

Meeting 3
Transportation

**Needham Street Area
Vision Plan**



Community Engagement Group
January 29, 2018

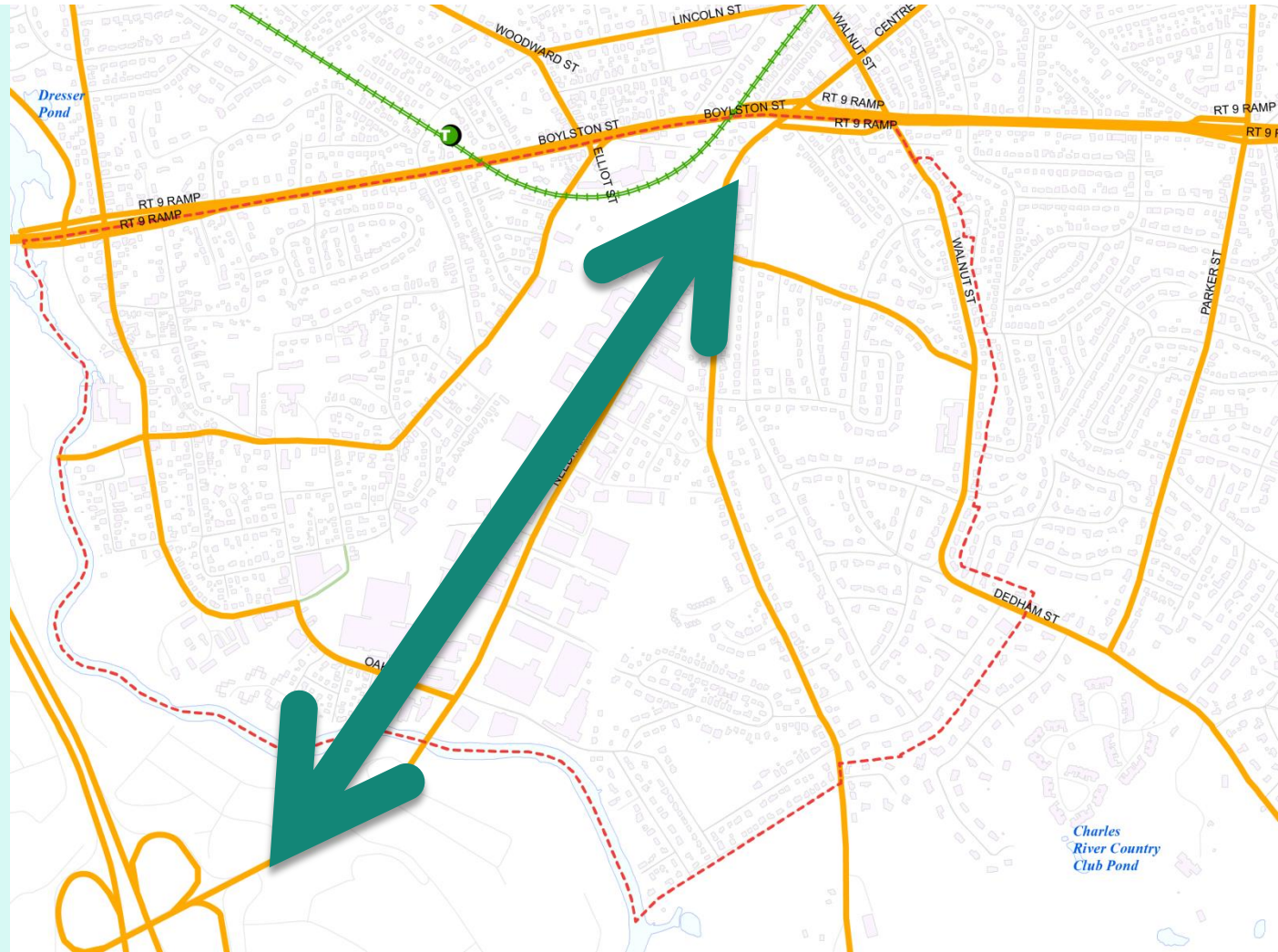
Agenda

- Transportation System Today
- Existing Challenges
- Opportunities
- Evaluation
- Public Comment

Transportation System Today

- Network

- Regional Roads & Rail



Transportation System Today

- **Network**

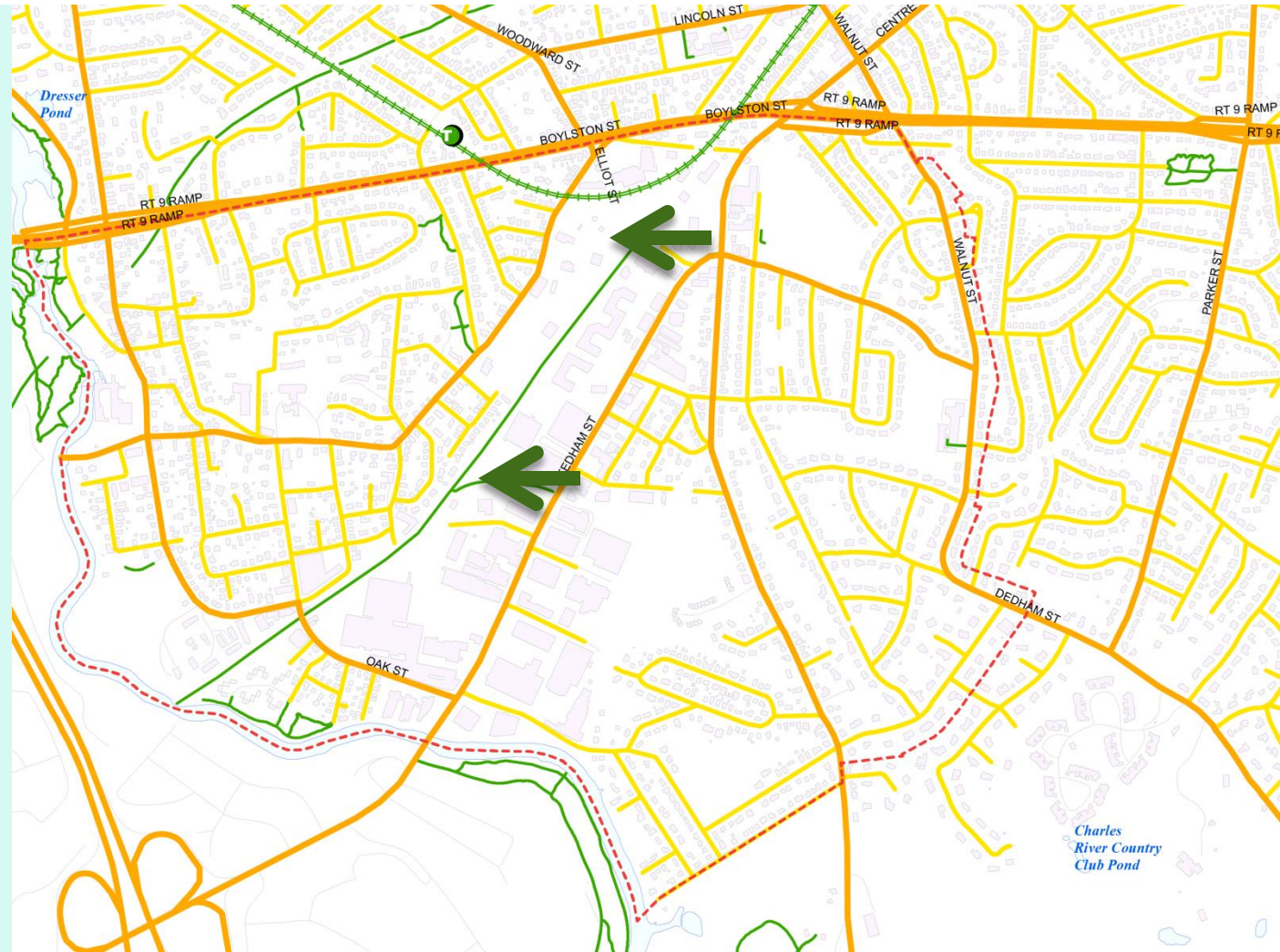
- Regional Roads & Rail
- Local Roads



Transportation System Today

- **Network**

- Regional Roads & Rail
- Local Roads
- Off-road Trails



Transportation System Today

- Network

- Regional Roads & Rail
- Local Roads
- Off-road Trails

- Options

- Walking



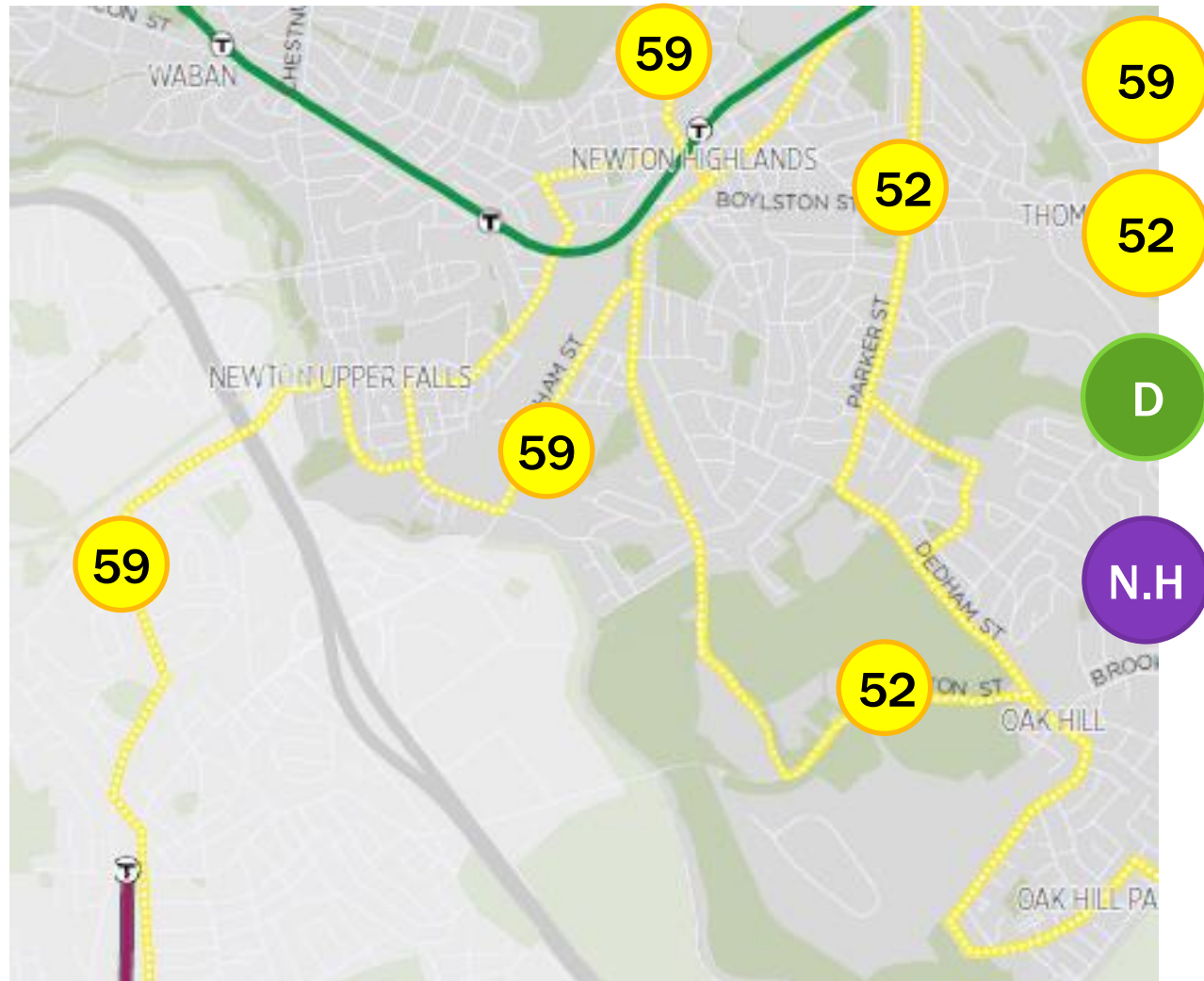
Transportation System Today

- Network

- Regional Roads & Rail
- Local Roads
- Off-road Trails

- Options

- Walking
- MBTA



Transportation System Today

• Network

- Regional Roads & Rail
- Local Roads
- Off-road Trails

• Options

- Walking
- MBTA

– Specialty

Transit

- School Buses
- Private School Buses
- Private Shuttles



School Buses

- Angier
- Countryside
- Zervas
- Brown
- South

Private School Buses

- Solomon Schechter (Wells Ave)

Buses avoid Needham St. whenever possible. Only stop along Needham St is at Avalon.

Route mapping currently not available; changes annually based on student need.

Transportation System Today

• Network

- Regional Roads & Rail
- Local Roads
- Off-road Trails



• Options

- Walking
- MBTA

– Specialty

Transit

- School Buses
- Private School Buses
- Private Shuttles

School Buses

- Angier
- Countryside
- Zervas
- Brown
- South
- Solomon Schechter

Private Shuttles

128 Business Council

- Monday - Friday
- 6:30 - 10:00 a.m. | 3:45 - 6:40 p.m.
- Stops at Newton Highlands, 320 Needham St, & Needham Xing
- Travels on Oak, Eliot, Woodward, & Lincoln Sts.

Trip Advisor

- Monday - Friday
- 7:15 - 10:30 a.m. | 4:30 - 7:00 p.m.
- Stops at Newton Highlands, Trip Advisor
- Travels on Needham, Oak, Eliot, Lincoln, Walnut, & Winchester Sts.; also on Centre St on route to Cambridge

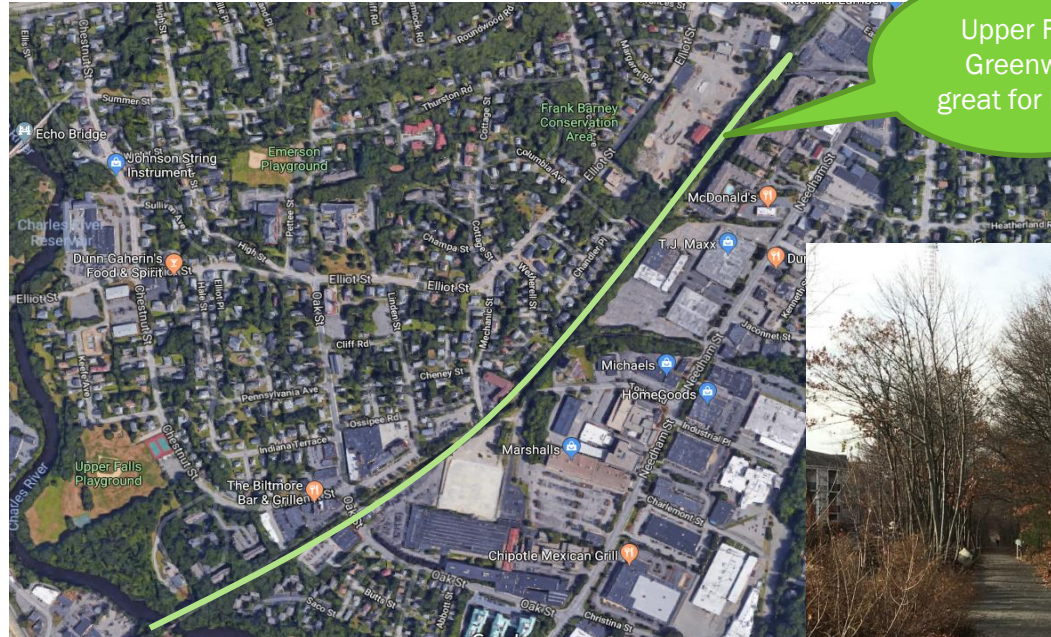
Transportation System Today

- **Network**

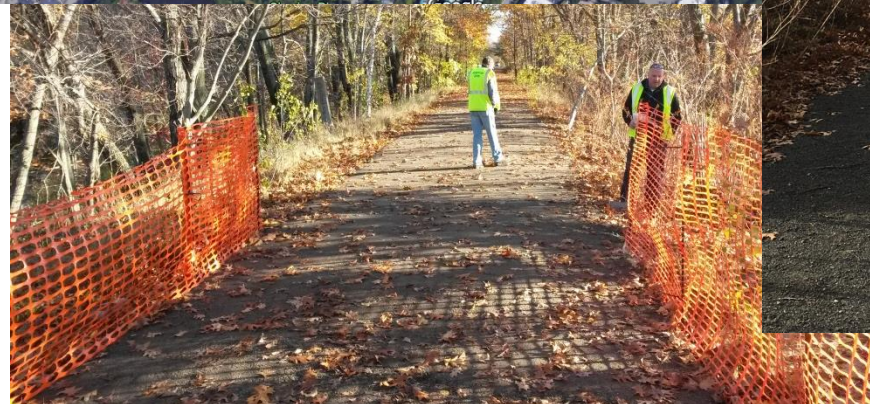
- Regional Roads & Rail
- Local Roads
- Off-road Trails

- **Options**

- Walking
- MBTA
- Specialty Transit
- **Biking**



Upper Falls Greenway- great for biking



Transportation System Today

• Network

- Regional Roads & Rail
- Local Roads
- Off-road Trails

• Options

- Walking
- MBTA
- Specialty Transit
- Biking
- Driving & Parking



Transportation System Today

- Network

- Regional Roads & Rail
- Local Roads
- Off-road Trails

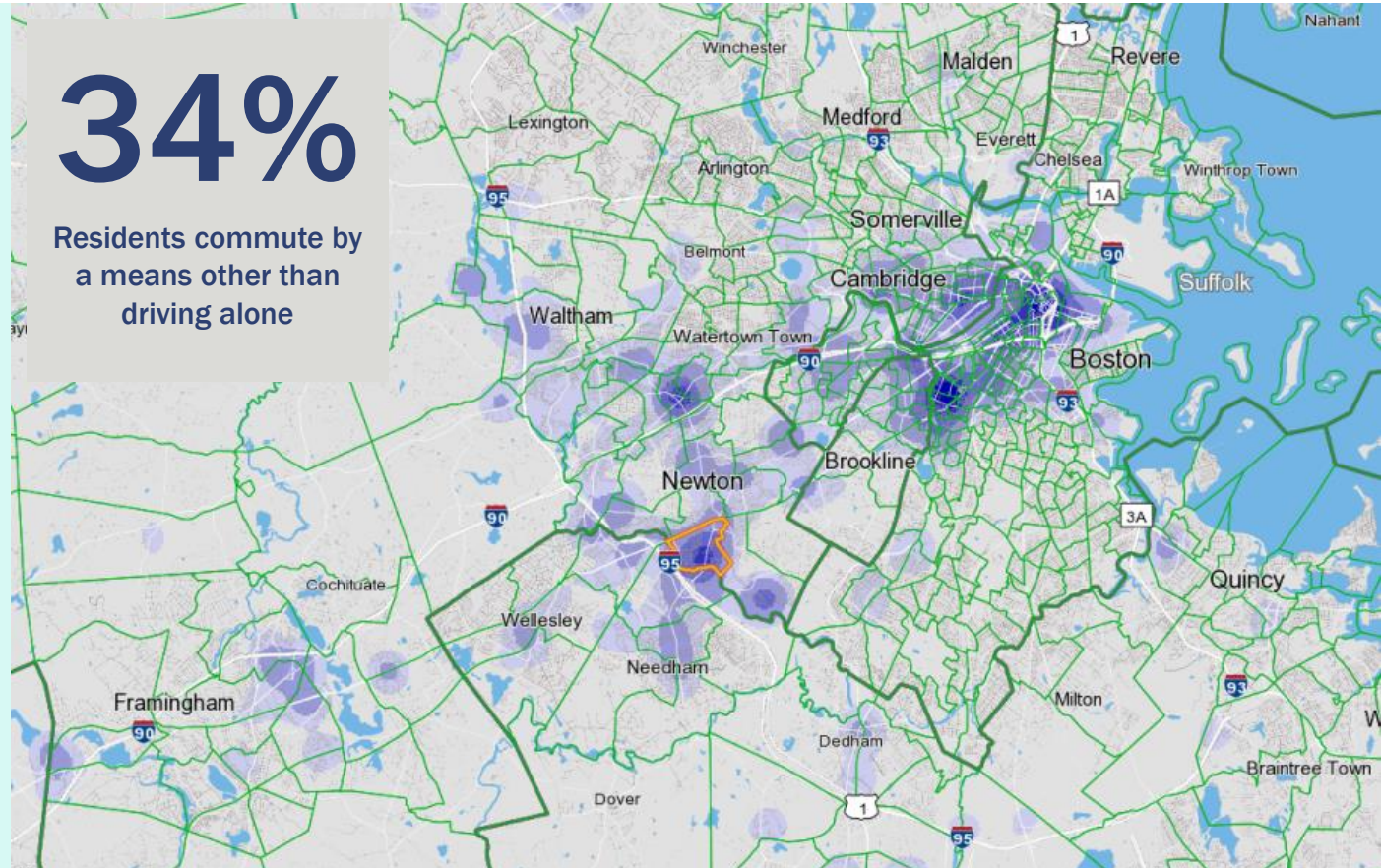
- Options

- Walking
- MBTA
- Specialty Transit
- Biking
- Driving & Parking

- Data

34%

Residents commute by a means other than driving alone



Concentrations of jobs held by residents in the census tract that best approximates the Needham St Area

Darker Purple = higher concentration

Newton, Longwood, Downtown Boston are highest

Transportation System Today

- **Network**

- Regional Roads & Rail
- Local Roads
- Off-road Trails

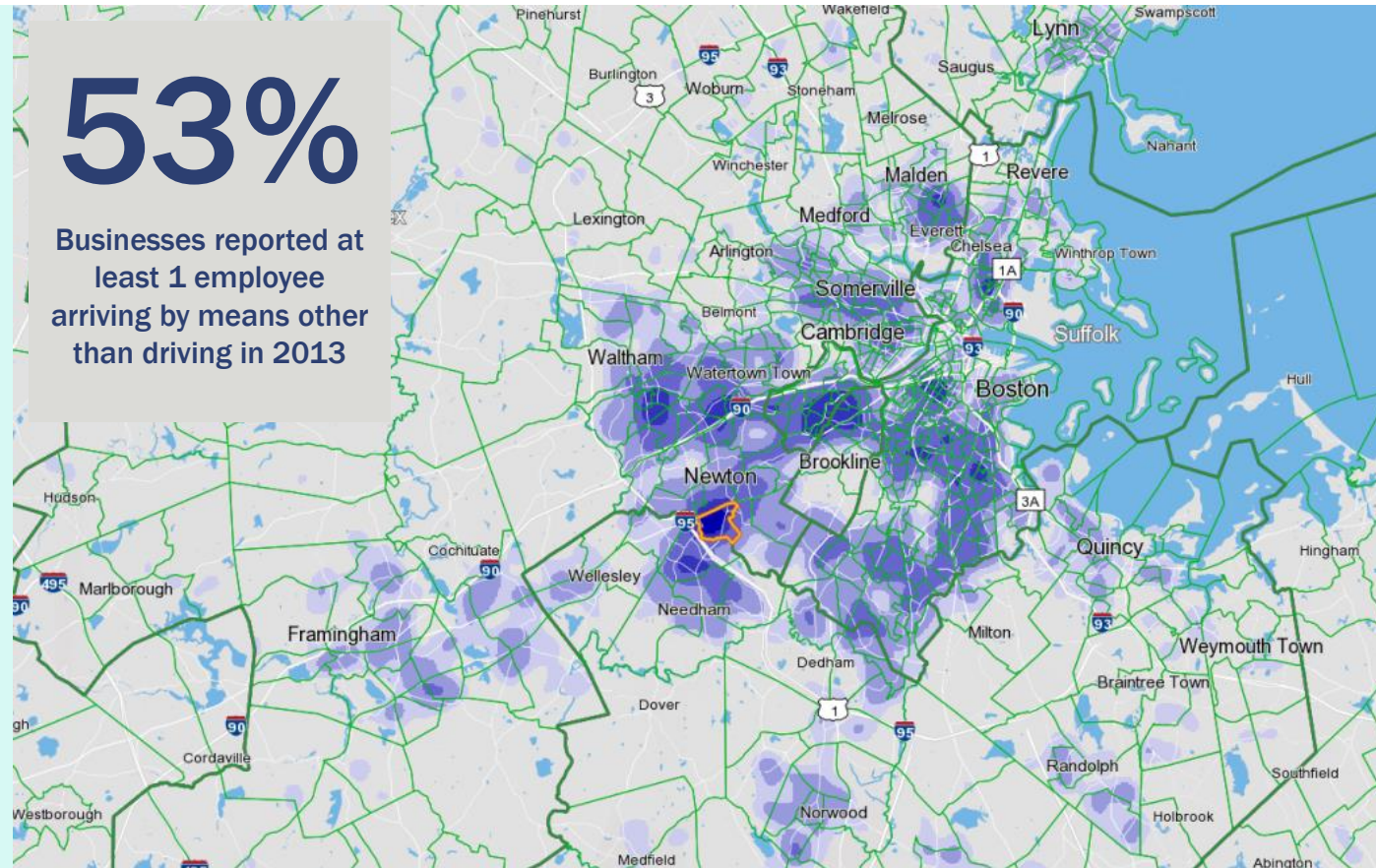
- **Options**

- Walking
- MBTA
- Specialty Transit
- Biking
- Driving & Parking

- **Data**

53%

Businesses reported at least 1 employee arriving by means other than driving in 2013



Concentrations of residences of employees in the census tract that best approximates the Needham St Area

Darker Purple = higher concentration

Newton, Brighton, Dorchester, Waltham, Everett, Chelsea

Transportation System Today

• Network

- Regional Roads & Rail
- Local Roads
- Off-road Trails

• Options

- Walking
- MBTA
- Specialty Transit
- Biking
- Driving & Parking

• Data

KEY FINDINGS FROM COMPARATIVE ANALYSIS

- ❖ Average Daily Traffic Volumes on Needham Street have generally declined from 1984 to 2011.
- ❖ Traffic Volumes are significantly higher at the South end of Needham Street (Needham at Christina/Oak) than at the North end of the street (Needham at Winchester). Additionally, Northeast bound traffic accounted for 50% of traffic in 1984 and accounted for nearly 60% in 2011.
- ❖ Peak traffic volumes on Needham Street no longer occur at traditional commuter hours. In both directions, traffic is significantly heavier in the early afternoon (noon---2PM) than during the usual “evening rush.”
- ❖ Cars/Trailers account for the vast majority of traffic on Needham Street. From 2010 to 2011, an increase in modal share by large, multi-axle vehicles, bicycles, and buses was observed. Subsequently, a decrease in the modal share by cars/trailers was observed.

-- 2013 Needham Street Compilation of Traffic Studies

Transportation System Today

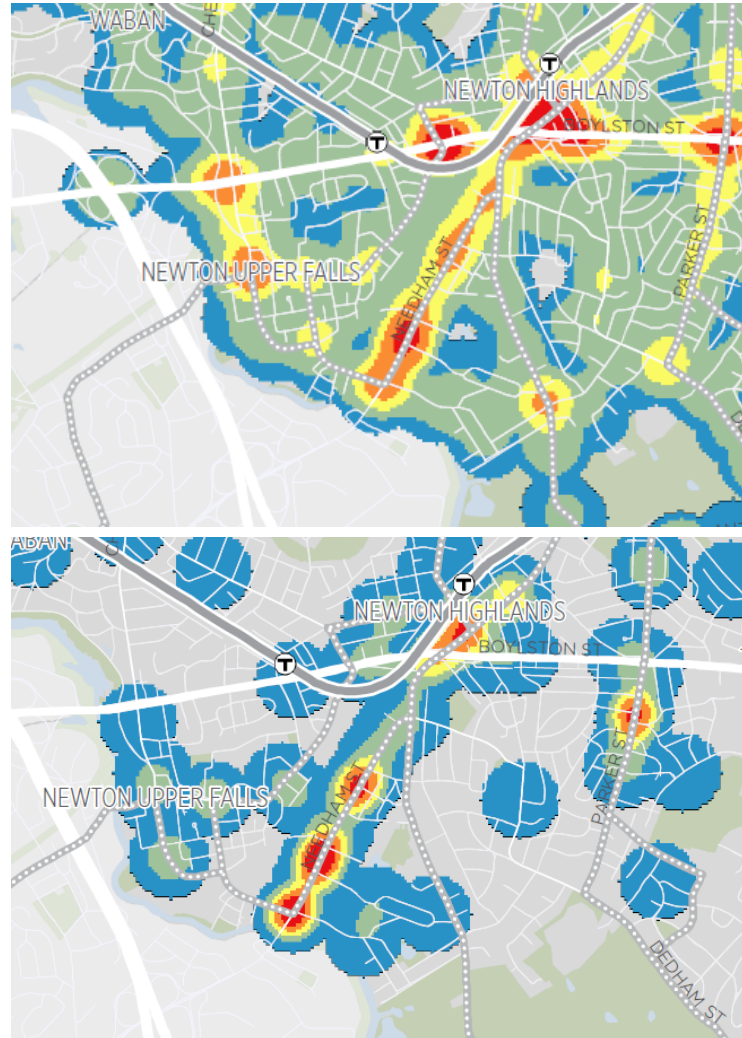
- **Network**

- Regional Roads & Rail
- Local Roads
- Off-road Trails

- **Options**

- Walking
- MBTA
- Specialty Transit
- Biking
- Driving & Parking

- **Data**



**All
Crashes**

**Crashes
Pedestrians &
Bicycles Involved**

Transportation System Today

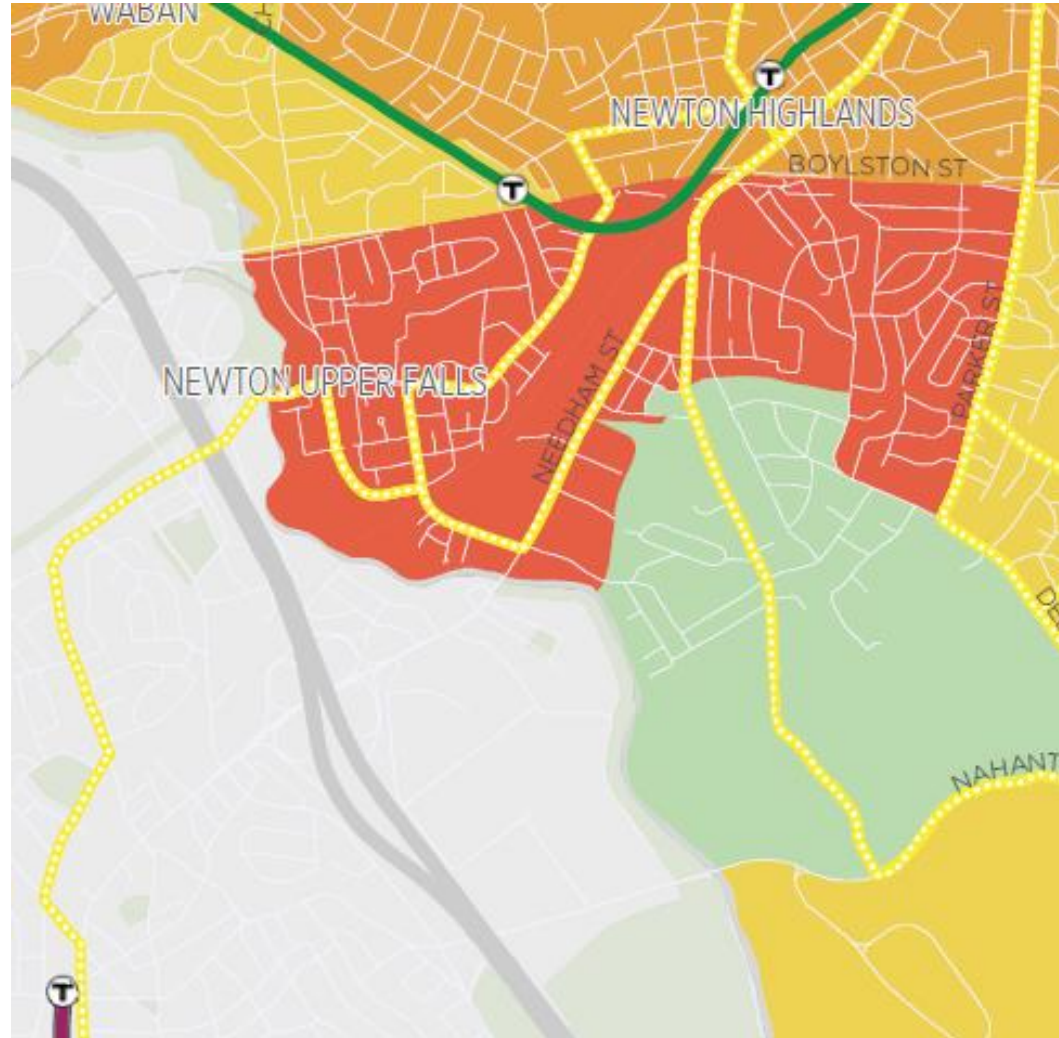
• Network

- Regional Roads & Rail
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• Options

- Walking
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- Driving & Parking

• Data



Transit Potential

Green
Yellow
Orange
Red



Greater potential transit ridership (jobs + residents)

Transportation System Today

Near Term Projects

- **Oak / Christina**

- Construction anticipated in 2018

- **Mass DOT Project**

- Bidding summer 2018
- Construction 2019

- **Bike Share**

- Coming Summer 2018



Transportation System Today

Near Term Projects

- **Oak / Christina**

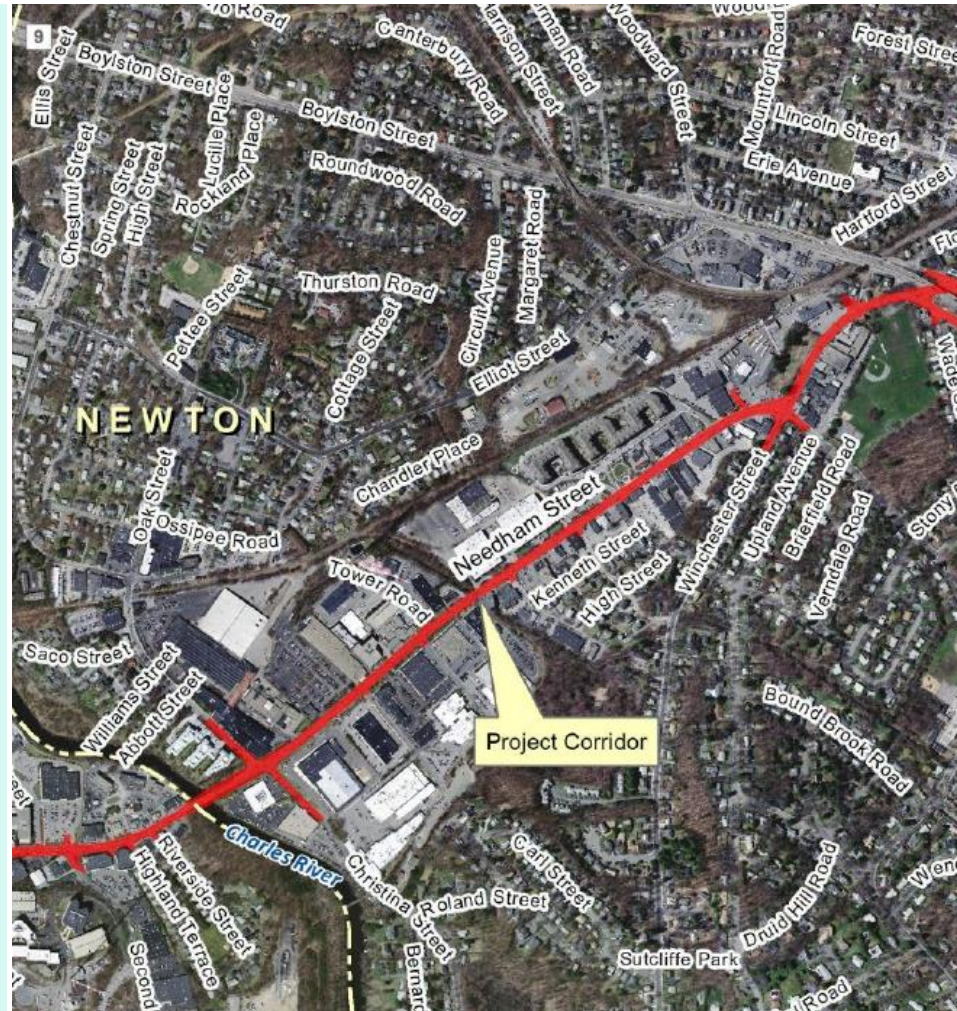
- Construction anticipated in 2018

- **Mass DOT Project**

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- Construction 2019

- **Bike Share**

- Coming Summer 2018



Needham Street
Fall 2019 – Fall 2022

\$22 Mil

Pedestrian

Continuous sidewalks
More, enhanced crossings
ADA compliance

Bike

5' raised bike lane
Shared use paths

Traffic Operations

Upgraded, adaptive signals
Improved signal timing
Protected turn phases

Transit

Far side bus stops

Transportation System Today

Near Term Projects

- **Oak / Christina**

- Construction anticipated in 2018

- **Mass DOT Project**

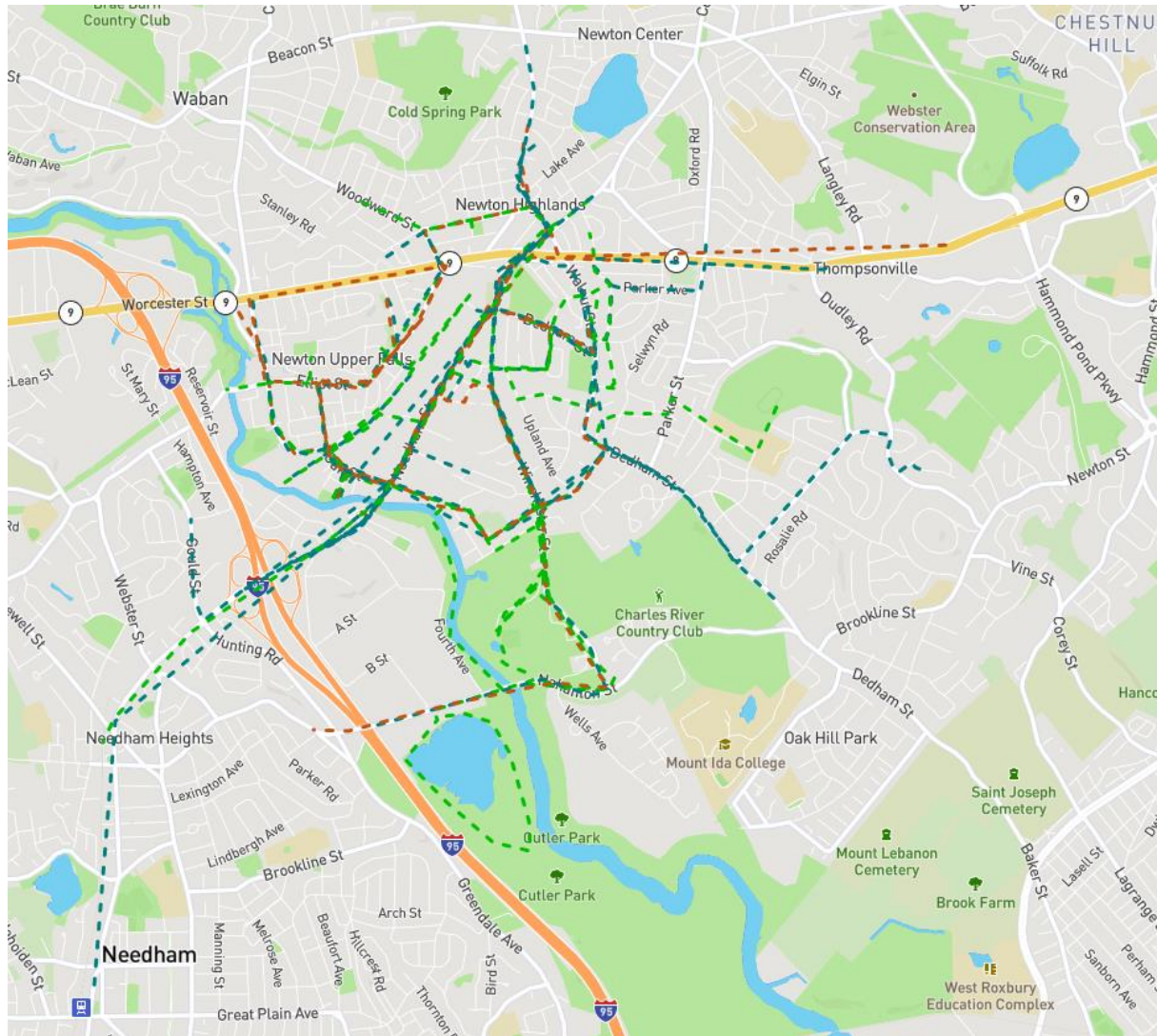
- Bidding summer 2018
- Construction 2019

- **Bike Share**

- Coming Summer 2018



Existing Challenges



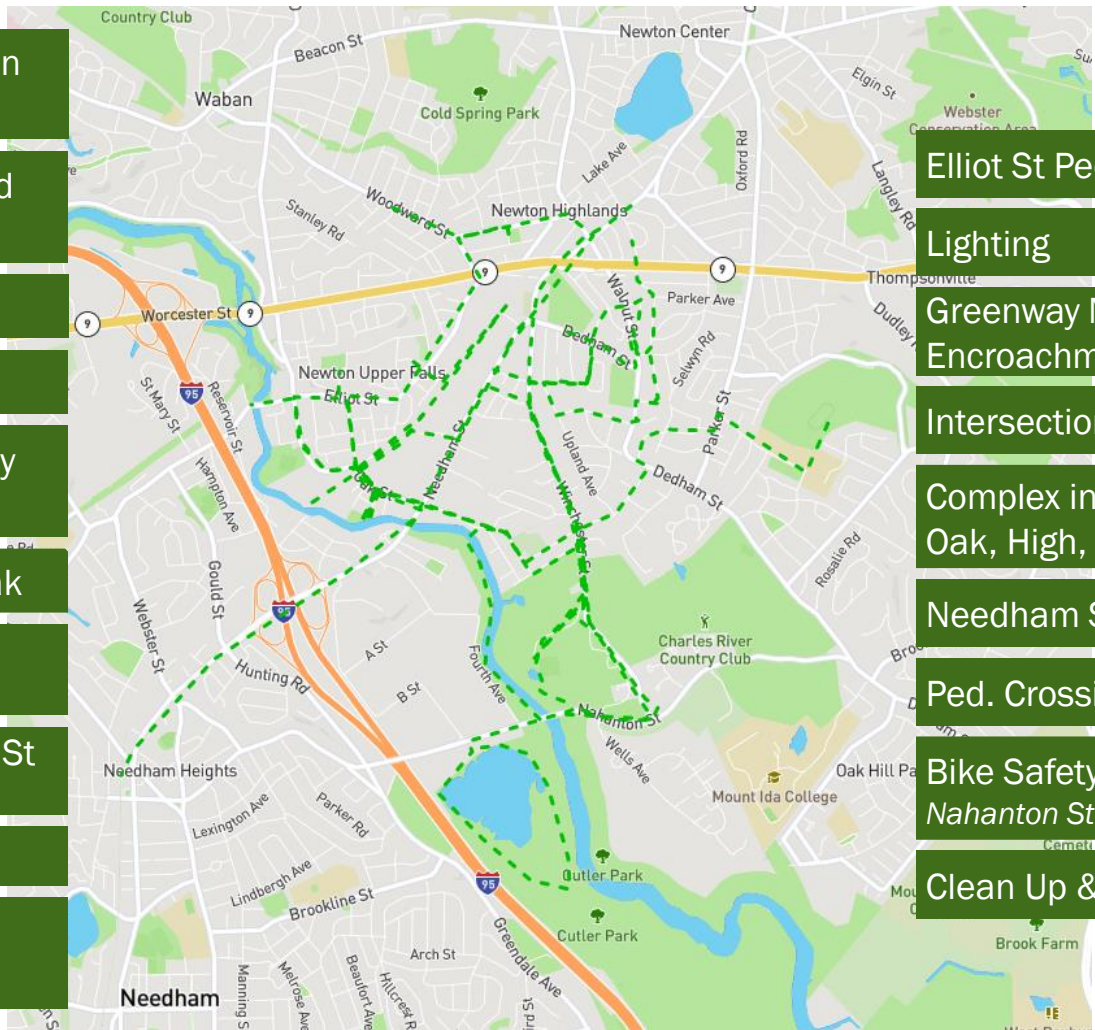
Existing Challenges

Most Enjoyable

Recreation Routes

Could Improve

- Looking at the old homes on Chestnut St.
- Hyde Community Playground & Playhouse
- Newton Community Farm
- Greenway
- DCR's Charles River Pathway to Cutler Park
- Charles River Canoe & Kayak
- Elliot St Bridge
But it needs benches
- Passing Stone Barn on Oak St
Route to Emerson Playground
- Walk/Bike in Cutler Park
- Variety of scenery – green space and urban bustle



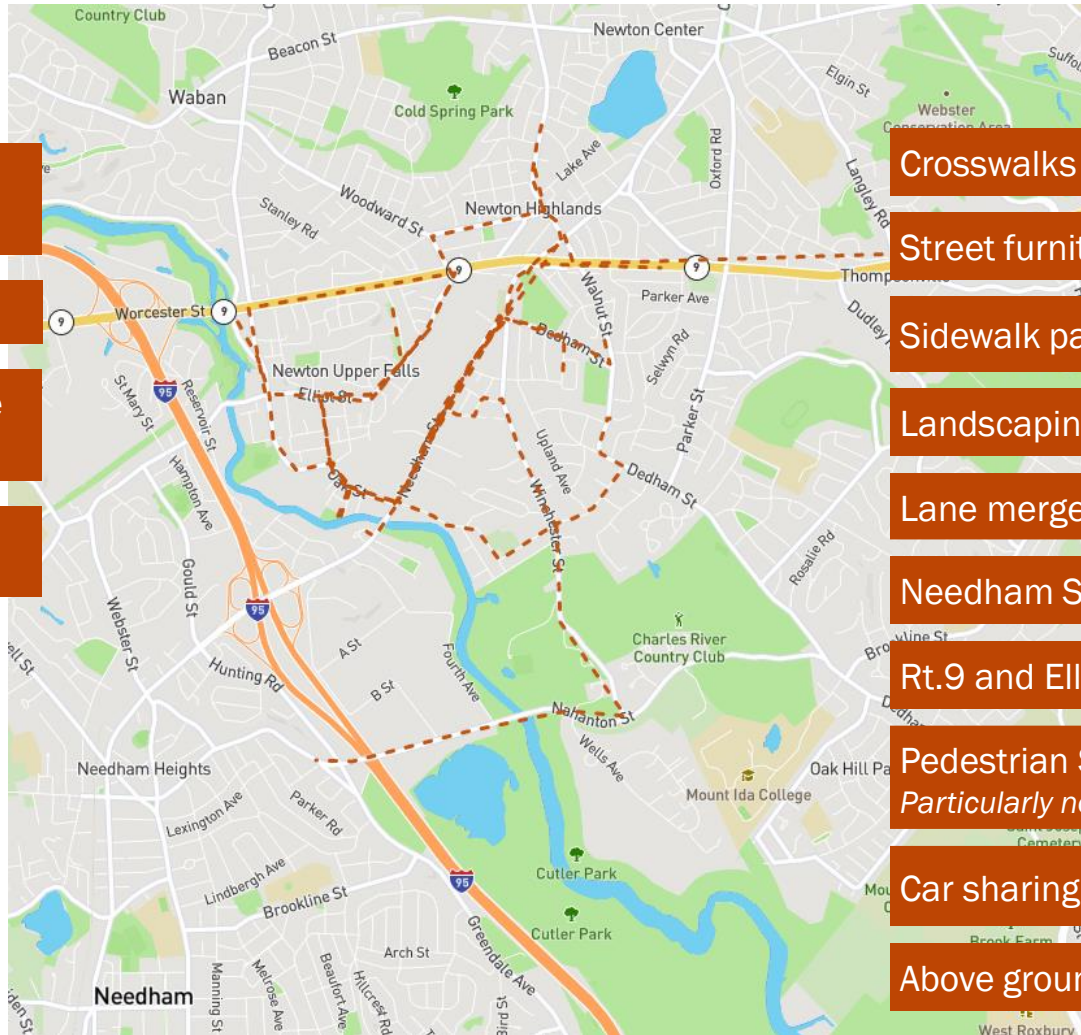
- Elliot St Pedestrian Safety
- Lighting
- Greenway Maintenance & Encroachments
- Intersections along Elliot St
- Complex intersection at Elliot, Oak, High, Pettee Streets
- Needham St Bridge
- Ped. Crossing by Farm
- Bike Safety
Nahanton St
- Clean Up & Beautification

Existing Challenges

Errands Routes

Most Enjoyable

Could Improve



The closeness of multiple errands destinations

Jean and Lee Kitchen

Light at Needham and Centre Streets

Newton Upper Falls when traffic is light

Crosswalks on Needham St

Street furniture layout

Sidewalk paving

Landscaping along routes

Lane merges

Needham St Bridge

Rt.9 and Elliot St. Intersection

Pedestrian Safety
Particularly near Ellis St

Car sharing options

Above ground wires

Existing Challenges

Do we need to
add anything to
the list?

Opportunities

In the Needham Street Area

Opportunities

Newton > in > motion
A Transportation Strategy for Newton

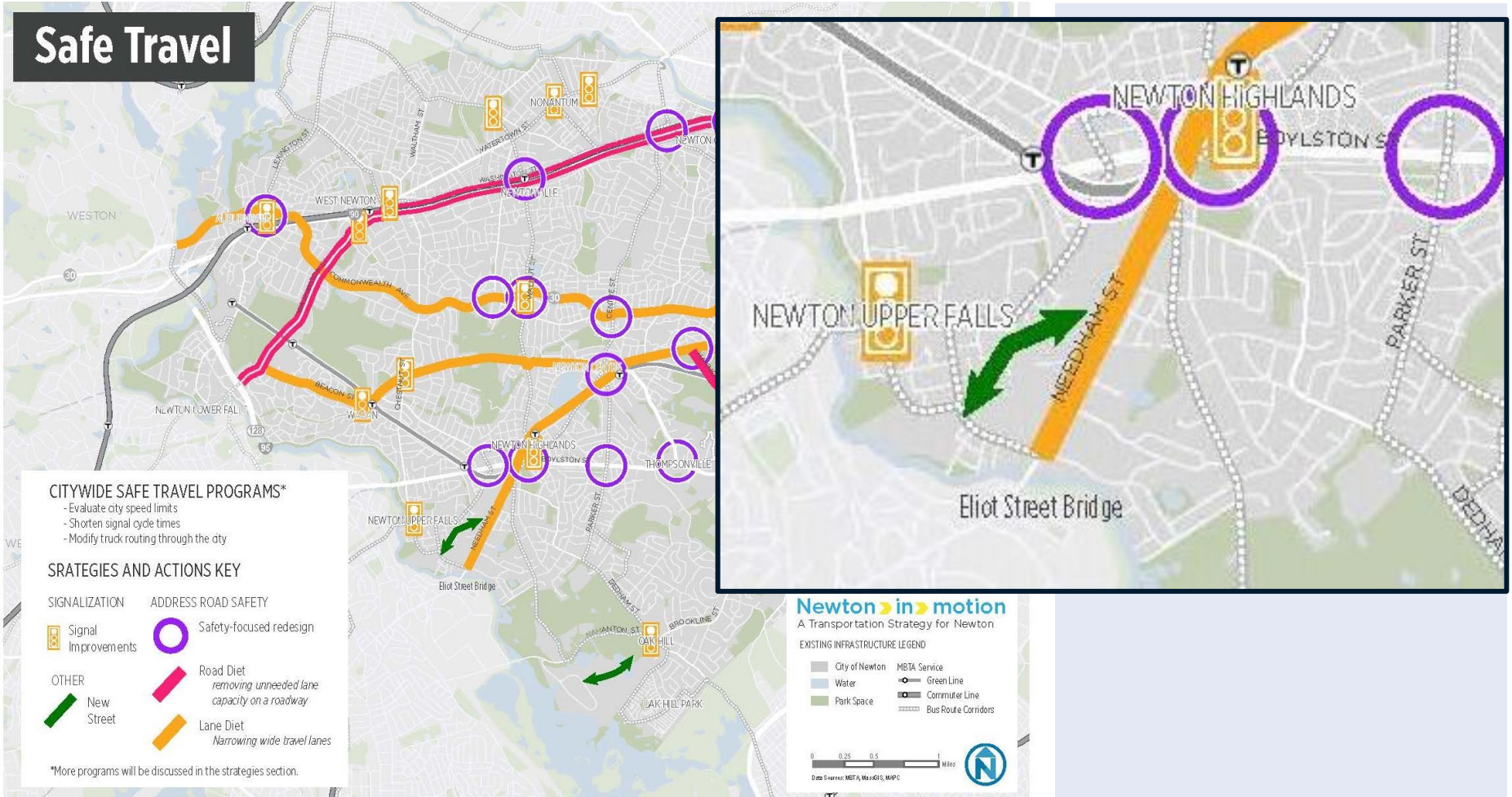
**Safe. Smart.
Accessible.
Livable.
Sustainable.**

Opportunities

Newton **> in >** motion

A Transportation Strategy for Newton

Safe Travel

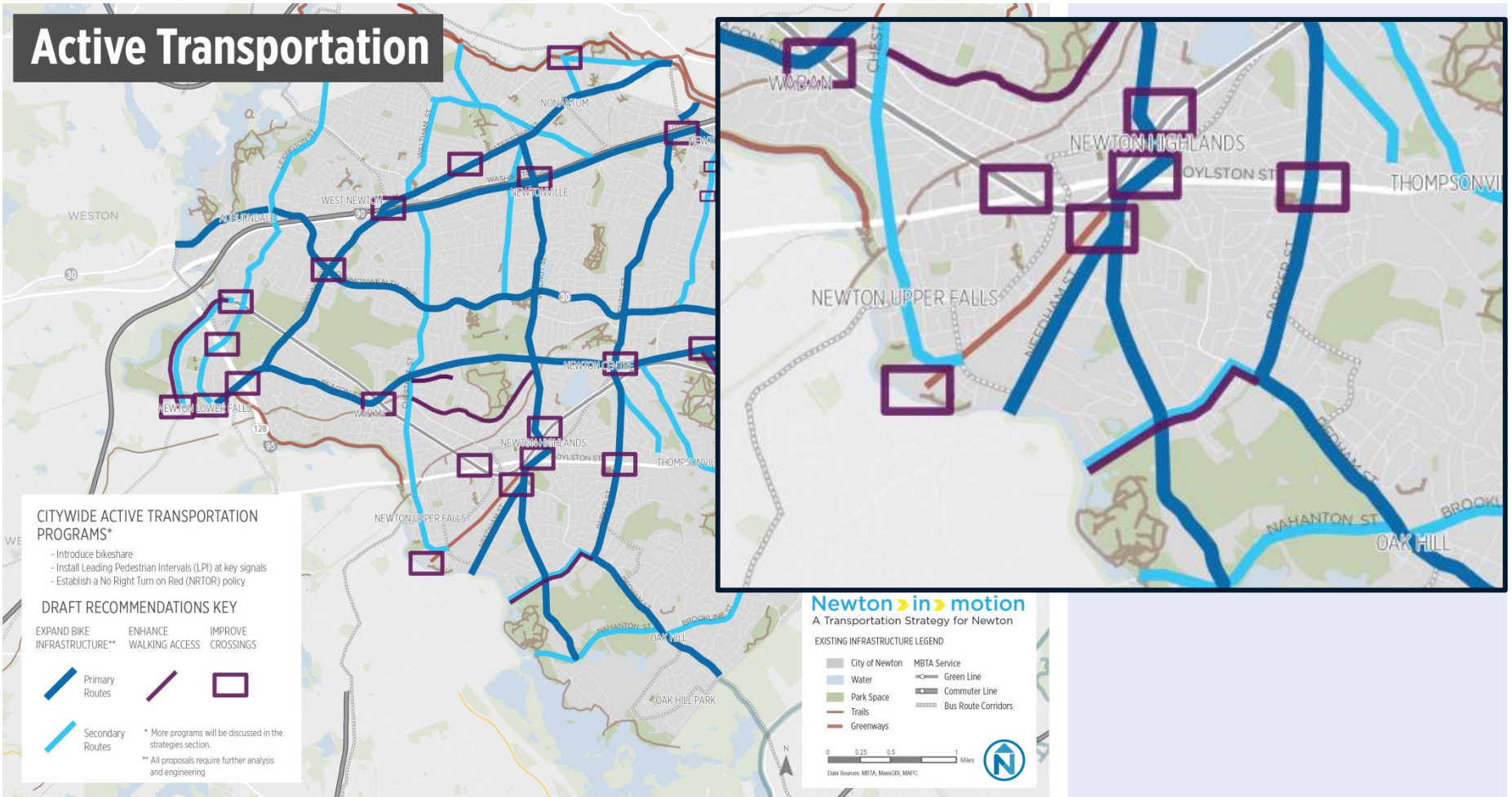


Opportunities

Newton **> in >** motion

A Transportation Strategy for Newton

Active Transportation

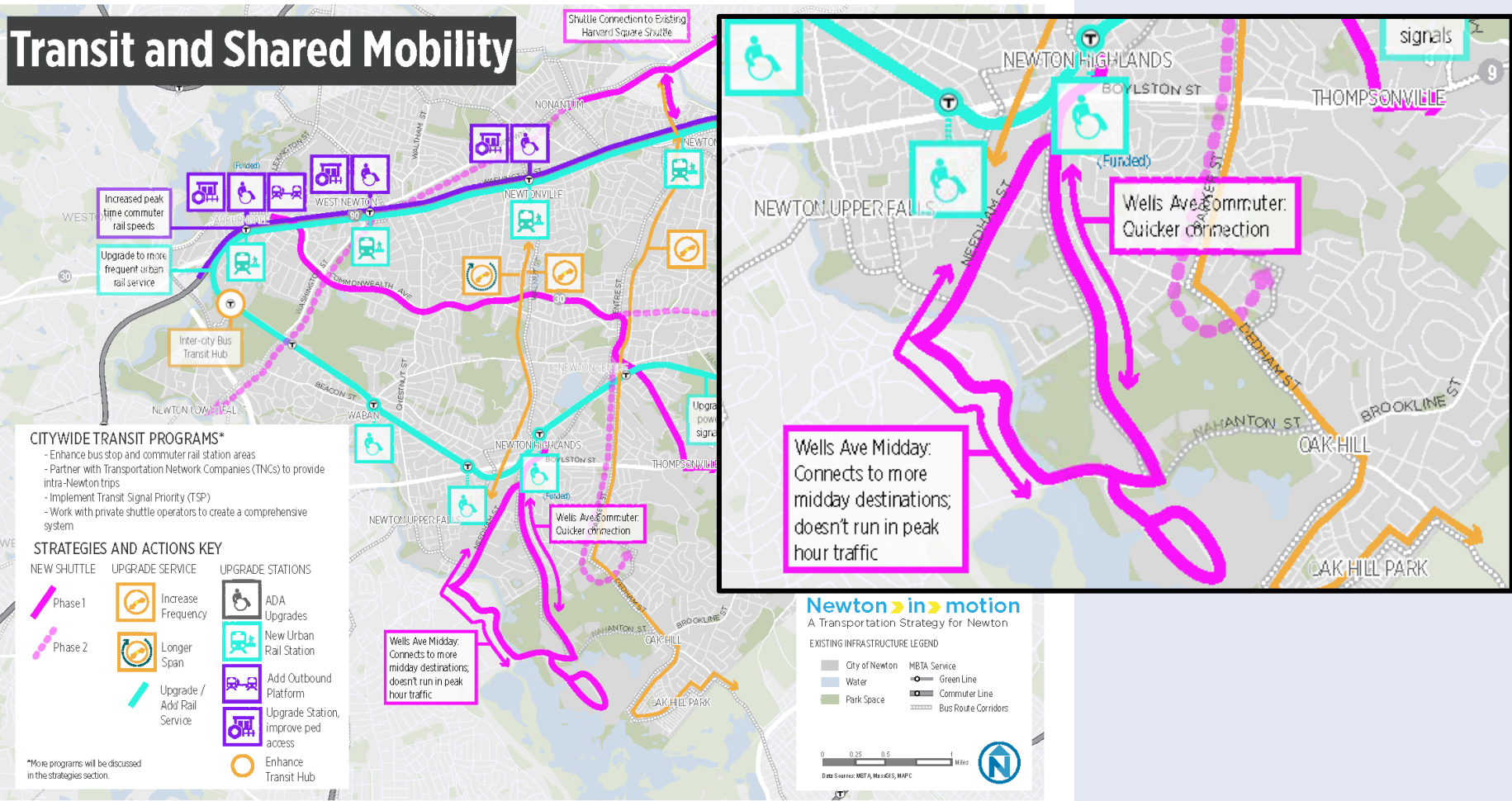


Opportunities

Newton **>** in **>** motion

A Transportation Strategy for Newton

Transit and Shared Mobility

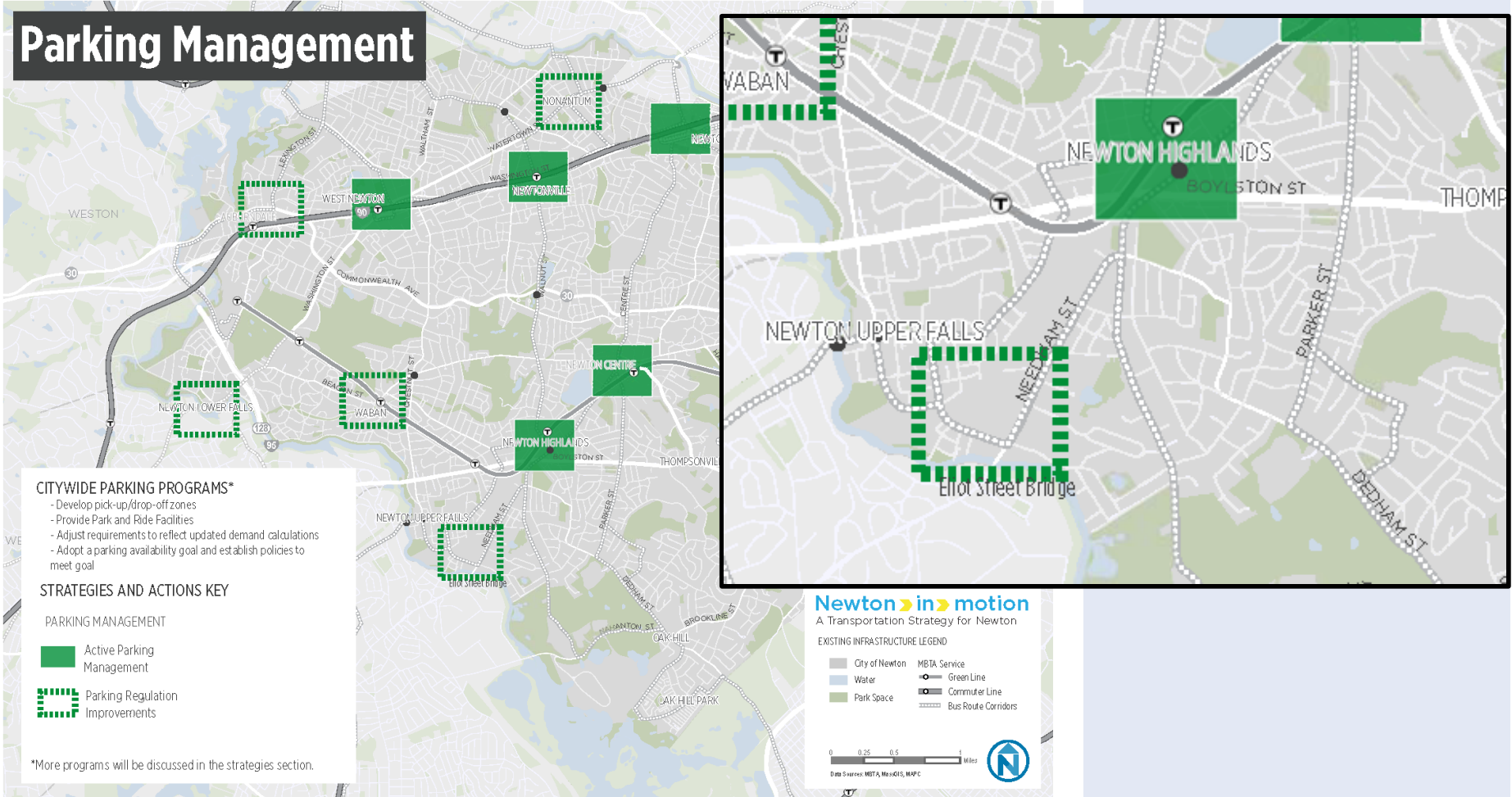


Opportunities

Newton **> in >** motion

A Transportation Strategy for Newton

Parking Management

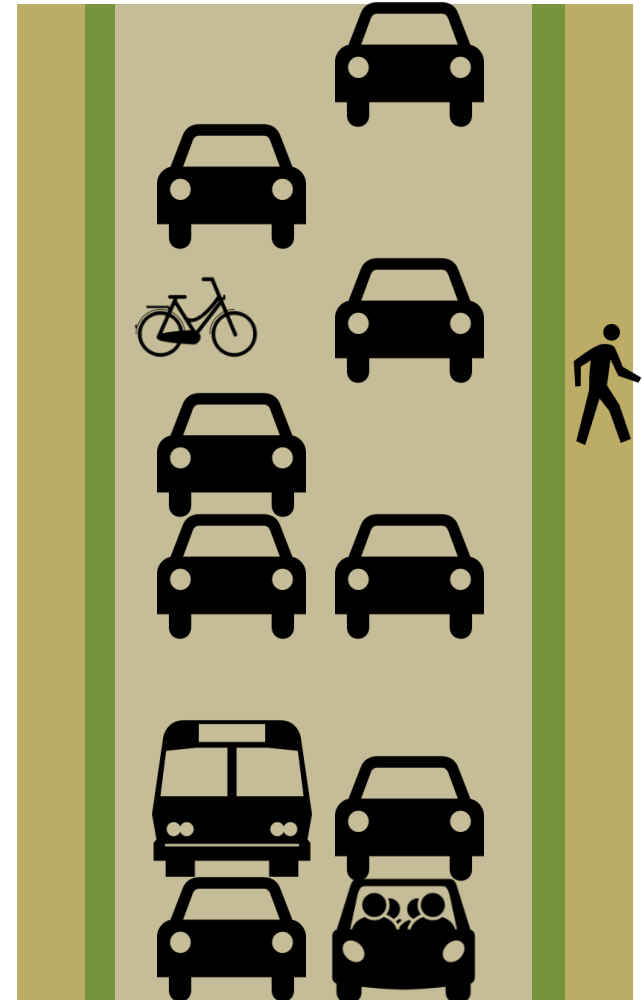


Opportunities

Transportation Demand Management (TDM)

Transportation Demand Management (TDM)

**Giving
People
Options**

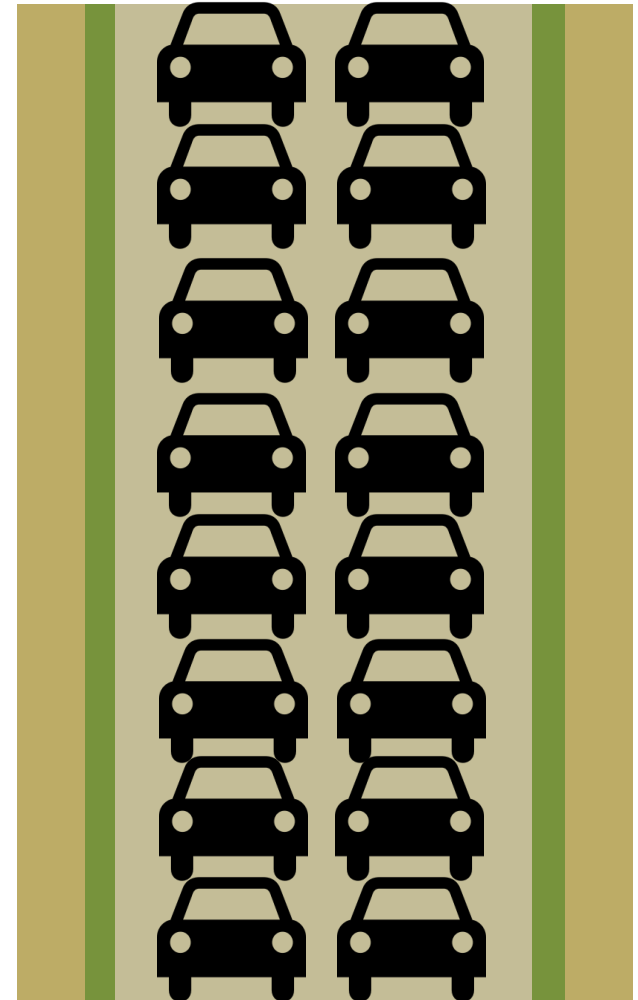


Opportunities

Transportation Demand Management (TDM)

Transportation Demand Management (TDM)

**Instead of
sitting in
traffic**



Opportunities

Transportation Demand Management (TDM)

Leave late/go in early

Telecommute

Carpool

Rideshare (Uber/Lyft)

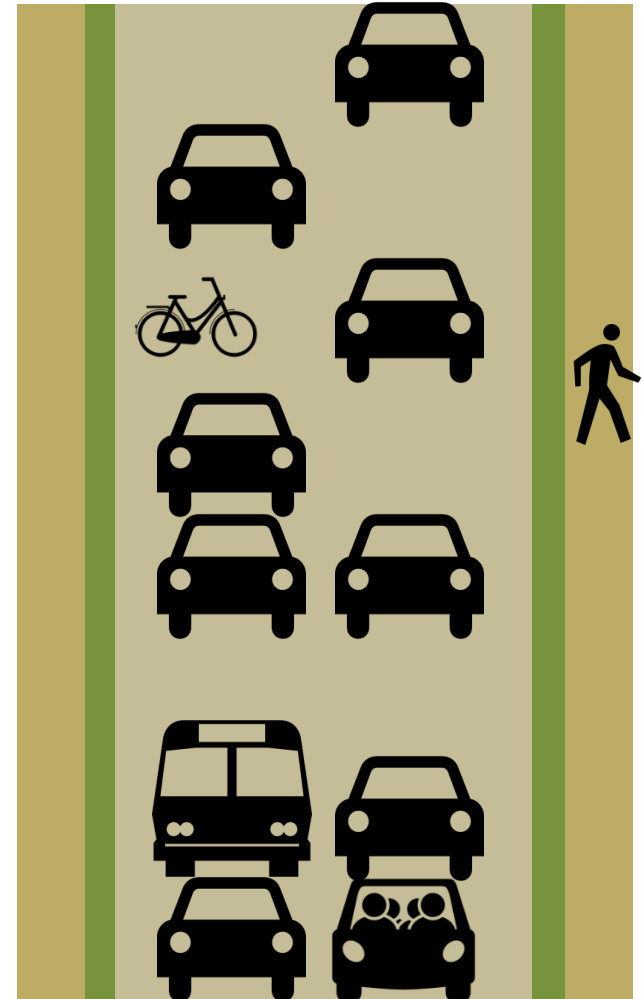
Walk

Bus

Green Line

Commuter Rail

Bike



Opportunities

Transportation Demand Management (TDM)

Locate housing near transit and jobs

Invest in walking, biking, and transit infrastructure

Distribute information about transportation options



Transit Passes

Separate housing and residential parking costs



Bike parking & locker rooms

Emergency ride home programs

On Site Carshare (e.g. zipcar)

Opportunities

Transportation Demand Management (TDM)

Proposed Approach:

Obligate developers to a mode-split goal
& implement TDM to reach agreed upon goal



**Novartis Necco Building
Cambridge, MA**

**Opening Goal: 44% Drive
Year 7 in Reporting: 33% Drive**

Mix of limited parking,
ongoing incentives for
transit, walking, biking

Opportunities

What opportunities do
you see in the
Needham Street Area?

What is your big idea for the next 50 years?

You have a magic wand, all the money in the world, and no limits