Chester 41848

Route 102 / Route 121
Safety Improvements

Selectmen’s Meeting Presentation
August 23, 2018
Agenda

• Existing conditions
• Project history
• Project scope
• Roundabout basics
• Initial design concepts
• Project schedule
Existing conditions

- Traffic volume:
  - 8,600 / 6,500 vpd on Route 102
  - 4,500 / 3,600 vpd on Route 121
  - Long delays on Route 121
  - Need to plan for Exit 4A

- Speed limit: 35 mph at intersection
Existing conditions

• Crashes: 64 in 10 years
  – Severity – 13 with injuries
  – Failure to yield or stop
  – Right angle
  – Sideswipes along 102
Project history

- Road safety audit conducted 2011
  - Short, medium, long term options
- Short-term: making stop signs visible
- Medium-term: flashing beacons
Project scope

- Long-term options
  - All-way stop
  - Traffic signal
  - Roundabout

- Goal: provide safe and efficient traffic operations
  - For current and future conditions
  - For all modes
Traffic Circles vs. Roundabouts

Danforth Circle

- Straight paths
- Crosswalks
- Wide lanes
Roundabout features
Laconia - Weirs Beach

- Truck apron
- Circulating lane
- Central island
- Splitter island w/ crosswalk
Roundabout Rules of the Road

- Slow down – designed for 15-20 mph
- Watch for peds in crosswalk
- Look left / yield to traffic in roundabout
- Proceed through roundabout
- Watch for peds in crosswalk
How Do Roundabouts Improve Safety?

- Vehicles yield on entry
- Small size keeps speeds low
- Paths are deflected
- Fewer conflict points

- Reduced chance of crashes
- Reduced severity
Roundabout Performance

- 75% fewer injuries
- 90% fewer SI and fatalities
- Better traffic operations
- Safer bike/ped environment
Roundabout Example: Pelham
NH 111A at Nashua Rd
Pelham
NH 111A at Nashua Rd

After
Traffic Signal concept
Roundabout concept
Roundabout concept
Project schedule

• Survey done summer 2018
• Fall/winter 2018: informational mtg with early details and impacts
• Mid-2019: public hearing for preferred alternative
• 2019 to 2021: detailed design, right of way process
Questions?
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