

# Welcome to the Newton Transportation Strategy Workshop #1



# Agenda

- » Introduction to the Newton Transportation Strategy
  - Study Process
  - Initial Explorations
  
- » Hear from You – Workshop Open House

# Project Overview



Newton-in-motion is a **strategic process**



that will create a **comprehensive guide** towards a more equitable, economically and environmentally sustainable **multimodal transportation system**.



This plan will go **hand-in-hand with other plans and strategies**



that carry **Newton forward** in a future of changing travel patterns and growing transportation options.



Take your part in sharing **your vision** for Newton's dynamic transportation future!



# NEWTON TRANSPORTATION STRATEGY PROJECT SCHEDULE

2015      2016 ▶



- Kick off
- Project Branding
- Data Collection & Analysis

• Visioning & Goals Development

✚ Visioning Workshop

• Network Plans  
• Vet Initial Ideas

✚ Initial Concepts Workshop

✚ Draft Plan Strategies Workshop

- Refine Initial Ideas
- Finalize Network Plans

Final Plan ✚ Presentation

# Coordination with Other Efforts

City of Newton

## Housing Strategy

# Housing Policy Forum

**When: Monday January 25, 2016**  
7:00 pm

**Where: Newton South High School Lecture Hall**

All are encouraged to attend and participate in the public forum of the Housing Strategy. This meeting will include a presentation on an assessment of City policies and a discussion of best practices to consider for Newton.



for more info visit [www.newtonma.gov/housing](http://www.newtonma.gov/housing)  
Questions: [housingstrategy@newtonma.gov](mailto:housingstrategy@newtonma.gov)

## FY2017 – FY2021 Five-Year Capital Improvement Plan And Long Range Projection



City of Newton, Massachusetts  
Setti D. Warren, Mayor  
October 5, 2015



## Zoning Reform

### Introduction

Homes and businesses, streets and parks, public and private spaces; these are the elements that define the physical character of a city. While the City of Newton directly controls the improvement of these public elements, it is mostly through the zoning ordinance that the City has influence on the use and design of private property. The City of Newton last conducted a significant review and update of its zoning ordinance in 1997. In December, 2011, the Zoning Reform Group released a report recommending that changes to the Zoning Ordinance be considered to enhance its usability and bring the regulations into compliance with the Comprehensive Plan. This report described a three phase process with Phase 1 focusing on enhancing the usability of the existing ordinance.

If you have any questions or comments about the Zoning Reform Project, please contact James Freas, Acting Director of Planning and Development, [zoningreform@newtonma.gov](mailto:zoningreform@newtonma.gov).

### News and Updates

At the October 5, 2015 regular meeting of the Board of Aldermen, the Board adopted the updated Zoning Ordinance, which takes effect on November 1, 2015. The adoption of the updated ordinance completes Phase 1 of the City's Zoning Reform project. The updated ordinance represents the City's first steps to enhance the usability of these regulations by: clarifying ambiguities and inconsistencies; improving legibility through the application of simpler language; use of more illustrations and tables; the creation of use tables to better explain permit processes and standards in each zoning district; using hyperlinked cross-references to increase functionality; and the utilization of a document format to improve legibility and transparency.

In accordance with state law (M.G.L.C. 40A, §6), the new zoning ordinance shall apply to any building permit or special permit issued after the first date of advertisement, which was September 2, 2015. Generally, the updated ordinance shall not apply to any building permit or special permit issued prior to that date. For more detailed information of applicability, please speak with a representative of the Planning Department or Inspection Services Department.

The City's updated Zoning Ordinance can be viewed through the hyperlink below or can be purchased from the City Clerk.

[Chapter 20: Zoning Ordinance](#)

The [Lookup Table](#) below is a cross referencing tool to look up content from the previous version of the City's Zoning Ordinance and see where it can be found in the City's updated Zoning Ordinance.

### Meeting Notes, Handouts, and Resources

[Use Tables for Proposed Updates to Zoning Ordinance](#)

- [Zoning Reform Phase 2](#)
- [Zoning Reform Group, 2011](#)
- [Zoning Reform Report, 2011](#)
- [Newton Zoning Ordinances](#)
- [Newton Comprehensive Plan, 2007](#)
- [Zoning Reform Phase 1](#)

## Announcing New Complete Streets Funding Program

The new Complete Streets Funding Program, authorized by the 2014 Transportation Bond Bill, offers Massachusetts municipalities incentives to adopt policies and practices that provide safe and accessible options for all travel modes – walking, biking, transit and vehicles – for people of all ages and abilities.

### Online Portal

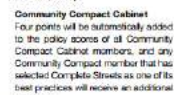
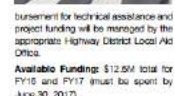
MassDOT has launched an interactive web portal to assist municipalities through the policy development, prioritization, planning, and project approval steps of the application process. In addition, a Complete Streets Funding Program Guidance document, outlining the program requirements, model policy guidance and scoring system, and eligible infrastructure, is available online.

### Primary Requirements

To be eligible for up to \$80,000 in technical assistance and up to \$400,000 in construction funding, a municipality must meet three primary requirements:

- Attendance of a municipal employee at a Complete Streets training
- Passage of a Complete Streets Policy that scores 80 or above out of a possible 100 points (Tier 1)
- Development of a Complete Streets Prioritization Plan (Tier 2)

MassDOT offers technical assistance to conduct a needs assessment, network gap analysis, and/or safety audit to determine a targeted investment strategy for Complete Streets infrastructure. Upon completion of these requirements, a municipality is eligible for construction funds (Tier 3). Reimbursement for technical assistance and project funding will be managed by the appropriate Highway District Local Aid Office.



Available Funding: \$12.6M total for FY16 and FY17 must be spent by June 30, 2017.

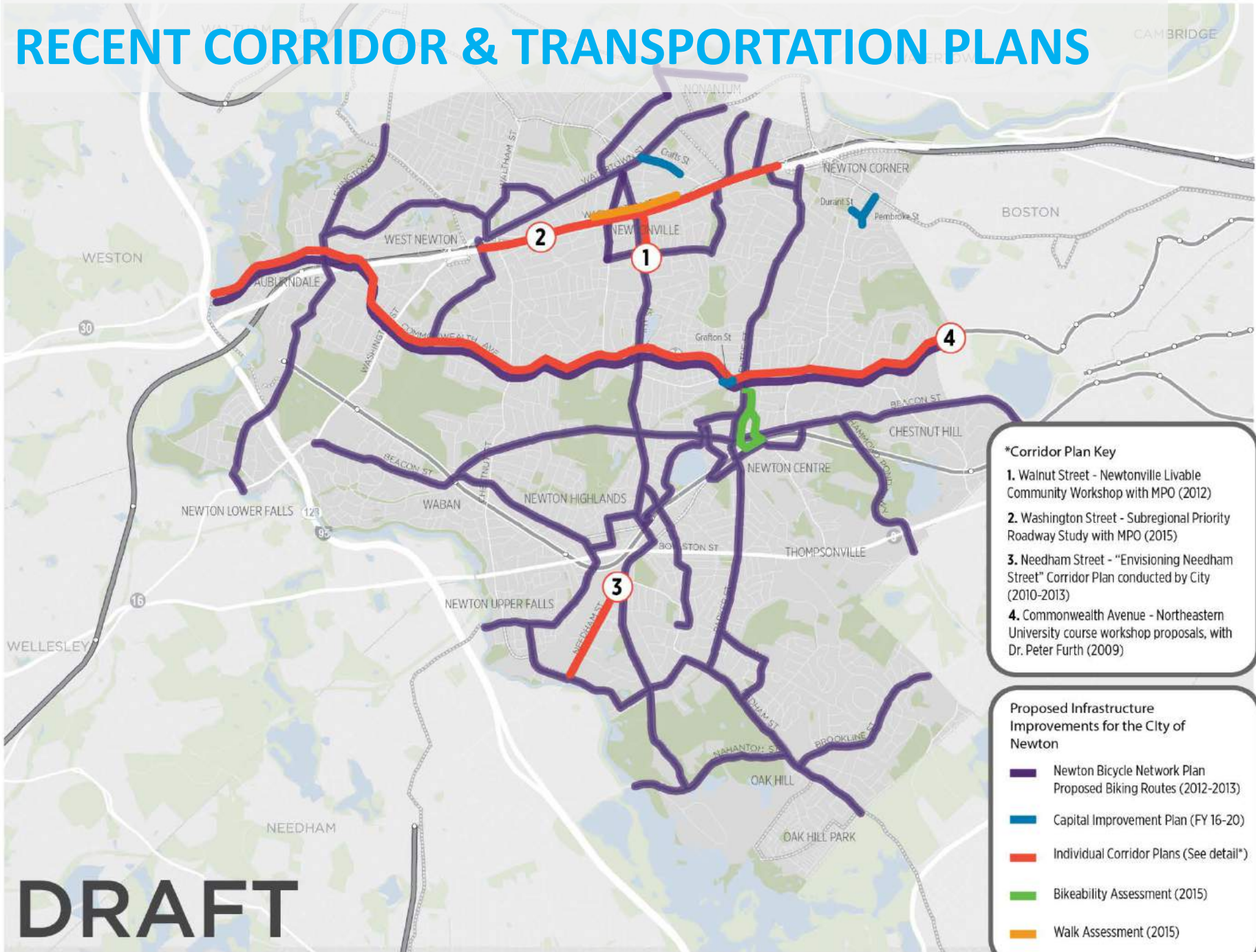
### Community Compact Cabinet

Four points will be automatically added to the policy scores of all Community Compact Cabinet members, and any Community Compact member that has selected Complete Streets as one of its best practices will receive an additional four points.

For more information and to register to become a Complete Streets Eligible municipality go to [www.mass.gov/massdot/completestreets](http://www.mass.gov/massdot/completestreets).



# RECENT CORRIDOR & TRANSPORTATION PLANS



- \*Corridor Plan Key**
1. Walnut Street - Newtonville Livable Community Workshop with MPO (2012)
  2. Washington Street - Subregional Priority Roadway Study with MPO (2015)
  3. Needham Street - "Envisioning Needham Street" Corridor Plan conducted by City (2010-2013)
  4. Commonwealth Avenue - Northeastern University course workshop proposals, with Dr. Peter Furth (2009)

- Proposed Infrastructure Improvements for the City of Newton**
- Newton Bicycle Network Plan Proposed Biking Routes (2012-2013)
  - Capital Improvement Plan (FY 16-20)
  - Individual Corridor Plans (See detail\*)
  - Bikeability Assessment (2015)
  - Walk Assessment (2015)

**DRAFT**

# Project Website

- » [www.newtonma.gov/transportationstrategy](http://www.newtonma.gov/transportationstrategy)
- » Project information
- » Mailing list sign up
- » Survey links for Workshop #1
- » Contact [transportationstrategy@newtonma.gov](mailto:transportationstrategy@newtonma.gov)



February  
4th-6th  
2016\*  
Thurs-Sat

# VISIONING WORKSHOP

*\*Snow date: Thursday Feb 25th to 27th*

**Location:** 275 Needham Street, next to the CVS in Marshall's Plaza

Thursday  
**FEBRUARY 4TH**

**10 AM - 7 PM**  
Open House

**12 - 1 PM**  
Presentation

Friday  
**FEBRUARY 5TH**

**10 AM - 7 PM**  
Open House

**6 - 7 PM**  
Reception and Presentation

Saturday  
**FEBRUARY 6th**

**9 AM - 12 PM**  
Open House

**10 - 11 AM**  
Presentation

Kids welcome and encouraged to participate!

## ABOUT THE VISIONING WORKSHOP

Help set the vision and goals for how Newton's transportation system is shaped in the future. At the visioning workshop, you can:

- Explore initial findings about transportation
- Share your transportation experience
- Document your transportation values and priorities

**SAVE THE DATE FOR FUTURE WORKSHOPS:** Week of April 4th, 2016 and Week of June 13th, 2016





# Workshop #1 – Also Online!

**Newton in motion**

A Transportation Strategy for Newton

## Newton Transportation Visioning Survey

### Vote For Your Transportation Goal

In this activity, please choose three **Transportation Goals** that are the most important to you. In the second question, share how and what you think the City and community could do to achieve these goals. Feel free to comment on as many of the goals as you like, but you must vote for only three!

#### 3. Rank your top three!

	First choice	Second choice	Third choice
<b>Real Options:</b> Provide a variety of options for getting to destinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Quality of Life:</b> The experience of using the transportation system should reflect Newton's high quality of life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Reducing Driving and Strengthening Alternatives:</b> Focus on reducing motor vehicle travel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Safety:</b> Policies, investments, and enforcement based on "safety first"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Balance:</b> Address and improve performance across all modes of travel and balance needs of users	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Smart Growth:</b> Transportation, planning, and land use decisions to enable more walking, biking, and use of public transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Consistency:</b> Transportation investment and decision making will be consistent with plans and policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### 4. What do recommend that the City and community do to achieve these goals? (optional)

Real Options

Quality of Life

Wikimap

**Newton in motion**  
A Transportation Strategy for Newton

Where would you improve transportation in Newton?  
Click **ADD POINT** to add to the map.

**ADD AS MANY POINTS AS YOU LIKE**

- Bicycling
- Walking & ADA
- Bus, Train, Shuttle
- Parking
- Driving
- Information & Signage

Add Point About & Help

Survey

**Newton in motion**

A Transportation Strategy for Newton

# Workshop #1 Overview

## » Goals:

- Hear from as many people as possible
- Learn about vision, goals, and priorities
- Understand transportation trends

## » Elements:

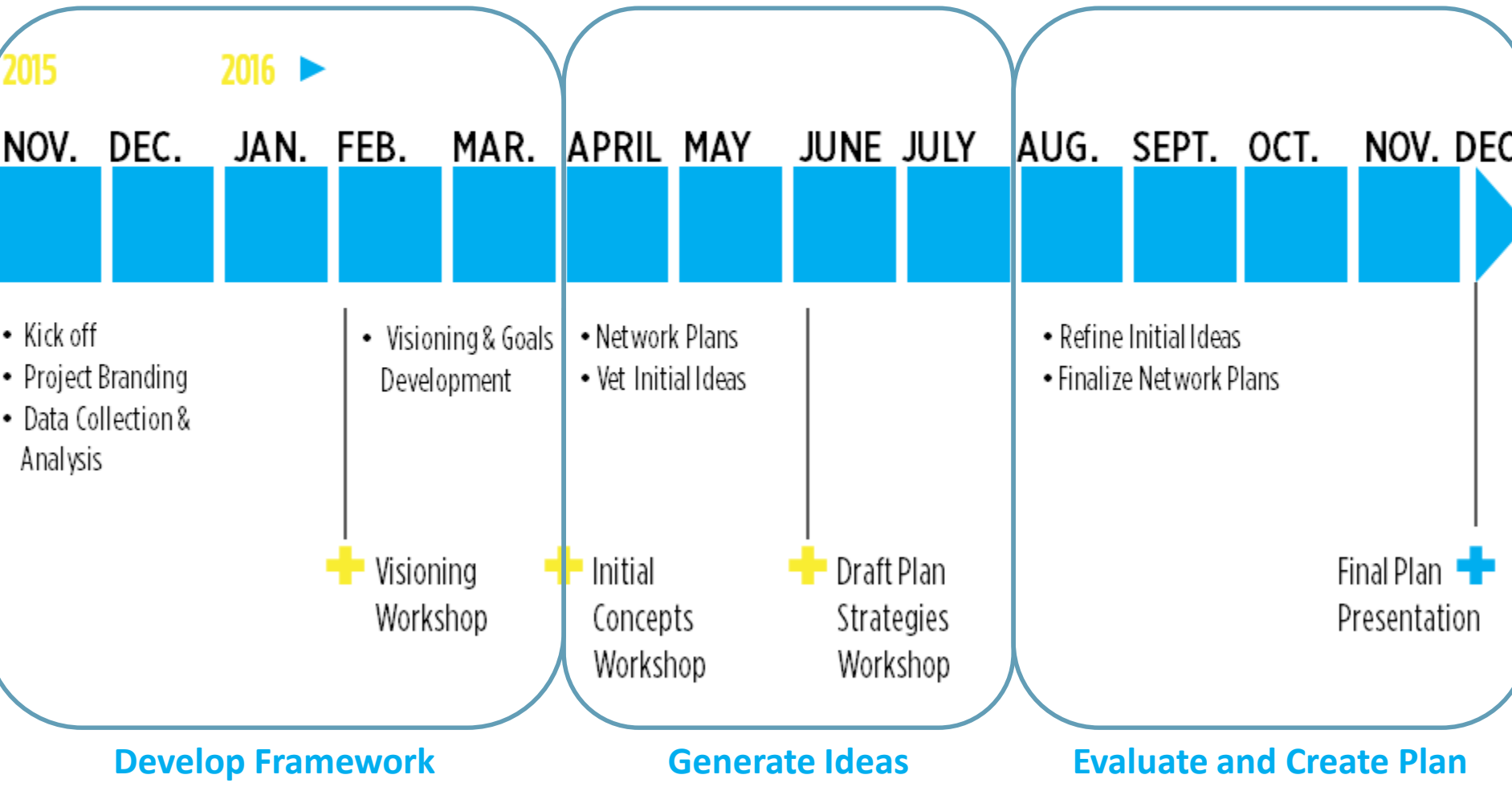
- 2.5 Days of Open House
- 3 Presentations (+ Reception)
- “Pop up”/Mobile Workshops
- Priority exercises
- Kids transportation games/activities

# Stakeholder Interviews

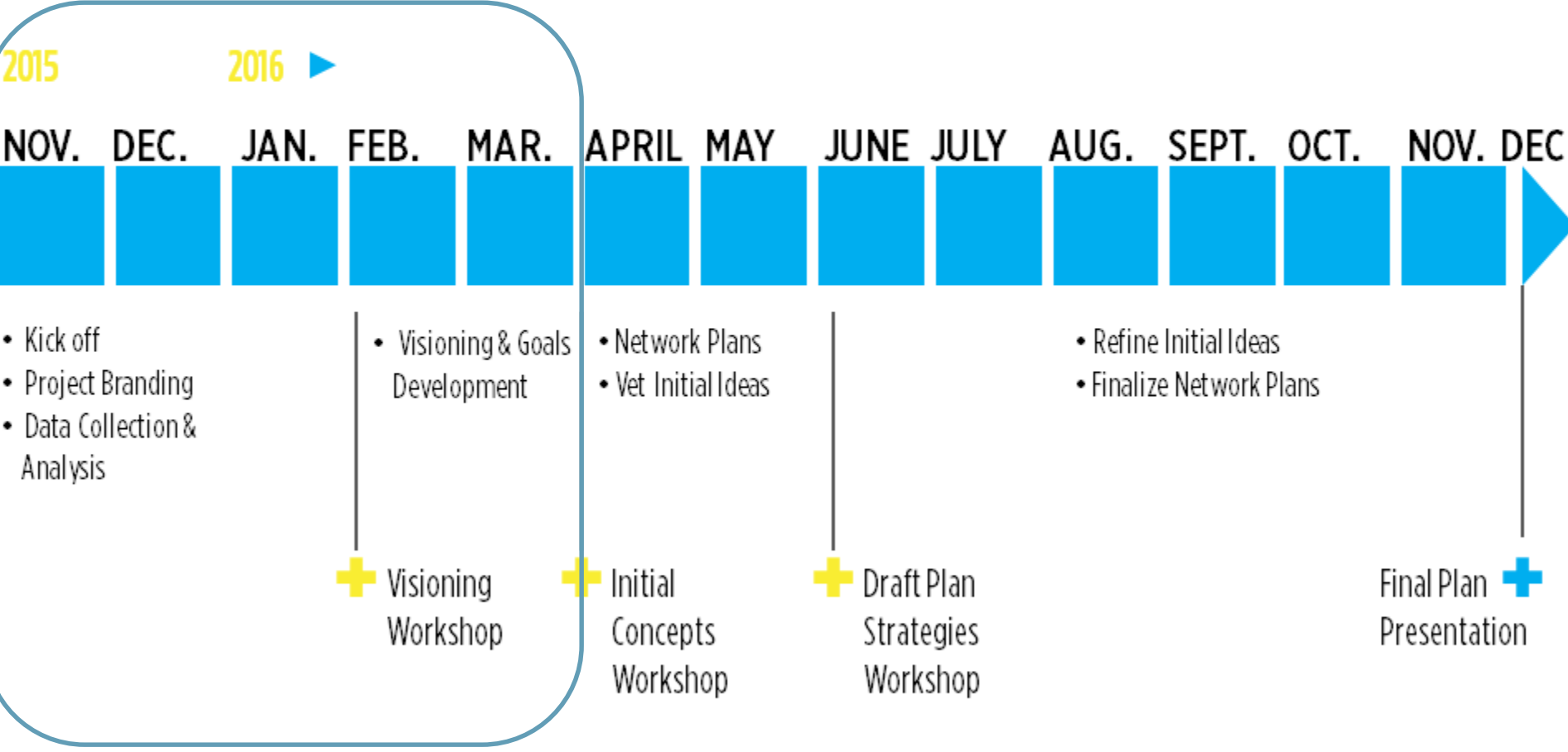
- » 128 Business Council
- » Boston College
- » City Staff
- » Councilor Roundtable
- » Green Newton
- » Lasell College
- » Newton-Needham Chamber
- » Safe Routes to School
- » School Committee
- » Traffic Council
- » Transportation Advisory Group
- » ... and more



# NEWTON TRANSPORTATION STRATEGY PROJECT SCHEDULE



# NEWTON TRANSPORTATION STRATEGY PROJECT SCHEDULE



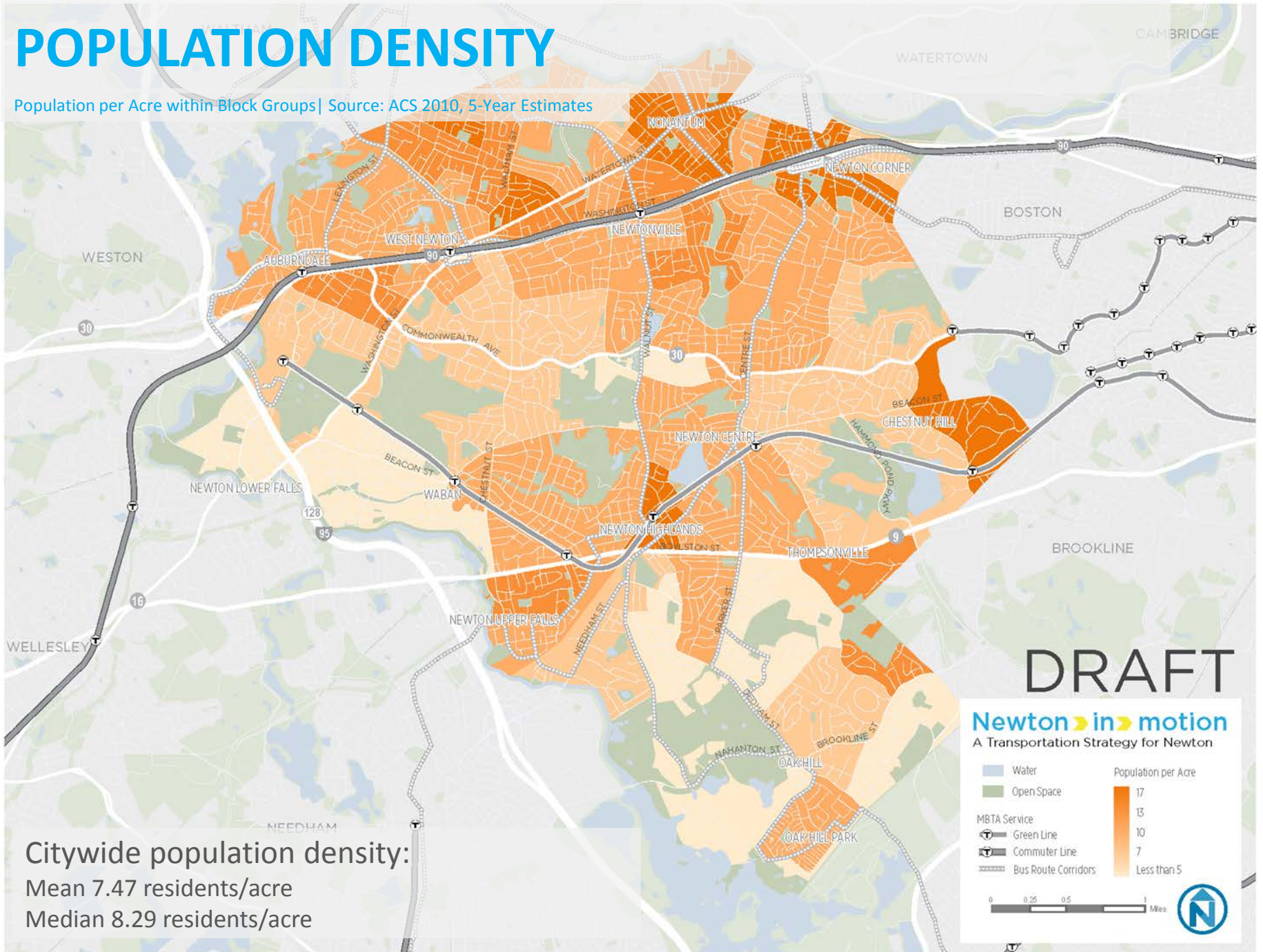
**Develop Framework**

# Proposed Goals – TAC 2011

- **Real Options:** Provide variety of options for getting to destinations
- **Quality of Life:** The experience of using the transportation system should reflect Newton’s high quality of life
- **Reducing Driving and Strengthening Alternatives:** Focus on reducing motor vehicle travel
- **Safety:** Policies, investments, and enforcement based on “safety first”
- **Balance:** Address and improve performance across all modes of travel and balance needs of users
- **Smart Growth:** Transportation, planning, and land use decisions to enable more walking, biking, and use of public transportation
- **Consistency:** Transportation investments and decision-making will be consistent with plans and policies

# POPULATION DENSITY

Population per Acre within Block Groups | Source: ACS 2010, 5-Year Estimates



## DRAFT

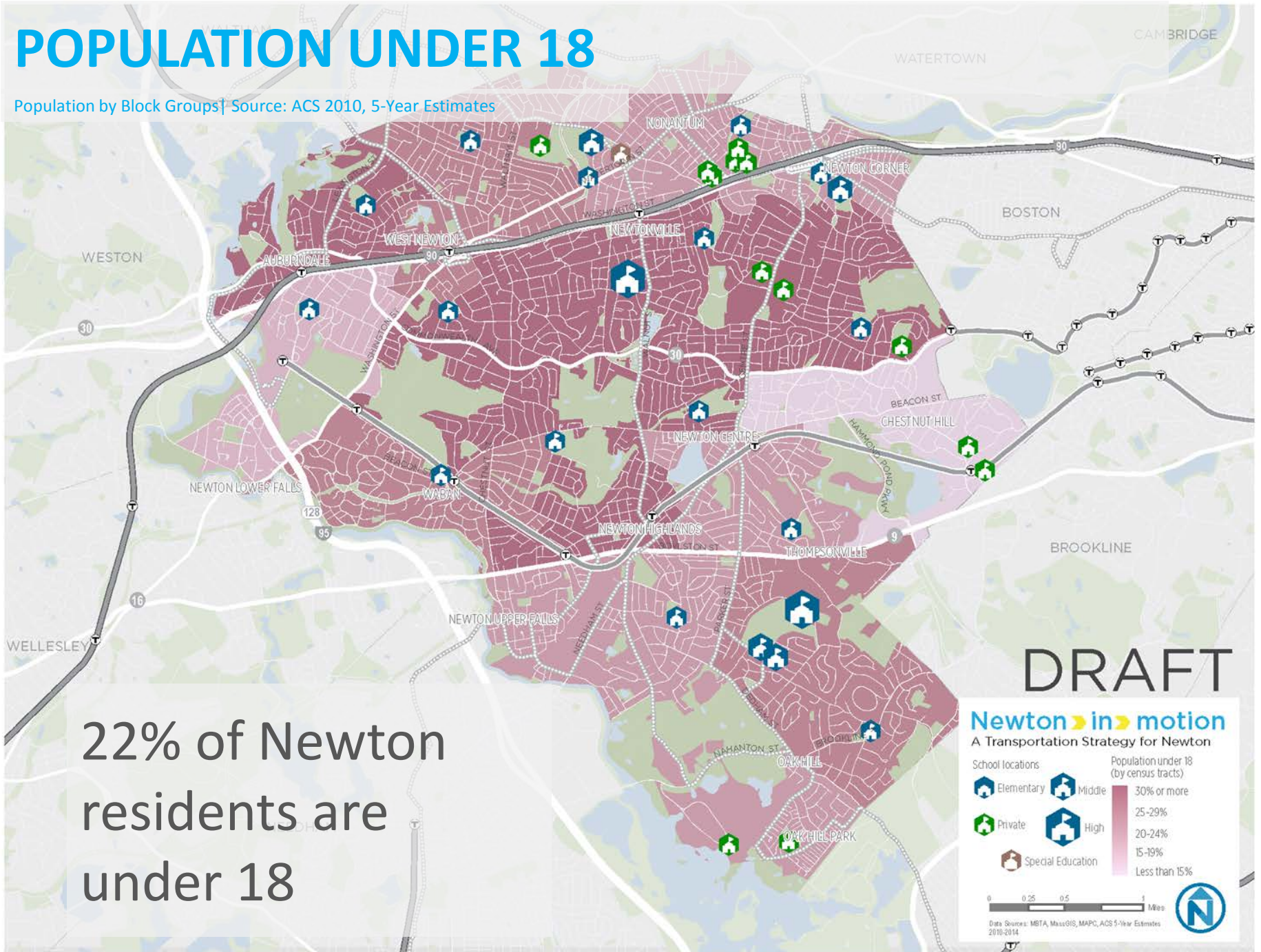
**Newton in motion**

A Transportation Strategy for Newton

Citywide population density:  
Mean 7.47 residents/acre  
Median 8.29 residents/acre

# POPULATION UNDER 18

Population by Block Groups | Source: ACS 2010, 5-Year Estimates



22% of Newton residents are under 18

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Newton **in** motion

A Transportation Strategy for Newton

School locations

- Elementary
- Middle
- Private
- High
- Special Education

0 0.25 0.5 1 Miles

Data Sources: MBTA, MassGIS, MAPC, ACS 5-Year Estimates 2010-2014

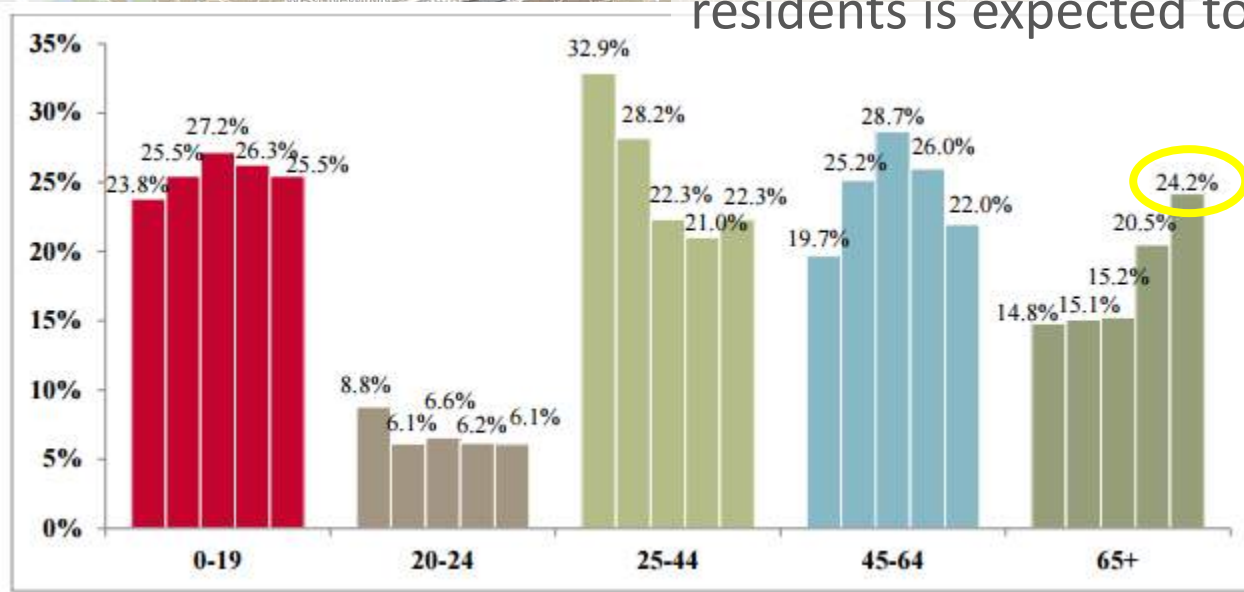




# POPULATION OVER 65

Population by Block Groups | Source: ACS 2010, 5-Year Estimates

By 2030, 1 of 4 Newton residents is expected to be 65+



Source: Dukakis Center Report #2, 2014

15% of Newton's population is over 65

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## Newton in motion

A Transportation Strategy for Newton

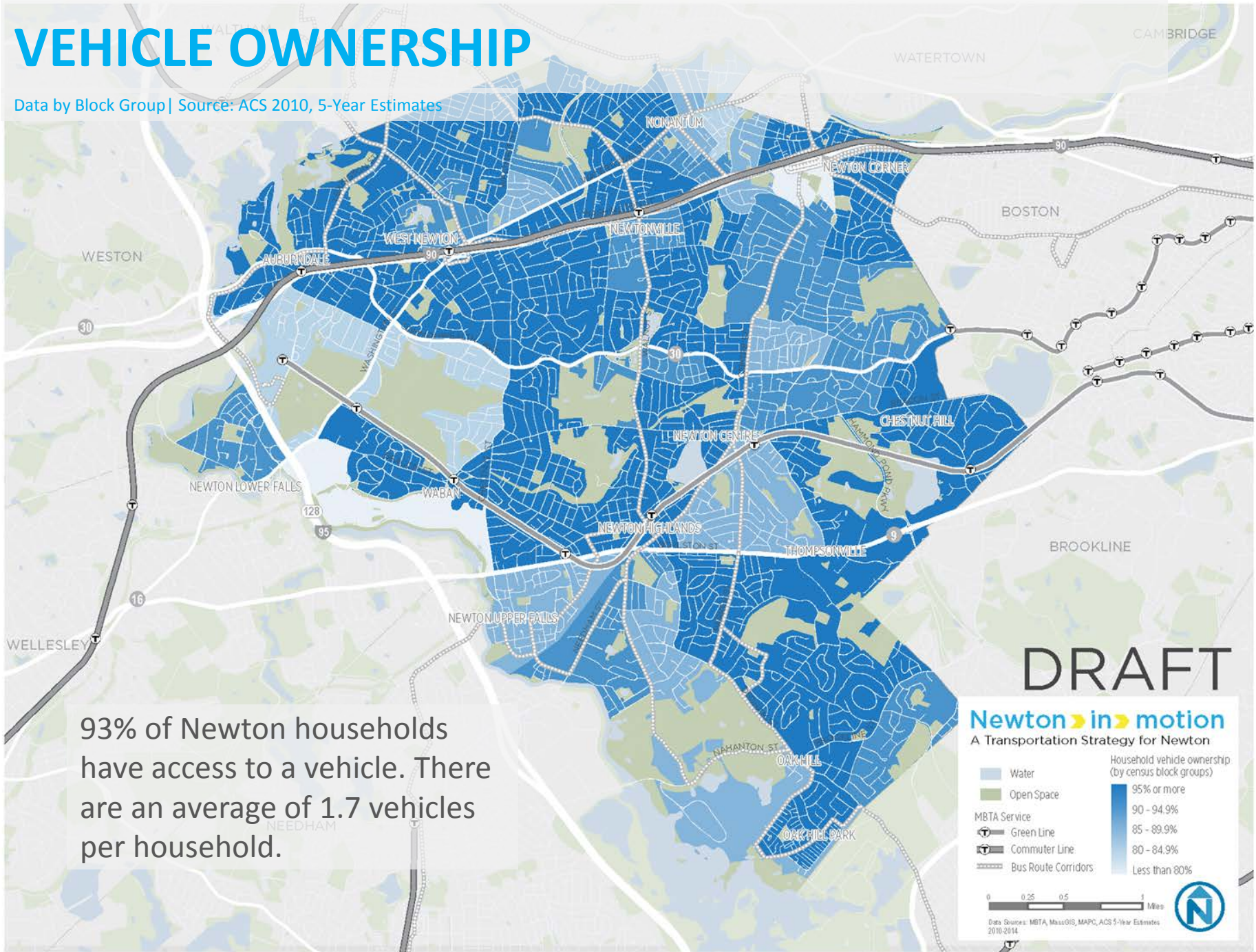


Data Sources: MBTA, MassGIS, MAPC, ACS 5-Year Estimates 2010-2014



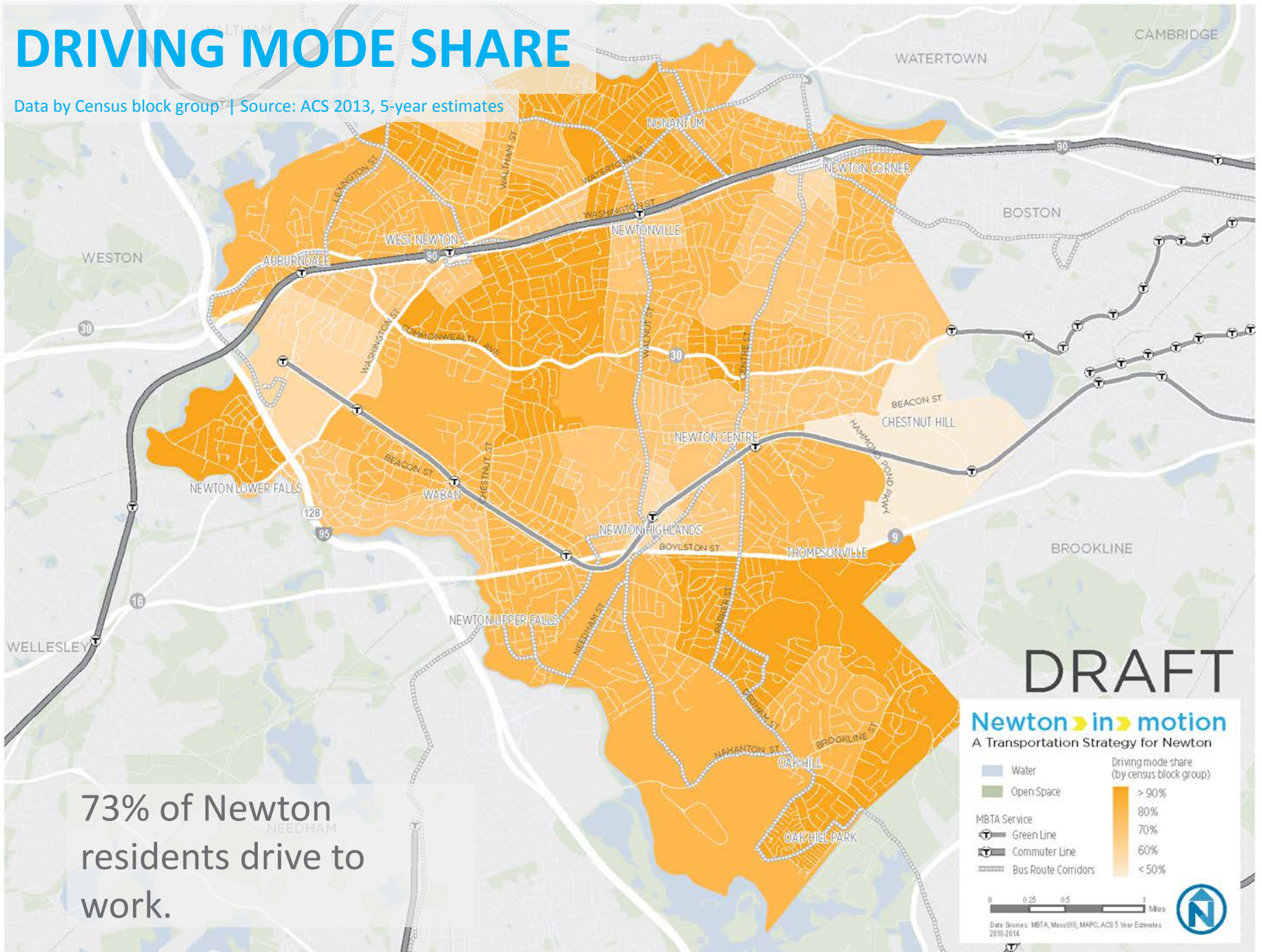
# VEHICLE OWNERSHIP

Data by Block Group | Source: ACS 2010, 5-Year Estimates



# DRIVING MODE SHARE

Data by Census block group | Source: ACS 2013, 5-year estimates



## DRAFT

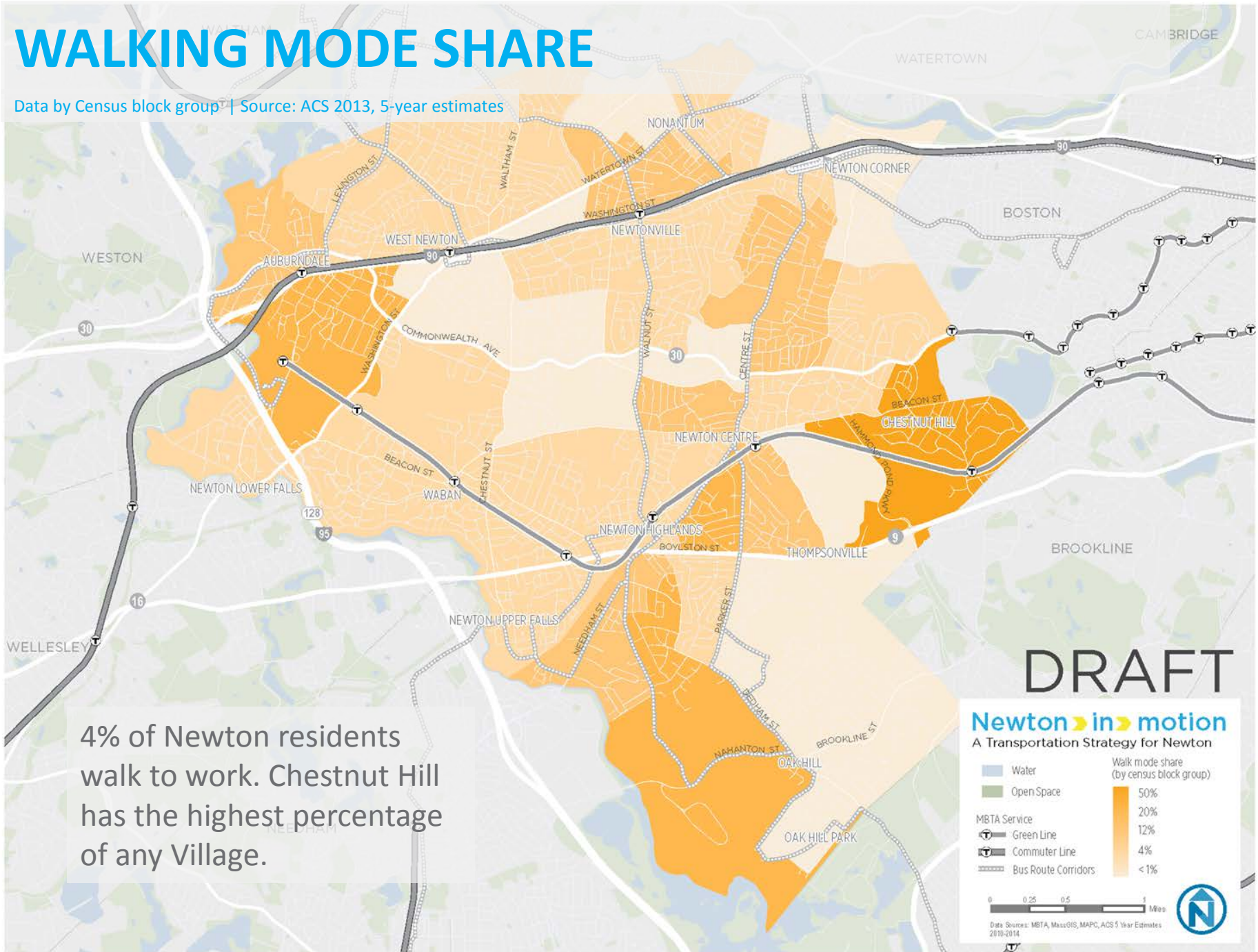
**Newton in motion**  
A Transportation Strategy for Newton

73% of Newton residents drive to work.



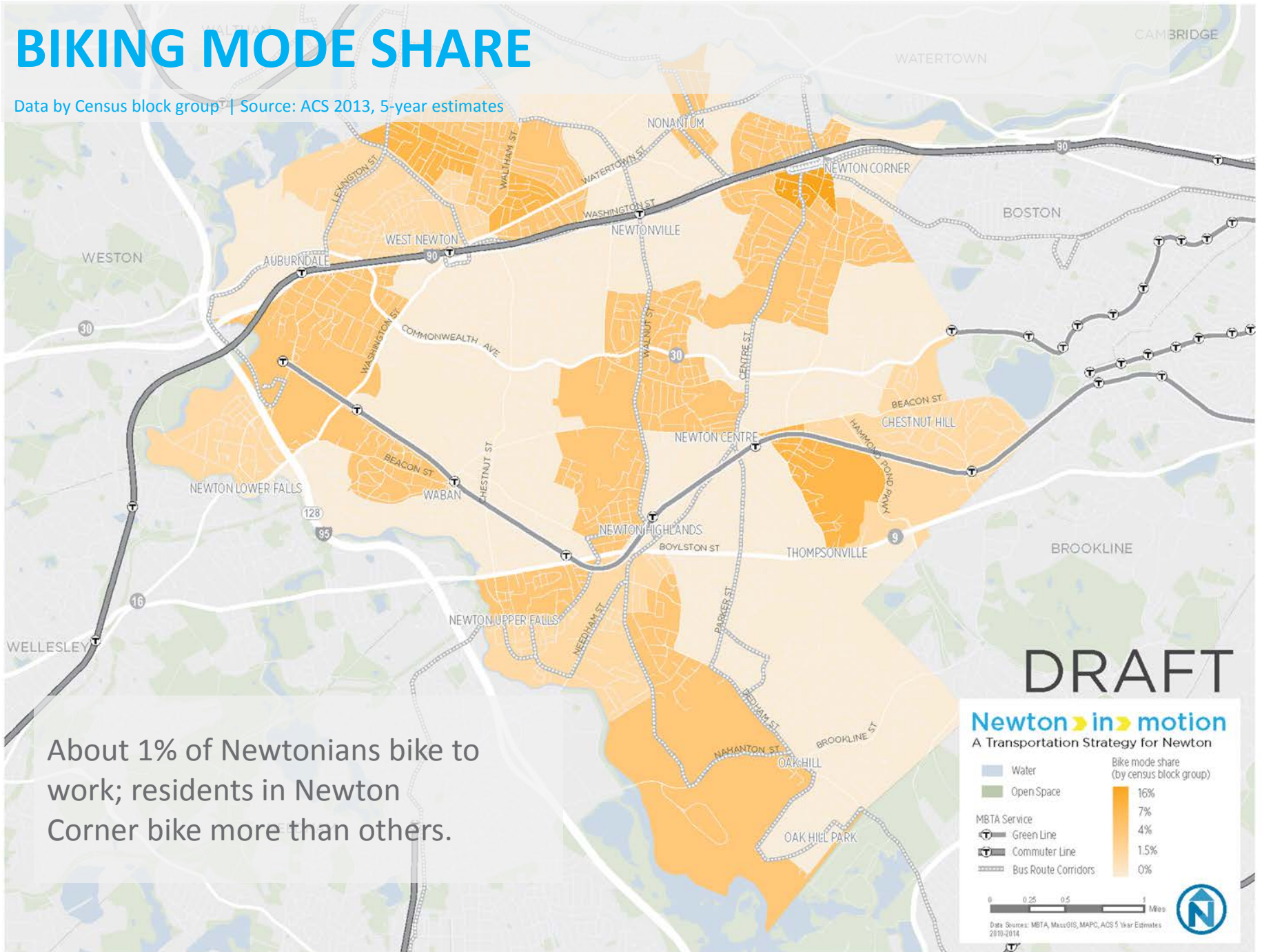
# WALKING MODE SHARE

Data by Census block group | Source: ACS 2013, 5-year estimates



# BIKING MODE SHARE

Data by Census block group | Source: ACS 2013, 5-year estimates



About 1% of Newtonians bike to work; residents in Newton Corner bike more than others.

## DRAFT

### Newton in motion

A Transportation Strategy for Newton

- Water
- Open Space
- MBTA Service
  - Green Line
  - Commuter Line
  - Bus Route Corridors
- Bike mode share (by census block group)
  - 16%
  - 7%
  - 4%
  - 1.5%
  - 0%

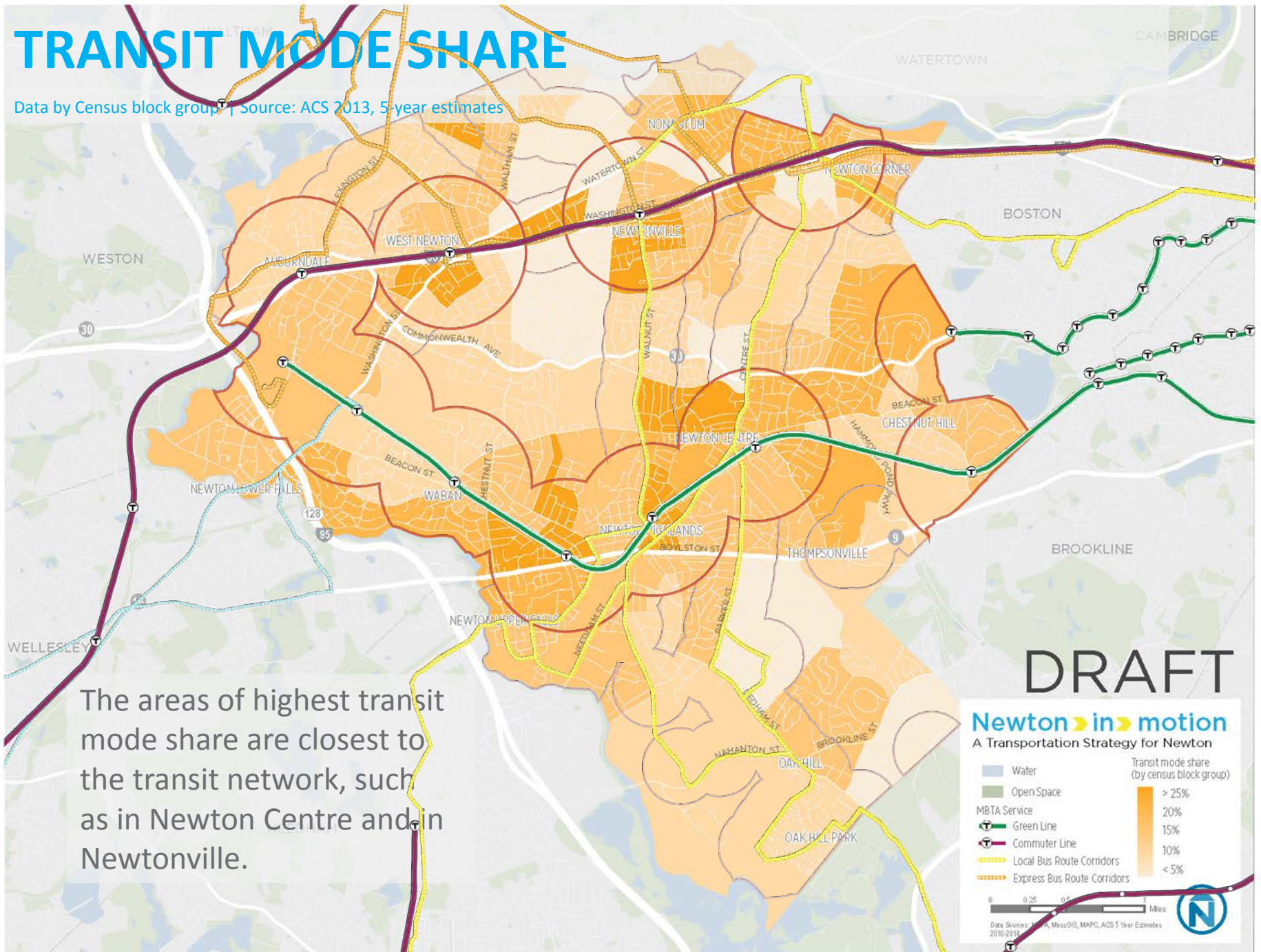
0 0.25 0.5 1 Miles

Data Sources: MBTA, MassGIS, MAPC, ACS 5 Year Estimates 2010-2014



# TRANSIT MODE SHARE

Data by Census block group | Source: ACS 2013, 5-year estimates



The areas of highest transit mode share are closest to the transit network, such as in Newton Centre and in Newtonville.

## DRAFT

**Newton in motion**  
A Transportation Strategy for Newton

- Water
- Open Space
- MBTA Service
  - Green Line
  - Commuter Line
- Local Bus Route Corridors
- Express Bus Route Corridors

Transit mode share (by census block group)

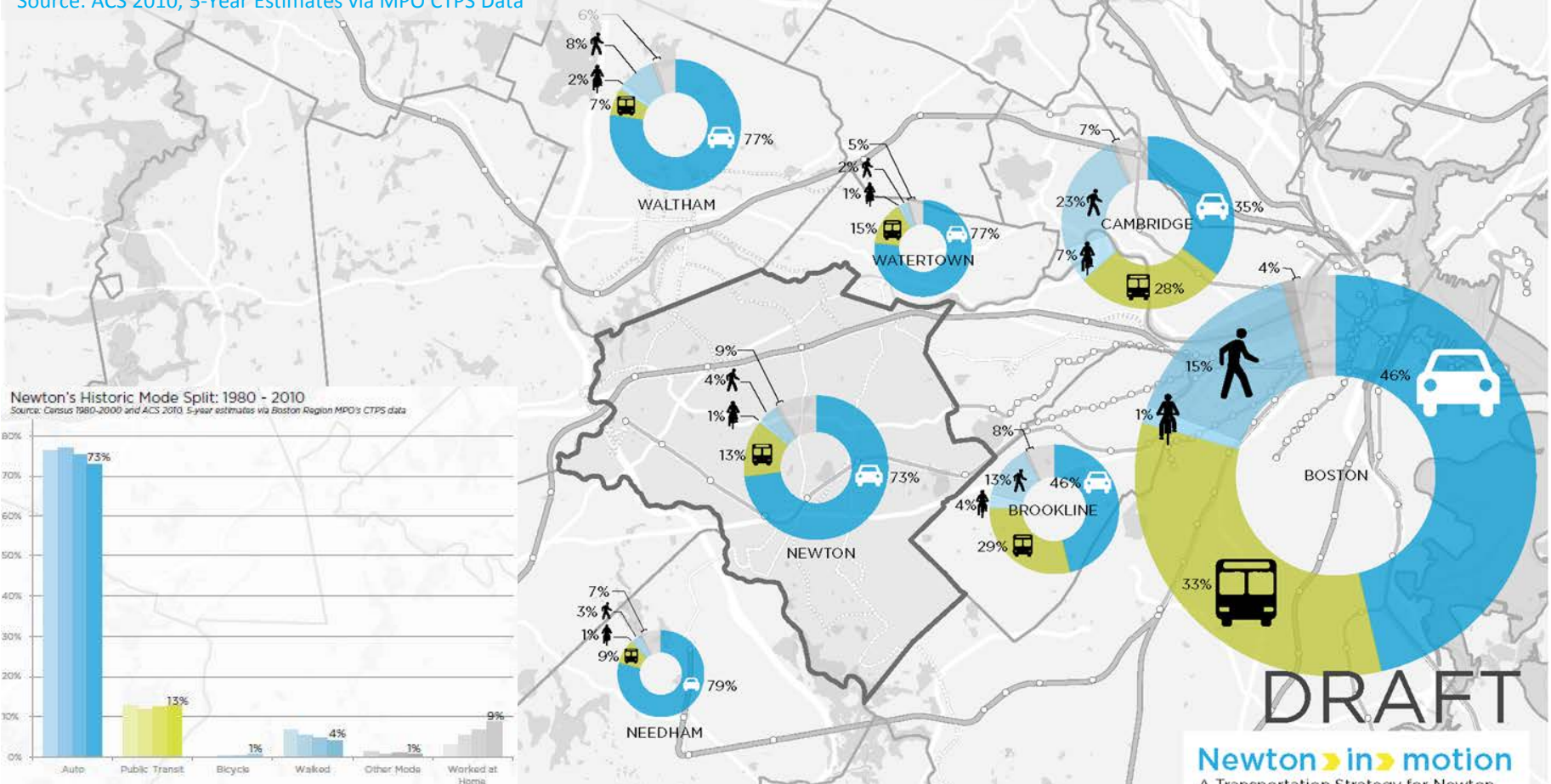
- > 25%
- 20%
- 15%
- 10%
- < 5%

0 0.25 0.5 1 Miles

Data Sources: MassGIS, MAPC, ACS 5 Year Estimates 2010-2014

# REGIONAL MODE SPLIT

Source: ACS 2010, 5-Year Estimates via MPO CTPS Data



A high percentage of Newtonians drive to work, even higher than peer communities with similar transit access. Telecommuting is a growing trend in Newton and the city has the highest shared compared to peers.

**Newton in motion**  
A Transportation Strategy for Newton

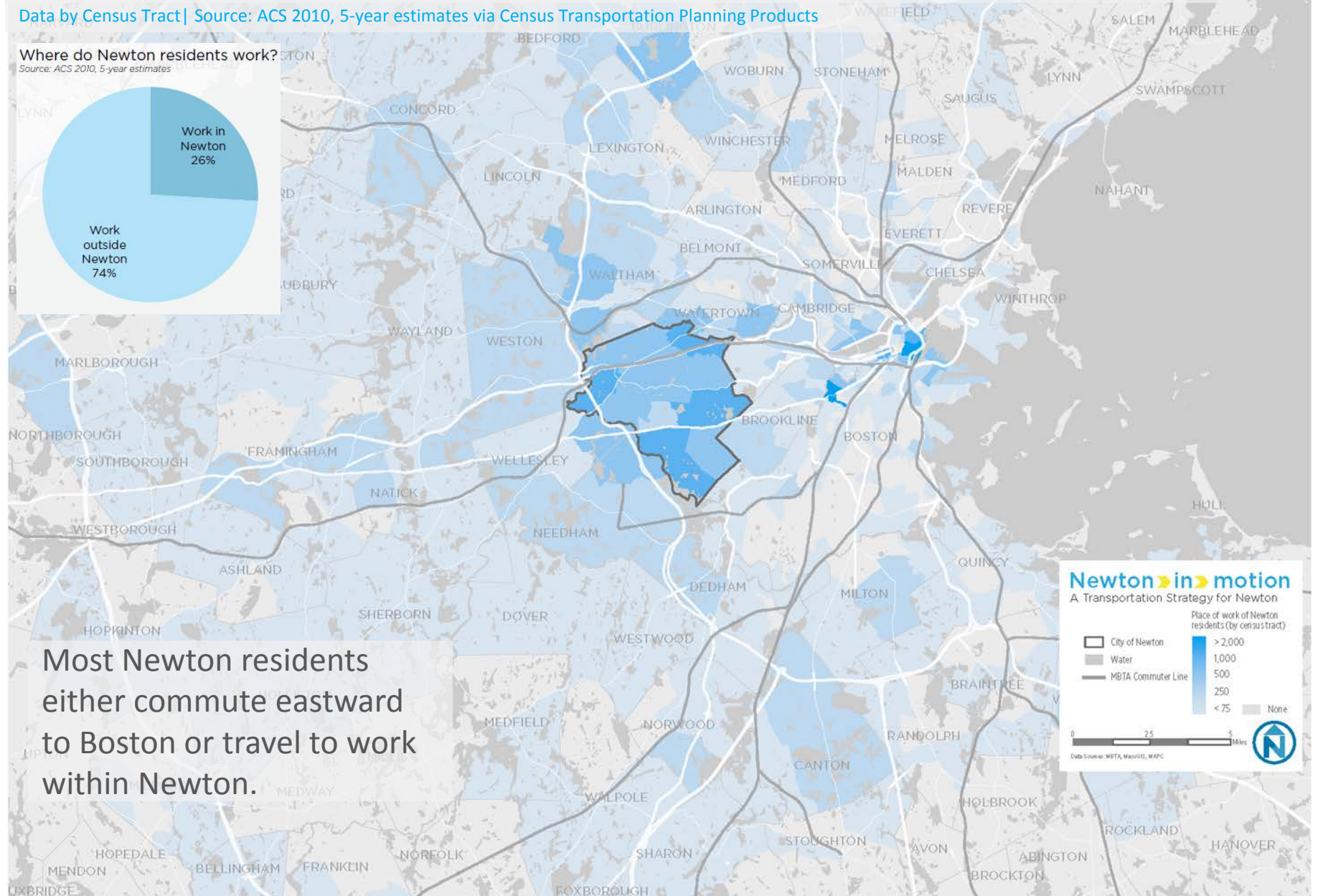
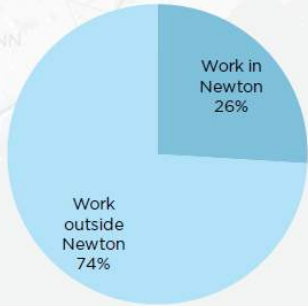
Data Sources: MBTA, MassGIS, MAPC

# PLACE OF WORK OF NEWTON RESIDENTS

Data by Census Tract | Source: ACS 2010, 5-year estimates via Census Transportation Planning Products

Where do Newton residents work?

Source: ACS 2010, 5-year estimates



Most Newton residents either commute eastward to Boston or travel to work within Newton.

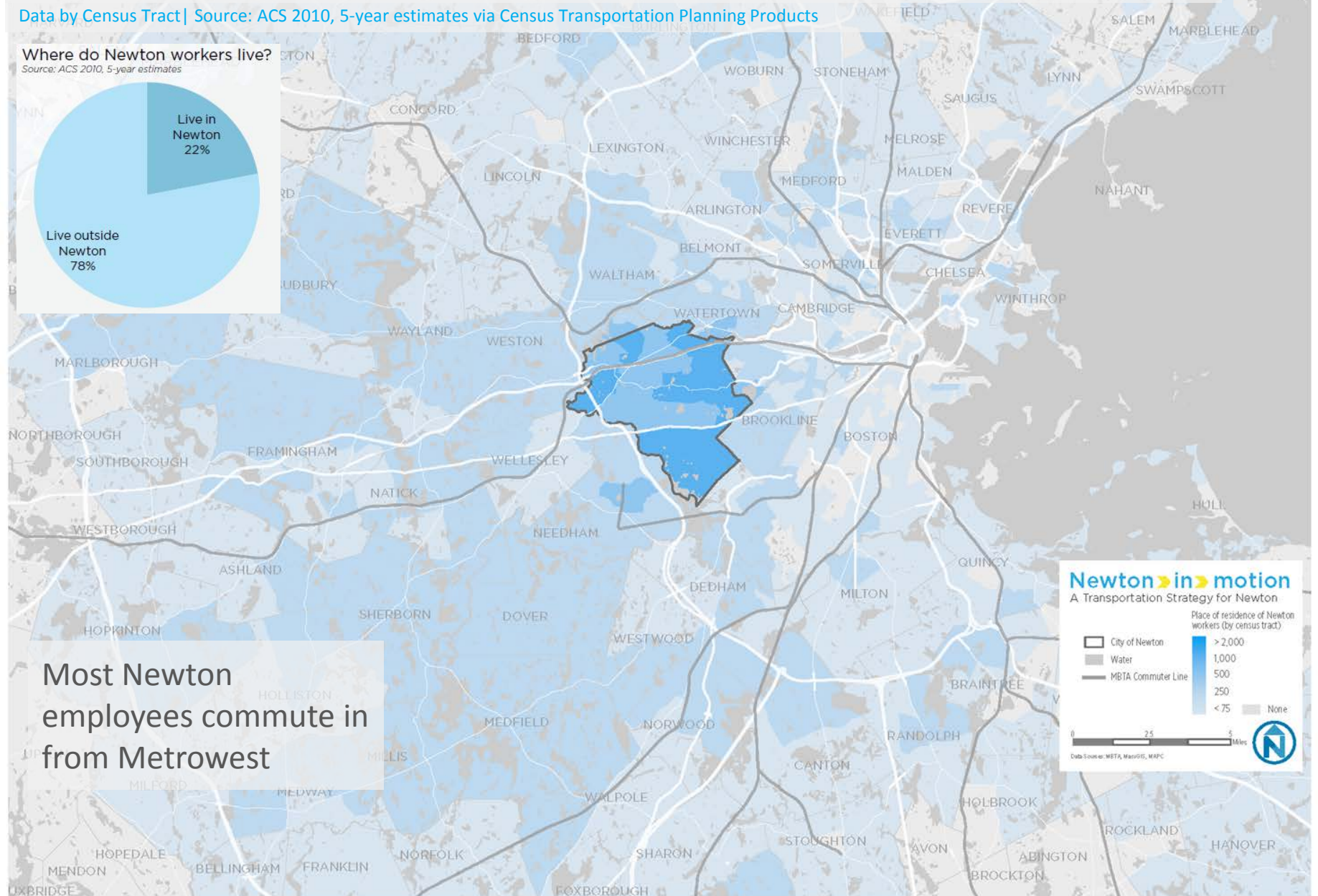
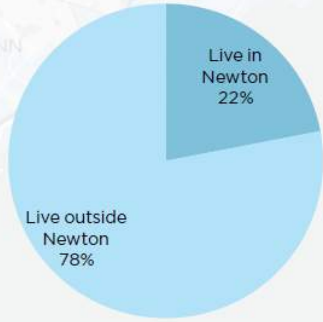


# RESIDENCE OF PEOPLE THAT WORK IN NEWTON

Data by Census Tract | Source: ACS 2010, 5-year estimates via Census Transportation Planning Products

Where do Newton workers live?

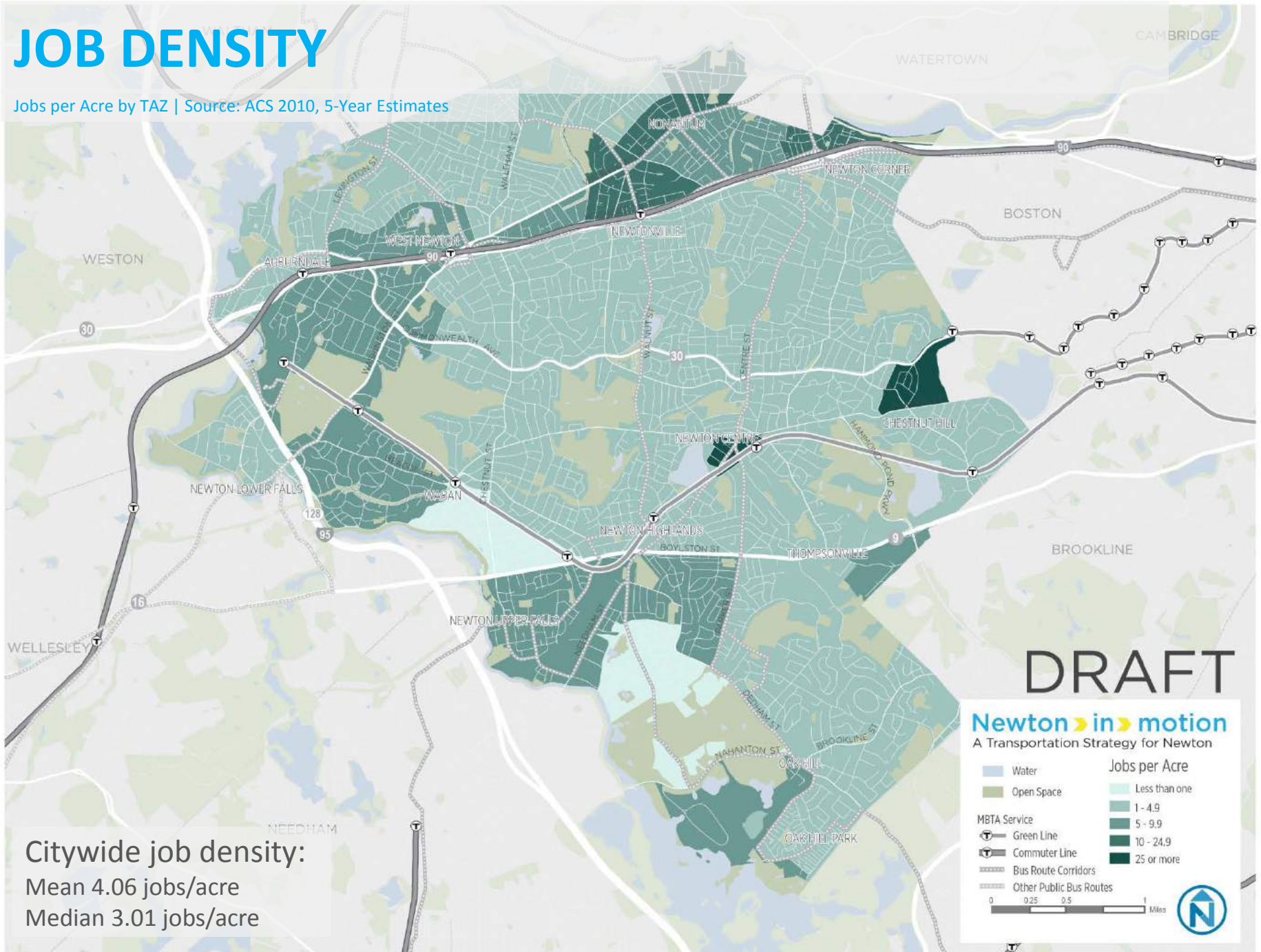
Source: ACS 2010, 5-year estimates



Most Newton employees commute in from Metrowest

# JOB DENSITY

Jobs per Acre by TAZ | Source: ACS 2010, 5-Year Estimates



Citywide job density:  
 Mean 4.06 jobs/acre  
 Median 3.01 jobs/acre

## DRAFT

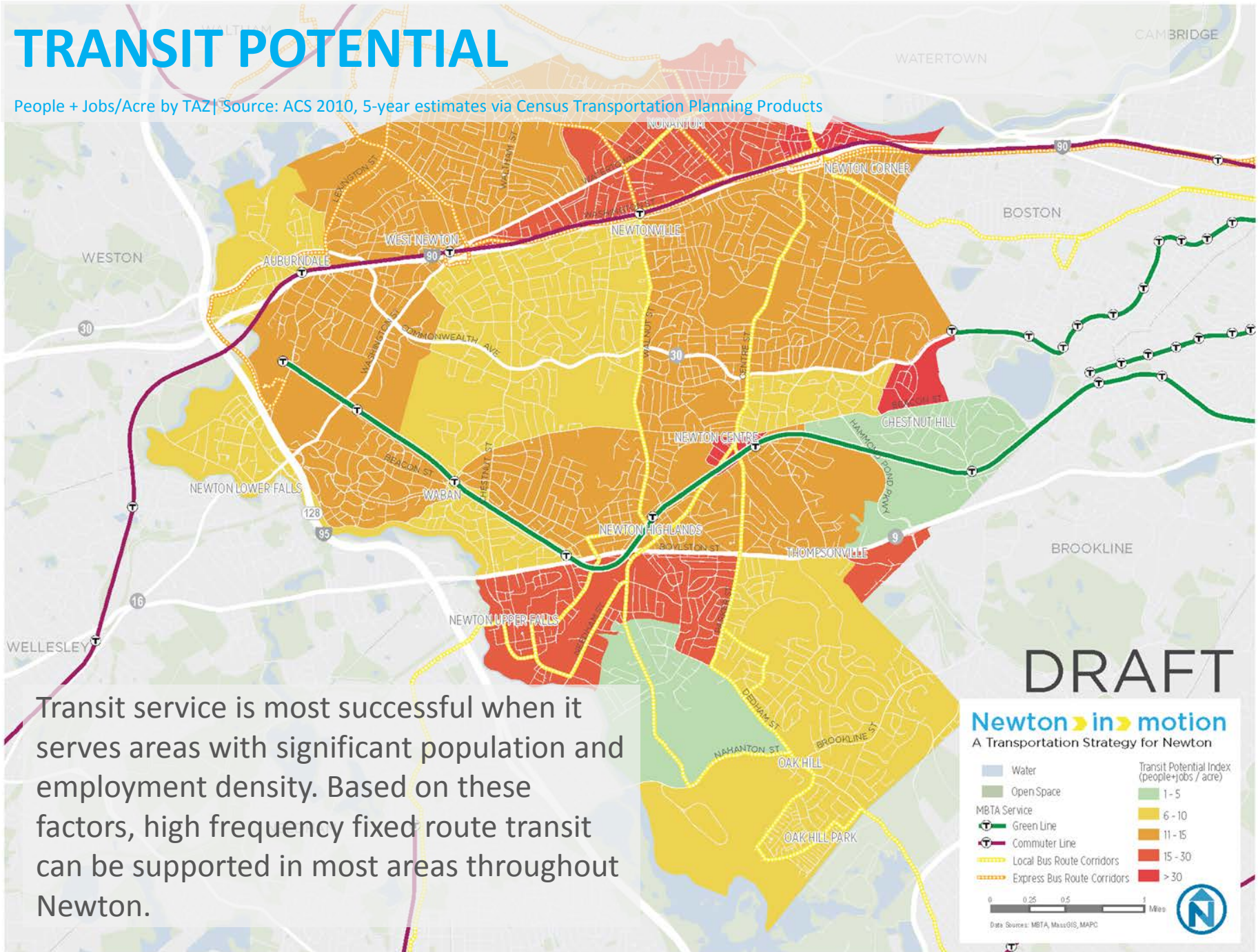
**Newton in motion**  
 A Transportation Strategy for Newton

	Water		Jobs per Acre
	Open Space		Less than one
	MBTA Service		1 - 4.9
	Commuter Line		5 - 9.9
	Bus Route Corridors		10 - 24.9
	Other Public Bus Routes		25 or more

0 0.25 0.5 1 Miles

# TRANSIT POTENTIAL

People + Jobs/Acre by TAZ | Source: ACS 2010, 5-year estimates via Census Transportation Planning Products



Transit service is most successful when it serves areas with significant population and employment density. Based on these factors, high frequency fixed route transit can be supported in most areas throughout Newton.

## DRAFT

**Newton in motion**  
A Transportation Strategy for Newton

- Water
  - Open Space
  - MBTA Service
    - Green Line
    - Commuter Line
  - Local Bus Route Corridors
  - Express Bus Route Corridors
- Transit Potential Index (people+jobs/acre)
- 1 - 5
  - 6 - 10
  - 11 - 15
  - 15 - 30
  - > 30



Density ↑



Bus every  
60 mins



Bus every  
30 mins



Bus every  
15 mins



Bus Rapid  
Transit



Light  
Rail

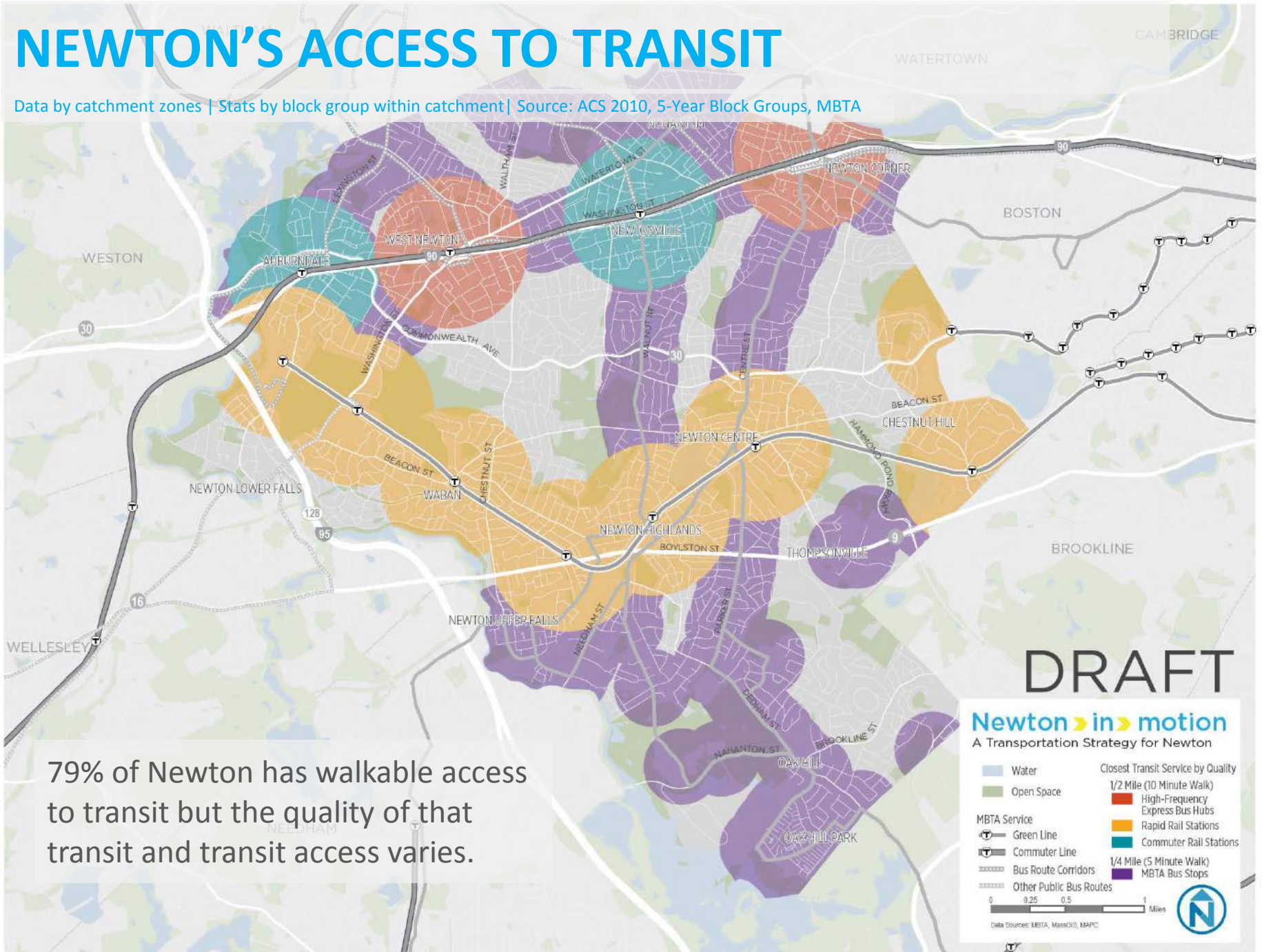
12-30 households/acre  
>15 jobs/acre

>12 households/acre  
>13 jobs/acre

>12 households/acre  
>13 jobs/acre

# NEWTON'S ACCESS TO TRANSIT

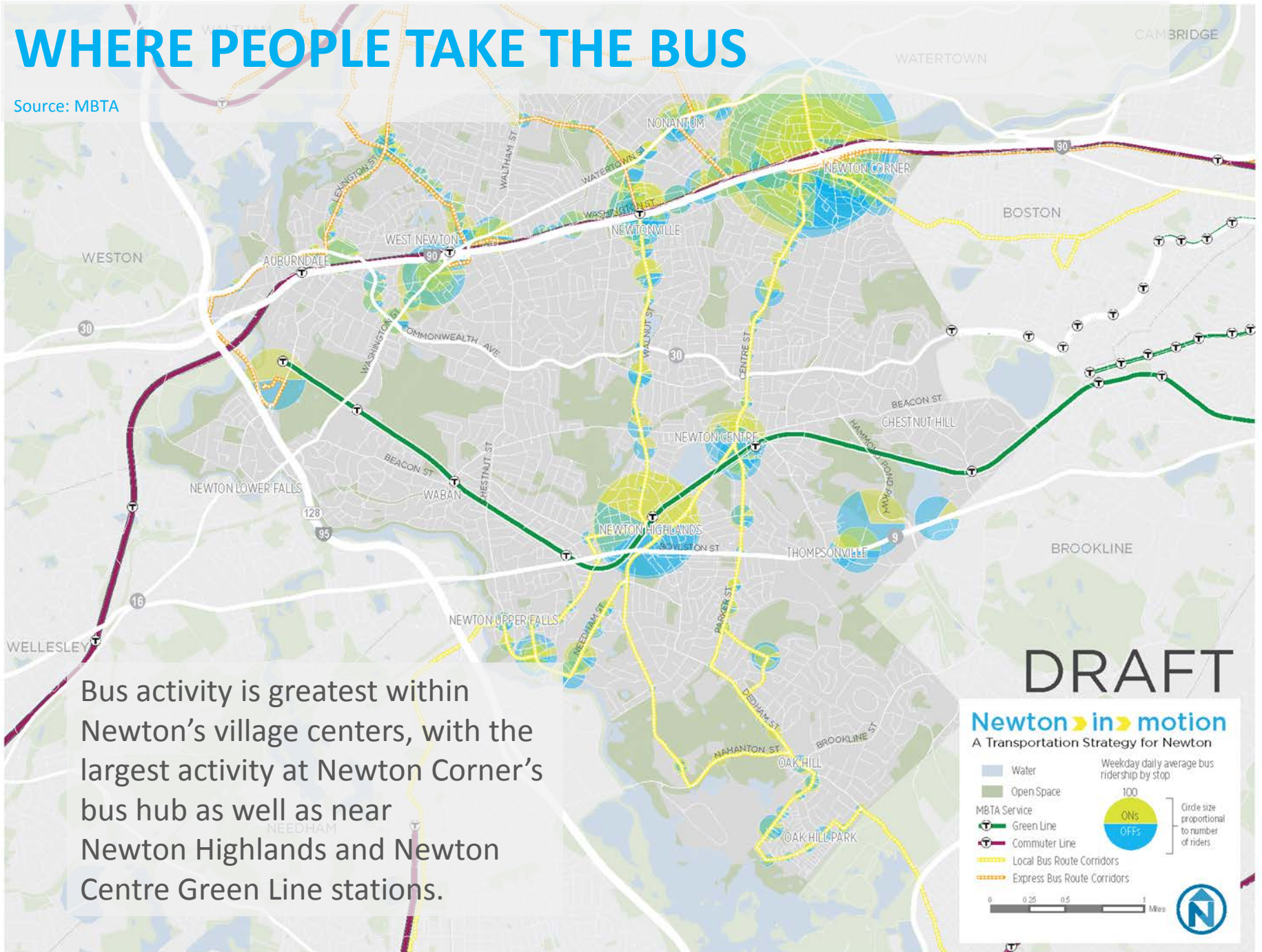
Data by catchment zones | Stats by block group within catchment | Source: ACS 2010, 5-Year Block Groups, MBTA



79% of Newton has walkable access to transit but the quality of that transit and transit access varies.

# WHERE PEOPLE TAKE THE BUS

Source: MBTA



Bus activity is greatest within Newton's village centers, with the largest activity at Newton Corner's bus hub as well as near Newton Highlands and Newton Centre Green Line stations.

## DRAFT

**Newton in motion**  
A Transportation Strategy for Newton

Water  
Open Space

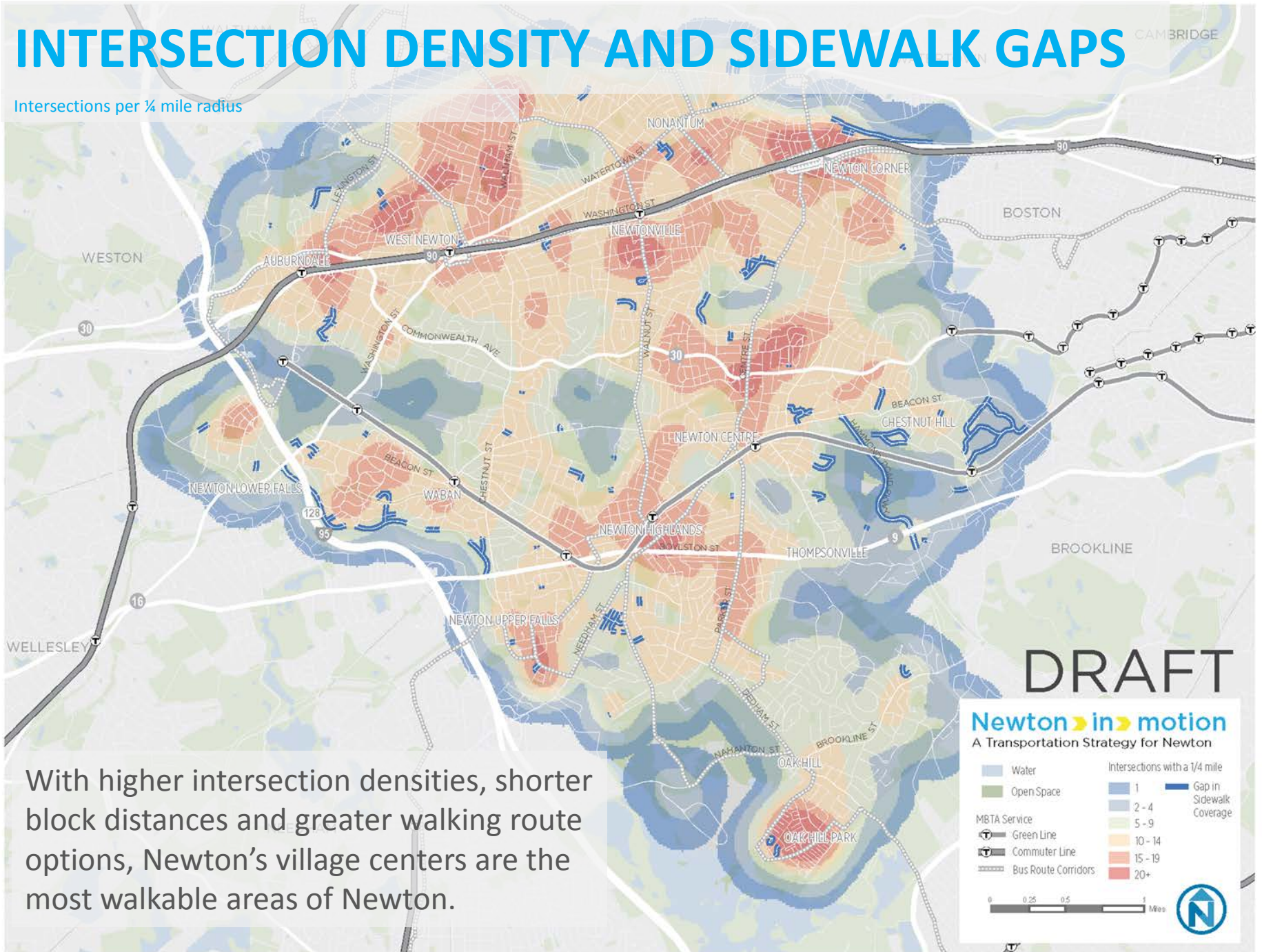
MBTA Service  
Green Line  
Commuter Line  
Local Bus Route Corridors  
Express Bus Route Corridors

Weekday daily average bus ridership by stop  
100  
ONS  
OFFS  
Circle size proportional to number of riders

0 0.25 0.5 1 Miles

# INTERSECTION DENSITY AND SIDEWALK GAPS

Intersections per ¼ mile radius



## DRAFT

**Newton in motion**  
A Transportation Strategy for Newton

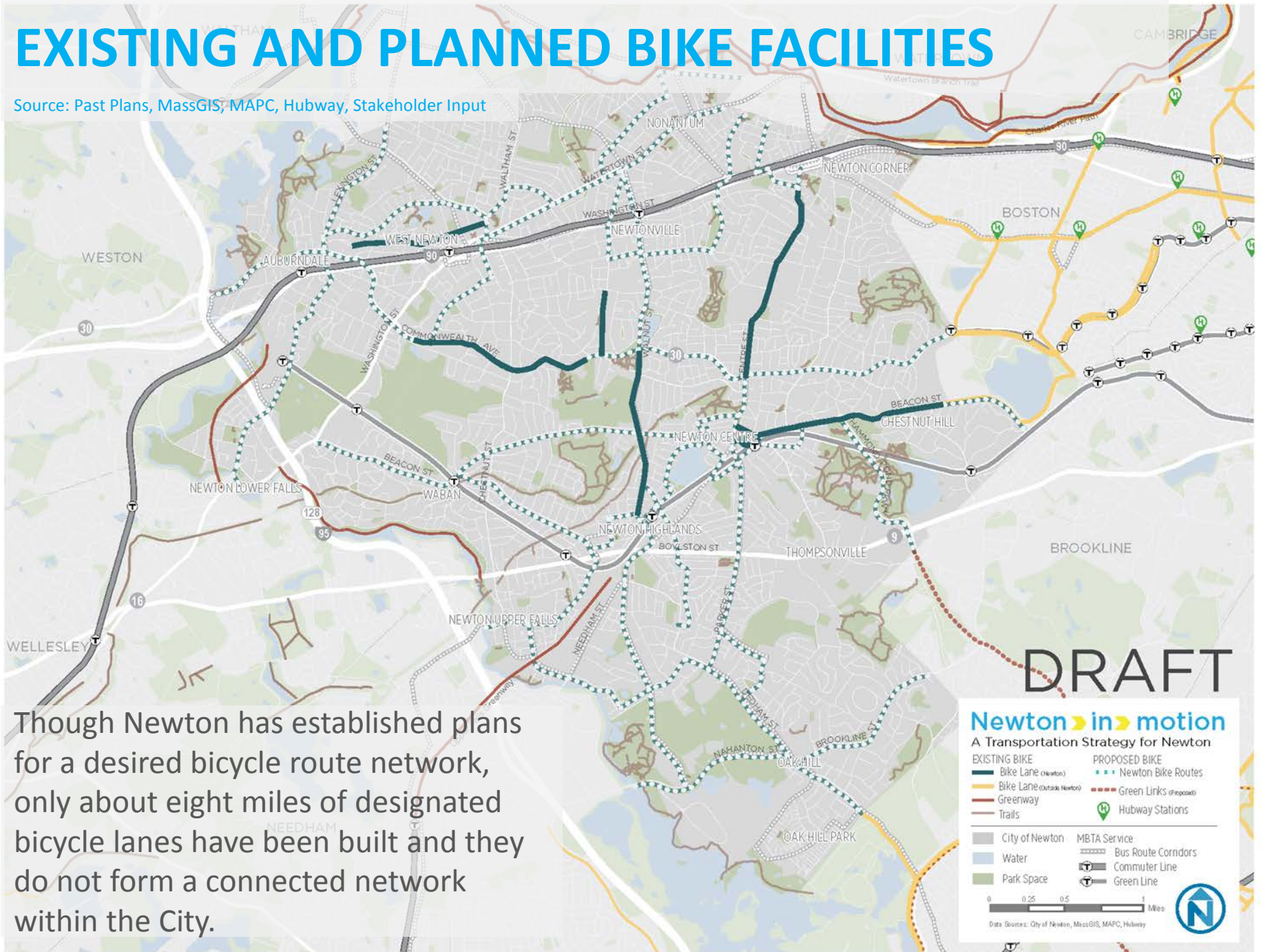
- |                     |                               |                          |
|---------------------|-------------------------------|--------------------------|
| Water               | Intersections with a 1/4 mile | Gap in Sidewalk Coverage |
| Open Space          | 1                             | 2 - 4                    |
| MBTA Service        | 5 - 9                         | 10 - 14                  |
| Commuter Line       | 15 - 19                       | 20+                      |
| Bus Route Corridors |                               |                          |



With higher intersection densities, shorter block distances and greater walking route options, Newton's village centers are the most walkable areas of Newton.

# EXISTING AND PLANNED BIKE FACILITIES

Source: Past Plans, MassGIS, MAPC, Hubway, Stakeholder Input

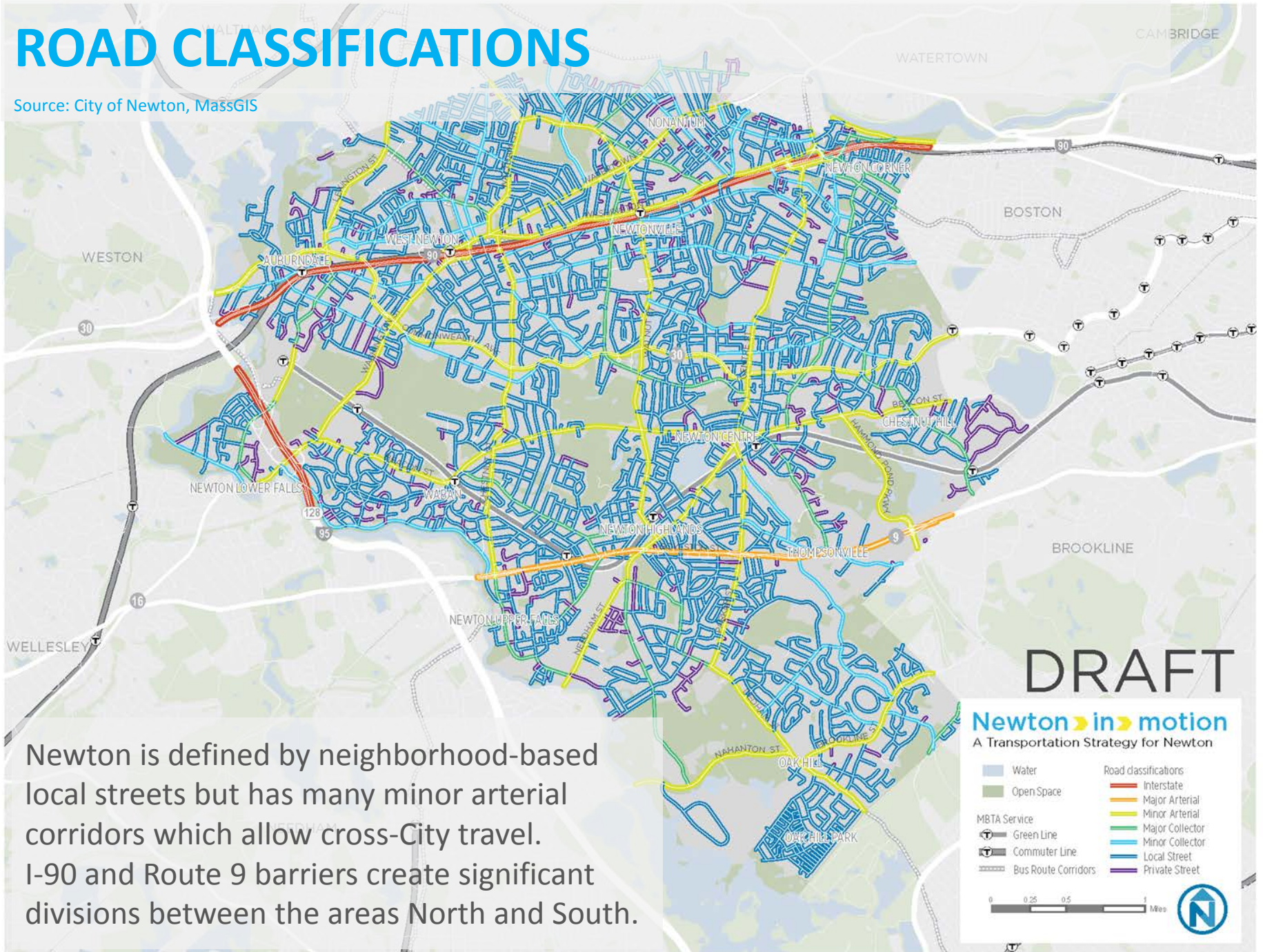


Though Newton has established plans for a desired bicycle route network, only about eight miles of designated bicycle lanes have been built and they do not form a connected network within the City.



# ROAD CLASSIFICATIONS

Source: City of Newton, MassGIS



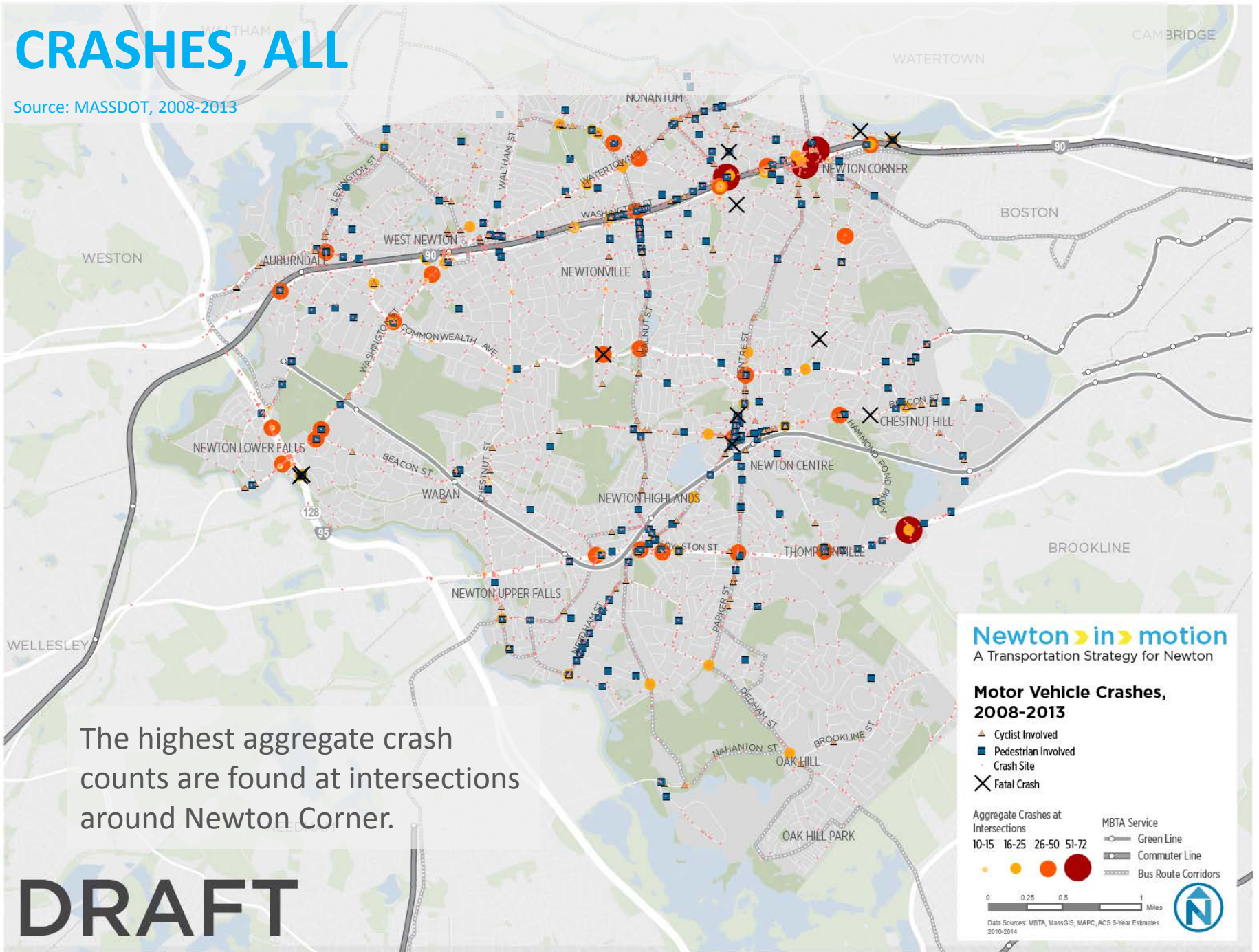
## DRAFT

**Newton in motion**  
A Transportation Strategy for Newton

Newton is defined by neighborhood-based local streets but has many minor arterial corridors which allow cross-City travel. I-90 and Route 9 barriers create significant divisions between the areas North and South.

# CRASHES, ALL

Source: MASSDOT, 2008-2013

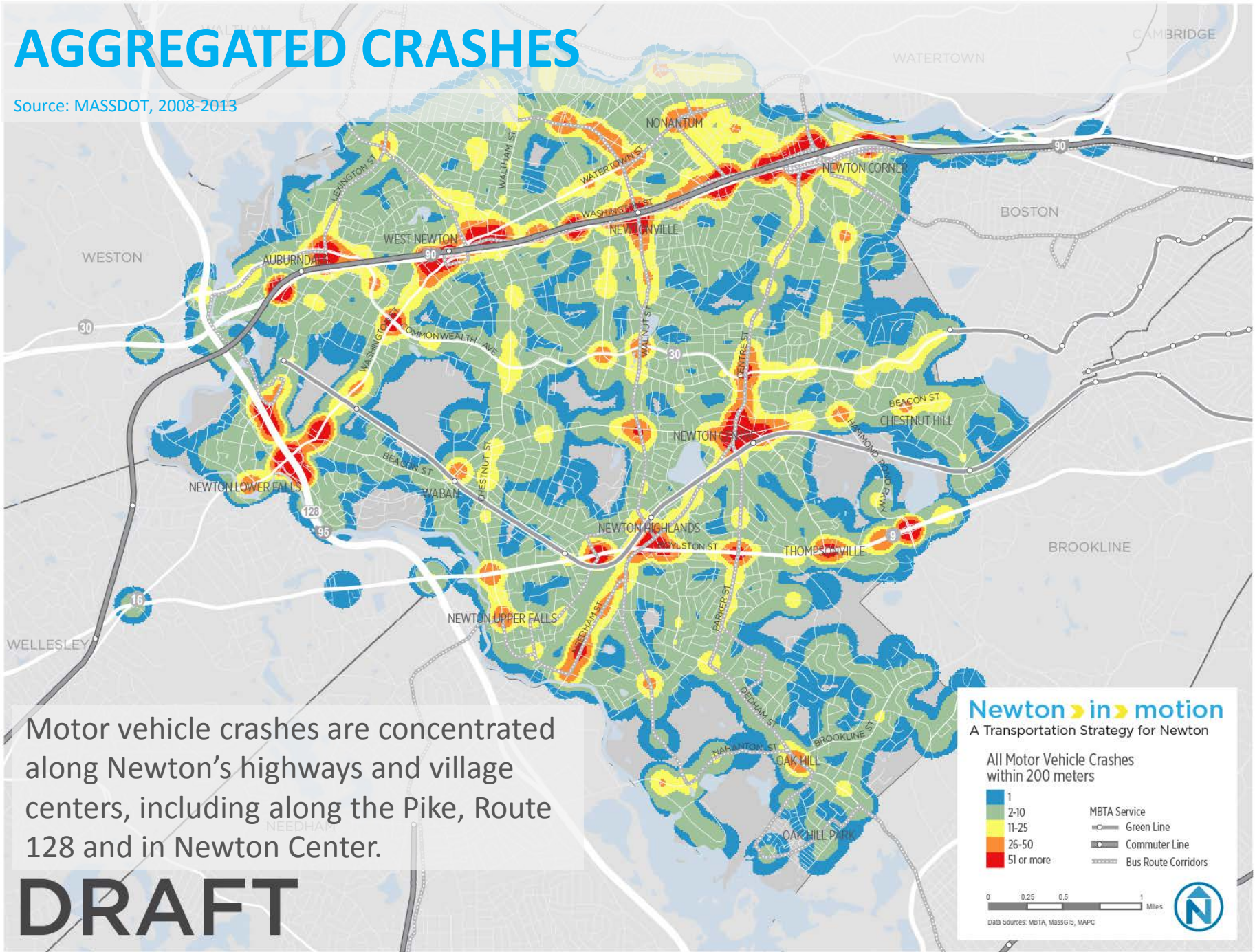


The highest aggregate crash counts are found at intersections around Newton Corner.

# DRAFT

# AGGREGATED CRASHES

Source: MASSDOT, 2008-2013



Motor vehicle crashes are concentrated along Newton's highways and village centers, including along the Pike, Route 128 and in Newton Center.

# DRAFT

**Newton in motion**

A Transportation Strategy for Newton

All Motor Vehicle Crashes within 200 meters

- 1
  - 2-10
  - 11-25
  - 26-50
  - 51 or more
- MBTA Service
- Green Line
  - Commuter Line
  - Bus Route Corridors

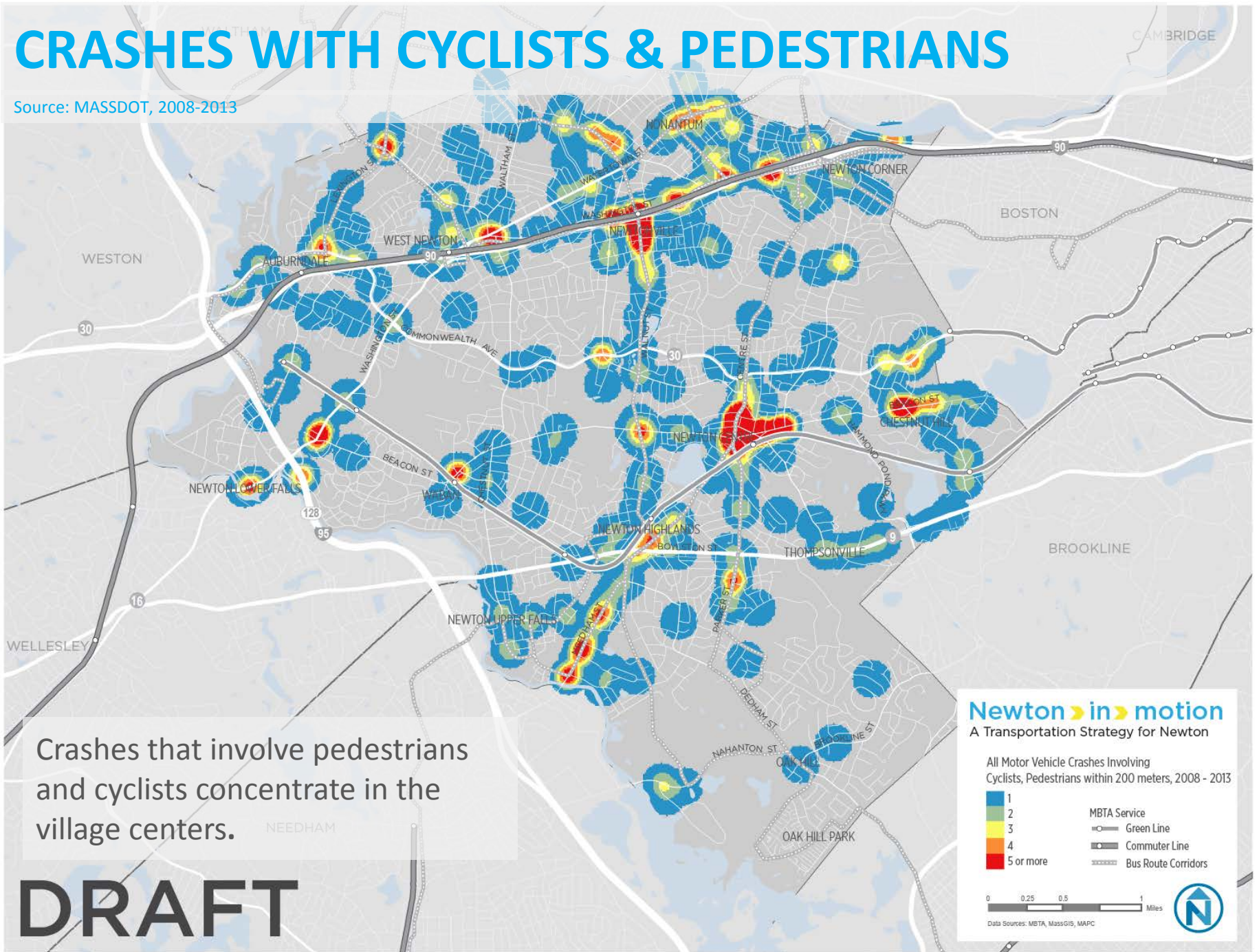
0 0.25 0.5 1 Miles

Data Sources: MBTA, MassGIS, MAPC



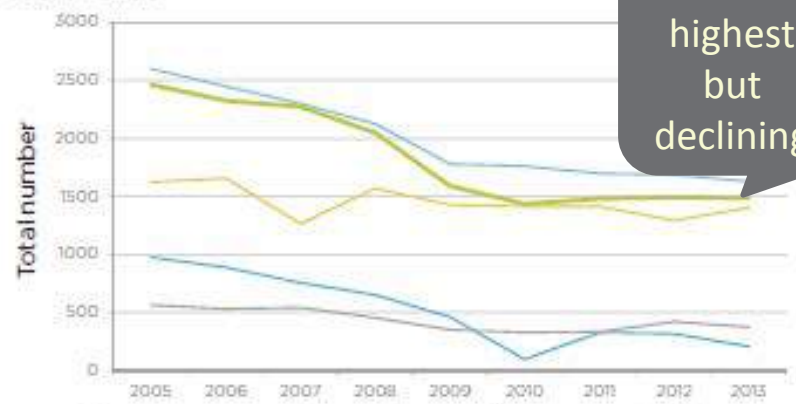
# CRASHES WITH CYCLISTS & PEDESTRIANS

Source: MASSDOT, 2008-2013

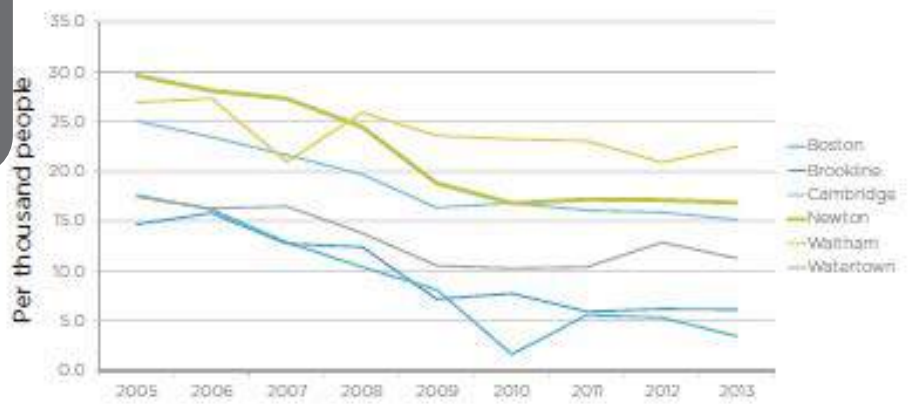


### Number of Motor Vehicle-related Collisions

Source: MassDOT

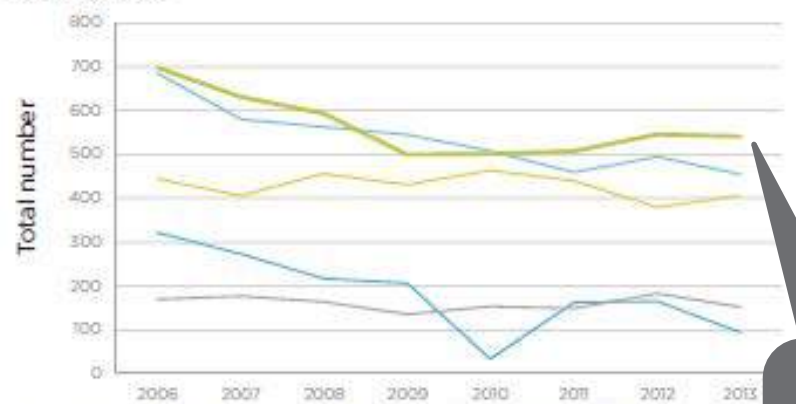


2<sup>nd</sup>  
highest  
but  
declining

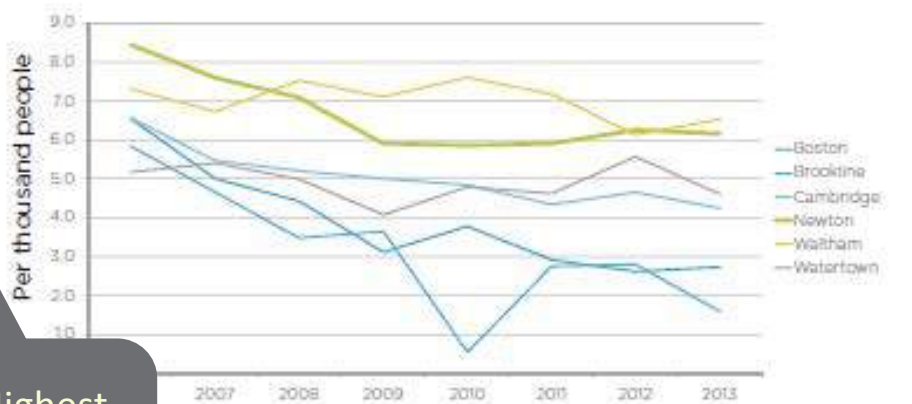


### Number of Non-fatal Motor Vehicle-related Injuries

Source: MassDOT

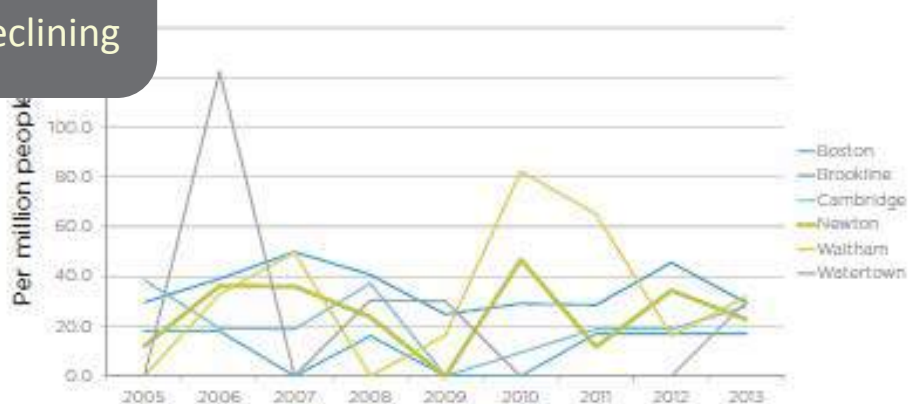
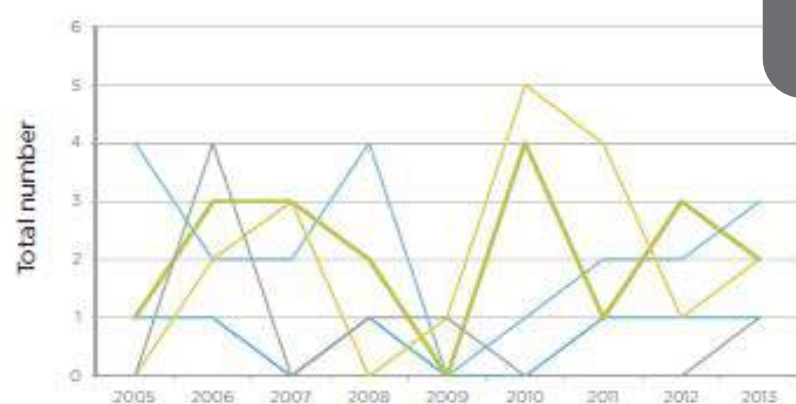


Highest  
but  
declining



### Number of Motor Vehicle-related Fatalities

Source: MassDOT

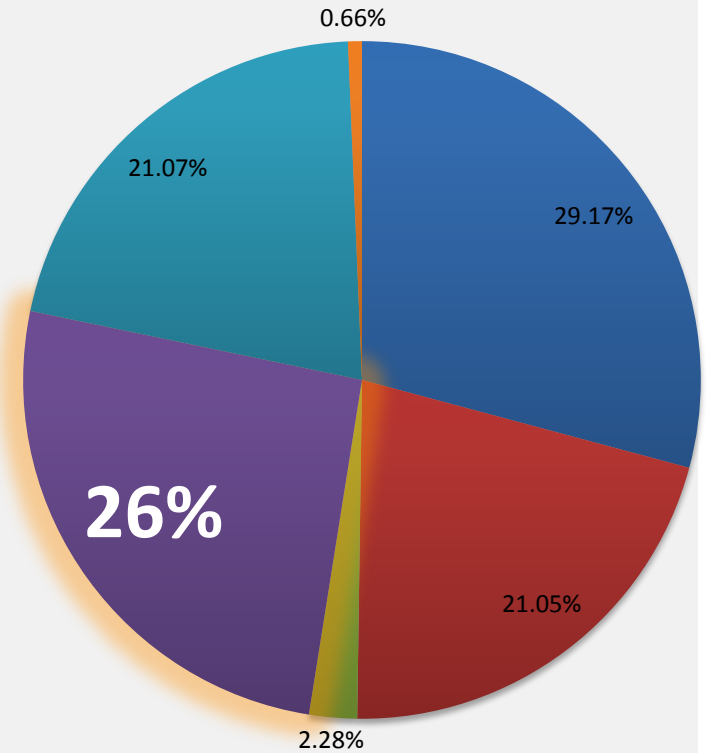
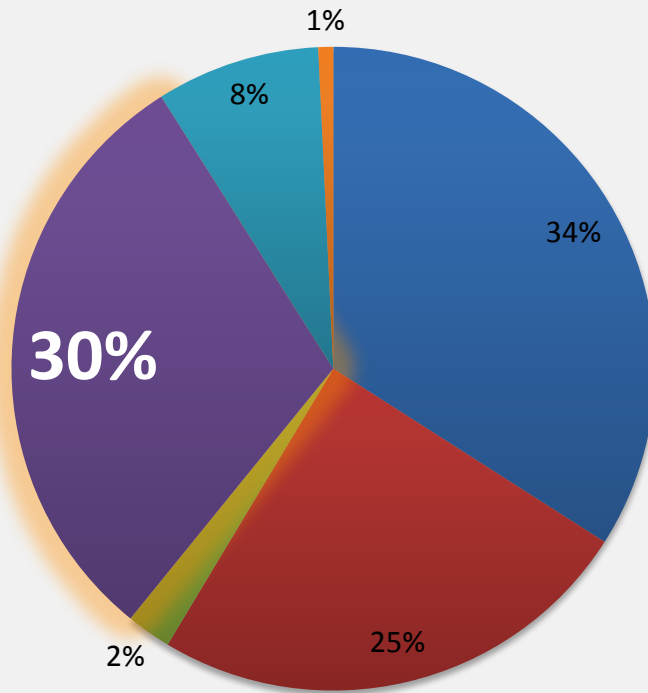


# NEWTON'S GREENHOUSE GAS FOOTPRINT

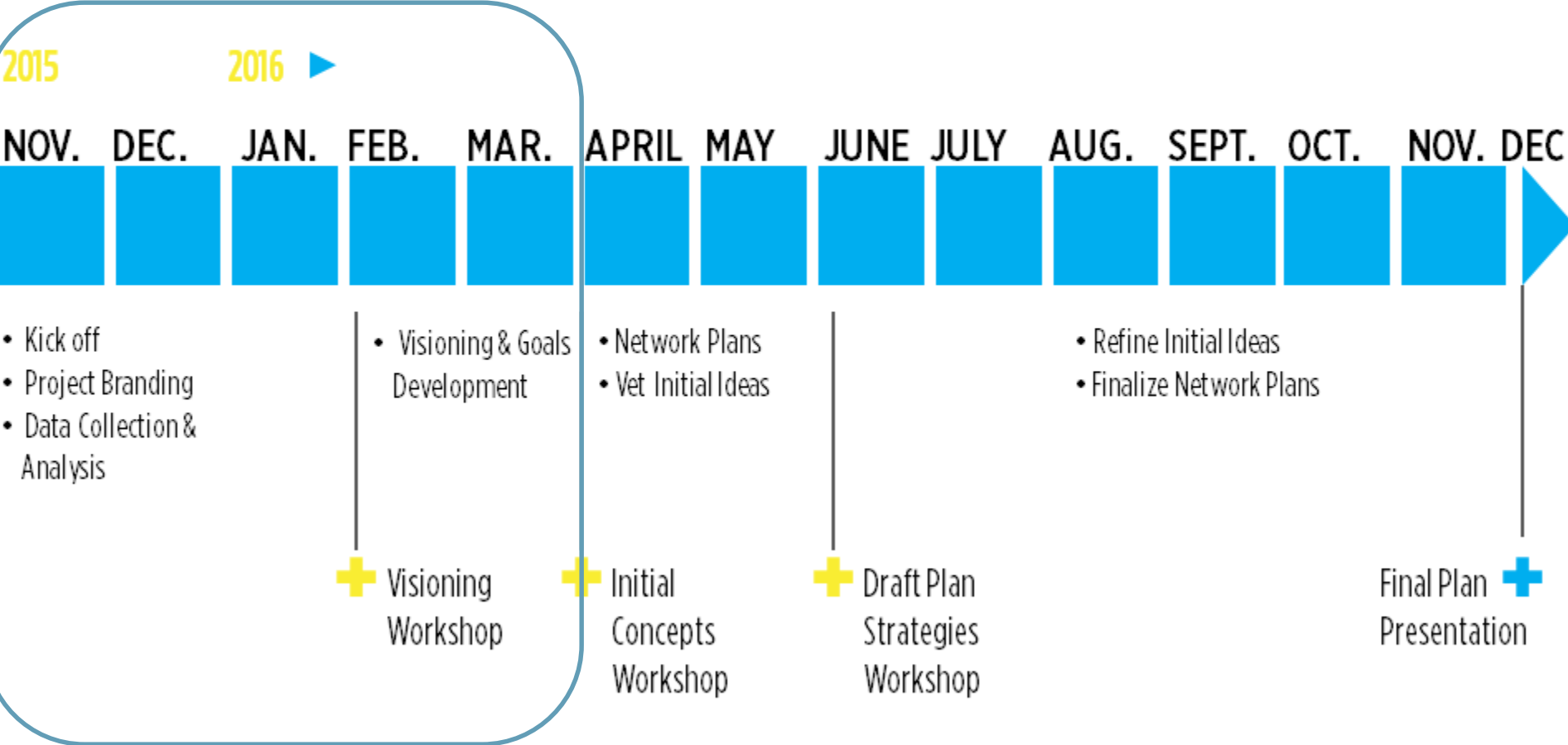
Newton Greenhouse Gas Footprint  
2013 – 100 yr Time Horizon

Newton Greenhouse Gas Footprint  
2013 – 20 yr Time Horizon

- Residential Energy Use
- Commercial Energy Use
- Municipal Energy Use
- Transportation
- Natural Gas Leaks
- Waste



# NEWTON TRANSPORTATION STRATEGY PROJECT SCHEDULE



**Develop Framework → Newton Transportation Factbook**

# NEWTON TRANSPORTATION STRATEGY PROJECT SCHEDULE

2015

2016 ▶



- Kick off
- Project Branding
- Data Collection & Analysis

- Visioning & Goals Development

- Network Plans
- Vet Initial Ideas

- Refine Initial Ideas
- Finalize Network Plans

+ Visioning Workshop

+ Initial Concepts Workshop

+ Draft Plan Strategies Workshop

Final Plan + Presentation

Generate Ideas

Evaluate and Create Plan



# Project Outcomes

- » Develop a vision for transportation in Newton
- » Identify goals and metrics
- » Recommend early action projects, policies, network plans, and future projects
- » Tie it all together in Action and Implementation Plans

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2015      2016 ▶



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Final Plan ✚ Presentation