

# Welcome!

Intersection and Signal Improvements of  
Washington St. (Rte. 53) at Mutton Lane & Pleasant St.  
Weymouth | 607755

## DESIGN PUBLIC HEARING

Weymouth Town Hall, Council Chambers  
June 23, 2016 | 6:00 PM

# Introduction

- Gautam Sen - MassDOT Project Manager
- Design Consultant – Nitsch Engineering
  - Stephen Farr, PE

# History of Public Outreach

- **Road Safety Audit (RSA) Field Visit – Dec 15, 2014**
  - **What is an RSA?**
  - **Who? Audit Team Consisted of:**
    - Residents
    - MassDOT officials
    - Central Transportation Planning Staff (CTPS)
    - Weymouth Planning Dept.
    - Weymouth Police and Fire Dept.
    - Weymouth Traffic and Engineering Dept.
    - Design Consultant
- **Meeting with Town of Weymouth – Feb. 11, 2015**

**Discussion of Design Alternatives**



# Project Team



## **MassDOT District 6**

Project Proponent

## **Consultant Engineering Firm**

Responsible for Design

## **MassDOT's Highway Division**

Responsible for administering the Design Process and providing Resident Engineer Services

## **Federal Highway Administration**

Federally Funded Project

## Project Area



**Washington St. (Rte. 53) at Mutton Lane & Pleasant St**

**Why do we need  
this project?**



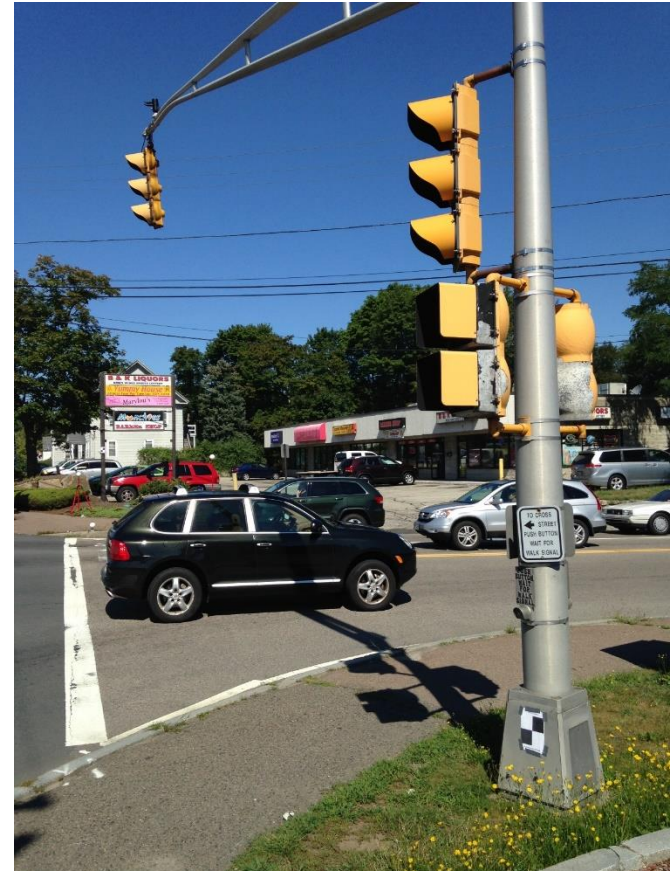
# Existing Issues

- **High Crash Location (Ranked 154 in top 200 Statewide crash locations 2011-2013). Over 60% of crashes are angle type.**
- **Access management (high number of driveways along corridor).**
- **Traffic Operations (Left turn lanes from Washington Street needed as well as protected signal phase).**
- **ADA / MAAB non-compliance.**
- **Lack of Bicycle accommodation.**
- **Traffic signal equipment visibility / condition.**

# Existing Issues (cont.)



# Existing Issues (cont.)



# Project Goals

- **Intersection Safety** | Improve Inter. Safety
- **Deficient Pedestrian Accommodation** | Improve Ped. Accom.
- **Deficient Bike Accommodation** | Improve Bike Accom.
- **Traffic Operation** | Maintain existing operation levels (min.)
- **No Right of Way Impacts** | All work to be within existing SHLO
- **Minimal Utility Relocation** | Utility Pole Replacement only
- **Town of Weymouth Complete Street Policy** | Design to conform with town of Weymouth and MassDOT guidelines

# Project Schedule

**75/100% Design  
Submittal  
April 6, 2016**

**Advertisement  
Summer 2016**

**Design Public Hearing  
June 23, 2016**

**Construction Starts  
Spring 2017**



# Project Scope

- Re-stripe corridor to reduce travel lanes to one in each direction aka (Road Diet).
- Replace and install new traffic signal equipment.
- New pedestrian ramps.
- Coordination of the two traffic signals – 800' +/- apart

## Proposed Alternative Layout



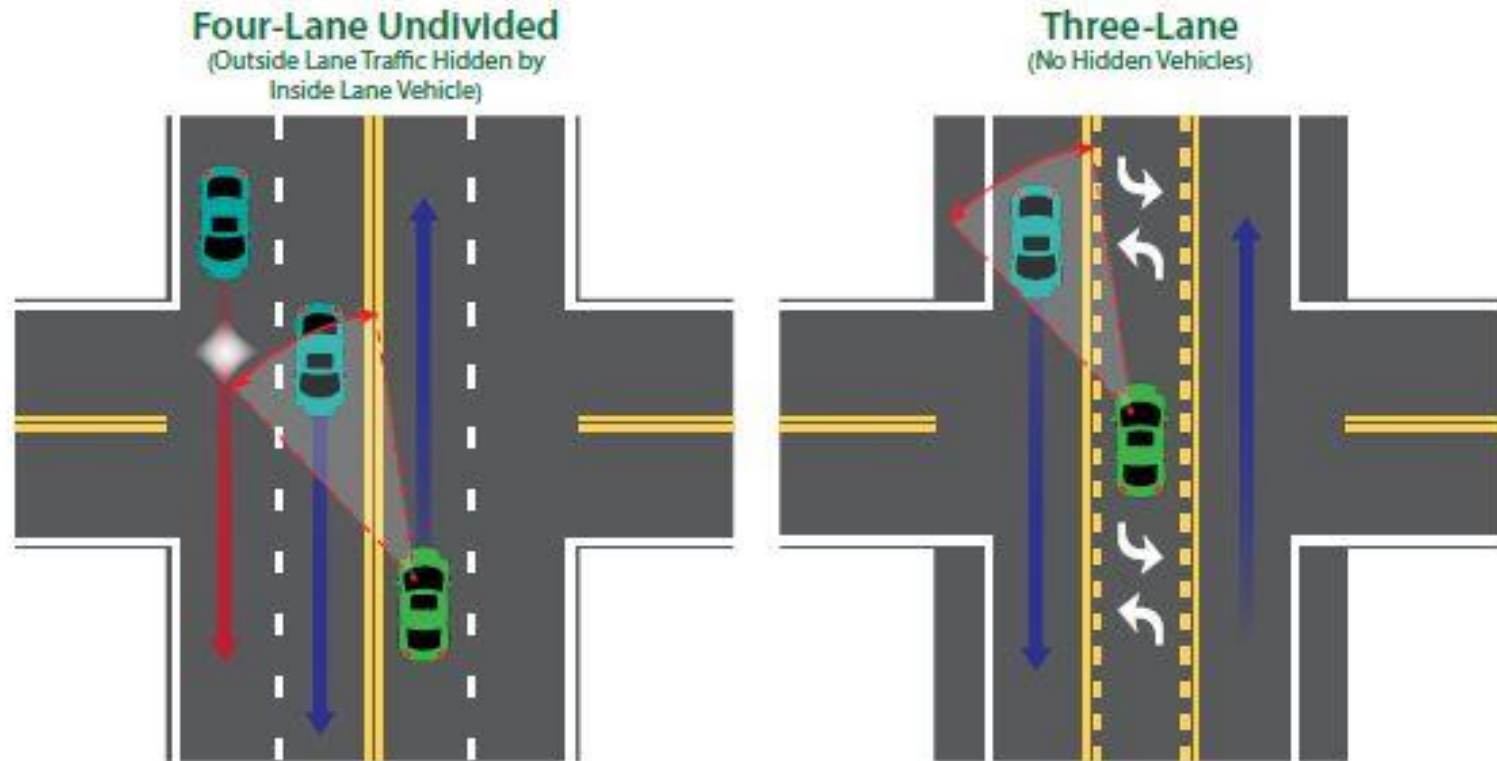
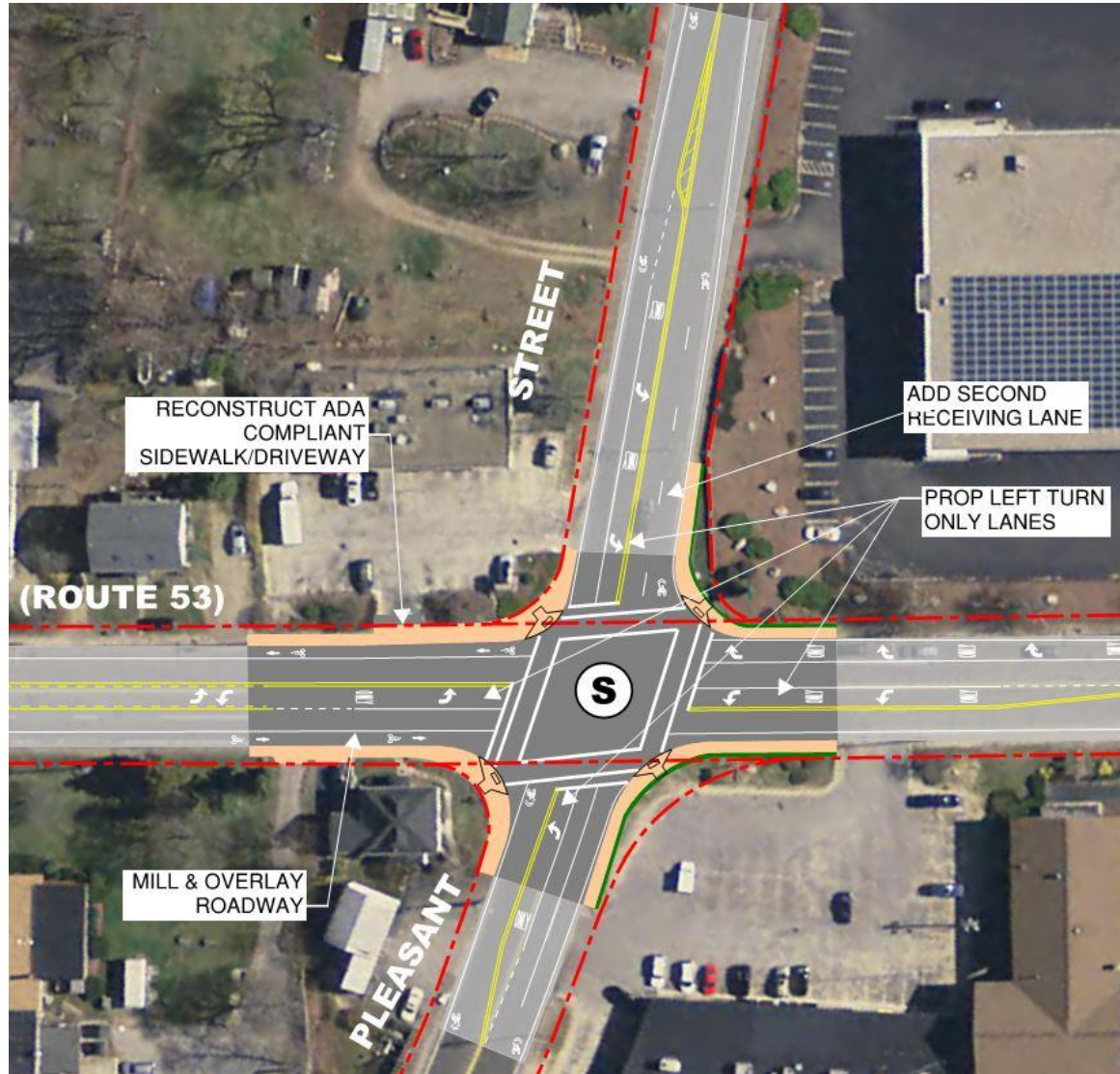


Figure 6. Major-Street Left-Turn Sight Distance for Four-Lane Undivided Roadway and Three-Lane Cross Section  
(Adapted from Welch, 1999)

# Washington Street @ Mutton Lane



# Washington Street @ Pleasant Street



**How will traffic  
be affected?**





# **ALERT: Traffic Impacts**

- Temporary Lane Closures during working hours.
- No Road closures or detours.
- Time of Day: As determined by town.

## **Project Duration**

**Estimated for one construction season (spring to fall)**

# Environmental Permitting



- **Weymouth Conservation Commission Agent determined**  
*“This work can proceed without an official filing with the Weymouth Conservation Commission if conducted in accordance with the minor buffer zone exemptions of the Wetlands Protection Act, specifically, 310 CMR 10.02(2)(b)1 and (2)(b)2.p”*

# Next Steps

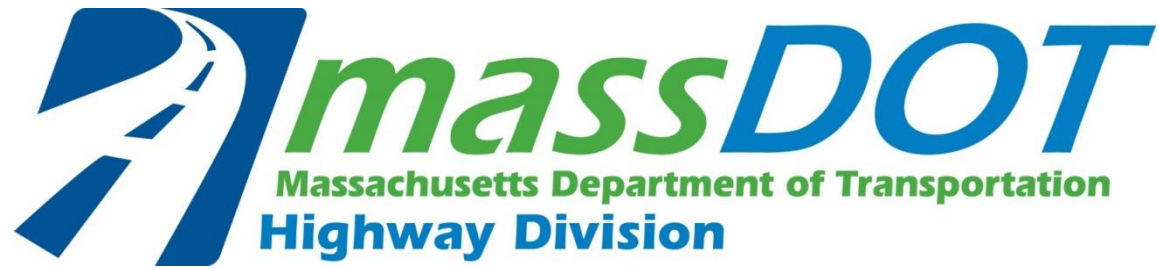
**MassDOT / Consultant review and response to all comments received in writing from the public.**

**Consultant will prepare next design submission package for MassDOT review and incorporate comments.**

# Contact Information



- Provide:
  - Mail-in comment sheets
  - Contact Person; Gautam Sen ( [Gautam.sen@state.ma.us](mailto:Gautam.sen@state.ma.us) )  
857 368-9330



# **Thank You**

## **Q&A**

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# **DESIGN PUBLIC HEARING**

**Town Hall, Council Chambers**  
**June 23, 2016 | 6:00 PM**

**INTERSECTION IMPROVEMENTS AT  
WASHINGTON STREET/MUTTON LANE AND  
WASHINGTON STREET/PLEASANT STREET,  
WEYMOUTH, MA**

**PROJECT LOCATION AND LIMITS**

The proposed project begins on Washington Street approximately 300 feet west of Mutton Lane and continues to a point approximately 300 feet east of Pleasant Street including minor work on the side streets of Mutton Lane and Pleasant Street.

**PURPOSE**

The purpose of the project is to improve vehicular and pedestrian safety at the intersection of Washington Street at Mutton Lane and Washington Street at Pleasant Street. The proposed project consists of improvements to the existing intersection geometry, the installation of new traffic signals, sidewalk reconstruction, and new pavement markings and signage.

**EXISTING CONDITIONS**

*Washington Street (Route 53) at Mutton Lane*

Washington Street (Route 53) and Mutton Lane intersect to form a four-way signalized intersection, with Washington Street (Route 53) approaching from the east and the west and Mutton Lane approaching from the north and the south. The intersection is controlled by a fully-actuated traffic signal under the jurisdiction of MassDOT.

From the west, Washington Street (Route 53) is 46 feet wide and permits two-way travel, delineated by a double yellow center line. Due east towards the intersection, the roadway widens from a 13-foot wide general purpose lane to accommodate an 11-foot wide shared through/right-turn lane and an 11-foot wide shared through/left-turn lane. Due west away from the intersection, the roadway narrows from two 11-foot wide general purpose lanes to a single 13-foot general purpose lane. One-foot shoulders are present on both sides of the roadway.

From the east, Washington Street (Route 53) is 46 feet wide and permits two-way travel, delineated by a double yellow center line. Due west towards the intersection, the roadway consists of an 11-foot wide shared through/right-turn lane and an 11-foot wide shared through/left-turn lane. Due east away from the intersection, the roadway consists of two 11-foot wide general purpose lanes. One-foot shoulders are present on both sides of the roadway. From the north, Mutton Lane is 29 feet wide and permits two-way travel, delineated by a double yellow center line. The roadway consists of a 13-foot wide general purpose lane in each direction. A one-foot shoulder is present in the northbound direction and a two-foot shoulder is present in the southbound direction.

From the south, Mutton Lane is 30 feet wide and permits two-way travel, delineated by a double yellow center line. A heavy vehicle restriction prohibits vehicles over 2-1/2 tons. The roadway consists of a 17-foot wide general purpose lane in each direction. Concrete sidewalks are present on both sides of Washington Street (Route 53) and both sides of Mutton Lane. Crosswalks are present across all approaches; however, pedestrian ramps at each crosswalk termini are not compliant with current Americans with Disabilities Act (ADA) standards. Bicycle accommodations are not present in the vicinity of the intersection.

The fully-actuated traffic signal operates in four phases, including a protected-permissive phase for Washington Street (Route 53) eastbound. During the first phase, Washington Street (Route 53) eastbound operates as a protected movement, during which all movements are protected. During the second phase, Washington Street (Route 53) eastbound left-turns are permitted and Washington Street (Route 53) eastbound and westbound operates concurrently. A pedestrian-actuated exclusive pedestrian phase operates as the third phase. Mutton Lane northbound and southbound operates as the fourth phase. There is a “No Turn on Red” restriction present on all approaches with the exception of the Washington Street (Route 53) eastbound approach. Emergency vehicle preemption is not present.

#### Washington Street (Route 53) at Pleasant Street

Washington Street (Route 53) and Pleasant Street intersect to form a four-way signalized intersection, with Washington Street (Route 53) approaching from the east and the west, and Pleasant Street approaching from the north and south. The intersection is controlled by a fully-actuated traffic signal under the jurisdiction of MassDOT.

From the west, Washington Street (Route 53) is 46 feet wide and permits two-way travel, delineated by a double yellow center line. Due east towards the intersection, the roadway consists of an 11-foot wide shared through/right-turn lane and an 11-foot wide shared through/left-turn lane. Due west away from the intersection, the roadway consists of two 11-foot wide general purpose lanes. One-foot shoulders are present on both sides of the roadway.

From the east, Washington Street (Route 53) is 46 feet wide and permits two-way travel, delineated by a double yellow center line. Due west towards the intersection, the roadway widens from a 12-foot wide general purpose lane to accommodate an 11-foot wide shared through/right-turn lane and an 11-foot wide shared through/left-turn lane. Due east away from the intersection, the roadway narrows from two 11-foot wide general purpose lanes to a single 12-foot wide general purpose lane. One-foot shoulders are present on both sides of the roadway.

From the north, Pleasant Street is 43 feet wide and permits two-way travel, delineated by a double yellow center line. Due south towards the intersection, the roadway widens from a 13-foot wide general purpose lane to accommodate a ten-foot wide shared through/right-turn lane and an 11-foot wide shared through/left-turn lane. Due north away from the intersection, the roadway consists of one 20-foot wide general purpose lane. One-foot shoulders are present on both sides of the roadway.

From the south, Pleasant Street is 44 feet wide and permits two-way travel, delineated by a double yellow center line. Due north towards the intersection, the roadway widens from a 15-foot wide general purpose lane to accommodate an 11-foot wide shared through/right-turn lane and an 11-foot wide shared through/left-turn lane. Due south away from the intersection, the roadway consists of one 20-foot wide general purpose lane. One-foot shoulders are present on both sides of the roadway.

Asphalt sidewalks are present on both sides of Washington Street (Route 53) and both sides of Pleasant Street. Crosswalks are present across all approaches; however, pedestrian ramps at each crosswalk termini are not compliant with current ADA regulations. Bicycle accommodations are not present in the vicinity of the intersection.

The fully-actuated traffic signal operates in three phases. Washington Street (Route 53) eastbound and westbound operates as the first phase. Pleasant Street northbound and southbound operate as the second phase. A pedestrian-actuated exclusive pedestrian phase operates as the third phase. Emergency vehicle preemption is present.

## **PROPOSED IMPROVEMENTS**

The proposed improvements for this project are as follows:

- Install new traffic signal equipment.
- Install ADA compliant pedestrian signal and push buttons and wheelchair ramps.
- Repave the existing roadway within the project limits.
- Install new pavement markings that provide for one travel lane in each direction along with a two-way left turn lane in the center of the roadway between the two intersections. 5-foot wide shoulders for bicycle accommodation will also be providing on Washington Street between the two intersections.
- Install new regulatory and warning signs.

## **MAINTENANCE OF TRAFFIC DURING CONSTRUCTION**

Roadways within the project area will remain open to traffic throughout construction. Traffic Management Plans have been developed for the project. Access to all residences and businesses will be maintained during construction. Abutters will be notified 24 hours in advance should access to their property need to be restricted.

## **RIGHT OF WAY IMPACT**

It is expected that all the construction activities are to be performed within the State Highway Layout (SHLO). No right-of-way impacts outside of the SHLO are anticipated.

## **PROJECT COST**

At this time, the estimated cost of construction is \$1,200,000. This project is funded under the Federal Aid Highway Safety Improvements Program (HSIP), whereby 90% of the construction cost will be funded by the Federal Highway Administration (FHWA) and 10% of the construction cost will be funded by the Commonwealth of Massachusetts

## **PROJECT STATUS**

The design plans are on display tonight. Comments made at this public hearing will be incorporated to the maximum extent feasible into the final design. Project is scheduled to be advertised for construction in the Summer of 2016 subject to obtaining necessary environmental permit and Right-Of-Way Certificate. The project must be programmed & funded in the Statewide Transportation Improvement Program in the appropriate Federal Fiscal Year in order for MassDOT to solicit bids for eventual construction.