highlands Region into the Preservation Area and the Planning Area; each area comprising approximately half of the Region. In the Preservation Area, future development is severely limited. In the Planning Area, growth is encouraged where water and sewer capacity are available, but generally discouraged where capacity is not available.

In Morris County, 32 of the County's 39 municipalities are within the Highlands Region. Of these, thirteen municipalities are included, in whole or in part, within the Highlands Preservation Area. The Preservation Area also contains the most of Morris County's remaining vacant land and unreserved farmland. Approximately 39% of the County is located within the Highlands Preservation Area and approximately 50% of the County is located in the Highlands Planning Area.

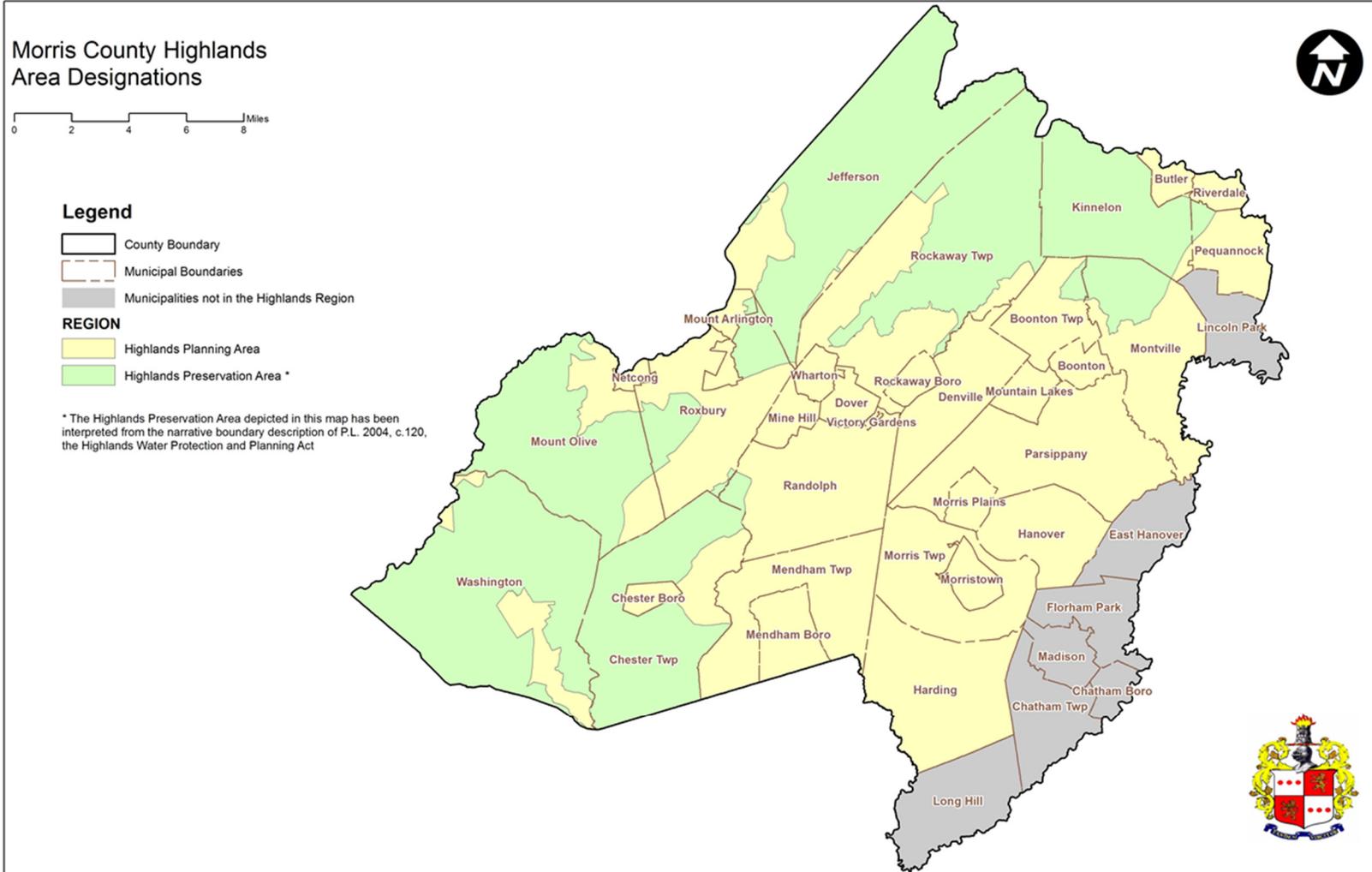
In coordination with the Act, the New Jersey Department of Environmental Protection adopted Highlands-specific regulations that limit development in the Preservation Area.² The Act also established the Highlands Council and tasked it with the responsibility of developing a regional master plan for the entire Highlands Region. The Council adopted a Highlands Regional Master Plan in 2008, which

includes additional standards for the regulation of land development in the Highlands Region.

In the Preservation Area, municipal compliance with the Act is mandatory; and both municipalities and counties are required to revise their master plans and development regulations to conform to the Highlands Regional Master Plan. For areas located in the Highlands Planning Area, conformance with the Highlands Act and the Highlands Regional Master Plan is voluntary, however NJDEP Highlands regulations impact development potential in both the Preservation and Planning Area.

The Highlands Act, associated NJDEP rules, and Highlands Regional Master Plan significantly impact future land use changes and development in the Highlands Region through new limitations on the extension of sewer and public water service, septic density requirements, water withdrawal limits, and the imposition of many other restrictions and requirements. New roadway infrastructure is similarly constrained by these regulations, with exemptions only for routine maintenance, rehabilitation, reconstruction, or repair of existing infrastructure, provided such action does not result in any new through capacity travel lanes.

² [Highlands Water Protection and Planning Act Rules, N.J.A.C.7:38.](#)



5. Municipal Plans

Boonton Town

5.1 Overview

Plans for all 39 municipalities in Morris County were reviewed. This included master plans, circulation elements, complete streets plans, land use plans, bicycle and pedestrian plans, and transportation studies. The age and comprehensiveness of these planning documents varied greatly. Not every municipal planning document or study included material related to transportation planning and therefore was not included in this literature review. The major recommendations, along with goals and objectives, were compiled for this document. They will help to serve as a guide for developing the goals, objectives, and recommendation of the Morris County Circulation Element.

Based on the 39 municipalities that were researched, a Local Priority Map and a Local Planning Priority Matrix were developed and included in this section. The Local Priority Map identifies the location and type of major projects proposed by or for each municipality, as identified by adopted local plans. The Local Planning Priority Matrix identifies a series of big-picture themes that were identified as common aspirations across all municipal planning documents.

Town of Boonton Master Plan, 1998

Goals and Objectives

- Provide road and intersection improvements to reduce safety hazards at primary accident locations and improve circulation through congested areas.
- Coordinate with state and county agencies to insure that any roadway improvements thoroughly examine all the circulation alternatives and resulting impacts on pedestrian mobility along Main Street.
- Support pursuing transportation options including park and ride facilities and bus service.
- Explore and promote expanded recreational opportunities both locally and regionally.
- Work with the adjacent communities as well as Morris County to improve and increase recreational opportunities for Boonton residents.
- Continuous pedestrian and bicycle paths should be provided through interconnections between residential developments and public facilities either along public rights-of-way or separate rights-of-way restricted to bicycle or pedestrian use.
- Support a balanced land use pattern of appropriate residential, commercial and industrial.
- Encourage in-fill development; support and concentrate development along the community's arterial roadways.
- Land uses and development that are consistent with and preserve the architectural and historical integrity.

Key Recommendations

- Consider the symbiotic relationship between Main Street, Myrtle Avenue and industrial properties as well as the residential uses, and maintain the characteristic distinction and separation between these areas.
- Examine traffic lights and timing, parking, space utilization and architectural integrity along Main and Plane Streets with an emphasis on improving the parking and traffic patterns in downtown Boonton.
- Examine traffic patterns and streets between Myrtle Avenue and Division Street and the PVO site and industrial areas to provide for improved truck access both to and from I-287.
- Provide a bicycle route from Vreeland Avenue and the Fireman's Home to and along the Jersey City reservoir property.
- Examine pedestrian mobility along Main Street (was improved by opening Washington Street).
- Consider the Oak/Wooten Street area for traffic calming in anticipation of Pepe Field pedestrian activity.
- Dell's Village intersection and pedestrian improvements are recommended. Especially, the intersection realignment of Elcock and Fanny Road, and sidewalks/bike paths that circle the entire area and continue to meet the Boulevard in Mountain Lakes.
- Establish hiking and biking trails along the Rockaway River as part of a Rockaway River Development Plan, as well as on watershed lands, Fireman's Fields, old railroad bridges, and Veteran's Field.
- Inter-municipal bike routes should be considered since connections exist into Mountain Lakes and Boonton's Grace Lord Park.
- Symbiotic relationship between Main Street, Myrtle Avenue and industrial properties; revitalization of underutilized commercial and industrial sites particularly along Division Street and Myrtle Avenue.
- Clean up plan to be developed at various industrial sites for possible development/redevelopment.

Boonton Township

Boonton Township Master Plan, 2001

Goals and Objectives

- Establish an adequate system of roads and provide for the safe and efficient movement of traffic through and throughout the Township.
- Due to low-density rural character, lack of commercial development, and school busing policies, the need for sidewalks is of minimal concern.
- The needs of pedestrians and cyclists should be informal in nature but should accommodate safe travel by these modes.
- Master Plan assumes a 5,000 person population.
- Maintain the low-density, single-family character of the community, while offering a range of housing types and densities to meet the needs of its population.
- Transition the industrial area into a business park environment through rezoning.

Key Recommendations

- Due to low-density rural character, lack of commercial development, and school busing policies, the need for sidewalks is of minimal concern.
- The needs of pedestrians and cyclists should be informal in nature but should accommodate safe travel by these modes.
- Tourne Park and Pyramid Mountain should be priority considerations for expansion of recreational walking/hiking trails.

Butler Borough

Butler Borough Master Plan, 2004

Goals and Objectives

- Plan documents the importance of public transportation in Butler in relieving traffic, and points out that public transportation in Butler is limited to two NJ TRANSIT routes and the Morris Area Paratransit System.
- Sidewalks are found in much of the residentially developed areas of the Borough. Future improvements should accommodate safe and efficient pedestrian access between residential neighborhoods, commercial developments (existing and planned), and other public places.
- The Borough is almost fully developed; the dominant land use is residential, primarily single-family detached structures.
- The Borough does not anticipate large scale substantial new development, but rather limited development and redevelopment.
- Future development will be "infill" development of vacant lots, subdivision of the few remaining larger, marginally developable lots, and conversions.

Key Recommendations

- A comprehensive study for road improvements for Maple Lake Road between the NJ-23 overpass and Paterson-Hamburg Turnpike should be initiated.
- An additional study addressing traffic volume, road improvements (widening), and commercial access is recommended for Morse Avenue and the NJ-23 intersection.
- The intersection of Maple Lake Road and Paterson-Hamburg Turnpike should be redesigned to provide improved grading and sight distance.

- Intersection of Decker Road, railroad tracks and Paterson-Hamburg Turnpike.
- Intersection alignment of Boonton Avenue and Kakeout Road.
- Intersection alignment of Boonton Avenue, Brook Street and Elm Street.
- Park Avenue intersections with Kiel Avenue and Main Street.

Chatham Borough

Chatham Borough Master Plan Reexamination Report 2006

Goals and Objectives

- Conflicts between shopper and commuter parking needs and between the traffic circulation needs of local residents vs. those of residents and workers throughout the region should be addressed.
- Future shuttle service to NJ TRANSIT rail stations should be explored in tandem with future multi-family and mixed-use development.
- Future shuttle service to NJ TRANSIT rail stations should be explored in tandem with future multi-family and mixed-use development.

Key Recommendations

- Reduce conflict between local demands of "Main Street" versus non-local commuter usage of NJ-124.
- Preserve Chatham's self-sufficient, small town character. Preserve, enhance, complement and increase the understanding of the historical character of the Borough.
- Preservation of the character of neighborhoods and open space. Keep a reasonable mix of residential properties available in the Borough (79% owner-occupied, mostly single-family).

- Improve the utilization and appearance of the Borough's industrial districts.
- Encourage the expansion, preservation and maintenance of open space. Protect Borough water quality and supply, protect wildlife corridors (Chatham wells, Passaic River). Connect parks and trails; support active recreation. Farmland preservation.
- Passaic River 'Blueway' is proposed; land acquisition along the Passaic River, and development of recreation on west bank.

Chatham Borough Complete Streets Policy Plan, 2012

Goals and Objectives

- Encourage connectivity within the township and neighboring communities.
- Develop strategies, policies and goals that promote individual and community health and sustainability through the provision of transportation options that encourage physical activity by preserving and enhancing the existing assets of Chatham Borough.
- The Borough has a Complete Streets Policy with checklist in place.

Chatham Borough 2013 Land Use Element Amendment, 2013

Key Recommendations

- Future transit connections should be explored to serve the River Road/Watching Avenue gateway, including shuttle bus links to existing NJ TRANSIT stations, as well as the feasibility of a new station anchoring the area.
- Improve and enhance River Road/Watchung Avenue gateway area; TOD opportunities, landscaping, economic development.

Chatham Township

Chatham Township Master Plan, 2000

Goals and Objectives

- In order to effectively carry traffic, adequate road widths should be established for the various major Township roads. Since many of the existing major roads are County roads, appropriate right-of-way and pavement widening should be undertaken, where possible, by the County or through negotiation between the Township and the County.
- As a general rule, major roads should have 66 foot rights-of-way to allow ample room for future pavement widening where necessary.

Key Recommendations

- The existing barrier median should be extended to prevent entering and exiting left turns to/from Shunpike Road to/from the Chatham Mall.
- The vertical and horizontal alignment of Shunpike Road, west of Green Village Road (south leg) and Green Village Road, south of Shunpike Road should be improved.

Chatham Township Walkway and Bikeway Plan, 2009

Goals and Objectives

- Promote bicycling and walking as a means of reducing traffic congestion, improving air quality, and promoting healthy lifestyles.
- Promote construction of sidewalks along school routes and high volume and high-speed roads as well as community gathering spaces.
- Promote biking and walking safety education.

Key Recommendations

- The Township should work with the County to improve the safety of bicycling along Green Village Road (links to Green Village and Hickory Square) with improvements including signage and roadway maintenance.
- Lafayette Avenue is a key corridor connecting residential neighborhood streets with schools.
- Meyersville/Fairmount/River Road is a major connector for residential areas but also features a scenic character and is attractive to walkers and cyclists. Bike lanes, signages, and roadway or sidewalk improvements are called for.
- PSE&G Power line easements – one has already been transformed into a well-used multi-use path. There are more that could follow this model.
- Swamp Loop Bike Route connects Chatham Township with Long Hill Township, and Harding Township and has benefitted from assistance from NJDOT and the County. If it has not yet been implemented, this seems to be a fully formed project idea.

Chatham Township Land Use Plan Element, 2011

Key Recommendations

- Township is nearly fully developed; redevelopment and the conversion of remaining undeveloped lands will be the principal factors influencing the future character of the community.
- Enhance the Township's largely residential character. Minimize inappropriate intrusions by development.
- Conserve natural resources. Wetlands account for 40% of land cover (Great Swamp National Wildlife Refuge)
- Enhance the open space system and recreational facilities. Preserve and enhance the remaining rural countryside.
- Establish a Greenway system.
- Location of "country" (i.e. less developed) section of Giralda Farms; possible higher-density residential development for retiring boomers.

Chester Borough

Chester Borough Master Plan, 2002

Goals and Objectives

- Recognize the special qualities of the Main Street downtown area and preserve its historic character.
- Maintain a balance between the land use, infrastructure, and circulation elements of the plan thereby protecting existing residential neighborhoods.
- Multi-modal transportation systems should be explored for applicability to the unique characteristics of the Borough.
- Desire to connect five different activity centers in the Borough with an integrated transportation system.
- Consider submission of Smart Growth Planning Grant to evaluate long-range solutions to downtown parking problems, including the feasibility of alternative transportation solutions.
- Consideration should be given to providing bus shelters to encourage ridership and offer patrons a minimum level of comfort during inclement weather.
- A designated park and ride facility where commuters could meet to van pool or car pool should be considered.
- It is critical to be aware of the issues related to the exclusive dependence upon this single mode of transportation (automobile).
- Specially delineated crosswalks should be component of streetscape.
- A bikeway route should be developed with signage, striping, and bike rack facilities at certain destination points to encourage the use of bicycles as a viable transportation mode.

Key Recommendations

- The Main Street area within the commercial core should be considered as a special design district with a detailed streetscape design plan prepared.
- Introduce the opportunity to use cluster or open-space development techniques; multi-family development.
- Maintain Main Street.

Chester Township

Chester Township Master Plan, 2000

Goals and Objectives

- Enhance the scenic rural quality of US-206 through Chester, where a 200' conservation easement was established on both sides of this state highway, and uncontrolled intersections of new local roads with US-206 are discouraged.
- Prevent hazardous traffic patterns and high congestion by limiting roadway connections and driveways onto State and County roads.
- Establish a Scenic Roadways Committee to investigate and evaluate its roadway corridors, and recommend roads that deserve the status of "scenic roadways."

Key Recommendations

- Several intersections identified for safety improvements:
 - Hillside Road/US-206
 - Hillside Road/US-206
 - Parker Road/State Park
 - North Road/Main Street

- Oakdale Road/Pleasant Hill Road
- Preserve and enhance Chester Township's natural environmental qualities.
- Preserve and enhance buildings, sites and landscapes of cultural, historic or archaeological significance.
- Maintain Rural Residential Character; Preserve Open Space and Agriculture; Encourage Development of Residential Neighborhoods; Support Affordable Housing Initiatives.

Denville Township

Denville Township Master Plan, 2000

Goals and Objectives

- NJDOT should continue to work with Denville to keep NJ-10 commuter traffic off local streets.
- NJ TRANSIT should be encouraged to take additional affirmative measures which will increase the number of rail riders.
- Bus lines should be encouraged to implement steps which will attract new riders.

Key Recommendations

- Plan stated that, "Opening up of 3rd lane of travel on NJ-10 has improved reduction of local travel", but plan is from 2000 and discussion from public workshops have provided opposite feedback.
- Maintain and enhance the viability of the various commercial districts. A compact, vibrant, medium size central business district at Diamond Spring Road and State Highways 46 and 53.

- Preserve and protect the suburban character of existing residential neighborhoods.
- Emphasis should be given to preserve environmentally sensitive areas.
- Encourage a compact, vibrant, medium size central business district at Diamond Spring Road and State Highways 46 and 53.

Denville Township Bikeway Plan Element, 2010

Goals and Objectives

- Establish a safe and comprehensive system of bicycle routes to link open space, recreational areas, residential neighborhoods, and business centers.
- Future development applications and/or municipal capital improvement projects should support the goal above.

Key Recommendations

- Diamond Spring Road, Morris Avenue, Bush Road, and Pocono Road have been identified for bike lanes. All are county roads. Morris Avenue was widened to accommodate bike facilities.
- Cedar Lake Road, River Road, Old Boonton Road, Diamond Spring (in the downtown) are county roads that have been identified for designation as bicycle routes with appropriate signage.

- Provide alternative routes for regional traffic to disperse and diffuse traffic to reduce and eliminate existing and potential congestion.
- Combine circulation and land use objectives wherever possible.
- Develop a safe and efficient circulation system capitalizing on the Town of Dover's excellent regional highway access and multi-modal transportation system.
- Lack of sidewalk continuity is a problem in Dover. There are major activity centers that are not connected by sidewalks and much of NJ-15 (north of Davis Avenue and in pockets near Dover High School) lack sidewalks or adequate crosswalks.
- Improve pedestrian and bicycle access to Dover Station.

Key Recommendations

- Traffic congestion is a major issue in Dover, especially downtown. There is traffic congestion day and night on Blackwell Street.
- Bus travel is hampered by downtown traffic congestion.
- Plan identified need for traffic signal retiming on Blackwell Street between Prospect Street and Salem Street.
- There is a lack of east-west routes through the downtown.
- The existing intersection between Morris Street and Dickerson Street at the entrance to Dover Station is extremely poor for pedestrians and motorists alike.
- Blackwell Street experiences significant jaywalking. This corridor is also where the highest rates of pedestrian crashes occur.
- Morris Street at Dickerson Street intersection is a bad situation for pedestrians.
- US-46 pedestrian crossings are lacking.
- Dover Station Access Modification would provide safer and more complete access for pedestrians.
- There have been signal timing and parking space modification proposals for reducing pedestrian conflicts on Blackwell Street. Additionally, bike lanes are proposed for the street.

Dover Town

Dover Town Master Plan, 2007

Goals and Objectives

- NJ-15 pedestrian enhancements proposed included completion of sidewalk continuity, bulbouts and crosswalks.
- Creation of a Greenway Network – it has been proposed that Dover develop a riverfront greenway plan for the length of the Rockaway River, develop the Morristown and Erie right-of-way as a green pedestrian corridor, capitalize on the Morris Canal, and partner with the County to provide better pedestrian connections to Hedden County Park.
- Dover's identity is defined by a pedestrian-scale central downtown surrounded by residential neighborhoods that should be preserved. Key priorities include:
 - Reduce auto-dependency by encouraging walkability
 - Increased densities at key intersections and transit facilities are acceptable as long as they fit the existing character.
- Encourage coordinated land use and transportation planning of business corridors including US-46, Blackwell Street, Mt Pleasant Avenue, Bassett Highway.
- US-46 needs a better designed roadway from an aesthetics perspective, interfacing better with surrounding neighborhoods, particularly downtown.

Dover Town Transit Oriented Development Plan, 2006

Key Recommendations

- Need for better circulation elements at Dover Station.
- Concentrate new development downtown in TOD area around Dover Station. The TOD area calls for new development in character with its historic context, enhanced pedestrian amenities, and high-quality public spaces.
- Support TOD development adjacent to Dover Station.

East Hanover Township

East Hanover Township Master Plan, 2005

Goals and Objectives

- Maximize circulation and mobility options for local and regional trips.
- Wherever possible and appropriate, link the residential street grids to ensure connectivity within and between neighborhoods. Improve the function of problem intersections.
- The township is both internally and externally linked by a free flowing circulation system that includes public transportation opportunities and a coordinated pedestrian and bicycle system.
- Maximize circulation and mobility options for local and regional trips.
- Provide opportunities for residents, business owners, employees and shoppers to access multiple modes of transportation including public transportation, bikeways and pedestrian ways.
- Together with the County, the Township should explore the following:
 - The possibility of NJ TRANSIT and private carriers expanding the service that currently runs along NJ-10. The fact that 47 percent of East Hanover's workforce worked in Morris County in 2000 indicates a need for additional westbound service in addition to eastbound service.
 - Providing employer and/or county-sponsored shuttles to NJ-10 bus stops, existing train stations and to park and ride lots along US- 46.
- Conducting a survey of major employers to gauge the potential for new or enhanced transit service based on where their employees lived and their proximity to existing transit service in other communities.
- Work with the County to design a comprehensive trail system.

- Require safe and attractive pedestrian and bicycle circulation systems within all major residential or commercial developments with linkages.
- Utilize traffic calming measures in high pedestrian activity areas.

Key Recommendations

- Improve the level of service along the NJ-10 corridor through the implementation of creative engineering, land use and design techniques.
- There are several improvements that should be made to Ridgedale Avenue:
 - The curve at the former Hanover Airport will be realigned to improve safety
 - Regional truck traffic should be rerouted off of Ridgedale Avenue at Eagle Rock Avenue and then onto Eisenhower Parkway.
 - The speed limit on Ridgedale Avenue should be reduced, particularly through the Village district.
 - Traffic calming devices such as median strips and corner bump outs should be installed in concert with the Village initiative discussed in the land use element.
 - A traffic light should be installed at the intersection of Murray Road to better utilize Murray Road as an alternative access to the NJ-10 shopping centers.
- Map identifies potential transit shuttle links to express buses along I-80 and to Madison Station.
- Transportation alternatives along NJ-10 have been enhanced through increased bus and shuttle service.
- Future expansions by Novartis and other large and small employers will further tax a road system that has a finite capacity. In order to take some of the burden off of the road system, and to support continued economic growth, the efforts should be made to maximize access to existing mass transit and strategically increase service over time.
- Bike lane proposed for Ridgedale Avenue from DeForest Avenue to the Florham Park border.

- A walking trail is proposed along the Whippany River.
- NJ-10 should have appropriate landscaped areas with provisions for walkways, bike paths, plantings, and shade trees.
- Provide a healthy balance of land uses that preserves the residential character, while providing convenient commercial and retail opportunities to acquire goods, services and employment.
- Provide for attractive and easily accessible commercial uses and districts.
- Retrofit existing strip-type development along the NJ-10 Corridor into concentrated, mixed-use alternatives.

Florham Park Borough

Florham Park Borough 2000 Master Plan, 2000

Goals and Objectives

- Improve vehicular and pedestrian circulation for the convenience and safety of those who work, reside in and visit the Borough.
- Work with State and County Officials, and private developers to lessen traffic burdens on the existing road system and pursue direct routes to the State highway network.
- Encourage measures to promote ridesharing and alternative modes of transportation.

Key Recommendations

- Eisenhower Parkway/NJ-24 connection.
- Columbia Turnpike/Park Avenue intersection.
- Columbia Turnpike/James Street safety and signal timing improvements.
- New interchange for NJ-24, providing direct access to former Exxon tract.

- Ensure that remaining developable lands in the Borough are developed in a manner that is compatible with existing neighborhoods, roads, and community facilities.
- Maintain the existing permitted density of development within the Borough's residential zones.
- Fish property: (50 acres) currently zoned R-44 for single-family lots on a minimum of one acre; Borough is desirous of retaining a significant portion of this property in open space; any development of this property should be clustered with large contiguous areas preserved.
- Commercial hub is centered on the intersection of Columbia Turnpike and Ridgedale Avenue.

Hanover Township

Hanover Township Master Plan – Circulation Element, 2013

Goals and Objectives

- Promote a coordinated roadway plan that enables the safe and efficient movement of people and goods and minimizes the negative impact of regional traffic on local roads, especially in residential areas.
- The Township should proactively minimize the negative impact of regional traffic on local roads, especially in residential areas, through the use signage and appropriate traffic regulations. Of specific concern is traffic that utilizes the local street network of the Trailwoods residential development as a cut through to avoid congestion on regional roadways, including Ridgedale Avenue, Hanover Avenue, Malapardis Road, and US-202.

- Encourage the development and use of alternative circulation modes and networks (e.g., pedestrian, bicycle, transit) for the convenience of the public and in order to reduce motor vehicle traffic on Township streets.
- Encourage the use of public transportation within the regional transportation system (i.e., public education of the opportunities available, installation of bus shelters).
- Encourage the development and use of alternate circulation modes and networks for the convenience of the public and in order to reduce motor vehicle traffic.
- Encourage walking and bicycling as a viable mode of transportation for all residents and visitors.
- Provide and interconnect pedestrian and bicycle pathways throughout the Township with particular emphasis on recreational uses and schools.
- Improve pedestrian accessibility in areas of the Township where pedestrian traffic is encouraged.

Key Recommendations

- Support completion and upgrade of regional roadways and intersections to aid in improving local traffic circulation, particularly those improvements involving NJ-10.
- The design of Parsippany Road is currently substandard for its function. The recommended improvements for Parsippany Road include installation of curbs, sidewalks and suitable lane widths or shoulders to accommodate bicycles.
- Recommended improvements at following NJ-10 intersections:
 - Improvements at the intersections with Ridgedale Avenue, North/South Jefferson Road, Whippany Road and Algonquin Parkway
- Circulation Plan identifies a number of intersection improvements with County roads on Page 9, with specific improvements to the locations identified starting on Page 15.

- Support completion and upgrade of regional roadways and intersections to aid in improving local traffic circulation, particularly those improvements involving NJ-10.
- The design of Parsippany Road is currently substandard for its function. The recommended improvements for Parsippany Road include installation of curbs, sidewalks and suitable lane widths or shoulders to accommodate bicycles.
- Recommended improvements at following NJ-10 intersections:
 - Improvements at the intersections with Ridgedale Avenue, North/South Jefferson Road, Whippany Road and Algonquin Parkway
- Circulation Plan identifies a number of intersection improvements with County roads on Page 9, with specific improvements to the locations identified starting on Page 15.
- Malapardis Road, Ridgedale Avenue, Mountain Avenue, Cedar Knolls Road, Park Avenue, Elm Place, Eden Lane, North Jefferson Road, South Jefferson Road, Whippany Road, Parsippany Road, Reynolds Avenue, Highland Avenue, Sunset Drive, Troy Hills Road, Bee Meadow Parkway, Algonquin Parkway, Ford Hill Road.

Hanover Township Amendments to the Open Space and Recreation Plan Update, 2011, 2013

Goals and Objectives

- Build upon the easements, maintenance and existing improvements associated with "Patriots Path."

Key Recommendations

- If the Township decides to develop dedicated bicycle routes, these routes should be primarily considered:

- The Morristown and Erie Railroad could potentially provide a multi-use trail on its right-of-way if it were to cease operation.
- Upgrade segments of the Patriots Path to make a suitable bicycle and pedestrian north-south spine.
- An East-West Spine could connect the train station in Morris Plains to the Black Meadows Preserve.
- Neighborhood connectors can provide an interconnected network off of the two spines.

Hanover Township Master Plan – Land Use Plan, 2013

Key Recommendations

- Town Center: new retail and professional office space zoning; create a focal point in the geographic center of the Township, and replace the industrial zoning (located along Eden Lane and Whippany River between South Jefferson Road and Parsippany Road).

Harding Township

Harding Township Master Plan, 2008

Goals and Objectives

- Encourage the location and design of roadways which will permit the free flow of traffic in appropriate locations while discouraging roadways in areas which are environmentally sensitive, historically significant, or rural in nature and/or would result in blight, depreciated property values, undue congestion, or safety problems.

- Protect rural roadways. Road standards and improvements can have important environmental consequences on the Great Swamp and on the rural-historic character of the township.
- Regional highway plans should be supported which will minimize future "through" traffic through Harding.
- Morris County should be encouraged to actively maintain existing bridges to avoid the need for replacement. To reduce repair costs and the need for replacement, the township (and County where appropriate) should pursue weight and speed limitations.
- The realignment of bridge approaches should be avoided in order to preserve the quality of streams and protect the community's character.
- Promotion of safe speeds must be an important objective of township policies because of the close association of the Harding community with its roads, the small scale and curvilinear design of those roads, as well as the increasing number of driveways for which there is limited visibility. Speed in this context is especially dangerous and should be checked to protect pedestrians and school children, joggers, cyclists and wildlife.

Key Recommendations

- Road improvements in connection with new development must be consistent with protection of the Great Swamp National Wildlife Refuge and the rural-historic preservation goals in the Great Swamp watershed and in rural-historic areas.
- Mt. Kemble Avenue (US-202) should be reclassified as a Minor Arterial because of the characteristics of the roadway and the character of the surrounding land use.
- Tempe Wick Road and Village Road should be classified as collector roads.
- Pavement widths of 20-22 feet (or average existing width) are recommended (for both township and county roads), consistent with the scale of existing collectors in Harding.

- Plan notes that Historic New Vernon Village has a pedestrian-friendly scale that should be protected. Any changes to the design detail of the street should be carefully considered to assure that the village's historic character is not unnecessarily compromised.
- Preserve and perpetuate the township's rural historic character and high quality natural environment (rural pattern of development is organized around the four historic crossroad villages of New Vernon, Green Village, Pleasantville and Logansville).
- Perpetuate the established patterns of development.
- Protect the Great Swamp National Wildlife Refuge.
- New Vernon Village Redevelopment Plan: traditional character of the village and reinforcing its roots as a pedestrian-friendly; post office.

Harding Township Master Plan Reexamination Report, 2013

Goals and Objectives

- There were continued concerns about the impact of commuter and other traffic travelling through Harding to regional destinations and a question as to whether the preoccupancy of a major office development (formerly AT&T) adjacent to Harding would have a negative impact on the townships. The recommendations contained in Part 4 of the 2006 Reexamination Report noted the need to address parking for Harding residents at nearby "park and ride" facilities in adjacent communities.
- Concerns about cyclist safety on township roads.

Jefferson Township

Jefferson Township Circulation Study, 1978

Goals and Objectives

- Discourage strip development along roadways to minimize the number of potential conflict points and preserve the rural quality and scenic amenities of the roadsides.
- Prevent roadway congestion by encouraging the clustering of residential, commercial and industrial uses thus limiting the number of access points along through streets and primary thoroughfares.
- Encourage and whenever possible, require the construction of adequate shoulder widths along all primary arterials in the Township for vehicular, bicycle and pedestrian traffic.
- Investigate available mass transit alternatives both local and regional to encourage the formulation of feasible mass transit routes with potential carriers throughout the Township.
- The 1978 Circulation Study recommends several bike routes for bikeway designation. However, the page that describes most of these routes is missing from the document. It is not clear if bicycle or pedestrian plans have developed or changed in the intervening 37 years.

Key Recommendations

- Encourage office and industrial development along the NJ-15 corridor in designated areas along NJ-181, Berkshire Valley Road and Ridge Road, while at the same time recognizing the need to control access along those major arterials in order to promote the safe and efficient movement of through traffic.

Jefferson Township 1991 Master Plan Update, 1991

Key Recommendations

- Encourage the development of appropriate commercial, industrial, employment and recreational facilities.
- Encourage office and industrial development along the NJ-15 corridor, NJ-23 and in designated areas along NJ-181 Berkshire Valley Road and Ridge Road.
- Improve the quantity, quality and location of recreational lands and open space.
- Encourage office and industrial development along the NJ-15 corridor, NJ-23 and in designated areas along NJ-181, Berkshire Valley Road and Ridge Road.

Kinnelon Borough

Kinnelon Borough Master Plan, 1978

Key Recommendations

- Improvements proposed for Kiel Avenue and Boonton Avenue on Pages 30-31; however, given the age of the plan (1978), it is unknown if these are still of concern to the Borough more than 35 years later.
- Traffic Analysis and Plan identifies several intersections of concern on Page 8; however, given the age of the plan (1978), it is unknown if these are of concerns to the Borough more than 35 years later.
- Continued maintenance of Kinnelon's semi-rural residential character and the preservation of community appearance.

Lincoln Park Borough

Lincoln Park Borough 2012 Master Plan Reexamination Report and Downtown Revitalization Action Plan, 2012

Goals and Objectives

- 2006 Master Plan re-examination recommends updating Borough Circulation Element.
- Improve safety and design of heavily travelled intersections.
- Contact Morris County to discuss the feasibility of redesigning the traffic lanes along Main Street to permit additional on-street parking, such as angled parking on one side and/or the Borough taking ownership of Main Street.
- Encourage more usage of all available options: (i.e. bus and train)
- Collaborate with NJ TRANSIT to increase train and bus service with more weekend and holiday service.
- Work with the local Transportation Management Association to educate and/or advertise the benefits of alternative commuting options.
- Work with NJ TRANSIT and the community to ensure the train station is clean, safe and inviting (e.g. improve lighting, appearance, amenities, and trash pickup).
- Work with NJ TRANSIT and the community to ensure that bus stops (in front of the library) are properly maintained and that more bus shelters in Lincoln Park are considered.
- Negotiations with the County Division of Transportation and NJ TRANSIT should be pursued to develop safe pedestrian/bicycle crossing of their traffic arteries.
- Repair and/or maintain existing sidewalks and crosswalks, where needed to ensure sidewalks are consistent, paved, smooth and well-lit (establish

maintenance and repair schedule for Downtown amenities and sidewalks).

- Provide safe, highly visible and clearly designated pedestrian crossing at intersections (e.g., raised crosswalks, curb cuts and bumpouts) as well as restripe and repaint all intersections to define and clarify the pedestrian/vehicular boundaries to enhance safety: At the intersection of Chapel Hill Road and US-202 between the dock tower at CVS and the school; At the intersection of US-202, Beaver Brook Road and Main Street to improve accessibility of the downtown from the PAL and Municipal parking lots.
- Retrofit bike lanes on roads to and through Lincoln Park (focus groups suggested bike lanes along Comly Road, Ryerson Road, Chapel Hill Park Avenue, U.S. 202, Main Street, Morris Canal, around train station).

Key Recommendations

- Intersections and roadway improvements in downtown area, including US-202.
- Work with NJDOT to implement traffic calming measures on US-202, such as thereby reducing the roadway to 2 lanes (one lane in each direction), add a center median or a turn lane or wider shoulders.
- Reduce traffic speeds on Comly Road, US-202, Main Street by implementing traffic calming measures.
- The plan identifies intersection improvements for a number of locations on Pages 19-21, but the plan is almost 30 years old.
- Investigate the reconfiguration of difficult intersections around downtown (such as the intersections at the Comly Road Bridge slip ramp and US-202 and Main Street needed the most attention).
- Improve pedestrian safety and accessibility between the train station, the businesses on Main Street and the surrounding parking lot.
- Create a continuous system of sidewalks by filling in gaps where sidewalks do not exist such as on the north side of U.S. 202.

- Downtown: bounded by Main Street, Comly Road, and US-202. Area includes train station and municipal building. Revitalization Plan encouraged Borough to examine area for suitability as area in need of redevelopment.
- Develop a system of off-road pathways to create the following linkages: The Shop Rite shopping center to Station Road/McKelvey Street, The Lincoln Park Train Station and the adjacent apartment complex.

Lincoln Park Borough Open Space and Recreation Plan, 2012

Key Recommendations

- Convert flood-prone properties along the Pompton River to recreational land via the FEMA application program with additional local matching funds. A Greenway/Blueway would require partnering with the County to develop safe bike/pedestrian crossings of US-202 and with NJ TRANSIT to cross the Montclair-Boonton Line.
- Down and Out Bicycle and Walkway – A 2008 walkability workshop resulted in a proposal for a road diet and traffic calming in the downtown paired with bike lanes, sidewalks, and new high-visibility crosswalks.
- Connect with the Township of Pequannock segment of the NYS&W Bicycle and Pedestrian Path and tie-in to new bike lanes and pedestrian paths on US-202 to link the trail to the Mountain View train station.

Lincoln Park Borough Master Plan, 1983

Key Recommendations

- Maintain the established residential areas in the Borough.
- Encourage orderly growth and development of the Borough while preserving the amenities associated with the "rural-suburban" character in particular.

Long Hill Township

Long Hill Master Plan, 1995

Goals and Objectives

- Ensure that road improvements along County and Township roadways are limited to those that address existing traffic safety problems and are undertaken in ways that strongly support the overall goals of this Master Plan and preserve and enhance the tree-lined roads that help create the desired rural character of the Township.
- The new Township Master Plan should examine the potential impact of this further anticipated growth on the three Township rail stations, and particularly the possible need for additional parking facilities.
- Encourage the development of new sidewalks in areas of relatively high pedestrian traffic and encourage the use of creative sidewalk design wherever appropriate to honor the Township's treed corridors and rural streetscapes.

Key Recommendations

- Valley Road will remain the Township's primary development and access corridor. Future development and redevelopment along this corridor should consider the reduction in traffic conflict points to the greatest extent possible.
- No widening or other major improvements should be made to Valley Road, except within the central shopping core (Main Avenue to Morristown Road), and only to the extent necessary to address existing traffic safety problems. The plan further envisions that improvements to Long Hill Road and collector roads be strictly limited to those essential to traffic safety.

- New sidewalks are based on the policy of developing new sidewalks in areas of high pedestrian traffic, including both sides of the main streets in the Gillette, Millington, Stirling and Valley Road business districts, and along major roads leading to train and bus stations, schools and other major generators of pedestrian activity, particularly those attracting children.
- Conserve and enhance the essential rural and residential character; maintain identity as a fundamentally low density residential community.
- Ensure that new commercial development is in scale with and oriented to the shopping, service, and other needs of residents.
- Downtown (Valley Road Business District) should be planned to develop over time into a thriving economically sustainable commercial center.

Long Hill Township Open Space Element of the Master Plan, 2013

Goals and Objectives

- Provide for pedestrian walkways and bicycle paths that will connect residential neighborhoods to parks and open space.

Key Recommendations

- The Passaic River Greenway is envisioned as a green corridor with passive recreational opportunities. It is expected to run from the municipal facility into the neighboring communities.
- The Central Greenway is proposed to run from the Passaic River Greenway along the path of the PSE&G utility corridor.
- A Stirling/Gillette bike path has been proposed between the Town Center and the Gillette Business District and train station. It is proposed that this route should be added to the County Bike system.

Meyersville Hamlet Element of the Long Hill Township Master Plan, 2009

Key Recommendations

- Meyersville Hamlet Zone: preserve and maintain the current low density, semi-rural character of the hamlet by limiting future commercial development to the present Hamlet Business Zone.

Valley Road Business District Element of the Long Hill Township Master Plan, 2009

Key Recommendations

- Create a new Valley Road Business District.

Madison Borough

Madison Borough Master Plan, 1992

Goals and Objectives

- Encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight.
- 1992 Plan encourages a number of congestion reduction strategies, including TDM, but also notes that the Borough has little developable land outside of Giralda Farms, and later re-examination notes this goal is not applicable.
- Bikeways are recommended for large developable parcels.

- Encourage pedestrian circulation facilities (sidewalks and bikeways) to serve as connections between community facilities, commercial areas and employment sites.
- Expand existing bikeways to incorporate the Borough's unique historic neighborhoods.
- The Borough should encourage the use of mass transit and support expansion of service or upgrading of facilities.

Key Recommendations

- Pedestrian circulation could be improved with the installation of sidewalks along Woodland Avenue from Noe Avenue to the Chatham Township border.
- Main Street in the Central Business District would benefit from pedestrian environment improvements including those that would improve safety, pollution, and noise.
- Preservation of open space and historically valuable properties.
- Control of vehicular traffic in residential neighborhoods.
- Maintenance of a diverse housing stock (acknowledges trend of demolishing older homes and constructing much larger houses).
- Maintenance of attractive, thriving commercial and professional districts.
- Promoting the continued viability of the central business district.
- Development around NJ Transit and downtown; design and sustainable design principles.

Madison Borough Open Space and Recreation Plan Update, 2009

Goals and Objectives

- Utilize the recommendations of the Safe Routes to School program to create a series of safe pedestrian loop routes to connect local neighborhoods to the elementary schools.

Madison Borough Green Village Road Special Use Area Redevelopment Plan, 2011

Key Recommendations

- Green Village Road Special Use Area (along Kings Road, opposite the NJ Transit rail line): connect Kings Road (mixed-use development), Drew University, and the downtown.

Madison Borough Master Plan Land Use Element Amendment, 2014

Key Recommendations

- Giralda Farms (175 acres): historically served as the corporate headquarters for major businesses, the campus has evolved into a mix of single-tenanted and multi-tenanted office buildings; strengthen and encourage transit connections, incorporation of sustainable design and low impact development techniques.

Mendham Borough

Mendham Borough Master Plan, 2006

Goals and Objectives

- Improve traffic flow and provide for the safe movement of people and vehicles through the Borough while minimizing adverse impact on residential streets.

- Plan notes that public transportation services are limited with little prospect for expansion.

Key Recommendations

- There are a number of intersections identified for possible improvements on pages IV-13 to IV-17 based on collected crash data.
- The main street (Mendham Road - CR-510) could benefit from additional crosswalks, regulatory signage reminding motorists to yield to pedestrians, and textured pavement and/or wide painted crosswalks.
- At the Robinson's egress to Mountain Avenue, mirrors and "limited Sight Distance" signage is recommended as well as textured pavement to clearly delineate pedestrian crossings.
- Retain the small town character of the community; Village Center Cluster.
- Preserve the rural quality of the Borough and its historic heritage beyond the Village environs.
- Maintain healthy business districts with a diversity of local businesses.

Mendham Township

Mendham Township Master Plan, 2002

Goals and Objectives

- Roads are historic and rural in nature and should not be altered or modified. Character should be preserved and improvements limited.

Key Recommendations

- Retain traditional character as a rural and historic area.

- Open space areas should be protected and expanded, especially areas important to environmental protection, historic preservation and community character.

Mine Hill Township

Mine Hill Township Master Plan, 1998

Goals and Objectives

- Encourage the location and design of transportation routes which will promote free flow of traffic while discouraging location of facilities and routes which will increase or create congestion or blight.

Key Recommendations

- Maintaining its distinct residential neighborhoods.
- Reinforce the commercial/industrial districts where favorable state highway access would attract a regional user.
- Mined lands: possible development on mined permitted only if the lands are rendered safe).
- Route 46 corridor.

Montville Township

Montville Township Circulation Plan Element, 2014

Goals and Objectives

- Discourage the widening of US-202 for additional vehicular travel lanes in order to maintain the present character and scale of the corridor and prevent increased automobile capacity.
- The provision of ample opportunities for pedestrian activity is a primary objective.
- Sidewalks are required by the land use ordinance in many zones.
- Bike lanes are required by the land use ordinance in locations indicated by the Circulation Plan Element.
- Adopt a Complete Streets Program/Policy.

Key Recommendations

- Construct new roadways in the vicinity of US-202 and Changebridge Road in order to divert trips from this congested intersection, thereby reducing delays and queuing. New bypass roadway is recommended that would extend from US-202 opposite the I-287 northbound ramps (where a traffic light already exists), and connect with Changebridge Road.
- Changebridge Road be extended northward from its intersection with US-202 and loop around the rear of the properties in this designated area, essentially parallel with the NJ Transit rail line.
- Evaluate the need for potential improvements at the following intersections:
 - US-202 and River Road
 - US-202 and Valhalla Road
 - US-202 and Taylortown Road

- Realign US-202 in front of Towaco Station to accommodate on street parallel parking in front of commercial uses where possible to eliminate less-than-optimal existing back out parking and existing drainage problems at trestles.
- Investigate the feasibility of providing an additional traffic lane between the signalized intersections at Old Bloomfield Avenue/Hook Mountain Road and the Route 46/Hook Mountain Road interchange as a means of allowing improved traffic flow in this area.
- Lack of north-south transit service in the town is an issue. New route is recommended on Changebridge Road.
- US-202/Main Road and Bloomfield Avenue are designated for wide sidewalks and/or required to utilize a landscaped buffer.
- Use the Sidewalk/Walkway Plan Map to identify locations for additional sidewalk construction.
- Develop Montville portions of the Morris Canal Greenway.
- Establish an In-Lieu Sidewalk Fund for developers.
- Implement the Bikeway Plan Map and use it to identify further opportunities for bicycle facilities. Bicycle routes include the North Loop, Central Loop, and Southern Loop.
- Construct additional sidewalks and bike facilities in the US-202 Corridor through the plan approval process. Work with the County to pursue funding for regional improvement plans.
- Re-align the Indian Hill / Firehouse Road intersection to reduce pedestrian conflicts.
- Improve pedestrian connections in the vicinity of Towaco Station.

Montville Township Open Space Plan Update – Trails Plan, 2011

Key Recommendations

- Though the Township does not presently contain any official bike lanes, the County's 1998 Bicycle and Pedestrian Master Plan Element designates shared roadways on all or parts of: Bloomfield Avenue, Boonton Avenue, Changebridge Road, Hook Mountain Road, Jacksonville Road, Rockaway Valley Road, and Vreeland Avenue.
- Develop recreational hiking and walking trails including the Pyramid/Turkey Mountain Greenway, Towaco Aquifer Greenway, Historic Center (including the Morris Canal Greenway), Community Greenway, Rockaway and Passaic River Blueways.

Montville Township Land Use Plan Element, 2010

Key Recommendations

- Preserve and protect the residential character and existing density of the community by restricting incompatible land uses and building heights.⁹⁴
- Continue the Township's recreation and open space planning and acquisition activities.
- Preserve and enhance the Township's retail commercial areas.
- US-202 Corridor West (extending from the Town of Boonton to Towaco Center): compatible arrangement of residential, commercial and other land uses; promote economic development in the area.
- Towaco Center: create a new mixed-use area, incorporating compatible residential and commercial land uses.
- Lake Valhalla: limit and control future development within the club's boundaries to protect the neighboring residential community.
- US-46 / Bloomfield Avenue: promote the revitalization and enhancement of the highway streetscape.

Morris Plains Borough

Morris Plains Borough Master Plan Reexamination Report, 2008

Goals and Objectives

- Develop design guidelines to promote the desired character of the various commercial district corridors found along Speedwell Avenue and the NJ-10 corridor.
- Maintain the Borough's system of streets and roads to continue to provide for the safe and efficient movement of traffic and discourage routes which adversely impact existing and future residential neighborhoods.
- Promote a desirable pedestrian environment within the downtown business district corridor.

Key Recommendations

- Promote the modernization of existing office and research-laboratory facilities.
- Provide for and encourage desirable non-residential development in appropriate areas.

Morris Plains Borough Open Space Plan, 2003

Goals and Objectives

- Bicycle/pedestrian route classifications should be reviewed on a site-by-site basis. Future development should be coordinated with the Open

Space plan and County Bikeway and Pedestrian Plan for opportunities to build the network.

Key Recommendations

- Bike lane and sidewalk improvements as proposed in the County's 1998 Pedestrian and Bicycle Element are largely endorsed. It is suggested that there should be a pedestrian walkway, trail and bikeway network linking the various residential neighborhoods and community facilities in the eastern portion of the borough to those in centrally located.
- Research Laboratory Development: Pfizer (on NJ 53 and NJ-10); and Johnson Road, a variety of corporate office facilities. Permit expansion while maintaining the quality of life for the surrounding residential neighborhoods.

Morris Township

Morris Township Master Plan Reexamination, 2007

Goals and Objectives

- A sidewalk priority program to include sidewalks, where practical, on all arterial and most major collector roads should be initiated.

Key Recommendations

- Need for Exxon redevelopment traffic study for intersections of interest – East Hanover Road/Whippany Road and NJ-24 on-ramp; Madison Avenue/Normandy Parkway, and Madison Avenue/Punch Bowl Road.

- Improved traffic flow on East and West Hanover Avenue should be restudied as it is an important arterial route which bypasses downtown Morristown.
- Madison Avenue signal timings and intersection improvements.
- Sidewalks should be prioritized on Madison Avenue, Normandy Parkway, Whippany Road, Park Avenue, Ridgedale Avenue, East Hanover Avenue, West Hanover Avenue and Columbia Road.
- A bicycle link from the arboretum to the Traction Line right-of-way should be considered.

Morris Township Master Plan, 1994

Key Recommendations

- Plan notes that extension of NJ-24 no longer appropriate based on population growth projections.
- Preservation of residential and open space character of the community; no shifts in the basic residential pattern; low density single-family home character of the Township and multi-family development in carefully selected areas.
- Preservation and enhancement of historic sites and recreational facilities.
- Maintenance of existing commercial areas and restriction of new commercial development.

Morris Township Amendment to the Land Use Plan Element and Circulation Plan Element, 2012

Key Recommendations

- Area around Columbia Turnpike/Park Avenue is heavily congested and well as adjacent intersections such as Madison Avenue/Kahn Road. Mixed-use development at Honeywell Campus would result in overall

reduction of traffic, but increase in peak hours. Identified need for fair share of improvements from new development.

- The Honeywell site was rezoned to a new designation (OL-40/PUD) that would allow the existing permitted uses and would also allow site redevelopment through a Planned Unit Development (PUD) option.

Town of Morristown

Morristown Town Mobility and Community Form Plan, 2014

Goals and Objectives

- Safely and conveniently connect residents, workers, and visitors to the various employment, residential, shopping, and recreational opportunities in town.
- Balance regional traffic access and placemaking.
- Increase the capacity of regional roadways not through roadway widening and expansions but through other techniques, such as traffic signal improvements, lane striping, and wayfinding enhancements.
- Address issues of traffic signal coordination along Speedwell Avenue and signal timing at the intersections of Ann Street with Mt. Kemble Avenue and Bank Street, among others.
- Morristown is supporting transit services through land use and community form decisions that create transit-oriented living, working, and shopping destinations.
- With TransOptions and NJ TRANSIT, study a revitalized shuttle bus circulator system to establish goals, understand demand, and develop operating and capital budgets, and to study the potential of merging

shuttle services with Morristown Medical Center and other private employers.

- Work with NJ TRANSIT to improve local bus and rail service through physical improvements to the train station area, the development of transit-oriented development projects, and the regular evaluation of transit rider needs and services.
- Create bus stops that provide shelter from the elements and are informative, visible, and an attractive part of the streetscape.
- Encourage complete, pedestrian- and bike-friendly streets.
- Use the new Streets Plan to govern the design of streets, sidewalks, and streetscapes.
- Require the inclusion of bike rooms or racks in new developments, and ensure sidewalk widths and the placement of street furniture, including bike racks, comply with the Streets Plan.

Key Recommendations

- Plan designates "roadway typologies" for function including those on county and state roads on Pages 46-49.
- Number of improvements and strategies identified for Morris Avenue (Pages 104-113) through train station district, Speedwell Avenue (Pages 121), NJ-124 (South Street) on Pages 122-127, and Washington Street (Pages 128-132).
- Create new roadway linkages to improve overall circulation; opportunities include expanding Cory Road under the train trestle and connecting Early Street to Clinton Street.
- Realignment of Speedwell Avenue/Spring Street intersection.
- Conduct a comprehensive traffic, pedestrian, and bicycle study focusing on the Green and approaching roadways to evaluate options for mobility and accessibility improvements (Pages 96-103).
- Work with NJDOT and Morris County to identify additional opportunities for on-street parking.

- Identify and address turning and back-up movements that hinder the flow of traffic and create safety concerns on major streets (e.g., turning movement on Western Avenue; turning movement and back-up on Market Street; and left turning movement onto Lafayette Avenue at Ridgedale Avenue).
- Residents are interested in a shuttle system that would circulate throughout the downtown during morning, lunch, and/or evening hours, enabling them to leave their cars parked.
- Improve pedestrian and bike connections and safety at the I-287 overpasses; consider widened sidewalks and bike lanes buffered from traffic, as well as additional crosswalks, lighting, and other elements.
- Conduct a comprehensive traffic, pedestrian, and bicycle study focusing on the Green and approaching roadways to evaluate options for mobility and accessibility improvements.
- Continue to develop safe walking routes to transit, schools, community facilities, and employment centers, as well as for seniors, by building partnerships with NJDOT, NJ TRANSIT, Morris School District, and others.
- Formalize and reinforce connections to Patriots' Path, the Traction Line Recreation Trail, and other pedestrian/bike trails linking Morristown to destinations within the region.
- Encourage transit-oriented, smart growth planning and development.
- Promote healthy residential neighborhoods; preserve the physical character and fabric of existing neighborhoods.
- Promote thriving commercial and mixed use areas.
- Mobility and Community Form Plan includes "Plan for Places" starting on Page 95 addressing areas for desired redevelopment.

Morristown Town Bicycle Plan, 2009

Goals and Objectives

- Integrate the consideration of bicycle facilities and amenities into Town planning activities and capital improvement projects.

- Develop a safe, convenient, and continuous network of bikeways that serves the needs of all types of bicyclists, and provides bicycle-parking facilities to promote cycling.
- Improve the safety of bicyclists through education and enforcement.
- Increase bicycle mode share by increasing public awareness of the benefits of bicycling and of the available bike facilities and programs.

Key Recommendations

- The Morristown Bicycle Plan has identified numerous corridors with segments suitable for bicycle compatibility including the County, State, and Federal roads: Speedwell Avenue, Bank Street, South Street, Morris Avenue, Morris Street, Washington Street, Sussex Avenue.
- The Morristown Bike Plan has identified striping templates for roads of various widths to accommodate a variety of bicycle treatments. The plan provides examples of suitable corridors that match these templates.

Speedwell Avenue Redevelopment Plan, 2011

Key Recommendations

- Speedwell Avenue Corridor Redevelopment: extension of the CBD, smart growth, sustainable design.

Mount Arlington Borough

Mount Arlington Borough Master Plan, 1999

Key Recommendations

- Plan makes note of need to cooperate with Roxbury Township on planning issues of common concern notably the Howard Blvd/I-80 interchange.

Mount Arlington Borough Master Plan – Land Use Plan, 1999

Key Recommendations

- Protecting and continuing the existing established development pattern and the character of existing residential neighborhoods.
- Development and redevelopment of the Mt. Arlington village center, remaining large vacant tracts of land, in-fill development of relatively small parcels, redevelopment of existing developed properties.
- HMC Hotel Motel Conference Zone on Howard Boulevard.
- Development and redevelopment of the Mt. Arlington village center.

Mount Olive Township

Mount Olive Township Master Plan and Master Plan Reexamination, 2003

Goals and Objectives

- Encourage commercial development in appropriate areas along US-46 and US-206 to serve the needs of Mount Olive residents and regional travelers, with sufficient design control to assure minimal interruption to traffic flows.

- Coordinate efforts with TransOptions, Morris County and the private sector to increase ride sharing programs and public transit options in Mount Olive Township.
- Discourage traffic from cutting through existing or future residential neighborhoods. Ensure the design of new subdivisions and roads avoid outside traffic through local residential streets.
- Sidewalks should be prioritized to improve public safety, increase public access between residential areas, shopping, schools, parks and public facilities, and to serve public requests for recreational walking areas.

Key Recommendations

- Work with the NJDOT in regard to the design criteria of Route 46 to maximize the highway’s safety within the constraints of the developed lands that front the highway. Encourage the NJDOT to use context sensitive design parameters for improvements to the highway.
- Work with NJDOT to modernize the western portion of Route 46 in the Township where it is divided. Safety improvements to the U-turns should be examined and undertaken.
- Master Plan notes a number of intersection improvements ranked by priority from original 1990 Traffic Master Plan on Pages 71-73. Locations which have been completed are identified in bold.
- Protect existing residential character.
- The plan identifies three centers to promote development and future growth in Planning areas 4B and 5 (Environmentally Sensitive Planning Areas), consistent with the policies of the State Development and Redevelopment Plan (SDRP). These three centers are are Hackettstown Regional Center, Budd Lake Regional Center, and Flanders Town Center.

Mount Olive Township Periodic Reexamination Report of the Master Plan and Development Regulations, 2010

Goals and Objectives

- Create trail systems within the Township's larger public open spaces that serve all ages and address multiple use needs, thereby expanding the recreational opportunities available to Township residents, promoting healthy lifestyles and enhancing quality of life and livability.
- Provide connectivity and access to other public lands within the Township, to regional trail systems and to trail systems and open spaces in neighboring communities.
- To establish trail connections that link neighborhoods with parklands and other community facilities such as schools, municipal facilities and shopping.

Mountain Lakes Borough

Mountain Lakes Borough Master Plan, 2013

Goals and Objectives

- Provide for safe and convenient pedestrian and vehicular circulation and access.
- Minimize traffic on local streets.
- Continue character of local streets (curvilinear and narrow).
- Minimize vehicular traffic on local streets from within and outside the Borough by creating opportunities to encourage and promote public transportation alternatives and Park and Ride facilities, and carefully monitor NJDOT plans for improvements to Route 46.
- The Borough's extensive system of pathways is one of the most important attributes that set Mountain Lakes apart from most other communities.
- Actively continue the Mountain Lakes tradition of encouraging improvements that enhance pedestrian and bicycling circulation, access and safety.

Key Recommendations

- Potential enhancements to Midvale Market area.
- Borough notes that improvements to US-46 would stimulate further development west of Borough and create more local "spill-over" traffic. Improvements should concentrate on safety and improved circulation.
- School-related congestion exists because of perception of safety for children. Development in adjacent communities is having an impact on local streets.
- Local streets are being used as alternatives to major highways such as US-46, I-80 and I-287 during periods of heavy congestion.
- Midvale Market Area would benefit from pedestrian environment upgrades including crosswalks, sight lines, and sidewalk improvements. It is important that the pathway system be maintained and improved where possible and appropriate. Where connections can be made to improve accessibility, they should be made. Any new residential developments should be connected to the system.
- A pedestrian/bikeway is part of the bridge repair/replacement over the rail line on Fanny Road at the border with Parsippany.
- A pathway from the ball field to the YMCA should be pursued with Boonton.
- Preserve the established development pattern of the community: a planned community from its beginning, park-like atmosphere emphasis on preservation.
- Encourage the redevelopment of the US-46 business corridor and improvements in the Midvale Market area, which serves as the town center.
- Encourage mixed-use development in the Midvale Market area.

Netcong Borough

Netcong Borough Master Plan Reexamination Report, 2008

Goals and Objectives

- Provide safe and efficient movement of people and vehicles through and within the Borough.
- Recognize and preserve heritage as a transportation hub.
- Public streets shall have generously-sized sidewalks and parking lanes on both sides of the project area. Sidewalks should be a minimum 8 feet in width and even wider (12 feet) are encouraged.

Key Recommendations

- Netcong station redevelopment plan recommends creating a new street network to enhance and facilitate vehicle and pedestrian movement in the area (though this would have no direct impact on County roads).
- Station layout should be reconfigured to create more parking and improve connections.
- Creation of new road network to improve circulation at station.
- A Greenway is proposed along the existing drainage course that extends from the Station Plaza area to Bank Street. This could connect to the linear Furnace Pond Greenway.
- Netcong is a designated "Transit Village".
- Retain the small-town character of the Borough.
- Protect and conserve the Borough's natural resources.
- Maintain and enhance the variety and balance of residential housing options.

- Recognize and preserve the historic heritage of the Borough as a transportation hub. Extend the commercial core of the downtown to embrace the New Jersey Transit rail station as an anchor and focal point.
- Compact, pedestrian-friendly extension of the downtown; Smart Growth.
- Netcong Station Area TOD redevelopment: Redevelopment area contains design guidelines. Additionally, Netcong has a Special Improvement District (SID) and Economic Development Committee.

Parsippany-Troy Hills Township

Parsippany Troy-Hills Township Reexamination Report of the Master Plan, 2014

Goals and Objectives

- Encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging the location of such facilities and routes which would result in congestion blight, or unsafe conditions.
- Ensure that traffic and pedestrian circulation issues are affirmatively addressed on a local and regional scale.

Key Recommendations

- Protect and reinforce the prevailing residential development patterns, permit attached residential development only in those areas specified in the plan and preclude them from other areas, prohibit incompatible land use arrangements.

- The changing corporate and professional office marketplace and emerging employment dynamics over the last decade has resulted in a substantial increase in office vacancy in the Township. The evolution of this market needs to be recognized in the land use policy statements of the Township.
- To preserve and enhance the Township's retail commercial areas by defining their functional role in the community.
- To preserve and enhance the Township's corporate, research and professional office zones.
- To protect and preserve the environmentally sensitive areas of Troy Meadows.

Parsippany Troy-Hills Township Circulation Element of the Master Plan, 2005

Goals and Objectives

- Transit objectives include shuttle buses from office campuses (Mack-Cali Business Campus, Morris Corporate Center, and various developments along Smith Road and Jefferson Road) to adjacent train stations, pursuing the creation of a bus terminal, and seek opportunities for creating or expanding park and rides.
- Parsippany recognizes that providing opportunities for walking and bicycling is a significant quality-of-life factor. To that end, Parsippany seeks to provide new bicycle and pedestrian connections across physical barriers and complete a network of paths.
- Parsippany seeks to provide direct pedestrian connections where possible and requires new commercial developments that are retail in nature to provide bicycle and pedestrian links to adjacent neighborhoods and commercial developments.
- Provide new bicycle/pedestrian connections across the various physical barriers in Parsippany-Troy Hills.

- Complete a network of bicycle/pedestrian paths for Parsippany-Troy Hills.
- Provide sidewalks along higher classes of roadway and in the vicinity of all schools.
- Provide direct pedestrian connections where possible.
- Require new commercial developments that are retail in nature to provide bicycle/pedestrian links to adjacent neighborhoods and adjacent commercial developments.

Key Recommendations

- US-46 identified for need for traffic signal timing and safety audit.
- There are several improvements identified in Circulation Element on Pages 27-50, but plan is 10 years old at this point.
- Recommendation that a streetscape improvement plan be studied and implemented along the corridor of Parsippany Road from the vicinity of the I-287 interchange to the Littleton Road intersection.
- The US-46 Park and Ride has been identified for pedestrian improvements to reduce pedestrian conflicts.
- Reconstruction of arterial roadways should include sidewalks. Priority corridors include North Beverwyck Road, Parsippany Road, Parsippany Boulevard (from Littleton Road to US-46), and US-46 (between Parsippany Boulevard and Arlington Plaza).

Parsippany-Troy Hills Township Open Space and Recreation Plan, 2011

Key Recommendations

- Develop a comprehensive trail plan that will provide alternative transportation routes between population centers and parks. The plan should examine inactive rail corridors and further the development of Patriot's Path and the trolley line trail.

Pequannock Township

Pequannock Township Master Plan, 1994

Goals and Objectives

- Ensure the preservation of the existing residential character along the Township's roadways, particular Newark-Pompton Turnpike, Boulevard, and West Parkway.
- Coordinate traffic management plans with Morris County and TMAs.
- Additional park and ride lots should be established within the Township. One potential site for a new facility is the vacant land at the southwest corner of West Parkway as it intersects with Route 23.

Key Recommendations

- Control and manage development on NJ-23 to reduce diversion onto local roadways.
- Identified intersection improvements for NJ-23 at Jackson Avenue and Alexander Avenue and along Lincoln Park Road.
- Preservation of the residential character; particularly the Newark Pompton Turnpike, the Boulevard, and west Parkway; limited range of professional uses in the residential zones along the Newark Pompton Turnpike between the c-1 commercial districts.
- Protection and conservation of the natural environment.

Pequannock Township Open Space and Recreation Plan Update, 2012

Goals and Objectives

- Discuss recreation and conservation opportunities with Lincoln Park Borough (and other neighboring communities/Passaic County) to further common interests and access to natural areas.
- Promote the linkage of new and existing open spaces and recreation facilities with pedestrian and bicycle paths.

Key Recommendations

- The Pompton Riverwalk project seeks to reclaim properties along the river that have flooded with frequency and create a greenway asset. However, NJ-23 complicates this project as it separates residential neighborhoods from the waterfront. Acquisitions along the waterfront should be categorized by their ability to offer access and support recreation; with less accessible parcels being converted to natural buffers.
- The NYS&W Pompton Spur is in negotiation for acquisition and conversion to a multi-use trail. Developing an action plan with Morris County for the completion of the conversion is a priority.

Randolph Township

Randolph Township Master Plan, 2006

Goals and Objectives

- Traffic demand generated by new development should not exceed the existing and planned capacity of the Township circulation system.
- Future road improvements identified in the Circulation Plan should be included in the capital improvement program and be developed in conjunction with new development.
- The use of mass transportation should be encouraged and opportunities expanded especially in relation to the mobility of senior citizens.

- Bus route should be expanded to serve demands along the Sussex Turnpike corridor, including Village Center.
- Opportunities to expand mass transportation in Randolph Township should be pursued with the assistance of developers and other government agencies.
- NJ TRANSIT is encouraged to explore the possibility of a transit stop located in Randolph.
- Pedestrian circulation facilities including sidewalks, bikeways and the Township's trail system serving as connections between community facilities, commercial areas, residential neighborhoods and employment sites should be encouraged as indicated in the Circulation Plan.
- The Township has adopted a resolution to consult the bikeway plan in future circulation planning.

Key Recommendations

- Maintain the rural / suburban character of the Township and the density and intensity of development in the community's residential zones.

Randolph Township Route 10 Corridor Study, 2006

Goals and Objectives

- There are a number of goals within the Route 10 Corridor Study, including enhancing gateways, keeping Route 10 as a regional and local arterial and developing commercial activity in development nodes rather than as commercial strip development.
- Future residential and commercial development should continue to be encouraged to interconnect their sites with vehicular and pedestrian linkages, particularly in the Village Center as outlined in the Village Center Study and the Route 10 Corridor Study.
- There are a number of problem areas identified on Page 6 and mapped on Page 12 of Route 10 Corridor Plan.

- Encourages access to County College of Morris directly onto NJ-10 eastbound to relieve congestion on Center Grove Road and Dover-Chester Road.

Key Recommendations

- NJ-10 Corridor: continue to develop as center of activity where retail, office, service and industrial type uses are encouraged to locate.

Randolph Township Mount Freedom Village Center Report, 2006

Goals and Objectives

- It is a primary goal to make the Mount Freedom Village center as walkable as possible. Creating and maintaining a well-developed sidewalk network would primarily accomplish this.

Key Recommendations

- Mount Freedom Village: envision it becoming a village center with small scale Colonial type shops, stores and services.

Randolph Township Bikeway Plan, 1995

Key Recommendations

- Bikeways are proposed in the bikeway Plan for Calais Road (from Sussex Turnpike to Dover-Chester Road), Sussex Turnpike (to Shongum School), Church Road – Millbrook Avenue, Carrell Road (to Town of Dover).
- The existing trail that extends along Church Road should be extended for pedestrians to continue south to other areas of Randolph. Also, a trail should extend south of Sussex Turnpike along Old Brookside Road using either a designated bike lane and/or a sidewalk and should connect to an

existing trail located south of Old Brookside Road. The same trail could extend along Sussex Turnpike as well as along Old Shunpike Road and Harvey Terrace.

- Another pedestrian connection is proposed to extend along the proposed extension of Woodlawn Terrace and continue through Kensington Square, south to Old Shunpike Road. This connection is an important link to the businesses located along Sussex Turnpike.
- Trails are proposed to tie-in north of the existing trail network to improve linkages with the Millbrook neighborhood.
- The township has made prior efforts to create trail connections across NJ-10 and extend through the County College campus to link to Quaker Church Road and other trails. It is a long-term goal to make these connections across NJ-10.
- A trail extension is proposed for an abandoned rail bed. This would require clearing brush and designating the trail.
- Access from the existing trail system north of the area between Millbrook Avenue and Church Road should be extended through this residential area along Ryan Court, Valley Road and Church Road to connect to the sidewalks proposed for Sussex Turnpike when reconstructed.

Riverdale Borough

Riverdale Borough Master Plan, 2008

Goals and Objectives

- Continued coordination with the New Jersey Department of Transportation and the Morris County Division of Transportation is encouraged to move forward with future transportation enhancements in areas where redesign is being encouraged, including the Paterson-Hamburg Turnpike corridor.

- A multi-modal transportation system (automobile, bus, pedestrian and rail) would ensure greater public access to the Riverdale area for local and regional users. A goal of including more public transit opportunities to the area would help lessen concerns over aggravating an already traffic congested situation that presently exists along surrounding roadways.
- Ensure that neighborhoods and communities are inter-connected such that each community may be reached by either bike/walking trails and/or public transit systems.
- Land use along major corridors must support pedestrian and non-motorized activities.
- Sidewalks and curbs shall be provided along both sides of the public right-of-way of municipal streets wherever possible.
- The Borough should prepare a Trail Plan to expand its local pedestrian circulation system and connect to Morris County trails and the trail systems of other municipalities creating linear and looping trail system connections wherever possible.
- Balance preservation of its remaining open space and environmentally sensitive areas with maintenance and enhancement of its diverse community character, residential, commercial and industrial development and redevelopment opportunities.
- Discouraging strip-style and typical franchise-style commercial development along major roadway corridors.

Key Recommendations

- Expansion of existing bus routes must be considered as new development and redevelopment within the Borough continues to occur. This is particularly important in high traffic areas where significant residential and commercial development is occurring such as along the NJ-23 corridor. Transit-oriented development patterns are encouraged and are discussed in more detail in the Land Use section of the Master Plan.
- The potential for some form of passenger rail service in the Borough in the future is uncertain, but this possibility should be considered and

encouraged as new development occurs in Riverdale along the Paterson-Hamburg Turnpike and in the vicinity of the Riverdale Quarry.

- The areas between the downtown and west of I-287 are particularly important for pedestrian accommodation if redevelopment takes place.
- Encouraging mixed-use types of development and the creation of specialty retail uses along the Paterson-Hamburg Turnpike in Riverdale and in the Riverdale Quarry.

Rockaway Borough

Rockaway Borough Master Plan, 1995

Goals and Objectives

- Encourage transit use.
- Encourage bicycle/pedestrian travel.

Key Recommendations

- Preserve and enhance the historic nature of the community.
- Within the industrial zones, promote and encourage the location of clean, high technology uses which are aesthetically and environmentally safe.
- Reduce the intensity of new development.
- Preserve/enhance/protect the Rockaway River corridor for passive recreational use.

Rockaway Township

Rockaway Township Master Plan, 1992

Key Recommendations

- Proposed "Iron Parkway" between Green Pond Road and Mount Hope Road.
- A number of intersection improvements are identified on Pages 14-15 in the Circulation Plan, created in 1992.

Rockaway Township Open Space and Recreation Plan Update, 2013

Key Recommendations

- Several potential rail-to-trail conversions have been identified as potential projects including segments of the Wharton & Northern Railroad and the Mount Hope Mineral Railroad beds. Connection of these across NJ-15 would facilitate inclusion in the Morris County West Morris Greenway.
- Preserve and protect the residential character and existing density.
- Enhance the development pattern and land use arrangement in White Meadow Lake and reinforce the minimum 0.3 acre lot area requirement.
- Concentrate higher density development in the southerly portion of the township.
- Support Picatinny Arsenal's retention as an armament research, development and engineering center.
- Green Pond Road corridor: village center development in Planned Economic District.

Roxbury Township

Roxbury Township Periodic Reexamination of the Master Plan and Development Regulations, 2005

Goals and Objectives

- Establishment of a truck routing plan.
- Report notes that traffic has increased significantly since 1990 and a number of circulation issues associated with parking, truck traffic, and cut-through traffic are identified, particularly along US-46 and Landing Road.
- Promote mass transportation and traffic management programs to reduce the total amount of traffic on local roads.

Key Recommendations

- Realignment of Hillside Avenue and NJ-10 intersection.
- Bisected by I-80 and NJ-10 and US-46, Roxbury has been an attractive location for non-residential development.
- Control commercial development and its impacts: siting commercial development along specified highway corridors, in ways that best protect nearby residential areas.
- Control major office and industrial development: siting such development in a manner to preserve the greatest amount of open space, identifying land suitable for industrial use in relation to utilities, access to arterial and primary roadways and rail access.

Roxbury Township Trails Plan, 2005

Goals and Objectives

- Create a network of trails and pathways accessible to a variety of pedestrian and nonmotorized vehicle users that will link the users with schools, recreation facilities, parks and other places of public assembly areas of scenic-beauty, areas of historic and cultural importance, and other regional trail networks.
- Require pedestrian and non-motorized circulation trails within any capital improvement project that would be within the path of the Roxbury Trails map.

Key Recommendations

- Develop trails within the Hercules Tract to provide trail access to a number of residents who live on the western side of the property.

Roxbury Township Open Space and Recreation Plan Update, 2011

Key Recommendations

- Develop the Patriots' Path Extension Area I and trail loops.
- The plan identifies several greenways in Roxbury that the town should continue to improve or construct. These include the Morris Canal, West Morris, Berkshire Valley, Eyland Woods, Drakes Brook, Mooney Mountain, and Ledgewood Greenways.

Roxbury Township Land Use Plan Element Update, 2009

Key Recommendations

- Preserve the integrity of existing residential areas: decreasing the development intensity on undeveloped and underdeveloped land, encouraging cluster development where it is beneficial.

Victory Gardens Borough

Victory Gardens Borough Circulation Plan Element, 1988

Goals and Objectives

- A number of roadway improvements were recommended in 1988 plan. The 1998 and 2006 Re-examination reports each noted that these improvements had not been made and there were no plans to implement them.

Victory Gardens Borough Master Reexamination, 2006

Key Recommendations

- Control of residential growth by not allowing for duplexes.

Washington Township

Washington Township 2009 Master Plan and Development Regulations Reexamination Report, 2009

Goals and Objectives

- Establish a continuous sidewalk among downtown destinations for residents and visitors.

- Bicycle access should be provided to points of interest and consideration should be given to designating and signing bicycle routes throughout the Township and particularly on major thoroughfares and county roads.
- Design of arterial and collector roads should include bicycle lanes where widths allow.
- Protect farmland and natural resource base.
- Slow residential development growth and the loss of undeveloped lands.
- Expanding the Township's non-residential tax ratable base: regional economy and Highlands regulations are expected to continue to limit this growth.

Key Recommendations

- Long Valley safety (identified as a bypass) project identified as a needed improvement.
- There is significant residential development that could occur along CR-517 and Newburgh Road. Sidewalks should be required in these areas to establish safe pedestrian access to new neighborhoods.

Washington Township Circulation Plan Element, 2003

Goals and Objectives

- Encourage various modes of transportation, including mass transit, buses, van pooling, and park and ride facilities at strategic locations within the Township in order to promote the goals of the Clean Air Act.

Long Valley Downtown & Pedestrian Sidewalk Plan, 2008

Key Recommendations

- East and West Mill Roads are recommended for a continuous sidewalk on both sides of the street.

- Schooley's Mountain Road is recommended for a continuous sidewalk on both sides of the street. Mid-block crossings are also recommended for pedestrian convenience and as a traffic calming measure.
- Crosswalks are recommended at a series of intersections on each of the corridors mentioned above.
- Long Valley Village: rural historic district, commercial uses, sidewalk and pedestrian improvements.

Wharton Borough

Wharton Borough Periodic Reexamination Report of the Master Plan & Land Use Plan, 2005

Goals and Objectives

- Encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging the location of such facilities and routes which would result in congestion blight, or unsafe conditions.
- Attention is required to enhance pedestrian safety within the borough's Main Street commercial areas, extending northward to Fern Avenue and at the southern end, near St. Mary's Street.

Key Recommendations

- The Plan notes that the Borough is actively pursuing the construction of a bypass roadway to alleviate traffic at the North Main Street and Dewey Avenue intersection. Congestion at the intersection continues to be problematic due to high traffic volume.
- Morris County's Department of Planning and Development has proposed connecting the Morris Canal as a multi-use trail to other trails collectively

forming the West Morris Greenway. The Borough favors recreational use of this feature which does not create detrimental impacts on adjoining residential properties.

- Preserve and protect the residential character and prevailing density of the community by restricting incompatible land uses from established residential areas, and limiting intensities of use.
- Preserve and enhance the Main Street business district.
- Promote the redevelopment and adaptive re-use of the Borough's former industrial buildings and sites.
- Improve and enhance the Central Business District by developing signage and architectural design guidelines, implementing procedures for use and tenant changes, and pursuing funding for streetscape and pedestrian improvements.

5.2 The Local Planning Overlay

Based on the 39 municipalities that were researched, a Local Priority Map **Figure 5-2** and a Local Planning Priority Matrix **Table 5-2** were developed. The Local Priority Map identifies the location and type of major projects proposed by or for each municipality, as identified by adopted local plans. The Local Planning Priority Matrix identifies a series of big-picture themes that were identified as common aspirations across all municipal planning documents.

The Local Planning Priority Map was developed to create a common database of focus areas highlighted in municipal plans during the Literature Review. The map illustrates special projects/areas of focus highlighted from the Literature Review that require the coordination of multiple government stakeholders and property owners.

The Local Planning Priority Matrix was developed to ensure that recommendations within the County's Circulation Element are consistent with the vision and goals of individual municipalities. This ensures that the key goals for development of each municipality are known from the beginning, allowing for improved coordination with municipal stakeholders and the public.

The process of developing the Priority Map and Matrix involved an analysis of adopted municipal plans from the County's 39 municipalities. Key goals and objectives, special projects or focus areas, and the overall desired character as envisioned by the community were analyzed. From this data, 15 common themes were identified.

The Local Planning Priority Matrix displays the 15 common themes with their relationship to each municipality. The 15 themes are further organized into the following four main categories in order to better summarize each community's goals:

Center-based growth. Many of the municipalities have identified growth within established, redeveloped, or new mixed-use centers as a priority. The types of centers identified include established downtowns or commercial centers, new mixed-use centers, and campuses. In some cases, limited rather than significant growth is desirable.

- Common Themes:
 - Growth or change in an established center.
 - Preservation or limited growth in an established center.
 - Growth of new mixed-use centers.
 - Growth or change centered around an university campus.

Growth related to mode of travel. Another set of themes discussed in many of the municipal plans related to ensuring that there are better connections between future development/redevelopment and modes of travel. This means encouraging growth within close proximity of transit stations, developing land use patterns to promote alternative modes of transportation to the private automobile, and encouraging growth or change to create improved commercial or mixed-use corridors.

- Common Themes:
 - Transit-Oriented Development.
 - Growth or change along major roadways.

- Growth or change that fosters use of alternative forms of transportation.

General growth priorities. A third set of themes was identified to delineate general growth priorities in the municipalities that did not fall into the first or second set. General growth priorities for the municipalities focus primarily on targeted locations in developed areas that are either nearly built-out, or greatly restricted environmentally and by the Highlands Preservation Act.

- Common Themes:
 - Enhance existing non-residential development.
 - Redevelopment and/or change at former industrial sites.
 - Growth through selective infill or redevelopment.

- Growth of residential development (cluster or multi-family).
- Growth in undeveloped tract(s) of land.

General conservation / preservation priorities. The fourth set of themes identified municipal priorities that limit and restrict growth, preserve open space, and preserve residential neighborhoods as a priority.

- Common Themes:
 - Preserve the character of residential neighborhoods.
 - Preserve and enhance open space, farmland, and natural resources.
 - Control the growth of non-residential development.

**Figure 5-2:
Local Planning Projects**

- Municipal Special Projects
- Morris County Parks
- Water Body
- Municipal Special Projects
- Railroad Stations
- Passenger Railroads

ID	Municipality	Local Planning Priorities
1	Chatham Borough	River Road/Watchung Avenue Gateway
2	Chatham Borough	Proposed Passaic River Blueway
3	Chatham Township	Great Swamp National Wildlife Refuge
4	Denville Township	Diamond Spring Road Business District
5	Dover Town	Dover Station TOD
6	Dover Town	Route 46
7	East Hanover Township	Route 10 Corridor
8	Florham Park Borough	Commercial Hub
9	Hanover Township	Town Center
10	Harding Township	New Vernon Village Redevelopment Plan
11	Jefferson Township	Route 15 Corridor
12	Long Hill Township	Meyersville Hamlet Zone
13	Long Hill Township	Valley Road Business District
14	Madison Borough	Green Village Road Special Use Area
15	Madison Borough	Giralda Farms
16	Mine Hill Township	Route 46 Corridor
17	Montville Township	Route 202 Corridor West
18	Montville Township	Towaco Center
19	Montville Township	Route 46 /Bloomfield Avenue
20	Morris Plains Borough	Research Laboratory Redevelopment
21	Morristown Town	Speedwell Avenue Corridor Redevelopment
22	Mount Arlington Borough	HMC Hotel Motel Conference Zone
23	Mountain Lakes Borough	Route 46 Business Corridor
24	Mountain Lakes Borough	Midvale Market Area
25	Netcong Borough	Netcong Station Area TOD Redevelopment
26	Parsippany-Troy Hills Township	Troy Meadows
27	Randolph Township	Route 10 Corridor
28	Randolph Township	Mount Freedom Village
29	Riverdale Borough	Paterson-Hamburg Turnpike Mix-Use
30	Rockaway Township	Picatinny Arsenal
31	Rockaway Township	Green Pond Road Corridor
32	Roxbury Township	Hercules Tract
33	Roxbury Township	Highway 46 Corridor
34	Washington Township	Long Valley Village

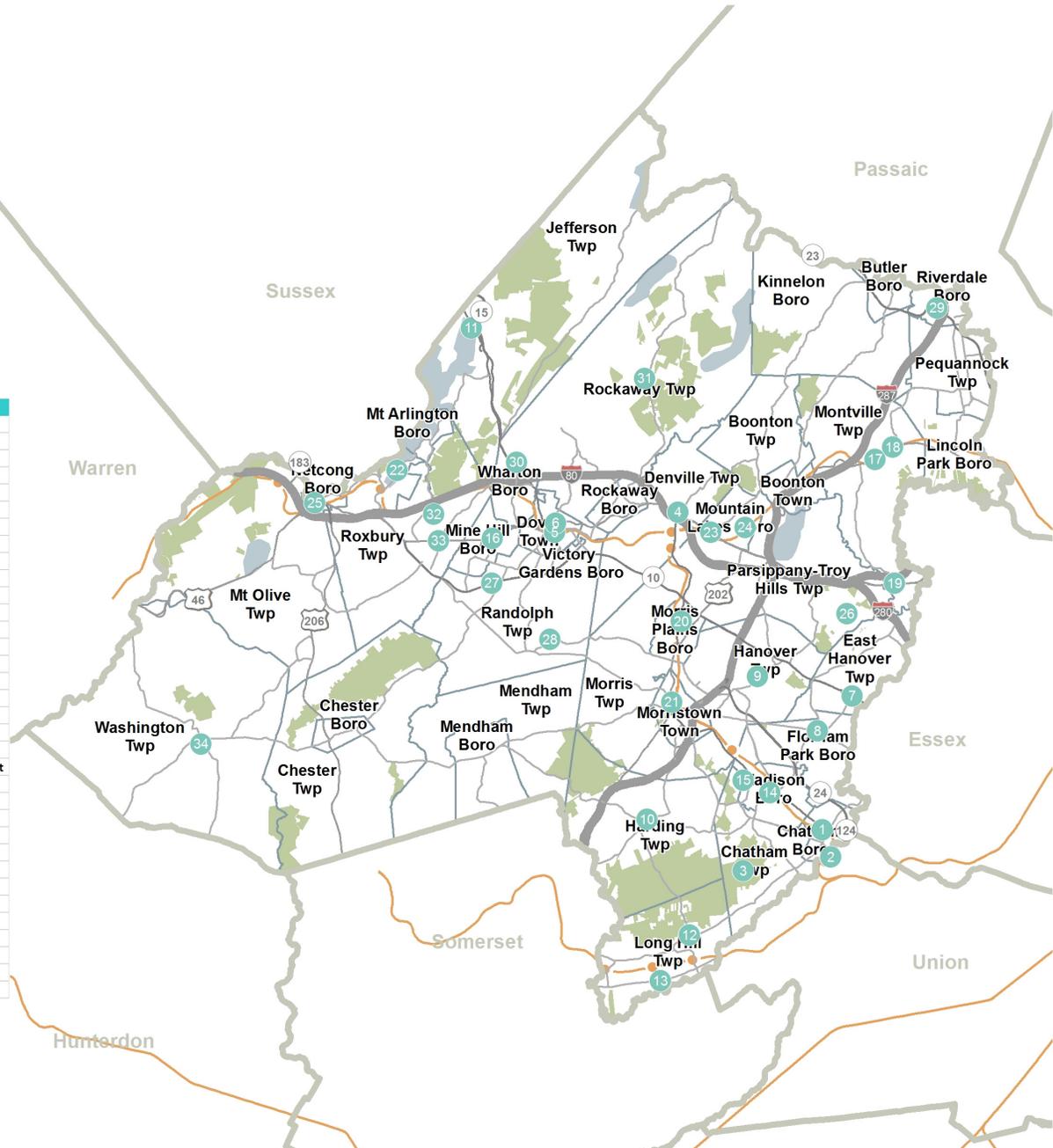


Table 5-2: Local Planning Priorities

Municipalities	Growth or change in an established center	Preservation or limited growth in an established center	Growth of new mixed-use centers	Growth or change centered around a university campus	Transit-Oriented Development	Growth or change along major roadways	Growth or change that fosters use of alternative forms of transportation	Enhance existing non-residential development	Redevelopment and/or change at former industrial sites	Growth through selective infill or redevelopment	Growth of residential development (cluster or multi-family)	Growth in undeveloped tract(s) of land	Preserve the character of residential neighborhoods	Preserve and enhance open space, farmland, and natural resources	Control the growth of non-residential development	
	Themes from Municipal Plans															
	Center-based growth				Growth related to mode of travel			General growth priorities					General conservation / preservation priorities			
Boonton Township									X				X			
Boonton Town	X					X			X	X			X			
Butler Borough										X			X			
Chatham Borough		X			X		X						X	X		
Chatham Township							X					X				
Chester Borough		X									X					
Chester Township													X	X		
Denville Township						X							X	X		
Dover Town	X				X	X	X									
East Hanover Township						X	X						X			
Florham Park Borough												X	X			

Table 5-2: Local Planning Priorities

Municipalities	Growth or change in an established center	Preservation or limited growth in an established center	Growth of new mixed-use centers	Growth or change centered around a university campus	Transit-Oriented Development	Growth or change along major roadways	Growth or change that fosters use of alternative forms of transportation	Enhance existing non-residential development	Redevelopment and/or change at former industrial sites	Growth through selective infill or redevelopment	Growth of residential development (cluster or multi-family)	Growth in undeveloped tract(s) of land	Preserve the character of residential neighborhoods	Preserve and enhance open space, farmland, and natural resources	Control the growth of non-residential development	
	Themes from Municipal Plans															
	Center-based growth			Growth related to mode of travel			General growth priorities						General conservation / preservation priorities			
Hanover Township			X					X		X			X			
Harding Township	X												X	X		
Jefferson Township						X								X		
Kinnelon Borough													X			
Lincoln Park Borough													X			
Long Hill Township	X						X						X			
Madison Borough				X	X		X	X					X	X		
Mendham Borough		X											X			
Mendham Township													X	X		
Mine Hill Township								X					X			
Montville Township			X		X	X							X	X		

Table 5-2: Local Planning Priorities

Municipalities	Growth or change in an established center	Preservation or limited growth in an established center	Growth of new mixed-use centers	Growth or change centered around a university campus	Transit-Oriented Development	Growth or change along major roadways	Growth or change that fosters use of alternative forms of transportation	Enhance existing non-residential development	Redevelopment and/or change at former industrial sites	Growth through selective infill or redevelopment	Growth of residential development (cluster or multi-family)	Growth in undeveloped tract(s) of land	Preserve the character of residential neighborhoods	Preserve and enhance open space, farmland, and natural resources	Control the growth of non-residential development
	Themes from Municipal Plans														
	Center-based growth				Growth related to mode of travel			General growth priorities					General conservation / preservation priorities		
Morris Plains Borough								X							
Morris Township													X	X	X
Morristown Town	X				X		X						X		
Mount Arlington Borough										X			X		
Mount Olive Township													X		
Mountain Lakes Borough	X					X							X		
Netcong Borough		X			X		X								
Parsippany-Troy Hills Township								X					X	X	
Pequannock Township													X	X	X
Randolph Township	X					X							X		
Riverdale Borough			X										X		X

Table 5-2: Local Planning Priorities

Municipalities	Growth or change in an established center	Preservation or limited growth in an established center	Growth of new mixed-use centers	Growth or change centered around a university campus	Transit-Oriented Development	Growth or change along major roadways	Growth or change that fosters use of alternative forms of transportation	Enhance existing non-residential development	Redevelopment and/or change at former industrial sites	Growth through selective infill or redevelopment	Growth of residential development (cluster or multi-family)	Growth in undeveloped tract(s) of land	Preserve the character of residential neighborhoods	Preserve and enhance open space, farmland, and natural resources	Control the growth of non-residential development	
	Themes from Municipal Plans															
	Center-based growth	Growth related to mode of travel					General growth priorities					General conservation / preservation priorities				
Rockaway Borough									X				X	X		
Rockaway Township	X					X							X			
Roxbury Township						X					X		X		X	
Victory Gardens Borough													X			
Washington Township													X	X		
Wharton Borough		X							X				X			

6. Summary and Findings

Summary Overview

The Summary and Findings summarizes the information found within the literature review and describes how it relates to the transportation network in Morris County.

Roads and Bridges

A safe and efficient roadway network is an important focus of municipal planning efforts. The plans recognize that no new roads or increased roadway capacity will likely be constructed. Therefore, the discussion of roadway travel has centered on improving the efficiency and safety of the existing system.

Municipal plans were reviewed for information related to transportation network improvements within their towns. All circulation elements addressed their roadways, though most information tended to be informational such as listing of roads within the municipality by FHWA classification (a requirement for master plans), traffic count data, and crash data. Most goals and objectives

related to transportation were located within a general listing of the municipality's planning goals and objectives. They tended to be generic in nature, such as aspiring to reduce congestion, promote safety and mobility for drivers and pedestrians, or to maintain the rural, historic, or residential qualities of the roadways within town. Maintaining the rural, historic, or residential character of their communities was found to be a common theme in many municipal plans, particularly for those located in northern and western areas of the County. These plans often cited a desire for maintaining these characteristics of their roads as well.

Some plans did identify specific roads in need of improvement. Most of these areas tended to be along major regional under state jurisdiction that support significant levels of commercial activity, such as US-46 and NJ-10. There were several plans which also discussed County roads, particularly as they passed through downtowns, employment centers, shopping districts, main streets, or major intersections. **Section 5** lists the goals and key recommendations identified within the plan review.

Bicycle and Pedestrian

The review of municipal plans revealed that most Morris County municipalities acknowledge the need for and benefits of a well-connected bicycle and pedestrian network in their community, including improving the continuity of sidewalks for pedestrians. Many to enhance these networks have been focused on developing and improving access to recreational trails, as a community amenity,

though it is understood that these improvements can also provide mobility to non-drivers for utilitarian trips as well.

Nine municipalities have adopted Complete Streets policies by resolution, aiming to make their roadways more accommodating for all roadway users, including bicyclists and pedestrians. A number of municipalities expressed a willingness to stripe bikes lanes, though unstriped bicycle routes are still the primary method of accommodating users.

Many municipal plans cited the importance of connecting and advancing networks beyond their own borders. The willingness to work with neighboring governments to create more regional, cohesive, and formalized connections was expressed. The plans identified a number ideas and potential projects shared among several municipalities. This shared interest may provide the opportunity to advance bicycle and pedestrian planning efforts County-wide. Furthermore, municipalities expressed interest in implementing bicycle and pedestrian improvements on County roads and strengthening connections to County-managed parks and cultural institutions.

The plan review identified key corridors for each municipality and larger initiatives that may require cross-jurisdictional and agency coordination. These initiatives could provide significant enhancement to the availability and accessibility of bicycle and pedestrian facilities within Morris County.

Public Transportation

Public transportation in Morris County, in some ways, is a tale of two counties. Much of the eastern portion of Morris County is generally well served by transit. For much of the northern and western parts of the County, there is little accessibility to public transportation services, with exception to the I-80 corridor and Morristown Line/Montclair Boonton Line service west of Dover, and save for community transportation like Morris Area Paratransit Service (MAPS), municipal dial-a-rides, or Job Access Reverse Commute (JARC) shuttles.

There is little discussion of public transportation needs within many of the municipal master plans in Morris County. Generally, plans included a basic inventory of existing services at the time of the plan's adoption. Limited discussion of transit is not unexpected since most public transportation service is operated by NJ TRANSIT or private bus carriers. Some exceptions do exist; the Township of Parsippany-Troy Hills and Town of Morristown have their own intra-municipal service.

Transit studies and plans for Morris County have been completed at the regional level, by state agencies and Morris County. The 2010 Northwest NJ Bus Study documented several needs and improvement strategies, several of which have already been implemented. These included a reconfiguration of the Morris County Metro Bus routes, transfer of local bus route operations from PABCO Transit to NJ TRANSIT, and creation and elimination of some routes.

Completed in 2013, the NJ-124 Transit Access Improvement Study examined transportation conditions in the vicinity of three NJ TRANSIT

Morris & Essex Line stations: Chatham, Madison, and Convent Station. Deficiencies in walk, auto/parking, transit, and bicycle access to the stations were examined and documented.

Truck and Rail Freight

The importance of goods movement for the County's economy has been well-documented and recognized by its planners and policymakers. Morris County acquired two freight railroads, the High Bridge Branch and Dover & Rockaway Railroad, in the 1980's in order to preserve their operations for industries located along the rights-of-way. In 2010, the County acquired and rehabilitated the Chester Branch railroad. Additionally, the County completed a comprehensive plan for freight in 2011.

The review of local plans revealed little direct consideration for freight transportation at the municipal level. Municipalities regulate goods movement indirectly by zoning for specific land uses that accommodate freight. This is accomplished by designating industrial and commercial zones harmoniously with the existing transportation network.

There are several County and regional plans addressing freight transportation. The 2011 Morris County Freight Infrastructure and Land Use Analysis examined supply chain operations in Morris County, including existing and underutilized industrial land uses that rely on goods movement in the County. As part of the project, the economic impact of freight to Morris County was analyzed, with particular focus on the three County-owned freight lines.

The Morris/Warren Rail Corridor Study, completed in 2013, examined the infrastructure and operational improvements necessary to modernize the primary rail freight corridor serving Morris and Warren counties, helping it accommodate taller and heavier cars and generate future economic development. The corridor consists of Norfolk Southern's Washington Secondary Line between Phillipsburg and Hackettstown in Warren County and NJ TRANSIT's Morristown Line from Hackettstown to Morristown in Morris County.

Aviation

An important factor supporting business and economic development, aviation plays a unique, but limited role in Morris County's overall transportation system. The County is home to two airports: the Morristown Municipal Airport, located in Hanover Township, and the Lincoln Park Airport in the Borough of Lincoln Park. Morristown's airport is a publicly owned general aviation reliever airport, which is under a long-term lease agreement with a private operator to manage airport operations. Lincoln Park is also considered a general aviation reliever airport. Although Lincoln Park is under private ownership it is accessible for public use.

Similar to freight, nearly all municipalities do not address aviation in their master plans. Hanover Township's *Circulation Plan Element* from 2013 discusses the presence of the Morristown Airport in the municipality, mentioning that in addition to the current volume of airplane traffic, there is an observed increase in helicopter use at the facility. The plan also notes that airport development is subject to only a cursory review by its planning board and that the township should

maintain a dialogue with the airport to address quality of life issues such as noise, safety, and traffic. Morristown's Master Plan provides a brief description of the airport and notes that it is only accessible by car.

Complete Streets

A national effort to accommodate bicyclists, pedestrians, transit users, and people of limited mobility on roads that were designed only for motorists is currently in progress. This movement has encouraged municipalities to adopt Complete Street policies.⁷ These policies direct planners and engineers to design roads that help enable safe access for all users. Complete Streets policies have been adopted by resolution in a number of Morris County municipalities **Figure 6-1**. The State and a number of county governments have adopted their own Complete Streets policies.

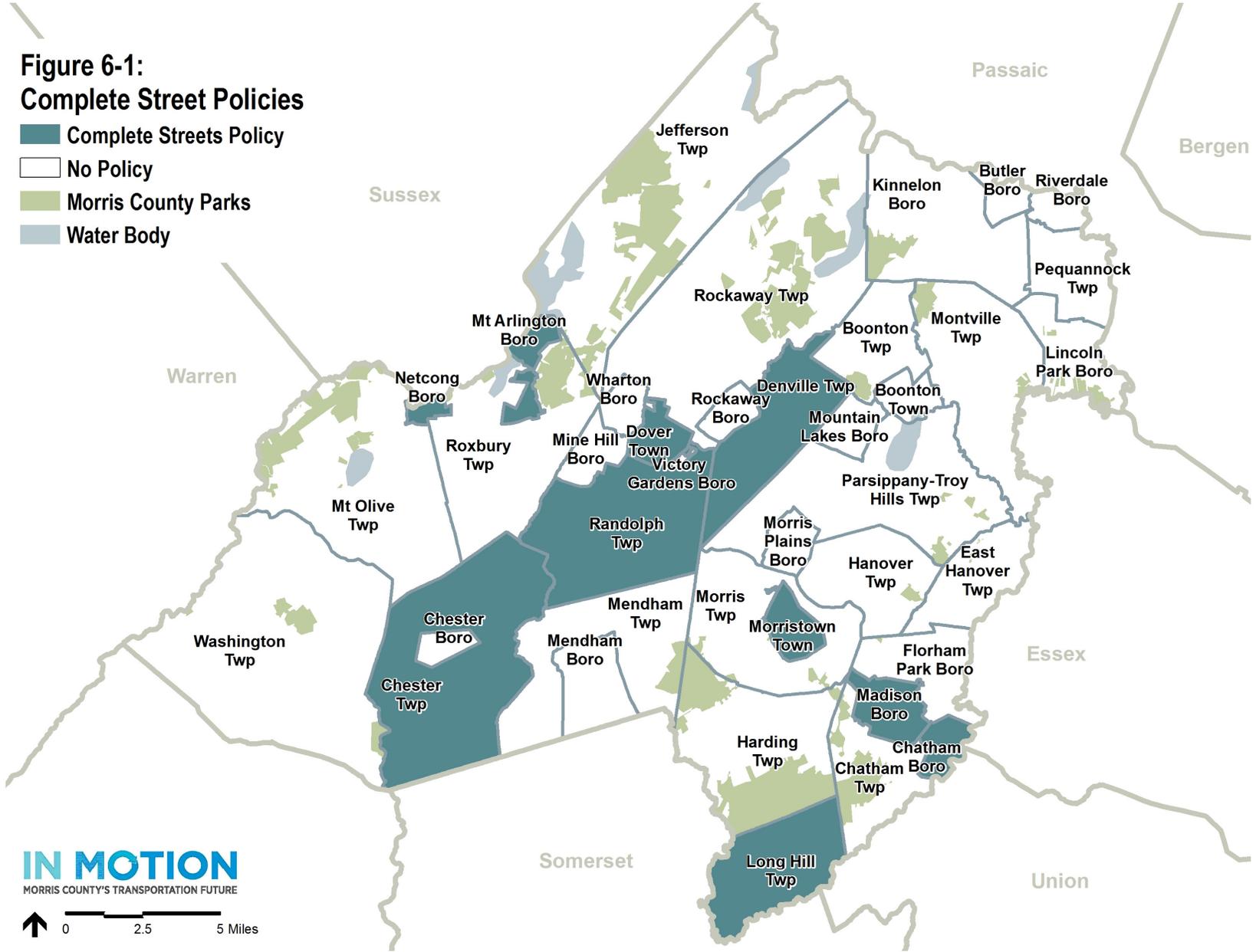
Physical elements of what is considered a "Complete Street" can include:

- Pedestrian infrastructure – sidewalks, crosswalks, ADA ramps, crossing islands, curb extensions
- Bicycle facilities – bike lanes, wide shoulders, "sharrows", neighborhood greenways
- Public transportation access – bus shelters, dedicated bus lanes, bus rapid transit, bus pullouts
- Traffic calming – road diets (reduction of lanes), street trees, back-in angled parking, center medians

Not all of the above treatments are required for a road to be considered a "Complete Street." Rather, it is expected that design treatments or adaptations be sensitive to the surrounding land use, the various modes of transportation, and feasibility of implementation.

**Figure 6-1:
Complete Street Policies**

- Complete Streets Policy
- No Policy
- Morris County Parks
- Water Body



IN MOTION
MORRIS COUNTY'S TRANSPORTATION FUTURE

0 2.5 5 Miles

Land Use

While zoning and land use decision making authority occurs at the municipal level and does not fall under the purview of county government in New Jersey, the information reviewed is nevertheless important to policy-making and project determination as these municipal decisions have a direct impact on the performance of the transportation network. However, policies from other governing bodies have had an impact on land use as well, notably the State Planning Act and the Highlands Water Protection and Planning Act. These two regional planning initiatives influence how Morris County may grow.

Plans for all 39 municipalities in Morris County were reviewed. This included master plans, circulation elements, complete streets plans, land use plans, bicycle and pedestrian plans, and transportation studies. The age and comprehensiveness of these planning documents varied greatly.

Based on the 39 municipalities that were researched a Local Priority Map and a Local Planning Priority Matrix were developed. The Local Priority Map identifies the location and type of major projects proposed by or for each municipality, as identified by adopted local plans. The Local Planning Priority Matrix identifies a series of big-picture themes that were identified as common aspirations across all municipal planning documents.

The 1975 Land Use Element provides a framework for future land use planning in Morris County and was intended to be used as a guide for municipal planning. Municipalities, not counties, are legislatively enabled to zone. Therefore, the Element does not present or create land use regulations. Rather, the Element provides a strategy for regional, center-based growth over a 25-year period, out to 1990.

The Highlands Water Protection and Planning Act, signed into law in August 2004, designated the Highlands Region for the preservation of open space, the protection of drinking water, and established the boundaries for a Preservation and Planning Areas. The Highlands Council developed The Highlands Regional Master Plan (RMP), which regulates land use within the Preservation and Planning Areas, although conformance with the RMP for municipalities located within the Planning Area is optional.

The State Planning Act of 1985 created the New Jersey State Planning Commission and Office of State Planning. The State Planning Commission is responsible for preparing, adopting, and making revisions to the State Development and Redevelopment Plan. This document establishes statewide planning objectives and identifies areas that are most appropriate for growth, limited growth, agriculture, open space conservation, preservation, and associated investments. The most recent version of the plan is the State Strategic Plan, drafted in 2012 and is pending adoption.

7. Conclusions

Technical Memorandum 3: Literature Review provides a framework for potential goals and objectives, priorities for areas of capital improvement, and planning policies for the development of the County Circulation Element.

The municipal plans, their circulation elements, and re-examinations provided guidance on community priorities, projects, and policies. The following are conclusions based on this review:

- 1)** Goals and objectives related to roads and bridges within Morris County tend to be generally stated, focusing on a reduction of congestion, improvement of safety and mobility, and protecting the residential character of local streets.
- 2)** Morris County municipalities, primarily those located in the north and western areas, want to keep their roadways of a historic, rural, or natural quality, corresponding to the characteristics of the surrounding land use.
- 3)** Improvements identified tend to be centered on major regional arterials, such as US-46, NJ-23 and NJ-10, which also provide major commercial office and retail development.

4) Communities tend to identify signalized intersection improvements as the main need for coordination with the County to improve mobility and reduce congestion.

5) Municipalities with place-based centers desire balanced roadway access that accommodates vehicular traffic through their downtown, but also provides for safe access and mobility for pedestrians, bicyclists, and public transit. Streetscape improvements, including sidewalks and street trees, as a way to improve the aesthetic qualities of the surrounding area, have also been recommended in these areas.

6) Public transportation is not well-addressed at the local level. Many municipalities indicate a need to provide for it as a method of reducing congestion, but only Morristown and Parsippany provide an internal bus system. Public transportation is considered to be regional, as it is provided by NJ TRANSIT or private carriers, such as Lakeland Bus and Coach USA.

7) Some municipalities discussed working with TMAs in developing and implementing transportation demand management (TDM) strategies.

8) Many municipal plans encourage bicycle and pedestrian travel on facilities within their borders. The focus tends to be on access to recreational trails and uses, rather than for utilitarian trips.

9) There is good potential for linking bicycle and pedestrian facilities between municipalities that focus on regional collaboration. The construction of the NYS&W Bicycle and Pedestrian Path is one such initiative. Another is the Morris Canal Greenway and the Canal

Society's Strategic Plan, which creates immediate and long-term opportunity for local and regional partnership.

10) Nine municipalities have formal Complete Streets policies. Several municipalities have recommendations to adopt Complete Streets policies.

11) Freight is generally addressed as a matter of road operations or land use, rather than as its own separate topic. Plan review indicated that there is a general desire to limit truck travel to certain roadways within Morris County. Additionally, there was no discussion related to freight rail.

12) Morris County's Freight Land Use and Infrastructure Analysis addressed both industrial land use, transportation related to goods movement, and economics of freight activity. This study identified opportunities for improving freight movement and development in Morris County. These included the utilization of the Hercules property and other properties for freight, the realignment of the Dover & Rockaway Railroad through Dover, and the need to address issues of height (17'0) and weight (286K) limitations on freight rail in the County. Subsequent studies reinforced these needs in greater detail.

13) Morristown Municipal Airport and Lincoln Park Airport are the two aviation facilities located in Morris County. Morristown Municipal Airport is a particular asset to major corporations that locate in Morris

County. It is, however, necessary to adequately address potential issues related to quality of life, such as noise or safety that stem from airport operations. Morris County established the Airport Advisory Committee (AAC) to help address these issues, but there was no discussion of the AAC's role in any plans reviewed.

14) Land Use, while generally regulated at the local level, is also influenced by state legislation, notably the State Planning Act and Highlands Water Protection and Planning Act. Municipalities that fall within the Preservation Area of the Highlands region developed Highlands Elements for their Master Plans to conform to the legislation. These plans are generic and tend to lack discussion on the Act's impact on the transportation network.

15) Many municipalities are planning to redevelop or create new town-centers for economic growth, rather than strip developments. These locations also tend to be located along corridors of regional travel.

16) Many municipalities indicated a preference for "no growth" as a way to preserve the historic, rural, or natural characteristics of their communities.

17) Repurposing major office developments along major corridors throughout Morris County is a recent phenomenon, and most municipalities have not yet addressed this issue.

¹ Morris Canal Greenway in Morris County Strategic Preservation Plan, Morris Land Conservancy and The Canal Society of New Jersey, 2005.

² www.morriscanalgreenway.org

³ Morris/Warren County Rail Corridor Study, Jacobs Engineering Group, Inc., 2013.

⁴ Morris/Warren County Rail Corridor Study, NJTPA, 2013, pp. 198.

⁵ The Rail Freight Capacity and Needs Assessment to Year 2040, HDR Engineering, Inc., 2013.

⁶ 2040 Freight Industrial Level Forecasts, Cambridge Systematics, Inc., 2012.

⁷ State of New Jersey Executive Order #114