MARTIN J. WALSH
MAYOR

CUMMINS HIGHWAY PROJECT

RIVER STREET TO HARVARD STREET

FEBRUARY 27, 2020

WELCOME !

Cummins Highway Open House
6:00 – 6:30

Cummins Highway Presentation
6:30 – 8:00

MARTIN J. WALSH
MAYOR

CUMMINS HIGHWAY PROJECT

RIVER STREET TO HARVARD STREET

FEBRUARY 27, 2020

CUMMINS HIGHWAY
Agenda

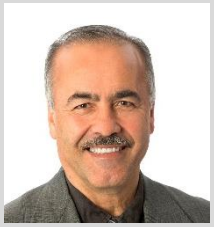
- Introduction 5 min
- Summary of Analysis, Design Concepts and Feedback 25 min
- Preferred Alternative Selection 15 min
- Questions & Answers 30 min

CUMMINS HIGHWAY
Introduction

Jeffrey Alexis, Project Manager, BPWD

Zach Wassmouth, Chief Design Engineer, BPWD

Para Jayasinghe, City Engineer, BPWD



Fayssal Husseini, Vice President, Nitsch

Stephen Farr, Project Manager, Nitsch

Jacqueline Perkins, Engineer, Nitsch

Ted Presume, Engineer, Nitsch

CUMMINS HIGHWAY
City Agencies

BOSTON PUBLIC
WORKS DEPARTMENT

Jeffrey Alexis, Project Manager
Public Works Department

City of Boston
Transportation
Department

City of Boston
Planning &
Development Agency

City of Boston
Disabilities Commission

City of Boston
Water & Sewer
Commission

City of Boston
Neighborhood Services

City of Boston
Parks & Recreation

CUMMINS HIGHWAY
Anticipated Project Schedule

Construction Starts
Spring 2021

Update Meeting
Date TBD

Design Engineering
Spring 2020– Fall 2020

Public Meeting No. 3 Feb 27, 2020

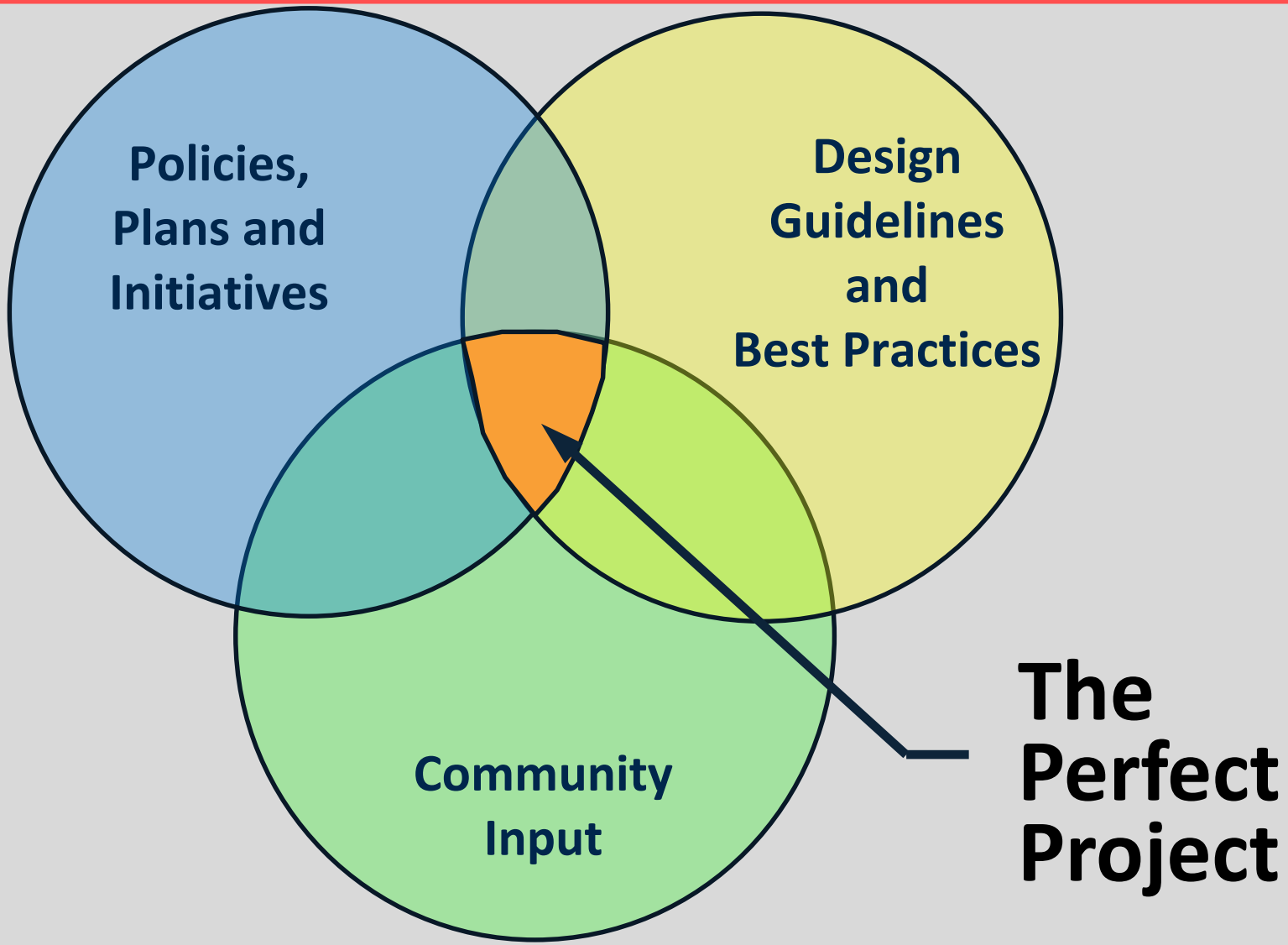
Public Meeting No. 2 October 29, 2019

Public Meeting No. 1 April 11, 2019

CUMMINS HIGHWAY
Project Goal

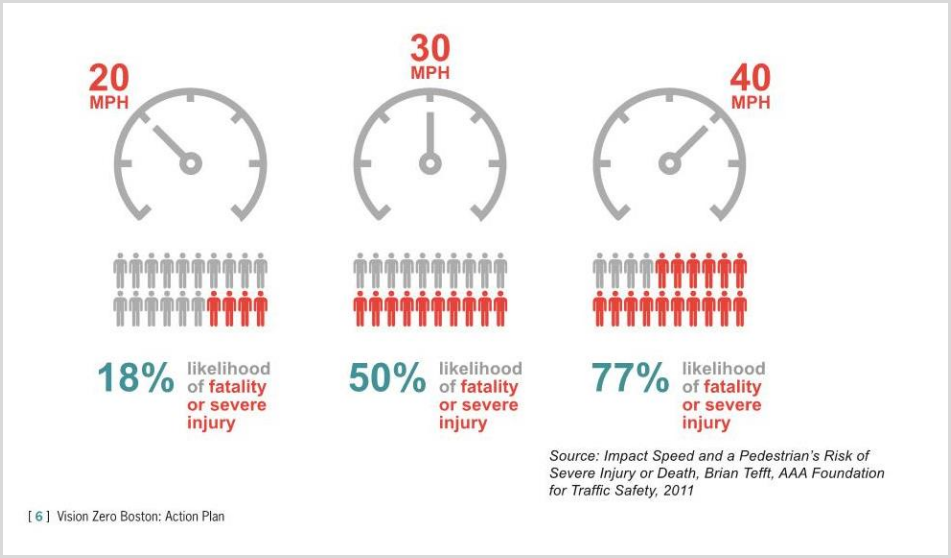
"WE WANT TO TRANSFORM CUMMINS HIGHWAY INTO A NEIGHBORHOOD STREET"

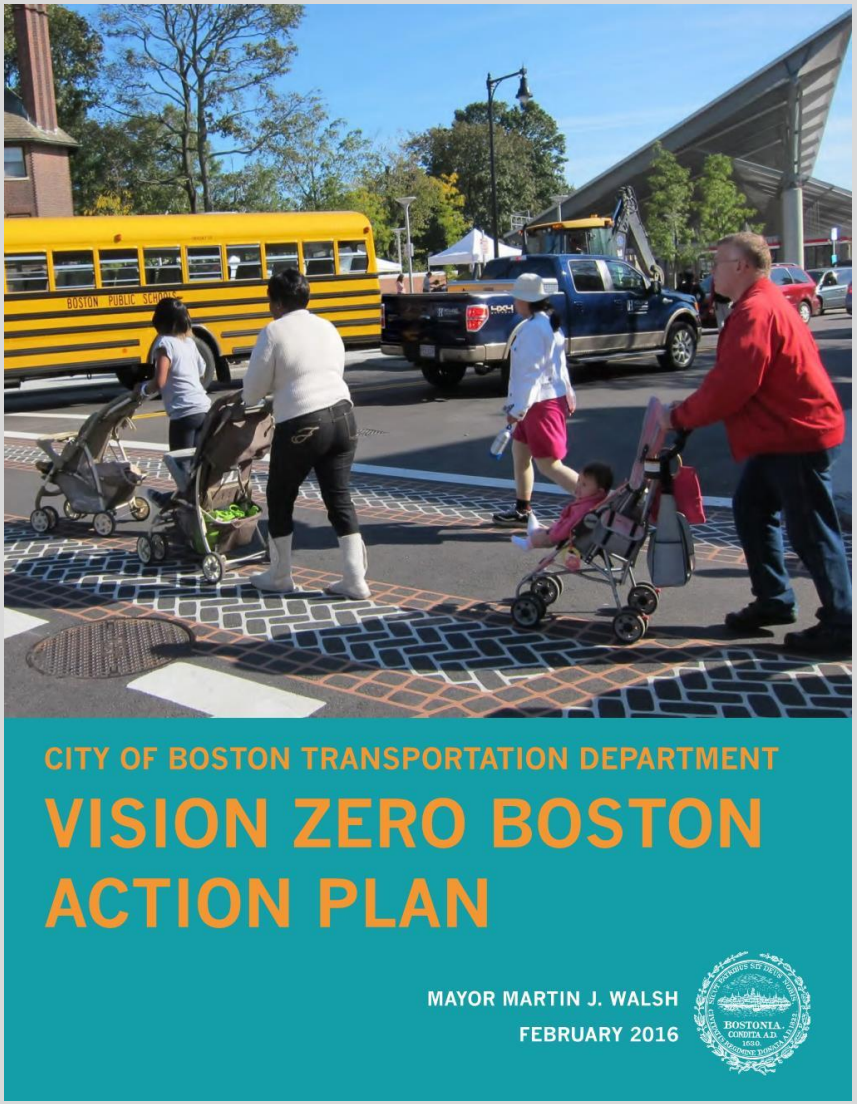
CUMMINS HIGHWAY
The Project Triple Bottom Line



CUMMINS HIGHWAY
Guiding Policies, Plans and Initiatives – Vision Zero

- Safety
- Slower Vehicle Speeds





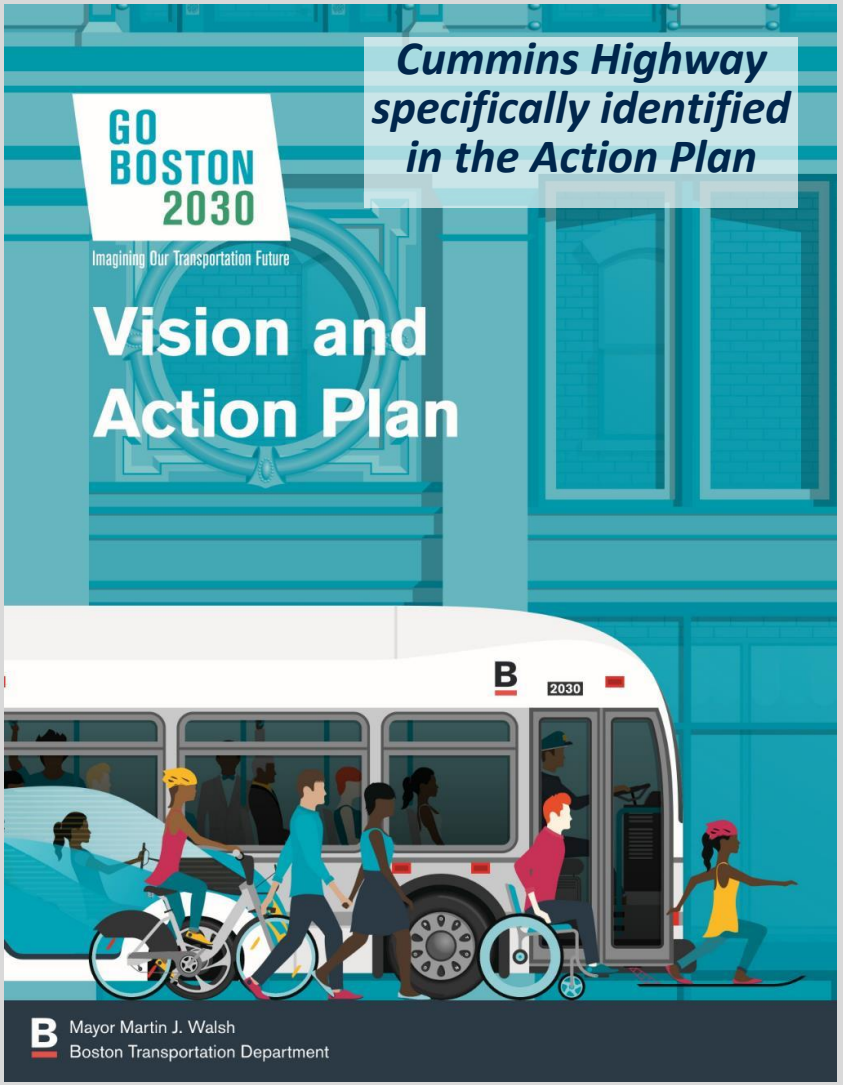
CUMMINS HIGHWAY
Guiding Policies, Plans and Initiatives – Go Boston 2030

Sets goals, target and action plan for Boston's transportation system.

2030 Targets include:

- **34% Increase in Transit**
- **14% Increase in Walking**
- **2% Increase in Biking**
- **39% Reduction in driving alone.**

- **Balancing Multi-Modality (Walking, Biking, Transit and Driving**
- **Enhancing Transportation Efficiency and Connectivity**



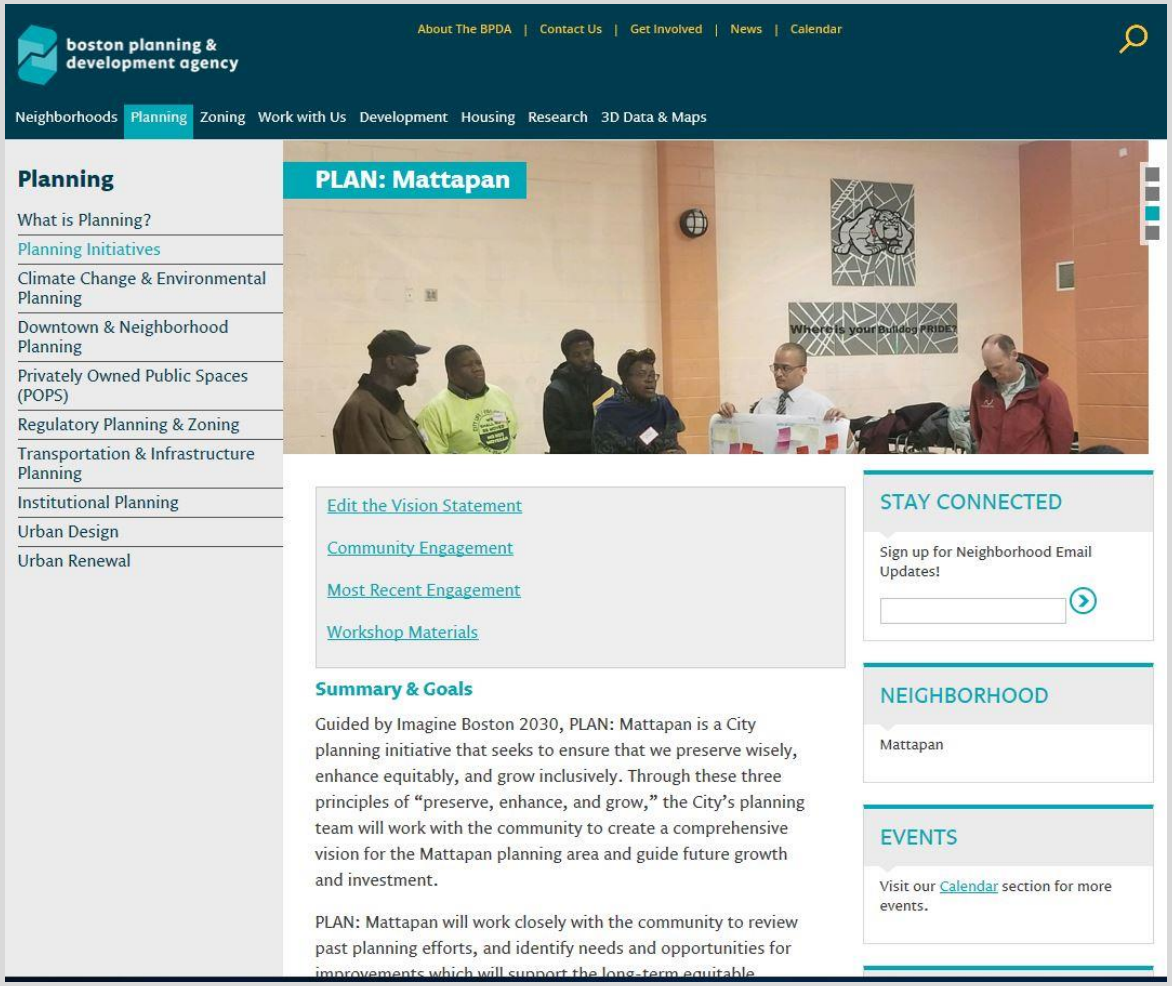
CUMMINS HIGHWAY
Guiding Policies, Plans and Initiatives

Fairmont Indigo Initiative- Provides recommendations and strategies to improve the vitality of the Blue Hill Ave / Cummins Highway Commuter Rail Station Area.

- **Safety**
- **Balancing Multi-modality (Walking, Biking, Transit and Driving)**
- **Transit Connectivity**

CUMMINS HIGHWAY
Guiding Policies, Plans and Initiatives – Plan: Mattapan

- **Transportation improvements to compliment the neighborhood vision for Mattapan**

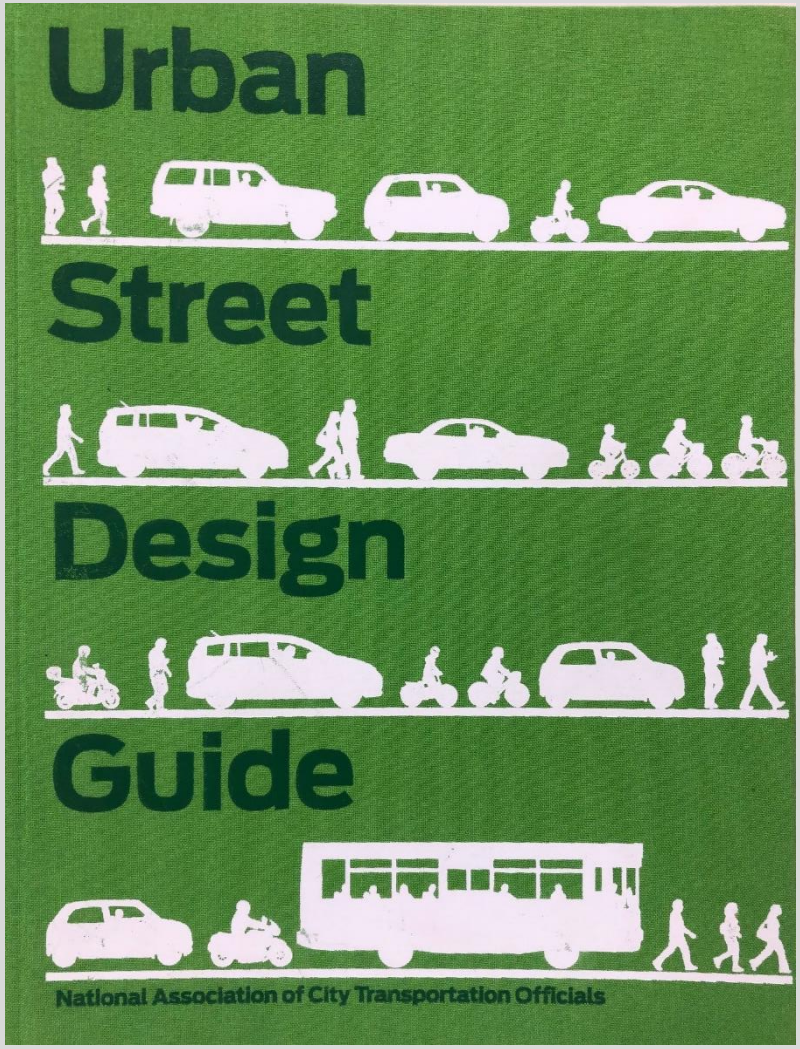


CUMMINS HIGHWAY
Design Guidelines and Best Practices

Urban Street Design Guide –

Prepared by the National Association of City Transportation Officials (NACTO).

- **Safety**
- **Balancing Multi-Modality (Walking, Biking, Transit and Driving)**

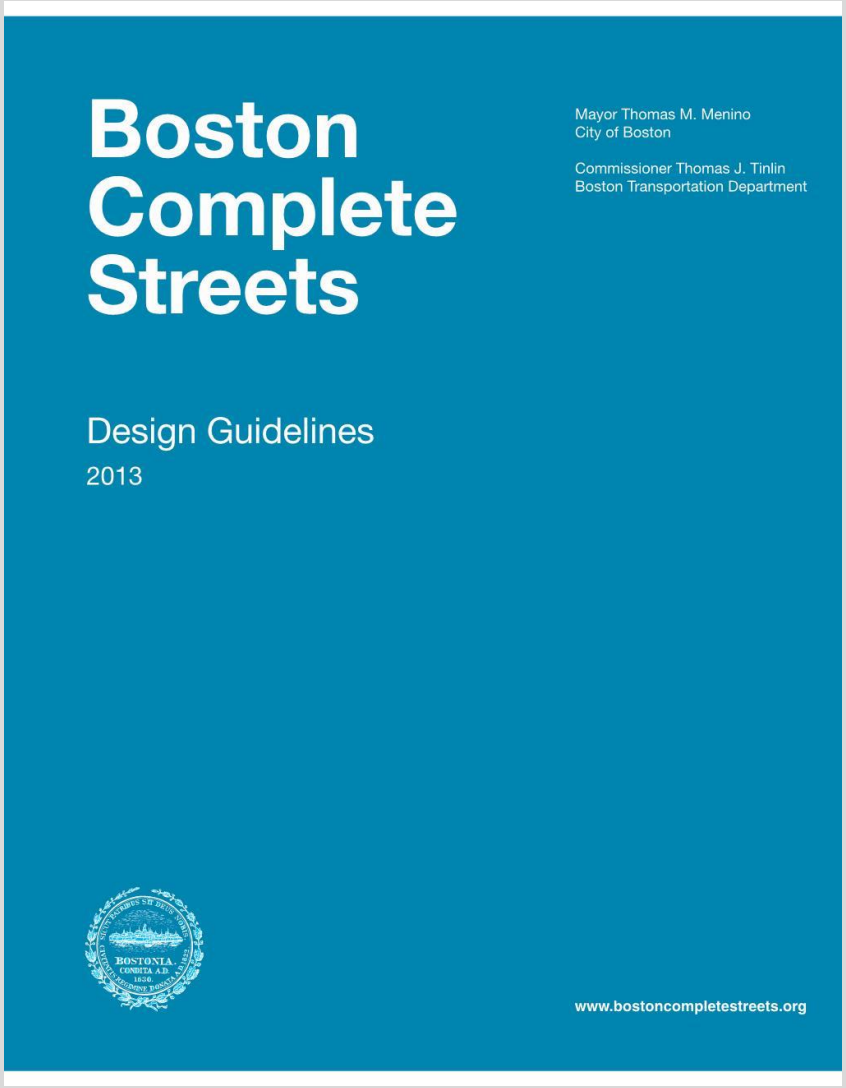


CUMMINS HIGHWAY
Design Guidelines and Best Practices

Boston Complete Streets- Provides citywide design principles and guidelines for streets that are:

- **Multi-modal**
- **Green**
- **Smart**

- **Balancing Multi-Modality (Walking, Biking, Transit and Driving)**
- **Designing Streets for People**

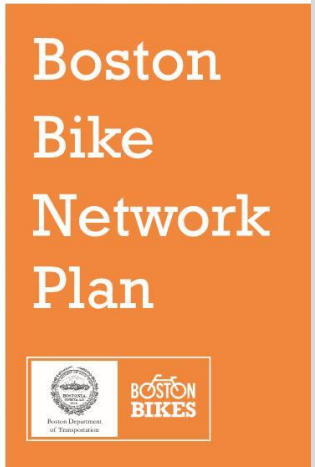


CUMMINS HIGHWAY
Design Guidelines and Best Practices

Boston Bike Network Plan-

Lays out a plan for bicycle connectivity to Roslindale Square, Mattapan Square / Neponset River Trail

- **Balancing Multi-Modality**

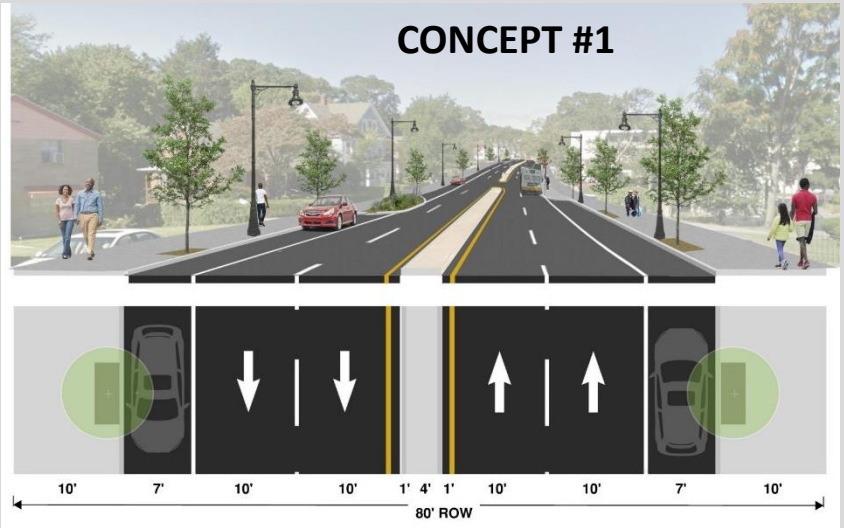


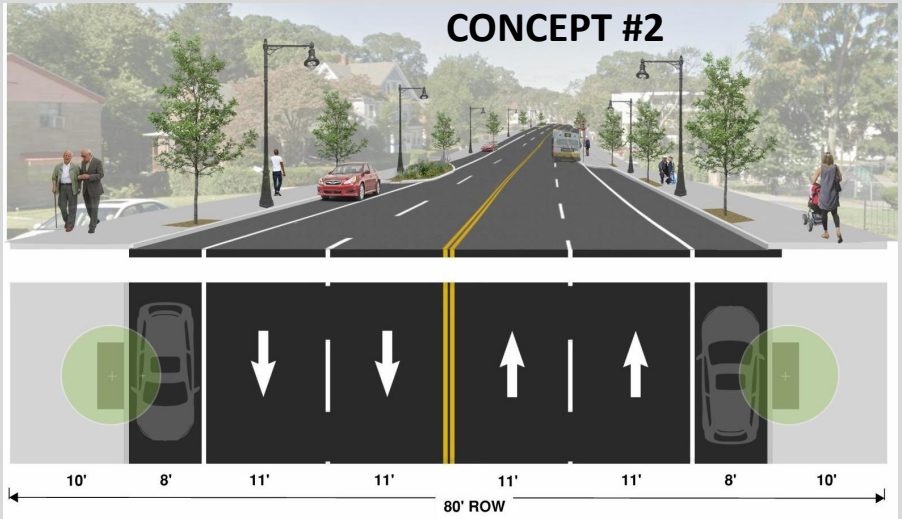
CUMMINS HIGHWAY
Community Input

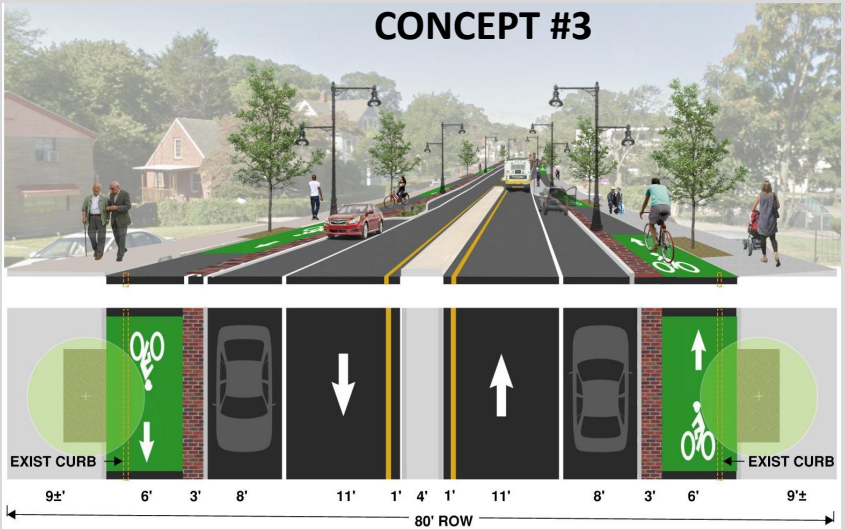
Mattahunt Community Center, October 29th Open House

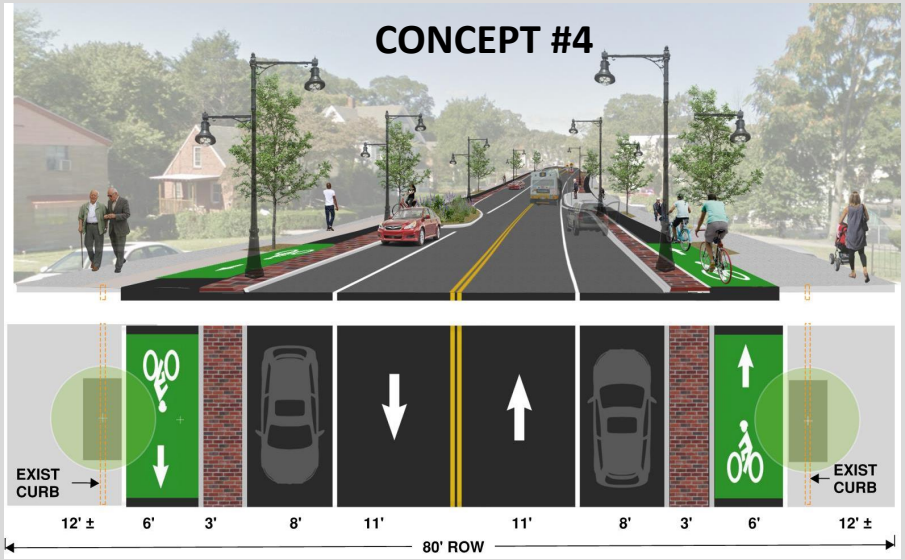
- Presented Four Roadway Concepts
- Over 30 written comments made at the Open House
- 41 responses to the Open House survey (online & hand-written)

CUMMINS HIGHWAY
Design Concepts



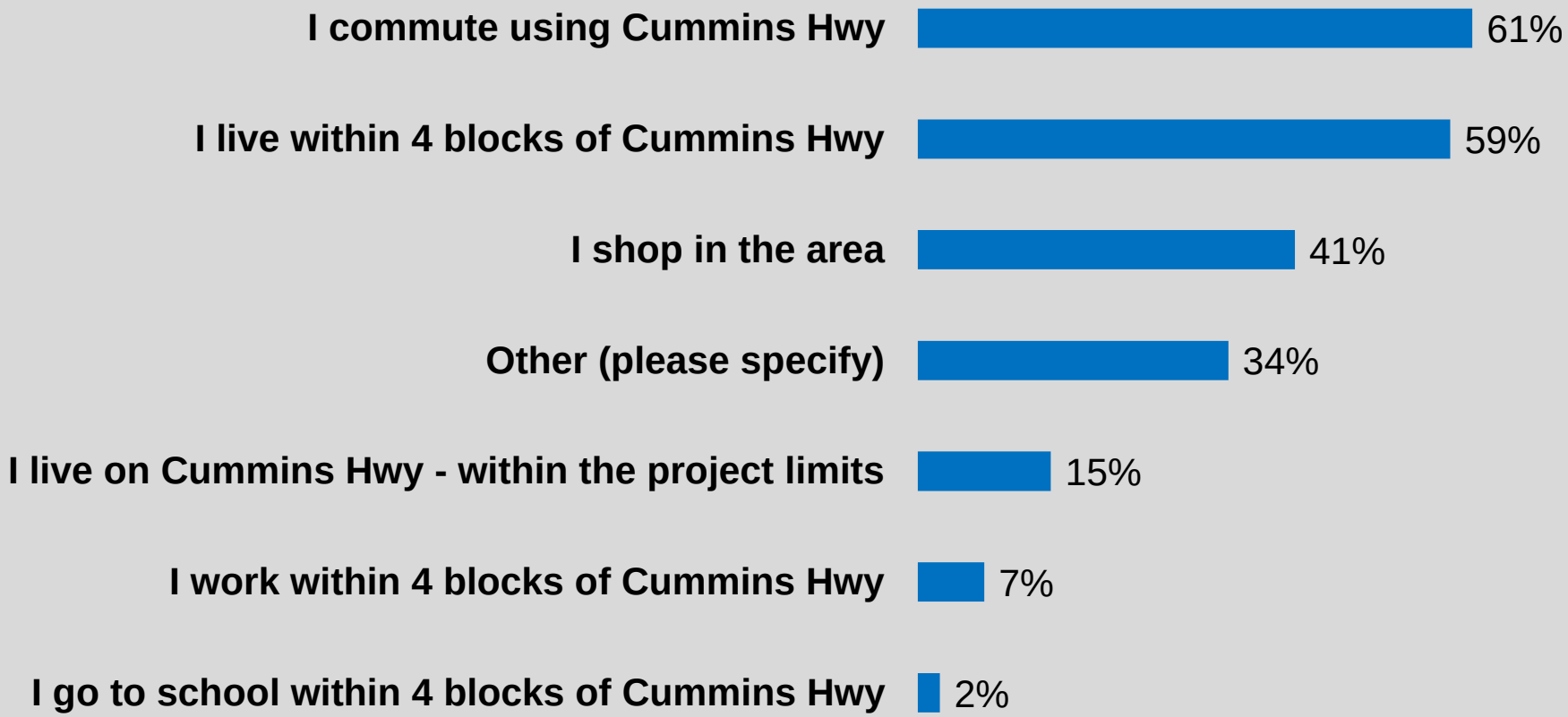






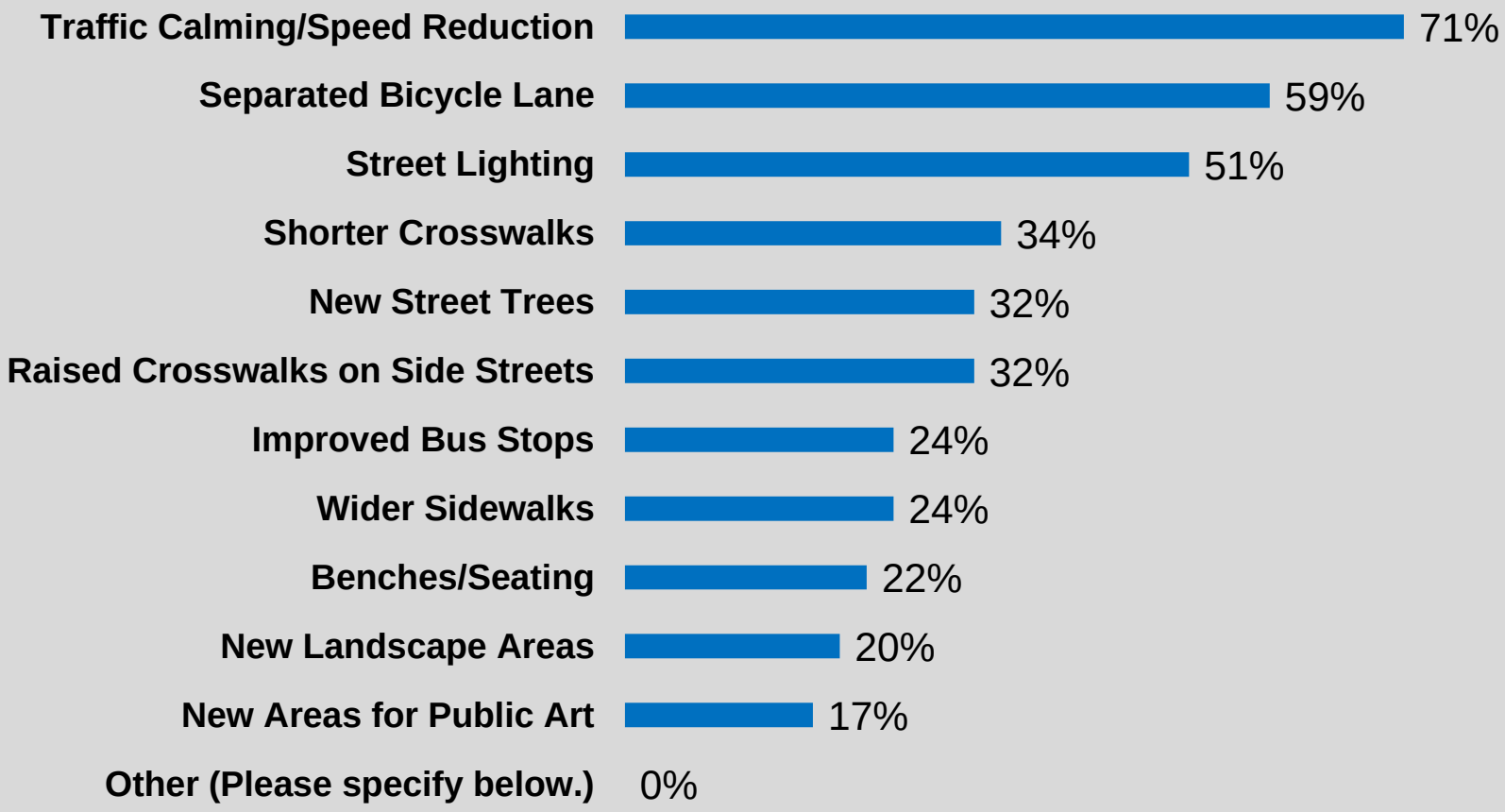
CUMMINS HIGHWAY
Summary of Responses to Design Survey

I am interested in Cummins Highway because….



CUMMINS HIGHWAY
Summary of Responses to Design Survey

What elements do you like most about the concepts? (Select up to 3.)

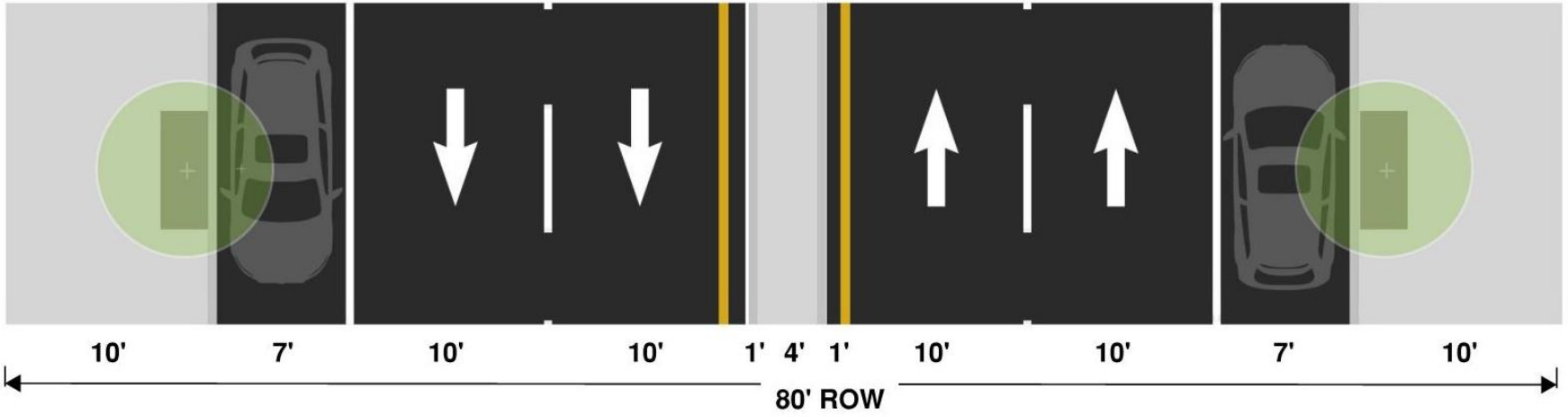


CUMMINS HIGHWAY

Concept 1 – Four Lanes (Maintain Median)

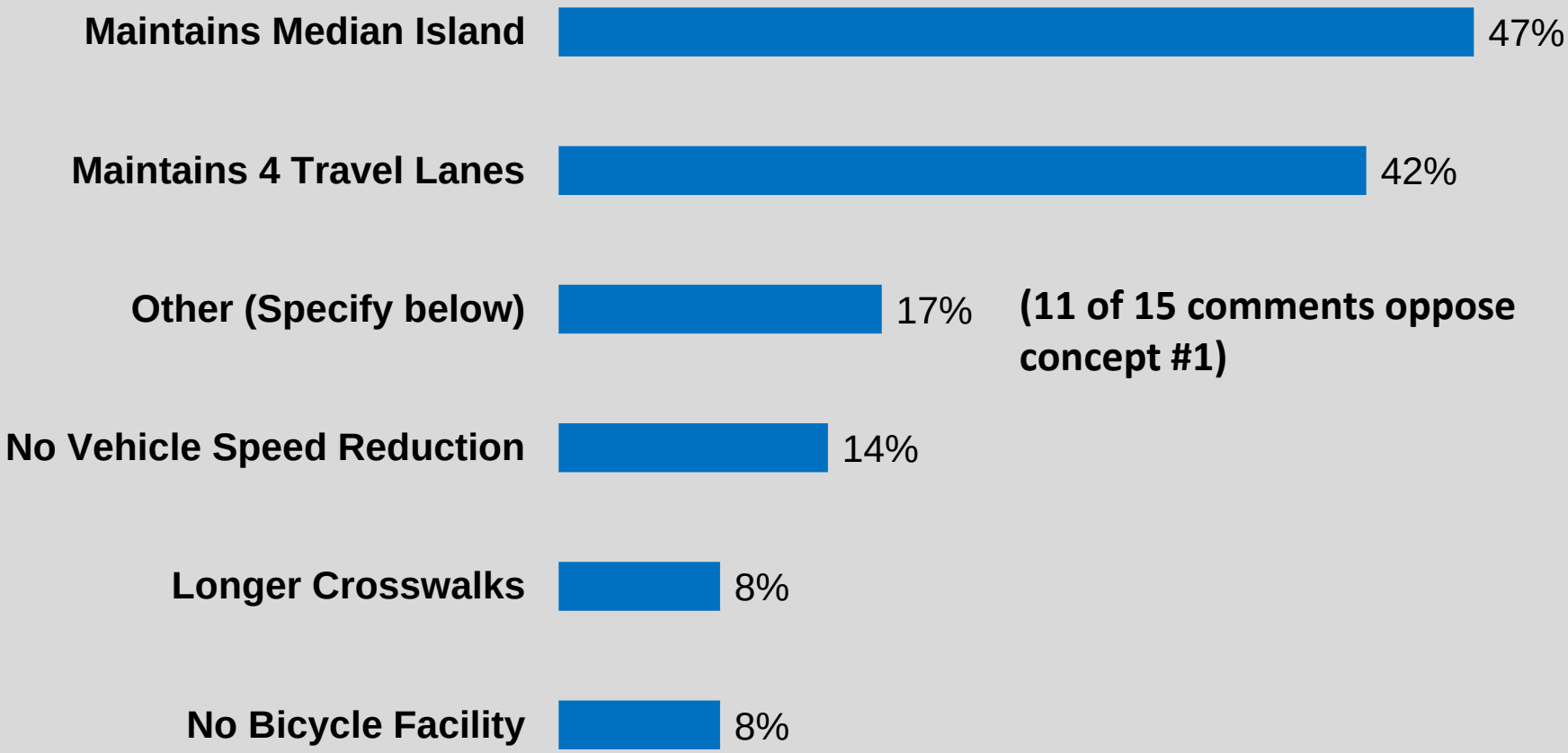
Advantages
-Improved Bus Stops
-New Street Lighting
-New Street Trees-

Dis-Advantages
-No Speed Reduction
-Long Cross Walks
-No Bicycle Facility



CUMMINS HIGHWAY
Summary of Responses to Design Survey

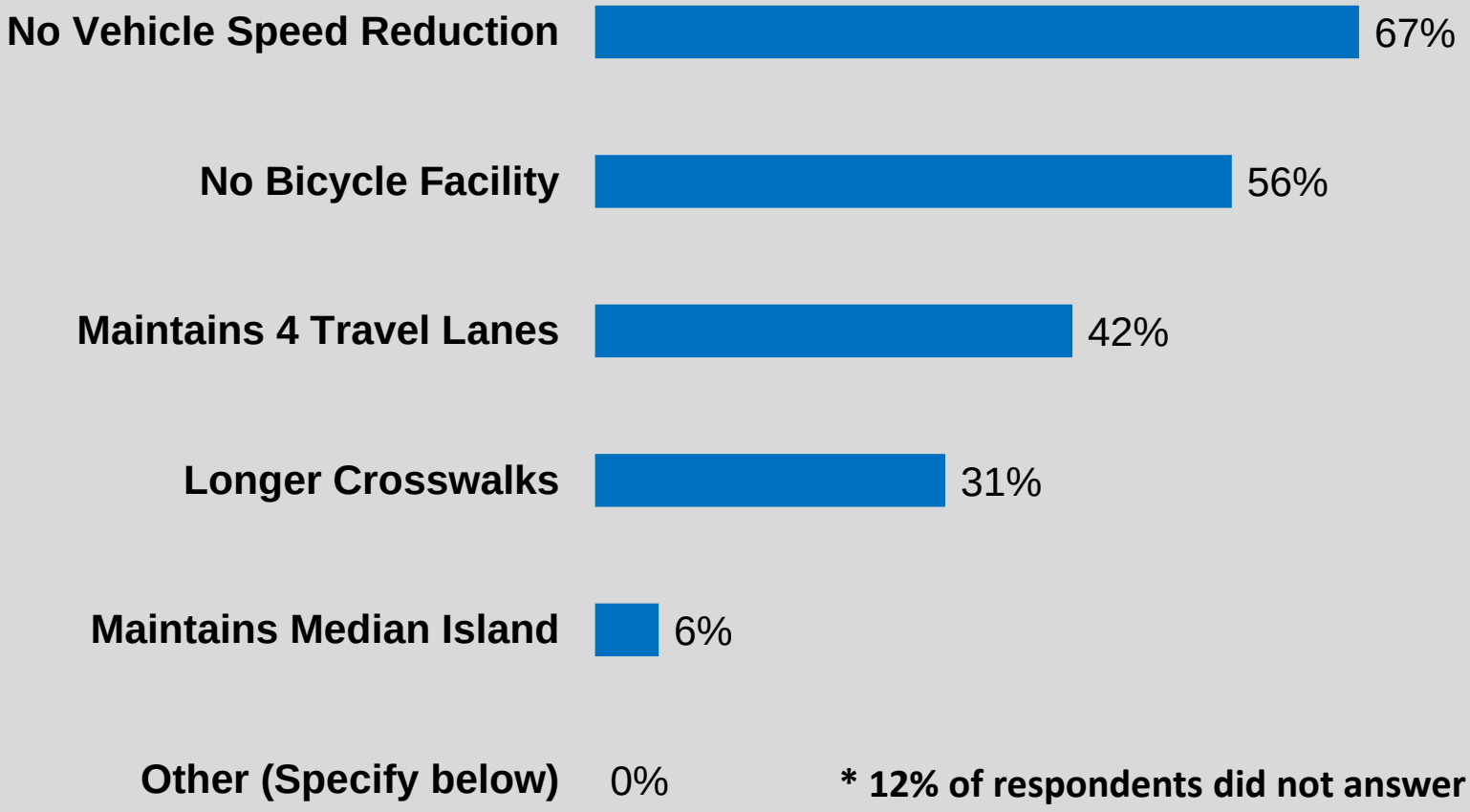
What elements do you <u>like</u> most about Concept No. 1? (Four lanes maintain median- select up to 3) *



* 12% of respondents did not answer this question

CUMMINS HIGHWAY
Summary of Responses to Design Survey

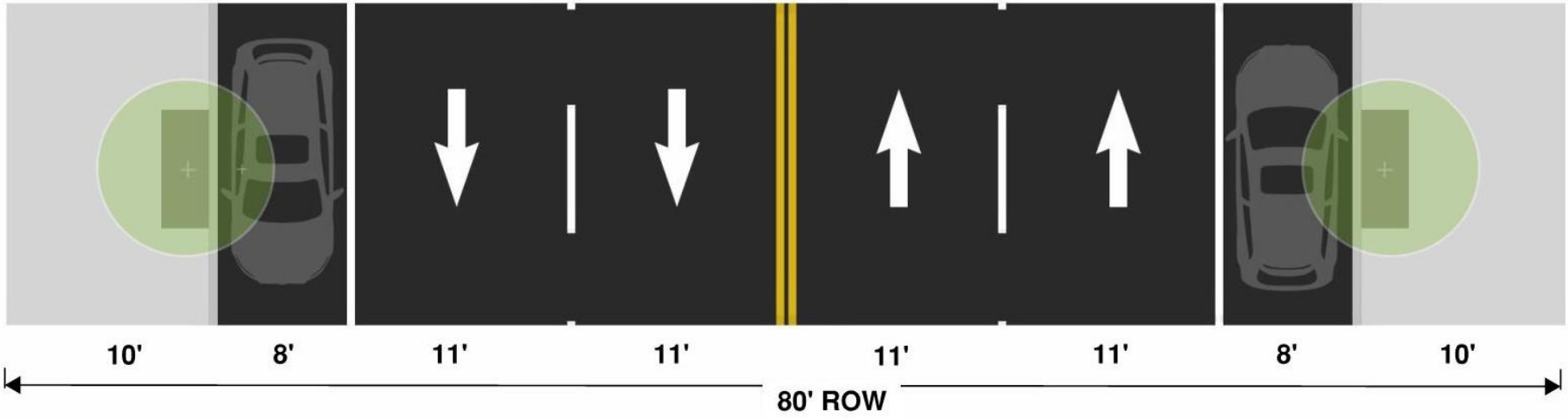
What elements do you dislike most about Concept No. 1? (Four lanes maintain median- select up to 3) *



*** 12% of respondents did not answer this question**

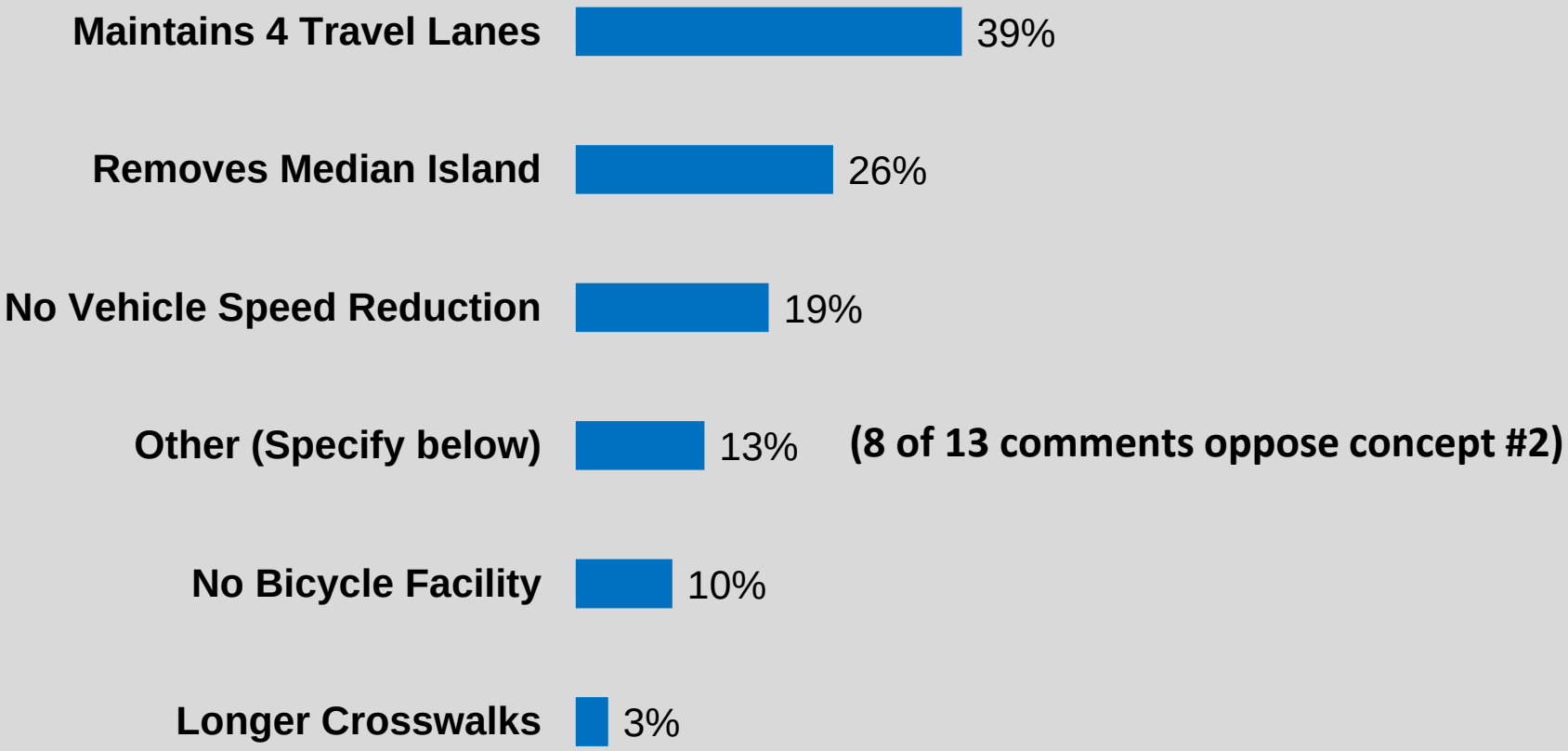
CUMMINS HIGHWAY

Concept 2 – Four Lanes (Remove Median)



CUMMINS HIGHWAY
Summary of Responses to Design Survey

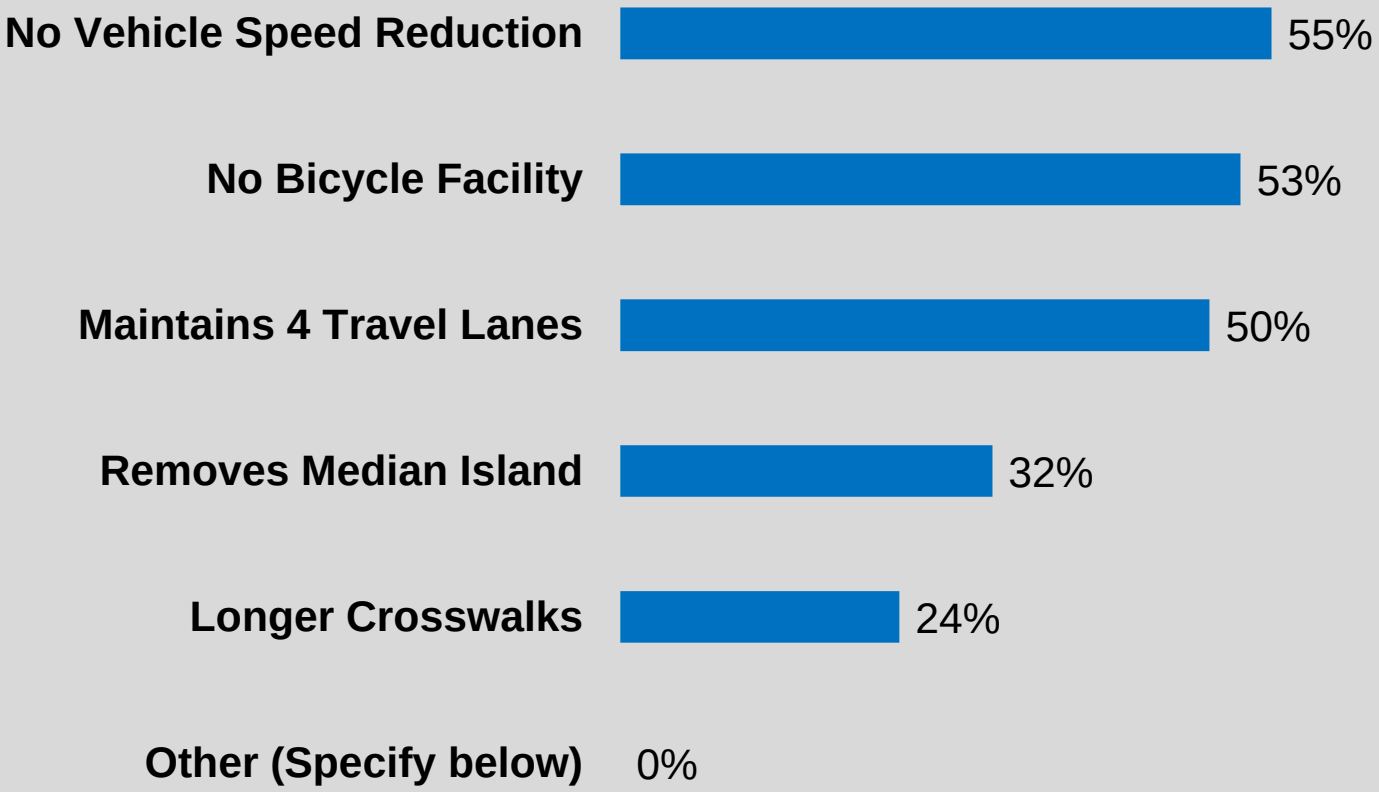
What elements do you like most about Concept No. 2? (Four lanes remove median – Select up to 3) *



* 24% of respondents did not answer this question

CUMMINS HIGHWAY
Summary of Responses to Design Survey

What elements do you dislike most about Concept No. 2? (Four lanes remove median – Select up to 3)



* 7% of respondents did not answer this question

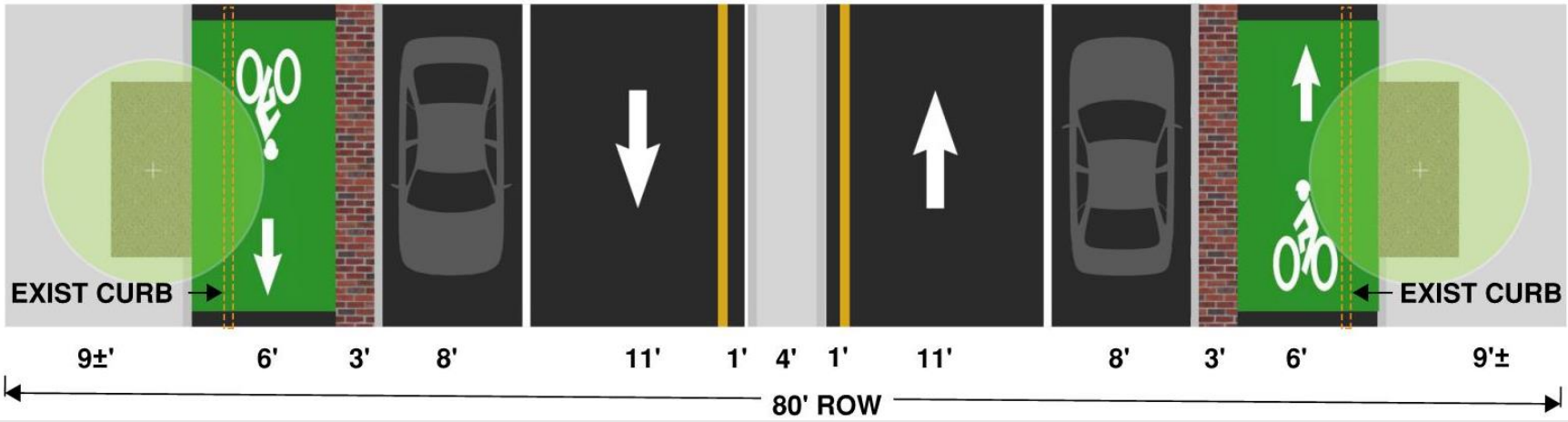
CUMMINS HIGHWAY

Concept 3 – Two Lanes (Maintain Median)

Advantages
- -Reduced Vehicle Speeds
- -Improved Bus Stops
- -Shorter Crosswalks
- -New Street Lighting
- -New Street Trees
- -Bicycle Facility

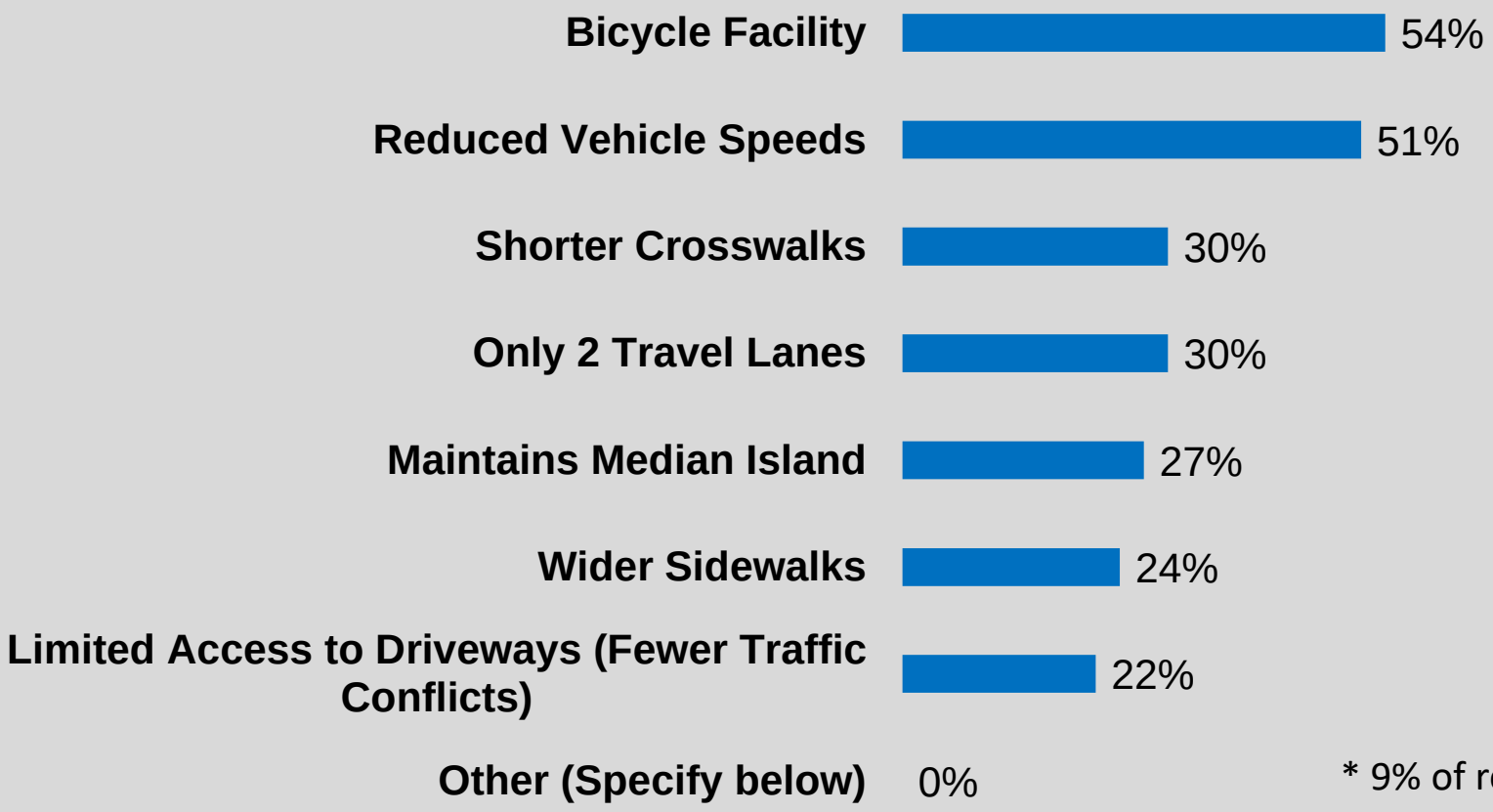
Keep Turning Lanes at Intersections

Dis-Advantages
- -Limited access to driveways due to median
- -Additional vehicle travel time delay



CUMMINS HIGHWAY
Summary of Responses to Design Survey

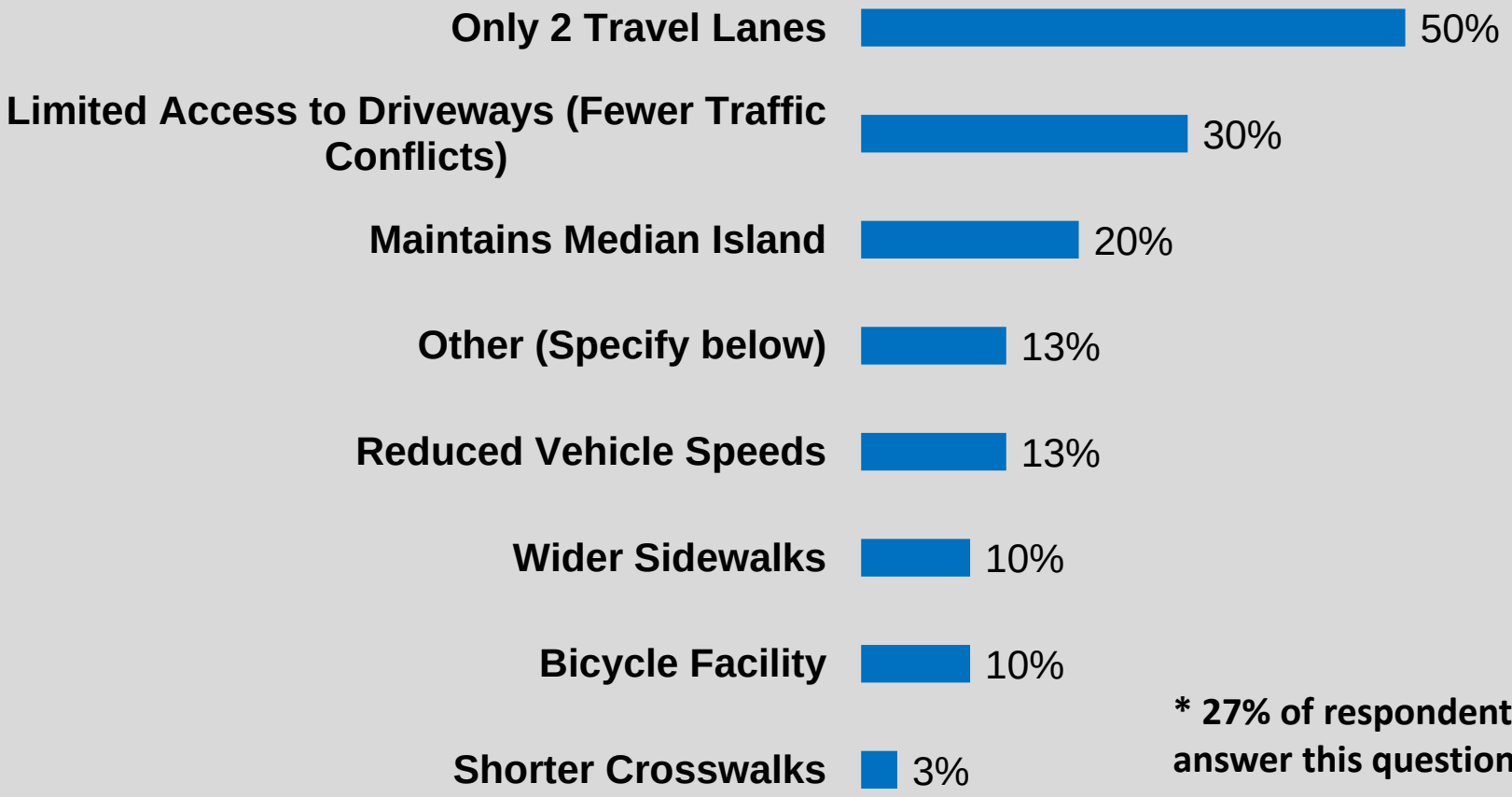
What elements do you <u>like</u> most about Concept No. 3? (Two lanes maintain median – Select up to 3)



* 9% of respondents did not answer this question

CUMMINS HIGHWAY
Summary of Responses to Design Survey

What elements do you dislike most about Concept No. 3? (Two lanes maintain median – Select up to 3) *



*** 27% of respondents did not answer this question**

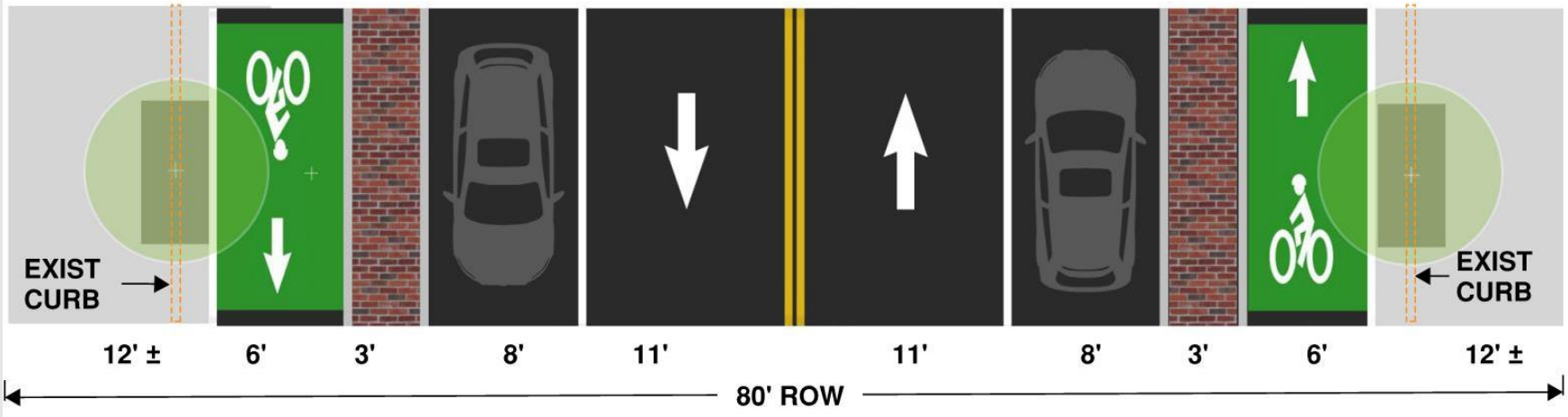
CUMMINS HIGHWAY

Concept 4 – Two Lanes (Remove Median)

Advantages
- -Reduced Vehicle Speeds
- -Wider Sidewalks
- -Improved bus stops
- -Shortest Crosswalks
- -New Street Lighting
- -New Street Trees
- -Bicycle Facility

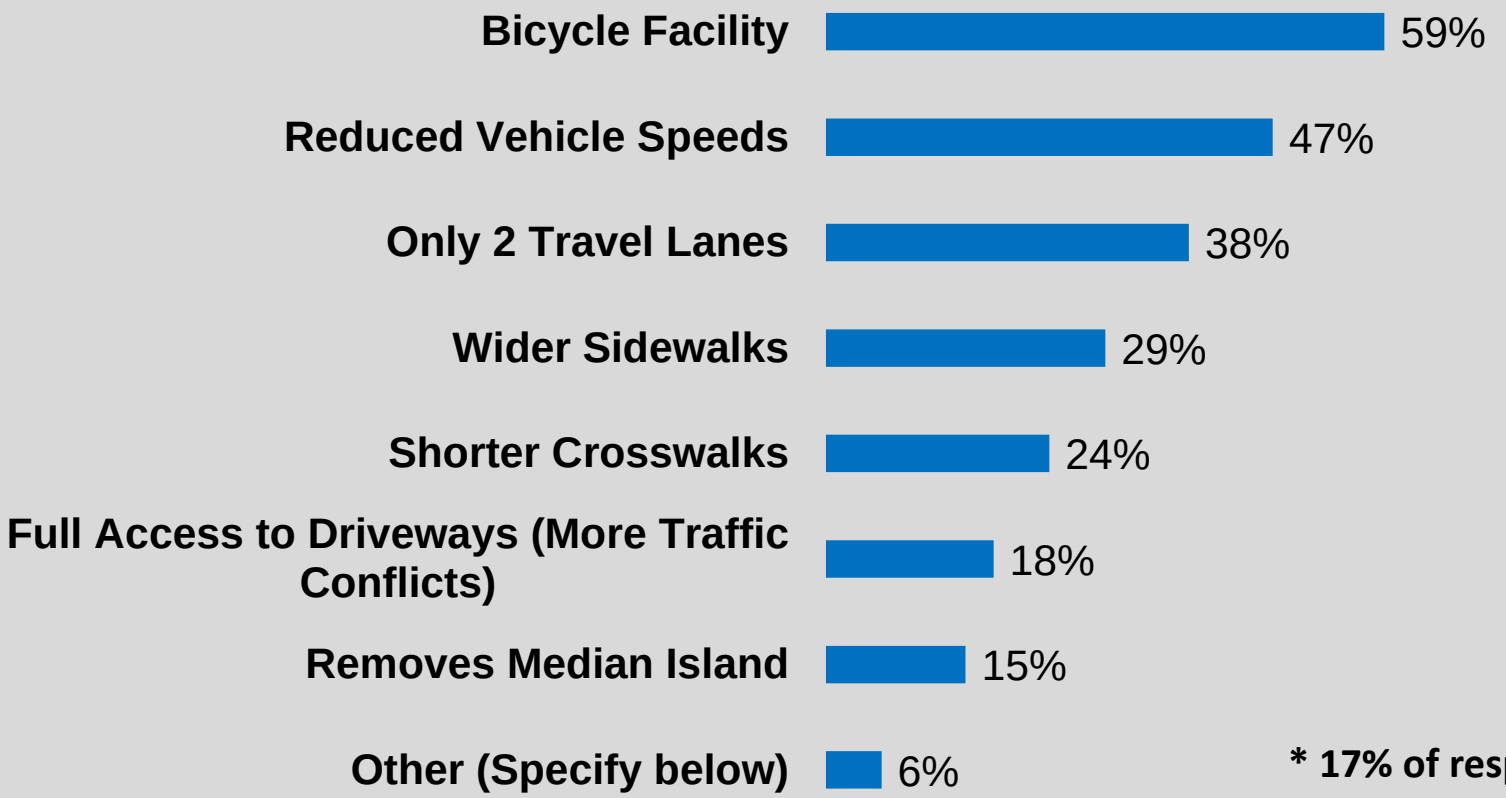
Keep Turning Lanes at Intersections

Dis-Advantages
- -Full access to driveways creates more conflicts with vehicles
- -Additional vehicle travel time delay



CUMMINS HIGHWAY
Summary of Responses to Design Survey

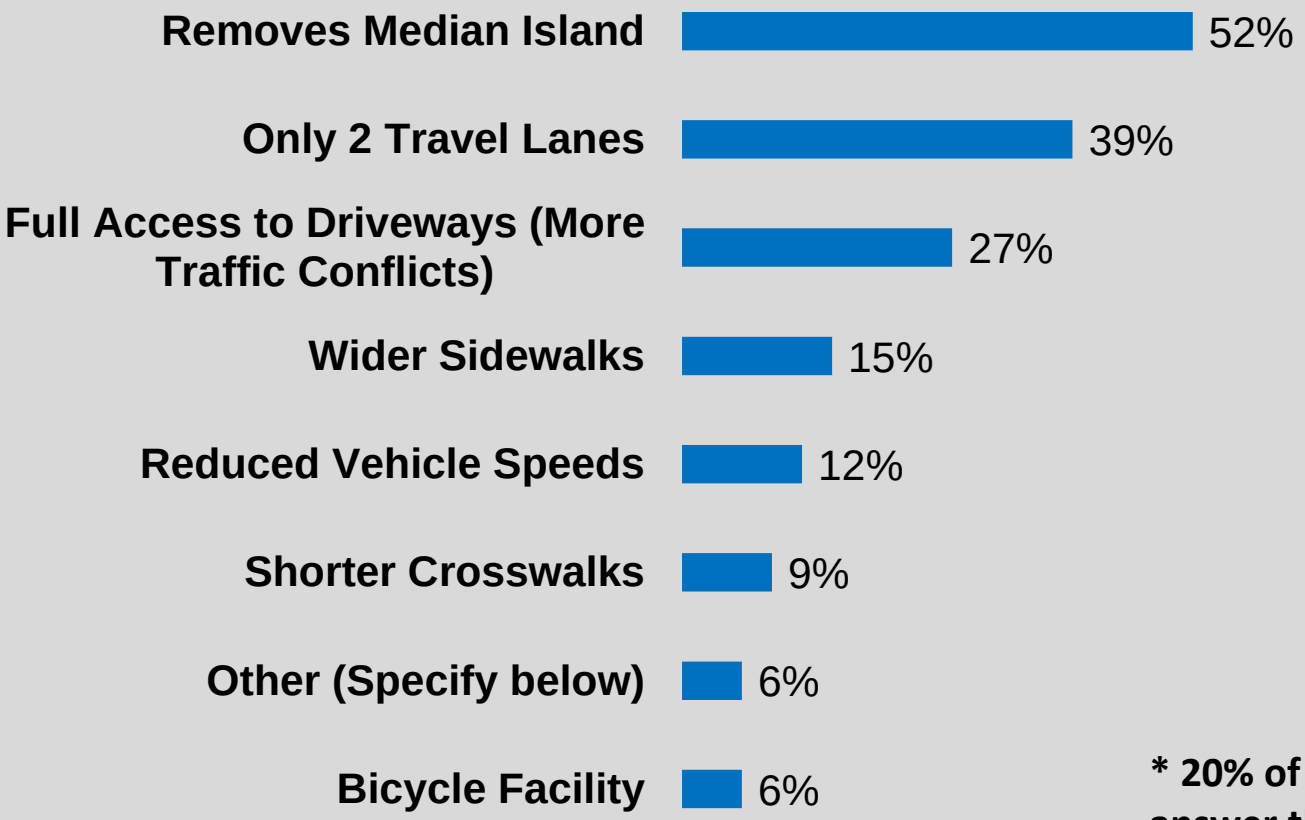
What elements do you like most about Concept No. 4? (Two lanes remove median – Select up to 3) *



*** 17% of respondents did not answer this question**

CUMMINS HIGHWAY
Summary of Responses to Design Survey

What elements do you dislike most about Concept No. 4? (Two lanes remove median – Select up to 3) *



*** 20% of respondents did not answer this question**

CUMMINS HIGHWAY
Summary of Responses to Design Survey

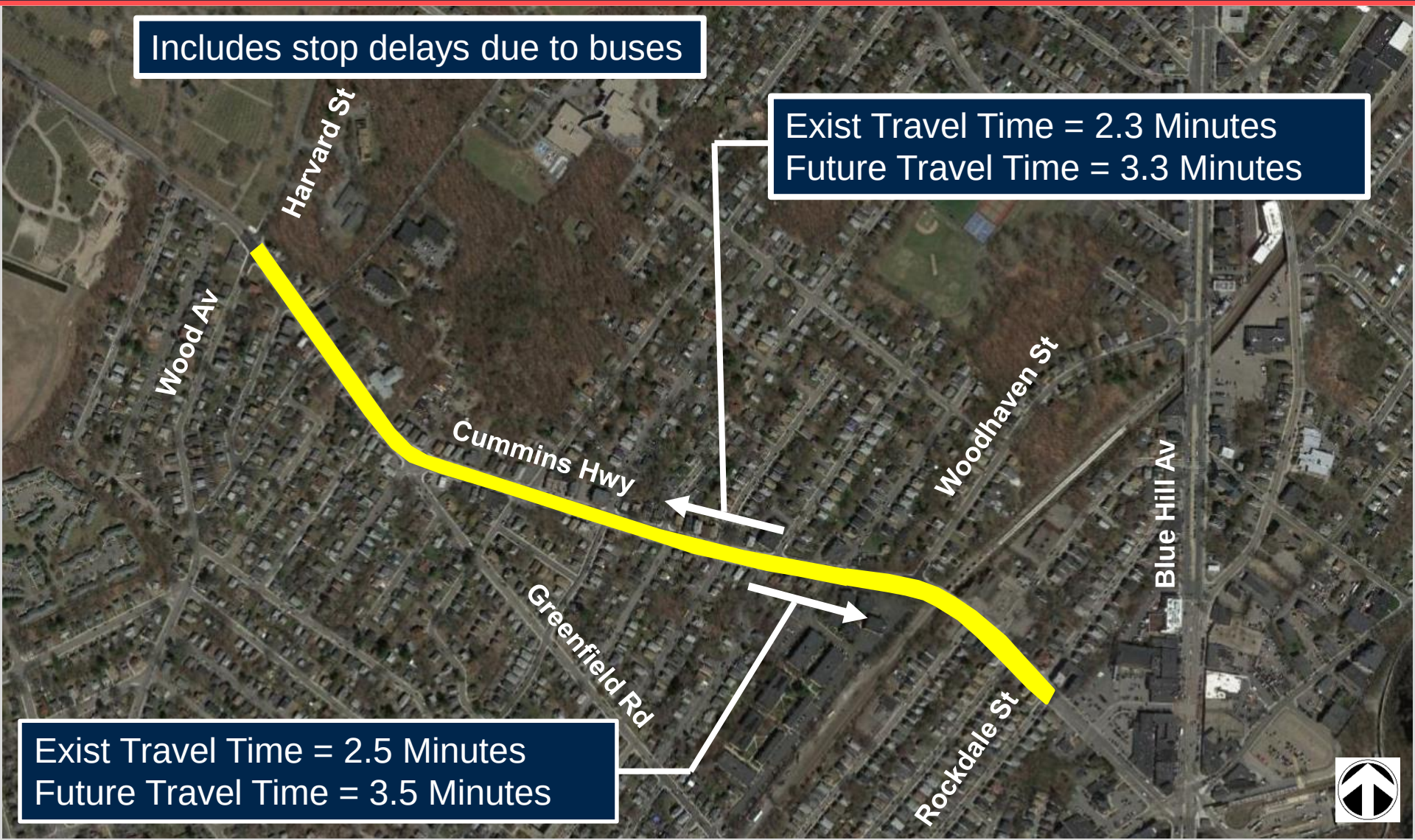
Design Elements Liked

- Traffic Calming
- Speed Reduction
- Shorter Crosswalks
- Wider Sidewalks
- Separated Bike Facility

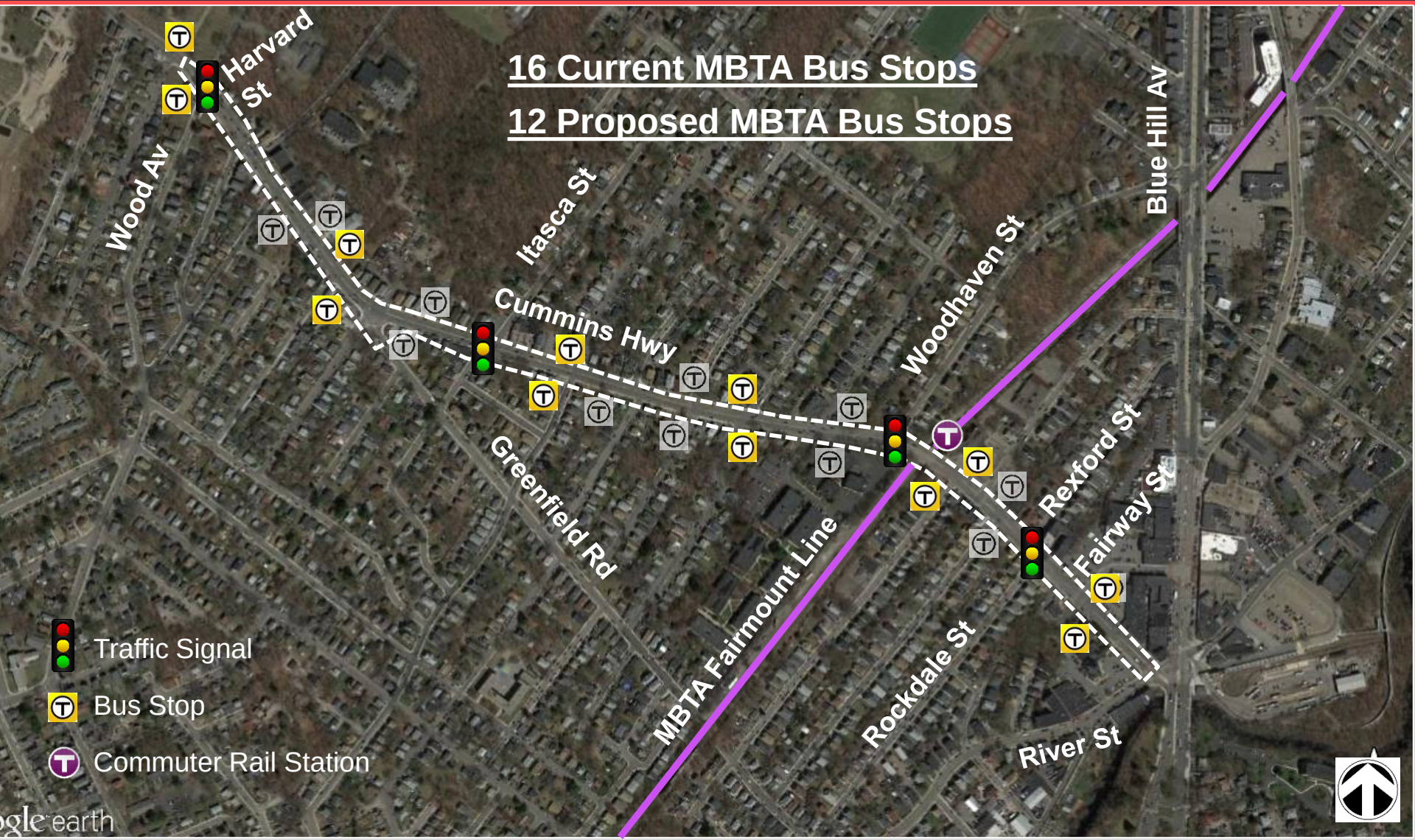
Design Concerns

- Removing the Median eliminates pedestrian refuge
- Removing the Median allows more left turns into driveways
- Traffic Congestion with only two lanes

CUMMINS HIGHWAY
Travel Delay – Average PM Peak Hour



CUMMINS HIGHWAY
Proposed Bus Stop Consolidation

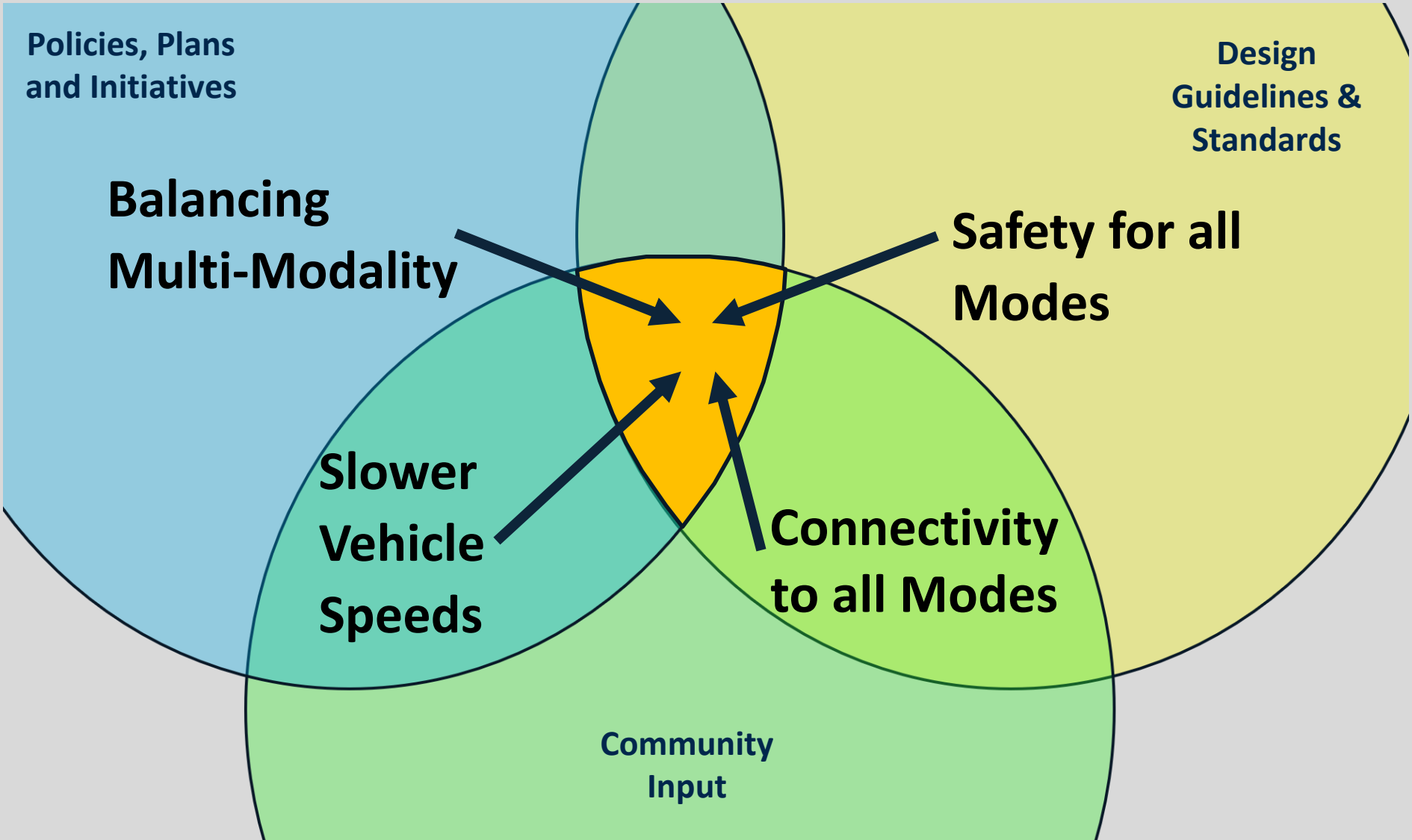


CUMMINS HIGHWAY
Proposed Bus Stop Consolidation

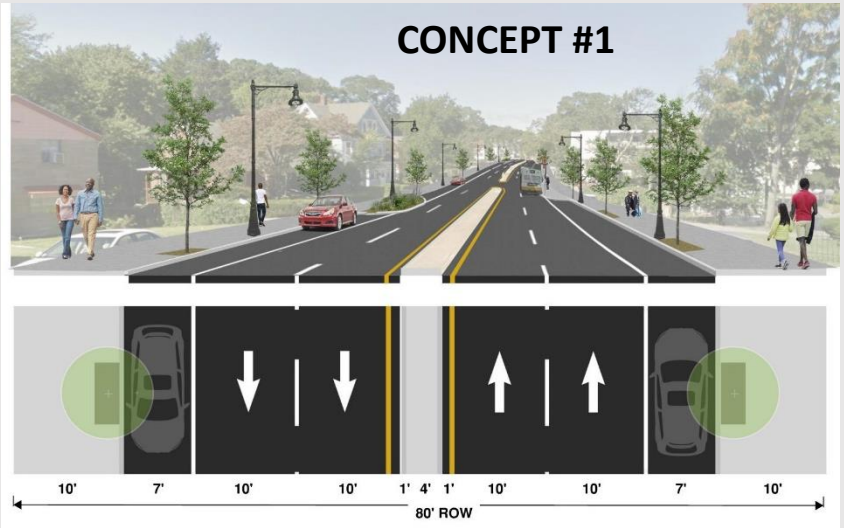
Bus Stop Consolidation Benefits:

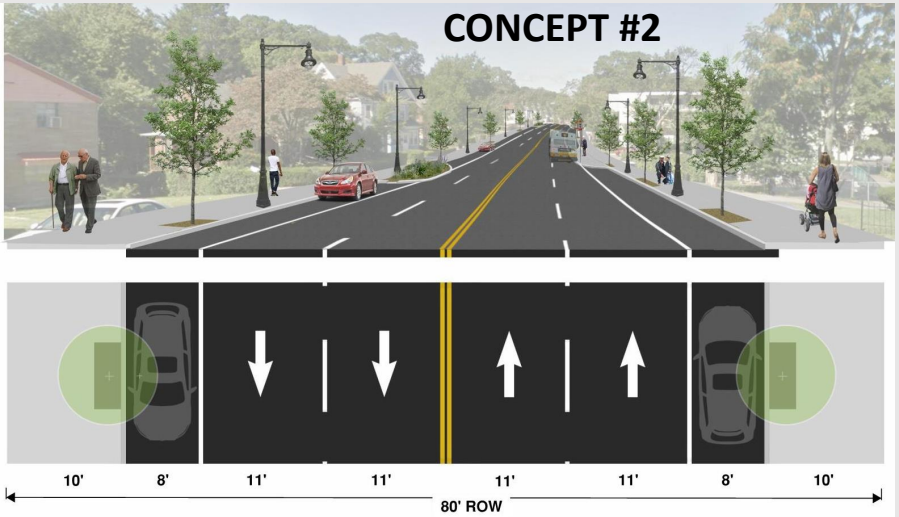
- Average Bus Stop = 15 seconds
- Fewer stops means quicker bus trips
- Less stops improves safety, reducing risk for all modes of travel
- Proposed stop spacing is approximately 880 feet, which is well below the maximum distance of 1,300 feet.

CUMMINS HIGHWAY
What elements are common to all?



CUMMINS HIGHWAY
Concept Selection





Concept #1 & #2 do not satisfy the needs of the community or the policies and guidelines of the city.

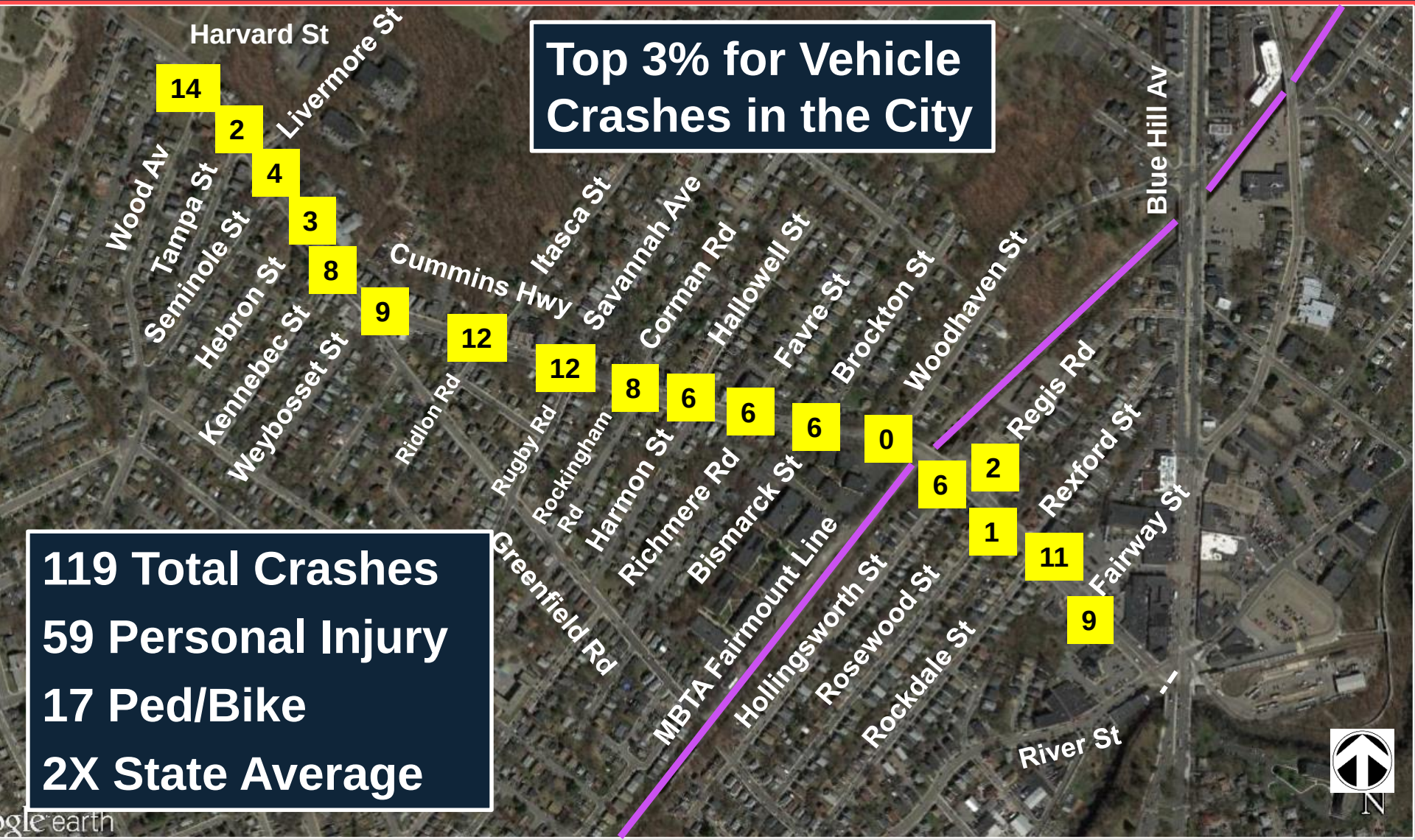
-No Speed Reduction

-No Safety Improvement

-No Multi-Modal Balance

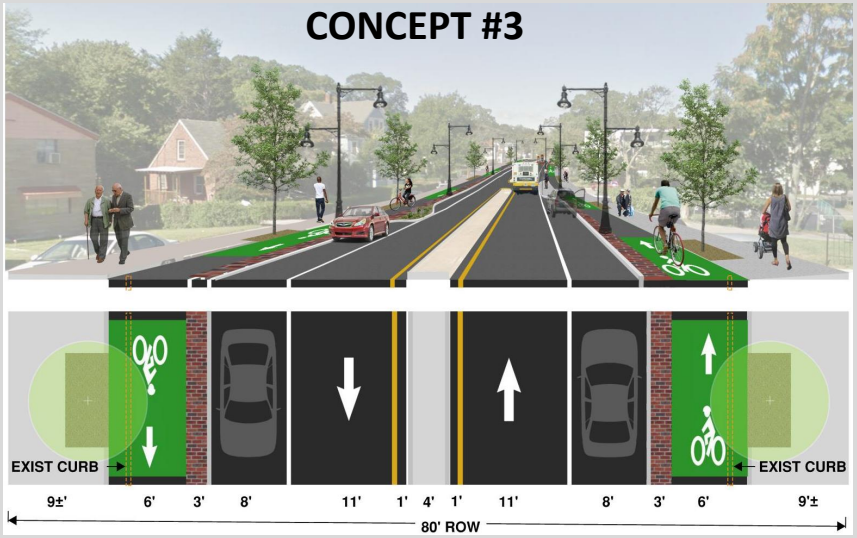
CUMMINS HIGHWAY
Existing Conditions- 85% Vehicle Speed

CUMMINS HIGHWAY
2016-2018 Crash Data (Boston Police Dept)



CUMMINS HIGHWAY

Concept Selection – Concept #3 vs. Concept #4

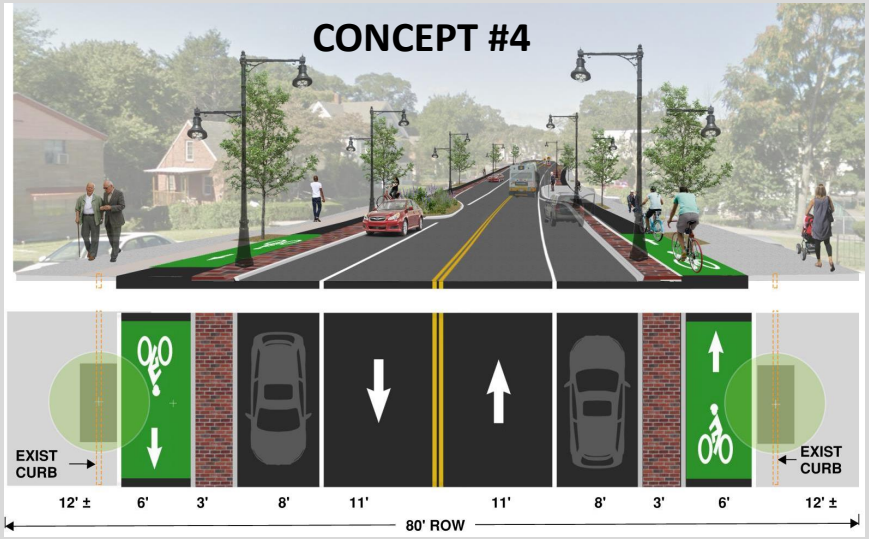


Advantages

- ✓ Less turning conflicts due to median

Dis-Advantages

- ○ Higher vehicle speeds
- ○ Narrower sidewalks
- ○ Longer crosswalks
- ○ Emergency vehicles may be stuck behind vehicle queue
- ○ Snow removal more difficult



Advantages

- ✓ Reduced Vehicle Speeds
- ✓ Wider Sidewalks
- ✓ Shortest Crosswalks
- ✓ Better Emergency Vehicle Access
- ✓ Easier Snow Removal

Dis-Advantages

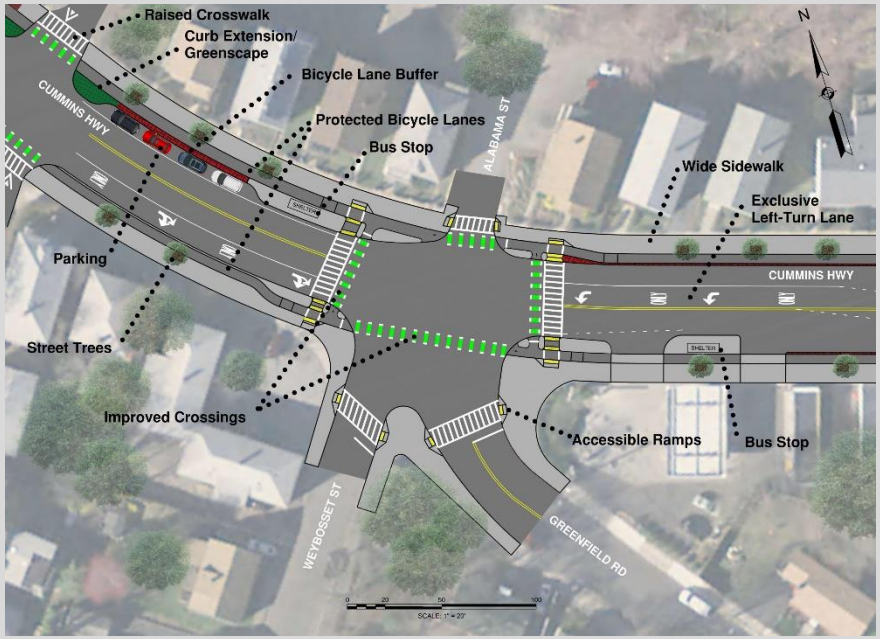
- ○ Full access to driveways creates more conflicts with vehicles

CUMMINS HIGHWAY
Preferred Alternative
Concept #4 Two Lanes - No Median

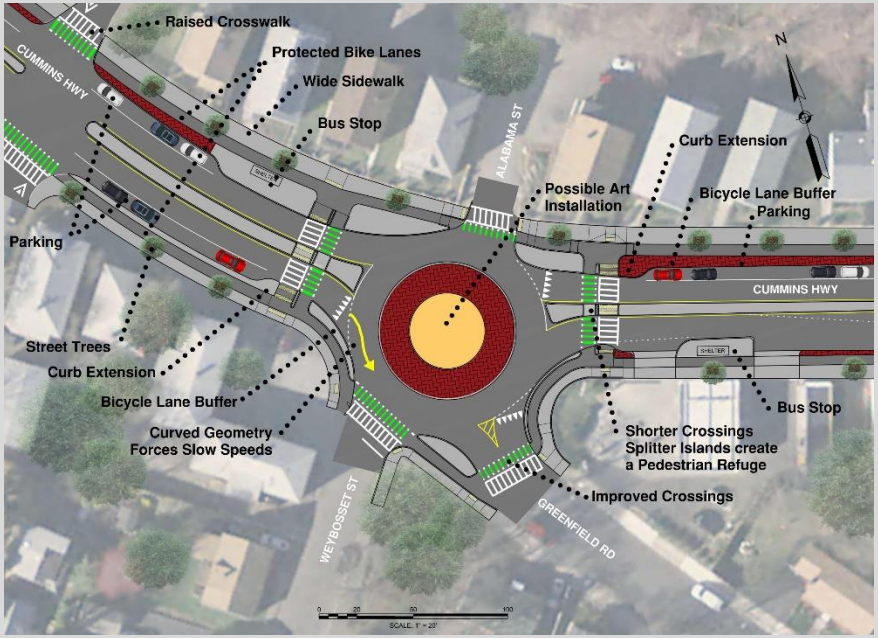
Rugby Rd / Savannah Ave Intersection

- ✓ Applies most traffic calming measures
- ✓ No median for maximum calming affect and emergency response capability
- ✓ Enhance bus stops
- ✓ Create bicycle facilities
- ✓ Street Trees
- ✓ Improve sidewalks and pedestrian access
- ✓ Improve street lighting
- ✓ Improve green space

CUMMINS HIGHWAY
Greenfield Road Intersection

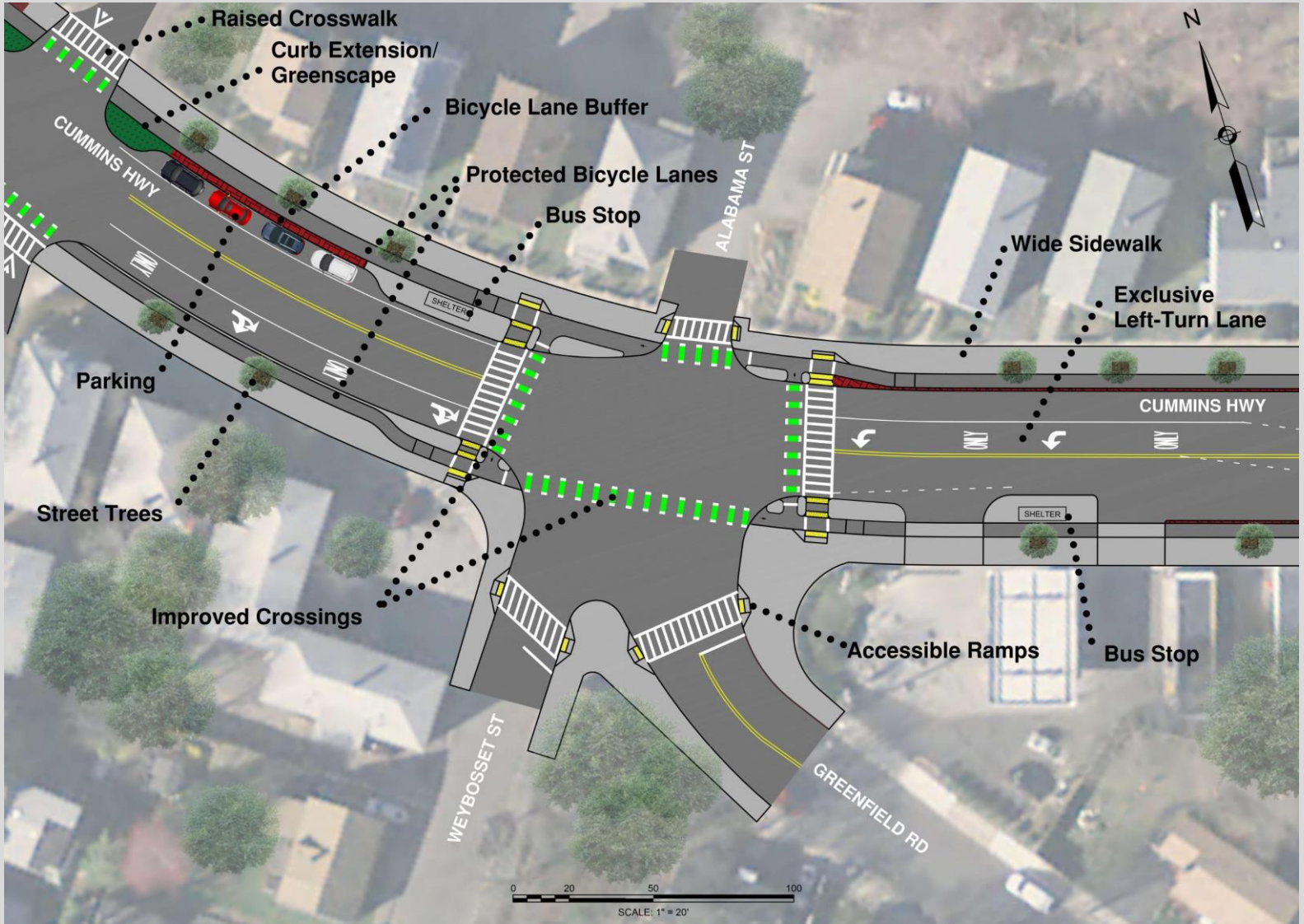


Traffic Signal
versus



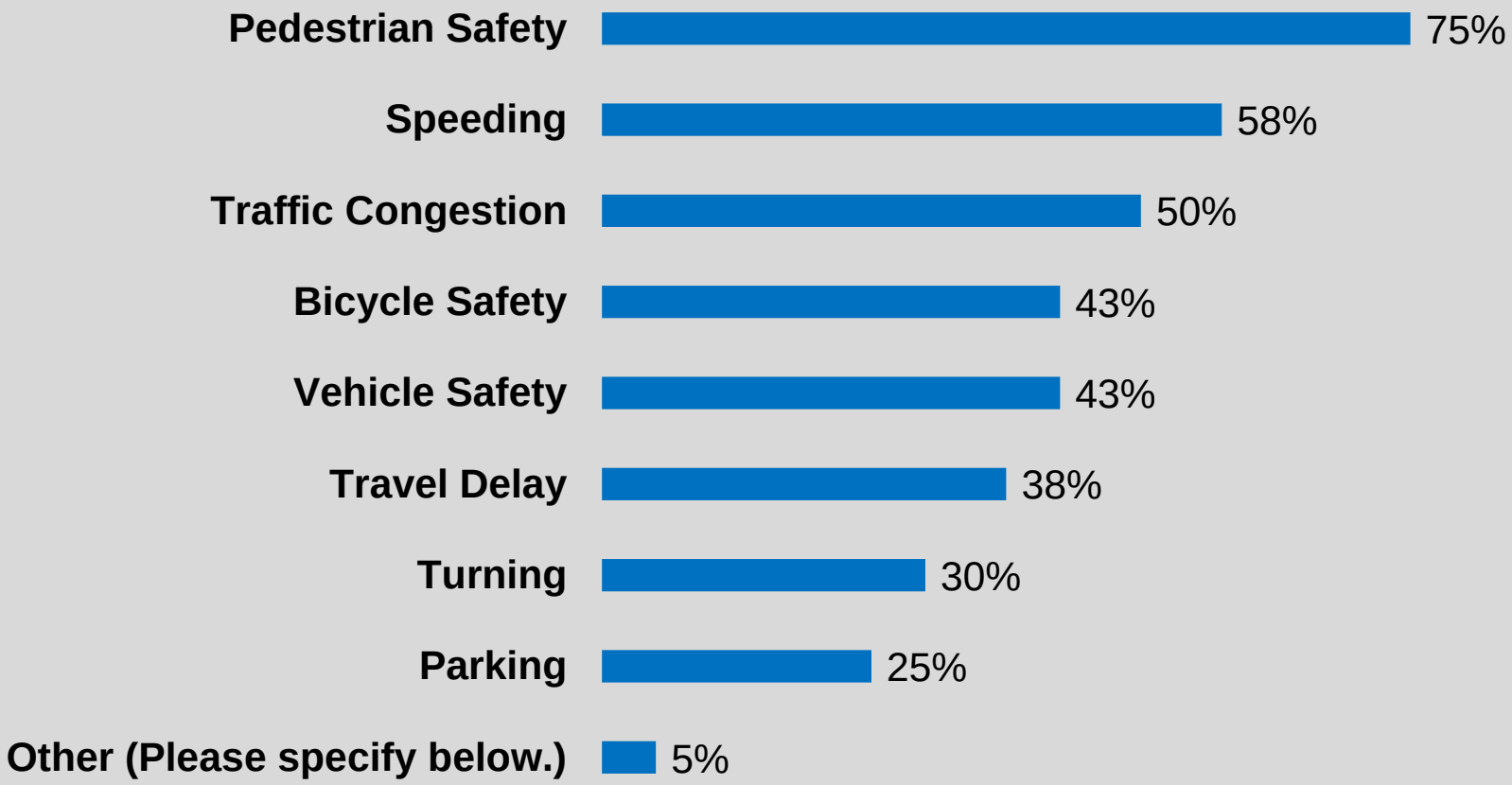
Roundabout

CUMMINS HIGHWAY
Traffic Signal Concept- Greenfield Road Intersection



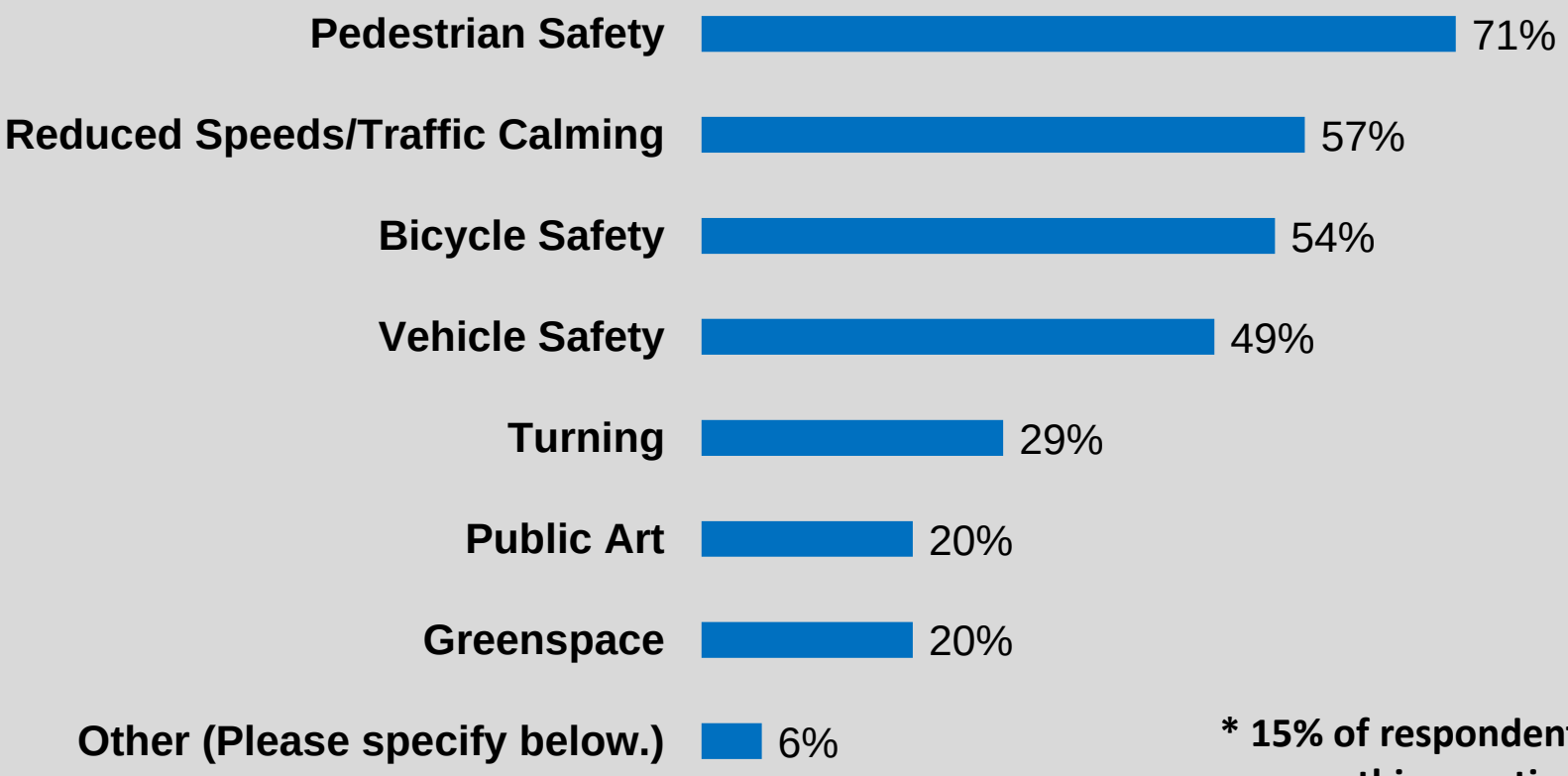
CUMMINS HIGHWAY
Summary of Responses to Design Survey

What are your concerns with the Cummins Highway / Greenfield Road signalized concept?



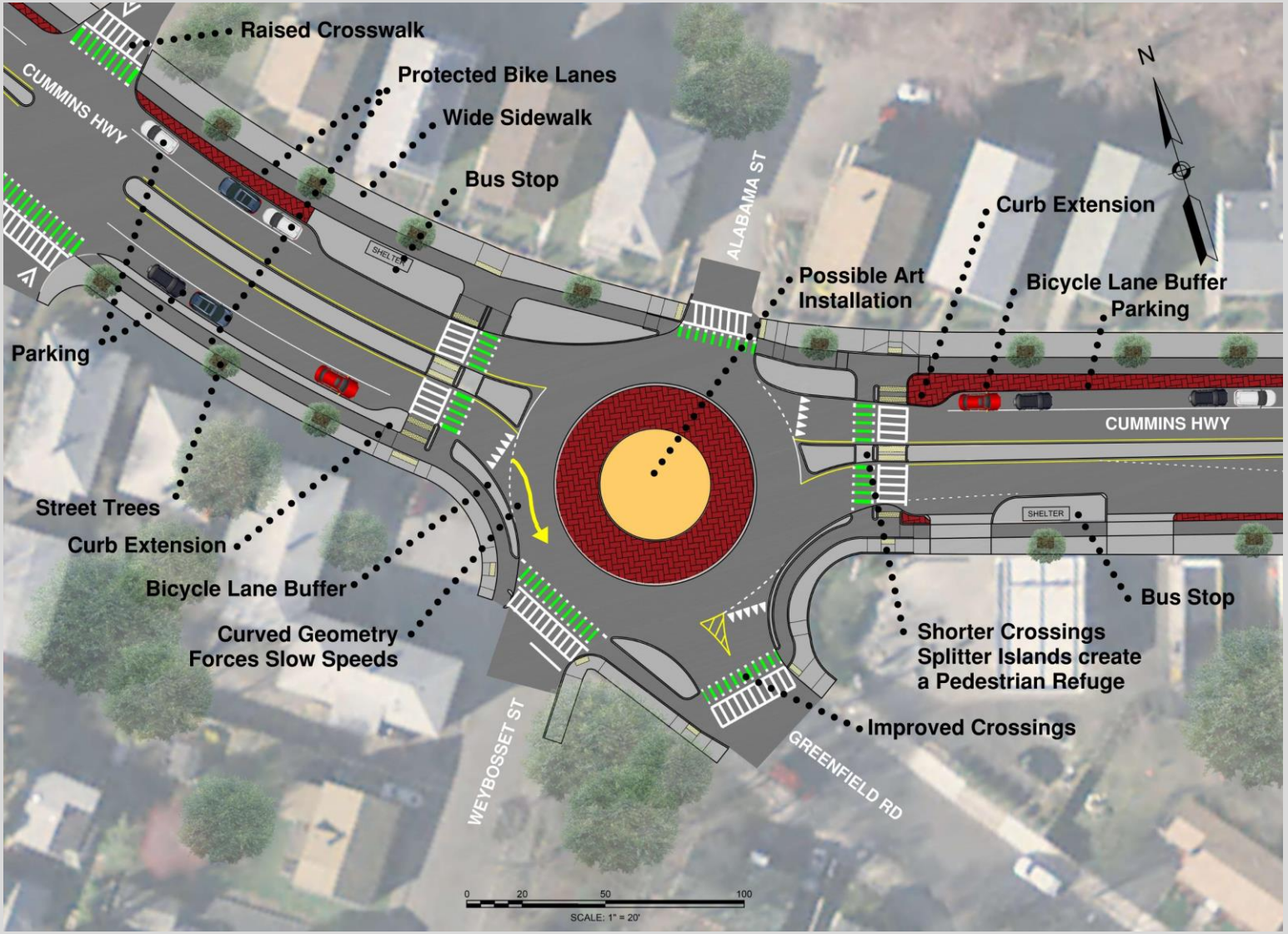
CUMMINS HIGHWAY
Summary of Responses to Design Survey

What do feel are the benefits with the Cummins Highway / Greenfield Road signalized concept? *



*** 15% of respondents did not answer this question**

CUMMINS HIGHWAY
Roundabout Concept- Greenfield Road Intersection



CUMMINS HIGHWAY

Roundabout vs. Rotary – What is the Difference?

VFW Parkway – West Roxbury Parkway, West Roxbury

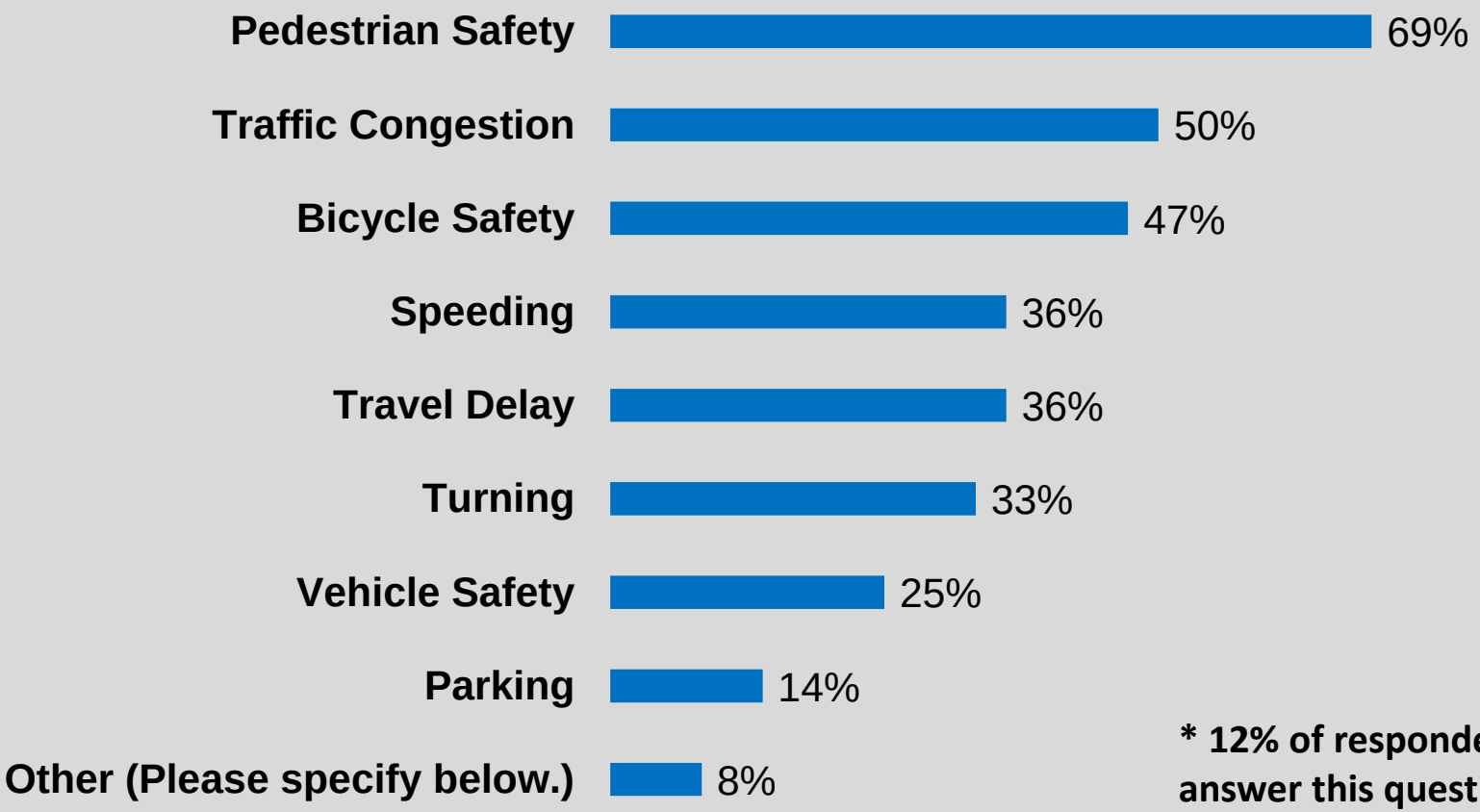
CUMMINS HIGHWAY

Roundabout vs. Rotary – What is the Difference?

Hyde Square, Jamaica Plain

CUMMINS HIGHWAY
Summary of Responses to Design Survey

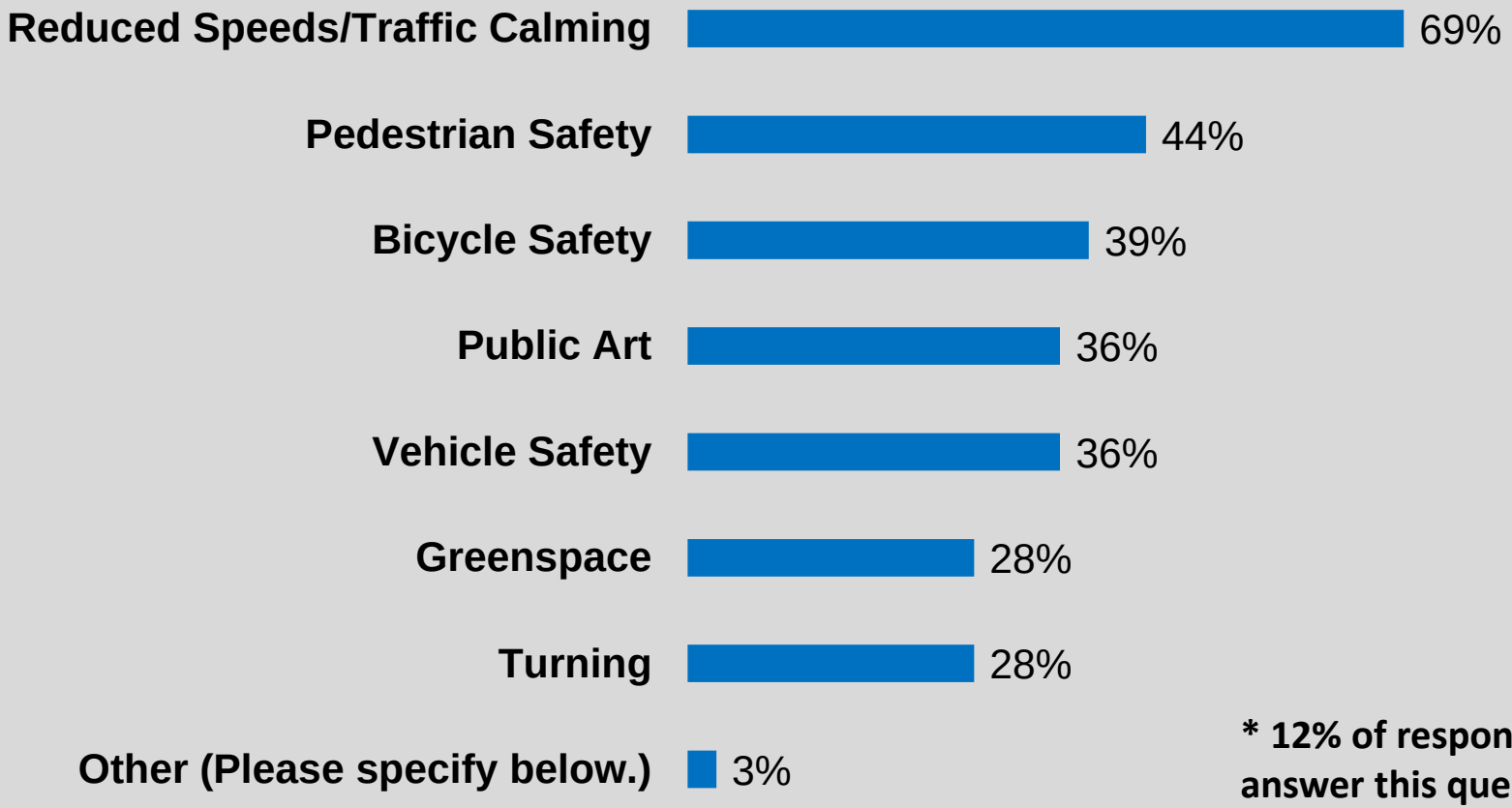
What are your concerns with the Cummins Highway / Greenfield Road roundabout concept? *



*** 12% of respondents did not answer this question**

CUMMINS HIGHWAY
Summary of Responses to Design Survey

What do you feel are the benefits with the Cummins Highway / Greenfield Road roundabout concept? *



*** 12% of respondents did not answer this question**

CUMMINS HIGHWAY
Summary of Responses to Design Survey

Design Elements Liked

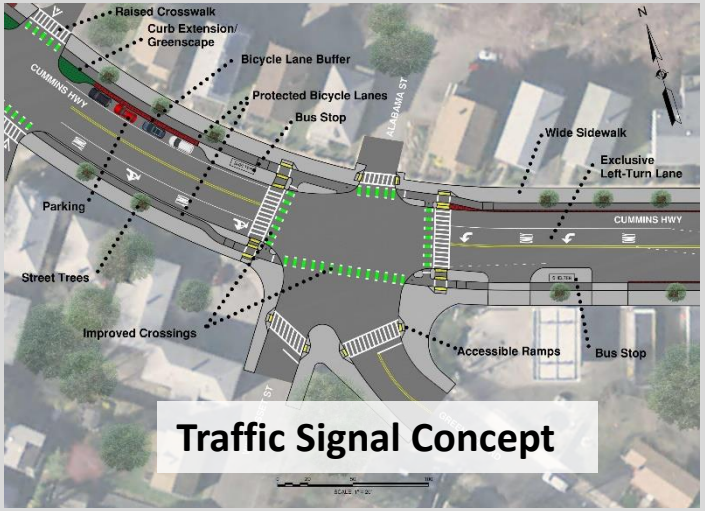
- Traffic Calming
- Add order to the intersection
- Speed Reduction
- Shorter Crosswalks

Design Concerns

- Speeding
- Pedestrian Safety
- Traffic Congestion

CUMMINS HIGHWAY

Concept Selection – Traffic Signal vs. Roundabout



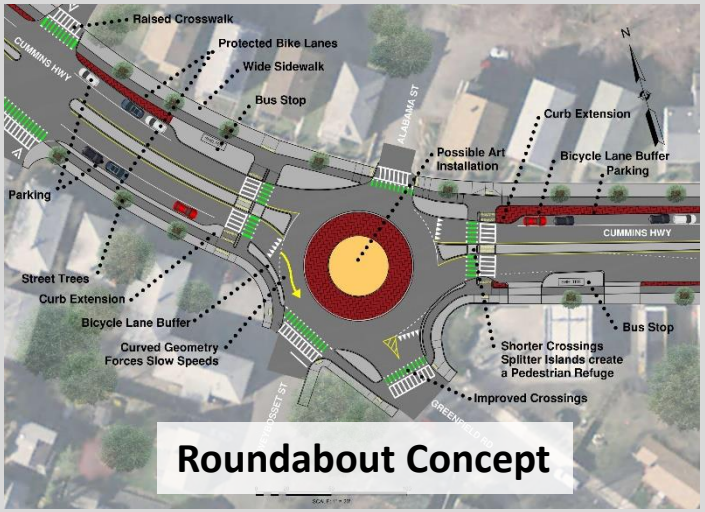
Traffic Signal Concept

Advantages

- ✓ Pedestrian signal gives clear indication when to cross
- ✓ Bicycles have more direct crossing

Dis-Advantages

- ○ Higher vehicle speeds
- ○ No traffic calming off-peak
- ○ Longer crosswalks
- ○ Signal maintenance and power costs
- ○ More vehicle conflicts



Roundabout Concept

Advantages

- ✓ Reduced Vehicle Speeds
- ✓ Continuous traffic calming during “off peak” periods
- ✓ Shortest Crosswalks
- ✓ Lower maintenance costs
- ✓ Less vehicle conflicts
- ✓ Less delay for pedestrians

Dis-Advantages

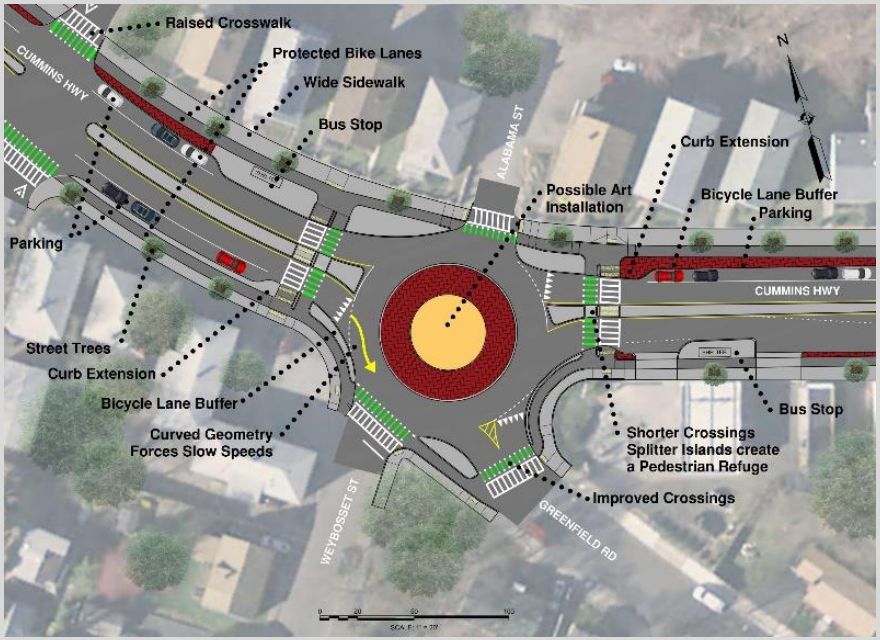
- ○ Pedestrians use judgement to cross during gaps in traffic
- ○ Bicycle crossing slightly longer

CUMMINS HIGHWAY
Preferred Alternative – Greenfield Roundabout

- ✓ Best traffic calming measure
- ✓ Slows traffic 24/7/365
- ✓ Safest option for all modes
- ✓ Lowest Maintenance
- ✓ Less delay for pedestrians

CUMMINS HIGHWAY
Preferred Corridor Concept

Roundabout



Two Lane No Median

CUMMINS HIGHWAY
Traffic Simulation – Afternoon Peak Hour

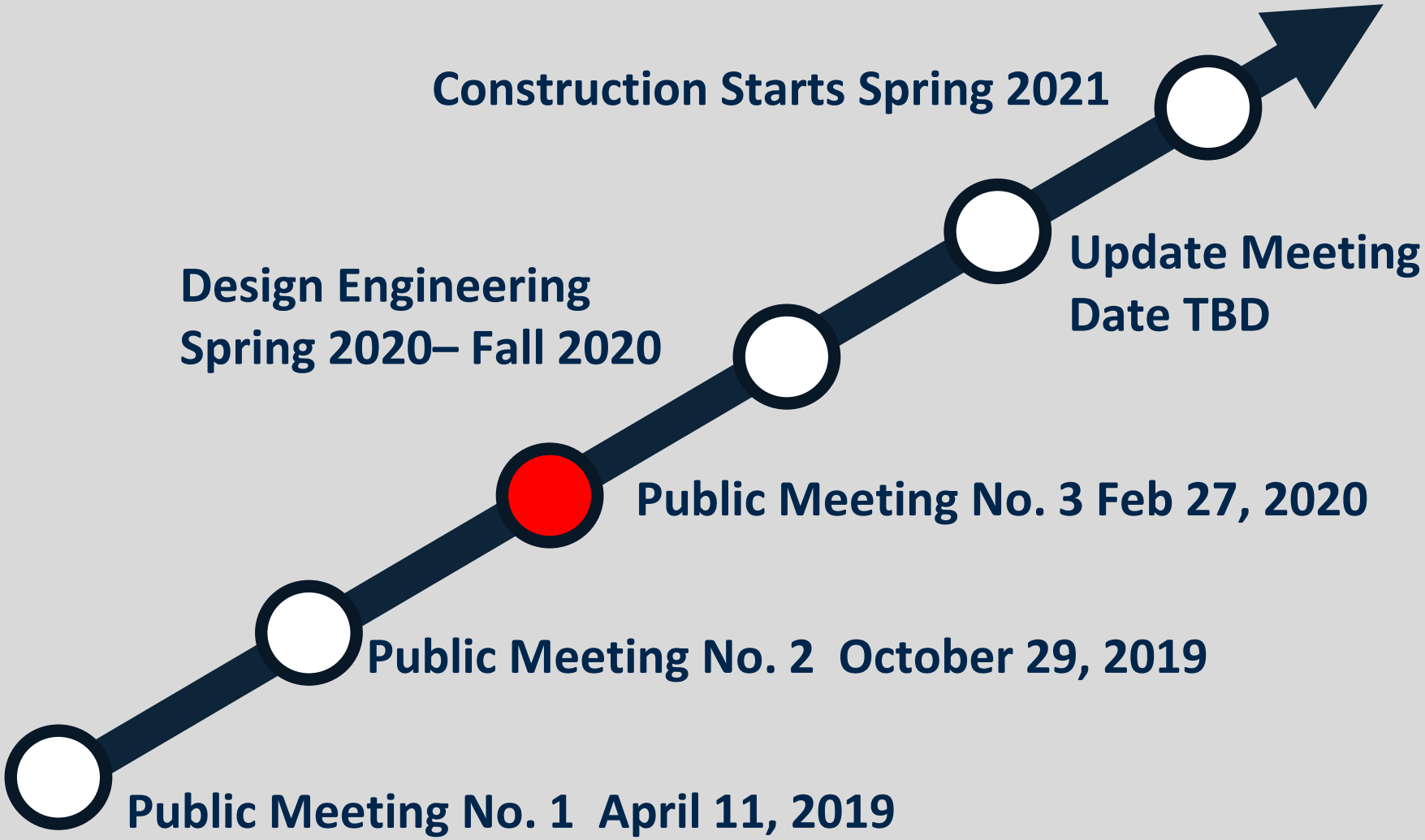
PREFERRED ALTERNATIVE
CONCEPT #4 with ROUNDABOUT

Future No-Build
Conditons
(2028)

Future Build
Conditions
(2028)

Note: All 3D buildings are for representation purpose ONLY.

CUMMINS HIGHWAY
Anticipated Project Schedule



THANK YOU

BOSTON PUBLIC
WORKS DEPARTMENT

Jeffrey Alexis
Project Manager
Principal Civil Engineer
Boston Public Works Department
617-635-4966
jeffrey.alexis@boston.gov

Questions and Answers ?

Mail-In Comment Sheet
Pickup form at Entrance/Exit

Project Website
https://www.boston.gov/departments/public-works/public-works-engineering-division-projects/cummins-highway-redesign