

Virtual Public Meeting

August 30, 2021

6:30 p.m.



ROUTE



Main Street

Resurfacing and
Road Diet Pilot Project

Notification of Recording

This virtual public meeting will be recorded. The Massachusetts Department of Transportation may choose to retain and distribute the video, still images, audio, and/or chat transcript. By continuing attendance with this virtual public meeting, you are consenting to participate in a recorded event.

If you are not comfortable being recorded, please turn off your camera, keep your microphone muted, and refrain from chatting in the transcript box.

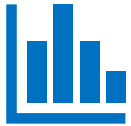
Other Important Notes

Please note that you are automatically muted upon entering the meeting. The meeting will be open to questions and answers at the end of the presentation. Submit your questions and comments using the chat panel or “raise your hand” to be unmuted for verbal questions.





1. Refresher: Project Overview & Schedule



2. Pilot Evaluation

A. Community Feedback and Adjustments

B. Data Analysis



3. South Main Street Design



4. Next Steps



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Project Purpose and Need

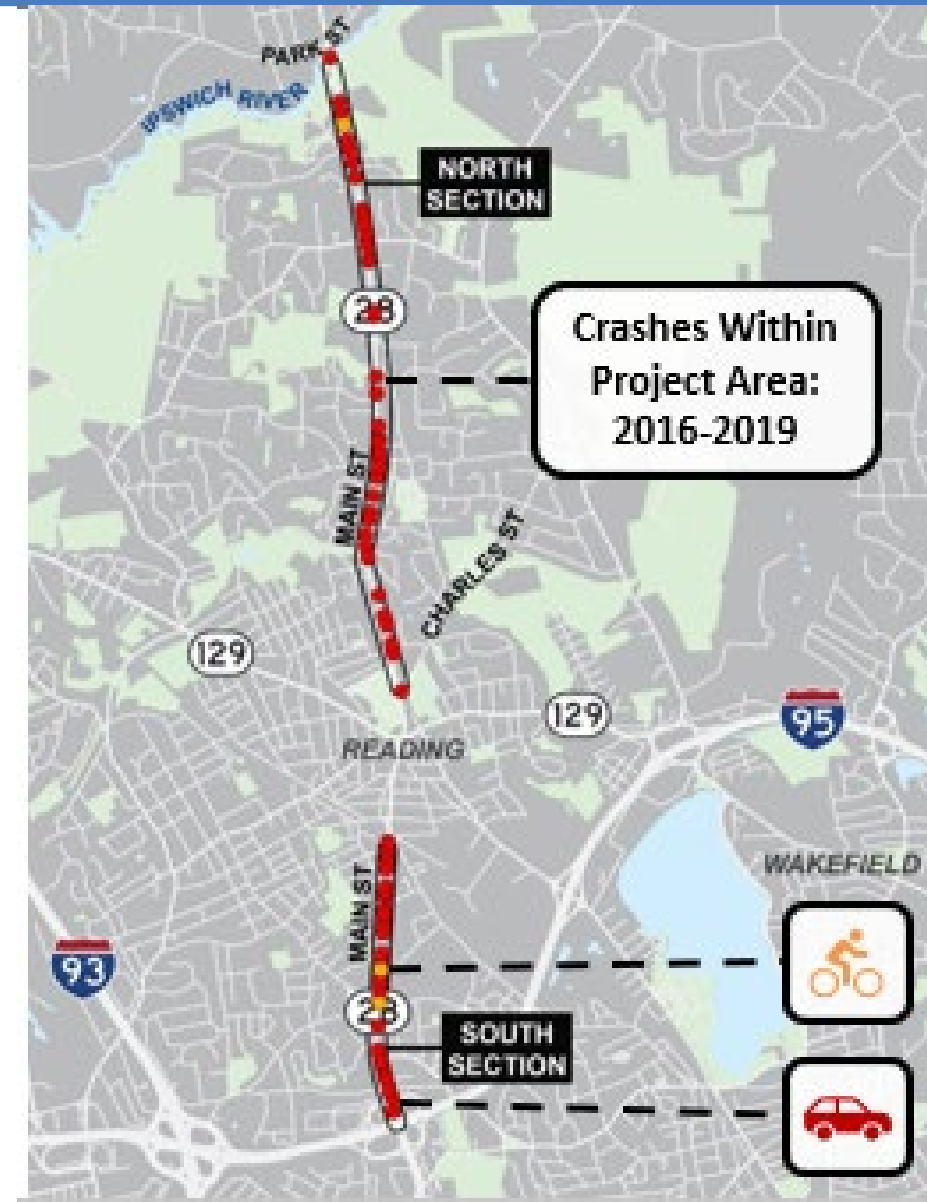
Average Crash Rate

3.23



Main Street Crash Rate

8.17



Project Goals



Maintain a state of good repair along Route 28



Improve safety for people using Main Street



Calm vehicle traffic

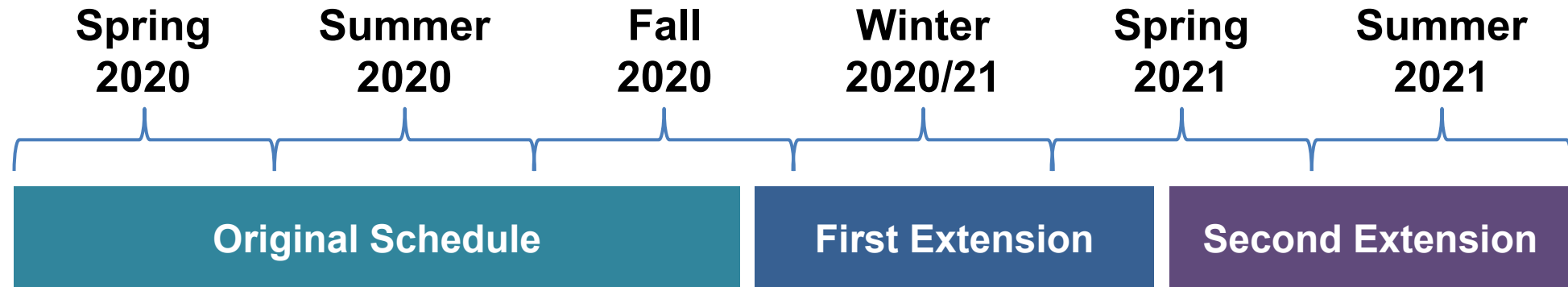


Improve accessibility for pedestrians



Meet MassDOT Complete Streets and Healthy Transportation policies

Pilot Schedule Adjustments



- In September 2020, MassDOT extended the pilot through March 2021 due to the impact of COVID-19 on traffic patterns and volumes
- In January 2021, MassDOT extended the pilot again after receiving requests from Town staff and members of the public

Data Quality vs. Pavement Service

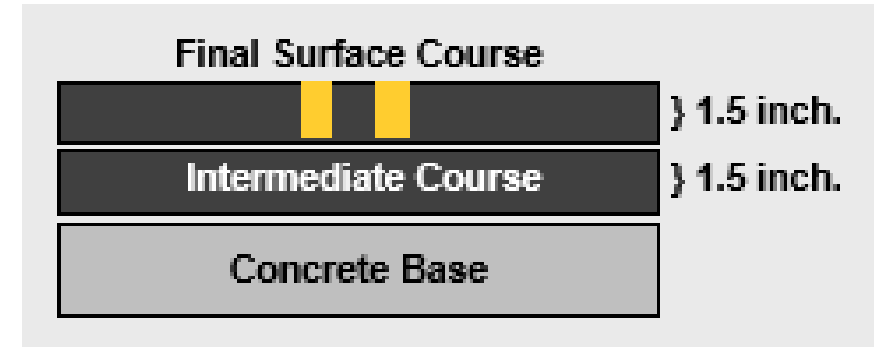
- MassDOT conducted the pilot to test the new pavement markings in “typical conditions”
- We want to have as much data as possible before making any final decisions
- The project team analyzed extending the pilot to gather more data

**MassDOT
MOBILITY
DASHBOARD**



Data Quality vs. Pavement Service

- Resurfacing the roadway requires two layers of asphalt:
 - One Intermediate Course (1 ½ inches)
 - One Surface Course (1 ½ inches)
- Delaying the Surface Course increases the risk of reflective cracking associated with the underlying concrete base
 - Reflective cracking would reduce the service life of the completed pavement



Updated 2021 Schedule

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV
North Main St.	Prepare and Adjust Structures		Pave and Paint with Abutter Coordination				
South Main St.	Collect Traffic Data		Conclude Evaluation	Prepare and Adjust Structures	Pave and Paint with Abutter Coordination		
Public Outreach	Public Meeting	Update Town Staff (PTTTF)		Tonight: Announce South Main Pavement Markings	Construction Updates and Project Completion		
Continue Meeting and Coordinating with Town Staff							
Gathering Public Input							



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Pilot Outreach Before and During Pilot

- Door-to-door flyering and outreach at businesses along project area
- Business Breakfast and Info Session
- MassDOT and Town of Reading project webpages
 - Project information
 - Road Diet guides
 - Project team contact info
- PIMA online comment map
- Informational video presentation
 - 1,000+ views on YouTube
 - Rebroadcasted on RCTV
- Two Reverse 9-1-1 Calls
 - “Code Red” calls to 20,000 residents
- Project information included in Town Water Bill
- September virtual public meeting
- Two presentations to Select Board
- Developed *How To Use A Center Turn Lane Info Guide* and shared it on social media and with Pleasant Street Center
- Press releases at key milestones
- Periodic social media posts

340+

Comments Submitted by

230+

Residents and Neighbors

200+

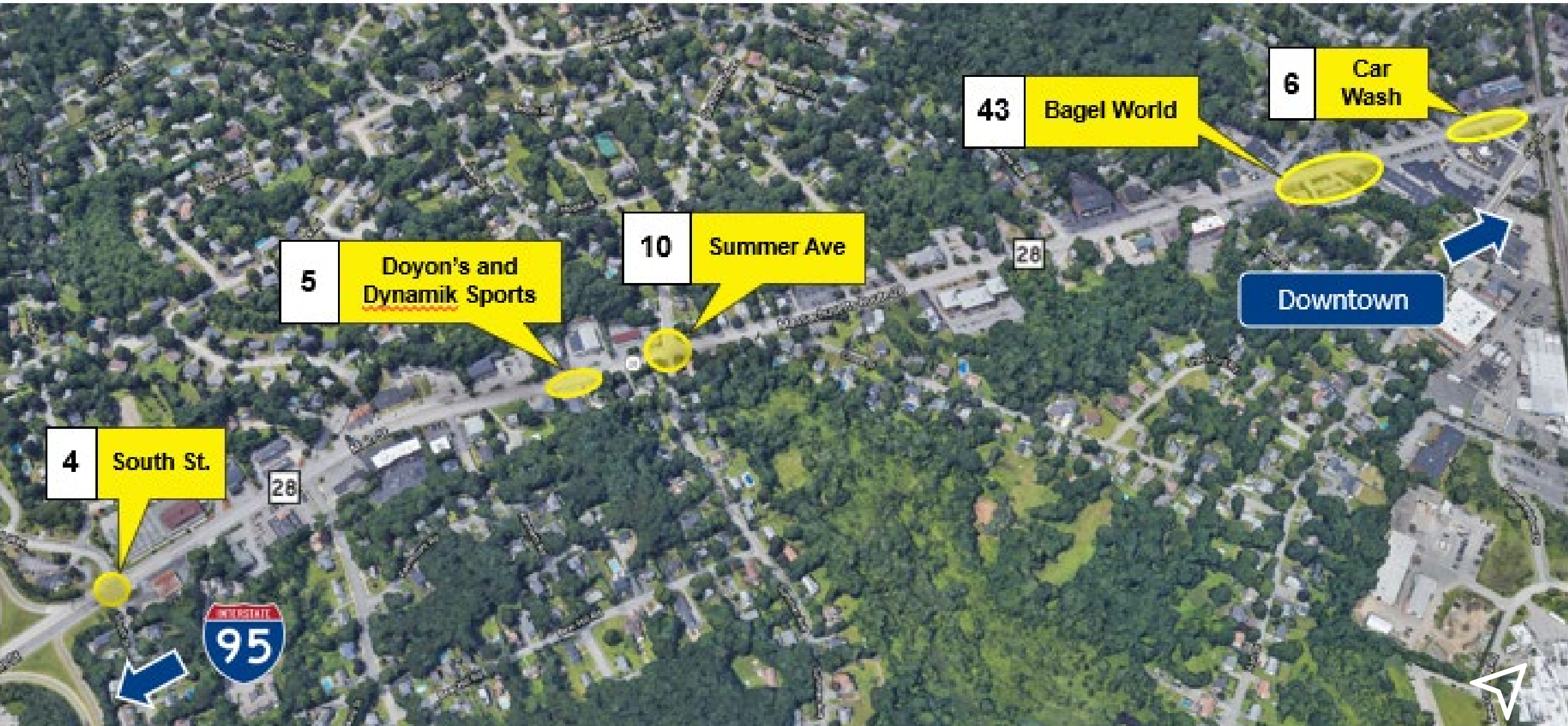
Requested and Received
Written Responses

Major Themes

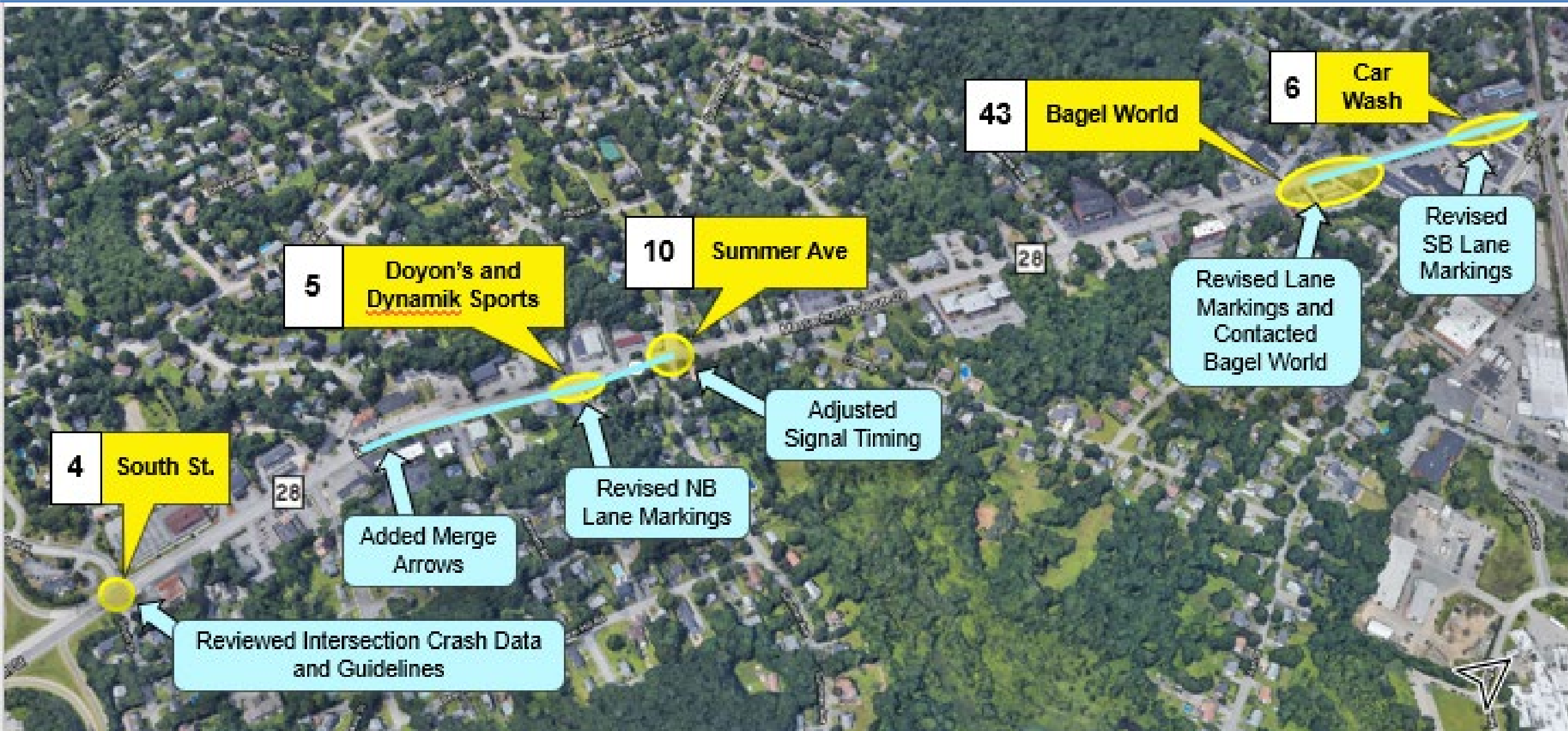
- Anticipated traffic impacts
- Anticipated diversions
- Impacts of COVID-19 on pilot
- Intersection configurations
- Access to businesses
- Less speeding on Main Street
- Improper use of Center Turn Lane
- Increased safety for people walking and biking
- Longer wait times to exit side streets
- Emergency response vehicles

South Main Street Comment Clusters

during pilot period



South Main Street Adjustments during pilot period



North Main Street Comment Clusters

during pilot period




North Main Street Adjustments during pilot period & final design



Theme Highlight: Need for Education

- Early on, reports of people improperly using the turn lanes to travel, speed, and pass
- Made design adjustments to reduce transitions, and people got used to the new markings
- MassDOT developed educational resources: website page, instructional handout



Search Mass.gov

SEARCH

PART OF

Route 28 in Reading - Resurfacing and Road Diet Pilot



OFFERED BY

Highway Division

Show 1 more

Center Left Turn Lanes - Route 28 Reading Resurfacing and Road Diet

Some two-way roads have a center turn lane that can be used for left turns by vehicles traveling in both directions.




Center Lane sign & diagram

TABLE OF CONTENTS

- Center Left Turn Lanes explained
- Using Center Left Turn Lanes
- Contact

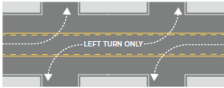
Two-Way Left Turn Lanes

INFORMATIONAL GUIDE



A two-way left-turn lane (TWLTL) is a street configuration that provides a center lane for left turning vehicles traveling in either direction.


A TWLTL removes left turning vehicles from the through lanes and allows vehicles to wait in the center lane until a safe gap in oncoming traffic is available before turning left.



Two-Way Left Turn Lanes...	Which can Result In...
Remove stopped or slow left-turning vehicles from the through lanes.	<ul style="list-style-type: none">Fewer rear-end collisionsReduced delay to through vehicles
Provide drivers a space to wait for an adequate gap in traffic before turning left.	<ul style="list-style-type: none">Fewer side-swipe collisions
Create special separation between opposing lanes of traffic.	<ul style="list-style-type: none">Fewer head-on collisions

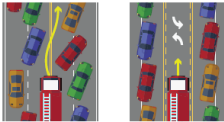
MAINTAINING ROADWAY CAPACITY

When a four-lane corridor contains a large number of driveways and side streets, the majority of through traffic stays in the outside lanes to avoid being delayed by slow and stopped left-turning vehicles in the inside lanes. These four-lane corridors essentially behave like there is only one through lane in each direction, so when they are converted to a three-lane section they are less likely to experience a significant change in capacity.




CLARITY DURING EMERGENCIES

Three-lane roadways provide increased clarity in the event of an emergency by allowing for law enforcement and emergency services vehicles to bypass stopped traffic by using the TWLTL. If necessary, drivers in through lanes can remain in place, leaving the TWLTL solely for emergency response vehicles.




Two-Way Left Turn Lanes

INFORMATIONAL GUIDE



HOW TO USE THEM

- Plan for the turn.
- Signal your turn at least 100 feet before making the turn. On a highway, signal at least 500 feet before a turn.
- Reduce your speed.
- Check your mirrors for traffic behind you and check the blind spot on your turning side.
- Watch out for oncoming vehicles that may be using the center turn lane.
- When it is safe and the center turn lane is clear, enter the center turn lane.
- Make sure no part of your vehicle is blocking through traffic.
- Wait in the center left turn lane until it is safe to turn left.



WHEN TO USE THEM

Two-way left turn lanes should only be used when:

- Making a left turn or a U-turn from the roadway when permitted.
- Making a left turn from a side street or driveway.


Drivers may not travel in a center turning lane. Never use the center left turn lane as an ordinary traffic lane or for passing other vehicles.

LEARN MORE


Before and after data from road diets around the country often show the three lane roads have similar capacities and lower crash rate than the original four lane road.

To learn more about road diets and two-way left-turn lanes, please visit:


- https://safety.fhwa.dot.gov/road_diets/
- <https://www.mass.gov/info-details/what-are-road-diets>



For questions and comments about the TWLTL on Main Street in Reading, email the Route 28 Resurfacing and Road Diet Pilot Project Team: Route28Pilot@dot.state.ma.us



For questions and comments about the TWLTL on Main Street in Reading, email the Route 28 Resurfacing and Road Diet Pilot Project Team: Route28Pilot@dot.state.ma.us



Reminder on How to Use Center Turning Lanes

- Drivers may not travel in a center turning lane
- Never use the center left turn lane as an ordinary traffic lane or for passing other vehicles
- Center left turn lanes should only be used when:
 - Making a left turn or a U-turn from the roadway when permitted
 - Making a left turn from a side street or driveway



Turning Left From the Center Lane



1. Plan for the turn.



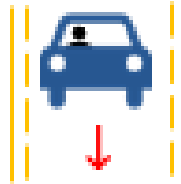
2. Signal your turn at least 100 feet before making the turn. On a highway, signal at least 500 feet before a turn.



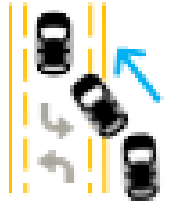
3. Reduce your speed.



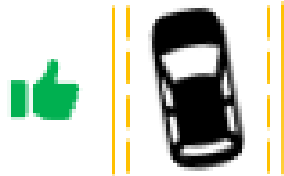
4. Check your mirrors for traffic behind you and check the blind spot on your turning side.



5. Watch out for oncoming vehicles that may be using the center turn lane.



6. When it is safe and the center turn lane is clear, enter the center turn lane.



7. Make sure no part of your vehicle is blocking through traffic.



8. Wait in the center left turn lane until it is safe to turn left across the oncoming traffic lane.



1. Refresher: Project Overview & Schedule



2. Pilot Evaluation

A. Community Feedback and Adjustments

B. Data Analysis

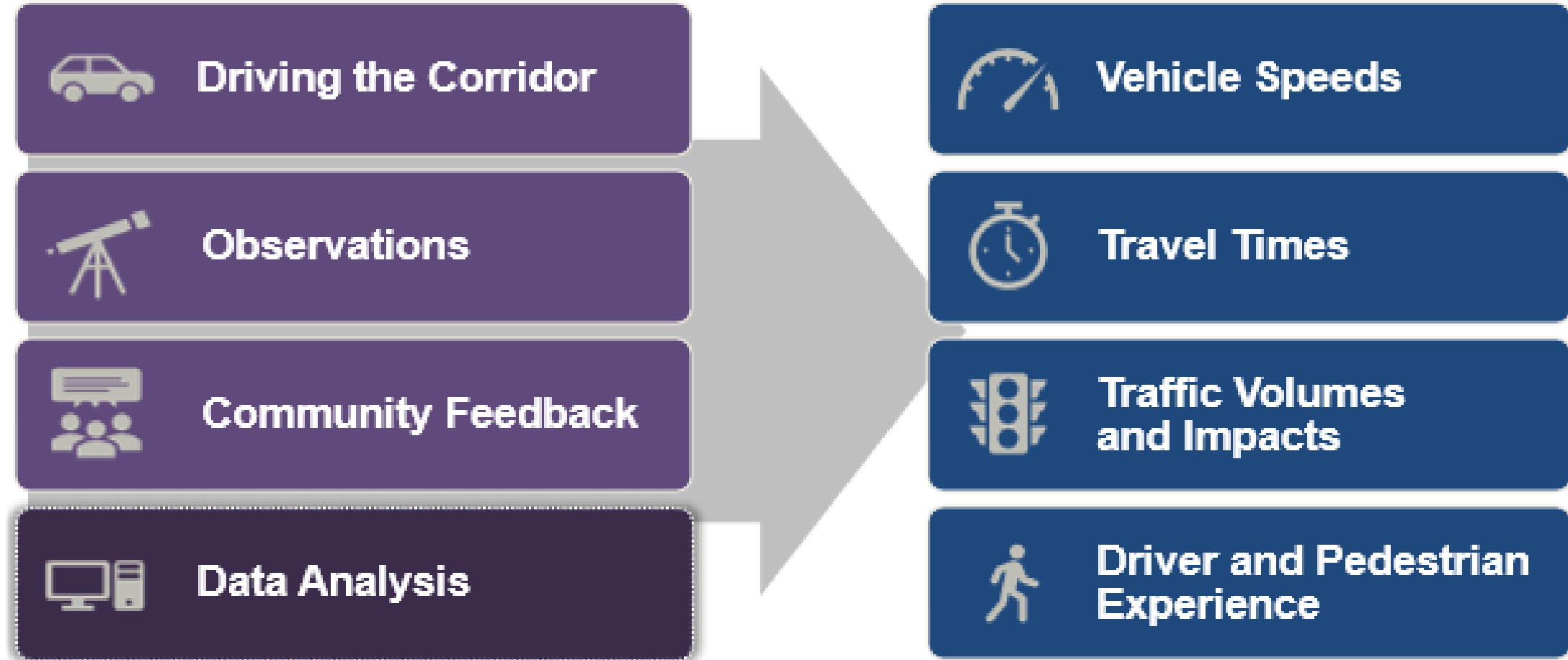


3. South Main Street Design

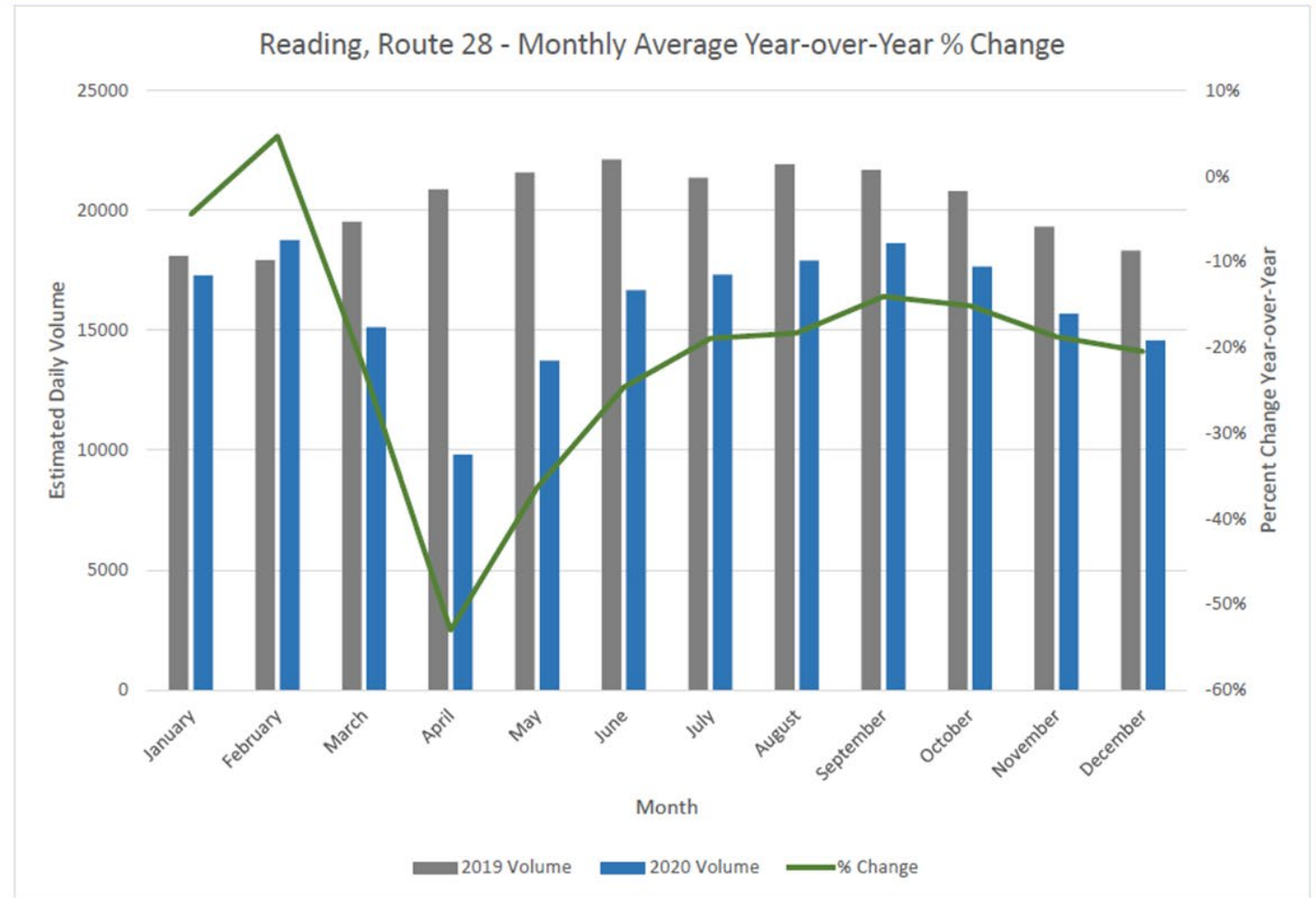
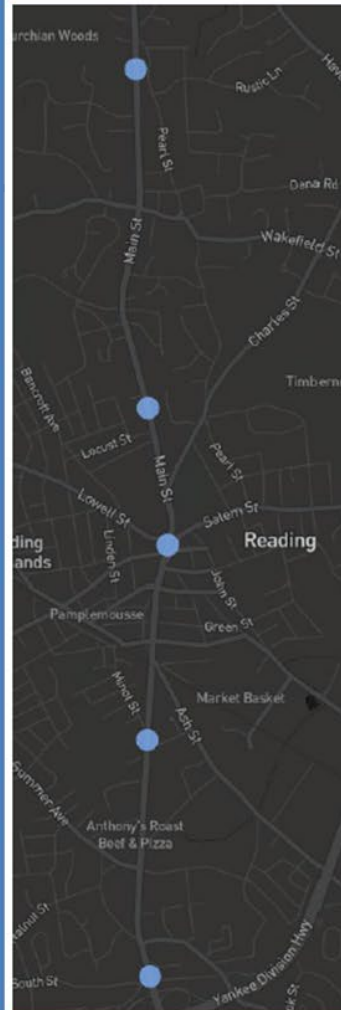


4. Next Steps

Pilot Evaluation: Data Analysis



Average Daily Volumes on Route 28/ Main Street



Average Daily Traffic Volumes for December

Location	2019	2020	% Change
Route 28 between Fairchild and Brentwood (North section)	17220	13660	-20.67%
Route 28 between Locust and Bethesda (North section)	17936	14156	-21.07%
Route 28 at Town Common	18868	14927	-20.89%
Route 28 between Avon and Minot (South section)	17080	13614	-20.29%
Route 28 at South St (south section)	20486	16470	-19.60%

Source: Streetlight Insight "Streetlight Volume (Vehicle Trips)" zone activity analysis; data shown through December 31, 2020

Traffic Volumes At Additional Locations



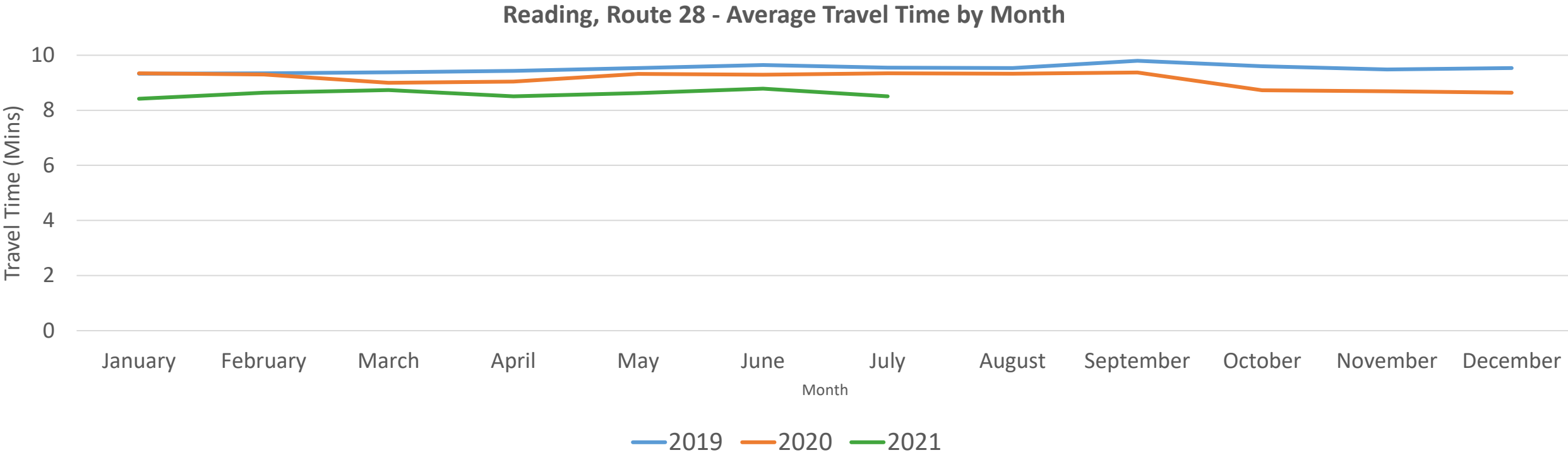
Percentage Change of Monthly Traffic Volumes

Percent Change of Average Monthly Volumes (2019 to 2020) at Various Locations in Reading

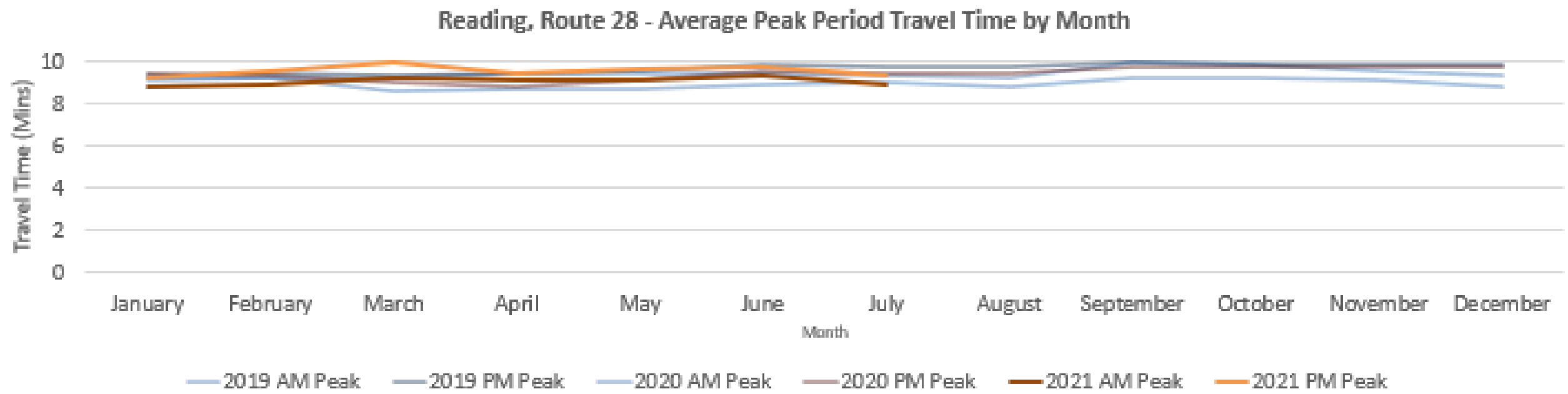
ID	Location Name	January % Chg.	February % Chg.	March % Chg.	April % Chg.	May % Chg.	June % Chg.	July % Chg.	August % Chg.	September % Chg.	October % Chg.	November % Chg.	December % Chg.
A	Franklin St. (Between Collins and Sailor Tom's)	0%	10%	-21%	-56%	-37%	-29%	-24%	-22%	-15%	-17%	-21%	-22%
B	Franklin St. (Between Pearl and Gavin)	-1%	10%	-19%	-52%	-36%	-25%	-21%	-19%	-15%	-16%	-19%	-22%
C	Franklin St. (Between Blueberry Ln and Sunset Rock Ln)	-2%	10%	-20%	-55%	-38%	-30%	-24%	-22%	-16%	-17%	-19%	-20%
D	Pearl St. (Between Briarwood and Willard)	-7%	31%	-6%	-50%	-33%	-25%	-23%	-28%	-14%	-18%	-21%	-25%
E	Haverhill St. (Between Rustic and Charles)	-2%	8%	-20%	-52%	-37%	-25%	-21%	-20%	-15%	-16%	-19%	-22%
F	Grove St. (Between Forest and Spruce)	-3%	11%	-20%	-55%	-38%	-30%	-21%	-21%	-16%	-16%	-19%	-20%
G	Charles St. (Between Cemetery and Timberneck)	-5%	6%	-20%	-56%	-39%	-28%	-22%	-23%	-15%	-16%	-17%	-19%
H	Route 129 (Between Intervale and Hartshorn)	0%	6%	-21%	-53%	-37%	-25%	-19%	-19%	-14%	-15%	-19%	-21%
I	Charles St. (At Memorial Park)	-9%	6%	-22%	-52%	-36%	-26%	-20%	-20%	-13%	-16%	-18%	-21%
J	Route 129 (Between Pierce and Manning)	-1%	7%	-22%	-53%	-37%	-24%	-19%	-18%	-14%	-15%	-18%	-20%
K	Haverhill St. (At River Road)	-2%	8%	-20%	-52%	-37%	-26%	-22%	-20%	-15%	-16%	-20%	-22%
	Route 28 (averaged through entire corridor)	-4%	5%	-23%	-53%	-36%	-25%	-19%	-18%	-14%	-15%	-19%	-20%

Source: Streetlight Insight "Streetlight Volume (Vehicle Trips)" zone activity analysis; data shown through December 31, 2020

Average Travel Times

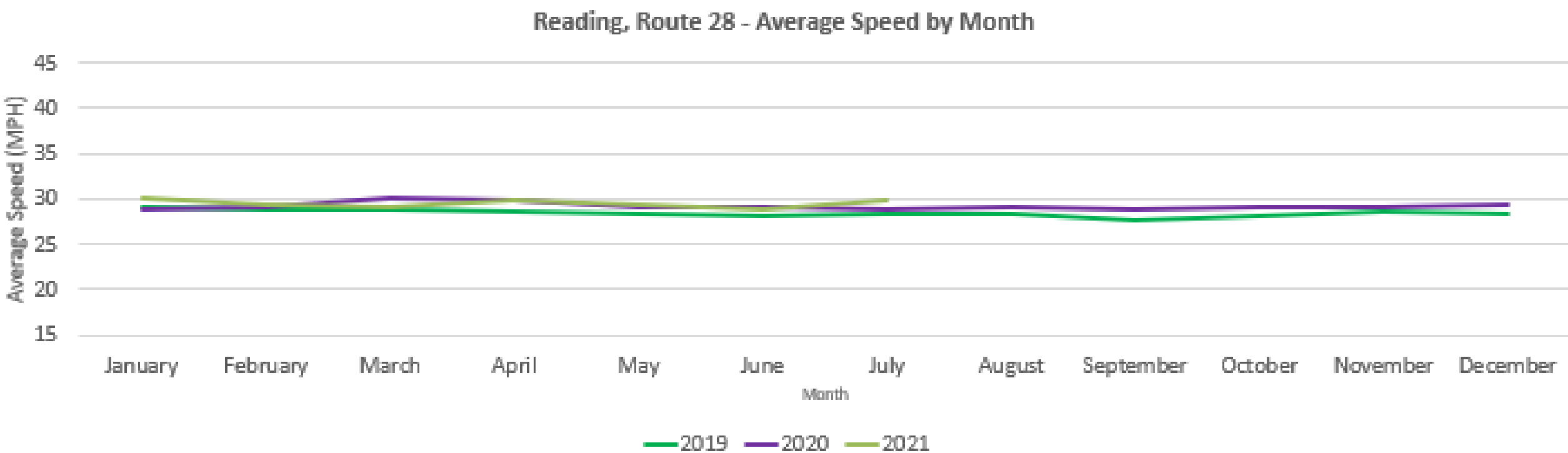


Average Travel Times: Morning (8-9 AM) and Afternoon (4-5 PM) Peaks



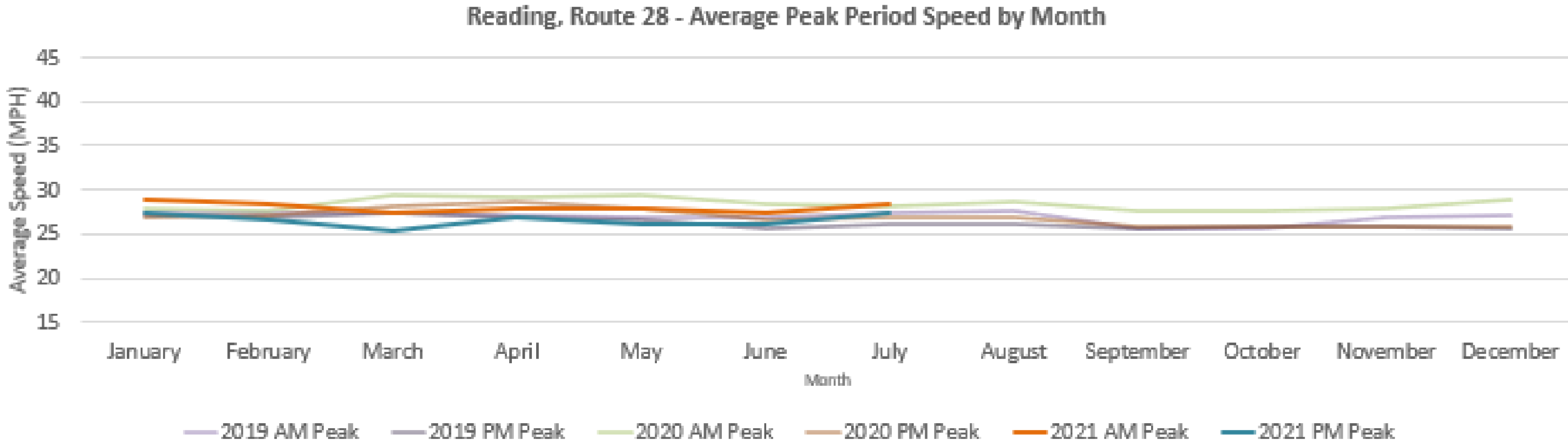
Source: RITIS Probe Data Analytics (INRIX); data shown through July 31, 2021. "AM Peak" is assumed to be 8-9AM; "PM Peak" is assumed to be 4-5PM.

Average Vehicle Speeds



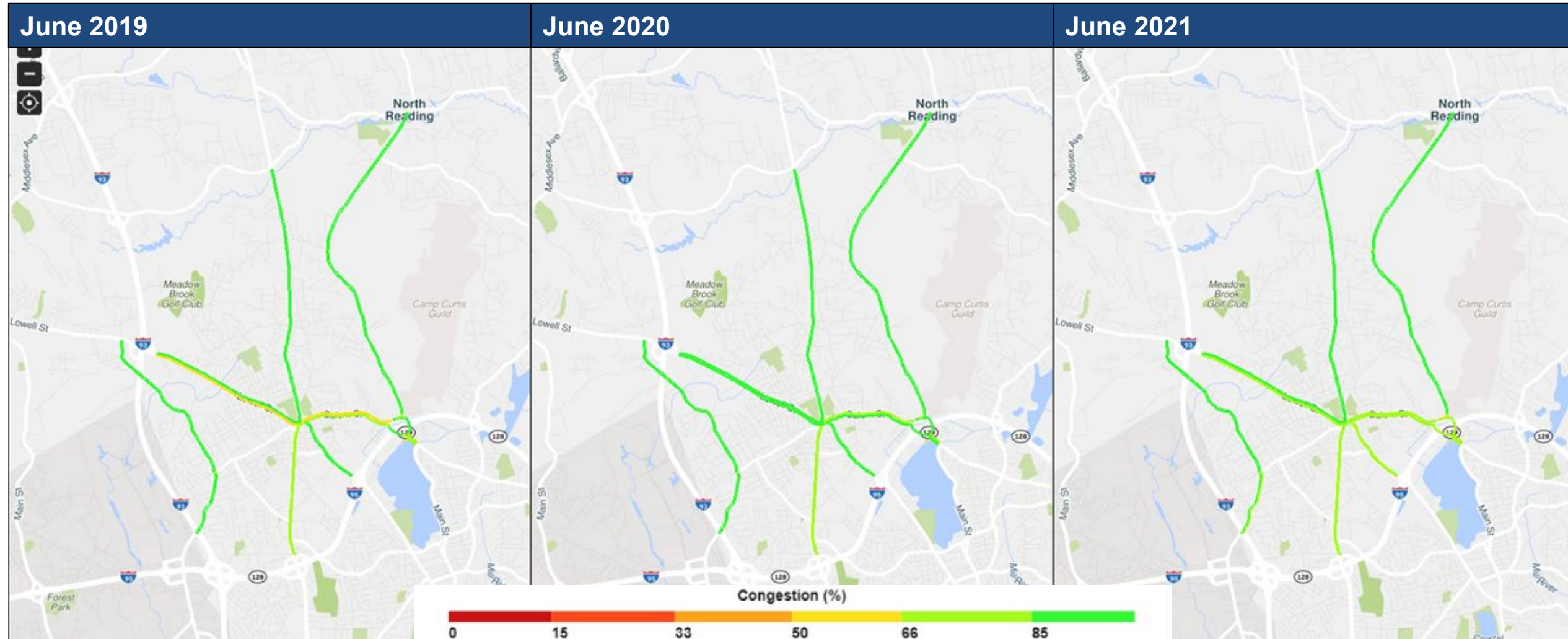
Source: RITIS Probe Data Analytics (INRIX); data shown through July 31, 2021. "AM Peak" is assumed to be 8-9AM; "PM Peak" is assumed to be 4-5PM.

Average Vehicle Speeds: Morning (8-9 AM) and Afternoon (4-5 PM) Peaks



Source: RITIS Probe Data Analytics (INRIX); data shown through July 31, 2021. "AM Peak" is assumed to be 8-9AM; "PM Peak" is assumed to be 4-5PM.

Afternoon (4 – 5 p.m.) Congestion Percentages

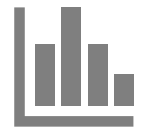


“Congestion %” is defined as measured speed as a percentage of the free flow speed. RITIS does not have complete coverage of all roadways within Reading. 2019 data includes segments (grey) with insufficient data coverage to display the congestion metric.

- Traffic volumes have stabilized at around 80% of what they were before the COVID-19 pandemic
- Average vehicle speeds on Main Street have stayed relatively consistent while other roadways in the region have seen an increase in speeding
- Average and peak travel times have stayed relatively consistent



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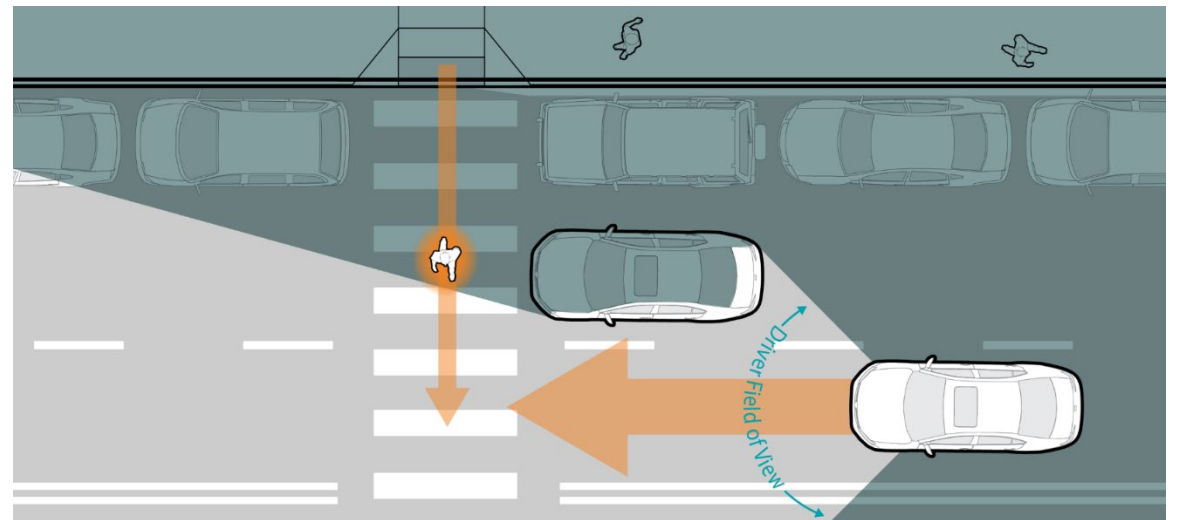
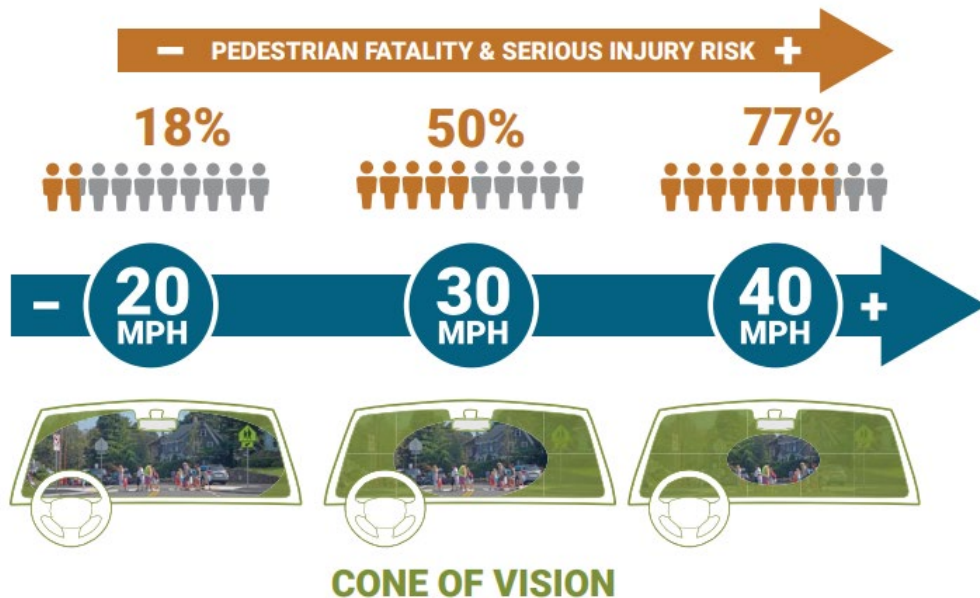
3. South Main Street Design



4. Next Steps

Pilot Conclusions – South Main Street

- Based on our findings, we believe the pilot lane configurations have reduced vehicle speeding and improved pedestrian safety
- North of Summer St: two-way left turn lane
- South of Summer: (towards interchange) returned to 2-and-2



South Main Street – Design Overview

Interchange to Summer Ave



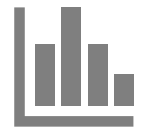
South Main Street – Design Overview

Summer Ave to Town Center





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Continue Meeting and Coordinating with Town Staff							
Gathering Public Input							

Monitoring After Project Completion

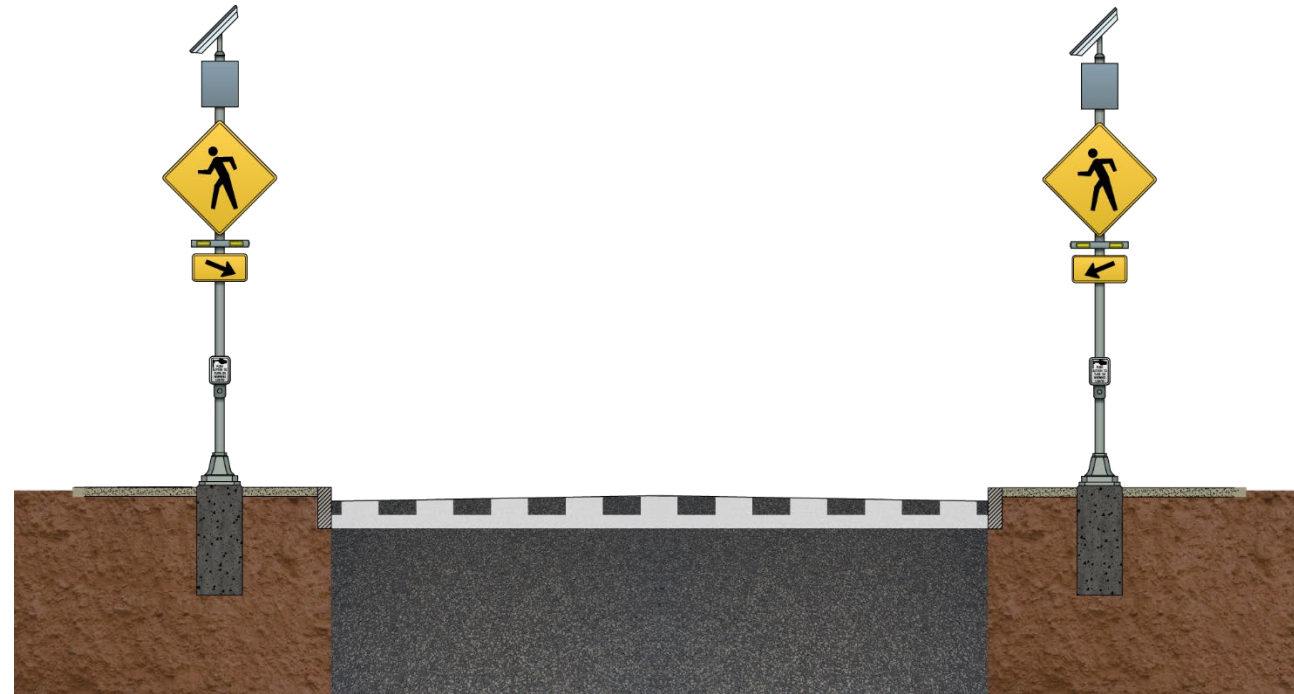
- MassDOT will continue to monitor available safety, speed, and crash data over the life of the pavement
- We will continue to review public inquiries submitted to MassDOT District 4
- Ongoing communication and routine coordination with Town of Reading staff



Related Project Updates:

Pedestrian Crossings at Knollwood and Minot

- Town asked MassDOT to assess ways to improve crossing safety at Knollwood Road and Minot Street
- These crossings may be appropriate for RRFBs
- MassDOT will evaluate both locations post construction to confirm feasibility/appropriateness
- Appropriate enhancements can be implemented using available on-call pedestrian safety contracts

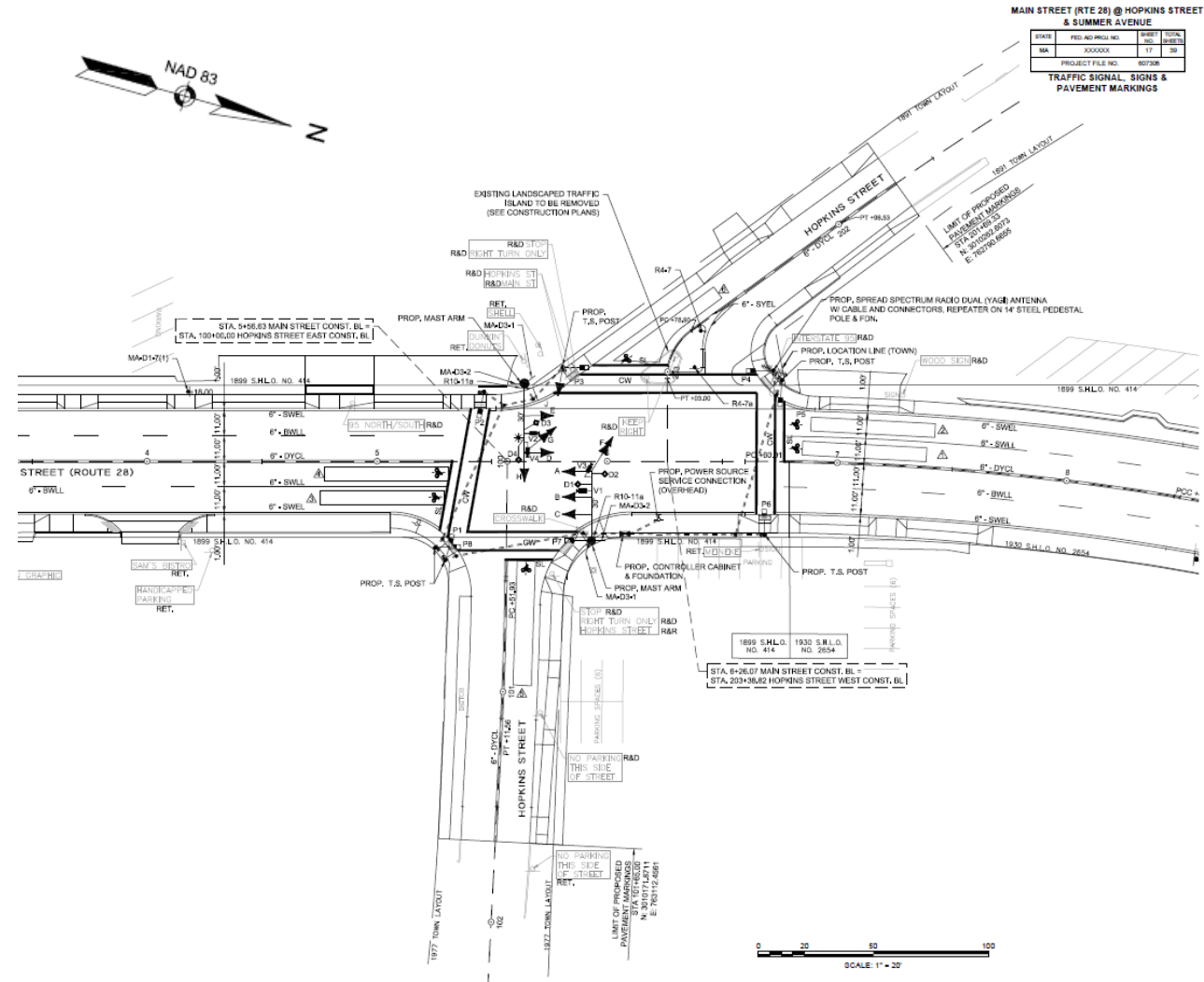


RRFBs: Rectangular Rapid Flashing Beacons

Related Project Updates:

Hopkins Street Intersection Construction

- Project scope: add traffic signals, crosswalks, rebuild intersection, replace signals at Summer Street
- Timing is being coordinated between projects, including matching to Rt. 28 final design
- Utility relocation expected to start within a few weeks
- Full construction starting next spring 2022

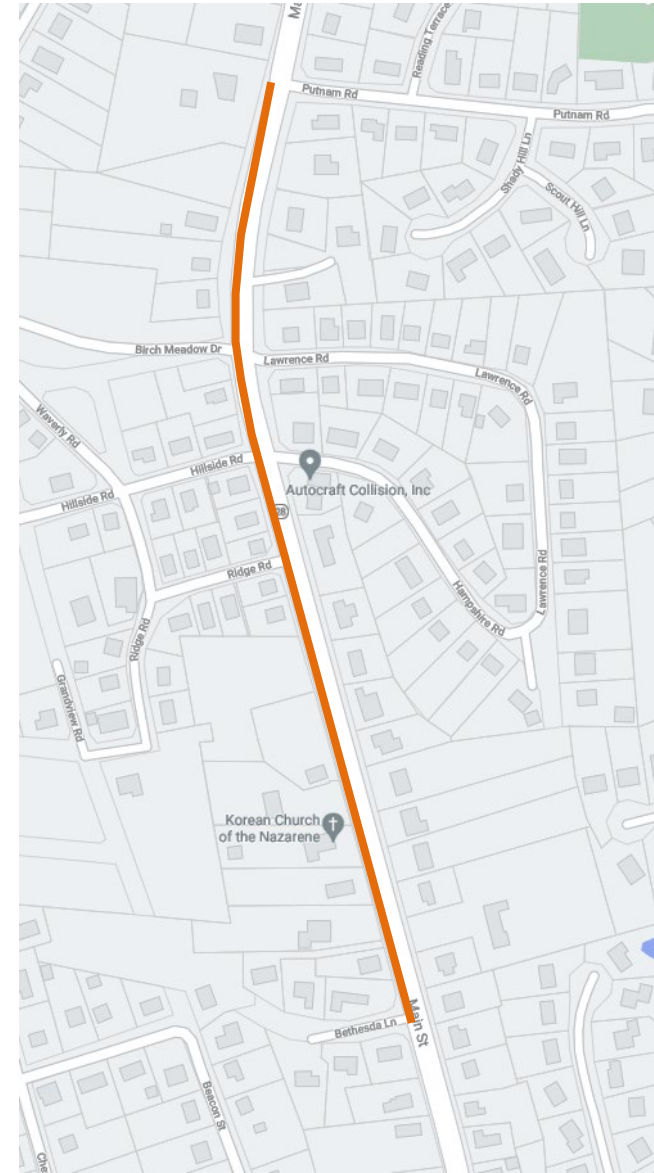


Related Project Updates:

National Grid Utility Repairs



- This spring, National Grid notified MassDOT of water intrusion and damage to ~2,100 ft. of gas line on North Main Street from Bethesda Lane to just north of Birch Meadow (including some side streets)
- Spot repairs performed, trench restored and repaved
- National Grid believes that it has addressed the water intrusion and damage without requiring full replacement
- If any further work is required, MassDOT District 4 will require National Grid to obtain an Access Permit. When intrusive work is completed, they would be required to:
 - Install a permanent patch where the utility work takes place
 - If substantial, mill and resurface the roadway and restore all sidewalks and pavement markings throughout the affected area



THANK YOU

LEARN MORE

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

Search: 'Route 28 Road Diet Pilot'

CONTACT US

Email MassDOT and District 4 Staff: dot.feedback.highway@state.ma.us

Q&A Guidelines



- “Raise your hand” to be unmuted for verbal questions



- Submit your questions and comments using the chat panel



- Please state your name before your question



- Please share only 1 question or comment at a time and limit your time to no more than 2 minutes to allow others to participate.



- To ask a question via phone, dial *9 and the moderator will call out the last 4-digits of your phone number and unmute your audio when it is your turn.

THANK YOU

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