

CINNAMINSON TOWNSHIP
CIRCULATION PLAN ELEMENT
OCTOBER 2009

Prepared by the Cinnaminson Planning Board
with the assistance of Banisch Associates, Inc.

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CIRCULATION PLAN ELEMENT

Introduction

Cinnaminson Township's Circulation Plan Element of the Master Plan is prepared in accordance with the Municipal Land Use Law, N.J.S.A. 40:55D-28b:

(4) A circulation plan element showing the location and types of facilities for all modes of transportation required for the efficient movement of people and goods into, about, and through the municipality, taking into account the functional highway classification system of the Federal Highway Administration and the types, locations, conditions, and availability of existing and proposed transportation facilities, including air, water, road, and rail;

The Circulation Plan Element responds to the proposals outlined in the Land Use Plan Element, as well as the regional context in which Cinnaminson is located. It also addresses the Master Plan's goal and objectives for circulation and transportation.

Cinnaminson Township's goals and objectives for vehicular, pedestrian and alternative forms of transportation in the Township are designed:

- To fashion a circulation plan sufficient to accommodate planned development, while retaining the unique and scenic features of the road network.
- To coordinate with other municipalities and governmental bodies for a regional approach to transportation that respects and enhances the character of the community.
- To establish transportation policies and programs that improve connections among housing, employment and commercial uses, including provisions for vehicular and pedestrian travel and bicycle paths.
- To control development so that traffic will not exceed the capacity of the existing road network to provide safe, efficient and convenient traffic movements, based on road service standards designed to maintain the character of the community.
- To recognize that roadways are public lands that deserve aesthetic design consideration, as well as efficient movement of vehicles, to carefully plan the Gateway entrances to the Township that promote a visitor's first impression of Cinnaminson.
- To encourage transportation funding for maintenance of the existing transportation system, rather than encouraging the development of new systems in the Township.
- To minimize the impacts of transportation systems on the environment, including air and noise pollution.

To create this Element a background document was prepared. The background document includes the analysis of existing conditions and facilities which comprise the circulation network in the Township. This analysis addresses regional influences, roadway jurisdiction, existing road functions, traffic accidents, traffic counts, goods movement,

available rail and bus services, bicycle paths and trails, pedestrian systems and the transportation plans of Burlington County, Delaware Valley Regional Planning Commission and New Jersey Department of Transportation (Appendix A). In contrast, this Circulation Plan Element is the document that puts forward policies, programs, investments and plans to meet the objectives of the Master Plan.

Transportation Policies

The proposed actions in this Element are guided by the objectives of the Master Plan and the definition provided in the Municipal Land Use Law (MLUL). But beyond these factors many municipalities establish more specific policies which foster the municipality's actions in implementing the recommendations of the Element.

The Planning Board has identified the following five policies to guide this Element:

1. Preserve pavement widths. The intent is to minimize new impervious surfaces for environmental and aesthetic benefits. If not necessary to widen a road to advance an improvement. Widening should only be utilized if it has an overwhelming positive benefit.
2. Advance safety improvements as required. Safety is of paramount importance, but these improvements should be analyzed in the context of all variables. (eg. congestion, environmental impact, aesthetics, traffic calming, etc.)
3. Employ traffic calming measures when appropriate. Traffic calming devices can have significant benefits, but only should be utilized as part of a comprehensive plan to address an issue.
4. Context Sensitive Design. The Planning Board supports the State's continued use of Context Sensitive Design in working with residents on mobility improvements in the Township. Context Sensitive Design (CSD) is an approach to planning and designing transportation projects based on active and early partnerships with communities. The Congestion Relief and Transportation Trust Fund Renewal Act signed into law in July 2000 require NJ DOT to have a CSD program. CSD involves a commitment to a process that encourages transportation officials to collaborate with community stakeholders so the design of the project reflects the goals of the people who live, work and travel in the area. Such collaboration results in creative and safe transportation solutions.
5. Land Use and Transportation Coordination Cinnaminson Township is of the belief that integrating land use and transportation planning is an approach that can reduce costs tremendously. It is a means of providing more traffic volume being handled by the existing transportation infrastructure, and it allows municipalities to develop in a way that will sustain their growth without inducing more congestion.

Roadway System

The system of roadways within a municipality is a significant part of the land use planning process, since it provides residents with their most basic means of making contact with their community. The Circulation Plan Background provided information on the jurisdiction of roads, street right-of-way widths and the incidents of accidents. This information as well as the plans of various jurisdictions and the Township's objectives

and policies has been analyzed in order to determine those situations where the present roadway system appears to be deficient or challenging; thereby helping to form the basis for recommendations.

Functional Classification

One of the requirements of the Municipal Land Use Law in constructing the Circulation Plan Element is to “take into account the functional highway classification system of the Federal Highway Administration (FHWA).” Each of the roadways in Cinnaminson Township performs a different function in the overall transportation network, and for purposes of planning is classified in three major types – arterial, collector or local.

Arterials

Arterials are vehicular rights-of-way with the primary function of carrying traffic in a continuous route across or through an area. Arterials are typically a principal part of the road network for through traffic flow, taking traffic from collector streets that serve neighborhoods and connecting to freeways, expressways or other limited access highways. Arterial roads also may be divided into principal and minor. Principal arterials are usually interstate and major state highways such Route 90 and 73 and other major highways that form an interconnected network of continuous routes serving regional corridors having the highest traffic volumes and the longest trip lengths such as US 130 and County Route 543. Conversely US 130 also functions as Cinnaminson’s “Main Street” providing for many local trips. Minor arterials interconnect with and augment the principal arterial system, and include County Routes 603, 606, 607 and 608.

Collectors

Collectors are roads that carry traffic between arterials and local streets as well as provide access to abutting properties. In Cinnaminson collectors are found in one category. The major or primary routes are those that carry higher volumes. In Cinnaminson these Major Urban Collectors are municipal roadways such as Union Landing Road, Taylor’s Lane and New Albany Road.

Local

Local streets or roads provide the primary function of access to abutting properties. Usually fronted with single family units, these streets typically have low speeds and low traffic volumes. The local road system contains the largest amount of roadway in the Township, but a significantly small amount of traffic volume.

The Circulation Plan Background Report presents the functional classification that was developed by the FHWA in 2004 based on the 2000 census. Table 1 identifies the 2004 functional classification (See Figure 4).

TABLE 1

Comparison of Functional Classification by Roadway and Jurisdiction

Roadways	Level of Government		
	Cinnaminson Township	Burlington County	New Jersey
Route 73			Urban Principal Arterial
Routes 90			Urban Freeway/Expressway
Route 130			Urban Principal Arterial
Route 543 (Broad St)		Urban Principal Arterial	
Route 603 (Moorestown-Riverton Rd)		Urban Minor Arterial	
Route 606 (Branch Pike)		Urban Minor Arterial	
Route 607 (Church St & Cinnaminson Ave.)		Urban Minor Arterial	
Route 608 (Lenola Rd)		Urban Minor Arterial	
Taylor's Lane	Urban Collector		
New Albany Road	Urban Collector		
Union Landing Road	Urban Collector		

Source: New Jersey Department of Transportation 2004 Functional Classification System

Improvement Plans, Programs and Studies

State Highway System

The federal Transportation Equity Act for the 21st Century (TEA-21) requires that each state develop one multimodal Statewide Transportation Improvement Program (STIP) for all areas of the state. In New Jersey, the STIP consists of a listing of statewide line items and programs, as well as the regional Transportation Improvement Program (TIP) projects, all of which were developed by the three Metropolitan Planning Organizations (MPOs). The Township is within the Delaware valley Regional Planning Commission-(DVRPC) region. The TIP contains local and state highway projects, statewide line items and programs, as well as proposed public transit projects.

This STIP conforms to and in many cases exceeds the specific requirements of the federal regulations:

It lists the priority projects programmed for each year of the first three years of the planning period.

1. It is fiscally constrained. Specifically, "planned federal aid expenditures" cannot exceed "projected revenues".
2. It contains all regionally significant projects regardless of funding sources.
3. It contains all projects programmed for federal funds.
4. It contains, for information, state funded projects.
5. It contains expanded descriptive information such as MPO, County, Municipality, Milepost, Sponsor and Program.

For federal fiscal years 2009 (beginning October 1, 2009) through 2012, there are a number of projects in the draft STIP within the Township, including the Delaware River Heritage Trail¹ and the Route 130, Cinnaminson Avenue/Church Road/Branch Pike Project².

Route 130

The most significant Burlington County planning effort addressing transportation is the Route 130/Delaware River Corridor Strategic Plan which is also the County's main effort at facilitating the revitalization of the Delaware River and Route 130.

The Route 130/Delaware River Corridor Regional Strategic Plan, a collaborative effort, defined a vision to guide revitalization based on an analysis of the strengths, resources and assets of the Delaware River and Route 130 communities extending sixteen miles from Cinnaminson to Florence Township and covering 59 square miles within Burlington County. Since adoption of the plan, the new RiverLINE light rail transit service was established.

A two-and-one-half year planning process culminated in the publication of Part I: Constraints and Opportunities Analysis that identified six major areas of concern that, in essence, defined the quality of life in the Corridor including transportation and circulation.

Part I identified 44 transportation problem locations. Working with the DVRPC these locations became part of DVRPC's Long Range Plan and were programmed for implementation in the DVRPC's FY 1998-2002 Transportation Improvement Program (TIP).

The four problem locations in the Township identified were:

1. US 130 From Andover Road to Taylor's Lane
2. US 130 and Moorestown-Riverton Road (County Route 603)
3. US 130 and Cinnaminson Ave. (County Route 607)
4. Fork Landing Road over Pennsauken Creek(and upgrading of Fork Landing Road)

In the TIP since FY1998 there have been a number of projects funded for Route 130. The following are projects which specifically impact Cinnaminson.

1. **Route 130 Corridor No. 3B, Airport Circle to CR 541 (High St. Burlington City)**

This is a corridor deficiency study with context sensitive design. It identified comprehensive corridor rehabilitation and operational improvements including, where

¹ The purpose of this project is to construct the New Jersey portion of "The Delaware River Heritage Trail." This trail has been envisioned as a bi-state, multiuse, non-motorized recreational route along both sides of the Delaware River. The New Jersey portion of this trail extends from Trenton to Palmyra with both on and off-road sections envisioned. The trail will provide a link to many neighborhoods, parks, and trails in the region.

² Funding is for the final phases of the project which was a major realignment of US 130 and Branch Pike, Church Rd and access to the new shopping center.

appropriate, pavement rehabilitation, intersection improvements, drainage improvements, development of an access management plan, pedestrian improvements, signing and lighting improvements, and roadside rehabilitation along Route 130 and various routes which enter and exit Route 130. The study supported a county led visual corridor planning effort for Route 130 which was administered and funded by DVRPC.

The federal Transportation Equity Act for the 21st Century (TEA-21) provided funding for this project under Section 1601, High Priority Projects Program. The Act allocated \$3.0 M for this project.

2. Burlington Light Rail Link

This project provides operating assistance for three years of a shuttle service between selected RiverLINE stations (Cinnaminson and Palmyra) and locations in Burlington County. The routes are to improve access to the regions transportation system by linking rail stations, bus stops and terminals, and park and ride lots. The first year of operations for two shuttle services was funded through the DVRPC Competitive CMAQ program.

3. Delaware River Heritage Trail, Burlington/Mercer

As previously noted the purpose of this project is to construct the New Jersey portion of "The Delaware River Heritage Trail." This trail has been envisioned as a bi-state, multi-use, non-motorized recreational route along both sides of the Delaware River. The New Jersey portion of this trail extends from Trenton to Palmyra with both on and off-road sections envisioned. The trail provides a link to many neighborhoods, parks, and trails in the region.

4. Route 130 Cinnaminson Ave / Church Road / Branch Pike

Presently under construction this intersection safety and operational improvement is a breakout of the Route 130, Corridor study. The improvements include removal of existing jughandles, construction of new jughandles, addition of turning movements, removal of Branch Pike signal, installation of new signal, reconstruction of Cinnaminson Avenue and Church Road to permit two-way traffic and realignment of Branch Pike.

The Regional Planning Division in the County's Department of Economic Development and Regional Planning is currently preparing an update to the regional plan (the 1998 regional plan was completed before the new RiverLINE light rail transit service was established) and will continue working with the twelve municipalities to execute the implementation agenda. Information developed in the State Plan cross-acceptance process is being used to help update and implement the plan.

County System

The Circulation Plan Background Report identifies the six (6) County-maintained roadways in Cinnaminson Township. One is a significant 500 series route³ which originates or terminates in other Counties beyond Burlington. County Route 543 extends

³ 500 series County roads are inter-county; 600 series County roads are intra-county

from the City of Camden to County Route 545 in Mansfield Township. For approximately two miles it coincides with Route 130 in Burlington Township to Burlington City where it extends north from the northbound lane of Route 130.

The remaining 600 series roads as noted are intra county roads. Highland Avenue even though it is only 1.35 miles in length it does connect the Township with Borough of Palmyra. This is in contrast to Moorestown-Riverton Road which extends for over ten miles connecting the Townships of Mount Laurel, Moorestown, Cinnaminson and the Borough of Riverton.

County Initiatives

During 2008 there are three County initiatives that affect the County system within Cinnaminson. As identified in Background Document eight projects were initiated by the County with none impacting the Township in 2006. This year three of the four initiatives involve roadways within the Township.

As a complement to the major intersection project involving Cinnaminson Avenue the County is milling and resurfacing Cinnaminson Avenue from 1100 feet north-west of Route 130 to Bank Avenue in Palmyra.

A second project is on Riverton Road from Route 130 to Broad Street (County Route 543) where drainage improvements, milling and resurfacing are taking place.

The final project is Lenola Road from the Bridge over Pennsauken Creek to Church Street (County Route 607). Again this project involves milling and resurfacing.

Burlington County Transportation Service

Another transportation service available in Cinnaminson is Burlington County Transportation Service (BCTS). BCTS is sponsored by the Burlington County Board of Chosen Freeholders. As noted in the background report BCTS is a service which is subsidized by revenues applied for annually from Casino Revenue, State and Federal Grants.

One of the services provided through BCTS are the South Jersey shuttles which provide residents and employees with transit services in areas not covered by NJ TRANSIT. All shuttle services connect with NJ TRANSIT bus and/or rail, enabling passengers' access to the regional transportation network.

In Burlington County it is referred to as "Burlink" which covers ten (ten) routes in the County. Two (2) of the routes provide service to Cinnaminson. The B9 service operates from the Palmyra RiverLINE station along Cinnaminson Avenue to Route 130 to Lenola Road, to the Moorestown Mall, Eastgate and Main Street in Moorestown. It then returns into the Township via Church Road to Route 130. The B9 connects with NJ Transit lines, the 317, 407, 409, 413, 418, 419 and 457.

The B10 route runs from the Cinnaminson RiverLINE station along Broad Street to Taylor's Lane to Route 130 south to Union Landing Road to Rowland Street and the station. This service is limited to peak hour service. It does connect with NJ Transit bus service (409 and 419).

Recognizing the rise in energy costs and the need to connect the RiverLINE to the population centers in the County the Planning Board strongly recommends that the County continue to seek the programming of federal assistance to continue and possibly expand this service.

Community Transportation Plan

In 2007 the Burlington County United We Ride Stakeholders and Steering Committee prepared the Community Transportation Plan. The Plan was in response to The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Public Law No. 109-59, August 10, 2005 which requires that projects selected for funding under the Elderly Individuals and Individuals with Disabilities, JARC, and New Freedom programs develop a “locally developed, coordinated public transit-human services transportation plan” and that the plan be “developed through a process that includes representatives of public, private, and nonprofit transportation and human services providers and participation by the public.”

The Plan made a number of recommendations including educating local residents about the availability of service and the methods of obtaining service as well as more advanced long term recommendations.

Considering the fact that 25% of the Township’s population fall within a transportation disadvantaged category (65 and older and under the age of 18) the Planning Board recommends that the schools and various senior organizations within the municipality reach out to the County to gain greater insight to the transportation services that are available to them.

Municipal System

The remaining roadways in the Township are under municipal jurisdiction or are privately owned and maintained. There are a number of local roads that provide major circulation functions within the Township and the region, such as Union Landing Road which connects County Route 543 to Rt. 130, New Albany Road which provides access to and from Rt. 130 and Moorestown and Taylor’s Lane which connects County Route 543 with Rt. 130. County Route 543 serves as an east-west connection with the communities of Delran, Riverton and Palmyra with the northern portion of the Township.

The Planning Board believes that these two of the three roads could serve a role within the County system. Although they are not specifically intra municipal they do service major employers as well as providing major connections to the RiverLINE. It is recommended that the Township initiate discussions with the County about the County assuming jurisdiction of these roadways. It would require on the part of the Township programming and making improvements to these roadways to meet County standards.

Municipal Initiatives

The Township is continuing to availing itself of funding from the State Aid Program maintained by NJDOT through its Local Aid and Economic Development Program. This year the Township received \$150,000 for the resurfacing of Dolores Drive, Maureen Drive and Hope Lane.

Centers of Place Program

Because of the Township's participation in the Route 130 and Delaware River Project led by the County the Township is eligible for Center of Place funding.

This program administered by NJDOT is designed to assist municipalities who have formally participated in implementation of the New Jersey State Development and Redevelopment Plan (SDRP). The Route 130 and Delaware River Project received endorsement by the State Planning Commission in 2001. There have been several grant recipients from the twelve municipalities with the most recent being Palmyra, \$90,000 for its Pathway Project.

Eligible projects include:

Pedestrian and Bicycle Facilities

- Strategies which enable mixed use of a "Main Street" as both public space and a transportation link
- Traffic calming improvements
- Bicycle lockers at transportation facilities, retail complexes, public buildings and public spaces
- Mid-block connections/paths to ease bicycle and pedestrian circulation

Scenic or Historic Transportation Programs

- Waterfront access improvements
- Restoration and/or historic aesthetic treatments

Parking and Circulation Management

- Parking pattern revisions
- Intercept parking facilities to relieve downtown parking deficit
- Signage for downtown circulation

Landscaping/Beautification of Transportation Related Facilities

- Overlooks of scenic vistas
- Streetside landscaping and furniture
- Rehabilitation and improvement of circulation related elements of parks
- Improvements to public spaces functionally associated with or in proximity to transportation facilities

Rehabilitation of Transportation Structures

- Rail/bus stations, ferry terminals, docks, boat ramps
- Tunnels, bridges, trestles, embankments
- Canals, viaducts, towpaths, locks

The Planning Board is recommending that the Township apply to this program as a means of implementing some of the policies of this plan.

Traffic Reduction Strategies

Traffic reductions strategies are methods to reduce the number of vehicle trips on roadways. These strategies include a variety of techniques ranging from carpooling to the more complicated and costly mass transit options. The Cross-County Transportation Management Association (CCTMA) serves the Burlington and Camden region primarily in advancing the reduction of trips.

Cinnaminson as part of the Philadelphia Metropolitan area contributes in the 27,709,000 vehicle miles traveled per day. Approximately 90% of Cinnaminson residents drive a car, van or truck to work. More significantly 83% of that group drives alone. Also, Cinnaminson is part of non-attainment area in terms of air quality and with a significant amount of that pollution associated with tailpipe emissions.

Considering these factors it is the Planning Board's recommendation that the Township join Cross County Connection like Maple Shade, Mount Laurel, Evesham Townships and other public and private interests to address mobility issues in the region and to reduce the number of vehicles on state and local roadways.

Traffic Survey

Working with CCC the Planning Board recommends that a survey be conducted in conjunction with major employers in the Township involving questions that focus on the desire of drivers to participate in options that would reduce single occupied vehicle trips. The questions in the survey specifically would be geared toward the constraints on drivers that might prevent them from otherwise use methods that would reduce vehicle trips. The results of the traffic survey would create inputs into an analysis to assess the benefits of trip reduction strategies in the Township and the region. The primary strategies suggested by the study would focus on:

- Carpooling
- Van/Ride Share
- Mass Transit – Public Transportation/Private Transportation
- Employer incentive programs for vehicle trip reduction

Monitoring

A monitoring program is a key component of measuring the success of the strategies applied in traffic reduction as well as other recommendations made in the Circulation Plan. Certain indicators are required to maintain a successful monitoring system. The following program is recommended:

1. Establish a comprehensive system of conducting traffic counts and the reporting of accidents to the Planning Board.
2. Maintain and update the employee survey.
3. Add the Board of Education and other nonresidential tenants to the survey.
4. Develop a series of indicators and utilize the existing character of Route 130 as a base for the establishment of future improvements.

Pedestrian Mobility

In the 2000 Census the Township of Cinnaminson had a total of 71 persons walking to work. This represents about one percent of the population 16 and over included in the Township's resident work force. This is in stark contrast to the 83% that drive alone to their place of employment.

Part of the issue in Cinnaminson is the pedestrian system. The Township is mainly defined by the roadway network and the primary system of walking is within neighborhoods only where most of the sidewalks are located. Walking to one of the Township's parks is much easier than walking to a place of employment.

The Board offers the following recommendations to increase pedestrian mobility:

- Advance the inclusion of pedestrian friendly design elements in development and redevelopment plans
- Encourage land use patterns and walking environments that are safe and secure, and thereby reduce pedestrian deaths and injuries.
- Identify crossover location for Route 130, crosswalks and the revamping of controlled intersections to incorporate time for pedestrian movement.
- Support programs to educate the public on the rights and responsibilities of pedestrians.
- Support government policies and funding initiatives that favor walking

The Planning Board authority to require the installation of sidewalks is someone sketchy within the Land Use ordinance. It is recommended that stronger language regarding the Board's authority to require sidewalks should be improved to read "in locations determined by the planning board to be in the interest of public safety and proper pedestrian circulation and considering the probable volume of pedestrian traffic, the adjoining street classification where sidewalks parallel streets, school bus stops, recreation areas, schools, and the general type of improvement shall be required".

Bikeways

The bicycle is a low-cost and effective means of transportation that is quiet, non-polluting, extremely energy-efficient, versatile, healthy and fun. Bicycles also provide low-cost mobility to the non-driving public, including the young. In addition, pedestrian and bicycle routes can be designed to accommodate both forms of transportation. The intent in recommending both pedestrian and bikeway plans are to ensure that the dual function is accommodated.

The State also has made a commitment to advance bicycling through technical assistance and funding. For example, the Statewide Bicycle and Pedestrian Master Plan has developed an inventory of bikeway locations in the State, but more importantly is fleshing out a list of priority locations for bicycle and pedestrian improvements, and is requiring opportunities for improving the bicycle or pedestrian compatibility of existing projects.

Within Cinnaminson no facilities are identified, but within surrounding communities facilities are being developed. The background document identifies these resources in Palmyra, Riverton, Burlington Township and Willingboro.

Considering State initiatives to promote bicycling by providing technical and financial aid, the Planning Board recommends that the Township prepare a bicycle plan. The plan should link schools, public institutions, open space, recreational facilities, commercial activities, employment centers and neighborhoods. The plan should identify compatible streets and roadways for bicycle lanes and other segments for bicycle paths. The plan should suggest signage and recommend parking arrangements at public, commercial and employment locations. The plan also could include a financing element for the development of the system for that part which is off existing roadways and for other improvements.

Transit Opportunities

RiverLINE

The RiverLINE provides transit service to Trenton and points further north such as Newark and New York with a transfer in Trenton to the Northeast Corridor service, or to Philadelphia with a transfer in Camden to the PATCO line. Service is every 15 minutes during peak hours and every 30 minutes off-peak and there are convenient stations including Cinnaminson.

According to NJ Transit there is connecting service at the Cinnaminson station. NJ Transit provides service on the Route 419 bus (Burlington, Riverside and Philadelphia via River Road and the Burlink B10 provides service from Taylor's Lane to US130 at peak hours.

Cinnaminson station is associated with parking available for riders. There are approximately 250 spaces on Bannard Street and a second lot on Industrial Avenue, south of Union Landing Road. There is also a bike rack on Bannard Street.

Bicycles are permitted onboard the River LINE at all times. Customers must secure bicycles on racks located in light rail cars. Cyclists must allow other passengers to exit and enter the rail car before boarding with a bicycle⁴.

Other Transit Improvements

Commuter bus service within the Township is provided by New Jersey Transit with service between Philadelphia and Trenton via Route 130 (409 and 418). Bus Service to Philadelphia from Cinnaminson Avenue starts at 4:59 AM and operates until 12:41 AM with service available every half hour during the peak hours and the midday and evening service ranging from 45 minutes to an hour. Service is approximately a 45 minute trip.

To Trenton bus service starts at 4:16 AM and the last trip to Trenton is at 9:22 PM. Service is available every half hour during the peak hours and the midday and evening service ranging from 45 minutes to an hour. Service to Trenton takes approximately one (1) hour and 15 minutes.

⁴ A maximum of 6 bikes are permitted per car.

There is a bus shelter on the south side of Cinnaminson Ave. and Route 130, on the south side of Wynwood Drive and Route 130 and on the south side of Taylor's Lane and Rt. 130. No shelters exist on the north bound side of Rt. 130.

To improve rider quality the Planning Board recommends that NJ Transit consider at a minimum the installation of shelter on the north bound side of Rt. 130 opposite the existing shelters and at a maximum consider additional shelter on the south side and north at Highland Ave. and at Riverton Road.

Other NJ Transit service (419) operates on Broad Street (County Route 543) with limited service on Route 130. Its orientation is Philadelphia originating out of Burlington City. Service toward Philadelphia through Camden is from 3:28 AM until 11:21 PM and with reverse service operating from 4:19 AM until 1:19 AM. Service is hourly and is a half hour to Burlington and to Camden during the peak hours.

On January 12, the 419 route was adjusted so that all 419 buses begin and end their trips at Walter Rand Transportation Center. This change resulted in improved reliability and on-time performance for New Jersey customers, because buses will not be subject to delays in downtown Philadelphia. Customers traveling to or from Philadelphia will be able to make connections at Walter Rand Transportation Center to continue their trip.

There are no bus shelters on Broad Street. Again the Planning Board recommends that NJ Transit install a limited number of bus shelters on Broad Street.

Goods Movement

Moving freight, such as raw materials and finished products, is an area of increasing importance in New Jersey. Businesses, jobs and consumers all rely on it. The key is to devise regional goods movement strategies that will facilitate the flow of freight and minimize the impact on local communities like Cinnaminson Township. Freight movement by trucks through Cinnaminson Township is a significant issue.

The State is taking steps to restrict large trucks (102-inch wide and double trailers) to the "National Network" of highways in the state. These restrictions will not obstruct commerce in the State. All trucks doing business in the State of New Jersey will have access to all N.J. based businesses. The crucial difference is that the large trucks not doing business in New Jersey will be prohibited from using state and county highways. Given New Jersey's high population density, high traffic density and older highway infrastructure, it is only natural that truck safety and truck routing issues would be more of a concern in New Jersey than they would be in most other less densely settled states. Table 2 provides those routes in the Township that are part of the National Network and therefore are trucks routes. All other roadways within the Township are restricted to trucks except for local deliveries and are restricted to four-ton limits.

TABLE 2
Truck Routes

Route	Extent
Route 130	Pennsauken to Delran Twp
Route 73	Pennsauken to Maple Shade
Broad Street (Co. Rt. 543)	Riverton to Delran Twp

Source: Large Truck Network, NJDOT, Div of Transportation & Data Technology, Bur. of Transportation Data Development 2006.

A recommendation of the Board is its desire to see Township police expanding the inspection of trucks. Also, the Board is supportive of legislation which redefines local deliveries. The Board believes that local deliveries and pickups can be made by local businesses, but trucks should return to the National Network by the shortest route possible.

The Township has the ability to identify its own truck routes to aid in the returning trucks to the National Network by identifying specific routes on local roads for trucks to follow onto the National Network. Recognizing the location of the Township's industrial area the Planning Board recommends that the Township Committee designate Taylor's Lane, and Industrial Highway as designated truck routes within the Township.

To address east-west movement within the industrial zone the Township should identify two truck routes on the recommendation of creating an Official Map. To provide access for trucks to industrial properties on Union Landing Road the Planning Board is recommending the identification of private roads to be established.

For this connection there are two possibilities. One proposal is to extend a connection road between Lots 1 and 2.02 in Block 610 and through Lot 3 or the use of an existing right-of-way along Lot 34 to Lots 37 and 38 in Block 702 and extending it across Lot 3 in Block 610 which would provide a connection between Union Landing Road and Taylor's Lane with the latter being a designated truck route. This proposal will deter movement on Union Landing Road impacting residential development and a preserved farmland parcel. The roadways could be privately maintained or maintained by the Township but constructed in a private/public partnership with the industries in the area that would benefit by the connection.

A second proposal involves the completion of Wallace Boulevard. The Boulevard provides internal movement within the Industrial District connecting numerous one acre industrial parcels to Union Landing Road and the Industrial Highway.

Greater benefit to the Industrial District would be the extension of Wallace Boulevard from Union Landing Road to Taylor's Lane. The Planning Board recommends that a 60 feet right-of-way be established along the westerly border of Block 702 Lot 2 from Union Landing Road through the boundary of Block 702 Lots 1 and 40 to Taylor's Lane or adjust the alignment to continue the access onto Taylor's Lane through the portion which fronts on Taylor's Lane. This would establish greater circulation within the industrial district.

Implementation Plan

The development of the Circulation Plan requires the development of an implementation strategy. The three areas of implementation should focus on investments, regulations and assessment of success.

Investments

While the Planning Board recognizes the ultimate authority of the Township Committee in fiscal matters, the Board can provide advice to the Committee through the following methods:

- The development of an official map. The Municipal Land Use Law (N.J.S.A. 40:55D-32) in Article 5 authorizes the Township Committee to adopt by ordinance an official map which reflects an appropriate provision of the municipal master plan. The map is deemed conclusive with respect to the location and width of streets, public drainage ways and the location of flood control devices and public areas, whether or not such streets, ways, basins or areas are improved or unimproved. Identification of certain improvements which require additional ROW or the consumption of land such as a bicycle path should be mapped on the official map.
- A capital improvement program as authorized by Article 4 of the Municipal Land Use Law (N.J.S.A. 40:55D-29). With Township Committee authorization the Planning Board may prepare a program of municipal improvement projects over a term of at least six years. The program may encompass projects currently being undertaken or those in the future that may involve Federal, State, County and other public funds. It also should be classified by its urgency. This is a good method of programming desirable improvements from the Circulation Plan.

Regulations

Another method of implementing the Circulation Plan recommendations is through the review and approval process of subdivisions and site plans. The recommendations in this area are:

- Review the Subdivision and Zoning code for improvements that would advance better mobility. Coordinate mobility recommendations with State and County where they have jurisdiction.
- Review the Subdivision and Zoning code for opportunities to obtain more human oriented, streetscape type development and more appropriate development types, architectural scales and building/road relationships
- Create incentives and expedited permitting for those site plans which encourage coordinated planning, linkage, and through access easements between multiple property owners.

Monitoring

To determine the success of the Circulation Plan and capital improvement program a monitoring system should be developed. An implementation monitoring program identifies the adjustments and changes that may be required in the Circulation Plan's recommendations. Targets and indicators are a method for monitoring implementation.

APPENDIX A

CIRCULATION PLAN BACKGROUND REPORT

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Introduction

The inventory and background contained in this report represents the analysis of existing conditions and facilities, which comprise the circulation network in the Township. This analysis addresses regional influences, roadway jurisdiction, existing road functions, street right-of-way widths, traffic accidents, road and bridge conditions, traffic counts, available rail and bus services, bicycle paths and trails, pedestrian systems and the transportation plans of Burlington County, Delaware Valley Regional Planning Commission and New Jersey Department of Transportation.

Regional Influences

In 1995, Congress designated a nationwide total of more than 160,000 miles of roads as the National Highway System (NHS). The purpose of the NHS is to provide an interconnected network of principal travel routes that serve major population centers, international border crossings, ports, airports, public transportation and other intermodal facilities; meet national defense requirements; and, serve interstate and interregional travel. The NHS was created to provide for the continued maintenance and repair of those roads most important for both commercial and defense-related purposes. The system consists of the entire Interstate Highway System plus other urban and rural principal arterial roadways. Dedicated funding is provided for these roads of national significance. The urban Freeway/Expressway of Route 90 and the principal arterial highways of Route 73 and Route 130 in Cinnaminson Township are part of this system.

These highways have a significant regional influence on the circulation system of the Township. Route 130 provides north-south mobility. It provides access to the major commercial and employment centers in the Township and within adjacent municipalities. It also offers access to two significant highways and Bridges (Rt. 73, Route 90, Betsey Ross Bridge and the Tacony-Palmyra Bridge and into Camden County, Philadelphia and eventually to Mercer County and Trenton to the north.

Route 73 although it traverses one-tenth of a mile within the Township it serves as a major east-west route between Philadelphia and many larger Burlington and Camden County communities such as Moorestown, Mt. Laurel, Evesham and Voorhees Townships.

The River LINE is a 34-mile passenger light rail line, which links Trenton and Camden. With 20 station stops serving communities along the Delaware River's Route 130 corridor, the light rail system connects riders to the larger transportation networks of NJ TRANSIT, Amtrak, PATCO, and SEPTA. One of the 20 stops is in Cinnaminson Township at Snowden Avenue. Weekday service to Trenton operates from 6:14 AM to 9:49 PM taking approximately 45 minutes with headways of service every 15 minutes in the peak am and pm to a half an hour during the mid-day.

Service to Philadelphia by way of PATCO is every 15 minutes in the AM and PM peaks to a half hour during the mid-day. Trips to the Walter Rand Transportation Center in Camden are approximately 15 minutes from Snowden Avenue. Service starts at 6:16 AM with the last trip back to Cinnaminson arriving at 9:29 PM.

Commuter bus service within the Township is provided by New Jersey Transit with service between Philadelphia and Trenton via Route 130 (409 and 418). Bus Service to Philadelphia from Cinnaminson Avenue starts at 5:24 AM and operates until 12:41 AM with service available every half hour during the peak hours and the midday and evening service ranging from 45 minutes to an hour. Service is approximately a 45 minute trip.

To Trenton bus service starts at 4:16 AM and the last trip to Trenton is at 9:22 PM. Service is available every half hour during the peak hours and the midday and evening service ranging from 45 minutes to an hour. Service to Trenton takes approximately one (1) hour and 15 minutes

Other NJ Transit service (419) operates on Broad Street (County Route 543) with limited service on Route 130. Its orientation is Philadelphia originating out of Burlington City. Service into Philadelphia is from 3:34 AM until 11:38 PM and with reverse service operating from 4:55 am until 12:49 AM. Service is hourly and is a half hour to Burlington and to Philadelphia.

Roadway Jurisdictions

There are four levels of roadway jurisdiction in the Township, including State, County, municipal and private. The primary highway system consists of the State highway routes 73, 90 and 130. Roadway jurisdiction is depicted on the Jurisdiction of Roads map (Figure 1).

The secondary highway system includes most of the County road network and a few municipal streets serving inter-municipal traffic. The County road system in the Township consists of both 500 series roads, which are inter-county roads, and 600 series roads, which are intra-county roads. The County roads in the Township include the following, by County Route number and local names:

1. Route 543-Broad Street – Saint Mihiel Drive
2. Route 602-Highland Avenue
3. Route 603-Moorestown-Riverton Road
4. Route 606-Branch Pike
5. Route 607-Church Street
6. Route 608-Lenola Road

The remaining roadways in the Township are under municipal jurisdiction or are privately owned and maintained. There are a number of local roads that provide major circulation functions within the Township, such as Union Landing Road which connects County Route 543 to Rt. 130, New Albany Road which provides access to and from Rt. 130 and Moorestown and Taylor's Lane which connects County Route 543 with Rt. 130.

Existing Road Functions

In addition to classification by roadway jurisdiction, roadways commonly are classified by function (Figure 2). As indicated in the 1989 New Jersey Transportation Plan, Volume 1 (N.J. Department of Transportation), "The functional classification system is used to

indicate the degree to which a facility provides mobility or land access or a combination of the two. Those roads, which are designed to provide the greatest degree of mobility and uninterrupted flow, are the Interstate and other principal arterials. Those roads designed to provide access to individual land uses are local roads and streets. In-between the two are minor arterials and major and minor collectors. Collector roads generally provide medium speed movements of vehicles from the local road system to the arterial system and for short distance movements through and between small communities."

Although there is not a direct relationship between the jurisdictional ownership and functional classification of a highway, generally the higher functional roads fall under State jurisdiction and the lower functional roads fall under local ownership. However, this generality is complicated by the fact that each level of government tends to view the function of a road from its own unique perspective. Thus, the comparability of functional road classification systems is compromised.

To illustrate this point, Table 1 provides the functional classification system by jurisdiction (State, county or municipal). The Table only identifies those roadways which have a status of arterial or collector. This does not include the balance of local roadways that are not classified in the Federal Highway Administration (FHWA) functional classification system.

The Township is required to consider the functional classification system in its transportation planning, as the Municipal Land Use Law (MLUL) indicates that a Circulation Plan Element must take into account the functional highway classification system of the FHWA.

TABLE 1
Comparison of Functional Classification by Roadway and Jurisdiction

Roadways	Level of Government		
	Cinnaminson Township	Burlington County	New Jersey
Route 73			Urban Principal Arterial
Routes 90			Urban Freeway/Expressway
Route 130			Urban Principal Arterial
Route 543		Urban Principal Arterial	
Route 603		Urban Minor Arterial	
Route 606		Urban Minor Arterial	
Route 607		Urban Minor Arterial	
Route 608		Urban Minor Arterial	
Taylor's Lane	Urban Collector		
New Albany Road	Urban Collector		
Union Landing Road	Urban Collector		

Source: New Jersey Department of Transportation 2004 Functional Classification System

Traffic Accidents

The Bureau of Accident Records in the NJDOT compiles an annual summary list of motor

vehicle accident locations, including data on the total number of accidents, fatal accidents, and accidents involving personal injury and property damage. The data presented in Table 2 addresses the period from 1997 to 2003 for State Highways Routes 73, 90 and 130 and Figure 3 identifies the number of accidents by location. Figure 4 depicts the overall number of accidents for other roads in the Township for the period 1997 to 2004. Table 3 shows the data for County and Township roadways.

TABLE 2
State Highway Accident Locations 1997 To 2003

Roadway	Location	1997	1998	1999	2000	2001	2002	2003	TOTAL
Route 73	31.25-31.44	3	3	1	4	1	1	3	16
Route 73	31.44-31.65	20	14	10	13	4	6	8	75
Route 73	31.65-31.71	0	0	0	0	10	10	12	32
Route 90	2.90-3.11	0	0	1	0	0	0	0	1
Route 90	3.11-3.22	0	0	0	0	0	0	1	1
Route 130	35.72-35.92	4	1	5	3	5	2	7	27
Route 130	35.92-36.12	39	47	43	31	16	13	35	224
Route 130	36.12-36.32	4	4	2	0	1	0	2	13
Route 130	36.32-36.52	6	2	3	2	15	19	2	49
Route 130	36.52-36.72	17	9	7	16	15	13	23	100
Route 130	36.72-36.92	1	1	1	2	1	1	2	9
Route 130	36.92-37.18	30	23	29	27	1	4	19	133
Route 130	37.18-37.38	1	3	0	2	0	0	1	7
Route 130	37.38-37.58	6	5	8	6	6	10	12	53
Route 130	37.58-37.78	1	5	3	1	1	3	1	15
Route 130	37.78-37.98	7	2	5	2	5	2	2	25
Route 130	37.98-38.18	3	11	9	8	11	10	17	69
Route 130	38.18-38.38	4	7	3	4	3	2	4	27
Route 130	38.38-38.58	17	18	22	23	8	26	14	128
Route 130	38.58-38.70	2	2	1	0	0	0	0	5
Yearly Total		165	157	153	144	103	122	165	

Source: Summary of Accident Rates on State Highways in Route and Milepost, NJDOT 1997-2000

There are several discernible trends and occurrences that bear noting. A significant number of accidents along Route 130 occur within the vicinity of traffic controls. The most notable is between milepost 35.92 and 36.12. These mileposts correspond to the Church and Cinnaminson Roads intersection. The others in descending order are at Riverton Road, New Albany and Taylor's Lane and Highland Avenue.

Table 3 provides a listing of municipal and county roadways and the number of accidents for all roadways with five or more accidents in the eight year period. Significant county roadways for accidents are:

1. County Route 607
2. County Route 606
3. County Route 603

All of these roadways directly or indirectly intersect with Route 130 and correspond to the high points for accidents on Rt. 130. They also are urban minor arterial due to the volume they carry into the Urban Principal Arterial (Rt. 130).

TABLE 3-County and Municipal Accident Locations 1998-2001

Roadway	1997	1998	1999	2000	2001	2002	2003	2004	Total
Ct. Rt. 607 Cinnaminson Road/Church St.	31	23	37	42	21	38	24	35	251
Ct. Rt. 606 Branch Pike	24	17	42	14	22	17	17	18	171
Ct. Rt. 543 Broad St	19	6	11	12	6	11	4	9	78
Ct. Rt. 608 Lenola Rd	12	4	10	3	0	0	2	5	36
Ct. Rt. 603. Riverton Rd.	10	20	31	21	26	15	7	21	151
Ct. Rt. 602 Highland Ave	1	7	3	5	1	1	2	4	24
Fork Landing Road	5	6	7	8	8	6	3	7	50
Park Ave.	3	1	1	0	1	1	1	2	10
Arbor Rd	3	1	1	1	1	1	0	1	9
Taylor's Lane	3	1	6	6	1	3	4	3	27
Waterford Dr.	3	0	0	3	0	1	1	0	8
New Albany Rd	3	8	5	3	4	6	4	5	38
Rowland St.	2	0	1	0	1	0	1	0	5
Manor Rd	2	2	1	0	0	0	1	0	6
Chestnut Hill Dr.	1	4	1	0	0	3	0	3	12
Pomona Rd.	1	2	0	5	1	0	1	5	15
Wayne Ave	1	1	1	1	1	1	1	1	8
Boxwood Lane	1	2	0	1	0	2	1	2	9
Surrey Lane	1	0	2	0	0	2	0	0	5
Andover Rd	1	2	0	2	1	1	4	6	17
Willow Dr	1	0	2	3	0	0	1	3	10
Endicott Dr	0	5	0	1	1	0	0	0	7
Laurel Dr.	0	2	2	0	1	0	0	0	5
Fairfax Dr.	0	2	1	1	1	0	0	0	5
Buttonwood Lane	0	1	0	1	1	0	1	2	6
Arleigh Rd.	0	0	2	2	0	0	1	0	5
Union Landing Rd	0	0	0	3	1	0	0	6	10
Parry Rd.	0	0	1	1	0	1	1	1	5
Total	128	117	168	139	99	110	82	139	982

Source: NJDOT Raw Data Accident Records

Traffic Counts

The Bureau of Transportation Data Development in the NJDOT maintains records of average annual daily traffic (AADT) on roads throughout the State. The Delaware Valley Regional Planning Commission likewise conducts traffic counts at various locations throughout the Township. Table 4 indicates traffic counts on roads in Cinnaminson Township, with their locations depicted on Figure 5. While termed average annual daily traffic, these data usually represent the count from a single day in the identified year.

TABLE 4 Traffic Counts on Roads in Cinnaminson Township 1991-2001

Route/Street	Milepost	Location of Average Annual Daily Traffic Count	Year	Average Annual Daily Traffic
<i>Rt. 130</i>	35.72	Pennsauken Creek	1991	55,100
<i>Rt. 130</i>	36.30		2004	51,044
<i>Rtt, 130</i>	36.62	Highland Ave.	1991	43,410
<i>Rt. 130</i>	38.46	New Albany Rd.	1991	55,420
<i>Rt. 73</i>	31.39	O' Donnel Lane	2004	31,809
<i>Rt. 90</i>	3.05	Pennsauken Creek	2004	21,892
<i>Ct Rt. 543</i>	8.49	Whitmore St.	2004	11,223
<i>Ct. Rt. 607 Church St</i>	8.18	Valley Forge Rd	2000	9,652
<i>Ct. Rt. 607 Cinnaminson Ave.</i>	9.95	Glenview Dr.	1999	13,162
<i>Taylor's Lane</i>	1.0		2001	7,885
<i>New Albany Rd.</i>	0.90	Saxony Dr	2002	5,508
<i>Fork Landing Rd.</i>		Rt. 73 & Main St	2002	5,008
<i>Buttonwood Lane</i>		Between Winwood Dr and Wedgewood Dr	2001	705

Goods Movement

"Freight or Goods Movement" encompasses a wide spectrum of commodities, including such things as manufactured goods, agricultural and raw materials, various fuels and petrochemicals, as well as waste and recyclable products. The volume of goods, and the way in which they are transported into, out of, and through New Jersey, combine to play a fundamental role in defining the state's economic and industrial character. Freight in New Jersey moves in a variety of ways -- by truck, rail, and air, as well as by ship to and from the state's ports.

New Jersey serves its citizens, and the rest of the nation, as a freight gateway at the center of the Northeast Corridor and a major conduit to the industrial Midwest. A hub for both interstate and international commerce, New Jersey is one of the few states on the Atlantic Seaboard that has successfully integrated growth in air, rail, maritime, and trucking into

an expansive and diversified economic engine. New Jersey's maritime ports, airports, and distribution centers feed, clothe, and otherwise provide for the needs of more than 75 million people.

New Jersey's most active port facility is the Port Newark/Port Elizabeth complex. Handling in excess of 2.5 million containers per year, the Port Authority of New York and New Jersey projects a doubling of this volume to five million containers within the next ten years, and yet again to ten million by the year 2040. Farther south within our region, the Port of Philadelphia and Camden handles a significant volume of break-bulk (non-containerized) cargo, with strong markets in iron and steel, fresh fruit and paper and projected increases in the future as well.

With growth in port commerce and air cargo continuing to spiral, there is an ever-increasing focus on New Jersey's roadway system, and its capacity to handle this increased traffic flows. Trucking continues to be the predominant mode of goods movement through New Jersey. While only 2% of all goods arriving or circulating throughout the region travel by rail, the recent acquisition of Conrail by Norfolk Southern and CSX Railroads may promote greater use of rail capacity through more competitive rail freight service.

Regional Considerations and Recommendations

The planning process places new emphasis on moving highway, rail, marine, and airfreight efficiently to and from the State and region. In addition, facilities in which freight is moved from one mode to another will be supported by public investment. Planning for these improvements will take place with the advice of the goods movement community. Incorporating the impacts of E-commerce will be essential in future planning.

Policies and strategy possibilities as developed by the Delaware Valley Regional Planning Commission (DVRPC) are:

1. Increase the level of public and private investment in transportation facilities that promote freight movement and economic development.
 - Encourage joint public/private programming of transportation improvements.
 - Creatively apply public transportation programs and funds to maximize the effectiveness of goods movement.
 - Program and integrate needed freight movement projects into the Transportation Improvement Program.
 - Institute small-scale improvements through the Freight Forward program. (*Freight Forward* has been instituted by transportation agencies to benefit freight carriers and shippers in the Delaware Valley. The program centers on "small cap" projects, which can be easily and quickly implemented. Examples are: fixing a pothole; resurfacing a highway/railroad grade crossing; installing a directional sign; increasing turning radii; retiming traffic signals; striping pavement; and improving a railroad siding.)

2. Identify and build improvements which facilitate the flow of goods.
 - Use the Delaware Valley Goods Movement Task Force to support and direct planning efforts.
 - Collect, analyze, and share goods movement data and trends leading to good planning and public education.
 - Identify needed improvements through the management systems, corridor and other technical studies, and NHS connector evaluations.
3. Improve the safety of operating conditions for the flow of goods
 - Provide adequate rest areas.
 - Improve safety of highway/railway grade crossings and, where feasible, eliminate crossings.
 - Protect resident quality-of-life while pursuing goods movement objectives.

Freight movement by trucks through Cinnaminson Township is a significant issue. Routes 130, 73 and 90 are important links within the State's National Highway System, and although Rt. 130 serves as the Township's commercial corridor it also functions as a major artery for goods movement.

Cinnaminson Township Truck Routes

Figure 6 identifies the truck routes in Cinnaminson Township. All other roadways within the Township are restricted to trucks except for local deliveries and are restricted to four-ton limits.

The following Table identifies the legal truck routes within the Township:

**TABLE 5
Truck Routes**

Route	Extent
Route 130	Pennsauken to Delran Twp
Route 73	Pennsauken to Maple Shade
Broad Street (Co. Rt. 543)	Riverton to Delran Twp

Source: Large Truck Network, NJDOT, Div of Transportation & Data Technology, Bur. of Transportation Data Development 2006

Travel to Work

To assist in evaluating the needs of residents in terms of mobility it is important to have a snap shot in time of where they work and how they get there. One method of doing this is to look at the survey conducted by the U.S. Census Bureau for "Journey to Work".

Table 6 provides an analysis of where Cinnaminson residents work and a comparison of these data to the County. In reviewing the percentages Cinnaminson is comparable in terms of place of work between the Township and the County except for working outside

of the state of residence, which sees a difference of over 10% between the Township and the County's other municipalities.

TABLE 6
Place of Work for Workers 16 and Over

	Cinnaminson Township		Burlington County	
Total	6,961	100%	207,471	100%
Worked in state of residence	5,160	74.1%	175,954	84.8%
Worked in county of residence	3,703	53.2%	116,422	56.1%
Worked outside county of residence	1,457	20.9%	59,532	28.7%
Worked outside state of residence	1,801	25.9%	31,517	15.2%

Source: U.S. Census Bureau, Census 2000 Summary

Table 7 addresses the means of transportation to work for workers. The automobile in the Township and the County are the means of choice. In terms of public transportation the percentages are similar. Since these figures are from 2000 they do not reflect the River Line. Finally, in the Township 4.3% of the work force work at home as opposed to the County wide percentage of 2.8.

TABLE 7
Means of Transportation to Work for Workers 16 Years and Over

	Cinnaminson Township		Burlington County	
Total	6,961		207,471	
Car, truck or van	6,297	90.5%	190,782	92.0%
Drove alone	5,768	82.9%	171,595	82.7%
Carpooled	529	7.6%	19,187	9.2%
Public Transportation	242	3.5%	6,099	2.9%
Bus or trolley	133	1.9%	2,869	1.4%
Streetcar or trolley car	0	0.0%	71	.03%
Subway or elevated	35	0%	1,348	0.7%
Railroad	74	1.1%	1,723	0.8%
Ferryboat	0	0%	3	0.00%
Taxicab	0	0.0%	85	0.04%
Motorcycle	0	0.0%	157	0.06%
Bicycle	33	0.5%	351	0.08%
Walked	71	1.0%	3,318	1.6%
Other means	16	0.2	980	0.5%
Worked at home	302	4.3%	5,784	2.8%

Source: U.S. Census Bureau, Census 2000 Summary

In the Washington to Boston corridor it is common when asked how far something is to have it responded to in terms of time rather than distance. Table 8 reflects this behavior by looking at travel time to work.

Approximately 54% of Cinnaminson residents have a 20-minute or more commute to their place of employment. This is in contrast to the County percentage of 61%. The Township largest cohort is the range from 10 to 14 minutes as compared to the County's

range 20.24 minutes. In both the Township and the County, the range of 10 to 24 minutes together contains the largest cohorts. In Cinnaminson it accounts for approximately 45% versus the County figure of 41%.

TABLE 8
Travel Time to Work for Workers

	Cinnaminson Township		Burlington County	
Did not work at Home	6,659	100%	201,687	100%
Less than 5 minutes	190	2.85%	5,426	2.69%
5 to 9 minutes	850	12.76%	20,005	9.92%
10 to 14 minutes	1,174	17.63%	26,407	13.09%
15 to 19 minutes	864	12.97%	27,653	13.71%
20 to 24 minutes	946	14.21%	28,175	13.97%
25 to 29 minutes	391	5.87%	13,468	6.68%
30 to 34 minutes	773	11.61%	25,549	12.67%
35 to 39 minutes	127	1.91%	6,626	3.29%
40 to 44 minutes	245	3.68%	9,004	4.46%
45 to 59 minutes	551	8.27%	18,298	9.07%
60 to 89 minutes	347	5.22%	14,295	7.09%
90 to more minutes	201	3.02%	6,781	3.36%

Source: U.S. Census Bureau, Census 2000 Summary

Another way to view travel time to work is to consider means of travel, as shown on Tables 9. In looking at the Township, only when trips extend an hour or more there is a 10% use of public transportation. In comparing the Township to the County, the increase of public transportation corresponds directly with the increase in travel time. The average travel time for a Township worker is approximately 26 minutes as opposed to the County average of approximately 28 minutes. For those who use public transportation, the average travel time for Township residents is 56 minutes compared to the County figure of 63 minutes.

TABLE 9
Travel Time to Work by Means of Transportation
and Aggregate Travel Time in Minutes for Township

	Cinnaminson Township	Percentage of Travel Time by Mode	Aggregate Travel Time in Minutes	Number of Minutes per Trip
Total	6,659		171,080	25.7
Under 30 minutes	4,415	66.3%	58,805	13.3
Public transit	15	0.3%	335	22.3
Other means	4,400	99.7%	58,470	13.3
30 to 44 minutes	1,145	17.2%	37,445	32.7
Public transit	50	4.4%	1,800	36.0
Other means	1,095	95.6%	35,645	32.6
45 to 59 minutes	551	8.3%	25,575	46.4
Public transit	105	19.1%	4,850	46.2
Other means	446	80.9%	20,725	46.5
60 or more minutes	548	8.2%	49,250	89.9
Public transit	72	13.1%	6,480	90.0
Other means	476	86.9%	42,770	89.9

Source: U.S. Census Bureau, Census 2000 Summary

TABLE 10
Travel Time to Work by Means of Transportation and Aggregate Travel Time
in Minutes for County

	Burlington County	Percentage of Travel Time by Mode	Aggregate Travel Time in Minutes	Number of Minutes per Trip
Total	201,687		5,689,530	28.2
Under 30 minutes	121,134	60.1%	1,709,915	14.1
Public transit	675	0.6%	10,335	15.3
Other means	120,459	99.4%	1,699,580	14.1
30 to 44 minutes	41,179	20.4%	1,359,205	33.0
Public transit	818	2.0%	27,820	34.0
Other means	40,361	98.0%	1,331,385	33.0
45 to 59 minutes	18,298	9.1%	858,350	46.9
Public transit	1,335	7.3%	63,925	47.9
Other means	16,963	92.7%	794,425	46.8
60 or more minutes	21,076	10.4%	1,762,060	83.6
Public transit	3,271	15.5%	285,155	87.2
Other means	17,805	84.5%	1,476,905	83.0

The impact of work trips on traffic congestion also relates to the distribution of the trips. Table 11 displays this information for Cinnaminson workers and compares them to their counterparts in the County. In reviewing the Table, 54% of Cinnaminson work trips take place between the hours of 7 to 9 am similar to that of the County figure of 53% for the same time period. These data indicate that Cinnaminson and County trips tend to extend the morning peak from 6 to 9 am increasing the percentage to 64% respectively.

TABLE 11
Time Leaving Home to Go to Work for Cinnaminson Township and County
Workers

	Cinnaminson Township	% of Total Township Trips	Burlington County	% of Total County Trips
Total	6,659		201,687	
12:00am to 4:59am	163	1.0%	5,204	2.6%
5:00am to 5:29am	115	1.7%	4,587	2.3%
5:30am to 5:59am	168	2.5%	6,503	3.2%
6:00am to 6:29am	512	7.7%	16,166	8.0%
6:30am to 6:59am	675	10.1%	21,365	10.6%
7:00am to 7:29am	940	14.1%	32,616	16.2%
7:30am to 7:59am	1,256	18.9%	33,963	16.8%
8:00am to 8:29am	862	12.9%	27,357	13.6%
8:30am to 8:59am	549	8.2%	13,603	6.7%
9:00am to 9:59am	526	7.9%	11,136	5.5%
10:00am to 10:59am	181	2.7%	4,124	2.0%
11:00am to 11:59am	86	1.3%	1,787	0.9%
12:00pm to 3:59pm	306	4.6%	11,423	5.7%
4:00pm to 11:59pm	320	4.8%	11,853	5.9%

Source: U.S. Census Bureau, Census 2000 Summary

Burlington County Transportation Planning

Route 130/Delaware River Corridor Strategic Plan

The most significant Burlington County planning effort addressing transportation is the Route 130/Delaware River Corridor Strategic Plan which is also the County's main effort at facilitating the revitalization of the Delaware River and Route 130.

The Route 130/Delaware River Corridor Regional Strategic Plan, a collaborative effort, defined a vision to guide revitalization based on an analysis of the strengths, resources and assets of the Delaware River and Route 130 communities extending sixteen miles from Cinnaminson Township to Florence Township and covering 59 square miles within Burlington County. Since adoption of the plan, the new RiverLINE light rail transit service was established.

The Route 130/Delaware River Corridor or Route 130 Corridor Revitalization Program was initiated in 1995 to reverse a 30-year, gradual decline in economic activity and quality of life involving the twelve municipalities located along U.S. Route 130 and the Delaware River including Beverly City, Burlington City, Burlington Township, Cinnaminson Township, Delanco Township, Delran Township, Edgewater Park Township and Florence Township, Palmyra Borough, Riverside Township, Riverton Borough and Willingboro Township.

A two-and-one-half year planning process culminated in the publication of Part I: Constraints and Opportunities Analysis that identified six major areas of concern that, in essence, defined the quality of life in the Corridor including transportation and circulation.

Part I identified 44 transportation problem locations. Working with the Delaware Valley Planning Commission (DVRPC) these locations became part of DVRPC's Long Range Plan or were programmed for implementation on DVRPC's FY 1998-2002 Transportation Improvement Program (TIP).

The four problem locations in the Township identified were:

5. US 130 From Andover Road to Taylor's Lane
6. US 130 and Moorestown-Riverton Road (County Route 603)
7. US 130 and Cinnaminson Ave. (County Route 607)
8. Fork Landing Road over Pennsauken Creek(and upgrading of Fork Landing Road)

Policies, actions and strategies for implementation on local, county, state and federal levels were identified and incorporated into the Strategic Plan as Part II: Recommendations in October 1998. Upon the completion of the strategic plan in 1998, the Freeholder Board and the twelve corridor municipalities adopted the plan. In April 1999, the New Jersey State Planning Commission formally endorsed the plan, giving the twelve municipalities priority for receiving state resources and funds through 2012.

The Regional Planning Division in the County's Department of Economic development and Regional Planning is currently preparing an update to the regional plan (the 1998

regional plan was completed before the new RiverLINE light rail transit service was established) and will continue working with the twelve municipalities to execute the implementation agenda. Information developed in the State Plan cross-acceptance process is being used to help update and implement the plan.

Burlington County Construction Projects

For 2006 the County is conducting eight (8) construction projects. These projects involve bridge replacement and bridge repairs, widening and resurfacing and drainage work. None of the eight (8) projects are taking place within the Township.

New Jersey Department of Transportation

Transportation Choices 2030

The NJDOT has a statutory requirement to prepare a new State Transportation Plan every five years. The most recent of these is Transportation Choices 2025 which required to be updated to 2030 this year.

Transportation Choices 2030 is both a process and a plan. It uses dynamic and interactive tools, including a web site, to involve the public in updating New Jersey's last long-range transportation plan, which was produced in July 1995 (Transportation Choices 2025). The updated plan sets forth transportation policies, strategies, and programs to guide New Jersey's transportation agencies for the next twenty-five years. The New Jersey Department of Transportation and NJ Transit, working closely with other state transportation organizations, regional agencies, and the public, developed the plan.

Transportation Choices 2030 is designed to:

- Update the State's vision, goals and objectives for its transportation system,
- Highlight current areas of concern,
- Anticipate future problems,
- Develop strategies to address both current and future problems, and
- Provide New Jerseyans with the best transportation system possible.

In addressing municipal governments, the Plan sets the following goals for 2010:

1. Utilization of "context sensitive design" (CSD) an approach that emphasizes broad stakeholder participation and all around ownership of results.
2. Emphasize on access management through Highway Access Code in cooperation with municipalities
3. Work with communities to create "transit villages" around rail stations that will maximize existing transportation services
4. Empower counties so they can coordinate and expand community-based transit services.

Municipalities, since they control land use decisions through local zoning ordinances and subdivision regulations, should:

1. Encourage center-based development,
2. Promote transit-friendly design,
3. Support mixed-use developments and

4. Work with NJDOT in developing access management plans on state highways

New Jersey FIT: Future In Transportation

The New Jersey FIT: Future In Transportation initiative represents a change in direction for the New Jersey Department of Transportation. It is a new approach in how NJDOT addresses the needs of transportation in the State, especially in the issue of congestion.

In the past, the State has tried to build its way out of our congestion problems. But has found it to be too costly and with only short term benefits. Realizing this NJDOT has decided to take a look at the root causes of the problem to see why it is in a cycle of widen highways, congestion, and then widen again.

The problem is not transportation alone. It turns out that land use, how municipalities use land, how it develops, where it develops has an effect on the transportation system. NJDOT is now trying to work with municipalities so that they consider transportation in the land use equation. It is encouraging municipalities to not only rely on the State's system of highways and roads, but to also look to their local network of roads to handle some of their traffic

NJDOT is of the belief that integrating land use and transportation planning is an approach that can reduce costs tremendously. It is a means of providing more traffic volume being handled by the existing transportation infrastructure, and it allows municipalities to develop in a way that will sustain their growth without inducing more congestion.

FY 2006 - 2008 Statewide Transportation Improvement Program

The Statewide Transportation Improvement Program (STIP) serves two purposes. First, it presents a comprehensive, one-volume guide to major transportation improvements planned in the state of New Jersey therefore providing a valuable reference for implementing agencies (such as the New Jersey Department of Transportation and the New Jersey Transit Corporation) and all those interested in transportation issues in this state. Second, it serves as the reference document required under federal regulations (23 CFR 450.216) for use by the Federal Highway Administration and the Federal Transit Administration in approving the expenditure of federal funds for transportation projects in New Jersey.

Federal legislation requires that each state develop one multimodal Statewide Transportation Improvement Program (STIP) for all areas of the state. In New Jersey, the STIP consists of a listing of statewide line items and programs, as well as the regional Transportation Improvement Program (TIP) projects, all of which were developed by the three Metropolitan Planning Organizations (MPO). The TIP contains local and state highway projects, statewide line items and programs, as well as public transit projects.

In Burlington County there are 15 projects programmed. Two of the projects involve Cinnaminson Township.

1. The Delaware River Heritage Trail

The purpose of this project is to construct the New Jersey portion of "The Delaware River Heritage Trail." This trail has been envisioned as a bi-state, multi-use, non-motorized recreational route along both sides of the Delaware River. The

New Jersey portion of this trail extends from Trenton to Palmyra with both on and off-road sections envisioned. The trail will provide a link to many neighborhoods, parks, and trails in the region. In Fiscal Year 2006 \$400,000 is programmed and \$400,000 in fiscal year 2007.

2. Route 130, Cinnaminson Avenue/Church Road/Branch Pike

This intersection safety and operational improvement is a breakout of the Route 130, Corridor 3B study. The improvements include removal of existing jughandles, construction of new jughandles, addition of turning movements, removal of Branch Pike signal, installation of new signal, reconstruction of Cinnaminson Avenue and Church Road to permit two-way traffic and realignment of Branch Pike. The following special Federal appropriation was allocated to this project. TEA-21/Q92 \$3,075,299 (balance available \$2,188,432). Also included in this appropriation is Route 130, Campus Drive (DB 95078B1 Burlington Township). In fiscal year \$688,432 is dedicated to this project.

Transit Village Initiative

The New Jersey Department of Transportation (NJDOT) and NJ TRANSIT spearhead a multi-agency Smart Growth partnership known as the Transit Village Initiative. The Transit Village Initiative helps to redevelop and revitalize communities around transit facilities to make them an appealing choice for people to live, work and play, thereby reducing reliance on the automobile.

The Transit Village Initiative is an excellent model for Smart Growth because it encourages growth in New Jersey where infrastructure and public transit already exist.

Aside from Smart Growth community revitalization, two other goals of the Transit Village Initiative are to reduce traffic congestion and improve air quality by increasing transit riders.

Studies have shown that an increase in residential housing options within walking distance of a transit facility, typically a one quarter to one half mile radius, does more to increase transit ridership than any other type of development. Therefore, it is a goal of the Transit Village Initiative to bring more housing, more businesses and more people into communities with transit facilities.

A designated Transit Village is a municipality that has been recommended for designation by the inter-agency Transit Village Task Force. (The task force consists of NJ Transit, Commerce and Economic Growth Commission, Council on the Arts, Department of Community Affairs, Department of Environmental Protection, Economic Development Authority, Housing and Mortgage Finance Agency, Office of Smart Growth, Main Street New Jersey and Redevelopment Authority) These municipalities have demonstrated a commitment to revitalizing and redeveloping the area around its transit facility into a compact, mixed-use neighborhood with a strong residential component.

A municipality can be designated a Transit Village only after much of the planning and background work has already been done on the municipal level. It may only be designated a Transit Village after many of the Transit Village Criteria have been met.

There are currently 17 designated Transit Villages. They are Pleasantville, Atlantic County (1999), Morristown, Morris County (1999), Rutherford, Bergen County (1999), South Amboy, Middlesex County (1999), South Orange, Essex County (1999), Riverside, Burlington County (2001), Rahway, Union County (2002), Metuchen, Middlesex County (2003), Belmar, Monmouth County (2003), Bloomfield, Essex County (2003), Bound Brook, Somerset County (2003), Collingswood, Camden County (2003), Cranford, Essex County (2003) Matawan, Monmouth County (2003), New Brunswick, Middlesex County (2005), Journal Square/Jersey City, Hudson County(2005) and Netcong, Morris County (2005).

Delaware Valley Regional Planning Commission

The Delaware Valley Regional Planning Commission (DVRPC) is the Metropolitan Planning Organization (MPO) for the nine-county region of the Philadelphia area. Created in 1965, DVRPC is an interstate, intercounty and intercity agency that provides continuing, comprehensive and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery Counties, as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden, Gloucester and Mercer counties in New Jersey. DVRPC provides technical assistance and services; conducts high priority studies that respond to the requests and demands of member state and local governments; fosters cooperation among various constituents to forge a consensus on diverse regional issues; determines and meets the needs of the private sector; and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the Commission. Each year, DVRPC oversees over \$1.4 billion in transportation investments (\$312 million for New Jersey). It evaluates and approves proposed transportation improvement projects. During the next three years it will develop and maintain a transportation improvement program covering some 200 projects in New Jersey at the value of \$936 million with \$506 million going to highways and \$430 million in transit going to DRPA/PATCO and New Jersey Transit.

DVRPC is the only MPO which maintains a land use plan and a transportation plan. The latter is required by US Department of Transportation as outlined in the Transportation Equity Act of the 21st Century (TEA-21). The land use element of the DVRPC 2030 Plan provides a vision of the region's future growth and development; determines regional plan consistency in order to locate and implement future transportation facilities and services; provides guidance and direction for municipal, county and state agencies to make infrastructure and conservation protection investments; and serves as the foundation for developing the region's Transportation Improvement Program (TIP), the short-range capital program of all federally funded transportation projects. The 2030 Regional Transportation Plan for the Delaware Valley provides a vision and a comprehensive long-range blueprint for moving people and goods safely and efficiently. It also advances and supports the region's land use plans and policies, and proposes strategies to carry out those policies. Further, it lists specific transportation improvement projects that are consistent with the policies. Some projects are nearing construction, while others are planned and may change before they reach the construction phase.

In 2003, DVRPC began preliminary work on identifying goals for the Year 2030 Plan. The result was "Regional Analysis of What-If Scenarios" which looked at several alternative scenarios and their impact on the future form of the region. "Destination 2030: A Vision for the Future" followed and analyzed current trends and articulated a singular vision as well as developing specific goals for eight critical issue areas: urban revitalization, growth management, economic development, the environment, equity and opportunity, transportation facilities, transportation operations, and transportation finance.

The next step was development of land use and transportation policies, including transportation projects. "Destination 2030" is the Long Range Plan for the Delaware Valley. The DVRPC Board adopted the "Destination 2030" Long Range Plan on June 23, 2005. DVRPC has submitted the Administrative Version of the "Destination 2030" Long Range Plan for federal review and approval. In the near future DVRPC will publish a final Technical Report and an Executive Summary document.

Projects included in the Regional Transportation Plan that impact the Township are:

1. NJ 73, NJ 90 & US 130 Access improvements and
2. RiverLINE operational improvements (extend sidings)

Bicycle And Pedestrian Circulation Considerations

Most municipal Circulation Plan Elements neglect to address bicycle and pedestrian mobility. The goals and objectives being considered for the Cinnaminson Township Master Plan include the following objective:

“To establish transportation policies and programs that improve connections among housing, employment and commercial uses, including provisions for vehicular and pedestrian travel and bicycle paths.”

To advance this objective, there are a number of resources available to the Township at the State, regional, county and local level. The following is a summary of these resources.

New Jersey Bicycle and Pedestrian Master Plan

The New Jersey Department of Transportation has made a commitment to encourage bicycling and walking in New Jersey. This commitment devotes resources to bicycle and pedestrian planning initiatives designed to improve the bicycle and pedestrian compatibility of the State's transportation network. The State's ultimate goal, beyond the scope of this project, is to develop an integrated statewide system of bicycle and pedestrian facilities and infrastructure.

The Department of Transportation completed Phase One of the Statewide Bicycle and Pedestrian Master Plan in June 1995. This established a vision and a set of targets for the future of bicycling and walking in the State.

Phase Two of the Master Plan updates the goals of the 1995 Plan and provides the following:

- An inventory of existing bicycle facilities,
- A list of priority locations for bicycle and pedestrian improvements, and
- Opportunities for improving the bicycle or pedestrian compatibility of existing projects.

Phase Two of the Master Plan was completed in 2004 providing the Department with a database of existing, proposed and potential bicycle and pedestrian facilities throughout the State. It also outlines key action recommendations in planning and facility implementation, education, enforcement, encouragement and data collection and tracking.

Most importantly the plan puts forward implementation strategies by levels of government. For municipalities it recommends:

- Develop local programs to address walking and bicycling.
- Initiate independent bicycle projects.
- Adopt bicycle and pedestrian friendly land use regulations, including bicycle parking requirements.
- Prepare and implement bicycle and pedestrian circulation elements.
- Adopt/amend comprehensive plans to address walking and bicycling issues.
- Incorporate bicycle and pedestrian considerations in all public, school, recreation and transportation facilities.
- Support/implement walk and bike to school programs.
- Support local enforcement to improve safety for bicyclists and pedestrians.
- Implement “police on bikes” program.
- Adopt ordinances or resolutions that support bicycling and walking (zoning and land use, design standards, parking, maintenance).
- Adopt policies, procedures and guidelines requiring that roadway projects be designed to accommodate shared use and to ensure safety for pedestrians, bicyclists and motorists.
- Promote bicycling and walking policies in all elements of the municipal Master Plan (circulation, land use, recreation, etc.) and other municipal programs.
- Include bicycle and pedestrian considerations in development codes, including bicycle parking requirements
- Dedicate funds for independent bicycle and pedestrian projects and establish funding sources for bicycle/pedestrian improvements related to roadway projects (land use/recreation fees, general funds, etc.).
- Establish bicycle and pedestrian advisory groups, appoint bicycle and pedestrian coordinators and/or include bicycle and pedestrian representatives on local commissions and boards as part of requirement for state funding of projects.
- Encourage planning and zoning board members, police officers, administrators and other municipal decision-makers to attend seminars, etc., on bicycling and walking.

NJDOT Bicycle Resource Project

The Voorhees Transportation Policy Institute (VTPI), a unit of the Alan M. Voorhees Transportation Center, Edward J. Bloustein School of Planning and Public Policy, and the Center for Advanced Infrastructure and Transportation – Local Technical Assistance Program (CAIT-LTAP), both of Rutgers, The State University of New Jersey, under the authorization of NJDOT, have developed “The New Jersey Pedestrian and Bicycle Resource Project”. The project has become an information clearinghouse and technical resource center to identify significant bicycle and pedestrian policies, planning activities, implementation and construction of projects throughout the State, and also nationwide and internationally. It provides advisory assistance to NJDOT and other public agencies and organizations on pedestrian and bicycle topics and issues. Additionally, the project provides educational resources and directs research on the most current and challenging issues confronting the development and construction of bicycle and pedestrian compatible infrastructure.

Bicycle Compatible Roadways and Bikeways and Pedestrian Compatible Planning and Design Guidelines

Provisions for bicycling, with its potential for providing economically efficient transportation, became an important policy goal of ISTEA. The Secretary of Transportation was directed to conduct a national study that developed a plan for the increased use and enhanced safety of bicycling and walking. The National Bicycling and Walking Study - Transportation Choices for a Changing America presents a plan of action for activities at the Federal, State and local levels for meeting the following goals:

- To double the current percentage (from 7.9 percent to 15.8 percent) of total trips made by bicycling and walking; and
- To simultaneously reduce by 10 percent the number of bicyclists and pedestrians killed or injured in traffic crashes.

The potential for increasing the number of bicycle trips is evident in the National Personal Transportation Survey, which shows that more than 25 percent of all trips are one mile or less and 40 percent are two miles or less. Almost half are three miles or less and two-thirds are five miles or less. Approximately 53 percent of all people live less than two miles from the nearest public transportation route. New Jersey residents have become aware of the energy, efficiency, health and economic benefits of bicycling for transportation and recreational purposes. In NJDOT’s statewide plan it established policies, goals and programmatic steps to promote safe and efficient bicycling for transportation and recreation in New Jersey. Through an extensive outreach effort, residents established a statewide vision for the future of bicycling and walking for all communities in New Jersey:

*“New Jersey is a place where people choose to bicycle and walk.
Residents and visitors are able to conveniently walk and bicycle with*

confidence and a sense of security in every community. Both activities are a routine part of transportation and recreation systems.”

In order to achieve this vision for New Jersey, and to enable people in every community of the State to bicycle with confidence and a sense of security, it is necessary to plan and provide appropriate facilities that will accommodate, encourage and promote bicycling. The manuals provide direction regarding how appropriate facilities for bicycling and walking should be provided.

Sidewalk and Bicycle Projects

According to NJDOT's database there are several projects in surrounding municipalities.

1. Heritage Trail - Palmyra Section This is 1.25 miles of bike lanes from the base of the Tacony Palmyra Bridge to 2nd St terminating at the Borough of Riverton's border. Additional section will extend from 2nd St. to Broad St.
2. Heritage Trail - Palmyra Section First section of regional bikeway project to utilize existing local and county roadways. It will provide access to Palmyra Nature Cove, downtown and Palmyra Light Rail Station.
3. Broad Street Pedestrian Revitalization Project (Palmyra) Sidewalk restoration from storefront to curblin on Broad Street from Lecony Avenue to Garfield Avenue.
4. Hartford Road Sidewalk (Delran) Construction of a sidewalk on Hartford Road from Summerhill Drive to approximately 2,100 feet east of U.S. Route 130.
5. North Church Street Bike Path (Moorestown) Bikeways in the Township are planned to link residential developments and recreation areas to the town center.

Bike Facilities

The following is a list of bicycling facilities within Burlington County.

1. **Bass River State Park (609) 296-1114**
Access State Road
Surface Paved
Distance 3-4 miles
Other facilities Beach area, picnic area, hiking
Type of facility Park roadway
2. **Brendan T. Byrne State Forest (609) 726-1191**
Access Off Route 70 or Route 72
Surface Paved and gravel
Distance 10 miles paved park road, 12.5 miles gravel path for mountain bikes
Other facilities Camping, picnic area, beach
Type of facility Multi-use trail, mountain biking, horseback riding, hiking
3. **Pemberton Rail Trail**
Access Pemberton (Hanover Street)
Surface Crushed stone
Distance 3 miles
Other facilities n/a
Type of facility Multi-use trail

4. Smithville County Park Trail (856) 642-3850

Access Smithville Road
Surface Compacted crushed stone
Distance 3.1 miles
Other facilities n/a
Type of facility Multi-use trail

5. Willingboro Bicycle Path (609) 871-5700

Access Northampton Drive and other municipal roads
Surface Asphalt
Distance 4.2 miles
Other facilities n/a
Type of facility Multi-use trail

Use of Sidewalks and the Residential Site Improvement Standards

Ongoing national debate over methods to reduce costs of housing construction has focused on all types of required improvements, including sidewalks. Where sidewalks were once considered an automatic requirement in new residential developments, the costs of construction and the impervious coverage impacts have been cited as reasons to minimize sidewalk construction.

The "Guide for Residential Design Review" (Moskowitz & Lindbloom, 1976) notes, "Apart from the need for sidewalks for circulation and safety, sidewalks can be an important element in the recreational system of a community. They serve as walking and biking trails for all age groups ... and are also the primary informal and unsupervised recreational system for preschoolers ... (and) should be required as part of any large scale residential development." Others have gone even further, stating, "Sidewalks are a more important recreational facility than playgrounds" (Site Planning, Lynch & Hack, 1984). Finally, the State Development and Redevelopment Plan echoes this message by stating "New Jersey's communities are healthy, active communities where adults and children are living active, healthy lives because exercise and walking are a vital part of their daily lives. Communities are designed to promote walking and cycling for transportation and recreation".

It is generally accepted that sidewalks should be provided along streets used for access to schools, parks, shopping and transit stops (Model Subdivision and Site Plan Ordinance, NJDCA, 1987). The model ordinance also notes that "... sidewalk requirements should be based on the street classification system and on density of development as measured in terms of lot size, lot frontage or number of housing units per acre."

The model ordinance noted that street classification is particularly important to safety since traffic volumes and speeds increase as roads assume higher traffic circulation functions. Density affects the extent of pedestrian movements to be generated, and in higher density developments sidewalks are important for both convenience and safety.

Additional factors cited in the model ordinance in determining sidewalk locations are major pedestrian generators, the existing sidewalk system and probable future development. The model ordinance also provides the following guidelines for sidewalk placement.

"Requirements for sidewalks vary depending on road classification and intensity of development"

The Residential Site Improvement Standards Act (N.J.S.A. 40:55D-40.1 et seq., or RSIS) was adopted by the Legislature and signed into law. The act was largely based on the work found in the Model Subdivision and Site Plan Ordinance, NJDCA, 1987. The act authorized the establishment within the Department of Community Affairs of a committee charged with the responsibility of developing uniform standards that would be adhered to by municipalities in approving residential site improvements. These standards have been approved by the Commissioner of Community Affairs and been adopted in the New Jersey Administrative Code (N.J.A.C. 5:21-1-8).

The code covers a number of features such as water supply, sanitary sewers, stormwater management and streets and parking. The standards also address sidewalks. According to N.J.A.C 5:21-4.5, sidewalks and/or graded areas shall be required, depending on road classification and intensity of development. Sidewalks are required either on one side or both in the case of residential access roads, neighborhood streets, minor collectors and major collectors. Graded areas are required on rural streets or lanes as well as in the case of low intensity minor collectors and residential access roads. Exceptions from these rules are available only to municipalities that receive a waiver.

Transportation Demand Management

Prompted largely by the worsening traffic conditions during the development surge in the mid-1980's, and the enactment of the Clean Air Act Amendments in November 1990, transportation demand strategies (TDMs) emerged as an important focus for reducing the quantity and impact of automobile traffic. As the name indicates, TDMs are alternative strategies designed to reduce the number of trips between residences and work places. They are typically implemented through a comprehensive traffic reduction ordinance (TRO), which establishes the goals and procedures as well as strategies.

Managing transportation demand is a complex undertaking as it involves not only a concerted administrative effort but also a fundamental change in personal habits. Since TROs involve an attempt to remove trips as well as to spread them, changes to commuting habits are inevitable, including the reduction of single-occupancy vehicles. Quantitative measurements to evaluate compliance with the goals of a TRO include the percent reduction in peak hour trips, percent participation rates, average peak hour vehicle ridership, and vehicle trip reduction to a desired level of service.

TDM strategies that are typically permitted as alternatives in a TRO include the following:

1. Ridesharing-park and ride, vanpools/carpools, vanpool/carpool lots
2. Flextime/compressed workweeks
3. Shuttle services
4. Subsidized transit and ridesharing
5. Preferential parking
6. Amenities for bicyclists and pedestrians
7. Telecommuting

Cross-County Connection Transportation Management Association

Since 1989, Cross-County Connection TMA has been working with businesses, local officials and commuters to provide solutions for transportation problems in southern New Jersey.

Cross County Connection TMA was formally incorporated in 1989 through the efforts of a group of southern New Jersey business leaders, local government officials, and representatives from the New Jersey Department of Transportation (NJDOT) and New Jersey Transit Corporation (NJ TRANSIT) to address mobility issues in the region and reduce the number of vehicles on state and local roadways. Today, Cross County Connection, a non-profit organization, partners with NJDOT, NJ TRANSIT, and the Federal Highway Administration provides solutions to complex transportation problems for counties, municipalities, employers, and commuters in our seven-county region.

Cross-County Connection TMA offers its counties and municipalities a wide variety of services with the goal of reducing traffic congestion and increasing the economic viability of the region. They include

- Professional transportation planning guidance for review or development of circulation elements in a master plan,
- Support in planning safe and accessible options for bicyclists and walkers,
- Emergency Traffic Alerts,
- Introductions to local transportation network, and advocacy with mass transit and van pool providers,
- Identify sources of funds and help prepare your grant applications,
- Establish and regularly re-stock transit schedules and commuter information at your public locations for residents,
- Assist in the planning, funding, implementing and marketing of community shuttle programs,
- Assist social service providers with transportation needs for clients,
- Review of planning documents,
- Analysis of the transportation network—in and out of town—to assist in creating more transit-friendly development,
- Custom GIS mapping to illustrate options,
- Creation of Task Forces to keep officials up to date on issues and to provide a voice in transit and
- Provide technical publications to assist with planning and development.

Burlington County Transportation Service

Another transportation service available in Cinnaminson is Burlington County Transportation Service (BCTS). BCTS is sponsored by the Burlington County Board of Chosen Freeholders. BCTS is a service which is subsidized by revenues applied for annually from Casino Revenue, State and Federal Grants. The purpose of BCTS is to provide a safe, efficient and economical para-transit service to all eligible Burlington County residents by trained drivers and staff. BCTS provides transportation services to transportation-disadvantaged Burlington County Residents who are: senior citizens (60+)

or persons with disabilities or economically disadvantaged. BCTS is intended to meet the transportation mobility needs of eligible residents to obtain transportation assistance for non-emergency medical treatment at doctor's offices, medical centers and hospitals; shopping; personal business; social, recreation purposes and limited transportation for employment and training in residing locality. BCTS provides transportation to three (3) County Nutrition Sites sponsored by the Burlington County Office on Aging. All rides are on a first call, first serve basis with no guarantee of a ride.

One of the services provided through BCTS are the South Jersey shuttles which provide residents and employees with transit services in areas not covered by NJ TRANSIT. All shuttle services connect with NJ TRANSIT bus and/or rail, enabling passengers' access to the regional transportation network.

In Burlington County it is referred to as "Burlink" which covers ten (ten) routes in the County. Two (2) of the routes provide service to Cinnaminson. The B9 service operates from the Palmyra RiverLINE station along Cinnaminson Avenue to Route 130 to Lenola Road to the Moorestown Mall, Eastgate and Main Street in Moorestown. It then returns into the Township via Church Road to Route 130.

The B10 route runs from the Cinnaminson RiverLINE station along Broad Street to Taylor's Lane to Route 130 south to Union Landing Road to Rowland Street and the station. This service is limited to peak hour service as opposed to the B9 which operates throughout the day.

Burlington County Community Transportation Plan

In June 2007 the Burlington County United We Ride Stakeholders and Steering Committee prepared the Community Transportation Plan. The Plan was in response to The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Public Law No. 109-59, August 10, 2005 which requires that projects selected for funding under the Elderly Individuals and Individuals with Disabilities, JARC, and New Freedom programs develop a "locally developed, coordinated public transit-human services transportation plan" and that the plan be "developed through a process that includes representatives of public, private, and nonprofit transportation and human services providers and participation by the public."

Through a Self Assessment Tool, existing resources were defined; gaps and barriers to overcome those gaps were identified. The central goal of United We Ride was to create a comprehensive and coordinated community based transportation service for older adults, disable residents, low income and rural residents within the County. It is the intention of the Transportation Stakeholders to maintain the current level of service while improving the efficiency of that service.

In the Plan three time frames in which to achieve the objectives of the Plan were identified: Short Range from 1-3 years, Medium Range from 4-6 years and Long Range from 7-10 years. .

The Short Range strategies are to be accomplished with the assistance of Cross County Connection (CCC), Resources for Independent Living, Commission for the Blind, Burlington County Workforce Investment Board (WIB), NJ TRANSIT with action on the

first two strategies in 2008. They involve travel training for new public transportation users and preparing and distributing a *Transportation Reference Guide*.

The next three strategies may also be accomplished in 2008 with the assistance of CCC and County staff. They are expanding speaking engagements to senior centers and service organizations promoting community transportation, expanding advertisement on TV/cable stations to explain types of available alternative transportation, developing policy to promote advertisement on vehicles for Freeholder approval, provide education and outreach to communities – especially students and low income residents. It is the recommendation that county staff and CCC provide “guest appearance” in middle school to promote environmental benefits of using alternative transportation, and identify a program to provide transportation service for disabled and at risk students to get from school to work then home for 18 to 21 year olds.

The medium range strategies from 4 to 6 years involve the Burlington County Board of Social Services (BSBSS) which provides transportation for seniors paid by Medicaid., BCTS which provides free transportation for seniors to non emergency medical appointments and Adult Health Care providers who provide transportation to senior and adult clients to non emergency medical appointments paid by Medicaid. None of these medical trips can be combined and there is a need to rectify this shortcoming by providing a statewide web site – maps detailing all routes including on- and demand service areas and Access Link. Establishing and implementing a “One Call to Go system” and establishing partnerships and sponsorships between the providers. Another recommendation is providing Last Mile Connector – a fixed loop AM and PM peak hour service in neighborhoods adjacent to fixed routes such as NJTRANSIT, Access Link, and BurLink. A nominal fare could be charged. There should be no deviations Other recommendations involve providing dedicated vehicle and driver in rural areas to allow driver to connect to existing services such as BurLink, BCTS, Access Link and NJTRANSIT routes, instituting travel training for middle school students and extending hours of service to provide transportation service for disabled and at risk students to get from school to work then home

Finally, Long Range Strategies from 7 to 10 years involve increasing hours of service by staggering or varying driver hours to provide split shifts to cover later hours during the week; coordinating last mile connections with locals – Communicate with municipalities; amending public school core curriculum to include “alternative modes of transportation” education; coordinating with identified service to provide transportation service for disabled and at risk students to get from school to work then home; exploring the feasibility of providing an extension of the River Line from Bordentown to Robbinsville on the existing Camden and Amboy Railroad right of way. Stations could be located in Bordentown Township, Hamilton Township and Robbinsville Finally, amend Section 5310 criteria for vehicles to permit municipalities AND counties to obtain vehicles.

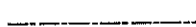




Jurisdiction of Roads

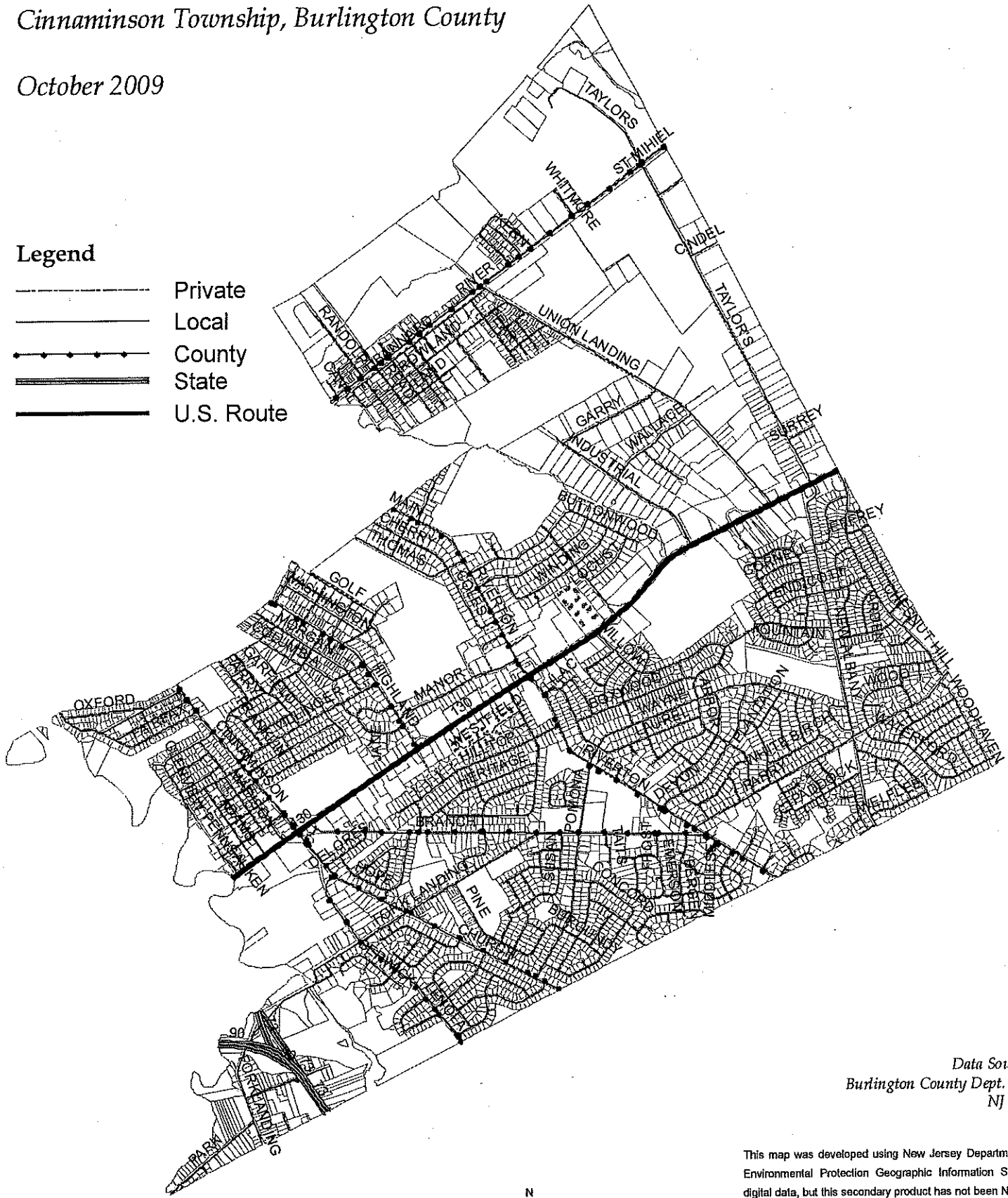
Cinnaminson Township, Burlington County

October 2009

Figure 1

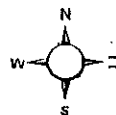
Legend

-  Private
-  Local
-  County
-  State
-  U.S. Route



Data Sources:
Burlington County Dept. of IT
NJ DEP

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been NJDEP verified and is not State-authorized.



Functional Classification

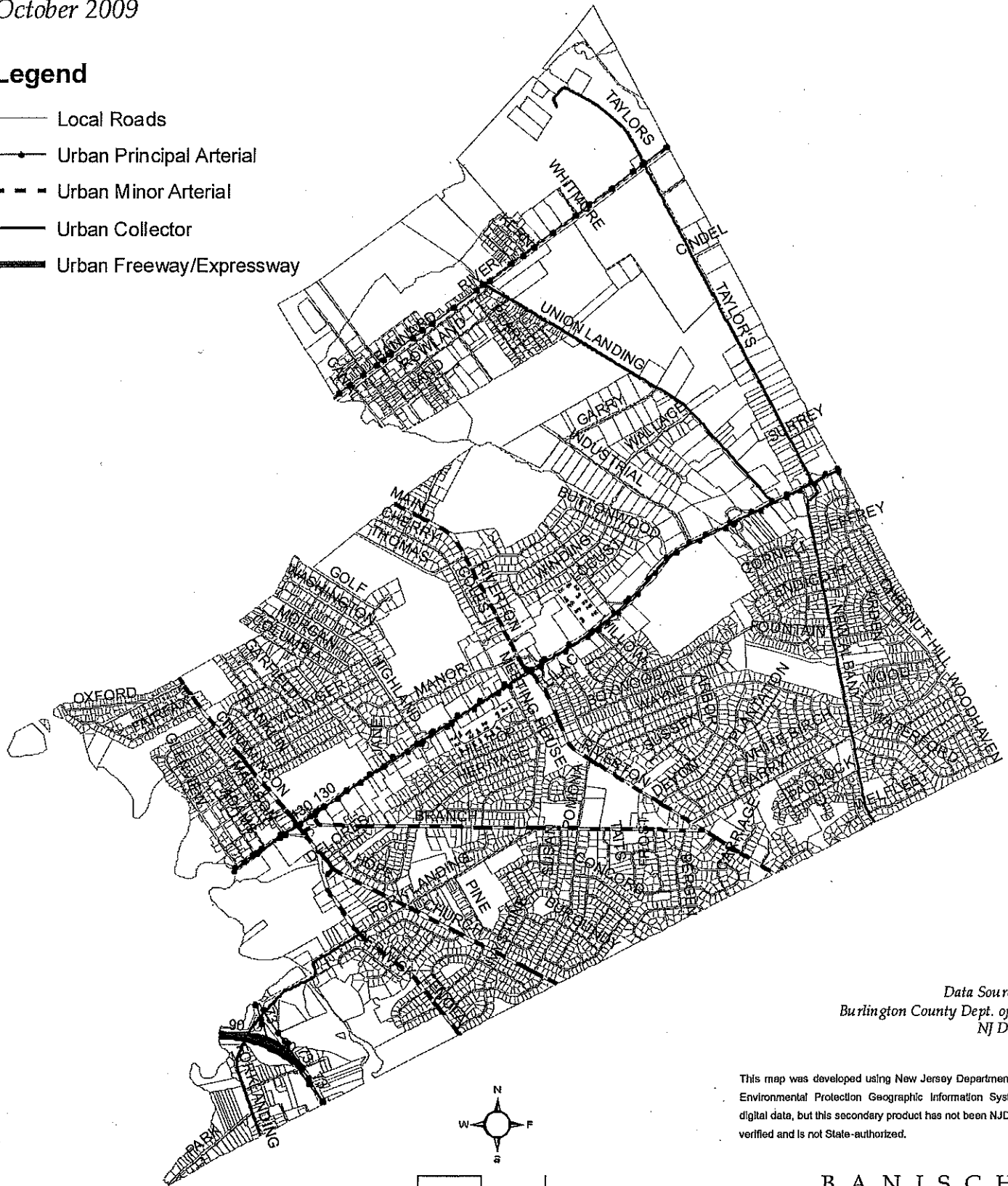
Cinnaminson Township, Burlington County

Figure 2

October 2009

Legend

- Local Roads
- Urban Principal Arterial
- - - Urban Minor Arterial
- Urban Collector
- Urban Freeway/Expressway



Data Sources:
Burlington County Dept. of IT
NJ DEP

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been NJDEP verified and is not State-authorized.

State Roadway Accident Locations 1997 to 2003 Cinnaminson Township, Burlington County

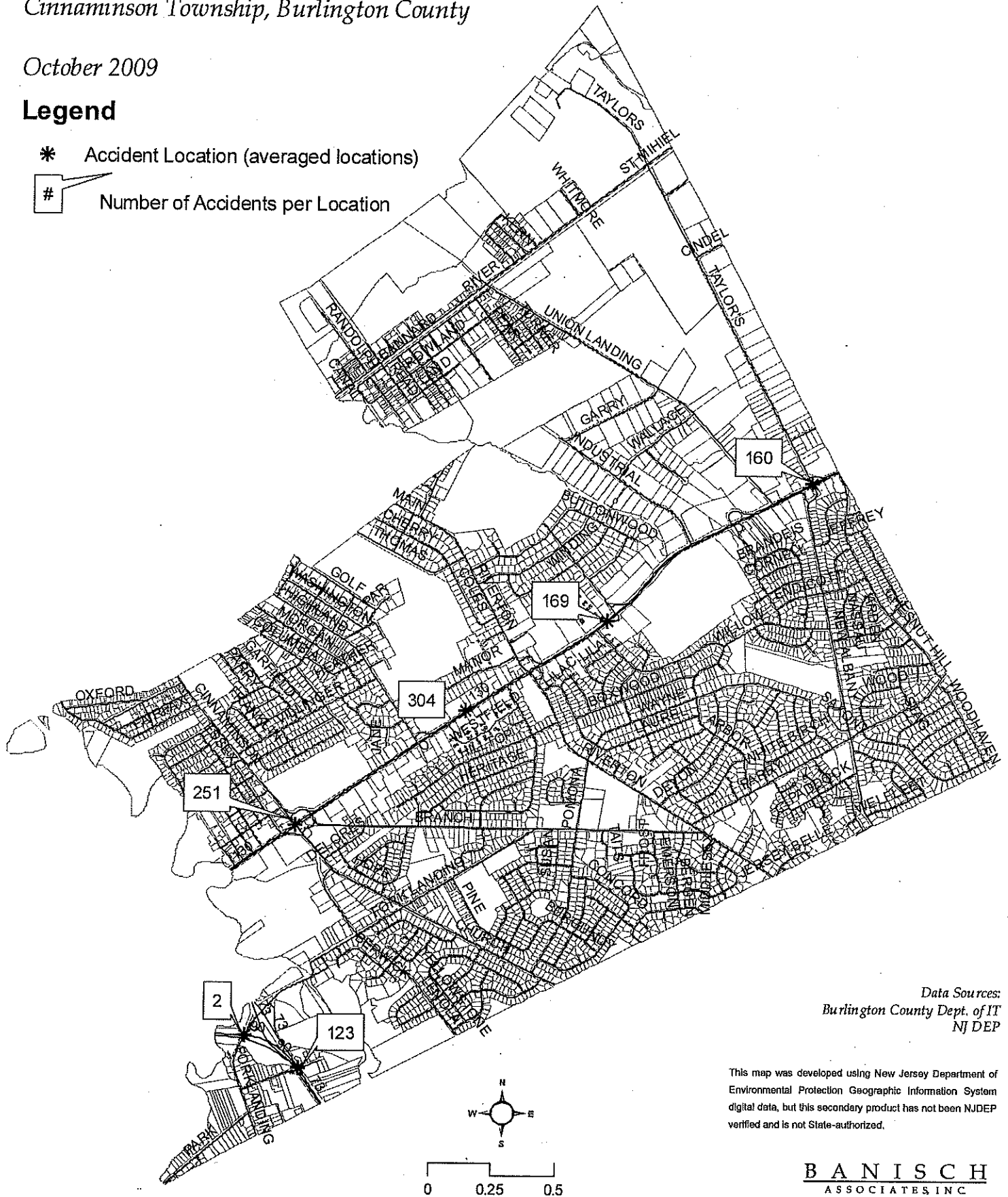
Figure 3

October 2009

Legend

* Accident Location (averaged locations)

Number of Accidents per Location



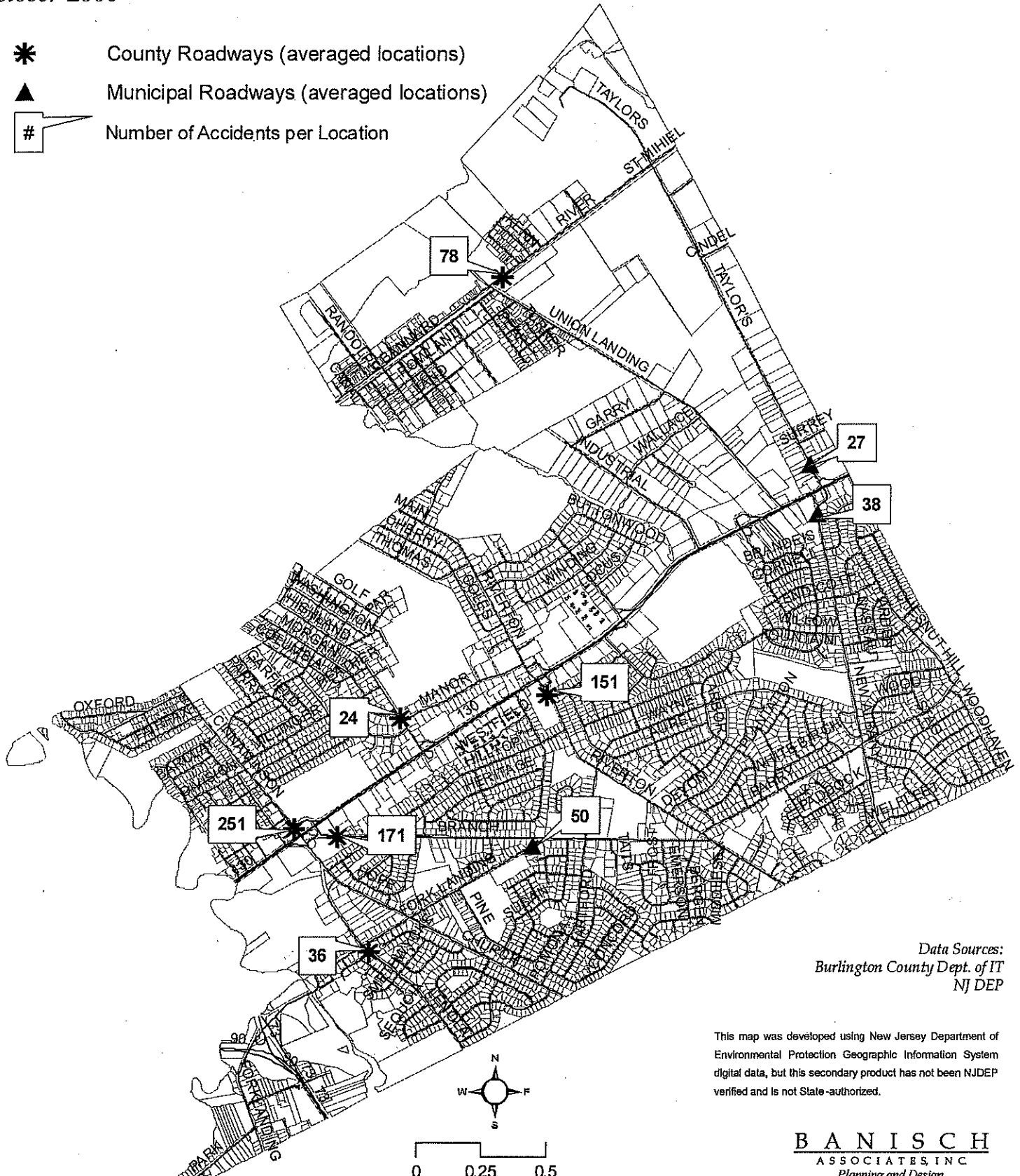
County and Municipal Roadway Accident Locations 1998 to 2001

Figure 4

Cinnaminson Township, Burlington County

October 2009

- * County Roadways (averaged locations)
- ▲ Municipal Roadways (averaged locations)
- # Number of Accidents per Location



Data Sources:
Burlington County Dept. of IT
NJ DEP

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been NJDEP verified and is not State-authorized.

Traffic Counts (Average Annual Daily Traffic) 1991 to 2001

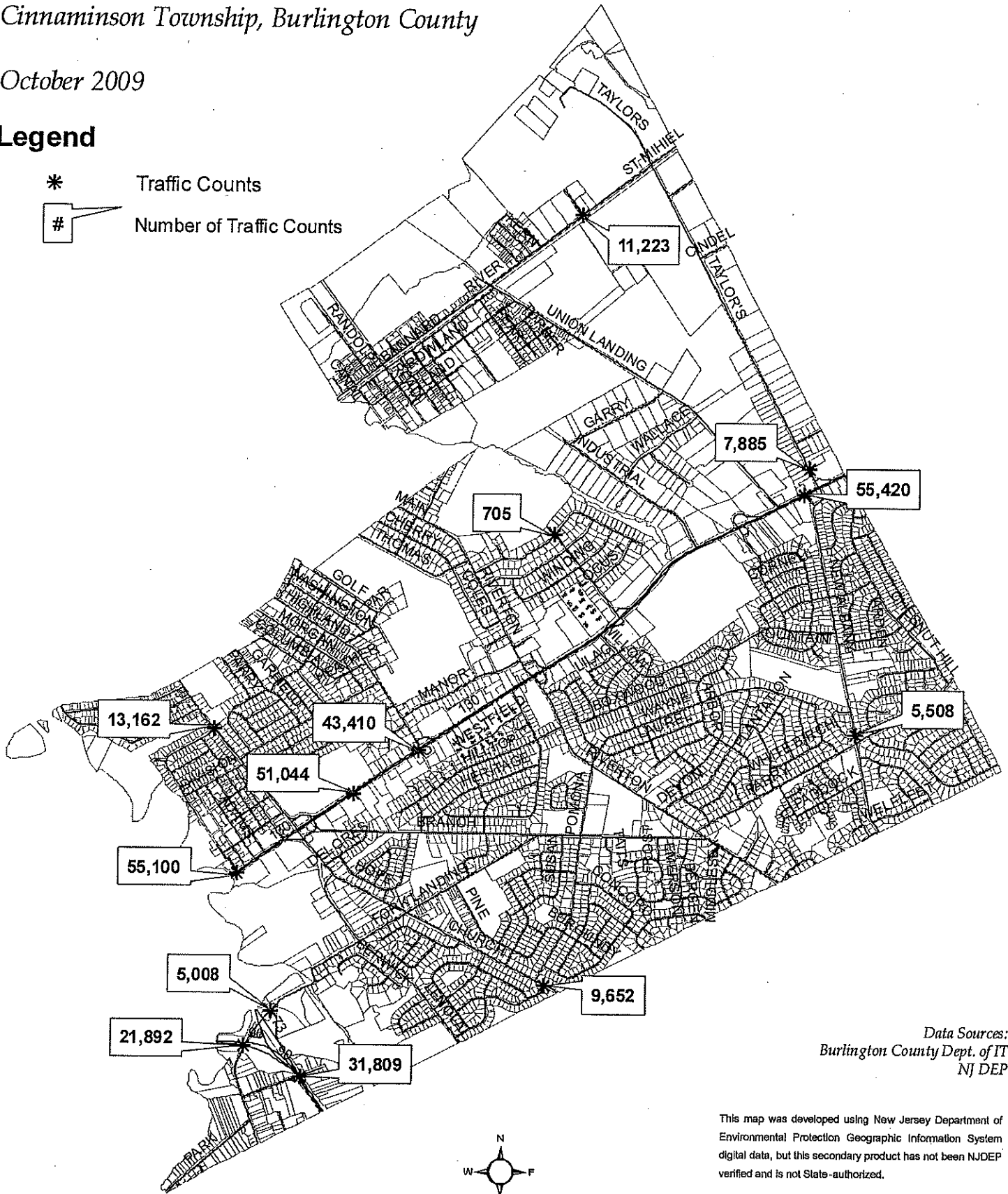
Cinnaminson Township, Burlington County

October 2009

Figure 5

Legend

- * Traffic Counts
- # Number of Traffic Counts



Data Sources:
Burlington County Dept. of IT
NJ DEP

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Truck Routes

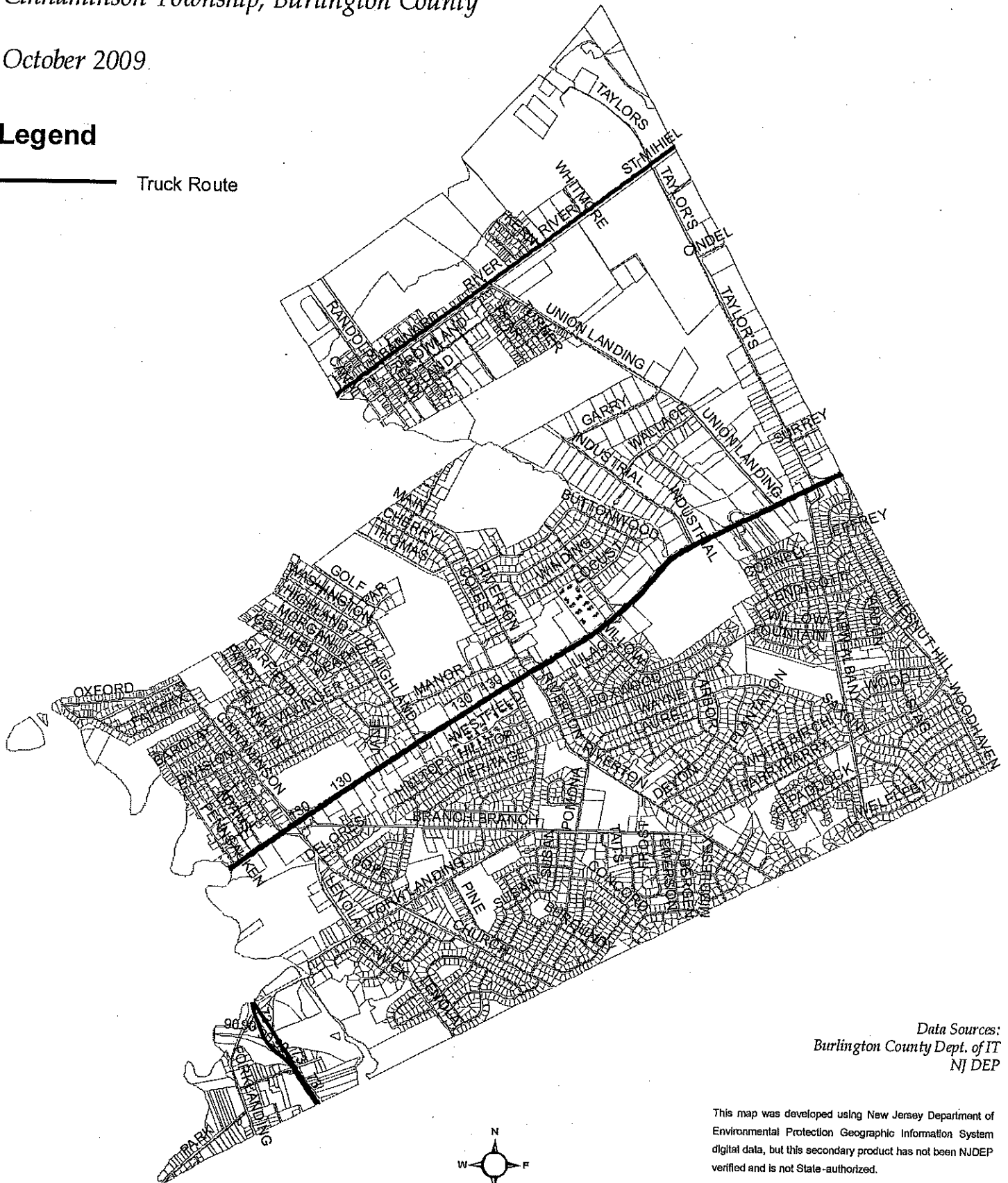
Cinnaminson Township, Burlington County

October 2009

Figure 6

Legend

— Truck Route



Data Sources:
Burlington County Dept. of IT
NJ DEP

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