

# Coming Soon to a Neighborhood Near You?

Off-Campus Recruiting by Public Research Universities



THE UNIVERSITY  
OF ARIZONA®

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[ozanj.github.io/naed\\_presentation](http://ozanj.github.io/naed_presentation)

# Acknowledgments

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# Motivation

## The problem with policy discourse about college access

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### The 2014 White House "Access Summit"

- The White House (2014a) review of causes of unequal college access
  - Highlights "achievement gap", "under-matching"
- *Commitments to Action on College Opportunity* (The White House, 2014b)
  - Universities pledge "action plans" (e.g., holistic admission, need-based aid, "outreach")

### Problem with policy discourse

- Place responsibility on students, K-12 schools; assume universities are passive or progressive

### Alternative explanation for access inequality

- University enrollment priorities biased against poor students and/or communities of color

### Research focus (this paper)

- We argue recruiting behavior is an indicator of enrollment preferences
- **Research question:** What are the similarities and differences in off-campus recruiting patterns across public research universities?

# Background

## The enrollment management industry

### The enrollment funnel



### Interventions along the funnel

- Identify prospects
  - Purchase "student lists"
- Recruit prospects remotely
  - Email, mail, text, etc.
- Recruit prospects in-person
  - **Off-campus recruiting visits** (e.g., high school visits, fairs)
  - Campus visits
  - Other "outreach"
- Solicit inquiries, stealth applicants
  - Social media, advertising
- Convert admits to enrollees
  - Financial aid leveraging

# Literature review

## Scholarship on the enrollment funnel

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Most research analyzes admissions (e.g., Killgore, 2009) or financial aid (e.g., McPherson, Schapiro, 1998)

- Final stages of enrollment funnel

Scholarship on recruiting is sparse

- Audits of university response to inquiries (e.g., Hanson, 2017; Thornhill, forthcoming)
- Off-campus recruiting visits
  - From the college perspective (Stevens, 2007)
    - Important for relationships with prospects, counselors at "feeder" schools
  - From the perspective of high school students (Holland, 2019)
    - Which universities visit affects student decisions; especially first-gen, students of color

Research gap

- We don't know which universities visit which schools and communities
- If poor students, communities of color are not being recruited, then "under-matching" may be due to under-recruiting rather than lack of guidance

# Theoretical motivation

## Enrollment priorities and recruiting behavior

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### Organizational theory

- Contingency theory (Thompson, 1967)
  - Technical level vs. managerial level
- "New" institutional theory (Meyer and Rowan, 1977)
  - Publicly adopt goals demanded by environment
  - Technical level cannot pursue all goals
    - Substantively adopt some goals (technical level)
    - Symbolically adopt others (policies, rhetoric)

### Application to enrollment management (EM)

- "Iron triangle" of EM highlights three broad enrollment goals: **access, academic profile, revenue**
  - Resources scarce; depending on priorities, some goals receive more resources than others
- Enrollment priorities cannot be discerned by policies, rhetoric
- Recruiting is allocation of resources from technical level
  - Knowing which populations targeted by recruiting interventions indicate enrollment priorities

# Research overview

## The broader off-campus recruiting research project

### Data collection

- Method
  - Web-scrape admissions websites
- Criteria to be included in data collection
  1. Post visits on admissions websites
  2. Organizational type
- Data collection sample
  - 54 public research universities
  - 49 private research universities
  - 42 selective private liberal arts
- Data collection period
  - 1/1/2017 to 12/31/2017
  - Ongoing data collection with larger sample

### Sample data



#### Admissions Events

Come meet us when we are in your area.

##### United States—California

- **Trabuco Hills High School**  
Thursday, November 3 at 12:22 PM  
Mission Viejo, CA
- **Tustin Unified College and Career Fair**  
Monday, November 7 at 6:00 PM  
Tustin, CA

##### United States—Georgia

- **Augusta Preparatory Day School**  
Thursday, November 3 at 12:45 PM  
Martinez, GA

##### United States—Kentucky

- **Cooper High School College Fair**  
Thursday, November 17 at 8:00 AM  
Union, KY
- **Randall Cooper High School College Fair**  
Thursday, November 17 at 8:00 AM  
Union, KY
- **Woodford County High School College Fair**  
Thursday, November 17 at 6:30 PM  
Versailles, KY
- **Covington Latin High School College Fair**  
Monday, April 3 at 6:30 PM  
Covington, KY

# Research overview

Focus of this research paper

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**Research question: what are the similarities and differences in off-campus recruiting patterns across public research universities?**

- Quantitative multiple case study of 15 public research universities

**Why this research question:**

- First paper from the larger study
- Explore behavior inductively, rather than test specific hypotheses
- Subsequent papers more focused, thematic (e.g., racial red-lining, international recruiting)

**Why focus on public research universities:**

- Historic mission of social mobility for state residents
- Decline in state funding, growth in nonresident enrollment (Jaquette and Curs, 2015)
- What are they doing to get all these nonresidents? More effort recruiting nonresidents than residents?

# Research methods

## Defining events

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**"Off-campus recruiting events" defined as off-campus events hosted by paid staff/consultants focused on soliciting applications**

- Event type
  - Include: college fairs, high school visits, community college visits, counselor events
  - Exclude: admitted or committed student events, interviews
- Event host
  - Include: paid admissions staff or consultants (e.g. regional recruiters)
  - Exclude: alumni, student volunteers
- Event location
  - Any off-campus location
  - e.g., high school, community college, hotel, convention center, cafe, etc.

# Research methods

## Data collection, data processing, data quality

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### Data collection

- University website checked four times per year by two staff for URLs with recruiting events
- Web-scraping scripts run once per week

### Data processing

- "Parsing": transform HTML text into tabular data
- "Geocoding": use Google Maps API to obtain detailed location data based on limited data
- Merge recruiting data to secondary data (e.g., schools, communities)

### Data quality (are these data any good?)

- Concern 1: are scraped events properly classified and merged to secondary data?
  - Solution: manually check each scraped event
    - 8 of 15 universities checked thus far
- Concern 2: are all events posted on admissions website?
  - Solution: issue public records requests for all off-campus recruiting events
    - Received data from 7 of 15 universities; not yet incorporated

# Research methods

## Secondary data

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### Secondary data Sources:

- NCES Common Core of Data (public high schools)
- NCES Private School University Survey (private high schools)
- U.S. Census American Community Survey (community characteristics)
- IPEDS (community colleges)
- EdFacts Initiative (public high school academic achievement)
- Equality of Opportunity Project (university income distributions)

# Research methods

## Research design for analyses

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### Quantitative multiple case study design

- "Quantitative case study" uses quantitative data as sole source of evidence (Korzilius, 2010)
- "Within-case" analyses of recruiting patterns
  - Situate within local context; national overview; "deep dive" of in-state and out-of-state patterns
  - Simple descriptive statistics (e.g., counts), static visualizations, interactive maps
- "Cross-case" analyses
  - Descriptive statistics and qualitative coding methods

### Comparison to alternative research designs

- Large-N, random sample design
  - Not possible because recruiting data unavailable for random sample
  - Not desirable for present research because large-N designs pool results across cases
- Qualitative case study (usually collect data from multiple sources)
  - Our design is narrowly focused, systematic analysis of particular phenomena
  - Unlike Stevens (2007), we do not develop a holistic understanding of recruiting behavior

# Research methods

## Analysis sample

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Analysis sample consists of 15 public research universities

- Chosen from larger data collection sample (N=54) based on "completeness" of recruiting event data
- Subsequent drafts may reduce sample size based on principles of purposeful sampling (Patton, 2002)

	University Sample (N=15)	University Population (N=80)
US News World & Report Ranking	92	94
25 <sup>th</sup> Percentile SAT/ACT Composite Score	1,126	1,085
75 <sup>th</sup> Percentile SAT/ACT Composite Score	1,334	1,300
Total Enrolled Freshmen	5,433	4,901
Percent Out-of-State Freshmen	26.9%	25.4%
In-State Tuition + Fees	\$11,454	\$10,788
Out-of-State Tuition + Fees	\$29,758	\$28,806
Percent Pell Recipients	21.5%	25.2%
Net Tuition Revenue	\$454,015,488	\$368,109,744
Percent of Total Revenue from Tuition	30.3%	26.9%
Revenue from State (Appropriations + Grants + Contracts)	\$293,370,560	\$287,457,456
State Revenue per Student	\$11,413	\$9,108
Percent of Total Revenue from State	22.2%	20.1%

# Deep-Dive Results

Click on a university to take a closer look at the results

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**N** refers to total number of off-campus recruiting visits

- [North Carolina State University](#) (N=649)
- [Rutgers University-New Brunswick](#) (N=1,143)
- [Stony Brook University](#) (N=730)
- [University of Alabama](#) (N=4,261)
- [University of Arkansas](#) (N=1,001)
- [University of California-Berkeley](#) (N=879)
- [University of California-Irvine](#) (N=540)
- [University of Cincinnati](#) (N=681)
- [University of Colorado-Boulder](#) (N=1,445)
- [University of Georgia](#) (N=834)
- [University of Kansas](#) (N=1,023)
- [University of Massachusetts-Amherst](#) (N=908)
- [University of Nebraska-Lincoln](#) (N=1,404)
- [University of Pittsburgh](#) (N=1,232)
- [University of South Carolina-Columbia](#) (N=1,472)

# Cross-university comparisons

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## Map of Visits

North Carolina State University at Raleigh



Rutgers University-New Brunswick



Stony Brook University



University of Alabama



University of Arkansas



University of California-Berkeley



University of California-Irvine



University of Cincinnati



University of Colorado-Boulder



University of Georgia



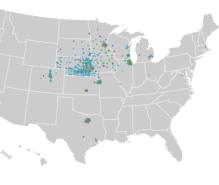
University of Kansas



University of Massachusetts-Amherst



University of Nebraska-Lincoln



University of Pittsburgh



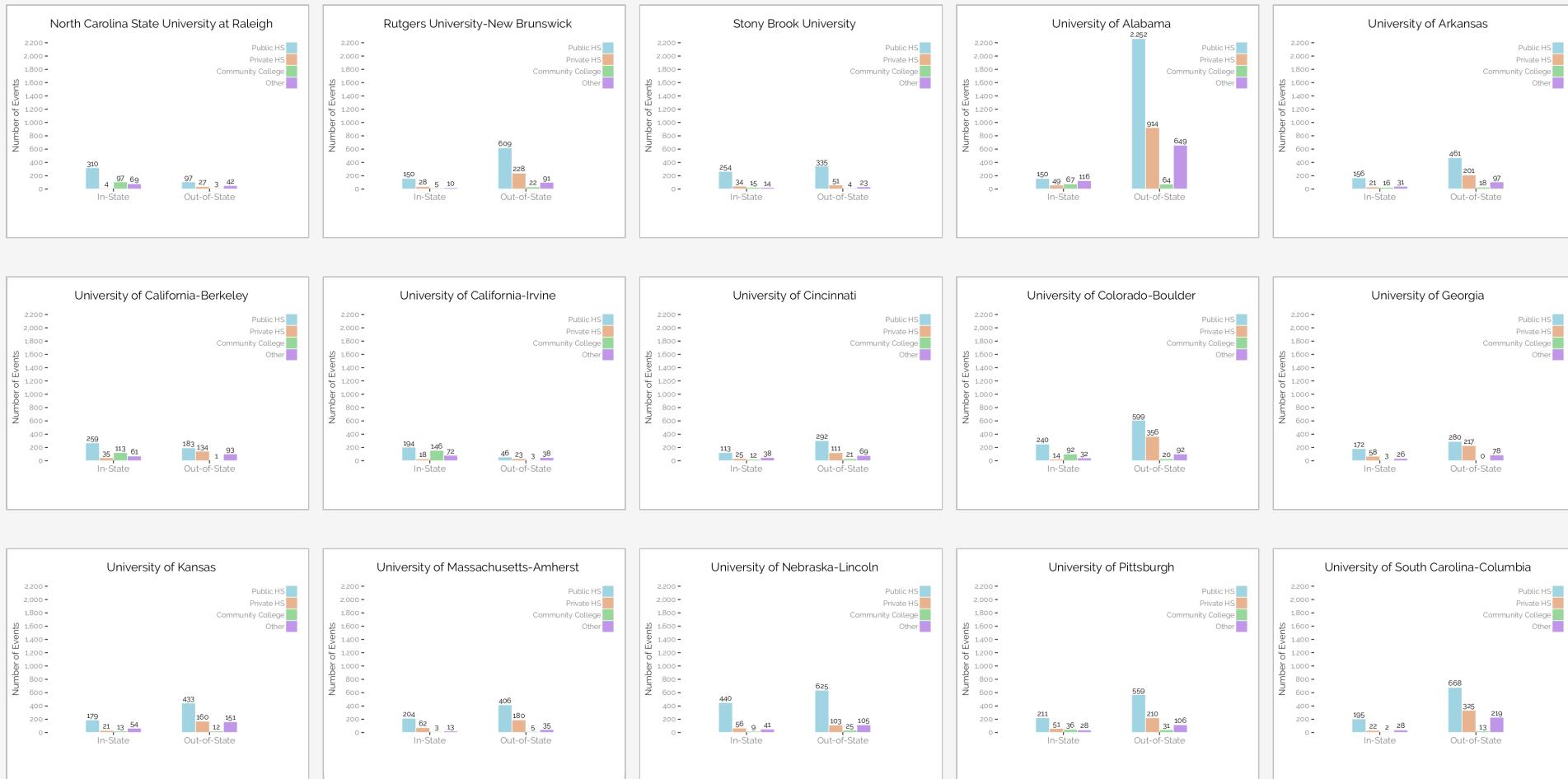
University of South Carolina-Columbia



# Cross-university comparisons

emraresearch.org

## Number of events by event type



# Summary

## Summary of results and next steps for this paper

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### Summary of results

- Majority of universities in our sample hosted twice as many out-of-state events as in-state events
  - Out-of-state events focus on affluent public schools and private schools
- Several universities focus more on in-state recruiting (e.g., U. Nebraska, North Carolina State)
- In-state visits tend to show little evidence of income or racial bias
- Some universities (e.g., Rutgers) show income/racial bias even in in-state visits
  - Must investigate whether bias persists after controlling for academic achievement, etc.

### Next steps

- Complete data quality checks (e.g., incorporate data from public records requests)
- Conduct "deep dive" for all universities
- Compare results across universities
  - Quantitative descriptive analyses; qualitative coding
- Develop broad categories of recruiting "types" and categorize universities

# Future research

Using "data science" and public records requests to study recruiting

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## Off-campus recruiting project

- Expand data collection (e.g., regional public universities); publicly release all data
- Develop manuscripts with more narrow focus (e.g., nexus between state/local politics and visits)

## Student list project (collected pilot data)

- Which student characteristics do universities prioritize when purchasing prospect lists from College Board/ACT?
- Data collection: Public records requests

## Experimental audits of university responses to "inquiries" (pre-pilot stage)

- More favorable response to inquiries with certain characteristics (e.g., affluence of zip-code/school, evidence of third-party grant/loan)?
- Data collection: Automate emails; auto-fill "inquiry forms"

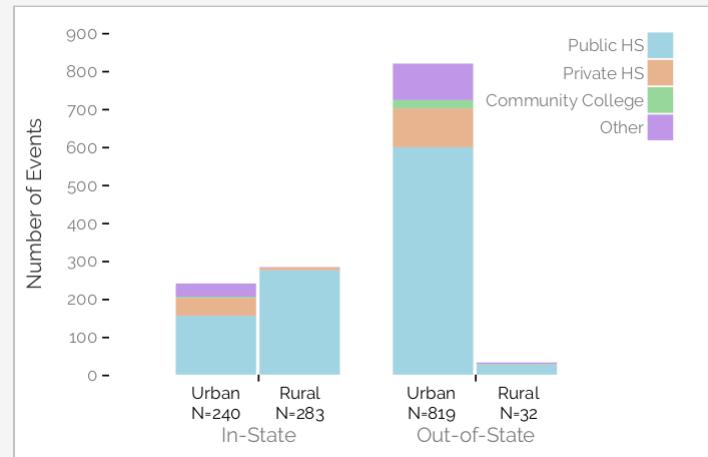
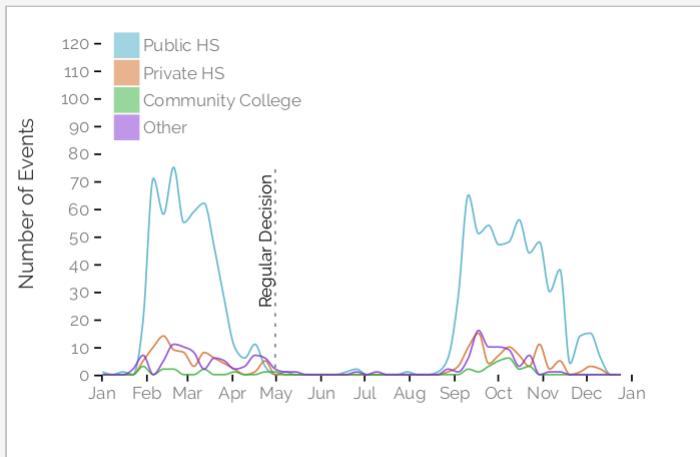
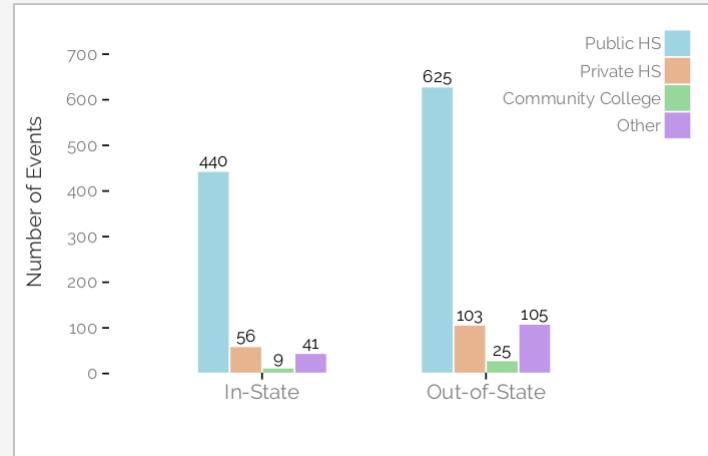
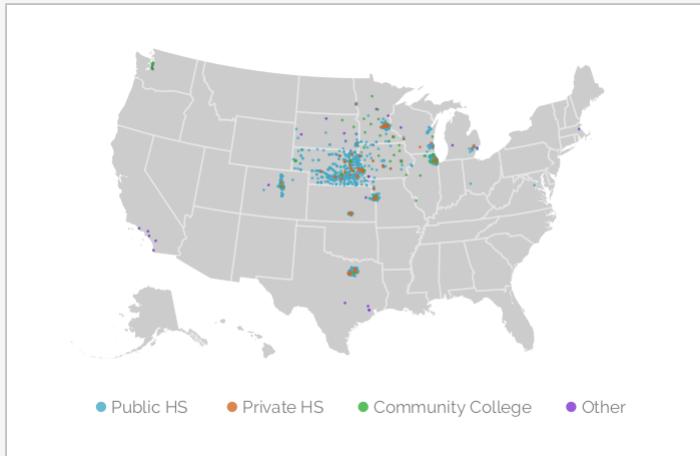
## Impact goals

- Change national policy discourse on access inequality
- Empower local actors to hold universities accountable access commitments (example [HERE](#))
  - Unless we document enrollment management behavior, we invite symbolic responses

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# National Overview

University of Nebraska-Lincoln



Select another university

# In-State Results

Nebraska

University of Nebraska-Lincoln



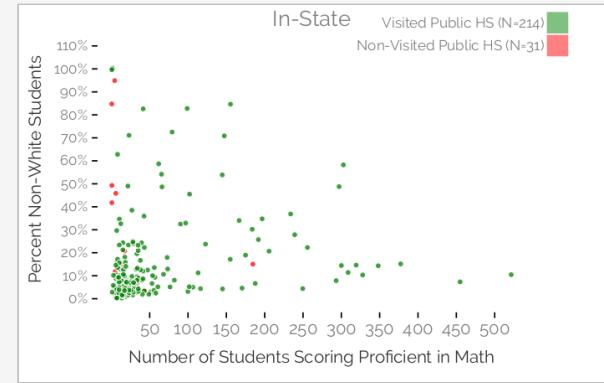
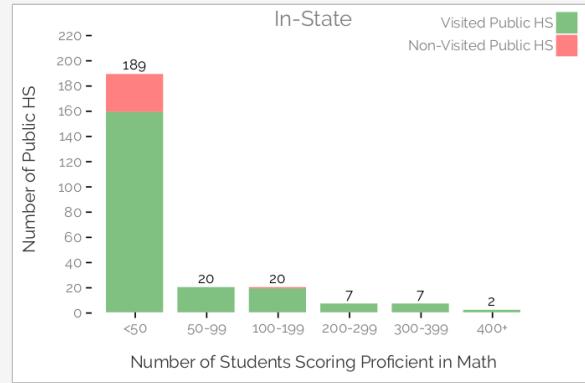
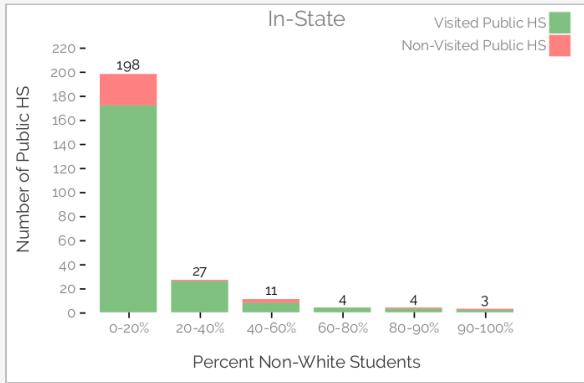
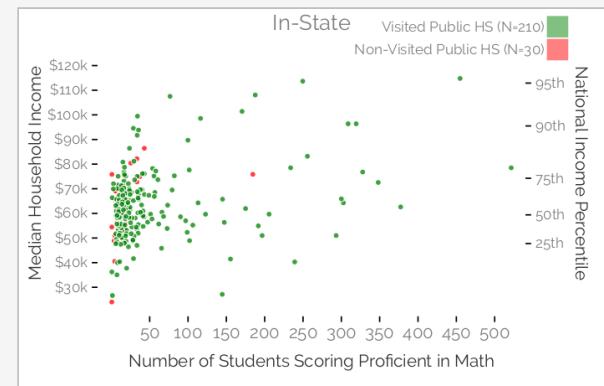
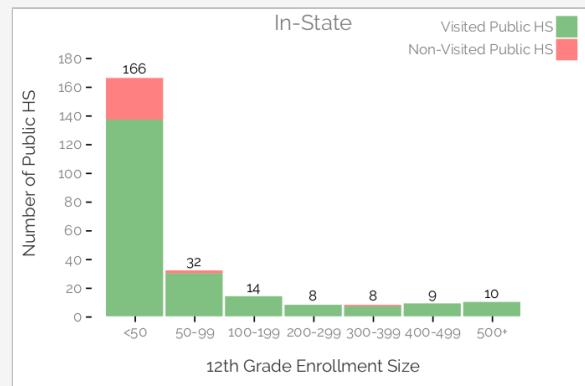
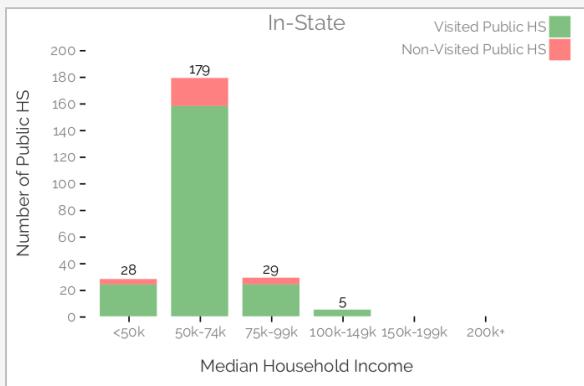
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# In-State Results

## Nebraska

University of Nebraska-Lincoln

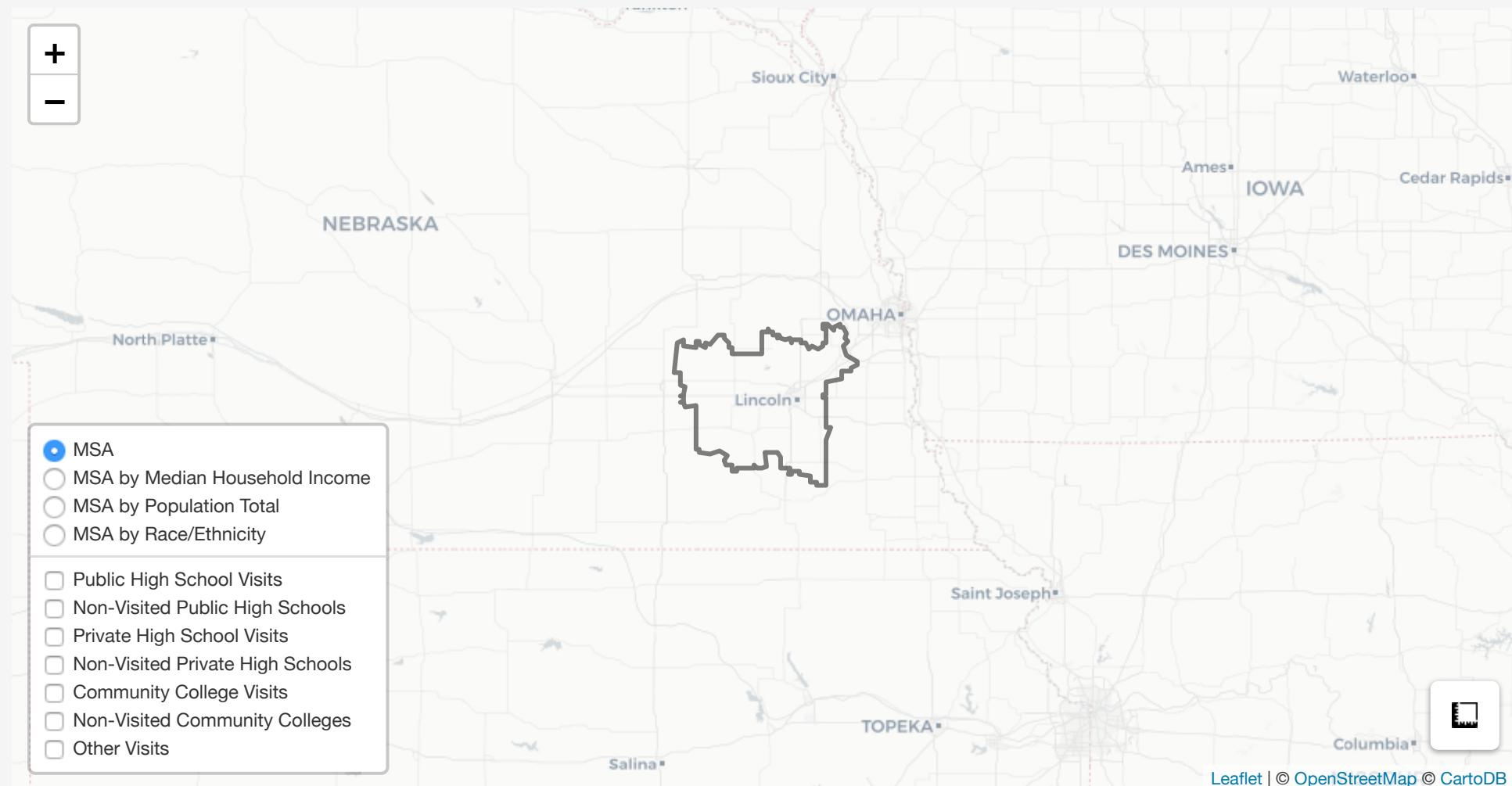


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# In-State Results

Lincoln, NE

University of Nebraska-Lincoln

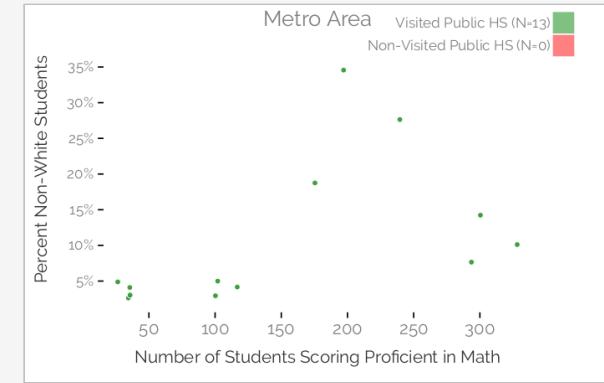
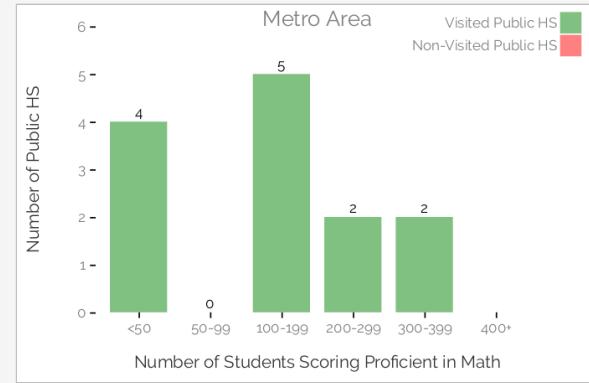
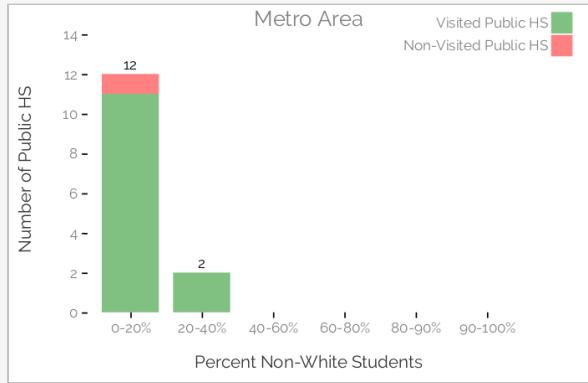
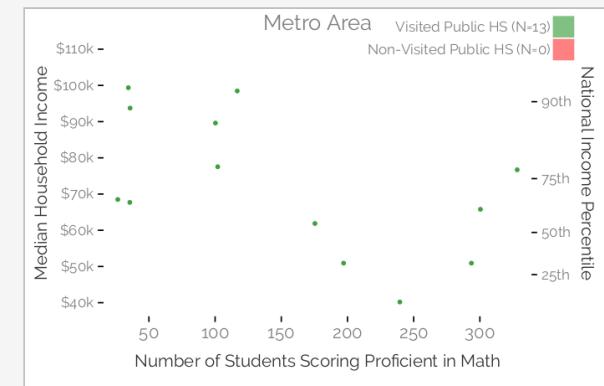
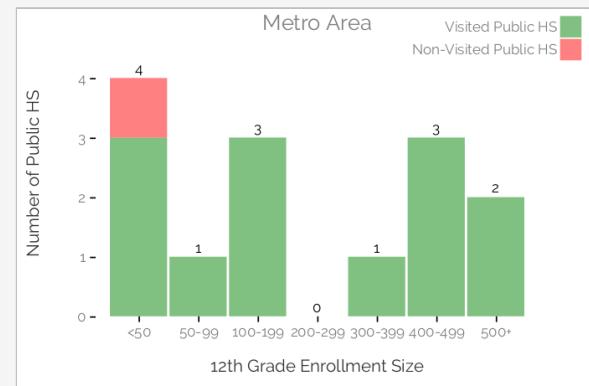
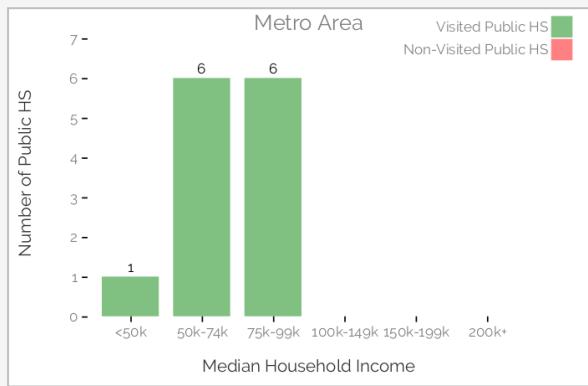


Select another university

# In-State Results

Lincoln, NE

University of Nebraska-Lincoln



Select another university

# Out-of-State Results

University of Nebraska-Lincoln

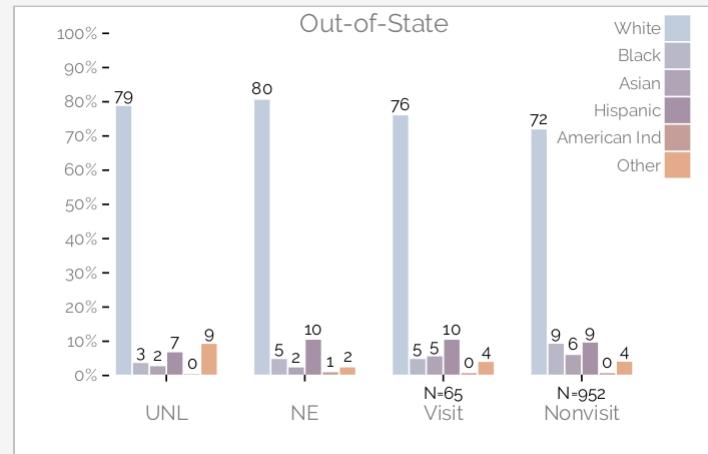
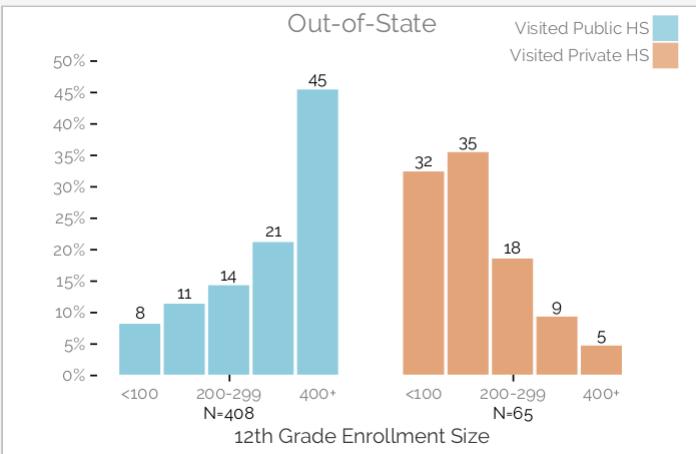
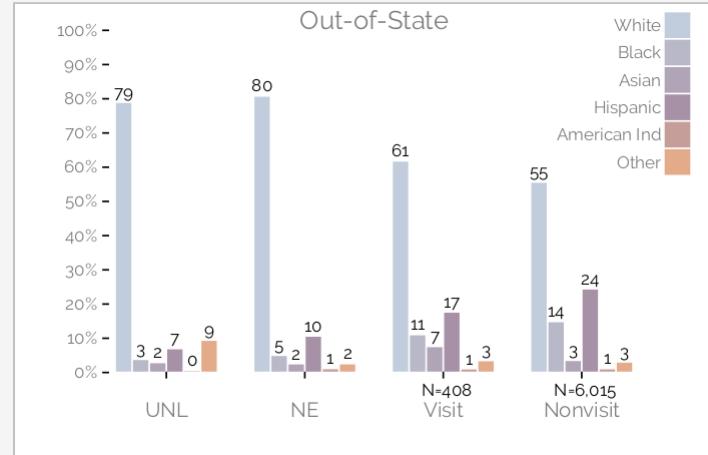
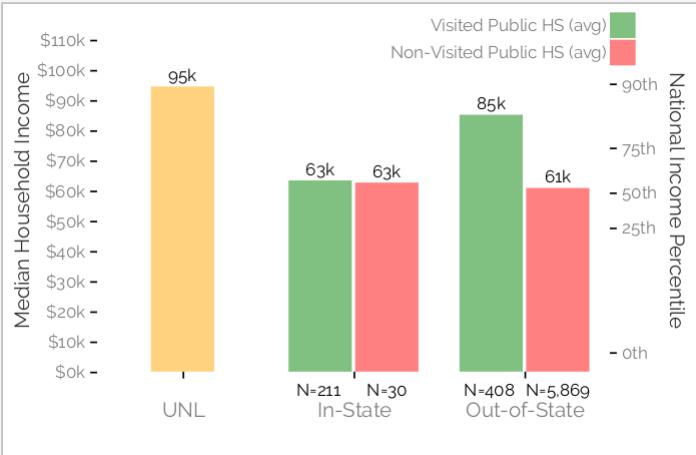
## Top Visited Metro Areas

<u>Metro Area</u>	<u>State</u>	<u>Total Visits</u>	<u>Public HS</u>	<u>Private HS</u>	<u>Cmty Coll</u>	<u>Other</u>
Chicago, Naperville, Elgin	IL, IN, WI	140	105	12	7	16
Dallas, Fort Worth, Arlington	TX	126	94	20	1	11
Minneapolis, St. Paul, Bloomington	MN, WI	110	87	21	0	2
Kansas City	MO, KS	98	75	14	1	8
Omaha, Council Bluffs	NE, IA	92	65	16	1	10
Denver, Aurora, Lakewood	CO	76	66	5	1	4
Lincoln	NE	61	45	7	0	9
Grand Island	NE	40	30	6	2	2
Wichita	KS	35	22	12	0	1
Norfolk	NE	35	25	6	4	0

Select another university

# Out-of-State Results

University of Nebraska-Lincoln

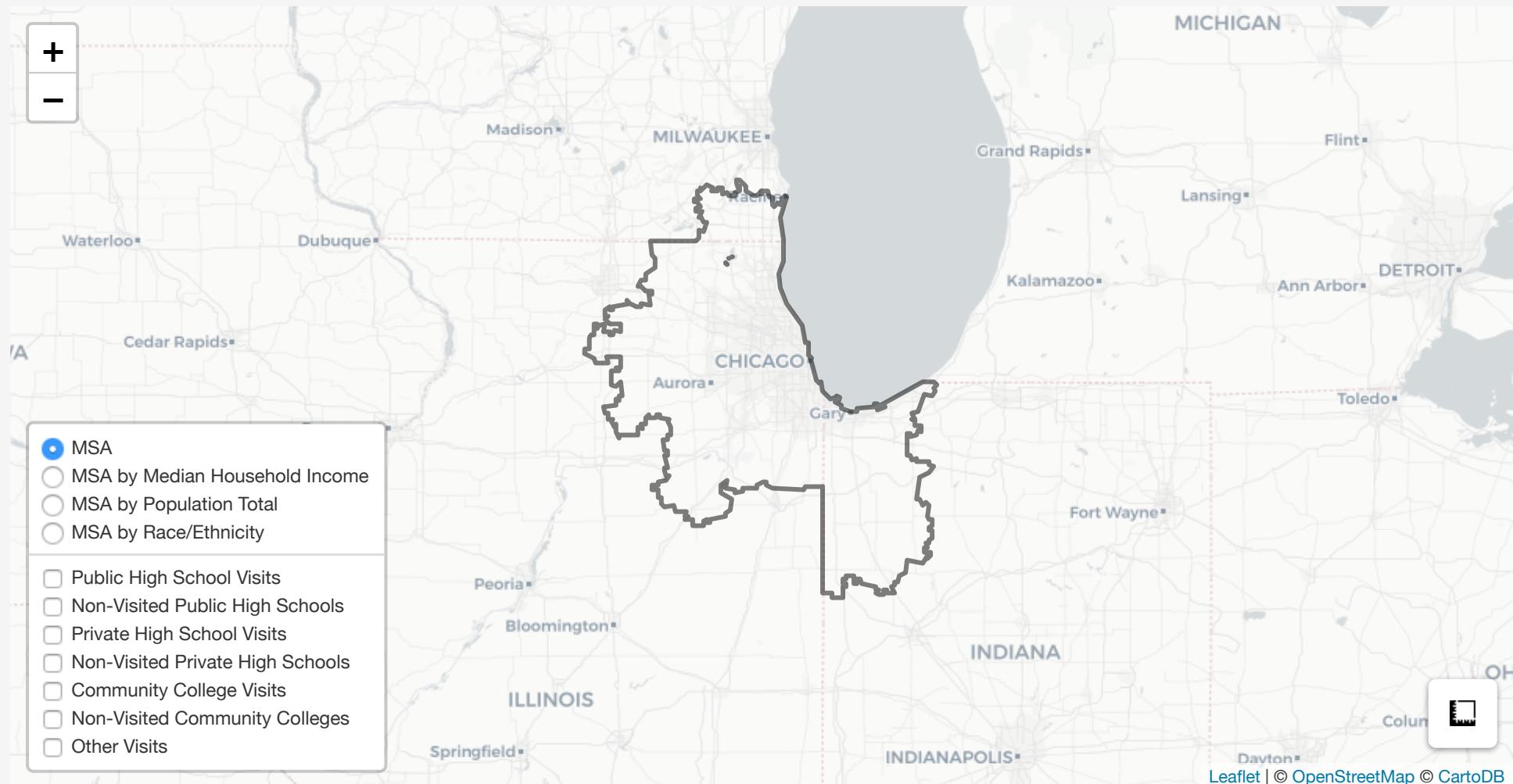


Select another university

# Out-of-State Results

University of Nebraska-Lincoln

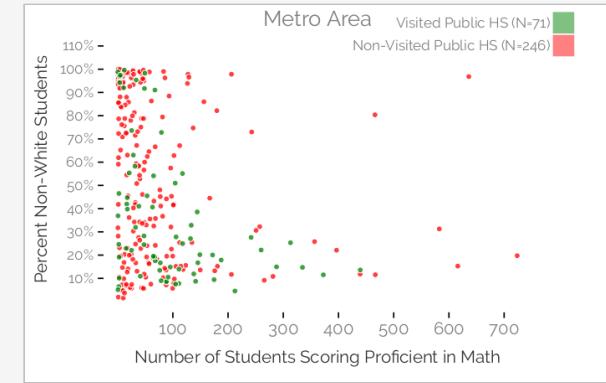
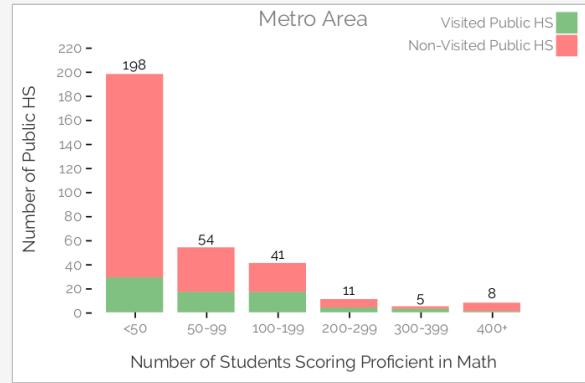
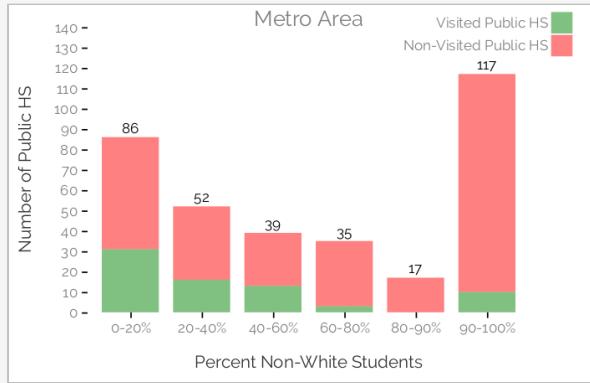
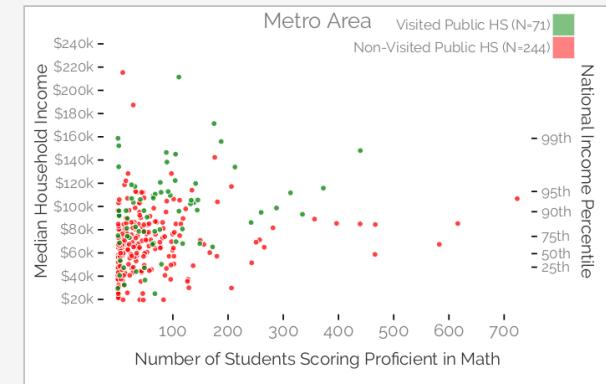
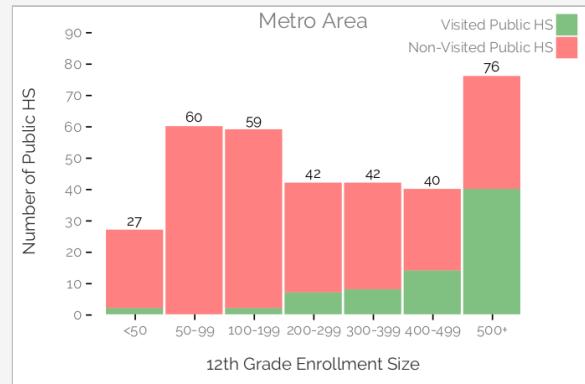
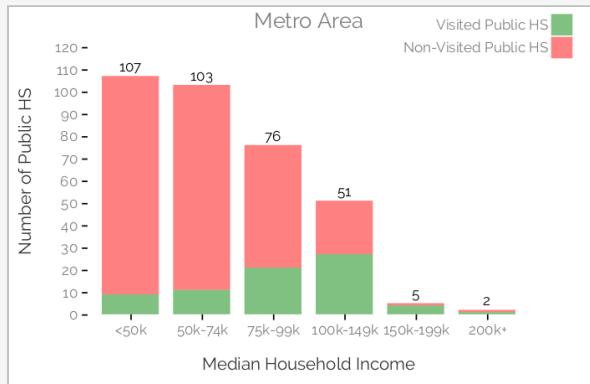
## Chicago-Naperville-Elgin, IL-IN-WI



# Out-of-State Results

Chicago-Naperville-Elgin, IL-IN-WI

University of Nebraska-Lincoln



Select another university

# Out-of-State Results

University of Nebraska-Lincoln

## Dallas-Fort Worth-Arlington, TX

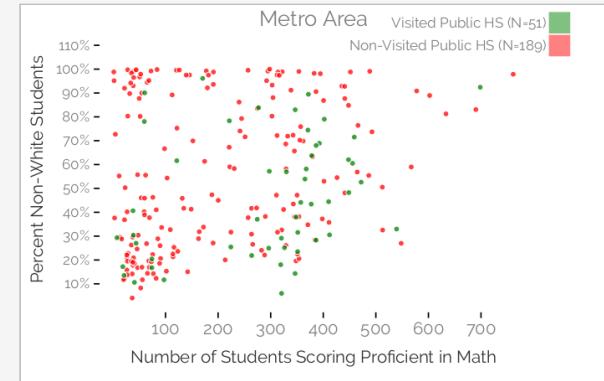
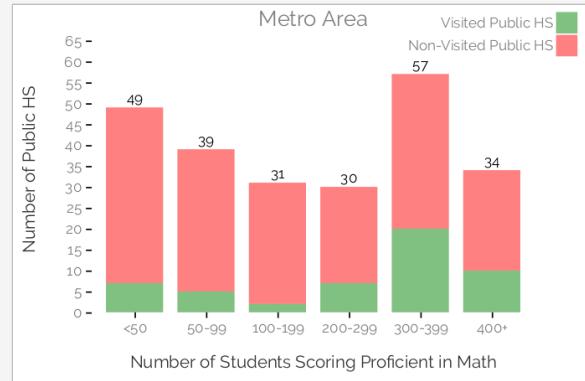
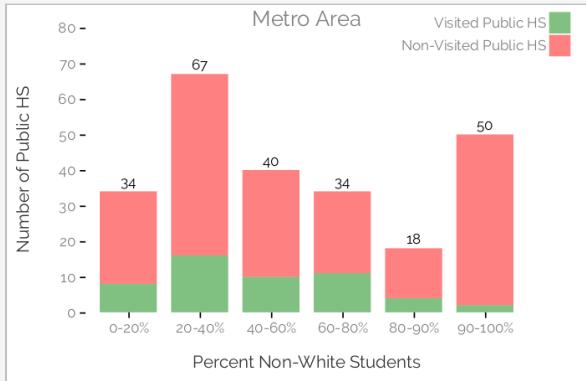
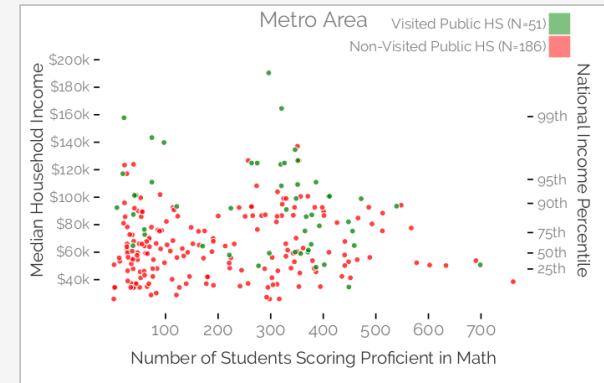
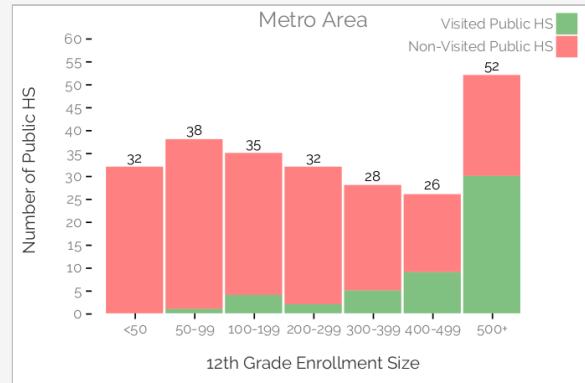
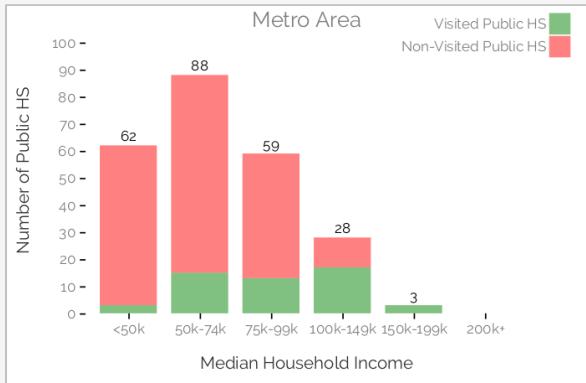


Select another university

# Out-of-State Results

Dallas-Fort Worth-Arlington, TX

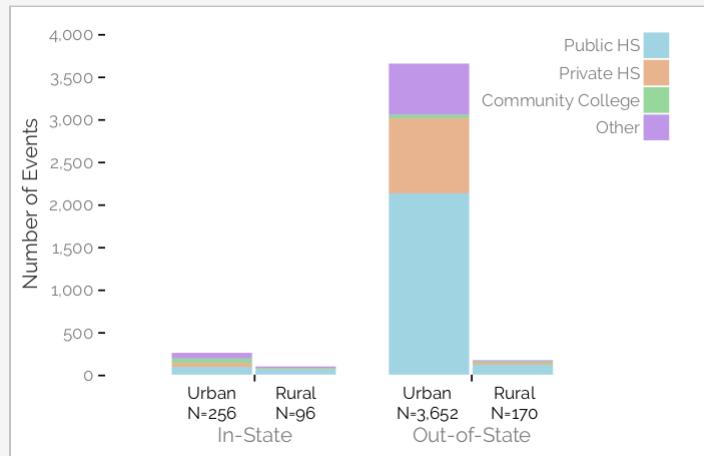
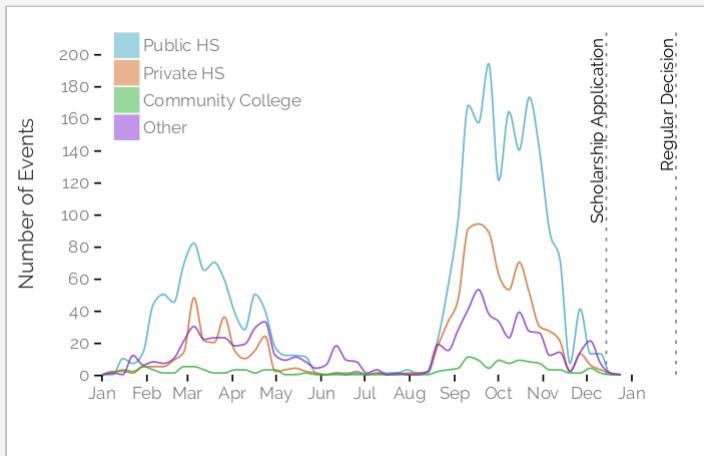
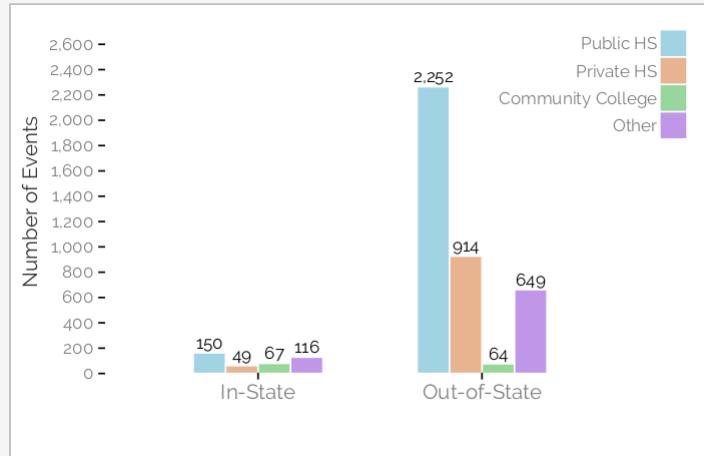
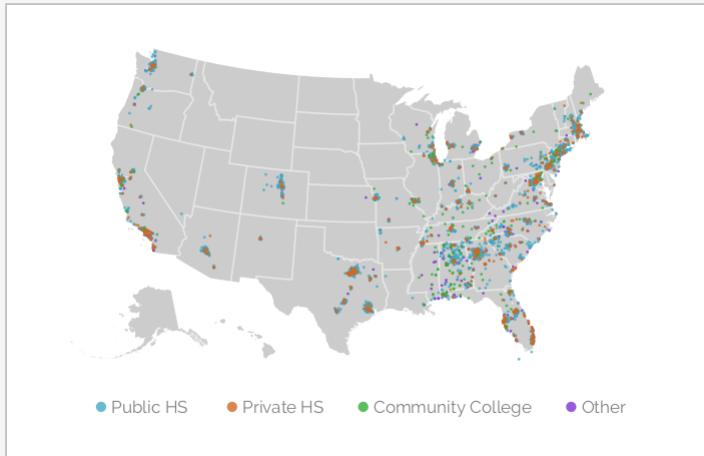
University of Nebraska-Lincoln



Select another university

# National Overview

University of Alabama

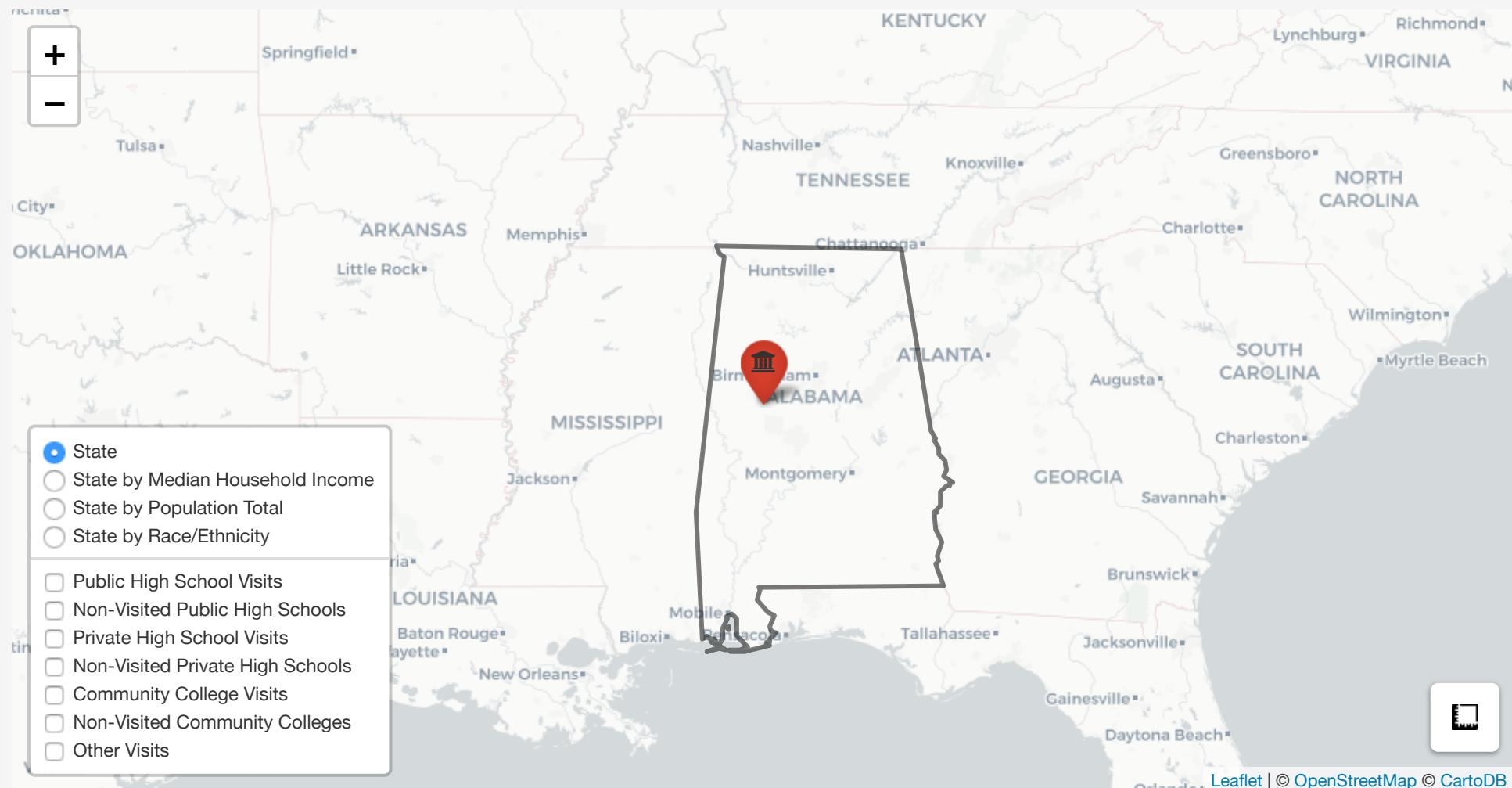


Select another university

# In-State Results

Alabama

University of Alabama

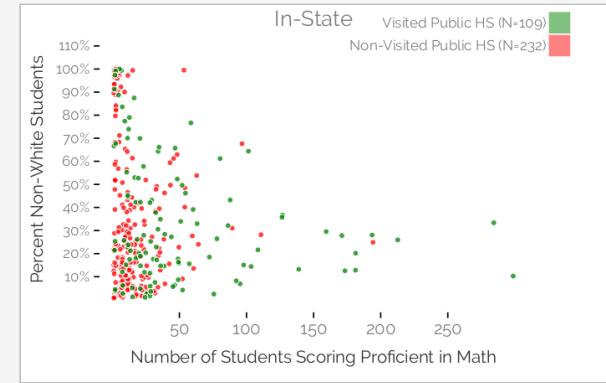
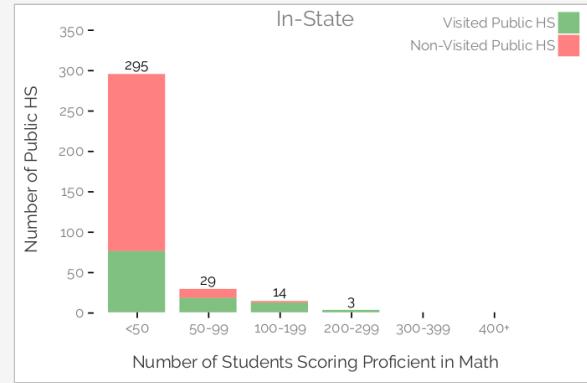
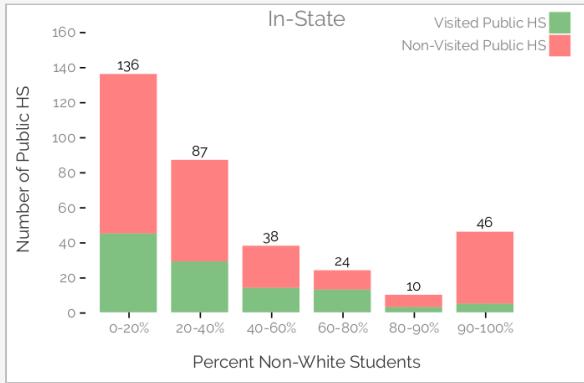
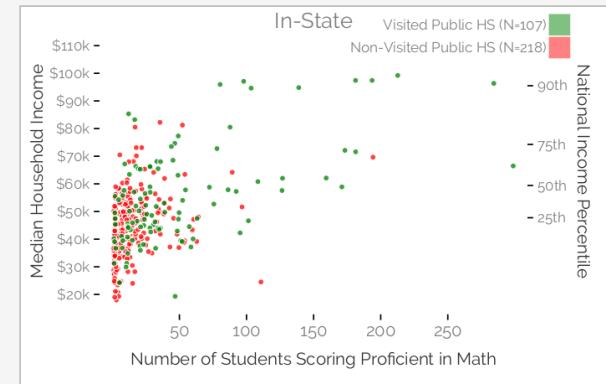
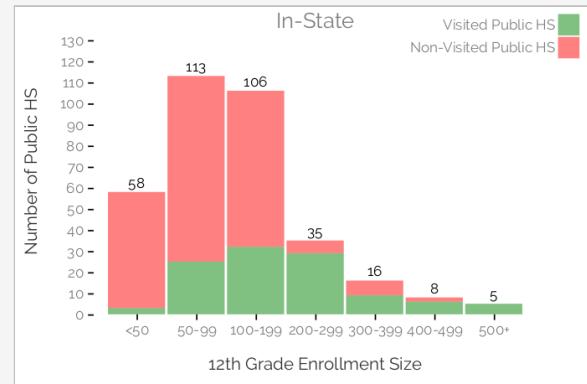
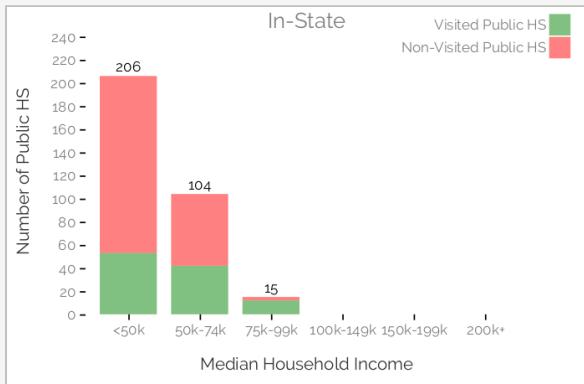


Select another university

# In-State Results

Alabama

University of Alabama

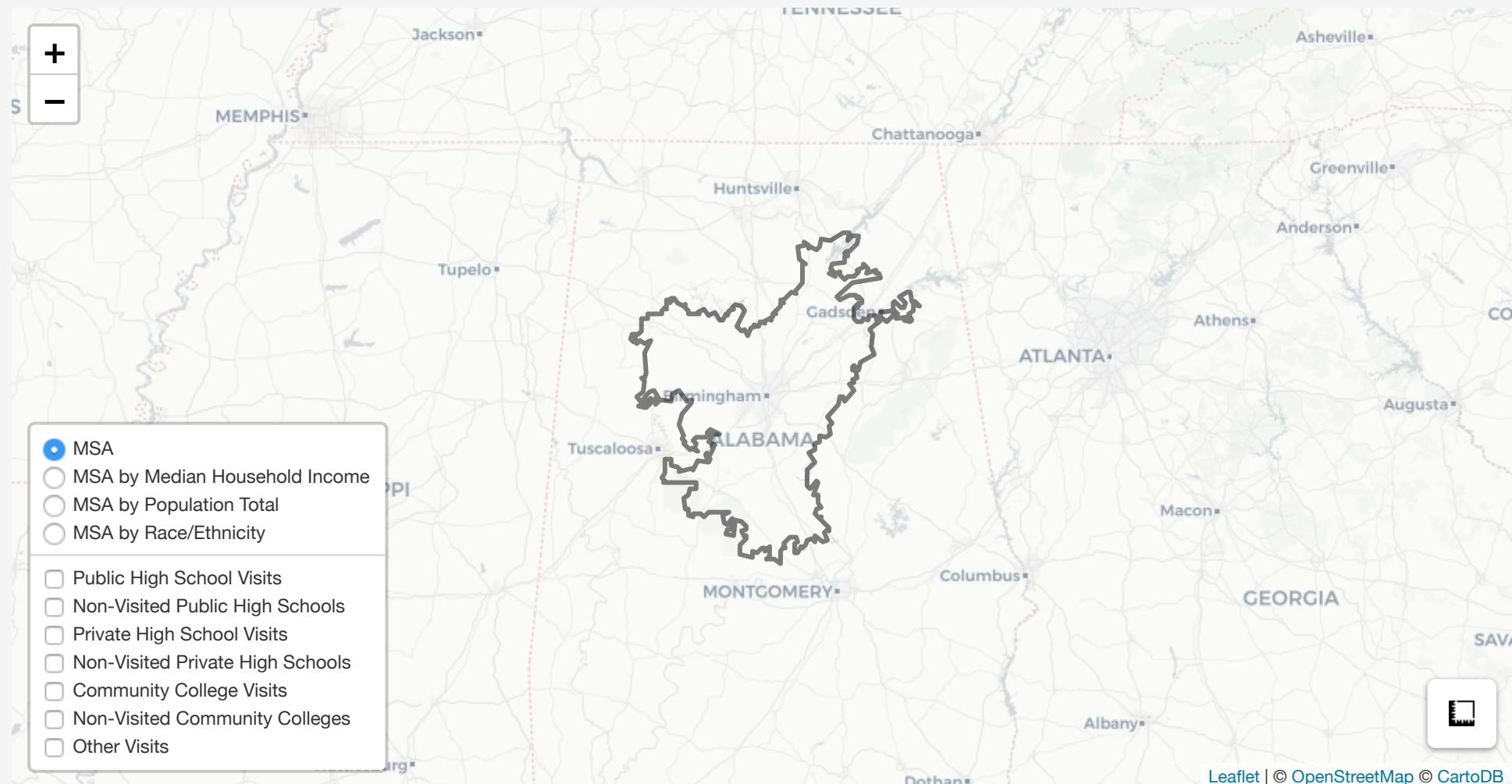


Select another university

# In-State Results

Birmingham-Hoover, AL

University of Alabama

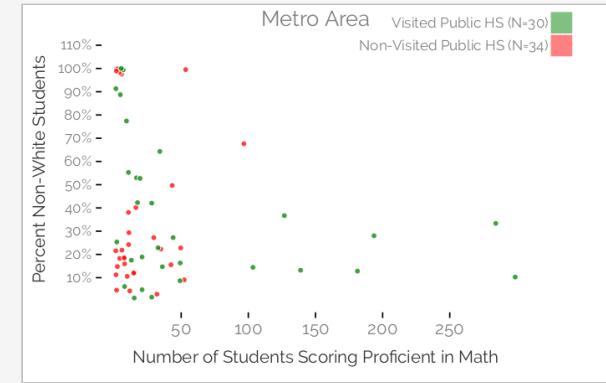
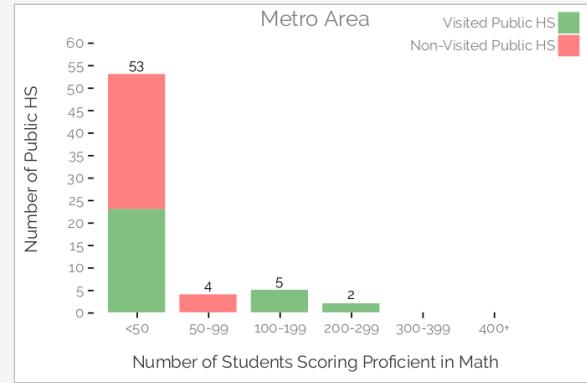
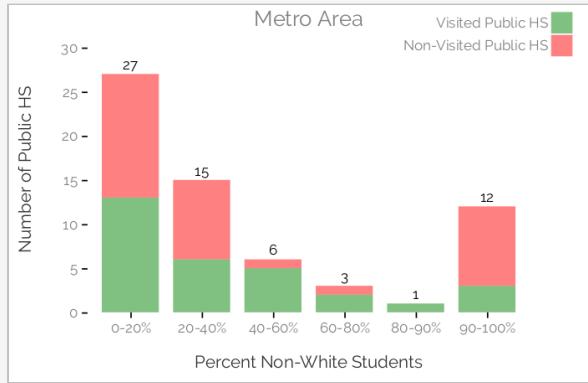
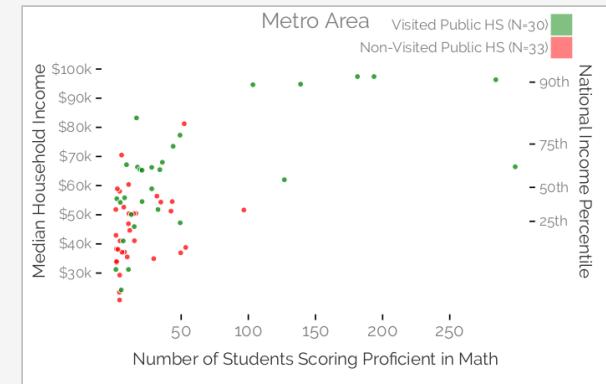
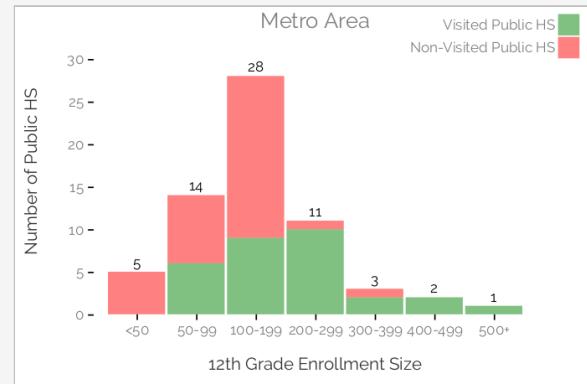
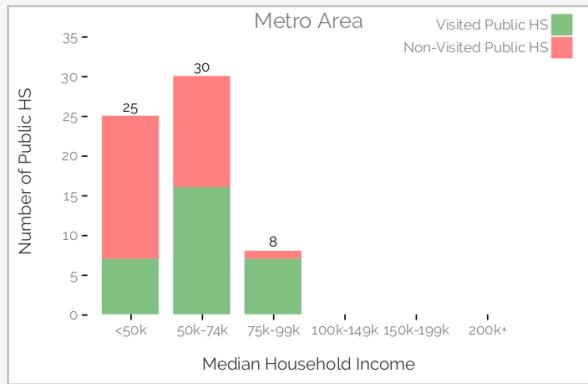


Select another university

# In-State Results

Birmingham-Hoover, AL

University of Alabama



Select another university

# Out-of-State Results

University of Alabama

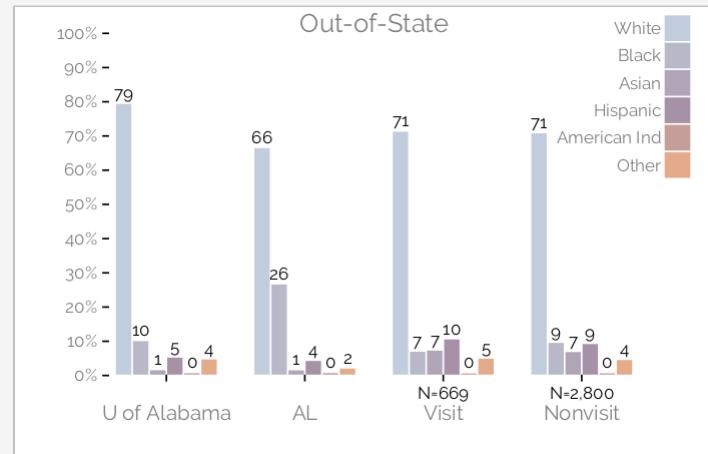
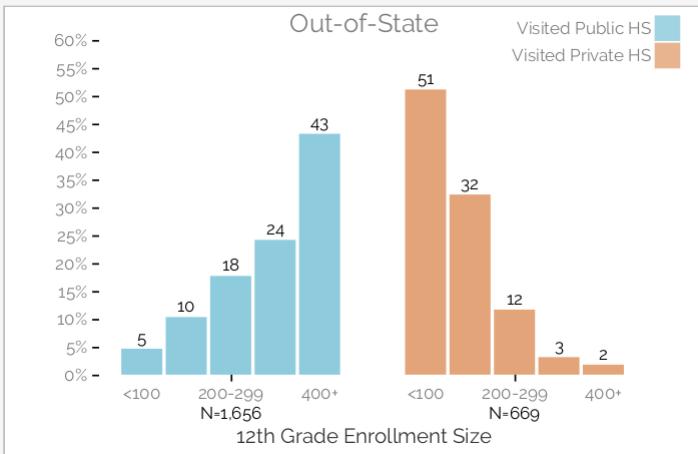
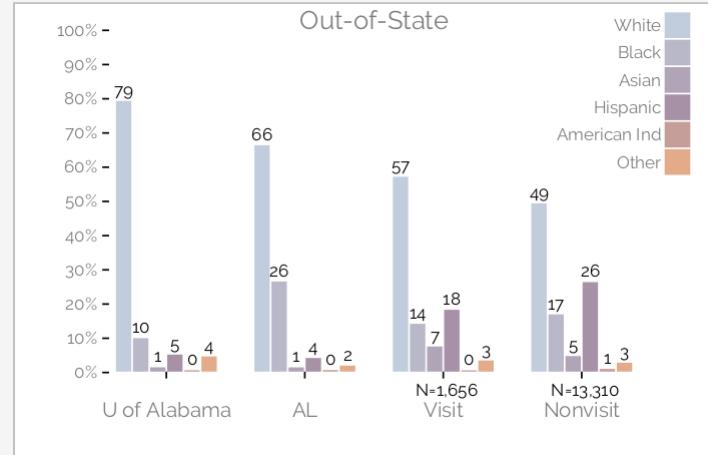
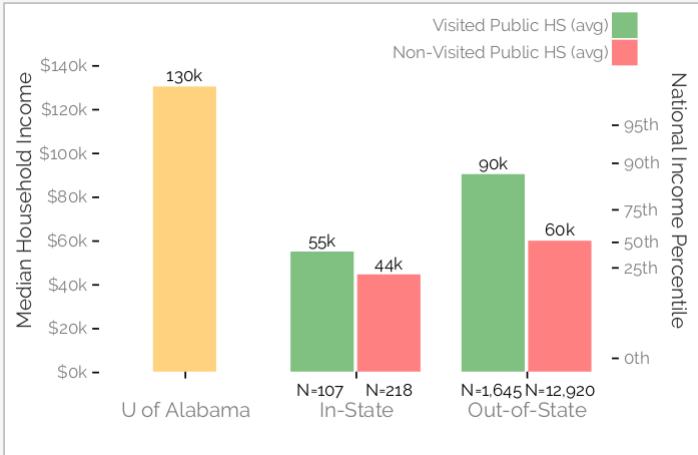
## Top Visited Metro Areas

<u>Metro Area</u>	<u>State</u>	<u>Total Visits</u>	<u>Public HS</u>	<u>Private HS</u>	<u>Cmty Coll</u>	<u>Other</u>
Atlanta, Sandy Springs, Roswell	GA	277	141	56	1	79
Dallas, Fort Worth, Arlington	TX	230	136	69	0	25
New York, Newark, Jersey City	NY, NJ, PA	172	130	23	6	13
Washington, Arlington, Alexandria	DC, VA, MD, WV	145	100	28	0	17
Houston, The Woodlands, Sugar Land	TX	139	102	32	0	5
Seattle, Tacoma, Bellevue	WA	119	73	25	0	21
Miami, Fort Lauderdale, West Palm Beach FL		112	71	37	0	4
Boston, Cambridge, Newton	MA, NH	111	67	26	0	18
Denver, Aurora, Lakewood	CO	107	71	9	0	27
Los Angeles, Long Beach, Anaheim	CA	101	41	43	2	15

Select another university

# Out-of-State Results

University of Alabama



Select another university

# Out-of-State Results

## Atlanta-Sandy Springs-Roswell, GA

University of Alabama



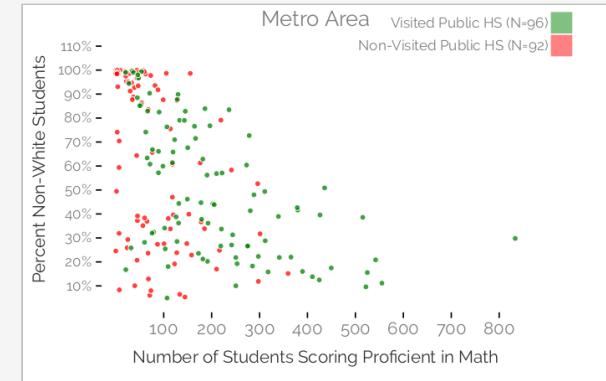
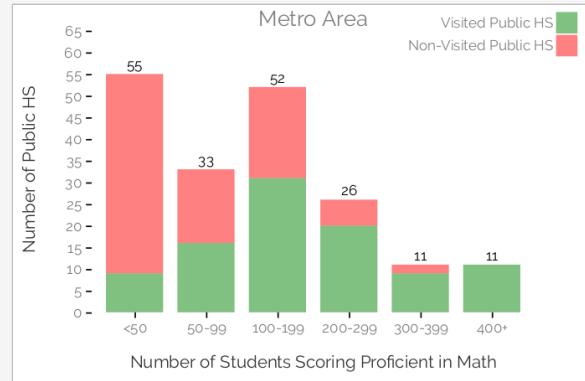
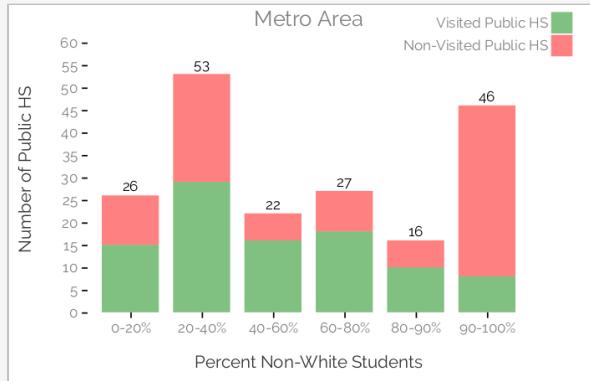
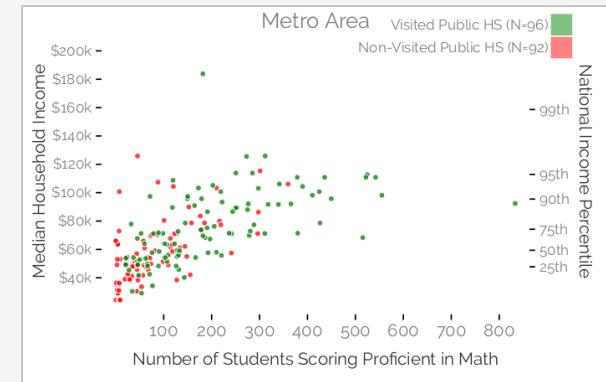
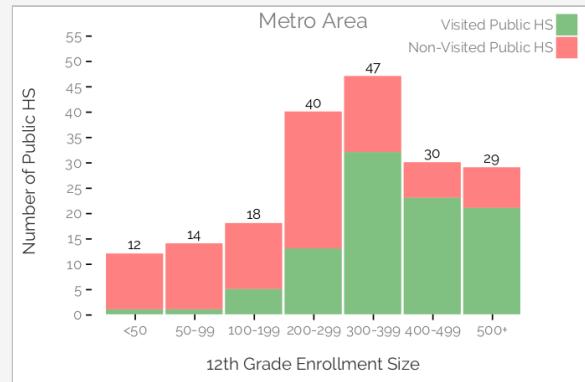
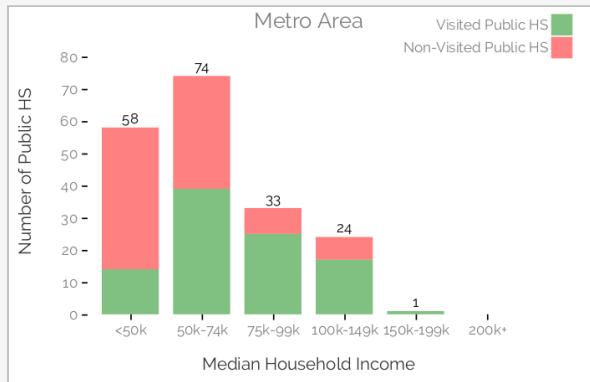
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Select another university

# Out-of-State Results

Atlanta-Sandy Springs-Roswell, GA

University of Alabama



Select another university

# Out-of-State Results

Dallas-Fort Worth-Arlington, TX

University of Alabama



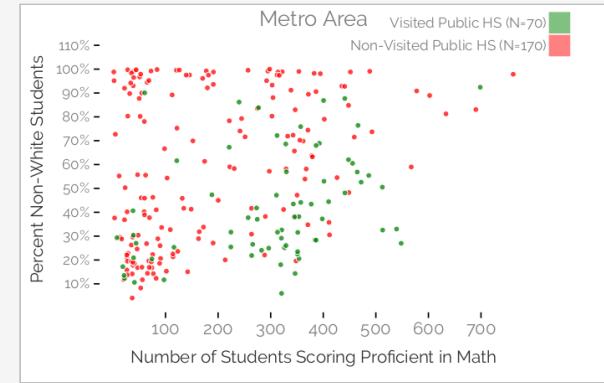
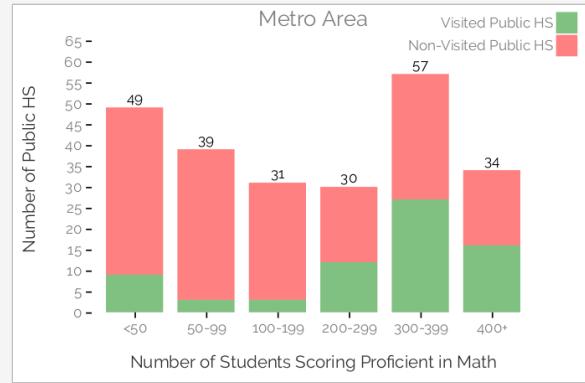
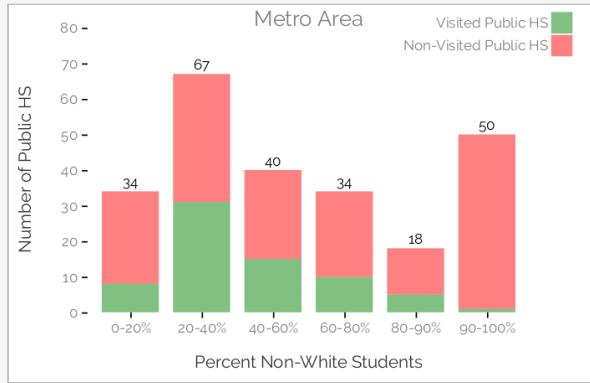
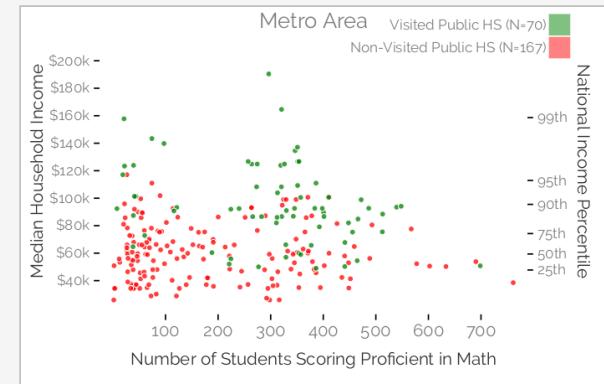
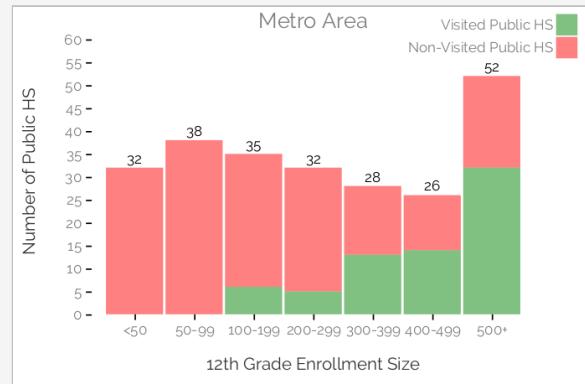
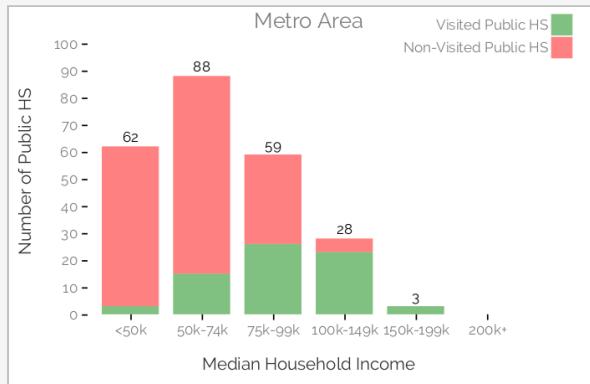
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Select another university

# Out-of-State Results

Dallas-Fort Worth-Arlington, TX

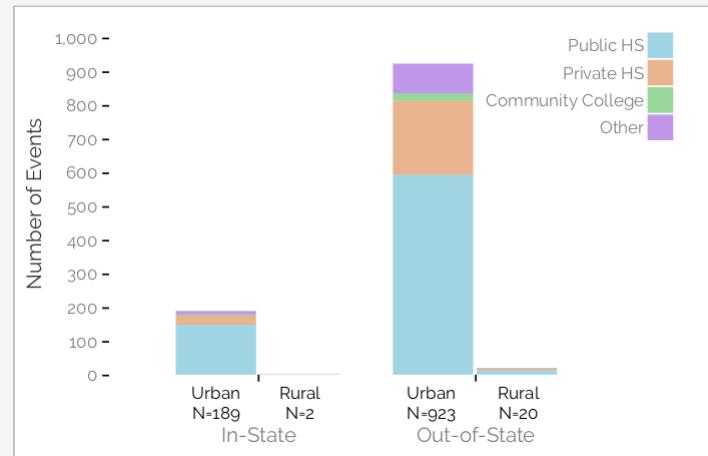
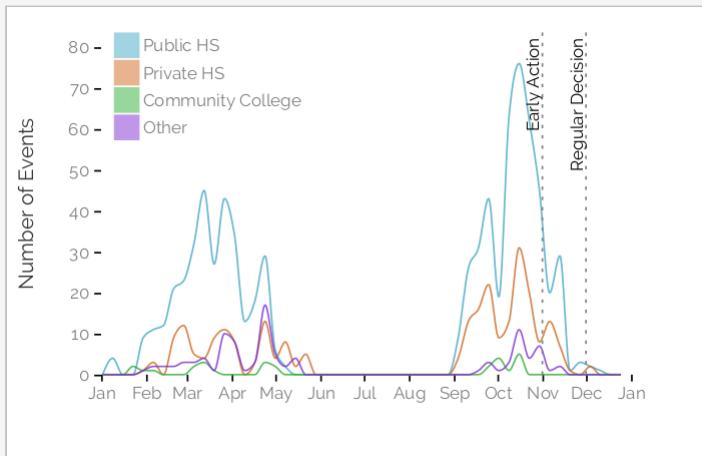
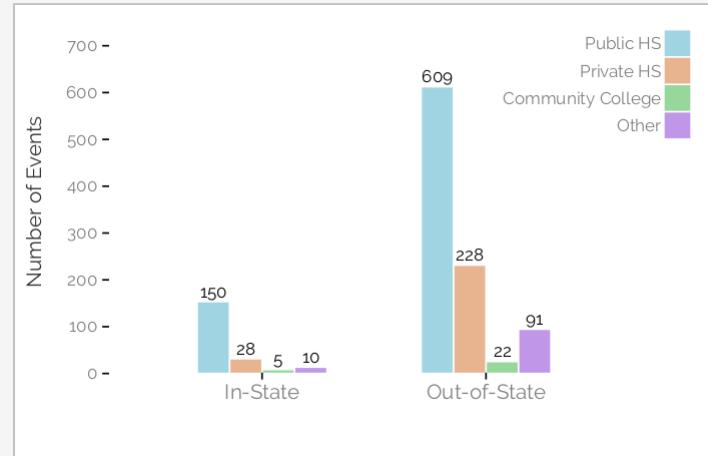
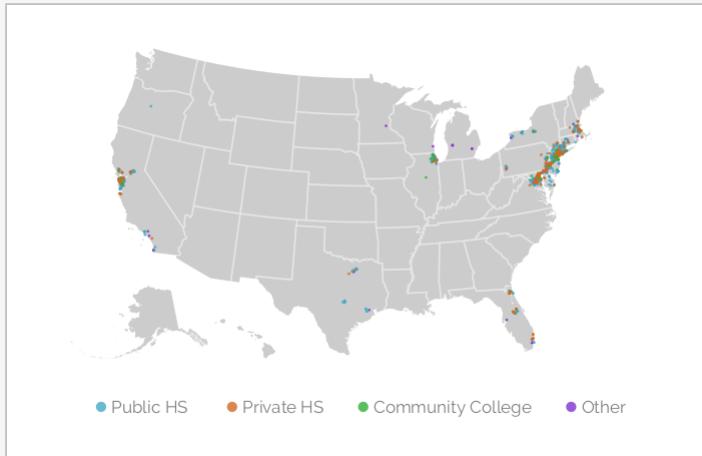
University of Alabama



Select another university

# National Overview

Rutgers University-New Brunswick



Select another university

# In-State Results

## New Jersey

Rutgers University-New Brunswick



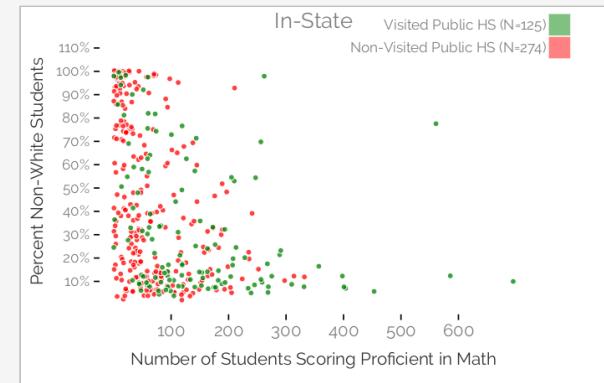
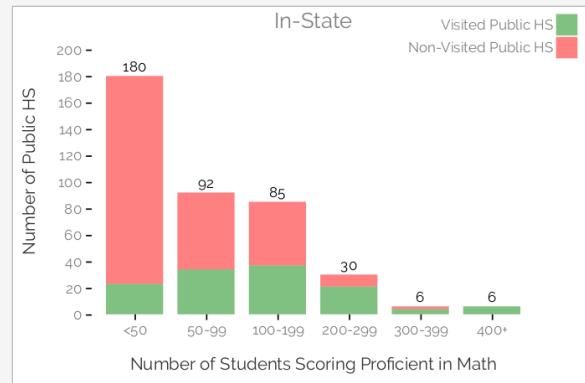
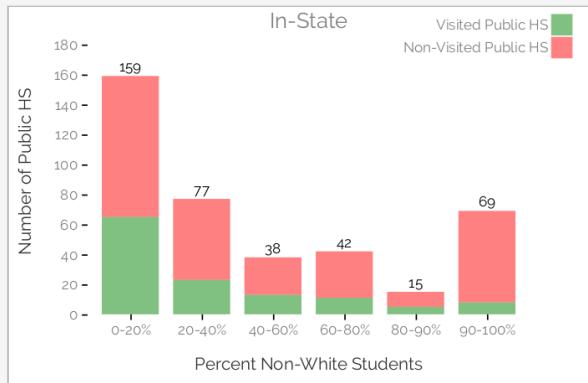
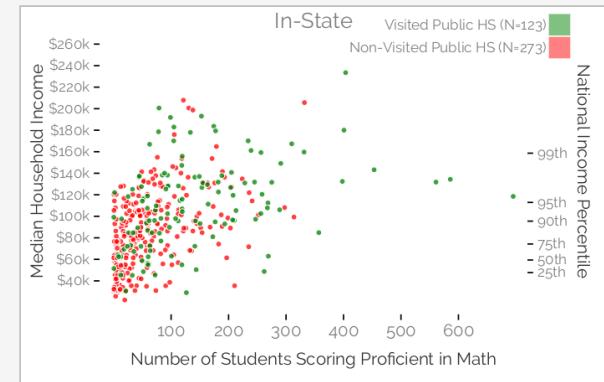
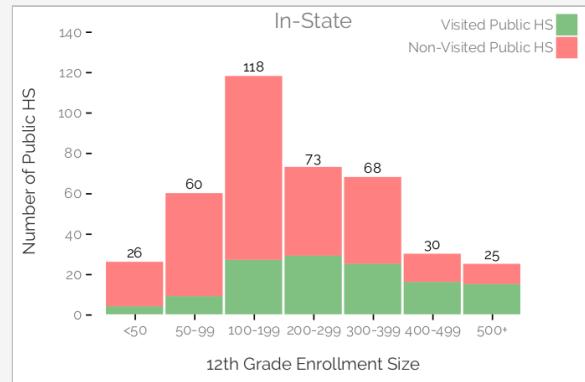
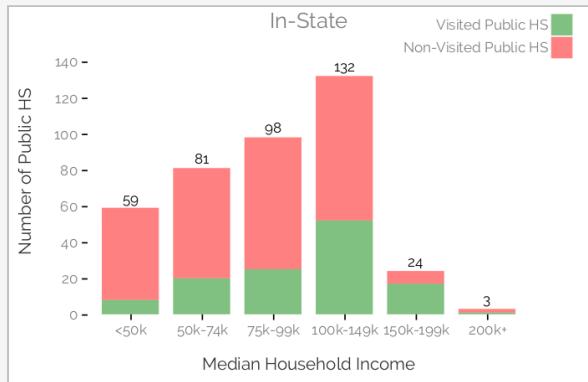
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Select another university

# In-State Results

## New Jersey

Rutgers University-New Brunswick

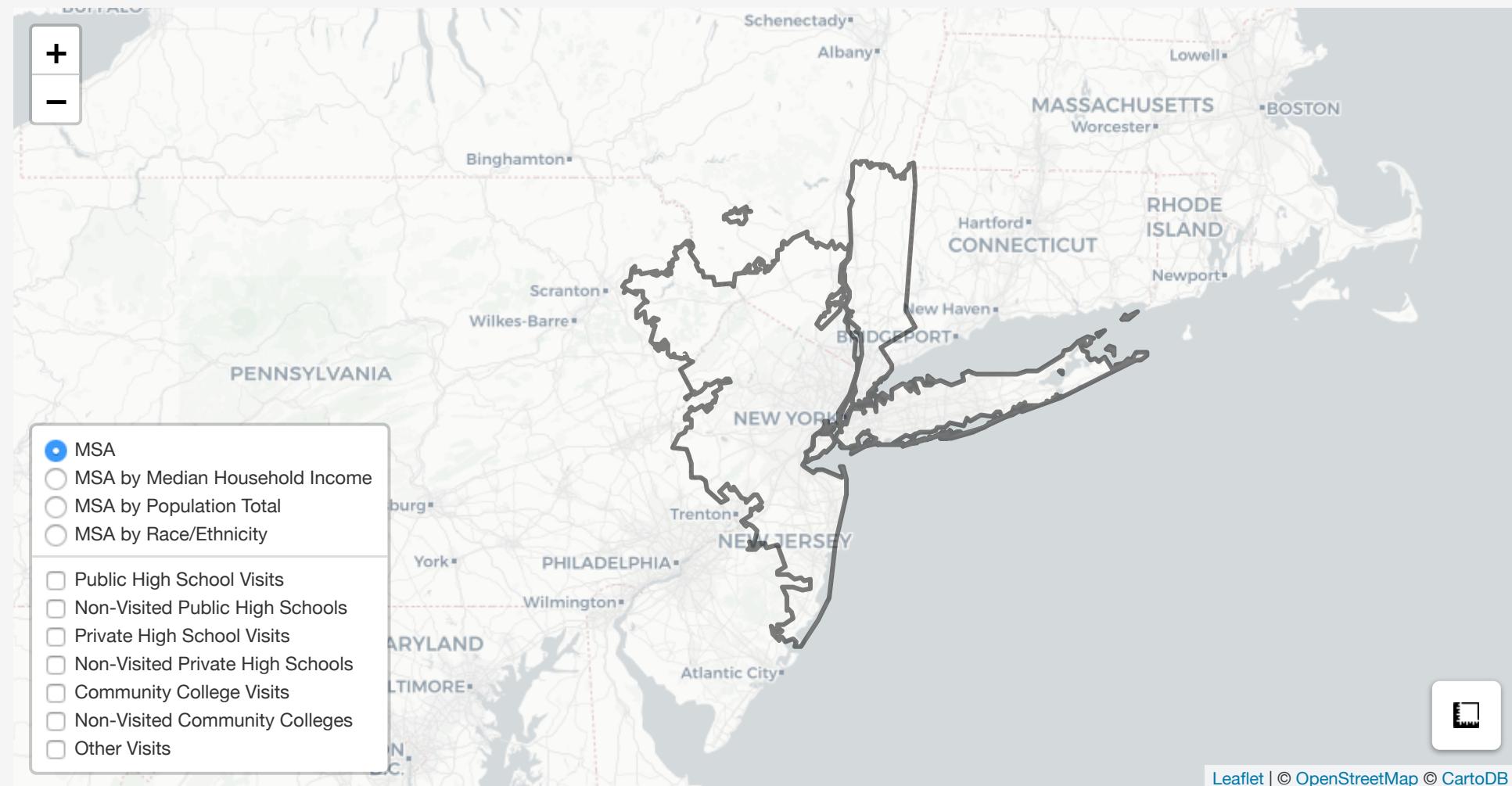


Select another university

# In-State Results

Rutgers University-New Brunswick

New York-Newark-Jersey City, NY-NJ-PA



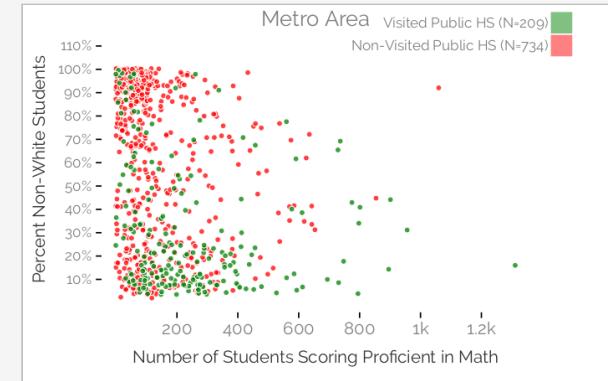
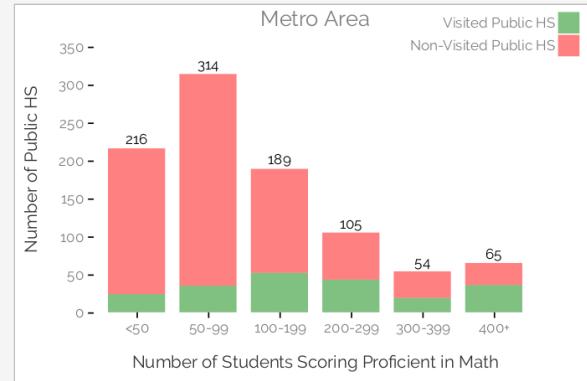
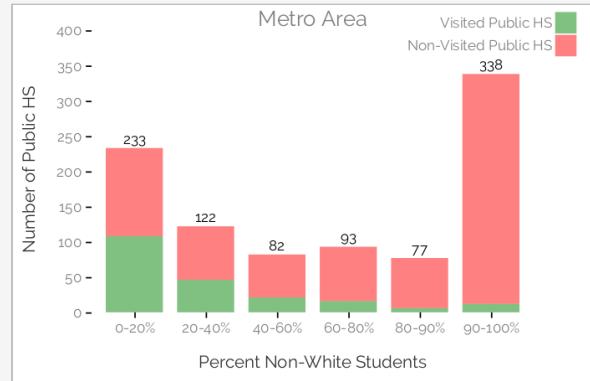
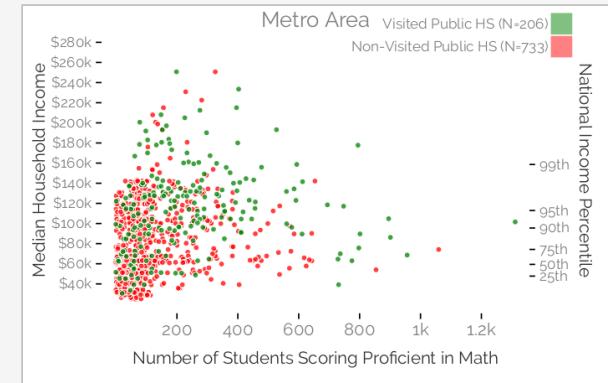
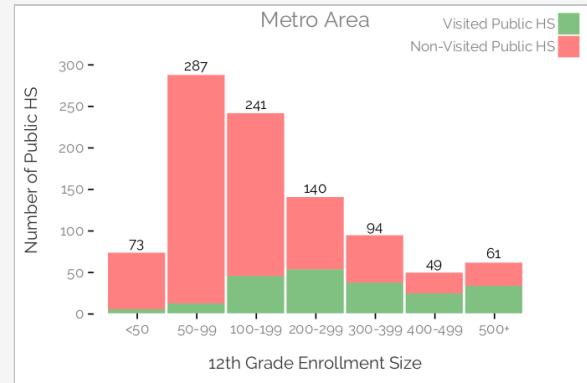
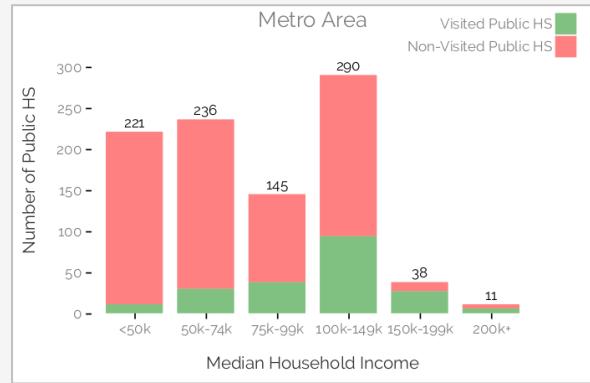
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Select another university

# In-State Results

New York-Newark-Jersey City, NY-NJ-PA

Rutgers University-New Brunswick



Select another university

# Out-of-State Results

Rutgers University-New Brunswick

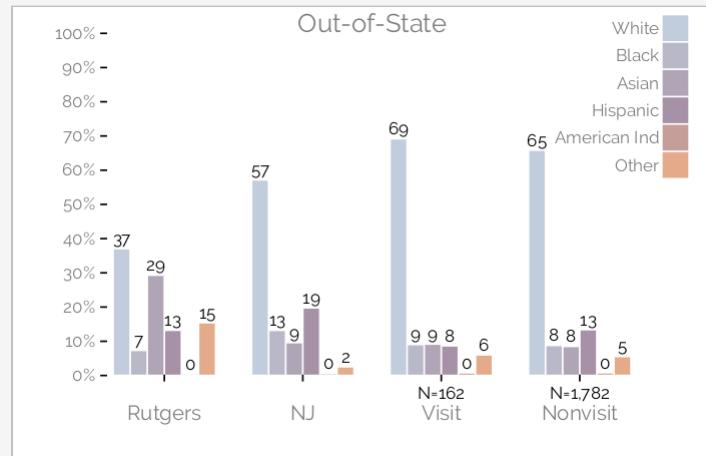
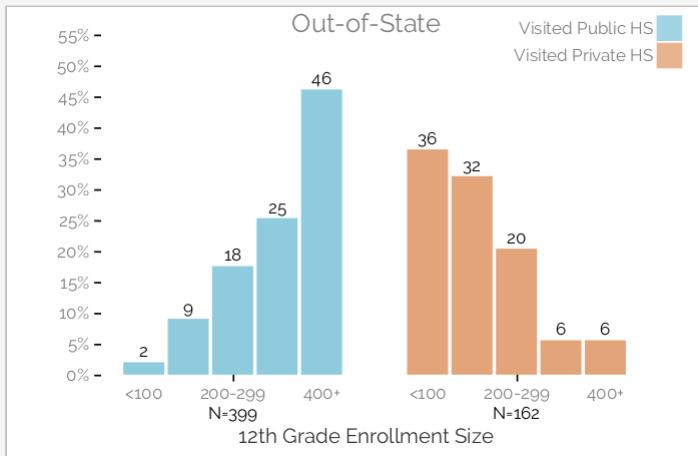
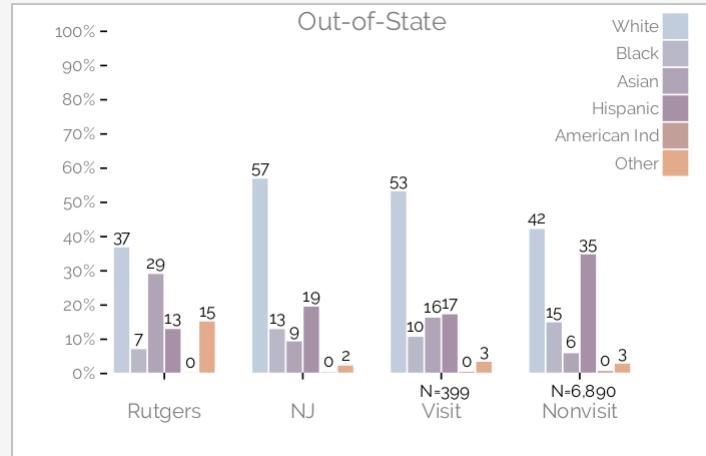
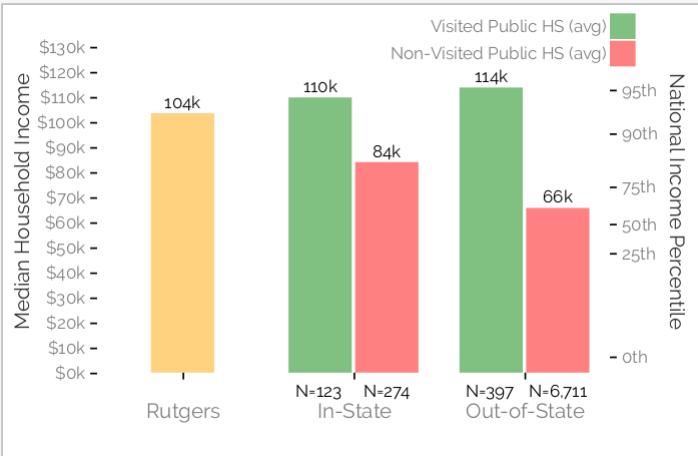
## Top Visited Metro Areas

<u>Metro Area</u>	<u>State</u>	<u>Total Visits</u>	<u>Public HS</u>	<u>Private HS</u>	<u>Cmty Coll</u>	<u>Other</u>
New York, Newark, Jersey City	NY, NJ, PA	410	297	75	9	29
Washington, Arlington, Alexandria	DC, VA, MD, WV	106	75	23	1	7
Philadelphia, Camden, Wilmington	PA, NJ, DE, MD	91	52	34	1	4
San Francisco, Oakland, Hayward	CA	79	56	15	2	6
Baltimore, Columbia, Towson	MD	76	36	31	2	7
Chicago, Naperville, Elgin	IL, IN, WI	52	39	6	5	2
San Jose, Sunnyvale, Santa Clara	CA	43	34	6	2	1
Boston, Cambridge, Newton	MA, NH	29	15	12	0	2
Sacramento, Roseville, Arden-Arcade	CA	24	17	6	0	1
Orlando, Kissimmee, Sanford	FL	19	10	7	0	2

Select another university

# Out-of-State Results

Rutgers University-New Brunswick

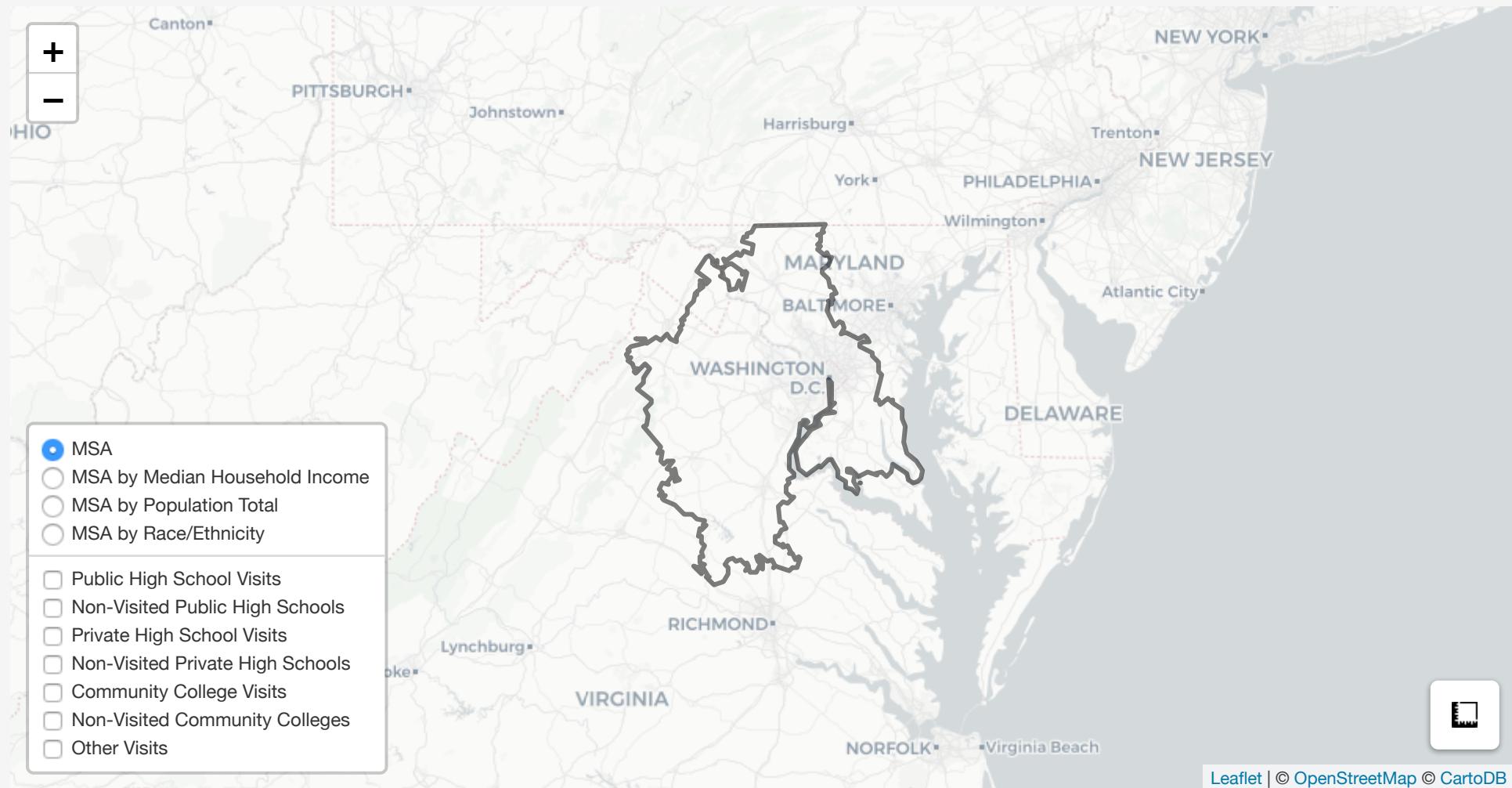


Select another university

# Out-of-State Results

Rutgers University-New Brunswick

Washington-Arlington-Alexandria, DC-VA-MD-WV

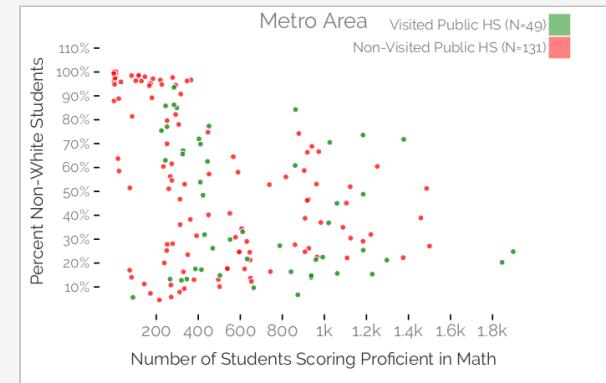
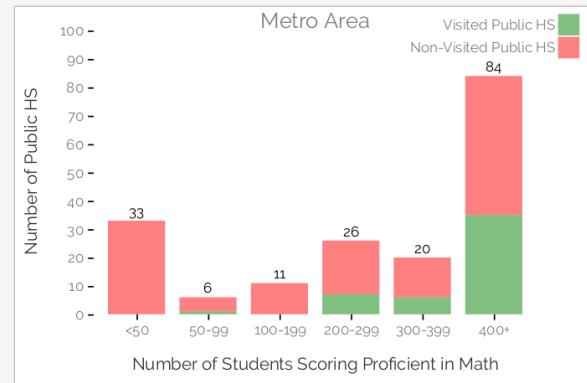
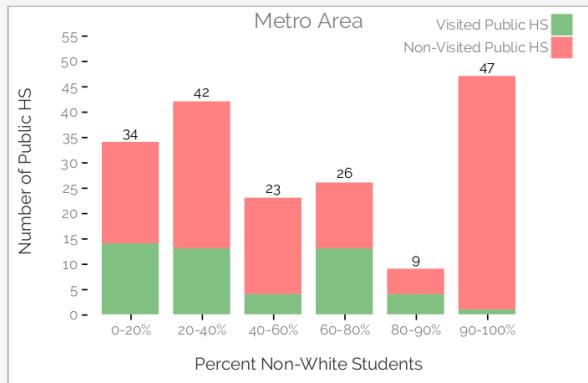
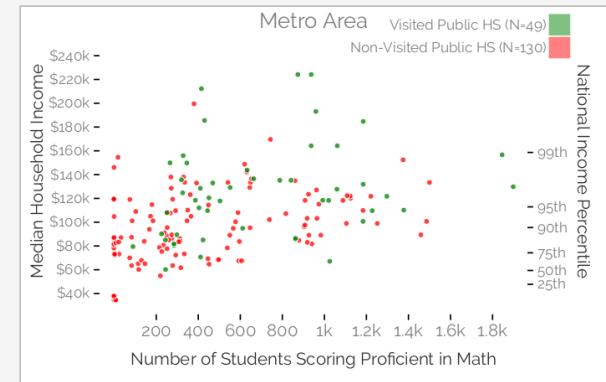
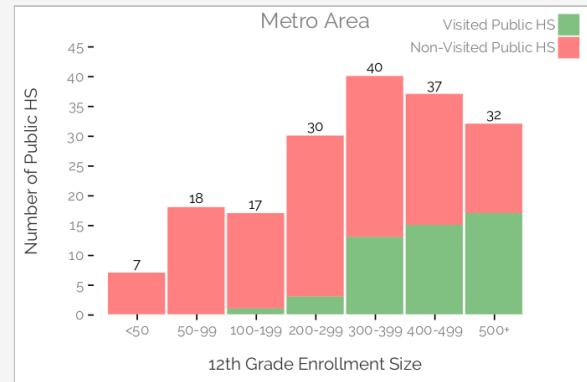
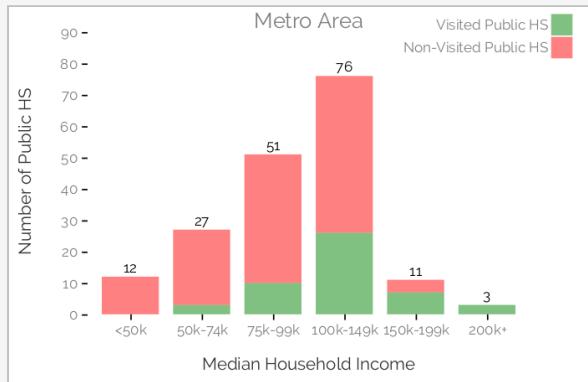


Select another university

# Out-of-State Results

Washington-Arlington-Alexandria, DC-VA-MD-WV

Rutgers University-New Brunswick

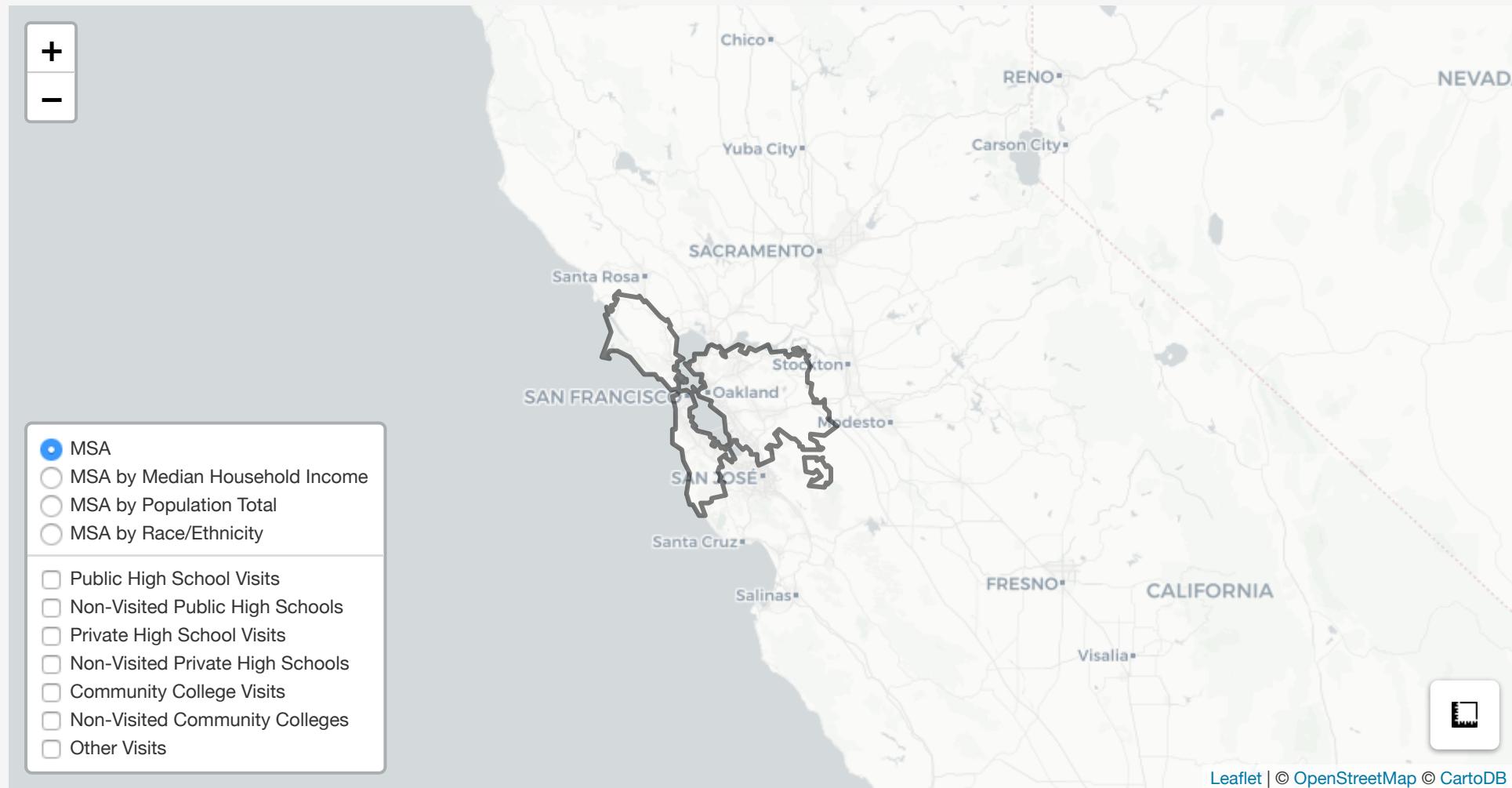


Select another university

# Out-of-State Results

San Francisco-Oakland-Hayward, CA

Rutgers University-New Brunswick

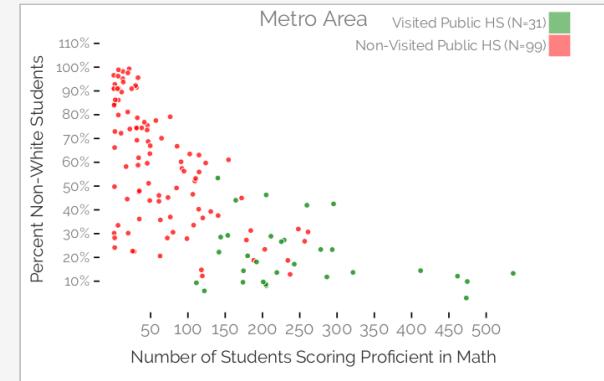
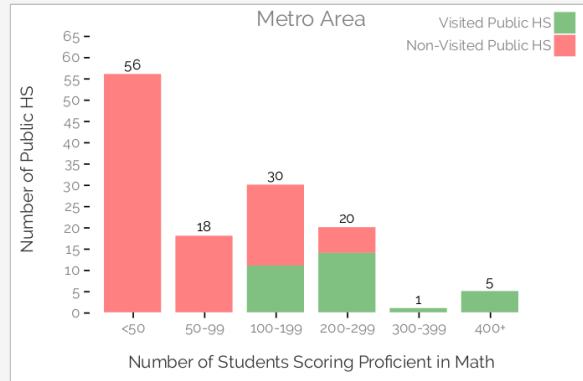
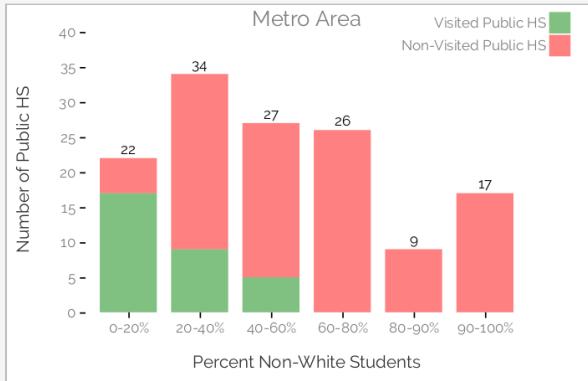
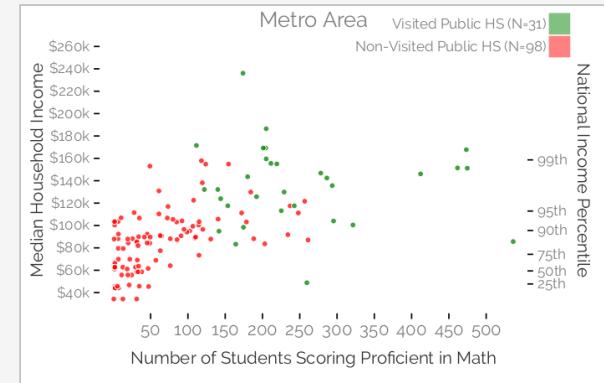
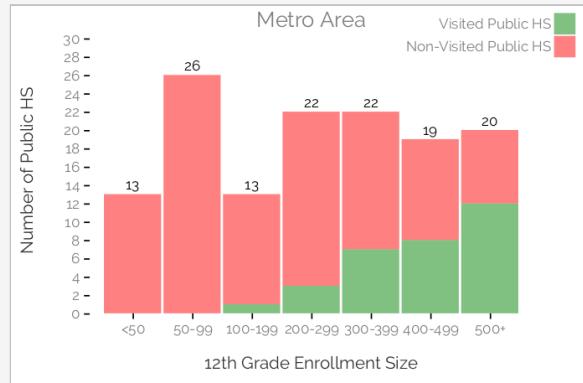
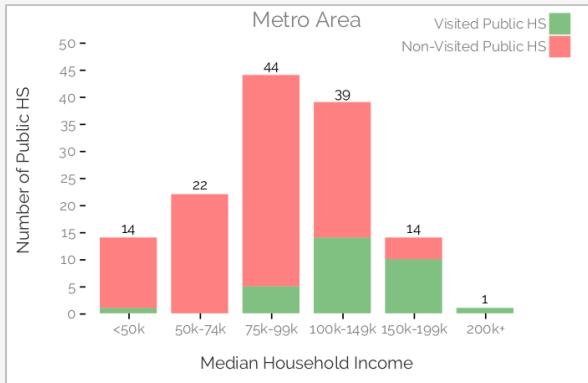


Select another university

# Out-of-State Results

San Francisco-Oakland-Hayward, CA

Rutgers University-New Brunswick



Select another university