

ROAD SAFETY AUDIT

Washington Street (Route 53) at Pleasant Street

Town of Pembroke

June 26, 2014

Prepared For:
MassDOT Highway Division



Prepared By:
BETA Group, Inc.



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Project Data

A Road Safety Audit for the intersection of Washington Street (Route 53) at Pleasant Street was held on June 6, 2014 at the Pembroke Water Department offices in Pembroke, MA. As indicated in Table 1, the audit team consisted of representatives from State, Regional and Local agencies and included a cross-section of engineering, planning and emergency response expertise.

Table 1. Participating Audit Team Members

Audit Team Member	Agency/Affiliation
Corey O'Connor	MassDOT Highway Division – Traffic Safety
Richard Madsen	MassDOT Highway Division – District 5 Projects
Sandra Serpa	MassDOT Highway Division – District 5 Projects
Thomas Rebello	MassDOT Highway Division – District 5 Traffic Ops
Nithin Krishna Linga Reddy	MassDOT Highway Division – Traffic Safety
Jed Cornock	OCPC
Gene Fulmine	Pembroke DPW
Scott Glauben	Pembroke DPW
Andrew Valcovic	CHA
John Morgan	CHA
Rick Wall	Pembroke Police Department (Chief)
Lew Stone	Pembroke Selectman
Jim Neenan	Pembroke Fire Department (Chief)
Bill McNulty	OCPC
Greg Lucas	BETA Group, Inc.
Justin Curewitz	BETA Group, Inc.

Background

The Federal Highway Administration defines a Road Safety Audit (RSA) as *the formal safety examination* of an existing or future road or intersection by an *independent, multidisciplinary team*. The purpose of an RSA is to *identify potential safety issues and possible opportunities for safety improvements* considering all roadway users. A Road Safety Audit was scheduled for the intersection of Washington Street (Route 53) at Pleasant Street in Pembroke because it has been identified as a high crash location within the Old Colony Planning Council (OCPC) region. 25% design plans were submitted in 2013 for the intersection (MassDOT File No. 607337), and the project is programmed in FY 2016 in the draft 2015-2018 Old Colony Transportation Improvement Program (TIP). The RSA is intended to identify potential short and long term safety improvements that can be made at the intersection, which can then be implemented through general maintenance for short term low cost improvements or incorporated into the reconstruction project to the greatest extent practicable.

Project Description

The intersection of Washington Street (Route 53) and Pleasant Street, shown in Figure 1, is located in the northern part of Pembroke. Route 53 follows a north-south alignment through Pembroke, running essentially parallel to Route 3 and serving as a connector from Hanover to the north to Route 3A, Kingston and Plymouth to the south.

Washington Street (Route 53) is functionally classified as an Urban Minor Arterial and is under MassDOT jurisdiction, while Pleasant Street is classified as an Urban Collector and is under town jurisdiction. Pleasant Street connects to Oak Street, which functions as a heavily-traveled cut-through route from Pembroke towards Route 139, Route 3 and Marshfield. Water Street intersects Route 53 approximately 600 feet north of Pleasant Street and serves a similar cut-through function. Land use in the area is primarily residential, with some commercial and industrial uses along Route 53. Wooded or tree-lined parcels are common near the study intersection.



**Washington Street (Route 53) at Pleasant Street
(looking north)**

The intersection is a T-type intersection, with Pleasant Street under STOP sign control approaching from the east. Route 53 provides a single travel lane with shoulders in each direction. Southbound left turning



Road Safety Audit
Washington St (Rte 53)
at Pleasant Street
Pembroke, MA

Figure 1
Location Map

vehicles can block the travel lane, and more aggressive drivers attempt to use the shoulder to pass. Northbound vehicles also use the shoulder to slow for a right turn to Pleasant Street.

Pleasant Street provides a single lane of travel in each direction separated by a double yellow centerline. Solid white edge lines delineate a shoulder that is not wide enough to accommodate bicycles. Pavement markings are in fair condition at the intersection. Intersection signage is provided consistent with FHWA recommendations for short-term, low cost fixes for unsignalized intersections. Signage includes STOP signs on both sides of the Pleasant Street approach, advance STOP AHEAD signs on both sides of the Pleasant Street approach, STOP markings at the stop bar on Pleasant Street, and intersection warning signs with supplemental “Pleasant St” plaques on both sides of Route 53 approaching Pleasant Street. No crosswalks are provided at the intersection, and no sidewalks or other pedestrian accommodations are provided on either Route 53 or Pleasant Street.

Crash data provided by the Pembroke Police Department and summarized by CHA show 25 crashes occurred at the intersection from 2011 through 2013. A collision diagram and crash summary are included in the Appendix. The most prevalent crash type were angle crashes, comprising 60% of all crashes. Thirteen of the 15 angle crashes at the intersection were between a vehicle turning left from Pleasant Street and a northbound through vehicle on Route 53. One angle crash involved a southbound left turning vehicle and a northbound through vehicle, while another as between a vehicle turning right from Pleasant Street and a northbound through vehicle.

Seven rear-end crashes occurred at the intersection: five southbound, one northbound, and one westbound on Pleasant Street. Southbound rear-end crashes are likely related to stopped left-turning vehicles, where drivers traveling southbound along Route 53 are not expecting to encounter a stopped vehicle. There was one rear-end crash on both the northbound and Pleasant Street approaches. Two crashes involved Pleasant Street vehicles that ran through the intersection and struck the fence bordering the property directly across from the Pleasant Street approach. Local officials noted that the property owner has constructed a second fence as a buffer due to frequent vehicle strikes. One crash involved an errant left-turning vehicle that struck the guardrail on the southeast corner of the intersection.

Speed regulation information was provided for both Route 53 and for Pleasant Street in Pembroke. Special Speed Regulation No. 678-B establishes a 40 mph limit for Route 53 from just south of Route 139 to just south of Pleasant Street. Posted signs establish a 45 mph speed limit in this area, in conflict with the regulation. A 35 mph limit is established for Pleasant Street, except for a reduction to 25 mph on the approach to Route 53.

Audit Observations

Following a brief introduction to the RSA process and a summary of existing crash information, the audit participants were asked to discuss safety issues at the intersection of Washington Street (Route 53) and Pleasant Street. A summary of those major safety considerations is as follows:

- **Traffic Congestion and Driver Aggression** – It was noted that congestion exists at the intersection during both peak and non-peak periods. Peaks exist during the typical morning and afternoon commuting periods, as well as the mid-afternoon following school dismissal and Saturday due to retail traffic along both Route 53 and Route 139 north of the intersection. Queuing on Pleasant Street as a result of congestion on both intersecting streets can increase driver frustration, impatience and aggression, causing drivers to take chances on unacceptable gaps which can lead to the history of angle crashes involving turning vehicles.
- **Directional Usage** – A closer analysis of crash reports at the intersection reveals four crashes where a northbound vehicle was noted to have their right turn signal on, but continued straight on Route 53 at the intersection, resulting in a collision with a vehicle departing Pleasant Street. Local officials confirmed that this phenomenon occurs.
- **Speed** – Vehicle speed on Route 53 was cited as a safety concern. It was suggested that drivers traveling at or above the posted speed limit contribute to the lack of available gaps, which creates challenges for drivers exiting Pleasant Street and contributes to the crash history involving vehicles exiting Pleasant Street. As previously noted, the 45 mph speed limit posted for Route 53 in the vicinity of Pleasant Street is incorrect; state regulations establish a 40 mph limit in this area.
- **Lack of Turn Lane / Shoulder Issues** – Drivers stopped to make a left turn to Pleasant Street from Route 53 block the southbound travel lane, which causes more aggressive drivers to attempt to pass in the shoulder. Audit participants noted that the shoulder is not of an adequate width for passing, and that uneven pavement in the shoulder will further impede passing and influence operations. Drivers may initially attempt to pass, but then slow when encountering the narrow, uneven shoulder, which could be a contributing factor in rear-end crashes.
- **Pedestrian Accommodation** – It was noted that there are no sidewalks along Route 53 or Pleasant Street at the intersection, and that no crosswalk is provided to cross either street.
- **Bicycle Accommodation** – Accommodation is not provided for bicycles at the intersection. Shoulders, where provided, are of an inconsistent and/or inadequate width for accommodation.
- **Proximity to Water Street** – Water Street intersects Route 53 approximately 600 feet north of Pleasant Street, with both streets intersecting from the east and both serving as cut-through routes to Route 139. It was noted that drivers are more aware of Pleasant Street than Water Street due to the presence of advance intersection warning signs for Pleasant Street, and that drivers slowing at Pleasant Street may be looking for Water Street, or vice versa. This may explain the frequency of drivers using their right turn signal approaching Pleasant Street but continuing north on Route 53.

- **Vegetation & Visibility** – Overgrown vegetation further restricts visibility along both Route 53 and Pleasant Street. Overgrowth of trees along Pleasant Street blocks visibility of Stop Ahead and STOP signs for drivers approaching Route 53, and a large tree on the northeast corner of the intersection reduces visibility for vehicles turning left (and looking right) from Pleasant Street. Local officials noted that the Town of Pembroke would be willing to trim vegetation along Pleasant Street, even though the intersection is under MassDOT jurisdiction; it should be noted that the Pleasant Street approach is under town jurisdiction, making it the town’s responsibility to clear vegetation. The tree on the northeast corner and the slope of the adjacent residential property also reduce visibility of Pleasant Street for drivers approaching southbound on Route 53. Reduced visibility may be a contributing factor in the 14 angle crashes involving vehicles departing Pleasant Street.



Tree on northeast corner restricts visibility (looking north)



Vegetation on Pleasant Street blocks STOP sign visibility

- **Signage** – Audit team members noted safety issues related to signage.

- Sign clutter is a potential issue both along Route 53 approaching the intersection, and on the northeast corner of the intersection. The number of signs creates a visual clutter that reduces the driver’s ability to receive all the information presented when approaching the intersection.

- A W1-7 Two-Direction Large Arrow Sign is typically installed at the far side of a T-intersection, but is missing at this location. It was suggested that the sign may have been installed in conjunction with recent short-term low cost signage improvements, but has since been knocked down, or that the sign may have been excluded due to its potential proximity to the edge of pavement and its potential to be struck by vehicles using the shoulder to pass.



Sign clutter on northeast corner

- **Lighting** - It was suggested that lighting may be insufficient at the intersection. The audit team discussed the change in land use from commercial to rural approaching the intersection, which contributes to the perception of a darker intersection. It should be noted that 20% of crashes occurred at night.

Potential Safety Enhancements

Audit participants identified safety issues and recommended potential improvements to address these issues. Audit participants were encouraged to consider both short and long term improvements for each issue. Each improvement considered has been categorized as short-term, mid-term, or long-term based on the definitions shown in Table 2. Additionally, a cost category has been assigned to each improvement based on the parameters set forth in Table 2.

Table 2. Estimated Time Frame and Costs Breakdown

Time Frame		Costs	
Short-term	<1 year	Low	<\$10,000
Mid-term	1–3 years	Medium	\$10,000–\$50,000
Long-term	>3 years	High	>\$50,000

- Construct a fully actuated traffic signal at the intersection. This mid-term, high cost improvement is a key component of the planned intersection reconstruction project. A traffic signal would stop traffic on Route 53 to allow traffic to enter from Pleasant Street, and would also increase awareness of the intersection for vehicles approaching on Route 53. Traffic signal installation should conform to all MassDOT Highway Division requirements, and should include a minimum of two overhead signals on each approach including retroreflective backplates, detection on all approaches including bicycle detection, and emergency preemption given the proximity of the Pembroke Fire Station south of the intersection on Route 53.
- Provide dedicated turn lanes on Route 53. This mid-term, high cost improvement includes widening Route 53 at Pleasant Street to provide a southbound left turn lane and a northbound right turn lane, while maintaining a single through lane in each direction and a shoulder accommodating bicycles. It was noted that the southbound left turn lane will have a lead phase to allow protected turns to Pleasant Street. Audit participants also noted that the right turn lane will help if drivers continue to errantly use their right turn signal when approaching Pleasant Street, since a driver that is actually making a right turn would be in the turn lane, whereas a through vehicle would remain in the through lane.
- Consider reducing the posted speed limit on Route 53. It was suggested that the posted speed limit should be reduced in order to reduce vehicle speed along Route 53, which would benefit vehicles attempting to find acceptable gaps to turn onto Route 53 from Pleasant Street. The audit team discussed the need for further reduction below 40 mph. This is a short-term, low cost improvement that requires further study and coordination between the Town and MassDOT.
- Continue speed enforcement efforts. Continued speed enforcement is a short-term and ongoing improvement, the cost of which is reduced enforcement elsewhere in the Town.
- Reconstruct shoulders on Route 53. This mid-term, high cost improvement would eliminate the existing uneven pavement in the southbound shoulder, and would provide a minimum 5-foot width in

accordance with MassDOT’s current standard for bicycle accommodation. It is assumed that this can be accommodated as part of the planned project.

- Provide pedestrian accommodations at the intersection. Pedestrian accommodations should include sidewalks, wheelchair ramps, and crosswalks across both Route 53 and Pleasant Street. It should be noted that current MassDOT policy requires sidewalks on both sides of all reconstructed roadways. This is a mid-term, high cost improvement that can be incorporated in the project.
- Provide bicycle accommodation at the intersection. Previous recommendations include a widened shoulder and bicycle detection, but it should also be noted that the current project design includes a bicycle lane between the through lane and the right turn lane on the northbound approach. This lane is critical to reduce conflicts between bicycles and right turning vehicles. This is a mid-term improvement that is included in overall project improvements.
- Provide an advance street name sign for Pleasant Street, and consider advance warning signage and street name plaque for Water Street. Existing advance warning signage for Pleasant Street should be replaced with an advance street name sign once the signal is constructed as a mid-term, low cost improvement in conjunction with the project. If errant directional usage continues northbound in advance of Pleasant Street, modified advance signage should be considered clarifying that Pleasant Street precedes Water Street. This is a mid-term, low cost improvement.
- Trim vegetation along Pleasant Street. This is a short-term, low cost improvement to increase visibility of existing signage.
- Remove tree on the northeast corner of the intersection to improve visibility for drivers exiting Pleasant Street. It was noted that the tree will be removed as part of project widening. The tree can be removed now as a short-term, low cost improvement to increase visibility.
- Review signs and remove inappropriate, incorrect or ambiguous signage. The number of existing signs on the Route 53 approaches and on the northeast corner of the intersection reduces their effectiveness. This is a short-term, low cost improvement.
- Consider installation of a W1-7 Two-Direction Large Arrow sign. As previously noted, this sign is typically provided on the far side of a T-intersection. The proximity of the sign to the edge of roadway should be considered and may preclude installation. This is a short-term, low cost improvement.
- Upgrade street lighting at the intersection, where feasible. Street lighting should be reviewed as part of the project and upgraded where necessary. This is a mid-term, high cost improvement.



Summary of Road Safety Audit

Table 3 summarizes potential recommendations discussed by the audit team. The recommendations are categorized based on the potential safety payoff, as well as by time frame and cost. The safety payoff is a qualitative judgment of the effectiveness of the potential safety improvements. Each recommendation has a responsibility assigned to it stating whether MassDOT or the Town of Pembroke would be responsible for implementing the recommended improvement. The term “Project” refers to improvements that are assumed to be included or could reasonably be accommodated as part of planned improvements. All improvements have an order of magnitude cost assigned.

Table 3. Potential Safety Enhancement Summary

Safety Issue	Safety Enhancement	Responsibility	Safety Payoff	Time Frame	Cost
Traffic Congestion, Driver Aggression, Speed, Bicycle Accommodation	Construct a fully actuated traffic signal at the intersection. The traffic signal shall include a minimum of two overhead signals on each approach with retroreflective backplates, detection on all approaches including bicycle detection, and emergency preemption.	Project	High	Mid-term	High*
Traffic Congestion, Driver Aggression, Directional Usage, Lack of Turn Lane	Provide dedicated turn lanes on Route 53. This improvement includes a southbound left turn lane and a northbound right turn lane.	Project	High	Mid-term	High*
Speed	Consider reducing the posted speed limit on Route 53. This requires further study and coordination between the Town and MassDOT.	MassDOT/ Town	Medium	Short-term	\$5,000
Speed	Continue speed enforcement efforts.	Town	Medium	Short-term	\$0 (Reduced enforcement elsewhere)
Shoulder Issues, Bicycle Accommodation	Reconstruct shoulders on Route 53. A minimum 5-foot shoulder should be provided.	Project	Medium	Mid-term	High*
Pedestrian Accommodation	Provide pedestrian accommodations at the intersection. This should include sidewalks, wheelchair ramps, and crosswalks across both Route 53 and Pleasant Street.	Project	Medium	Mid-term	High*
Bicycle Accommodation	Provide bicycle accommodation at the intersection. This includes a northbound bicycle lane between the through lane and right turn lane, in conjunction with other recommendations.	Project	Medium	Mid-term	TBD*
Proximity to Water Street, Directional Usage	Provide an advance street name sign for Pleasant Street following signal installation.	Project	Medium	Mid-term	\$2,000*
	Consider advance warning signage and street name plaque for Water Street.	MassDOT	Medium	Mid-term	\$2,000
Vegetation & Visibility	Trim vegetation along Pleasant Street.	Town	High	Short-term	\$2,000
Vegetation & Visibility	Remove tree on the northeast corner of the intersection to improve visibility for drivers exiting Pleasant Street.	MassDOT	High	Short-term	\$2,000
Signage	Review signs and remove inappropriate, incorrect or ambiguous signage.	Project	Low	Short-term	\$2,500*

Table 3. Potential Safety Enhancement Summary

Safety Issue	Safety Enhancement	Responsibility	Safety Payoff	Time Frame	Cost
Signage	Consider installation of a W1-7 Two-Direction Large Arrow sign.	MassDOT	Medium	Short-term	\$500
Lighting	Upgrade street lighting at the intersection and along Route 53.	MassDOT	Medium	Mid-term	\$25,000

* Improvements to be incorporated into the proposed project are assumed to be included as part of the overall project cost.

Appendix A. RSA Meeting Agenda

Agenda

Road Safety Audit

Pembroke, MA

Washington Street (Route 53) at Pleasant Street

Meeting Location: Pembroke Water Department Offices
91 Glenwood Road , Pembroke, MA

Friday, June 6, 2004

1:00 PM – 3:00 PM

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

1:00 PM Welcome and Introductions

1:15 PM Discussion of Safety Issues

- Crash history, Speed Regulations – provided in advance
- Existing Geometries and Conditions

2:00 PM Site Visit

- Drive to the intersection of Washington Street (Route 53) and Pleasant Street
- As a group, identify areas for improvement

2:30 PM Discussion of Potential Improvements

- Discuss observations and finalize safety issue areas
- Discuss potential improvements and finalize recommendations

3:00 PM Adjourn for the Day – but the RSA has not ended

Instructions for Participants:

- Before attending the RSA on June 6th, participants are encouraged to drive/walk through the 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

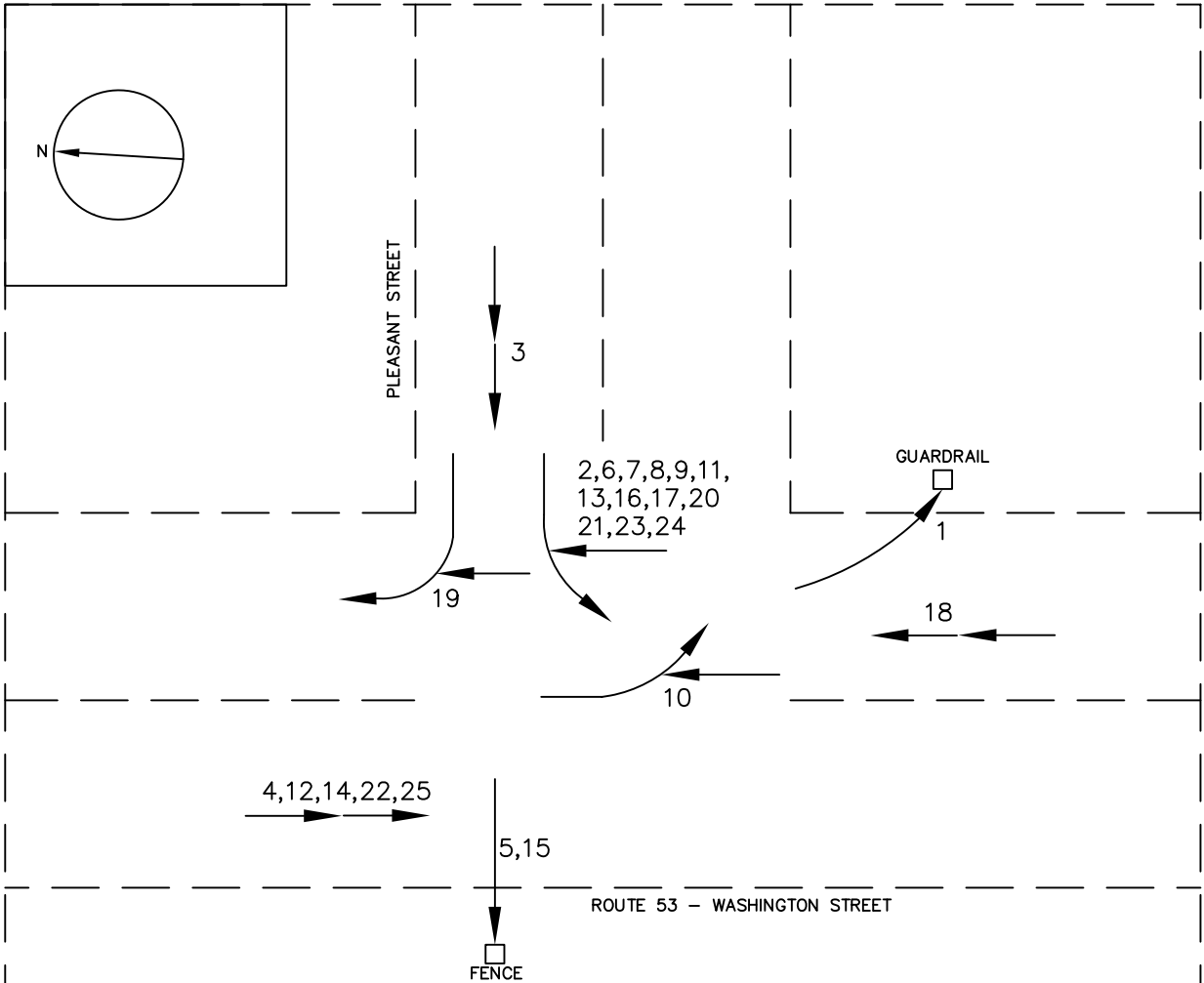
Participating Audit Team Members

Date: June 6, 2014

Location: Pembroke – Washington Street (Route 53) at Pleasant Street

Audit Team Member	Agency/Affiliation	Email Address	Phone Number
Greg Lucas	BETA	GLucas@BETA-Inc.com	781-255-1982
Justin Curewitz	BETA	JCurewitz@BETA-Inc.com	781-255-1982
Richard Madsen	MassDOT D5 Projects	Richard.Madsen@dot.state.ma.us	508-884-4241
Sandra Serpa	MassDOT D5 Projects	Sandra.Serpa@dot.state.ma.us	508-884-4353
Thomas Rebello	MassDOT D5 Traffic	Thomas.Rebello@dot.state.ma.us	508-884-4247
Gene B. Fulmine Jr.	Pembroke DPW	GFulminejr@townofpembrokemass.org	781-709-1427
Nithin Krishna Linga Reddy	MassDOT Safety	Reddy.nithinkrishnalinga@state.ma.us	978-727-2217
Corey O'Connor	MassDOT Safety	Corey.OConnor@state.ma.us	857-368-9638
Jed Cornock	OCPC	JCornock@ocpcrpa.org	508-583-1833
Scott Glauben	Pembroke DPW	sglauben@townofpembrokemass.org	781-831-2550
Andrew Valcovic	CHA	AValcovic@chacompanies.com	781-792-2283
John Morgan	CHA	JMorgan@chacompanies.com	781-782-5437
Rick Wall	Pembroke Police	RWall@pembrokepolice.org	781-293-7112
Lew Stone	Pembroke Selectman	LStone198@comcast.net	781-826-6672
Jim Neenan	Pembroke Fire	JNeenan@pembrokefire.org	781-293-2300
Bill McNulty	OCPC	WMcNulty@ocpcrpa.org	508-583-1833

Appendix C. Detailed Crash Data



TYPE OF ACCIDENT	
1 REAR-END	
2 HEAD-ON	
3 SIDESWIPE	
4 OVERTURNED	
5 FIXED-OBJECT	
6 ANGLE	
7 PARKED CAR	
8 OUT OF CONTROL	
# - Collision Diagram Reference Number	

WASHINGTON STREET (RTE. 53) AT PLEASANT ST.

TOWN OF PEMRBOKE, MA

2011 - 2013

TOTAL ACCIDENT REPORTS - 25

TOTAL ACCIDENTS - 25



101 Accord Park Drive
Norwell, MA 02061
Main: (781) 982-5400 • www.chacompanies.com

TITLE:
COLLISION DIAGRAM
WASHINGTON ST.
(RTE. 53) AT
PLEASANT ST.

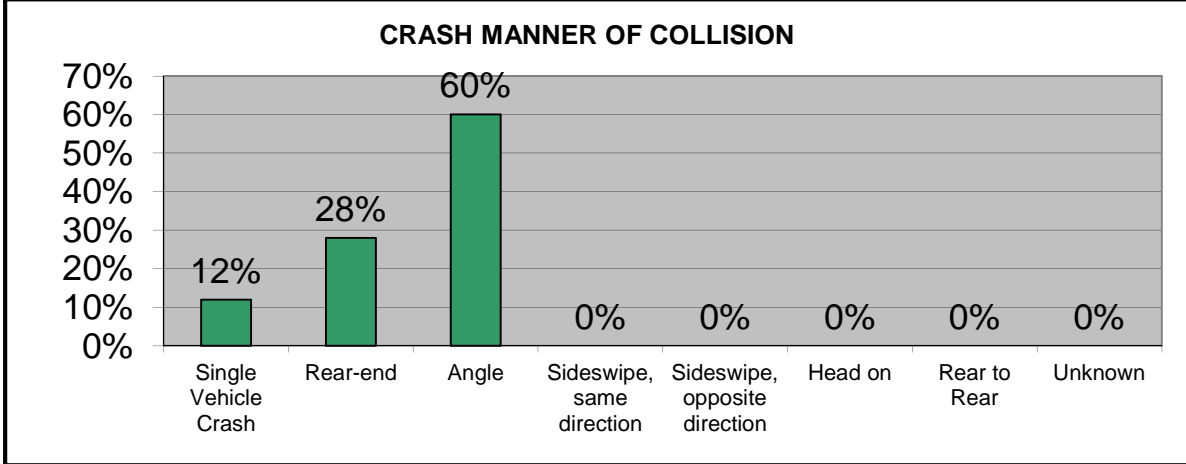
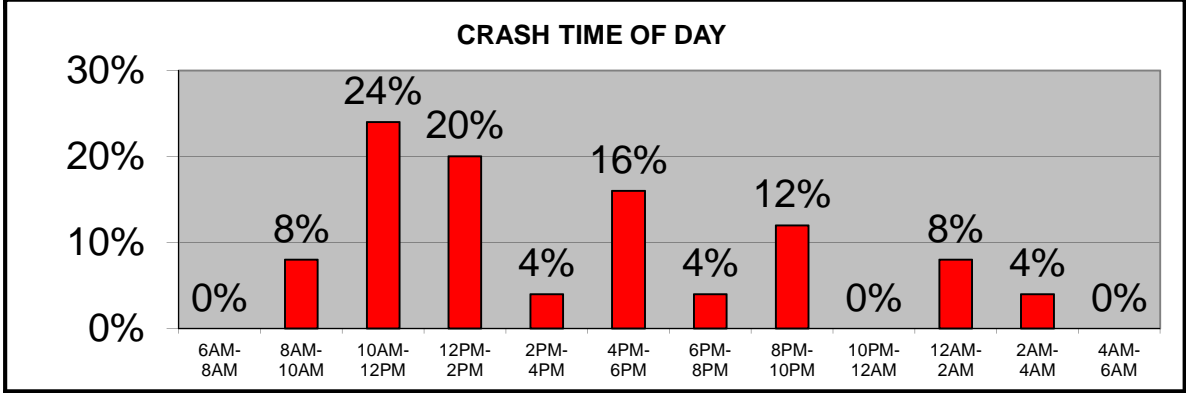
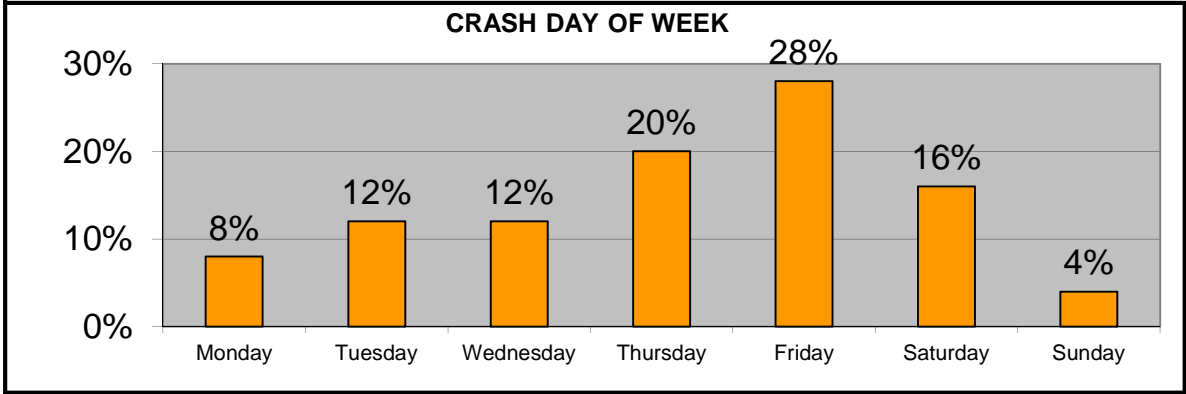
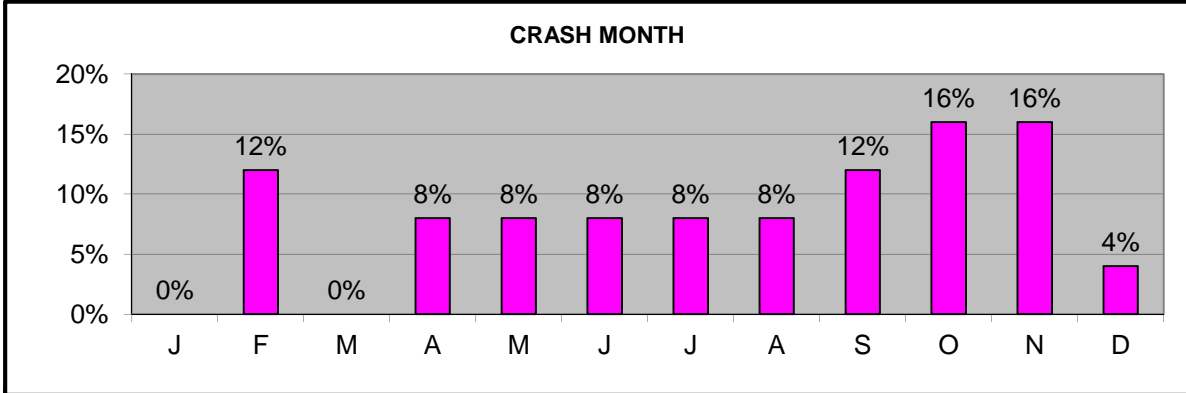
DATE: MAY 2014

Crash Data Summary Table

WASHINGTON STREET (RTE. 53) AT PLEASANT STREET, PEMROKE, MA
2011 - 2013

Crash Diagram Ref #	Crash Date m/d/y	Crash Day	Time of Day	Manner of Collision Type	Light Condition Type	Weather Condition Type	Road Surface Type	Driver Contributing Code Type	Ages				Accident Report Narrative
									D1	D2	D3	D4	
1	2/5/11	Saturday	3:41 AM	Single Vehicle Crash	Dark - lighted roadway	Clear	Dry	Operating Vehicle in erratic, reckless, careless, negligent, or aggressive manner	44				Driver, operating under the influence of alcohol, failed to successfully navigate a left turn onto Pleasant and collided with guardrail
2	4/13/11	Wednesday	4:25 PM	Angle	Daylight	Rain	Wet	Failed to yield right of way	59	56			Driver thought she had enough time to pull out of Pleasant and make a left turn
3	4/26/11	Tuesday	11:18 AM	Rear-end	Daylight	Clear	Dry	Inattention	21	50	53		
4	6/17/11	Friday	11:09 AM	Rear-end	Daylight	Rain	Wet	No Improper Driving	51	47			Driver was about to turn left onto Pleasant and decided to go straight and was rear ended by a vehicle attempting to pass on the right
5	6/25/11	Saturday	12:59 AM	Single Vehicle Crash	Dark - lighted roadway	Clear	Dry	Operating Vehicle in erratic, reckless, careless, negligent, or aggressive manner	18				Driver, operating under the influence of alcohol, failed to stop at STOP sign on Pleasant and collided with two fences at #331 Washington
6	7/6/11	Wednesday	1:07 PM	Angle	Daylight	Clear	Dry	Failed to yield right of way	19	65			Driver believed the vehicle traveling north on Washington had right turn signal on to turn onto Pleasant and collided with the NB vehicle when attempting a left onto Washington
7	8/18/11	Thursday	8:13 PM	Angle	Dark - lighted roadway	Clear	Dry	Failed to yield right of way	34	57			
8	9/15/11	Thursday	4:54 PM	Angle	Daylight	Cloudy	Wet	Distracted	29	25			Driver believed the vehicle traveling north on Washington had right turn signal on to turn onto Pleasant and collided with the NB vehicle when attempting a left onto Washington
9	10/27/11	Thursday	1:19 PM	Angle	Daylight	Rain	Wet	Inattention	48	30			Driver did not see a NB vehicle on Washington and collided with the vehicle while attempting a left turn onto Washington
10	11/4/11	Friday	8:23 PM	Angle	Dark - lighted roadway	Clear	Dry	Failed to yield right of way	47	72	22		Driver failed to use directional signal and yield to the right of way while attempting a left onto Pleasant
11	11/7/11	Monday	10:38 AM	Angle	Daylight	Clear	Dry	Failed to yield right of way	63	61			A NB vehicle on Washington stopped to let the a vehicle make a left turn from Pleasant but then proceeded straight through the intersection and collided with the vehicle attempting the left turn from Pleasant
12	11/11/11	Friday	3:20 PM	Rear-end	Daylight	Clear	Dry	Inattention	49	35			Vehicle stopped to make a left onto Pleasant rear ended by SB thru traffic
13	2/22/12	Wednesday	4:25 PM	Angle	Daylight	Clear	Dry	Failed to yield right of way	68	20			Driver thought he had enough time to pull out of Pleasant and make a left turn
14	5/18/12	Friday	8:37 PM	Rear-end	Dark - lighted roadway	Clear	Dry	Inattention	23	51			Vehicle stopped to make a left onto Pleasant rear ended by SB thru traffic
15	9/22/12	Saturday	1:00 AM	Single Vehicle Crash	Daylight	Cloudy	Wet	Operating Vehicle in erratic, reckless, careless, negligent, or aggressive manner	31				
16	10/21/12	Sunday	1:12 PM	Angle	Daylight	Clear	Dry	Failed to yield right of way	54	20			Two NB vehicles on Washington Street made right turns onto Pleasant. Driver attempted to make a left turn from Pleasant and collided with a third NB vehicle going straight thru the intersection
17	11/20/12	Tuesday	12:01 PM	Angle	Daylight	Clear	Dry	Inattention	43	18			A NB vehicle on Washington had right blinker on to turn onto Pleasant but changed her mind at the last moment, colliding with a vehicle attempting a left from Pleasant
18	2/15/13	Friday	10:12 AM	Rear-end	Daylight	Clear	Dry	Inattention	89	44			
19	5/17/13	Friday	5:50 PM	Angle	Daylight	Clear	Dry	Inattention	19	19			
20	7/8/13	Monday	12:58 PM	Angle	Daylight	Clear	Dry	Failed to yield right of way	77	18			The vehicle traveling north on Washington had right turn signal on to turn onto Pleasant but proceeded straight and collided with the NB vehicle when attempting a left onto Washington
21	8/16/13	Friday	6:34 PM	Angle	Daylight	Cloudy	Wet	Other improper action	21	71			Driver believed the vehicle traveling north on Washington had right turn signal on to turn onto Pleasant and collided with the NB vehicle when attempting a left onto Pleasant
22	9/3/13	Tuesday	8:21 AM	Rear-end	Daylight	Clear	Dry	Inattention	79	28			
23	10/3/13	Thursday	8:51 AM	Angle	Daylight	Clear	Dry	Failed to yield right of way	83	66			
24	10/31/13	Thursday	10:29 AM	Angle	Daylight	Clear	Wet	No Improper Driving	25	56			
25	12/14/13	Saturday	11:39 AM	Rear-end	Daylight	Cloudy	Dry	Operating defective equipment	50	32			Driver stated his brakes failed when attempting to stop for a vehicle already stopped at the Pleasant St. intersection

Crash Data Summary Tables and Charts
 WASHINGTON STREET (RTE. 53) AT PLEASANT STREET, PEMROKE, MA



Crash Data Summary Tables and Charts
 WASHINGTON STREET (RTE. 53) AT PLEASANT STREET, PEMROKE, MA

