

# Welcome!

Shrewsbury Route 20 Safety & Operations Improvements Master Plan Shrewsbury, MA

Public Information Meeting Shrewsbury, MA June 24, 2019 | 7:00 PM



## Introduction

- MassDOT District 3
- Joe Frawley
- Erin Kinahan
- Howard Stein Hudson MassDOT's Design Consultant
- Paul Nelson
- Bob Stathopoulos



# **Tonight's Meeting**

- Overview of the Master Plan
- Review of existing conditions in the study area
- Review of safety deficiencies
- Proposed Master Plan
  - Addition of Through and Turn Lanes
  - Signal Infrastructure Work
  - Pedestrian and Bicycle Accommodations
- Next steps
  - Completion by Late Fall/Early Winter 2019



## **Master Plan History**

- Ongoing coordination with Town staff
- Eastern Section Conceptual Master Plan Presentation to Public – March 2019
- Western Section Conceptual Master Plan June 2019
- Public Info Meeting June 24, 2019
- Entire Corridor Concept Design and Report Fall 2019



### Master Plan – Full Study Area



### Shrewsbury, MA

Worcester City Line to Route 9/Route 20 Interchange



### Master Plan Area – Tonight's Focus



#### **Worcester City Line to Centech Boulevard**



# **Existing Issues**

### Intersection and Corridor Safety

- Eastern Section Issues (*Presented at March 5<sup>th</sup> Meeting*):
  - Route 20 at South Street
  - Route 20 at Walnut Street
  - Route 20 at Valente Drive
- Western Section Issues (*In Progress*):
  - Stoney Hill Road at Route 20 Access
  - Route 20/Route 140 Interchange
  - Access Management
- Congestion
- Capacity needed to support current traffic and future traffic growth fueled by private development
- Lack of Bicycle and Pedestrian Accommodation



# **Existing Conditions - Zoning**





### **Existing Conditions – Bike, Pedestrian, Transit**





### **Existing Conditions – Environmental Evaluation**





### **Existing Conditions – Complete Streets**





## **Existing Conditions - Crashes**





# **Stoney Hill Road at Route 20**

Signalized Intersection Alternative:

- MassDOT Guidelines MUTCD Signal Warrants
  - 8-hour Warrant based on vehicular volumes (Warrant 1)
  - Crash Experience based on crashes, volume, other improvements (Warrant 7)
    - Not High Crash Locations
    - Not Eligible for HSIP Funding



# **Stoney Hill Road at Route 20**





## **Crashes at Stoney Hill Road (East)**

- 11 Total Crashes
- Non-Fatal Injury (27%)
- Angle Crashes (27%)
- 5 p.m. 8 p.m. (36%)

#### Angle crashes related to:

- High speeds
- Insufficient gaps
- Crossing multiple lanes





## **Crashes at Stoney Hill Road (West)**

- 13 Total Crashes
- Non-Fatal Injury (8%)
- Angle Crashes (15%)
- 7 a.m. 9 a.m. (46%)

#### Angle crashes related to:

- High speeds
- Insufficient gaps
- Crossing multiple lanes





## **Crashes at Grafton Street**

- 90 Total Crashes
- Non-Fatal Injury (21%)
- One Reported Fatality
- Angle Crashes (55%)
- 3 p.m. 7 p.m. (37%)

#### Angle crashes related to:

- High speeds
- No Left Turn Lanes
- No Left Turn Indication at Signal
- Multiple Access Points





## **Crashes at Lake Street**

- 47 Total Crashes
- Non-Fatal Injury (13%)
- Rear-End Crashes (49%)
- 3 p.m. 7 p.m. (50%)

**Rear-End crashes related to:** 

- High speeds
- Congestion
- Yellow Light Dilemma





### **Future Traffic Volumes**





## **Proposed Master Plan**

- Two travel lanes in each direction on Route 20
- Traffic signal improvements
- Additional turning lanes at existing signalized intersections
- Pedestrian and Bicyclist Facilities
  - Shared Use Path and Sidewalk on Route 20
- Safety improvements at deficient locations
- ROW Impacts and Cost not considered at this time
  Master Plan cross-section has trade-offs due to potential ROV
  - Master Plan cross-section has trade-offs due to potential ROW and Environmental Impacts



## Proposed Master Plan (cont'd)



#### EXISTING RIGHT-OF-WAY WIDTH VARIES FROM APPROXIMETLY 53' TO 75'























## **Proposed Cross-Section**



### EXISTING RIGHT-OF-WAY WIDTH VARIES FROM APPROXIMETLY 53' TO 75'



- Two Lanes in each direction
- Address Safety issues









## **Route 20 at Lake Street**

- MassWorks Project
- Upgrades to the signal
- Two lanes in each direction + Turning lanes
- Two Edgemere Development Access Points









## **Proposed Cross-Section**



EXISTING RIGHT-OF-WAY WIDTH VARIES FROM APPROXIMETLY 53' TO 75'



- Narrower Shared-use path
- No 4-foot median
- Two-Way Left Turn Lane for Neighborhood Access





- Narrower Shared-use path
- No 4-foot median
- Maintain Two Travel Lanes in Each Direction





- Maintain Two Travel Lanes in Each Direction
- Two-Way Left Turn Lane to Left Turn Lane





### **Next Steps**

- Wikimap info for comments 20-30 days
- Schedule for entire Master Plan Report and Concept Plans
  - Draft Report Early Fall 2019
  - Final Report Late Fall/Early Winter 2019
- Implementation discussion
- Prioritized Projects
  - Some driven by Private Development
  - Grafton Street is currently under design
  - New Project to be selected MassDOT and Town officials to work on identifying priority projects (project may be for Route 20 Eastern Section)



# **Thank You**

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