MASHPEE ROTARY CORRIDOR STUDY
Alternatives Presentation
Mashpee Public Library
December 5, 2019

AGENDA
- Project Overview
- Summary of Listening Session
- Road Safety Audit
- Design Alternatives
- Activity
- Next Steps
STUDY AREA

PROJECT GOALS

- Improve Safety
- Reduce Congestion
- Accommodate All Users
APRIL LISTENING SESSION

LIKES

• Multi-use paths
• Bypass roads
• Open space
• Walking paths in Commons
• Holiday Lights
• How Rotary is always Moving
• Rotary Works Well Most of Year
• Rotary over traffic light, easy & efficient
ISSUES

• Challenging for peds/bikes
• Rotary too large/unsure if two lanes
• Additional turn lanes needed
• High speeds
• People don’t know how to drive rotary
• Lane merges
• Rotary curb cuts problematic
• Rotary over traffic light, easy & efficient
• Lack of signage and pavement markings

SUGGESTIONS

• Smarter signals
• Bike connections & walking paths
• More lighting
• Grade separation
• Traffic signals
• Roundabouts
• More speed signage
• Remove one road from rotary
• Add lane lines in rotary
• Add/lengthen turn lanes at traffic signals
EMAIL COMMENTS

“Don’t change the rotary”

“Focus on other areas to improve”

“I can easily avoid the rotary if needed”

“Add lane lines like Otis Rotary to slow cars down”

“Do not support major reconfiguration of rotary or a traffic signal”

Mashpee Rotary Crashes

(2012-2016)
128 Total crashes
25 injury crashes

* A Top 50 Crash Location on Cape Cod
# ROADWAY SAFETY AUDIT

## Recommendations

<table>
<thead>
<tr>
<th>Short Term</th>
<th>Mid-Term</th>
<th>Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace deteriorated “State Law” signs</td>
<td>Re-design splitter islands</td>
<td>Investigate rotary replacement</td>
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<tr>
<td>Add yield striping and a 2nd “Yield” sign on all approaches</td>
<td>Install wayfinding diagrammatic signage for rotary</td>
<td>Consider redesigning into a two-lane modern roundabout</td>
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<tr>
<td>Install “Reduce Speed Ahead” signs</td>
<td>Retrofit the rotary with lane markings</td>
<td></td>
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<tr>
<td>Confirm Rt 151 queue detection is working.</td>
<td>Construct a shared use path around rotary</td>
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EXISTING CONDITIONS: SAFETY

MassDOT Crash Data (2012-2016)

EXISTING CONDITIONS: SAFETY

MassDOT Crash Data (2012-2016)
Traffic Terms Defined

Rotary vs. Roundabout
Mashpee Rotary

- Large diameter
- Wide circulatory lanes
- No directional striping or signage
- High speed

Roundabout Design

- Smaller diameter
- Lane striping & assignment
- Low speed
- Multi-modal accommodation

Note: The marking configuration shown on this figure requires U-turning drivers to change lanes within.
Route 149 Roundabout
(Exit 5), Barnstable

Rotary Retrofit
ALTERNATIVES REVIEW

- Mashpee Rotary
- Local Intersections
- Multi-Modal Improvements
Mashpee Rotary Alternatives

• Rotary Retrofit
• Two-Lane Roundabout
• Overpass/Tunnel
• Traffic Signal
  • 3 options

Rotary Retrofit
Rotary Retrofit

- Safety
- Congestion
- Pedestrian/Bike Accommodation
- Property Impacts
- Community Character

Time frame: Mid-Term  Cost: $
Roundabout Concept

- Safety
- Congestion
- Pedestrian/Bike Accommodation
- Property Impacts
- Community Character

Time frame: Long-Term  Cost: $$

Overpass Concept

29

30
Overpass Concept

- Safety
- Congestion
- Pedestrian/Bike Accommodation
- Property Impacts
- Community character

Time frame: Long Term  Cost: $$$$
Traffic Signal – Option A

- Safety
- Congestion
- Pedestrian/Bike Accommodation
- Property Impacts
- Community character

Time frame: Long Term Cost: $$

Traffic Signal – Option B
Traffic Signal – Option C

Local Intersections

- Route 28 at Job’s Fishing Rd/Donna’s Ln
- Great Neck Road North at Old Barnstable Road
- Great Neck Road South at Donna’s Ln
- Route 28 at Meetinghouse Road
- Route 28 at Quinaquisset Avenue
Route 28 at Job’s Fishing Road

Mid Term
• Restripe eastbound Job’s Fishing Road lanes

Long Term
• Add a westbound right turn lane on Donna’s Lane

Route 28 at Job’s Fishing Road

The Shed Place
Bank
Walgreens
Great Neck Road North at Old Barnstable Road

**Short Term**
- Upgrade signage to MUTCD standards
- Re-stripe westbound approach for improved alignment
- Right turn only on Old Barnstable Road (one-way section)
- Closure of Old Barnstable Road

**Long Term**
- Traffic Signal
- Roundabout

Great Neck Rd North at Old Barnstable Rd Roundabout

Office Building

Verizon
Great Neck Rd North at Old Barnstable Rd
Traffic Signal

Great Neck Road South at Donna’s Lane

**Short Term**
- Install signage to encourage exiting retail traffic from South Cape Plaza to use Route 28 instead of Great Neck Road South
- Install stop sign on Blue Spruce Way (Windchime)
- Install intersection ahead warning signage on Great Neck Road

**Mid Term**
- Construct a right turn lane on Donna’s Lane

**Long Term**
- Traffic Signal
- Roundabout
Route 28 at Meetinghouse Road

Short Term
• Restrict Meetinghouse Road to right turns out only

Long Term
• Install Route 28 eastbound left turn lane
• Roundabout
Route 28 at Quinaquisset Ave

Short Term
• Upgrade signage and striping

Long Term
• Align with Meetinghouse Road to create a 4-way intersection with a traffic signal or roundabout
Multi-Modal Accommodations

- Add multi-use path around rotary
- Connect sidewalk and shared use path gaps within study area
- Upgrade traffic signals with pedestrian ADA (i.e. Route 28 and Orchard Road)

Future Multi-Modal Connections
TRANSIT

• Consideration of small multi-modal center (long term)

• Consideration of small local circulator route (i.e. trolley)

• Review CCRTA routing (for regional efficiency)

• Identify areas for bus pull-offs (short term)
ALTERNATIVES FEEDBACK

• Which concepts do you LIKE and why?
• Which concepts do you DISLIKE and why?
• Do the concepts fit within the character and address the ISSUES?
• Any concepts that are not shown and should be considered?

Please write on the boards and provide your feedback.

- Rotary Upgrades - Local Intersections
- Rotary Replacement - Multi-Modal Improvements

NEXT STEPS

• Public Comments – Open until December 20th
• Revise Concepts and Finalize Recommendations
• Draft and Final Report – Early 2020
• Work with MassDOT and Town to implement short and mid-term recommendations (1-5 years)
• Plan for long-term changes (5+ years) – would involve additional public input