

2020 Census City Undercounts: Risks, Consequences, and Solutions

Hosted by the National League of Cities

In partnership with the Beeck Center

January 14th, 2021



❑ Welcome

- **Moderator: Miki Noguchi, Cities Count, National League of Cities**

❑ Presentations

- **Susan Strate, UMass Donahue Institute, Massachusetts liaison to the Federal State Cooperative for Population Estimates (FSCPE)**
- **Mayor Steve Patterson, City of Athens, OH**
- **Denice Ross, Chair, Census Quality Reinforcement Taskforce and Senior Fellow, Beeck Center, Georgetown University**

❑ Q&A

❑ Closing

Census 2020 Response Rates in Massachusetts Off-Campus Student Housing Areas

January 14, 2021

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UMASS DONAHUE INSTITUTE
ECONOMIC & PUBLIC POLICY RESEARCH

Context

High Risk of College Student Undercount in 2020 Census



March

College
campuses
start to close

April 1

Census
Count Date

April 9

ENRFU -
Early Non
Response
Follow Up
Scheduled

Evacuated College Students Should Still Be Counted at Their Usual College Addresses

“**Even if** you are away from your student housing due to your school being temporarily closed due to COVID-19, you will be counted **at the student housing where you usually live.**”

“You should **count yourself at your off-campus** address **even if** you go elsewhere for school breaks or if you are temporarily staying elsewhere, including with your parents, if your school is closed due to COVID-19.”

Source: Fact Sheet on Counting College Students. U.S. Census Bureau, available at: <https://2020census.gov/en/news-events/operational-adjustments-covid-19.html>

Off-Campus Students More At-Risk of Undercount

Census Bureau had forged agreements with colleges for administrative records reporting on the approximately 150,000 students living in on-campus dormitories in MA

The plan to comprehensively capture of Massachusetts' estimated **350,000 off-campus college students** was still being developed by the Census Bureau (as of June 2020)

High Stakes for Massachusetts

Federal funds leveraged estimated at

\$1,200 per \$2,400 per person per year

1,000 persons uncounted =

**\$12 to \$24 million in forfeited federal
funds over the next decade**

High Stakes for Massachusetts

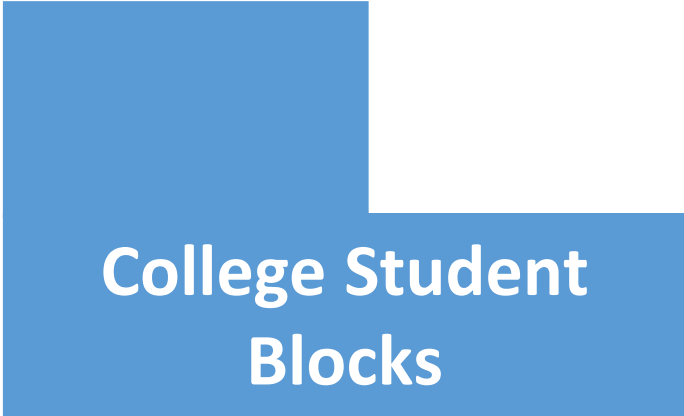
Massachusetts is home to almost 500,000 college students

- almost 29,000 out-of-state freshmen each year
= \$348 million to \$696 million over 10 years
- over 60,000 international students
= \$720 million to \$1.4 billion over 10 years
- estimated 350,000 off-campus students
=\$4.2 to \$8.4 billion over 10 years

Status of Off-Campus Census Count?

Identifying College Student Blocks

To prepare for Census Early NRFU
UMDI identified over 2,800
Massachusetts blocks most likely to
include concentrations of off-campus
college students.



College Student
Blocks

- Census and ACS demographic data (age, college enrollment)
- Buffer zones around bus routes and MBTA stops
- De-identified student addresses from colleges and universities throughout Massachusetts
- Plus 1,800 Census *default blocks*: all blocks within ½ mile of a university that have at least 1 housing unit

American Community Survey Data

▲ Five Colleges

Early NRFU Blocks Western Mass.

Percent Undergraduate Enrolled Age 18-24

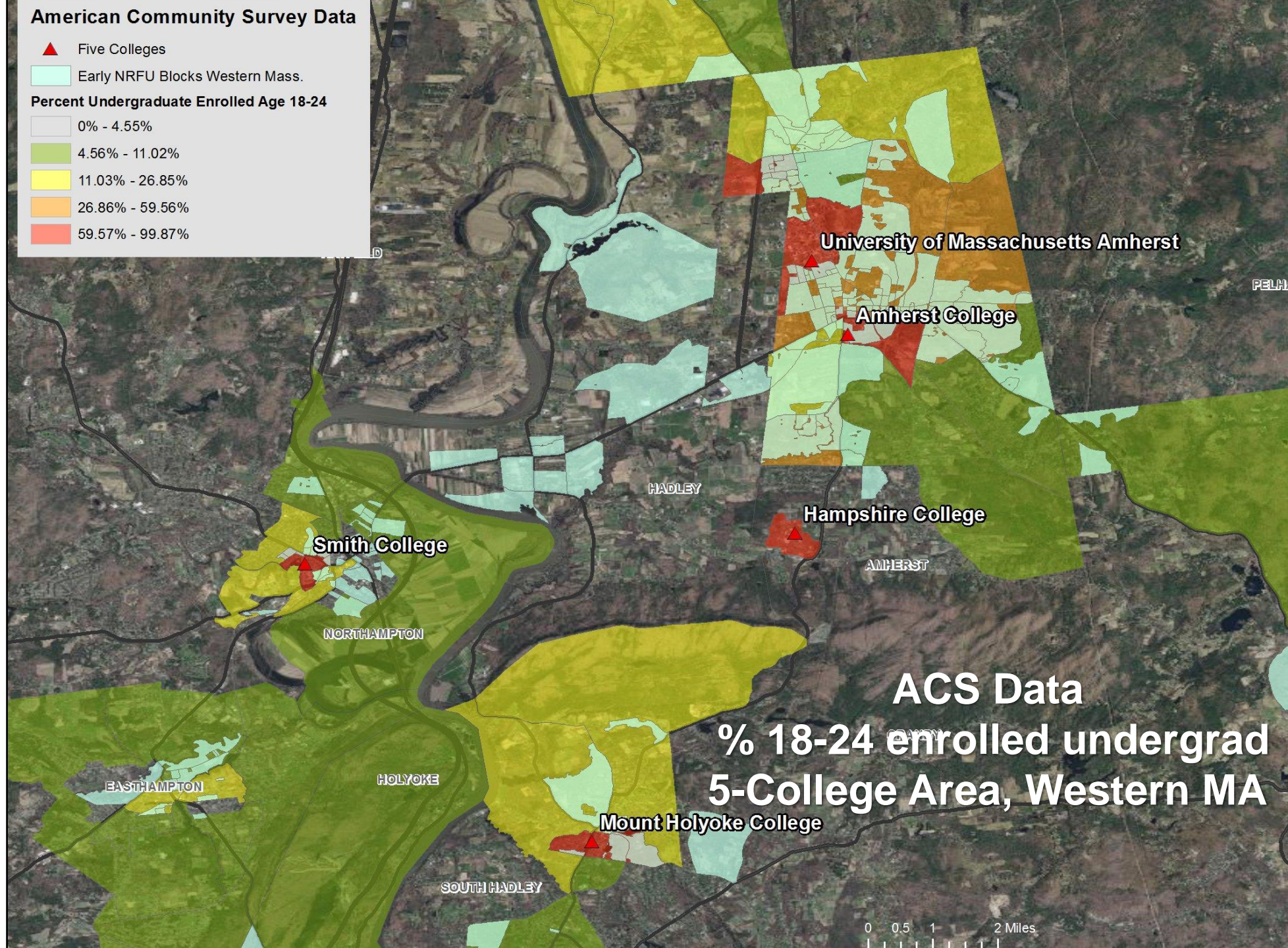
0% - 4.55%

4.56% - 11.02%

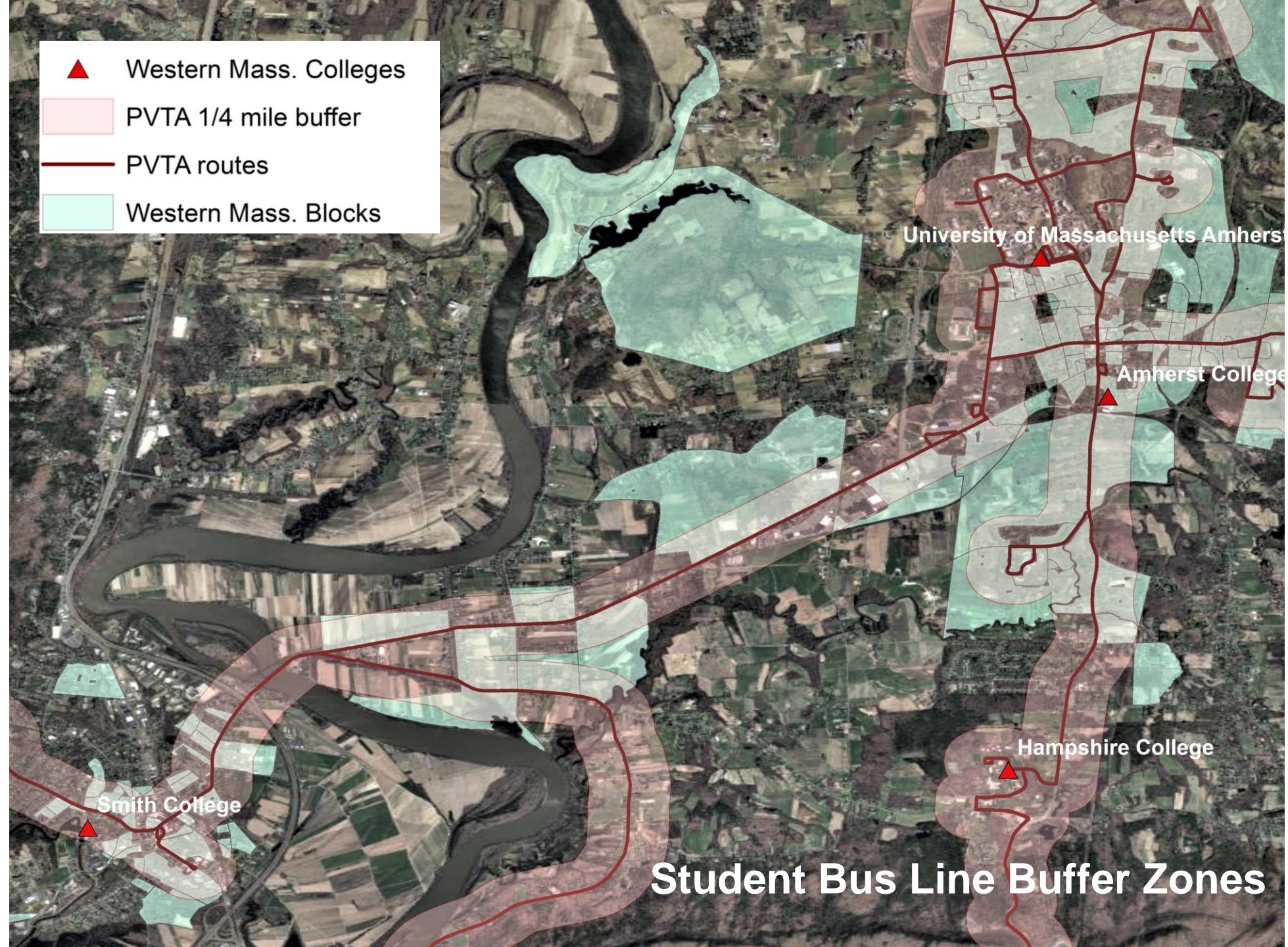
11.03% - 26.85%

26.86% - 59.56%

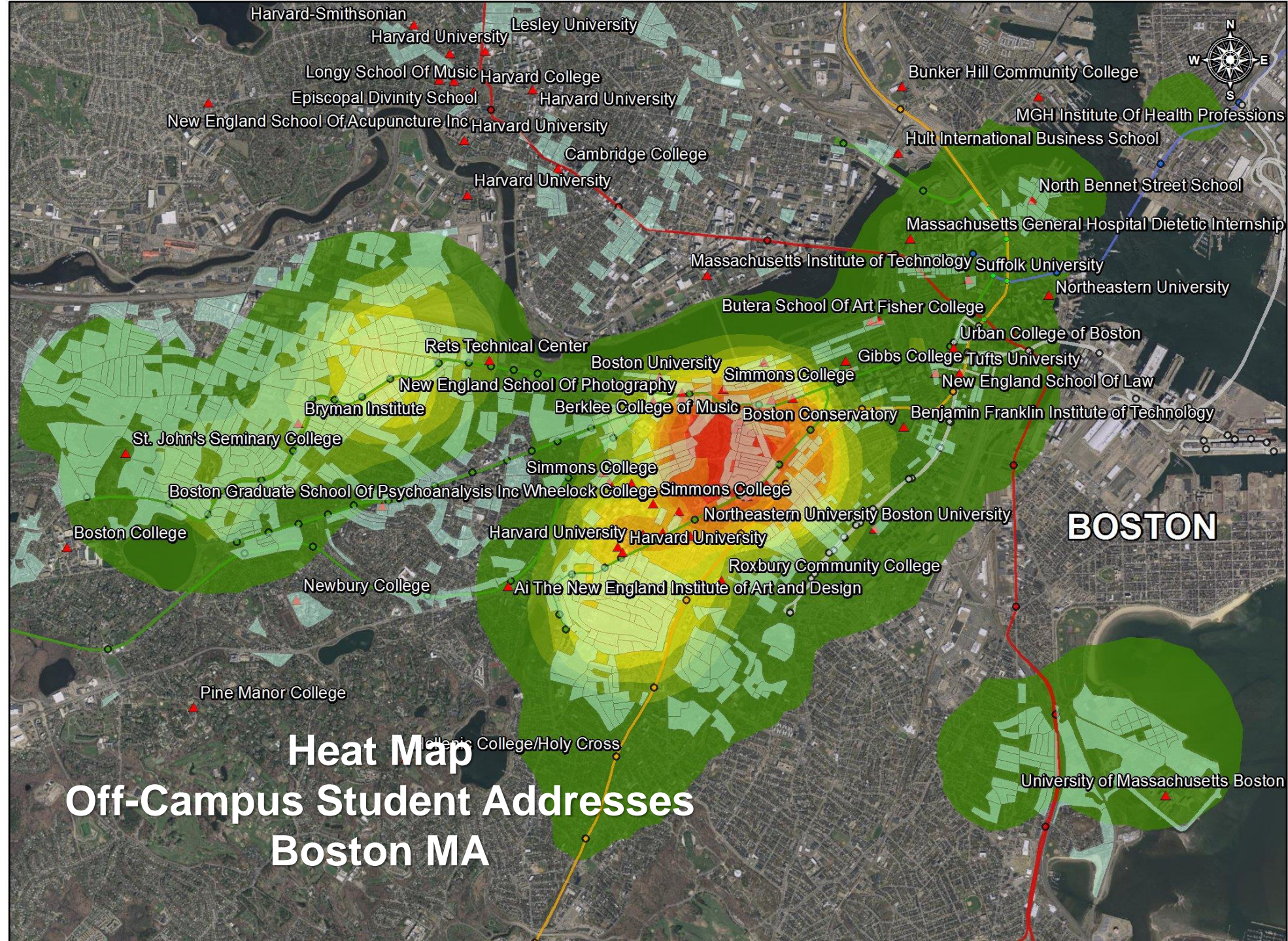
59.57% - 99.87%



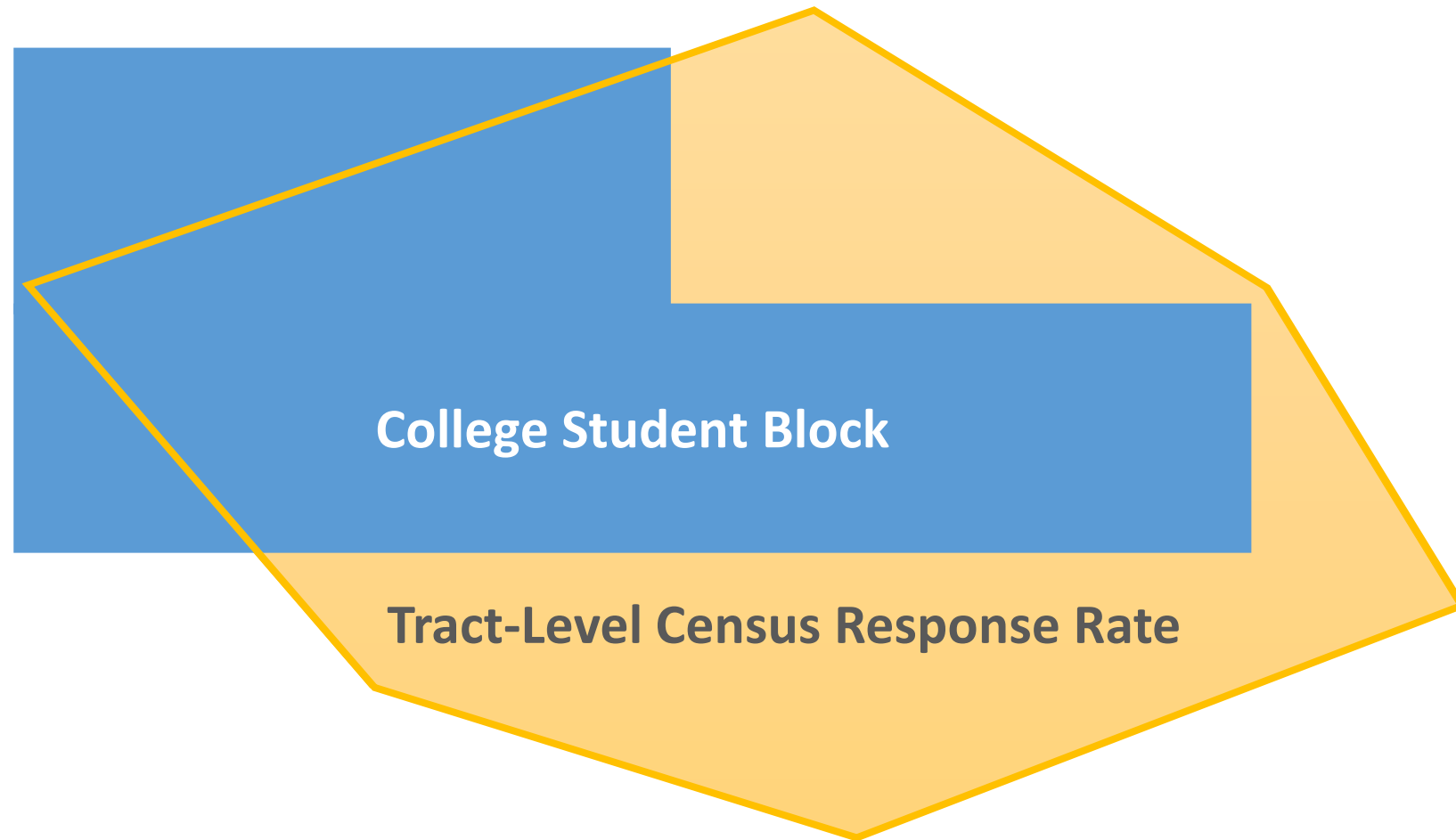
- ▲ Western Mass. Colleges
- PVTA 1/4 mile buffer
- PVTA routes
- Western Mass. Blocks



Student Bus Line Buffer Zones



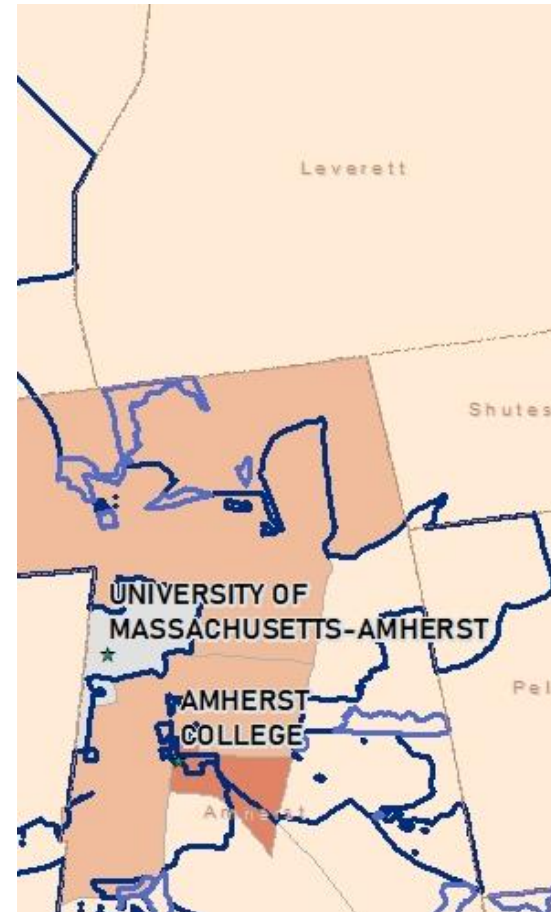
UMDI Off Campus Response Rate Analysis



UMDI Off Campus Response Rate Analysis

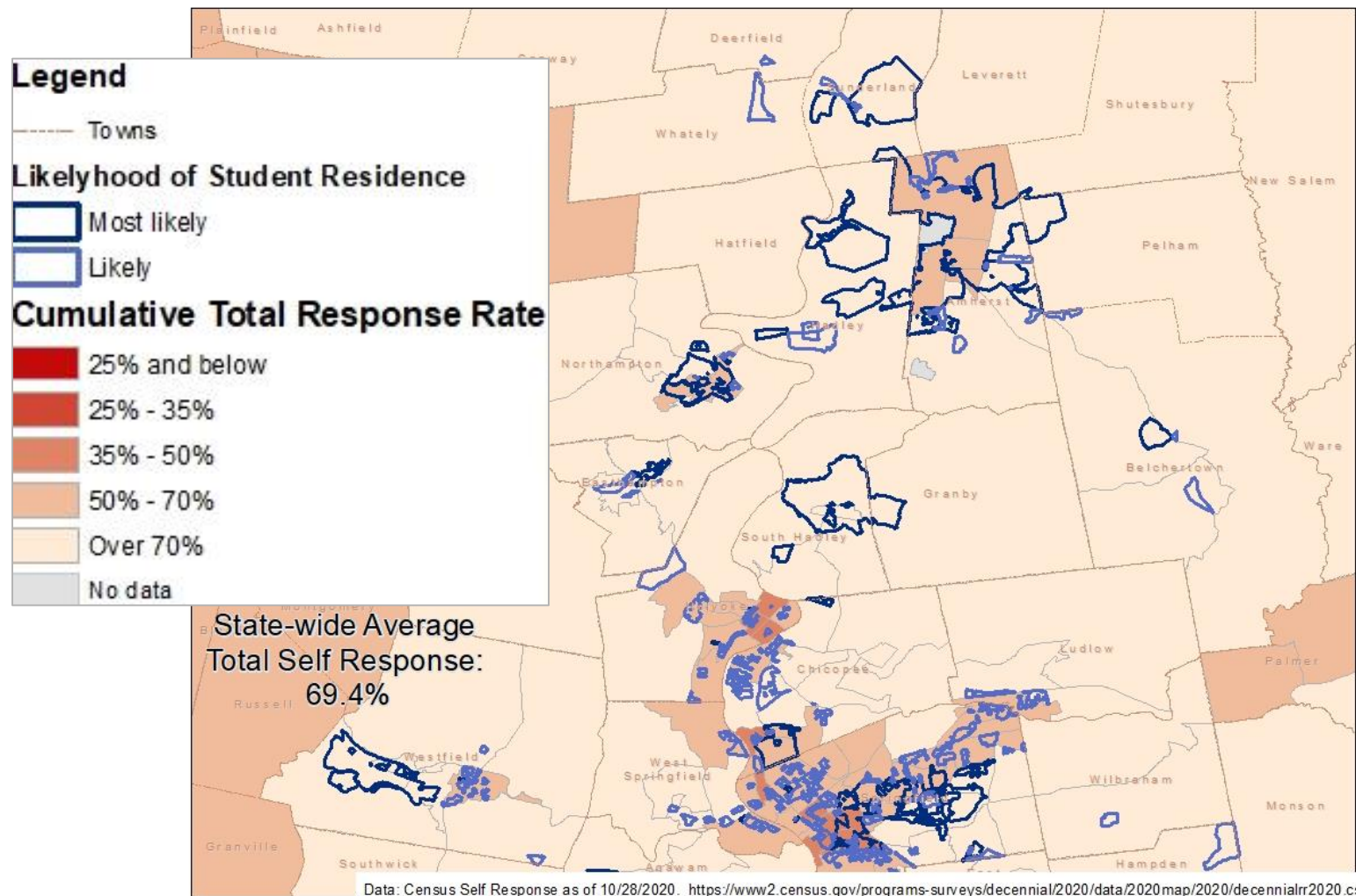
Visually contextualize how college blocks associate with tract response rates

Analyze how student tract response rates compare non-student tract response rates



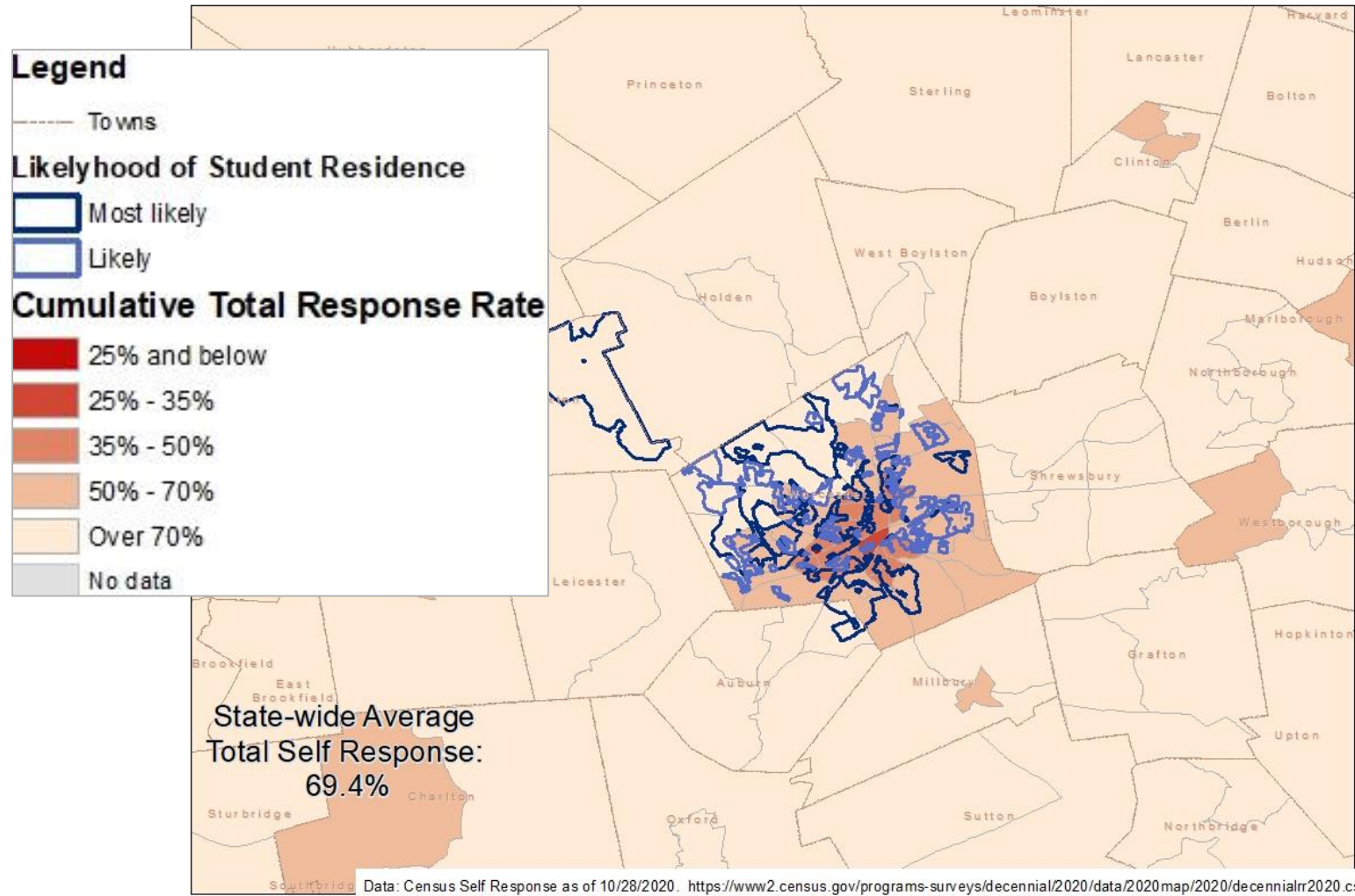
Findings

Pioneer Valley: Total Self-Response Rates



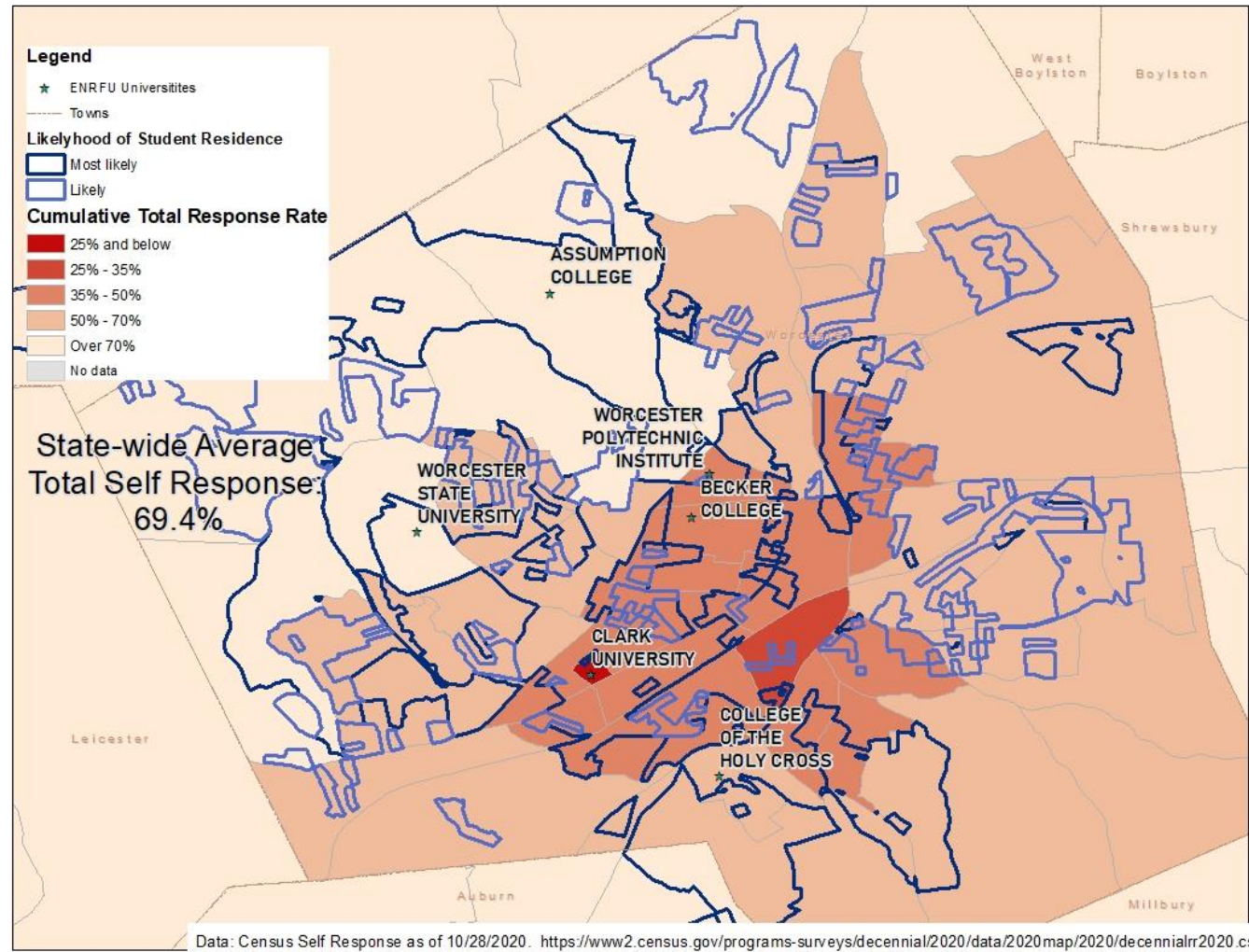
Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Worcester: Total Self-Response Rates



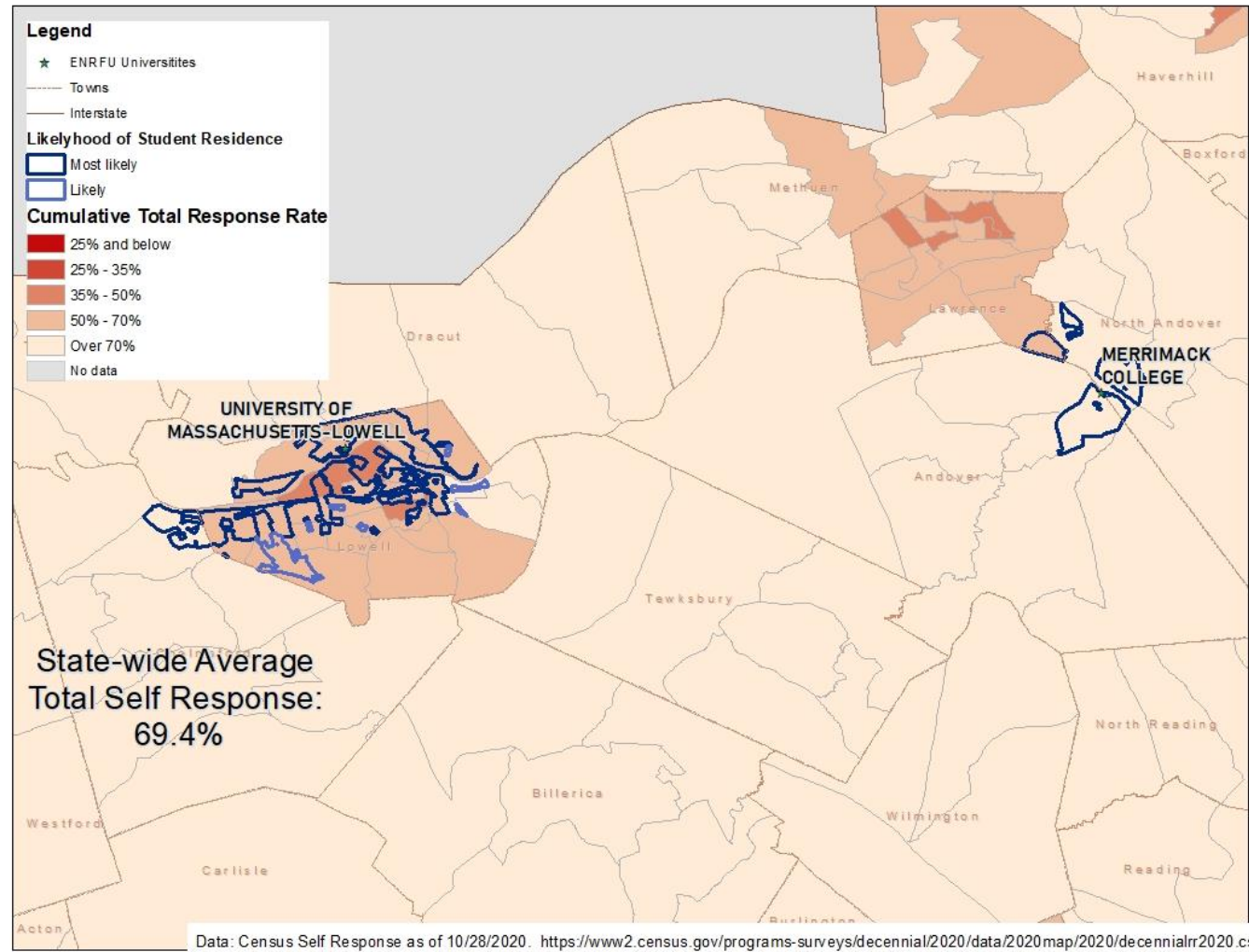
Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Worcester: Total Self-Response Rates



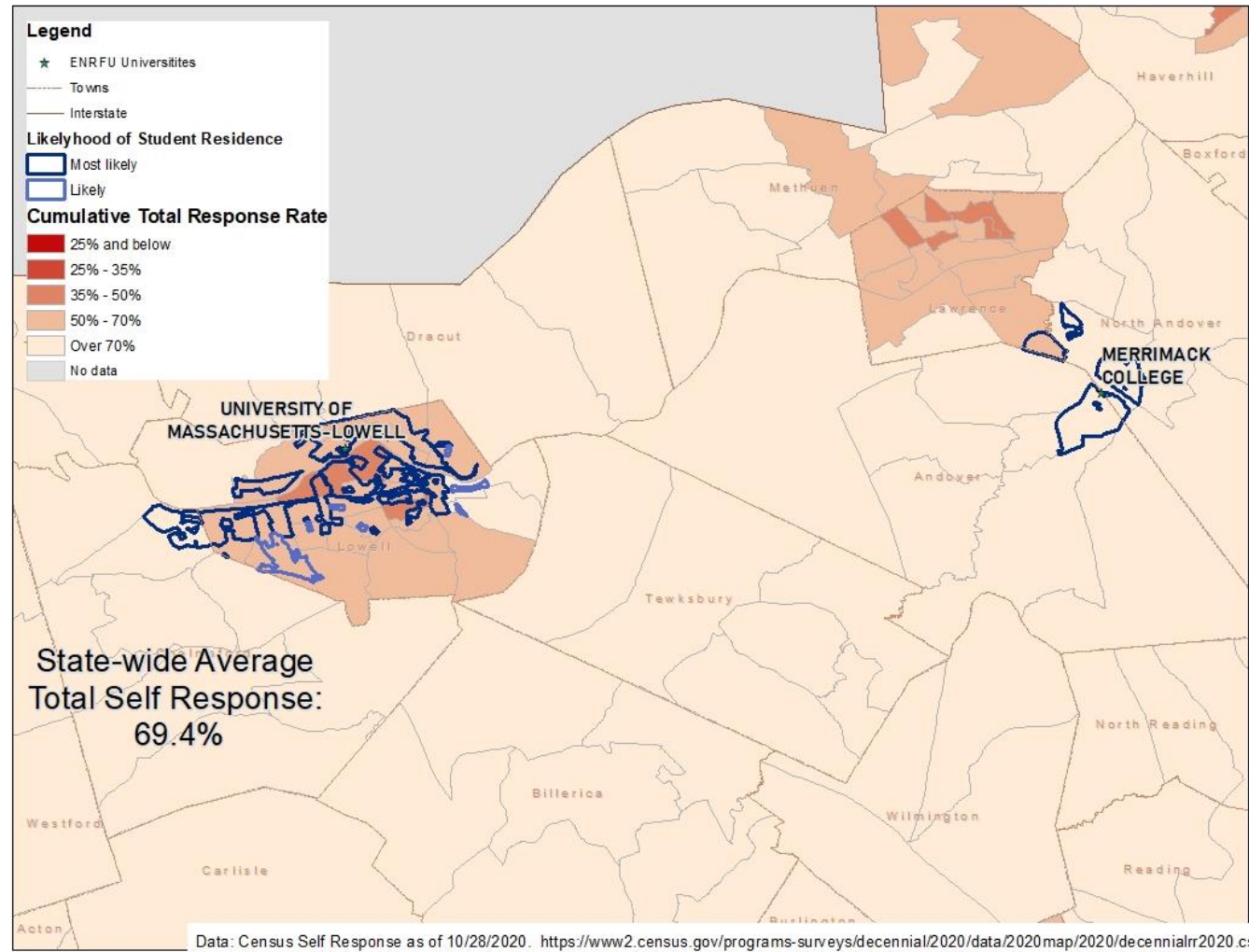
Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Lowell: Total Self-Response Rates



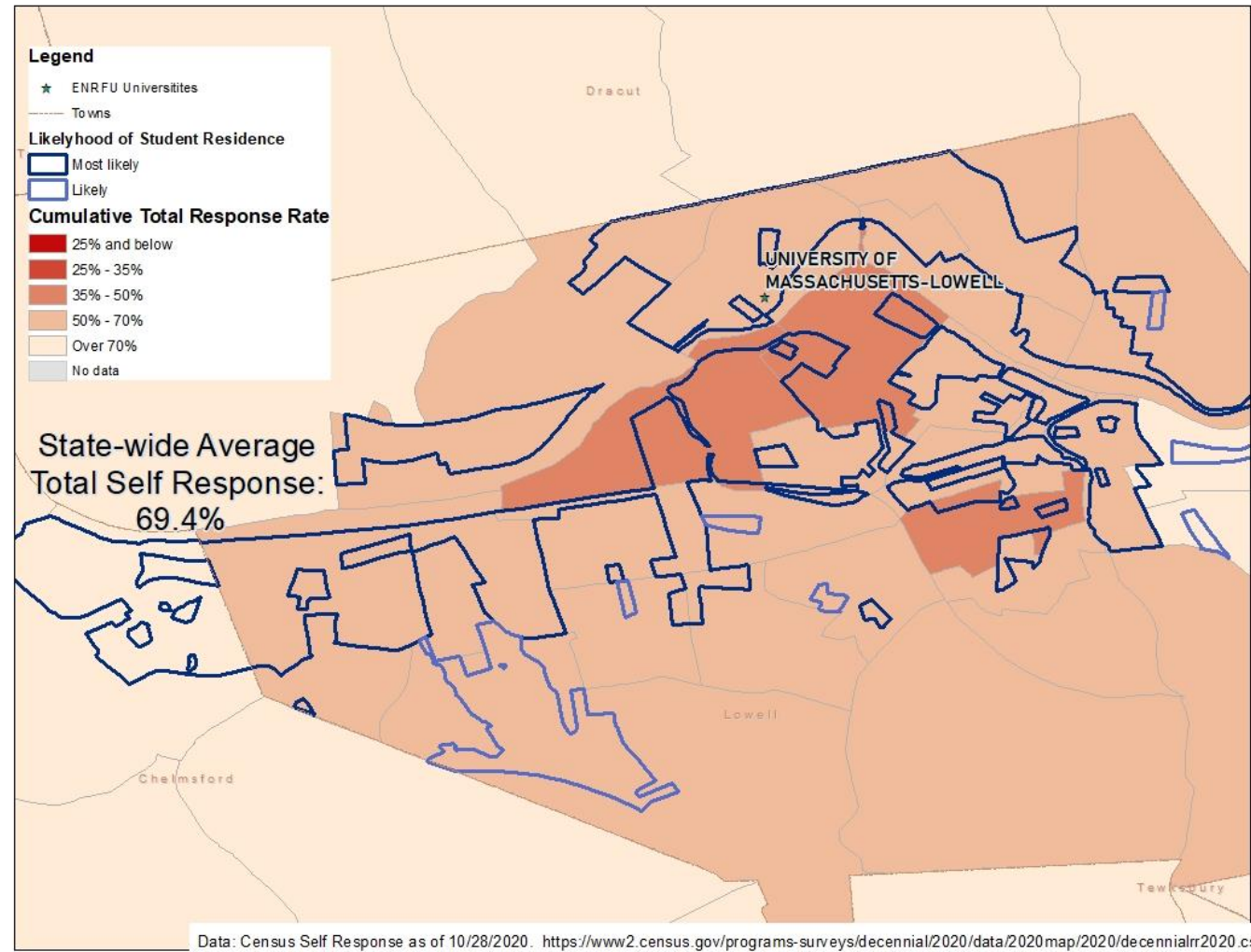
Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Lowell: Total Self-Response Rates



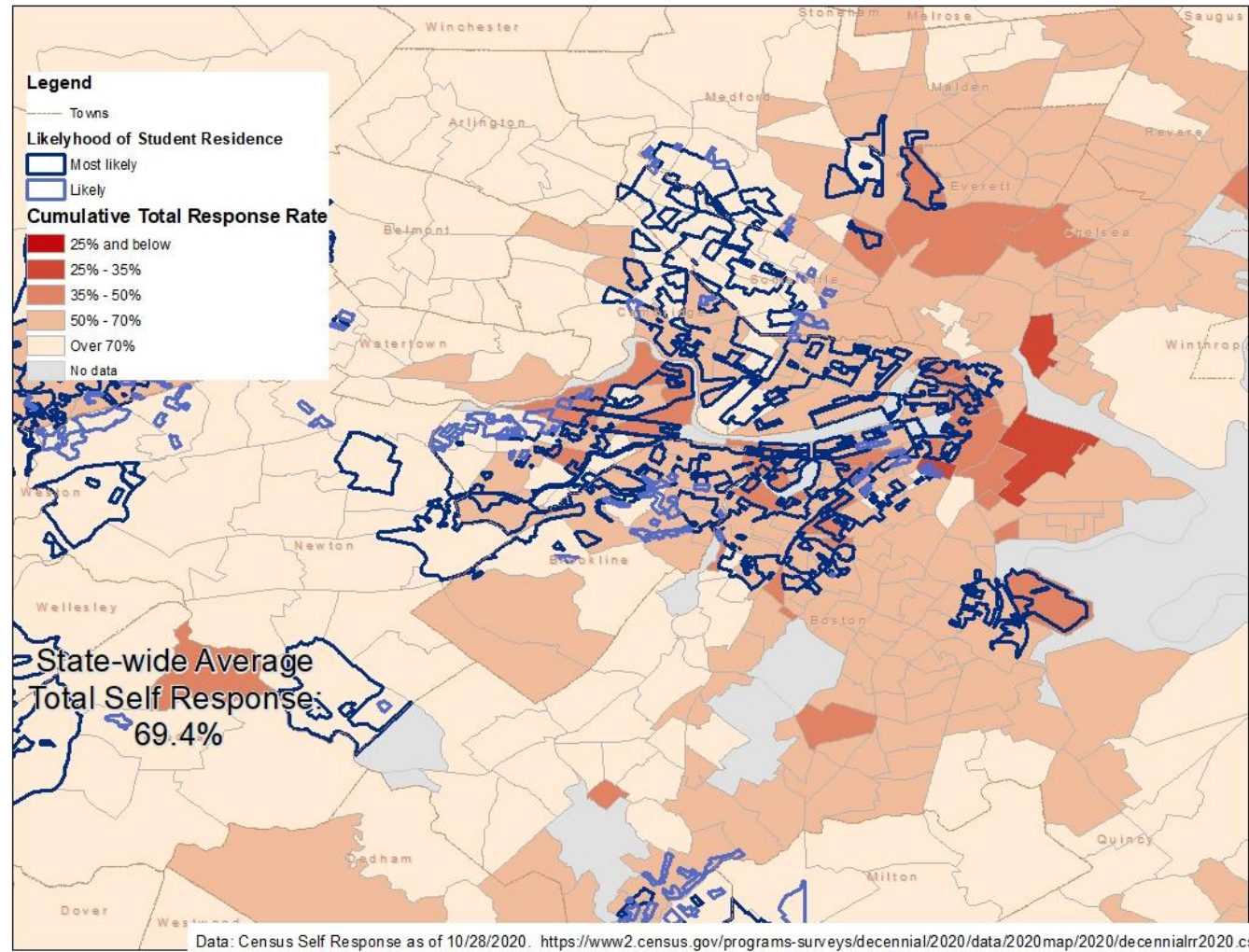
Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Lowell: Total Self-Response Rates



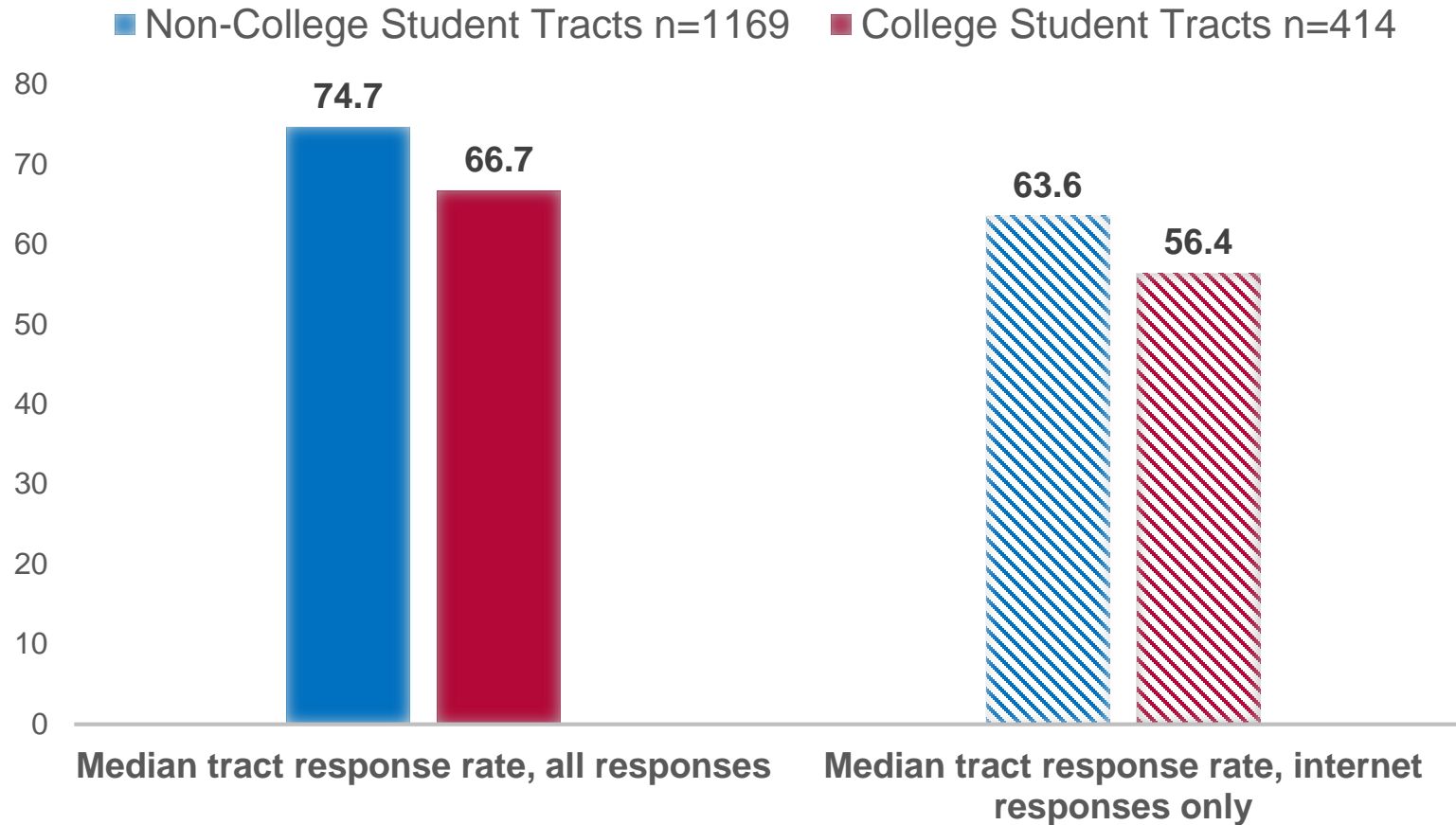
Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Boston: Total Self-Response Rates



Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

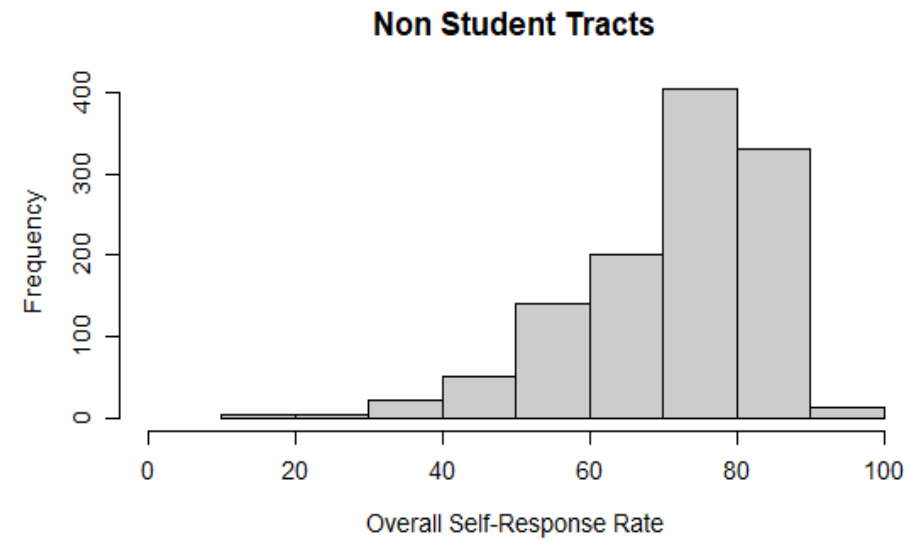
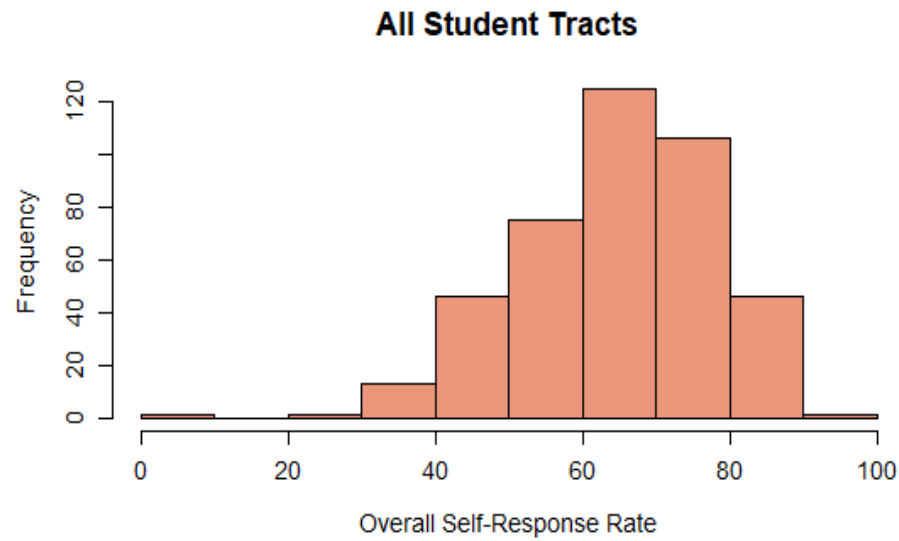
Census Response Rates College Vs. Non-College Tracts



Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

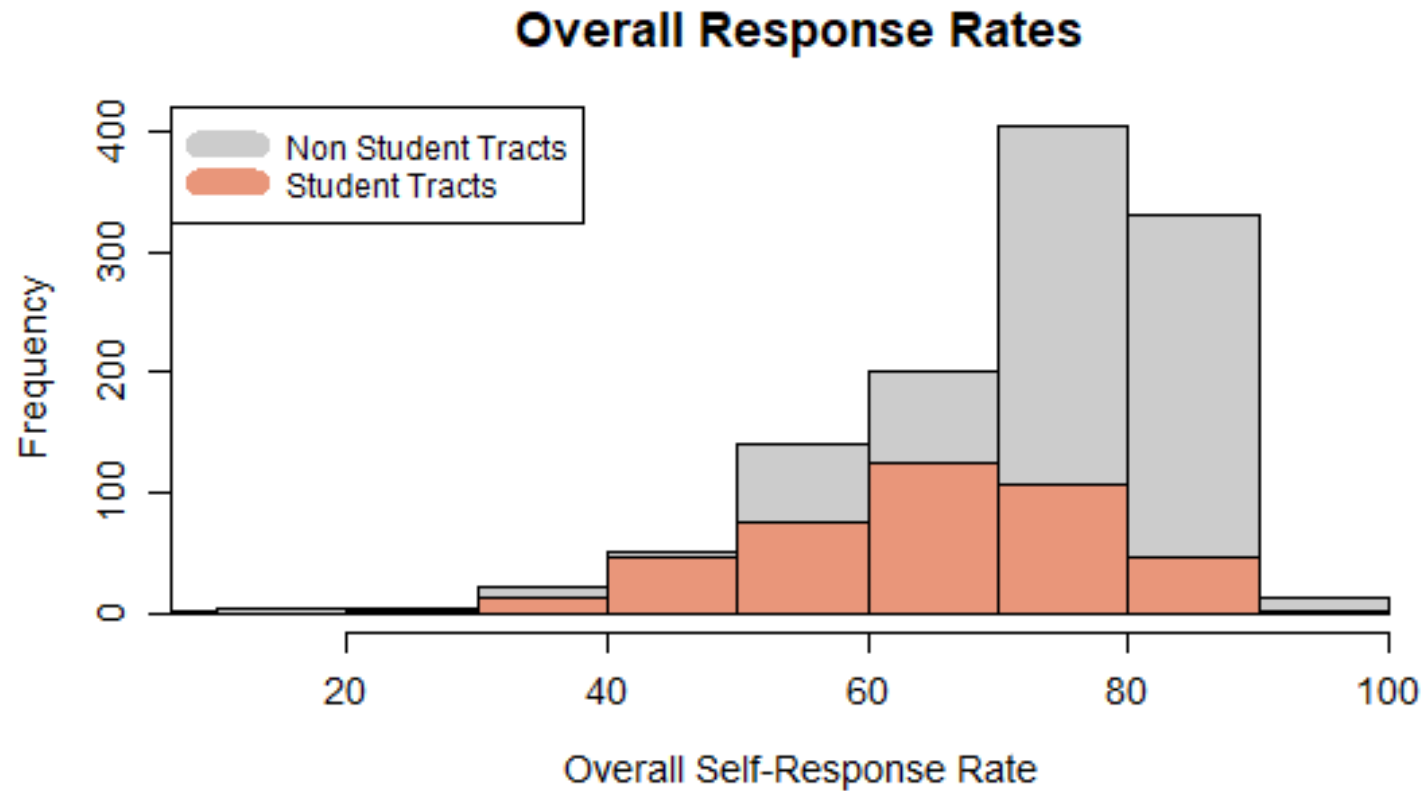
<https://www2.census.gov/programs-surveys/decennial/2020/data/2020map/2020/decennialrr2020.csv>

Distribution of Tract Response Rates in College vs. Non-College Tracts



Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Distribution of Tract Response Rates in College vs. Non-College Tracts



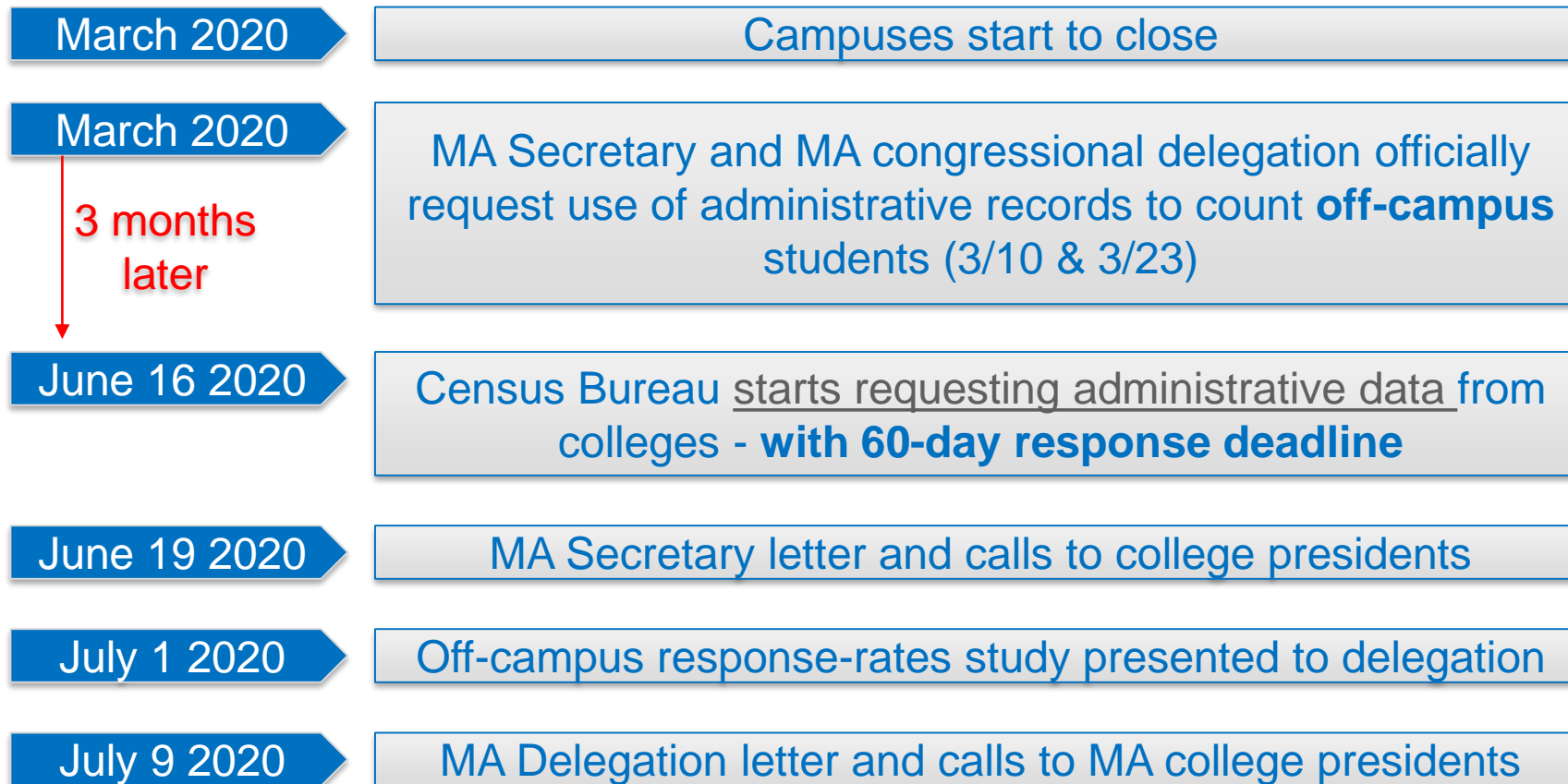
Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

Action

Study Purpose

- incentive to push for a comprehensive administrative solution by the Bureau
- real-time information to inform enumeration priority areas and institutions through the Census count end-date October 15
- **identification of specific blocks and institutions to be included in any post-enumeration correction or follow-up activities conducted by the Bureau**

Action Timeline



Action Timeline

Aug 14 2020

College Data due to Census Bureau

Sept 2020

MA delegation writes to Bureau to ascertain that college-supplied administrative information will be used

Oct 8 2020

CB: **“We can confirm that we will be using these records to assist in enumeration of addresses for which we have received neither a completed self-response nor an interview with a census taker that would indicate the address was occupied on April 1, 2020.”**

Outstanding Concerns

- Will an address be considered “counted” if **a single self-response** is completed for the address? What about the housemates?
- College town population much smaller in summer and fall 2020 during NRFU.
- How does Census NRFU interview **account for all students who would normally have been living there on April 1 2020** had it not been for Covid-19 closures?
- **To what extent are proxy interviews** being used for population counts? Property Managers providing lease holders info only, not the full roster?
- **Off-campus international students** who may have left the U.S. before the internet self-response other outreach campaigns initiated?
- student directory is being utilized for *non-responding addresses*. These **data should also be used for both quality control and supplementation of household populations** when the administrative or student directory information indicates that the complete population at an address may not have been fully enumerated - whether through self-response, Census-taker interview, or proxy interview.

The “Ask”

- Extend 12/31/2020 Deadline for Reapportionment Data Delivery **now extended to March 6**
- Extend 4/1/2021 Deadline for PL-94 Redistricting Data
- **Add “Administrative Records” and “Population” to the scope of the *Count Questions Resolution Program* – look for upcoming Federal Register Notice**
- Ask Census to continue to collect administrative data from colleges and other sources to supplement count data if needed
- More clarity on FRPA for colleges asked to submit administrative data
- Ask Local and State contacts to urge colleges to respond to Census requests for data
- Census special Covid analysis on international students

Resources

DIY Resources – the Basics

Census Self-Response Rates

- Census website: <https://2020census.gov/en/response-rates/self-response.html>
- Data World <https://data.world/uscensusbureau/2020-census-response-rate-data>

College Geographic Locations

- <https://nces.ed.gov/programs/edge/Geographic/SchoolLocations>
- See: [Postsecondary School File](#)
- Filtered by 4-year institutions with 1,000+ undergrads

DIY Resources - Demographic

Census Planning Database

- <https://www.census.gov/topics/research/guidance/planning-databases.html>
- Use for demographic data at small (block group) geographic area

U.S. Census 2016 American Community Survey Data

- Block group data of 18-24 year olds and enrolled in college ACS_16_5YR_B14007
- Link - <https://data.census.gov/cedsci/all?q=B14007>

2010 Census data

- <https://www.census.gov/programs-surveys/decennial-census/data/datasets.2010.html>

DIY Resources – Other

2010 Census data and shapefiles

- Data link – <https://www.census.gov/programs-surveys/decennial-census/data/datasets.2010.html>
- Shapefile link – <https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.2010.html>

Other:

- Digitized local bus or other transit routes
- Request de-identified student addresses from colleges

Thank You!

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Response Rates by Student Concentration Levels

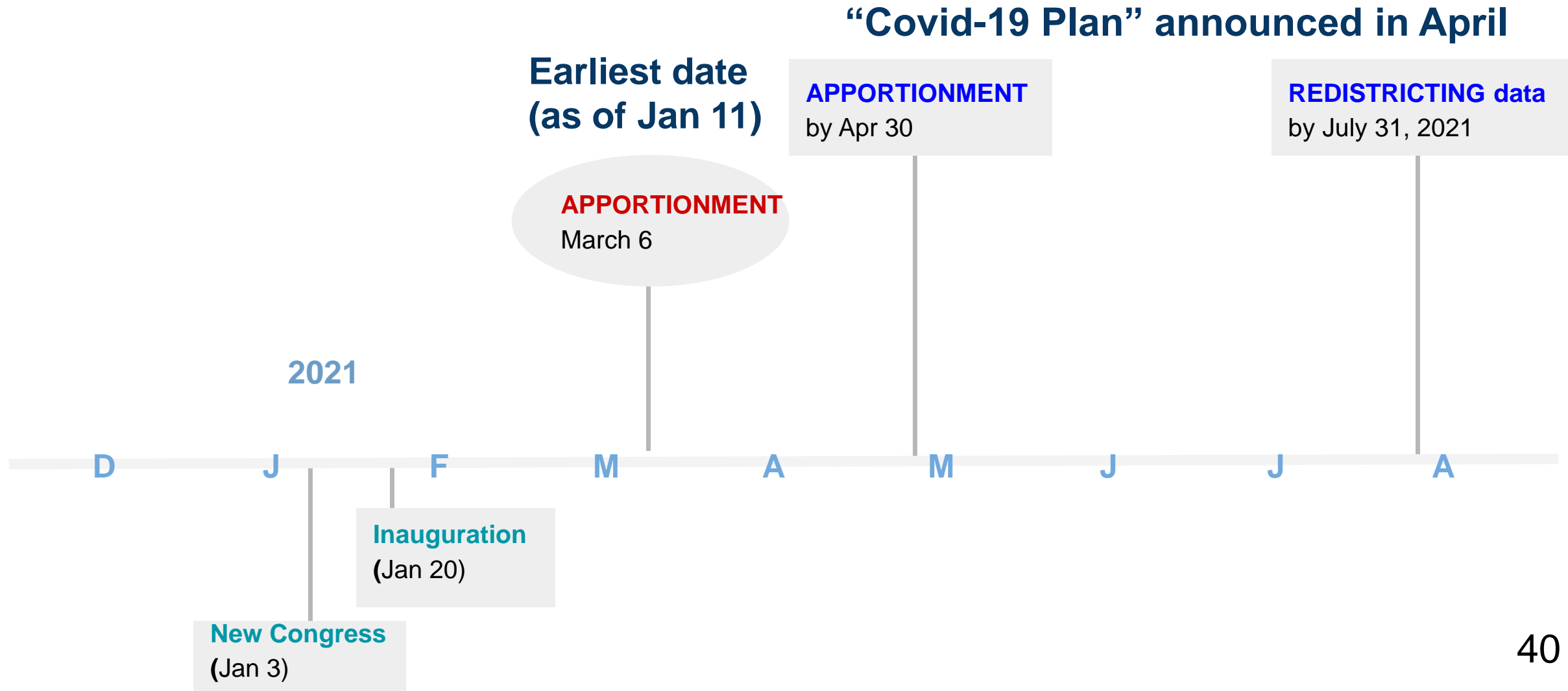
Level of College Student Blocks by Area	Number of Tracts	Median response rate, all responses	Median response rate, internet responses only
Level 1: Over 75% by area	53	65	58.2
Level 2: 50-75% by area	82	65.5	56.8
Level 3: 25-75% by area	87	66.6	54.0
Level 4: 10-25% by area	92	67.1	53.3
Level 5: 10% or under by area	100	67.8	57.4
All College Student Tracts	414	66.7	56.4
No College Student Tracts	1169	74.7	63.6

Due to rounding and geographic boundary considerations, tracts that had 0.5% or less of their area consisting of student blocks were considered Non College Student Tracts

Source: U.S. Census Bureau. Census Self Response as of 10/28/2020.

<https://www2.census.gov/programs-surveys/decennial/2020/data/2020map/2020/decennialrr2020.csv>

Best Guess at Timing



Count Question Resolution	Population Estimates Challenge Program	Special Censuses
<p>Begins after delivery of Redistricting data ~Oct 2021 and goes through June 2023.</p> <p>Allows challenges to census counts for population or housing units based on a narrow criteria related to technical, data processing issues</p>	<p>Begins after release of 2021 population estimates in 2022, and every year thereafter ending with 2029 estimates.</p> <p>Jurisdictions have 90 days after release to submit</p> <p>Allows challenges to improve intercensal population estimates by correcting a processing error or the erroneous use of data or processes in calculating estimates</p>	<p>Under section 196 of Title 13, the Census Bureau can conduct a basic enumeration of an area through the Special Census program at the request of a governmental unit.</p> <p>Local officials might request this enumeration if there has been a significant population change in their community due to growth or annexation. The governmental unit requesting a special census is financially responsible for its cost.</p>

Figure 2. State-Level Changes Resulting from the 2010 Count Questions Resolution Program Were Relatively Small

Original 2010 Census total population and housing unit counts and the corrected counts resulting from the 2010 Count Question Resolution program

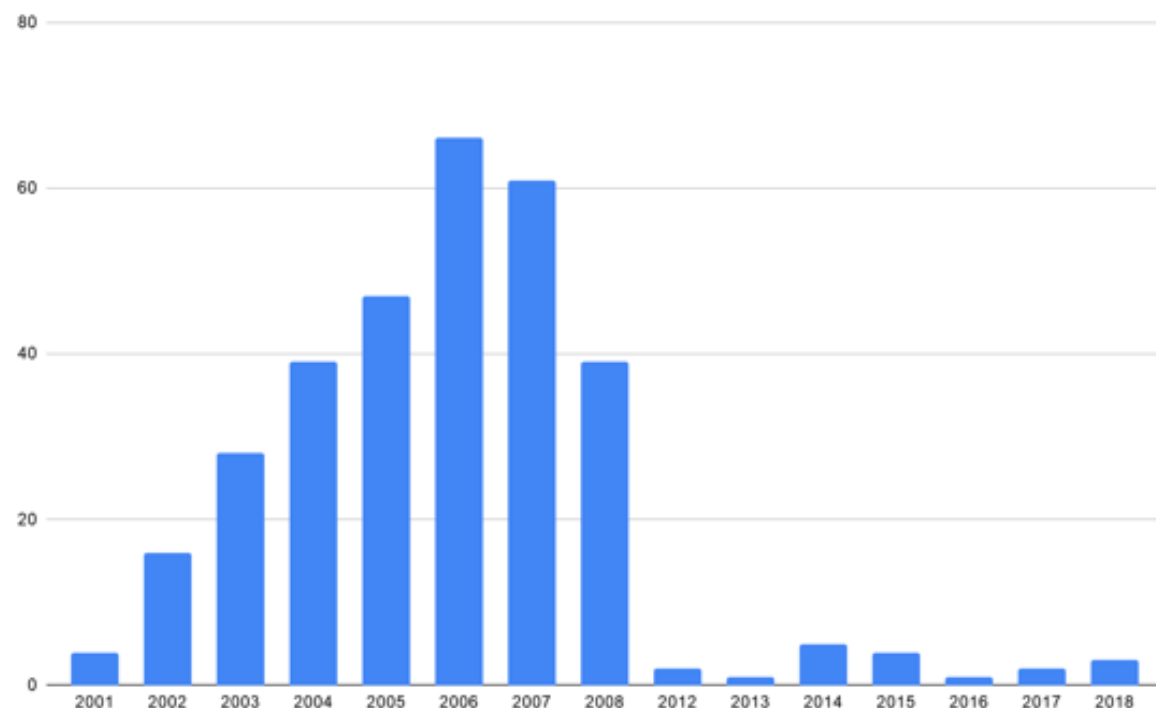
	<i>Original Tabulation</i>		<i>Corrected (Revised)</i>		<i>Absolute Change</i>	
<i>State</i>	<i>Total population</i>	<i>Total housing units</i>	<i>Total population</i>	<i>Total housing units</i>	<i>Change in Population</i>	<i>Change in Housing units</i>
Alabama	4,779,736	2,171,853	4,779,753	2,171,862	17	9
Alaska	710,231	306,967	710,235	306,970	4	3
Arkansas	2,915,918	1,316,299	2,915,919	1,316,300	1	1
District of Columbia	601,723	296,719	601,767	296,739	44	20
Florida	18,801,310	8,989,580	18,801,332	8,989,592	22	12
Georgia	9,687,653	4,088,801	9,687,850	4,088,882	197	81
Idaho	1,567,582	667,796	1,567,652	667,796	70	0
Maryland	5,773,552	2,378,814	5,773,626	2,378,860	74	46
Michigan	9,883,640	4,532,233	9,883,706	4,532,269	66	36
New Jersey	8,791,894	3,553,562	8,791,909	3,553,569	15	7
New Mexico	2,059,179	901,388	2,059,181	901,390	2	2
Ohio	11,536,504	5,127,508	11,536,504	5,127,509	0	1
South Dakota	814,180	363,438	814,191	363,442	11	4
Texas	25,145,561	9,977,436	25,145,565	9,977,438	4	2

Note: [DRAFT FIGURE] The table only shows states where total population and housing unit counts differed between the original and corrected tabulation at the state level. While there can be large relative changes in the population counts for small geographic units, the increase in population or housing units for one area is usually offset by a loss in a neighboring area. Consequently, there is typically little change in the population and housing unit totals at the state and national level.

Source: Georgetown Center on Poverty & Inequality, 2021; "Notes and Errata: 2010 Census Population and Housing." U.S. Census Bureau, last revised May 2018. Available at <https://www.census.gov/library/publications/2010/dec/sf10-1.html>.

Figure 3. The Number of Successful Population Estimate Challenges Have Declined

Accepted challenges to the vintage population estimates during the 2000s and 2010s

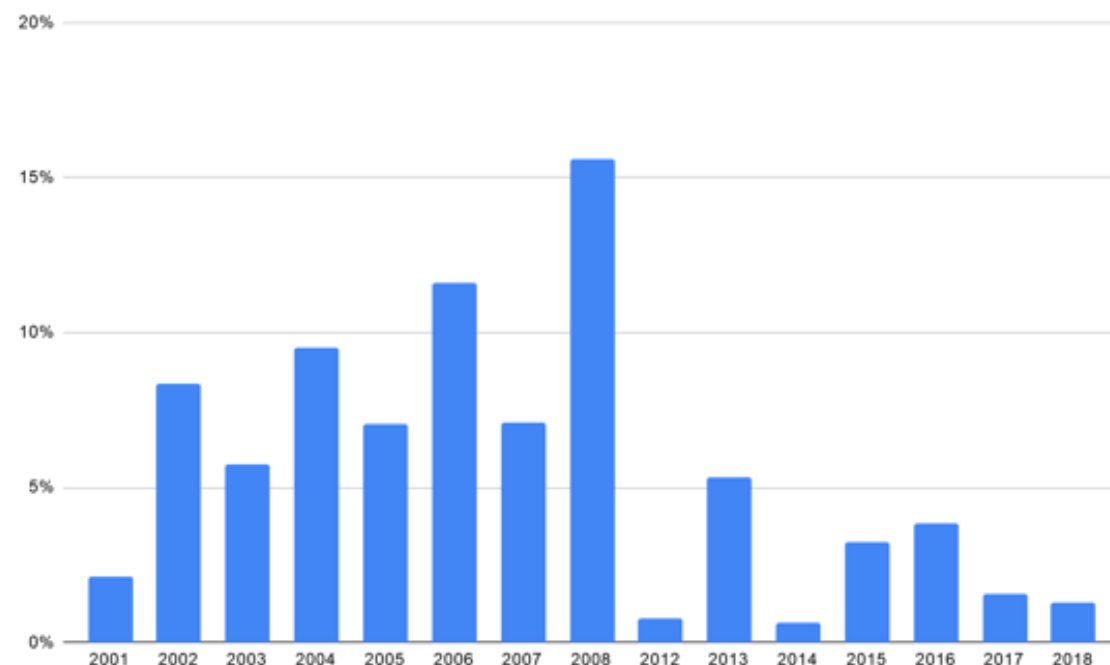


Note: [DRAFT FIGURE] Population Estimates Challenge program results are available for the vintage estimates for the years 2018 to 2012, 2008 to 2001, and 1998. The available data for the successful 1998 challenge (for Collier County) is not reflected in the figure.

Source: Georgetown Center on Poverty and Inequality, 2021. "Challenge Results." U.S. Census Bureau, last revised February 2020. Available at <https://www.census.gov/programs-surveys/popest/about/challenge-program/results.html>.

Figure 4. Successful Challenges Have Resulted in Smaller Percent Changes to Population Totals

Average percent change in a governmental unit's vintage population estimate by year following a successful challenge during the 2000s and 2010s



Note: [DRAFT FIGURE] Population Estimates Challenge program results are available for the vintage estimates for the years 2018 to 2012, 2008 to 2001, and 1998. The available data for the successful 1998 challenge (for Collier County) is not reflected in the figure.

Source: Georgetown Center on Poverty and Inequality, 2021. "Challenge Results." U.S. Census Bureau, last revised February 2020. Available at <https://www.census.gov/programs-surveys/popest/about/challenge-program/results.html>.

Take-Aways

1. More time and opportunities for collaborating w/ Bureau to improve counts for federal funding. Apportionment and Redistricting data are coming imminently.
1. For other uses of census data, cities may want to be aware of strengths/limitations of neighborhood-level data so harder to reach populations are not left behind.
2. Connect with allies inside local gov (your GIS analyst!) and your state demographer to help understand the strengths/limitations of 2020 Census data for your city.
1. Email census@ncoc.org if you'd like to be a part of advocacy for opportunities to improve the count.

Technical Assistance

NLC Local Democracy Webinar series for Municipal Leaders

- *Find our past Census webinars [here](#)*
- *Registration will re-open soon for future sessions*

Contact Information

Cities Count - censusrapidresponse@nlc.org

<https://www.nlc.org/initiative/cities-count-preparing-for-the-2020-census/>

Cities Vote - citiesvote@nlc.org

<https://www.nlc.org/initiative/cities-vote-ensuring-everyone-counts-in-every-election/>

- ❑ [How Do the 2020 Census Self-Response Rates Compare to 2010 and What Does That Mean For COVID Recovery?](#) – October 30
- ❑ [It's Not Too Late! 3 Ways Your City Can Still Get an Accurate Census Count](#) – September 8
- ❑ [Cities and Libraries Partner to Achieve a Complete Census Count](#) – August 12
- ❑ [Why the 2020 Census is Essential to Municipalities](#) – June 17
Explains the critical link between COVID-19, racial equity, Census, and federal funding and representation. Provides resources for targeting historically undercounted communities. Part of the national "Our Power, Our Census" day of action.
- ❑ [National Census Day at National League of Cities](#) – April 1
Concrete GOTC ideas in the age of COVID, and additional resources.
- ❑ [Cities and the Census: A Call to Action](#) – February 14
The importance of the Census, its data, and NLC's commitment to a fair and accurate census count.

2020 Census: from important to urgent to emergency level implications for municipalities

1. COVID-19 Pandemic:

- NLC's Cities Are Essential campaign: \$500 Billion direct support to cities for COVID recovery
 - **Allocation of these billions will be determined by 2020 Census numbers** – accuracy and fairness of this specific year's count MATTERS
 - **Historically undercounted communities are *the same* black and brown communities disproportionately impacted by COVID** illness and related economic displacement, increasing their risk of undercount this specific year
- Cities' *current* abilities & challenges to respond to COVID-19 determined **by 2010 Census numbers**
- Climate change is creating ecosystems more hospitable for disease – natural disasters are increasing
 - Census data = next 10 years' federal funding for the next global pandemic or other natural disaster

2. Local Democracy is a Critical Piece to Racial Equity in Systems Reform

- The Census determines congressional representation
 - Cities need to achieve a full and complete census count so they receive the federal/state representation they need to accurately support their needs through 2030
- Census data is used in the elections' redistricting process in every state