

ROAD SAFETY AUDIT

Great Neck Road North/Old Barnstable Road

Town of Mashpee

June 2009

Prepared for:
Massachusetts Highway Department



Prepared by:
Howard/Stein-Hudson Associates
38 Chauncy Street
Boston, MA 02111



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Background

The intersection of Great Neck Road North/Old Barnstable Road in Mashpee is in the Top 5% of High Crash Locations on Cape Cod. This intersection and three others that meet initial criteria for eligibility of the Highway Safety Improvement Project (HSIP) funding were selected by the Cape Cod Joint Transportation Committee (CCJTC) for potential future redesign to improve safety. To this end, an RSA was conducted to identify the safety issues and potential safety enhancements. Based on the results of this and several other RSAs within the Cape Cod region, the MassHighway Safety Management Unit and CCJTC will prioritize the locations to receive HSIP funding for design improvements.

The Town of Mashpee has contracted with an engineering consulting firm for roadway enhancements on Great Neck Road North from the rotary with Route 28 and Route 151 to Route 130. These roadway enhancements would be designed separately from the RSA. The redesign will include installing sidewalks on the west side of the roadway, improving roadway drainage, and improving several intersections.

Project Data

The audit team conducted an RSA for the intersection of Great Neck Road North/Old Barnstable Road in Mashpee, Massachusetts, on June 8, 2009. The RSA agenda is provided in **Appendix A. Table 1** lists the audit team members and their affiliations. **Appendix B** provides contact information for all team members.

Table 1. Participating Audit Team Members

Audit Team Member	Agency/Affiliation
Catherine Laurent	Mashpee Department of Public Works
Rene Read	Mashpee Assistant Town Manager
Priscilla Leclerc	Cape Cod Commission
Michael Sexton	Mashpee Police Department
Douglas Prentiss	Fay, Spofford, & Thorndike
Tim White	Federal Highway Administration
Lisa Schletzbaum	MassHighway Safety
Bonnie Polin	MassHighway Safety
Carrie Lavallee	MassHighway Projects
Keri Pyke	Howard/Stein-Hudson Associates
Michelle Langone	Howard/Stein-Hudson Associates
Ryan Walsh	Howard/Stein-Hudson Associates

Project Location Description

The intersection of Great Neck Road North/Old Barnstable Road is located in the Town of Mashpee, as shown in **Figure 1**. The intersection is located approximately a quarter-mile north of the rotary intersection of Route 28/Great Neck Road North/Great Neck Road South/Route 151. To the west of Great Neck Road North, the area consists of residential houses and two schools: Kenneth C. Coombs Elementary School and Quashnet School. To the east of Great Neck Road North, the area consists of conservation land. Great Neck Road North is a roadway abutted by several commercial plazas and buildings. Currently, although a Cape Cod Regional Transit Authority (CCRTA) bus stop sign is located on Great Neck Road North northbound at Old Barnstable Road, CCRTA states that there is no active bus stop at that intersection.

In order to begin assessing the possible safety issues, prior to the RSA the team reviewed a collision diagram and crash detail summary based on the crash records supplied by the Mashpee Police Department. Of the 27 crashes related to the intersection from 2004 through 2009, one fatality occurred and 15 crashes resulted in injury. Additionally, 73% were angle crashes. Crashes typically occurred during the day (85%).

MassHighway performed a speed study on Great Neck Road North at Old Barnstable Road, where the posted speed limit is 45 miles per hour northbound and 40 miles per hour southbound. The 85th percentile speed was 43 miles per hour northbound and 43 miles per hour southbound.

The detailed intersection crash data from 2004 through 2009 are provided in **Appendix C**. Other intersection data such as traffic volumes and additional intersection information provided by the Town of Mashpee and CCC are presented in **Appendix D**.

The intersection is the junction of the following roadways, which are categorized according to Massachusetts Executive Office of Transportation Office of Transportation Planning functional classifications:

Great Neck Road North is an urban minor arterial roadway. Owned by the Town of Mashpee, Great Neck Road North runs north–south and connects Route 28 and Route 151 to Route 130 in Mashpee. It has one travel lane in each direction, with approximately two feet of shoulder space on each side. The posted speed limit along Great Neck Road North is 45 miles per hour in the northbound direction and 40 miles per hour in the southbound direction. The posted speed limit is consistent with the speed regulations.

Old Barnstable Road is a local roadway owned by the Town of Mashpee. Old Barnstable Road runs east–west within the study area and connects to Route 28 and the Town of Falmouth. East of the intersection, Old Barnstable Road operates one-way westbound, with one travel lane. Old Barnstable Road west of Great Neck Road North has one travel lane in each direction. At its intersection with Great Neck Road North, Old Barnstable Road is stop-controlled. The Old Barnstable Road eastbound approach is offset from the westbound approach by approximately 15 feet. There is an asphalt sidewalk on both sides of the Old Barnstable Road westbound approach. There are no sidewalks on the Old Barnstable Road westbound approach. There is a streetlight mounted on a utility pole on the northeast corner of the intersection.

Figure 1. Locus Map



Road Safety Audit Observations

Figure 2 shows field conditions at the intersection from an aerial perspective. The safety issues and possible enhancements determined in the RSA conducted on June 8, 2009, include:

- Inadequate intersection geometry;
- Grading issues;
- Restricted sight distance;
- Inadequate pavement markings;
- Deficient signs; and
- Poor pedestrian accommodations.

Several of these issues require further study and engineering judgment before determining the feasibility of implementing enhancements to address them.

The following sections describe in more detail the safety issues determined during the RSA. In the table following the descriptions, each issue is listed with possible enhancements, estimated safety payoff, time frame, and cost. Safety payoff estimates are based on the approximate percent of crashes reduced by enhancement and are categorized as low (<30%), medium (31% to 70%), and high (>71%). The time frame is categorized as short-term (<1 year), mid-term (1 to 3 years), or long-term (>3 years). The costs are categorized as low (<\$10,000), medium (\$10,001 to \$50,000), or high (>\$50,001).

Figure 2. Project Location and Observations



Not to scale.

Safety Issue #1. Intersection Geometry

Observation:

Several of the corner radii are too small for the types of vehicles using Great Neck Road North and Old Barnstable Road, as evidenced by the wheel tracks in the soft shoulders at the corners of the intersection. The RSA team observed several vehicles encroaching over the double yellow center line when turning onto either Great Neck Road North or Old Barnstable Road.

On the Old Barnstable Road westbound approach, which is configured for one-way operation, vehicles queue on the left side of the roadway across from opposing traffic on the Old Barnstable Road eastbound approach. This can be confusing for both eastbound and westbound drivers.

Enhancements:

1. Increase corner radii to accommodate larger vehicles.
2. Narrow the Old Barnstable Road westbound approach and align it with the departure lane on the other side of the intersection to the extent possible within the right-of-way.



Tractor-trailer exiting Old Barnstable Road and heading south on Great Neck Road North.

Safety Issue #2. Grading Issues

Observation:

Approximately 42% of the crashes at the intersection of Great Neck Road North/Old Barnstable Road occurred when the roadway surface was wet. The RSA team noted that vehicles on both approaches of Old Barnstable Road must travel up a slight incline to cross or turn onto Great Neck Road North, which can be difficult when the roadway surface is wet or icy. It takes longer for a vehicle to complete a maneuver from a stopped condition on Old Barnstable Road. This may contribute to the high percentage of angle crashes under wet pavement conditions.

Additionally, RSA team members noted that ponding occurs on the Old Barnstable Road westbound approach. CCC photographs taken prior to the RSA under wet conditions show that there is a low spot on the Old Barnstable Road westbound approach in the vicinity of the stop line.

Enhancements:

1. Change the crown line on Great Neck Road North to facilitate crossing and turning movements from Old Barnstable Road.



Grading changes between Great Neck Road North and Old Barnstable Road.

2. Re-grade the Old Barnstable Road westbound approach to eliminate the low spot.

Safety Issue #3. Limited Sight Distance

Observation:

As previously stated, approximately 73% of the crashes at the intersection of Great Neck Road North/Old Barnstable Road were angle crashes. All of these angle crashes involved a vehicle from the Old Barnstable Road westbound approach. Field observations noted that vehicles stopped on the Old Barnstable Road westbound approach have difficulty seeing vehicles traveling northbound on Great Neck Road North due to existing signs, fence, and grass area.



Looking south from Old Barnstable Road at Great Neck Road.

Several RSA team members noted the low traffic volumes and high incidence of crashes on the Old Barnstable Road westbound approach. This one-way section of Old Barnstable Road provides a by-pass of the Route 28/Great Neck Road/Route 151 rotary.

Enhancements:

1. Measure the sight distances from the Old Barnstable Road westbound approach and compare them to the required sight distances for the existing conditions. Based on these results, the following additional enhancements may be appropriate:
2. Relocate signs and fence on the southeast corner to increase visibility for vehicles exiting Old Barnstable Road westbound.
3. Re-align both the horizontal and vertical geometry of Great Neck Road North to provide adequate sight distance for all approaches.
4. Re-grade the slope on the eastern side of the Great Neck Road North northbound approach to provide adequate sight distance for the Old Barnstable Road westbound approach.
5. Study closing the Old Barnstable Road westbound approach to vehicle traffic. This would include traffic analysis of the Route 28/Great Neck Road/Route 151 rotary to ensure that the closure would not create undue traffic delay there.

Safety Issue #4. Pavement Markings

Observation:

The intersection of Great Neck Road North/Old Barnstable Road has deficient pavement markings. The double yellow center lines and edge lines on all approaches, as well as the stop lines and crosswalks on Old Barnstable Road, are worn or missing.

Enhancements:

1. Re-stripe and maintain durable pavement markings at the intersection of Great Neck Road North/Old Barnstable Road.



Worn pavement markings at the Great Neck Road North/Old Barnstable Road intersection.

Safety Issue #5. Sign Improvements

Observation:

Some regulatory and warning signs are located so that they block the visibility of traffic. Additionally, some warning signs prior to the intersection are missing. Several sign locations, sizes, and heights do not conform to MUTCD requirements.

Enhancements:

1. Install new double-sided one-way signs on both sides of the roadway on the Old Barnstable Road westbound approach to improve their visibility to vehicles traveling northbound and southbound on Great Neck Road North.
2. Replace the worn “Intersection Ahead” warning sign for the Great Neck Road North northbound approach.
3. Install an “Intersection Ahead” warning sign for the Great Neck Road North southbound approach.
4. Relocate the 45 mph speed limit sign for Great Neck Road North northbound traffic farther beyond the intersection with Old Barnstable Road. This may require modifications to the speed regulations.
5. Adjust sign locations, sizes, and heights to conform to MUTCD requirements and not to impair sight distance.
6. Remove the CCRTA bus stop sign located on the eastern side of Great Neck Road North just north of Old Barnstable Road.



Signs located at the corner of Old Barnstable Road.

Safety Issue #6. Limited Pedestrian Accommodations

Observation:

Pedestrians crossing Great Neck Road North walk quickly to get across the roadway. No adequate accommodations are provided at the intersection to allow pedestrians to access the sidewalk located on the western side of Great Neck Road North.

Enhancements:

1. Provide a crosswalk at a safe location across Great Neck Road North with pedestrian warning signs to inform drivers.

Recommendations

Based on its observations and discussions, the RSA team identified the issues and possible enhancements that could improve safety at the intersection of Great Neck Road North/Old Barnstable Road in Mashpee, Massachusetts. **Table 2** summarizes these safety issues and possible enhancements.

Short-term recommendations include:

- Re-stripping and maintaining pavement markings, including stop lines, edge lines, crosswalks, and center lines, at the intersection of Great Neck Road North/Old Barnstable Road;
- Improving sight distance for Old Barnstable Road westbound vehicles; and
- Improving sign locations, sizes, and placements at the intersection of Great Neck Road North/Old Barnstable Road.

Because the one-way section of Old Barnstable Road westbound that connects Route 28 to Great Neck Road North passes through conservation land, has low traffic volumes, and has a high incidence of angle crashes, the RSA team has proposed study of closing that section to vehicular traffic. It could become a pedestrian and bicycle route through the conservation land. If this becomes the preferred option, the redesign should also include adequate bicycle and pedestrian accommodations at the intersection. Should this option prove infeasible due to creating other potential issues at the Route 28 rotary, other options have been provided.

To enhance the safety of the intersection of Great Neck Road North/Old Barnstable Road, the *long-term recommendation* is to improve the intersection geometry and grading. Further study and design work need to be conducted to determine the feasibility of making these improvements to the Great Neck Road North/Old Barnstable Road intersection.

The RSA team also discussed the possibility of traffic calming measures at the intersection due to the severity of crashes, to which speed is a contributing factor. The other short- and long-term improvements, including either elimination of vehicular traffic on the Old Barnstable Road westbound approach or improvements to the intersection sight distance, should reduce the number of crashes at the intersection overall, negating the need for traffic calming.

The RSA team discussed the installation of a left-turn lane on the Great Neck Road North northbound approach. This idea was not pursued because the crash history does not indicate a problem with northbound left-turning vehicles. In addition, the installation of a northbound left-turn lane could decrease the overall safety of the intersection by creating another lane for traffic turning from the side streets to cross to complete maneuvers.

Table 2. Proposed Safety Enhancement Summary

Safety Issue	Safety Enhancement	Safety Payoff	Time Frame	Cost
Intersection Geometry	Increase corner radii to accommodate larger vehicles.	Mid	Mid-Term	Mid
	Narrow the Old Barnstable Road westbound approach and align it with the departure lane on the other side of the intersection to the extent possible within the right-of-way.	Low	Mid-term	High
Grading Issues	Change the crown line on Great Neck Road North to facilitate crossing and turning movements from Old Barnstable Road.	High	Long-term	High
	Re-grade the Old Barnstable Road westbound approach to eliminate the low spot.	High	Mid-term	Mid
Limited Sight Distance	Measure the sight distances on Old Barnstable Road westbound.	Low	Short-term	Low
	Relocate signs and fence on the southeast corner to increase visibility for vehicles exiting Old Barnstable Road westbound.	High	Short-term	Low
	Re-align both the horizontal and vertical geometry of Great Neck Road North to provide adequate sight distances for all approaches.	High	Long-term	High
	Re-grade the slope on the eastern side of Great Neck Road North northbound approach to provide adequate sight distance for the Old Barnstable Road westbound approach.	High	Short-term	Low
	Study closing the Old Barnstable Road westbound approach to vehicle traffic. This would include traffic analysis of the Route 28/Great Neck Road/Route 151 rotary to ensure that the closure would not create undue traffic delay.	High	Short-term	Mid
Pavement Markings	Re-stripe and maintain durable pavement markings at the intersection of Great Neck Road North/Old Barnstable Road.	Low	Short-term	Low
Sign Improvements	Install new double-sided one-way signs on both sides of the roadway on the Old Barnstable Road westbound approach to improve their visibility to vehicles traveling northbound and southbound on Great Neck Road North.	Low	Short-term	Low
	Replace the worn "Intersection Ahead" warning sign for Great Neck Road North northbound approach.	Low	Short-term	Low
	Install an "Intersection Ahead" warning sign for Great Neck Road North southbound approach.	Low	Short-term	Low
	Relocate the 45 mph speed limit sign for Great Neck Road North northbound traffic farther beyond the intersection with Old Barnstable Road. This may require modifications to the speed regulations.	Low	Mid-term	Low
	Adjust sign locations, sizes, and heights to conform to MUTCD requirements and not to impair sight distance.	Low	Short-term	Low
	Remove the CCRTA bus stop sign located on the eastern side of Great Neck Road North just north of Old Barnstable Road.	Low	Short-term	Low
Limited Pedestrian Accommodations	Provide a crosswalk at a safe location across Great Neck Road North with pedestrian warning signs to inform drivers.	Mid	Short-term	Low

Appendix A. RSA Meeting Agenda

Agenda

Road Safety Audit

Mashpee – Great Neck Rd N at Old Barnstable Rd

Meeting Location: Town Hall

16 Great Neck Road North

Monday, June 8, 2009

12:30 PM – 2:30 PM

Type of meeting: High Crash Location – Road Safety Audit
Attendees: Invited Participants to Comprise a Multidisciplinary Team
Please bring: Thoughts and Enthusiasm!!

12:30 PM **Welcome and Introductions**

12:45 PM **Review of Site Specific Material**

- Crash, Speed & Volume Summaries– provided in advance
- Existing Geometries and Conditions

1:15 PM **Visit the Site**

- Drive to the intersection
- As a group, identify areas for improvement

2:00 PM **Completion of RSA**

- Finalize all areas for improvement
- Discuss potential improvements and finalize recommendations

2:30 PM **Adjourn for the Day – but the RSA has not ended**

Instructions for Participants:

- Before attending the RSA on June 8th, participants are encouraged to drive through the Great Neck Road North and Old Barnstable Road intersection and complete/consider elements on the RSA Prompt List with a focus on safety.
- All participants will be actively involved in the process throughout. Participants are encouraged to come with thoughts and ideas, but are reminded that the synergy that develops and respect for others' opinions are key elements to the success of the overall RSA process.
- After the RSA meeting, participants will be asked to comment and respond to the document materials to assure it is reflective of the RSA completed by the multidisciplinary team.

Appendix B. RSA Audit Team Contact List

Participating Audit Team Members

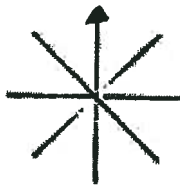
Date: June 8, 2009

Location: Town Hall, 16 Great Neck Road North, Mashpee

Audit Team Members	Agency/Affiliation	Email Address	Phone Number
Catherine Laurent	Mashpee Department of Public Works	claurent@ci.mashpee.ma.us	(508) 539-1420
Rene Read	Mashpee Assistant Town Manager	rread@ci.mashpee.ma.us	(508) 539-1400
Michael Sexton	Mashpee Police Department	msexton@mashpeepd.com	(508) 539-1480
Priscilla Leclerc	Cape Cod Commission	pleclerc@capecodcommission.org	(508) 362-3828
Douglas Prentiss	Fay, Spofford, & Thorndike	dprentiss@fstinc.com	(781) 221-1207
Tim White	Federal Highway Administration	Timothy.A.White@fhwa.dot.gov	(617) 494-3290
Lisa Schletzbaum	MassHighway Safety	lisa.schletzbaum@mhd.state.ma.us	(617) 973-7685
Bonnie Polin	MassHighway Safety	bonnie.polin@mhd.state.ma.us	(617) 973-7991
Carrie Lavallee	MassHighway Projects	carrie.lavalle@mhd.state.ma.us	(617) 973-8834
Keri Pyke	Howard/Stein-Hudson Associates	kpyke@hshassoc.com	(617) 482-7080
Michelle Langone	Howard/Stein-Hudson Associates	mlangone@hshassoc.com	(617) 482-7080
Ryan Walsh	Howard/Stein-Hudson Associates	rwalsh@hshassoc.com	(917) 339-0488

Appendix C. Detailed Crash Data

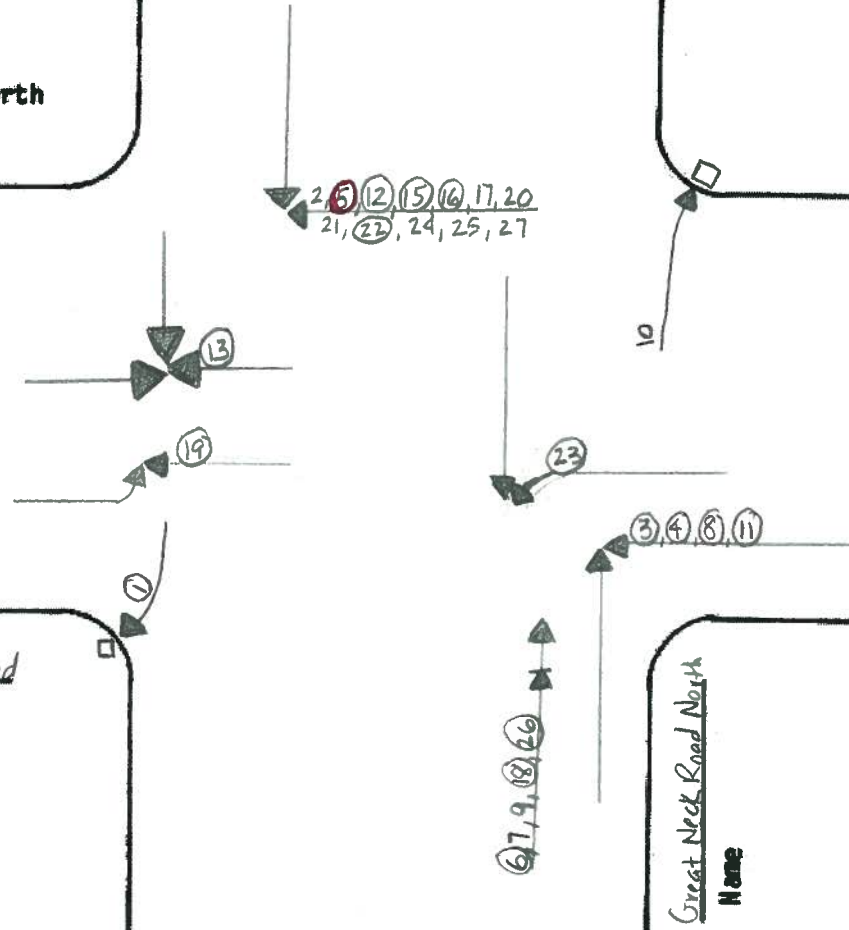
Mashpee



**Indicate North
by Arrow**















**COLLISION
DIAGRAM***

2, 5, 12, 15, 16, 17, 20
21, 22, 24, 25, 27



Old Barnstable Road
Name

Great Neck Road North
Name

SYMBOLS	TYPES OF COLLISIONS	SHOW FOR EACH ACCIDENT
<ul style="list-style-type: none">  Moving Vehicle  Backing Vehicle  Non-involved Vehicle  Pedestrian  Parked Vehicle  Fixed Object  Fatal Accident  Injury Accident 	<ul style="list-style-type: none">  Rear-End  Head On  Side Swipe  Out of Control  Left Turn  Right Angle 	<ol style="list-style-type: none"> 1. Approximate location of accident 2. Type of collision and vehicles involved. 3. Time, Day, Date 4. Any other pertinent factors mentioned on the report (i.e. presence of oil on road, ruts, etc.)

INTERSECTION Great Neck Road North and Old Barnstable Road

PERIOD FROM: 1/1/2004 to 1/31/2009

* Crash 5 is a fatal crash

A-6

* Diagram based on crash reports obtained from the Mashpee Police Department.

Crash Data Summary

Intersection of Great Neck Road North and Old Barnstable Road

Jan 1, 2004-Jan 31, 2009

Crash Number	Crash Day	Crash Date	Time of Day	Manner of Collision	Light Condition	Weather Condition	Road Surface	Driver Contributing Code	Comments
1	Saturday	February 14, 2004	11:21:00 PM	Single Vehicle Crash	Dark-lighted roadway	Clear	Dry	Operating vehicle in erratic, reckless, careless, negligent or aggressive manner	
2	Monday	April 19, 2004	5:24:00 PM	Angle	Daylight	Cloudy	Dry	Failed to yield right of way	
3	Tuesday	May 4, 2004	2:01:00 PM	Angle	Daylight	Cloudy	Dry	Failed to yield right of way	
4	Tuesday	May 25, 2004	9:01:00 AM	Angle	Daylight	Cloudy	Dry	Failed to yield right of way	
5	Friday	June 11, 2004	9:23:00 PM	Angle	Dark-lighted roadway	Cloudy	Dry	Failed to yield right of way	FATAL CRASH INVOLVING A MOTORCYCLE
6	Monday	July 5, 2004	3:41:00 PM	Rear-end	Daylight	Clear	Wet	Followed too closely	
7	Tuesday	July 13, 2004	8:57:00 AM	Rear-end	Daylight	Rain	Wet	Followed too closely	
8	Sunday	July 25, 2004	12:18:00 PM	Angle	Daylight	Clear	Dry	Failed to yield right of way	
9	Friday	November 5, 2004	3:28:00 PM	Rear-end	Daylight	Clear	Dry	Followed too closely	
10	Tuesday	February 1, 2005	11:36:00 AM	Angle	Daylight	Clear	Wet	Failed to yield right of way	MV1 pulled out from the sidestreet cause MV2 from the main street lost control of vehicle and struck
11	Wednesday	March 2, 2005	7:57:00 AM	Angle	Daylight	Clear	Slush	Failed to yield right of way	SLUSHY ROADWAY DID NOT APPEAR TO BE FACTOR IN CRASH
12	Monday	February 13, 2006	12:17:00 PM	Angle	Daylight	Clear	Wet	Failed to yield right of way	
13	Tuesday	April 4, 2006	9:04:00 AM	Angle	Daylight	Rain	Wet	Failed to yield right of way	
14*	Wednesday	October 18, 2006	11:15:00 AM	Rear-end					Not Included in Summary below.
15	Wednesday	November 1, 2006	4:44:00 PM	Angle	Dusk	Clear	Dry	Inattention	
16	Sunday	December 10, 2006	12:36:00 PM	Angle	Daylight	Clear	Dry	Failed to yield right of way	
17	Saturday	January 6, 2007	11:05:00 AM	Angle	Daylight	Rain	Wet	Failed to yield right of way	
18	Tuesday	September 18, 2007	11:52:00 AM	Rear-end	Daylight	Clear	Dry	Inattention	
19	Thursday	November 29, 2007	5:57:00 PM	Angle	Dark-lighted roadway	Cloudy	Dry	Failed to yield right of way	
20	Tuesday	January 15, 2008	8:26:00 AM	Angle	Daylight	Clear	Ice	Failed to yield right of way	ICE ON ROAD MAY HAVE BEEN A FACTOR
21	Monday	April 14, 2008	10:09:00 AM	Angle	Daylight	Clear	Dry	Failed to yield right of way	
22	Monday	May 5, 2008	8:39:00 AM	Angle	Daylight	Cloudy	Dry	Failed to yield right of way	
23	Thursday	June 26, 2008	9:05:00 AM	Angle	Daylight	Clear	Dry	Failed to yield right of way	
24	Sunday	July 6, 2008	1:38:00 PM	Angle	Daylight	Clear	Dry	Failed to yield right of way	
25	Saturday	November 15, 2008	11:16:00 AM	Angle	Daylight	Cloudy	Wet	Failed to yield right of way	VEHICLE LOST TRACTION DUE TO OIL/WATER ON ROADWAY
26	Saturday	November 15, 2008	11:25:00 AM	Rear-end	Daylight	Cloudy	Wet	Followed too closely	
27	Wednesday	January 28, 2009	2:44:00 PM	Angle	Daylight	Cloudy	Ice	Inattention	POSSIBLE ICE ON ROADWAY

Summary

26 Total Crashes

Manner of Collision			Time of Day					
Angle	Rear-End	Single Vehicle Crash	6:00am-10:00am	10:00am-2:00pm	2:00pm-6:00pm	6:00pm-10:00pm	10:00-2:00am	2:00am-6:00am
19	5	2	7	10	7	1	1	0
73.1%	19.2%	7.7%	26.9%	38.5%	26.9%	3.8%	3.8%	0.0%

Road Surface				Lighting			
Dry	Wet	Ice	Slush	Daylight	Dusk	Dark-lighted	Unknown
15	8	2	1	22	1	3	0
57.7%	30.8%	7.7%	3.8%	84.6%	3.8%	11.5%	0.0%

Day of Week						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5	7	3	2	2	4	3
19.2%	26.9%	11.5%	7.7%	7.7%	15.4%	11.5%

* Information obtained from Mashpee Incident Report, not a Crash Report

Crash Data Summary

Intersection of Great Neck Road North and Old Barnstable Road

Jan 1, 2004-Jan 31, 2009

: a snow bank

Appendix D. Additional Information
