

15 July 2020

Presentation will
begin shortly



GROVE STREET NEIGHBORHOOD GREENWAY PILOT PROJECT



Matt Johnson, AICP



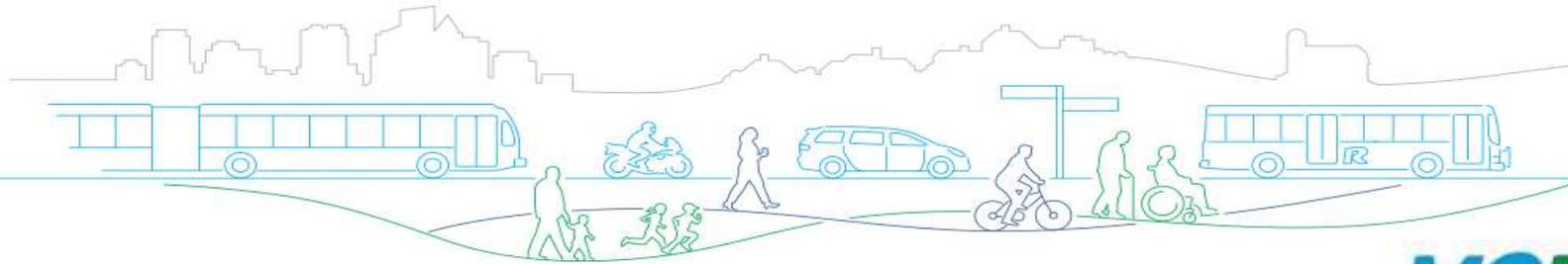
Welcome!



2

Welcome to the virtual community meeting!

- This is one of our first virtual meetings. We're all learning, so please bear with us.
- We're going to go over some basic controls to help you use the Zoom meeting format before we start the presentation.
- Please note **this meeting is being recorded**.
 - It is being recorded on video and audio and will be posted on our website.
 - If you do not wish to have your voice or likeness recorded, please turn your video camera off, and refrain from asking questions using the audio option. Instead, you can send your questions via the chat.



Using Zoom

3

Welcome to the virtual community meeting!

Let's get you oriented to the Zoom meeting.

- Muting
 - Everyone is on mute. You cannot unmute yourself. We can unmute you during the Q&A and comment period.
 - To request to speak, you'll need to use the **raise hand** feature (instructions in just a minute). Once we unmute you, you may still need to click a pop up menu to unmute yourself.
 - If you have called in by telephone, you can unmute yourself by dialing *6 once we unmute you.



Using Zoom

4

Welcome to the virtual community meeting!

Let's get you oriented to the Zoom meeting.

- Video
 - Your video camera is off by default. To reduce the bandwidth of the meeting, we request that you please do not turn your camera on.



Using Zoom

5

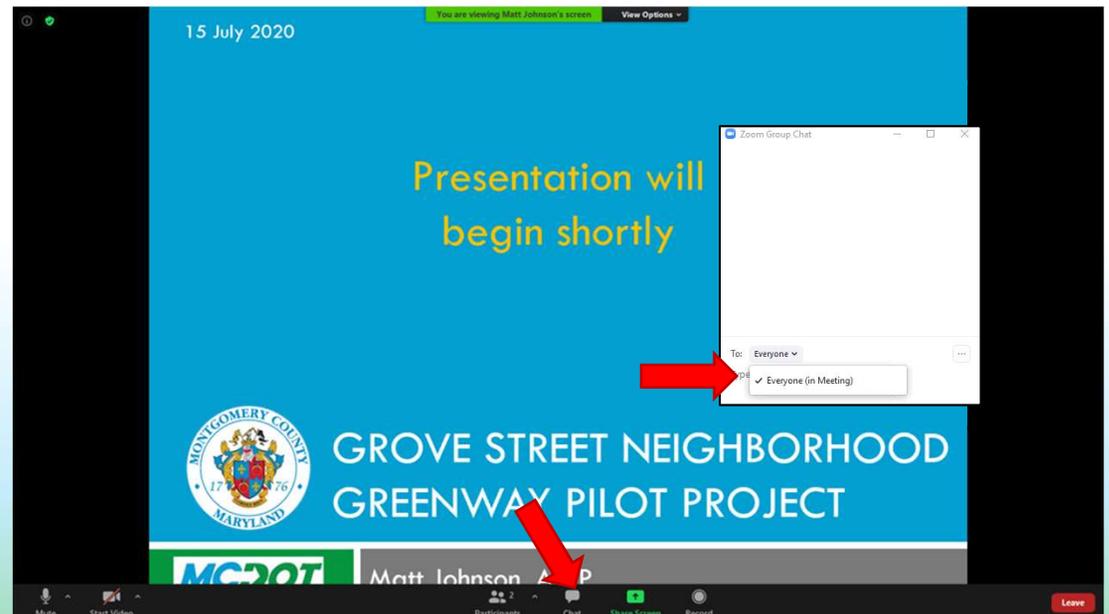
Welcome to the virtual community meeting!

Let's get you oriented to the Zoom meeting.

- Ask a question (Text)
 - If you have a question during the presentation, send it via **chat**.

To send a chat:

- Click "chat" in the bottom menu
- A new window will appear. In the "to" field, change the drop down to "Kyle Lukacs"
- Type your question and send it.





Using Zoom

6

Welcome to the virtual community meeting!

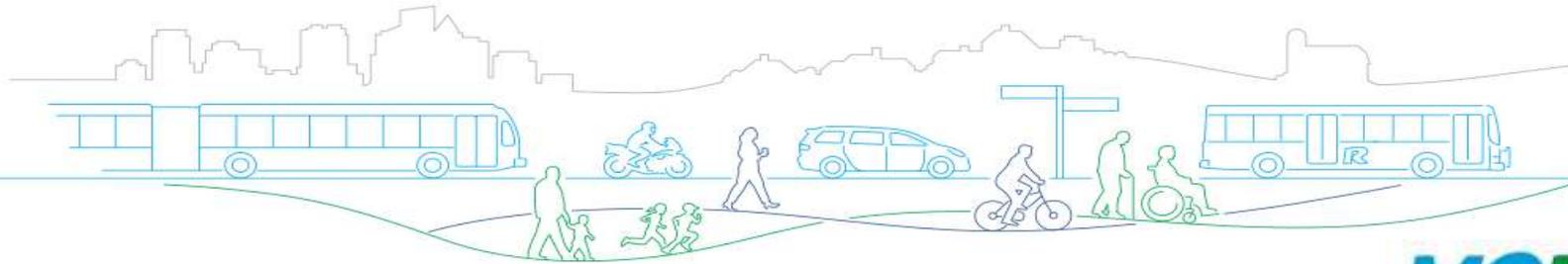
Let's get you oriented to the Zoom meeting.

- Raise your hand
 - If you'd like to speak to ask a question or make a comment, please **raise your hand**

To raise your hand

- Click "participants" in the bottom menu
- A new window will appear. Click the blue "raise hand button".
- If you've dialed in by phone, dial *9.





Using Zoom

7

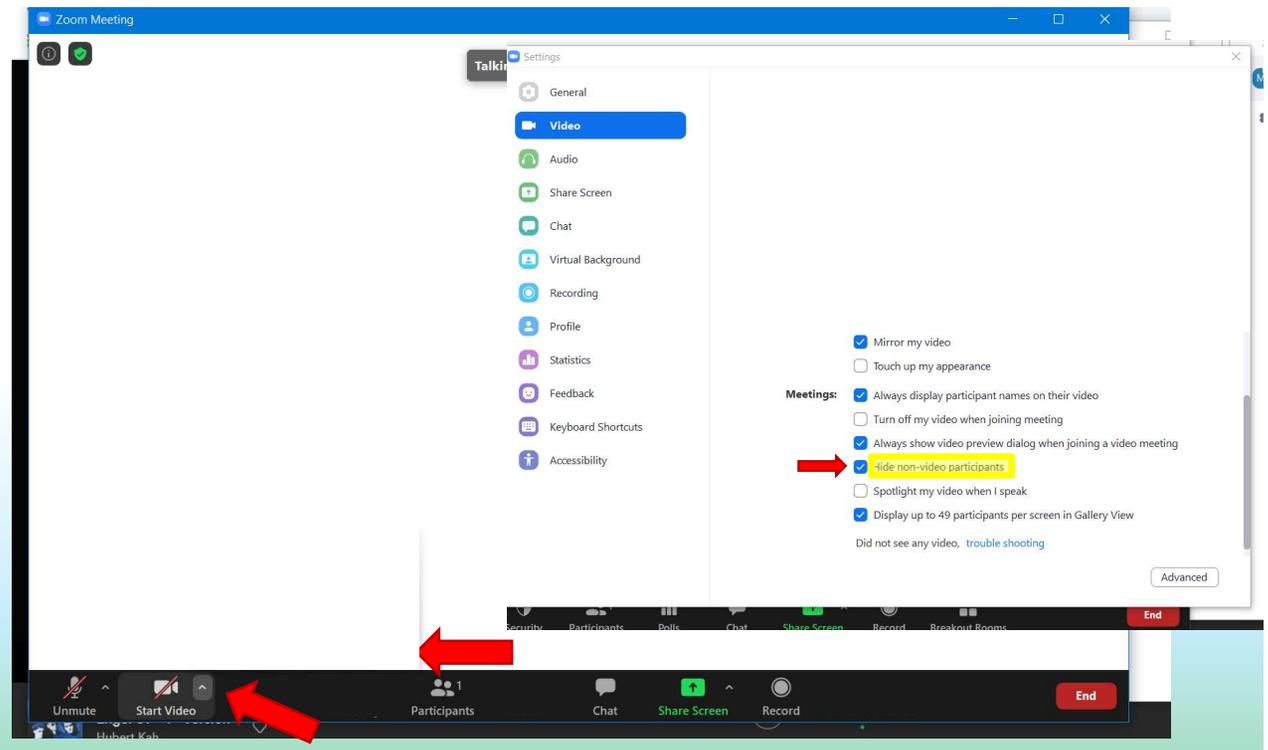
Welcome to the virtual community meeting!

Let's get you oriented to the Zoom meeting.

- View

To change your view so that you only see people with cameras on:

- Click the up arrow next to "start video".
- Select "Video settings".
- Make sure "Hide non-video participants" is checked.





Contact

8

Matt Johnson
Project Manager

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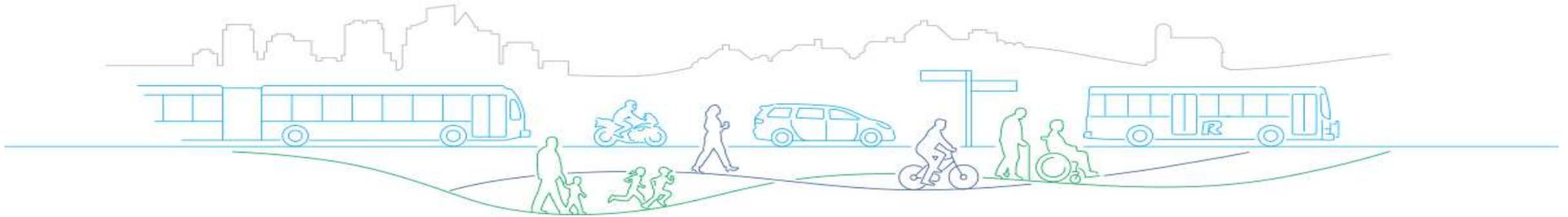
Note: Due to Covid-19, most of our staff is working from home. Email is much preferred for communication, rather than our desk phones.



Agenda

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- 7:00: Overview of Zoom features
- 7:10: Introductions
- 7:15: Meeting presentation
- 7:55: Breakout sessions
- 8:20: Report back
- 8:40: Question & Answer
- 9:00: Adjourn



Introductions

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- We have staff here from MCDOT, our engineering consulting firm Stantec, and other agencies.



Meeting Goals

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- This meeting is intended to get feedback from the community about **conceptual treatments**.
- We are not proposing a specific **implementation plan** tonight. This means, you aren't going to see a specific proposal.
- We will come back to the community in late Summer/early Fall with a specific proposal for further comment.
- Tonight, we want to get your thoughts about treatments, the pilot schedule, and any other feedback you or your neighbors have.



Project Area

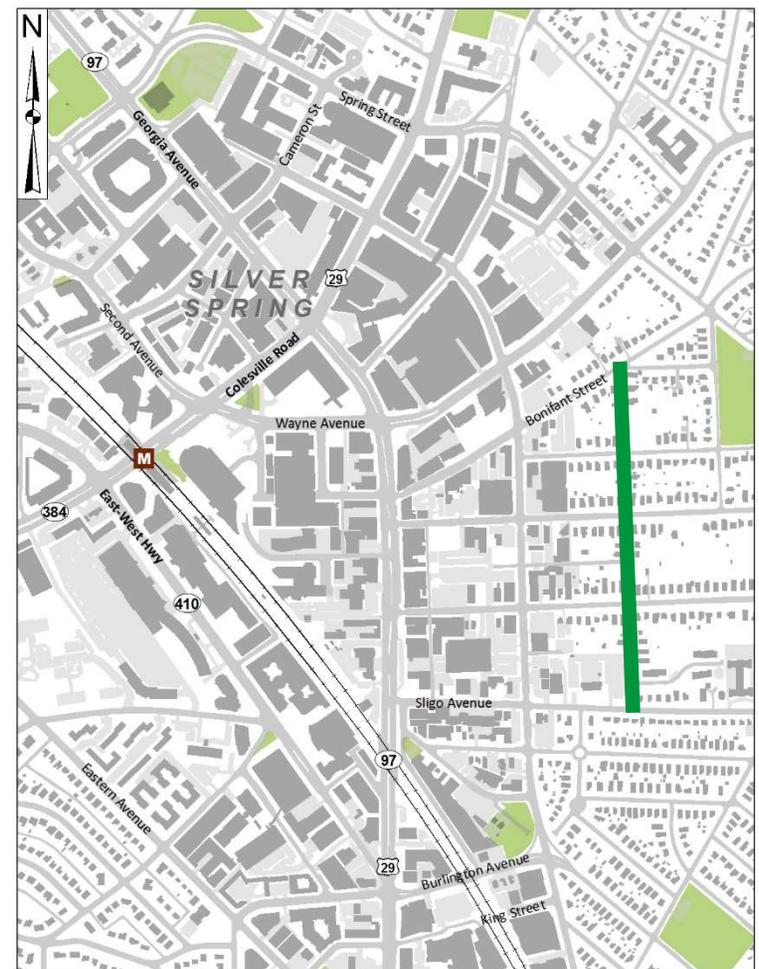
12



Grove Street looking North at Thayer Avenue (May 2020)



Grove Street looking South at Easley Street (May 2020)

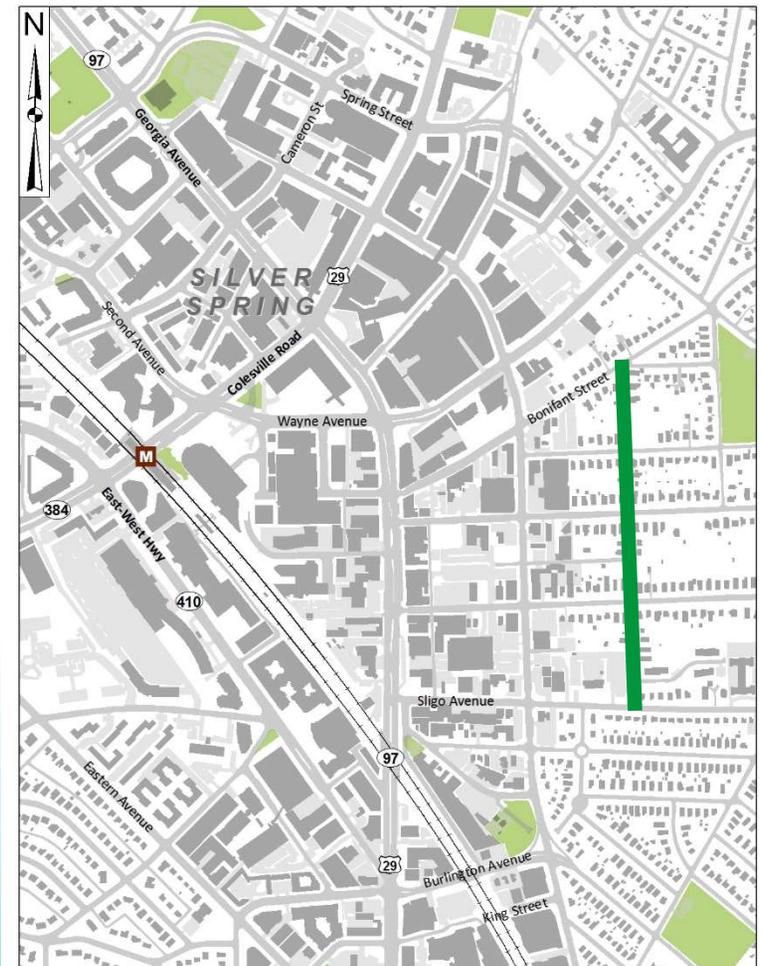




Scope

13

- Grove Street is designated as a **neighborhood greenway**
- This project will be a **pilot** to test out treatments in the corridor
- Note: As part of a separate project, MCDOT will be resurfacing Grove Street in Summer/Fall 2020, before any treatments are installed.





What is a Neighborhood Greenway?

14

- A **neighborhood greenway** is a street designed to give **walking** and **biking** *priority* and to reduce vehicle **speed** and **volume**.
- Tools to create a neighborhood greenway include signs, pavement markings, speed countermeasures, and volume management measures to discourage **cut-through trips** by vehicles and to create safe, convenient crossings of arterial streets for bicyclists and pedestrians.



What is a Neighborhood Greenway?

15

Speed treatments



Diversionsary treatments





What is a Pilot Project?

16

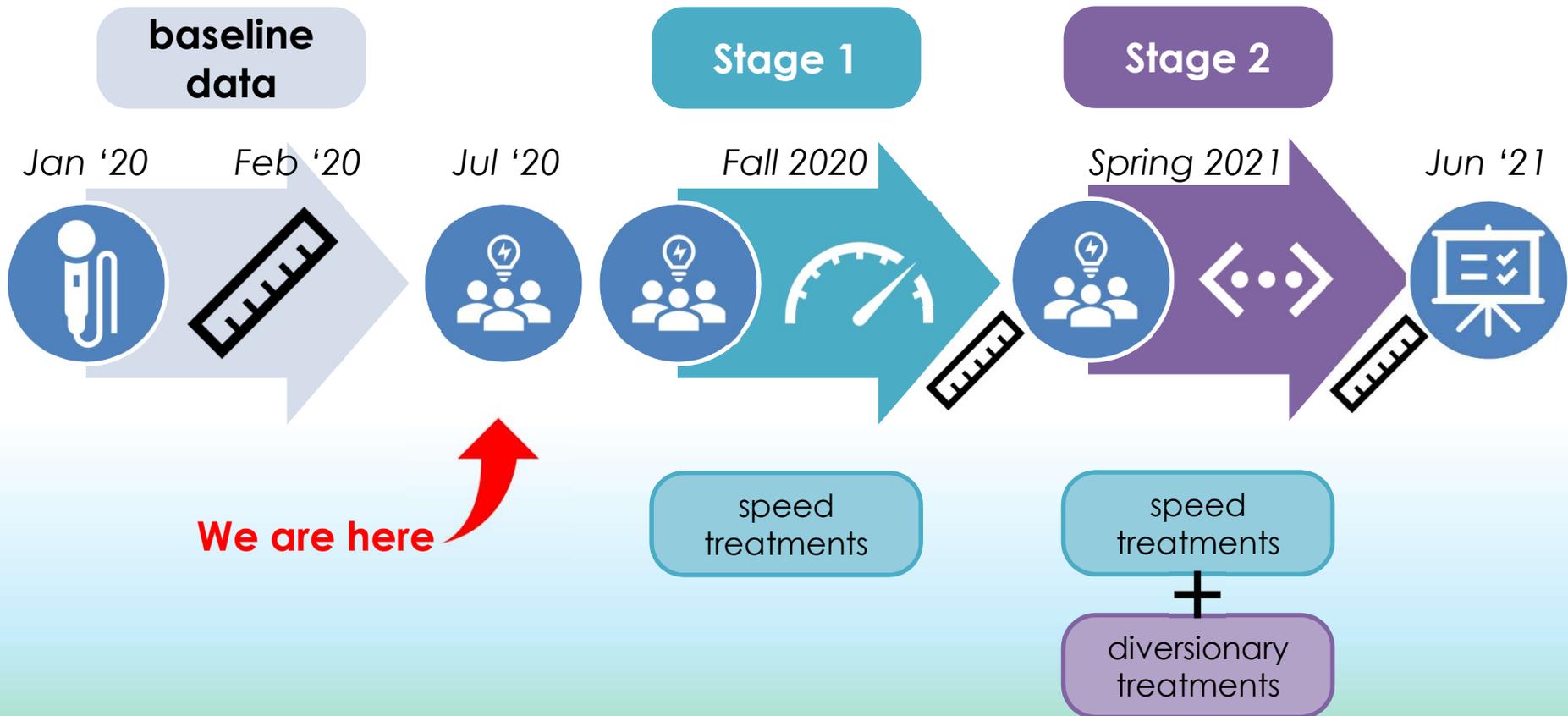
- MCDOT is **not** proposing to make permanent changes to Grove Street. Instead, a **pilot project** will allow MCDOT to try different treatments in consultation with the community, observe the results, and make changes to improve the effectiveness of the greenway.
- We will propose **semi-permanent** treatments that can be easily removed, modified, or relocated.
- During the pilot, we will collect **speed** and **volume** data to see how effective the treatments are.
- We will look at data from Grove and adjacent streets.

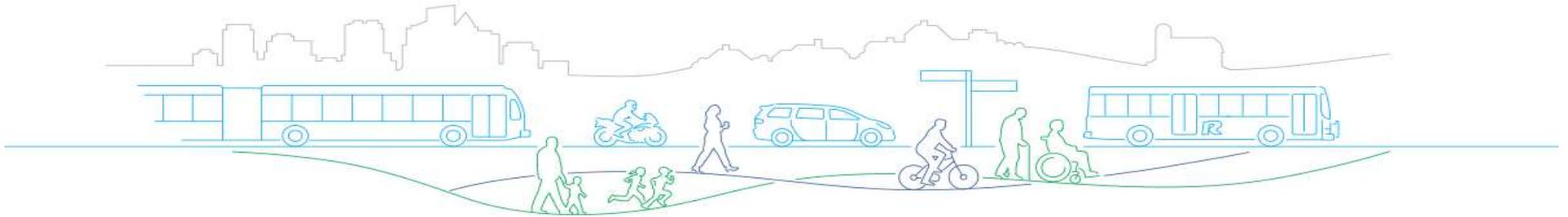


Schedule

17

- The pilot is anticipated to take a two-stage format.





Pilot Project Questions?

18

- We have time for 1 or 2 quick clarifying questions on the pilot project now.
- **Please** questions **only**. The comment period will be later.

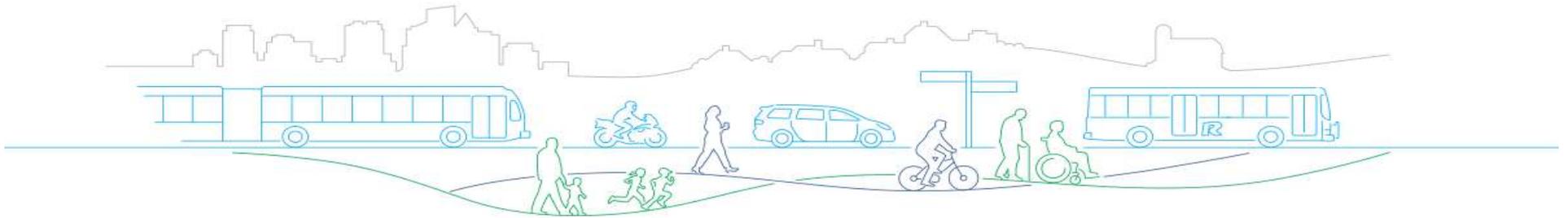


Temporary shared street

19

- In June 2020, MCDOT installed a temporary “shared street” on Grove Street to provide additional space for social distancing during Covid-19.
- This is a separate (though related) effort from the semi-permanent project we’re talking about tonight.
- The plan is to leave this in place until the Grove Street Pilot is installed in Fall 2020.

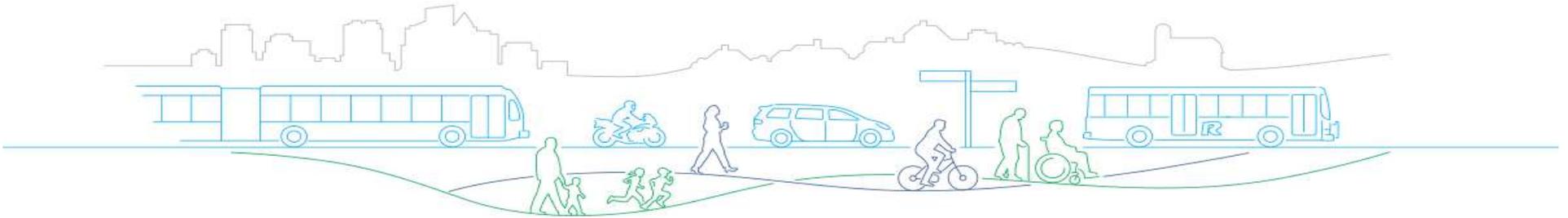




Stage 1 – Speed treatments

20

- Stage 1 of the pilot will focus on speed treatments.
- Speed treatments are designed to slow down drivers through a combination of tools.
- They can generally be divided into three categories:
 - Vertical deflection
 - Horizontal deflection
 - Narrowing
- Let's go over what speed treatments might look like.



Vertical deflection

21

Temporary Speed Hump



Temporary Speed Hump (City of Buffalo)

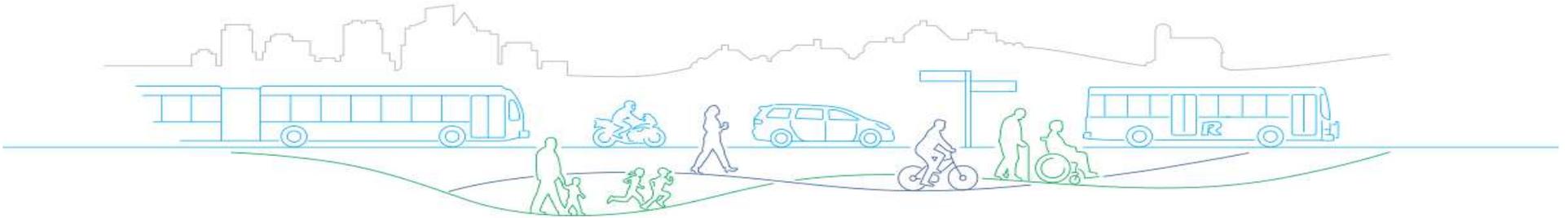
Spacing – approximately every 350 feet

Pros

- Many manufacturers to choose from
- Inexpensive
- Easy to install
- Silver Spring has experience with speed humps

Cons

- Can be uncomfortable to traverse
- May need to be removed during winter months



Vertical deflection

22

Temporary Speed Cushions



Temporary Speed Cushion (NACTO)

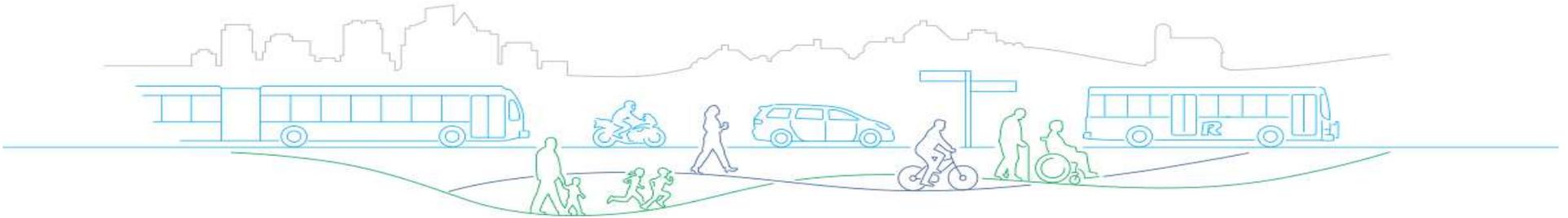
Spacing – approximately every 350 feet

Pros

- Many manufactures to choose from
- Less expensive than temporary speed humps
- Easy to install
- Less impact to emergency vehicle response times

Cons

- Can be uncomfortable if traveled over by an excessive speed
- May be need to be removed during winter months for snow removal



Vertical deflection

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Temporary Speed Table



Temporary Speed Table

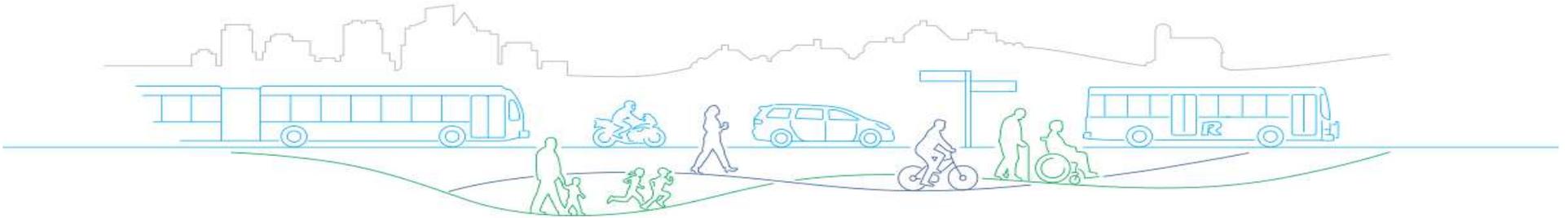
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Pros

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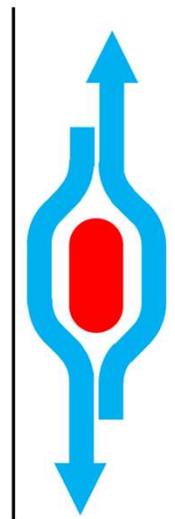
Cons

- Can be uncomfortable if traveled over by an excessive speed
- May be need to be removed during winter months for snow removal
- More expensive than speed humps

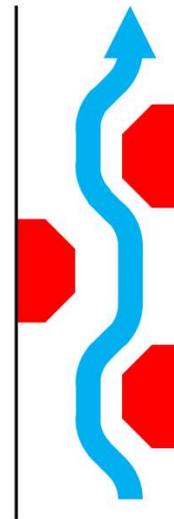


Horizontal deflection

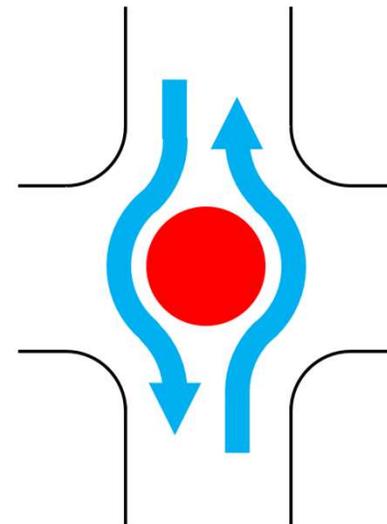
24



splitter

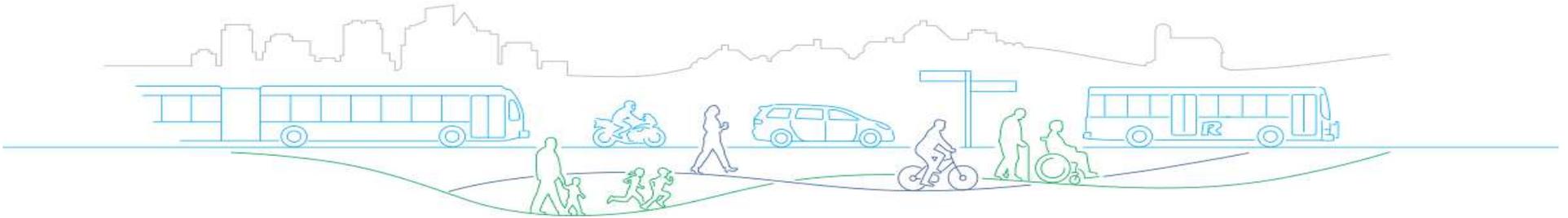


chicane



mini-roundabout





Horizontal deflection

25

Temporary Splitter Island



Temporary Splitter Island (PPP, Inc)

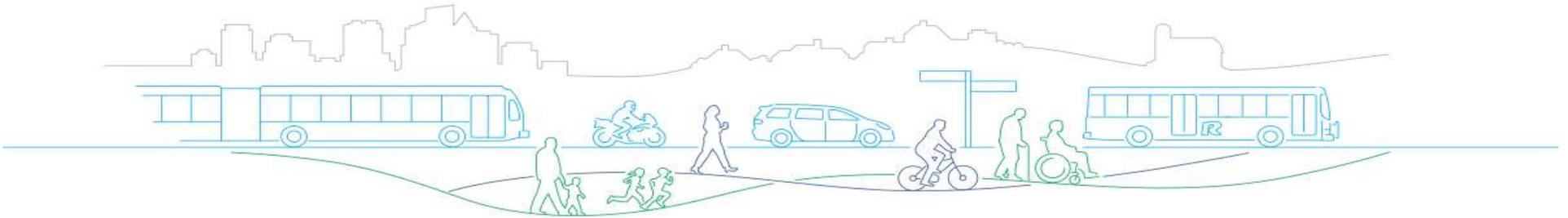
Spacing – no more than 1 per block

Pros

- Inexpensive
- Easy to install

Cons

- Minor reduction in on-street parking
- May only slow traffic in the northbound direction due to parking being on the east side



Horizontal deflection

26

Temporary Chicane



Temporary Chicane (Lakewood, OH)

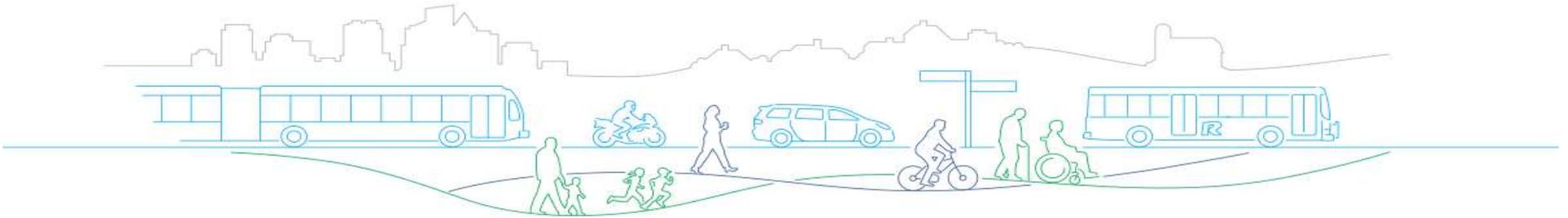
Spacing – no more than 1 per block

Pros

- Inexpensive
- Easy to install

Cons

- Minor reduction in on-street parking



Horizontal deflection

27

Temporary Mini-Roundabout



Temporary Mini-Roundabout (Rockford, IL)

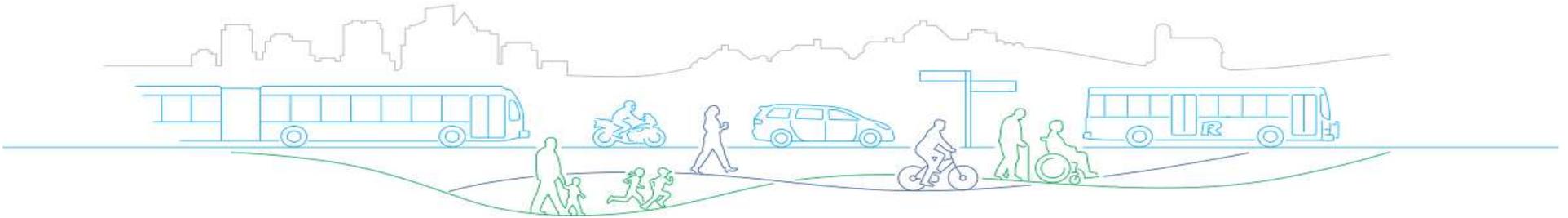
Spacing – at intersections

Pros

- Inexpensive
- Easy to install
- May decrease stop sign violations

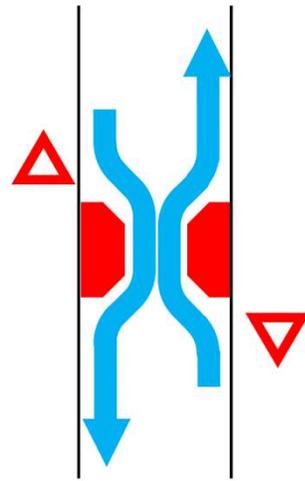
Cons

- May not reduce speeds between intersections
- Sligo & Thayer have Ride On bus routes
- Larger vehicles may have difficulty navigating

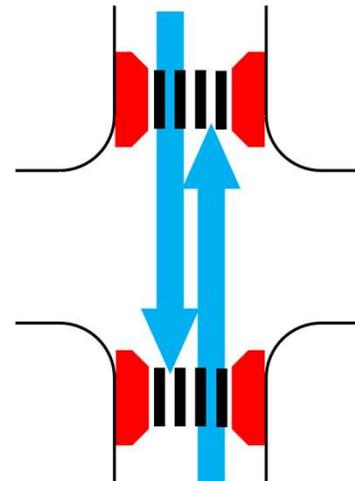


Narrowing

28

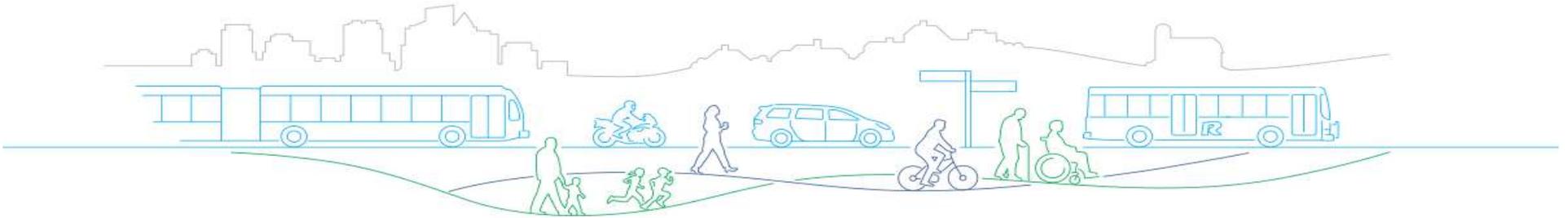


choker



bump-out





Narrowing

29

Temporary Choker (Neck-Down)



Temporary Choker (Richard Drdul)

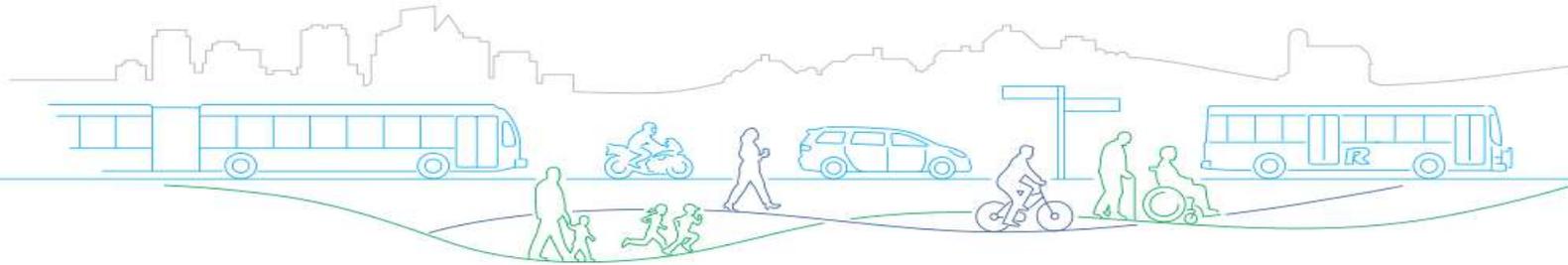
Spacing – no more than 1 per block

Pros

- Inexpensive
- Easy to install

Cons

- Minor reduction in on-street parking



Narrowing

30

Temporary Bump-Out



Temporary Bump-Out (Jonathan Rogers)

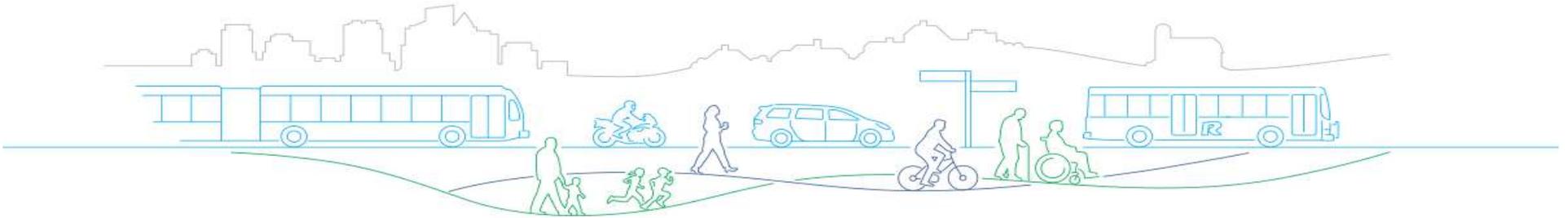
Spacing – at intersections

Pros

- Inexpensive
- Easy to install
- Reduces pedestrian exposure
- May decrease stop sign violations

Cons

- May not reduce speeds between intersections
- May make larger vehicle turns significantly more challenging



Poll question

31

Do you think **speeding** is a problem on Grove Street?



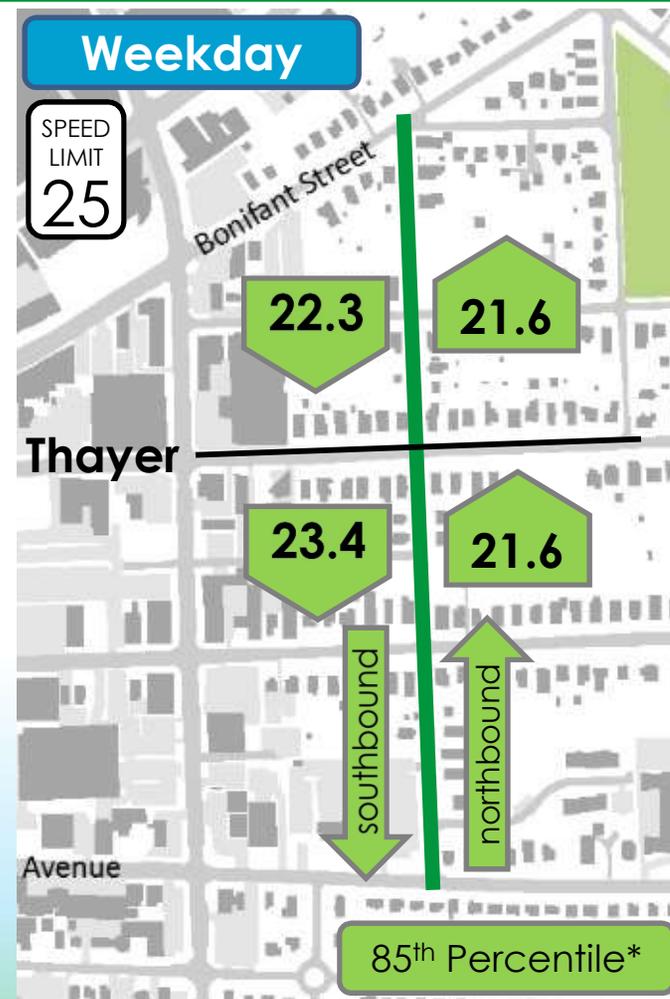
Grove Street Speeds

Data from week of Feb. 2-9, 2020

32

- What do speeds look like on Grove?
 - 85th Percentile

*85th percentile speed is the speed at which 85% of cars are travelling at or below. 15% of cars are traveling faster than that speed.





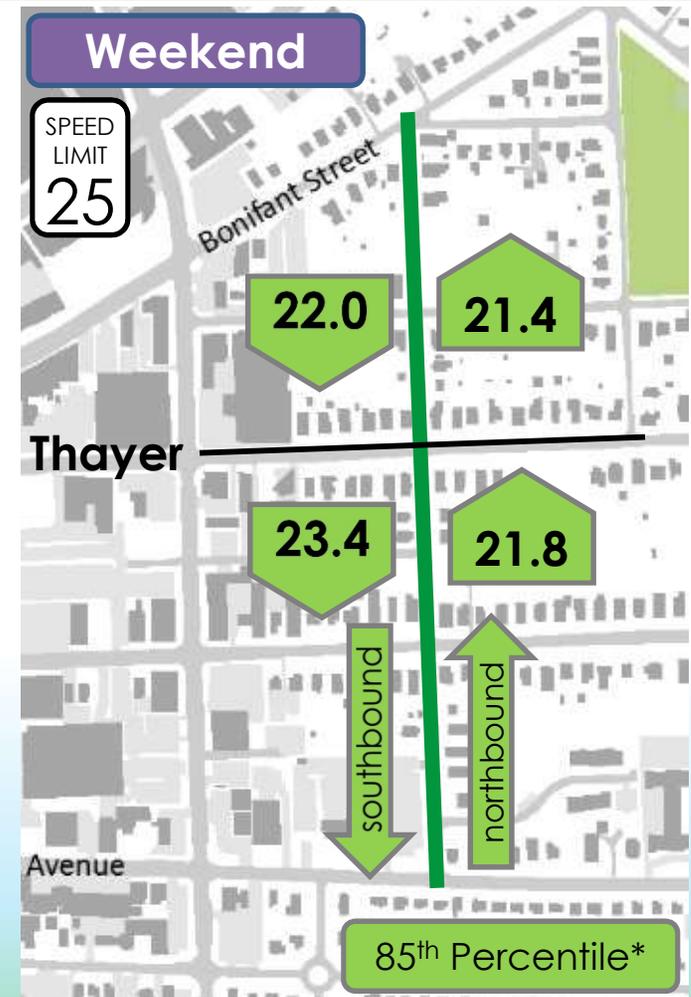
Grove Street Speeds

Data from week of Feb. 2-9, 2020

33

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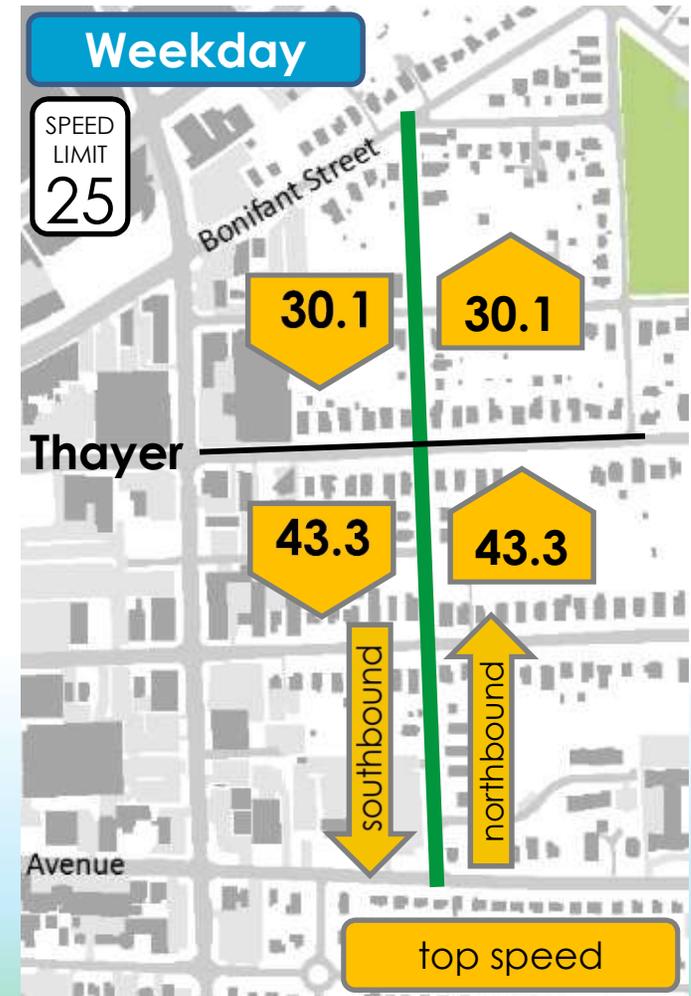


Grove Street Speeds

Data from week of Feb. 2-9, 2020

34

- What do speeds look like on Grove?
 - Top speed
 - About 2-4% of drivers are above the speed limit



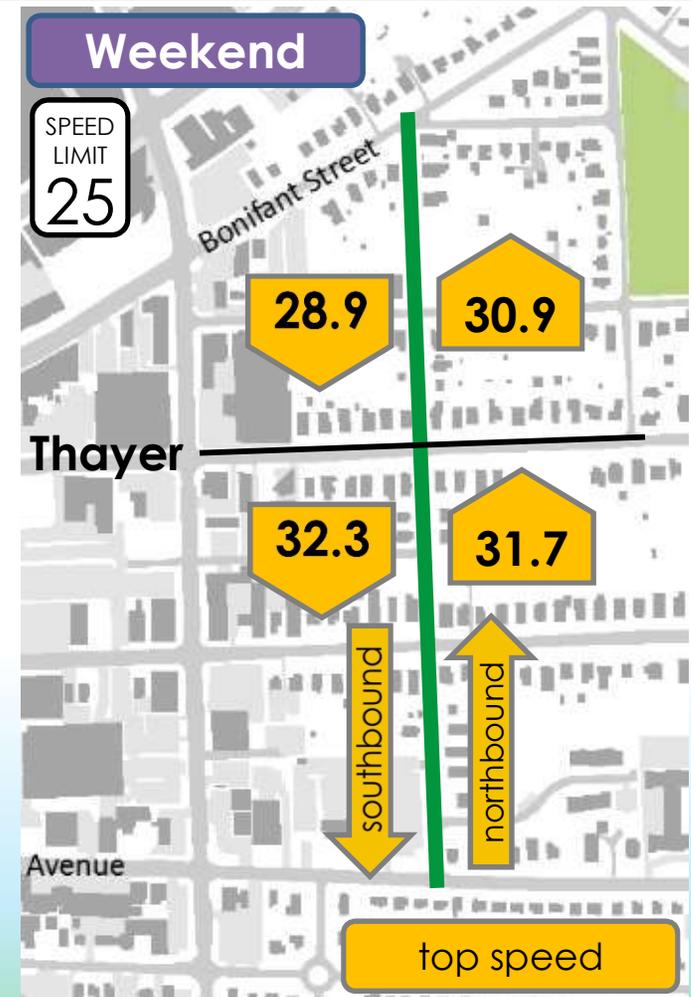


Grove Street Speeds

Data from week of Feb. 2-9, 2020

35

- What do speeds look like on Grove?
 - Top speed
 - About 2-4% of drivers are above the speed limit





Speed Conclusions

36

- Our traffic counts show that most drivers are traveling less than the speed limit already.
- Speed treatments might be able to lower the 85th percentile speed more, but probably not by much.
- The treatments should be effective against the fastest drivers.
- It's not clear that speed treatments alone will cause any traffic diversion.



Speed Management Questions?

37

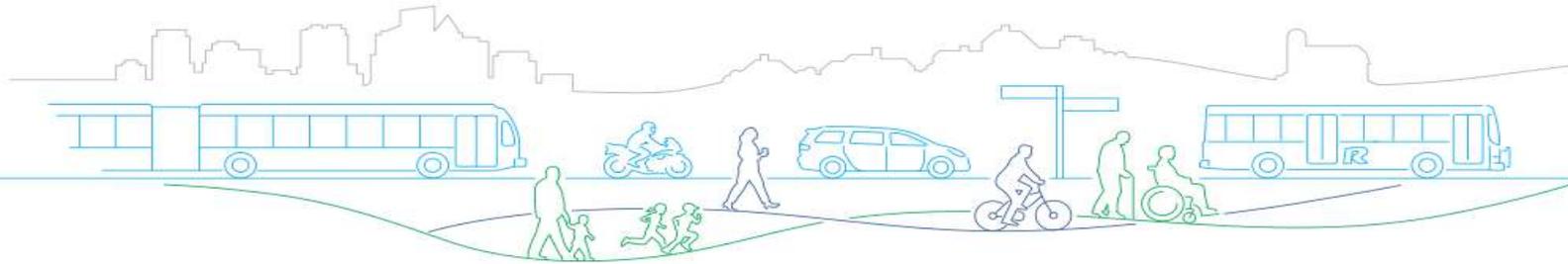
- We have time for 1 or 2 quick clarifying questions on the speed treatments now.
- **Please** questions **only**. The comment period will be later.



Stage 2 – Diversionary Treatments

38

- Stage 2 of the pilot will add at least one diversionary treatment.
- Diversionary treatments are designed to reduce traffic volume by forcing drivers to take a different route.
- They can be divided into two general categories:
 - “Soft” or regulatory.
 - “Hard” or physical.
- Let’s look at how diversionary treatments can work.



“Soft” Diversionary Treatments

39

- The existing shared street on Grove Street is a great example of a “soft” treatment. Signs indicate that the road is for local traffic only, but drivers can pass the barricades.
- Another example could be a time-based entry restriction.



“soft” entry restriction



temp. shared street – “soft” diversionary treatments

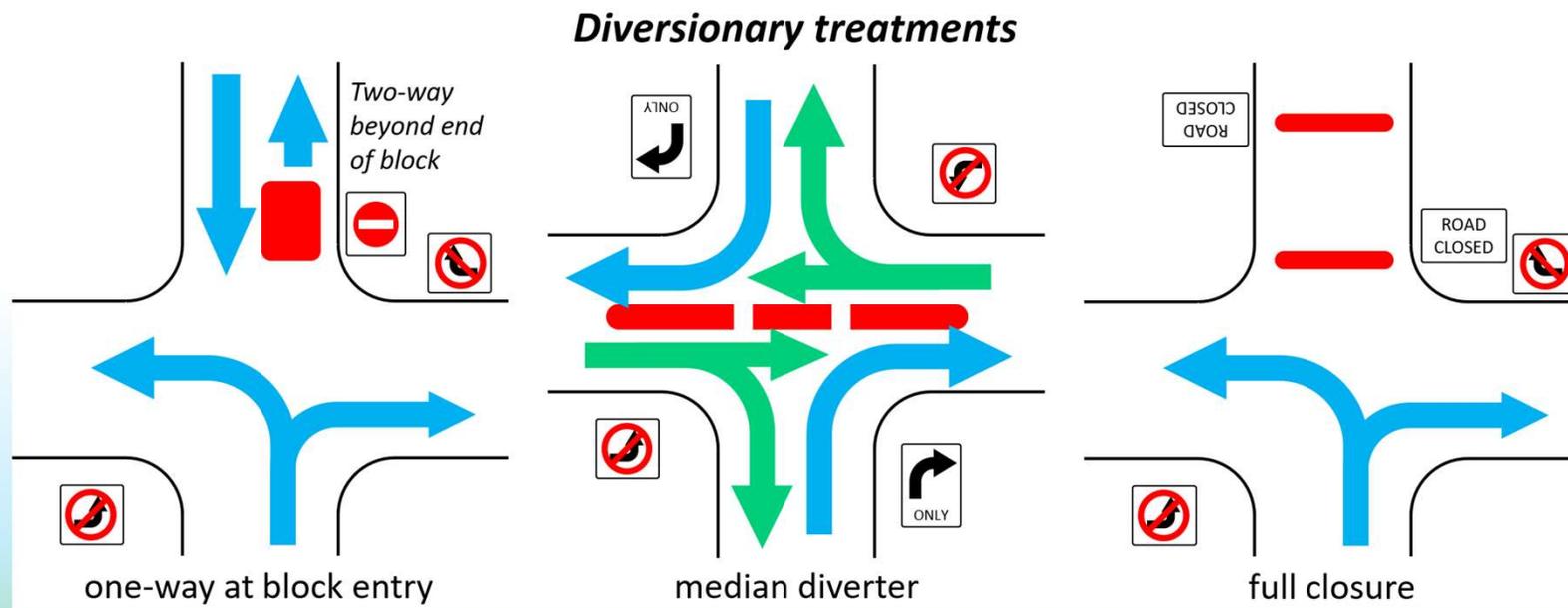


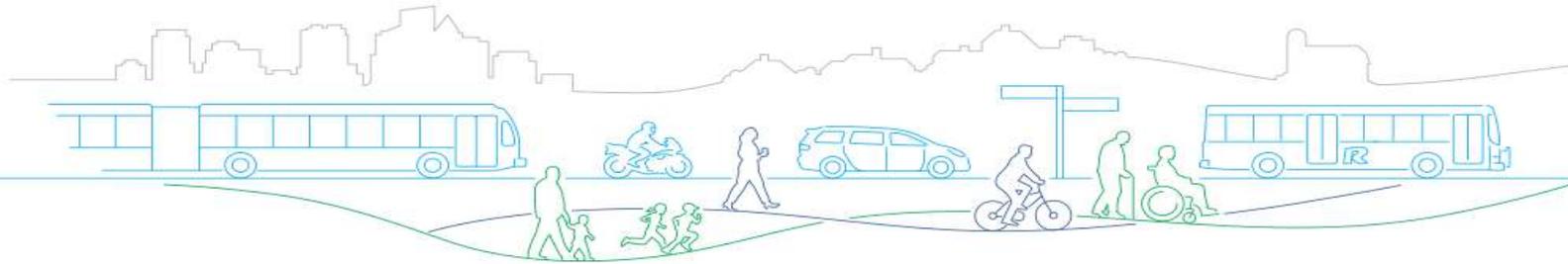


“Hard” Diversionary Treatments

40

- Physical barriers prevent through movement or bar entry, and can therefore be more effective at reducing cut through traffic.





“Hard” Diversionary Treatments

41

- Physical barriers prevent through movement or barrier entry, and can therefore be more effective at reducing cut through traffic.



one-way at block entry



flexpost median



closure at end of 1 block



Other Diversionary Treatments

42

- Making an entire block or several blocks one-way at all times is a regulatory treatment, but it's not as soft as the "soft" treatments.
- Traffic volumes on Grove Street are very unbalanced, so one-way treatments could be very effective at reducing cut-through traffic.
- The downside is that local residents would also be forced to find alternate routes.





Poll question

43

Did you think **the amount of traffic** was a problem on Grove Street before the shared street was installed?



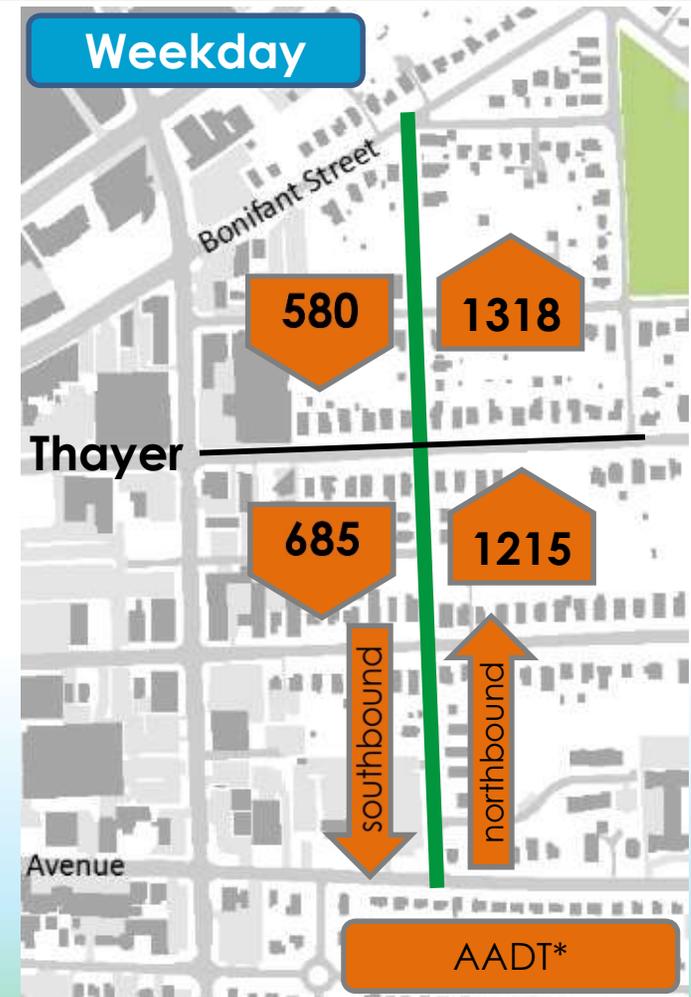


Grove Street Volumes

Data from week of Feb. 2-9, 2020

44

- What do traffic volumes look like on Grove?
 - Northbound traffic is roughly double southbound traffic



*AADT is the Average Annual Daily Traffic.

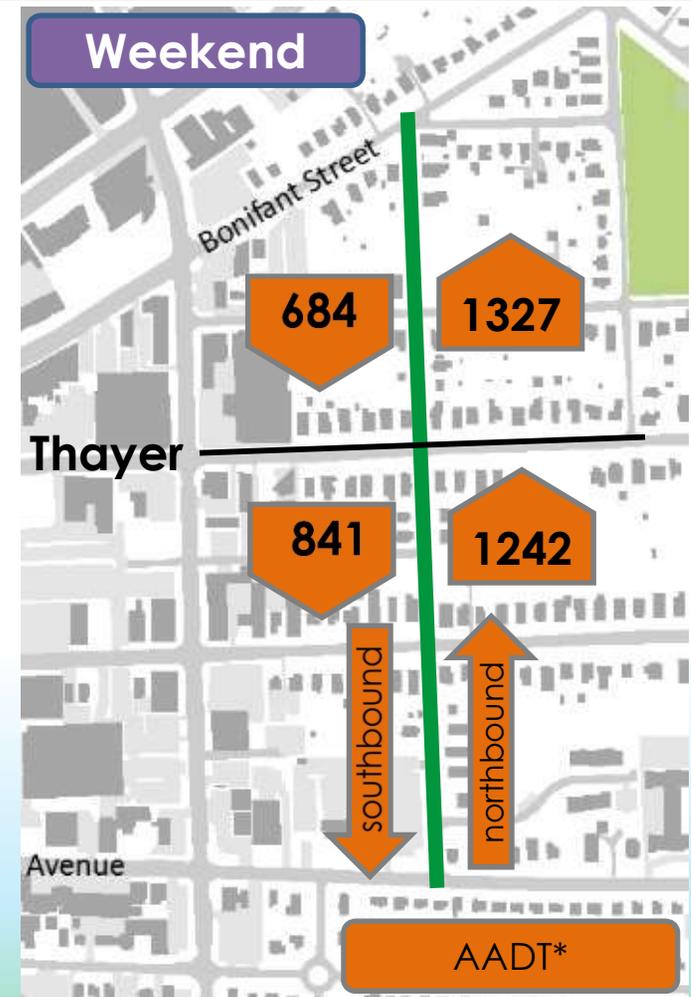


Grove Street Volumes

Data from week of Feb. 2-9, 2020

45

- What do traffic volumes look like on Grove?
 - Northbound traffic is roughly double southbound traffic
 - Weekend traffic is higher than weekday traffic



*AADT is the Average Annual Daily Traffic.



Volume: Why the Difference

46

- Why is there more traffic going northbound than southbound?
 - Northbound cut-through traffic can make two rights (1 off Fenton, 1 more back onto Fenton or Wayne or Colesville). Southbound traffic has to make two lefts.
 - PM traffic tends to be more congested than AM traffic, so there may be more incentive to cut through in the PM, when more traffic is northbound.
 - Traffic on Cedar Street is one-way northbound, so this prevents southbound cut-through traffic.



Diversiónary Treatment Questions?

47

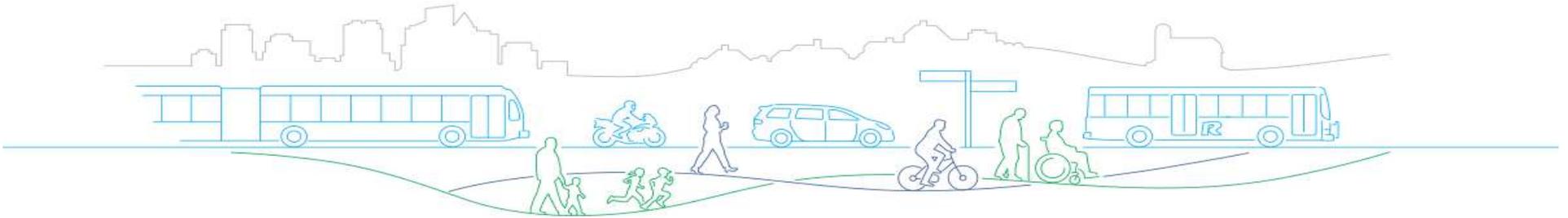
- We have time for 1 or 2 quick clarifying questions on diversionary treatments now.
- **Please** questions **only**. The comment period will be later.



Walking Space

48

- One of the most frequent comments we received after our January meeting was about the need for walking space.
- We don't have the right-of-way to build a sidewalk behind the existing curb, nor do we have enough funding to acquire the property needed.
- There would also be utility, drainage, and other impacts associated with a new sidewalk.
- As an alternative, MCDOT is considering installing a "walking lane", which would repurpose road space for walking, with a barrier between the roadway and the walking space.



Walking Space

49

- Below, you can see images showing the current situation, an example of a traditional sidewalk, and a walking lane.



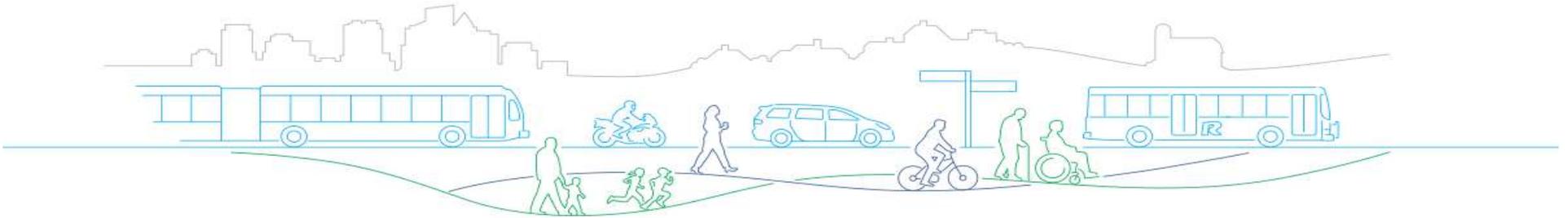
no pedestrian facilities



sidewalk behind curb



walking lane



Walking Space

50

- Here are other examples of walking lanes.



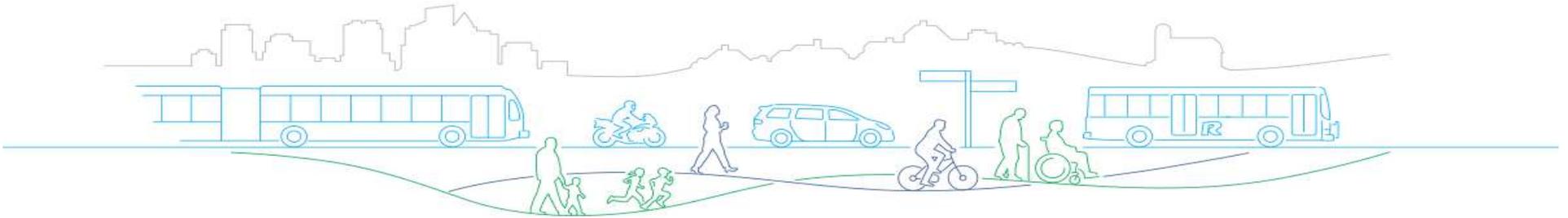
walking lane examples



Walking Space

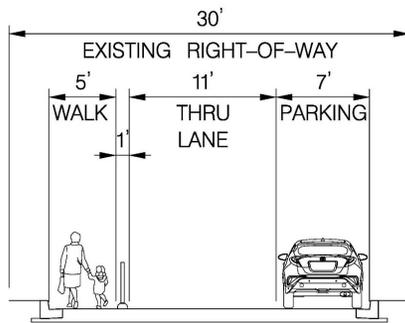
51

- Grove Street is 24' between the curbs.
- Right now, that leaves room for parking (7') and two travel lanes (17' total).
- A walking space will require at least 6'.
- That means there may not be enough room for all three of the below uses:
 - Parking
 - Two-way traffic
 - Walking space

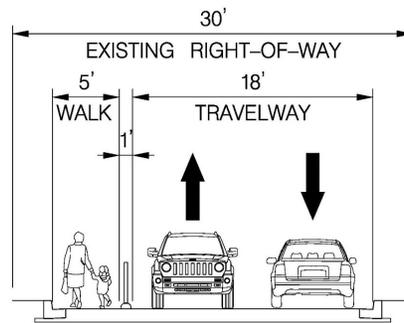


Walking Space

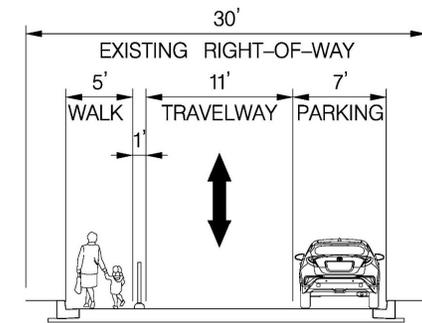
■ Potential sections



PROPOSED ONE-WAY
TYPICAL SECTION
BETWEEN 200' NORTH OF TWIN BROOK LANE
AND
BONIFANT STREET



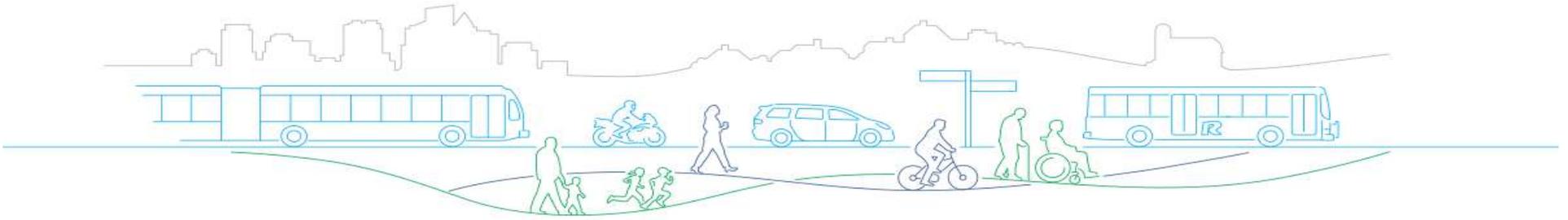
PROPOSED TWO WAY
WITHOUT PARKING
TYPICAL SECTION
BETWEEN 200' NORTH OF TWIN BROOK LANE
AND
BONIFANT STREET



PROPOSED TWO WAY
WITH PARKING
TYPICAL SECTION
BETWEEN 200' NORTH OF TWIN BROOK LANE
AND
BONIFANT STREET

NOTE:
DIRECTION OF ONE-WAY
TRAFFIC MAY VARY BLOCK
TO BLOCK.

NOTE:
PARKING WILL NEED TO BE
REMOVED INTERMITTENTLY TO
PROVIDE PASSING ZONES.



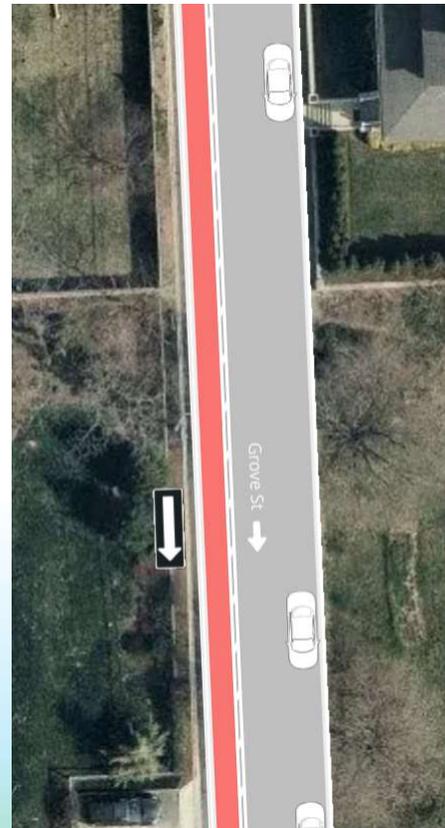
Walking Space

53

Existing



One-way

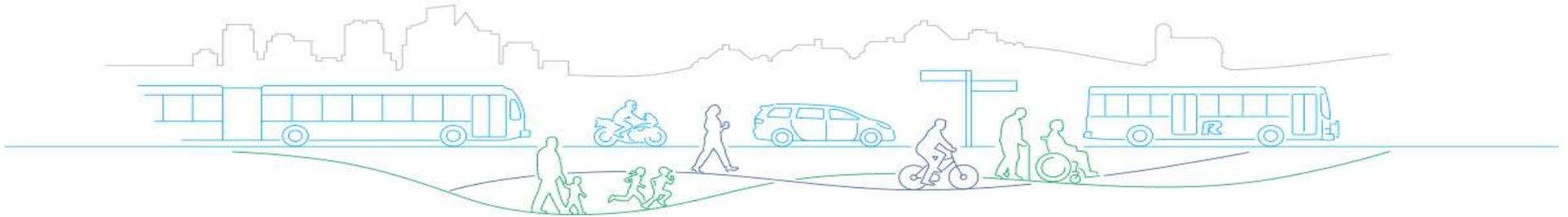


No parking



Passing zones

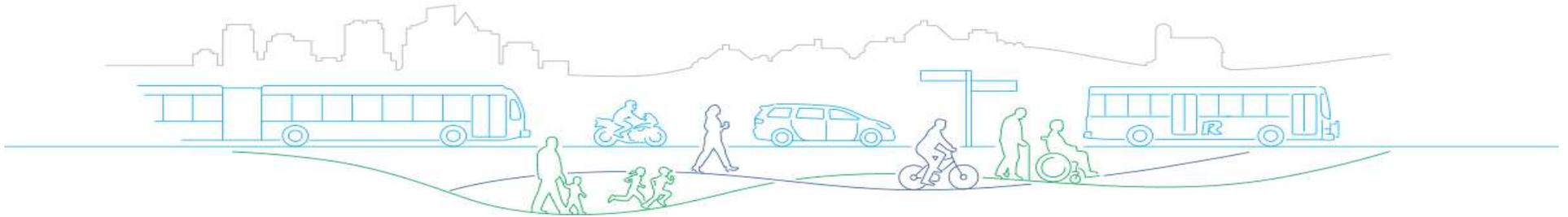




Poll question

54

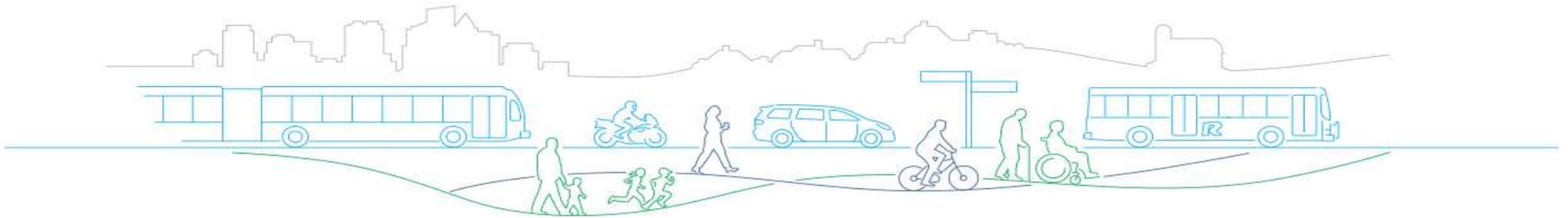
How do you feel about the need for **dedicated walking space**?



Walking Lane Questions?

55

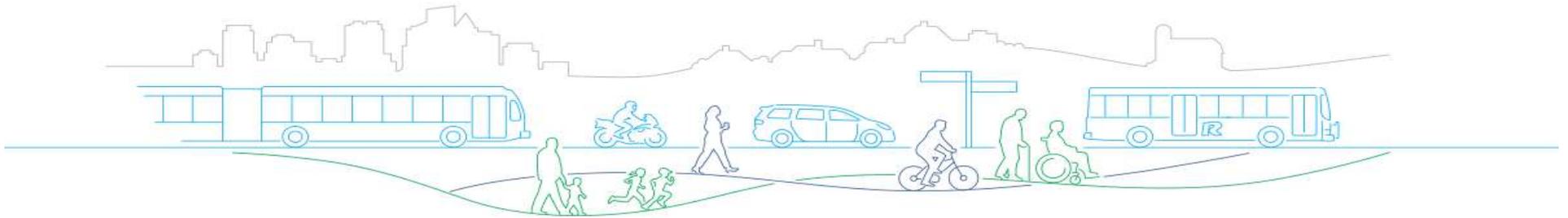
- We have time for 1 or 2 quick clarifying questions on the walking lane now.
- **Please** questions **only**. The comment period will be later.



Poll question

57

Does it still make sense to have a **two-stage pilot**, or would it be better to institute a diversionary treatment this Fall (instead of waiting until Spring)?



Next steps

58

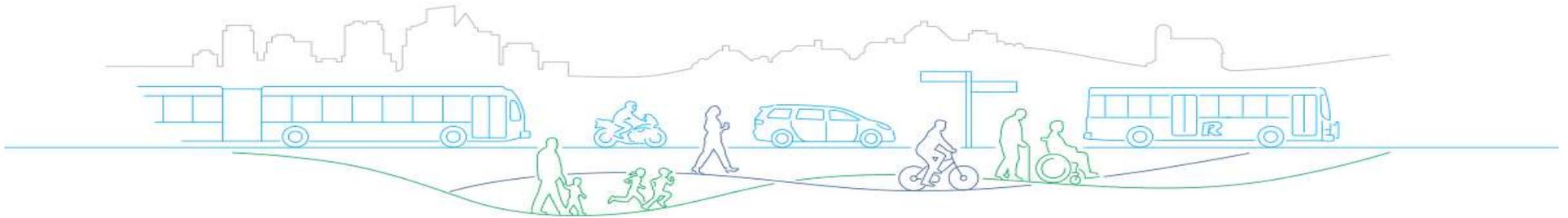
- Based on the feedback we receive tonight and through the comment process, MCDOT will develop an implementation plan.
- MCDOT will come back to the community in late Summer/early Fall 2020 with the implementation plan for final comments before installation.
- In Fall 2020, MCDOT will install the first round of treatments.
- MCDOT will monitor how the treatments are working and will make modifications if necessary.



Agenda

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- 7:00: Overview of Zoom features
- 7:10: Introductions
- 7:15: Meeting presentation
- **7:55: Breakout sessions**
- 8:20: Report back
- 8:40: Question & Answer
- 9:00: Adjourn



Breakout Discussion

60

- Please be respectful of the other attendees and give others a chance to speak as well.
- You will now have the ability to unmute yourself, but please keep yourself muted **unless you're speaking** to reduce background noise.
- Remember, if you're dialing in by phone, you can unmute yourself by dialing *6.
- If you don't feel comfortable asking a question out loud, please use the chat feature to chat to your **Facilitator**.



Breakout Discussion

61

- We'd like to hear your thoughts on these items in the breakout groups:
 - Are there particular **blocks** or **intersections** that have problems?
 - How do you feel about the **walking lane**?
 - What kinds of **treatments** would you like to see?
 - What treatments do you **not** want to see?
 - Do you have any **other concerns** about the project?
 - What else do you think we **need to know**?

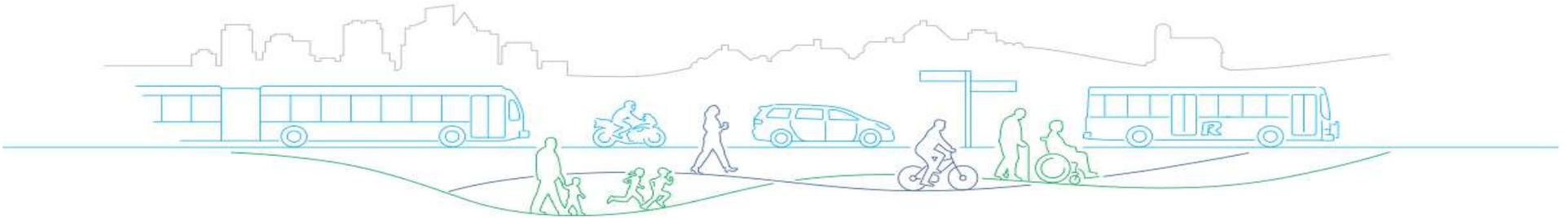
Return to main session at 8:20PM.



Agenda

62

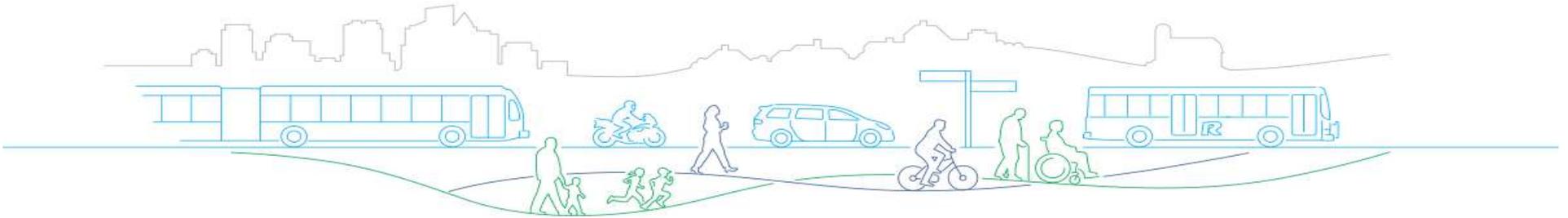
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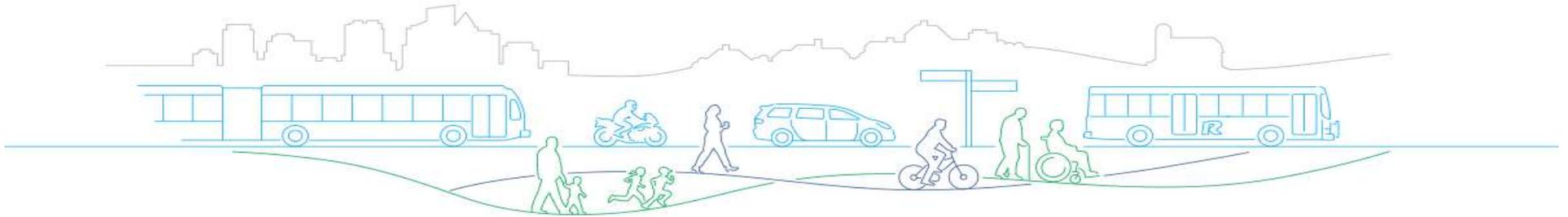


Report back

64

- What we heard from you

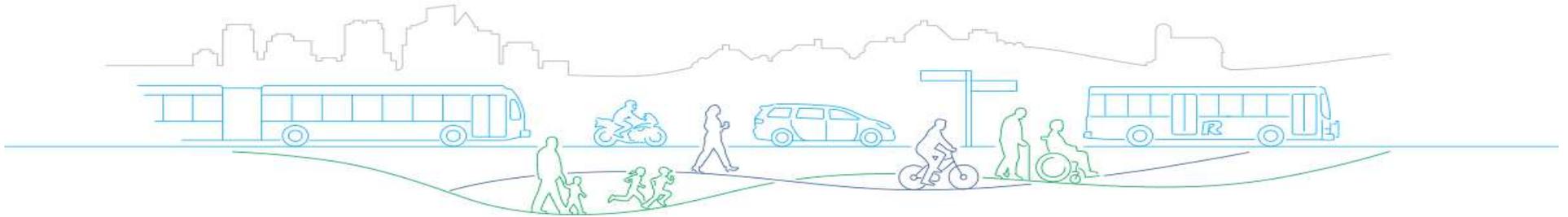




Agenda

65

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Feedback

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Thank you for attending tonight's meeting. We want to hear your feedback! There are several ways to share your thoughts with us:

- Visit our webpage for more info:
<https://montgomerycountymd.gov/dot-dte/projects/grovestreet/>
- Take our survey: <https://www.surveymonkey.com/r/MFZBBW6>
- Email comments: Matt.Johnson@MontgomeryCountyMD.gov
- Mail comments to
MCDOT Transportation Engineering
100 Edison Park Drive
4th Floor, SE
Gaithersburg, MD 20878



Raising your hand

67

- Raise your hand
 - If you'd like to speak to ask a question or make a comment, please **raise your hand**

To raise your hand

- Click "participants" in the bottom menu
- A new window will appear. Click the blue "raise hand button".
- If you've dialed in by phone, dial *9.

15 July 2020

You are viewing Matt Johnson's screen View Options

Presentation will begin shortly

MONTGOMERY COUNTY MARYLAND 1793-1876

GROVE STREET NEIGHBORHOOD GREENWAY PILOT PROJECT

MCDOT Matt Johnson AICP

Mute Start Video Participants Chat Share Screen Record Leave



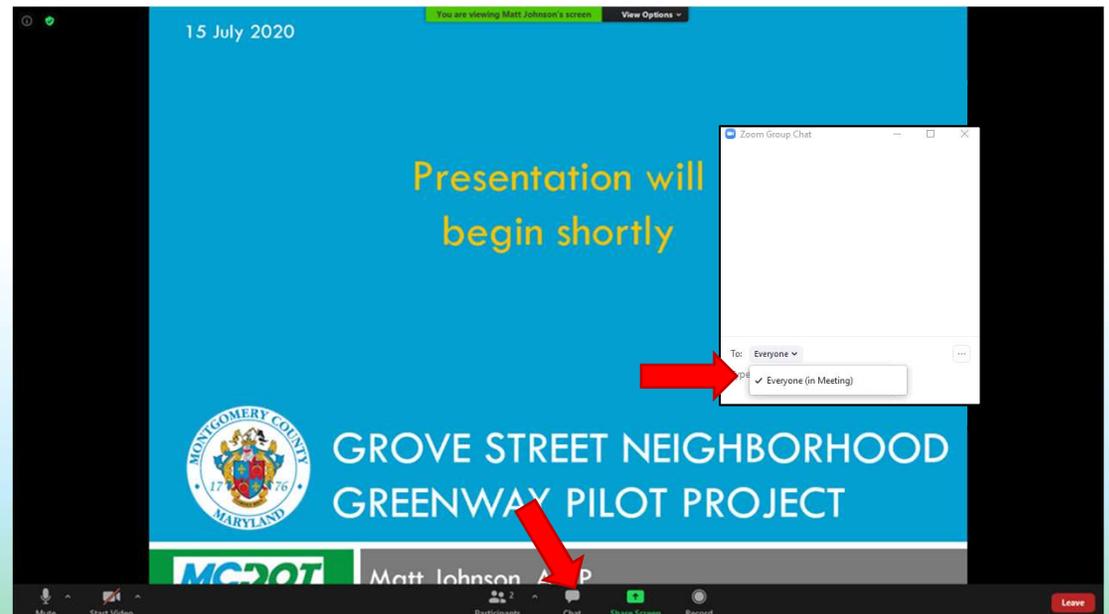
Asking a question via chat

68

- Ask a question (Text)
 - If you have a question you'd prefer to ask through the chat feature (without speaking) or if your microphone isn't working follow these steps.

To send a chat:

- Click "chat" in the bottom menu
- A new window will appear. In the "to" field, change the drop down to "Kyle Lukacs"
- Type your question and send it.





Questions?



69

?

Matt Johnson
Project Manager

240.777.7237

Matt.Johnson@MontgomeryCountyMD.Gov