



CAPE COD
COMMISSION

Town of Wellfleet Road Safety Audit Route 6 at Main Street

December 2016



**Prepared by the Cape Cod Commission in cooperation with the Town of Wellfleet, and
MassDOT Highway Division Traffic Safety and District 5 Offices.**



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Background

All levels of government— local, regional, state, and federal—have been considering locations where crashes are most severe for many years. Several years ago the national consensus was that there should be goals to reduce crashes, and in the 2005 federal legislation: Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), there was more emphasis on improving highway safety along with a dedicated funding program—the Highway Safety Improvement Program (HSIP). The latest federal legislation: Fixing America’s Surface Transportation (FAST), signed into law on December 4, 2015, retains the Highway Safety Improvement Program (HSIP) as one of its core highway programs.

In an effort to reduce the number of crash-related fatalities and incapacitating injuries, Massachusetts developed a Strategic Highway Safety Plan in 2006. The mission of the Safety Plan is to “Develop, promote, implement, and evaluate data-driven, multidisciplinary strategies to maximize safety for users of the roadway system.” One of the many strategies noted in the Safety Plan is to “conduct Road Safety Audits at high-crash locations throughout the Commonwealth.” MassDOT incorporated the Road Safety Audit as a requirement for securing Federal funding (Highway Safety Improvement Program [HSIP] funds) for safety projects.

The Federal Highway Administration (FHWA) defines a Road Safety Audit as the formal safety examination of an existing or future road or intersection by an independent, multidisciplinary team. The purpose of a Road Safety Audit is to identify potential safety issues and possible opportunities for safety improvements while considering all roadway users.

The Cape Cod Commission, serving as the regional planning agency for the fifteen towns on Cape Cod, has reviewed many transportation locations over the years during various processes, including the Regional Transportation Plan, the Transportation Improvement Program, and Developments of Regional Impact, considering the existing safety issues and potential improvements. In addition, the CCC began looking at specific safety locations annually through safety studies and Road Safety Audits. A portion of the federal HSIP funds are allocated for improvements to the region’s highest crash locations.

Introduction

The Town of Wellfleet has 2,750 residents as of the 2010 United States Census of Population, and is the second least populous of the fifteen towns on Cape Cod over an area of 35 square miles. The town gained a population of one person from year 2000 to 2010 in the United States Census of Population, and is the 281st most populous of Massachusetts’ 351 cities and towns. The town is part of the Barnstable urbanized area (UZA), the fourth most populous following Boston, Springfield, and the Worcester UZA.



Wellfleet is the home of a historic village center, Atlantic coast and Cape Cod Bay beaches, the Cape Cod National Seashore, and quaint residential areas. During the summer months there is a substantial increase in activity with the arrival of visitors as well as through-travelers. The Commission performed the Wellfleet Route 6 Safety Study in 2012 which included a preliminary analysis of the safety issues at this intersection among others. This report is available on the Commission's web site at:

http://www.capecodcommission.org/resources/transportation/2012-Wellfleet-Rt6_12272012.pdf

An ongoing study by the Cape Cod National Seashore and the Cape Cod Commission is examining the potential options to extend the Cape Cod Rail Trail from its current northern terminus in South Wellfleet to MacMillan Pier in Provincetown. This study includes a review of potential routes for the "spine" as well as connections to attractions along the way such as village centers and beaches. This intersection is an important component of potential plans for both the spine as well as east-west connections that may use Cahoon Hollow Road. More information about the study, known as the Outer Cape Bicycle & Pedestrian Master Plan, is available on the Cape Cod Commission's website at: www.capecodcommission.org/ocbpmp

In 2015, Town of Wellfleet officials approached Cape Cod Commission staff to request a Road Safety Audit at the intersection of Route 6 and Main Street.

Project Data

Crash reports were requested from the Town of Wellfleet for this Road Safety Audit and were supplied by the Wellfleet Police Department. The crash data were reviewed and a collision diagram was developed (see appendix).

From the reports provided by Wellfleet Police Department, 21 crashes were found to be at the location for the years 2011-2013 with 16 property damage only, five injury crashes, and no fatal crashes. The resulting Equivalent Property Damage Only (EPDO) is 41. EPDO is an indicator of overall severity; Property Damage Only crashes are scored with a value of 1, Injury crashes are scored with a value of 5, and Fatality crashes are scored with a value of 10.

Of the 21 crashes from 2011-2013, over half (57%) were turning movement/angle crashes, 29% were rear-end. There were two (9%) fixed-object crashes. In 2013 there was a fatal crash to the south of the study area, about 100 south of Pine Point Road. The victim was a 16-year old cyclist struck by a southbound vehicle while crossing Route 6.

CCC staff also prepared reports of the traffic volume data. Turning Movement Counts (TMCs) were performed for this intersection as well as Route 6/Cahoon Hollow Road in August and September of 2015. Traffic on Route 6 in Wellfleet varies greatly throughout



the year, peaking during the summer months as visitors travel to Wellfleet and through town to Truro and Provincetown to the north.

The collision diagram and the traffic count data are included in the appendices.

Multidisciplinary Team

The Road Safety Audit was scheduled with representatives of the Massachusetts Department of Transportation (MassDOT), town officials, and representatives of other stakeholders. The Road Safety Audit meeting was held on March 30, 2016, beginning at 1:00 p.m., at the Wellfleet Fire Department. The multidisciplinary team also visited the site during the Road Safety Audit meeting, and then reconvened at the fire department's conference room.

Audit Team Member	Agency / Affiliation
Ronald Fisetete	Wellfleet Police Department
Richard Pauly	Wellfleet Fire Department
Thomas Ferreira	Wellfleet Fire Department
Brian Carlson	Wellfleet Administration
Mark Vincent	Wellfleet Department of Public Works
Suzanne Thomas	Town of Wellfleet
Peter Doolittle	Cape Cod Regional Transit Authority
Pamela Haznar	MassDOT Highway Div.– District 5
Barbara Lachance	MassDOT Highway Div.– District 5
Richard Madsen	MassDOT Highway Div.– District 5
John Mastera	MassDOT Highway Div./Safety
Leah Nesbitt	MassDOT Highway Div.
Mohammad AbuArja	MassDOT
Douglas Prentiss	Stantec
Steven Tupper	Cape Cod Commission
Lev Malakhoff	Cape Cod Commission



Project Location and Description

Route 6 at Main Street in Wellfleet is a four-way signalized intersection shown on the locus map in Figure 1. In this area of Cape Cod Route 6 travels in a generally north-south orientation between Provincetown and Orleans. Main Street travels from Route 6 to the west to serve the village center of Wellfleet. A driveway on the eastern side of the intersection serves a commercial parcel currently occupied by a pharmacy.

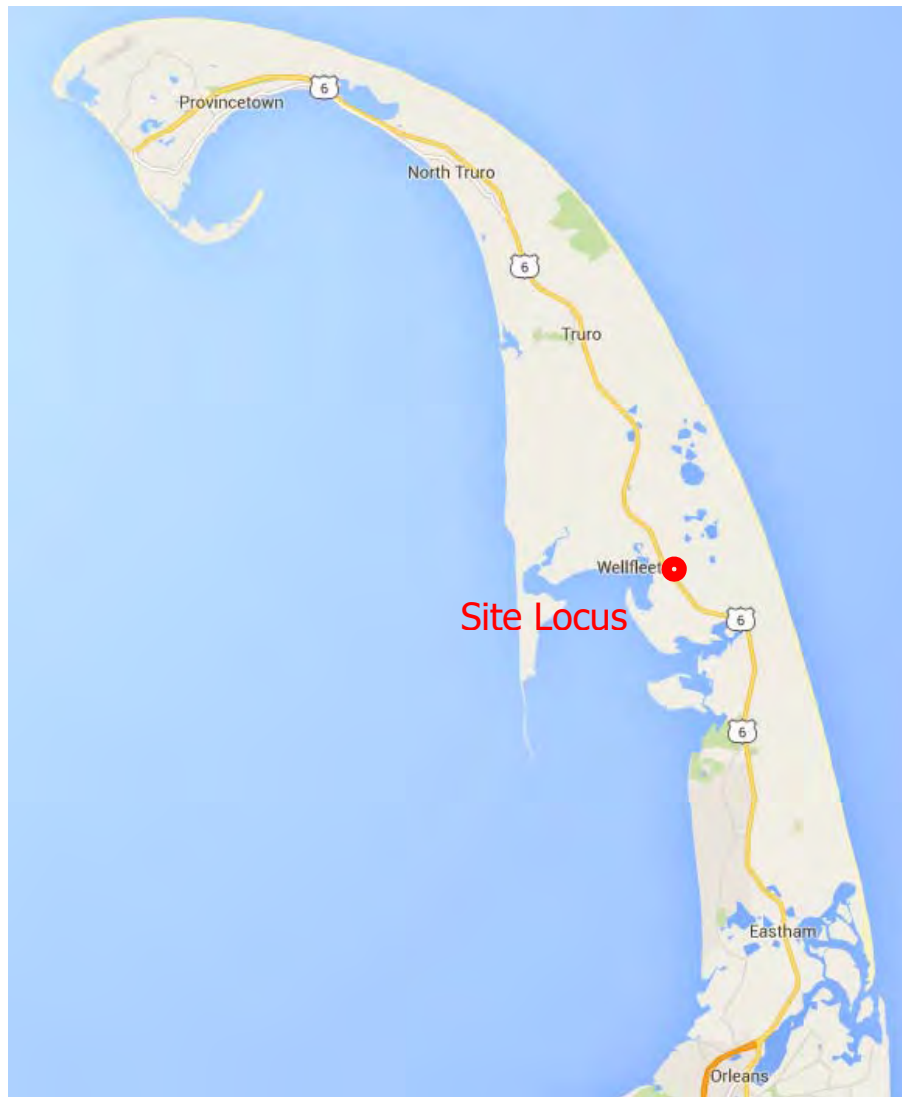


Figure 1 - Locus Map

Figure 2 shows a close-up view of the intersection. Northbound Route 6 consists of a left-turn-only lane, a through-lane, and a through/right-turn lane. Southbound Route 6



consists of a through/right-turn lane and a through/left-turn lane. Main Street is a two-lane road, in the vicinity of the intersection widening occurs to allow for separate turning movements. While not shown in the aerial photo, there is a right-turn pavement marking on the Main Street approach. The commercial driveway is served by a single multi-purpose lane approaching the intersection. There are no pedestrian push buttons at the traffic signal, nor any crosswalks.



Figure 2 – Close Aerial View of Route 6/Main Street Intersection

Figure 3 on the following page shows a larger-scale aerial of the study location. As shown in this view, Route 6 to the north of the study area is a two-lane roadway; southbound Route 6 transitions to a four-lane roadway in the vicinity of Old Kings Highway. Likewise, Route 6 to the south of the study area is a two lane roadway and begins its transition to a five-lane cross section from the south of Cahoon Hollow Road.

Cahoon Hollow Road forms an important connector for cyclists and pedestrians traveling from Main Street to the Cape Cod National Seashore and Atlantic beaches.



Figure 3 – Large-scale aerial view of Route 6 at Main Street intersection



Road Safety Audit

On Wednesday, March 30, 2016 the Road Safety Audit Team met at the Wellfleet Fire Department for a discussion of the existing conditions, visited the site for field observations, and returned to discuss the safety issues at the location. The summary crash data, a collision diagram, and traffic volume reports were brought to the Road Safety Audit team meeting, and are included in the Appendices.



Figure 4 - View looking north, showing lane configuration

The following safety issues were identified through the site visit and discussions with the Road Safety Audit team. Each safety issue area is examined through observations and potential enhancements.



Safety Issue #1. Multi-modal Accommodations

Observations:

Bicyclist and pedestrian accommodations are essentially non-existent within the study area. There are no sidewalks along any of the study area roadways. The study team noted throughout the intersection the existence of “goat paths” (evidence of pedestrians traveling along the roadways on unimproved surfaces). Team members with local knowledge noted that many bicyclists and pedestrians travel along the south side of Main Street and turn right at the intersection, staying along the west side of Route 6 destined for residential areas, commercial establishments, and to eastern areas via Cahoon Hollow Road. Pedestrians traveling between Main Street and the pharmacy do have the benefit of the median island that can be used as a pedestrian refuge while crossing Route 6. Many pedestrians and bicyclists have been observed crossing Route 6 to access Cahoon Hollow Road and various other destinations - some at their peril as evidenced by a 2013 fatality of a bicyclist crossing about 100 feet south of the gas station (about a quarter-mile south of the Main Street/Route 6 intersection).

The potential for danger to bicyclists and pedestrians is demonstrated by the damaged guardrail observed on the northwest quadrant of the intersection; additionally, the height of this guardrail appears too low. Team members noted that travel speeds on Route 6 can be excessive especially in such close proximity to pedestrians and bicyclists.

This intersection has also been identified as a potential key component in the Outer Cape Bicycle & Pedestrian Master Plan (currently underway by the Cape Cod National Seashore and Cape Cod Commission). One of the challenges to providing bicycle/pedestrian accommodations in the area is the proximity of the cemetery along the east side of Route 6 between Main Street and Cahoon Hollow Road.



Figure 5 - Cyclist traveling from Main Street to southbound Route 6



The Cape Cod Regional Transit Authority (RTA) does not provide a scheduled bus stop at this location (there is no flag service in this region of Cape Cod) for the “Flex” bus service which travels through this intersection. However, the RTA representative participating in the audit mentioned that passengers might disembark at this location upon special request (specifically, at the pharmacy on the east side of the intersection).

Potential Enhancements:

Install crosswalks; signal upgrade to include pedestrian phase.

Provide pedestrian & bicycle accommodations along Route 6 between Main Street and Cahoon Hollow Road. This may include sidewalk and bicycle accommodating shoulders and/or separated share-use path.

Provide bicycle accommodating shoulders along Route 6 north of Main Street and south of Cahoon Hollow Road.

Repair damaged guardrail and reset the existing guardrail to the standard height.

Safety Issue #2. Pavement Markings & Signage

Observations

Pavement markings seem to be in reasonable condition, however, sand and debris are obscuring a fair amount of the markings along the east side of Route 6. Participants also noted that there were no guide signs on the approach to Route 6 from Main Street and felt that a guide sign may help to convey to motorists that they will be entering a major arterial roadway, and also for general wayfinding.



Figure 6 - Edge line markings obscured by sand

Team members noted the unusual guidance provided by the “right-turn-only” symbol installed on the right-hand side of the Main Street approach; however no lane markings are provided at this approach (see Figure 7).



Figure 7 - Looking west toward Main Street approach

Retroreflectivity of signs was considered to be very poor especially on some of the signs installed in the median of Route 6. The height of some of the signs seemed to be too low and had the potential to block sight lines (see Figure 8).



Figure 8 - Looking east from Main Street - note low height of "Keep Right" signs

Traveling north from Main Street, Route 6 is reduced from four lanes to two but there is no merge signage. There is no “keep right” signage on the entrance to Main Street from Route 6 on the signal post in the splitter island.

Potential Enhancements

Include “through/left-turn” pavement marking on Main Street approach separated by single white line from existing “right-turn only” marking.

Update pavement markings with retro-reflective materials.

Assess correct sign height and positioning, replace as needed with retroreflective signage.

Install merge signage on Route 6 northbound north of Main Street.

Install “keep-right” signage on entrance to Main Street.

Safety Issue #3. Intersection Control

The team’s local members noted that the Main Street approach’s detectors do not sense vehicles waiting to turn right. This has resulted in motorists who are unfamiliar with the signal phasing to wait for very long times (perhaps uncomfortable with making a right turn during the red phase), finally proceeding only after a Main Street vehicle activates the signal by attempting a left turn or through movement. These conditions may have



been contributing causes to rear-end collisions as shown on the collision diagram in the appendix.

In general, team members noted that the overall quality of the signal equipment was considered “antiquated:” signal heads seemed small (perhaps due to the lack of backplates), housing posts were obstructions to sight lines and median hazards. Newer signal heads (installed recently in response to a damaged mast arm) do not have back plates.

A lack of a protected left-turn phase for southbound Route 6 vehicles forces motorists to make risky left-turns on occasions when sight lines are obstructed (see more discussion in the next Safety Issue).

The current signal does not have emergency preemption and it was noted that this location is in close proximity to the fire and police department and therefore a frequently used intersection during calls to points south.

Potential Enhancements

Install or upgrade loop detectors on all approach lanes.

Install retroreflective backplates on signal housings

Update signal equipment (remove post-mounted and install overhead signal housings)

Provide protected right-turn phase for Main Street during Route 6 northbound left-turn phase. This could be implemented in the interim with replacement of the right-most signal housing and some reworking of the signal phasing (if possible).

Install signal-preemption (e.g., Opticom) to give priority to emergency vehicles.

Safety Issue #4. Obstructions

Observations

As noted in above safety issues, there are a number of intersection control elements (signs, signal housing poles) that interfere with sight lines. The most serious obstruction to sight lines occurs when the northbound Route 6 left-turn lane is occupied. Southbound motorists waiting to turn left into the pharmacy cannot identify safe gaps in the northbound traffic stream to complete their maneuver. This is evidenced by the five left-turn angle crashes (two involving injuries) at this location (as shown in the collision diagram in the appendix). Additionally, southbound motorists’ view of the signals is briefly blocked by a large tree at the edge of the roadway.



Figure 9 - Looking south -note oncoming left turn lane (when occupied) obscures view of southbound left-turning motorists

Another visual defect is the elevation of the overhead utility cables, some of which may interfere with a motorist's view of the signal housings (see Figure 10). The location of the signal control box in combination with vegetation and a guide sign obscures the view from motorists entering the intersection from the pharmacy.



Figure 10 - Potential obstructed view of signal housings due to utility cables

Potential Enhancements

During intersection upgrade, remove post-mounted signal housings and replace with overhead housings; add left-turn phase for southbound Route 6; add left-turn lane/signal phase for southbound Route 6 (to eliminate the hazard caused by northbound left-turning vehicles obscuring the view of southbound left-turning motorists).

Investigate increasing elevation of utility cables.

Relocate/elevate signage.

Safety Issue #5. Pavement Conditions & Drainage

Observations

A number of pavement distresses were observed throughout the study area including weathering, spalling, transverse and longitudinal cracking. Paving material loss is so great that portions of the signal loop detectors are exposed.

Areas of the intersection showed evidence of ponding and rutting which could contribute to hydroplaning such as in the northwest quadrant. Uneven settling of pavement was noted by the varying curb reveal in the area.



Figure 11 - Example of pavement distress

Potential Enhancements

During intersection upgrade, full-depth pavement reconstruction and resetting of curbing.

Safety Issue #6. Auxiliary Lanes & Local Access Issues

Observations

The team noted that Route 6 drivers often take advantage of the additional lanes in the intersection to pass slower drivers since Route 6 north and south of the intersection is a two-lane road with limited passing opportunities. For northbound drivers (see aerial view in Figure 12) the total pavement width begins to increase south of Cahoon Hollow Road, eventually accommodating two through lanes and a dedicated left-turn lane. Through travelers designated for points north occasionally will “race” the vehicle in the adjacent lane.



Figure 12 - Aerial view of Route 6 south of Main Street (north to left)

This same phenomenon occurs for southbound vehicles (see aerial view in Figure 13). The “racing” phenomenon is occasionally complicated by vehicles waiting to turn left into the pharmacy.



Figure 13 - Aerial view of Route 6 north of Main Street (north to left)

The number of access points to the commercial parcel on the southeast quadrant of the Route 6/Cahoon Hollow Road intersection is excessive. There are two unrestricted driveways onto Route 6 in the vicinity of the merge/diverge area and a wide driveway on Cahoon Hollow Road very close to the Route 6 travel lanes.

Another conflict occurs due to southbound Route 6 vehicles waiting to turn left into Cahoon Hollow Road – at an area that is already constrained by the lane reduction of through vehicles from two lanes to one. The study team also noted the difficulty that motorists turning left out of Cahoon Hollow Road can result in significant queueing. This has caused some travelers to turn right from Cahoon Hollow Road and then execute a U-turn maneuver at the Main Street intersection. U-turns are currently not restricted at this location.

The Route 6 northbound left-turn lane appears to be narrow. Team members have observed motorists making U-turns on this approach, possibly by travelers unfamiliar with this area who latently decided to go back to a business after passing it by.



Potential Enhancements

Restripe Route 6 southbound to accommodate a left turn storage area at Cahoon Hollow Road.

Reduce number of access drives and improve channelization to parcel on southeast quadrant of Route 6/Cahoon Hollow Road.

Evaluate the need for two through lanes (reduction to one lane in each direction should result in lower speeds).

Summary of Road Safety Audit

The summary list of the Road Safety Audit observations and enhancements is provided in Table 1 to assist in the design and/or implementation of potential improvements elicited during the process. It is also recommended that any design process for more involved geometric changes include further analysis and public input.

Safety payoff estimates are subjective and may be based on the relative percent of crashes that may be reduced by the enhancement based on known and documented crash reduction factors, if available, or estimated crash reduction based on a stated source [for example, low (<30%), medium (31% to 70%), and high (>71%)]. The time frame is categorized as short-term (<1 year), medium-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).

Table 1 - Potential Safety Enhancement Summary

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Responsible Agency
Multi-modal accommodations	Install crosswalks; include pedestrian phase	High	Medium	High	MassDOT with local input
	Bicycle & pedestrian accommodations along Rt 6 S. of Main St (sidewalks & shoulders or separated path)	High	Medium	High	
	Shoulders along Rt 6 north of Main St	Medium	Medium	Medium	
Pavement markings & signage	Add through/left turn and lane separation marking on Main St	Low	Short	Low	MassDOT with local input
	Update markings with retro-reflective materials	Medium	Short	Medium	
	Install retro-reflective signage at correct height	Medium	Medium	Medium	
	Install merge signage on northbound Rt 6 north of Main St	Low	Short	Low	
	Install "keep right" signage on entrance to Main St	Low	Short	Low	
Repair damaged guardrail and reset the existing guardrail to the standard height.	Low	Medium	Low		
Intersection control	Install/upgrade loop detectors	Low	Medium	High	MassDOT with local input
	Install retroreflective backplates on signal housings	Medium	Short	Low	
	Upgrade signal equipment	Medium	Medium	High	
	Provide protected right-turn phase for Main St	Low	Medium	Low	
Obstructions	Install signal preemption (Opticom)	Low	Medium	Medium	MassDOT with local input
	Remove post-mounted signal housings	High	Medium	High	
	Increase elevation of utility cables	Low	Medium	Medium	
Pavement conditions & drainage	Elevate signage	Medium	Short	Low	MassDOT with local input
	Full-depth pavement reconstruction and resetting of curbing	Low	Medium	High	
Auxiliary lanes & local access issues	Restripe Rt 6 southbound for left-turn lane at Cahoon Hollow Rd	Medium	Medium	Medium	MassDOT with local input
	Reduces number of access drives and improve channelization on parcel south of Cahoon Hollow Rd	Medium	Medium	Medium	
	Evaluate the need for two through lanes in each direction	t.b.d.	t.b.d.	t.b.d.	



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Appendix A

Road Safety Audit Meeting Agenda

3225 MAIN STREET • P.O. BOX 226
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Road Safety Audit (RSA) Meeting

Wellfleet: Intersection of Route 6 at Main Street

Wednesday, March 30, 2016

1:00 p.m. – 3:00 p.m.

Location: Wellfleet Fire Department – Conference Room
10 Lawrence Road, Wellfleet MA 02667

1:00 p.m. Welcome and Introductions

1:10 p.m. Review of Site-Specific Material

- Crash and Traffic Volume Summaries
- Existing Geometries and Conditions

1:30 p.m. Visit the Site (Group)

- Assemble as a group at the site for observation of conditions
- As a group, identify areas for improvement

2:15 p.m. Post-Visit Discussion at Meeting Room / Completion of RSA

- Discuss observations and finalize on-site findings
- Discuss potential improvements and draft recommendations

3:00 p.m. Adjourn

Next Steps: After the RSA meeting, CCC staff will prepare a draft document and circulate it to participants. Participants will be asked to comment and respond to the draft document to assure that it is reflective of the RSA completed by the multidisciplinary team. With comments submitted, a final document is then produced; the final document is expected to be available within three weeks of the RSA.





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Appendix B

Road Safety Audit Team Contact List

Participating Audit Team Members

Audit Team Member	Agency / Affiliation	Email Address
Ronald Fisetle	Wellfleet Police Department	ronald.fisetle@wellfleet-ma.gov
Richard Pauly	Wellfleet Fire Department	rich.pauley@wellfleet-ma.gov
Thomas Ferreira	Wellfleet Fire Department	
Brian Carlson	Wellfleet Administration	bcarlson@wellfleet-ma.gov
Mark Vincent	Wellfleet Department of Public Works	mark.vincent@wellfleet-ma.gov
Suzanne Thomas	Town of Wellfleet	suzanne.thomas@wellfleet-ma.gov
Peter Doolittle	Cape Cod Regional Transit Authority	pdoolittle@capecodrta.org
Pamela Haznar	MassDOT Highway Div. – District 5	pamela.haznar@state.ma.us
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John Mastera	MassDOT Highway Div./Safety	john.mastera@state.ma.us
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Steven Tupper	Cape Cod Commission	stupper@capecodcommission.org
Lev Malakhoff	Cape Cod Commission	lmalakhoff@capecodcommission.org

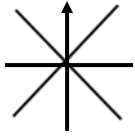


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Appendix C

Collision Diagram & Crash Report Summary

Collision Diagram



Indicate North by arrow

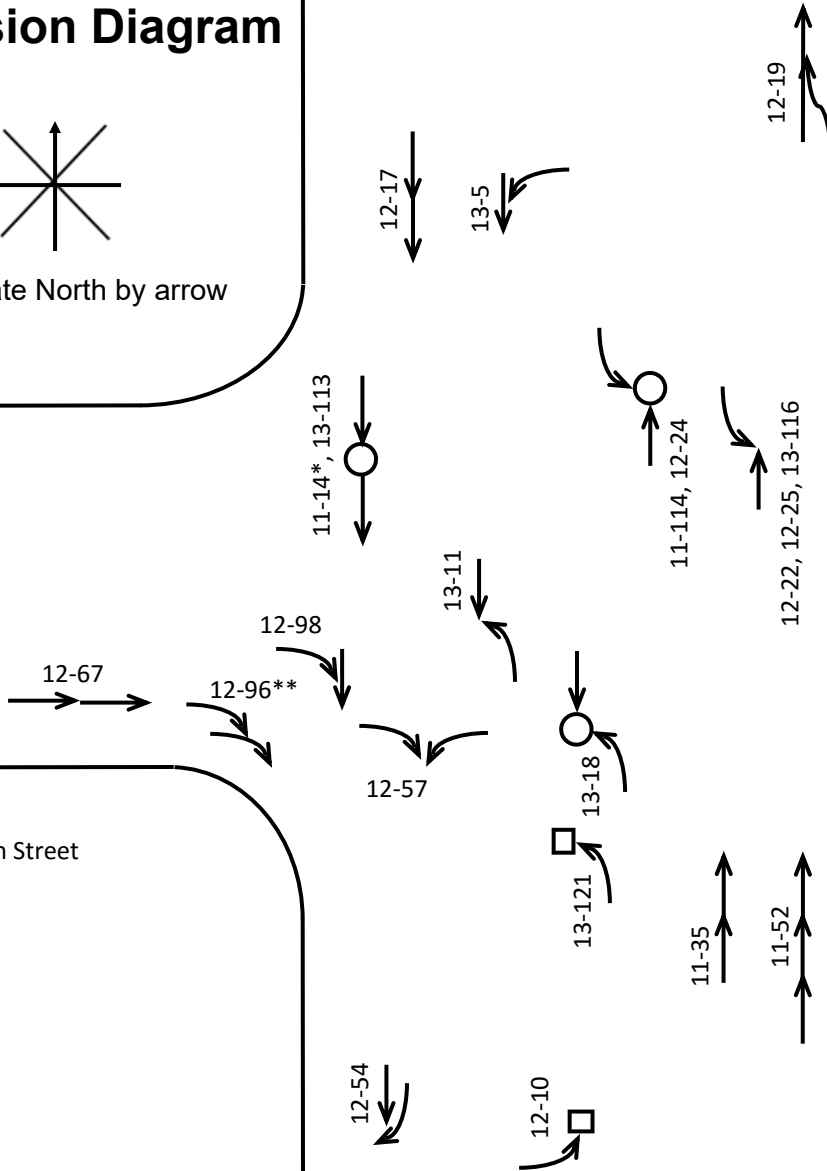


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Name: Commercial Driveway

Name: Main Street

Name: Route 6



SYMBOLS

- Moving Vehicle
- Backing Vehicle
- Non-involved Vehicle
- Pedestrian
- Bicyclist
- Parked Vehicle
- Fixed Object
- Fatal Crash
- Injury Crash

TYPES OF COLLISIONS

- Rear-End
- Head On
- Side Swipe
- Out of Control
- Turning Movement
- Right Angle

CRASH INFORMATION Each crash is labeled with a Crash# and additional information is included on the crash summary.

Notes:
*11-14 - "Road Rage" Incident
**12-96 - "Impatience" Incident

Total Crashes:	21
Injury Crashes:	5
Fatality Crashes:	0

INTERSECTION: **Route 6 AND Main Street** (Wellfleet)

CRASHES FROM 2011 TO 2013

Analysis prepared: 2/15/2016

Crash #	DATE	TIME	INJURY	NOTES	MAPPED
11 - 14	2/10/11	1339	X	<p>INTERVIEWS WITH BOTH PARTIES INDICATED A POSSIBLE "ROAD RAGE" INCIDENT BETWEEN BOTH DRIVERS. BOTH DRIVERS GAVE CONFLICTING STORIES ABOUT TRAVELLING SOUTH ON ROUTE 6 FROM TRURO INTO WELFLEET, BOTH DRIVERS STATED ONE OR THE OTHER DRIVER KEPT BREAKING HARD AND THEN SPEEDING AHEAD OR TAILGATING. ONCE IN WELFLEET, DRIVER #2 APPARENTLY BRAKED IN TRAFFIC AS SHE TRAVELLED THROUGH THE MAIN STREET LIGHTS INTERSECTION ON ROUTE 6. DRIVER #1 FAILED TO RECOGNIZE THE SLOWING TRAFFIC AND STRUCK VEHICLE #2 IN REAR BUMPER. MINOR DAMAGE TO REAR BUMPER OF VEHICLE #2. NO DAMAGE TO VEHICLE #1. INJURIES REPORTED BY DRIVER #2. DRIVER #2 TRANSPORTED TO CAPE COD HOSPITAL. DRIVER #1 CITED FOR FOLLOWING TOO CLOSE. (ammended 4/5/2011; adjusted vehicle #)</p>	X
11 - 35	6/2/11	1446		<p>Vehicle #1 was traveling northbound on Route Six when vehicle #2 came up behind the vehicle too quickly and struck the rear end of vehicle #1. Operator of vehicle #2 did not realize she hit vehicle #1 and continued to travel north. Officers were able to locate vehicle #2 and observed the damage to the front end. Vehicle #1 had rear end damage.</p>	X
11 - 52	7/7/11	1652		<p>All three vehicles were travelling northbound on Rt. 6. Vehicle #1 slowed due to the flow of traffic, which caused vehicle #2 to slow as well. Vehicle #3 was unable to slow in time and made major contact with the rear end of vehicle #2, which then forced vehicle #2 into the rear end of vehicle #1.</p>	X
11 - 114	9/19/11	1415	X	<p>BOTH VEH 1 AND VEH 2 HAD GREEN LIGHTS, HOWEVER THERE IS NO DESIGNATED LEFT TURN LANE OR LIGHT FOR VEH 2 AND THEREFORE VEH 2 MUST SAFELY CROSS BOTH NB LANES TO GO TO THE PHARMACY LOT ONCE THE SB LIGHT IS GREEN IN CONJUNCTION WITH THE NB GREEN LIGHT. VEH 1 HAD THE RIGHT OF WAY AND VEH 2 IS CLEARLY AT FAULT...HOWEVER OPERATOR VEH 2 STATED THAT SHE COULD NOT SEE ONCOMING VEH 1 DUE TO STACKED LINE OF VEHICLES IN LEFT TURN LANE FOR MAIN STREET.</p>	X

Crash #	DATE	TIME	INJURY	NOTES	MAPPED
12-10	3/31/2012	1358		<p>EXITTED THE MOBIL GAS STATION AND MADE A LEFT TURN ONTO ROUTE 6. WHILE MAKING TURN HE WAS DISTRACTED BY ANOTHER VEHICLE HEADING SOUTH ON ROUTE 6 AND DID NOT SEE SIGN WHICH HE THEN STRUCK WITH FRONT OF HIS VEHICLE.</p>	X
12-17	5/19/2012	1846		<p>vehicle #1 struck from behind while slowing in traffic by vehicle #2. accident not investigated at scene. operator of vehicle #1 came to station to report the mva, the second operator did not report to the WPD. operator of vehicle #2 cited for following too closely.</p>	X
12-19	5/24/2012	2050		<p>Vehicle #1 was traveling north on Rte 6. Vehicle #2 was also traveling north on Rte 6 at Seamens Savings Bank. At this location on Rte 6, the two north bound lanes merge into one north bound lane. Vehicle #1 was slightly ahead of Vehicle #2 when vehicle #2 failed to yield the right of way causing vehicles to side swipe.</p> <p>damage to vehicle #1 right rear door, right rear quarter panel.</p> <p>damage to vehicle #2 left front quarter panel and bumper.</p> <p>MVA not investigated at scene. Parties came to WPD to report.</p>	X
12-22	5/30/2012	1304		<p>VEH 1 making left hand turn into parking lot. VEH 2 traveling straight on Route 6 North. VEH 2 had a green light. VEH 1 had a green light to yield to traffic. Turn lane was obstructed for VEH 1 and she failed to see the oncoming VEH 2. VEH 1 sustained damage to the right rear wheel and rear right side. VEH 2 sustained damage to its front end. There were no injuries.</p>	X
12-24	6/2/2012	1357	X	<p>PER INVESTIGATION AT THE SCENE THE DRIVER OF VEHICLE # 1 WAS SOUTHBOUND ON ROUTE 6 AND ATTEMPTING TO MAKE A LEFT TURN INTO THE CALLIS' COURTYARD COMPLEX. THE DRIVER OF VEHICLE # 2 WAS TRAVELLING NORTHBOUND ON ROUTE 6 THROUGH THE MAIN STREET INTERSECTION. BOTH VEHICLES HAD A GREEN LIGHT, HOWEVER, VEHICLE # 2 HAD THE RIGHT OF WAY AS VEH # 1 HAD TO CROSS ON COMING TRAFFIC. VEH # 1 FAILED TO YIELD TO THE APPROACHING MOTOR VEHICLE (VEH # 2). VEHICLE # 2 T-BONED VEH # 1 ON THE PASSENGER SIDE. VEH #1 ENDED UP UPSIDE DOWN IN THE ENTRANCE WAY OF CALLIS' COURTYARD. VEH # 2 ENDED UP ON THE GRASS AREA AT THE FRONT OF CALLIS' COURTYARD. ALL THREE PARTIES TRANSPORTED TO CAPE COD HOSPITAL WITH MINOR INJURIES. BOTH VEHICLES APPEAR TO BE A TOTAL LOSS. BOTH VEHICLES REMOVED FROM THE SCENE BY TIN KNOCKER TOWING.</p>	X
12-25	6/11/2012	1255		<p>OPERATOR OF VEHICLE #2 AT FAULT FOR FAILING TO YIELD RIGHT OF WAY TO VEHICLE #1. ALTHOUGH BOTH VEHICLES HAD A GREEN LIGHT, VEHICLE #2 FAILED TO USE CARE IN MAKING LEFT TURN IN FRONT OF VEHICLE #1.</p>	X
12-54	7/21/2012	1106		<p>Vehicle #1 was travelling Southbound in the left lane, while vehicle #2 was travelling Southbound in the right lane. Vehicle #1 then activated its right turn signal and attempted to make a right turn into a gas station (from the left lane). Vehicle #1 then side swiped the left front end of vehicle #2. This collision then forced vehicle #2 up on to the right curb of the road.</p>	X

Crash #	DATE	TIME	INJURY	NOTES	MAPPED
12-57	7/24/2012	1233		Vehicle #1 turning right onto Route 6 from Main Street. Vehicle #2 turning left onto Route 6 from Callis' Corner Parking Lot. Vehicles sideswiped each other attempting to merge into Route 6. Vehicle #1 sustained damage to its front quarter panel, hood and driver's side door. Vehicle #2 sustained damage to the entire length of its passenger side. There were no injuries.	X
12-67	8/2/2012	2203		Vehicle #1 was stopped at a red light, when Vehicle #2 bumped Vehicle #1 from the rear. Only scratches on the rear bumper of Vehicle #1 and minor scratches on the front bumper of Vehicle #2. No injuries reported.	X
12-96	9/9/2012	1335		both vehicles located in parking lot of wellfleet mobil station-not at accident location. investigation at the scene revealed that vehicle #1, which was behind vehicle #2 at the main street intersection with rt 6 attempted to enter rt 6 by driving around vehicle #2, vehicle #2 was also entering rt 6. vehicle #1 struck the rear and side of vehicle #2. operator of vehicle #1 admitted that the accident was caused by her impatience.	X
12-98	9/14/2012	1739		Responded to [REDACTED]'s residence to interview him since he called stating that his vehicle was just struck by an empty boat trailer being towed by a green truck, and that the truck failed to stop after the collision and he was unable to get the identifying registration. Investigation revealed that [REDACTED] was traveling south on RT6 and had right of way, when other vehicle made right on red cutting out in front of him. Truck & trailer took up both travel lanes, forcing [REDACTED] left up onto ctr island. Trailer struck right side of his vehicle damaging both doors and rear qtr panel. Damage documented and consistent with statement. [REDACTED] deemed credible and not at fault for collision. Other vehicle never located.	

Crash #	DATE	TIME	INJURY	NOTES	MAPPED
13-5	2/6/2013	1643		VEHICLE #1 EXITED OLD KINGS HWY. CROSSED THE DOUBLE SOLID LINE ON ROUTE SIX AND CAME INTO VEHICLE #2 LANE WHO WAS TRAVELING STRAIGHT AHEAD. THIS CAUSED VEHICLE #2 TO BREAK SUDDENLY BUT NOT SOON ENOUGH UNTIL HE RAN INTO VEHICLE #1 RIGHT REAR FENDER WITH HIS LEFT FRONT FENDER. THEIR WAS MINOR DAMAGE TO BOTH VEHICLES. THE OPERATOR OF VEHICLE #1 [REDACTED] WAS ISSUED A WRITTEN WARNING BY THIS OFFICER FOR MARKED LANES VIOLATION.	x
13-11	3/30/2013	2118		See attached report from Officer Spore of the Cape Cod Regional Law Enforcement Council.	x
13-18	5/21/2013	1859	x	Vehicle #1 was traveling West, slowing down when the light turned green, Vehicle #2 was traveling East and turned left at the Main Street lights, when this light was signaled red. When I spoke to operator of vehicle #1, they advised the light was green. Operator of Vehicle #2 advised he thought the light was green. Multiple Witnesses advised that the West bound lane had a green light. Damage to Vehicle #1 was heavy to to the front end. Vehicle #2 damage was heavy to passenger side. Passenger of Vehicle #2 was transported to Cape Cod Hospital for injuries. The weather at the time of the accident was cloudy and foggy.	x
13-113	11/6/2013	1332	x	Operator of Vehicle 1, States the light turned yellow and she began stopping for red light when Operator of vehicle #2 slammed into the rear of her vehicle and pushed her car straight. Operator of vehicle #1 was seen by EMS for report of back and neck pain, although denied transport to hospital. Damage to vehicle #1 was rear bumper and shattered back glass. Operator of Vehicle # 2 states that vehicle #1 slammed her brakes on and he had no time to stop. Operator of Vehicle #2 made attempt to stop but rear ended vehicle #1 followed by veering off to the left and hitting a light post. Heavy damage to front end of vehicle. No injury from Operator of Vehicle #2. No Witnesses to accident, Only photo's of Vehicle #2 downloaded, Photo's of Vehicle #1 failed to download	x
13-116	11/22/2013	1335		Vehicle #1 was traveling North, when Vehicle #2 made attempt to cross lanes into Outer Cape Pharmacy parking lot. At this intersection there is No left hand turn signal, and Vehicle #1 was struck by Vehicle #2. Witness was traveling directly behind Vehicle #1 and also almost collided with Vehicle #2, but was able to avoid. North bound lanes had green light at time of accident. **See photo's	x
13-121	12/17/2013	1549		Veh #1 was attempting to make a left turn from Route 6 onto Main Street. Then slid into the traffic light, knocking it over. Damage to the vehicle was minor to the L/F side of the bumper.	x



CAPE COD
COMMISSION

Appendix D

Traffic Data

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

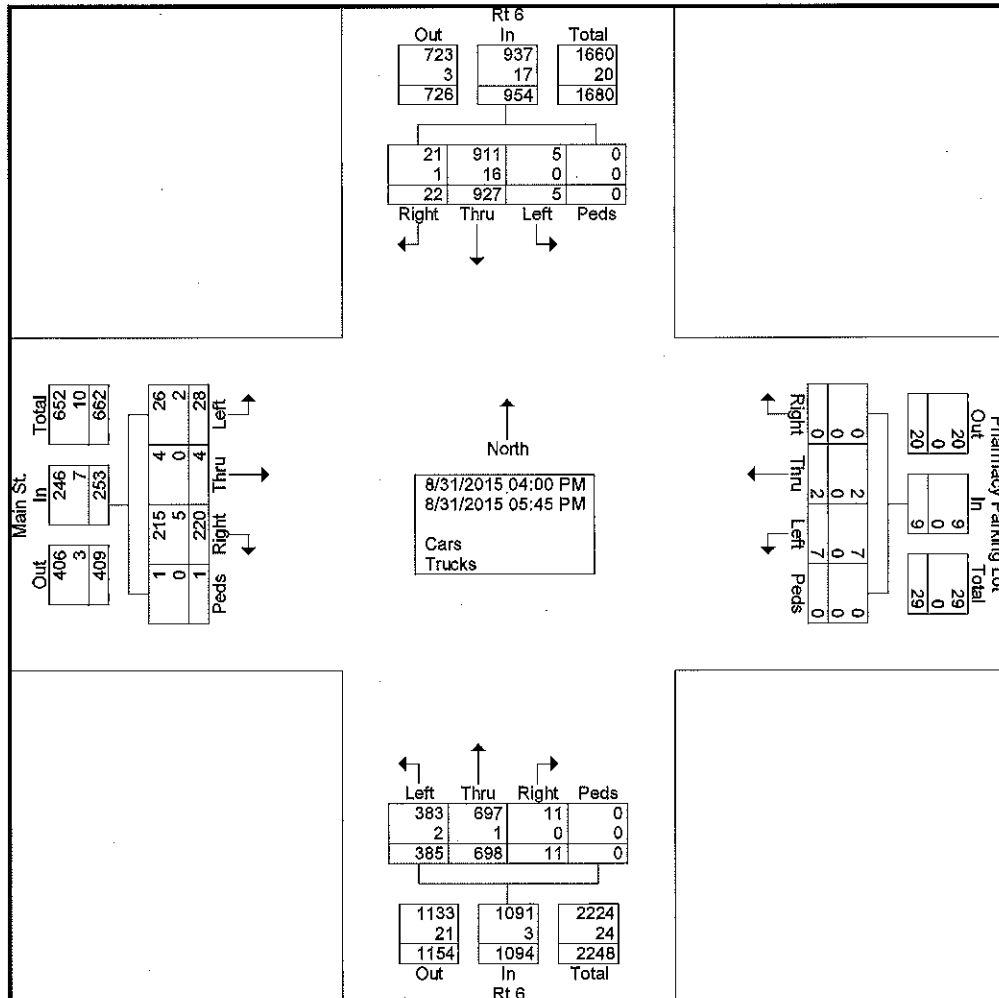
www.capecodcommission.org

Location: Rt 6 @ Main St
 Town: Wellfleet
 Counted by: JW
 Counters: 4

File Name : 22
 Site Code : 2292
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rt 6 From North					Pharmacy Parking Lot From East					Rt 6 From South					Main St. From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	1	161	8	0	170	0	1	0	0	1	55	114	1	0	170	3	0	35	0	38	379
04:15 PM	0	173	2	0	175	1	1	0	0	2	65	72	2	0	139	5	1	40	0	46	362
04:30 PM	1	159	3	0	163	3	0	0	0	3	73	108	1	0	182	5	1	44	0	50	398
04:45 PM	1	114	5	0	120	0	0	0	0	0	38	85	3	0	126	10	2	38	0	50	296
→ Total	3	607	18	0	628	4	2	0	0	6	231	379	7	0	617	23	4	157	0	184	1435
05:00 PM	0	79	1	0	80	1	0	0	0	1	45	83	2	0	130	2	0	17	0	19	230
05:15 PM	1	107	1	0	109	1	0	0	0	1	50	76	0	0	126	0	0	15	0	15	251
05:30 PM	0	86	1	0	87	1	0	0	0	1	24	98	1	0	123	3	0	17	1	21	232
05:45 PM	1	48	1	0	50	0	0	0	0	0	35	62	1	0	98	0	0	14	0	14	162
Total	2	320	4	0	326	3	0	0	0	3	154	319	4	0	477	5	0	63	1	69	875
Grand Total	5	927	22	0	954	7	2	0	0	9	385	698	11	0	1094	28	4	220	1	253	2310
Apprch %	0.5	97.2	2.3	0		77.8	22.2	0	0		35.2	63.8	1	0		11.1	1.6	87	0.4		
Total %	0.2	40.1	1	0	41.3	0.3	0.1	0	0	0.4	16.7	30.2	0.5	0	47.4	1.2	0.2	9.5	0	11	
Cars	5	911	21	0	937	7	2	0	0	9	383	697	11	0	1091	26	4	215	1	246	2283
% Cars	100	98.3	95.5	0	98.2	100	100	0	0	100	99.5	99.9	100	0	99.7	92.9	100	97.7	100	97.2	98.8
Trucks	0	16	1	0	17	0	0	0	0	0	2	1	0	0	3	2	0	5	0	7	27
% Trucks	0	1.7	4.5	0	1.8	0	0	0	0	0	0.5	0.1	0	0	0.3	7.1	0	2.3	0	2.8	1.2



Cape Cod Commission

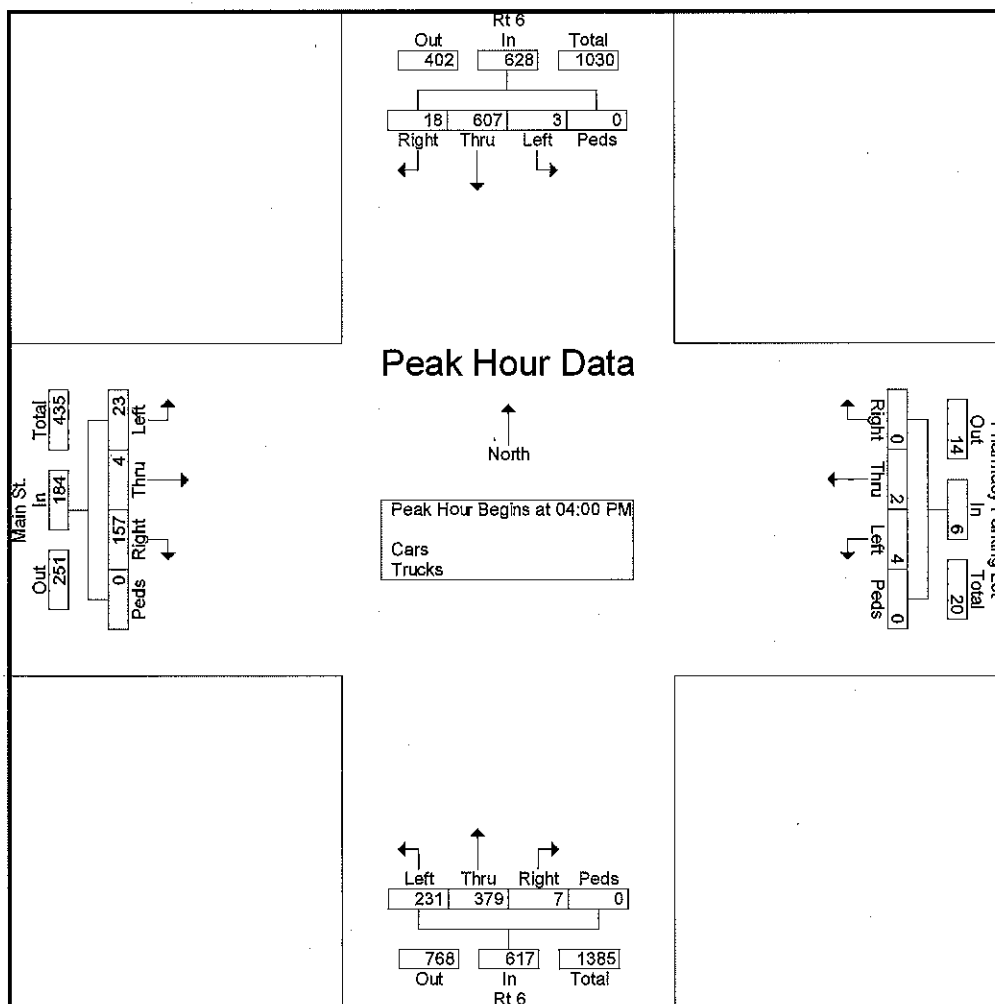
3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @ Main St
 Town: Wellfleet
 Counted by: JW
 Counters: 4

File Name : 22
 Site Code : 2292
 Start Date : 8/31/2015
 Page No : 2

Start Time	Rt 6 From North					Pharmacy Parking Lot From East					Rt 6 From South					Main St. From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM ←																					
04:00 PM	1	161	8	0	170	0	1	0	0	1	55	114	1	0	170	3	0	35	0	38	379
04:15 PM	0	173	2	0	175	1	1	0	0	2	65	72	2	0	139	5	1	40	0	46	362
04:30 PM	1	159	3	0	163	3	0	0	0	3	73	108	1	0	182	5	1	44	0	50	398
04:45 PM	1	114	5	0	120	0	0	0	0	0	38	85	3	0	126	10	2	38	0	50	296
Total Volume	3	607	18	0	628	4	2	0	0	6	231	379	7	0	617	23	4	157	0	184	1435
% App. Total	0.5	96.7	2.9	0		66.7	33.3	0	0		37.4	61.4	1.1	0		12.5	2.2	85.3	0		
PHF	.750	.877	.563	.000	.897	.333	.500	.000	.000	.500	.791	.831	.583	.000	.848	.575	.500	.892	.000	.920	.901



Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

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Location: Rt 6 @ Main St
 Town: Wellfleet
 Counted by: JW
 Counters: 4

File Name : 22
 Site Code : 2292
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Cars

Start Time	Rt 6 From North					Pharmacy Parking Lot From East					Rt 6 From South					Main St. From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	1	156	8	0	165	0	1	0	0	1	55	113	1	0	169	3	0	34	0	37	372
04:15 PM	0	172	2	0	174	1	1	0	0	2	64	72	2	0	138	5	1	40	0	46	360
04:30 PM	1	158	3	0	162	3	0	0	0	3	73	108	1	0	182	4	1	43	0	48	395
04:45 PM	1	111	5	0	117	0	0	0	0	0	38	85	3	0	126	10	2	38	0	50	293
Total	3	597	18	0	618	4	2	0	0	6	230	378	7	0	615	22	4	155	0	181	1420
05:00 PM	0	79	1	0	80	1	0	0	0	1	45	83	2	0	130	2	0	17	0	19	230
05:15 PM	1	103	1	0	105	1	0	0	0	1	49	76	0	0	125	0	0	14	0	14	245
05:30 PM	0	85	0	0	85	1	0	0	0	1	24	98	1	0	123	2	0	17	1	20	229
05:45 PM	1	47	1	0	49	0	0	0	0	0	35	62	1	0	98	0	0	12	0	12	159
Total	2	314	3	0	319	3	0	0	0	3	153	319	4	0	476	4	0	60	1	65	863
Grand Total	5	911	21	0	937	7	2	0	0	9	383	697	11	0	1091	26	4	215	1	246	2283
Apprch %	0.5	97.2	2.2	0		77.8	22.2	0	0		35.1	63.9	1	0		10.6	1.6	87.4	0.4		
Total %	0.2	39.9	0.9	0	41	0.3	0.1	0	0	0.4	16.8	30.5	0.5	0	47.8	1.1	0.2	9.4	0	10.8	

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @ Main St
 Town: Wellfleet
 Counted by: JW
 Counters: 4

File Name : 22
 Site Code : 2292
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Trucks

Start Time	Rt 6 From North					Pharmacy Parking Lot From East					Rt 6 From South					Main St. From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	7
04:15 PM	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3
04:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	10	0	0	10	0	0	0	0	0	1	1	0	0	2	1	0	2	0	3	15
*** BREAK ***																					
05:15 PM	0	4	0	0	4	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	6
05:30 PM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
Total	0	6	1	0	7	0	0	0	0	0	1	0	0	0	1	1	0	3	0	4	12
Grand Total	0	16	1	0	17	0	0	0	0	0	2	1	0	0	3	2	0	5	0	7	27
Apprch %	0	94.1	5.9	0		0	0	0	0		66.7	33.3	0	0		28.6	0	71.4	0		
Total %	0	59.3	3.7	0	63	0	0	0	0	0	7.4	3.7	0	0	11.1	7.4	0	18.5	0	25.9	

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @ Main St
 Town: Wellfleet
 Counted by: JW
 Counters: 4

File Name : 22
 Site Code : 2292
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Bikes

Start Time	Rt 6 From North					Pharmacy Parking Lot From East					Rt 6 From South					Main St. From West					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
*** BREAK ***																						
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2
Total	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5
*** BREAK ***																						
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4
*** BREAK ***																						
Total	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	5
Grand Total	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	10
Apprch %	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0			
Total %	0	20	0	0	20	0	0	0	0	0	0	80	0	0	80	0	0	0	0	0	0	

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

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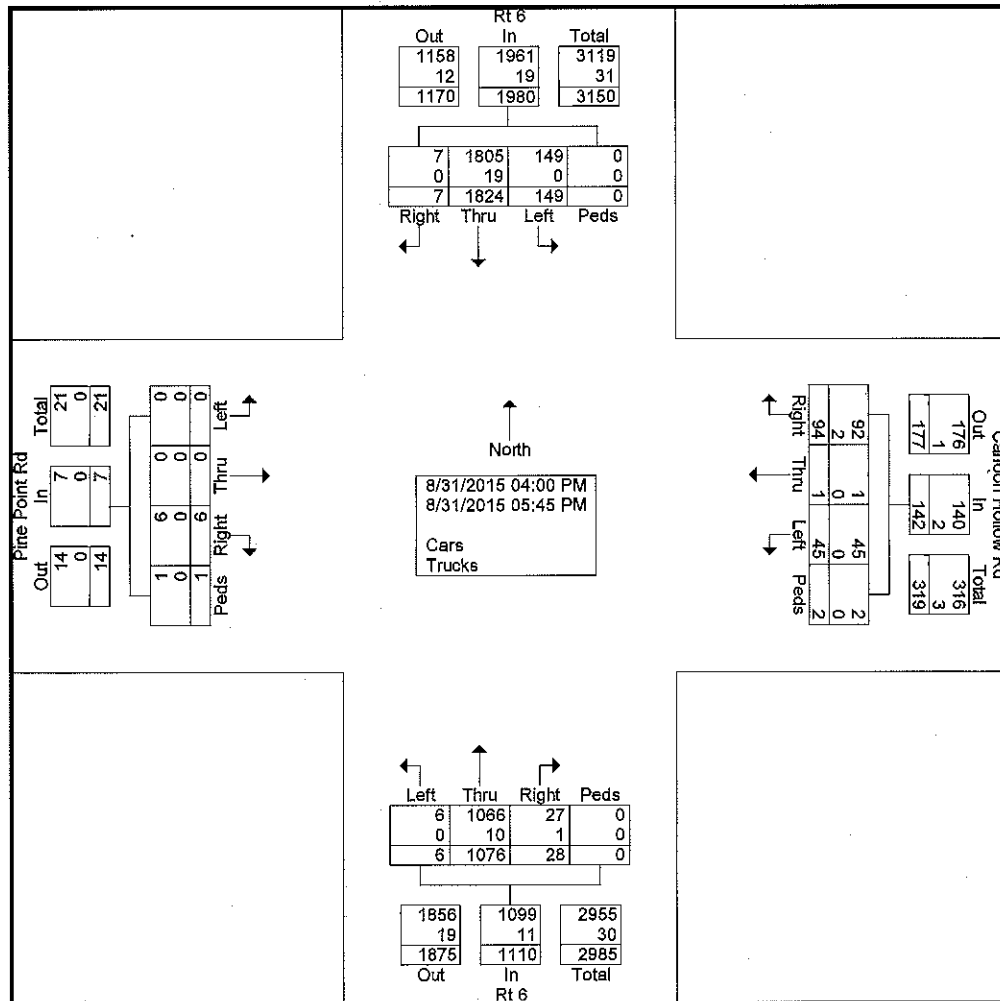
Location: Rt 6 @Cahoon Hollow/Pine Pt Rd
 Town: Wellfleet
 Counted by: PT
 Counters: 3

File Name : 14
 Site Code : 00003879
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	11	226	2	0	239	4	0	11	0	15	3	155	1	0	159	0	0	1	0	1	414
04:15 PM	36	232	1	0	269	6	0	3	0	9	0	143	3	0	146	0	0	0	1	1	425
04:30 PM	18	249	1	0	268	3	0	12	0	15	1	122	6	0	129	0	0	2	0	2	414
04:45 PM	14	212	0	0	226	7	0	6	0	13	1	141	5	0	147	0	0	1	0	1	387
Total	79	919	4	0	1002	20	0	32	0	52	5	561	15	0	581	0	0	4	1	5	1640
05:00 PM	14	266	0	0	280	4	0	19	1	24	0	128	4	0	132	0	0	1	0	1	437
05:15 PM	14	216	0	0	230	4	1	18	1	24	0	149	5	0	154	0	0	0	0	0	408
05:30 PM	24	214	2	0	240	4	0	12	0	16	1	104	2	0	107	0	0	1	0	1	364
05:45 PM	18	209	1	0	228	13	0	13	0	26	0	134	2	0	136	0	0	0	0	0	390
Total	70	905	3	0	978	25	1	62	2	90	1	515	13	0	529	0	0	2	0	2	1599
Grand Total	149	1824	7	0	1980	45	1	94	2	142	6	1076	28	0	1110	0	0	6	1	7	3239
Apprch %	7.5	92.1	0.4	0		31.7	0.7	66.2	1.4		0.5	96.9	2.5	0		0	0	85.7	14.3		
Total %	4.6	56.3	0.2	0	61.1	1.4	0	2.9	0.1	4.4	0.2	33.2	0.9	0	34.3	0	0	0.2	0	0.2	
Cars	149	1805	7	0	1961	45	1	92	2	140	6	1066	27	0	1099	0	0	6	1	7	3207
% Cars	100	99	100	0	99	100	100	97.9	100	98.6	100	99.1	96.4	0	99	0	0	100	100	100	99
Trucks	0	19	0	0	19	0	0	2	0	2	0	10	1	0	11	0	0	0	0	0	32
% Trucks	0	1	0	0	1	0	0	2.1	0	1.4	0	0.9	3.6	0	1	0	0	0	0	0	1

1639



Cape Cod Commission

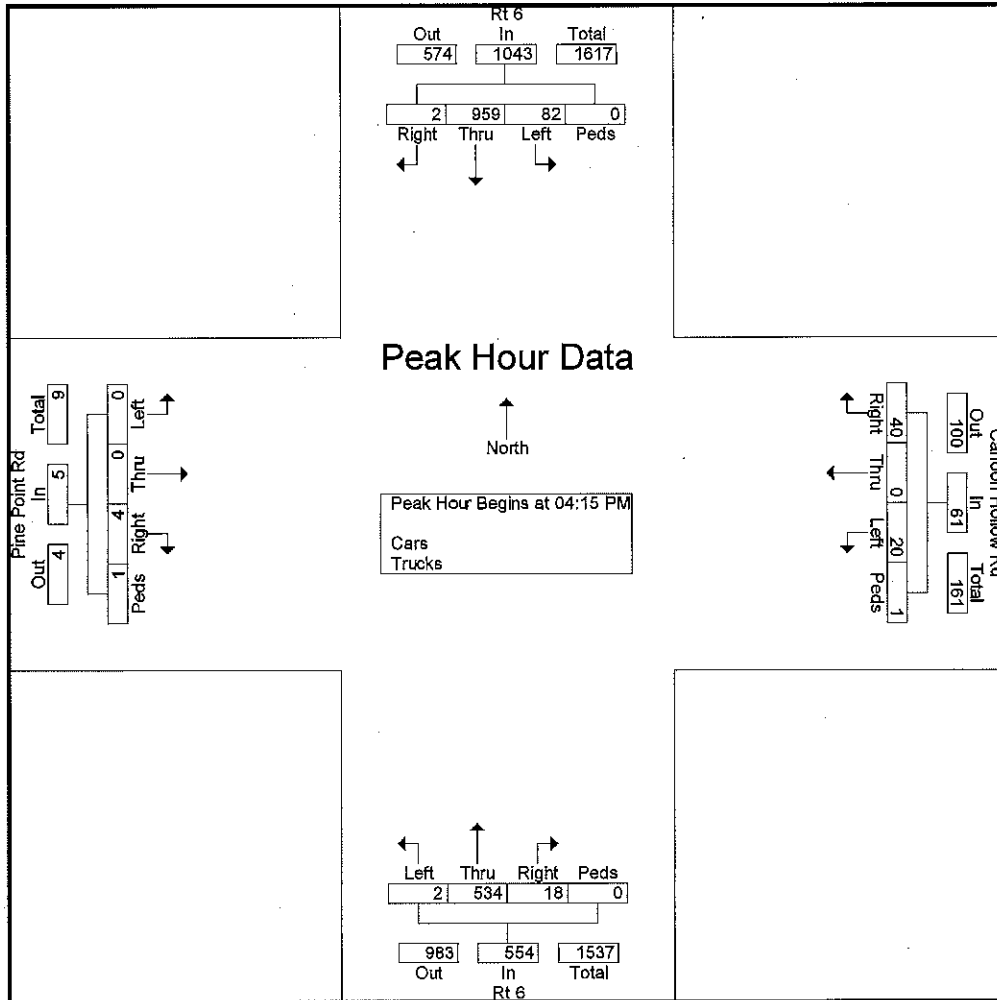
3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @Cahoon Hollow/Pine Pt Rd
 Town: Wellfleet
 Counted by: PT
 Counters: 3

File Name : 14
 Site Code : 00003879
 Start Date : 8/31/2015
 Page No : 2

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM ←																					
04:15 PM	36	232	1	0	269	6	0	3	0	9	0	143	3	0	146	0	0	0	1	1	425
04:30 PM	18	249	1	0	268	3	0	12	0	15	1	122	6	0	129	0	0	2	0	2	414
04:45 PM	14	212	0	0	226	7	0	6	0	13	1	141	5	0	147	0	0	1	0	1	387
05:00 PM	14	266	0	0	280	4	0	19	1	24	0	128	4	0	132	0	0	1	0	1	437
Total Volume	82	959	2	0	1043	20	0	40	1	61	2	534	18	0	554	0	0	4	1	5	1663
% App. Total	7.9	91.9	0.2	0		32.8	0	65.6	1.6		0.4	96.4	3.2	0		0	0	80	20		
PHF	.569	.901	.500	.000	.931	.714	.000	.526	.250	.635	.500	.934	.750	.000	.942	.000	.000	.500	.250	.625	.951



Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @Cahoon Hollow/Pine Pt Rd
 Town: Wellfleet
 Counted by: PT
 Counters: 3

File Name : 14
 Site Code : 00003879
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Cars

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	11	223	2	0	236	4	0	10	0	14	3	152	1	0	156	0	0	1	0	1	407
04:15 PM	36	231	1	0	268	6	0	3	0	9	0	141	3	0	144	0	0	0	1	1	422
04:30 PM	18	247	1	0	266	3	0	12	0	15	1	121	6	0	128	0	0	2	0	2	411
04:45 PM	14	208	0	0	222	7	0	6	0	13	1	140	5	0	146	0	0	1	0	1	382
Total	79	909	4	0	992	20	0	31	0	51	5	554	15	0	574	0	0	4	1	5	1622
05:00 PM	14	266	0	0	280	4	0	19	1	24	0	128	3	0	131	0	0	1	0	1	436
05:15 PM	14	214	0	0	228	4	1	18	1	24	0	147	5	0	152	0	0	0	0	0	404
05:30 PM	24	211	2	0	237	4	0	11	0	15	1	104	2	0	107	0	0	1	0	1	360
05:45 PM	18	205	1	0	224	13	0	13	0	26	0	133	2	0	135	0	0	0	0	0	385
Total	70	896	3	0	969	25	1	61	2	89	1	512	12	0	525	0	0	2	0	2	1585
Grand Total	149	1805	7	0	1961	45	1	92	2	140	6	1066	27	0	1099	0	0	6	1	7	3207
Apprch %	7.6	92	0.4	0		32.1	0.7	65.7	1.4		0.5	97	2.5	0		0	0	85.7	14.3		
Total %	4.6	56.3	0.2	0	61.1	1.4	0	2.9	0.1	4.4	0.2	33.2	0.8	0	34.3	0	0	0.2	0	0.2	

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @Cahoon Hollow/Pine Pt Rd
 Town: Wellfleet
 Counted by: PT
 Counters: 3

File Name : 14
 Site Code : 00003879
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Trucks

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	3	0	0	3	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	7
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
04:45 PM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
Total	0	10	0	0	10	0	0	1	0	1	0	7	0	0	7	0	0	0	0	0	18
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
05:30 PM	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
05:45 PM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
Total	0	9	0	0	9	0	0	1	0	1	0	3	1	0	4	0	0	0	0	0	14
Grand Total	0	19	0	0	19	0	0	2	0	2	0	10	1	0	11	0	0	0	0	0	32
Apprch %	0	100	0	0		0	0	100	0		0	90.9	9.1	0		0	0	0	0		
Total %	0	59.4	0	0	59.4	0	0	6.2	0	6.2	0	31.2	3.1	0	34.4	0	0	0	0	0	

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @Cahoon Hollow/Pine Pt Rd
 Town: Wellfleet
 Counted by: PT
 Counters: 3

File Name : 14
 Site Code : 00003879
 Start Date : 8/31/2015
 Page No : 1

Groups Printed- Bikes

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2
Total	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	12
05:00 PM	0	2	0	0	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3
05:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	4	0	0	5	0	0	2	0	2	0	2	1	0	3	0	0	0	0	0	0	10
Grand Total	1	10	0	0	11	0	0	2	0	2	0	8	1	0	9	0	0	0	0	0	0	22
Apprch %	9.1	90.9	0	0		0	0	100	0		0	88.9	11.1	0		0	0	0	0	0		
Total %	4.5	45.5	0	0	50	0	0	9.1	0	9.1	0	36.4	4.5	0	40.9	0	0	0	0	0	0	

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

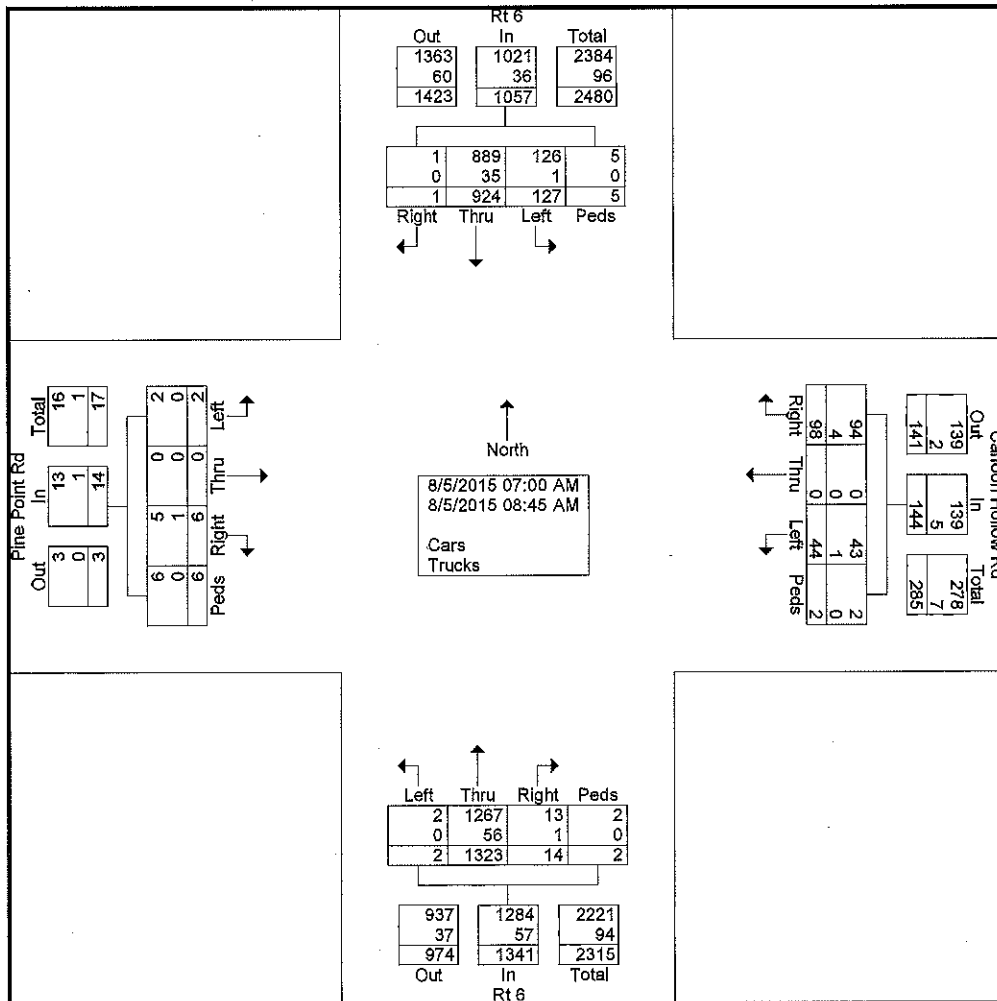
www.capecodcommission.org

Location: Rt 6 @ CahoonHollow/Pine Pt Rd
 Town: Wellfleet
 Counted by:
 Counters:

File Name : 3879_09032015
 Site Code : 3879
 Start Date : 8/5/2015
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:15 AM	10	106	0	0	116	0	0	7	0	7	0	129	0	0	129	0	0	0	0	0	0
07:30 AM	5	120	0	1	126	3	0	13	0	16	2	193	2	2	199	0	0	0	5	5	346
07:45 AM	17	124	0	1	142	8	0	14	0	22	0	209	2	0	211	0	0	2	1	3	378
Total	32	350	0	2	384	11	0	34	0	45	2	532	4	2	540	0	0	2	6	8	977
08:00 AM	16	147	1	0	164	6	0	17	0	23	0	171	2	0	173	1	0	2	0	3	363
08:15 AM	14	135	0	2	151	7	0	13	2	22	0	183	1	0	184	0	0	1	0	1	358
08:30 AM	38	140	0	1	179	7	0	11	0	18	0	231	1	0	232	1	0	0	0	1	430
08:45 AM	27	152	0	0	179	13	0	23	0	36	0	206	6	0	212	0	0	1	0	1	428
Total	95	574	1	3	673	33	0	64	2	99	0	791	10	0	801	2	0	4	0	6	1579
Grand Total	127	924	1	5	1057	44	0	98	2	144	2	1323	14	2	1341	2	0	6	6	14	2556
Apprch %	12	87.4	0.1	0.5	30.6	0	68.1	1.4	0.1	98.7	0.1	51.8	0.5	0.1	52.5	14.3	0	42.9	42.9	0.5	
Total %	5	36.2	0	0.2	41.4	1.7	0	3.8	0.1	5.6	0.1	51.8	0.5	0.1	52.5	0.1	0	0.2	0.2	0.5	
Cars	126	889	1	5	1021	43	0	94	2	139	2	1267	13	2	1284	2	0	5	6	13	2457
% Cars	99.2	96.2	100	100	96.6	97.7	0	95.9	100	96.5	100	95.8	92.9	100	95.7	100	0	83.3	100	92.9	96.1
Trucks	1	35	0	0	36	1	0	4	0	5	0	56	1	0	57	0	0	1	0	1	99
% Trucks	0.8	3.8	0	0	3.4	2.3	0	4.1	0	3.5	0	4.2	7.1	0	4.3	0	0	16.7	0	7.1	3.9



Cape Cod Commission

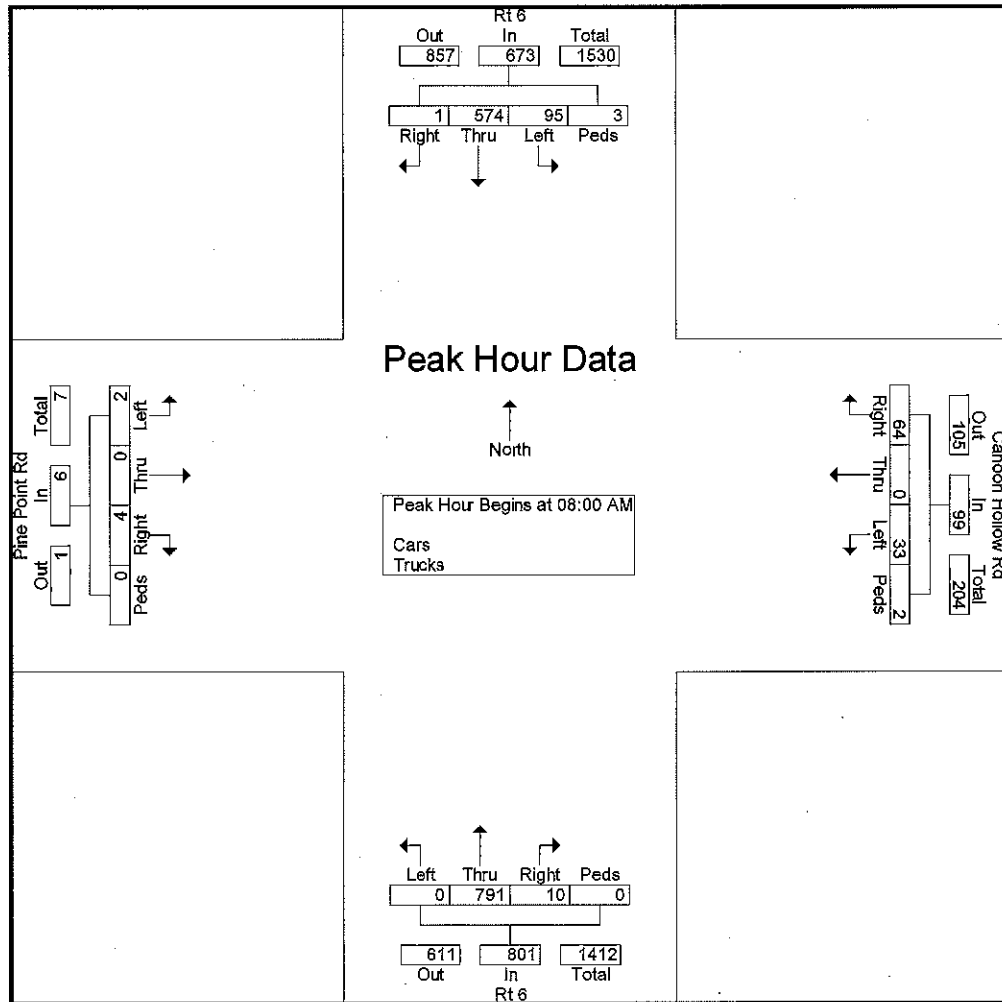
3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @ CahoonHollow/Pine Pt Rd
 Town: Wellfleet
 Counted by:
 Counters:

File Name : 3879_09032015
 Site Code : 3879
 Start Date : 8/5/2015
 Page No : 2

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM ←																					
08:00 AM	16	147	1	0	164	6	0	17	0	23	0	171	2	0	173	1	0	2	0	3	363
08:15 AM	14	135	0	2	151	7	0	13	2	22	0	183	1	0	184	0	0	1	0	1	358
08:30 AM	38	140	0	1	179	7	0	11	0	18	0	231	1	0	232	1	0	0	0	1	430
08:45 AM	27	152	0	0	179	13	0	23	0	36	0	206	6	0	212	0	0	1	0	1	428
Total Volume	95	574	1	3	673	33	0	64	2	99	0	791	10	0	801	2	0	4	0	6	1579
% App. Total	14.1	85.3	0.1	0.4		33.3	0	64.6	2		0	98.8	1.2	0		33.3	0	66.7	0		
PHF	.625	.944	.250	.375	.940	.635	.000	.696	.250	.688	.000	.856	.417	.000	.863	.500	.000	.500	.000	.500	.918



Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @ CahoonHollow/Pine Pt Rd
 Town: Wellfleet
 Counted by:
 Counters:

File Name : 3879_09032015
 Site Code : 3879
 Start Date : 8/5/2015
 Page No : 1

Groups Printed- Cars

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
07:15 AM	10	105	0	0	115	0	0	7	0	7	0	120	0	0	120	0	0	0	0	0	0	242
07:30 AM	5	116	0	1	122	3	0	12	0	15	2	179	2	2	185	0	0	0	5	5	5	327
07:45 AM	17	116	0	1	134	8	0	14	0	22	0	203	1	0	204	0	0	2	1	3	3	363
Total	32	337	0	2	371	11	0	33	0	44	2	503	3	2	510	0	0	2	6	8	8	933
08:00 AM	16	142	1	0	159	5	0	14	0	19	0	167	2	0	169	1	0	2	0	3	3	350
08:15 AM	14	128	0	2	144	7	0	13	2	22	0	178	1	0	179	0	0	0	0	0	0	345
08:30 AM	37	133	0	1	171	7	0	11	0	18	0	220	1	0	221	1	0	0	0	1	1	411
08:45 AM	27	149	0	0	176	13	0	23	0	36	0	199	6	0	205	0	0	1	0	1	1	418
Total	94	552	1	3	650	32	0	61	2	95	0	764	10	0	774	2	0	3	0	5	5	1524
Grand Total	126	889	1	5	1021	43	0	94	2	139	2	1267	13	2	1284	2	0	5	6	13	13	2457
Apprch %	12.3	87.1	0.1	0.5		30.9	0	67.6	1.4		0.2	98.7	1	0.2		15.4	0	38.5	46.2			
Total %	5.1	36.2	0	0.2	41.6	1.8	0	3.8	0.1	5.7	0.1	51.6	0.5	0.1	52.3	0.1	0	0.2	0.2	0.5	0.5	

Cape Cod Commission

3225 Main Street, Barnstable, MA, 02630

www.capecodcommission.org

Location: Rt 6 @ CahoonHollow/Pine Pt Rd

Town: Wellfleet

Counted by:

Counters:

File Name : 3879_09032015

Site Code : 3879

Start Date : 8/5/2015

Page No : 1

Groups Printed- Trucks

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
*** BREAK ***																					
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0
07:30 AM	0	4	0	0	4	0	0	1	0	1	0	14	0	0	14	0	0	0	0	0	0
07:45 AM	0	8	0	0	8	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0
Total	0	13	0	0	13	0	0	1	0	1	0	29	1	0	30	0	0	0	0	0	0
08:00 AM	0	5	0	0	5	1	0	3	0	4	0	4	0	0	4	0	0	0	0	0	0
08:15 AM	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	1
08:30 AM	1	7	0	0	8	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0
08:45 AM	0	3	0	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0
Total	1	22	0	0	23	1	0	3	0	4	0	27	0	0	27	0	0	1	0	1	1
Grand Total	1	35	0	0	36	1	0	4	0	5	0	56	1	0	57	0	0	1	0	1	99
Apprch %	2.8	97.2	0	0		20	0	80	0		0	98.2	1.8	0		0	0	100	0		
Total %	1	35.4	0	0	36.4	1	0	4	0	5.1	0	56.6	1	0	57.6	0	0	1	0	1	

Cape Cod Commission

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Location: Rt 6 @ CahoonHollow/Pine Pt Rd
 Town: Wellfleet
 Counted by:
 Counters:

File Name : 3879_09032015
 Site Code : 3879
 Start Date : 8/5/2015
 Page No : 1

Groups Printed- Bikes

Start Time	Rt 6 From North					Cahoon Hollow Rd From East					Rt 6 From South					Pine Point Rd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
*** BREAK ***																					
07:30 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3	0	0	3	5
*** BREAK ***																					
Total	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3	0	0	3	5
08:00 AM	4	1	0	0	5	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	7
08:15 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	3
08:45 AM	2	0	0	0	2	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	4
Total	6	1	0	0	7	0	1	3	0	4	0	1	1	0	2	0	4	0	0	4	17
Grand Total	6	1	0	0	7	0	2	4	0	6	0	1	1	0	2	0	7	0	0	7	22
Apprch %	85.7	14.3	0	0		0	33.3	66.7	0		0	50	50	0		0	100	0	0		
Total %	27.3	4.5	0	0	31.8	0	9.1	18.2	0	27.3	0	4.5	4.5	0	9.1	0	31.8	0	0	31.8	

CAPE COD COMMISSION

3225 MAIN STREET • P.O. BOX 226 • BARNSTABLE, MASSACHUSETTS 02630
(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

