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# *Route 22 Corridor Planning Study*

*North Haven – East Haven – North Branford*



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## EXECUTIVE SUMMARY

The Route 22 Corridor Planning Study was initiated by the South Central Regional Council of Governments (SCRCOG) to identify and address existing transportation needs and deficiencies in the Route 22 study area in response to increasing traffic demands and growing safety concerns along State and local roadways. The study was developed in close coordination with the study participants including municipal officials from the participating towns, Connecticut Department of Transportation (ConnDOT) staff, SCRCOG staff, the consultant design team, and the general public.

The Route 22 study area is located in the towns of North Haven, East Haven, and North Branford and is bounded by Clintonville Road and Forest Road (Route 22) on the north and east, Foxon Road (Route 80) on the south, and I-91 on the west. The investigation of existing and future transportation conditions along State roadways and local roadways in the study area resulted in the identification of numerous areas of concern that became the focus of further study. These areas of concern were prioritized into candidate improvement locations based on overall operational and safety needs. Improvement recommendations with associated construction cost estimates and near and long-term implementation plans were developed for each State and local roadway identified as a candidate improvement location.

### **I Improvement Recommendations – State Roadways**

Improvement opportunities along the State roadways in the study area generally consist of providing intersection geometry and capacity improvements to reduce travel congestion and delays. Other improvements consist of providing enhanced access management and pedestrian accommodations to satisfy identified operational and safety needs in the study area. A brief summary of each improvement recommendation is provided below. A more detailed discussion of these improvement recommendations is included in Section 4.1 of this study.

#### **Route 22 (Clintonville Road) at Chapel Hill Road and Pond Hill Road**

No capacity improvements are recommended at this unsignalized intersection as part of the overall improvement strategy at this time. The results of capacity analyses at this location indicate that both the Pond Hill Road and Chapel Hill Road approaches to Route 22 are experiencing – or will be experiencing – delays resulting in LOS E. However, relatively low traffic volumes on both minor roadway approaches that result in v/c ratios of 0.21 or less do not support the need for improvements to increase capacity.

#### **Route 17 (Middletown Avenue) at Cloudland Road and Spring Road**

No intersection capacity improvements are recommended at this unsignalized intersection as part of the overall improvement strategy at this time due to generally acceptable operation of the intersection and sufficient available traffic capacity.

**Route 103 (Maple Avenue) at Pool Road and Laydon Avenue**

The southeastbound left turn lane along Route 103 will experience 95<sup>th</sup> percentile vehicle queues that exceed 300% of the available storage capacity of 120 feet. This approach will also approach capacity (v/c ratio of 0.93) while operating just below the LOS E threshold during the future (2016) PM peak hour.

The improvement recommendation at this location includes widening approximately 450 feet of Route 103 between Bailey Road and the intersection to provide additional storage capacity for the existing left turn lane and providing signal timing modifications to optimize the existing signal operations. No geometric improvements are recommended for the minor roadway approaches due to limited improvement potential within the existing right-of-way constraints.

**Route 22 (Clintonville Road) at US 5 and Route 103**

This signalized intersection is a ConnDOT-listed accident location with 66 recorded accidents occurring between January 1, 2001 and December 31, 2004. Approximately 82% of these accidents were rear-end collisions and nearly 50% occurred on the Route 103 northbound approach to the intersection. Based upon a safety analysis of this intersection, there are no immediate geometric improvements or signal timing improvements recommended at this time to alleviate the safety concerns at this location.

The existing tangent intersection approaches contribute to the overall visibility of the stop condition warranted by the signal. As a result, probable contributing factors to the overall number of rear-end collisions could be generally high traffic demand, driver inattention, and excessive approach speeds, all of which are not readily remedied by minor geometric improvements or signal adjustments.

**Route 22 (Forest Road) between Route 17 and Foote Hill Road**

This section of Route 22 is a ConnDOT-listed accident location with 56 recorded accidents occurring between January 1, 2001 and December 31, 2004. More than one-third of all accidents were located at or near an intersection with a commercial driveway access. In addition, half of these accidents occurred at the Mobil service station, Sunoco service station, or Northford Plaza shopping center driveway.

The improvement recommendation at this location includes providing near-term access management improvements to better define ingress and egress at commercial drives located south of the junction with Route 17. Cost-effective improvements could include the installation of regulatory signing and pavement markings, or the removal of curb cuts to limit the number of conflict points for vehicles accessing the Mobil and Sunoco service stations and Northford Plaza shopping center driveways. It is also recommended that long-term access management improvements at this location be coordinated with the improvement recommendations for the Route 22 at Route 17 intersection.

**Route 22 (Clintonville Road) at Route 150 (Woodhouse Avenue)**

This unsignalized intersection consists of two non-standard skewed approaches (Route 150 and Pistapaug Road) to Route 22. The undesirable intersection geometry has created

perceived safety concerns associated with available sight lines along Route 22. In addition, the Route 150 approach will operate near capacity at LOS F during the future (2016) PM peak hour.

The improvement recommendation at this location includes realigning the Route 150 approach to provide a signalized, perpendicular T-intersection with Route 22 and eliminating the Pistapaug Road connection between Route 22 and Route 150. This improvement would require widening Route 22 to the south side through the intersection to provide a 150-foot long, 11-foot wide eastbound left turn lane to Route 150. It would also require providing a 100-foot long, 11-foot wide westbound right turn lane to Route 150. These improvements will result in a LOS B during the future (2016) PM peak hour.

### **Route 22 (Clintonville Road) at Route 17 (Middletown Avenue) and Mansfield Drive**

This signalized intersection consists of undesirable and unusual intersection geometry that results in perceived safety concerns for eastbound Route 22 traffic destined for northbound Route 17. Route 22 (Clintonville Road) approaches Route 17 from the east and eastbound traffic is redirected southbound along a one-way ramp beginning approximately 200 feet east of intersection. Consequently, the Route 22 approach at Route 17 only accommodates one-way westbound traffic from the intersection. A turning roadway from the southbound Route 22 ramp provides access to northbound Route 17. The location of this turning roadway opposite the two-way Brook Pharmacy driveway and its proximity to the northbound left turn lane make the turning maneuver to northbound Route 17 difficult during peak traffic periods. In addition, the northeastbound left turn lane will experience 95<sup>th</sup> percentile vehicle queues of 211 feet, exceeding the available storage capacity of 125 feet.

The improvement recommendation at this location consists of widening Route 22/Route 17 to provide a 100-foot long extension (225-foot total length) of the existing left turn lane south of the intersection. This improvement should be coordinated with the improvement recommendations for the Route 22 (Forest Road) and Route 17 intersection.

The study team evaluated several improvement concepts to improve the existing intersection geometry by relocating the northbound Route 17 movement, though none of the evaluated concepts proved feasible primarily due to the existing topography in this location. The severity of the safety concerns associated with the left turning roadway can be lessened, however, by relocating the egress traffic movement from the Brooks Pharmacy parking lot driveway that is currently located opposite the left turn. This egress can be provided from the rear of the parking lot in conjunction with improvements that would include a rear access road to Mansfield Drive and adjacent development, as described under the Route 22 (Forest Road) at Route 17 improvement recommendations.

### **Route 22 (Forest Road) at Route 17 (Middletown Avenue)**

This signalized intersection consists of three heavily skewed approach legs with a stop-controlled leg located between Route 17 and Route 22 that accommodates movements from northbound Route 22 to southbound Route 17 and vice versa. The stop-controlled leg provides insufficient storage space for tractor-trailer trucks attempting turns at this location resulting in impeded through traffic movements and associated safety issues. In

addition, the lack of pedestrian accommodations throughout the area creates safety concerns for pedestrians along the heavily traveled Route 22/Route 17 corridor. Existing operational deficiencies are also present in this area due to a general lack of access management and the numerous commercial curb cuts located in close proximity to one another.

Two alternative potential improvement concepts were developed for this area to address the primary goals of providing improved intersection geometry, improved access management, and enhanced pedestrian accommodations to develop a sense of place in Northford Center.

Concept A consists of realigning the Route 17 approach to Route 22 and creating a four-legged signalized intersection with a new primary commercial driveway access to commercial developments located on the east side of the roadway. This configuration eliminates the existing stop-controlled leg located south of the signal by providing improved intersection geometry that can accommodate a large left turning vehicle from northbound Route 22 (Forest Road) to southbound Route 17. The new primary commercial driveway access provides opportunities to eliminate curb cuts that provide access to the Northford Plaza shopping center. Widening of Route 22 would likely be required to provide a northbound left turn lane to Route 17 and a southbound left turn lane to the new commercial driveway. This widening would also facilitate lengthening of the existing northbound left turn lane at the Mansfield Drive intersection to provide adequate storage capacity.

Concept B consists of reconfiguring the existing intersection and providing a four-legged, single lane roundabout with a new primary commercial driveway access to commercial developments located on the east side of the roadway. Similar to Concept A, the roundabout eliminates the existing stop-controlled leg located south of the signal. In addition, the roundabout layout can accommodate the turning movements of WB-50 and WB-62 design vehicles by utilizing a mountable apron around the interior circle to accommodate inside tracking of the rear wheels. This concept would also provide secondary traffic calming benefits in this area.

Both potential improvement concepts relocate Ardsley Avenue access to Route 22 via the new primary commercial driveway access. In addition, both concepts provide accommodations for a potential commercial access road that would parallel Route 22/Route 17, extending behind Brooks Pharmacy and connecting to Mansfield Drive. This access road would provide alternative commercial access points, allow ingress-only movements from Route 22/17 to Brooks Pharmacy and the Northford Store, and facilitate commercial in-fill opportunities in the area.

New sidewalks and streetscape improvements could be coordinated with Concept A or Concept B intersection reconfiguration improvements to provide enhanced pedestrian access to commercial developments in the area while creating a sense of place in Northford Center. These improvements would be consistent with the sidewalk and streetscape elements that were constructed as part of the Brooks Pharmacy development.

**Route 80 at Thomson Street and Mill Avenue**

This signalized intersection is a ConnDOT-listed accident location with 48 recorded accidents occurring between January 1, 2001 and December 31, 2004. Eastbound or westbound vehicles caused more than 70% of all accidents. In addition, approximately one-third of these accidents were attributed to violations of the traffic signal and involved angle collisions with northbound or southbound traffic in the intersection.

Based upon a safety analysis of this intersection and a review of the existing traffic signal plans, there is potential to increase the existing northbound and southbound all-red time from one second to two seconds. This additional second, in conjunction with any other timing modifications to maintain existing operations, would provide more time for eastbound and westbound vehicles to clear the intersection prior to northbound and southbound traffic advancing into the intersection.

**I.A Preliminary Construction Cost Summary – State Roadway Improvements**

The following table presents a summary of the preliminary construction cost estimates for the State roadway improvement recommendations. These estimates were developed in accordance with ConnDOT guidelines for preliminary cost estimating dated January 2006. It should be noted that the costs shown in the table are exclusive of utility relocation, right-of-way acquisition, and environmental mitigation costs due to the limited information available at this time.

**Preliminary Construction Cost Estimates – State Roadways**

Location	Estimated Construction Cost (2006 \$)
Route 103 (Maple Avenue) at Pool Road & Laydon Avenue	\$90,000
Route 22 between Route 17 & Foote Hill Road	\$10,000
Route 22 at Route 150	\$1,100,000
Route 22 at Route 17 Intersections – Concept A	\$1,800,000
Route 22 at Route 17 Intersections – Concept B	\$1,500,000
Route 80 at Thompson Street & Mill Avenue	\$2,000

**I.B Recommended Implementation Strategy – State Roadway Improvements**

The following table presents a summary of the recommended near and long-term recommendations for the overall State roadway improvement implementation strategy. A brief summary of each recommended action and improvement is provided along with the agencies and/or parties involved in the implementation of the recommended improvement.

**Implementation Strategy Summary – State Roadways**

Recommended Action	Involved Parties/Agencies
<b>Near-Term Implementation Plan</b>	
Route 80 at Mill Avenue & Thompson Street ▪ Signal Timing Modifications	ConnDOT
Route 22 (Forest Rd) between Route 17 & Foote Hill Road ▪ Access Management Improvements at Mobil, Sunoco, Northford Plaza	ConnDOT North Branford
Route 22 at Route 17 Intersections ▪ Garnering Local Support, Pursuing Zoning Regulation Changes	North Branford
Initiation of Long-Term Improvements ▪ Including Funding Applications, Environmental Studies, Prelim. Design	ConnDOT
<b>Long-Term Implementation Plan</b>	
Route 103 (Maple Avenue) at Pool Road & Laydon Avenue ▪ Extension of Left Turn Lane/Widening, Signal Timing Modifications	ConnDOT North Haven
Route 22 (Clintonville Road) at Route 150 ▪ Realignment of Route 150	ConnDOT North Branford
Route 22 (Clintonville Road) at Route 17 & Mansfield Drive ▪ Extension of Left Turn Lane/Widening	ConnDOT North Branford
Route 22 (Forest Road) at Route 17 ▪ Reconfiguration of Intersection, New Primary Commercial Access	ConnDOT North Branford

**II Improvement Recommendations – Local Roadways**

Increasing traffic demands and travel speeds along local roadways in the Route 22 study area have raised concerns regarding safety for all motorized and non-motorized roadway users including bicyclists and pedestrians. Cut-through traffic routes that experience the highest volumes of average daily traffic and the highest travel speeds are of primary concern. A number of these cut-through traffic routes were identified through the public involvement stages of this study. These routes were investigated by the study team and subsequently prioritized based on several criteria including traffic volumes, speeds, cut-through traffic percentages, and existing land use along each route.

In addition, the study team developed a toolbox of traffic calming measures that was designed to help reduce travel speeds on collector roadways and local streets. Traffic calming measures that are applicable to roadways in the study area include edge striping, colored/textured shoulder pavement, speed humps, bulbouts, chokers, lateral shifts, and neighborhood traffic circles.

The following table presents a summary of the cut-through routes for which detailed traffic calming recommendations were developed. Each route is listed with its priority ranking score which is discussed in detail in Section 4.2 of this study. The types of traffic calming measures that are applicable to the specific routes are also noted.

**Summary of Applicable Traffic Calming Measures**

Route	Priority Score	Edge Striping	Textured Shoulder	Speed Hump	Bulbout	Choker	Lateral Shift	Traffic Circle
Spring Road North Haven	89	X	X		X			X
Foxon Hill Road East Haven	83	X	X					
Cloudland Road/Charnes Drive North Haven/East Haven	81	X	X	X				
Mill Road North Branford	75	X	X		X			X
Pool Road North Haven	75	X	X		X	X	X	X
Mill Road North Haven	74	X	X			X		
Arrowdale Road North Haven	70	X	X		X			X
Village Street North Branford	60	X	X					
Half Mile Road/Auger Road Ext. North Haven/East Haven/North Branford	55	X	X					X

**II.A Typical Cost Guidelines**

The following table presents typical construction costs for various physical traffic calming measures recommended for use in the study area. Typical cost ranges are provided for certain measures to reflect the size variability associated with constructing these measures in different areas.

**Cost Guidelines for Physical Traffic Calming Measures**

Measure	Typical Cost
Bulbouts	\$10,000 - \$15,000 per intersection
Chokers/Lateral Shifts	\$8,000 - \$12,000 per location
Neighborhood Traffic Circles	\$5,000 - \$10,000 each
Speed Humps	\$4,000 each



**II.B Recommended Implementation Strategy – Local Roadway Improvements**

The following table presents a summary of the recommended near and long-term recommendations for the overall local roadway improvement implementation strategy. A brief summary of each recommended action and improvement is provided along with the agencies and/or parties involved in the implementation of the recommended improvement.

**Implementation Strategy Summary – Local Roadways**

Recommended Action	Involved Parties/Agencies
<b>Near-Term Implementation Plan</b>	
Continue Soliciting Input from Local Residents Relative to Traffic Calming Needs	Respective Municipalities
Establish Procedures for Town-Wide Traffic Calming Program	Respective Municipalities
Continue Enforcement of Speed Limits Along Identified Cut-Through Routes	Respective Municipalities
Implement Edge Striping Improvements where Applicable	Respective Municipalities
<b>Long-Term Implementation Plan</b>	
Investigate Opportunities to Include Traffic Calming Improvements in Future Roadway Projects	Respective Municipalities

It is generally recommended that traffic calming measures be implemented in stages, depending on the complexity of the solution. This staged implementation should begin with the least restrictive strategies that apply to the situation (signs, pavement markings, enforcement) and then progressively incorporate vertical and/or horizontal measures if required to achieve the desired improvement.

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# 1

## INTRODUCTION

The South Central Regional Council of Governments (SCRCOG) initiated the *Route 22 Corridor Planning Study* to identify existing transportation concerns and deficiencies in the Route 22 study area relative to increasing regional traffic demands. This study addresses these concerns and deficiencies through the development of feasible improvement concepts for State and local roadways in the area. The overall recommendation plan prioritizes improvement concepts based on identified levels of need and includes implementation strategies to help local municipalities and SCRCOG pursue future roadway improvement programming.

### 1.1 Study Area

The Route 22 study area, as shown in Figure 1-1, is located in the towns of North Haven, East Haven, and North Branford and consists of the State and local roadway network bounded by:

- Clintonville Road and Forest Road (Route 22) on the north and east
- Foxon Road (Route 80) on the south
- I-91 between Exits 8 and 12 on the west

The State routes included in this area are Quinnipiac Avenue/Maple Avenue (Route 103), which parallels I-91 between Routes 80 and 22, and Middletown Avenue (Route 17), which diagonally bisects the study area in a southwest-northeast direction.

The study area is generally characterized by centers of moderate to low-density suburban development with several largely undeveloped areas of rural woodland and farming land uses. The area includes the Clintonville, Pine Hill and Montowese sections of North Haven; the Foxon section of East Haven; Northford Center and the Totoket section of North Branford.

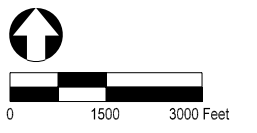
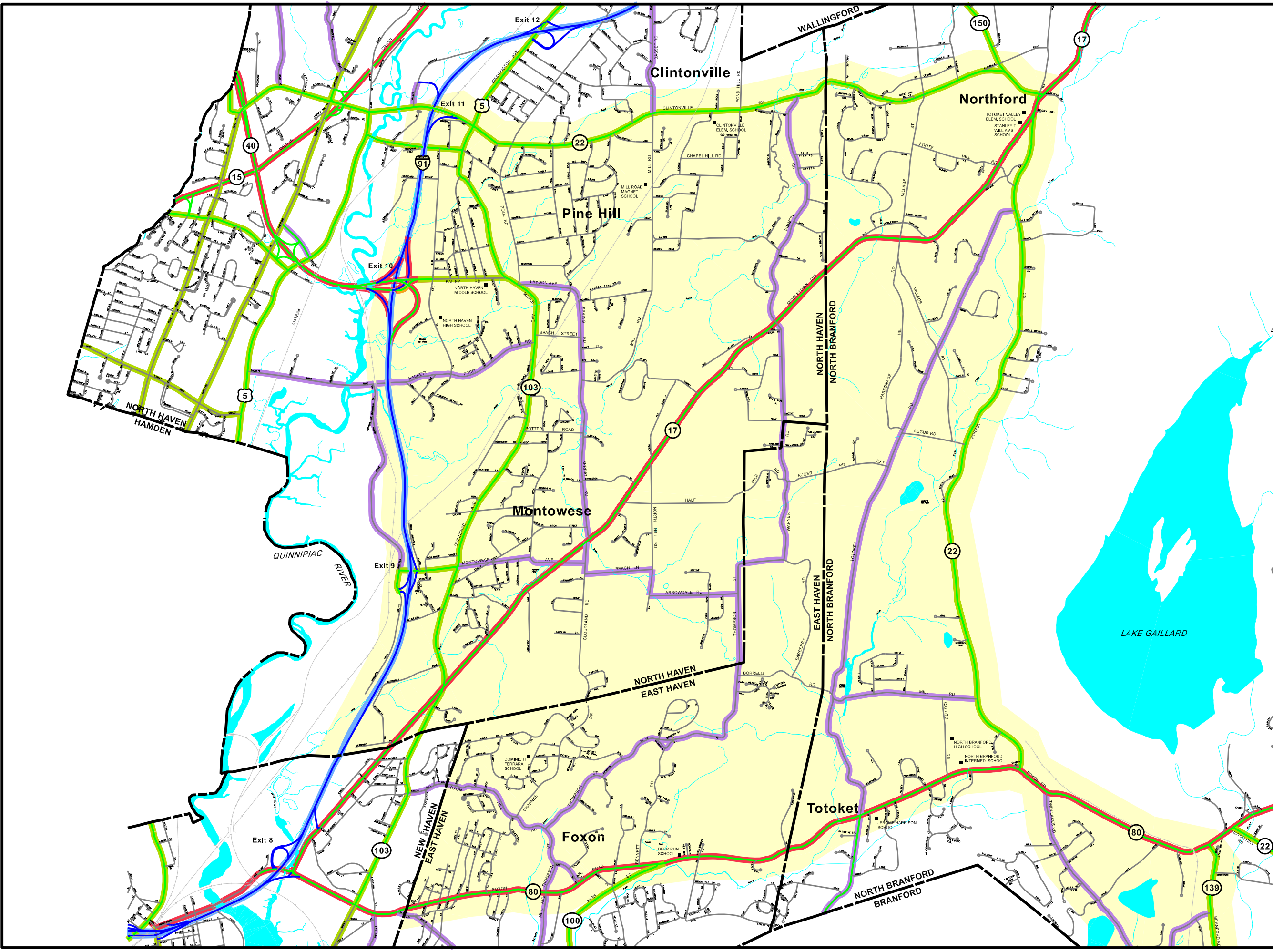
Local (municipal-owned and maintained) roadways in the Route 22 study area are generally classified as collector roads and local streets. Collector roads by definition typically serve to provide a link between local street systems and arterial roadways such as primary State and interstate routes. Local streets provide access to higher order roadways for local land abutters. Figure 1-1 shows the functional classification of each roadway within the study area based on information available from the Connecticut Department of Transportation (ConnDOT).



LEGEND

Study Area

- Functional Classifications:
- Interstate
  - Principal Arterial
  - Minor Arterial
  - Collector
  - Local



Study Area Map

Figure 1-1

## 1.2 Objectives

Deteriorating travel conditions along primary State and interstate highways in and around the Route 22 study area are contributing to increasing traffic demands on the local roadway network. Factors such as increasing traffic congestion, and near and long-term roadway construction programs on I-95, I-91 and Route 80 are routinely causing travel delays that are resulting in an increasing number of motorists utilizing alternative routes through the local roadway network in an attempt to bypass these delays. Consequently, increasing traffic volumes and travel speeds associated with cut-through traffic, as well as increasing traffic demands associated with residential growth in the study area, are raising safety concerns for local roadway users and corridor residents. In response to these conditions, the following primary objectives were established for this study:

- ***Identify existing areas of concern:*** This includes the identification of specific locations within the Route 22 study area that are contributing to travel delays, traffic congestion, and general safety concerns for roadway users.
- ***Evaluate improvement opportunities:*** This includes the development of preliminary improvement concepts to address transportation needs in the identified areas of concern; refinement of these concepts through public outreach and participation; and evaluation of the overall feasibility, effectiveness, and implementation costs of these improvement concepts.
- ***Recommend cost-effective improvement and implementation strategies:*** This includes the definition of improvement priorities and the development of implementation plans to help the participating municipalities and SCRCOG pursue future roadway improvement programming.

## 1.3 Study Limitations

It is evident based on visual inspection of the local roadways in the study area that some are non-standard with respect to the current design standards established and followed by ConnDOT. It is also evident that some of the local roadways are in poor physical condition. General roadway surface improvements and the improvement of non-standard design elements such as roadway width and horizontal alignment would require significant capital investment from the participating municipalities and would not necessarily address the root concerns associated with increasing cut-through traffic volumes and speeds. For these reasons, this study provides limited analysis and discussion of large-scale physical improvements and improvements to non-standard design elements along local roadways relative to existing site constraints and municipal budgetary constraints. Localized improvements and traffic calming measures along local roadways are thoroughly investigated and included in this study's improvement recommendations.

## 1.4 Traffic Forecasting

Traffic forecasting was used to predict future (year 2016) traffic demands in the Route 22 study area for the purposes of assessing future transportation needs and evaluating the effectiveness of the recommended improvement concepts. The SCRCOG transportation

demand model, which was developed in TransCAD modeling software, was used as the basis for developing the traffic forecasts for this study.

Efforts were taken by the study team to validate the performance of the SCRCOG model because reliable model outputs are critical to accurately predicting and understanding anticipated future conditions. These efforts consisted of reviewing and assessing the model inputs and the reasonableness of the modeling methods that have been incorporated into the model. In addition, the base year model outputs were compared to various existing transportation data to validate the model's performance. The study team concluded that the SCRCOG transportation model conforms to the standards of good transportation modeling practice and is a useful tool for predicting future conditions in the Route 22 study area.

### **1.5 Public Involvement**

A key component of the Route 22 corridor study is active participation from the study participants (e.g. municipal officials, ConnDOT and SCRCOG staff, consultant design staff), key stakeholders (e.g. local business representatives, local interest groups), and the general public. It is critical to the success of the study for each of these groups to be involved throughout the process so that the existing conditions, issues, and concerns in the study area can be thoroughly understood and effectively addressed. Active public involvement is also critical to reaching a consensus for the recommended improvement concepts. In-depth study and conceptual design of alternatives that are generally accepted by the public minimizes the likelihood for future opposition and facilitates the implementation of these improvements in subsequent stages of design and construction.

To encourage active public participation throughout the study process, the following outreach mechanisms were incorporated into the Route 22 study:

- “Kick-off” meeting with participating municipal staff
- Data gathering session with ConnDOT staff
- Data gathering work sessions (three) with municipal staff
- Work sessions (two) with municipal staff at key study milestones
- Public workshops (two) with the general public

## 2

## EXISTING CONDITIONS

The initial stages of the Route 22 study consisted of an extensive data gathering effort to identify various transportation-related conditions and environmental constraints that currently exist in the study area. Regional transportation conditions that have the potential to impact traffic operations and travel in the Route 22 study area were also identified. The types of information that were collected included:

- ConnDOT's 2004 digital orthophotographs of the study area
- Digital basemapping and geographical information system (GIS) data
- Historic sites and districts listed on the National Register of Historic Places
- Current and planned roadway improvement projects
- Current, planned and potential residential and commercial site development
- ConnDOT-listed accident locations for State roadways
- Local intersections of concern as identified by municipalities
- Local cut-through routes of concern as identified by municipalities
- ConnDOT's most recent automatic traffic recorder (ATR) counts for State roadways
- Current ATR counts and speed recordings along State and local cut-through routes
- Turning movement counts at key State and local intersections

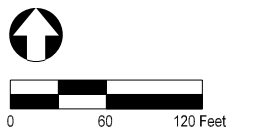
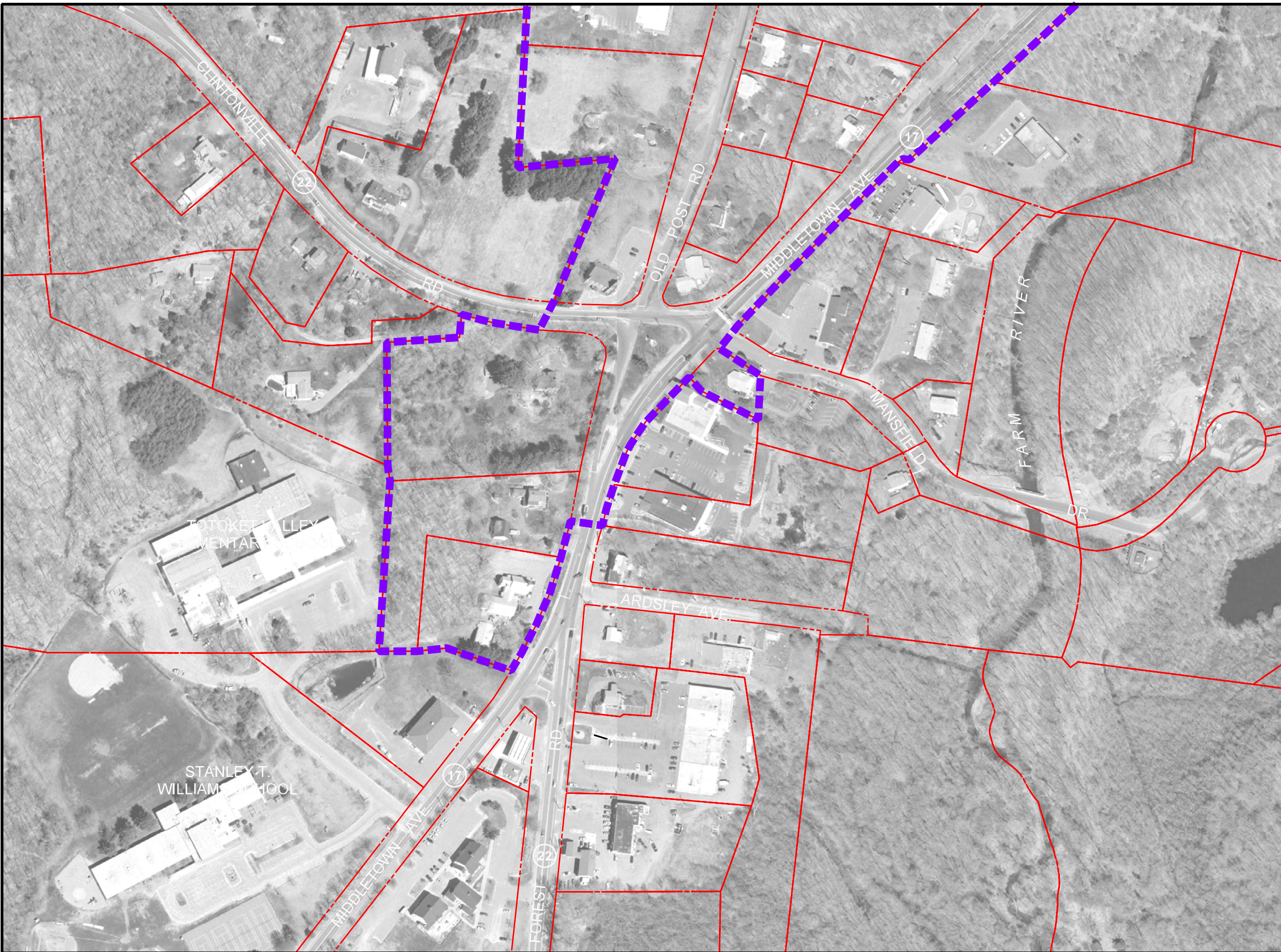
### 2.1 Topographical Information

The primary resource used to locate and identify existing topographical features and constraints was 2004 digital orthophotography of the study area provided by ConnDOT. This information is georeferenced to the Connecticut State Plane coordinate grid and clearly shows roadways, watercourses, and land uses. Figure 2-1 illustrates the detailed information that is available from the orthophotographs. Because physical features and land uses are continually changing, it is necessary to field check the existing conditions and compare this information to the 2004 data prior to utilizing it for design purposes.

The availability of digital basemapping and GIS data is limited to that provided by the Town of North Branford. GIS data layers were provided for the entire town and contained data layers associated with rights-of-way (ROW), building structures, land use, roadways, bridges, drainage structures, watercourses, and other topographical features. The Regional Water Authority developed this data in 1999. Hard-copy topographical maps are available for the towns of North Haven and East Haven.

LEGEND

- Approximate ROW/  
Property Lines
- █ Historic District  
Boundary



Northford Center  
Historic District

Figure 2-1

## 2.2 Site Constraints

For the purposes of this study, site constraints generally include existing ROW limits and building structures, wetlands and waterbodies, major bridge structures, utilities, and any other physical features in the study area that limit roadway improvement opportunities in specific locations. These constraints are further defined and discussed in detail relative to the recommended improvement concepts presented in Section 4 of this study report.

Historical and cultural resources are also important site constraints and can affect the types and levels of improvement that can be implemented in certain areas. The historic sites and districts listed on the National Register of Historic Places and located within the study area are shown in Table 2-1.

**Table 2-1. Historic Sites and Districts on National Register of Historic Places**

Resource Name	Town	General Location
Northford Center Historic District	North Branford	Middletown Ave, Old Post Rd
George Baldwin House	North Branford	530 Foxon Rd (Route 80)
Rising Sun Tavern	North Haven	Old Tavern Lane

As shown in Figure 2-1, the Northford Center Historic District includes the northern intersection of Route 22 and Route 17 and a portion of the overlap of these routes in North Branford. This area, which includes the intersections of Route 22 and Route 17 and a portion of Route 22 south of Route 17, is an area of concern as discussed in Section 2.6. The proximity of the historic district to the area of concern restricts the nature and extent of feasible improvement alternatives that can be considered in this location.

## 2.3 Residential and Commercial Development

The Route 22 study recommendations consider both the existing and future traffic and transportation conditions in the corridor. In order to best approximate the future traffic conditions, it is important to identify residential and commercial developments that have the potential to significantly impact local or regional traffic demands and existing travel patterns. Traffic forecasts typically incorporate average traffic growth rates. These rates do not necessarily account for traffic growth associated with individual developments such as big box retailers and large residential subdivisions.

As part of the data gathering work sessions, the participating municipalities identified planned commercial and residential developments in the study area as well as potential development opportunities. The anticipated traffic impacts associated with these developments were incorporated into the future traffic forecasts where appropriate. The participating municipalities identified the following potential developments:

North Haven

- Commercial development comparable to a Target department store along Universal Drive north of I-91 Exit 9
- Elderly housing development on Montowese Avenue between Route 103 and Route 17
- Undeveloped commercial-zoned parcel along Universal Drive south of I-91 Exit 9

North Branford

- 50 to 120-unit residential subdivision on Route 17 north of Northford Center
- 120 to 235-unit elderly housing development on Route 80 east of Route 22
- 84,000 sq-ft commercial development on Route 80 between Twin Lakes Road and Route 139
- 30 acres of undeveloped, industrial-zoned land on Fire-Lite Place off of Route 22

East Haven

- No development that is anticipated to significantly affect future traffic demand

**2.4 ConnDOT-Listed Accident Locations**

ConnDOT maintains a list of locations on the State roadway system where actual accident rates exceed a critical accident rate that is calculated based on the type of location, traffic volumes, and vehicle miles traveled on the roadway. Accidents occur at these locations at a rate higher than is expected for similar locations. ConnDOT lists a location if 15 or more accidents occur over a rolling three year period and the actual accident rate exceeds the critical rate. The whereabouts of ConnDOT-listed accident locations helps to both identify existing transportation deficiencies and prioritize improvement needs based on safety criteria. Accident locations within the study area listed by ConnDOT include:

North Haven

- Route 22 at Route 103 and US 5
- Route 22 at Pool Road
- Route 22 at Bassett Road and Mill Road

North Branford

- Route 22 between Route 17 and Foote Hill Road

East Haven

- Route 80 at Thompson Street and Mill Street

For the purposes of this study it is assumed that the locations listed here require special consideration based on past safety needs. ConnDOT will generally consider improvement recommendations in these locations a higher priority for funding and project implementation.

No similar accident locations along local roadways were identified by the participating municipalities.

## 2.5 Roadway Improvement Projects

Information regarding recently completed and currently planned roadway improvement projects in the Route 22 study area was obtained from ConnDOT to minimize the potential for redundancy between recommendations of this study and ConnDOT’s ongoing roadway improvement program. Table 2-2 provides a brief summary of recently completed and planned projects administered by the Department.

**Table 2-2. Roadway Improvement Projects Administered by ConnDOT**

Project Location	Town	Purpose	Complete/Planned
Routes 22/5 at I-91 Exit 11 NB off	NH	Signal upgrade	Planned
Route 22 at Pool Road	NH	Signal upgrade; Turn lanes	Pending
Route 22 at Bassett & Mill Rd	NH	Signal upgrade	Planned
Route 17 at Route 103	NH	Signal upgrade	Planned
Route 22 at Village Street	NB	Signal upgrade; Turn lanes	Completed (2004)
Route 22 at Augur Road	NB	Widen shoulder bypass	Completed
Route 22 at Route 80	NB	WB left turn phase	Planned
Route 80 b/t Route 139/Twin Lakes	NB	Widen road to four lanes	Under construction
Route 80 at Great Hill Rd/Route 139	NB	Intersection improvements	Planned
Route 80 at Doral Farms Rd	NB	Signal upgrade	Planned
Route 80 at Totoket Road	NB	WB left turn signal phase	Planned

NH – North Haven; NB – North Branford;

In addition to current and planned ConnDOT initiatives in the study area, the North Haven police department is conducting a study of the Montowese Avenue corridor. The purpose of the Montowese Avenue study is to investigate roadway improvements and traffic calming measures to address traffic demands and speeds within the corridor.

## 2.6 Areas of Concern

The regional roadway network that includes the Route 22 study corridor also includes I-91 and I-95 in the greater New Haven area. Given ever-increasing traffic demands, I-95 and I-91 are historically congested during peak travel periods, particularly during summer months when higher recreational traffic volumes combine with typical commuter traffic. In addition, these roadways are particularly vulnerable to reduced levels of serviceability that are associated with localized traffic incidents and long-term roadway construction programs (e.g. I-95 New Haven Harbor Crossing Corridor Improvement Program, Pearl Harbor Memorial (Q) Bridge, I-95/I-91/Route 34 interchange). Local experience shows that it is not uncommon for daily commuters and other motorists familiar with the region to utilize alternate routes to bypass congestion and delays on major roadways. The result is a migration of peak traffic from the interstates to other major north-south and east-west routes such as US 1, Route 80, Route 139, Route 22 and Route 103. As these other major routes begin experiencing congestion and delays resulting from traffic demand that had been diverted from the interstates, motorists begin utilizing secondary and local roadways to maintain mobility through the region.



Current traffic data and observations suggest that the conditions described above, in combination with locally generated traffic demands, are affecting travel conditions in the Route 22 study area. Because Route 22 and Route 80 provide direct and indirect access (via other major routes such as Routes 103 and 139) to I-91 and I-95, they serve local traffic that is destined for the interstates and regional traffic that is diverted from the interstates during periods of congestion. The overall traffic demand on these major routes has resulted in motorists utilizing alternative routes through the local roadway network in an attempt to bypass traffic congestion and travel delays.

In conjunction with work sessions with municipal officials and SCRCOG staff, as well as workshops with the general public, the study team identified and evaluated *areas of concern* that are potential candidates for future roadway improvements. These areas of concern include intersections or roadway segments identified as sources of delay within the study area; local roadway cut-through routes that are evidently being used to bypass delays; and other locations with identified operational and safety issues.

### 2.6.1 State Roadways

Local experience, observation and available traffic data suggest that several locations on State roadways around the perimeter of the study area are sources of peak period travel delays. Because of their function and location in the overall roadway network, these locations experience some of the highest daily traffic volumes. Consequently, traffic operations at these locations affect the greatest number of motorists and operational breakdowns have the potential to divert significant amounts of traffic to the local roadway system. These major locations are shown in Figure 2-2 and include:

*Route 80 between I-91 Exit 8 and East Haven Town Line – New Haven:* Exit 8 is a full-service interchange located near the southwest quadrant of the Route 22 study area and provides direct access to and from Route 80. Dense commercial development, intersections with Routes 17 & 103, and high traffic demands along Route 80 between Exit 8 and the East Haven town line contribute to travel delays in this area.

*I-91 Exit 9 and adjacent Montowese Avenue (SR 715) – North Haven:* Exit 9 is a full-service interchange located approximately two miles north of Exit 8 and provides direct access to and from Montowese Avenue and significant commercial development along Universal Drive. Exit 9 also provides indirect access to Route 17, Route 103, and local roadways located in the central portion of the study area.

*US 5 between Route 22 and I-91 Exit 12 – North Haven:* Exit 12 is a full-service interchange located near the northwest quadrant of the Route 22 study area and provides direct access to and from US 5. Because Exit 11 only provides limited service to I-91 from Route 22, Exit 12 serves as a major point of access to Route 22 via US 5. Although the intersection of US 5, Route 22 and Route 103 does not reportedly experience unusually long delays, dense commercial development, high traffic demands, and several signalized intersections along US 5 between Exit 12 and Route 22 contribute to travel delays in this area.

*Route 17 and Route 22 Junction and Vicinity – Northford:* This junction consists of two closely spaced intersections located in the Northford section of North Branford in the northeast quadrant of the study area. The short section of roadway where Route 17 and Route 22 overlap carries an average of 17,600 vehicles per day (2004 Traffic Log, ConnDOT). Peak hour travel delays at this location are exacerbated by unusual intersection geometry, high traffic volumes and concentrated commercial development.

*Route 80 and Route 139 Intersection – North Branford:* This intersection is located in the southeast quadrant of the study area and is a bottleneck for eastbound traffic on Route 80 during the afternoon peak traffic period. It is anticipated that capacity improvements along the section of Route 80 between the Route 22 overlap and Route 139 scheduled for completion in 2007 will greatly reduce congestion delays at this location.

In addition, numerous other State roadway intersections were identified as areas of concern for a variety of reasons including travel delays, existing intersection geometry, and general safety concerns. These areas are shown in Figure 2-2 and listed below with their particular identified need or deficiency:

North Haven

- Route 22 at Mill Road and Bassett Road – intersection delays
- Route 22 at Chapel Hill Road – difficulty accessing Route 22 from side road
- Route 17 at Cloudland Road and Spring Road – intersection delays, geometry
- Route 103 at Pool Road and Laydon Avenue – intersection delays, geometry, safety

North Branford

- Route 22 at Route 150 – intersection geometry, safety
- Route 22 at Mill Road – intersection sight distance from Mill Road
- Route 80 at Totoket Road – intersection delays

East Haven

- Route 80 at Route 100 – intersection geometry

### **2.6.2 Local Cut-Through Traffic**

Cut-through traffic can generally be defined as non-local traffic that utilizes local streets rather than the arterial roadway network for through travel movements. The term is typically applied to traffic on residential neighborhood streets where a high percentage of non-local traffic is creating an unsafe environment due to increasing volumes and travel speeds. For the purposes of this study, cut-through traffic applies to non-local traffic utilizing minor collector roads as well as local streets for through movements.

The identification of cut-through traffic routes involves recognizing that a particular roadway is experiencing unusually high volumes of traffic relative to its functional classification and local land uses, especially during peak periods. These routes can usually be associated with the avoidance of identified areas of congestion or sources of delay. As part of the data gathering work sessions, the participating municipalities identified specific roadways that are recognized cut-through routes. The identified cut-through routes are shown in Figure 2-2 and listed below. As illustrated in the figure, it is apparent that several of these cut-through routes are routinely being utilized to bypass the major areas of concern discussed previously in Section 2.6.1.

#### North Haven

- Montowese Avenue/Beach Lane/Arrowdale Road/Thompson Street corridor
- Half Mile Road corridor (to Augur Road Extension in East Haven)
- Cloudland Road/Spring Road/Laydon Avenue corridor
- Pool Road

#### North Branford

- Augur Road Extension/Augur Road corridor (from Half Mile Road in East Haven)
- Mill Road (from Borrelli Road in East Haven)
- Twin Lakes Road
- Village Street/Augur Road corridor
- Village Street/Foote Hill Road corridor
- Village Street (north of Route 22) from Route 150
- Mill Road




#### East Haven

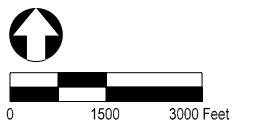
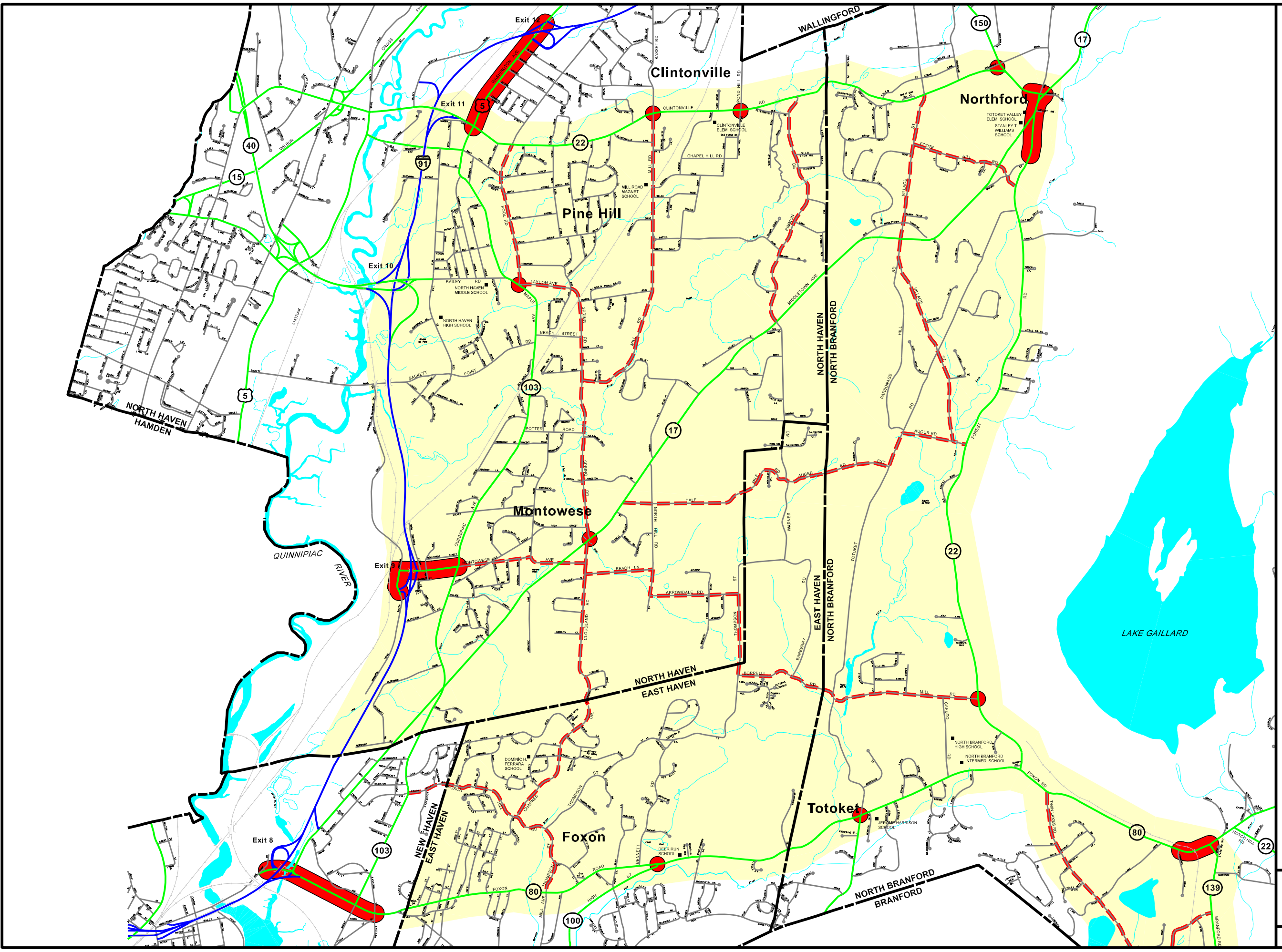
- Half Mile Road/Augur Road Extension corridor
- Thompson Street/Borrelli Road/Mill Road corridor (from Montowese Avenue/Beach Lane/Arrowdale Road in North Haven)
- Charnes Drive (from Cloudland Road in North Haven)
- Foxon Hill Road

It was noted by municipal officials that perceived vehicle speeds are a concern on Cloudland Road, Beach Lane and Arrowdale Road in North Haven, and on Foxon Hill Road in East Haven.



LEGEND

-  Study Area
-  Area of Concern
-  Cut-Through Route



Areas of Concern & Identified Cut-Through Routes

Figure 2-2

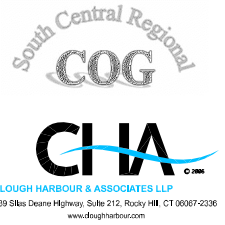
## **2.7 Traffic Data**

Traffic data that includes existing average daily traffic and peak hour volumes help assess the magnitude of travel delays in the identified areas of concern. Capacity analyses to determine levels of service (LOS) based on existing and future forecasted volumes provide a qualitative measure of roadway capacity and overall travel conditions. In addition, daily traffic volumes and speed data help identify the predominant cut-through routes and provide an initial indication of which routes are most vulnerable to safety issues associated with high traffic speeds.

### **2.7.1 Volumes**

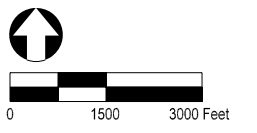
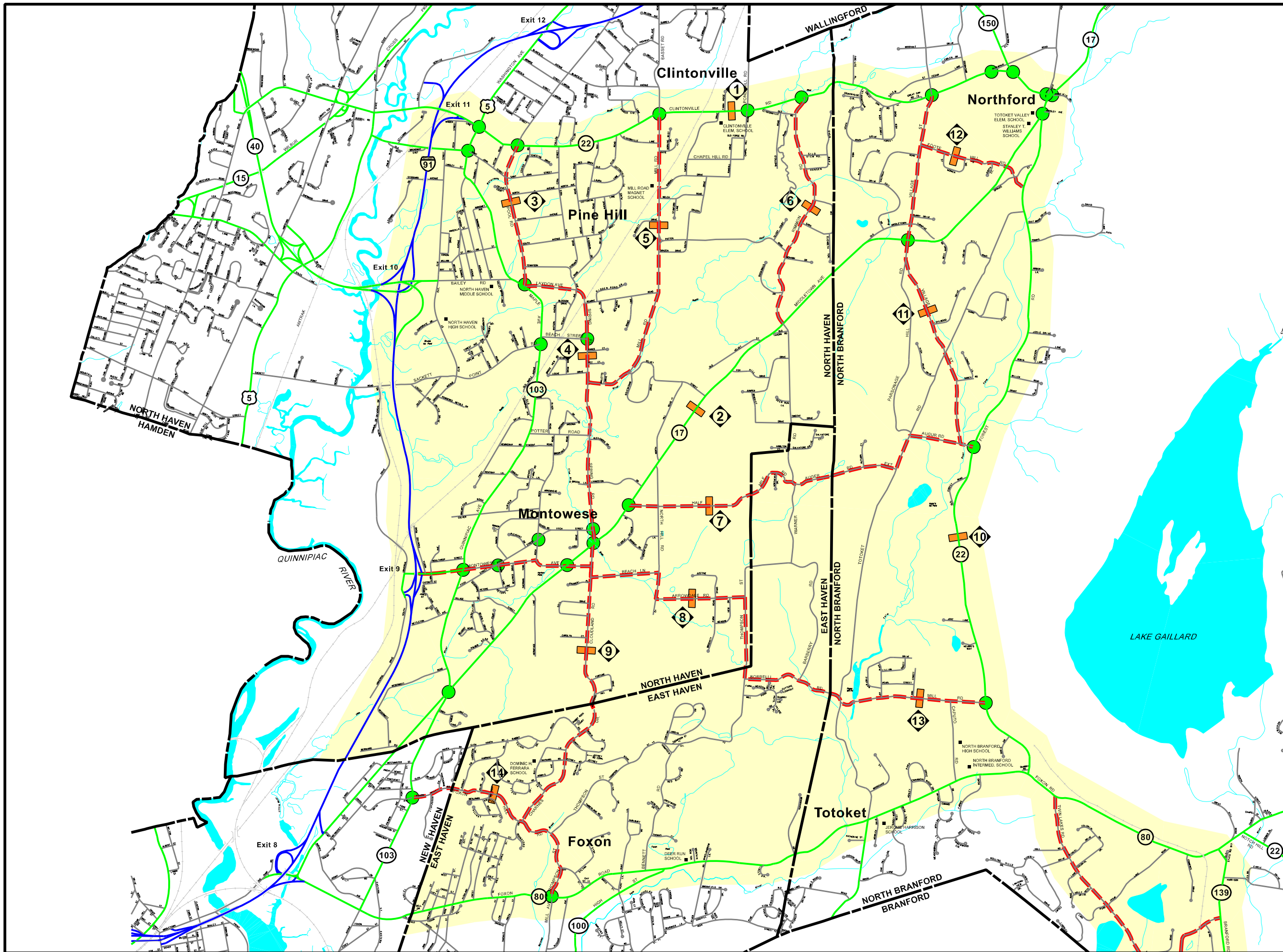
ConnDOT maintains average daily traffic (ADT) information for State roadway segments in the Route 22 study area based on periodic automatic traffic recorder (ATR) counts. A summary of ADT volumes from ConnDOT's 2004 Traffic Log for routes 22, 80, 17, 103, and SR 715 (Montowese Avenue) is provided in the appendix of this report. This data shows that ADTs range from 5,600 vehicles per day (vpd) on sections of Route 17 in North Branford to 25,600 vpd on Route 80 near the East Haven – New Haven town line.

To supplement available State roadway information, the study team obtained ATR counts at strategic locations (shown in Figure 2-3) along the local roadways identified as cut-through routes. ATR counts were also obtained at locations on Route 22 and Route 17 to validate ConnDOT's traffic data along these routes. ATRs were placed in mid-January 2006 and recorded a typical 48-hour weekday period that consisted of Tuesday-Wednesday or Wednesday-Thursday. All recordings were made under generally fair weather conditions. Table 2-3 provides a summary of the recorded volumes obtained by the ATRs. The recorded volumes were subsequently adjusted by a seasonal adjustment factor provided by ConnDOT to develop AADT volumes.



LEGEND

- Study Area
- Cut-Through Route
- ATR Location
- # ATR Location ID
- Intersection Count Location



ATR & Intersection Count Locations

Figure 2-3

**Table 2-3. ATR Count Summary**

Location	Volumes			
	Average	AM Peak	PM Peak	Peak Hour
<b>North Haven</b>				
1 Route 22	12900	840 WB	830 EB	1260 PM
2 Route 17	7850	460 WB	480 EB	710 PM
3 Pool Road	4000	150 NB	200 SB	380 PM
4 Spring Road	4650	250 NB	300 SB	480 PM
5 Mill Road	3350	175 NB	170 SB	300 PM
6 Rimmon Road	850	55 NB	50 SB	90 AM
7 Half Mile Road	1200	65 WB	65 EB	120 PM
8 Arrowdale Road	3050	270 WB	240 EB	330 PM
9 Cloudland Road	3350	180 NB	270 SB	390 PM
<b>North Branford</b>				
10 Route 22	12500	700 NB	730 SB	1310 AM
11 Village Street	2150	165 NB	165 SB	240 PM
12 Foote Hill Road	700	40 EB	55 EB	90 PM
13 Mill Road	2200	140 WB	130 EB	240 PM
<b>East Haven</b>				
14 Foxon Hill Road	4800	300 WB	430 EB	580 PM

As shown in the table, daily volumes ranged between 1200 and 4800 vehicles. Morning (AM) and afternoon (PM) peak hours indicated a directional distribution of traffic in the northbound-westbound and eastbound-southbound directions, respectively. The distinct directional distribution of traffic during the AM and PM peak hours is characteristic of a predominantly commuter-comprised traffic stream. The overall peak hour traffic occurred in the PM in a majority of count locations.

Intersection turning movement counts were also obtained for morning and afternoon peak traffic periods at numerous locations (shown in Figure 2-3) throughout the study area. A summary of these counts is provided in the appendix of this report.

### 2.7.2 Speeds

Existing travel speeds were obtained in conjunction with ATR counts at strategic locations along the identified cut-through routes. Speeds were also obtained at locations on Route 22 and Route 17. Table 2-4 provides a summary of average and 85<sup>th</sup> percentile travel speeds at these locations. The 85<sup>th</sup> percentile speed refers to the speed at which 85% of vehicles are traveling at or below.

**Table 2-4. Travel Speed Summary**

Location	Speed [mph]		
	Posted	Average	85 <sup>th</sup> Percentile
<b>North Haven</b>			
1 Route 22	40	36	45
2 Route 17	45	40	52
3 Pool Road	30	39	45
4 Spring Road	30	38	44
5 Mill Road	30	37	44
6 Rimmon Road	30	29	35
7 Half Mile Road	30	31	41
8 Arrowdale Road	30	34	42
9 Cloudland Road	30	36	43
<b>North Branford</b>			
10 Route 22	45	45	53
11 Village Street	25	34	39
12 Foote Hill Road	25	32	41
13 Mill Road	25	35	41
<b>East Haven</b>			
14 Foxon Hill Road	25	31	39

As shown in the table, average speeds along the cut-through routes ranged between 31 and 39 mph; 85<sup>th</sup> percentile speeds ranged between 39 and 45 mph. Typical local roadway speed limits are 30 mph in North Haven, and 25 mph in East Haven and North Branford. In general, 85<sup>th</sup> percentile speeds exceed the posted speeds along the predominant cut-through routes by approximately 11 to 16 mph. Speeding of this magnitude and frequency indicates that vehicle speeds are more than a perceived concern along local roadways in the study area.

## 2.8 Candidates for Improvement

A determination of which State roadway locations and local cut-through routes were candidates for further study was made by considering such factors as identified need, existing and future operations, existing travel speeds, accident history, and current or planned improvements at each location. Locations that were identified as potential improvement candidates are presented in the following sections.

### 2.8.1 State Roadways

Table 2-5 presents a matrix summary of potential improvement candidates based on identified areas of concern and ConnDOT-listed accident locations. Candidate locations where ConnDOT improvement projects are currently being constructed or planned are also noted in the matrix.



**Table 2-5. Summary of Potential Improvement Candidates – State Roadways**

Location	Town	Identified Concern	Listed Accident Location	ConnDOT Project
Route 22 at Chapel Hill & Pond Hill Rd	NH	X		
Route 17 at Spring Rd & Cloudland Rd	NH	X		
Route 103 at Laydon Ave & Pool Rd	NH	X		
Route 22 at Route 103 & US 5	NH		X	
Route 22 b/t Route 17 & Foote Hill Rd	NB	X	X	
Route 22 (Clintonville Rd) at Route 17	NB	X		
Route 22 (Forest Rd) at Route 17	NB	X		
Route 22 at Route 150	NB	X		
Route 80 at Thompson St & Mill Ave	EH		X	
Route 80 at Totoket Road	NB	X		X
Route 80 at Route 139	NB	X		X
Route 22 at Pool Road	NH		X	X
Route 22 at Bassett Rd & Mill Rd	NH	X	X	X

NH – North Haven; NB – North Branford; EH – East Haven

It was assumed for the purposes of this study that areas of concern located outside of the study area would not be directly addressed by the study recommendations. These areas include Route 80 between I-91 Exit 8 and the East Haven town line, and US 5 between I-91 Exit 12 and Route 22. In addition, locations where improvements are being implemented or planned by ConnDOT were not studied under the assumption that these improvements address the existing and future transportation concerns in these areas.

The locations shaded in Table 2-5, which are exclusive of locations being addressed by ConnDOT, were considered for further evaluation by the study team. Intersections that are identified areas of concern were evaluated for existing and future operational deficiencies to determine the extent of travel delays at these locations. Intersections that are ConnDOT-listed accident locations were evaluated for possible safety improvements.

### 2.8.1.1 Existing Traffic Operations

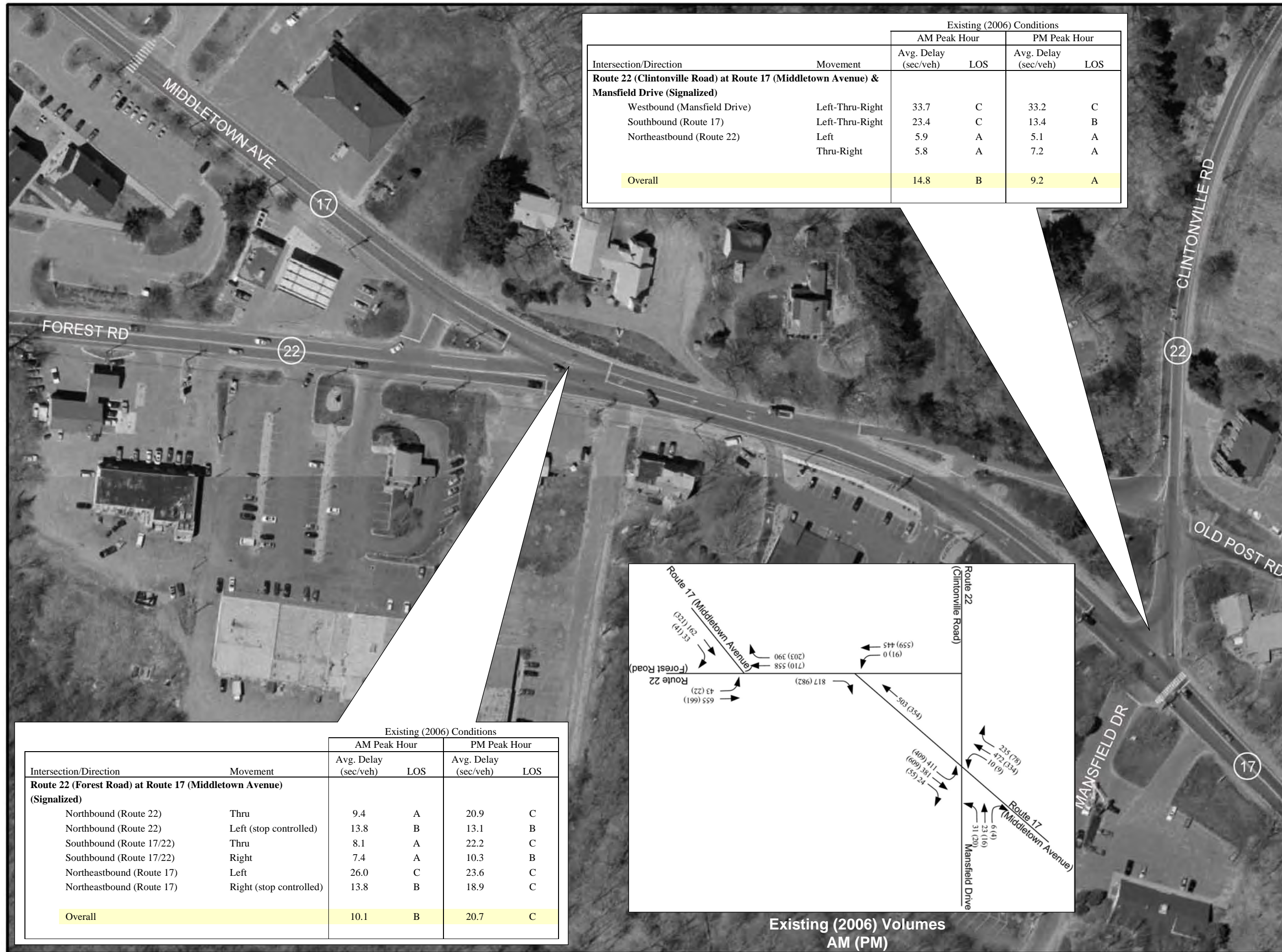
Existing traffic operations were analyzed for the eight intersection locations described in Section 2.8.1 as candidate improvement locations. Safety analyses were conducted for two of the eight intersections. Results are presented in Section 2.8.1.2. Capacity analyses were performed at six intersections using existing turning movement volumes provided by SCRCOG and procedures outlined in the *2000 Highway Capacity Manual* (Transportation Research Board) to determine a measure of existing operations. The results of the existing capacity analyses are illustrated in Figures 2-4 through 2-8. The operational effectiveness of each intersection movement and the intersection as a whole were assigned a level of service (LOS) based on the computed average control delay (in seconds per vehicle, sec/veh) for each movement or group of movements. LOS values range from A to F with A representing

the best operational conditions. LOS F represents long delays and generally unacceptable conditions. LOS D or better is generally considered acceptable.

The results of the existing capacity analyses indicate that the following unsignalized intersections have movements that currently operate at LOS E or F during the existing AM or PM peak hour:

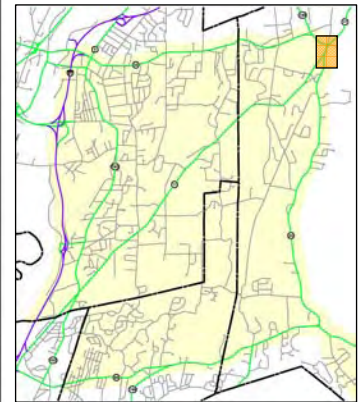
- Route 22 at Chapel Hill Road and Pond Hill Road in North Haven  
*Pond Hill Road approach to Route 22 operates at LOS E during the AM peak hour*
- Route 17 at Spring Road and Cloudland Road in North Haven  
*Left turn movement from Spring Road approach to Route 17 operates at LOS E during the AM peak hour*

The remaining movements at the other intersections all operate at LOS D or better during both the AM and PM peak hours.

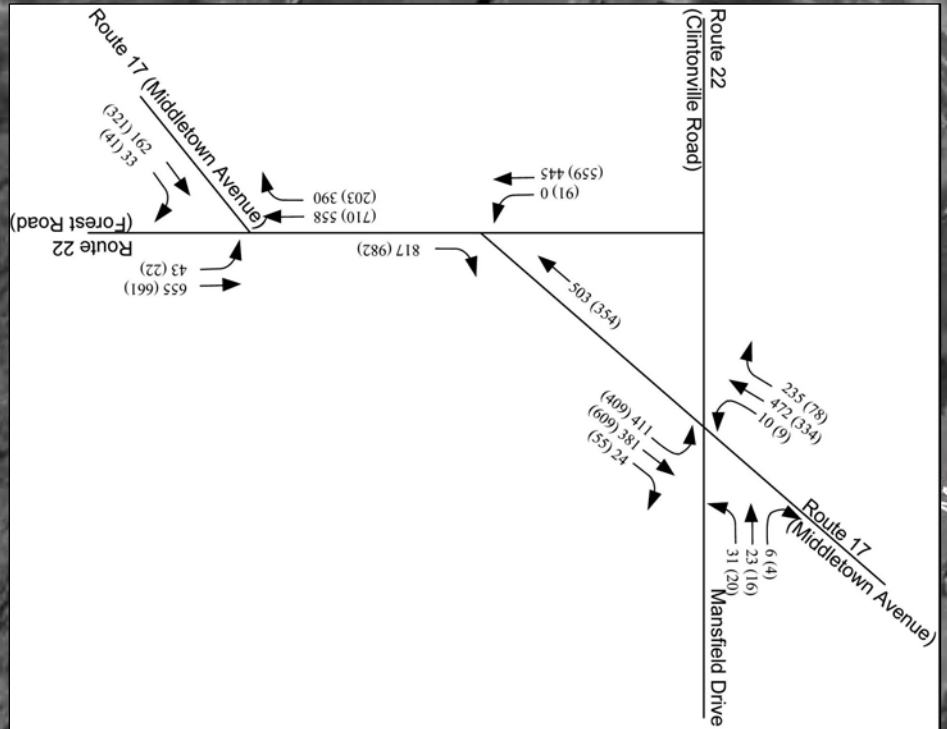


Intersection/Direction	Movement	Existing (2006) Conditions			
		AM Peak Hour		PM Peak Hour	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Route 17 (Middletown Avenue) &amp; Mansfield Drive (Signalized)</b>					
Westbound (Mansfield Drive)	Left-Thru-Right	33.7	C	33.2	C
Southbound (Route 17)	Left-Thru-Right	23.4	C	13.4	B
Northeastbound (Route 22)	Left	5.9	A	5.1	A
	Thru-Right	5.8	A	7.2	A
<b>Overall</b>		<b>14.8</b>	<b>B</b>	<b>9.2</b>	<b>A</b>

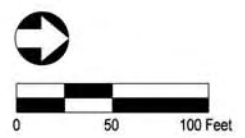
**Route 22**  
Corridor Planning Study  
North Haven - East Haven - North Branford



Location Map

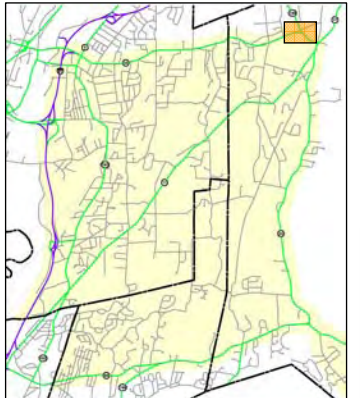


Intersection/Direction	Movement	Existing (2006) Conditions			
		AM Peak Hour		PM Peak Hour	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 22 (Forest Road) at Route 17 (Middletown Avenue) (Signalized)</b>					
Northbound (Route 22)	Thru	9.4	A	20.9	C
Northbound (Route 22)	Left (stop controlled)	13.8	B	13.1	B
Southbound (Route 17/22)	Thru	8.1	A	22.2	C
Southbound (Route 17/22)	Right	7.4	A	10.3	B
Northeastbound (Route 17)	Left	26.0	C	23.6	C
Northeastbound (Route 17)	Right (stop controlled)	13.8	B	18.9	C
<b>Overall</b>		<b>10.1</b>	<b>B</b>	<b>20.7</b>	<b>C</b>

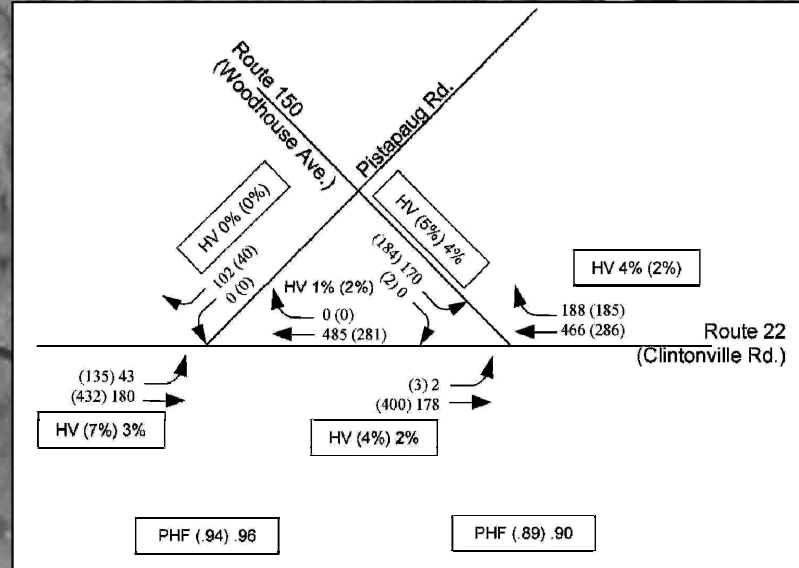


Route 22 at Route 17 Intersections Existing Capacity Analysis

Figure 2-4



Location Map



Existing (2006) Volumes  
AM (PM)

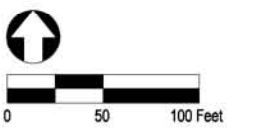
PISTAPAUG RD

WOODHOUSE AVE

CLINTONVILLE ROAD

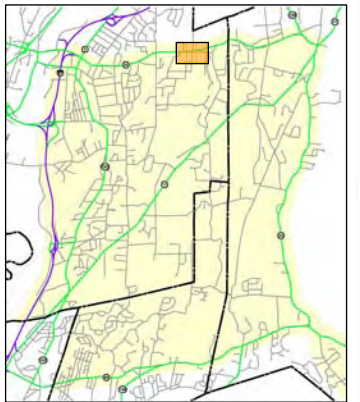
Existing (2006) Conditions

Intersection/Direction	Movement	AM Peak Hour		PM Peak Hour	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Route 150 (Woodhouse Avenue) (Unsignalized)</b>					
Southeastbound (Route 150)	Left-Right	30.5	D	34.8	D



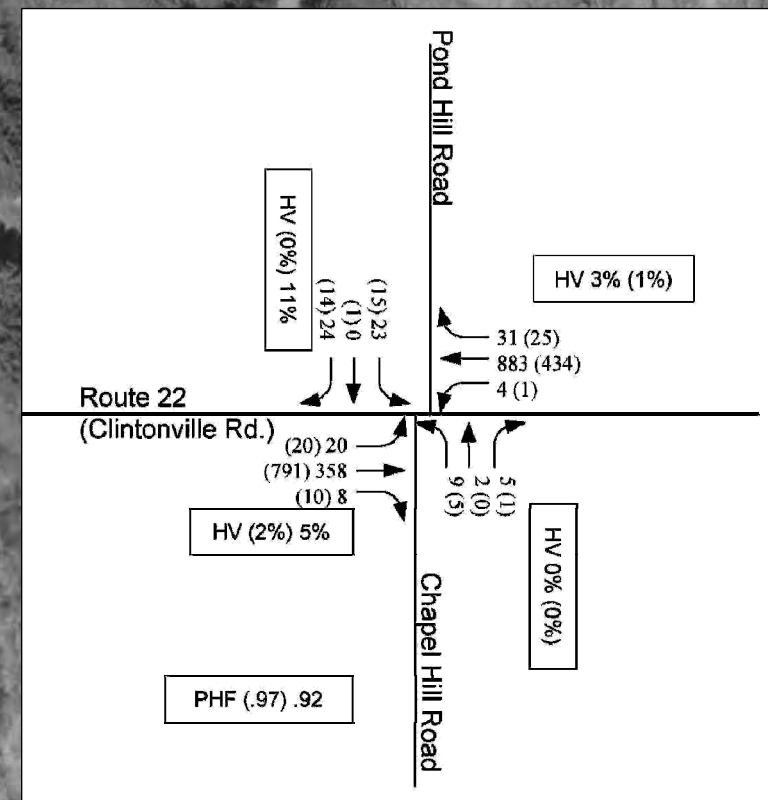
Route 22 at Route 150  
Existing Capacity Analysis

Figure 2-5

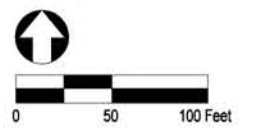


Location Map

Intersection/Direction	Movement	Existing (2006) Conditions			
		AM Peak Hour		PM Peak Hour	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Chapel Hill Road &amp; Pond Hill Road (Unsignalized)</b>					
Eastbound (Route 22)	Left	0.4	A	0.3	A
Westbound (Route 22)	Left	0.1	A	0.0	A
Northbound (Chapel Hill Road)	Left-Thru-Right	34.6	D	31.7	D
Southbound (Pond Hill Road)	Left-Thru-Right	39.8	E	25.2	D

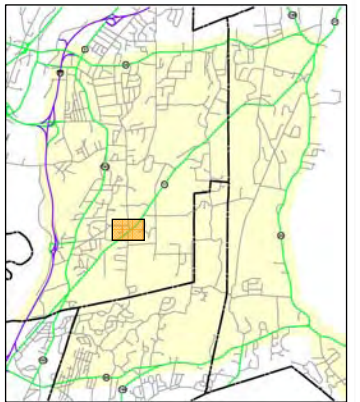


Existing (2006) Volumes  
AM (PM)



Route 22 at Chapel Hill Road & Pond Hill Road  
Existing Capacity Analysis

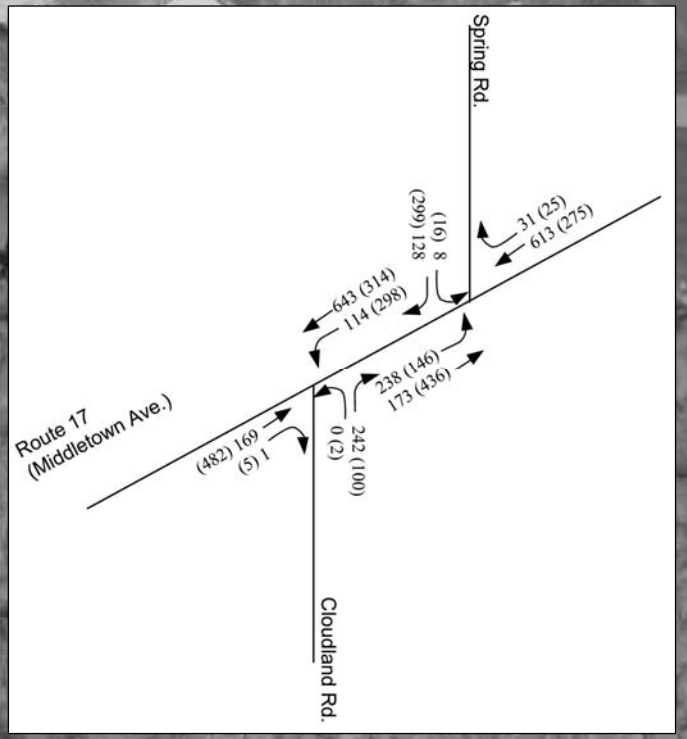
Figure 2-6



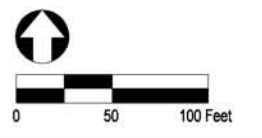
Location Map

Intersection/Direction	Movement	Existing (2006) Conditions			
		AM Peak Hour		PM Peak Hour	
		Avg. Delay (veh/sec)	LOS	Avg. Delay (veh/sec)	LOS
<b>Route 17 (Middletown Avenue) at Spring Road (Unsignalized)</b>					
Eastbound (Route 17)	Left-Thru	7.6	A	3.2	A
Southbound (Spring Road)	Left	39.9	E	24.3	C
	Right	16.6	C	13.9	B

Intersection/Direction	Movement	Existing (2006) Conditions			
		AM Peak Hour		PM Peak Hour	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 17 (Middletown Avenue) at Cloudland Road (Unsignalized)</b>					
Westbound (Route 17)	Left-Thru	10.9	B	6.8	A
Northbound (Cloudland Road)	Left-Right	2.2	A	14.1	B

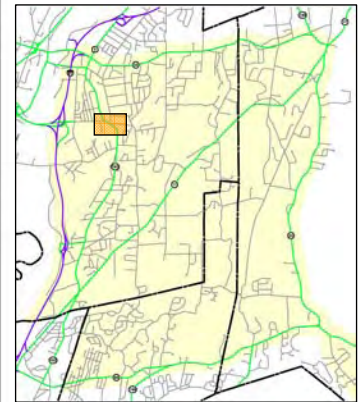


Existing (2006) Volumes  
AM (PM)

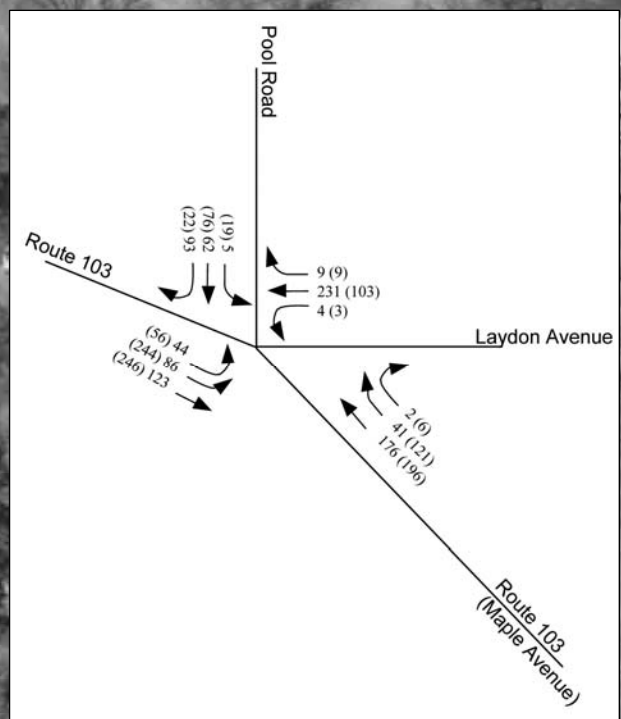


Route 17 at Cloudland Road & Spring Road  
Existing Capacity Analysis

Figure 2-7



Location Map



Existing (2006) Volumes  
AM (PM)



Intersection/Direction	Movement	Existing (2006) Conditions			
		AM Peak Hour		PM Peak Hour	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 103 (Maple Avenue) at Pool Road &amp; Laydon Avenue (Signalized)</b>					
Westbound (Laydon Avenue)	Left-Thru-Right	47.5	D	39.3	D
Southbound (Pool Road)	Left-Thru-Right	50.5	D	38.5	D
Southeastbound (Route 103)	Left	24.8	C	22.3	C
	Thru	17.6	B	10.4	B
Northwestbound (Route 103)	Thru	18.5	B	10.3	B
	Right	17.3	B	10.3	B
<b>Overall</b>		<b>33.2</b>	<b>C</b>	<b>19.6</b>	<b>B</b>



Route 103 at Pool Road & Laydon Avenue  
Existing Capacity Analysis

Figure 2-8

### 2.8.1.2 Safety Analysis

The study team reviewed historical accident data for the three ConnDOT-listed accident locations that were identified in Section 2.8.1 as candidate improvement locations. Accident data was obtained from ConnDOT for the four-year period beginning January 1, 2001 and ending December 31, 2004. This data was then analyzed for trends in certain characteristics such as collision types, contributing factors, and travel directions of offending vehicles to determine if physical roadway conditions or traffic demands are in part causing unsafe operating conditions in these locations. Details of the safety analysis are discussed below and presented in Tables 2-6 through 2-8.

#### Route 22 at Route 103 and US 5 – North Haven

As shown in Table 2-6, most accidents at this intersection have been rear-end collisions attributed to following too closely. Nearly half of all accidents, including rear-end collisions, have been caused by northbound vehicles entering the intersection from Route 103. The existing alignment of each approach leg is relatively tangent and provides adequate visibility of the intersection such that stopping sight distance is probably not a major contributing factor to the number of accidents at this location. However, the Route 103 approach has a relatively higher density of commercial access points and potential sources of conflict and distraction than the other approaches to the intersection, which could be contributing to a higher percentage of collisions on this approach. Overall traffic demand, driver inattention, and excessive approach speeds could be other probable causes given the nature of the intersection and driving environment in this location.

**Table 2-6. Accident Summary – Route 22 at Route 103 and US 5**

<b>Collision Type</b>	<b>Number</b>	<b>Percentage</b>
Turning – Same Direction	2	3.0
Turning – Opposite Direction	2	3.0
Turning – Intersecting Paths	2	3.0
Angle	2	3.0
Rear-End	54	81.9
Other	4	6.1
<b>Total</b>	<b>66</b>	<b>100</b>
<b>Contributing Factor</b>	<b>Number</b>	<b>Percentage</b>
Violated Traffic Control	3	4.5
Failed to Grant ROW	3	4.5
Following too Closely	51	77.3
Other	9	13.7
<b>Offending Vehicle Direction</b>	<b>Number</b>	<b>Percentage</b>
Northbound – Route 103	31	46.9
Southbound – US 5	11	16.7
Eastbound – Route 22	12	18.2
Westbound – Route 22	12	18.2



Route 22 between Route 17 and Foote Hill Road – North Branford

As shown in Table 2-7, more than one-third of all accidents along this section of roadway have been located at or near an intersection with a commercial driveway access. Of these, half (11 of 22) have been located at the Mobil service station, Sunoco service station, or Northford Plaza shopping center driveway. This data suggests that the number of commercial curb cuts in close proximity to each other and the general lack of access management in this area are contributing factors to the accident history.

**Table 2-7. Accident Summary – Route 22 between Route 17 and Foote Hill Road**

<b>Collision Type</b>	<b>Number</b>	<b>Percentage</b>
Turning – Same Direction	3	5.4
Turning – Opposite Direction	4	7.1
Turning – Intersecting Paths	5	8.9
Angle	2	3.6
Rear-End	23	41.1
Other	19	33.9
<b>Total</b>	<b>56</b>	<b>100</b>
<b>Contributing Factor</b>	<b>Number</b>	<b>Percentage</b>
Failed to Grant ROW	12	21.4
Following too Closely	22	39.3
Object in Road	8	14.3
Other	14	25.0
<b>Accidents Intersections</b>	<b>Number</b>	<b>Percentage</b>
Public Road Intersection	17	30.4
Residential Drive Intersection	1	1.8
Commercial Drive Intersection	22	39.3
None	16	28.5

Route 80 at Thompson Street and Mill Avenue – East Haven

As shown in Table 2-8, more than 70% of all accidents at this intersection are caused by vehicles traveling eastbound or westbound along Route 80. Nearly one-third of these are attributed to violations of the traffic signal and involve angle collisions with northbound and southbound traffic in the intersection. A possible factor in these accidents could be excessive speeding along Route 80, exacerbated by the downgrade of the westbound approach. Higher traveling speeds increase stopping distances such that vehicles are less likely to stop before entering the intersection on a signal phase change. Overall traffic demand and driver inattention could be other probable causes given the nature of the intersection and driving environment in this location.

**Table 2-8. Accident Summary – Route 80 at Thompson Street and Mill Avenue**

<b>Collision Type</b>	<b>Number</b>	<b>Percentage</b>
Turning – Same Direction	4	8.3
Turning – Opposite Direction	8	16.6
Turning – Intersecting Paths	3	6.3
Angle	11	22.9
Rear-End	19	39.6
Other	3	6.3
<b>Total</b>	<b>48</b>	<b>100</b>
<b>Contributing Factor</b>	<b>Number</b>	<b>Percentage</b>
Violated Traffic Control	13	27.1
Failed to Grant ROW	10	20.8
Following too Closely	16	33.3
Other	9	18.8
<b>Offending Vehicle Direction</b>	<b>Number</b>	<b>Percentage</b>
Northbound – Mill Avenue	10	20.8
Southbound – Thompson Street	4	8.4
Eastbound – Route 80	17	35.4
Westbound – Route 80	17	35.4

### 2.8.2 Local Cut-Through Routes

Automatic traffic recorder (ATR) counts that were obtained along the identified cut-through routes (summarized above in Section 2.7.1 and Table 2-3) indicate a distinct directional distribution of traffic in the AM and PM peak hours. In the AM peak hour, the predominant traffic direction is northbound-westbound through the study area toward I-91. In the PM peak hour, traffic is predominantly southbound-eastbound away from I-91. A peak hour directional distribution along a local roadway that is skewed to the predominant AM or PM travel direction indicates that the roadway is a potential cut-through route.

In addition to directional distribution in the peak hour, overall daily traffic demand is an important consideration in determining which cut-through routes are candidates for improvement. Higher traffic volumes typically result in conditions in the corridor that are generally unfavorable to local residents and other roadway users. These conditions include increased noise levels, reduced air quality, and increased safety concerns. Safety is a primary concern as occurrences of speeding, potential for accidents, and conflicts between automobiles and pedestrians or bicyclists all increase with increasing traffic.

For the purposes of this study, identified cut-through routes with peak hour directional distributions that are skewed to the predominant AM or PM travel direction *and* experiencing the highest daily traffic demands were considered candidates for improvement. Table 2-9 provides a summary of the identified cut-through routes based on peak hour directional distribution and daily traffic.

**Table 2-9. Summary of Potential Improvement Candidates – Cut-Through Routes**

Route	AADT	AM Peak Traffic (%)		PM Peak Traffic (%)	
		NB/WB	SB/EB	SB/EB	NB/WB
Foxon Hill Road	5150	74	26	73	27
Spring Road	5000	63	37	61	39
Cloudland Road	3550	68	32	68	32
Arrowdale Road	3250	81	19	73	27
Mill Road (North Branford)	2350	63	37	55	45
Village Street	2300	74	26	67	33
Pool Road	4250	57	43	52	48
Mill Road (North Haven)	3600	58	42	54	46
Half Mile Road	1250	61	39	62	38
Rimmon Road	900	61	39	62	38
Foote Hill Road	750	46	54	64	36

NB – Northbound; WB – Westbound; SB – Southbound; EB – Eastbound

As shown in Table 2-9, an arbitrary minimum daily volume requirement of 1000 vehicles was established for the purposes of this study as a basis for determining which routes would be further investigated for potential traffic calming improvements. Rimmon Road and Foote Hill Road experience the lowest AADT volumes. The remaining routes, which are shaded in Table 2-9 are candidates for potential traffic calming improvements.

## 3

## FUTURE TRAFFIC CONDITIONS

The impacts of future traffic demands on the existing roadway network were evaluated to determine which candidate improvement areas (presented in Chapter 2) will require capacity improvements to provide acceptable levels of service in the future. For the purposes of this study, a ten-year planning horizon (2016) was selected as a basis for traffic demand forecasting. Anticipated traffic demand in 2016 was developed from the South Central Regional Council of Governments (SCRCOG) regional transportation demand model. The “no-build” forecast model incorporates planned transportation network improvements and anticipated land-use changes, but does not include specific improvements to roadways within the study corridor.

### 3.1 Traffic Forecasting

The traffic forecasting component of this study consisted of performing base year (2006) and future year (2016) model runs to determine the percentage change in the modeled traffic volumes along State and local roadways in the study area. The percentage change in volumes as determined by the traffic model were then applied to actual 2006 traffic counts to develop a future forecast that is based on existing traffic patterns.

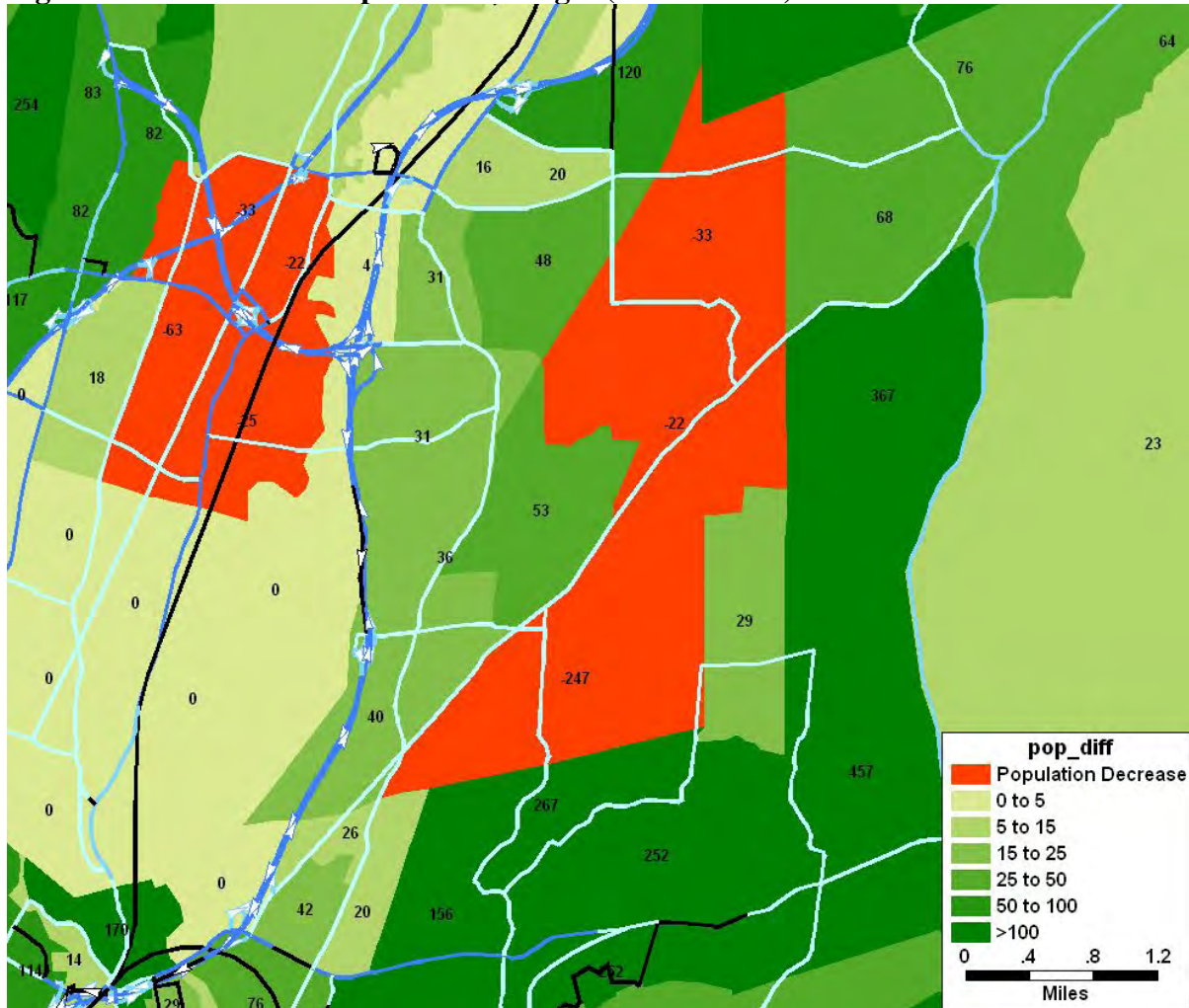
The main factors affecting future traffic demands within the regional roadway network include capacity improvements to roadways to be completed by 2016, and changes in land-use and demographics. Roadway capacity improvements that were incorporated into the future model include:

- I-95 between Branford and New Haven including the new Pearl Harbor Memorial (Q) Bridge crossing and I-95/I-91/Route 34 interchange in New Haven
- US Route 1 located west of New Haven
- Route 80 adjacent to the study area and located between Route 22 and Route 139 in North Branford

Regional shifts in population and employment that result from anticipated changes in land-use also directly impact traffic in the region. Vehicle trips to and from zones within the network are derived from this information and used to predict future traffic demand. Population and employment estimates were obtained from an available SCRCOG dataset for year 2020. This data was used in conjunction with year 2000 population and employment data to interpolate values for year 2016.

As shown in Figure 3-1, the greatest population increases are forecasted to occur in the southern and eastern portions of the study area. These areas are shown in the darkest shade of green along Route 80 in East Haven and North Branford and the western side of Route 22 (Forest Road) in North Branford. It should be noted that values shown on the figure represent absolute differences in the actual population number, not percentage change.

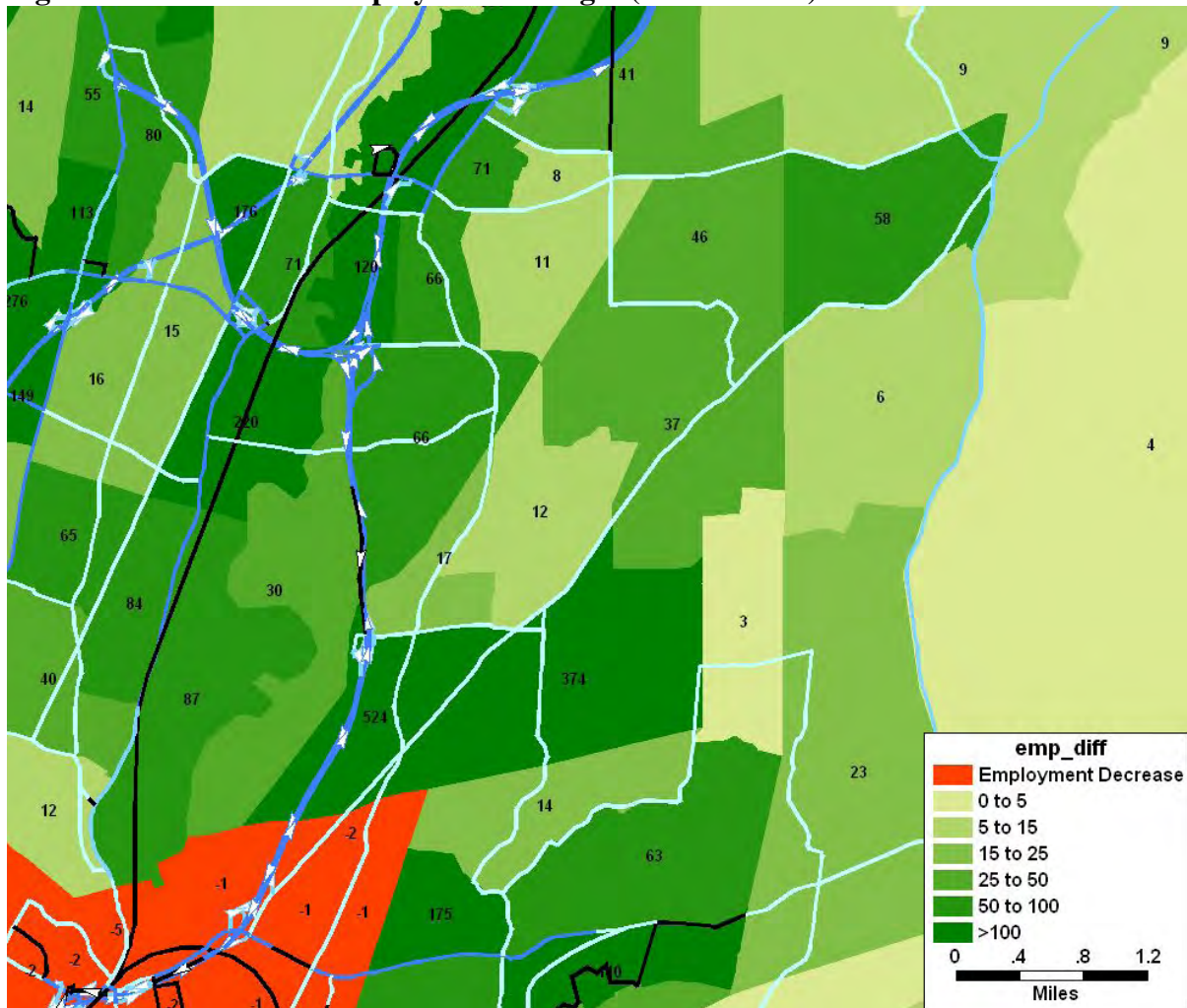
**Figure 3-1. Forecasted Population Changes (2000 to 2016)**



Source: Resource Systems Group, Inc.

Figure 3-2 illustrates the forecasted changes in employment within the study area. As shown in the figure, the greatest increase in employment is anticipated to occur in and around the I-91 corridor in North Haven, along sections of Route 17 and Route 103 in North Haven, and along western sections of Route 80 in East Haven and North Branford. Several areas of increasing employment along Route 17 coincide with areas of decreasing population as shown above in Figure 3-1 suggesting a general trend toward more commercial and fewer residential land-uses in these areas. It should be noted that values shown on the figure represent absolute differences in the actual employment number, not percentage change.

**Figure 3-2. Forecasted Employment Changes (2000 to 2016)**

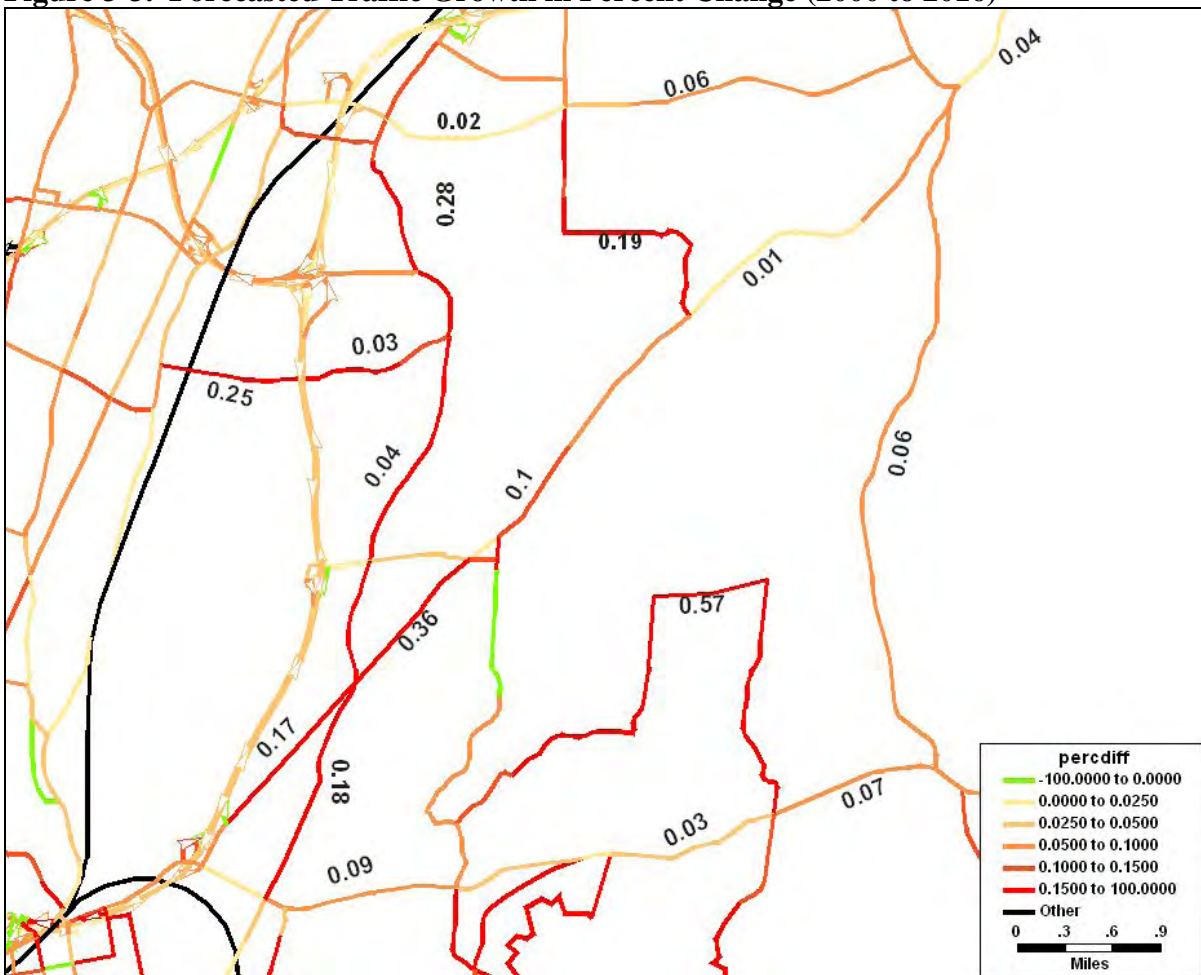


Source: Resource Systems Group, Inc.

The regional traffic forecasts as illustrated in Figure 3-3 are fairly consistent with the projected population and employment changes. In general, traffic demand is expected to increase by the greatest percentages in the southern and western portions of the study area where employment and population increases are the greatest. Areas located north and east of the study area are projected to experience little or no growth in employment and population, which is reflected by a relatively modest percentage growth in traffic demand on Route 22 and Route 17 in the northeastern study area.

Representative traffic growth percentages along State roadways in the study area are noted in the figure. Generalized growth percentages along these roadways are summarized in Table 3-1.

**Figure 3-3. Forecasted Traffic Growth in Percent Change (2000 to 2016)**



Source: Resource Systems Group, Inc.

**Table 3-1. Forecasted Traffic Growth Along State Roadways (2000 to 2016)**

Location	Percent Change (Range)
Route 22 (Clintonville Road)	+ 2 – 6
Route 22 (Forest Road)	+ 4 – 10
Route 17 – Northeastern Section	+ 1 – 10
Route 17 – Southwestern Section	+ 17 – 35
Route 80	+ 3 – 10
Route 103 – Northern Section	+ 10 – 30
Route 103 – Southern Section	+ 20 – 30

It should be noted that, as illustrated in Figure 3-3, many of the local roadways within the Route 22 study area are not represented in the regional model roadway network. Consequently, traffic growth percentages cannot be derived directly from the model and applied to base year traffic counts to forecast demand on these roadways. Growth estimates along local roadways not in the regional model roadway network can, however, be inferred with some degree of confidence from modeled growth projections along adjacent roadways in the network.

In addition, the forecasted growth percentages as shown in Figure 3-3 and Table 3-1 reflect year 2000 to 2016 growth. A fraction of these growth percentages equal to approximately two-thirds of the forecasted values were applied to 2006 traffic counts to determine the forecasted ATR and intersection count volumes presented throughout the report.

### **3.1.1 Impacts of I-95 Construction on Traffic Forecasting**

One of the primary concerns at the outset of this study was the anticipated effect that traffic diverted by long-term roadway construction programs on I-95 would have on the future traffic conditions in the Route 22 study area. Local experience and observation suggest that congestion and construction-related delays on I-95 have the potential to divert a measurable amount of traffic to the State and local roadway network in the Route 22 study area. Based on information obtained from ConnDOT, however, it is anticipated that major construction associated with the I-95 New Haven Harbor Corridor Improvement Program, including the Pearl Harbor Memorial (Q) Bridge and I-95/I-91/Route 34 interchange projects, will be completed by 2015. As a result, the future (2016) traffic forecasts for this study have incorporated the completed I-95 improvements into the model, while assuming no specific delays associated with construction on I-95 in the greater New Haven area will be forecasted in 2016.

### **3.2 Future Traffic Demands**

Growth percentages that were determined from the SCRCOG regional transportation model were applied to the seasonally adjusted daily and afternoon (PM) peak hour volumes observed at the automatic traffic recorder (ATR) locations presented in Section 2.7.1. The



base year (2006) and future year (2016) average annual daily traffic (AADT) and PM peak hour volumes are presented in Table 3-2.

**Table 3-2. AADT and PM Peak Hour Volume Comparison – 2006 to 2016**

Location	2006		2016		% Change
	AADT	PM Peak	AADT	PM Peak	
<b>North Haven</b>					
1 Route 22	13800	1350	14200	1390	3
2 Route 17	8400	760	8800	800	5
3 Pool Road	4250	410	4800	460	12
4 Spring Road	5000	510	5600	570	11
5 Mill Road	3600	320	4000	360	11
6 Rimmon Road	900	85	1000	95	11*
7 Half Mile Road	1250	130	1400	150	12*
8 Arrowdale Road	3250	360	3600	400	11*
9 Cloudland Road	3550	420	3800	450	7
<b>North Branford</b>					
10 Route 22	13400	1330	13900	1380	4
11 Village Street	2300	260	2450	280	7*
12 Foote Hill Road	750	95	800	100	7*
13 Mill Road	2350	250	2600	280	11*
<b>East Haven</b>					
14 Foxon Hill Road	5150	620	5500	660	7

\*Percentage change was inferred from adjacent roadways because roadway is not included in the regional model roadway network.

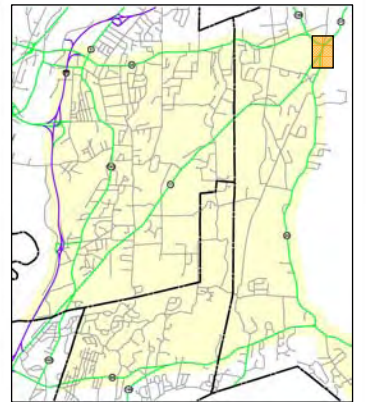
As shown in Table 3-2, traffic demands at the 14 ATR locations are projected to grow between three and 12 percent over the next ten years. This amount of growth translates to approximately a one percent or less increase in daily traffic per year for each ATR location between 2006 and 2016.

### 3.3 Future Traffic Operations

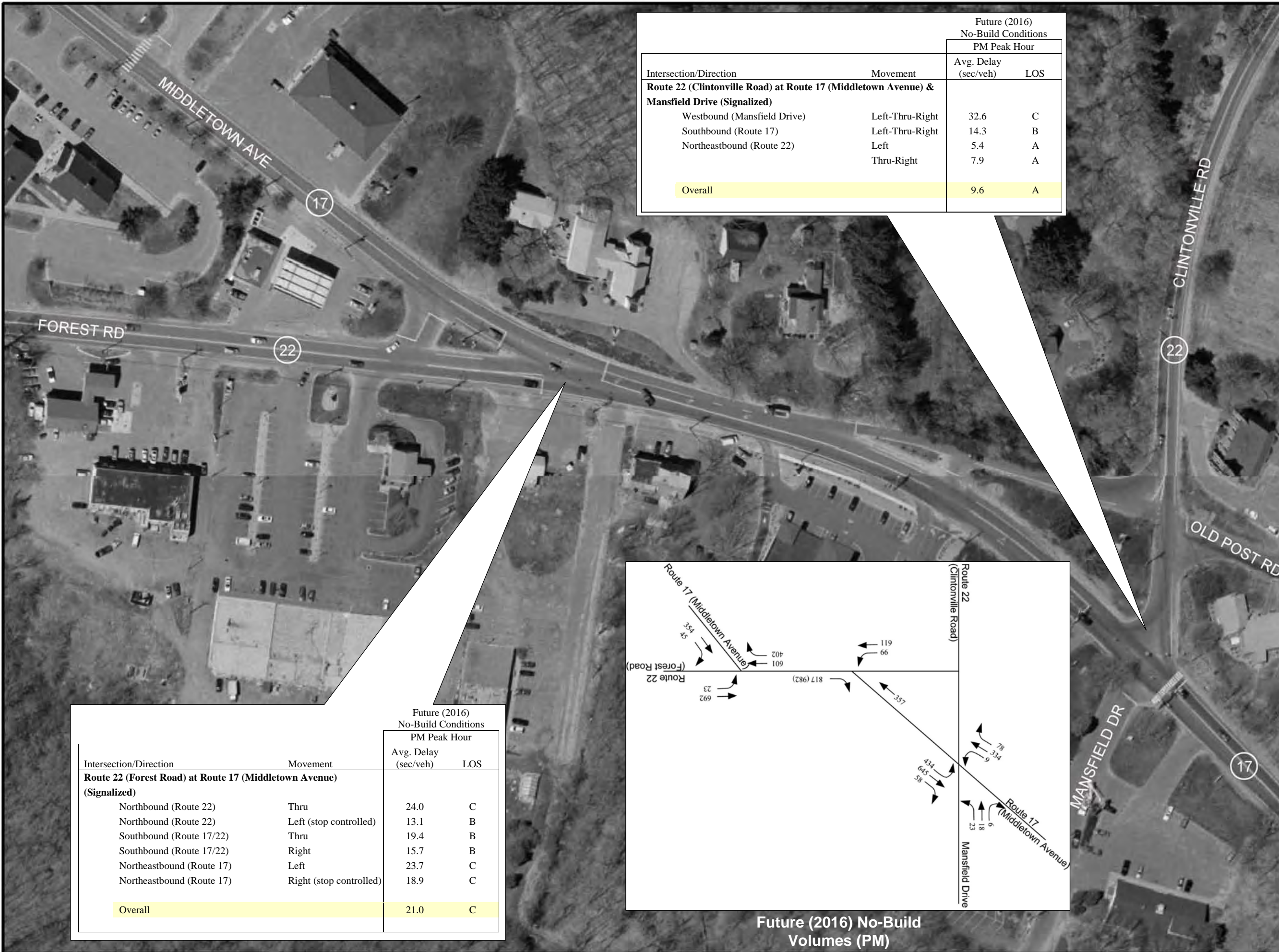
Modeled growth percentages were also applied to the observed turning movement volumes that were obtained at the six intersections described in Section 2.8.1 as candidate improvement locations. The intersections include:

- Route 22 at Chapel Hill Road and Pond Hill Road (unsignalized) in North Haven
- Route 22 at Route 150 (unsignalized) in North Branford
- Route 22 (Forest Road) at Route 17 (signalized) in North Branford
- Route 22 (Clintonville Road) at Route 17 and Mansfield Drive (signalized) in North Branford
- Route 17 at Spring Road and Cloudland Road (unsignalized) in North Haven
- Route 103 at Laydon Avenue and Pool Road (signalized) in North Haven

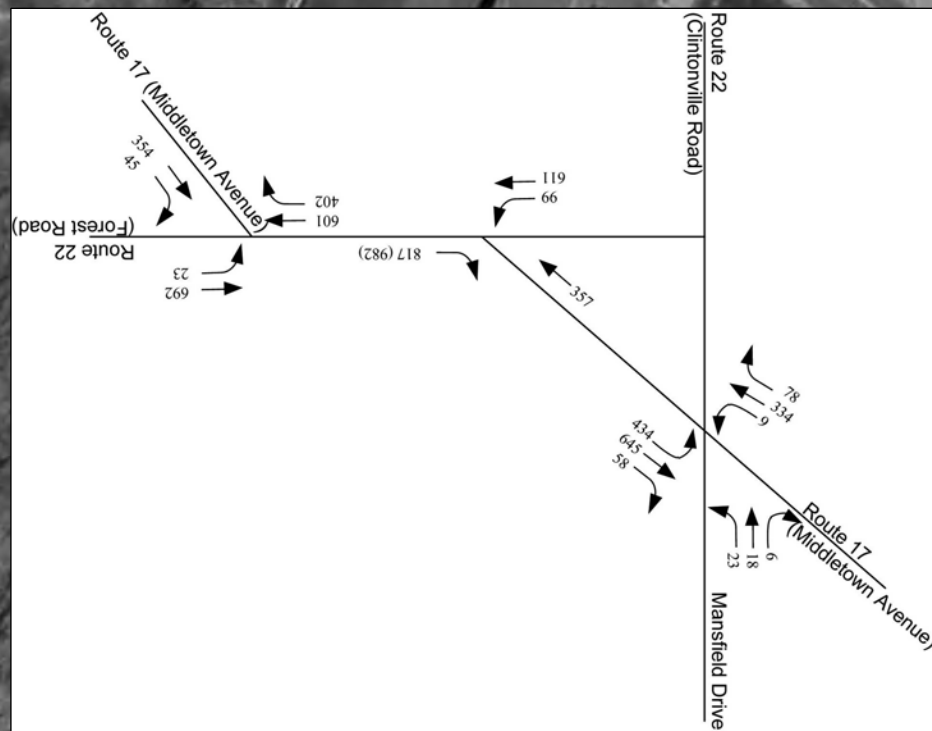
These locations were identified during the public involvement stages of this study as being areas of concern and were subsequently prioritized for further evaluation. Capacity analyses were performed at these six intersections using forecasted traffic volumes and procedures outlined in the *2000 Highway Capacity Manual* (Transportation Research Board) to determine a measure of future operations assuming no improvements (“no-build” condition) are made. The results of the 2016 no-build capacity analyses are illustrated in Figures 3-4 through 3-8. The operational effectiveness of each intersection movement and the intersection as a whole were assigned a level of service (LOS) as determined from the computed or measured control delay in seconds per vehicle (sec/veh) for each movement or group of movements. LOS values range from A to F with A representing the best operational conditions. LOS F represents long delays and generally unacceptable conditions. LOS D or better is generally considered acceptable.



Location Map

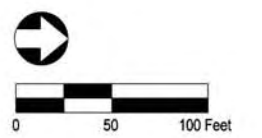


Intersection/Direction	Movement	Future (2016) No-Build Conditions PM Peak Hour	
		Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Route 17 (Middletown Avenue) &amp; Mansfield Drive (Signalized)</b>			
Westbound (Mansfield Drive)	Left-Thru-Right	32.6	C
Southbound (Route 17)	Left-Thru-Right	14.3	B
Northeastbound (Route 22)	Left	5.4	A
	Thru-Right	7.9	A
<b>Overall</b>		<b>9.6</b>	<b>A</b>



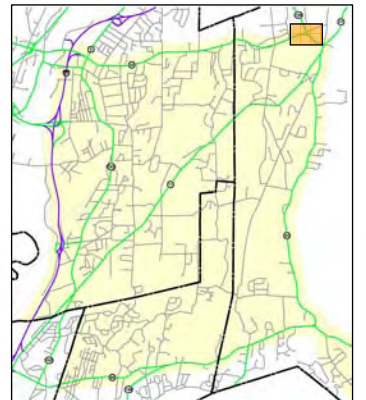
Future (2016) No-Build  
Volumes (PM)

Intersection/Direction	Movement	Future (2016) No-Build Conditions PM Peak Hour	
		Avg. Delay (sec/veh)	LOS
<b>Route 22 (Forest Road) at Route 17 (Middletown Avenue) (Signalized)</b>			
Northbound (Route 22)	Thru	24.0	C
Northbound (Route 22)	Left (stop controlled)	13.1	B
Southbound (Route 17/22)	Thru	19.4	B
Southbound (Route 17/22)	Right	15.7	B
Northeastbound (Route 17)	Left	23.7	C
Northeastbound (Route 17)	Right (stop controlled)	18.9	C
<b>Overall</b>		<b>21.0</b>	<b>C</b>

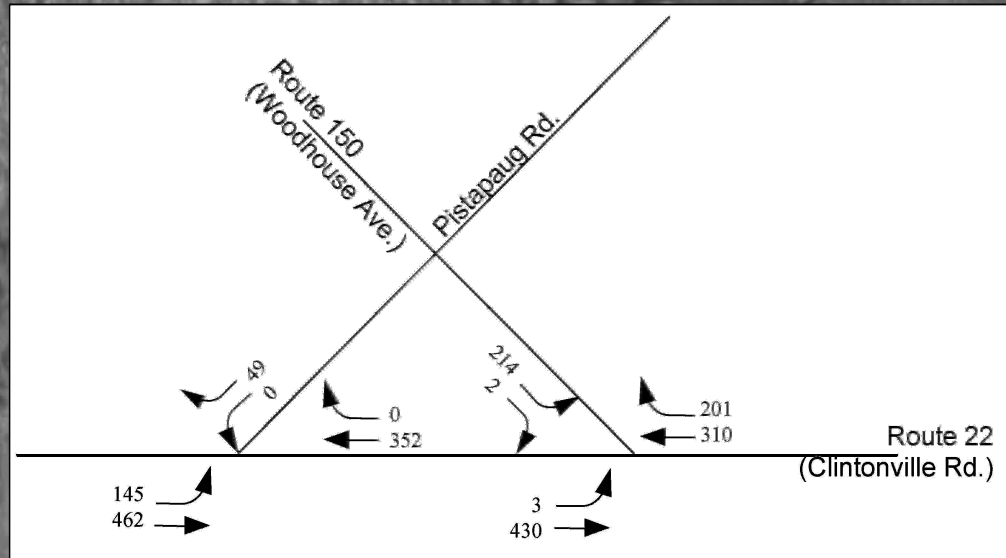


Route 22 at Route 17  
Intersections  
Future No-Build  
Capacity Analysis

Figure 3-4

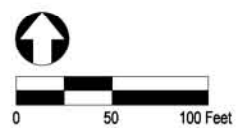


Location Map



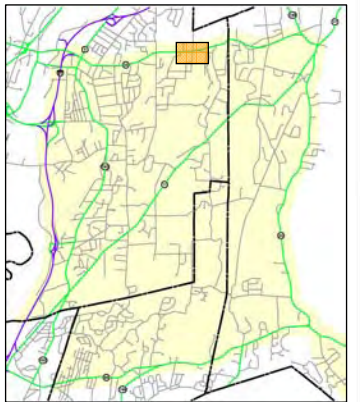
Future (2016) No-Build  
Volumes (PM)

		Future (2016) No-Build Conditions PM Peak Hour	
Intersection/Direction	Movement	Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Route 150 (Woodhouse Avenue) (Unsignalized)</b>			
Southeastbound (Route 150)	Left-Right	56.7	F



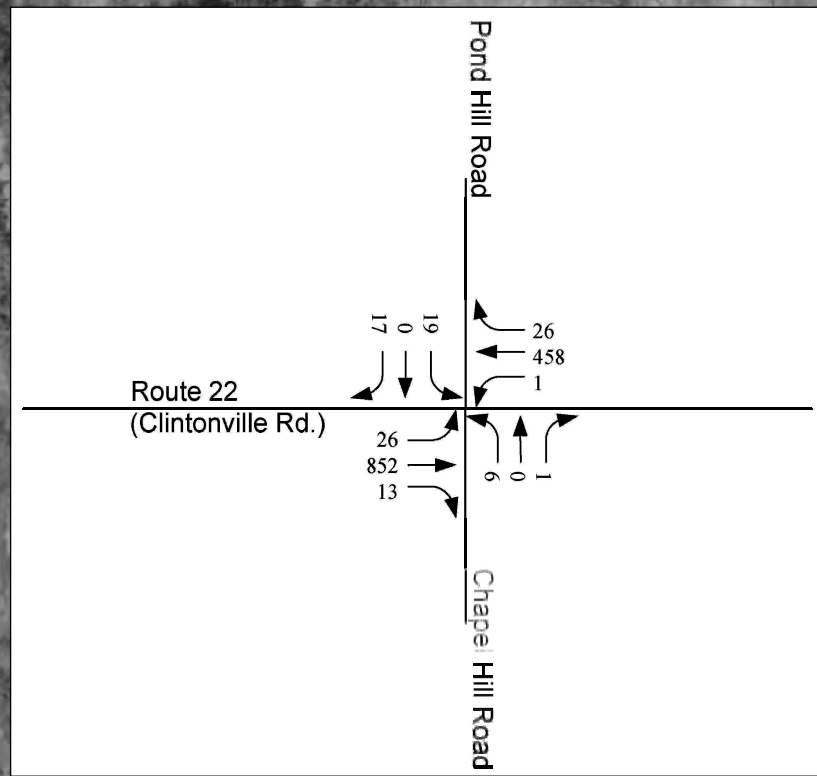
Route 22 at Route 150  
Future No-Build  
Capacity Analysis

Figure 3-5

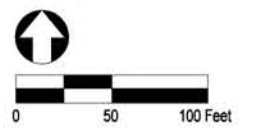


Location Map

Intersection/Direction	Movement	Future (2016) No-Build Conditions PM Peak Hour	
		Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Chapel Hill Road &amp; Pond Hill Road (Unsignalized)</b>			
Eastbound (Route 22)	Left	0.4	A
Westbound (Route 22)	Left	0.0	A
Northbound (Chapel Hill Road)	Left-Thru-Right	37.7	E
Southbound (Pond Hill Road)	Left-Thru-Right	30.1	D

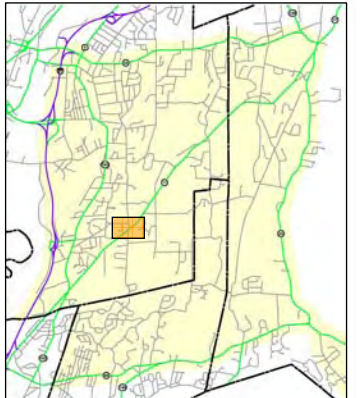


Future (2016) No-Build  
Volumes (PM)



Route 22 at Chapel Hill Road  
& Pond Hill Road  
Future No-Build  
Capacity Analysis

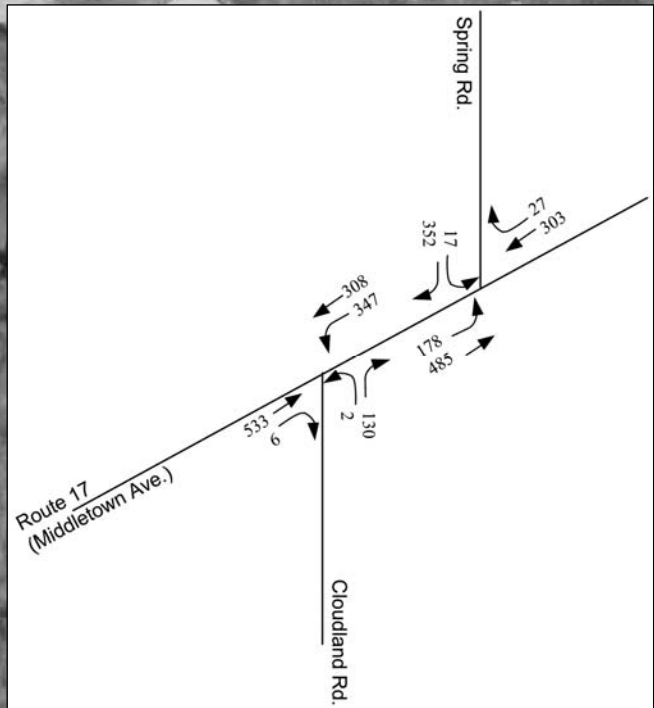
Figure 3-6



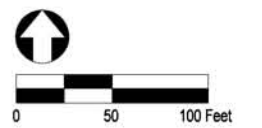
Location Map

Intersection/Direction	Movement	Future (2016) No-Build Conditions PM Peak Hour	
		Avg. Delay (veh/sec)	LOS
<b>Route 17 (Middletown Avenue) at Spring Road (Unsignalized)</b>			
Eastbound (Route 17)	Left-Thru	3.8	A
Southbound (Spring Road)	Left	30.6	D
	Right	16.2	C

Intersection/Direction	Movement	Future (2016) No-Build Conditions PM Peak Hour	
		Avg. Delay (sec/veh)	LOS
<b>Route 17 (Middletown Avenue) at Cloudland Road (Unsignalized)</b>			
Westbound (Route 17)	Left-Thru	8.1	A
Northbound (Cloudland Road)	Left-Right	15.9	C

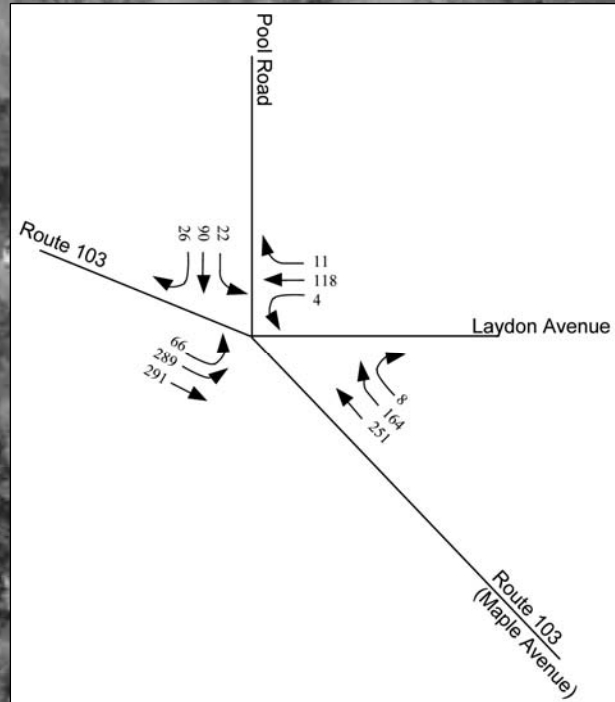


Future (2016) No-Build  
Volumes (PM)

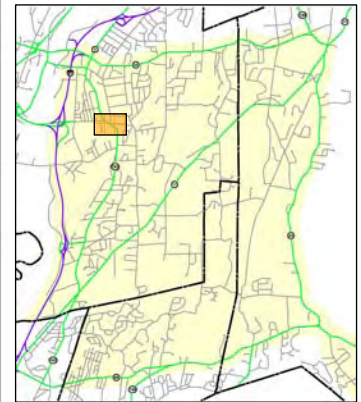


Route 17 at Cloudland Road  
& Spring Road  
Future No-Build  
Capacity Analysis

Figure 3-7

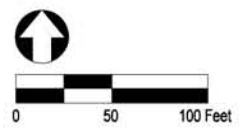


Future (2016) No-Build Volumes (PM)



Location Map

Intersection/Direction	Movement	Future (2016) No-Build Conditions PM Peak Hour	
		Avg. Delay (sec/veh)	LOS
<b>Route 103 (Maple Avenue) at Pool Road &amp; Laydon Avenue (Signalized)</b>			
Westbound (Laydon Avenue)	Left-Thru-Right	42.3	D
Southbound (Pool Road)	Left-Thru-Right	41.2	D
Southeastbound (Route 103)	Left	53.1	D
	Thru	11.7	B
Northwestbound (Route 103)	Thru	11.7	B
	Right	11.5	B
<b>Overall</b>		<b>28.7</b>	<b>C</b>



Route 103 at Pool Road & Laydon Avenue  
Future No-Build Capacity Analysis

Figure 3-8

The results of the 2016 no-build capacity analyses indicate that the following unsignalized intersections have movements that are anticipated to operate at LOS E or F during the PM peak hour:

- Route 22 at Chapel Hill Road and Pond Hill Road in North Haven  
*Chapel Hill Road approach to Route 22 will operate at LOS E*
- Route 22 at Route 150 in North Branford  
*Route 150 approach to Route 22 will operate at LOS F*

### 3.4 Comparison of Existing and Future Traffic Operations

The analyses of the future no-build condition at the six intersections that were determined to be candidate improvement locations show that the projected growth in traffic demand in the Route 22 study area is expected to have a limited impact on the overall capacity-related traffic operations at these locations.

As summarized in Table 3-3, none of the signalized intersections experience, or are expected to experience, PM peak hour traffic volumes that result in delay significant enough to cause unacceptable LOS E or F conditions. These results indicate that none of the signalized intersections experience, or will experience, PM peak hour traffic demand that exceeds the overall capacity of the intersection. Consequently, no improvements specifically intended to increase capacity at these locations are necessary at this time.

**Table 3-3. PM Peak Hour Traffic Operations Comparison – 2006 to 2016**

Intersection/Direction	Movement	Existing (2006) Conditions		Future (2016) No-Build Conditions	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Route 17 (Middletown Avenue) &amp; Mansfield Drive (Signalized)</b>					
Westbound (Mansfield Drive)	Left-Thru-Right	33.2	C	32.6	C
Southbound (Route 17)	Left-Thru-Right	13.4	B	14.3	B
Northeastbound (Route 22)	Left	5.1	A	5.4	A
	Thru-Right	7.2	A	7.9	A
Overall		9.2	A	9.6	A
<b>Route 22 (Forest Road) at Route 17 (Middletown Avenue) (Signalized)</b>					
Northbound (Route 22)	Thru	20.9	C	24.0	C
	Left – stop control	13.1	B	13.1	B
Southbound (Route 17/22)	Thru	22.2	B	19.4	B
	Right	10.3	B	15.7	B
Northeastbound (Route 17)	Thru	23.6	C	23.7	C
	Right – stop control	18.9	C	18.9	C
Overall		20.7	C	21.0	C



**Table 3-3. PM Peak Hour Traffic Operations Comparison – 2006 to 2016**

Intersection/Direction	Movement	Existing (2006) Conditions		Future (2016) No-Build Conditions	
		Avg. Delay (sec/veh)	LOS	Avg. Delay (sec/veh)	LOS
<b>Route 22 (Clintonville Road) at Route 150 (Woodhouse Avenue) (Unsignalized)</b>					
Southeastbound (Route 150)	Left-Right	34.8	D	56.7	F
<b>Route 22 (Clintonville Road) at Chapel Hill Road &amp; Pond Hill Road (Unsignalized)</b>					
Eastbound (Route 22)	Left	0.3	A	0.4	A
Westbound (Route 22)	Left	0.0	A	0.0	A
Northbound (Chapel Hill Road)	Left-Thru-Right	31.7	D	37.7	E
Southbound (Pond Hill Road)	Left-Thru-Right	25.2	D	30.1	D
<b>Route 17 (Middletown Avenue) at Cloudland Road (Unsignalized)</b>					
Westbound (Route 17)	Left-Thru	6.8	A	8.1	A
Northbound (Cloudland Road)	Left-Right	14.1	B	15.9	C
<b>Route 17 (Middletown Avenue) at Spring Road (Unsignalized)</b>					
Eastbound (Route 17)	Left-Thru	3.2	A	3.8	A
Southbound (Spring Road)	Left	24.3	C	30.6	D
	Right	13.9	B	16.2	C
<b>Route 103 (Maple Avenue) at Pool Road &amp; Laydon Avenue (Signalized)</b>					
Westbound (Laydon Avenue)	Left-Thru-Right	39.3	D	42.3	D
Southbound (Pool Road)	Left-Thru-Right	38.5	D	41.2	D
Southeastbound (Route 103)	Left	22.3	C	53.1	D
	Thru	10.4	B	11.7	B
Northwestbound (Route 103)	Thru	10.3	B	11.7	B
	Right	10.3	B	11.5	B
Overall		19.6	B	28.7	C

Two of the unsignalized intersections have minor approach movements that are projected to deteriorate from an acceptable LOS D in the existing condition to an unacceptable LOS E or F in the future no-build condition. As a result, capacity improvements and signalization were investigated at these locations (see Chapter 4) to provide improved LOS under future traffic conditions.

# 4

## IMPROVEMENT RECOMMENDATIONS

The extensive data collection, public outreach, and traffic forecasting efforts of this study served to identify the transportation needs and deficiencies in the Route 22 study area. The purpose of this section is to present a summary of the improvement recommendations that were developed to directly address these needs and deficiencies while remaining consistent with the study objectives of reducing travel delays and improving safety. Implementation of the improvement recommendations is discussed in Section 5.

### 4.1 State Roadway Recommendations

Improvement opportunities along the State roadways in the study area generally consist of providing intersection geometry and capacity improvements to reduce travel congestion and delays. Other improvements consist of providing enhanced access management and pedestrian accommodations to satisfy the previously identified operational and safety needs in the study area. Based upon the list of candidate improvement locations discussed in Section 2.8, improvement recommendations were developed for the following locations:

#### North Haven

- Route 22 (Clintonville Road) at Chapel Hill Road and Pond Hill Road
- Route 17 (Middletown Avenue) at Cloudland Road and Spring Road
- Route 103 (Maple Avenue) at Pool Road and Laydon Avenue
- Route 22 (Clintonville Road) at US 5 and Route 103

#### North Branford

- Route 22 (Forest Road) between Route 17 and Foote Hill Road
- Route 22 (Clintonville Road) at Route 150 (Woodhouse Avenue)
- Route 22 (Clintonville Road) at Route 17 (Middletown Avenue) and Mansfield Drive
- Route 22 (Forest Road) at Route 17 (Middletown Avenue)

#### East Haven

- Route 80 at Thomson Street and Mill Avenue

A brief summary is provided in the following sections for each improvement location including the identified issues, capacity and operational deficiencies, specific improvement recommendations, impacts and constraints, and construction cost estimates specific to each location.

**Route 22 (Clintonville Road) at Chapel Hill Road and Pond Hill Road**

**Location**

- Town of North Haven
- Approximately 1.7 miles east of US 5
- Approximately 0.6 miles west of the North Haven – North Branford town line

**Description**

- Unsignalized, four-legged intersection
- Route 22 (Clintonville Road) – two-lane through roadway running east-west
- Chapel Hill Road – two-lane minor roadway approaching Route 22 from south
- Pond Hill Road – two-lane minor roadway approaching Route 22 from north; offset approximately 45 feet east of Chapel Hill Road

**Identified Issues**

- Perceived delays associated with entering Route 22 traffic stream from Chapel Hill Road during peak traffic hours
- Available sight distance is limited looking east from Chapel Hill Road due to the existing grade and crest vertical curvature of the Route 22 westbound approach to the intersection

**Capacity/Operational Deficiencies**

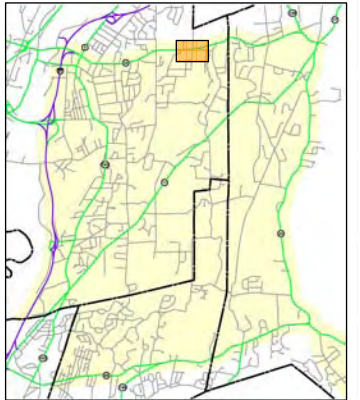
- LOS E on Pond Hill Road approach during existing (2006) AM peak hour
- LOS E on Chapel Hill Road approach during future (2016) PM peak hour

**Recommendations**

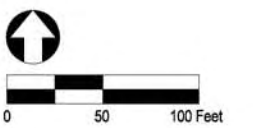
- Although the results of the capacity analyses indicate that both the Pond Hill Road and Chapel Hill Road approaches to Route 22 are experiencing – or will be experiencing – delays resulting in LOS E, no capacity improvements are recommended as part of the overall improvement strategy at this time. The relatively low traffic volumes on both minor roadway approaches (36 vph on Pond Hill Road and 7 vph on Chapel Hill Road during the PM peak hour) resulting in v/c ratios of 0.21 or less do not support the need for improvements to increase capacity.

**Other Remarks**

- Improvement of the driver sightline looking east from the intersection could require modifications to the existing roadway profile to increase available sight distance. The actual available sight distance relative to the standard sight distance for this section of Route 22 would involve further investigation to determine what improvements, if any, would be required to provide additional sight distance.



Location Map



Route 22 at Chapel Hill Road & Pond Hill Road  
Recommendations Review

Figure 4-1

**Route 17 (Middletown Avenue) at Cloudland Road and Spring Road**

**Location**

- Town of North Haven
- Approximately 1.3 miles northeast of Route 103

**Description**

- Unsignalized, offset four-legged intersection
- Route 17 (Middletown Avenue) – two-lane through roadway running northeast-southwest
- Cloudland Road – two-lane minor roadway approaching Route 17 at a 46-degree skew from south
- Spring Road – two-lane minor roadway approaching Route 17 from north; offset approximately 160 feet northeast of Cloudland Road

**Identified Issues**

- Perceived delays during peak traffic hours
- Greater than 300 vph crossing Route 17 between Cloudland Road and Spring Road during the AM and PM peak hours
- Undesirable intersection geometry consisting of a non-standard skewed approach of Cloudland Road and a separation distance of approximately 160 feet between minor roadway approaches

**Capacity/Operational Deficiencies**

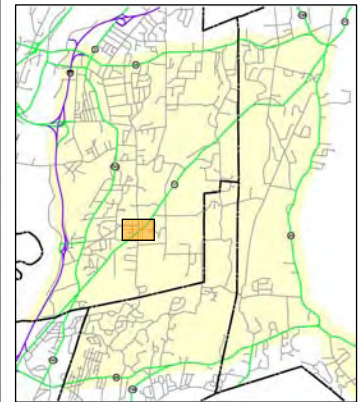
- LOS E for southbound left turning vehicles on Spring Road approach during existing (2006) AM peak hour, however, traffic demand is far below capacity with a v/c ratio 0.08

**Recommendations**

- No intersection capacity improvements are recommended as part of the overall improvement strategy at this time due to generally acceptable operation of the intersection and sufficient available capacity
- Should safety become a concern at this intersection due to increasing volumes associated with the continued use of Cloudland Road and Spring Road as local cut-through routes, consideration should be given to providing improvements. Potential solutions could include signalization of the offset intersections to provide a controlled movement of traffic between the minor roadway approaches or realignment of Cloudland Road to eliminate the existing offset and skewed approach while also providing signalization (see Figure 4-1).

**Constraints and Impacts**

- General impacts associated with realignment could include right-of-way, utility, and environmental impacts
- Existing Five Mile Brook crossing would require widening to accommodate a realignment of Cloudland Road as shown in Figure 4-1



Location Map



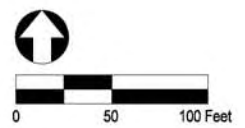
Signalization required to provide acceptable LOS B

Substantial ROW impacts to abutting properties

Widening of existing roadway required to provide left turn lanes on both Route 17 approaches

Widening of existing Five Mile Brook crossing required to accommodate realignment

Potential Cloudland Road realignment to eliminate existing intersection offset



Route 17 at Cloudland Road & Spring Road  
Potential Improvement Concept

Figure 4-2

**Route 103 (Maple Avenue) at Pool Road and Laydon Avenue**

**Location**

- Town of North Haven
- Approximately one mile south of Route 22

**Description**

- Signalized, four-legged intersection
- Route 103 (Maple Avenue) – two-lane through roadway running northwest-southeast at intersection; southeastbound left turn lane; northwestbound right turn lane
- Pool Road – two-lane minor roadway approaching Route 103 at a 50-degree skew from north
- Laydon Avenue – two-lane minor roadway approaching Route 103 at a 35-degree skew from east

**Identified Issues**

- Perceived delays during peak traffic hours
- Undesirable intersection geometry consisting of non-standard skewed minor roadway approaches
- Perceived safety concerns associated with existing intersection geometry

**Capacity/Operational Deficiencies**

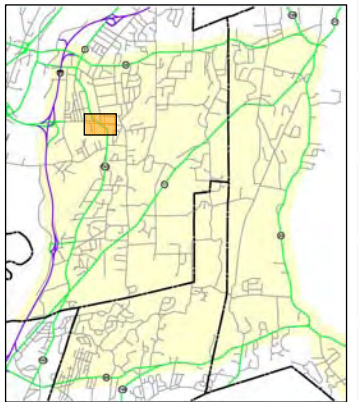
- Route 103 southeastbound left turn lane approach will near capacity (v/c ratio of 0.93) and will operate just below the LOS E threshold during the future (2016) PM peak hour
- Route 103 southeastbound left turn lane will also experience 95<sup>th</sup> percentile vehicle queues that exceed 300% of the available storage capacity of 120 feet

**Recommendations**

- Widen approximately 450 feet of Route 103 between Bailey Road and the intersection to provide additional storage capacity for the existing left turn lane. The resulting typical section in this area will be two 11-foot lanes and a 4-foot shoulder to match the existing typical section of the southeastbound approach at the intersection (see Figure 4-2).
- Adjust existing signal timings
- No geometric improvements are recommended for the minor roadway approaches due to limited improvement potential within the existing right-of-way constraints.

**Constraints and Impacts**

- General impacts associated with widening could include right-of-way, utility and drainage impacts



Location Map

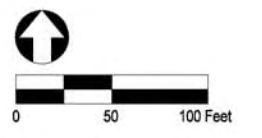


Widen existing roadway approximately 5' to 10' to accommodate additional storage capacity for southeastbound left turn lane

Modify existing signal timings to provide additional green time for southeastbound left turn lane

Potential impacts to existing ROW, utilities, and roadside drainage within limits of widening

Match existing roadway width at intersection



Route 103 at Pool Road & Laydon Avenue  
Improvement Recommendation

Figure 4-3



**Route 22 (Clintonville Road) at Route 103 and US 5**

**Location**

- Town of North Haven
- Approximately 500 feet east of I-91 Exit 11 northbound off-ramp
- Approximately three-fourths of a mile south of I-91 Exit 12

**Description**

- Signalized, four-legged intersection
- Route 22 (Clintonville Road) – Westbound approach consisting of one through lane, one shared through lane and right turn lane, and one left turn lane
- Route 103 – Northbound approach consisting of one through lane, one shared through lane and right turn lane, and one left turn lane
- US 5 – Southbound approach consisting of two through lanes, one right turn lane, and one left turn lane
- US 5 – Eastbound approach consisting of two left turn lanes, one shared through lane and right turn lane

**Identified Issues**

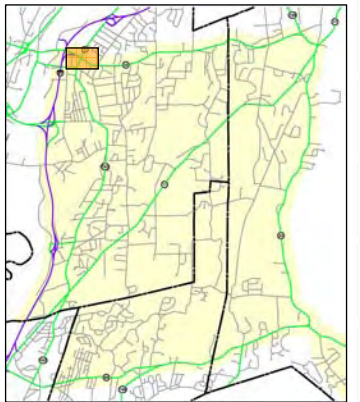
- ConnDOT-listed accident location
- 66 total accidents occurred at this location over the review period from January 1, 2001 to December 31, 2004
- Nearly 82% of all accidents were rear-end collisions during the review period
- Nearly 50% of all accidents occurred on the Route 103 northbound approach

**Capacity/Operational Deficiencies**

- None identified at this time

**Recommendations**

- Based upon the safety analysis presented in Section 2.8.1.2, there are no immediate geometric improvements or signal timing improvements recommended at this time to alleviate the safety concerns at this location. The existing tangent intersection approaches contribute to the overall visibility of the stop condition warranted by the signal. Probable contributing factors to the overall number of rear-end collisions could be generally high traffic demand, driver inattention, and excessive approach speeds, all of which are not readily remedied by minor geometric improvements or signal adjustments.



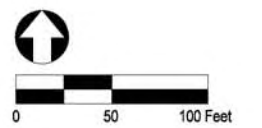
Location Map



Signalized intersection with 66 total accidents  
(January 1, 2001 – December 31, 2004)

No geometric improvements or signal timing  
modifications recommended at this time

Nearly 50% of all accidents occurred  
on northbound approach



Route 22 at Route 103 & US 5  
Recommendations Review

Figure 4-4

**Route 22 (Forest Road) between Route 17 and Foote Hill Road**

**Location**

- Town of North Branford, Northford Center
- Foote Hill Road intersection located approximately 2500 feet south of Route 17

**Description**

- Approximately one-half mile segment of Route 22
- Section nearest Foote Hill Road is less developed with more residential and open space land uses
- Section nearest Route 17 is more densely developed with abutting commercial land uses

**Identified Issues**

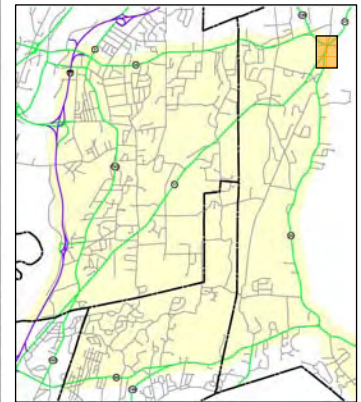
- ConnDOT-listed accident location
- 56 total accidents occurred at this location over the review period from January 1, 2001 to December 31, 2004
- More than one-third of all accidents were located at or near an intersection with a commercial driveway access during the review period
- Half of all accidents at commercial drives occurred at the Mobil service station, Sunoco service station, or Northford Plaza shopping center driveway

**Capacity/Operational Deficiencies**

- No capacity deficiencies identified at this time
- Existing operational deficiencies are associated with a general lack of access management in this area given the numerous commercial curb cuts located in close proximity to one another

**Recommendations**

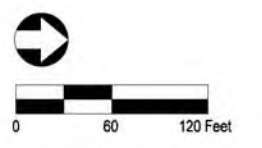
- Provide near-term access management improvements to better define ingress and egress at commercial drives located south of the junction with Route 17. Cost-effective improvements could include the installation of regulatory signing and pavement markings, or the removal of curb cuts to limit the number of conflict points for vehicles accessing the Mobil and Sunoco service stations and Northford Plaza shopping center driveways. See Figure 4-3 for a potential improvement concept in this area.
- Coordinate long-term access management improvements at this location with the improvement recommendations for the Route 22 at Route 17 intersection



Location Map

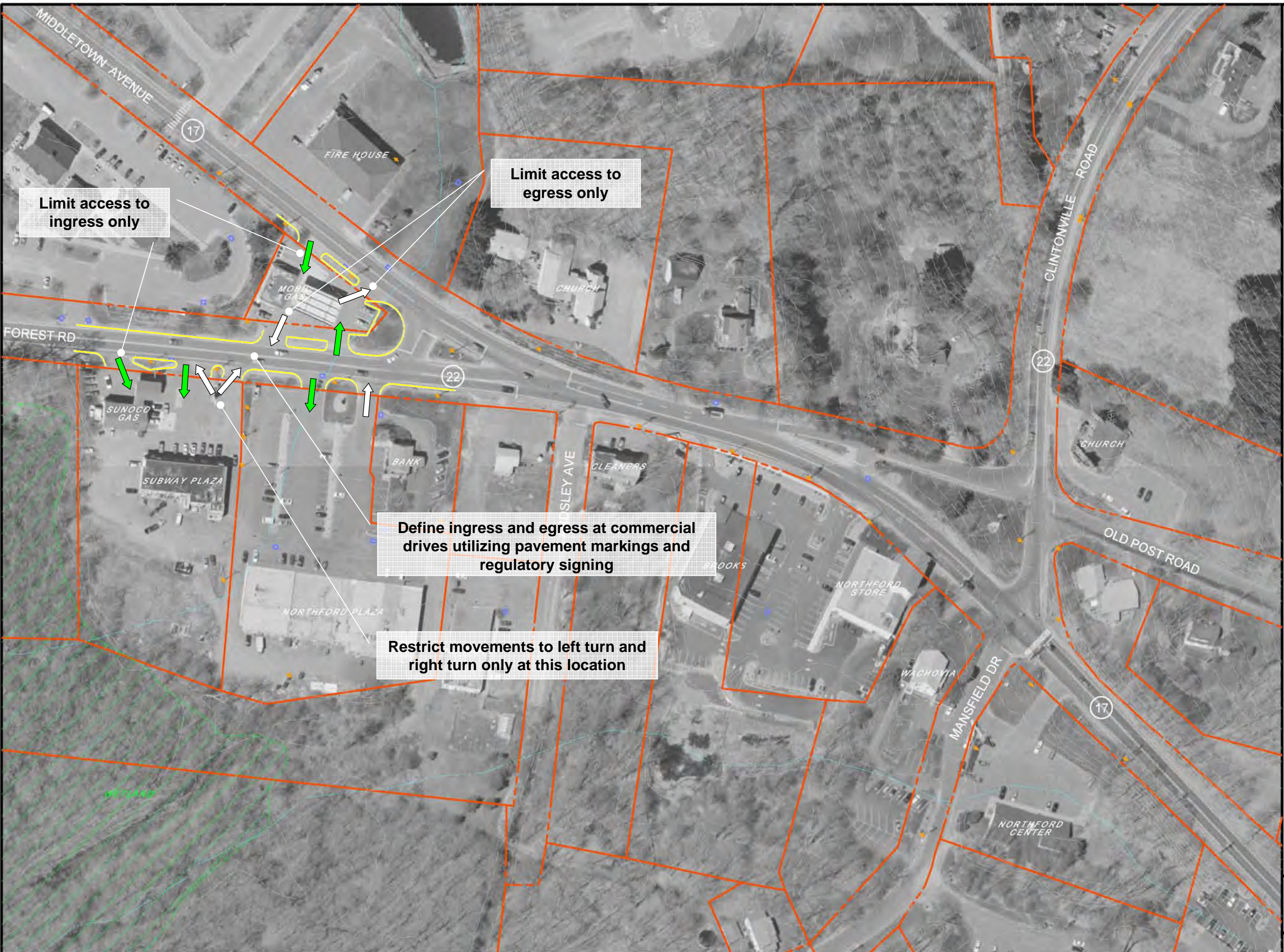
**LEGEND**

- Approximate ROW/ Property Lines
- Wetland Area
- Utility Pole
- Drainage Basin
- Pavement to be removed



Route 22 between Route 17 & Foote Hill Road  
Potential Improvement Concept

Figure 4-5



**Route 22 (Clintonville Road) at Route 150 (Woodhouse Avenue)**

**Location**

- Town of North Branford
- Approximately 1500 feet west of Route 17
- Approximately 1.1 miles east of North Haven – North Branford town line

**Description**

- Unsignalized, two-legged intersection
- Route 22 (Clintonville Road) – two-lane through roadway running east-west on curve
- Route 150 – two-lane roadway approaching Route 22 from northwest at a 15-degree skew providing access to and from the east on Route 22
- Pistapaug Road – two lane minor roadway approaching Route 22 from northeast at a 10-degree skew and located approximately 1000 feet west of Route 150. Pistapaug Road provides a connection to Route 150 and provides access to and from the west on Route 22

**Identified Issues**

- Undesirable intersection geometry consisting of non-standard skewed roadway approaches
- Perceived safety concerns associated with existing intersection geometry and available sight lines along Route 22

**Capacity/Operational Deficiencies**

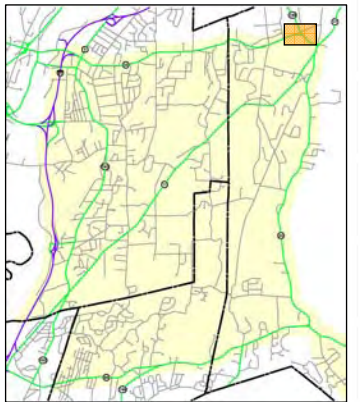
- LOS F on Route 150 approach during future (2016) PM peak hour with a v/c ratio of 0.83

**Recommendations**

- Realign the Route 150 approach to provide a signalized, perpendicular T-intersection with Route 22 and eliminate the Pistapaug Road connection between Route 22 and Route 150 (see Figure 4-4). Provide connections between the existing drives fronting Pistapaug Road and Route 22. Potential alternative is to cut access to Pistapaug Road from Route 22 and maintain Pistapaug Road as a “no-outlet” connection to existing residences.
- Widen Route 22 to the south side through the intersection to provide a 150-foot long, 11-foot wide eastbound left turn lane to Route 150. Provide a 100-foot long, 11-foot wide westbound right turn lane to Route 150.
- LOS B will be provided for all intersection approaches during the future PM peak hour under the build condition

**Constraints and Impacts**

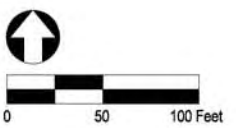
- General impacts associated with realignment and widening could include right-of-way, utility, and environmental impacts
- Existing culvert crossing located approximately 500 feet east of existing Pistapaug Road would have to be widened or replaced to accommodate the Route 22 widening
- Existing wetland located north of Route 22 between Pistapaug Road and Route 150 dictates the location of the Route 150 realignment



Location Map

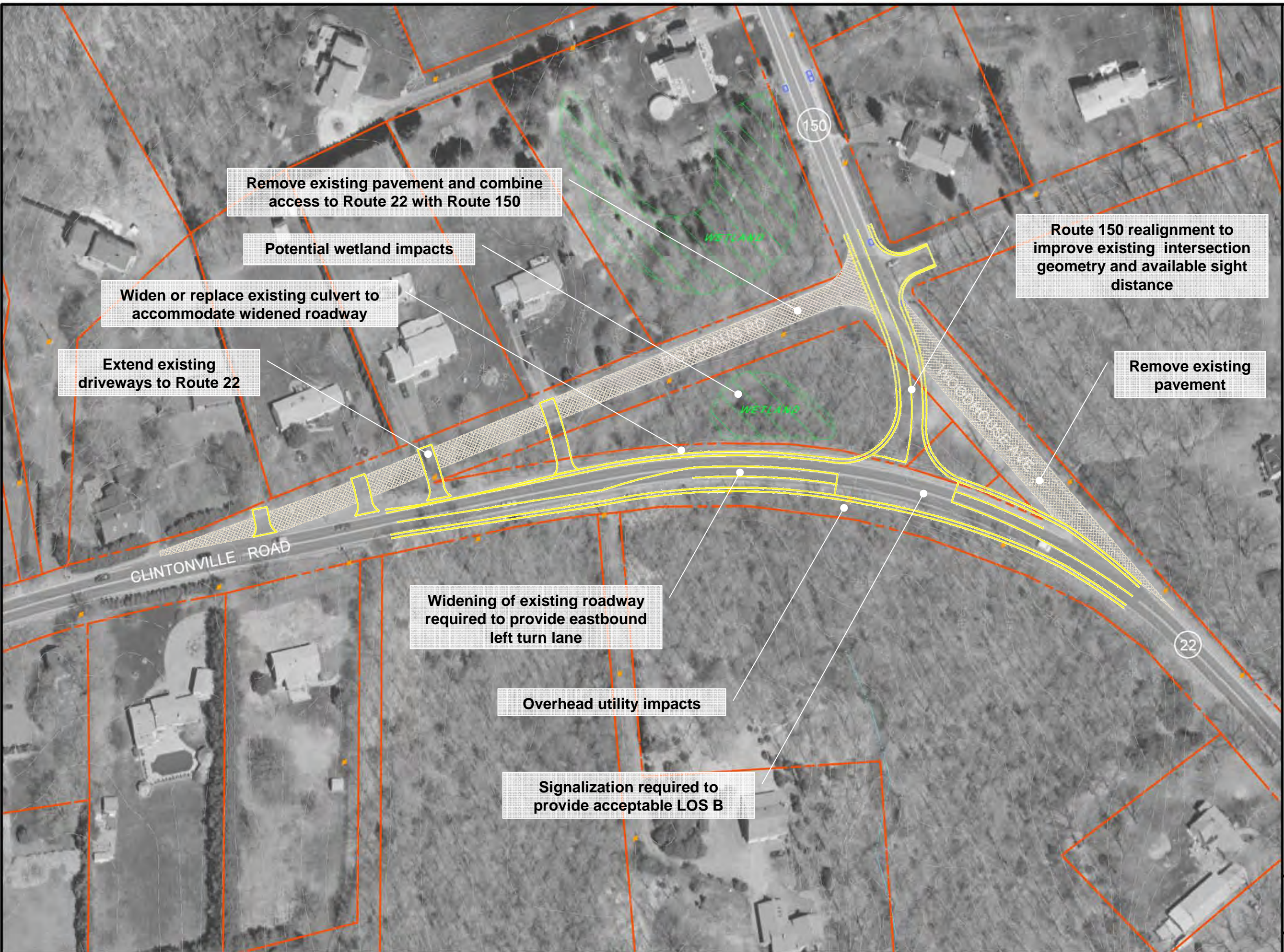
LEGEND

- Approximate ROW/Property Lines
- Wetland Area
- Utility Pole
- Drainage Basin
- Pavement to be removed



Route 22 at Route 150  
Improvement Recommendation

Figure 4-6



**Route 22 (Clintonville Road) at Route 17 (Middletown Avenue) and Mansfield Drive**

**Location**

- Town of North Branford, Northford Center
- Northeast portion of study area
- Approximately 700 feet north of the Route 22 (Forest Road) at Route 17 intersection

**Description**

- Signalized, four-legged intersection
- Route 22 (Clintonville Road) – two-lane roadway approaching Route 17 from east; eastbound traffic is redirected southbound along one-way ramp approximately 200 feet east of intersection; Route 22 approach at Route 17 only accommodates one-way westbound traffic from intersection
- Turning roadway from southbound Route 22 ramp (located opposite Brooks Pharmacy drive) provides access to northbound Route 17
- Route 22 (Forest Road)/Route 17 Overlap – two-lane roadway with northeastbound left turn lane to Route 22 (Clintonville Road) approaching intersection from southwest
- Route 17 – two-lane roadway approaching intersection from north
- Mansfield Drive – two-lane roadway approaching intersection from east

**Identified Issues**

- Undesirable and unusual intersection geometry
- Perceived delays and safety concerns associated with turning roadway to northbound Route 17 located opposite the two-way Brooks Pharmacy drive

**Capacity/Operational Deficiencies**

- Overall intersection LOS A during the PM peak hour under future traffic conditions
- Route 22/Route 17 northeastbound left turn lane will experience 95<sup>th</sup> percentile vehicle queues of 211 feet, exceeding the available storage capacity of 125 feet

**Recommendations**

- Widen Route 22/Route 17 to provide a 100-foot long extension (225-foot total length) of the existing left turn lane south of the intersection.
- Coordinate widening with improvement recommendations for Route 22 (Forest Road) and Route 17 intersection (see Figure 4-5)

**Constraints and Impacts**

- General impacts associated with widening could include minor right-of-way, utility, and drainage impacts
- Recommended improvements are located within the Northford Center Historic District

**Constraints and Impacts (continued)**

- No impacts to the historic center green area are anticipated as a result of widening
- Site constraints including steep alignment grades westbound from the intersection along Route 22 limit intersection improvement opportunities. See *Other Remarks* for additional discussion

**Other Remarks**

- Due to the safety concerns associated with the existing left turning roadway from the southbound Route 22 ramp to northbound Route 17, several alternative improvement concepts that would relocate this movement were evaluated (see Figures A-1 to A-3 in the Appendix). These concepts included removing the southbound Route 22 ramp and extending the eastbound Route 22 movements to the intersection with Mansfield Drive while providing a left-thru and right turn lane configuration; maintaining the Route 22 ramp and extending only the eastbound left-thru movement to the intersection; providing a roundabout in the vicinity of the Brooks Pharmacy drive to accommodate all movements from Route 17 southbound, Route 22 eastbound, and Route 22/17 northeastbound.
- None of the evaluated concepts described above proved feasible primarily due to the existing topography and the non-standard longitudinal grade that would result along the eastbound Route 22 approach to the intersection. In order to provide a standard grade, it would be necessary to raise the elevation of the intersection several feet resulting in grading impacts to the green and properties adjacent to the roadway.
- The severity of the safety concerns associated with the left turning roadway can be lessened by relocating the egress traffic movement from the Brooks Pharmacy parking lot drive that is currently located opposite the left turn. This egress can be provided from the rear of the parking lot in conjunction with improvements that would include a rear access road to Mansfield Drive and adjacent development, as described under the Route 22 (Forest Road) at Route 17 improvement recommendations.



**Route 22 (Forest Road) at Route 17 (Middletown Avenue)**

**Location**

- Town of North Branford, Northford Center
- Northeast portion of study area
- Approximately 700 feet south of the Route 22 (Clintonville Road) at Route 17 and Mansfield Drive intersection

**Description**

- Signalized, three-legged intersection
- Route 22 (Forest Road) – two-lane roadway approaching Route 17 intersection from south; left turn to stop-controlled leg providing access to southbound Route 17 is located approximately 150 feet south of stop bar for signal
- Route 22 (Forest Road)/Route 17 Overlap – two-lane roadway with southbound left turn lane to Route 22 (Forest Road) approaching intersection from north
- Route 17 – two-lane roadway approaching intersection from south; right turn to stop-controlled leg providing access to southbound Route 22 is located approximately 80 feet south of stop bar for signal

**Identified Issues**

- Undesirable and unusual intersection geometry consisting of heavily skewed approaches with a stop-controlled leg located between Route 17 and Route 22
- Stop-controlled leg provides insufficient storage space for tractor-trailer trucks attempting turns at this location resulting in impeded through traffic movement and safety issues
- Lack of pedestrian accommodations throughout area creating safety concerns in the heavily traveled corridor
- Intersection is northern terminus of ConnDOT-listed accident location between Foote Hill Road and Route 17

**Capacity/Operational Deficiencies**

- Overall intersection LOS C during the PM peak hour under future (2016) traffic conditions
- Existing operational deficiencies are associated with a general lack of access management in this area given the numerous commercial curb cuts located in close proximity to one another

**Recommendations**

- Two alternative potential improvement concepts were developed in this area to address the primary goals of providing improved intersection geometry, improved access management, and enhanced pedestrian accommodations to develop a sense of place in Northford Center. The two concepts are presented separately in the following discussion.

**Improvement Concept A – Conventional Intersection Reconfiguration**

- As shown in Figure 4-5, this concept consists of realigning the Route 17 approach to Route 22 and creating a four-legged intersection with a new primary commercial driveway access
- This configuration eliminates the existing stop-controlled leg located south of the signal by providing improved intersection geometry that can accommodate a large left turning vehicle from northbound Route 22 (Forest Road) to southbound Route 17
- The new primary commercial driveway access provides opportunities to eliminate curb cuts that provide access to the Northford Plaza shopping center
- Ardsley Avenue access to Route 22 is relocated and provided by a connection to the new primary commercial driveway
- A potential commercial access road that would parallel Route 22/Route 17 is shown in Figure 4-5. This access road would extend behind Brooks Pharmacy and connect to existing Mansfield Drive, providing alternative commercial access points and allowing ingress-only movements from Route 22/17 to Brooks Pharmacy and the Northford Store
- Widening of Route 22 south of Route 17 would likely be required to provide a northbound left turn lane to Route 17
- Widening of Route 22/Route 17 would likely be required to provide a southbound left turn lane to the new commercial driveway. This widening would also facilitate lengthening of the existing northbound left turn lane at the Mansfield Drive intersection to provide adequate storage capacity
- New sidewalks and streetscape improvements could be coordinated with the intersection reconfiguration to provide enhanced pedestrian access to commercial developments in the area while creating a sense of place in Northford Center. These improvements would be consistent with the sidewalk and streetscape elements that were constructed as part of the Brooks Pharmacy development
- Additional details relative to modifying commercial access, providing commercial infill opportunities, and incorporating streetscape elements into Improvement Concept A are similar to those details for Concept B. See Figure 4-6 for a color rendering of Concept B that illustrates many of these details that could be incorporated into this concept.

**Improvement Concept B – Roundabout Intersection Reconfiguration**

- As shown in Figure 4-6, this concept consists of reconfiguring the existing intersection and providing a four-legged, single lane roundabout with a new primary commercial driveway access
- Similar to Concept A, the roundabout eliminates the existing stop-controlled leg located south of the signal. The roundabout layout as shown can accommodate the turning movements of WB-50 and WB-62 design vehicles by utilizing a mountable apron around the interior circle to accommodate inside tracking of the rear wheels

**Improvement Concept B (continued)**

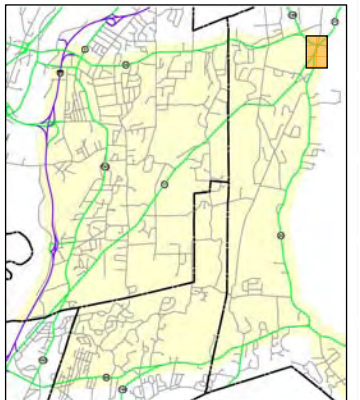
- The roundabout layout as shown can also accommodate an additional 240 vehicles accessing the roundabout from the new commercial driveway while maintaining a LOS D or better during the future PM peak hour
- This concept would likely provide secondary traffic calming benefits in this area as vehicles are required to reduce speeds through the roundabout and along its approaches in order to negotiate the curvature of the approach legs
- Details regarding the new primary commercial driveway access, the potential commercial access road to Mansfield Drive, and the relocated access for Ardsley Avenue are similar to Concept A as described above
- New sidewalks and streetscape improvements could be coordinated with the roundabout configuration to provide enhanced pedestrian access to commercial developments in the area while creating a sense of place in Northford Center. Similar to Concept A, these improvements would be consistent with the sidewalk and streetscape elements that were constructed as part of the Brooks Pharmacy development

**Constraints and Impacts**

- General impacts associated with both improvement concepts include right-of-way, utility, drainage, environmental, and construction-related impacts
- The existence of quality wetlands and poor soil conditions located behind the Brooks Pharmacy will likely dictate the ultimate alignment of the commercial access road as it is shown in the figures. Although the concept will likely remain unchanged, further investigation of the existing environmental constraints in this area will be required to determine feasible alignment alternatives for the access road
- Improvements are partially located within the Northford Center Historic District
- No impacts to the historic center green area are anticipated as a result of either improvement
- Location of the roundabout is dictated by the proximity of steep backslopes located along Route 22/Route 17 adjacent to the church, and by the proximity of the Mobil service station and bank to the intersection

**Other Remarks**

- Either intersection reconfiguration under Improvement Concept A or B can be implemented independently of the potential commercial access road that connects to Mansfield Avenue. Although this access road would create more access management opportunities along Route 22, it is not critical to the overall operation of either intersection.
- Given the need to acquire rights-of-way for implementation for these concepts, it will likely be critical for the Town to foster the support of the abutting property owners by promoting the benefits of improved commercial access and development potential that could result.



Location Map

LEGEND

- Approximate ROW/Property Lines
- Wetland Area
- Utility Pole
- Drainage Basin
- Pavement to be removed



Route 22 at Route 17  
Intersections  
Improvement Concept A

Figure 4-7



Potential new signaled intersection configuration

Eliminate existing stop-controlled intersection leg

Relocate access to Ardsley Avenue properties to new commercial driveway access

Enhanced pedestrian accommodations and potential streetscape improvements

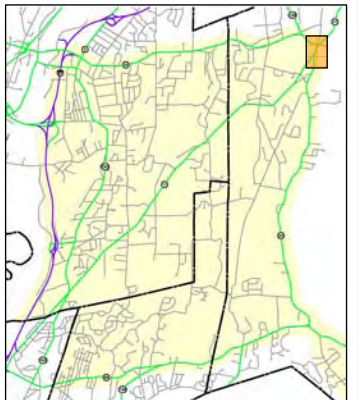
Potential widening to accommodate necessary left turn lanes

Potential access management improvements along Route 22

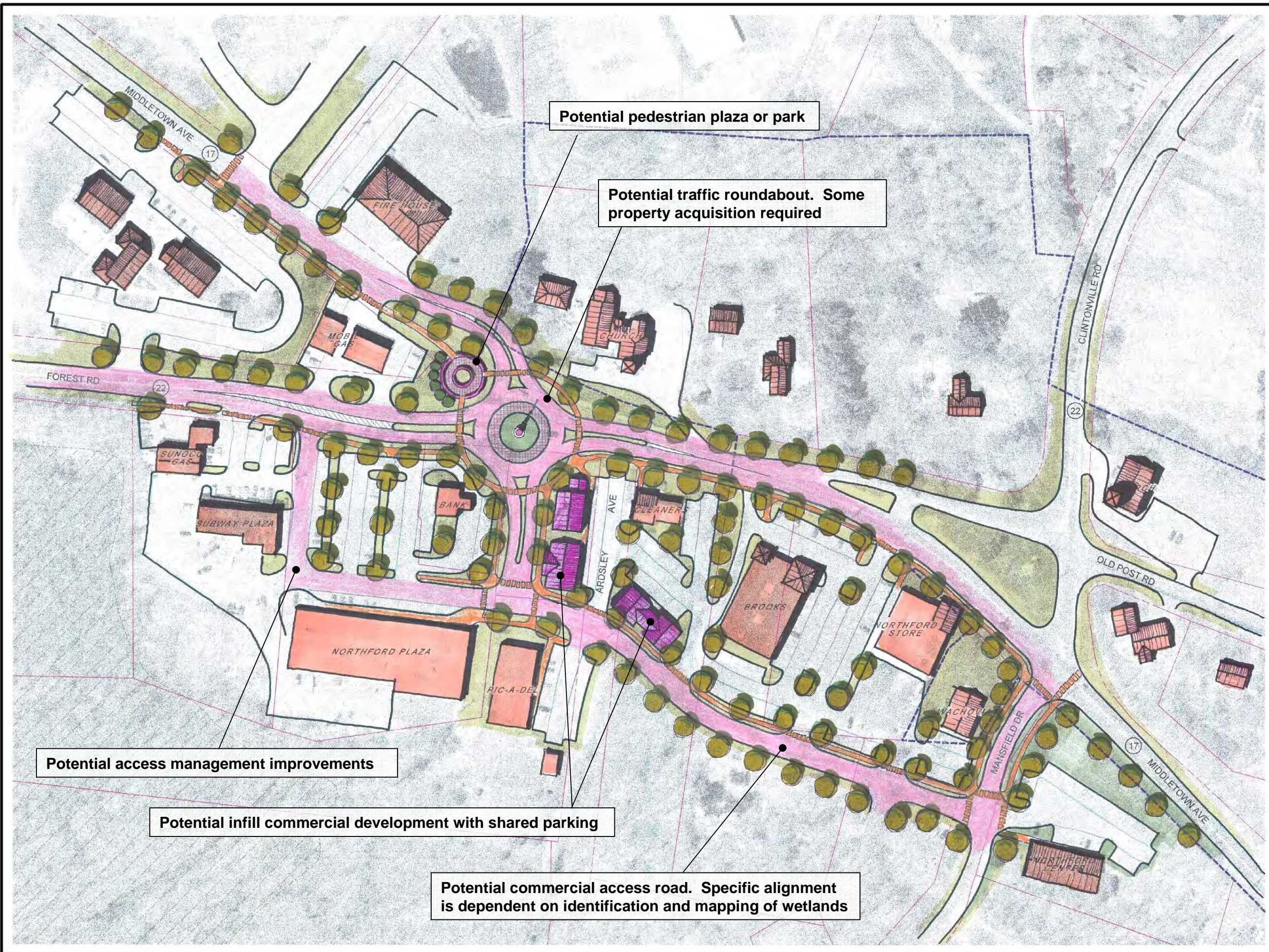
See Figure 4-5 for example parking lot configuration

New primary commercial driveway access

Potential commercial access road. Specific alignment is dependent on identification and mapping of wetlands



Location Map



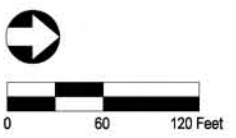
Potential pedestrian plaza or park

Potential traffic roundabout. Some property acquisition required

Potential access management improvements

Potential infill commercial development with shared parking

Potential commercial access road. Specific alignment is dependent on identification and mapping of wetlands



Route 22 at Route 17  
Intersections  
Improvement Concept B

Figure 4-8

**Route 80 (Foxon Road) at Mill Avenue and Thompson Street**

**Location**

- Town of East Haven
- Approximately one mile east of New Haven – East Haven town line
- Approximately three-fourths of a mile west of Route 100 intersection

**Description**

- Signalized, four-legged intersection
- Route 80 – Westbound approach consisting of one through lane, one shared through lane and right turn lane, and one left turn lane
- Route 80 – Eastbound approach consisting of one through lane, one shared through lane and right turn lane, and one left turn lane
- Mill Avenue – Northbound approach consisting of one shared through lane and right turn lane, and one left turn lane
- Thompson Street – Southbound approach consisting of one through lane, one right turn lane, and one left turn lane

**Identified Issues**

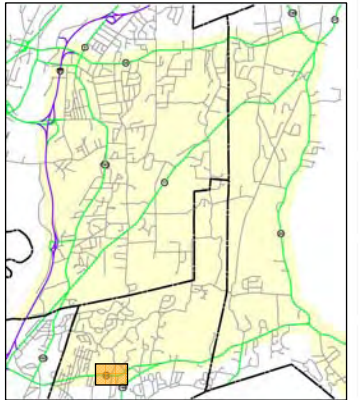
- ConnDOT-listed accident location
- 48 total accidents occurred at this location over the review period from January 1, 2001 to December 31, 2004
- More than 70% of all accidents were caused by eastbound or westbound vehicles
- Approximately one-third of accidents caused by eastbound or westbound vehicles were attributed to violations of the traffic signal and involved angle collisions with northbound or southbound traffic in the intersection

**Capacity/Operational Deficiencies**

- None identified at this time

**Recommendations**

- Based upon the safety analysis presented in Section 2.8.1.2 and a review of the existing traffic signal plans, there is potential to increase the existing northbound and southbound all-red time from one second to two seconds. This additional second, in conjunction with any other timing modifications to maintain existing operations, would provide more time for eastbound and westbound vehicles to clear the intersection prior to northbound and southbound traffic advancing into the intersection.



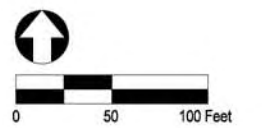
Location Map



Signalized intersection with 48 total accidents  
(January 1, 2001 – December 31, 2004)

Increase northbound and southbound all-red  
time from one to two seconds

More than 70% of all accidents caused by  
eastbound or westbound vehicles



Route 80 at Mill Avenue &  
Thompson Street  
Improvement Recommendation

Figure 4-9

### 4.1.1 Preliminary Construction Cost Estimate

A construction cost estimate for each of the improvement recommendations described above was developed in accordance with ConnDOT guidelines for preliminary cost estimating dated January 2006. Table 4-1 presents a summary of the estimated construction costs for each improvement. These costs assume full-depth construction and reconstruction within the limits of new pavement to provide a relatively conservative cost estimate. However, the costs shown in the table are exclusive of utility relocation, right-of-way acquisition, and environmental mitigation costs due to the limited information available at this time.

**Table 4-1. Preliminary Construction Cost Estimates – State Roadways**

Location	Estimated Construction Cost (2006 \$)
Route 103 (Maple Avenue) at Pool Road & Laydon Avenue	\$90,000
Route 22 between Route 17 & Foote Hill Road	\$10,000
Route 22 at Route 150	\$1,100,000
Route 22 at Route 17 Intersections – Concept A	\$1,800,000
Route 22 at Route 17 Intersections – Concept B	\$1,500,000
Route 80 at Thompson Street & Mill Avenue	\$2,000

### 4.2 Local Roadway Recommendations

Data collection efforts and public input received during the initial phases of this study confirmed that numerous local roadways in the study area are experiencing high traffic volumes and speeds associated with cut-through traffic of non-local origin or destination. A preliminary list of potential improvement candidates was developed in Section 2 to further define those roadways with the greatest needs based on existing traffic conditions. The purpose of this section is to evaluate improvement opportunities on these roadways and recommend a variety of feasible traffic calming measures to improve overall safety by reducing travel speeds and discouraging the use of local cut-through routes. Improvement recommendations are provided for the following local roadways:

- Spring Road (North Haven)
- Foxon Hill Road (East Haven)
- Cloudland Road including Charnes Drive (North Haven, East Haven)
- Mill Road (North Branford)
- Pool Road (North Haven)
- Mill Road (North Haven)
- Arrowdale Road (North Haven)
- Village Street (North Branford)
- Half Mile Road including Auger Road Extension (North Haven, East Haven, North Branford)



In addition, the study team developed a priority ranking guide, traffic calming “toolbox”, cost guidelines, and implementation strategies that can be utilized by the municipalities to make informed and effective decisions regarding the implementation of traffic calming improvements along their roadways.

#### **4.2.1 Priority Ranking Methodology for Traffic Calming Needs**

A priority ranking guide based on a point scoring system was developed to comparatively assess traffic calming needs in the Route 22 study area. The scoring process consists of comparing various criteria related to traffic calming – such as traffic volumes, speeds, cut-through traffic percentages, and existing land-use – to threshold values established for the criteria. The point totals derived from the scoring system for various locations within the study area can be used to: 1) identify or confirm the need for traffic calming measures and 2) assign priority to two or more locations with competing needs. The participating towns can also utilize the ranking guide as a planning tool for the prioritization of future traffic calming needs and public requests for traffic calming measures.

The scoring system and method of assigning points to the various criteria are summarized in Table 4-2. A detailed description of each ranking criterion is provided following the table.

**Table 4-2. Priority Ranking Guide for Traffic Calming Needs**

Ranking Criteria		Point Range	Basis for Point Assignment
Speed		0 to 35	Extent by which 85% speed exceeds posted speed limit. 3 points assigned for every 1 mph over the posted speed
Average Daily Volume		0 to 15	Average Daily Traffic (ADT or AADT) 1 point assigned for every 350 vehicles
Peak Hour Volume		0 to 15	Peak volume in both directions. 1 point assigned for every 35 vehicles)
% Cut Through Traffic		0 to 15	2 points assigned for every 10% above 20%
Pedestrian/Bicyclist Considerations	Pedestrian/Bicyclist Generation: General	0 to 15  (5 points for each group)	5 points assigned if public facilities that might generate general pedestrian/bicyclist activity exist within walking proximity of the study area. Some examples include but are not limited too: parks, playgrounds, sports fields, commercial plazas, community centers, etc.
	Pedestrian Generation: Special Needs		5 points assigned if facilities for the young or elderly, handicapped or other special needs exist within walking proximity of the study area. Some examples include but are not limited to: schools, senior centers, group homes, etc.
	Pedestrian Facility		3 points assigned if a continuous sidewalk exists on only side of the street; 5 points if there are no sidewalks
Residential Density		0 to 5	1 point assigned for every 25 dwelling units/mile of roadway
Total Points:		100	

**Speed:** A common statistical measure of speed for design purposes is the 85<sup>th</sup> percentile speed. This represents the speed at which 85 percent of motorists on a roadway drive at or below. Locations where the 85<sup>th</sup> percentile speed is found to be below the legal posted limit indicate that speed is not likely to be a factor for traffic calming. Conditions where the 85<sup>th</sup> percentile speed exceeds the posted speed by 10 mph indicate the need for response, either by police enforcement and/or traffic calming plan.

**Volume:** The negative effects of traffic flow on local roadways are not typically related to capacity or congestion, but instead are related to the exposure of other users (e.g. pedestrians and bicyclists) to vehicular traffic. Average Daily Traffic (ADT) volumes are typically 1,500 vehicles per day (vpd) or less on local residential streets. ADT volumes on residential collector roadways may approach 3,500 vpd. ADTs above this level can contribute to diminished quality of the roadway environment for non-motorized users.

Peak hourly traffic flow can also affect the quality of the local roadway environment. Afternoon peak hour volumes are typically about 10 percent of the ADT. Applying this to

the ADT range for local roadways indicates that peak hour traffic volumes exceeding 350 vehicles per hour can have a negative effect on the quality of the roadway environment.

**Cut-Through Traffic:** Non-local traffic on a local roadway can produce a negative perception of the quality of the roadway environment that is independent of the overall traffic volume. Typically, some level of cut-through traffic is likely to be a normal consequence of neighborhood activity, reflecting factors such as visitors, deliveries, and services. For the purposes of conducting this study, an allowance of 20% of the total traffic flow for non-local users was considered.

**Pedestrian/Bicycle Considerations:** These criteria consider the non-motor vehicle uses within the roadway environment. Factors such as the presence of activity centers that generate pedestrian or bicycle trips (such as recreational facilities or community centers) are considered as well as facilities serving special needs groups (such as the young, aged or physically challenged). The availability of sidewalks or trails to serve these users is also considered.

**Residential Density:** The residential density along a roadway accounts for the effect that variation in residential settings (i.e. lot sizes, setbacks, etc.) can have on the neighborhood perception of traffic volume or speed conditions.

#### **4.2.2 Methodology for Estimating Cut-Through Traffic**

Cut-through traffic volumes along a particular roadway can be estimated by conducting an origin-destination study of the vehicles utilizing the roadway during a certain period of time. Conducting an origin-destination study is a labor-intensive process that can include recording vehicle license plate numbers and determining which vehicles are local and which are non-local, or cut-through traffic, based on vehicle registration information. An alternative method for determining cut-through traffic volumes consists of comparing measured traffic volumes to the trip generation characteristics of the land-uses served by the roadway. This alternative method was used for the purposes of this study due to the size of the study area and the overall number of locations being investigated.

The volume of daily traffic generated by local trips along each of the identified cut-through routes was approximated by the following procedure:

1. Determining the number of housing units contributing to local traffic on each route using 2000 US Census Block level data
2. Multiplying the number of housing units by the estimated vehicle trip generation rate per household consistent with SCRCOG's regional travel demand model (eight vehicle trips per household per weekday)
3. Relating the number of total daily household trips to the locations of the ATR stations and the recorded directional distributions of traffic

The approximate volume of daily traffic generated by local trips as calculated from the above procedure was then compared to the average daily traffic volume recorded at each ATR

station. Generally, a route is being used as cut-through route by non-local traffic when the actual volume along the route exceeds the calculated volume based on trip generation.

#### **4.2.3 Summary of Priority Ranking Results**

Table 4-3 provides a summary of the existing roadway traffic conditions and the priority ranking results derived from the application of the point scoring system to the local roadways identified as candidates for traffic calming improvements. As shown in the table, all of the evaluated roadways were determined to be cut-through routes based on the percentages of cut-through traffic that range between 37% on Foxon Hill Road to 76% on Mill Road in North Branford. In addition, eight of nine roadways scored the maximum number of points allotted for speed. This result indicates that the 85<sup>th</sup> percentile speed exceeds the posted speed limit on nearly all of the evaluated roadways. The results of the overall ranking illustrate the weight that existing speeds and volumes carry in determining traffic calming priorities. For example, Foxon Hill Road scored considerably higher than Arrowdale Road based on higher daily and peak hour volumes despite showing a far less percentage of cut-through traffic.

**Table 4-3. Priority Ranking of Traffic Calming Needs**

Existing Traffic Conditions		Spring Road	Foxon Hill Road	Cloudland Road	Mill Road (N.B.)	Pool Road	Mill Road (N.H.)	Arrowdale Road	Village Street	Half Mile Road
AADT [vpd]		5000	5150	3550	2350	4250	3600	3250	2300	1250
Peak Hour Volume [vph]		510	620	420	250	410	320	360	260	130
85 <sup>th</sup> Percentile Speed [mph]		44	39	43	41	45	44	42	39	41
% Cut Through Traffic		67	37	70	76	67	57	71	46	57
Ranking Criteria	Point Range	Point Score								
Speed	0 to 35	35	35	35	35	35	35	35	35	33
Average Daily Volume	0 to 15	15	15	10	7	12	10	9	7	4
Peak Hour Volume	0 to 15	15	15	12	7	12	9	10	7	4
% Cut Through Traffic	0 to 15	9	3	10	11	9	7	10	5	7
Pedestrian Considerations	Pedestrian Generation: General	0 to 15 (5 points for each group)	0	5	0	0	0	0	0	0
	Pedestrian Generation: Special Needs		5	0	5	5	0	5	0	0
	Pedestrian Facility		5	5	5	5	5	5	5	5
Residential Density	0 to 5	5	5	4	1	2	3	1	1	2
<b>Total Points</b>	<b>100</b>	<b>89</b>	<b>83</b>	<b>81</b>	<b>75</b>	<b>75</b>	<b>74</b>	<b>70</b>	<b>60</b>	<b>55</b>

#### 4.2.4 Traffic Calming Toolbox

Typical traffic calming measures are intended to change driver behavior through the use of passive, psychological, and physical controls. Passive controls typically consist of devices that advise motorists to change their driving behavior such as mobile radar trailers, police enforcement, and traffic signing. Psychological controls are intended to induce desired behavior patterns through changes in the driver's environment. Typical techniques include the introduction of visual cues such as pavement markings or roadside trees that visually narrow the roadway. Physical controls are changes to the roadway that force drivers to take certain actions such as reducing travel speeds, or changing travel patterns such that traffic volumes are reduced.

The traffic calming recommendations for the study area include psychological and physical controls intended specifically to reduce travel speeds along the collector-type roadways that have been identified as cut-through routes. Devices that would typically be utilized to reduce traffic volumes – such as half and full roadway closures, diverters, and restricted movement signing – are not recommended for use along collector roadways in the study area. Physically limiting certain movements given the existence of few alternative routes through the study area would greatly limit access for local users; potentially impede emergency response services; and likely divert more traffic to other cut-through routes. Consequently, the traffic calming toolbox for this study presents measures that can be utilized within the intended function of the local roadway network to reduce travel speeds. A reduction in volumes is a potential secondary benefit of implementing speed reduction measures as slower operating speeds along the target roadways make them less desirable as cut-through routes.

The traffic calming toolbox is presented in Figure 4-7. It should be noted that regulatory 'STOP' signs are not included in the toolbox of traffic calming devices. Stop signs are intended to assign vehicle right-of-way at an intersection. They are generally not effective in reducing average vehicle speeds along a roadway except in the immediate vicinity of the intersection. Studies have also shown that mid-block speeds are higher after all-way-stop-control is implemented at an intersection as drivers compensate for the deceleration and acceleration at the intersection. Stop signs also do not have a significant effect on traffic volume. Travel time is usually a factor in route selection by drivers. Since Stop signs do not have an appreciable effect on overall travel time along a roadway, they consequently do not have a significant effect on a driver's selection of which routes to travel.

**Figure 4-10. Traffic Calming Toolbox**

### Edge Striping

Edge striping is a psychological device that can be used to visually narrow the roadway creating more driver awareness and encouraging slower speeds. Edge striping also creates a defined shoulder area that can be used by bicyclists and pedestrians to enhance safety.

#### Advantages

- Relatively easy to implement
- Cost-effective
- Encourages slower speeds

#### Disadvantages

- Supplemental devices may be required to achieve speed reduction goals



### Colored/Textured Shoulder Pavement

The shoulder created by edge striping can be supplemented with the application of textured or colored pavement, which is also a psychological device. Colored/textured pavement provides additional contrast to visually narrow the apparent roadway width.

#### Advantages

- Relatively easy to implement
- Encourages slower speed

#### Disadvantages

- Supplemental devices may be required to achieve speed reduction goals



### Speed Hump

Speed humps are physical devices consisting of rounded raised sections of pavement approximately 3 ½” high and 12 feet or more in length that span the entire roadway width. Speed humps are often used in series at a defined spacing to achieve a specific speed. Gradual slope transitions are traversable by snow plows.

#### Advantages

- Effective in speed reduction
- Relatively inexpensive

#### Disadvantages

- May slow emergency vehicles
- Increase noise and air pollution



**Figure 4-10. Traffic Calming Toolbox (Continued)**

**Bulbouts**

Bulbouts are curb extensions at intersection corners that narrow a street by extending the sidewalk or widening the planting strip. They can also be implemented in the absence of sidewalks. They reduce the curb-to-curb roadway width and tighten the curb radii to reduce turning speed. On collector roadways, approaches to bulbouts can be designed to provide a gradual transition from the existing curblines to the narrowed section to facilitate winter snow plowing operations.



Advantages

- Reduce speeds and volumes
- Improve pedestrian safety when used with sidewalks

Disadvantages

- May slow right-turn emergency vehicles
- Design must consider existing roadside drainage patterns and impacts

**Chokers**

Chokers are typically curb extensions at mid-block sections that narrow a street by extending the sidewalk or widening the planting strip. They can also be implemented in the absence of sidewalks. Chokers create a short section of roadway with two lanes that are narrower than the typical roadway cross section. On collector roadways, approaches to chokers can be designed to provide a gradual transition from the existing curblines to the narrowed section to facilitate winter snow plowing operations.



Advantages

- Reduce speeds and volume
- Provide landscaping opportunities
- Reduces pedestrian crossing width when used with sidewalks

Disadvantages

- Can impact driveway access/parking
- Require delineation and advance warning in lower density areas
- Design must consider existing roadside drainage patterns and impacts



**Figure 4-10. Traffic Calming Toolbox (Continued)**

**Lateral Shifts**

Lateral shifts are curb extensions that alter the roadway alignment by shifting it to one side and then shifting it back again. Typically these shifts occur on an otherwise straight roadway.

Advantages

- Used on collector roadways
- No impedance to emergency vehicles

Disadvantages

- If designed improperly, drivers will deviate out of appropriate lanes
- Potential loss of on street parking in urban areas



**Neighborhood Traffic Circle**

Neighborhood traffic circles are raised islands, placed in intersections, around which traffic circulates. They are typically circular in shape and often landscaped. Motorists traveling straight through the intersection are required to slow down in order to negotiate the circle and yield to others. Traffic circles for traffic calming purposes are not the same as roundabouts, which are used for intersection control.

Advantages

- Effective in moderating speeds
- Aesthetically pleasing
- Circulates traffic efficiently

Disadvantages

- Small delay to emergency vehicles
- Potential loss of on street parking in urban areas



**SPRING ROAD – Town of North Haven**

**Applicable Traffic Calming Measures**

- Edge Striping
- Textured/Color-Dyed Shoulders
- Bulbouts
- Neighborhood Traffic Circles

**Potential Bulbout Locations**

- Spring Road at Beach Street
- Spring Road at Potter Road
- Spring Road at Brook Lane

**Potential Traffic Circle Locations**

- Spring Road at Beach Street
- Spring Road at Potter Road
- Spring Road at Brook Lane

\*Note: Bulbouts should not be used in conjunction with neighborhood traffic circles.

Spring Road is a local collector roadway located in the Town of North Haven. The roadway runs north from Route 17 and becomes Laydon Avenue as it turns westerly to intersect Route 103 and Pool Road.

Spring Road serves as a north-south cut-through route that parallels Route 103. Several side streets along Spring Road including Potter Road and Beach Street have been identified as secondary cut-throughs to Route 103. From Cloudland Road at the south, access is provided to Route 17 and Cloudland Road located south of Route 17.



<b>Spring Road Existing Conditions</b>		
AADT [vpd]	5000	
Peak Hour Volume [vph]	510	
85 <sup>th</sup> Percentile Speed [mph]	44	
% Cut Through Traffic	67	
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	N/A
	Pedestrian Facility	No sidewalks
Residential Density [units/mi]	120	

**FIGURE 4-11. TRAFFIC CALMING EXAMPLE: TRAFFIC CIRCLE AT INTERSECTION OF SPRING ROAD & BEACH STREET**



**FOXON HILL ROAD – TOWN OF EAST HAVEN**

**Applicable Traffic Calming Measures**

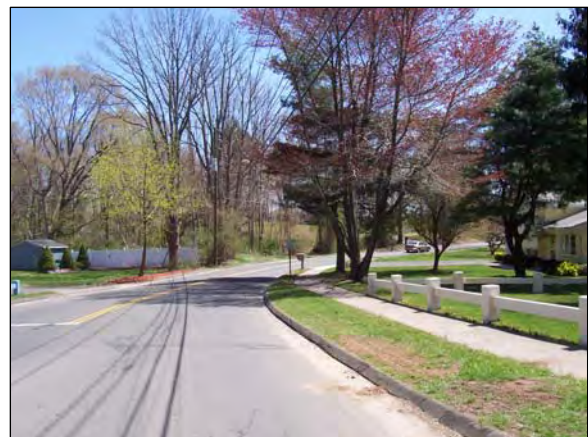
- o Edge Striping
- o Textured/Color-Dyed Shoulders

**Physical Traffic Calming Devices** such as speed humps, bulbouts, and neighborhood traffic circles are not recommended along Foxon Hill Road due to the generally rolling topography and numerous horizontal curves that characterize the corridor.

**Thompson Street**, which connects Foxon Hill Road to Route 80, is part of CT Transit’s D12 bus route. Consequently, the portion of Thompson Street located between Gay Street and Route 80 is not a candidate for physical traffic calming measures.

Foxon Hill Road is a local collector roadway located in the Town of East Haven. The roadway runs east from Route 103 in New Haven and continues southeasterly into East Haven. East of Charnes Road, the roadway becomes Thompson Street and intersects Route 80.

Foxon Hill Road serves as an east-west cut-through route that provides a connection between Route 103 and Route 80.



Foxon Hill Road Existing Conditions		
AADT [vpd]		5150
Peak Hour Volume [vph]		620
85 <sup>th</sup> Percentile Speed [mph]		39
% Cut Through Traffic		37
Pedestrian Considerations	Pedestrian Generation: General	Commercial develop. in area
	Pedestrian Generation: Special Needs	N/A
	Pedestrian Facility	No continuous sidewalks
Residential Density [units/mi]		200

**CLOUDLAND ROAD – TOWN OF NORTH HAVEN**  
**CHARNES DRIVE – TOWN OF EAST HAVEN**

**Applicable Traffic Calming Measures**

- o Edge Striping
- o Textured/Color-Dyed Shoulders
- o Speed Humps (limited to Charnes Road)

**Potential Speed Hump Locations**

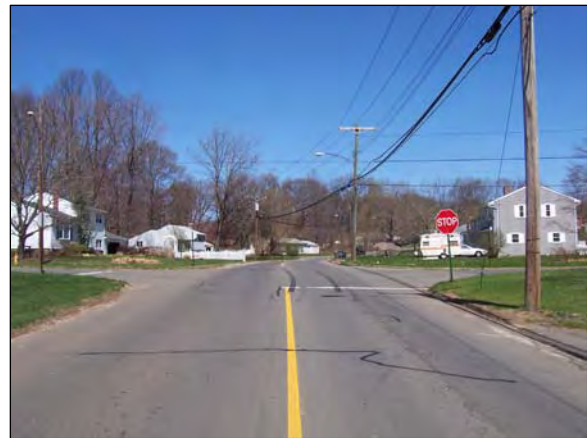
- o Residential sections of Charnes Road
- o Space at 550 ft to achieve 30 mph
- o Space at 275 ft to achieve 25 mph

\*Note: Speed humps are typically placed in series at incremental distances to achieve a desired speed.

**Physical Traffic Calming Devices** such as speed humps and bulbouts are not recommended along Cloudland Road due to the generally rolling topography.

Charnes Road is a local roadway that runs north from Foxon Hill Road in East Haven and continues north into North Haven as Cloudland Road. Cloudland Road intersects Route 17 just north of Montowese Avenue.

These roadways serve as a north-south cut-through route that essentially parallels Route 103. The route connects to Route 80 on the south via Thompson Street. From Cloudland Road at the north, access is provided to Montowese Avenue, Route 17, and Spring Road located north of Route 17 in North Haven.



<b>Cloudland Road Existing Conditions</b>		
AADT [vpd]	3550	
Peak Hour Volume [vph]	420	
85 <sup>th</sup> Percentile Speed [mph]	43	
% Cut Through Traffic	70	
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	School
	Pedestrian Facility	No sidewalks
Residential Density [units/mi]	100	

FIGURE 4-12. TRAFFIC CALMING EXAMPLE: SPEED HUMPS ALONG CHARNES DRIVE



**MILL ROAD – Town of North Branford**

**Applicable Traffic Calming Measures**

- o Edge Striping
- o Textured/Color-Dyed Shoulders
- o Bulbouts
- o Neighborhood Traffic Circle

**Potential Bulbout Locations**

- o Mill Road at Woodchase Road
- o Mill Road at Caputo Road

**Potential Traffic Circle Locations**

- o Mill Road at Woodchase Road
- o Mill Road at Caputo Road

\*Note: Bulbouts should not be used in conjunction with neighborhood traffic circles.

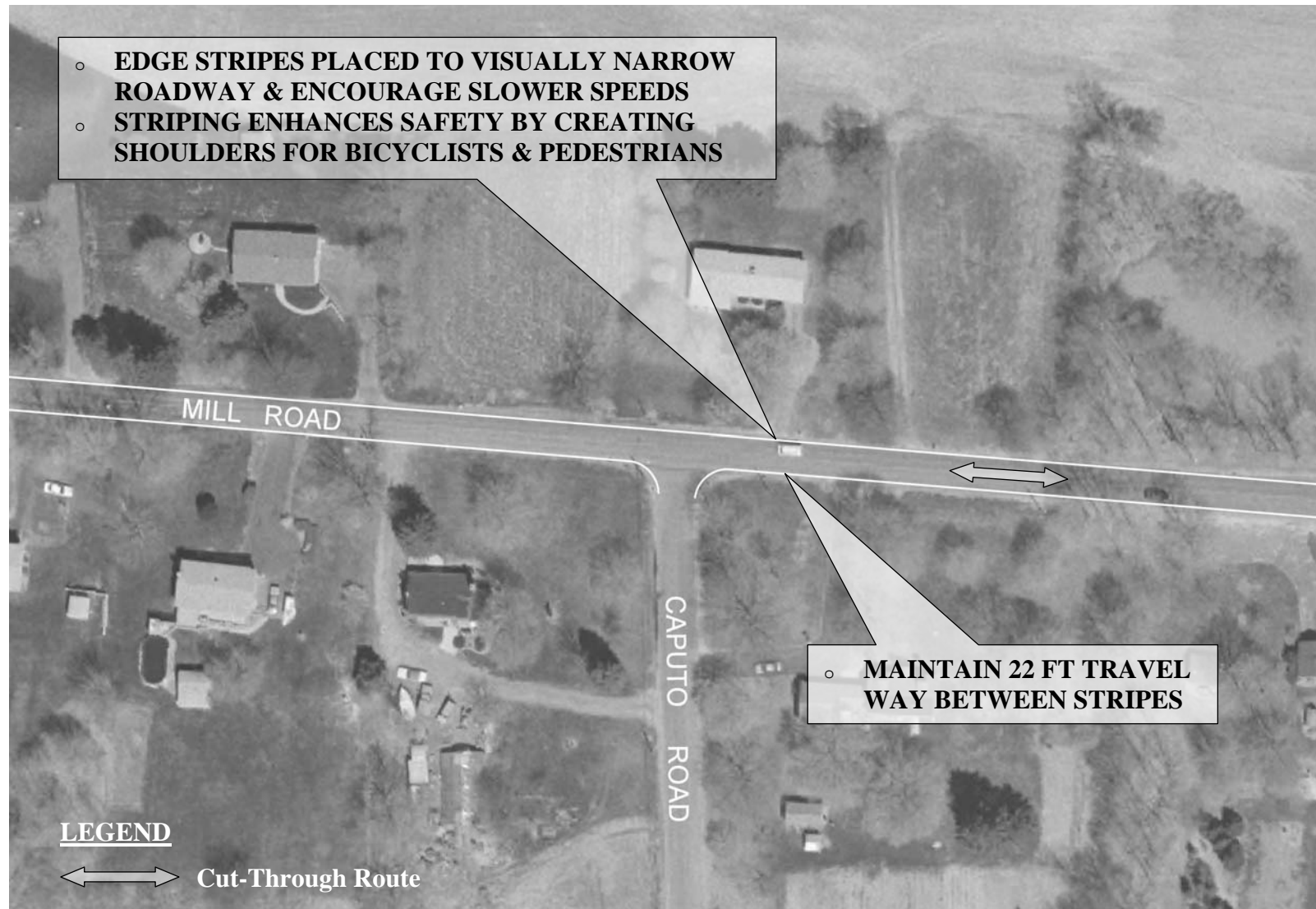
Mill Road is a local collector roadway located in the Town of North Branford between Totoket Road and Route 22. Mill Road’s intersection with Route 22 is located approximately a half mile north of Route 80.

This section of roadway is part of a longer east-west cut-through route that follows Montowese Avenue from Route 17 and continues along Beach Lane, North Hill Road, Arrowdale Road, and Thompson Street in North Haven. Borrelli Road in East Haven is also part of this cut-through route that runs between Route 17 and Route 22.

Mill Road Existing Conditions		
AADT [vpd]	2350	
Peak Hour Volume [vph]	250	
85 <sup>th</sup> Percentile Speed [mph]	41	
% Cut Through Traffic	76	
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	School
	Pedestrian Facility	No continuous sidewalks
Residential Density [units/mi]	35	



**FIGURE 4-13. TRAFFIC CALMING EXAMPLE: EDGE STRIPING ALONG MILL ROAD (NORTH BRANFORD)**





**POOL ROAD – TOWN OF NORTH HAVEN**

**Applicable Traffic Calming Measures**

- Chokers
- Lateral Shifts
- Bulbouts
- Edge Striping
- Color-Dyed/Textured Shoulders
- Neighborhood Traffic Circle

**Potential Choker/Lateral Shift Locations**

- Between side streets along Pool Road, from Tennyson Avenue to Saint John Street

**Potential Bulbout Locations**

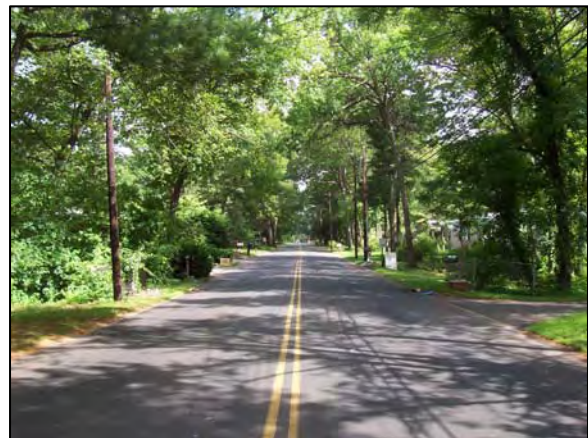
- Pool Road and Tennyson Avenue, South Avenue, Central Avenue, and North Avenue

**Potential Traffic Circle Locations**

- Pool Road and Saint John Street

Pool Road is a local roadway located in the Town of North Haven. The roadway intersects Route 103 (Maple Avenue) south of Bailey Road and continues north to Route 22 and beyond the study area. Although not classified as a collector roadway by ConnDOT, Pool Road collects traffic from numerous intersecting local streets in the Pine Hill section of North Haven.

This section of roadway is part of a longer north-south cut-through route that links to Laydon Avenue on the south. Pool Road parallels Route 103 within the study area and US 5 north of Route 22, providing access to I-91 Exit 12 via Blakeslee Avenue.



Pool Road Existing Conditions		
AADT [vpd]		4250
Peak Hour Volume [vph]		410
85 <sup>th</sup> Percentile Speed [mph]		45
% Cut Through Traffic		67
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	N/A
	Pedestrian Facility	No continuous sidewalks
Residential Density [units/mi]		65

**MILL ROAD – TOWN OF NORTH HAVEN**

**Applicable Traffic Calming Measures**

- Edge Striping
- Color-Dyed/Textured Shoulders
- Chokers

**Physical Traffic Calming Devices** such as speed humps, bulbouts, and neighborhood traffic circles are not recommended along the southern and central sections of Mill Road due to the curving nature of the roadway.

**Edge striping and color-dyed/textured shoulders** can be applied along Mill Road to achieve a 22-foot travel way.

**Potential Choker Locations**

- Between Randall Drive and Katie Lane
- Between Clintonville Lane and Route 22

Mill Road is a local roadway located in the Town of North Haven between Spring Road and Route 22.

This section of roadway serves as a north-south cut-through route between Spring Road and Route 22, where it also intersects with Bassett Road located to the north of Route 22. The Mill Road magnet school is located near the north end of Mill Road.



<b>Mill Road Existing Conditions</b>		
	AADT [vpd]	3600
	Peak Hour Volume [vph]	320
	85 <sup>th</sup> Percentile Speed [mph]	44
	% Cut Through Traffic	57
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	School
	Pedestrian Facility	No continuous sidewalks
	Residential Density [units/mi]	80

**ARROWDALE ROAD – TOWN OF NORTH HAVEN**

**Applicable Traffic Calming Measures**

- Edge Striping
- Textured/Color-Dyed Shoulders
- Bulbouts
- Neighborhood Traffic Circle

**Potential Bulbout Locations**

- Arrowdale at Justine Road
- Arrowdale at Meadow View Road

**Potential Traffic Circle Locations**

- Arrowdale at North Hill Road
- Arrowdale at Justine Road
- Arrowdale at Meadow View Road

\*Note: Bulbouts should not be used in conjunction with neighborhood traffic circles.

Arrowdale Road is a local collector roadway located in the Town of North Haven east of Route 17 and west of the East Haven town line.

This section of roadway is part of a longer east-west cut-through route that follows Montowese Avenue from Route 17 and continues along Beach Lane, North Hill Road, Arrowdale Road, and Thompson Street in North Haven. Borrelli Road in East Haven and Mill Road in North Branford are also part of this cut-through route that ends at Route 22.



<b>Arrowdale Road Existing Conditions</b>		
AADT [vpd]	3250	
Peak Hour Volume [vph]	360	
85 <sup>th</sup> Percentile Speed [mph]	42	
% Cut Through Traffic	71	
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	N/A
	Pedestrian Facility	No continuous sidewalks
Residential Density [units/mi]	32	

**FIGURE 4-14. TRAFFIC CALMING EXAMPLE: BULBOUTS AT INTERSECTION OF ARROWDALE ROAD & JUSTINE DRIVE**



**VILLAGE STREET – TOWN OF NORTH BRANFORD**

**Applicable Traffic Calming Measures**

- o Edge Striping
- o Textured/Color-Dyed Shoulders

**Physical Traffic Calming Devices** such as speed humps, bulbouts, and neighborhood traffic circles are not recommended along Village Street due to the generally rolling topography.

Village Street is a local roadway located in the Town of North Branford. The roadway runs north from Augur Road, crossing Totoket Road, Route 17, and Route 22 before terminating at Route 150.

Village Street serves as a north-south cut-through route that provides a connection between Clintonville Road (east-west Route 22) and Forest Road (north-south Route 22) while bypassing Northford Center. The Village Street intersections with Clintonville Road and Route 17 are signalized. The roadway connects to Forest Road on the south via Augur Road.



Village Street Existing Conditions		
AADT [vpd]	2300	
Peak Hour Volume [vph]	260	
85 <sup>th</sup> Percentile Speed [mph]	39	
% Cut Through Traffic	46	
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	N/A
	Pedestrian Facility	No sidewalks
Residential Density [units/mi]	35	

**HALFMILE ROAD – TOWN OF NORTH HAVEN  
AUGER ROAD EXTENSION – TOWN OF EAST HAVEN/NORTH BRANFORD**

**Applicable Traffic Calming Measures**

- Edge Striping
- Textured/Color-Dyed Shoulders
- Neighborhood Traffic Circle

**Edge striping and textured/color-dyed shoulders** can be applied to achieve a 22-foot wide travel way along wider sections of Halfmile Road and Auger Road Extension.

**Potential Traffic Circle Locations**

- Halfmile Road and North Hill Road

\*Note: Significant portions of Halfmile Road and Auger Road Extension are 20-foot wide making physical traffic calming devices to reduce the travel lane width infeasible alternatives. The effectiveness of edge striping is also limited due to the already narrow width of the roadway.

Halfmile Road is a local roadway located in the Towns of North Haven and East Haven between Totoket Road and Route 22. The Mill Road intersection with Route 22 is located approximately a half mile north of Route 80.

This section of roadway is part of a longer east-west cut-through route between Route 17 and Route 22. Traveling east, the cut-through follows Halfmile Road to Auger Road Extension, along Totoket Road, and subsequently to Auger Road where it terminates at Route 22 (Forest Road).



Halfmile Road Existing Conditions		
AADT [vpd]		1250
Peak Hour Volume [vph]		130
85 <sup>th</sup> Percentile Speed [mph]		41
% Cut Through Traffic		57
Pedestrian Considerations	Pedestrian Generation: General	N/A
	Pedestrian Generation: Special Needs	N/A
	Pedestrian Facility	No continuous sidewalks
Residential Density [units/mi]		60

### 4.2.5 Typical Cost Guidelines

Table 4-4 presents typical construction costs for various physical traffic calming measures recommended for use in the study corridor.

**Table 4-4. Cost Guidelines for Physical Traffic Calming Measures**

Measure	Typical Cost
Bulbouts	\$10,000 - \$15,000 per intersection
Chokers/Lateral Shifts	\$8,000 - \$12,000 per location
Neighborhood Traffic Circles	\$5,000 - \$10,000 each
Speed Humps	\$4,000 each

It should be noted that the cost for neighborhood traffic circles can vary widely depending upon the overall size and landscaping treatments that are selected for the center.

### 4.2.6 Additional Traffic Calming Opportunities

Public comments received during the public outreach phase of this study indicated that two additional roadways not included in the initial study review are potential cut-through routes. These include Old Post Road located between Pistapaug Road and Route 17 in North Branford, and Totoket Road located between Mill Road and Route 22 (Forest Road) in North Branford. In response to these comments, the study team performed a subsequent site review to determine the applicability of potential traffic calming measures.

Totoket Road is functionally classified as a collector road, and is generally hilly and narrow in width. Traffic calming devices applicable for this roadway are limited to edge striping and textured/color-dyed shoulders that reduce the travel way to 22-feet in width. The already narrow roadway will potentially limit the effectiveness of edge striping applications.

Old Post Road serves as a local road, and is also generally hilly. The roadway serves the agricultural operations of the adjacent land uses and is also therefore, restricted in physical traffic calming devices that reduce volume. Psychological speed reduction devices, such as edge striping and textured/color-dyed shoulders, are applicable to the roadways environment to reduce the travel way to 22-feet in width.

## 5

## IMPROVEMENT IMPLEMENTATION

Section 4 presented the overall improvement recommendations that were developed by the study team to address the identified needs and deficiencies along State and local roadways in the Route 22 study area. This section further defines these improvement recommendations by providing a recommended implementation strategy that can be utilized by the SCRCOG and municipalities to begin programming improvements and securing funding sources. Near and long-term improvement priorities are also defined for State and local roadways.

### 5.1 Implementation Strategy for State Roadway Improvements

The study team identified improvement opportunities that included capacity, operational, and safety improvements for six locations along State roadways in the study area. These locations include:

- Route 103 (Maple Avenue) at Pool Road and Laydon Avenue in North Haven
- Route 22 (Forest Road) between Route 17 and Foote Hill Road in North Branford
- Route 22 (Clintonville Road) at Route 150 in North Branford
- Route 22 (Clintonville Road) at Route 17 and Mansfield Drive in North Branford
- Route 22 (Forest Road) at Route 17 in North Branford
- Route 80 at Mill Avenue and Thompson Street in East Haven

It is recommended that near-term priority be assigned to the ConnDOT-listed accident locations on Route 22 (Forest Road) between Route 17 and Foote Hill Road in North Branford, and Route 80 at Mill Avenue and Thompson Street in East Haven so that immediate safety improvements can be pursued. Other improvements can be initiated as project funding and approval are secured. These locations are discussed below.

#### 5.1.1 Near-Term Implementation Plan

Near-term improvement opportunities include study recommendations that can be implemented with relatively little capital investment and with few or no impacts on existing rights-of-way or environmental resources. These types of improvements could include signal timing modifications, signing improvements, and limited roadway work within the existing highway bounds.

Based on these criteria, the study team recommends further investigation of potential signal timing modifications at the intersection of Route 80 at Mill Avenue and Thompson Street to increase northbound and southbound all red time as described in Section 4.1. This



improvement should be considered a high priority because of safety issues that has made the intersection a ConnDOT-listed accident location.

In addition, the study team recommends further investigation of potential near-term access management improvements along Route 22 (Forest Road) between Route 17 and Foote Hill Road, specifically in the vicinity of the commercial driveways for the Mobil and Sunoco service stations, and the Northford Plaza shopping center. Improvements in this area should also be considered a high priority because of safety issues that has made this segment of Route 22 a ConnDOT-listed accident location.

The near-term implementation strategy for this study should also include initiating the submittal of funding applications, the development of environmental studies, and other activities that will be required for the implementation of the long-term improvement recommendations.

Specific activities that could be initiated in the near-term could include the garnering support of property owners, Northford Center historic district representatives, and members of the local community for the Route 22 intersection improvements in Northford. The Town of North Branford should also continue pursuing necessary changes to the current zoning regulations that would provide for combined commercial access to abutting properties.

### **5.1.2 Long-Term Implementation Plan**

Long-term improvement opportunities include study recommendations that are typically warranted by future traffic conditions, or those that address existing deficiencies but cannot be readily implemented in the near-term due to such factors as limited funding availability, anticipated right-of-way impacts, and environmental permitting requirements. Recommendations that should be considered long-term improvement projects include:

- Route 103 (Maple Avenue) at Pool Road and Laydon Avenue in North Haven
- Route 22 (Clintonville Road) at Route 150 in North Branford
- Route 22 (Clintonville Road) at Route 17 and Mansfield Drive in North Branford
- Route 22 (Forest Road) at Route 17 in North Branford

The study team suggests that long-term priority should be assigned to the Route 22 at Route 17 intersections in Northford Center since these improvements offer a comprehensive solution to operational and access management deficiencies that currently contribute to safety concerns in this area.

## **5.2 Implementation Strategy for Local Traffic Calming Improvements**

It is generally recommended that traffic calming measures be implemented in stages, depending on the complexity of the solution. This staged implementation should begin with the least restrictive strategies that apply to the situation (signs, pavement markings, enforcement) and then progressively incorporate vertical and/or horizontal measures if required to achieve the desired improvement. A trial period for designs involving vertical or horizontal deflections using temporary devices is also desirable prior to a permanent

installation. This trial period should generally be between 60 and 90 days in order to assess the effects of the design. During this trial period, the devices should be evaluated to determine their effectiveness in addressing the project's goals and objectives and to verify that the solution has not transferred the problem to other neighborhood streets. This trial period will also provide the opportunity to adjust or refine the design without incurring significant cost.

The proposed solution, including any planned sequencing or trial periods, should be communicated to the public. Common tools that may be used to provide this information include mailings, public information meetings and workshops. The methods of communication should also provide mechanisms for public feedback to the municipality regarding the effectiveness and general support for the installed devices.

The final step in the project development is the approval for final implementation. This may include employing a mechanism such as a petition or ballot to demonstrate support by the residents, nonresident owners and businesses within the defined project area. This mechanism would then be used as advisory information to municipal officials for final approval. Once the appropriate approvals are issued, the project can move to final design and construction.

### **5.2.1 Near-Term Implementation Plan**

Although this study process identified a number of routes that are potential candidates for traffic calming measures, it is recommended that the participating municipalities continue soliciting input from local residents relative to the perceived need for traffic calming along local streets. Because the process of implementation relies heavily on public outreach, this effort should be continued in the near-term using the study recommendations to generate local interest in a town-wide traffic calming program. As procedures for a town-wide program are established, municipalities should continue enforcement of the local speed limits to deter speeding along the identified cut-through routes. In addition, edge striping could be implemented in the near-term and used as a measure of the effectiveness of psychological devices in calming traffic along these routes.

### **5.2.2 Long-Term Implementation Plan**

Because funding of traffic calming improvements is often a primary concern for local municipalities, the study team recommends that municipalities look for opportunities to include the implementation of traffic calming measures in future local roadway improvement projects. Long-term planning to include the construction of such physical measures as bulbouts, chokers, and neighborhood traffic circles in future capital investments will likely reduce the overall cost of the traffic calming measures as economies of scale are realized for construction and design efforts. In general, it is more cost-effective to implement improvements in conjunction with other roadway projects or as a town-wide improvement program.

### 5.3 Implementation Strategy Summary

Table 5-1 presents a summary of the recommended near and long-term State and local roadway implementation strategies. Recommended actions and improvements as discussed in Section 4 are provided along with the agencies and/or parties involved in the implementation of the recommended improvements.

**Table 5-1. Implementation Strategy Summary**

Recommended Action	Involved Parties/Agencies
<b>State Roadways – Near-Term Implementation Plan</b>	
Route 80 at Mill Avenue & Thompson Street ▪ Signal Timing Modifications	ConnDOT
Route 22 (Forest Rd) between Route 17 & Foote Hill Road ▪ Access Management Improvements at Mobil, Sunoco, Northford Plaza	ConnDOT North Branford
Route 22 at Route 17 Intersections ▪ Garnering Local Support, Pursuing Zoning Regulation Changes	North Branford
Initiation of Long-Term Improvements ▪ Including Funding Applications, Environmental Studies, Prelim. Design	ConnDOT
<b>State Roadways – Long-Term Implementation Plan</b>	
Route 103 (Maple Avenue) at Pool Road & Laydon Avenue ▪ Extension of Left Turn Lane/Widening, Signal Timing Modifications	ConnDOT North Haven
Route 22 (Clintonville Road) at Route 150 ▪ Realignment of Route 150	ConnDOT North Branford
Route 22 (Clintonville Road) at Route 17 & Mansfield Drive ▪ Extension of Left Turn Lane/Widening	ConnDOT North Branford
Route 22 (Forest Road) at Route 17 ▪ Reconfiguration of Intersection, New Primary Commercial Access	ConnDOT North Branford
<b>Local Roadways – Near-Term Implementation Plan</b>	
Continue Soliciting Input from Local Residents Relative to Traffic Calming Needs	Respective Municipalities
Establish Procedures for Town-Wide Traffic Calming Program	Respective Municipalities
Continue Enforcement of Speed Limits along Identified Cut-Through Routes	Respective Municipalities
Implement Edge Striping Improvements where Applicable	Respective Municipalities
<b>Local Roadways – Long-Term Implementation Plan</b>	
Investigate Opportunities to Include Traffic Calming Improvements in Future Roadway Projects	Respective Municipalities

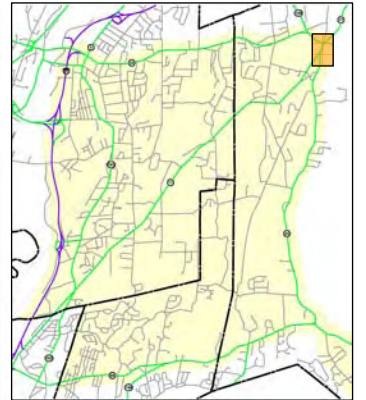
## **APPENDIX CONTENTS**

**Route 22 at Route 17 and Mansfield Drive – Rejected Potential Improvement Concepts**

**SCRCOG Intersection Turning Movement Count Data**

**ConnDOT ADT Data for State Roadways**

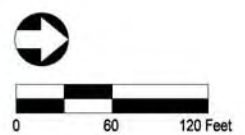
**Public Comment Forms**



Location Map

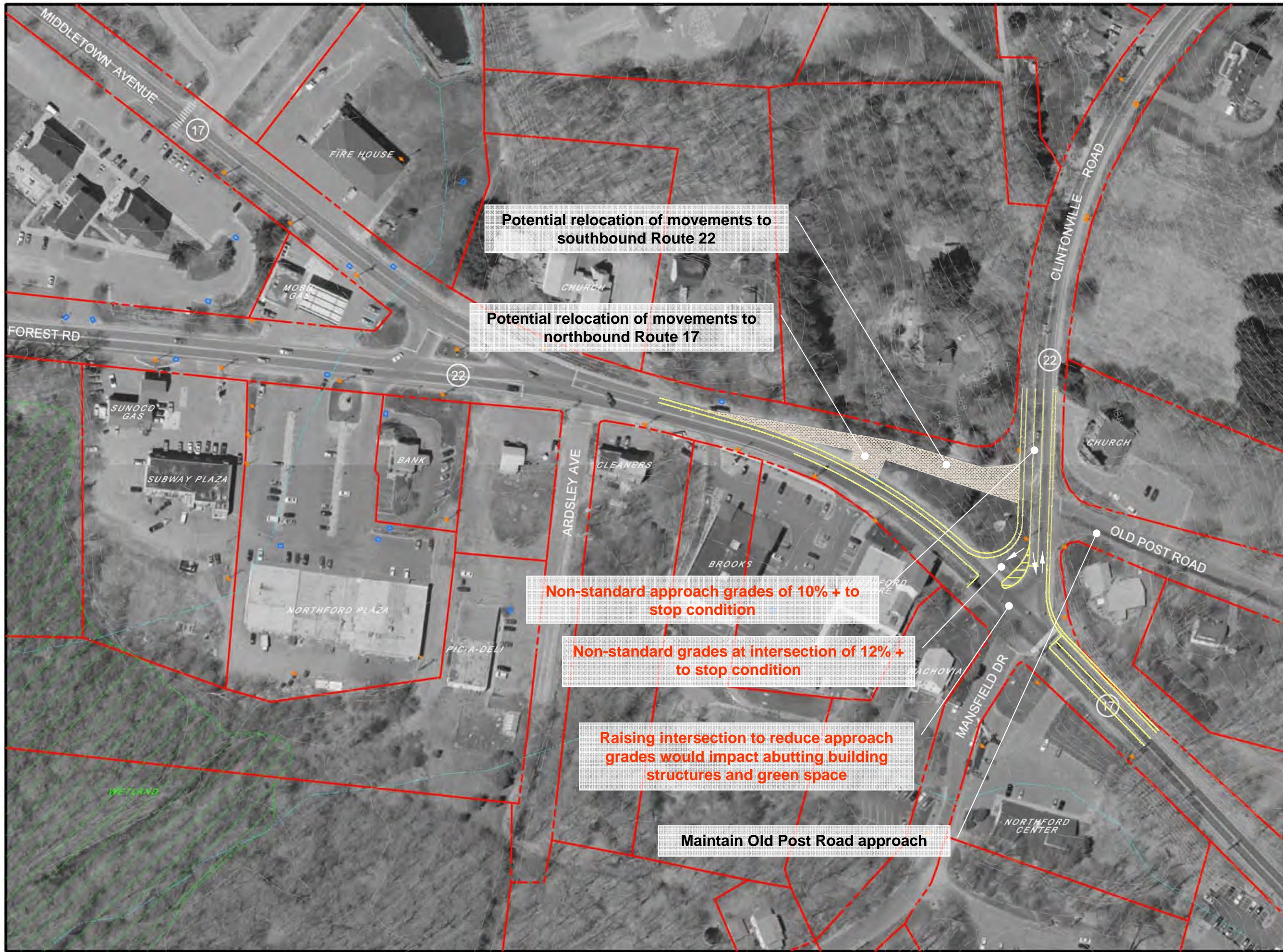
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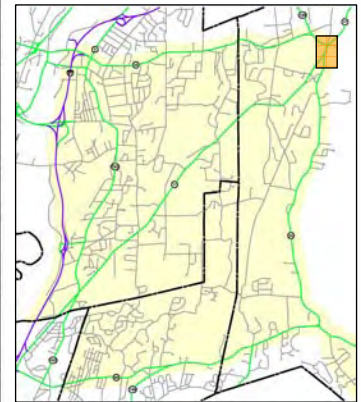
- Approximate ROW/Property Lines
- Wetland Area
- Utility Pole
- Drainage Basin
- Pavement to be removed



Route 22 at Route 17 & Mansfield Drive  
Rejected Improvement Concept

Figure A-1

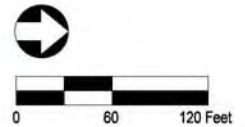




Location Map

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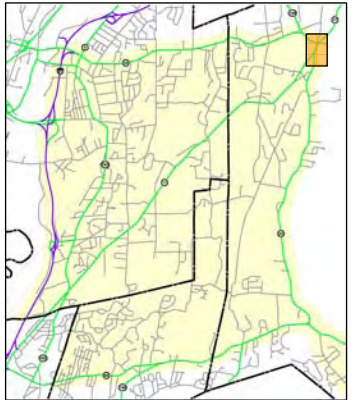
- Approximate ROW/Property Lines
- Wetland Area
- Utility Pole
- Drainage Basin
- Pavement to be removed



Route 22 at Route 17 & Mansfield Drive  
Rejected Improvement Concept

Figure A-2

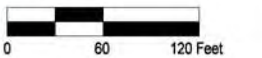




Location Map

LEGEND

- Approximate ROW/Property Lines
- Wetland Area
- Utility Pole
- Drainage Basin
- Pavement to be removed



Route 22 at Route 17 & Mansfield Drive  
Rejected Improvement Concept

Figure A-3



File Name: Q:\Traffic Count Data\Route 22 Project\NOB13 - AM - 2005.pwf

Start Date: 11/22/2005

Start Time: 7:00:00 AM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Route 17 & Route 22 & Mansfield Drive

Comment 3: Counters - Jones & Cewe

Comment 4: Day - Tuesday

Start Time	Cars								
	Route 17 (Middletown Avenue) From North			Mansfield Drive From East			Route 17 & Route 22 From South		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
07:00 AM	13	30	0	0	1	2	3	29	35
07:05 AM	14	48	1	1	3	1	2	21	12
07:10 AM	22	53	0	0	1	4	0	27	15
07:15 AM	20	47	0	0	3	1	0	26	22
07:20 AM	18	43	0	0	1	2	0	32	31
07:25 AM	13	42	0	0	0	0	2	22	30
07:30 AM	16	41	0	2	2	3	3	46	29
07:35 AM	22	47	1	0	4	2	2	25	28
07:40 AM	20	36	1	0	4	1	1	32	37
07:45 AM	26	25	3	0	1	0	3	26	46
07:50 AM	29	45	2	1	1	1	4	36	33
07:55 AM	12	30	1	0	1	1	2	26	27
08:00 AM	16	34	0	0	2	8	3	27	39
08:05 AM	24	35	0	0	1	3	0	22	26
08:10 AM	19	32	0	0	3	3	1	25	40
08:15 AM	12	47	0	1	1	2	2	24	23
08:20 AM	11	40	0	0	1	2	0	23	27
08:25 AM	19	40	2	1	1	4	0	29	33
08:30 AM	6	10	0	0	1	6	4	19	26
08:35 AM	16	59	0	0	2	3	2	21	24
08:40 AM	13	40	1	1	3	6	2	21	28
08:45 AM	14	37	0	0	1	3	1	20	39
08:50 AM	12	41	1	1	1	5	4	26	26
08:55 AM	10	27	1	0	0	1	4	26	37

Start Time	Trucks								
	Route 17 (Middletown Avenue) From North			Mansfield Drive From East			Route 17 & Route 22 From South		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
07:00 AM	0	1	0	0	0	0	0	3	3
07:05 AM	0	4	0	0	0	0	0	5	0
07:10 AM	0	1	0	0	0	0	0	1	2
07:15 AM	0	3	0	0	0	0	0	1	2
07:20 AM	0	0	0	0	0	0	0	4	2
07:25 AM	0	1	0	0	0	0	0	1	2
07:30 AM	0	4	0	0	0	0	0	2	0
07:35 AM	0	3	0	0	0	0	0	2	1
07:40 AM	0	2	0	0	0	0	0	2	3
07:45 AM	0	1	0	0	0	0	0	4	2
07:50 AM	0	0	0	0	0	0	0	4	2
07:55 AM	0	1	0	1	0	0	1	6	1
08:00 AM	5	2	0	0	1	0	2	3	1
08:05 AM	2	2	0	0	0	0	0	1	3
08:10 AM	1	3	0	0	0	0	0	8	2
08:15 AM	0	0	0	0	0	0	0	0	5
08:20 AM	0	2	0	0	0	1	0	4	2
08:25 AM	1	0	0	0	0	0	0	4	1
08:30 AM	0	2	0	0	0	0	0	2	7
08:35 AM	0	3	0	0	0	0	0	2	1
08:40 AM	0	3	0	0	0	0	0	1	3
08:45 AM	0	3	0	0	0	1	0	2	0
08:50 AM	0	1	0	0	0	0	1	3	2
08:55 AM	0	2	0	0	0	0	0	3	2



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Start Date: 11/22/2005

Start Time: 4:00:00 PM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Route 17 & Route 22 & Mansfield Drive

Comment 3: Counters - Jones & Cewe

Comment 4: Day - Tuesday

Start Time	Cars								
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	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
04:00 PM	5	28	0	0	2	8	2	38	25
04:05 PM	8	25	0	0	1	1	3	42	25
04:10 PM	8	29	0	0	1	4	9	46	33
04:15 PM	10	21	0	0	1	4	6	40	23
04:20 PM	7	26	3	0	1	6	3	41	34
04:25 PM	8	33	0	1	0	2	0	45	29
04:30 PM	7	24	1	0	1	1	5	45	36
04:35 PM	7	24	1	3	4	2	4	54	35
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04:45 PM	12	33	0	0	0	0	6	42	36
04:50 PM	5	33	1	0	1	2	5	48	39
04:55 PM	3	29	1	0	0	4	6	51	23
05:00 PM	6	25	1	0	3	1	7	47	37
05:05 PM	5	31	0	0	2	1	3	50	38
05:10 PM	8	29	1	0	1	1	7	47	28
05:15 PM	4	25	1	0	1	3	2	51	31
05:20 PM	7	37	0	0	1	1	4	64	27
05:25 PM	10	18	0	1	1	1	1	54	38
05:30 PM	9	23	1	0	1	0	1	60	24
05:35 PM	5	19	1	1	1	1	2	50	33
05:40 PM	6	22	0	0	0	1	3	49	26
05:45 PM	13	27	1	0	2	1	5	44	39
05:50 PM	8	28	1	0	2	0	5	54	24
05:55 PM	5	22	0	0	0	2	5	45	22

Start Time	Trucks								
	Route 17 (Middletown Avenue) From North			Mansfield Drive From East			Route 17 & Route 22 From South		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
04:00 PM	1	0	0	0	0	0	0	0	0
04:05 PM	0	0	0	0	0	0	0	0	2
04:10 PM	0	1	0	0	0	0	0	2	2
04:15 PM	0	1	0	0	0	0	0	0	2
04:20 PM	0	0	1	0	0	0	0	1	0
04:25 PM	1	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	3	0
04:35 PM	0	0	0	0	0	0	0	2	0
04:40 PM	0	0	0	0	0	0	0	2	3
04:45 PM	0	2	0	0	0	0	0	2	2
04:50 PM	0	1	0	0	0	0	0	1	1
04:55 PM	1	2	0	0	0	0	0	4	0
05:00 PM	0	1	0	0	0	0	0	3	2
05:05 PM	0	1	0	0	0	0	0	1	0
05:10 PM	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	1	0
05:20 PM	0	0	0	0	0	0	0	0	2
05:25 PM	0	0	0	0	0	0	0	1	0
05:30 PM	0	0	0	0	0	0	0	0	0
05:35 PM	0	0	0	0	0	0	1	1	2
05:40 PM	0	1	0	0	1	0	0	0	1
05:45 PM	1	0	0	0	0	0	0	1	0
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 Comment 2: Route 22 & Route 17 - Northbound  
 Comment 3: Counter - Ciarleglio  
 Comment 4: Day - Tuesday

Cars		
Route 22 (Clintonville Road)		
Start Time	Thru	Left
07:00 AM	26	8
07:05 AM	18	5
07:10 AM	27	2
07:15 AM	16	4
07:20 AM	28	2
07:25 AM	18	2
07:30 AM	29	4
07:35 AM	29	5
07:40 AM	31	7
07:45 AM	28	4
07:50 AM	25	6
07:55 AM	28	4
08:00 AM	31	2
08:05 AM	26	5
08:10 AM	30	1
08:15 AM	26	4
08:20 AM	31	5
08:25 AM	22	5
08:30 AM	33	3
08:35 AM	19	6
08:40 AM	18	5
08:45 AM	18	8
08:50 AM	20	1
08:55 AM	23	4

Trucks		
Route 22 (Clintonville Road)		
Start Time	Thru	Left
07:00 AM	3	0
07:05 AM	0	0
07:10 AM	1	0
07:15 AM	4	0
07:20 AM	0	0
07:25 AM	0	0
07:30 AM	2	0
07:35 AM	3	0
07:40 AM	1	0
07:45 AM	1	1
07:50 AM	2	0
07:55 AM	2	0
08:00 AM	0	1
08:05 AM	1	0
08:10 AM	1	2
08:15 AM	1	1
08:20 AM	1	1
08:25 AM	2	0
08:30 AM	2	1
08:35 AM	6	0
08:40 AM	1	2
08:45 AM	3	1
08:50 AM	2	1
08:55 AM	2	1

File Name: Q:\Traffic Count Data\Route 22 Project\NOB14 - PM - 2005.pwf  
 Start Date: 11/22/2005  
 Start Time: 4:00:00 PM  
 Site Code: 00000000  
 Comment 1: North Branford  
 Comment 2: Route 22 & Route 17 - Northbound  
 Comment 3: Counter - Ciarleglio  
 Comment 4: Day - Tuesday

Cars		
Route 22 (Clintonville Road)		
Start Time	Thru	Left
04:00 PM	34	11
04:05 PM	28	14
04:10 PM	40	21
04:15 PM	32	5
04:20 PM	45	16
04:25 PM	36	17
04:30 PM	30	10
04:35 PM	35	16
04:40 PM	32	9
04:45 PM	36	18
04:50 PM	46	13
04:55 PM	47	11
05:00 PM	49	13
05:05 PM	45	13
05:10 PM	49	12
05:15 PM	45	14
05:20 PM	43	13
05:25 PM	35	14
05:30 PM	30	8
05:35 PM	37	14
05:40 PM	26	12
05:45 PM	32	21
05:50 PM	22	15
05:55 PM	39	13

Trucks		
Route 22 (Clintonville Road)		
Start Time	Thru	Left
04:00 PM	2	0
04:05 PM	2	0
04:10 PM	1	0
04:15 PM	1	0
04:20 PM	1	1
04:25 PM	1	0
04:30 PM	2	0
04:35 PM	0	0
04:40 PM	1	2
04:45 PM	1	0
04:50 PM	1	0
04:55 PM	1	0
05:00 PM	1	1
05:05 PM	1	0
05:10 PM	3	0
05:15 PM	1	1
05:20 PM	1	0
05:25 PM	3	0
05:30 PM	0	0
05:35 PM	2	1
05:40 PM	0	0
05:45 PM	3	1
05:50 PM	2	0
05:55 PM	0	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOB15 - AM - 2005.pwf

Start Date: 11/30/2005

Start Time: 7:00:00 AM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Route 22 (Clintonville Rd) & Village St

Comment 3: Counters - Cewe & Ciarleglio

Comment 4: Day - Wednesday

Start Time	Cars											
	Village Street From North			Route 22 (Clintonville Road) From East			Village Street From South			Route 22 (Clintonville Road) From West		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
07:00 AM	1	0	1	0	41	2	0	2	6	0	13	0
07:05 AM	3	2	2	2	32	1	0	4	12	3	9	0
07:10 AM	5	0	5	1	34	0	0	2	5	6	7	1
07:15 AM	2	3	0	0	46	1	1	0	6	3	13	0
07:20 AM	5	3	0	1	49	1	1	3	11	8	14	0
07:25 AM	1	1	0	0	39	1	0	1	22	4	16	2
07:30 AM	3	3	1	1	45	1	0	4	15	1	11	0
07:35 AM	4	2	2	0	42	0	0	7	13	2	16	0
07:40 AM	4	0	0	1	36	3	2	6	13	3	21	0
07:45 AM	3	4	0	0	44	1	0	4	12	2	14	0
07:50 AM	4	2	0	0	54	1	1	2	26	4	18	0
07:55 AM	1	2	1	0	49	1	0	1	22	4	16	1
08:00 AM	1	2	0	0	41	1	0	2	17	4	17	1
08:05 AM	1	2	0	0	31	1	0	1	17	1	15	1
08:10 AM	5	3	0	1	47	0	0	3	9	6	16	0
08:15 AM	3	1	2	0	50	2	2	2	7	4	24	0
08:20 AM	0	1	1	1	38	0	1	2	10	2	13	0
08:25 AM	0	0	0	0	36	1	1	3	6	4	14	0
08:30 AM	0	3	0	0	40	1	1	1	5	1	14	0
08:35 AM	3	0	1	0	51	1	0	5	10	1	22	0
08:40 AM	0	3	0	1	44	1	1	1	9	1	20	0
08:45 AM	0	0	0	0	44	1	0	2	9	2	20	0
08:50 AM	0	0	1	0	27	2	0	1	8	1	14	0
08:55 AM	0	0	1	0	41	3	0	1	3	5	16	0

Start Time	Trucks											
	Village Street From North			Route 22 (Clintonville Road) From East			Village Street From South			Route 22 (Clintonville Road) From West		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	0
07:05 AM	0	0	0	0	1	0	0	0	0	1	0	0
07:10 AM	0	0	0	0	1	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:20 AM	0	0	0	0	0	0	0	0	0	0	1	1
07:25 AM	0	0	0	0	0	0	0	1	0	0	0	1
07:30 AM	0	1	0	1	0	0	0	0	0	0	1	0
07:35 AM	0	0	0	0	1	0	0	0	0	1	0	0
07:40 AM	0	0	0	0	1	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	2	0	1	0	0	0	1	0
07:50 AM	0	0	0	0	2	0	0	0	0	0	2	0
07:55 AM	0	0	0	0	2	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	5	0	0	0	1	0	1	0
08:05 AM	0	0	0	0	3	0	0	0	0	0	0	0
08:10 AM	0	0	0	0	0	0	0	0	0	0	3	0
08:15 AM	0	0	0	1	0	0	0	0	0	0	2	0
08:20 AM	0	0	1	0	4	0	0	0	0	0	4	1
08:25 AM	0	0	0	0	1	0	0	0	1	0	1	0
08:30 AM	1	0	0	0	1	0	0	0	1	1	1	0
08:35 AM	0	0	0	0	1	0	0	0	0	2	1	0
08:40 AM	0	0	0	1	1	0	0	0	0	0	4	0
08:45 AM	0	0	0	0	1	0	0	0	1	0	4	0
08:50 AM	0	0	0	0	1	0	0	1	0	0	0	0
08:55 AM	0	0	0	0	0	0	0	1	0	0	0	0





File Name: Q:\Traffic Count Data\Route 22 Project\NOH16 - PM - 2005.pwf  
 Start Date: 12/1/2005  
 Start Time: 4:00:00 PM  
 Site Code: 00000000  
 Comment 1: North Haven  
 Comment 2: Route 22 & Bassett Road & Mill Road  
 Comment 3: Counter - Jones & Cewe  
 Comment 4: Day - Thursday

Start Time	Cars											
	Bassett Road From North			Route 22 (Clintonville Road) From East			Mill Road From South			Route 22 (Clintonville Road) From West		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
04:00 PM	3	7	11	16	45	2	0	2	4	0	44	6
04:05 PM	1	15	11	23	54	2	3	8	6	3	38	9
04:10 PM	5	10	17	13	35	1	6	7	3	2	49	4
04:15 PM	9	10	17	13	30	1	2	7	1	3	60	5
04:20 PM	2	11	23	6	43	2	2	5	5	1	58	4
04:25 PM	2	11	12	7	47	1	1	7	1	0	43	7
04:30 PM	0	5	15	9	35	1	3	9	1	0	55	11
04:35 PM	2	4	18	10	36	0	2	6	0	7	45	7
04:40 PM	5	16	25	4	25	0	7	6	3	1	44	6
04:45 PM	3	10	20	14	37	1	1	8	1	3	44	8
04:50 PM	5	11	9	10	47	1	2	6	3	0	40	7
04:55 PM	4	5	12	10	27	2	3	6	4	2	53	12
05:00 PM	5	17	17	5	23	0	3	9	2	3	51	19
05:05 PM	3	11	17	14	49	2	3	4	1	1	65	17
05:10 PM	4	6	15	7	39	2	5	22	5	0	54	12
05:15 PM	1	12	27	5	25	1	4	6	5	1	54	14
05:20 PM	2	14	26	10	25	0	3	9	1	3	58	11
05:25 PM	2	11	12	13	29	6	1	4	4	1	67	12
05:30 PM	6	7	24	8	20	0	2	9	3	2	53	4
05:35 PM	4	9	18	12	31	0	1	5	0	1	51	11
05:40 PM	5	5	13	3	25	3	3	9	1	0	39	7
05:45 PM	2	7	13	9	31	0	1	1	3	1	42	10
05:50 PM	8	10	18	3	27	1	0	2	1	1	47	12
05:55 PM	3	9	12	4	30	1	0	6	0	0	40	6

Start Time	Trucks											
	Bassett Road From North			Route 22 (Clintonville Road) From East			Mill Road From South			Route 22 (Clintonville Road) From West		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
04:00 PM	0	0	0	1	1	0	0	0	0	0	0	0
04:05 PM	0	0	1	0	0	0	0	0	0	1	2	0
04:10 PM	0	0	0	0	1	1	0	2	0	0	2	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:20 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:25 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:35 PM	0	0	0	0	1	0	0	0	0	0	1	0
04:40 PM	0	0	0	0	0	0	0	0	0	0	2	0
04:45 PM	0	0	0	0	1	0	0	0	1	0	0	0
04:50 PM	0	0	0	0	1	0	0	0	0	0	4	0
04:55 PM	0	0	0	0	0	0	0	0	0	0	2	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	1	0
05:05 PM	0	0	0	0	0	0	0	0	0	0	1	0
05:10 PM	0	0	0	0	2	0	1	0	0	0	1	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	4	0
05:20 PM	0	0	0	0	0	1	0	0	0	0	2	0
05:25 PM	0	0	0	0	0	0	0	0	0	1	2	0
05:30 PM	0	0	0	1	0	0	0	0	0	0	2	0
05:35 PM	0	0	0	1	0	0	0	0	0	0	0	0
05:40 PM	0	0	0	0	1	0	0	0	0	0	1	0
05:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
05:50 PM	0	0	0	0	1	0	0	0	0	0	0	0
05:55 PM	0	0	0	0	1	0	0	0	0	0	0	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOH33 - AM - 2005.pwf  
 Start Date: 11/29/2005  
 Start Time: 7:00:00 AM  
 Site Code: 00000000  
 Comment 1: North Haven  
 Comment 2: Route 22 & Pond Hill Rd & Chapel Hill Rd  
 Comment 3: Counters - Cewe & Ciarleglio  
 Comment 4: Day - Tuesday

Start Time	Cars											
	Pond Hill Road From North			Route 22 (Clintonville Road) From East			Chapel Hill Road From South			Route 22 (Clintonville Road) From West		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
07:00 AM	1	0	1	1	40	0	0	0	1	0	19	1
07:05 AM	3	0	2	1	49	0	0	0	1	0	19	0
07:10 AM	0	0	0	1	61	0	0	0	0	0	25	0
07:15 AM	2	0	0	2	69	0	2	0	0	0	23	0
07:20 AM	0	0	5	1	67	0	0	0	1	0	37	1
07:25 AM	3	0	2	2	60	0	0	0	0	0	45	0
07:30 AM	6	0	0	1	58	0	0	0	0	0	39	2
07:35 AM	0	0	1	3	68	0	1	0	1	1	20	2
07:40 AM	1	0	3	4	76	0	0	0	2	0	21	2
07:45 AM	2	0	5	3	82	1	0	0	1	2	27	4
07:50 AM	0	0	1	2	76	0	2	1	1	0	29	5
07:55 AM	2	0	0	8	79	0	1	1	0	0	25	2
08:00 AM	1	0	1	1	75	0	0	0	0	0	23	0
08:05 AM	2	0	3	1	70	0	0	0	2	0	28	0
08:10 AM	4	0	0	1	73	2	1	0	0	1	26	0
08:15 AM	0	0	0	3	73	0	0	0	1	2	23	0
08:20 AM	4	0	0	2	56	1	0	0	0	0	24	0
08:25 AM	3	0	0	0	56	0	0	0	1	0	23	2
08:30 AM	5	0	4	0	49	1	1	0	1	1	25	2
08:35 AM	5	1	2	1	58	0	1	0	0	0	17	3
08:40 AM	3	1	1	1	47	1	0	0	0	2	31	2
08:45 AM	1	0	0	0	47	1	1	0	0	0	27	1
08:50 AM	2	0	1	0	56	0	0	0	0	0	23	0
08:55 AM	1	0	1	0	57	1	2	0	1	0	25	0

Start Time	Trucks											
	Pond Hill Road From North			Route 22 (Clintonville Road) From East			Chapel Hill Road From South			Route 22 (Clintonville Road) From West		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	0
07:05 AM	2	0	0	0	1	1	0	0	0	0	2	0
07:10 AM	0	0	0	0	4	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	2	0	0	0	0	0	1	0
07:20 AM	0	0	0	0	1	0	0	0	0	0	1	0
07:25 AM	0	0	0	0	1	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	2	0	0	0	0	0	1	1
07:35 AM	1	0	0	0	0	0	0	0	0	0	2	0
07:40 AM	1	0	0	0	3	0	0	0	0	0	1	0
07:45 AM	1	0	0	0	4	0	0	0	0	0	0	1
07:50 AM	0	0	0	0	3	0	0	0	0	0	1	0
07:55 AM	0	0	0	0	2	0	0	0	0	0	2	0
08:00 AM	0	0	0	0	6	0	0	0	0	0	2	0
08:05 AM	0	0	1	1	2	0	0	0	0	0	2	0
08:10 AM	0	0	0	0	0	1	0	0	0	1	2	0
08:15 AM	0	0	1	0	2	0	0	0	0	1	1	0
08:20 AM	0	0	0	0	2	0	0	0	0	0	4	1
08:25 AM	0	0	0	0	3	0	0	1	0	0	3	0
08:30 AM	1	0	0	0	5	0	0	0	0	0	5	0
08:35 AM	0	0	0	0	4	0	0	0	0	0	2	0
08:40 AM	0	0	0	0	0	0	0	0	0	0	4	1
08:45 AM	0	0	0	1	2	0	0	0	0	0	0	0
08:50 AM	1	0	0	0	5	0	0	0	0	0	4	0
08:55 AM	0	0	0	0	1	0	0	0	0	0	0	0





File Name: Q:\Traffic Count Data\Route 22 Project\NOB16 - AM - 2005.pwf  
 Start Date: 12/7/2005  
 Start Time: 7:00:00 AM  
 Site Code: 00000000  
 Comment 1: North Branford  
 Comment 2: Route 22 (Clintonville Rd) & Route 150  
 Comment 3: Counters - Cewe & Ciarleglio  
 Comment 4: Day - Wednesday

Start Time	Cars					
	Route 150 (Woodhouse Avenue) From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
07:00 AM	0	4	11	26	7	0
07:05 AM	0	12	9	20	6	0
07:10 AM	0	7	13	34	15	1
07:15 AM	0	6	14	29	15	0
07:20 AM	0	9	12	30	9	0
07:25 AM	0	15	15	38	17	0
07:30 AM	0	18	16	21	14	1
07:35 AM	0	13	17	30	10	0
07:40 AM	0	17	21	42	13	0
07:45 AM	0	12	16	52	16	0
07:50 AM	0	12	14	41	14	0
07:55 AM	0	13	9	36	11	0
08:00 AM	0	14	11	33	7	0
08:05 AM	0	17	21	41	15	0
08:10 AM	0	9	15	38	16	0
08:15 AM	0	8	18	38	13	1
08:20 AM	0	16	7	41	24	0
08:25 AM	0	5	11	43	14	0
08:30 AM	0	9	7	24	12	0
08:35 AM	0	16	11	21	20	0
08:40 AM	0	8	8	24	12	0
08:45 AM	0	13	13	30	18	0
08:50 AM	0	8	15	24	15	0
08:55 AM	0	7	5	18	13	0

Start Time	Trucks					
	Route 150 (Woodhouse Avenue) From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
07:00 AM	0	0	2	0	2	0
07:05 AM	0	0	0	0	0	0
07:10 AM	0	0	1	0	1	0
07:15 AM	0	1	1	2	1	0
07:20 AM	0	0	0	0	1	0
07:25 AM	0	1	0	1	1	0
07:30 AM	0	1	0	2	0	0
07:35 AM	0	1	2	2	2	0
07:40 AM	0	0	0	0	0	0
07:45 AM	0	2	1	0	2	0
07:50 AM	0	0	0	3	2	0
07:55 AM	0	0	0	1	0	0
08:00 AM	0	0	1	2	0	0
08:05 AM	0	0	1	0	0	0
08:10 AM	0	1	3	4	1	0
08:15 AM	0	0	0	0	0	0
08:20 AM	0	0	0	0	0	0
08:25 AM	0	0	0	0	1	0
08:30 AM	0	1	0	3	0	0
08:35 AM	0	0	0	2	4	0
08:40 AM	0	0	0	0	6	0
08:45 AM	0	0	2	1	2	0
08:50 AM	0	0	2	1	4	0
08:55 AM	0	0	0	0	2	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOB16 - PM - 2005.pwf  
 Start Date: 12/7/2005  
 Start Time: 4:00:00 PM  
 Site Code: 00000000  
 Comment 1: North Branford  
 Comment 2: Route 22 (Clintonville Road) & Route 150  
 Comment 3: Counters - Cewe & Ciarleglio  
 Comment 4: Day - Wednesday

Start Time	Cars					
	Route 150 (Woodhouse Road) From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
04:00 PM	0	7	12	18	25	0
04:05 PM	1	12	9	22	28	0
04:10 PM	0	16	11	23	29	0
04:15 PM	0	16	9	27	32	0
04:20 PM	0	10	11	19	27	0
04:25 PM	2	12	8	33	27	0
04:30 PM	1	4	11	16	30	0
04:35 PM	0	12	21	11	30	0
04:40 PM	0	18	6	25	30	0
04:45 PM	0	12	19	32	27	0
04:50 PM	0	16	15	20	30	0
04:55 PM	0	11	25	16	29	0
05:00 PM	1	17	8	31	35	1
05:05 PM	1	17	12	24	32	1
05:10 PM	0	13	17	17	50	1
05:15 PM	0	18	12	32	43	0
05:20 PM	0	15	12	33	29	0
05:25 PM	0	16	16	23	23	0
05:30 PM	0	10	19	14	34	0
05:35 PM	0	19	14	21	37	1
05:40 PM	0	17	18	29	18	0
05:45 PM	0	2	17	24	36	0
05:50 PM	0	12	10	21	32	0
05:55 PM	0	8	19	16	28	2

Start Time	Trucks					
	Route 150 (Woodhouse Road) From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
04:00 PM	0	0	2	0	2	0
04:05 PM	0	1	1	0	0	0
04:10 PM	0	2	3	1	0	0
04:15 PM	0	1	0	1	1	0
04:20 PM	0	1	0	1	1	0
04:25 PM	0	1	0	0	0	0
04:30 PM	0	0	1	1	1	0
04:35 PM	0	0	0	0	1	0
04:40 PM	0	1	0	0	1	0
04:45 PM	0	1	0	1	1	0
04:50 PM	0	2	0	0	2	0
04:55 PM	0	0	0	1	1	0
05:00 PM	0	1	1	2	0	0
05:05 PM	0	1	0	0	1	0
05:10 PM	0	3	1	1	0	0
05:15 PM	0	0	0	0	0	0
05:20 PM	0	0	0	1	1	0
05:25 PM	0	0	1	0	0	0
05:30 PM	0	0	0	2	0	0
05:35 PM	0	0	0	2	2	0
05:40 PM	0	0	0	0	1	0
05:45 PM	0	0	0	1	1	0
05:50 PM	0	0	0	0	0	0
05:55 PM	0	0	1	0	0	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOB17 - AM - 2005.pwf

Start Date: 12/8/2005

Start Time: 7:00:00 AM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Rt 22 (Clintonville Rd) & Pistapaug Road

Comment 3: Counters - Jones & Cewe

Comment 4: Day - Thursday

Start Time	Cars					
	Pistapaug Road From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
07:00 AM	1	0	0	36	7	3
07:05 AM	6	0	0	27	12	1
07:10 AM	9	1	0	26	7	2
07:15 AM	3	0	0	30	18	0
07:20 AM	7	0	0	29	17	0
07:25 AM	8	0	0	39	18	2
07:30 AM	5	0	0	44	14	4
07:35 AM	6	0	0	32	13	3
07:40 AM	11	0	0	49	10	2
07:45 AM	8	0	0	43	12	2
07:50 AM	13	0	0	35	17	6
07:55 AM	13	0	0	30	15	6
08:00 AM	7	0	0	30	8	0
08:05 AM	13	0	0	49	15	4
08:10 AM	6	0	0	40	13	3
08:15 AM	6	0	0	43	15	3
08:20 AM	6	0	0	44	20	2
08:25 AM	10	0	0	33	16	2
08:30 AM	8	0	0	36	14	2
08:35 AM	10	0	0	26	11	2
08:40 AM	1	0	0	38	23	0
08:45 AM	5	0	0	35	19	2
08:50 AM	5	0	0	34	16	1
08:55 AM	3	0	0	41	19	1

Start Time	Trucks					
	Pistapaug Road From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
07:00 AM	0	0	0	0	2	0
07:05 AM	0	0	0	0	0	0
07:10 AM	0	0	0	0	0	0
07:15 AM	0	0	0	1	1	0
07:20 AM	1	0	0	0	2	0
07:25 AM	0	0	0	1	1	0
07:30 AM	0	0	0	0	1	0
07:35 AM	0	0	0	0	1	0
07:40 AM	0	0	0	1	0	1
07:45 AM	0	0	0	0	1	2
07:50 AM	0	0	0	1	2	0
07:55 AM	0	0	0	2	2	0
08:00 AM	0	0	0	0	0	1
08:05 AM	0	0	0	0	1	0
08:10 AM	0	0	0	0	0	0
08:15 AM	0	0	0	1	0	2
08:20 AM	0	0	0	1	1	0
08:25 AM	0	0	0	0	1	1
08:30 AM	1	0	0	0	1	0
08:35 AM	0	0	0	0	1	0
08:40 AM	0	0	0	0	0	0
08:45 AM	0	0	0	1	2	0
08:50 AM	0	0	0	1	3	0
08:55 AM	0	0	0	0	1	1

File Name: Q:\Traffic Count Data\Route 22 Project\NOB17 - PM - 2005.pwf

Start Date: 12/8/2005

Start Time: 4:00:00 PM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Rt 22 (Clintonville Rd) & Pistapaug Road

Comment 3: Counters - Jones & Cewe

Comment 4: Day - Thursday

Start Time	Cars					
	Pistapaug Road From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
04:00 PM	3	0	0	24	31	3
04:05 PM	1	0	0	20	25	6
04:10 PM	5	0	0	19	40	12
04:15 PM	4	0	0	26	21	7
04:20 PM	2	0	1	18	40	13
04:25 PM	4	0	0	16	25	8
04:30 PM	3	0	0	26	32	16
04:35 PM	2	0	0	22	35	11
04:40 PM	5	0	0	22	26	3
04:45 PM	4	0	0	30	42	7
04:50 PM	5	0	0	23	34	14
04:55 PM	3	0	0	19	29	10
05:00 PM	3	0	0	17	27	11
05:05 PM	5	0	0	20	43	12
05:10 PM	2	0	0	17	42	9
05:15 PM	1	0	0	26	41	13
05:20 PM	3	0	0	28	38	11
05:25 PM	4	0	0	23	30	16
05:30 PM	3	0	0	29	35	16
05:35 PM	2	0	0	20	34	8
05:40 PM	3	0	0	15	37	11
05:45 PM	6	0	0	19	31	10
05:50 PM	6	0	0	14	28	7
05:55 PM	1	0	0	28	23	7

Start Time	Trucks					
	Pistapaug Road From North		Route 22 (Clintonville Road) From East		Route 22 (Clintonville Road) From West	
	Right	Left	Right	Thru	Thru	Left
04:00 PM	0	0	0	1	1	0
04:05 PM	0	0	0	0	1	0
04:10 PM	0	0	0	1	1	0
04:15 PM	0	0	0	0	1	0
04:20 PM	0	0	0	1	1	0
04:25 PM	0	0	0	0	1	0
04:30 PM	0	0	0	0	0	0
04:35 PM	0	0	0	1	1	0
04:40 PM	0	0	0	0	1	0
04:45 PM	0	0	0	0	1	1
04:50 PM	0	0	0	0	1	1
04:55 PM	0	0	0	0	1	0
05:00 PM	0	0	0	2	0	0
05:05 PM	0	0	0	0	1	0
05:10 PM	0	0	0	0	1	0
05:15 PM	0	0	0	1	1	0
05:20 PM	0	0	0	1	0	0
05:25 PM	0	0	0	0	0	0
05:30 PM	0	0	0	0	2	0
05:35 PM	0	0	0	0	0	0
05:40 PM	0	0	0	0	2	0
05:45 PM	0	0	0	0	1	0
05:50 PM	0	0	0	0	0	0
05:55 PM	0	0	0	2	1	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOB3 - AM - 2005.pwf

Start Date: 11/3/2005

Start Time: 7:00:00 AM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Route 17 & Route 22

Comment 3: Counters - Jones & Cewe & Ciarleglio

Comment 4: Day - Thursday

Start Time	Cars					
	Route 17 & Route 22 From North		Route 22 (Forest Road)		Route 17 (Middletown Avenue)	
	Right	Left	Thru	Left	Right	Thru
07:00 AM	29	47	50	4	1	6
07:05 AM	25	56	46	6	4	7
07:10 AM	22	38	29	2	3	7
07:15 AM	21	50	55	5	2	8
07:20 AM	27	47	52	1	5	16
07:25 AM	40	47	62	3	5	15
07:30 AM	39	51	49	2	1	11
07:35 AM	30	49	57	4	2	11
07:40 AM	43	45	49	2	1	13
07:45 AM	29	50	47	7	3	12
07:50 AM	35	30	36	3	0	7
07:55 AM	29	28	49	4	0	10
08:00 AM	36	35	58	4	5	14
08:05 AM	23	36	63	4	2	11
08:10 AM	29	51	41	0	1	8
08:15 AM	25	38	53	4	2	7
08:20 AM	29	39	34	5	0	4
08:25 AM	25	42	36	4	3	13
08:30 AM	24	32	48	4	3	8
08:35 AM	31	30	50	3	3	10
08:40 AM	31	34	44	1	3	11
08:45 AM	37	45	33	3	2	21
08:50 AM	12	31	35	4	5	19
08:55 AM	18	34	40	2	2	7

Start Time	Trucks					
	Route 17 & Route 22 From North		Route 22 (Forest Road)		Route 17 (Middletown Avenue)	
	Right	Left	Thru	Left	Right	Thru
07:00 AM	1	4	2	2	0	1
07:05 AM	0	1	9	0	0	1
07:10 AM	0	1	1	0	1	1
07:15 AM	0	3	3	0	1	2
07:20 AM	0	3	3	0	0	2
07:25 AM	0	4	3	0	0	1
07:30 AM	0	5	0	0	2	4
07:35 AM	0	7	2	1	1	2
07:40 AM	0	4	1	2	0	2
07:45 AM	1	2	6	0	0	1
07:50 AM	2	2	2	0	1	5
07:55 AM	0	1	4	0	0	1
08:00 AM	2	3	5	1	0	1
08:05 AM	2	5	5	0	1	2
08:10 AM	2	0	3	0	0	3
08:15 AM	1	5	2	0	1	0
08:20 AM	2	1	1	0	0	1
08:25 AM	0	2	1	0	0	1
08:30 AM	1	0	2	3	2	1
08:35 AM	4	4	3	5	0	2
08:40 AM	2	1	1	0	0	2
08:45 AM	1	1	2	3	2	5
08:50 AM	1	1	6	2	1	2
08:55 AM	0	1	5	0	0	1

File Name: Q:\Traffic Count Data\Route 22 Project\NOB3 - PM - 2005.pwf

Start Date: 11/3/2005

Start Time: 4:00:00 PM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Route 17 & Route 22

Comment 3: Counters - Jones & Cewe & Ciarleglio

Comment 4: Day - Thursday

Start Time	Cars					
	Route 17 & Route 22 From North		Route 22 (Forest Road) From Southeast		Route 17 (Middletown Avenue) From Southwest	
	Right	Left	Thru	Left	Right	Thru
04:00 PM	17	39	41	3	2	25
04:05 PM	16	52	21	1	4	18
04:10 PM	10	46	48	4	3	13
04:15 PM	18	57	59	2	5	20
04:20 PM	12	55	37	1	6	26
04:25 PM	10	56	38	4	7	23
04:30 PM	12	58	33	3	2	17
04:35 PM	11	50	43	1	7	30
04:40 PM	15	58	37	2	5	26
04:45 PM	15	42	61	1	3	34
04:50 PM	22	45	39	2	3	21
04:55 PM	17	57	49	4	4	22
05:00 PM	14	51	49	2	3	25
05:05 PM	21	63	48	0	2	22
05:10 PM	17	57	47	0	4	29
05:15 PM	14	72	62	3	5	28
05:20 PM	15	64	55	1	6	36
05:25 PM	16	64	60	1	4	35
05:30 PM	14	67	46	1	2	17
05:35 PM	11	64	61	1	1	29
05:40 PM	17	48	45	1	4	20
05:45 PM	10	50	35	3	3	21
05:50 PM	12	52	42	2	5	30
05:55 PM	13	40	49	2	3	19

Start Time	Trucks					
	Route 17 & Route 22 From North		Route 22 (Forest Road) From Southeast		Route 17 (Middletown Avenue) From Southwest	
	Right	Left	Thru	Left	Right	Thru
04:00 PM	0	2	1	0	0	0
04:05 PM	0	2	3	0	1	1
04:10 PM	1	2	4	0	0	0
04:15 PM	0	3	2	0	0	0
04:20 PM	2	2	6	1	1	0
04:25 PM	0	2	3	0	0	0
04:30 PM	0	0	1	0	0	2
04:35 PM	0	2	3	0	0	1
04:40 PM	1	3	1	1	0	2
04:45 PM	1	2	2	1	0	0
04:50 PM	1	1	3	0	0	0
04:55 PM	0	2	2	0	0	1
05:00 PM	2	1	3	0	0	0
05:05 PM	0	2	2	1	0	1
05:10 PM	0	1	1	0	0	0
05:15 PM	2	1	3	0	0	0
05:20 PM	1	2	1	1	0	0
05:25 PM	1	0	8	1	0	0
05:30 PM	1	1	3	1	0	0
05:35 PM	0	1	9	0	0	1
05:40 PM	1	2	2	0	0	0
05:45 PM	0	1	0	0	0	0
05:50 PM	2	3	6	1	0	0
05:55 PM	0	0	0	0	0	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOB6 - AM - 2005.pwf

Start Date: 11/2/2005

Start Time: 7:00:00 AM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Route 22 (Clintonville Rd) & Old Post Rd

Comment 3: Counters - Jones & Cewe

Comment 4: Day - Wednesday

Start Time	Cars						
	Old Post Road From North		Route 22 (Clintonville Road) From East			Route 22 (Clintonville Road) From West	
	Right	Thru	Right	Thru	Left	Right	Left
07:00 AM	0	5	2	43	0	14	0
07:05 AM	0	3	2	43	0	28	0
07:10 AM	0	2	3	40	1	18	0
07:15 AM	0	7	1	52	0	26	0
07:20 AM	1	3	2	49	0	27	0
07:25 AM	0	3	3	51	0	24	1
07:30 AM	0	3	6	42	0	30	0
07:35 AM	0	2	3	60	0	37	0
07:40 AM	1	4	2	60	0	26	0
07:45 AM	0	4	3	48	0	33	0
07:50 AM	1	1	0	51	0	23	0
07:55 AM	2	3	2	60	0	29	0
08:00 AM	0	4	6	45	0	28	1
08:05 AM	0	3	2	38	1	31	0
08:10 AM	0	0	1	51	0	27	0
08:15 AM	1	1	5	54	0	25	0
08:20 AM	3	3	8	49	0	29	0
08:25 AM	0	4	3	44	0	32	0
08:30 AM	1	3	7	26	0	23	0
08:35 AM	3	5	3	38	0	36	0
08:40 AM	0	2	4	53	0	29	0
08:45 AM	1	2	4	35	0	20	1
08:50 AM	1	2	4	32	0	25	0
08:55 AM	3	5	2	35	1	19	0

Start Time	Trucks						
	Old Post Road From North		Route 22 (Clintonville Road) From East			Route 22 (Clintonville Road) From West	
	Right	Thru	Right	Thru	Left	Right	Left
07:00 AM	0	0	0	1	0	0	0
07:05 AM	0	1	0	0	0	6	0
07:10 AM	0	0	1	0	0	0	0
07:15 AM	0	0	0	3	0	0	0
07:20 AM	0	0	0	0	0	0	0
07:25 AM	0	1	0	1	0	4	0
07:30 AM	0	0	0	6	0	5	0
07:35 AM	0	1	0	3	0	1	0
07:40 AM	0	0	1	0	0	3	0
07:45 AM	0	1	0	0	0	1	0
07:50 AM	0	0	0	1	0	1	0
07:55 AM	0	0	0	2	0	0	0
08:00 AM	0	1	2	3	0	0	0
08:05 AM	0	1	0	3	0	1	0
08:10 AM	0	1	1	3	0	0	0
08:15 AM	0	0	1	3	0	1	0
08:20 AM	0	1	1	4	0	1	0
08:25 AM	0	0	0	3	0	0	0
08:30 AM	1	0	1	4	0	5	0
08:35 AM	0	0	0	1	0	3	0
08:40 AM	0	0	0	1	0	3	0
08:45 AM	0	1	0	0	0	0	0
08:50 AM	0	0	0	2	0	2	0
08:55 AM	0	0	0	3	0	1	0



File Name: Q:\Traffic Count Data\Route 22 Project\NOB6 - PM - 2005.pwf

Start Date: 11/2/2005

Start Time: 4:00:00 PM

Site Code: 00000000

Comment 1: North Branford

Comment 2: Route 22 (Clintonville Rd) & Old Post Rd

Comment 3: Counters - Jones & Cewe

Comment 4: Day - Wednesday

Start Time	Cars						
	Old Post Road From North		Route 22 (Clintonville Road) From East			Route 22 (Clintonville Road) From West	
	Right	Thru	Right	Thru	Left	Right	Left
04:00 PM	0	2	7	31	0	34	0
04:05 PM	1	4	3	24	0	49	0
04:10 PM	1	2	3	30	1	45	0
04:15 PM	1	2	4	20	0	38	0
04:20 PM	0	3	6	35	0	39	0
04:25 PM	1	4	6	32	0	48	0
04:30 PM	1	1	3	30	0	44	0
04:35 PM	1	4	2	24	0	42	0
04:40 PM	0	3	3	40	0	49	0
04:45 PM	2	3	6	36	0	43	0
04:50 PM	0	1	6	31	0	62	0
04:55 PM	0	3	9	38	1	39	0
05:00 PM	1	4	2	33	0	39	0
05:05 PM	1	4	4	33	0	61	0
05:10 PM	0	2	2	40	0	48	0
05:15 PM	0	2	6	29	0	48	0
05:20 PM	1	5	4	54	1	57	0
05:25 PM	0	2	6	40	0	49	0
05:30 PM	0	4	2	41	0	47	0
05:35 PM	0	5	1	35	0	45	0
05:40 PM	0	4	1	53	0	39	0
05:45 PM	0	5	4	42	0	41	0
05:50 PM	0	4	5	24	0	36	0
05:55 PM	0	2	3	28	0	34	0

Start Time	Trucks						
	Old Post Road From North		Route 22 (Clintonville Road) From East			Route 22 (Clintonville Road) From West	
	Right	Thru	Right	Thru	Left	Right	Left
04:00 PM	0	0	0	2	0	3	0
04:05 PM	0	1	0	1	0	0	0
04:10 PM	0	0	1	3	0	2	0
04:15 PM	1	0	0	0	0	2	0
04:20 PM	0	0	0	0	0	3	0
04:25 PM	0	0	0	1	0	0	0
04:30 PM	0	0	0	1	0	1	0
04:35 PM	0	0	0	3	0	0	0
04:40 PM	0	0	0	1	0	1	0
04:45 PM	0	0	0	0	0	3	0
04:50 PM	0	0	0	0	0	4	0
04:55 PM	0	0	1	0	0	4	0
05:00 PM	0	0	0	0	0	2	0
05:05 PM	0	0	0	1	0	1	0
05:10 PM	0	0	0	1	0	1	0
05:15 PM	0	0	0	2	0	0	0
05:20 PM	0	0	0	2	0	2	0
05:25 PM	0	0	0	0	0	1	0
05:30 PM	0	0	0	1	0	0	0
05:35 PM	0	0	0	2	0	1	0
05:40 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
05:50 PM	0	0	0	0	0	0	0
05:55 PM	0	0	0	1	0	3	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOH10 - PM - 2005.pwt  
 Start Date: 11/28/2005  
 Start Time: 4:00:00 PM  
 Site Code: 00000000  
 Comment 1: North Haven  
 Comment 2: Route 22 (Clintonville Road) & Pool Road  
 Comment 3: Counters - Jones & Cewe  
 Comment 4: Day - Monday

Start Time	Cars															
	Pool Road From North				Route 22 (Clintonville Road) From East				Pool Road From South				Route 22 (Clintonville Road) From West			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
04:00 PM	2	13	4	0	1	35	3	0	8	12	0	0	0	0	3	0
04:05 PM	2	11	8	0	2	56	3	0	6	17	0	0	0	43	0	0
04:10 PM	5	14	4	0	4	36	3	0	6	11	1	0	0	44	5	0
04:15 PM	9	14	7	0	5	29	3	0	11	8	1	0	0	40	1	0
04:20 PM	0	8	5	0	3	45	2	0	5	12	3	0	0	46	3	0
04:25 PM	3	14	6	0	2	33	1	0	4	9	0	0	0	37	3	0
04:30 PM	3	13	8	0	6	36	2	0	7	21	0	0	0	57	2	0
04:35 PM	5	14	8	0	4	22	4	0	3	17	2	0	0	48	1	0
04:40 PM	3	14	6	0	4	33	0	0	10	11	0	0	0	52	4	0
04:45 PM	1	12	8	0	4	34	0	0	5	14	4	0	0	63	1	0
04:50 PM	2	7	4	0	8	35	3	0	12	15	1	0	0	57	3	0
04:55 PM	4	15	5	0	6	28	1	0	4	7	1	0	0	58	1	0
05:00 PM	0	10	5	0	4	28	2	0	5	10	1	0	0	74	0	0
05:05 PM	3	15	5	0	4	34	0	0	10	18	0	0	0	49	5	0
05:10 PM	2	4	4	0	3	40	2	0	3	18	1	0	0	68	1	0
05:15 PM	2	21	9	0	5	23	0	0	7	17	1	0	0	59	2	0
05:20 PM	2	12	5	0	3	26	2	0	4	15	0	0	0	64	2	0
05:25 PM	2	13	10	0	3	28	3	0	5	11	0	0	0	50	1	0
05:30 PM	4	12	2	0	1	38	4	0	2	14	2	0	0	59	3	0
05:35 PM	2	20	5	0	2	30	3	0	3	12	1	0	0	40	1	0
05:40 PM	0	16	7	0	1	31	2	0	5	5	0	0	0	53	2	0
05:45 PM	0	8	5	0	3	17	3	0	4	7	0	0	0	43	4	0
05:50 PM	0	4	7	0	3	26	0	0	2	4	0	0	0	55	2	0
05:55 PM	2	12	5	0	3	23	3	0	4	9	3	0	0	44	0	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOH10 - PM - 2005.pwf  
 Start Date: 11/28/2005  
 Start Time: 4:00:00 PM  
 Site Code: 00000000  
 Comment 1: North Haven  
 Comment 2: Route 22 (Clintonville Road) & Pool Road  
 Comment 3: Counters - Jones & Cawe  
 Comment 4: Day - Monday

Start Time	Pool Road From North				Route 22 (Clintonville Road) From East				Pool Road From South				Route 22 (Clintonville Road) From West			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
04:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0
04:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
04:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
04:20 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0
04:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
04:35 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
04:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
04:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
04:55 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0
05:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0
05:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
05:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
05:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
05:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
05:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
05:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Trucks



File Name: Q:\Traffic Count Data\Route 22 Project\NOH38 - AM - 2005.pwf  
 Start Date: 12/5/2005  
 Start Time: 7:00:00 AM  
 Site Code: 00000000  
 Comment 1: North Haven  
 Comment 2: Route 22 (Clintonville Rd) & Rimmon Road  
 Comment 3: Counters - Jones & Ciarleglio  
 Comment 4: Day - Monday

Start Time	Cars						
	Route 22 (Clintonville Road) From East		Rimmon Road From South		Route 22 (Clintonville Road) From West		Thru
	Thru	Left	Right	Left	Right	Thru	
07:00 AM	42	0	0	2	1	22	
07:05 AM	46	0	3	4	0	22	
07:10 AM	34	0	4	1	0	16	
07:15 AM	43	0	5	6	0	33	
07:20 AM	64	2	3	3	0	24	
07:25 AM	54	0	2	0	0	46	
07:30 AM	62	0	1	4	0	32	
07:35 AM	55	0	2	5	1	28	
07:40 AM	69	1	0	5	1	20	
07:45 AM	73	0	1	4	0	28	
07:50 AM	63	0	1	0	0	20	
07:55 AM	73	2	0	1	0	23	
08:00 AM	66	0	0	2	0	29	
08:05 AM	56	0	1	4	0	24	
08:10 AM	68	0	0	3	1	21	
08:15 AM	47	0	1	1	0	19	
08:20 AM	69	0	0	3	1	23	
08:25 AM	49	0	1	1	0	20	
08:30 AM	49	0	0	2	0	22	
08:35 AM	35	2	2	6	0	37	
08:40 AM	58	1	2	2	0	18	
08:45 AM	65	0	0	2	0	12	
08:50 AM	60	0	0	2	1	18	
08:55 AM	43	0	1	3	0	11	

Start Time	Trucks					
	Route 22 (Clintonville Road) From East		Rimmon Road From South		Route 22 (Clintonville Road) From West	
	Thru	Left	Right	Left	Right	Thru
07:00 AM	0	0	0	0	0	3
07:05 AM	0	0	0	1	0	0
07:10 AM	0	0	0	0	0	1
07:15 AM	1	0	0	0	0	0
07:20 AM	0	0	0	0	0	3
07:25 AM	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	2
07:35 AM	0	0	1	0	0	0
07:40 AM	1	0	0	0	0	4
07:45 AM	0	0	0	0	0	1
07:50 AM	0	0	0	0	0	1
07:55 AM	0	0	0	0	0	4
08:00 AM	1	0	0	0	0	0
08:05 AM	3	0	0	0	2	1
08:10 AM	3	0	0	0	0	1
08:15 AM	1	0	0	0	1	5
08:20 AM	2	0	0	0	0	4
08:25 AM	2	0	0	1	0	0
08:30 AM	1	0	0	0	0	1
08:35 AM	1	0	0	0	0	3
08:40 AM	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0
08:50 AM	2	0	0	0	0	2
08:55 AM	0	0	0	0	0	1

File Name: Q:\Traffic Count Data\Route 22 Project\NOH38 - PM - 2005.pwf

Start Date: 12/5/2005

Start Time: 4:00:00 PM

Site Code: 00000000

Comment 1: North Haven

Comment 2: Route 22 (Clintonville Rd) & Rimmon Road

Comment 3: Counters - Jones & Ciarleglio

Comment 4: Day - Monday

Start Time	Cars					
	Route 22 (Clintonville Road) From East		Rimmon Road From South		Route 22 (Clintonville Road) From West	
	Thru	Left	Right	Left	Right	Thru
04:00 PM	66	6	1	0	1	47
04:05 PM	64	8	1	1	0	44
04:10 PM	48	1	2	1	0	62
04:15 PM	34	3	0	1	1	43
04:20 PM	26	1	1	1	0	47
04:25 PM	39	2	0	2	0	47
04:30 PM	39	2	0	1	0	47
04:35 PM	38	2	0	1	0	52
04:40 PM	33	0	2	0	2	58
04:45 PM	25	2	1	1	0	61
04:50 PM	24	2	0	1	1	68
04:55 PM	37	0	0	1	1	63
05:00 PM	31	7	0	2	1	55
05:05 PM	40	0	1	0	0	66
05:10 PM	30	1	1	0	1	69
05:15 PM	29	0	0	3	4	38
05:20 PM	36	1	0	3	2	74
05:25 PM	23	4	0	1	2	61
05:30 PM	27	0	1	0	1	54
05:35 PM	35	1	0	1	2	47
05:40 PM	24	1	2	2	2	35
05:45 PM	36	0	0	2	1	48
05:50 PM	28	1	1	2	1	39
05:55 PM	25	0	2	1	0	38

Start Time	Trucks					
	Route 22 (Clintonville Road) From East		Rimmon Road From South		Route 22 (Clintonville Road) From West	
	Thru	Left	Right	Left	Right	Thru
04:00 PM	2	0	0	0	0	1
04:05 PM	1	0	0	0	0	0
04:10 PM	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	3
04:20 PM	0	0	0	0	0	1
04:25 PM	2	0	0	0	0	2
04:30 PM	0	0	0	0	0	1
04:35 PM	1	0	0	0	0	0
04:40 PM	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	1
04:50 PM	1	0	0	0	0	1
04:55 PM	1	0	0	0	0	0
05:00 PM	1	1	0	0	0	0
05:05 PM	0	0	0	0	0	1
05:10 PM	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0
05:20 PM	0	0	0	0	0	2
05:25 PM	0	0	0	0	1	1
05:30 PM	1	0	0	0	0	0
05:35 PM	2	0	0	0	0	1
05:40 PM	2	0	0	0	0	2
05:45 PM	0	0	0	0	0	1
05:50 PM	1	0	0	1	0	0
05:55 PM	0	0	0	0	0	0

File Name: Q:\Traffic Count Data\Route 22 Project\NOH39 - AM - 2005.pwf

Start Date: 12/6/2005

Start Time: 7:00:00 AM

Site Code: 00000000

Comment 1: North Haven

Comment 2: Rt 103 (Maple Ave) & Pool Rd & Laydon Av

Comment 3: Counters - Cewe & Ciarleglio

Comment 4: Day - Tuesday

Start Time	Cars											
	Pool Road From North			Laydon Avenue From East			Route 103 (Maple Avenue) From Southeast			Route 103 (Maple Avenue) From Northwest		
	Maple Ave (NB)	Maple Ave (SB)	Laydon Ave	Pool Road	Maple Ave (NB)	Maple Ave (SB)	Laydon Ave	Pool Road	Maple Ave (NB)	Maple Ave (SB)	Laydon Ave	Pool Road
07:00 AM	3	3	1	0	11	1	0	0	9	5	0	0
07:05 AM	7	4	0	0	13	0	0	1	10	3	1	0
07:10 AM	13	5	0	0	19	0	0	1	10	12	7	4
07:15 AM	22	7	0	2	16	0	0	3	16	6	7	3
07:20 AM	10	1	1	0	16	0	0	2	9	9	7	4
07:25 AM	7	5	0	0	13	0	0	2	8	7	5	2
07:30 AM	6	6	0	0	23	0	0	4	15	6	3	1
07:35 AM	11	5	0	2	23	1	0	5	15	9	6	4
07:40 AM	6	7	1	2	18	0	0	5	18	12	7	5
07:45 AM	7	4	1	0	24	0	0	2	14	12	9	2
07:50 AM	6	5	0	0	27	0	1	5	16	10	6	2
07:55 AM	2	8	0	0	16	1	0	3	13	17	14	3
08:00 AM	3	3	0	1	15	0	1	3	12	6	6	2
08:05 AM	2	2	1	1	15	1	0	1	15	10	4	2
08:10 AM	3	8	1	1	12	1	0	3	7	3	4	0
08:15 AM	2	5	1	1	19	0	0	8	9	9	3	2
08:20 AM	5	5	1	0	16	0	1	3	12	7	7	1
08:25 AM	4	7	1	0	16	0	0	3	9	10	4	3
08:30 AM	2	3	0	0	15	1	0	2	10	5	9	1
08:35 AM	5	3	0	2	12	1	0	2	9	9	4	2
08:40 AM	2	2	1	2	8	0	0	4	12	9	2	1
08:45 AM	3	4	0	4	12	0	0	7	15	10	8	2
08:50 AM	5	10	1	3	15	0	0	2	10	7	2	0
08:55 AM	4	5	1	0	22	0	0	2	12	11	3	0

Start Time	Trucks											
	Pool Road From North			Laydon Avenue From East			Route 103 (Maple Avenue) From Southeast			Route 103 (Maple Avenue) From Northwest		
	Maple Ave (NB)	Maple Ave (SB)	Laydon Ave	Pool Road	Maple Ave (NB)	Maple Ave (SB)	Laydon Ave	Pool Road	Maple Ave (NB)	Maple Ave (SB)	Laydon Ave	Pool Road
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	0
07:05 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:10 AM	1	0	0	0	2	0	0	0	2	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	1	3	1	1
07:20 AM	0	0	0	0	1	0	0	0	1	3	1	1
07:25 AM	0	0	0	0	3	0	0	0	1	1	3	1
07:30 AM	0	0	0	0	1	0	0	1	0	1	0	0
07:35 AM	3	0	0	0	0	0	0	1	2	1	0	0
07:40 AM	1	0	0	0	1	0	0	0	2	0	0	1
07:45 AM	0	1	0	0	1	0	0	0	3	1	0	1
07:50 AM	1	0	0	0	3	0	0	0	2	1	2	5
07:55 AM	0	0	0	0	0	0	0	0	2	2	0	3
08:00 AM	1	0	0	0	1	0	0	0	1	2	1	0
08:05 AM	1	0	0	0	1	0	0	1	1	1	0	1
08:10 AM	1	0	0	0	1	0	0	0	2	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	2	1	0	0
08:20 AM	0	0	0	0	0	0	0	1	1	2	1	0
08:25 AM	0	2	0	1	1	0	0	0	3	0	0	0
08:30 AM	0	2	0	0	0	0	0	1	0	1	0	0
08:35 AM	0	0	0	0	0	0	0	0	1	1	0	0
08:40 AM	0	0	0	0	0	0	0	0	1	0	0	0
08:45 AM	0	1	0	0	0	0	0	1	1	4	0	0
08:50 AM	0	0	0	0	1	0	0	1	0	1	0	0
08:55 AM	0	1	1	0	0	0	0	0	1	1	0	0





ROUTE - 017 MIDDLETOWN AVE (NEW HAVEN) TO ED ROUTE 2 (GLASTONBURY)  
LOGGED DIRECTION/NORTH

FROM *****	CUM MILES	TO *****	CUM MILES	SECT LENGTH	2004 ADT
MIDDLETOWN AVE(LOCAL)	0	EXIT FR SB I-91(018)	0.09	0.09	13600
EXIT FR SB I-91(018)	0.09	RTE 80(WB)(FOXON BLVD)	0.22	0.13	28900
RTE 80(WB)(FOXON BLVD)	0.22	ACC TO NB I-91(019)	0.51	0.29	20300
ACC TO NB I-91(019)	0.51	CROSS ST	0.83	0.32	14300
CROSS ST	0.83	NEW HAVEN - NORTH HAVEN TL	1.19	0.36	9200
NEW HAVEN - NORTH HAVEN TL	1.19	EXIT FR USSC CORP	1.51	0.32	9200
EXIT FR USSC CORP	1.51	RTE 103(QUINNIPIAC AVE)	1.7	0.19	7200
RTE 103(QUINNIPIAC AVE)	1.7	MONTOWESE AVE	2.74	1.04	6100
MONTOWESE AVE	2.74	NORTH HILL RD #1	3.64	0.9	8400
NORTH HILL RD #1	3.64	RIMMON RD	4.8	1.16	7600
RIMMON RD	4.8	NORTH HAVEN - NORTH BRANFORD TL	5.21	0.41	6800
NORTH HAVEN - NORTH BRANFORD TL	5.21	VILLAGE ST	5.76	0.55	6800
VILLAGE ST	5.76	FOOTE HILL RD #2	6.58	0.82	5600
FOOTE HILL RD #2	6.58	S JCT RTE 22(FOREST RD)	6.98	0.4	6300
S JCT RTE 22(FOREST RD)	6.98	N JCT RTE 22(OLD PST RD)(1-WAY EB)	7.04	0.06	17600
N JCT RTE 22(OLD PST RD)(1-WAY EB)	7.04	WOODS HILL RD	8.53	1.49	10100
WOODS HILL RD	8.53	REEDS GAP RD WEST	9.47	0.94	8600
REEDS GAP RD WEST	9.47	WHITE HOLLOW RD	9.98	0.51	6600
WHITE HOLLOW RD	9.98	NORTH BRANFORD - DURHAM TL	10.78	0.8	4800
NORTH BRANFORD - DURHAM TL	10.78	N JCT STAGECOACH RD	12.97	2.19	4800
N JCT STAGECOACH RD	12.97	SAW MILL RD	13.41	0.44	5800
SAW MILL RD	13.41	PARMELEE HILL RD	14.34	0.93	4500
PARMELEE HILL RD	14.34	RTE 77(GUILFORD RD)	14.98	0.64	5400
RTE 77(GUILFORD RD)	14.98	RTE 79(NB)(MADISON RD)	15.15	0.17	10100
RTE 79(NB)(MADISON RD)	15.15	RTE 68(WALLINGFORD RD)	16	0.85	18400
RTE 68(WALLINGFORD RD)	16	RTE 147(MIDDLEFIELD RD)	16.58	0.58	17500
RTE 147(MIDDLEFIELD RD)	16.58	DR TO LINO'S SHOPPING CTR	16.94	0.36	13500
DR TO LINO'S SHOPPING CTR	16.94	DURHAM - MIDDLETOWN TL	17.29	0.35	12200
DURHAM - MIDDLETOWN TL	17.29	BRUSH HILL RD	18.72	1.43	12200
BRUSH HILL RD	18.72	BROWN ST	19.46	0.74	13500
BROWN ST	19.46	RTE 155(WB)(RANDOLPH RD)	19.96	0.5	15100
RTE 155(WB)(RANDOLPH RD)	19.96	HIGHLAND AVE	20.38	0.42	11900
HIGHLAND AVE	20.38	FARM HILL RD	20.95	0.57	13400
FARM HILL RD	20.95	SOUTH MAIN ST	21.52	0.57	17300
SOUTH MAIN ST	21.52	NB EXIT TO MAIN ST EXT(009)	21.68	0.16	14000
NB EXIT TO MAIN ST EXT(009)	21.68	NB ACC FR MAIN ST EXT(011)	21.83	0.15	10000
NB ACC FR MAIN ST EXT(011)	21.83	NB EXIT TO SB RTE 9(TR 801)	21.9	0.07	14100
NB EXIT TO SB RTE 9(TR 801)	21.9	BGN OVLP RTE 9	22.14	0.24	12000
BGN OVLP RTE 9	22.14	END OVLP RTE 9	22.97	0.83	OVLP
END OVLP RTE 9	22.97	BGN OVLP RTE 66	23.14	0.17	22000
BGN OVLP RTE 66	23.14	MIDDLETOWN - PORTLAND TL	23.7	0.56	OVLP
MIDDLETOWN - PORTLAND TL	23.7	END OVLP RTE 66	26.12	2.42	OVLP
END OVLP RTE 66	26.12	BARTLETT ST	27.23	1.11	4400
BARTLETT ST	27.23	RTE 17A(MAIN ST)	28.15	0.92	3500
RTE 17A(MAIN ST)	28.15	DR TO PORTLAND TOWN GARAGE	28.4	0.25	7000
DR TO PORTLAND TOWN GARAGE	28.4	PORTLAND - GLASTONBURY TL	30.58	2.18	6400
PORTLAND - GLASTONBURY TL	30.58	N JCT GREAT POND RD	31.69	1.11	6400
N JCT GREAT POND RD	31.69	FOOTE RD	32.04	0.35	8200
FOOTE RD	32.04	RTE 160(WATER ST)	32.63	0.59	9800
RTE 160(WATER ST)	32.63	HOPEWELL RD	32.81	0.18	11600
HOPEWELL RD	32.81	CHESTNUT HILL RD	33.38	0.57	13300
CHESTNUT HILL RD	33.38	OVERLOOK RD	33.9	0.52	15200
OVERLOOK RD	33.9	SB MAIN ST	34.05	0.15	17000
SB MAIN ST	34.05	NB ACC FR WILLIAMS ST EAST(002)	35.47	1.42	13300
NB ACC FR WILLIAMS ST EAST(002)	35.47	NB EXIT TO NEW LONDON TPKE(004)	35.71	0.24	14200
NB EXIT TO NEW LONDON TPKE(004)	35.71	NB ACC FR NEW LONDON TPKE(006)	35.88	0.17	10700
NB ACC FR NEW LONDON TPKE(006)	35.88	EB RTE 2(VFW HWY)	36.33	0.45	16800

ROUTE - 022 ROUTE 10 (HAMDEN) TO US 1 (GUILFORD)  
LOGGED DIRECTION/EAST

FROM *****	CUM MILES	TO *****	CUM MILES	SECT LENGTH	2004 ADT
RTE 10(WHITNEY AVE)	0	SOUTH NEW RD	0.14	0.14	5900
SOUTH NEW RD	0.14	IVES ST	0.21	0.07	4700
IVES ST	0.21	HAMDEN - NORTH HAVEN TL	0.99	0.78	4100
HAMDEN - NORTH HAVEN TL	0.99	RIDGE RD # 1	1.13	0.14	4100
RIDGE RD # 1	1.13	SR 725(HARTFORD TPKE)	1.77	0.64	7000
SR 725(HARTFORD TPKE)	1.77	EXIT FR NB RTE 15(129)	1.85	0.08	15400
EXIT FR NB RTE 15(129)	1.85	BGN OVLP US 5	2.02	0.17	21300
BGN OVLP US 5	2.02	END OVLP US 5	2.68	0.66	OVLP
END OVLP US 5	2.68	BASSETT RD	3.87	1.19	12400
BASSETT RD	3.87	RIMMON RD	4.77	0.9	11700
RIMMON RD	4.77	NORTH HAVEN - NORTH BRANFORD TL	4.91	0.14	10200
NORTH HAVEN - NORTH BRANFORD TL	4.91	SALEM ST	5.35	0.44	10200
SALEM ST	5.35	VILLAGE ST	5.61	0.26	9100
VILLAGE ST	5.61	RTE 150(WOODHOUSE AVE)	6.15	0.54	7700
RTE 150(WOODHOUSE AVE)	6.15	BGN OVLP RTE 17	6.46	0.31	10400
BGN OVLP RTE 17	6.46	END OVLP RTE 17	6.52	0.06	OVLP
END OVLP RTE 17	6.52	AUGUR RD	8.69	2.17	11900
AUGUR RD	8.69	BGN OVLP RTE 80	10.88	2.19	12600
BGN OVLP RTE 80	10.88	END OVLP RTE 80	12.38	1.5	OVLP
END OVLP RTE 80	12.38	NORTH BRANFORD - GUILFORD TL	14.04	1.66	6800
NORTH BRANFORD - GUILFORD TL	14.04	US 1(BOSTON POST RD)	14.07	0.03	6800

ROUTE - 080 ROUTE 17 (NEW HAVEN) TO ROUTE 154 (DEEP RIVER)  
LOGGED DIRECTION/EAST

FROM *****	CUM MILES	TO *****	CUM MILES	SECT LENGTH	2004 ADT
RTE 17(MIDDLETOWN AVE)	0	RTE 103(QUINNIPIAC AVE)	0.44	0.44	36400
RTE 103(QUINNIPIAC AVE)	0.44	EASTERN ST	0.57	0.13	33700
EASTERN ST	0.57	NEW HAVEN - EAST HAVEN TL	0.8	0.23	26500
NEW HAVEN - EAST HAVEN TL	0.8	GREEN ST	1.44	0.64	26500
GREEN ST	1.44	MILL ST	1.66	0.22	25100
MILL ST	1.66	HUNT LA	2.12	0.46	19400
HUNT LA	2.12	RTE 100(NORTH HIGH ST)	2.37	0.25	18100
RTE 100(NORTH HIGH ST)	2.37	RIVER RD	2.64	0.27	21200
RIVER RD	2.64	EAST HAVEN - NO BRANFORD TL	3.24	0.6	18400
EAST HAVEN - NO BRANFORD TL	3.24	DR TO TOTOKET SHOPPING CTR	3.62	0.38	18400
DR TO TOTOKET SHOPPING CTR	3.62	SR 740(TOTOKET RD)	3.73	0.11	17100
SR 740(TOTOKET RD)	3.73	W JCT RTE 22(FOREST RD)	4.8	1.07	17200
W JCT RTE 22(FOREST RD)	4.8	TWIN LAKES RD	5.01	0.21	25000
TWIN LAKES RD	5.01	RTE 139(BRANFORD RD)	6.11	1.1	21700
RTE 139(BRANFORD RD)	6.11	E JCT RTE 22(NOTCH HILL RD)	6.3	0.19	21100
E JCT RTE 22(NOTCH HILL RD)	6.3	WEST POND RD	7.13	0.83	17200
WEST POND RD	7.13	WHITEWOOD LA	7.65	0.52	13900
WHITEWOOD LA	7.65	COUNTY RD	7.93	0.28	11800
COUNTY RD	7.93	NO BRANFORD - GUILFORD TL	8.08	0.15	10400
NO BRANFORD - GUILFORD TL	8.08	LONG HILL RD	8.95	0.87	10400
LONG HILL RD	8.95	RTE 77(DURHAM RD)	9.48	0.53	9600
RTE 77(DURHAM RD)	9.48	HOOP POLE RD	10.2	0.72	7000
HOOP POLE RD	10.2	LITTLE MEADOW RD	10.82	0.62	6200
LITTLE MEADOW RD	10.82	GUILFORD - MADISON TL	11.81	0.99	5500
GUILFORD - MADISON TL	11.81	RTE 79(NB)(DURHAM RD)	14.05	2.24	5500
RTE 79(NB)(DURHAM RD)	14.05	ENT TO NO MADISON SHOPPING CTR	14.19	0.14	6900
ENT TO NO MADISON SHOPPING CTR	14.19	SUMMER HILL RD	14.83	0.64	5200
SUMMER HILL RD	14.83	MADISON - KILLINGWORTH TL	15.41	0.58	4600
MADISON - KILLINGWORTH TL	15.41	RTE 81(NB)(CLINTON RD)	18.19	2.78	4600
RTE 81(NB)(CLINTON RD)	18.19	ROAST MEAT HILL RD	19.07	0.88	4800
ROAST MEAT HILL RD	19.07	KILLINGWORTH - DEEP RIVER TL	20.67	1.6	3600
KILLINGWORTH - DEEP RIVER TL	20.67	RTE 145(STEVENSTOWN RD)	21.6	0.93	3600
RTE 145(STEVENSTOWN RD)	21.6	RTE 145(CEDAR LAKE RD)	21.95	0.35	5300
RTE 145(CEDAR LAKE RD)	21.95	WESTBROOK RD	22.21	0.26	4500
WESTBROOK RD	22.21	SR 602(WARSAW ST)	24.01	1.8	5000
SR 602(WARSAW ST)	24.01	EXIT FR SB RTE 9(016)	25.11	1.1	5200
EXIT FR SB RTE 9(016)	25.11	EXIT FR NB RTE 9(013)	25.36	0.25	5400
EXIT FR NB RTE 9(013)	25.36	UNION ST	25.73	0.37	6200
UNION ST	25.73	RTE 154(MAIN ST)	25.91	0.18	4200

ROUTE - 103      ROUTE 80 (NEW HAVEN) TO ROUTE 22 (NORTH HAVEN)  
LOGGED DIRECTION/NORTH

FROM *****	CUM MILES	TO *****	CUM MILES	SECT LENGTH	2004 ADT
RTE 80(FOXON BLVD)	0	SMITH AVE	0.79	0.79	9800
SMITH AVE	0.79	NEW HAVEN - NORTH HAVEN TL	1.06	0.27	7100
NEW HAVEN - NORTH HAVEN TL	1.06	DR TO QUINNIPIAC PLAZA	1.36	0.3	7100
DR TO QUINNIPIAC PLAZA	1.36	RTE 17(MIDDLETOWN AVE)	1.47	0.11	8200
RTE 17(MIDDLETOWN AVE)	1.47	VILLAGE ST	2.06	0.59	10800
VILLAGE ST	2.06	SR 715(MONTOWESE AVE)	2.25	0.19	12200
SR 715(MONTOWESE AVE)	2.25	POTTER RD	3.2	0.95	7900
POTTER RD	3.2	BAILEY RD	4.28	1.08	9300
BAILEY RD	4.28	SHAWMUT AVE(SB)	4.99	0.71	6200
SHAWMUT AVE(SB)	4.99	SR 729(EB)(BROADWAY)	5.15	0.16	8200
SR 729(EB)(BROADWAY)	5.15	RTE 22(CLINTONVILLE RD)	5.31	0.16	14700

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

East Haven  
Route 80 & Thompson Street & Mill Street  
Day - Tuesday  
Counters - Sullivan & Ciarleglio

File Name : eh5 - am - 2006  
Site Code : 00000000  
Start Date : 4/4/2006  
Page No : 1

## Groups Printed - Cars - Trucks

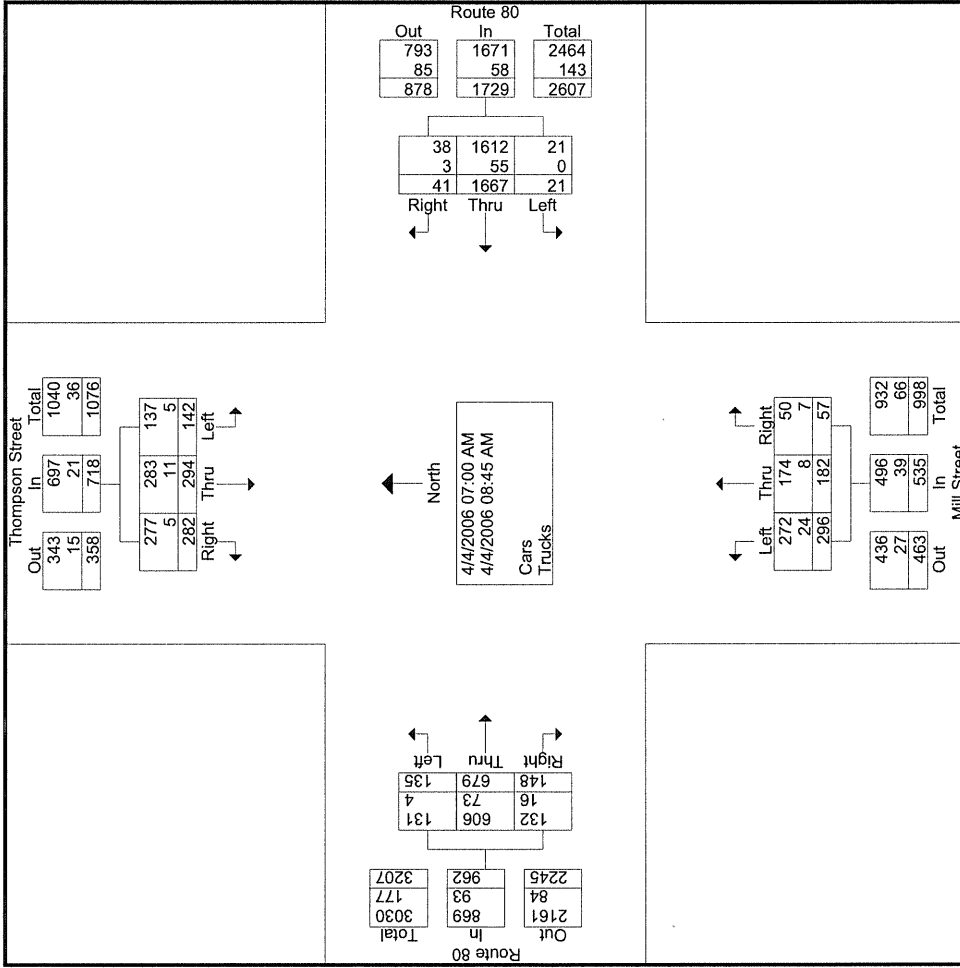
Start Time	Thompson Street From North				Route 80 From East				Mill Street From South				Route 80 From West				
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	47	24	39	110	3	197	2	202	11	31	42	84	11	103	14	128	524
07:15 AM	37	38	18	93	2	254	1	257	9	14	40	63	18	85	16	119	532
07:30 AM	44	30	10	84	3	205	0	208	6	22	33	61	11	58	18	87	440
07:45 AM	24	28	10	62	4	219	3	226	6	29	27	62	22	103	14	139	489
Total	152	120	77	349	12	875	6	893	32	96	142	270	62	349	62	473	1985
08:00 AM	27	37	18	82	7	191	6	204	4	28	41	73	27	74	16	117	476
08:15 AM	29	33	12	74	14	225	2	241	9	21	36	66	19	83	14	116	497
08:30 AM	33	40	12	85	5	188	5	198	5	17	35	57	17	77	26	120	460
08:45 AM	41	64	23	128	3	188	2	193	7	20	42	69	23	96	17	136	526
Total	130	174	65	369	29	792	15	836	25	86	154	265	86	330	73	489	1959
Grand Total	282	294	142	718	41	1667	21	1729	57	182	296	535	148	679	135	962	3944
Approch %	39.3	40.9	19.8		2.4	96.4	1.2		10.7	34	55.3		15.4	70.6	14		
Total %	7.2	7.5	3.6	18.2	1	42.3	0.5	43.8	1.4	4.6	7.5	13.6	3.8	17.2	3.4	24.4	
Cars	277	283	137	697	38	1612	21	1671	50	174	272	496	132	606	131	869	3733
% Cars	98.2	96.3	96.5	97.1	92.7	96.7	100	96.6	87.7	95.6	91.9	92.7	89.2	89.2	97	90.3	94.7
Trucks	5	11	5	21	3	55	0	58	7	8	24	39	16	73	4	93	211
% Trucks	1.8	3.7	3.5	2.9	7.3	3.3	0	3.4	12.3	4.4	8.1	7.3	10.8	10.8	3	9.7	5.3

# South Central Regional Council of Governments

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East Haven  
 Route 80 & Thompson Street & Mill Street  
 Day - Tuesday  
 Counters - Sullivan & Ciarleglio

File Name : eh5 - am - 2006  
 Site Code : 00000000  
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# South Central Regional Council of Governments

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East Haven  
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File Name : EH5 - PM - 2006  
Site Code : 00000000  
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## Groups Printed- Cars - Trucks

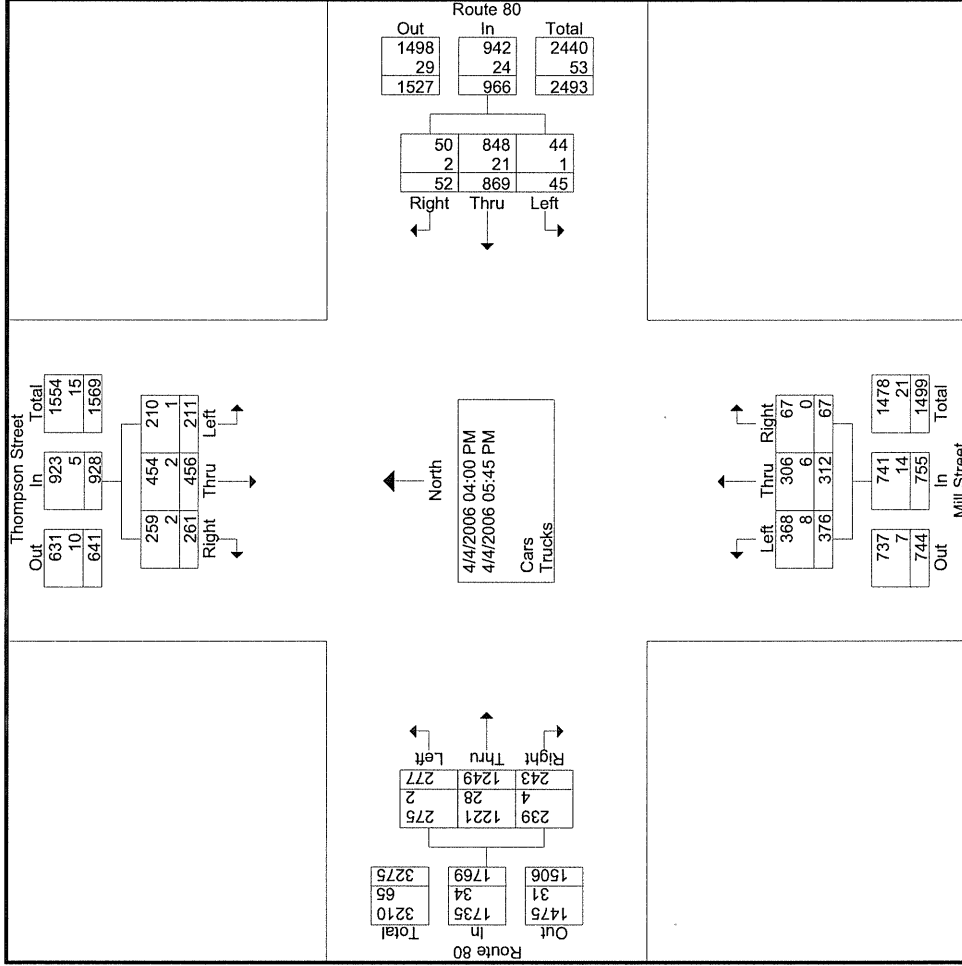
Start Time	Thompson Street From North				Route 80 From East				Mill Street From South				Route 80 From West				
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	27	55	27	109	5	123	6	134	14	48	55	117	31	161	22	214	574
04:15 PM	43	45	22	110	10	111	3	124	10	33	49	92	26	175	36	237	563
04:30 PM	18	61	24	103	9	130	2	141	7	33	56	96	40	149	34	223	563
04:45 PM	30	49	16	95	3	92	6	101	10	44	60	114	39	175	37	251	561
Total	118	210	89	417	27	456	17	500	41	158	220	419	136	660	129	925	2261
05:00 PM	32	61	39	132	8	109	9	126	8	54	40	102	23	151	36	210	570
05:15 PM	34	77	33	144	8	115	4	127	2	36	32	70	25	141	38	204	545
05:30 PM	41	59	31	131	4	107	6	117	9	29	42	80	23	131	33	187	515
05:45 PM	36	49	19	104	5	82	9	96	7	35	42	84	36	166	41	243	527
Total	143	246	122	511	25	413	28	466	26	154	156	336	107	589	148	844	2157
Grand Total	261	456	211	928	52	869	45	966	67	312	376	755	243	1249	277	1769	4418
Approch %	28.1	49.1	22.7		5.4	90	4.7		8.9	41.3	49.8		13.7	70.6	15.7		
Total %	5.9	10.3	4.8	21	1.2	19.7	1	21.9	1.5	7.1	8.5	17.1	5.5	28.3	6.3	40	
% Cars	259	454	210	923	50	848	44	942	67	306	368	741	239	1221	275	1735	4341
% Cars	99.2	99.6	99.5	99.5	96.2	97.6	97.8	97.5	100	98.1	97.9	98.1	98.4	97.8	99.3	98.1	98.3
Trucks	2	2	1	5	2	21	1	24	0	6	8	14	4	28	2	34	77
% Trucks	0.8	0.4	0.5	0.5	3.8	2.4	2.2	2.5	0	1.9	2.1	1.9	1.6	2.2	0.7	1.9	1.7

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East Haven  
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File Name : EH5 - PM - 2006  
 Site Code : 00000000  
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# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 & Spring Road & Cloudland Road  
Day - Thursday  
Counters - Sullivan & Ciarleglio

File Name : NOH44 - AM - 2006  
Site Code : 00000000  
Start Date : 4/27/2006  
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Start Time	Groups Printed- Cars - Trucks																
	Spring Road From North				Route 17 (Middletown Avenue) From East				Cloudland Road From South				Route 17 (Middletown Avenue) From West				
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	10	18	5	33	8	128	7	143	9	52	1	62	0	27	5	32	270
07:15 AM	9	15	2	26	8	142	4	154	2	43	0	45	0	51	8	59	284
07:30 AM	5	27	1	33	2	179	0	181	12	65	0	77	0	23	1	24	315
07:45 AM	7	23	3	33	12	149	5	166	4	58	0	62	0	38	3	41	302
Total	31	83	11	125	30	598	16	644	27	218	1	246	0	139	17	156	1171
08:00 AM	9	33	2	44	9	127	7	143	5	51	0	56	1	38	7	46	289
08:15 AM	6	26	3	35	8	122	1	131	1	43	0	44	0	28	16	44	254
08:30 AM	3	15	3	21	11	116	7	134	1	54	1	56	1	25	13	39	250
08:45 AM	6	15	7	28	9	104	9	122	4	46	1	51	0	27	7	34	235
Total	24	89	15	128	37	469	24	530	11	194	2	207	2	118	43	163	1028
Grand Total	55	172	26	253	67	1067	40	1174	38	412	3	453	2	257	60	319	2199
Approch % Total %	21.7	68	10.3	21.5	5.7	90.9	3.4	53.4	8.4	90.9	0.7	20.6	0.6	80.6	18.8	14.5	
% Cars	51	157	23	231	61	989	36	1086	36	404	3	443	2	230	58	290	2050
% Trucks	4	15	3	22	91	92.7	90	92.5	94.7	98.1	100	97.8	100	89.5	96.7	90.9	93.2
% Trucks	7.3	8.7	11.5	8.7	6	78	4	88	2	8	0	10	0	27	2	29	149
% Trucks					9	7.3	10	7.5	5.3	1.9	0	2.2	0	10.5	3.3	9.1	6.8

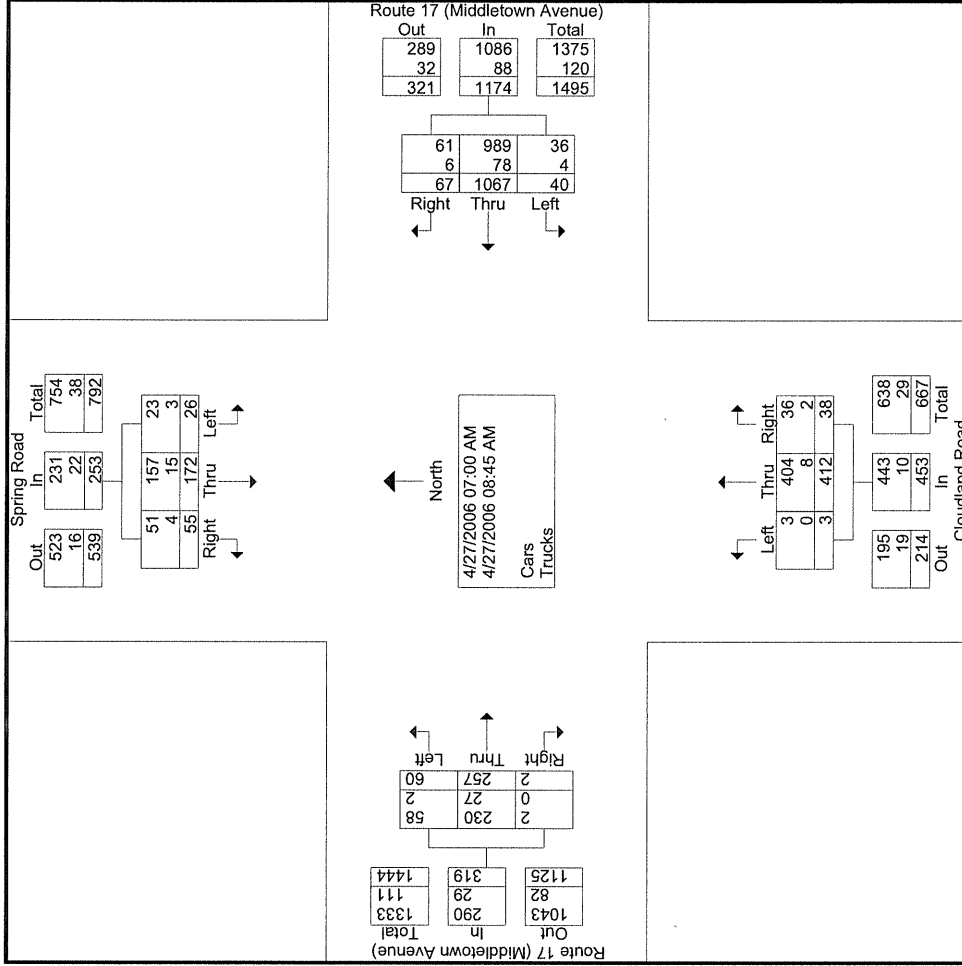


# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
 North Haven, Connecticut 06473  
 (203) 234-7555

North Haven  
 Route 17 & Spring Road & Cloudland Road  
 Day - Thursday  
 Counters - Sullivan & Ciarleglio

File Name : NOH44 - AM - 2006  
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# South Central Regional Council of Governments

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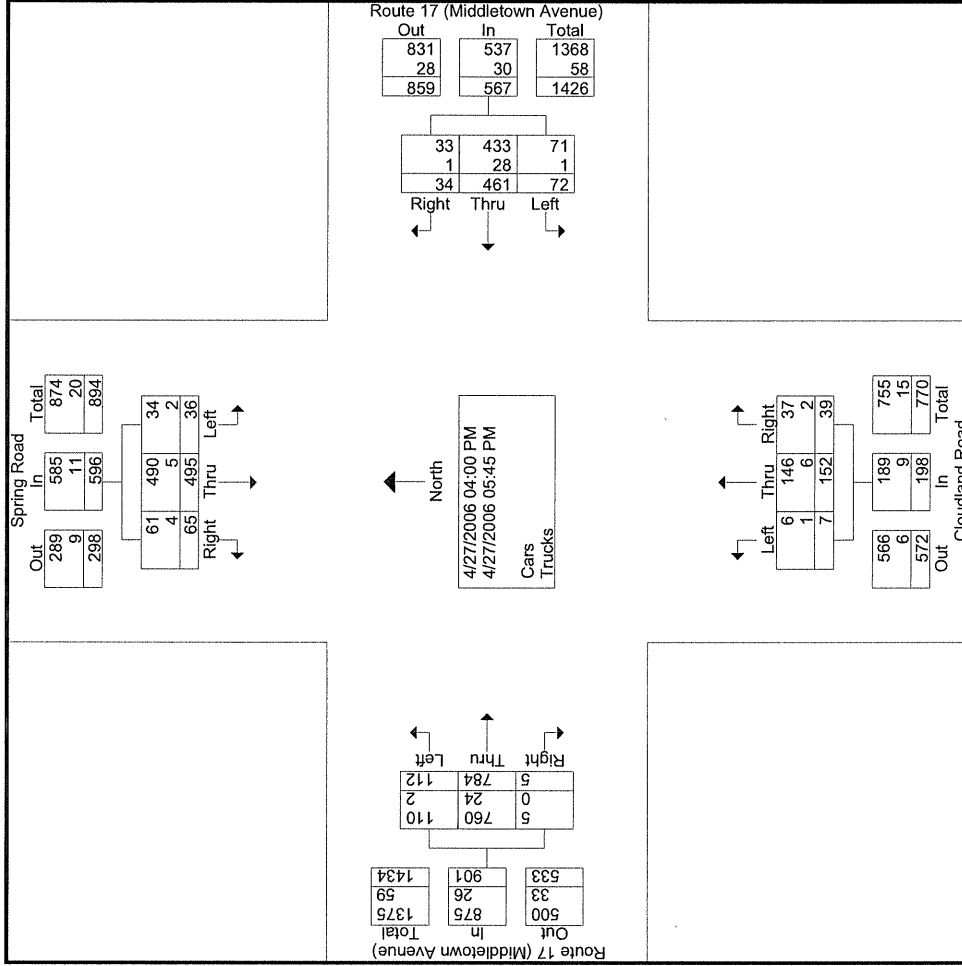
Start Time	Groups Printed- Cars - Trucks																
	Spring Road From North				Route 17 (Middletown Avenue) From East				Cloudland Road From South				Route 17 (Middletown Avenue) From West				
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	6	76	6	88	2	69	9	80	6	24	2	32	0	92	10	102	302
04:15 PM	7	73	3	83	2	68	10	80	1	13	1	15	0	99	11	110	288
04:30 PM	5	39	5	49	3	38	3	44	4	23	0	27	0	103	9	112	232
04:45 PM	8	47	6	61	2	49	12	63	6	14	2	22	0	76	14	90	236
Total	26	235	20	281	9	224	34	267	17	74	5	96	0	370	44	414	1058
05:00 PM	9	81	4	94	9	53	14	76	6	21	0	27	0	112	13	125	322
05:15 PM	11	81	3	95	4	60	5	69	1	20	2	23	4	103	16	123	310
05:30 PM	12	49	4	65	4	59	14	77	9	21	0	30	0	110	23	133	305
05:45 PM	7	49	5	61	8	65	5	78	6	16	0	22	1	89	16	106	267
Total	39	260	16	315	25	237	38	300	22	78	2	102	5	414	68	487	1204
Grand Total	65	495	36	596	34	461	72	567	39	152	7	198	5	784	112	901	2262
Approch %	10.9	83.1	6		6	81.3	12.7		19.7	76.8	3.5		0.6	87	12.4		
Total %	2.9	21.9	1.6	26.3	1.5	20.4	3.2	25.1	1.7	6.7	0.3	8.8	0.2	34.7	5	39.8	
% Cars	61	490	34	585	33	433	71	537	37	146	6	189	5	760	110	875	2186
% Cars	93.8	99	94.4	98.2	97.1	93.9	98.6	94.7	94.9	96.1	85.7	95.5	100	96.9	98.2	97.1	96.6
Trucks	4	5	2	11	1	28	1	30	2	6	1	9	0	24	2	26	76
% Trucks	6.2	1	5.6	1.8	2.9	6.1	1.4	5.3	5.1	3.9	14.3	4.5	0	3.1	1.8	2.9	3.4

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# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
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North Haven  
Washington Ave & Broadway & St John St  
Day - Monday  
Counters - Sullivan & Ciarleglio

File Name : NOH40 - AM - 2006  
Site Code : 00000000  
Start Date : 4/10/2006  
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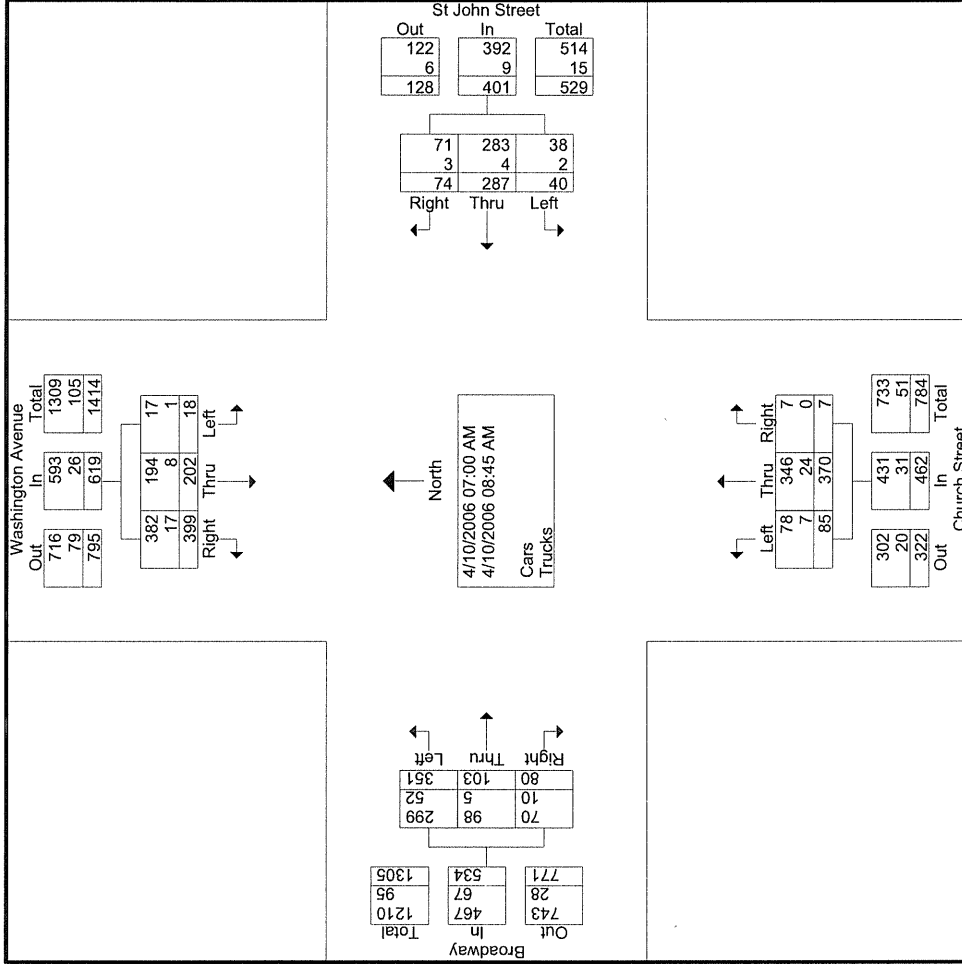
		Groups Printed- Cars - Trucks																
		Washington Avenue From North				St John Street From East				Church Street From South				Broadway From West				
Start Time		Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM		38	21	3	62	12	37	0	49	0	29	8	37	9	8	34	51	199
07:15 AM		69	23	1	93	5	35	4	44	0	33	9	42	8	9	44	61	240
07:30 AM		46	20	0	66	13	32	8	53	2	54	6	62	11	12	48	71	252
07:45 AM		60	30	1	91	12	34	5	51	0	50	14	64	11	8	40	59	265
Total		213	94	5	312	42	138	17	197	2	166	37	205	39	37	166	242	956
08:00 AM		57	28	1	86	6	55	5	66	0	64	12	76	10	14	47	71	299
08:15 AM		45	22	1	68	10	41	9	60	0	35	9	44	8	12	46	66	238
08:30 AM		29	22	2	53	6	27	4	37	2	52	16	70	12	12	50	74	234
08:45 AM		55	36	9	100	10	26	5	41	3	53	11	67	11	28	42	81	289
Total		186	108	13	307	32	149	23	204	5	204	48	257	41	66	185	292	1060
Grand Total		399	202	18	619	74	287	40	401	7	370	85	462	80	103	351	534	2016
Approch %		64.5	32.6	2.9		18.5	71.6	10		1.5	80.1	18.4		15	19.3	65.7		
Total %		19.8	10	0.9	30.7	3.7	14.2	2	19.9	0.3	18.4	4.2	22.9	4	5.1	17.4	26.5	
% Cars		382	194	17	593	71	283	38	392	7	346	78	431	70	98	299	467	1883
% Cars		95.7	96	94.4	95.8	95.9	98.6	95	97.8	100	93.5	91.8	93.3	87.5	95.1	85.2	87.5	93.4
Trucks		17	8	1	26	3	4	2	9	0	24	7	31	10	5	52	67	133
% Trucks		4.3	4	5.6	4.2	4.1	1.4	5	2.2	0	6.5	8.2	6.7	12.5	4.9	14.8	12.5	6.6

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North Haven  
 Washington Ave & Broadway & St John St  
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# South Central Regional Council of Governments

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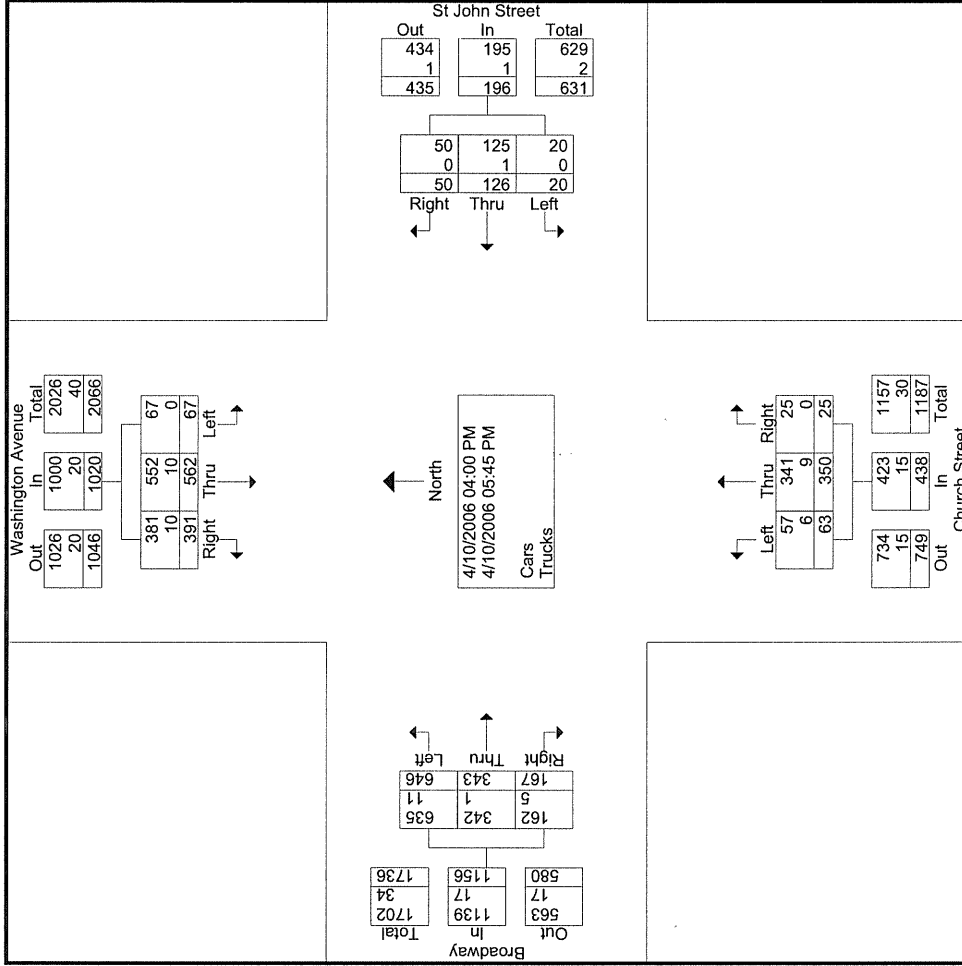
Start Time	Washington Avenue From North						St John Street From East						Church Street From South						Broadway From West					
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total				
	Total						Total						Total						Total					
04:00 PM	62	62	5	129	7	8	3	18	6	45	4	55	15	57	116	188	390							
04:15 PM	39	74	6	119	10	14	1	25	1	32	5	38	33	38	84	155	337							
04:30 PM	55	68	2	125	5	20	4	29	6	31	3	40	20	30	70	120	314							
04:45 PM	40	64	10	114	9	17	0	26	0	21	3	24	9	24	39	72	236							
<b>Total</b>	196	268	23	487	31	59	8	98	13	129	15	157	77	149	309	535	1277							
05:00 PM	48	84	11	143	2	13	3	18	5	55	18	78	26	70	127	223	462							
05:15 PM	47	81	9	137	6	22	5	33	3	60	11	74	19	40	81	140	384							
05:30 PM	62	68	17	147	5	21	1	27	2	51	10	63	21	47	70	138	375							
05:45 PM	38	61	7	106	6	11	3	20	2	55	9	66	24	37	59	120	312							
<b>Total</b>	195	294	44	533	19	67	12	98	12	221	48	281	90	194	337	621	1533							
<b>Grand Total</b>	391	562	67	1020	50	126	20	196	25	350	63	438	167	343	646	1156	2810							
<b>Approch %</b>	38.3	55.1	6.6		25.5	64.3	10.2		5.7	79.9	14.4		14.4	29.7	55.9									
<b>Total %</b>	13.9	20	2.4	36.3	1.8	4.5	0.7	7	0.9	12.5	2.2	15.6	5.9	12.2	23	41.1								
<b>% Cars</b>	381	552	67	1000	50	125	20	195	25	341	57	423	162	342	635	1139	2757							
<b>% Cars</b>	97.4	98.2	100	98	100	99.2	100	99.5	100	97.4	90.5	96.6	97	99.7	98.3	98.5	98.1							
<b>% Trucks</b>	10	10	0	20	0	1	0	1	0	9	6	15	5	1	11	17	53							
<b>% Trucks</b>	2.6	1.8	0	2	0	0.8	0	0.5	0	2.6	9.5	3.4	3	0.3	1.7	1.5	1.9							

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Washington Ave & Broadway & St John St  
Day - Monday  
Counters - Sullivan & Ciarleglio

File Name : NOH40 - PM - 2006  
Site Code : 00000000  
Start Date : 4/10/2006  
Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Av) & Fox Hill Road  
Day - Tuesday  
Counters - Sullivan & Ciarleglio

File Name : NOH45 - AM - 2006  
Site Code : 00000000  
Start Date : 5/2/2006  
Page No : 1

Start Time	Groups Printed- Cars - Trucks														
	Route 17 (Middletown Avenue)					Fox Hill Road					Route 17 (Middletown Avenue)				
	Thru	From North	Left	App. Total	Right	From East	Left	App. Total	Right	From South	Thru	App. Total	Right	App. Total	Int. Total
07:00 AM	122	0	0	122	0	3	3	3	4	41	45	4	45	170	
07:15 AM	155	0	0	155	0	9	9	9	1	53	54	1	54	218	
07:30 AM	155	1	1	156	0	5	5	5	2	43	45	2	45	206	
07:45 AM	148	0	0	148	1	8	8	9	4	37	41	4	41	198	
<b>Total</b>	<b>580</b>	<b>1</b>	<b>1</b>	<b>581</b>	<b>1</b>	<b>25</b>	<b>26</b>	<b>26</b>	<b>11</b>	<b>174</b>	<b>185</b>	<b>11</b>	<b>185</b>	<b>792</b>	
08:00 AM	132	0	0	132	0	7	7	7	2	30	32	2	32	171	
08:15 AM	106	0	0	106	0	6	6	6	1	34	35	1	35	147	
08:30 AM	108	0	0	108	0	8	8	8	5	31	36	5	36	152	
08:45 AM	108	0	0	108	1	7	8	8	0	31	31	0	31	147	
<b>Total</b>	<b>454</b>	<b>0</b>	<b>0</b>	<b>454</b>	<b>1</b>	<b>28</b>	<b>29</b>	<b>29</b>	<b>8</b>	<b>126</b>	<b>134</b>	<b>8</b>	<b>134</b>	<b>617</b>	
<b>Grand Total</b>	<b>1034</b>	<b>1</b>	<b>1</b>	<b>1035</b>	<b>2</b>	<b>53</b>	<b>55</b>	<b>55</b>	<b>19</b>	<b>300</b>	<b>319</b>	<b>19</b>	<b>319</b>	<b>1409</b>	
Apprch %	99.9	0.1	0.1	99.9	3.6	96.4	96.4	96.4	6	94	93.1	6	93.1	92.8	
Total %	73.4	0.1	0.1	73.5	0.1	3.8	3.9	3.9	1.3	21.3	22.6	1.3	22.6	1308	
Cars	957	1	1	958	2	51	53	53	17	280	297	17	297	1308	
% Cars	92.6	100	100	92.6	100	96.2	96.4	96.4	89.5	93.3	93.1	89.5	93.1	92.8	
Trucks	77	0	0	77	0	2	2	2	2	20	22	2	22	101	
% Trucks	7.4	0	0	7.4	0	3.8	3.6	3.6	10.5	6.7	6.9	10.5	6.9	7.2	

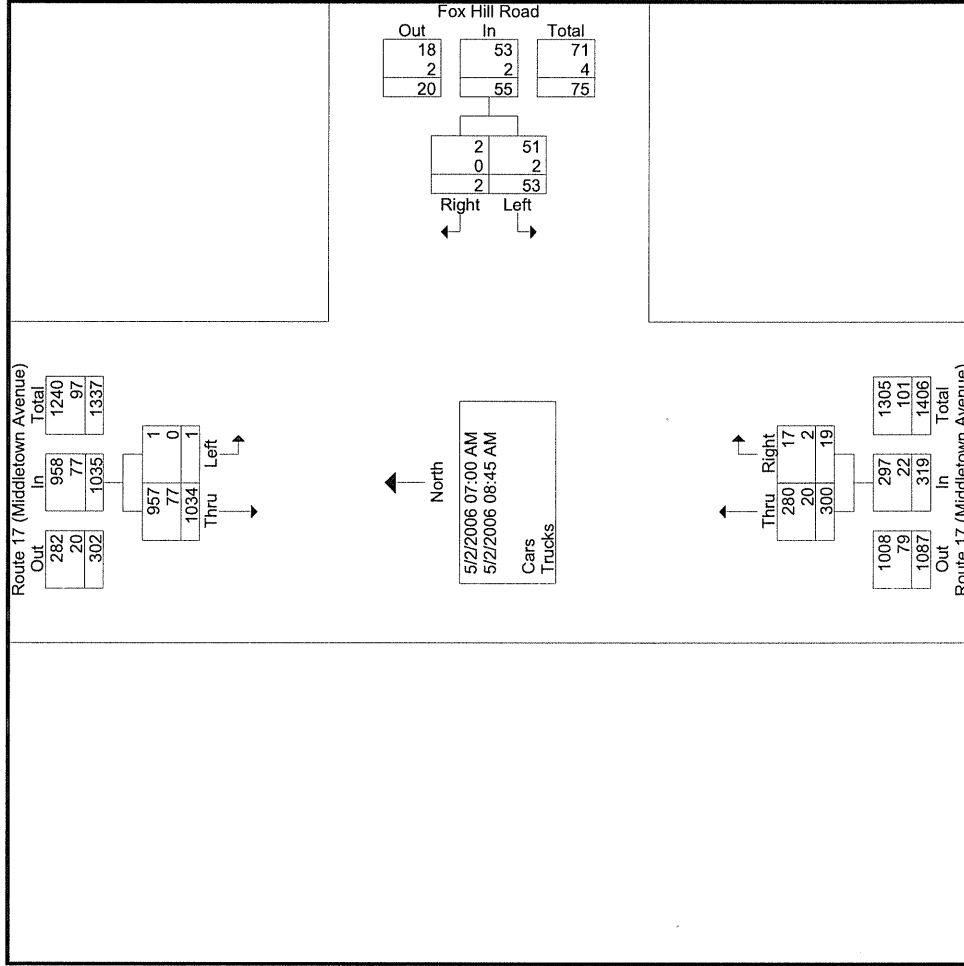


# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
 North Haven, Connecticut 06473  
 (203) 234-7555

North Haven  
 Route 17 (Middletown Av) & Fox Hill Road  
 Day - Tuesday  
 Counters - Sullivan & Ciarleglio

File Name : NOH45 - AM - 2006  
 Site Code : 00000000  
 Start Date : 5/2/2006  
 Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Av) & Fox Hill Road  
Day - Tuesday  
Counters - Sullivan & Ciarleglio

File Name : NOH45 - PM - 2006  
Site Code : 00000000  
Start Date : 5/2/2006  
Page No : 1

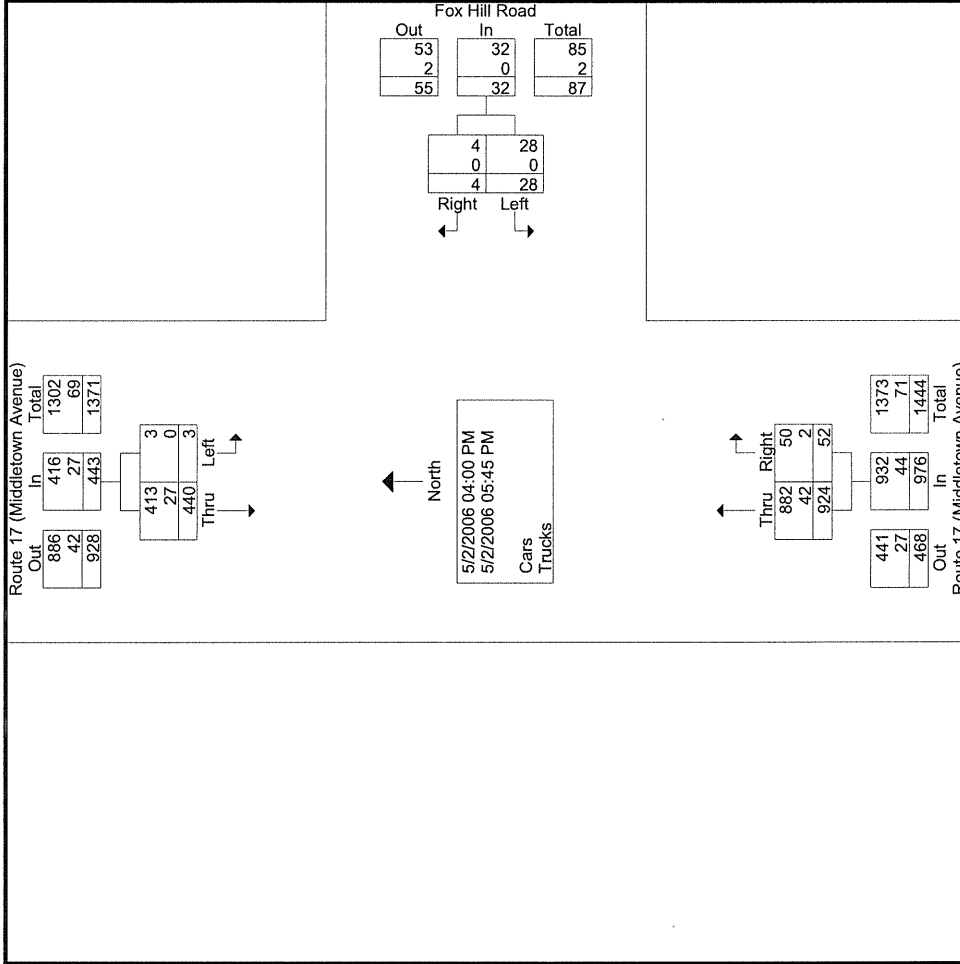
Start Time	Route 17 (Middletown Avenue)				Fox Hill Road From East				Route 17 (Middletown Avenue) From South				Int. Total
	Thru	Left	App. Total	Right	Left	Right	App. Total	Right	Thru	Left	App. Total	Right	
04:00 PM	68	0	68	0	8	8	8	0	111	111	117	6	193
04:15 PM	28	0	28	0	2	2	2	0	113	113	124	11	154
04:30 PM	43	1	44	1	3	4	4	1	118	118	124	6	172
04:45 PM	73	0	73	0	1	1	1	0	100	100	108	8	182
<b>Total</b>	<b>212</b>	<b>1</b>	<b>213</b>	<b>1</b>	<b>14</b>	<b>15</b>	<b>15</b>	<b>1</b>	<b>442</b>	<b>442</b>	<b>473</b>	<b>31</b>	<b>701</b>
05:00 PM	76	2	78	0	7	7	7	0	139	139	144	5	229
05:15 PM	65	0	65	1	3	4	4	1	128	128	133	5	202
05:30 PM	43	0	43	2	2	4	4	2	113	113	117	4	164
05:45 PM	44	0	44	0	2	2	2	0	102	102	109	7	155
<b>Total</b>	<b>228</b>	<b>2</b>	<b>230</b>	<b>3</b>	<b>14</b>	<b>17</b>	<b>17</b>	<b>3</b>	<b>482</b>	<b>482</b>	<b>503</b>	<b>21</b>	<b>750</b>
<b>Grand Total</b>	<b>440</b>	<b>3</b>	<b>443</b>	<b>4</b>	<b>28</b>	<b>32</b>	<b>32</b>	<b>4</b>	<b>924</b>	<b>924</b>	<b>976</b>	<b>52</b>	<b>1451</b>
Approch %	99.3	0.7		12.5	87.5			5.3	94.7	94.7		3.6	
Total %	30.3	0.2	30.5	0.3	1.9	2.2	2.2	0.3	63.7	63.7	67.3	3.6	
Cars	413	3	416	4	28	32	32	4	882	882	932	50	1380
% Cars	93.9	100	93.9	100	100	100	100	100	95.5	95.5	95.5	96.2	95.1
Trucks	27	0	27	0	0	0	0	0	42	42	44	2	71
% Trucks	6.1	0	6.1	0	0	0	0	0	4.5	4.5	4.5	3.8	4.9

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Av) & Fox Hill Road  
Day - Tuesday  
Counters - Sullivan & Ciarleglio

File Name : NOH45 - PM - 2006  
Site Code : 00000000  
Start Date : 5/2/2006  
Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Ave) & Half Mile Rd  
Day - Wednesday  
Counters - Sullivan & Ciarleglio

File Name : NOH43 - AM - 2006  
Site Code : 00000000  
Start Date : 4/26/2006  
Page No : 1

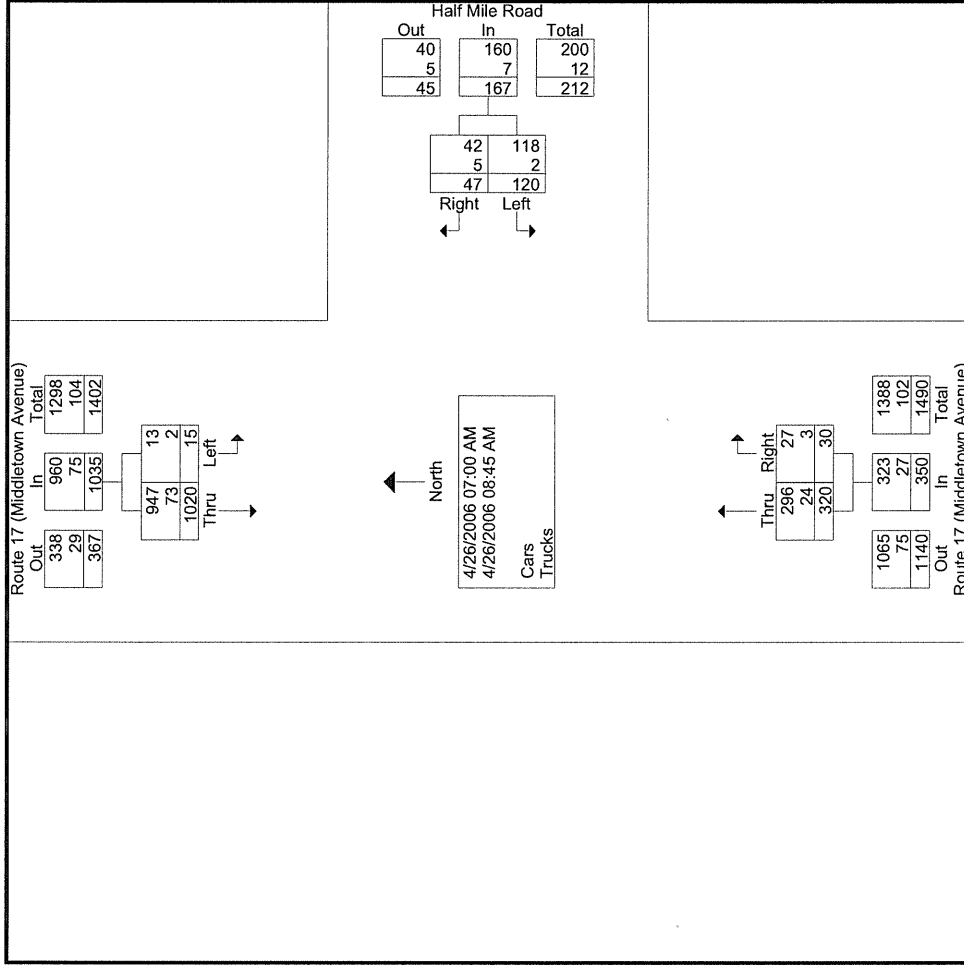
Start Time	Groups Printed- Cars - Trucks															
	Route 17 (Middletown Avenue)					Half Mile Road					Route 17 (Middletown Avenue)					
	Thru	From North	Left	App. Total	Right	From East	Left	App. Total	Right	From South	Thru	App. Total	Right	Thru	App. Total	Int. Total
07:00 AM	127	1	1	128	9	14	14	23	2	43	43	45	2	43	45	196
07:15 AM	126	2	2	128	9	13	13	22	5	54	54	59	5	54	59	209
07:30 AM	144	2	2	146	5	11	11	16	7	36	36	43	7	36	43	205
07:45 AM	141	2	2	143	10	18	18	28	2	42	42	44	2	42	44	215
<b>Total</b>	538	7	7	545	33	56	56	89	16	175	175	191	16	175	191	825
08:00 AM	102	1	1	103	3	18	18	21	3	31	31	34	3	31	34	158
08:15 AM	141	3	3	144	6	13	13	19	2	40	40	42	2	40	42	205
08:30 AM	128	2	2	130	3	14	14	17	5	29	29	34	5	29	34	181
08:45 AM	111	2	2	113	2	19	19	21	4	45	45	49	4	45	49	183
<b>Total</b>	482	8	8	490	14	64	64	78	14	145	145	159	14	145	159	727
<b>Grand Total</b>	1020	15	15	1035	47	120	120	167	30	320	320	350	30	320	350	1552
Apprch %	98.6	1.4	1.4		28.1	71.9	71.9		8.6	91.4	91.4		8.6	91.4		
Total %	65.7	1	1	66.7	3	7.7	7.7	10.8	1.9	20.6	20.6	22.6	1.9	20.6	22.6	
Cars	947	13	13	960	42	118	118	160	27	296	296	323	27	296	323	1443
% Cars	92.8	86.7	86.7	92.8	89.4	98.3	98.3	95.8	90	92.5	92.5	92.3	90	92.5	92.3	93
Trucks	73	2	2	75	5	2	2	7	3	24	24	27	3	24	27	109
% Trucks	7.2	13.3	13.3	7.2	10.6	1.7	1.7	4.2	10	7.5	7.5	7.7	10	7.5	7.7	7

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
 North Haven, Connecticut 06473  
 (203) 234-7555

North Haven  
 Route 17 (Middletown Ave) & Half Mile Rd  
 Day - Wednesday  
 Counters - Sullivan & Ciarleglio

File Name : NOH43 - AM - 2006  
 Site Code : 00000000  
 Start Date : 4/26/2006  
 Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Ave) & Half Mile Rd  
Day - Wednesday  
Counters - Sullivan & Ciarleglio

File Name : NOH43 - PM - 2006  
Site Code : 00000000  
Start Date : 4/26/2006  
Page No : 1

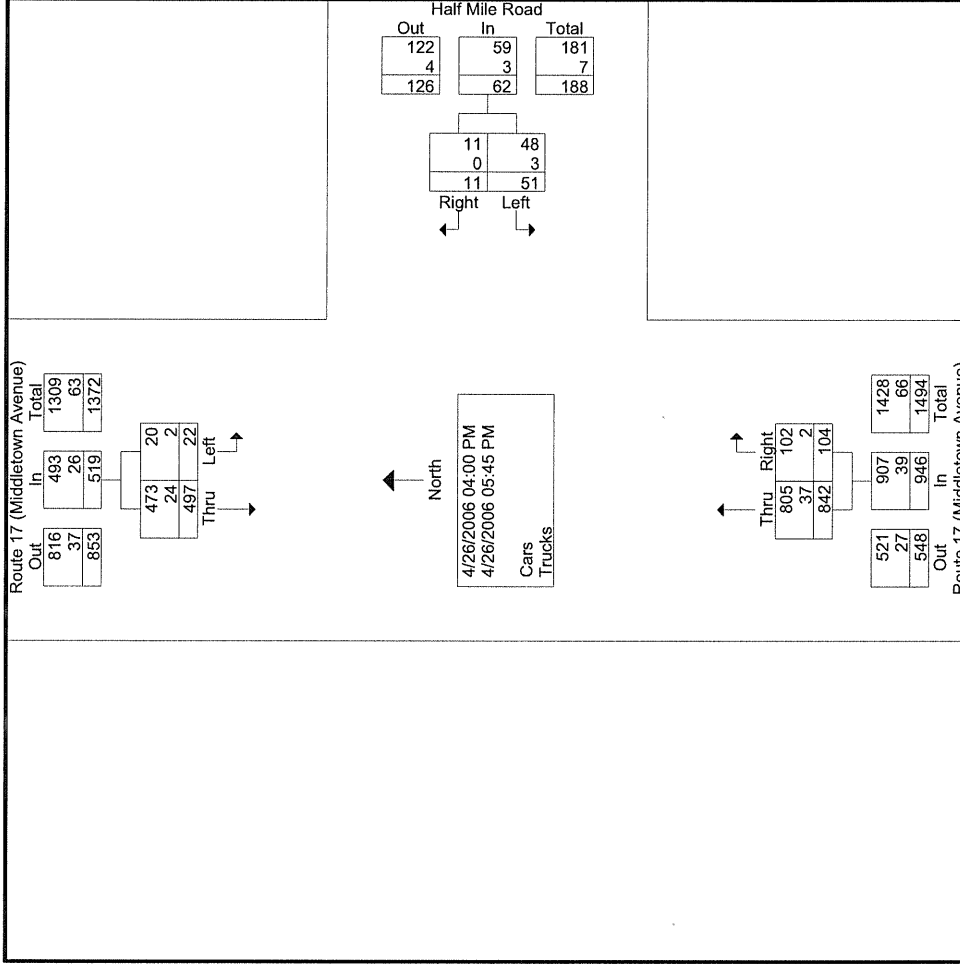
Start Time	Route 17 (Middletown Avenue) From North				Groups Printed- Cars - Trucks Half Mile Road From East				Route 17 (Middletown Avenue) From South				
	Thru	Left	App. Total		Right	Left	App. Total		Right	Thru	App. Total		Int. Total
04:00 PM	92	2	94		2	4	6		8	89	97		197
04:15 PM	58	1	59		0	6	6		18	113	131		196
04:30 PM	69	1	70		0	10	10		13	110	123		203
04:45 PM	52	5	57		1	3	4		9	100	109		170
Total	271	9	280		3	23	26		48	412	460		766
05:00 PM	65	4	69		3	3	6		16	128	144		219
05:15 PM	56	4	60		2	6	8		19	125	144		212
05:30 PM	54	2	56		2	11	13		9	97	106		175
05:45 PM	51	3	54		1	8	9		12	80	92		155
Total	226	13	239		8	28	36		56	430	486		761
Grand Total	497	22	519		11	51	62		104	842	946		1527
Approch %	95.8	4.2			17.7	82.3			11	89			
Total %	32.5	1.4	34		0.7	3.3	4.1		6.8	55.1	62		
Cars	473	20	493		11	48	59		102	805	907		1459
% Cars	95.2	90.9	95		100	94.1	95.2		98.1	95.6	95.9		95.5
Trucks	24	2	26		0	3	3		2	37	39		68
% Trucks	4.8	9.1	5		0	5.9	4.8		1.9	4.4	4.1		4.5

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
 North Haven, Connecticut 06473  
 (203) 234-7555

North Haven  
 Route 17 (Middletown Ave) & Half Mile Rd  
 Day - Wednesday  
 Counters - Sullivan & Ciarleglio

File Name : NOH43 - PM - 2006  
 Site Code : 00000000  
 Start Date : 4/26/2006  
 Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Ave) & Rimmon Road  
Day - Tuesday  
Counters - Sullivan & Ciarleglio

File Name : noh42 - am - 2006  
Site Code : 00000000  
Start Date : 4/25/2006  
Page No : 1

		Groups Printed- Cars - Trucks															
		Route 17 From Northeast				Warner Road From Southeast				Route 17 From Southwest				Rimmon Road From Northwest			
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	3	127	1	131	1	7	0	8	0	30	6	36	6	1	2	9	184
07:15 AM	2	137	3	142	5	3	0	8	1	31	13	45	8	3	0	11	206
07:30 AM	0	155	2	157	3	3	2	8	0	41	8	49	5	1	3	9	223
07:45 AM	2	137	3	142	1	8	1	10	0	28	6	34	7	2	1	10	196
Total	7	556	9	572	10	21	3	34	1	130	33	164	26	7	6	39	809
08:00 AM	2	151	0	153	4	3	0	7	0	30	2	32	10	1	3	14	206
08:15 AM	0	114	3	117	0	2	1	3	0	27	3	30	2	1	2	5	155
08:30 AM	0	130	0	130	3	5	0	8	0	21	0	21	3	0	0	3	162
08:45 AM	0	90	1	91	3	1	0	4	0	35	6	41	6	0	2	8	144
Total	2	485	4	491	10	11	1	22	0	113	11	124	21	2	7	30	667
Grand Total	9	1041	13	1063	20	32	4	56	1	243	44	288	47	9	13	69	1476
Approch %	0.8	97.9	1.2		35.7	57.1	7.1		0.3	84.4	15.3		68.1	13	18.8		
Total %	0.6	70.5	0.9	72	1.4	2.2	0.3	3.8	0.1	16.5	3	19.5	3.2	0.6	0.9	4.7	
Cars	8	966	9	983	15	30	4	49	1	224	43	268	47	9	13	69	1369
% Cars	88.9	92.8	69.2	92.5	75	93.8	100	87.5	100	92.2	97.7	93.1	100	100	100	100	92.8
Trucks	1	75	4	80	5	2	0	7	0	19	1	20	0	0	0	0	107
% Trucks	11.1	7.2	30.8	7.5	25	6.2	0	12.5	0	7.8	2.3	6.9	0	0	0	0	7.2

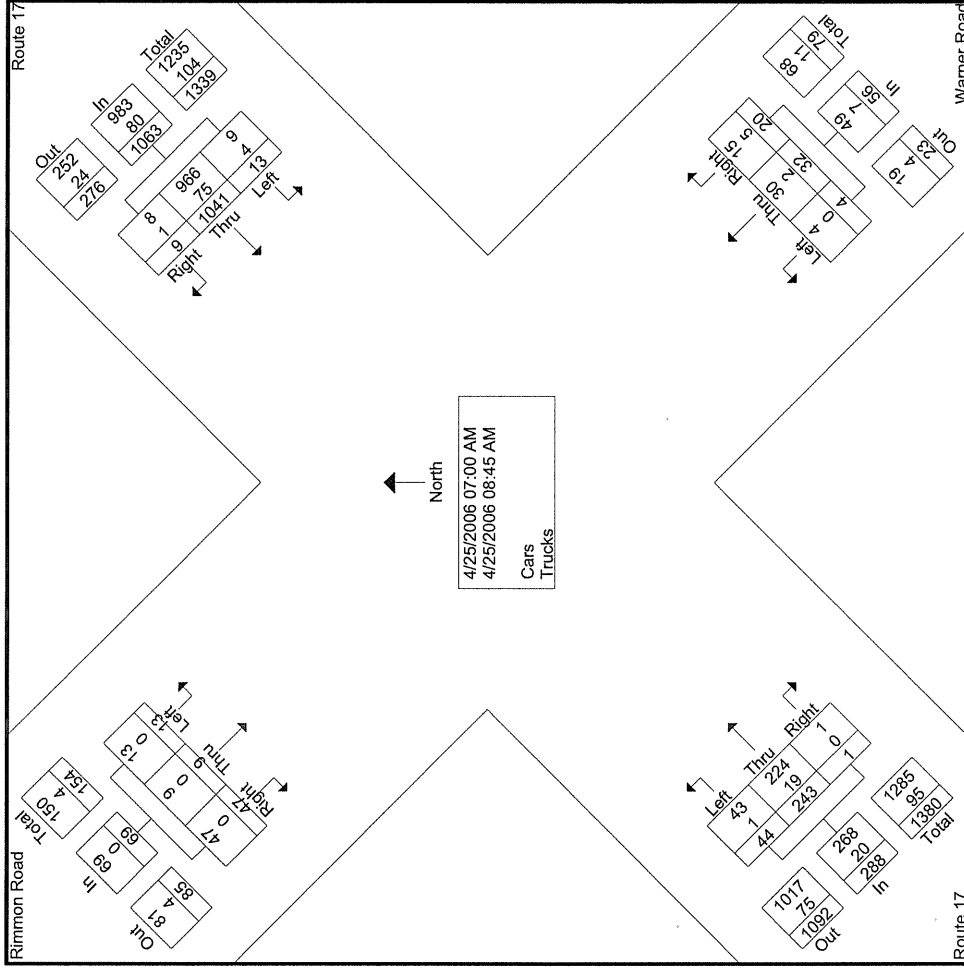


# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
 North Haven, Connecticut 06473  
 (203) 234-7555

North Haven  
 Route 17 (Middletown Ave) & Rimmon Road  
 Day - Tuesday  
 Counters - Sullivan & Ciarleglio

File Name : noh42 - am - 2006  
 Site Code : 00000000  
 Start Date : 4/25/2006  
 Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Ave) & Rimmon Road  
Day - Tuesday  
Counters - Sullivan & Ciarleglio

File Name : NOH42 - PM - 2006  
Site Code : 00000000  
Start Date : 4/25/2006  
Page No : 1

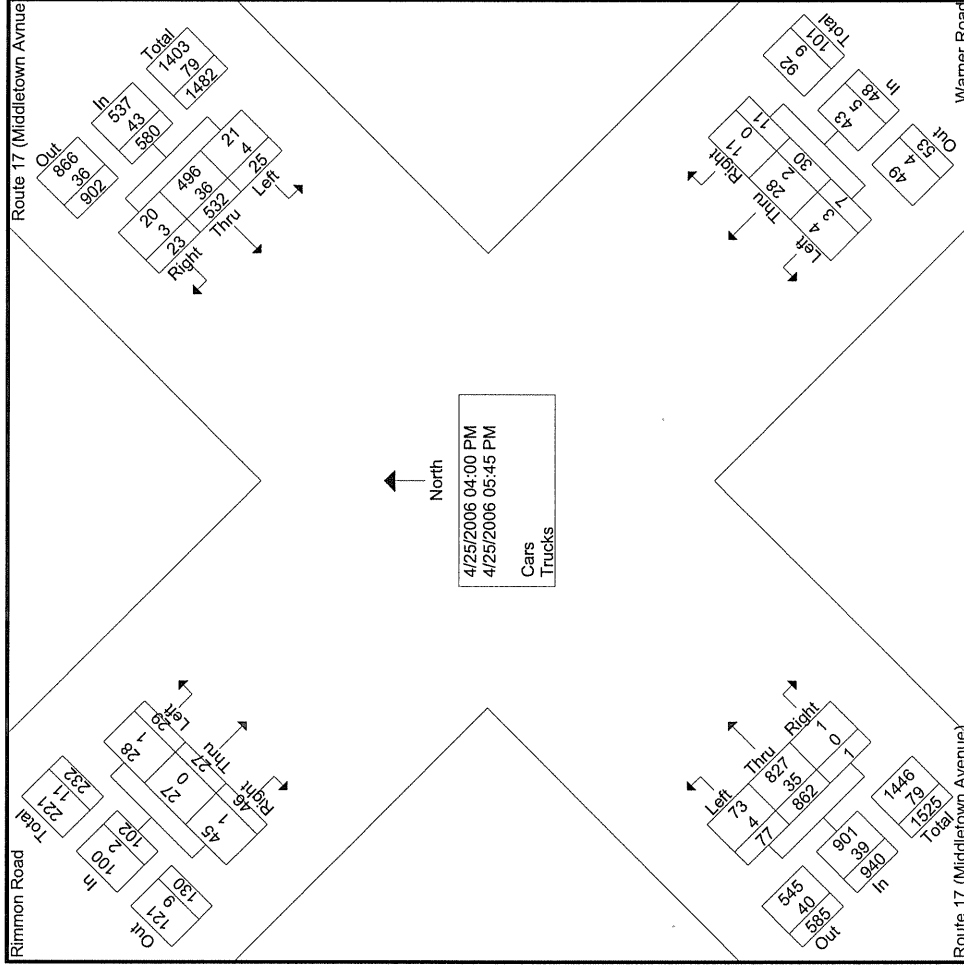
Start Time	Groups Printed- Cars - Trucks																
	Route 17 (Middletown Avnuce)				Warner Road From Southeast				Route 17 (Middletown Avenue) From Southwest				Rimmon Road From Northwest				
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	3	82	3	88	2	6	0	8	0	100	9	109	16	3	4	23	228
04:15 PM	1	60	9	70	1	2	0	3	1	111	11	123	1	1	3	5	201
04:30 PM	1	68	2	71	2	2	1	5	0	113	12	125	5	4	4	13	214
04:45 PM	2	72	2	76	2	5	3	10	0	119	8	127	10	3	2	15	228
Total	7	282	16	305	7	15	4	26	1	443	40	484	32	11	13	56	871
05:00 PM	3	49	1	53	0	5	0	5	0	123	6	129	3	4	4	11	198
05:15 PM	7	56	1	64	2	6	2	10	0	113	12	125	4	6	6	16	215
05:30 PM	2	73	6	81	2	3	0	5	0	103	9	112	3	3	5	11	209
05:45 PM	4	72	1	77	0	1	1	2	0	80	10	90	4	3	1	8	177
Total	16	250	9	275	4	15	3	22	0	419	37	456	14	16	16	46	799
Grand Total	23	532	25	580	11	30	7	48	1	862	77	940	46	27	29	102	1670
Approch % Total %	4	91.7	4.3	96.7	22.9	62.5	14.6	82.2	0.1	91.7	8.2	90.1	45.1	26.5	28.4	6.1	94.7
Cars	20	496	21	537	11	28	4	43	1	827	73	901	45	27	28	100	1581
% Cars	87	93.2	84	92.6	100	93.3	57.1	89.6	100	95.9	94.8	95.9	97.8	100	96.6	98	94.7
Trucks	3	36	4	43	0	2	3	5	0	35	4	39	1	0	1	2	89
% Trucks	13	6.8	16	7.4	0	6.7	42.9	10.4	0	4.1	5.2	4.1	2.2	0	3.4	2	5.3

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
 North Haven, Connecticut 06473  
 (203) 234-7555

North Haven  
 Route 17 (Middletown Ave) & Rimmon Road  
 Day - Tuesday  
 Counters - Sullivan & Ciarleglio

File Name : NOH42 - PM - 2006  
 Site Code : 00000000  
 Start Date : 4/25/2006  
 Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Ave) & Village St  
Day - Wednesday  
Counters - Sullivan & Ciarleglio

File Name : NOH10 - AM - 2006  
Site Code : 00000000  
Start Date : 5/3/2006  
Page No : 1

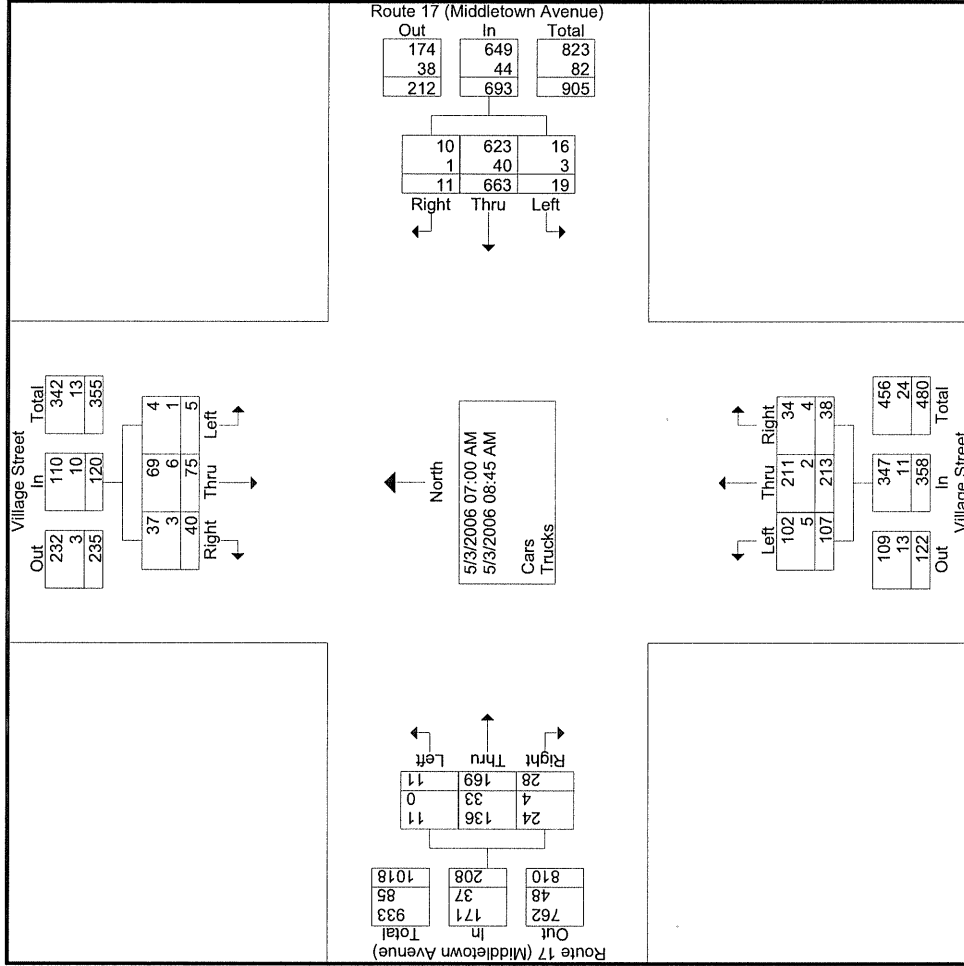
Start Time	Groups Printed- Cars - Trucks																
	Village Street From North				Route 17 (Middletown Avenue) From East				Village Street From South				Route 17 (Middletown Avenue) From West				
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	8	17	1	26	0	90	2	92	3	20	23	46	5	16	1	22	186
07:15 AM	3	12	0	15	4	88	1	93	5	31	11	47	1	31	2	34	189
07:30 AM	5	7	0	12	0	92	0	92	2	38	22	62	4	30	2	36	202
07:45 AM	10	7	0	17	2	99	1	102	5	40	14	59	3	21	3	27	205
Total	26	43	1	70	6	369	4	379	15	129	70	214	13	98	8	119	782
08:00 AM	5	7	0	12	0	66	3	69	1	20	10	31	3	13	0	16	128
08:15 AM	3	8	1	12	0	72	1	73	11	21	12	44	6	22	1	29	158
08:30 AM	3	11	1	15	2	80	5	87	7	27	6	40	5	22	1	28	170
08:45 AM	3	6	2	11	3	76	6	85	4	16	9	29	1	14	1	16	141
Total	14	32	4	50	5	294	15	314	23	84	37	144	15	71	3	89	597
Grand Total	40	75	5	120	11	663	19	693	38	213	107	358	28	169	11	208	1379
Approch %	33.3	62.5	4.2		1.6	95.7	2.7		10.6	59.5	29.9		13.5	81.2	5.3		
Total %	2.9	5.4	0.4	8.7	0.8	48.1	1.4	50.3	2.8	15.4	7.8	26	2	12.3	0.8	15.1	
% Cars	37	69	4	110	10	623	16	649	34	211	102	347	24	136	11	171	1277
% Cars	92.5	92	80	91.7	90.9	94	84.2	93.7	89.5	99.1	95.3	96.9	85.7	80.5	100	82.2	92.6
Trucks	3	6	1	10	1	40	3	44	4	2	5	11	4	33	0	37	102
% Trucks	7.5	8	20	8.3	9.1	6	15.8	6.3	10.5	0.9	4.7	3.1	14.3	19.5	0	17.8	7.4

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Ave) & Village St  
Day - Wednesday  
Counters - Sullivan & Ciarleglio

File Name : NOH10 - AM - 2006  
Site Code : 00000000  
Start Date : 5/3/2006  
Page No : 2



# South Central Regional Council of Governments

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North Haven  
Route 17 (Middletown Ave) & Village St  
Day - Wednesday  
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File Name : NOH10 - PM - 2006  
Site Code : 00000000  
Start Date : 5/3/2006  
Page No : 1

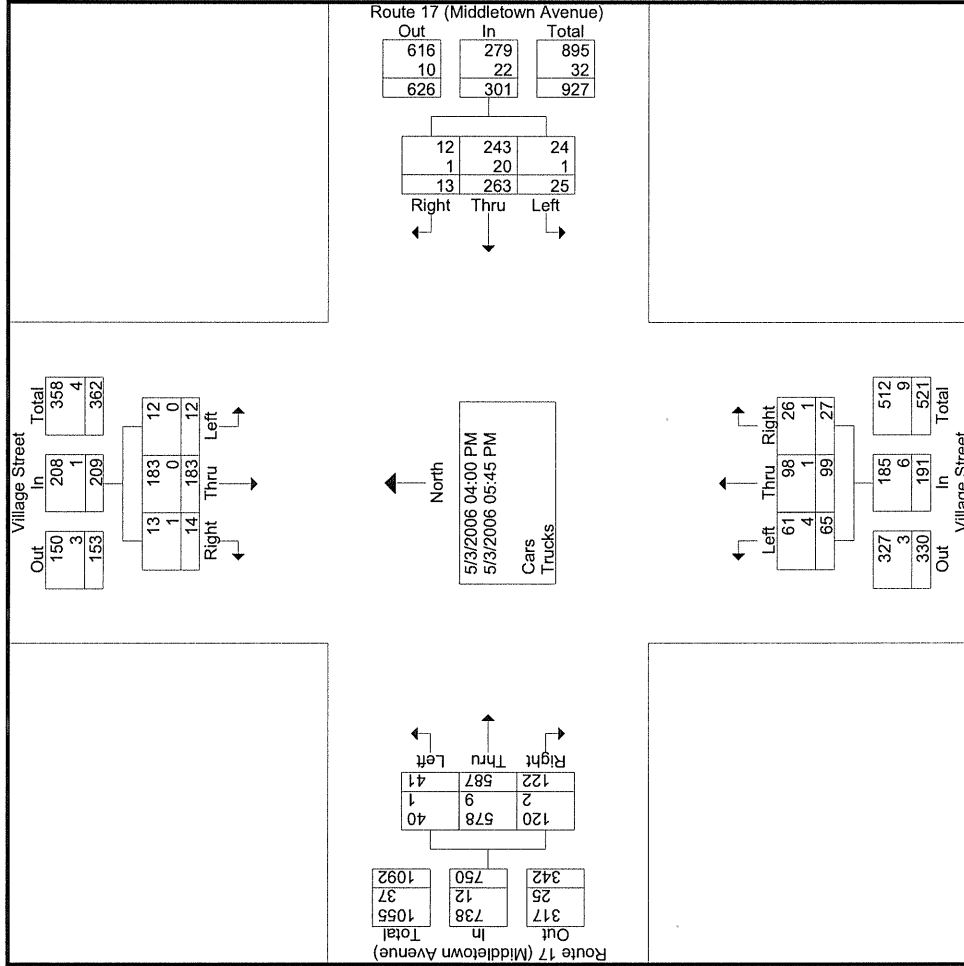
Start Time	Groups Printed- Cars - Trucks															
	Village Street From North				Route 17 (Middletown Avenue) From East				Village Street From South				Route 17 (Middletown Avenue) From West			
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total
04:00 PM	2	20	0	22	3	41	4	48	4	11	10	25	12	50	2	64
04:15 PM	2	11	2	15	2	25	3	30	2	13	8	23	13	59	2	74
04:30 PM	1	17	3	21	0	12	2	14	2	10	8	20	20	68	6	94
04:45 PM	1	9	0	10	1	27	2	30	5	12	4	21	17	75	6	98
<b>Total</b>	<b>6</b>	<b>57</b>	<b>5</b>	<b>68</b>	<b>6</b>	<b>105</b>	<b>11</b>	<b>122</b>	<b>13</b>	<b>46</b>	<b>30</b>	<b>89</b>	<b>62</b>	<b>252</b>	<b>16</b>	<b>330</b>
05:00 PM	3	43	2	48	2	43	3	48	2	15	10	27	20	89	7	116
05:15 PM	3	33	3	39	4	45	3	52	3	15	6	24	19	98	7	124
05:30 PM	1	32	1	34	0	41	3	44	2	11	10	23	10	78	7	95
05:45 PM	1	18	1	20	1	29	5	35	7	12	9	28	11	70	4	85
<b>Total</b>	<b>8</b>	<b>126</b>	<b>7</b>	<b>141</b>	<b>7</b>	<b>158</b>	<b>14</b>	<b>179</b>	<b>14</b>	<b>53</b>	<b>35</b>	<b>102</b>	<b>60</b>	<b>335</b>	<b>25</b>	<b>420</b>
<b>Grand Total</b>	<b>14</b>	<b>183</b>	<b>12</b>	<b>209</b>	<b>13</b>	<b>263</b>	<b>25</b>	<b>301</b>	<b>27</b>	<b>99</b>	<b>65</b>	<b>191</b>	<b>122</b>	<b>587</b>	<b>41</b>	<b>750</b>
<b>Approch %</b>	<b>6.7</b>	<b>87.6</b>	<b>5.7</b>	<b>14.4</b>	<b>4.3</b>	<b>87.4</b>	<b>8.3</b>	<b>20.7</b>	<b>14.1</b>	<b>51.8</b>	<b>34</b>	<b>13.2</b>	<b>16.3</b>	<b>78.3</b>	<b>5.5</b>	<b>51.7</b>
<b>Cars</b>	<b>13</b>	<b>183</b>	<b>12</b>	<b>208</b>	<b>12</b>	<b>243</b>	<b>24</b>	<b>279</b>	<b>26</b>	<b>98</b>	<b>61</b>	<b>185</b>	<b>120</b>	<b>578</b>	<b>40</b>	<b>738</b>
<b>% Cars</b>	<b>92.9</b>	<b>100</b>	<b>100</b>	<b>99.5</b>	<b>92.3</b>	<b>92.4</b>	<b>96</b>	<b>92.7</b>	<b>96.3</b>	<b>99</b>	<b>93.8</b>	<b>96.9</b>	<b>98.4</b>	<b>98.5</b>	<b>97.6</b>	<b>98.4</b>
<b>Trucks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>20</b>	<b>1</b>	<b>22</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>9</b>	<b>1</b>	<b>12</b>
<b>% Trucks</b>	<b>7.1</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>7.7</b>	<b>7.6</b>	<b>4</b>	<b>7.3</b>	<b>3.7</b>	<b>1</b>	<b>6.2</b>	<b>3.1</b>	<b>1.6</b>	<b>1.5</b>	<b>2.4</b>	<b>1.6</b>

# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 17 (Middletown Ave) & Village St  
Day - Wednesday  
Counters - Sullivan & Ciarleglio

File Name : NOH10 - PM - 2006  
Site Code : 00000000  
Start Date : 5/3/2006  
Page No : 2



# South Central Regional Council of Governments

127 Washington Avenue, 4th Floor West  
North Haven, Connecticut 06473  
(203) 234-7555

North Haven  
Route 103 (Maple Ave) & Sackett Point Rd  
Day - Wednesday  
Counters - Sullivan & Ciarleglio

File Name : NOH41 - AM - 2006  
Site Code : 00000000  
Start Date : 4/12/2006  
Page No : 1

Start Time	Route 103 (Maple Avenue)				Route 103 (Maple Avenue)				Sackett Point Road			
	Right	Thru	App. Total	Thru	Left	App. Total	Right	From West	App. Total	Int. Total		
07:00 AM	51	22	73	33	44	77	24	10	34	184		
07:15 AM	98	47	145	30	113	143	13	20	33	321		
07:30 AM	38	47	85	46	59	105	26	23	49	239		
07:45 AM	45	53	98	57	46	103	5	4	9	210		
<b>Total</b>	<b>232</b>	<b>169</b>	<b>401</b>	<b>166</b>	<b>262</b>	<b>428</b>	<b>68</b>	<b>57</b>	<b>125</b>	<b>954</b>		
08:00 AM	43	35	78	33	32	65	11	6	17	160		
08:15 AM	37	45	82	53	34	87	17	13	30	199		
08:30 AM	44	32	76	36	37	73	9	12	21	170		
08:45 AM	56	52	108	44	39	83	5	20	25	216		
<b>Total</b>	<b>180</b>	<b>164</b>	<b>344</b>	<b>166</b>	<b>142</b>	<b>308</b>	<b>42</b>	<b>51</b>	<b>93</b>	<b>745</b>		
<b>Grand Total</b>	<b>412</b>	<b>333</b>	<b>745</b>	<b>332</b>	<b>404</b>	<b>736</b>	<b>110</b>	<b>108</b>	<b>218</b>	<b>1699</b>		
Apprch %	55.3	44.7		45.1	54.9		50.5	49.5				
Total %	24.2	19.6	43.8	19.5	23.8	43.3	6.5	6.4	12.8			
Cars	397	316	713	308	383	691	89	97	186	1590		
% Cars	96.4	94.9	95.7	92.8	94.8	93.9	80.9	89.8	85.3	93.6		
Trucks	15	17	32	24	21	45	21	11	32	109		
% Trucks	3.6	5.1	4.3	7.2	5.2	6.1	19.1	10.2	14.7	6.4		

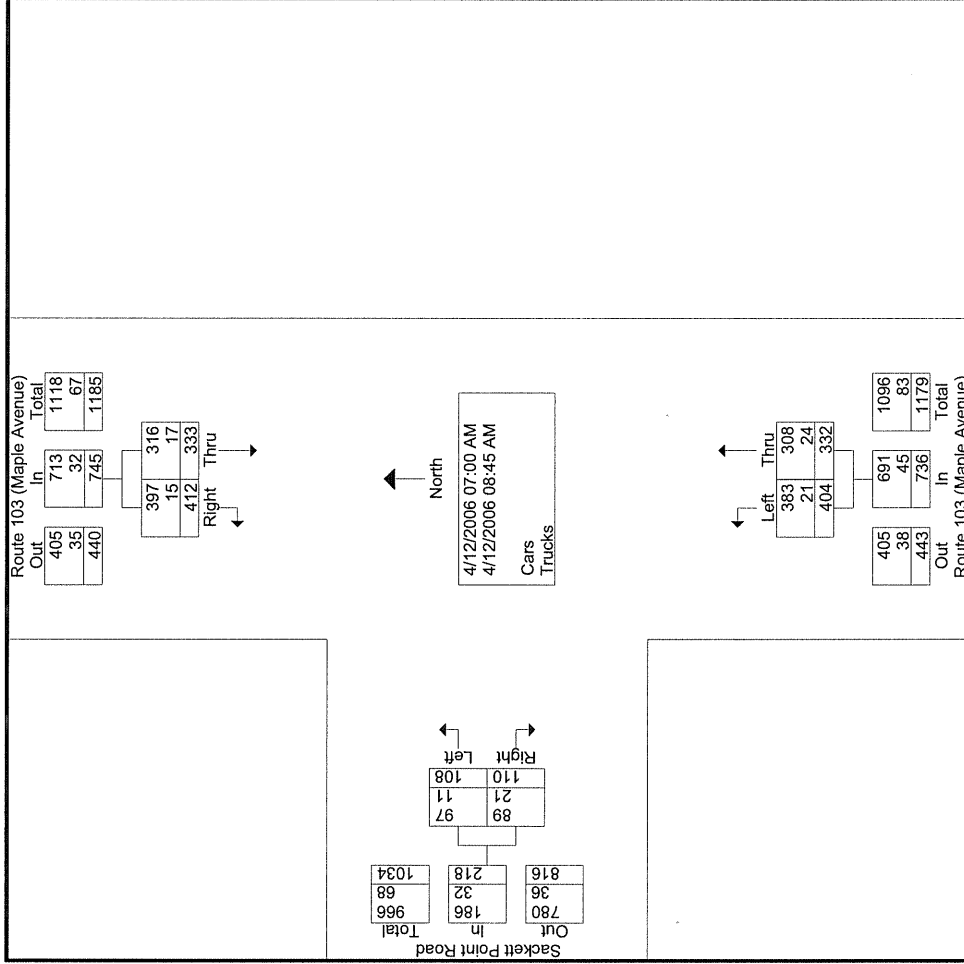


# South Central Regional Council of Governments

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North Haven  
Route 103 (Maple Ave) & Sackett Point Rd  
Day - Wednesday  
Counters - Sullivan & Ciarleglio

File Name : NOH41 - AM - 2006  
Site Code : 00000000  
Start Date : 4/12/2006  
Page No : 2



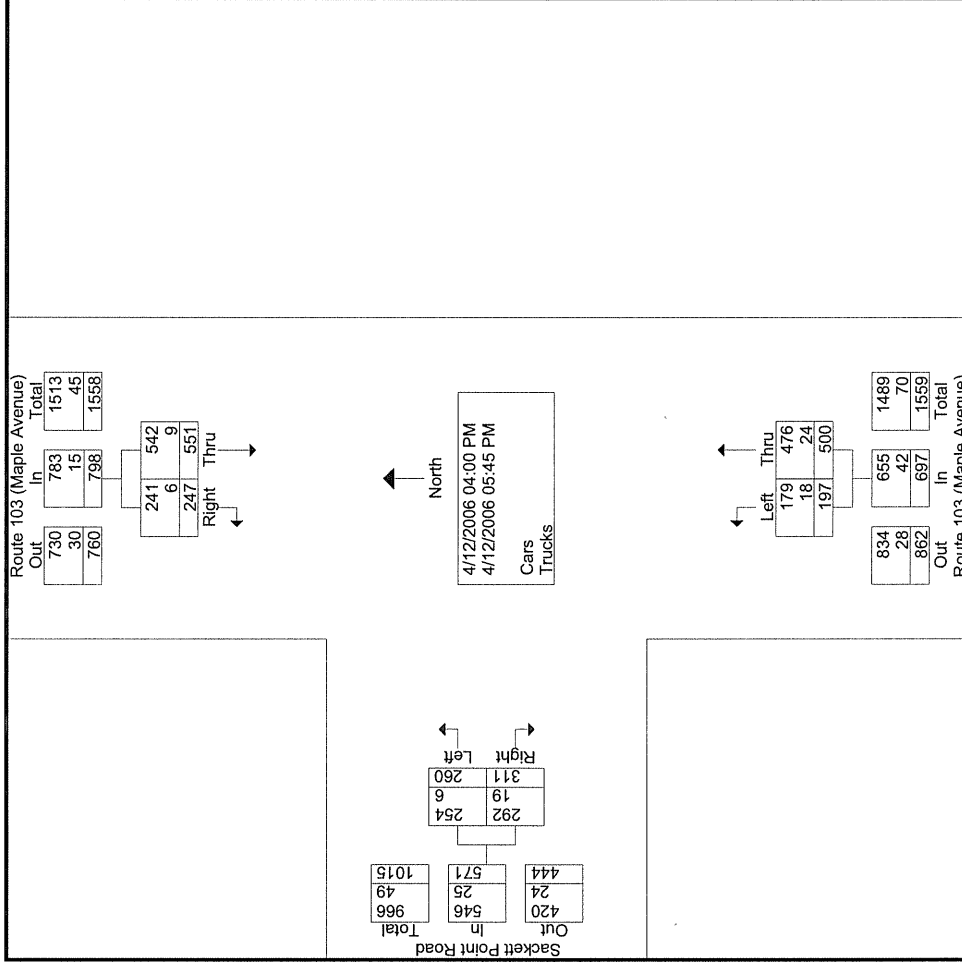


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Site Code : 00000000  
Start Date : 4/12/2006  
Page No : 2



# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

Bedden 7 AM to 9 AM + 4 pm to 6 pm

Where do you feel cut-through traffic may be an issue?

80 + Tolket Rd

What other transportation-related issues would you like to see addressed?

Rt 80 Widened from Thompson St East Haven  
to Rt 22 North Branford

Do have any other comments regarding the study?

Rt 80 + Tolket - Intersection improvements at

How did you hear about tonight's meeting?

- Newspaper (which one) \_\_\_\_\_  
 Internet \_\_\_\_\_  
 Other Walkin

Please provide your name and address (optional):

\_\_\_\_\_  
\_\_\_\_\_

PLEASE DROP YOUR FORM IN THE COMMENT BOX BEFORE YOU LEAVE TONIGHT.

THANK YOU FOR YOUR INPUT.

For additional information, please contact the South Central Regional Council of Governments at  
(203) 234-7555 or visit our website at [www.scrkog.org](http://www.scrkog.org)

# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

Center of Northford  
Very dangerous in the area of Brooks/Northford Store

Where do you feel cut-through traffic may be an issue?

Village Street  
Burrell Rd / Mill Road to North Haven

What other transportation-related issues would you like to see addressed?

Re-align Pistopaug / Rt 22 / Rt 150  
Very many traffic accidents. Bad geometry.

Do have any other comments regarding the study?

Too many curb cuts in Northford Center

How did you hear about tonight's meeting?

- Newspaper (which one) \_\_\_\_\_  
 Internet \_\_\_\_\_  
 Other Town Engineer

Please provide your name and address (optional):

\_\_\_\_\_

PLEASE DROP YOUR FORM IN THE COMMENT BOX BEFORE YOU LEAVE TONIGHT.

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

*Rt 22 & 17 Intersection*

Where do you feel cut-through traffic may be an issue?

*RT 150*

What other transportation-related issues would you like to see addressed?

*Public Transportation*

Do have any other comments regarding the study?

*Do not look to straighten RT 22 making it a  
speedway.*

How did you hear about tonight's meeting?

Newspaper (which one) \_\_\_\_\_

Internet \_\_\_\_\_

Other *Township Council Meeting*

Please provide your name and address (optional):

PLEASE DROP YOUR FORM IN THE COMMENT BOX BEFORE YOU LEAVE TONIGHT.

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

*Northford Center - Rt 22 - Rt 80 intersection*

Where do you feel cut-through traffic may be an issue?

What other transportation-related issues would you like to see addressed?

*A quick and final completion of Rt 95  
work in East Haven + New Haven*

Do have any other comments regarding the study?

*The Study should have been better  
publicized before this meeting*

How did you hear about tonight's meeting?

Newspaper (which one) \_\_\_\_\_

Internet

Other \_\_\_\_\_

Please provide your name and address (optional):

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

North Haven by RT 5 + Northford center

Where do you feel cut-through traffic may be an issue?

Notch Hill Road North Branford  
Village St North Branford  
Mill Road Area North Branford East Haven North Haven line

What other transportation-related issues would you like to see addressed?

Traffic light or stop sign at intersection  
of Notch Hill Road + Valley Rd

Do have any other comments regarding the study?

If there is a problem with cut through traffic one must  
make it least convenient (stop lights work) for  
motorist

How did you hear about tonight's meeting?

- Newspaper (which one) New Haven Register  
 Internet  
 Other \_\_\_\_\_

Please provide your name and address (optional):

PLEASE DROP YOUR FORM IN THE COMMENT BOX BEFORE YOU LEAVE TONIGHT.

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

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Where do you feel cut-through traffic may be an issue?

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What other transportation-related issues would you like to see addressed?

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Do have any other comments regarding the study?

I would like a study into the intersection  
of Route 22, Pond Hill and Chapel Hill Rd

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How did you hear about tonight's meeting?

- Newspaper (which one) \_\_\_\_\_  
 Internet \_\_\_\_\_  
 Other \_\_\_\_\_

Please provide your name and address (optional):

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

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Where do you feel cut-through traffic may be an issue?

Twin Lakes Rd from Route 20 to  
Route 139.  
Route 17 and 22, Northford.

What other transportation-related issues would you like to see addressed?

Mill Rd & Forest Rd traffic and  
high speed.

Do have any other comments regarding the study?

If you have contacted D.O.T,  
how come they haven't responded to  
letters sent to them?

How did you hear about tonight's meeting?

- Newspaper (which one) New Haven Register  
 Internet  
 Other a homeroom teacher

Please provide your name and address (optional):

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

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Where do you feel cut-through traffic may be an issue?

Route 14 and 22, Northford  
Twin Lakes Rd from Rt 80 to Rt 139 to Rt 14 / Bfd

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What other transportation-related issues would you like to see addressed?

Mill Rd + forested traffic  
and high speed.

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Do have any other comments regarding the study?

If you had contacted with the D.O.T., how come letters containing ideas to help Route 22 were not responded to? Or is that something amongst D.O.T. and not yourself?

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How did you hear about tonight's meeting?

- Newspaper (which one) New Haven Register  
 Internet  
 Other A homeroom teacher

Please provide your name and address (optional):

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

North Ford / North Haven Bypass near Honeywell

Where do you feel cut-through traffic may be an issue?

Intersection 22 + 17 Bypass needed

What other transportation-related issues would you like to see addressed?

Rail and Airport

Do have any other comments regarding the study?

Thank you. cps Mill Rd + Route 22  
Pedestrian traffic From convenient Home to  
Stop Saver

How did you hear about tonight's meeting?

Newspaper (which one)

Register

Internet

Other

Please provide your name and address (optional):

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# Route 22 Corridor Planning Study

North Haven – East Haven – North Branford

## Comment Form

Where do you typically experience travel delays in the Route 22 corridor?

Rt 22 into Northford Center  
Backup on 17 from north into center of Northford

Where do you feel cut-through traffic may be an issue?

Rustenburg and Old Post Road - How about  
a speed bump.

What other transportation-related issues would you like to see addressed?

I'm concerned about the green in Northford  
and how it may be affected by state's  
traffic plan.

Do have any other comments regarding the study?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How did you hear about tonight's meeting?

- Newspaper (which one) Register  
 Internet  
 Other friend

Please provide your name and address (optional):

\_\_\_\_\_  
\_\_\_\_\_

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