TRANSITMATTERS

BOSTON INDICATORS
MEASURING WHAT WE VALUE

Transit-Supportive Density in Greater Boston

Research Presentation

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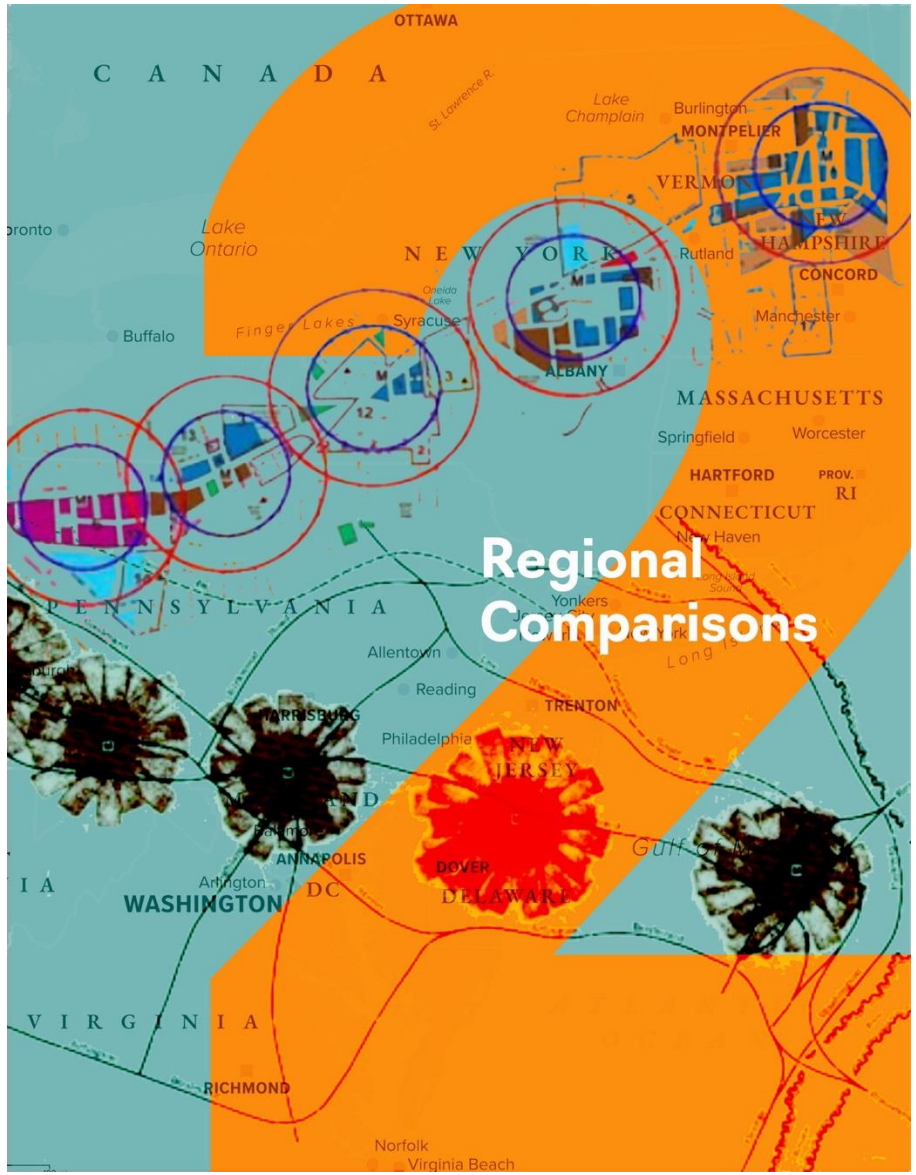
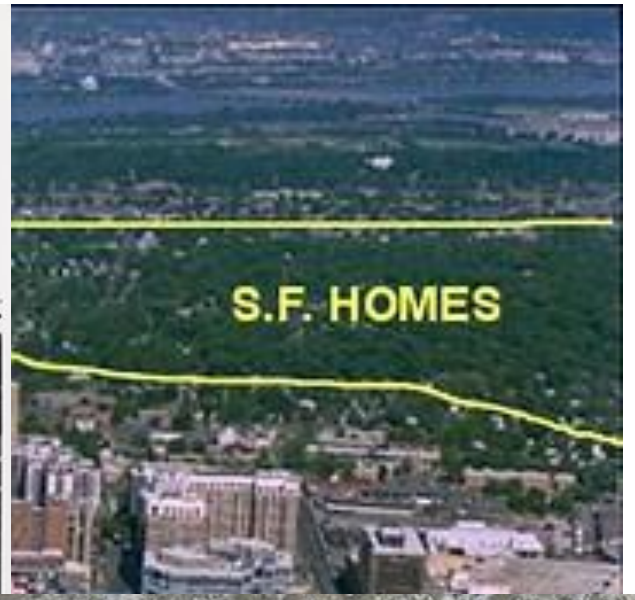
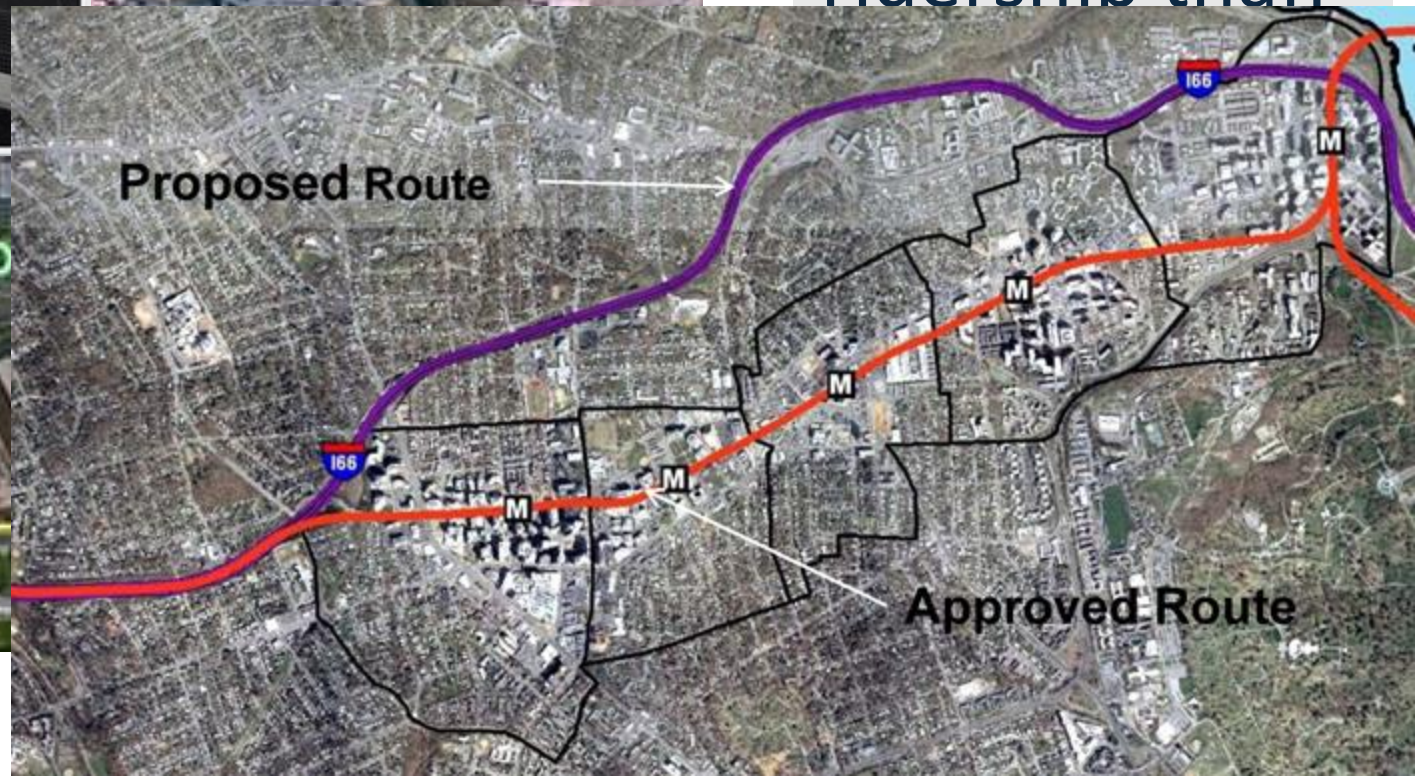

Regional
Comparisons
OTTAWA
CANADA
Lake Champlain
Burlington
MONTPELIER
VERMONT
Lake Ontario
NEW YORK
Rutland
CONCORD
Buffalo
Syracuse
Finger Lakes
Manchester
ALBANY
MASSACHUSETTS
Springfield
Worcester
HARTFORD
PROV.
RI
CONNECTICUT
New Haven
PENNSYLVANIA
Yonkers
Allentown
Reading
TRENTON
HARRISBURG
Philadelphia
NEW JERSEY
ANNAPOLIS
DOVER
DELAWARE
Arlington
WASHINGTON
DC
VIRGINIA
RICHMOND
Norfolk
Virginia Beach

The MBTA is in 8th or 10th place depending on the data.
Our 8th place ranking for worst traffic is not unrelated.



WMATA's Orange Line had 46% higher ridership than



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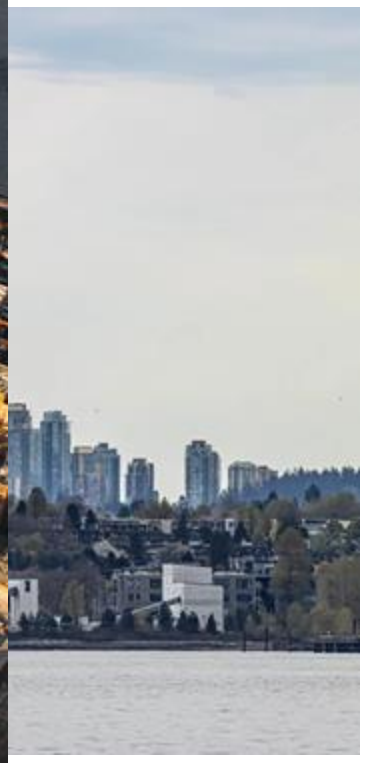
's 49.4%



New Jersey's more centralized approach is part of the reason for the stronger growth since 1990. (20.2% vs. 14.5%)

TRANSIT VILLAGE INITIATIVE

DOWNTOWN NEW JERSEY

NJTC


Research
Benchmarks for
Transit-Supportive
Density

Measuring density

Population metrics
Metrics such as population, households, jobs, or housing units each highlight different aspects of density:

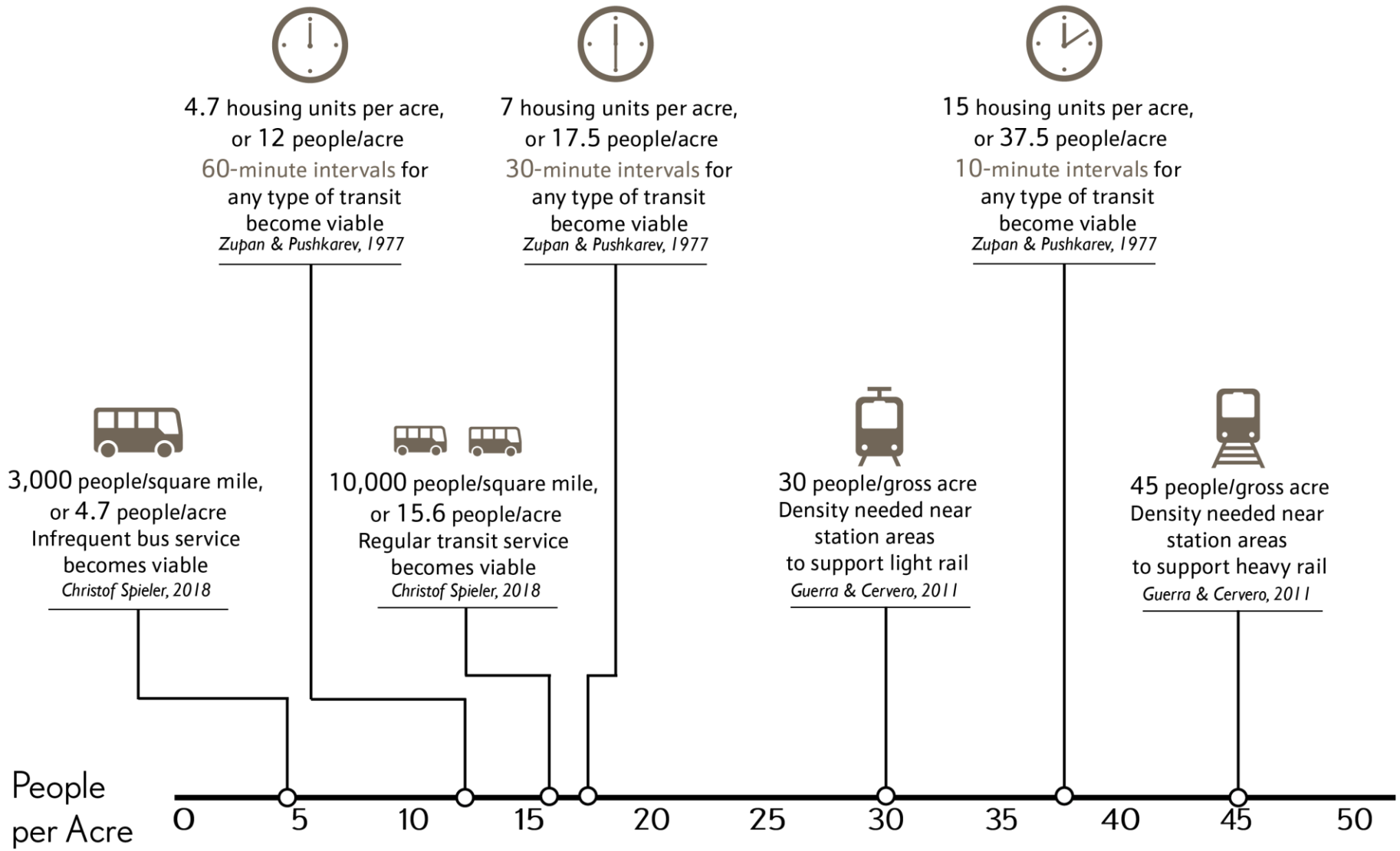
- *Population Density*
- *Employment Density*
- *Population + Employment Density*
- *Household Density*
- *Housing Unit Density*

Defining “transit-supportive”

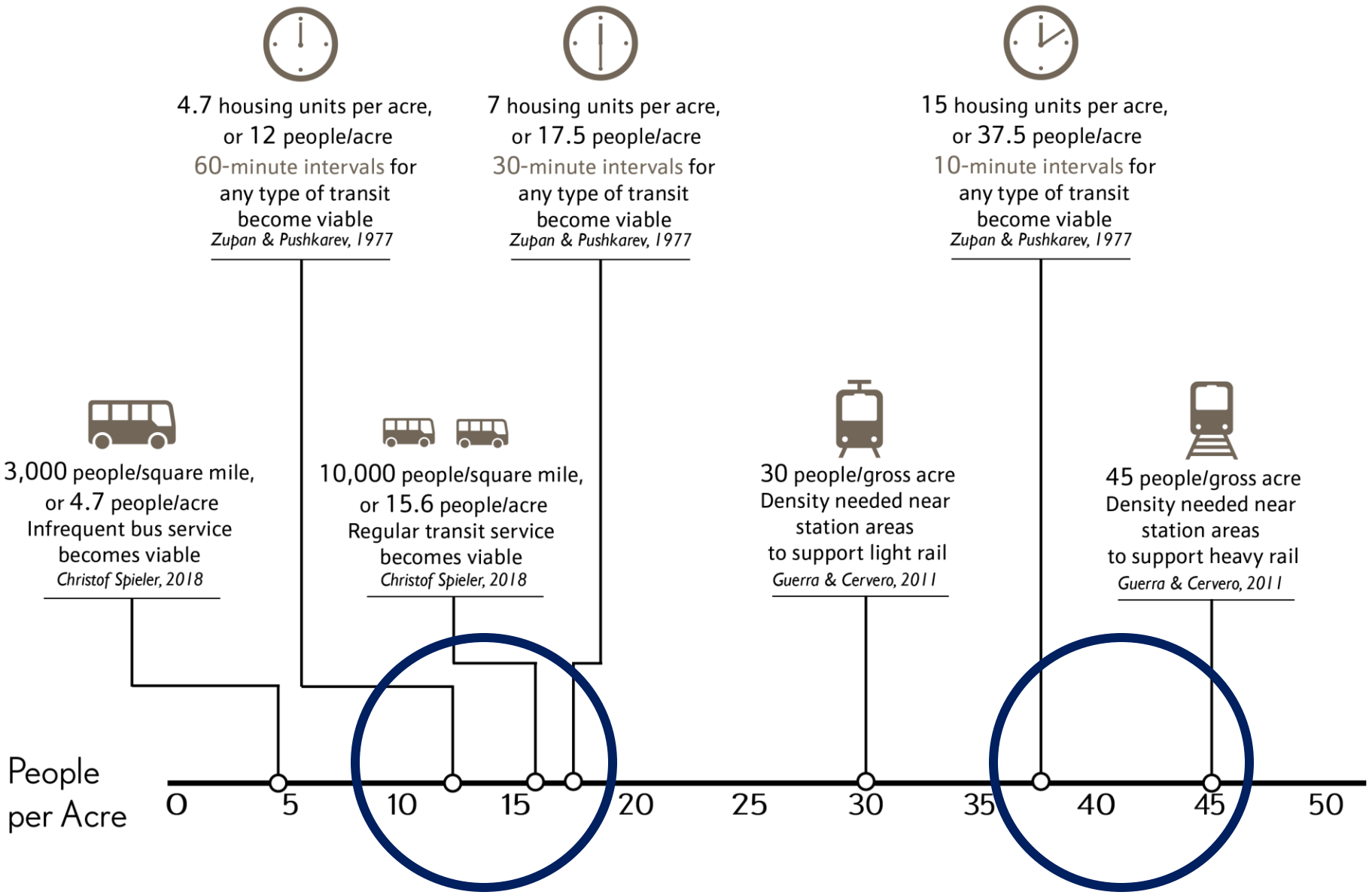
Transportation type
Different transit modes require varying levels of density if they are to receive the ridership needed to justify service.

- *Buses*
- *Light Rail/Streetcar (e.g., the Green Line)*
- *Subways/Rapid Transit (e.g., the Red or Orange Lines)*
- *Heavy Rail (e.g., Commuter Rail)*

Research Estimates of Density Thresholds for Effective Transit Services



Research Estimates of Density Thresholds for Effective Transit Services



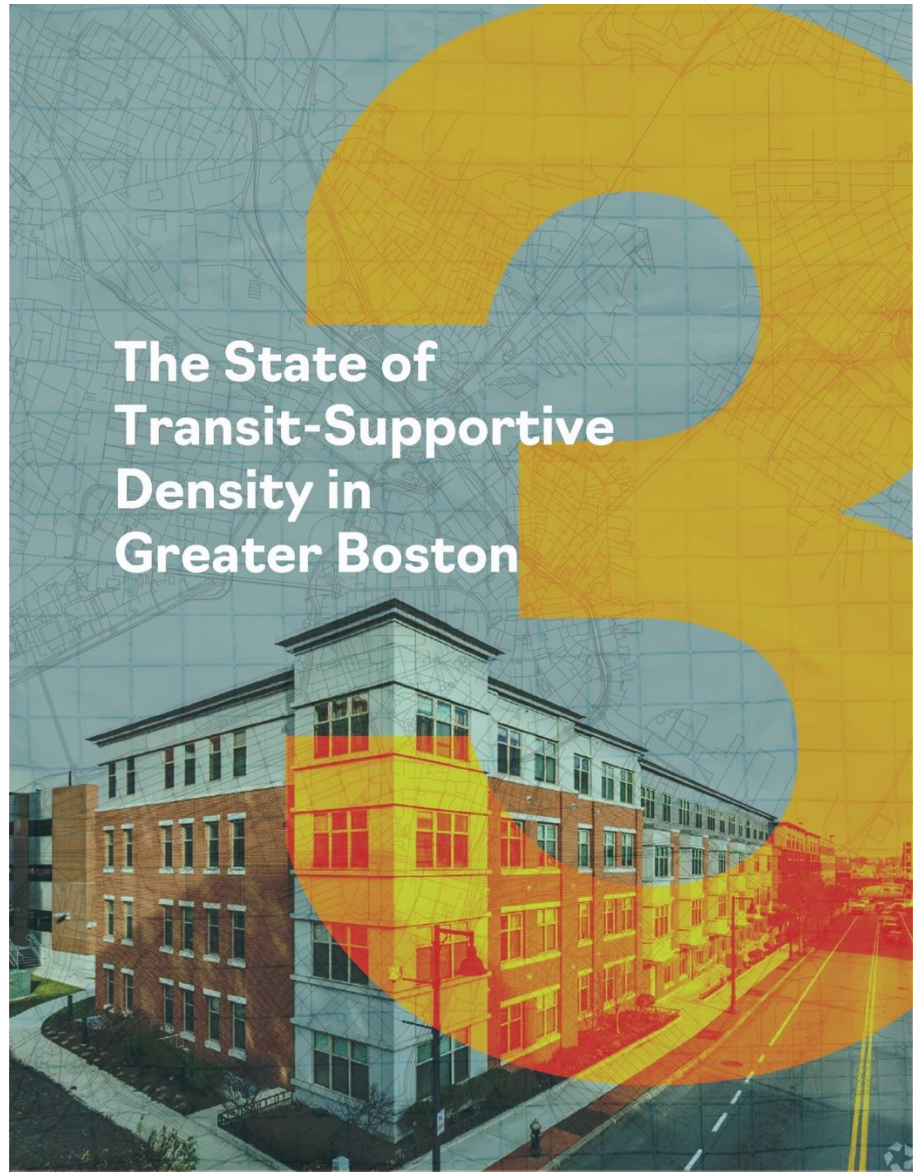
Rough density benchmarks used in the rest of this report

Minimum density levels identified by researchers and transit agencies for supporting high-functioning transit.

Metric	Moderate-Frequency Service	High-Frequency Service
People per acre	15	40
Housing units per acre	6	16

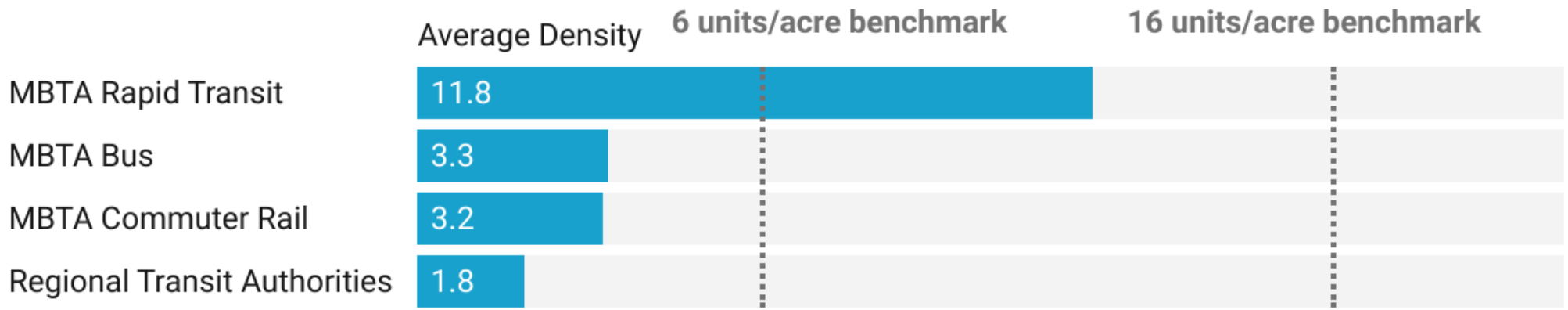
Housing units per acre estimate is established by dividing people per acre by 2.5, the average household size in Greater Boston.

Table: Boston Indicators / TransitMatters • Created with Datawrapper


The State of
Transit-Supportive
Density in
Greater Boston

Density levels are low along Commuter Rail and bus lines, but rapid transit station areas also have room to grow.

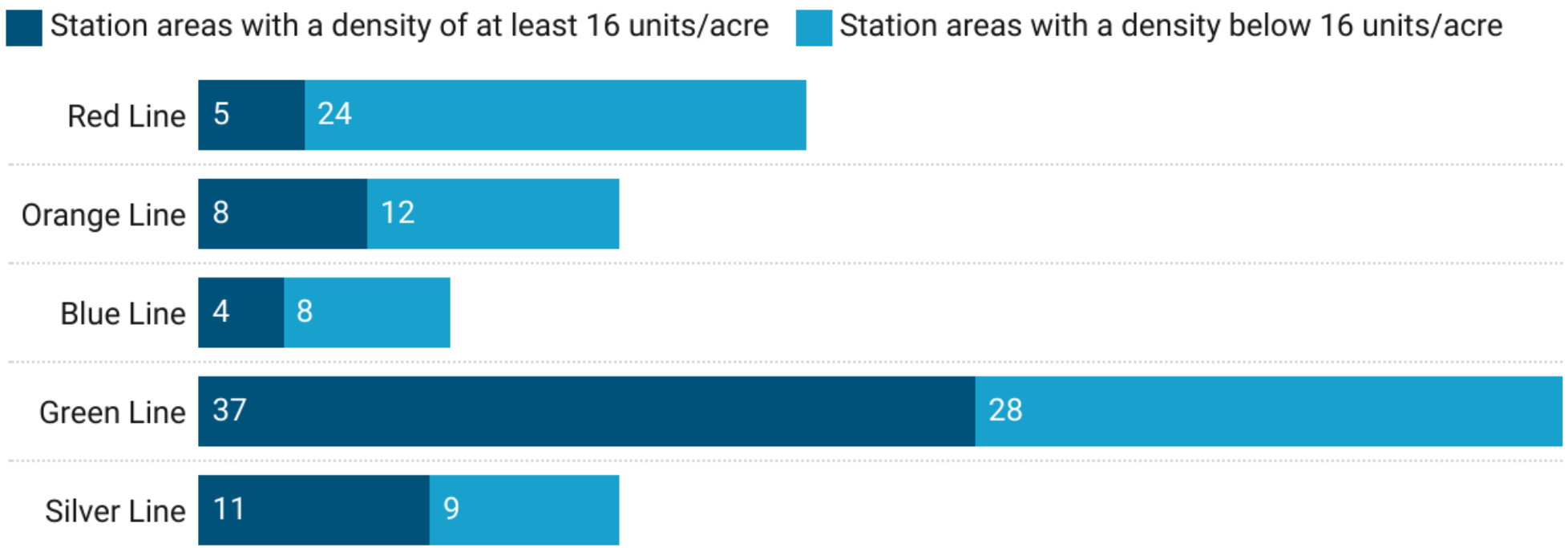
Average density by type of transit service. Housing units per acre.



Note: Considers all parcels within a half-mile of a type of service. When a parcel is close to two types of service, they are assigned to one according to the following hierarchy: Rapid Transit supersedes Commuter Rail, Commuter Rail supersedes either type of bus. 6 units/acre is the minimum density required to justify a moderate level of service, while 16 units/acre is the minimum density required to justify a frequent level of transit service.

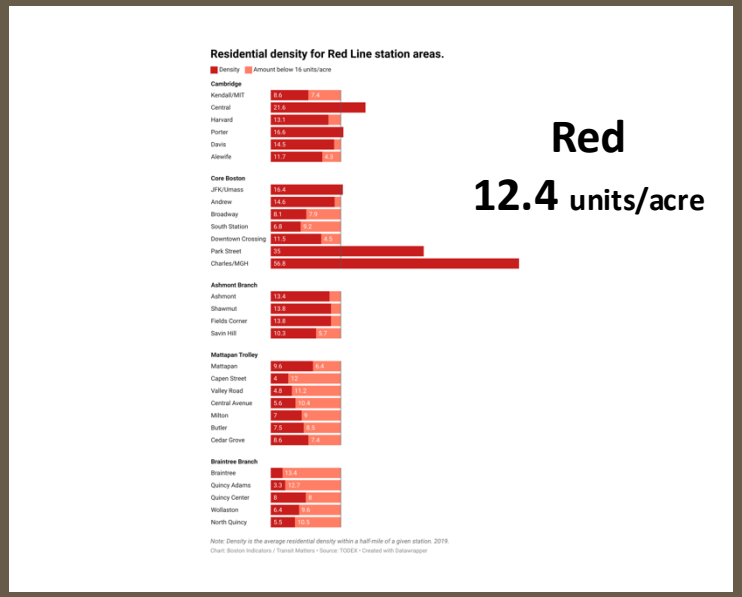
Chart: Boston Indicators / Transit Matters • Source: Analysis of Residensity • Created with Datawrapper

Over half of all station areas along the rapid transit network have a residential density below 16 units per acre.

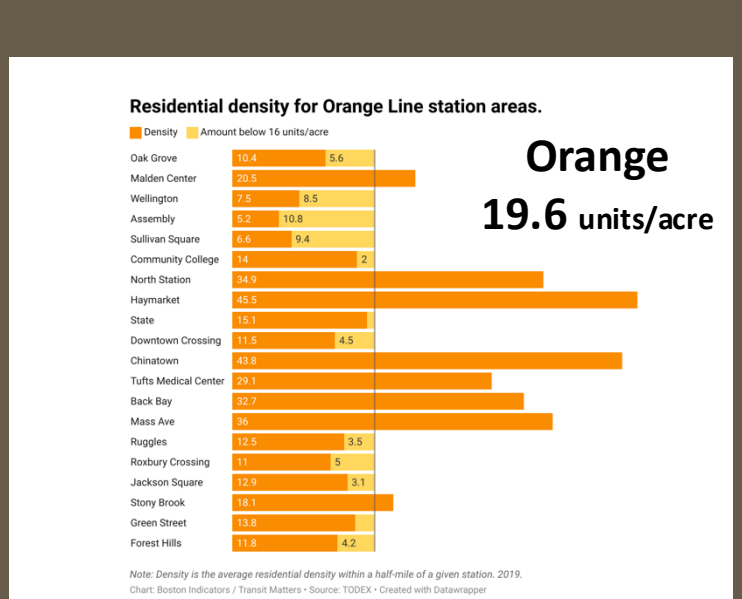


Note: Station area denotes a half-mile buffer around a given station area. Red Line includes Mattapan Trolley. Green Line does not include Green Line Extension into Somerville.

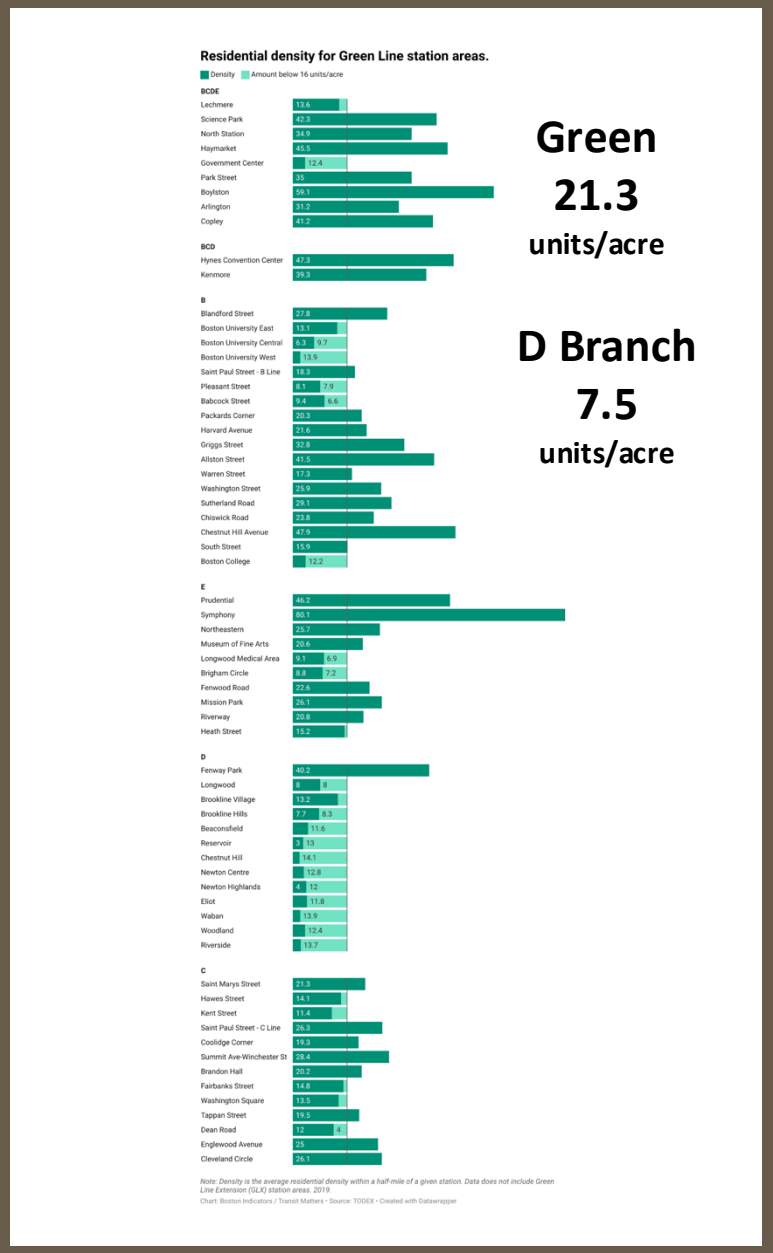
Chart: Boston Indicators / Transit Matters • Source: TODEX • Created with Datawrapper



Red
12.4 units/acre

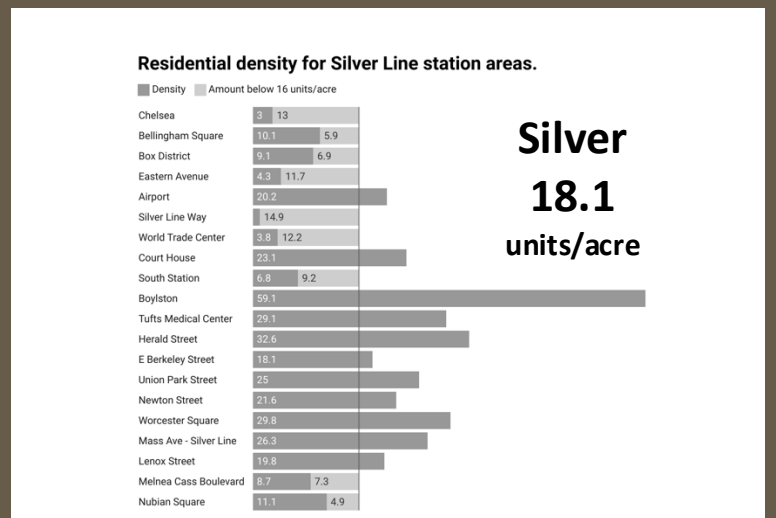


Orange
19.6 units/acre

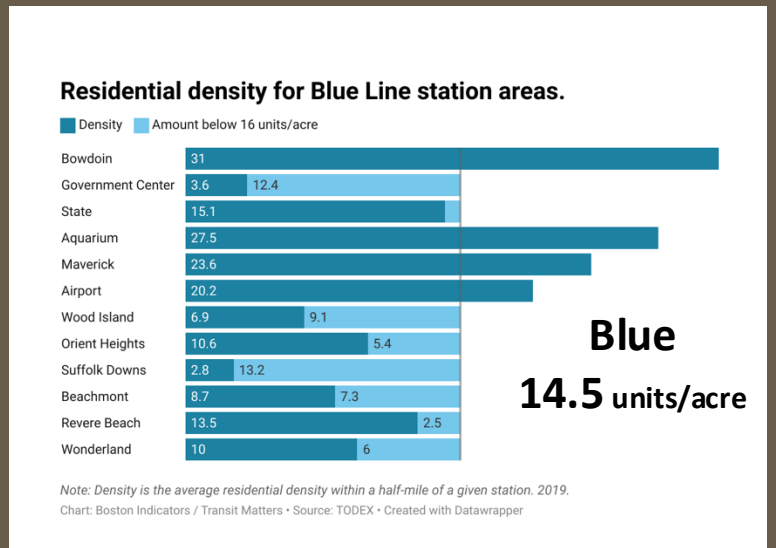


Green
21.3
units/acre

D Branch
7.5
units/acre



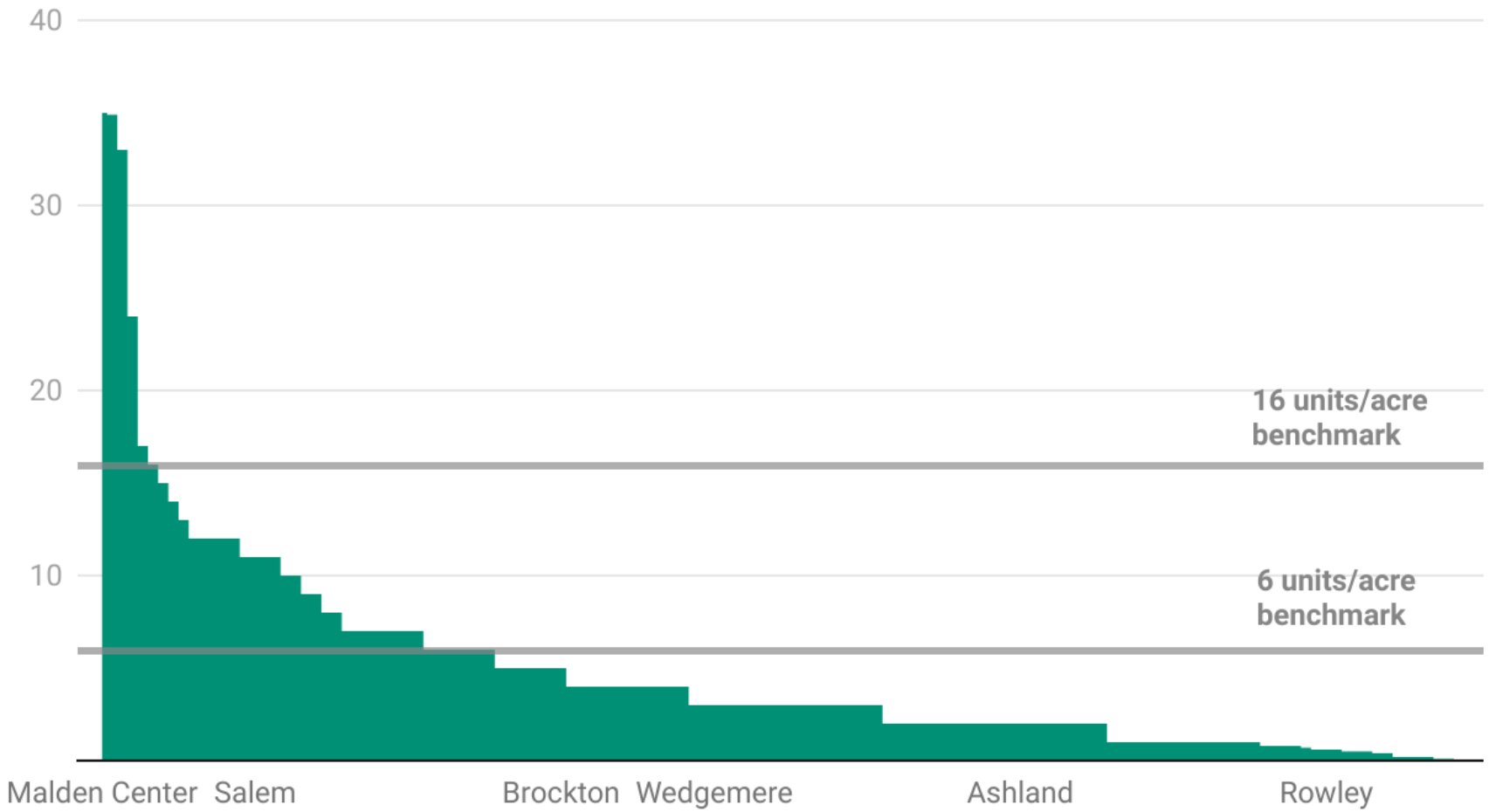
Silver
18.1
units/acre



Blue
14.5 units/acre

Residential density for Commuter Rail station areas.

In housing units per acre. 2019.

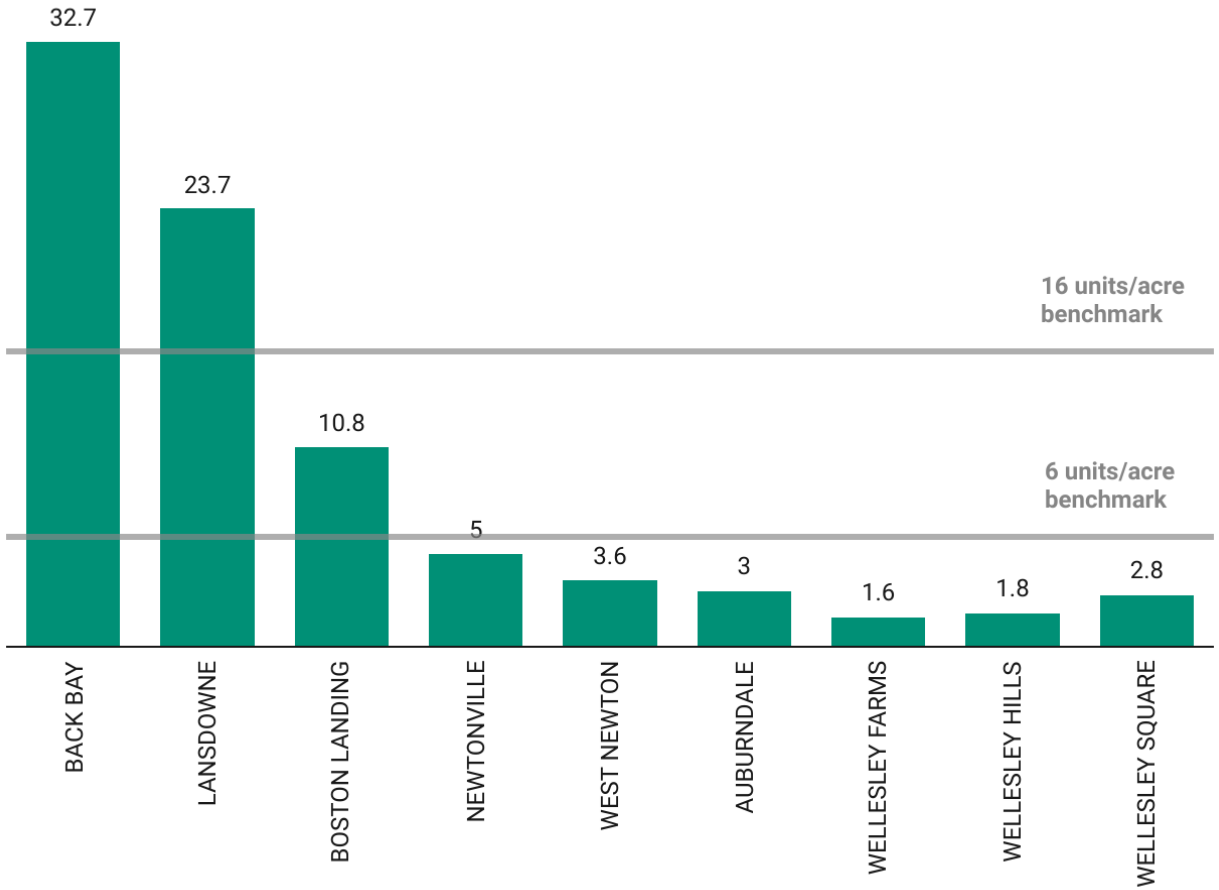


Note: Station area denotes a half-mile buffer around a given station area.

Chart: Boston Indicators / TransitMatters • Source: TODEX • Created with Datawrapper

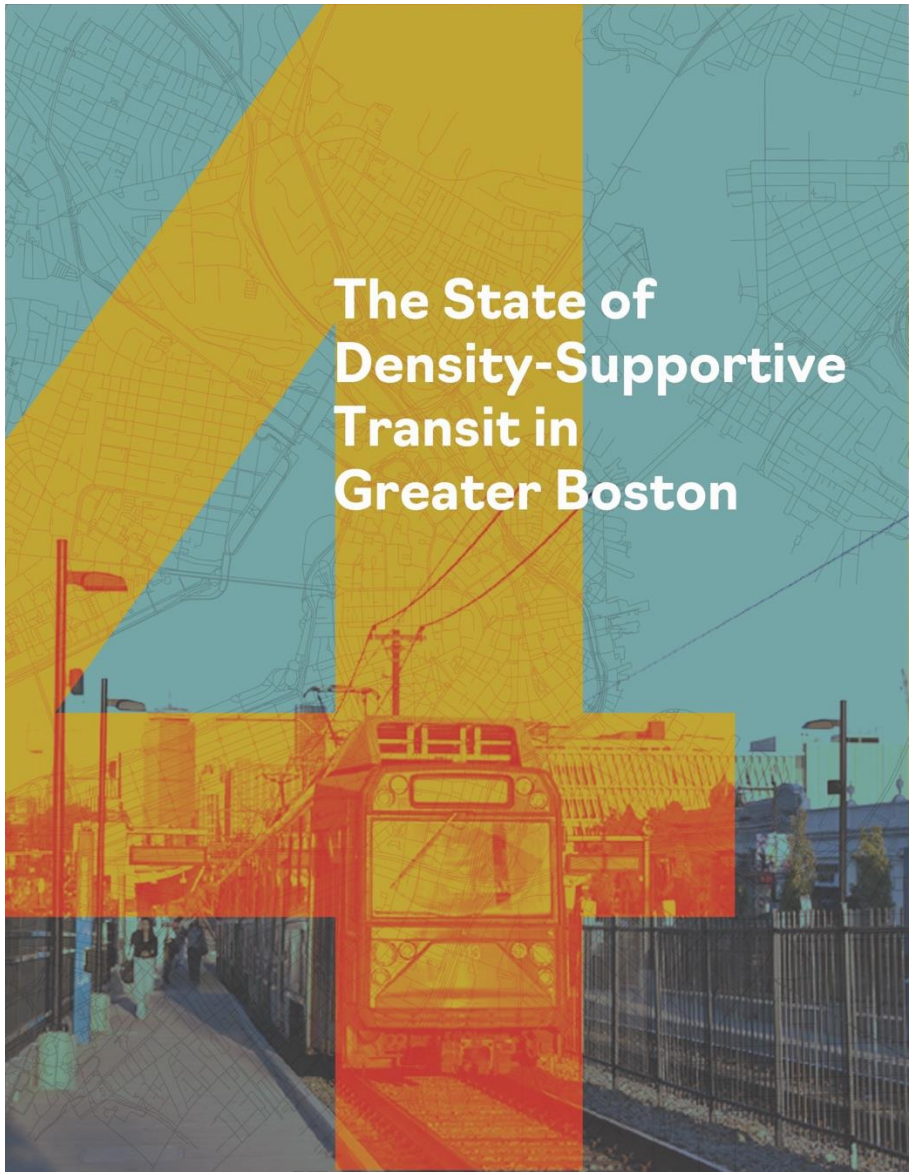
Outside of Boston, densities along the Worcester line immediately dip below six units per acre.

Residential density by station area. 2019.



Note: Density along the Worcester Line for stations within 30 minutes of South Station. Units per acre within a half-mile of the respective station area.

Chart: Boston Indicators / Transit Matters • Source: TODEX • Created with Datawrapper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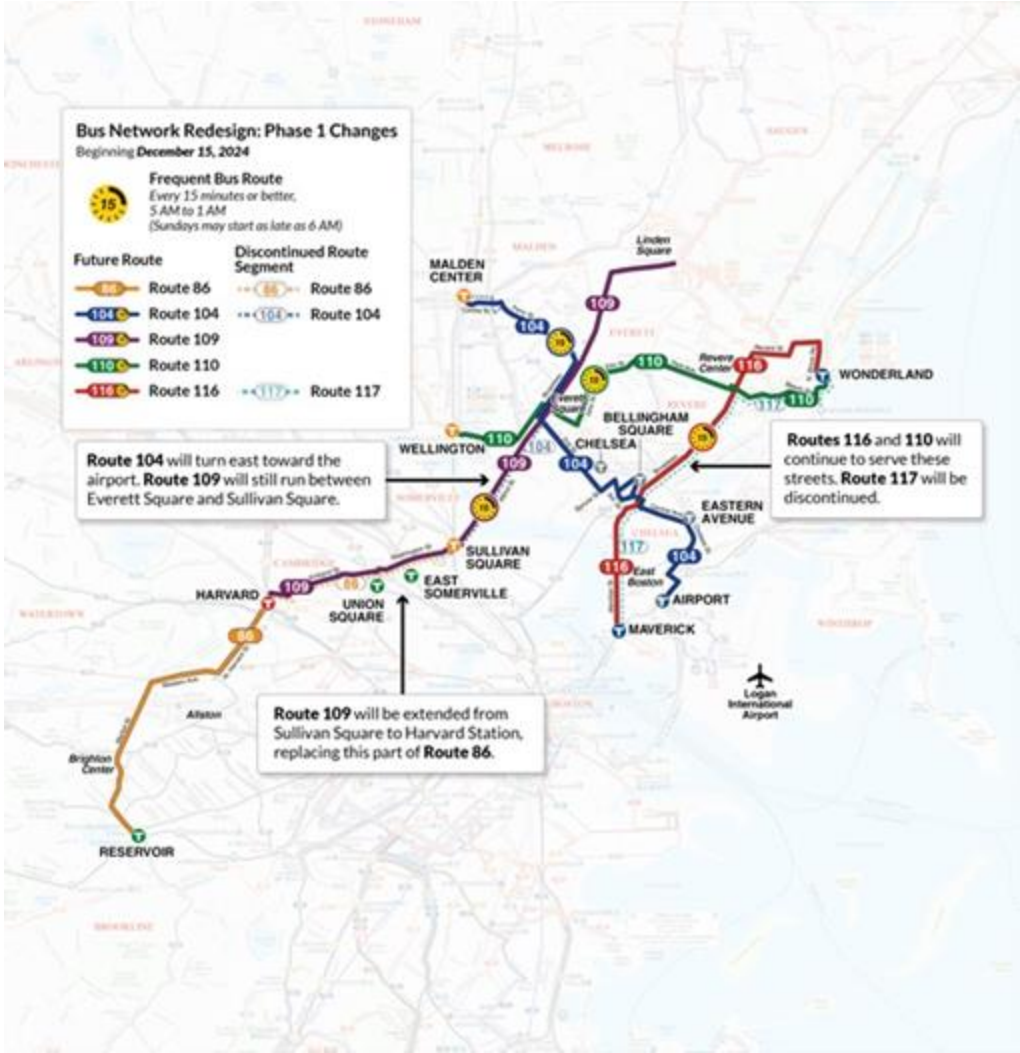
15 Min Frequencies Unlock Transportation Choice



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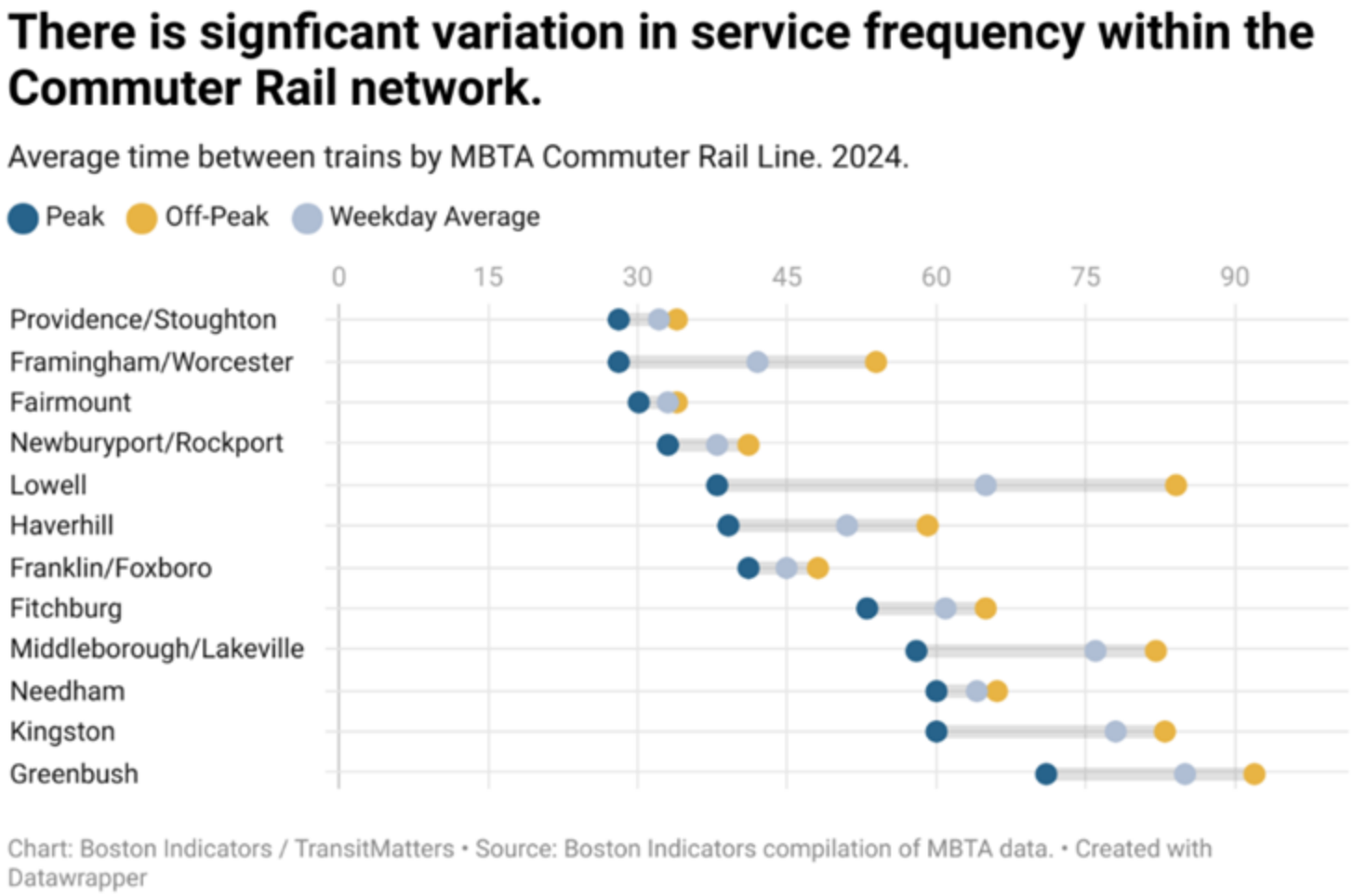
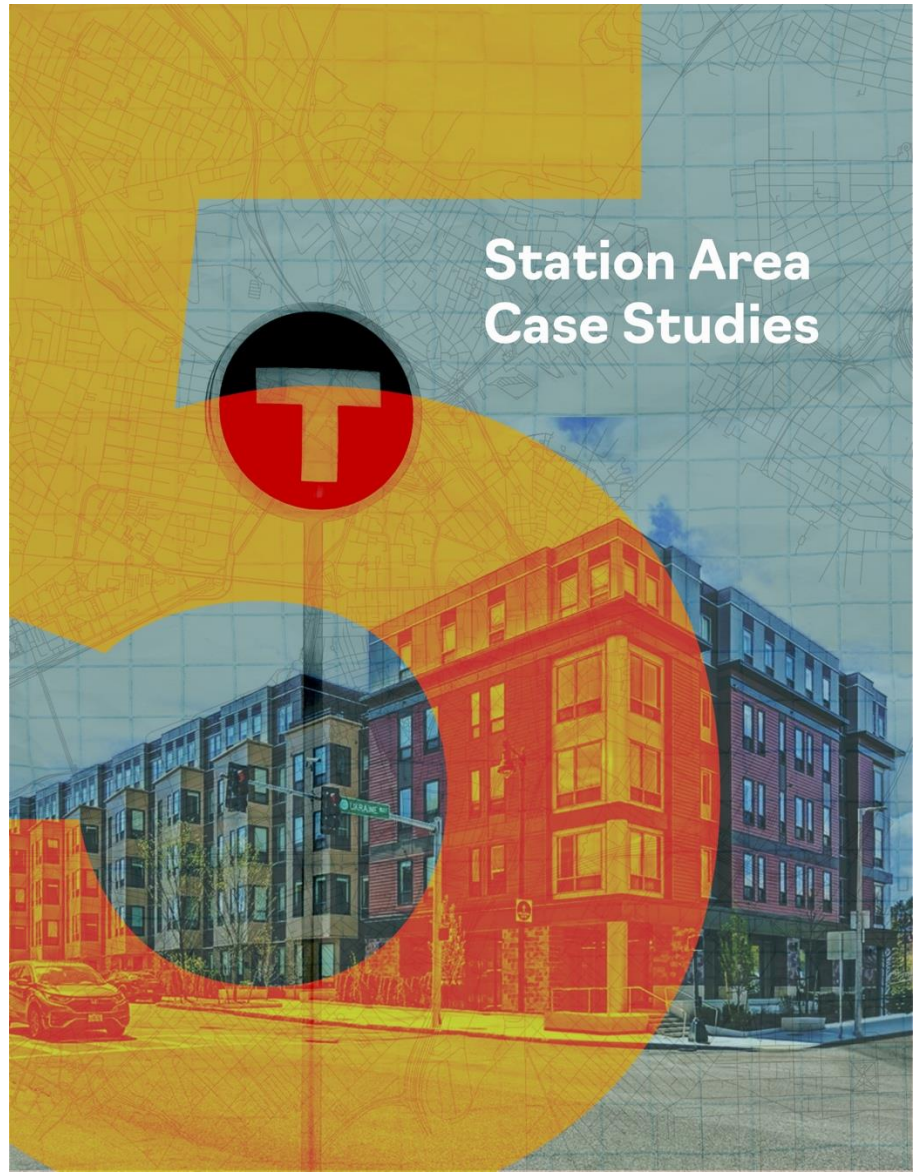


Station Area Case Studies



Urban Area with Rich Transit, but Low Density

Forest Hills

Trains

Franklin/Foxb... Needham Line

Providence/St...

Subway services

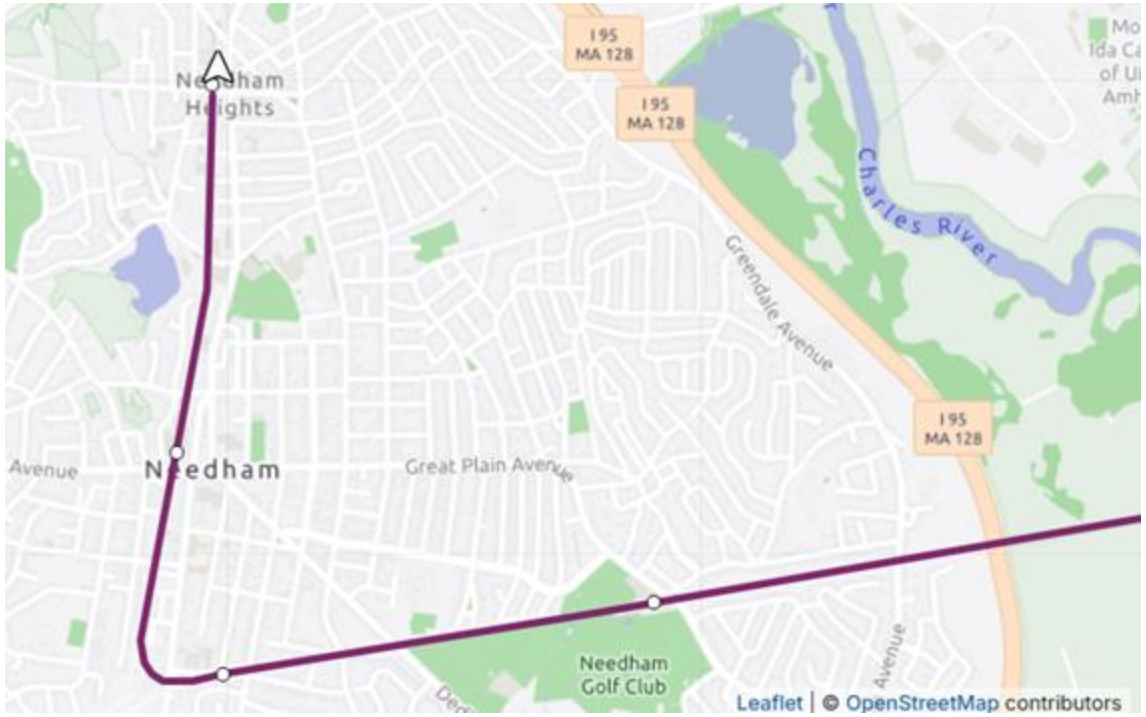
Orange Line

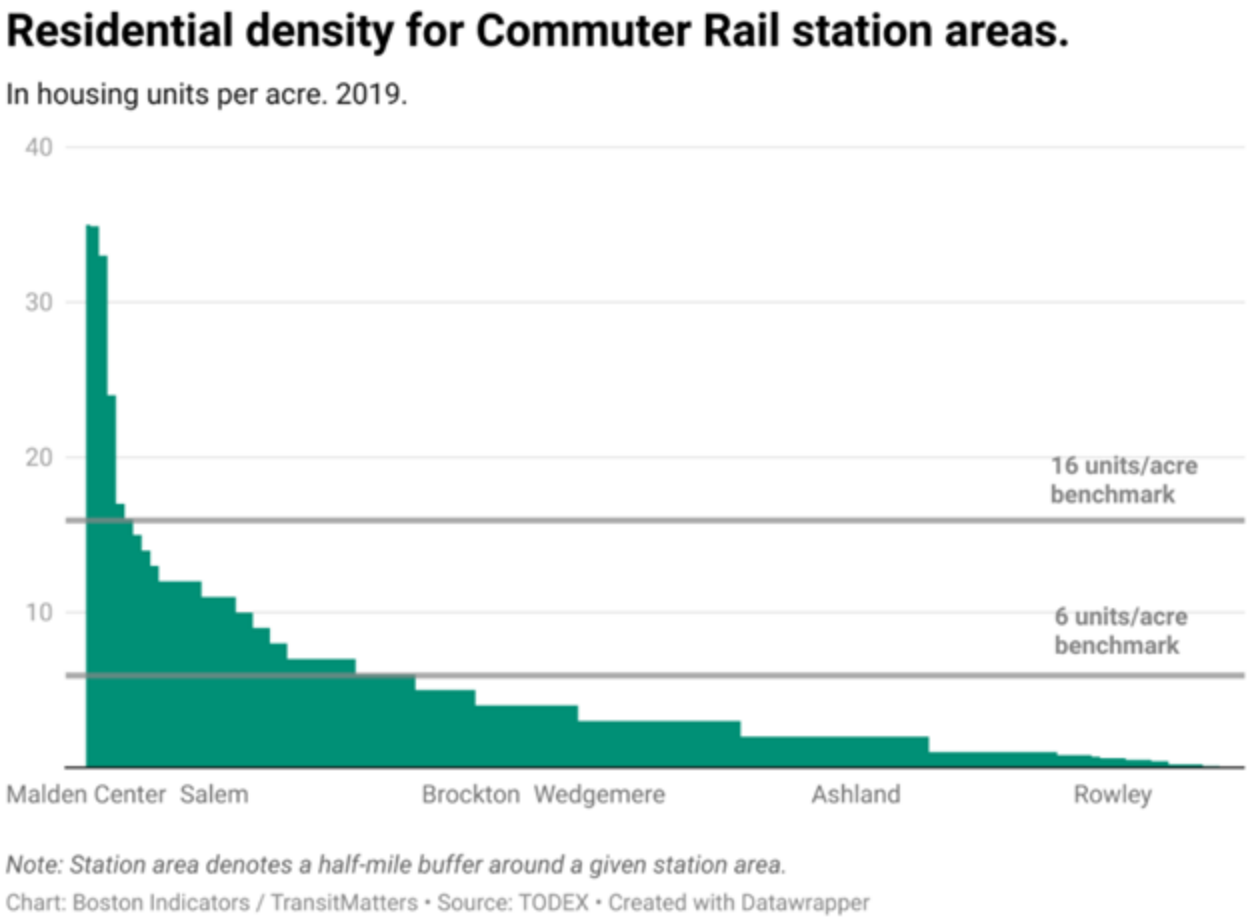
Buses

16	21	30
31	32	32/33
34	34E	35
36	37	38
39	40	40/50
42	50	51

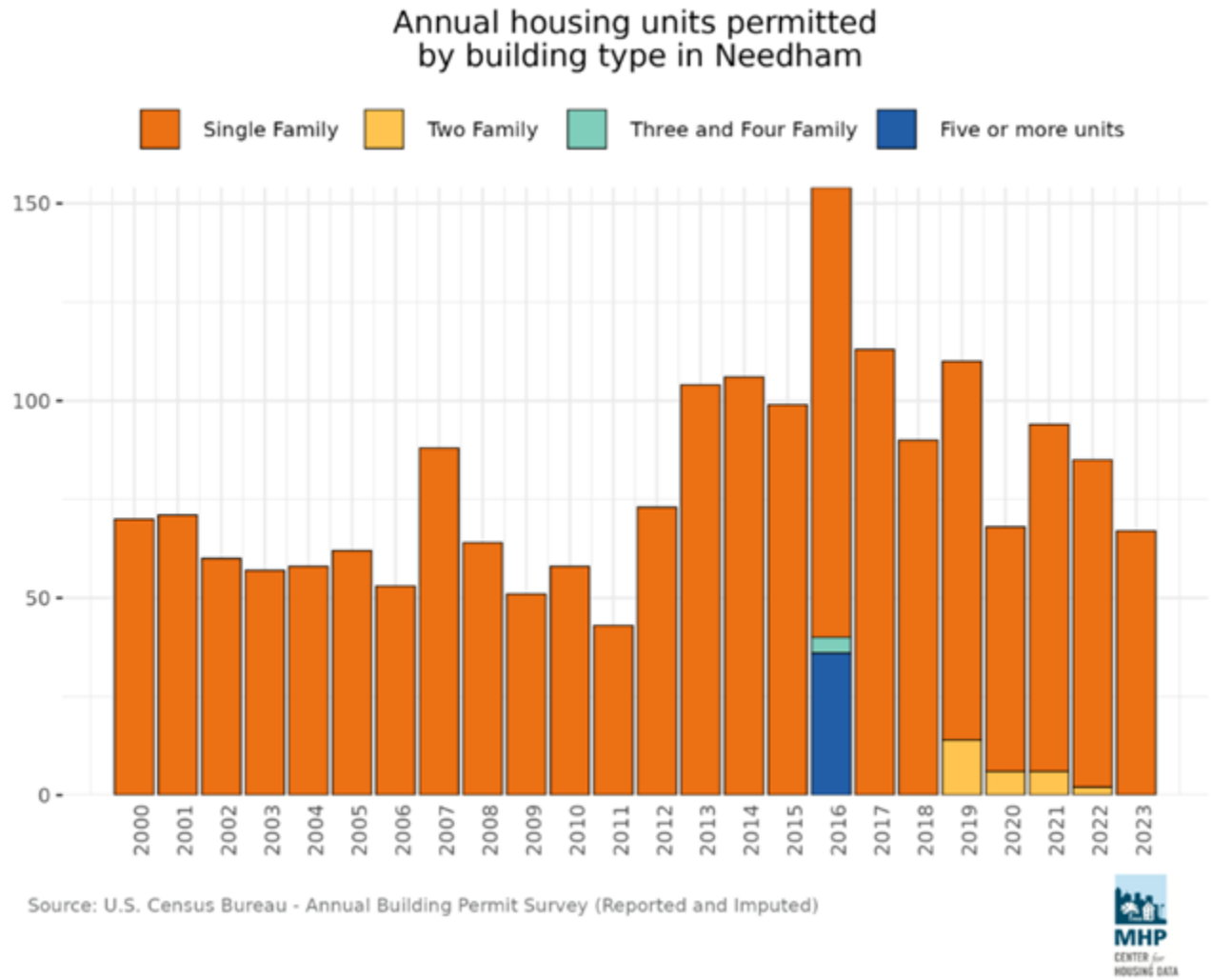
Suburban Area with Rich Transit, but Low Density

Needham





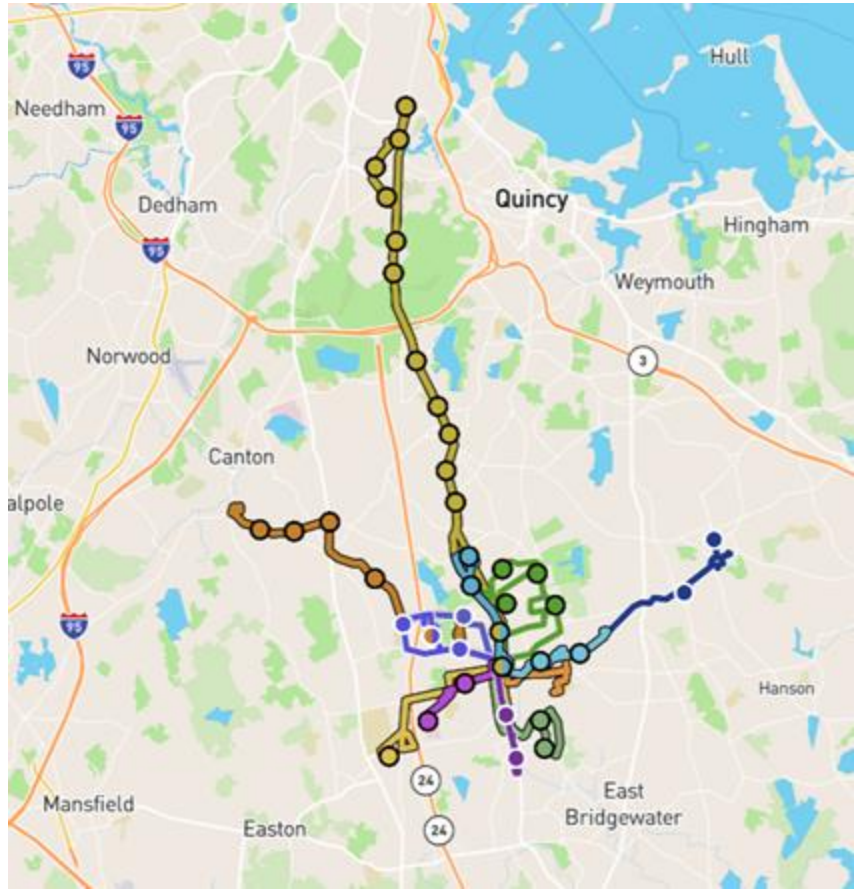
Suburban Area with Rich Transit, but Low Density



Regional Urban Areas with Decent Transit, but Low Housing Demand

Brockton

There is an abundance of underutilized land around Brockton's Commuter Rail stations. Photo: Transit Matters



Chelsea Allinger

Executive Director

Greater Greater Washington

The Boston Foundation

GREATER GREATER WASHINGTON

Transit-Supportive Density in Greater Boston: A Response from Greater (Greater) Washington

Chelsea A. Allinger
Executive Director

January 30, 2025

The Washington, DC region is great >> and it can be greater.

About Greater Greater Washington

- Working toward a region where housing is abundant and affordable and where it's safe and easy to walk, bike, roll, or take transit to get around
- Our focus is land use, housing, and transportation policy reform in the Greater Washington region
- We advocate, educate, and engage decision-makers and residents to push for change
- Founded back in 2008, most know us for our blog:

How single-stair apartment reforms could advance across the region this year

ARCHITECTURE ANALYSIS By Julian Frost January 22, 2025

Bikeshare Beat: Capital Bikeshare records over 6.1 million rides in 2024, fastest growing system in US

ANALYSIS By Samuel Littauer (Contributor) January 29, 2025

WMATA's return to automatic trains is a big deal. Here's what it means

TRANSIT ANALYSIS By Adam Bressler (Guest Contributor) December 11, 2024

Montgomery County voters want zoning changes for more homes

POLITICS GGWASH POLICY By Dan Reed (Regional Policy Director) October 21, 2024

Transit-supportive density makes sense
…and voters want to see more of it

Public opinion polling

- We've polled at state and county levels in Maryland, with plans for more.
- **Why polling?** Demographically representative data on voter preferences
- **Findings:** Overall, voters are very supportive of policies to enable increased housing production, including increased housing options in neighborhoods zoned for single-family only
- These findings are consistent with a growing body of polls conducted elsewhere in the country

Montgomery County voter preferences

Poll of 505 likely Democratic primary voters in Montgomery County, Maryland, in September/October 2024

Poll was conducted via text and included reference photos of housing types.

Findings:

A majority of voters support:

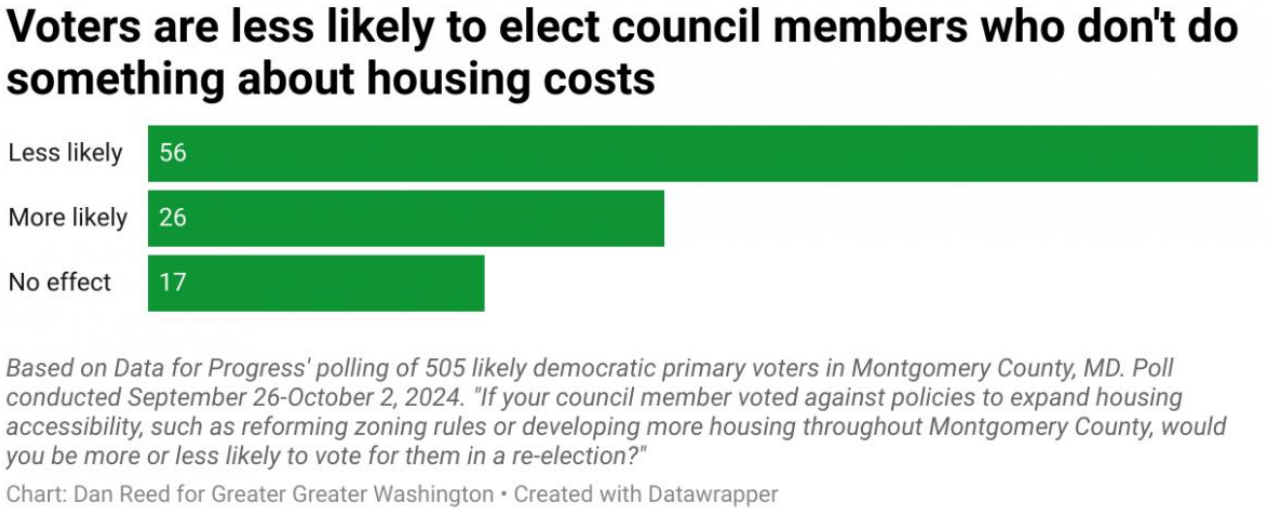
- Allowing townhomes and small apartment buildings near major roads (61%)
- Allowing fourplexes within one mile of rail transit stations (61%)
- Allowing duplexes and triplexes in single-family zones across the county (55%)

Fall 2024 Montgomery County poll

Findings, continued:

Across age, race, education, gender, and income, majority support for loosening single-family zoning to increase housing production.

Just 37% of voters have ever reached out to their county councilmember about *any* issue – but housing concerns factor into their decisions at the ballot box.



Washington region case studies are “proof of concept” – and reveal additional needs

Reflection on case studies

Arlington: Held up as a national example for good reason! At the same time, bull's eye approach constrained supply and choice – even within walking distance of transit – leading to recent push for county-wide Missing Middle reforms.

NoMa: NoMa and Navy Yard neighborhoods in DC led the US in new apartment construction from 2017-2022. Among other benefits, they stand out for economic resilience during the pandemic.

Need: We've been bullish on housing and even so, Washington region needs to add 320,000 housing units from 2020-2030 – 75,000 more than forecast (COG). This exacerbates high housing costs.

The need is great *and* the demand exists: This is the moment for change.

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Thank you for attending

Transit-Supportive Density in Greater Boston