

# DATA TOOLS FOR PLANNERS

MHP Center for Housing Data  
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Tom Hopper  
Matija Jankovic

Director of Research & Analytics  
Senior Research Analyst



 **RESiDENSITY**

**TODEX**  **MA**  
Transit-Oriented Development Explorer

**dataTOWN**  
COMMUNITY INFO • ONE PLACE

  
**MHP**  
CENTER for  
HOUSING DATA



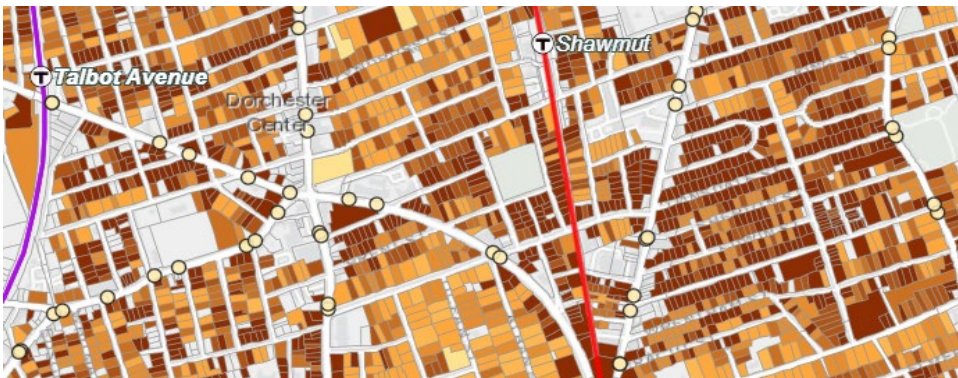
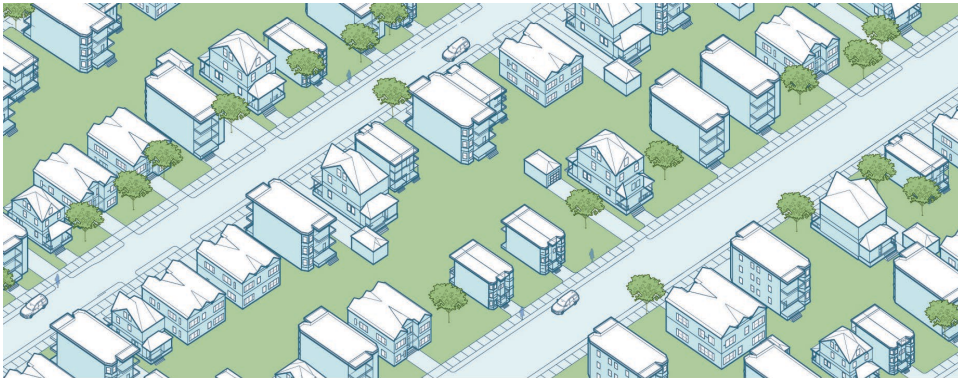
# Municipal staffers are in a tough, but critical position relative to Section 3A



- Huge regional needs, strong local control
- Solutions to regional needs are often at odds with local perceptions and/or political will
- Finding a way to satisfy local needs and concerns while also meeting regional needs and state expectations is a tough needle to thread.
- Section 3A sets a clear expectation that housing production in transit-accessible locations is important to alleviating the symptoms from our regional housing crisis.
- Planners need support, resources, and access to quality information to chart a course for the future, engage meaningfully with community members, and meet state expectations in an efficient way.



# MHP Center for Housing Data: community data goals




- Conduct research and create tools that lead to better conversations around housing, and ultimately lead to better housing outcomes for Massachusetts residents.
- Work with our community assistance teammates to learn from local experience and use this to drive better research in the future.
- Promote greater data literacy and empower more people to access and use data when discussing housing and other policy topics.

# Today's presentation

- Overview of three MHP web-based resources to help you plan for Section 3A
- Interactive site demonstrations
- Q&A and discussion of local data needs





COMMUNITY INFO • ONE PLACE

Choose your community

Worcester ▾

Home

- Population <
- Housing stock <
- Jobs and Labor Force <
- Other Topics <


# DataTown

community info • one place

## Welcome to DataTown, Massachusetts


A place to explore and learn about your  
community

There is a lot of great information out there, but have you  
ever tried to collect data about your city or town, only to find  
that you need to go to multiple sites and navigate a  
multitude of data types that don't quite make sense for  
Massachusetts? Even if you can find the data you need, do  
you find yourself spending too much time organizing and  
visualizing that data?




WHAT'S NEW?  
WE ARE LIVE! THANKS FOR VISITING!

- > Fixed error on Race graphic downloads - Thanks Sarah B. for the feedback!
- > Download communities by Age Typology - Thanks Katie B. for the feedback!
- > Improved mobile performance - Thanks Janelle C. for the feedback!



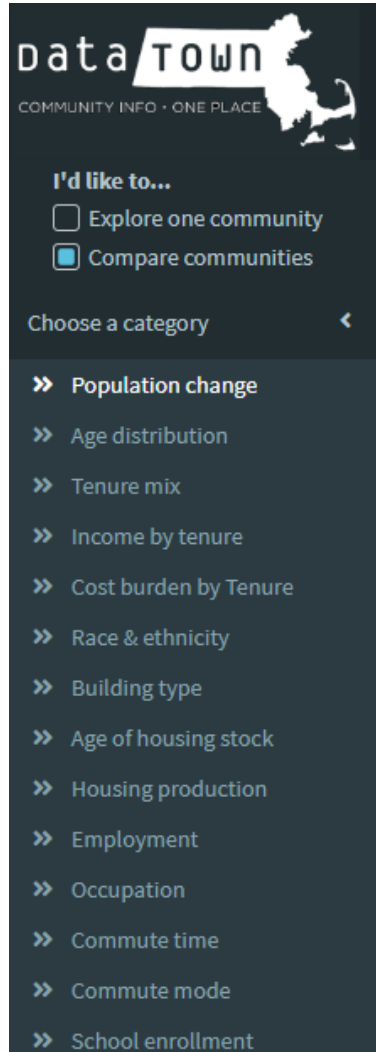
UPCOMING DATA SETS AND FUNCTIONS:

- > 2010 Decennial Census comparison options
- > Bureau of Labor Statistics
- > County-level comparisons
- > Return to top of page on tab click
- > Additional improvements for mobile users



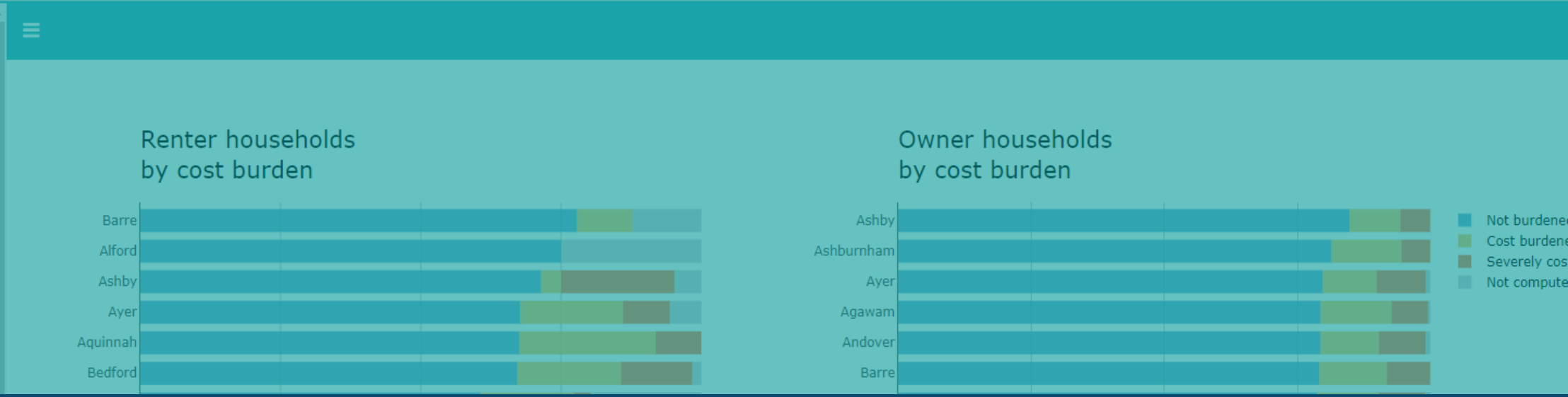
QUESTIONS? COMMENTS?  
CONTACT US!  
TELL US WHAT YOU'D LIKE TO SEE ON THE SITE NEXT!

# DataTown features

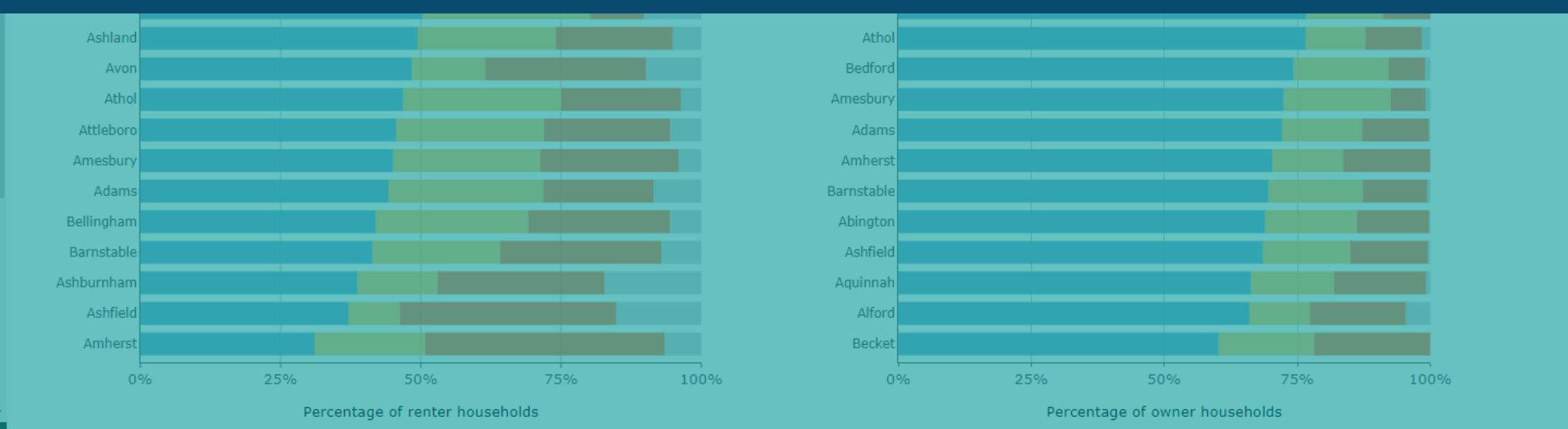


- Municipal level data from common publicly-available data sources, including the U.S. Census Bureau, MA Division of Local Services, MA Dept of Education, and others (with more content added routinely).
- Cleaned, downloadable data sets at the push of a button for any of the 351 cities and towns in Massachusetts.
- Charts and graphs are generated automatically and include statistical error bars. All visualizations are available for download at the click of a button for inclusion in presentations, reports, and other materials.
- Ability to compare multiple communities on most metrics.
- Coaching text and data source explainers to assist with interpretation.



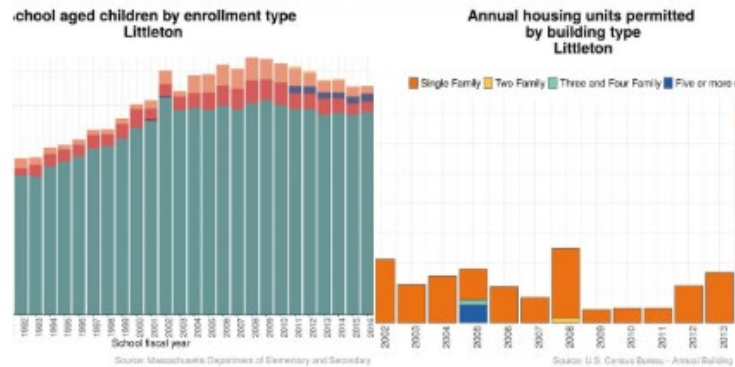


# DataTown site demo

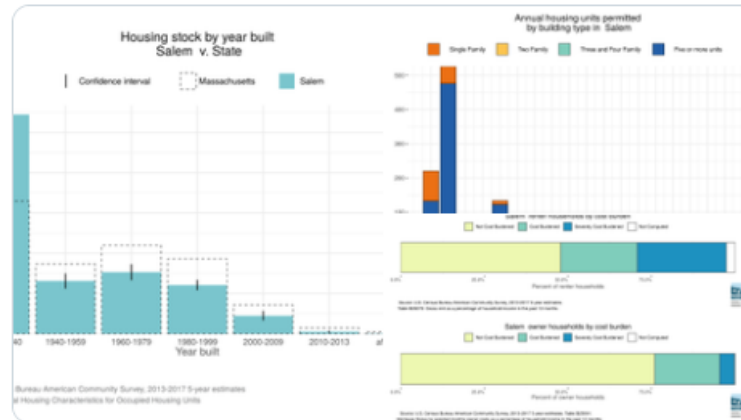


# Using DataTown in your community

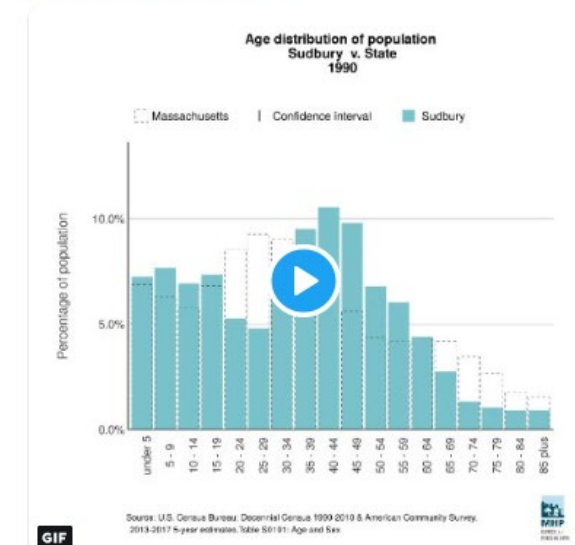
Found some interesting data in response to concerns about the impact residential growth has on our schools @TownofLittleton thanks to #DataTown #mhphousing.



Most @CityofSalemMA housing built before 1950. Not enough new housing built in last decade. 50% of renters+25% of owners struggling w/housing costs. All contributing to need for new housing (market rate+affordable) and why we need to pass @MassGovernor's Housing Choice Bill asap.



2/ In 1990, ~7% of Sudbury's population was 65+. According to the 2017 5 year ACS estimate, number is now estimated to be >15%. Changing demographics = changing housing needs. @bbhousing mhp.net/datatown





TODEX MA  
Transit-Oriented Development Explorer

MapDataResearch BriefMethodology

Contact usOther Projects

Station MapStation Graph

### Welcome to TODEX, a Transit-Oriented Development Explorer for Massachusetts

We believe that good transit policy requires good land use and housing policy, and we've created this site to share our ongoing research on development patterns around transit stations in Greater Boston. Massachusetts Housing Partnership's Center for Housing Data has started this effort by estimating the number and concentration of homes near every rapid transit and commuter rail station in the system. Make sure to check out the "Research Brief" for a policy discussion and to read about our plans for future research. If you're curious about how our analysis is conducted, check out the "Methodology" tab to learn more and even access GIS files to explore or use the data in your own work.

If you're looking to jump right in, start by clicking any station area on the map and a graphic showing the number of homes and residential density for every parcel in the chosen area will appear here. To look at totals and compare across station areas, head to the "Data" tab to sort, filter and download the summary data. As you explore, if you have any questions, notice anything missing, or have suggestions for how we can improve this work, please reach out using the contact button in the navigation bar. Your input improves the quality of the data and the strength of our research, so we would love to hear from you.

Thanks for visiting!

← Click on any station area to start exploring

Download image

Getting started

How are station areas defined?

What is a good housing density?

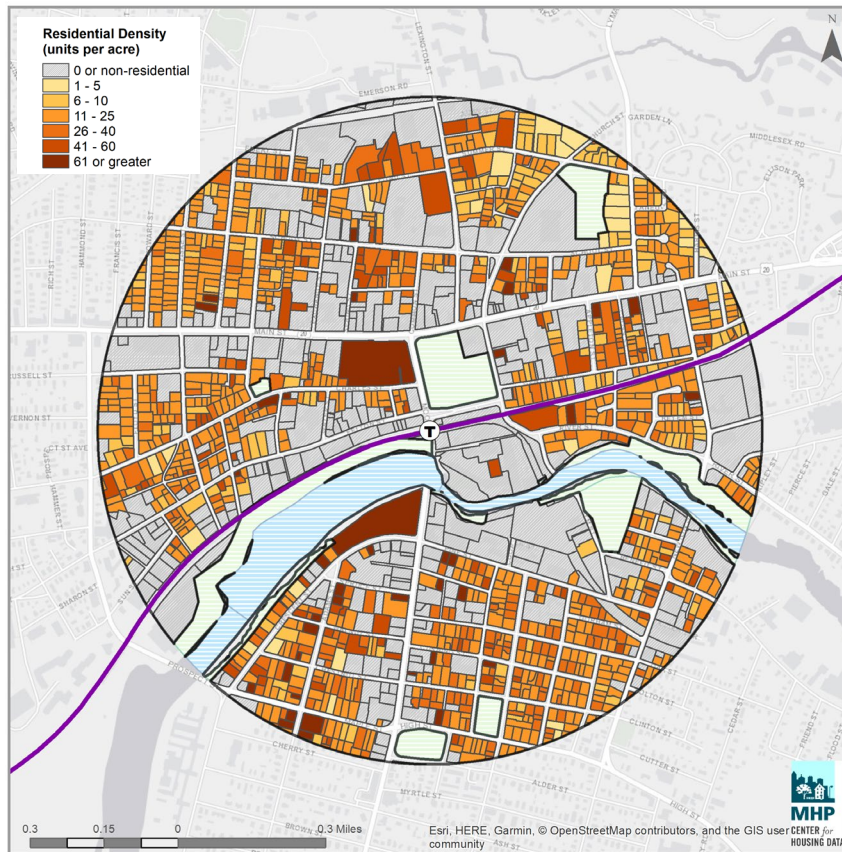
Notice a missing housing development?

Leaflet | Tiles © Esri — Esri, DeLorme, NAVTEQ, TomTom, Intermap, iPC, USGS, FAO, NPS, NRCAN, GeoBase, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

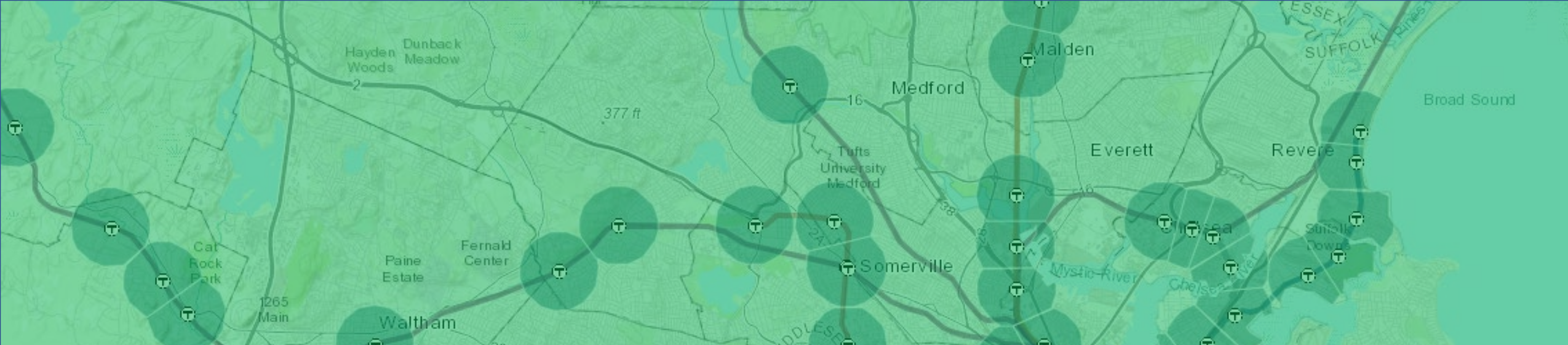


# TODEX features

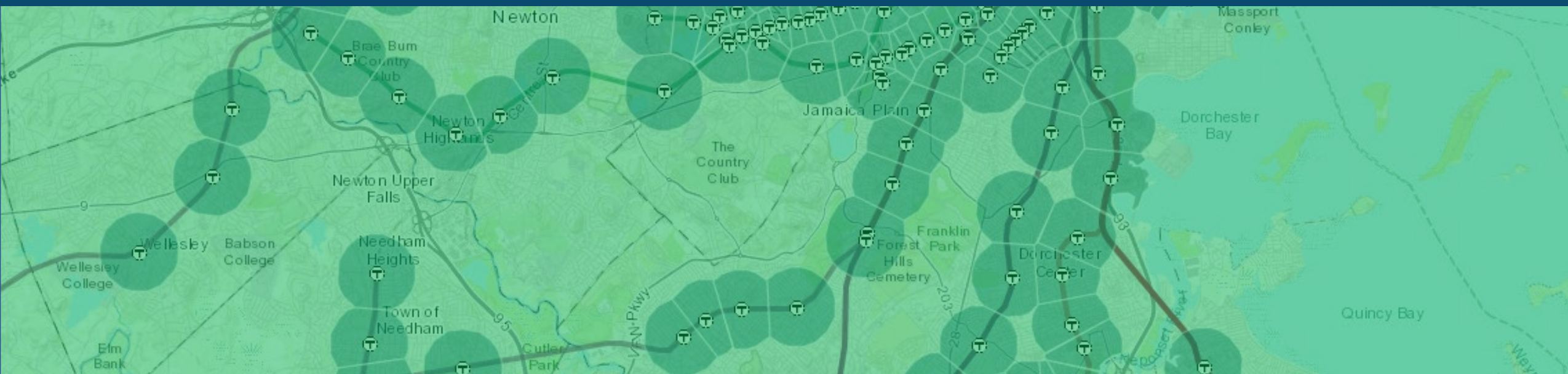
- Map explorer with housing unit counts and residential density estimates for 261 distinct MBTA rail station areas.
- High-resolution map images showing density patterns, downloadable with the click of a button.
- Data table that can be sorted, filtered, and searched to compare residential density across the MBTA rail system.
- Research brief highlighting the value of transit-oriented development and summarizing key findings from our research.
- Detailed methodological walkthrough
- Ability to download the full data set for further research





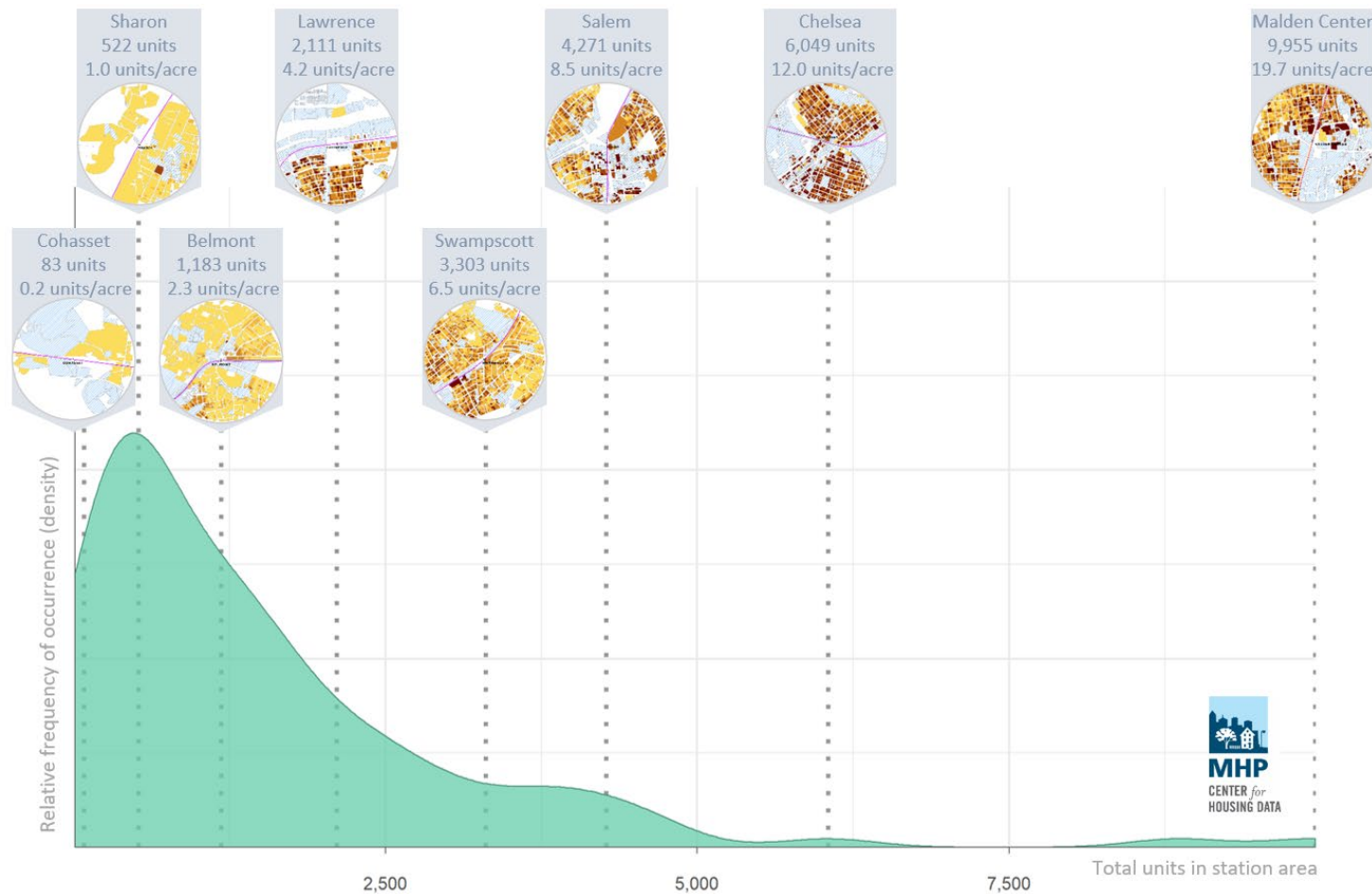


# TODEX site demo





# What is TODEx telling us?



- Low average density near transit: average of 6.6 homes per acre across the system.
- Of the 261 station areas explored in our study, 113 had an average gross density level of less than five units per acre. Most of these station areas are located along the commuter rail.
- An increase in density to an average of 10 homes per acre would result in almost 250,000 more housing units.
- Wide variation in development patterns as a result of inconsistent commitments and expectations around TOD values across municipalities.

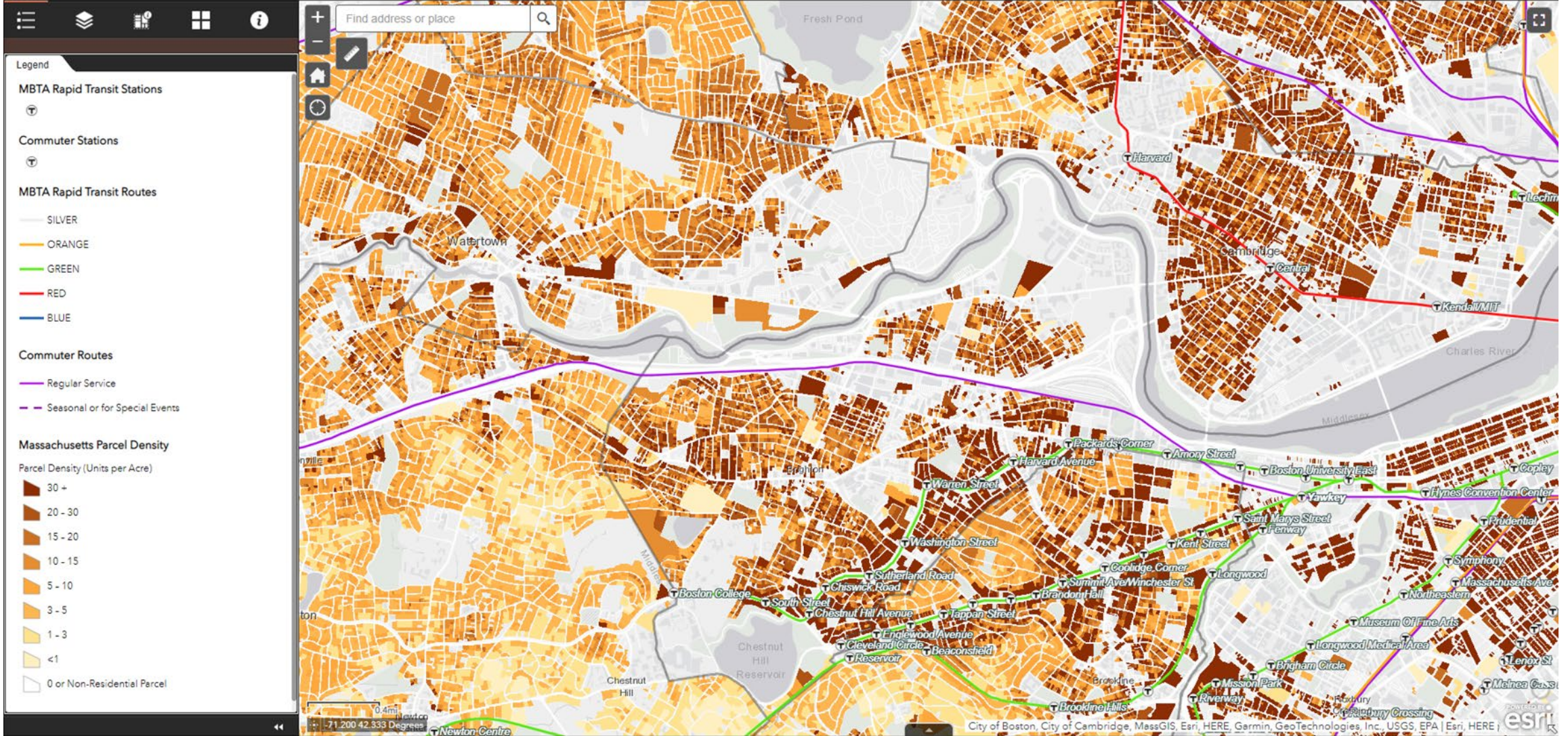


# Residency *Coming Soon!*



**RESIDENSITY**

Created by the Center for Housing Data at MHP





# What does Residency do?

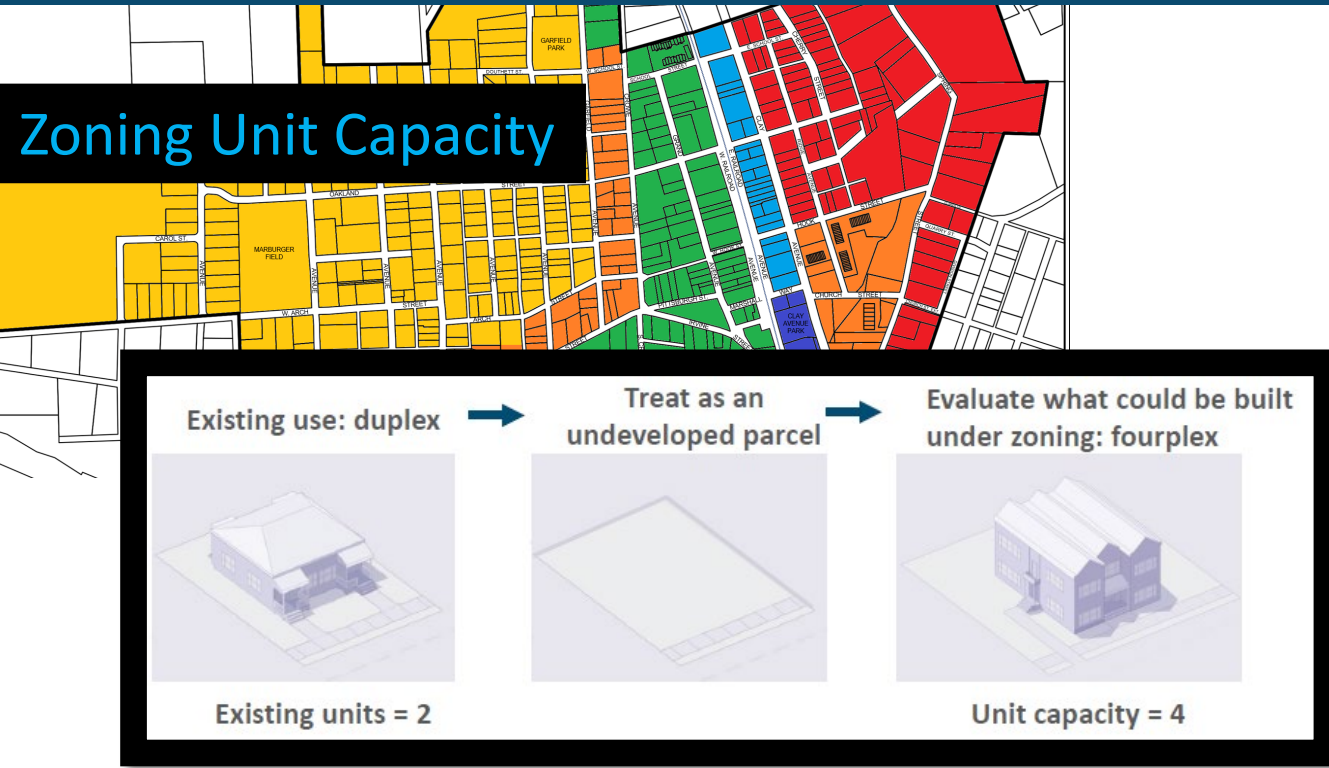


**Total Residential Units:** 2,383 Units  
**District Area:** 137.13 Acres  
**District Density:** 17.38 Units per Acre

- Intuitive & completely free to use online ArcGIS platform developed by CHD
- Deploys a similar methodology to TODEx to estimate housing units and residential density anywhere in Massachusetts
- Has unit estimates, density calculations, and use descriptions for every land parcel in the state
- Allows users to measure density statistics for any user-defined district (e.g. draw a district of any shape and location on the map and it will calculate the density of that district, both polygonal and circular districts)
- Export custom density maps in PDF format, export shapefiles (geospatial data), and tabular data
- Useful tool to assist communities in planning for the new MBTA Zoning Guidelines for Multifamily Districts



# Zoning Unit Capacity vs. Density on the Ground

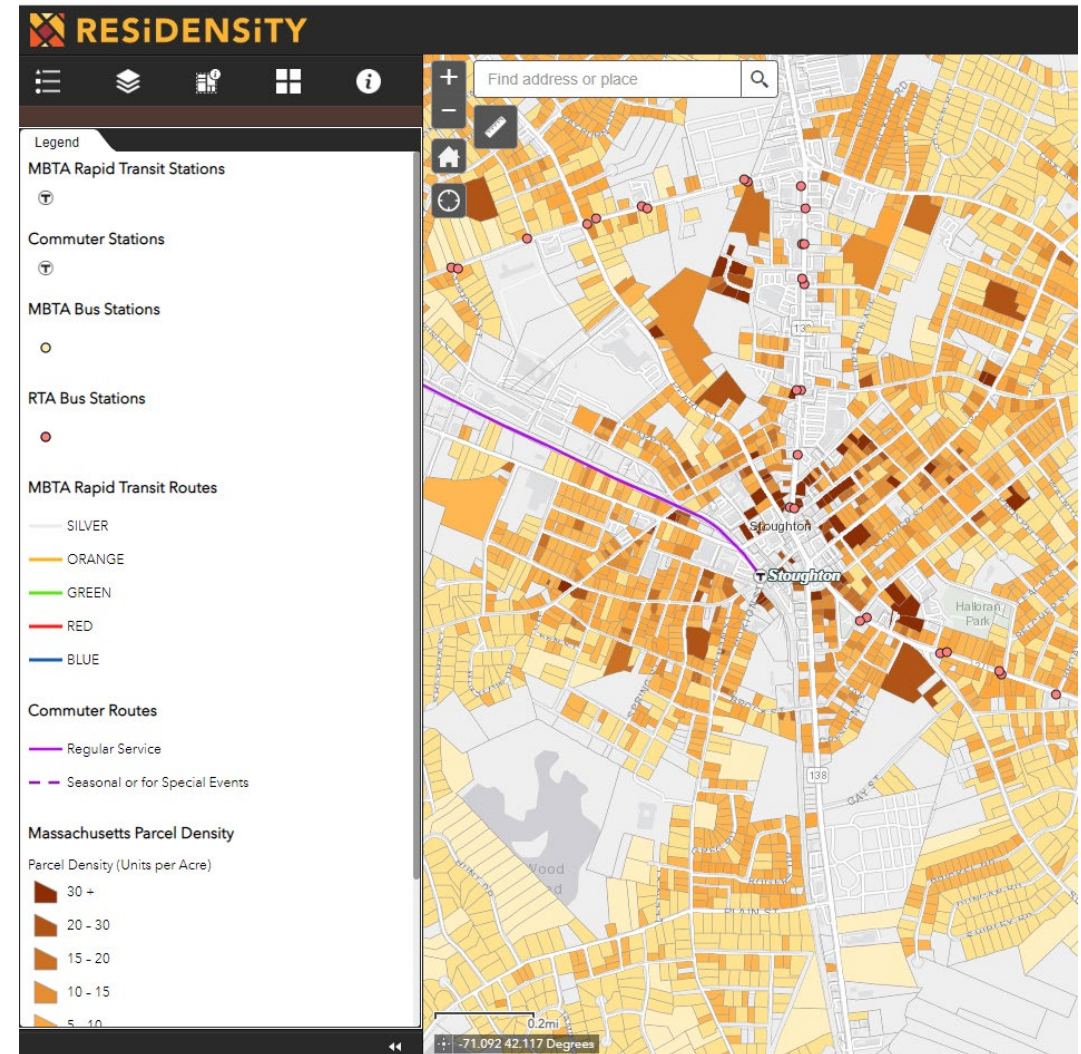


- Important to clarify – **Residency is not a tool for testing compliance with the MBTA Zoning Requirements.**
- The zoning requirements set standards for **zoning capacity**, meaning that compliance is determined by the **unit capacity of zoning districts**, not density on the ground.
- ***Residency measures existing density on the ground, not potential density!***

# How can planners use Residency?



- Taking stock of density in their own communities
- Calculating residential density on the ground in any custom area including existing zoning districts
- Using density maps to inform planning decisions
  - Identifying areas of missed opportunity – for instance, commuter stations or bus corridors that could benefit from greater density
- Presenting to stakeholders – Case making!
  - Where are the areas with higher residential density in your community? What do they look like? Are these places the community enjoys?
- Research and analysis – Downloading the data, making charts, maps, and more

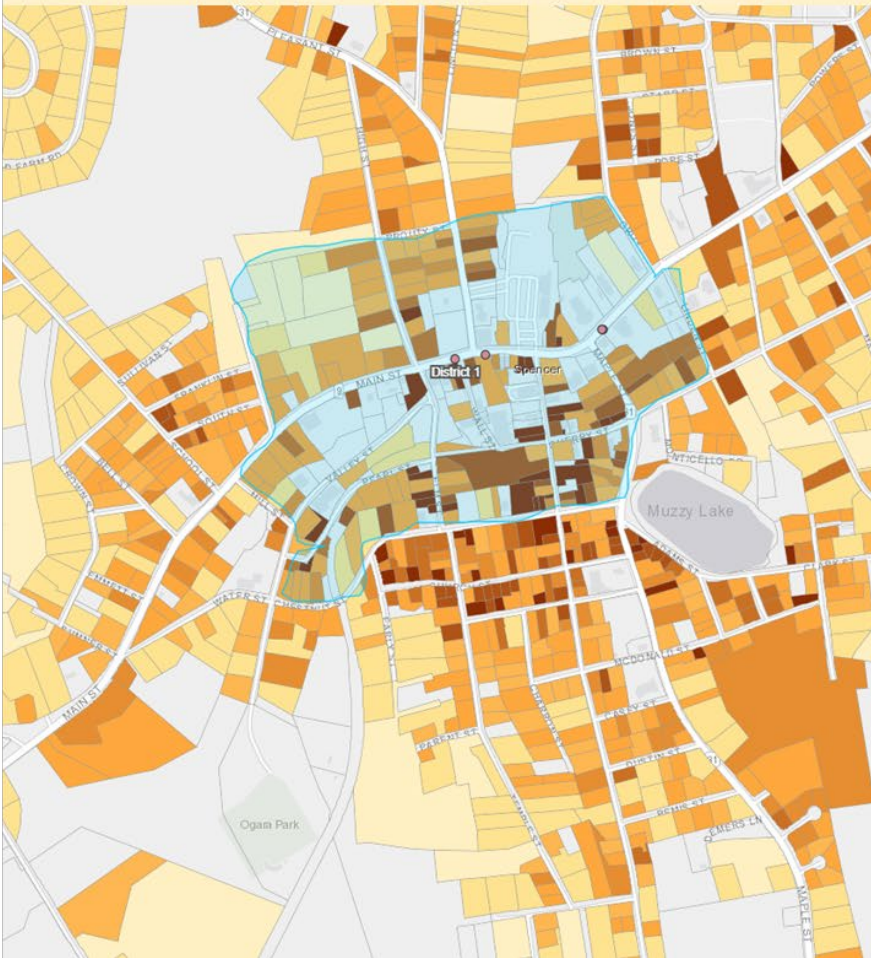




# Sample Analyses & Use Cases for Planners



## Spencer town center custom district analysis



**Total Residential Units:** 565 Units  
**District Area:** 122 Acres  
**District Density:** 4.6 Units per Acre

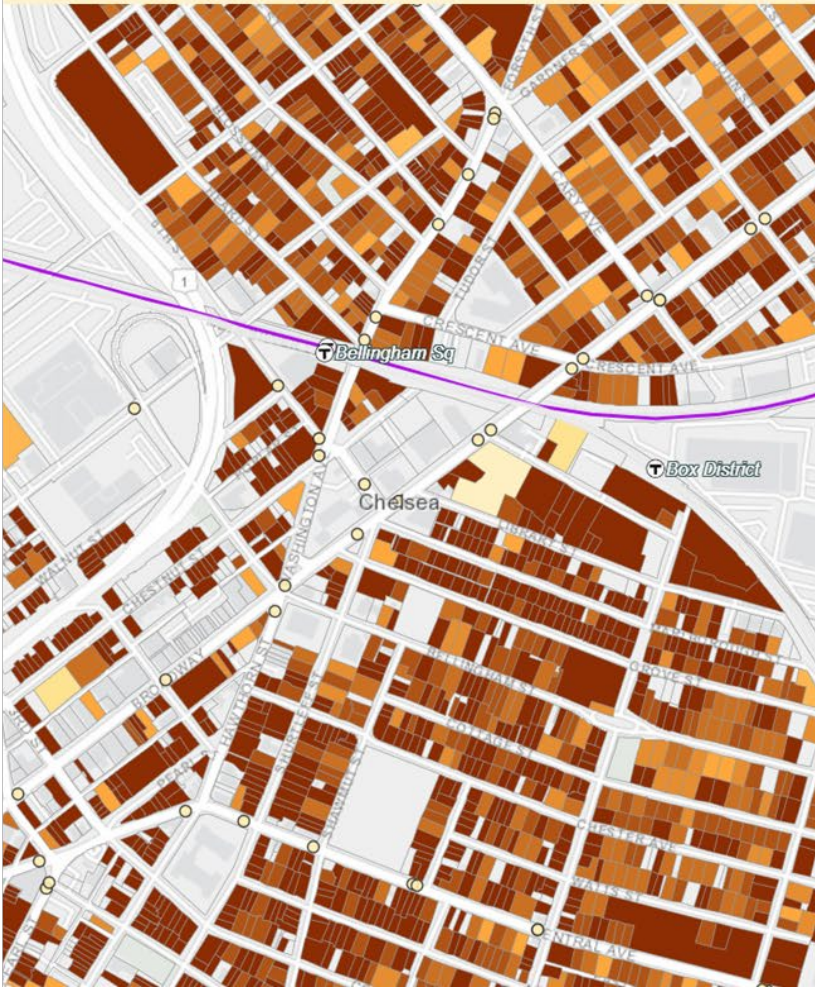
UseDescription	ResidentialUnits	ParcelAcres	Avg. Parcel Density
Apartments with four to eight units	145	7.5	19.4
Two-Family	89	12.8	7.0
Three-Family	77	5.9	13.1
Mixed Use - Commercial with Residential	75	8.5	8.8
Apartments over eight units	71	2.4	29.8
Housing Authority	43	2.2	19.4
Single Family	38	10.5	3.6
Other exempt housing	19	0.1	136.6
Multiple houses on parcel	5	2.3	2.2
Mixed Use - Residential with Commercial	2	0.3	6.9
Mixed Use - Industrial with Residential	1	0.3	4.0
Tax-exempt, public, charitable, institutional	0	6.2	0.0
Commercial	0	15.9	0.0
Industrial	0	4.6	0.0
Developable residential land	0	41.5	0.0
Undevelopable residential land	0	1.0	0.0



# Sample Analyses & Use Cases for Planners

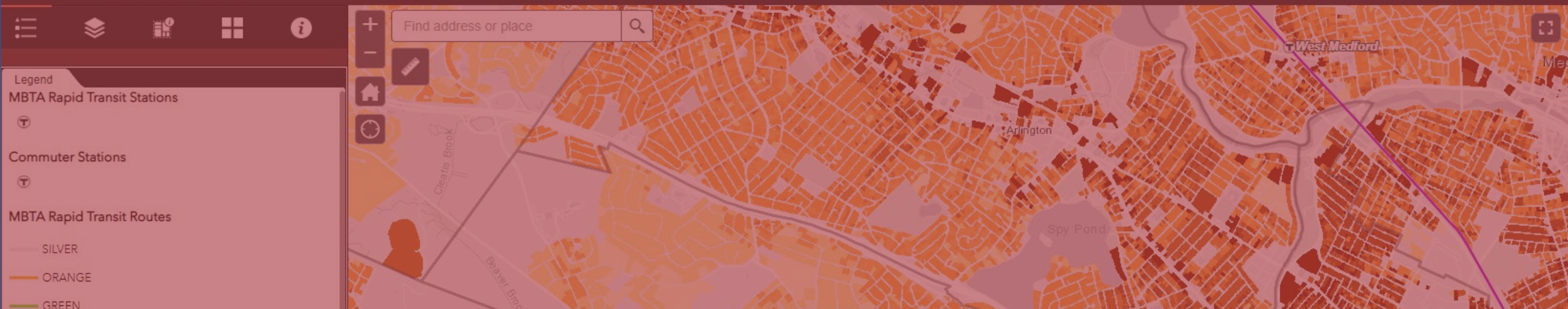


## Bellingham Sq/Box District, Chelsea custom district analysis

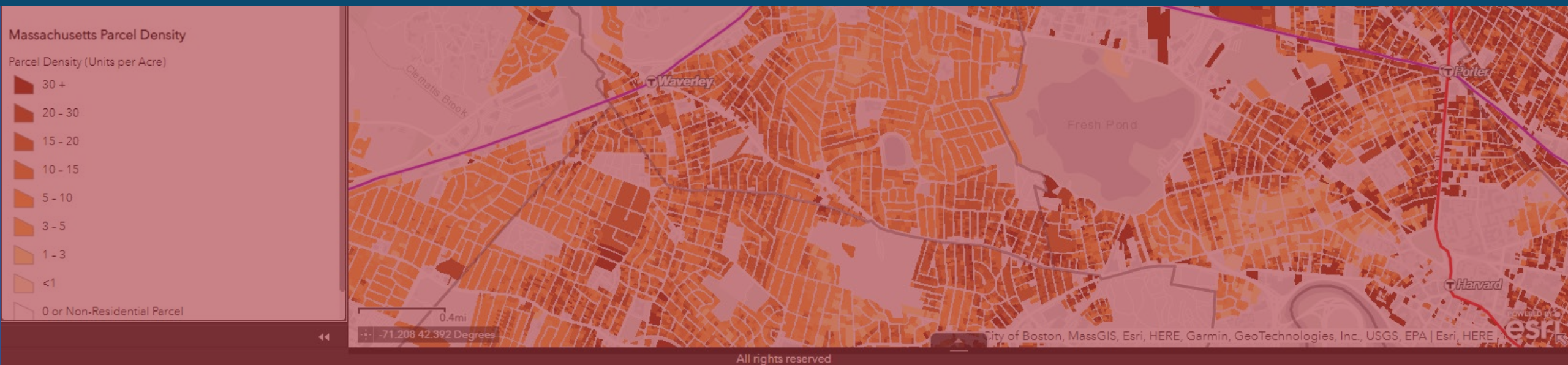


Total Residential Units:		6,050	Units
District Area:		223	Acres
District Density:		27.2	Units per Acre
Use Description	Residential Units	Parcel Acres	Avg. Parcel Density
Three-Family	1,538	37.0	41.5
Apartments over eight units	1,102	12.8	85.8
Two-Family	1,032	43.2	23.9
Apartments with four to eight units	1,026	14.4	71.3
Condo	646	16.3	39.6
Single-Family	214	15.8	13.5
Mixed Use with over 8 apartments	158	1.2	137.9
Housing Authority	131	3.5	37.2
Boarding house or other congregate housing	83	0.5	161.1
Single-family mixed use	63	2.4	25.9
Other exempt housing	18	1.5	12.3
Multiple houses on parcel	14	0.3	52.2
Mixed Use - Commercial with Residential	10	0.2	52.3
Condo, Three-Family	8	0.2	38.4
Two-family mixed use	5	0.3	17.0
Condo, Two-Family	2	0.2	8.3
Undevelopable residential land	-	3.5	0.0
Industrial	-	17.2	0.0
Commercial	-	21.9	0.0
Tax-exempt, public, charitable, institutional	-	20.5	0.0
Potentially developable residential land	-	2.2	0.0
Accessory Land with Improvement	-	3.5	0.0
Developable residential land	-	3.5	0.0
Commercial, Tax-exempt, public, charitable, institutional	-	0.2	0.0
Apartments with four to eight units,Three-Family	-	0.4	0.0





# Residency site demo



# Become a Beta-Tester for Residency!



**Residency is still in development, but we're nearly ready to release the site to the public!** In the meantime, we're looking for people interested in being beta-testers for the site.

**If you're interested, please fill out our google form!**

[forms.gle/6gHKO27shF1vTbkt7](https://forms.gle/6gHKO27shF1vTbkt7)



**Follow us on twitter** @mhpdata for updates on Residency and check out the landing page at <https://www.mhp.net/about-us/data/residency>



# Thank you! + Q&A



## Check out some of our work:

Our website:

[www.mhp.net/data](http://www.mhp.net/data)

DataTown: Key housing and demographic data for municipalities

[www.mhp.net/DataTown](http://www.mhp.net/DataTown)

TODEX: Transit-Oriented Development Explorer

[www.mhp.net/TODEX](http://www.mhp.net/TODEX)

Greater Boston Housing Report Card, 2021

<https://www.tbf.org/news-and-insights/reports/2021/jun/greater-boston-housing-report-card-2021>

**Callie Clark,**  
Director of Policy  
cclark@mhp.net  
@CalClark17

**Matija Jankovic,**  
Senior Research Analyst  
mjankovic@mhp.net

**Tom Hopper,**  
Director of Research & Analytics  
thopper@mhp.net  
@Data\_Hopper



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