

Main Street (Route 28) Resurfacing and Road Diet Pilot

Reading, MA



- 1. Welcome
- 2. Project Background
- 3. Road Diets 101
- 4. Main Street Lane Configurations
- 5. Project Schedule
- 6. Q&A

Project Team



MassDOT Highway Division Design, Construction, and Evaluation



Howard Stein Hudson
Public Involvement

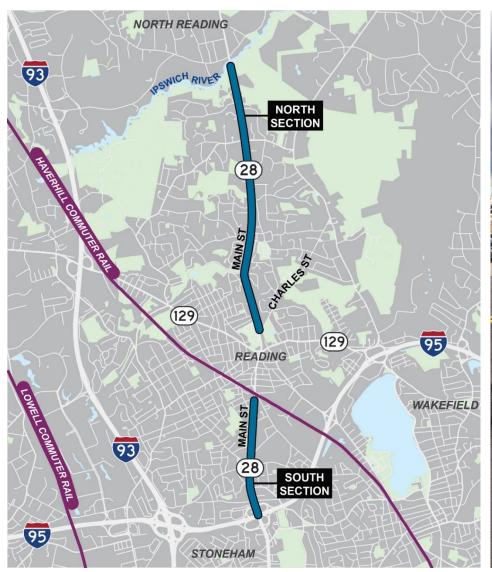


Town of ReadingMunicipal Outreach and Coordination



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Project Area

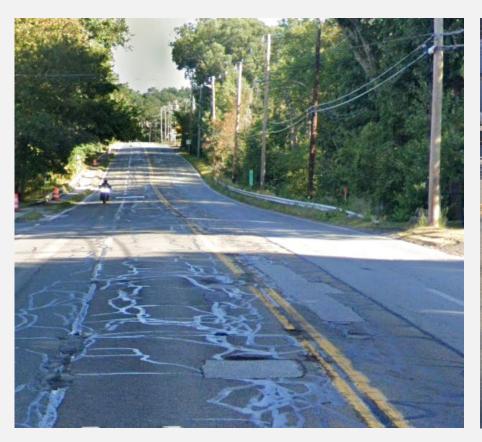




North Section Existing Issues: Poor Pavement Conditions



North Section Existing Issues: Poor Pavement Conditions (cont.)



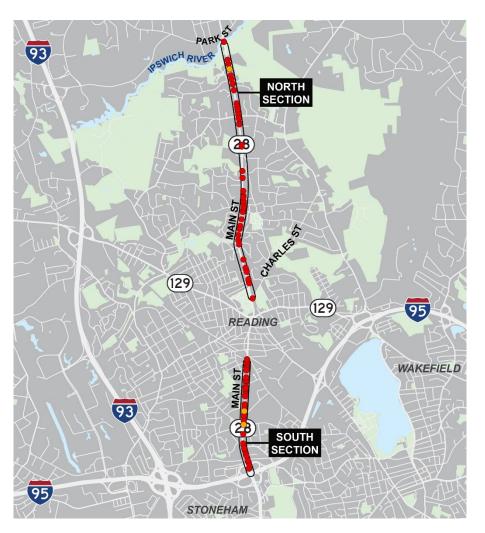


Google Maps

South Section Existing Issues: Inaccessible Crosswalks



Existing Issues: Crashes on Main Street



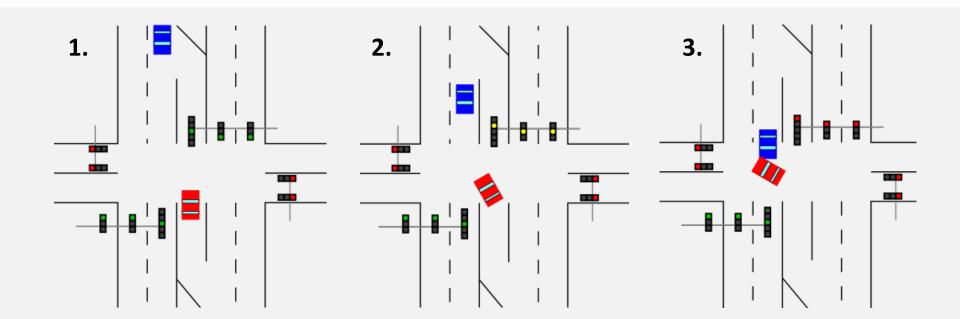


Crashes Within Project Area: 2016-2019

Project History: Road Safety Audit

RSA Completed in 2016

- ADT 15,100-19,500
- De facto left-turn lane
- Left-turn offset
- Yellow trap



Project History: Resurfacing in Progress



Project Goals

- Maintain a state of good repair along Route 28
- ☐ Improve safety for people using Main Street
- Calm vehicle traffic
- Improve accessibility for pedestrians
- Meet MassDOT Complete Streets and Healthy Transportation policies



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What is a Road Diet?

- 1. Eliminates one or more vehicular travel lanes
- 2. Repurposes roadway space
- 3. Improves safety and mobility for all modes



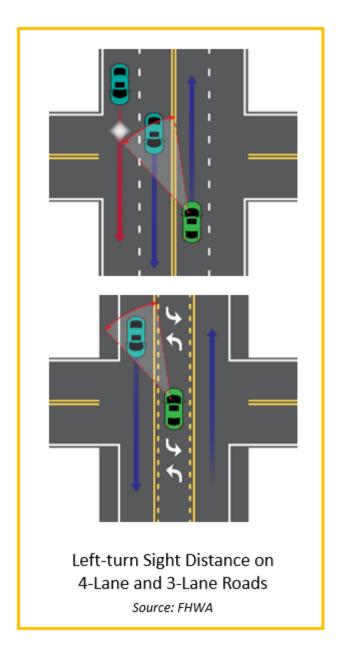
Safety Benefits

Fewer Crashes

- Rear-end
- Sideswipe
- Left-turn/angle
- Pedestrian and bicycle

Simplified Operations

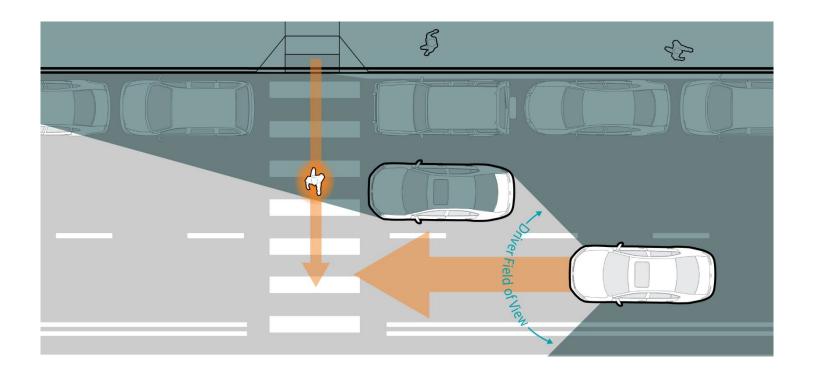
- Separating left-turns at signalized intersections
- More consistent traffic flow



Safety Benefits (cont.)

Safer Accommodations for Vulnerable Non-Motorized Users

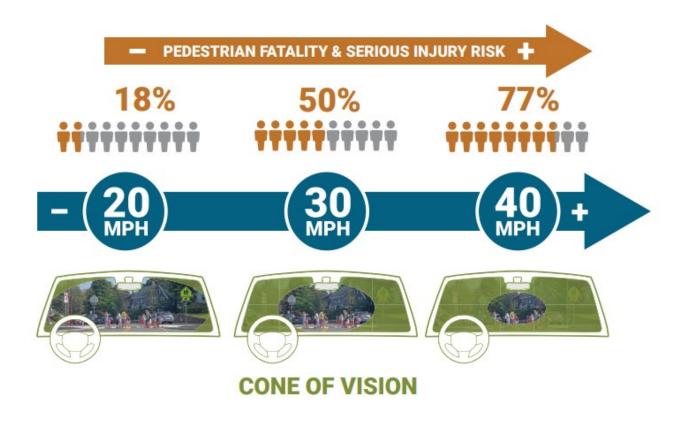
- Reduced pedestrian crash risk
- Can reallocate space for dedicated bicycle facilities



Safety Benefits (cont. 3)

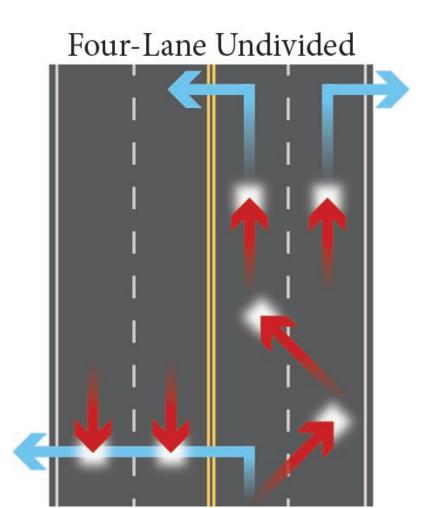
Traffic Calming

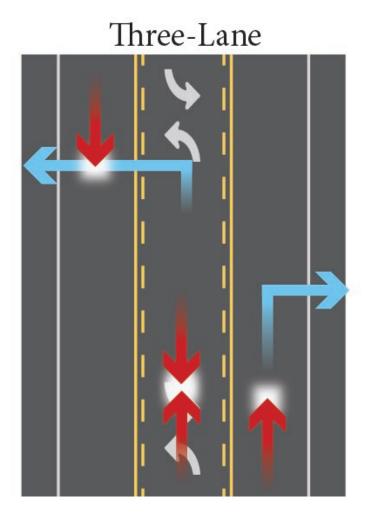
- Fewer lanes can reduce speeds by eliminating passing
- Lowers speeds and fatal and injury crash rates



Conflict Points Along Corridor



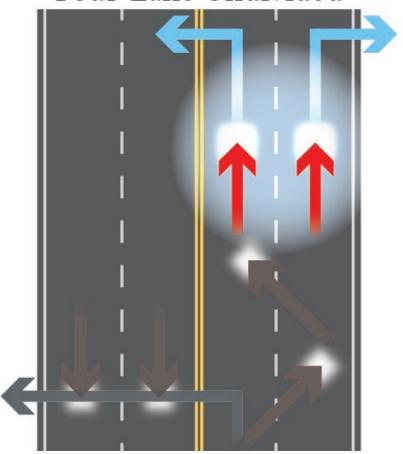




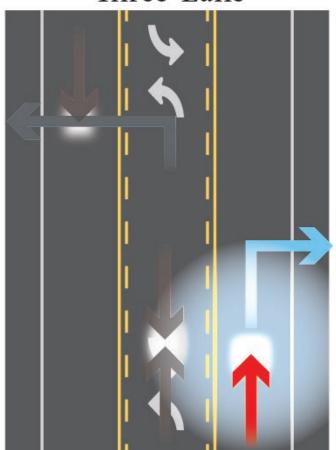
Rear-end Conflict Points



Four-Lane Undivided

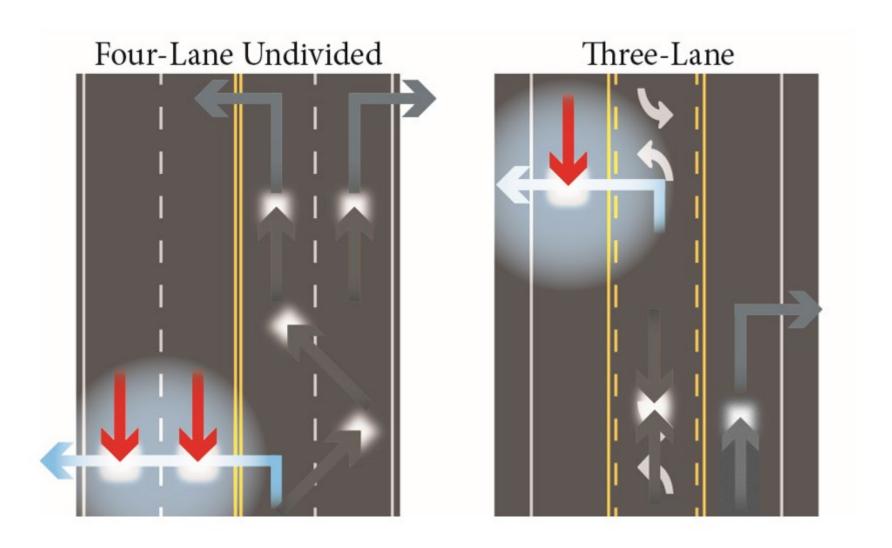


Three-Lane



Left-turn Conflict Points

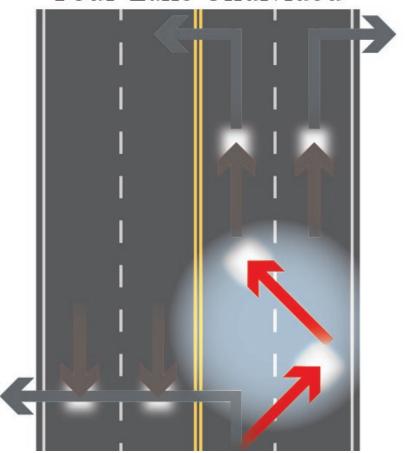




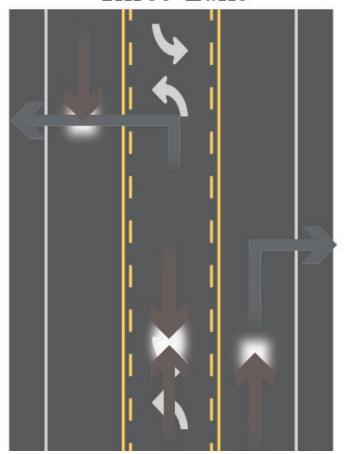
Side Swipe Conflict Points



Four-Lane Undivided



Three-Lane

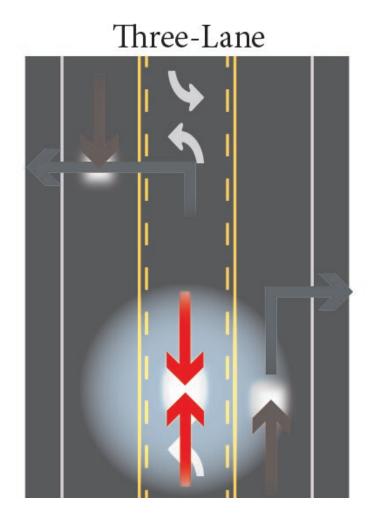


Head-to-head Conflict Points



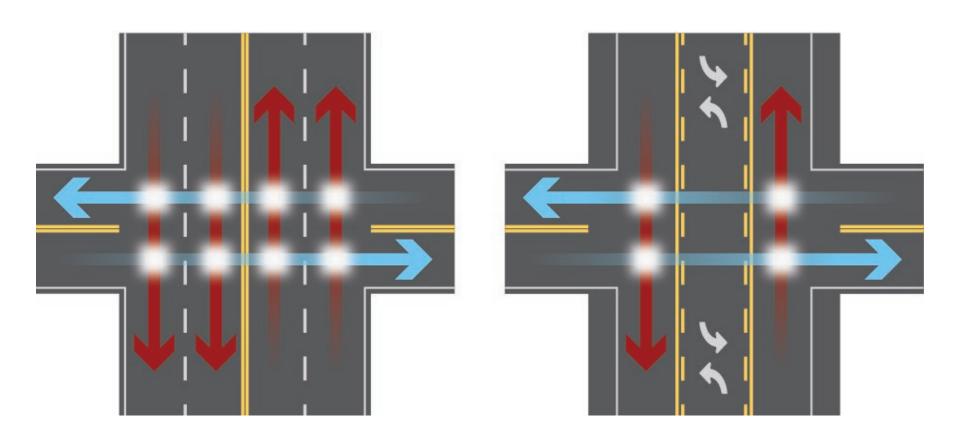


Four-Lane Undivided

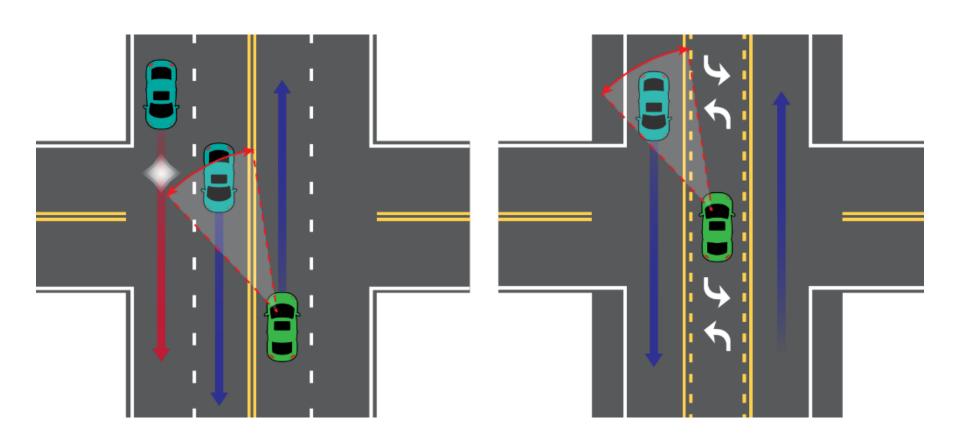


Broadside Conflict Points At Intersections





Left-Turn Conflict Points At Intersections and Driveways



Proven Results in Massachusetts

Summer Street Road Diet Pilot - Hingham

- Speeds decreased as much as 5 mph
- Little to no travel time increase or traffic diversions
- Currently in design phase for permanent installation



Photo credit: Jacob Wessel

Route 135 - Wellesley

- 55% fewer crashes
- 69% fewer severe injury occurrences



Nonantum Road - Boston, Newton, and Watertown

- 23% fewer crashes
- 32% fewer severe injury occurrences



Day Boulevard – Boston





REPORTING PERIOD	AVG. TRAVEL TIMES (MIN.)
Oct. 2017	4.1
Apr. 2018	3.8
Avg. Before Road Diet	4.0
Oct. 2018	4.1
Apr. 2019	3.9
Avg. After Road Diet	4.0

SPEED TEST LOCATIONS	MAX SPEED BEFORE (mph)	MAX SPEED AFTER (mph)
H St.–I St. (EB)	60-64	55-59
N St. (EB)	70+	50-54
N St. (WB)	65-69	50-54

Proven Results Nationwide

4-to-3 Lane Road Diets in the U.S.

• 19% to 47% fewer crashes

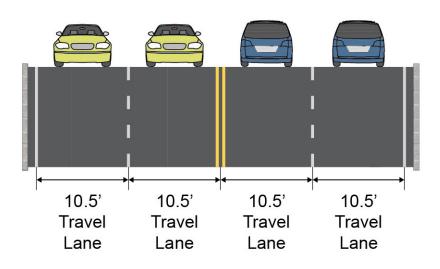




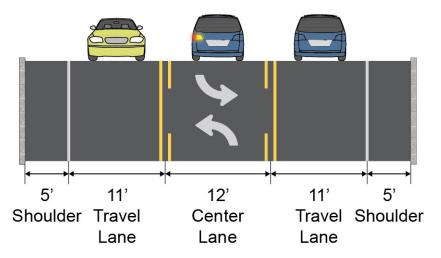
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Typical Cross-Section

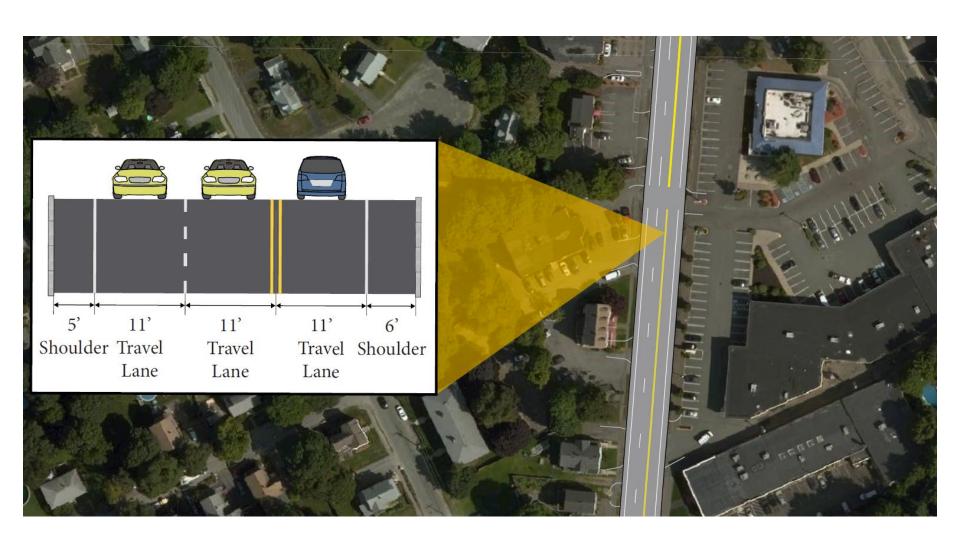
Typical Lane Configuration Before Road Diet Pilot



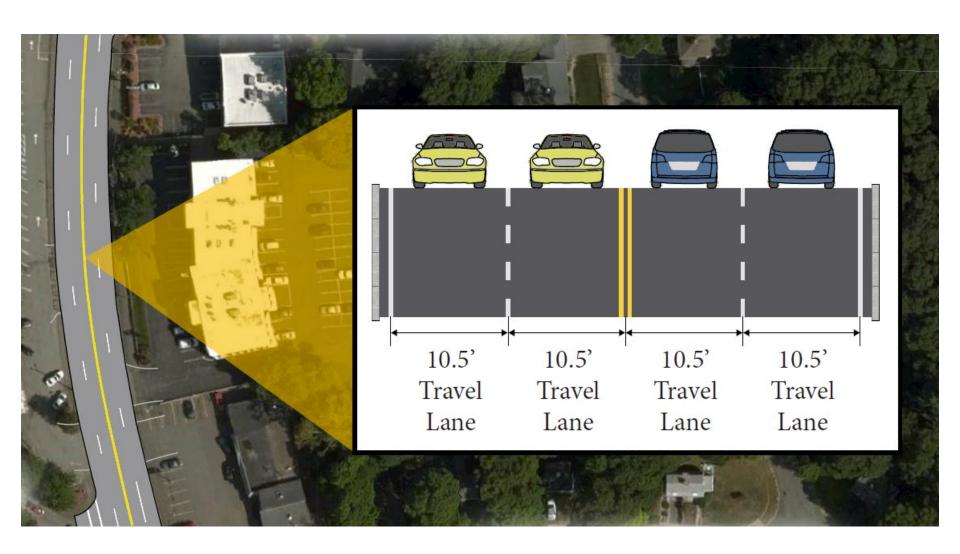
Typical Lane Configuration During Road Diet Pilot



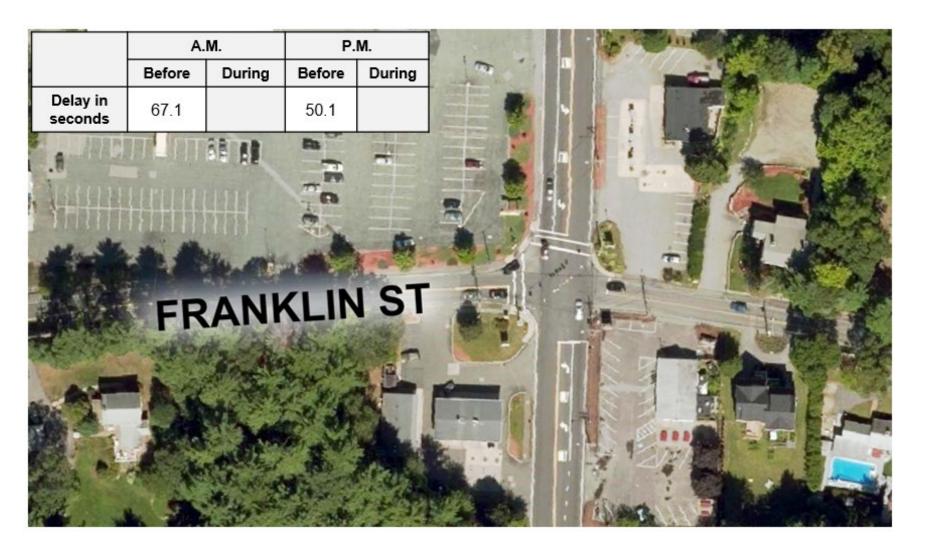
Cross-Section Near Ash Street



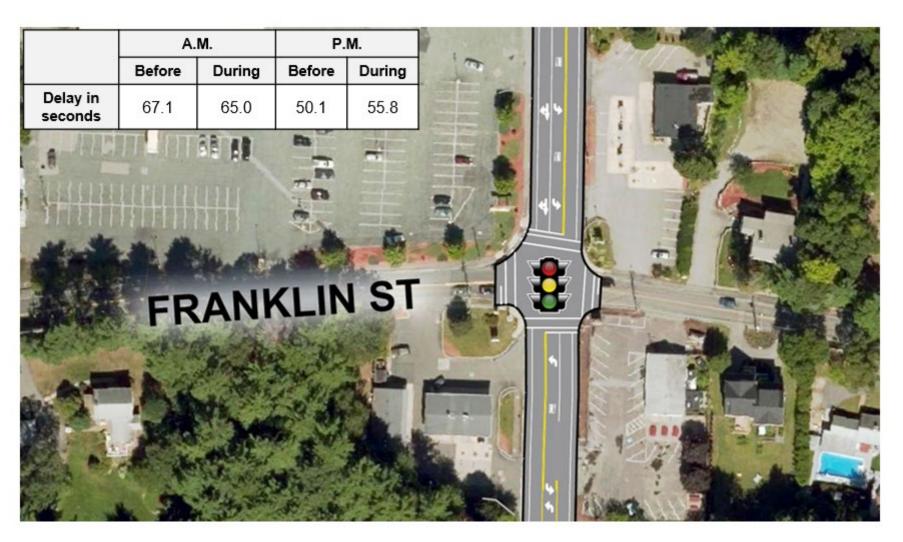
Cross-Section Approaching I-95



Franklin Street Intersection: Before Road Diet Pilot



Franklin Street Intersection: During Road Diet Pilot



Forest Street and Forest Glen Road Intersection: Before Road Diet Pilot



Forest Street and Forest Glen Road Intersection: After Road Diet Pilot



Birch Meadow Drive and Lawrence Road Intersection: Before Road Diet Pilot



Birch Meadow Drive and Lawrence Road Intersection: During Road Diet Pilot



Summer Avenue Intersection: Before Road Diet Pilot



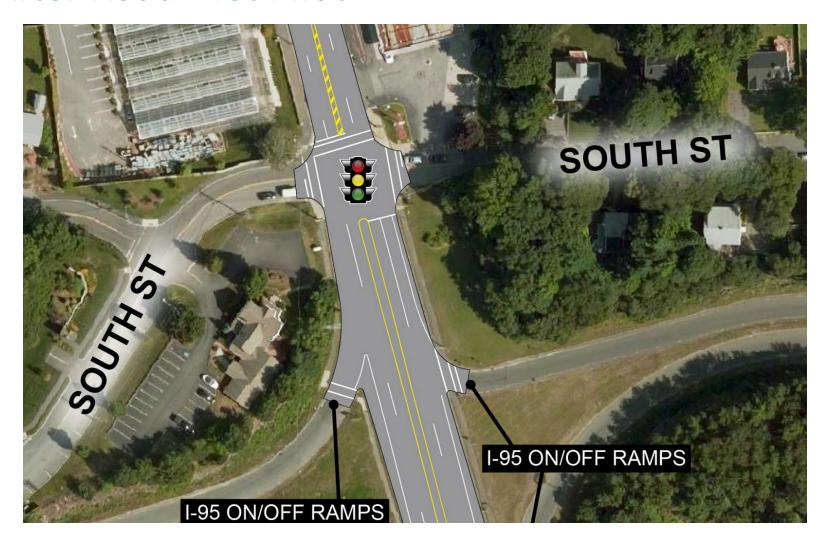
Summer Avenue Intersection: During Road Diet Pilot



South Street Intersection: Before Road Diet Pilot



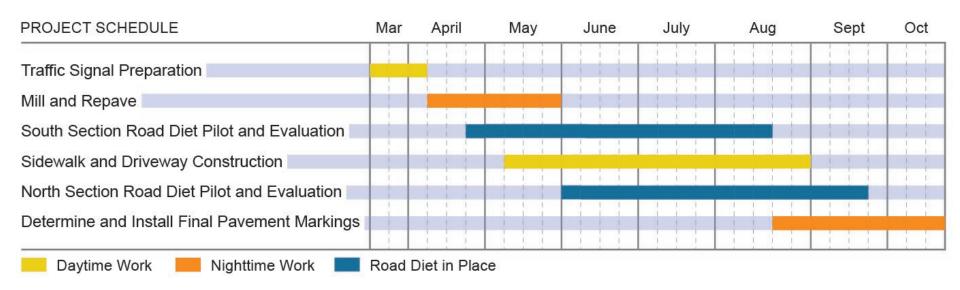
South Street Intersection: After Road Diet Pilot





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Project Schedule



As construction activities are weather-dependent, please check the project website for the most up-to-date project schedule.

Upcoming Work

4/6 - 4/10

- Daytime drainage work on North Section
- Daytime installation of "Road Diet" signs on both sections

<u>4/13 – 4/17</u>

- Daytime drainage work on North section
- Overnight installation of Road Diet on South Section

<u>4/20 – 4/24</u>

Begin night time milling operations on North Section

Construction Impacts

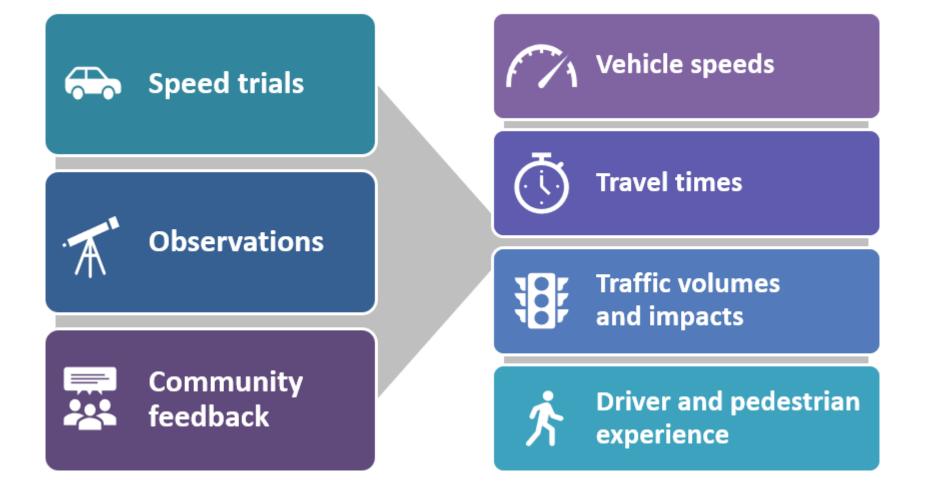
Milling and Paving

- Before and after road diet pilot
- Work will take place overnight to minimize disruption

Sidewalk and Driveway Reconstruction

- During road diet pilot
- Work will take place during daytime
- Temporary and isolated impacts
- Contractor will provide advance notice to affected abutters

Road Diet Pilot Evaluation



Public Engagement: Gathering Feedback

During Road Diet Pilot

- MassDOT website:
 - www.mass.gov/route-28-in-reading-resurfacing-and-road-diet-pilot
 - Project information, design plans, and FAQs
 - Interactive online map and survey
- Project email address: <u>Route28Pilot@dot.state.ma.us</u>
- Public open house and/or meetings
 - Virtual and/or in-person
- If possible, partner with Town to conduct in-person outreach

Public Engagement: Sharing Final Design

After Road Diet Pilot

MassDOT Website:

www.mass.gov/route-28-in-reading-resurfacing-and-road-diet-pilot

- Evaluation data and results
- Final design plans
- Project information and FAQs
- Public Open House and/or Meeting
 - Virtual and/or in-person

Stay Informed and Share Your Feedback

To learn more and share your feedback, visit:

mass.gov/route-28-in-reading-resurfacing-and-road-diet-pilot (or Google 'Rt 28 Road Diet Pilot')

If you have questions or would like more information, contact:

Route 28 Pilot@dot.state.ma.us