

# Metro Boston Rental Listings Collaboration



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Objective:

a member collaborative to shape  
and support the Metro Boston  
Rental Listings Database



# Existing Sources of Rent Data are Insufficient

## American Community Survey

- Rent average for long-term and new residents, including those housed in deed-restricted affordable housing
- Data aggregated to 5-year intervals and released with a two-year time lag
- Data only available aggregated to Census geographies

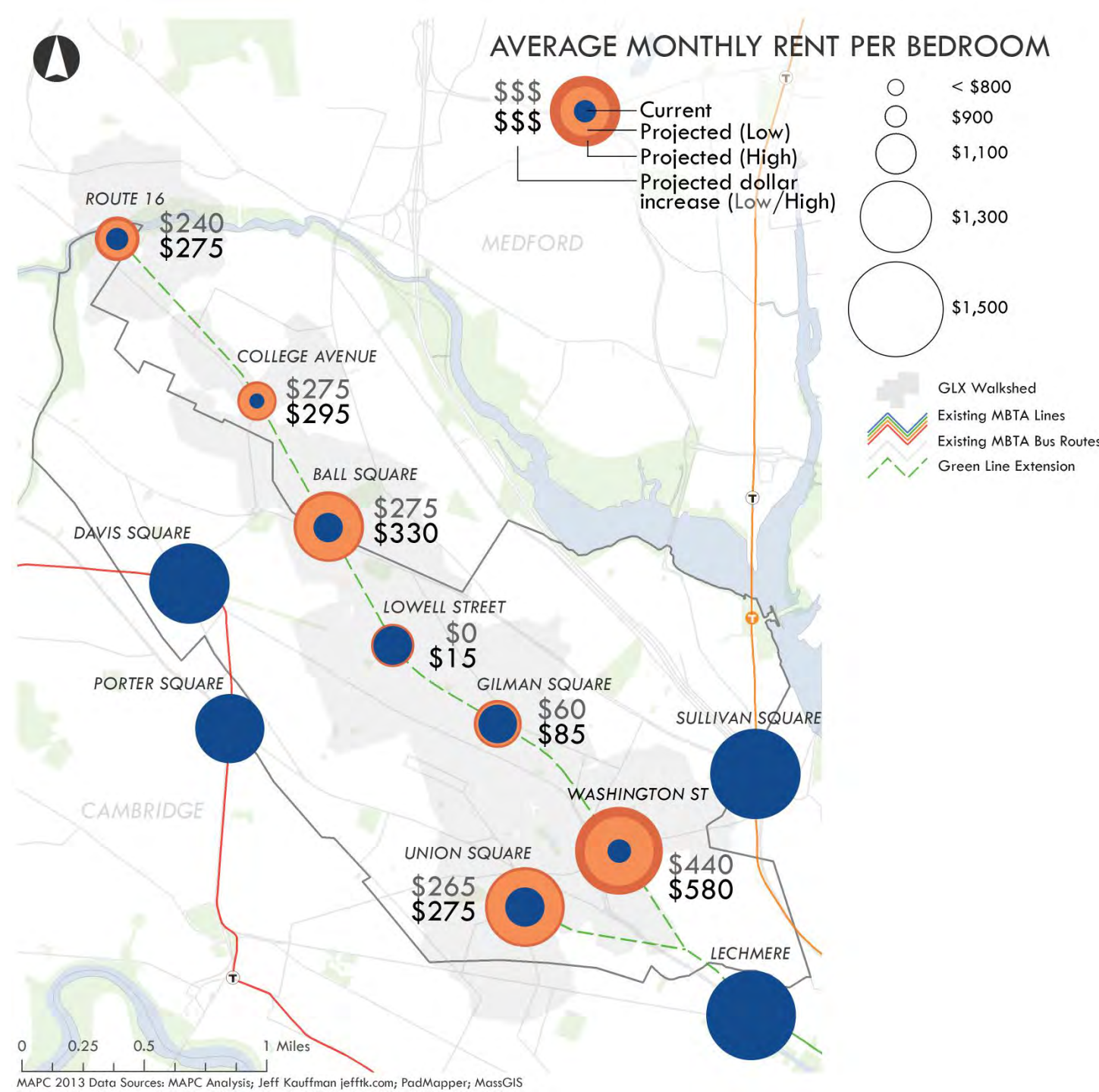
## Private sources

- Opaque about methods of collection
- To get record-level rental listings is expensive and often cost prohibitive

# Timeline

- 2013-14: First use of Padmapper data for research report
- 2015: Technology and capacity to scrape rental listings from online platforms
- 2017: Development project with municipal partners to clean and improve collected data
- 2018: Quarterly data reported to municipal partners
- 2019: Rental Listings Collaboration established
- 2020: COVID-19 monthly listings
- 2021: Recruiting new members

Figure source: *Dimensions of Displacement*, MAPC, 2014

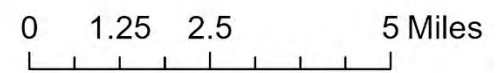
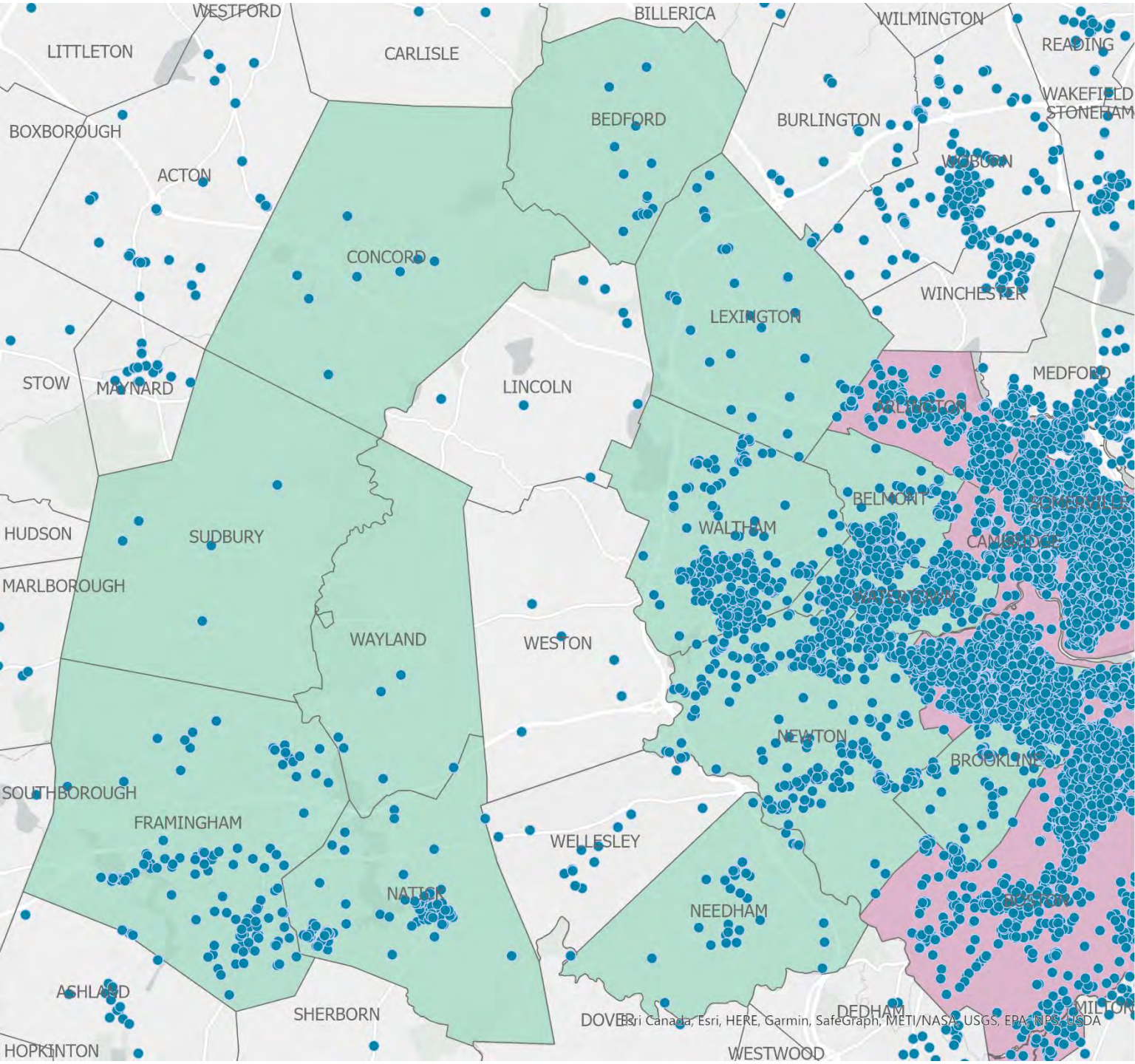


Exploring the data:  
price trends, affordability,  
and recent applications of  
the data

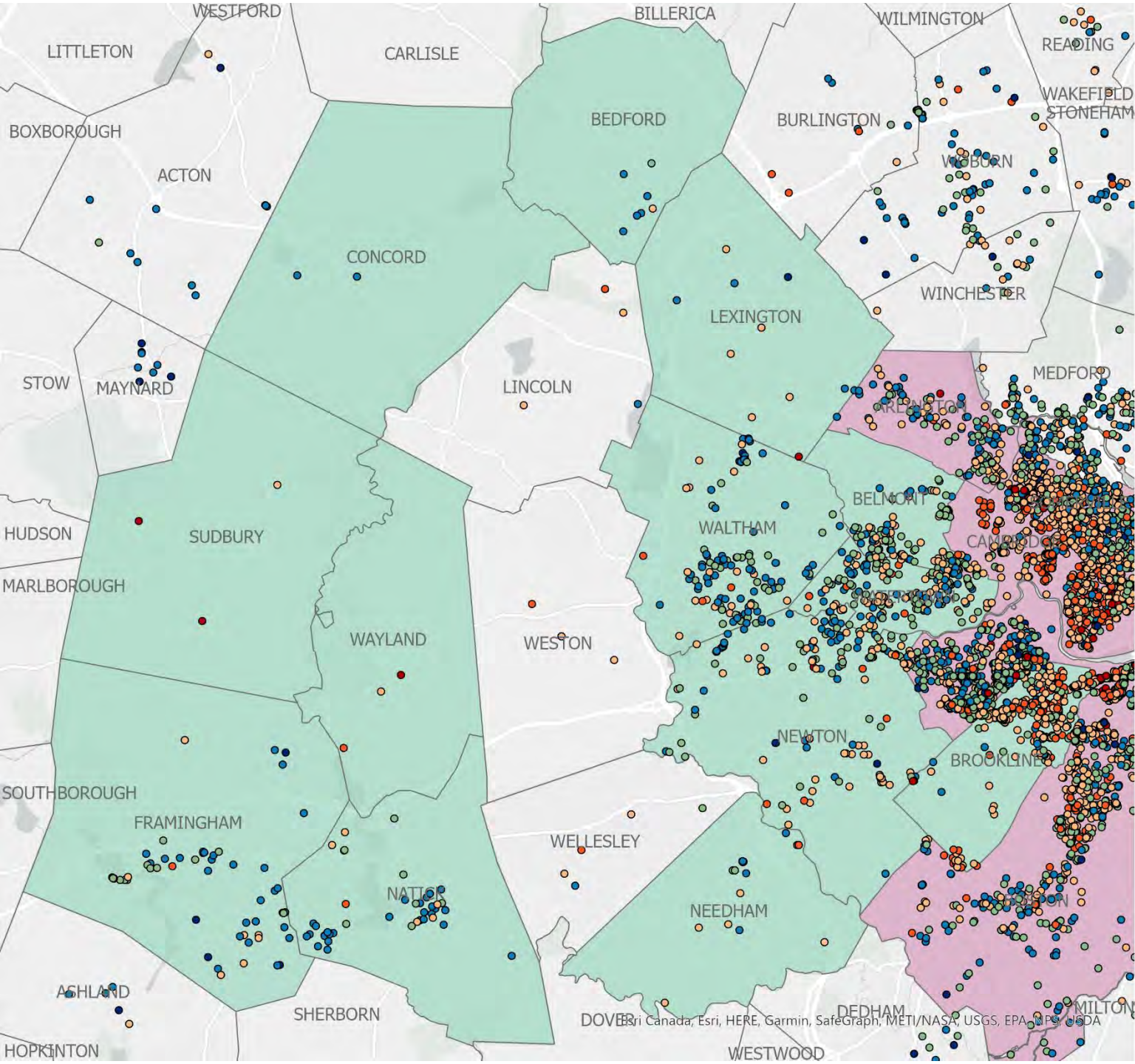
# Metro Boston Rental Listings Database

West Metro HOME Consortium

- Rental Listings 2021
- West Metro HOME Consortium
- MBRLDB Collaboration



Esri, Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA



# Metro Boston Rental Listings Database

West Metro HOME Consortium

## Two-bedroom Rents 2021

- \$500.00 - \$1,500.00
- \$1,500.01 - \$2,000.00
- \$2,000.01 - \$2,336.00 (FMR)
- \$2,336.01 - \$3,000.00
- \$3,000.01 - \$4,000.00
- \$4,000.01 - \$11,999.00

- West Metro HOME Consortium
- MBRLDB Collaboration

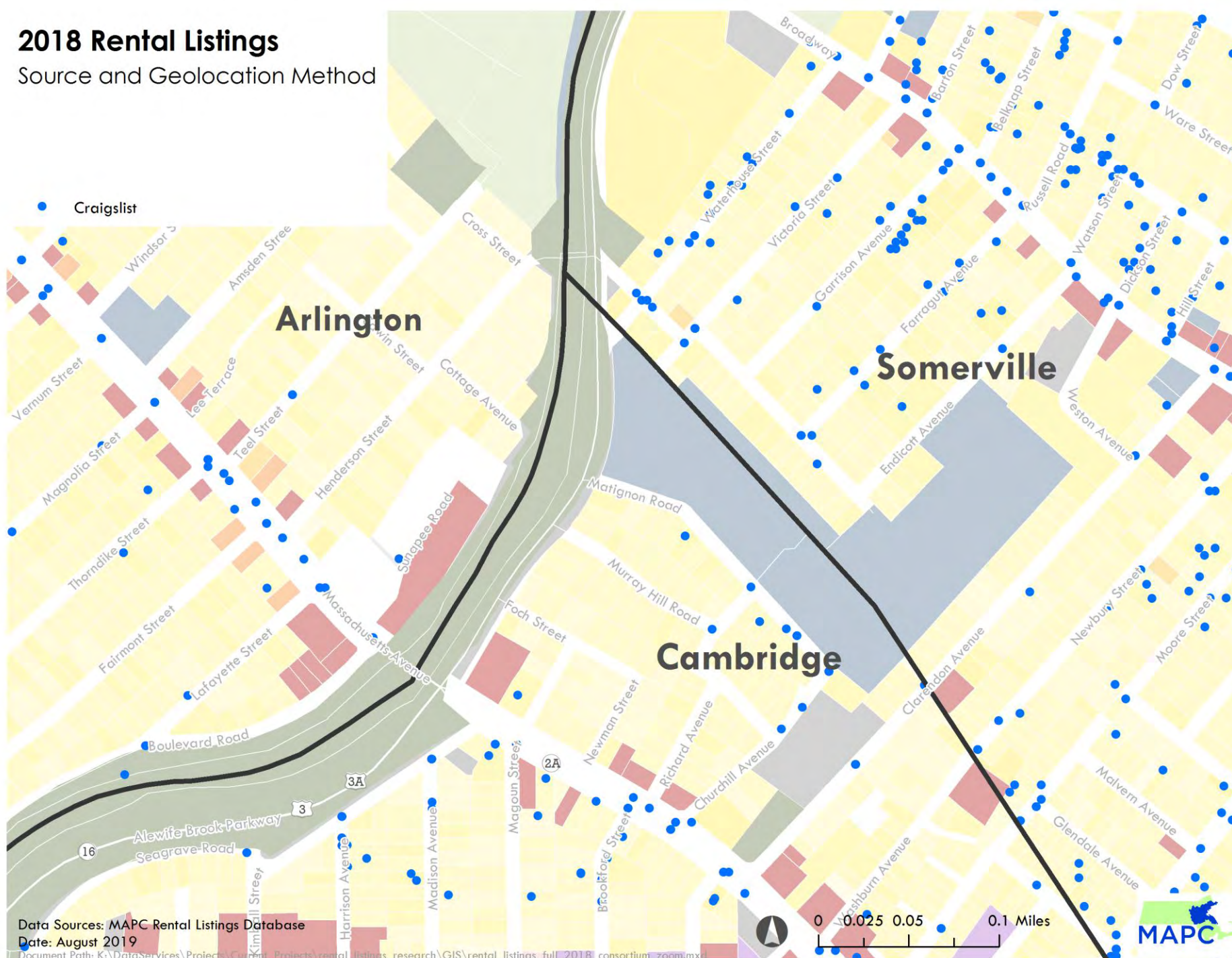


0 1.25 2.5 5 Miles



# 2018 Rental Listings

Source and Geolocation Method



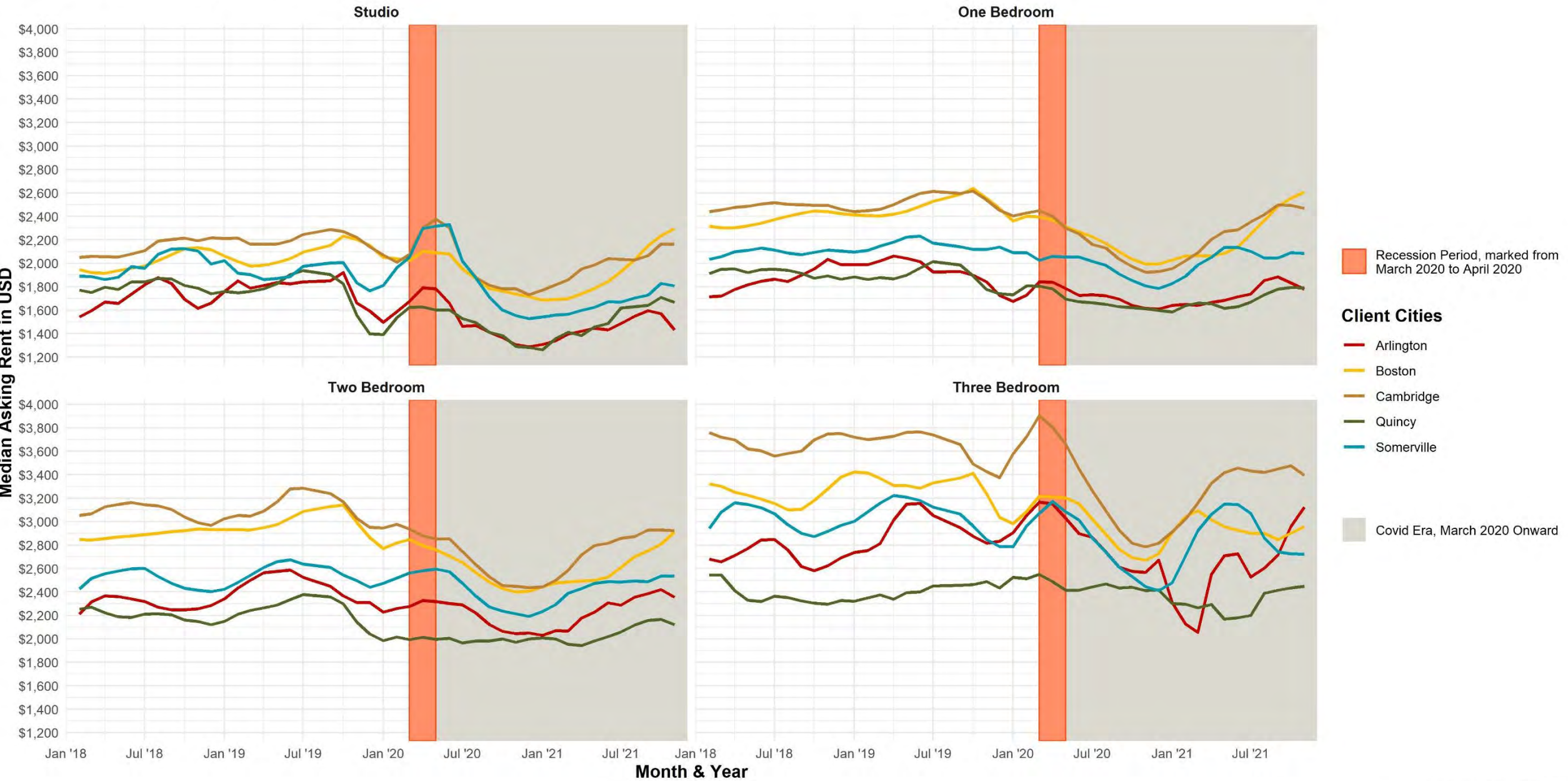
Data Sources: MAPC Rental Listings Database

Date: August 2019

Document Path: K:\DataServices\Projects\Current\_Projects\rental\_listings\_research\GIS\rental\_listings\_full\_2018\_consortium\_zoom.mxd

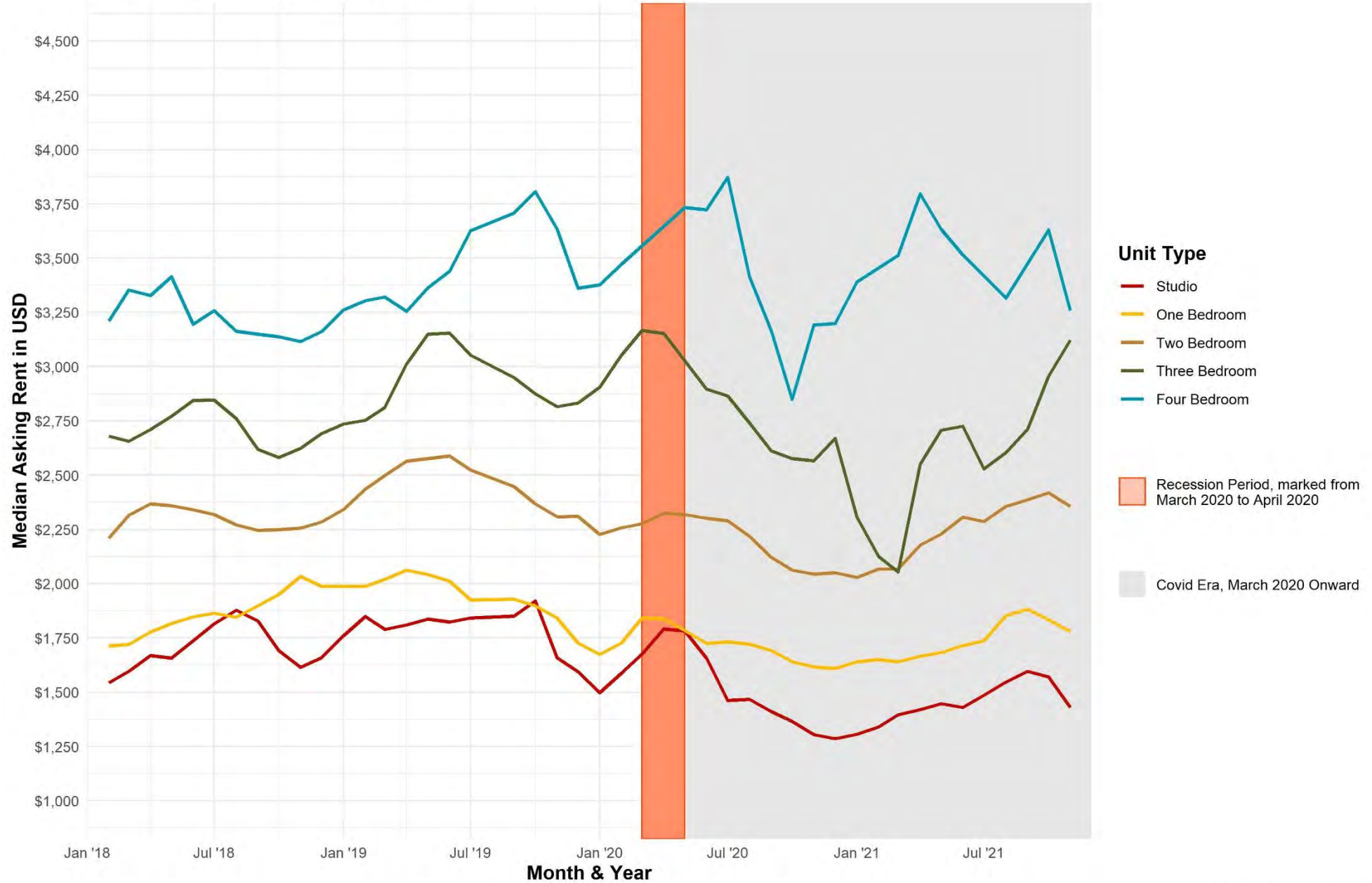
# Median Asking Rent by Bedroom Count

January 2018 through December 2021



# Arlington

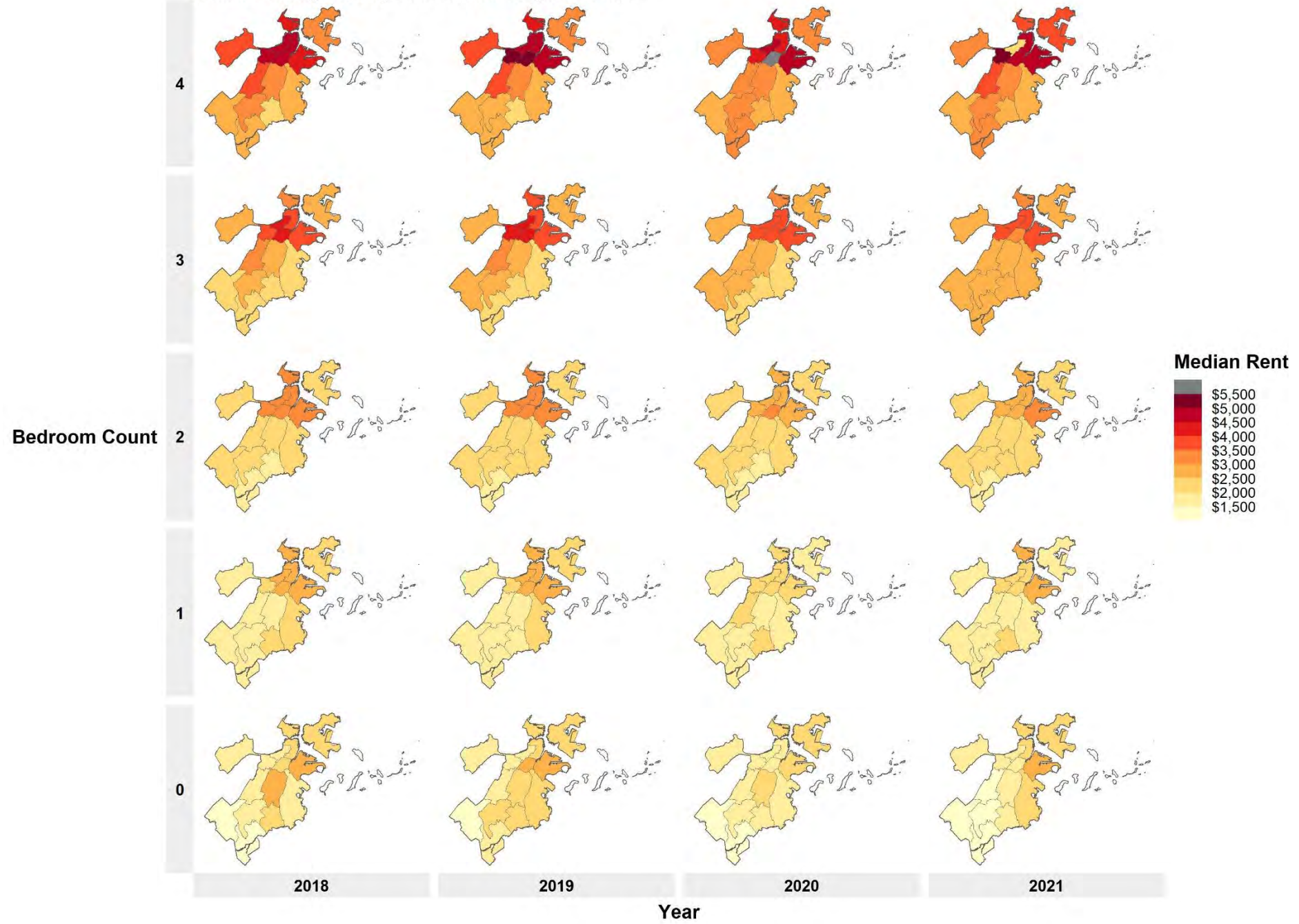
## Median Asking Rent by Bedroom Count



3-month rolling average  
COVID-19 Pandemic Era marked from March 2020 onward  
Recession Period marked from March 2020 to April 2020

# Boston

## Median Asking Rent by Bedroom for Neighborhoods



# Applications of data to-date

- Boston uses data to validate quarterly rent trends identified with other sources purchased via a program pre-dating the Rental Listings Database, with the eventual goal of transitioning to using the Rental Listings Database as their sole source for rental information
- Boston Housing Authority has used our listings to help develop criteria for new Small Area Fair Market Rent (SAFMR) standards, and to help identify “opportunity” zip codes with available listings at or below SAFMR
- Cambridge is using data to develop a rental listings dashboard to help municipal housing and planning keep track of rental trends and evaluate housing policies and programs
- Somerville has used data to respond to legal challenges to their condo conversion ordinance by validating relocation costs written into the ordinance
- Arlington has used the data to support housing policy conversations that to-date they have not had enough useful data to show in response to opposition
- COVID-19 rental market trends – during the pandemic member municipalities requested monthly (rather than quarterly) data reporting so they could watch trends more closely; Cambridge used listing titles to examine prevalence of deals offered by landlords and expanded analysis to all five member municipalities

Methods: collecting,  
cleaning, categorizing,  
summarizing, and  
reporting

# Automated Data Processing Steps

1. Scrape data from online sources
2. Clean, deduplicate, assess, and annotate
3. Summarize counts, mean, and median asking rents to municipal, neighborhood, zip code, and census tract levels
4. Visualize trends
5. Report cleaned records, summary information, spatial data, and visualizations to Collaboration members monthly, including quarter and annual summaries throughout the calendar year

# Known Limitations

- Potential bias in data sources, consistent with observed biases in online rental platforms generally
- Address-level geocoding constraints due to lack of address information in Craigslist listings and small number of listings sourced from Padmapper
- API/data structure instability from listings sources can lead to gaps in data collection



# Areas for Improvement

The following are areas we would like to improve with Collaboration support as funding allows:

- Deduplication: Capture and remove more duplicate records through improvements to text analysis methods
- Text processing: Improve identification and flagging of special case listings (roommates, short-term rentals, sublets, single family homes, etc.) and validation of number of bedrooms through improved text analysis
- Geolocation: Develop methods for estimating location accuracy of Craigslist points

# Areas for Expansion

The following are potentially desirable expansions of the Rental Listings Database for Collaboration to pursue if funding is available or in future years:

- Online reporting portal: develop a private-access web interface for Consortium members to directly access quarterly and annual data products and to view visualizations of summary information
- Additional rental listings source(s): potentially add new rental listings data sources that could improve biases in data or add address-level information, either through adding new sources to digital collection or by purchasing quarterly data

# Collaboration Framework

# Membership Benefits

## First access to monthly data and visualizations

- Record-level listing data for your municipality or area of interest
- Summary statistics at the municipality, neighborhood, or other geographic level, by bedroom count and age of unit
- Shapefile with point-level records of all listings in your municipality or area of interest
- Set of data visualizations, including maps and charts, showing trends for your municipality and comparisons with other member municipalities

## Decision-making input

- The collaboration works with MAPC to decide how annual funds are invested, whether in making improvements to the database, adding new features, or purchasing additional data

## Knowledge sharing with Collaboration members

- Quarterly Collaboration meetings serve as an opportunity to share research methods and findings with the group, providing the opportunity for shared learning and collaboration on research and policy development and evaluation

# Operating Structure

## Quarterly meetings

- Members of the Collaboration meet with MAPC on a quarterly basis to review recent data reports, share information about relevant research and use of data, and to make decisions about work planning and funding allocation

## Memorandum of understanding (MOU)

- Collaboration members and MAPC will sign an MOU that serves as a contract for the work of the Rental Listings Database

# Fee Structure

Population Range	FY22 Fee
1,000,000+	\$14,400
150,000 to 999,999	\$7,200
70,000 to 149,999	\$4,800
40,000 to 69,999	\$2,400
Under 40,000	\$1,200

# Fee Structure

Population Range	FY22 Fee	
1,000,000+	\$14,400	
150,000 to 999,999	\$7,200	← (Boston)
70,000 to 149,999	\$4,800	← Newton (Cambridge, Quincy, Somerville)
40,000 to 69,999	\$2,400	← Brookline, Framingham, Waltham (Arlington)
Under 40,000	\$1,200	← Bedford, Belmont, Concord, Lexington, Natick, Needham, Sudbury, Watertown, Wayland

# Contact:

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