

Coming Soon to a Neighborhood Near You?

Off-Campus Recruiting by Public Research Universities



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Motivation

Policy discourse about access to public research universities

The problem: access to public research universities

- Historical mission of social mobility for meritorious state residents
- Concern about growing socioeconomic and racial inequality in access

Mainstream policy discourse about access inequality

- "Achievement gap", "under-matching"; place responsibility on students, K-12 schools
- Universities pledge commitment to access via policies (e.g., holistic admission)
- Problem with policy discourse: decades of research finds policy adoption a symbolic effort to appease stakeholders (e.g., Davis, 2005)

Geography of Opportunity (Galster and Killen, 1995)

- Educational opportunities are a function of where students live
- Number of local colleges and universities spatially varies along the racial and socioeconomic characteristics of neighborhoods (Hillman, 2016)
- Shifts onus away from students and K-12 schools; but students' college choices are also shaped by choices of colleges and universities (Rhoades, 2014)

Motivation

Analyze recruiting to understand university enrollment priorities

Alternative explanation for access inequality

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

Why study university recruiting behavior

- Universities expend substantial resources identifying and recruiting prospects (Noel-Levitz, 2018)
- Internal resource allocation better indicator of organizational priorities than rhetoric, policies
- Knowing which student populations targeted by recruiting efforts indicates enrollment priorities

Research focus

- Analyze off-campus recruiting visits (e.g., visit to a local high school) by public research universities as a means of gaining insight about university enrollment priorities
- **Research question**
 - What are the similarities and differences in off-campus recruiting patterns across universities?
- **Analytic focus**
 - Income; race; academic achievement; in-state vs. out-of-state

Background

The enrollment management industry

The enrollment funnel



Interventions along the funnel

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

Literature review

Scholarship on recruiting

Evaluations of recruiting/outreach interventions (e.g., Dynarski, Libassi, Michelmore, Owen, 2018)

- But unclear whether universities substantively adopt "best practices" in less controlled settings

Audits of response to "inquiries" by admissions officers (e.g., Hanson, 2017; Thornhill, forthcoming)

- Identifies biases of individual admissions officers

Off-campus recruiting visits

- Scholarship analyzing college perspective (Stevens, 2007)
 - Important for relationships with prospects, counselors at "feeder" schools
- Market research (Noel-Levitz, 2018)
 - Second highest source of "inquiries"; third highest source of enrollees
- Scholarship analyzing 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, communities

- If schools in low-income communities or communities of color are not receiving visits, "under-matching" may be due to under-recruiting rather than lack of guidance

Theoretical framework

Enrollment priorities and recruiting behavior

Theoretical motivation for studying recruiting

- "New" institutional theory (Meyer and Rowan, 1977)
 - Organizations have finite resources and cannot pursue multiple goals (Thompson, 1967) -When facing pressure to pursue many goals, organizations:
 - Substantively adopt some goals (directing resources)
 - Symbolically adopt others (policies, rhetoric)
- "Iron triangle" of enrollment management (EM)
 - Three broad enrollment goals: **access, academic profile, revenue**
 - Scarce resources; depending on priorities, some goals receive more resources than others
 - Off-campus recruiting is allocation of resources
 - Knowing which populations targeted by recruiting interventions indicate enrollment priorities

Theoretical framework

Expectations about similarities and differences in recruiting behavior

Resource dependence theory (RDT) (Pfeffer and Salancik, 1978)

- Sensitive to demands from providers of important resources that cannot be obtained elsewhere
- Org strategies when a resource becomes uncertain/declines or demands become onerous
 - e.g., compliance, avoidance, cooptation, **resource diversification**
- *Universities with weak state funding*
 - More visits to affluent out-of-state, affluent in-state
- *Universities with small/declining "college age" population*
 - More out-of-state visits

Academic Capitalism (AC) (Slaughter and Rhoades, 2004)

- RDT assumes restoring state funding would compel universities to de-emphasize nonresident enrollment/recruiting
- AC suggests pursuit of revenue displaces public-good mission for market logic
- *Recruiting by universities with similar external conditions can differ depending how whether or to what extent "market logic" ideology is adopted*

Research methods

The broader off-campus recruiting research project

Data collection

- Method
 - Web-scrape admissions websites
 - Public records requests
- Criteria to be included in data collection
 1. Post visits on admissions websites
 2. Organizational type
- Data collection sample (larger project)
 - 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 methods

Defining events

"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.

Data and Methods

Summary of Data Collection Sources and Quality Checks Performed

	Alabama	UC Berkeley	UC Irvine	Georgia	UMass	Nebraska
Web-scrape data collection						
Scraped data on off-campus recruiting events?	Y	Y	Y	Y	Y	Y
Manually checked each scraped event?	Y	Y	Y	Y	Y	Y
Public records request data collection						
Requested data from Enrollment Management VP from university?	Y	Y	Y	Y	Y	Y
Received data from Enrollment Management VP?	N	N	N	Y	N	N
State law allows nonresidents to request from public universities?	Ambiguous	Y	Y	N	Y	Y
Made public records request to university?	Y	Y	Y	N	Y	Y
Received public records data from university (by 3/18/2019)?	N	N	Y	-	Y	N
Manually checked each visit from requested data?	-	-	Y	Y	Y	-
Data used in report analyses						
Web-scrape data is primary data source?	Y	Y	N	N	N	Y
Public records data used as primary data source?	N	N	Y	Y	Y	N

Research methods

Research design and analyses

Quantitative multiple case study research design (Korzilius, 2010)

- Quantitative data collection and quantitative analyses
- Analyze each case separately, rather than pooling across cases as in large-N, random sample design

Data analysis (Eisenhardt, 1989; Pratt, Rockmann, and Kaufmann, 2006)

- "Within-case" analyses of recruiting patterns
 - Broad focus on income, race, achievement (main independent variables of interest)
 - Situate within local context; "deep dive" of in-state, out-of-state, and overall patterns
 - Simple descriptive statistics (e.g., counts), static visualizations, interactive maps
 - Linear probability models controlling for "rational" reasons for visit (e.g., enrollment size, achievement, distance)
 - Identify first-order empirical themes
- "Cross-case" analyses
 - Consolidate first-order findings into broader empirical themes

Research methods

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Analysis sample

	Alabama	UC Berkeley	UC Irvine	Georgia	UMass	Nebraska	Population (N = 80)
Academic Profile							
US News & World Report Ranking	103	20	39	56	74	111	94
25th Percentile SAT/ACT Score	1,053	1,316	1,078	1,165	1,135	1,027	1,085
75th Percentile SAT/ACT Score	1,351	1,527	1,334	1,360	1,332	1,262	1,300
Enrollment							
Total Enrolled Freshmen	7,559	6,252	6,551	5,433	4,679	4,860	4,957
% Out-of-State Freshmen	68.1%	24.4%	25.8%	12.3%	26.9%	29.9%	25.4%
% Pell Recipients	17.0%	19.4%	37.8%	20.3%	21.5%	23.9%	24.0%
Tuition and Fees							
In-State Tuition + Fees	\$10,701	\$13,807	\$13,654	\$11,890	\$15,301	\$8,725	\$11,026
Out-of-State Tuition + Fees	\$27,544	\$41,076	\$40,924	\$30,502	\$32,914	\$23,558	\$29,441
Revenues							
Net Tuition Revenue	\$493,397,152	\$852,825,280	\$534,855,840	\$463,142,400	\$382,249,088	\$227,792,208	\$379,065,984
% Total Revenue from Tuition	39.0%	31.2%	17.5%	29.6%	30.6%	20.3%	26.3%
Total State Appropriations	\$158,247,648	\$411,178,720	\$329,859,744	\$445,318,208	\$353,021,024	\$286,740,832	\$267,926,000
Appropriation per Student	\$4,450	\$9,992	\$9,548	\$11,879	\$12,578	\$12,561	\$7,903

Note: Author calculations based on 2016-2017 IPEDS. Population of universities includes universities categorized as Highest Research Activity by 2015 Carnegie Classification. The University of Alabama is the only institution in the study sample that is not classified as Highest Research Activity.

Within-case results

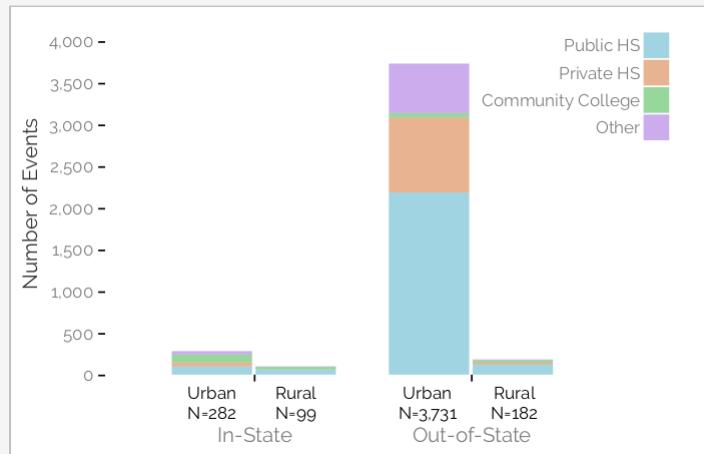
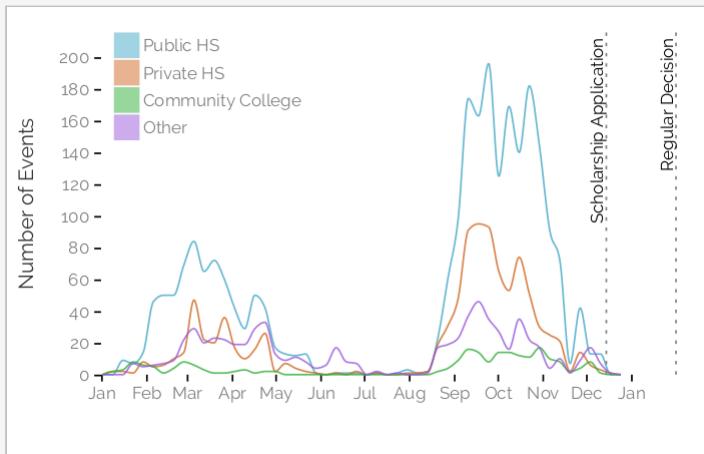
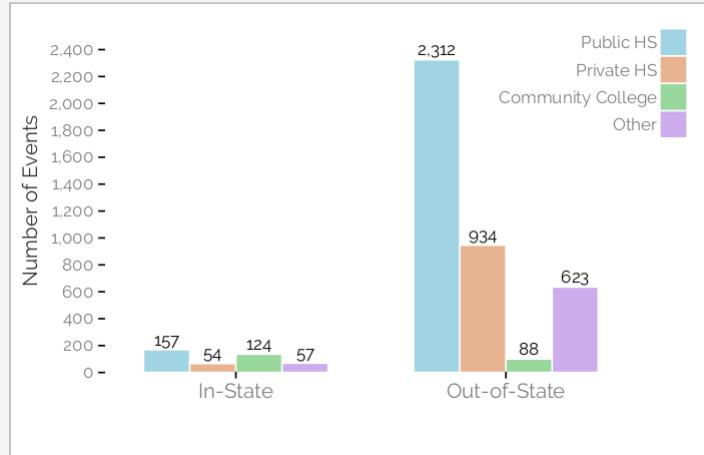
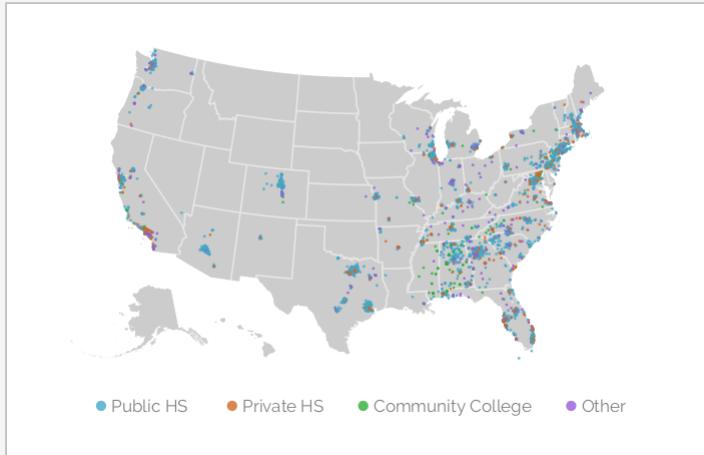
Click on a university see within-case results

N refers to total number of off-campus recruiting visits

- [North Carolina State University](#) (N=371)
- [Rutgers University-New Brunswick](#) (N=1,629)
- [Stony Brook University](#) (N=1,101)
- [University of Alabama](#) (N=4,349)
- [University of Arkansas](#) (N=1,013)
- [University of California-Berkeley](#) (N=906)
- [University of California-Irvine](#) (N=939)
- [University of Cincinnati](#) (N=1,369)
- [University of Colorado-Boulder](#) (N=1,568)
- [University of Georgia](#) (N=885)
- [University of Kansas](#) (N=1,419)
- [University of Massachusetts-Amherst](#) (N=1,137)
- [University of Nebraska-Lincoln](#) (N=1,421)
- [University of Pittsburgh](#) (N=1,233)
- [University of South Carolina-Columbia](#) (N=1,495)

National Overview

University of Alabama



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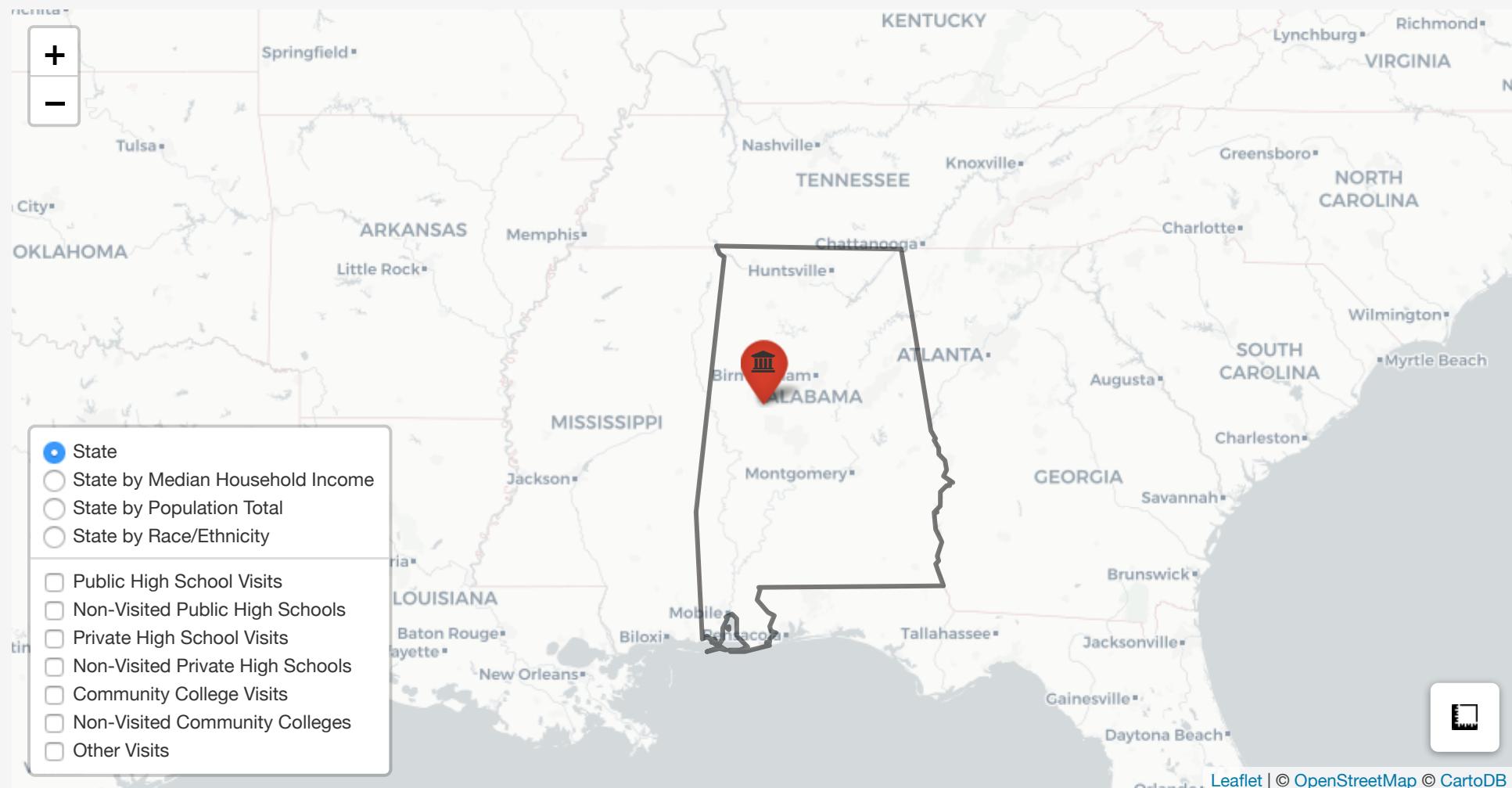
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In-State Results

Alabama

University of Alabama



Select another university

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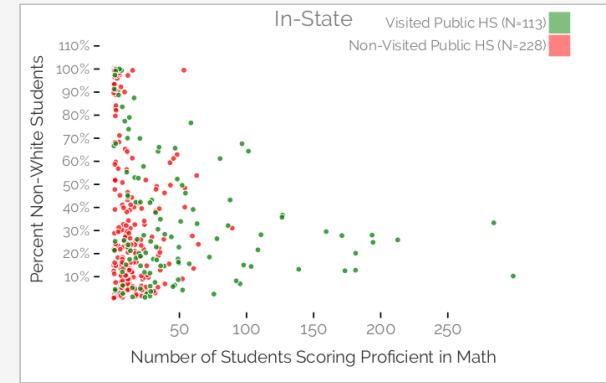
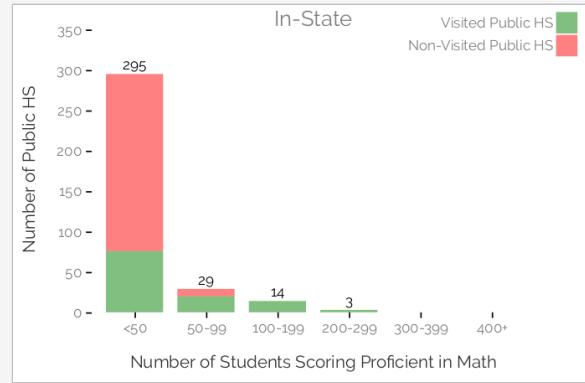
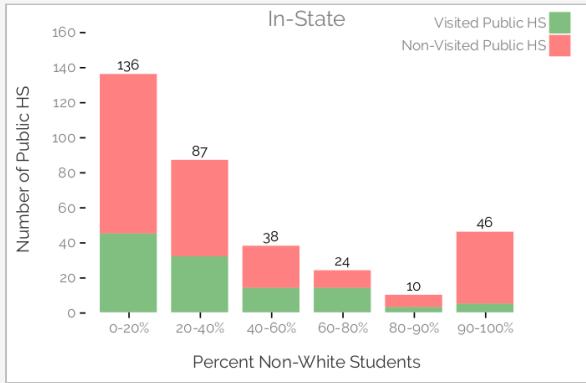
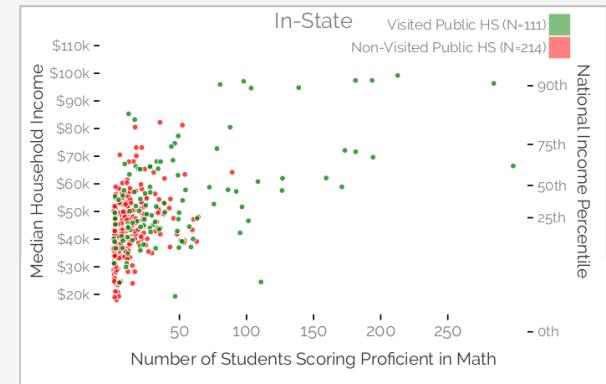
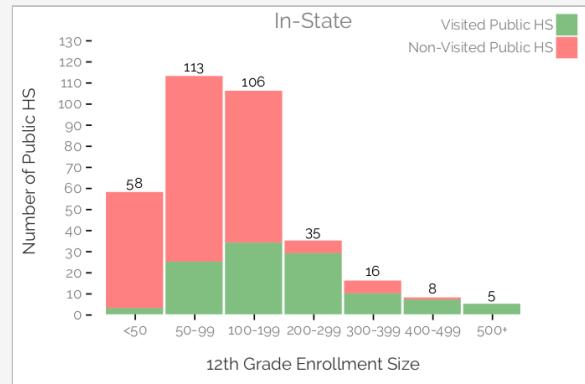
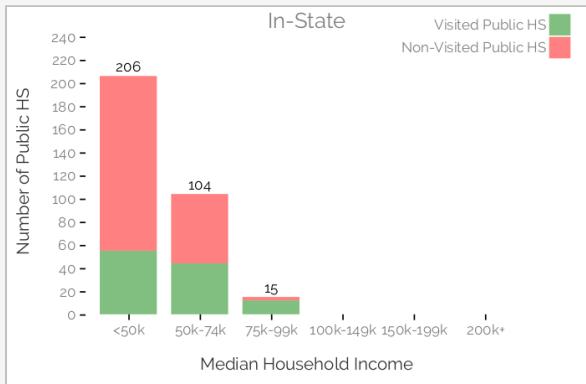
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In-State Results

Alabama

University of Alabama



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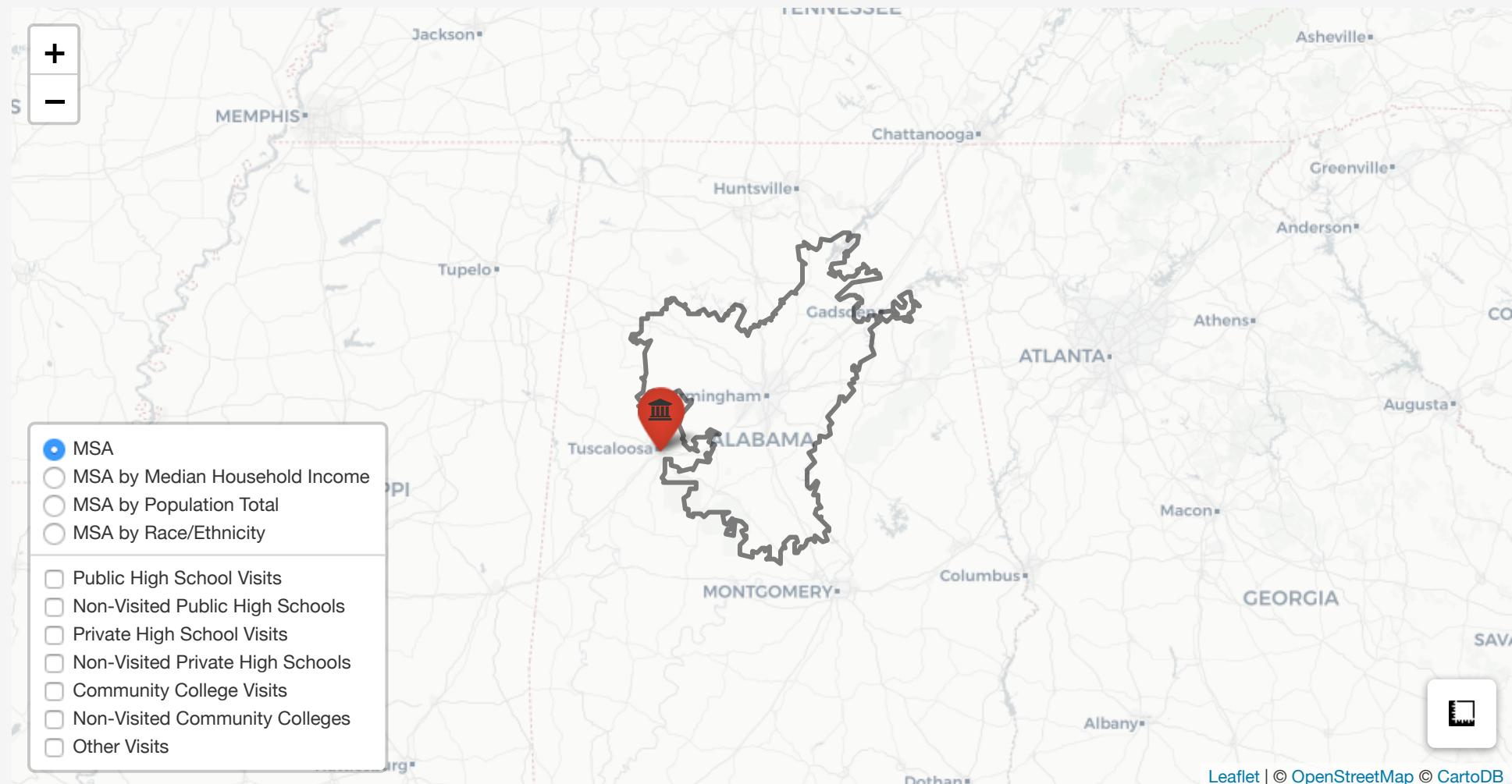
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In-State Results

Birmingham-Hoover, AL

University of Alabama



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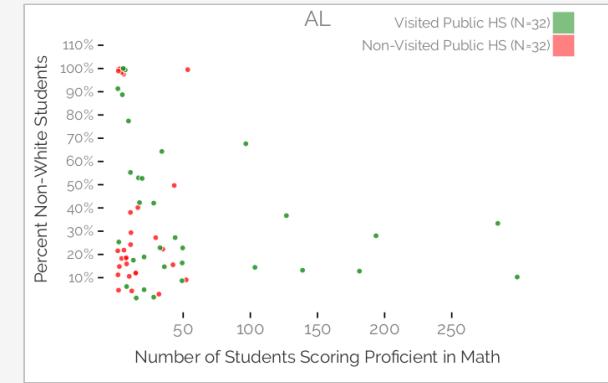
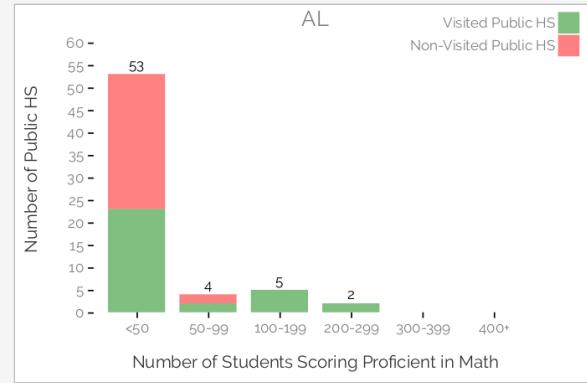
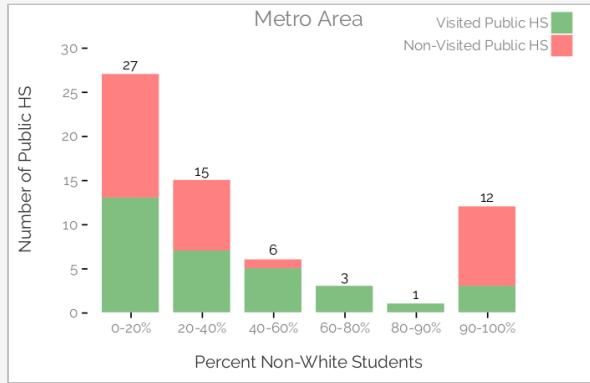
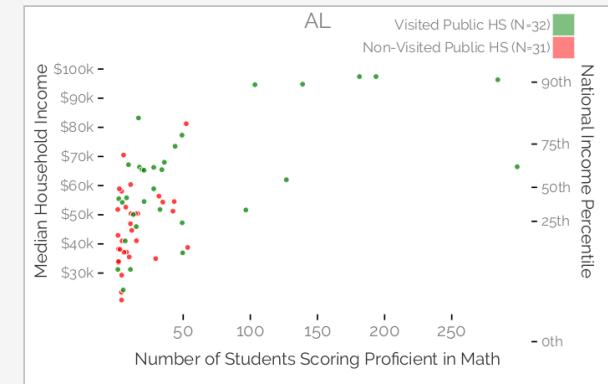
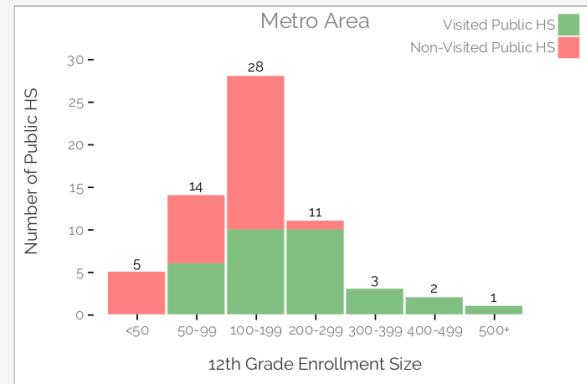
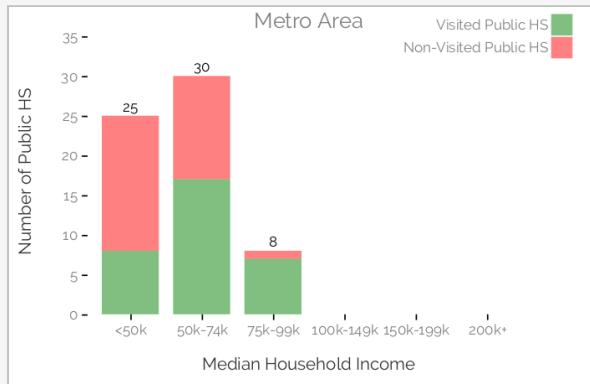
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In-State Results

Birmingham-Hoover, AL

University of Alabama



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Out-of-State Results

Top Visited Metro Areas

University of Alabama

<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	274	139	54	2	79
Dallas, Fort Worth, Arlington	TX	244	140	78	2	24
New York, Newark, Jersey City	NY, NJ, PA	174	134	23	6	11
Washington, Arlington, Alexandria	DC, VA, MD, WV	147	100	28	0	19
Houston, The Woodlands, Sugar Land	TX	141	103	33	0	5
Seattle, Tacoma, Bellevue	WA	119	73	25	0	21
Miami, Fort Lauderdale, West Palm Beach	FL	117	74	37	0	6
Boston, Cambridge, Newton	MA, NH	112	67	29	0	16
Denver, Aurora, Lakewood	CO	106	71	9	0	26
Los Angeles, Long Beach, Anaheim	CA	104	41	44	2	17

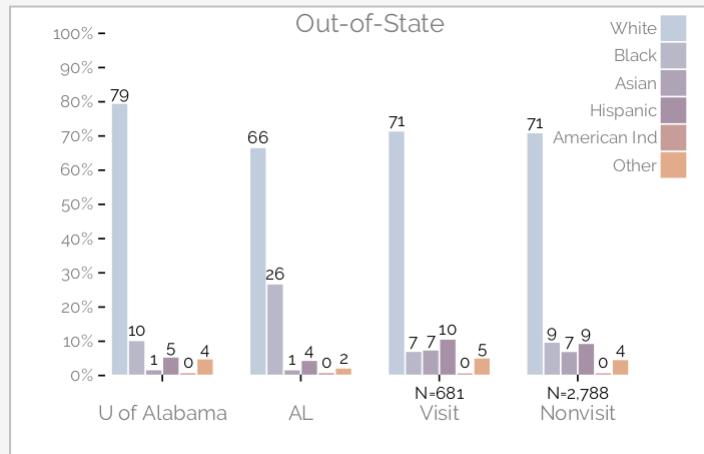
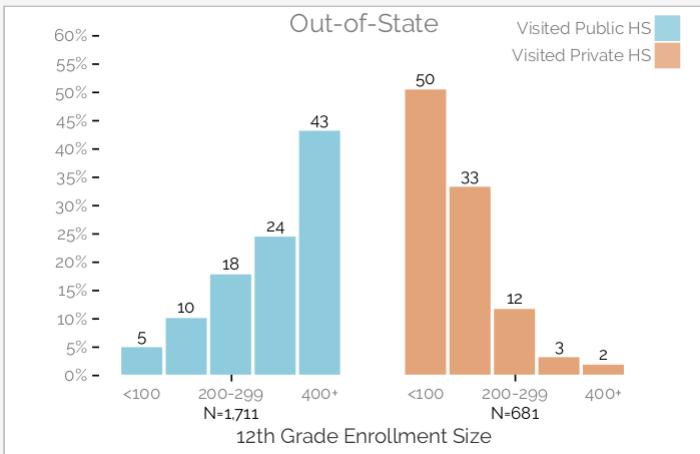
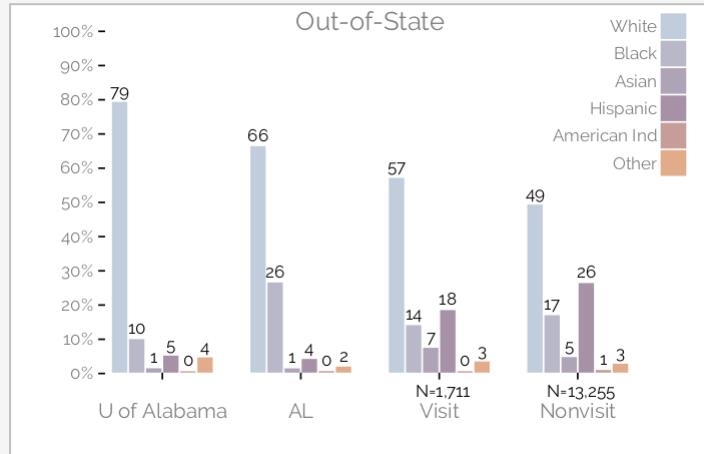
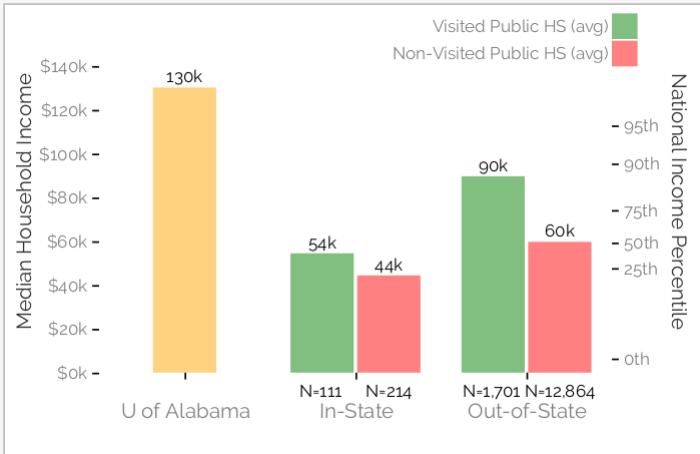
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Out-of-State Results

University of Alabama



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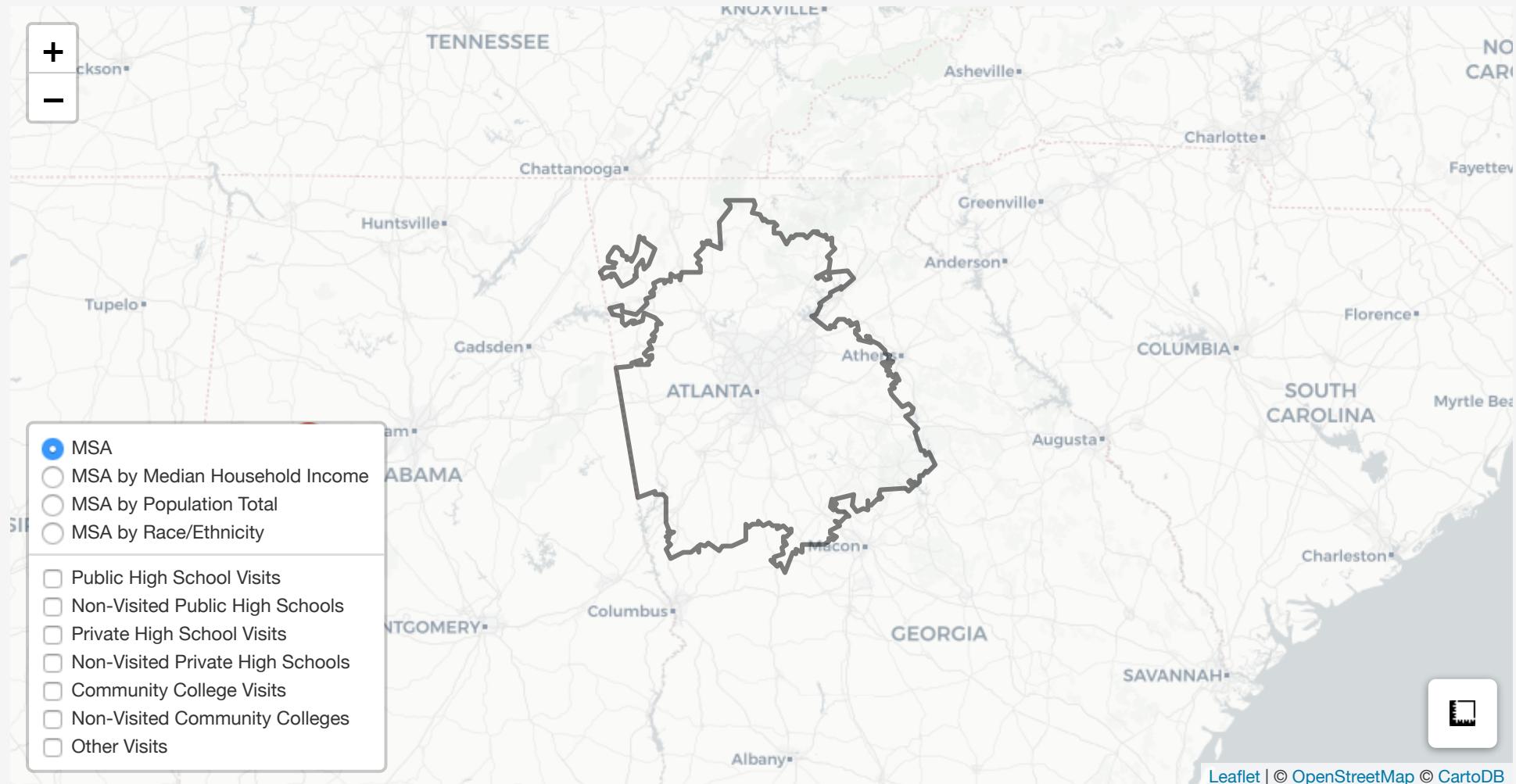
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Out-of-State Results

Atlanta-Sandy Springs-Roswell, GA

University of Alabama



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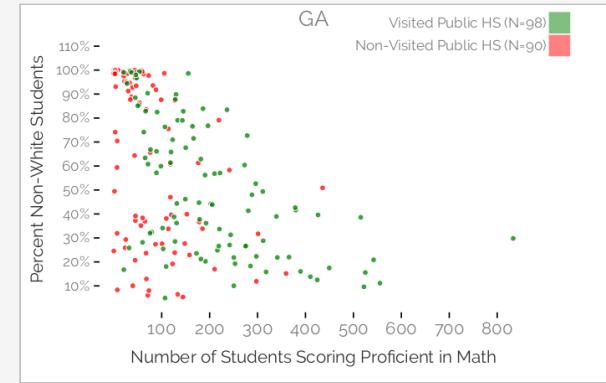
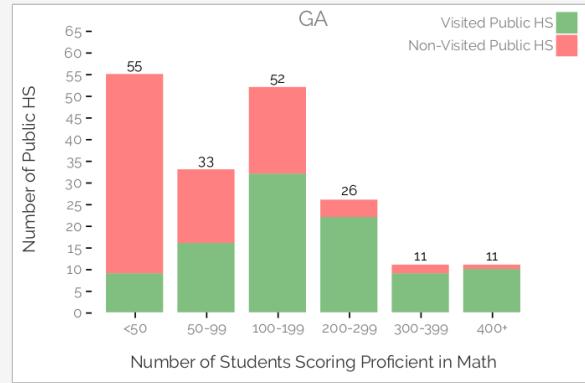
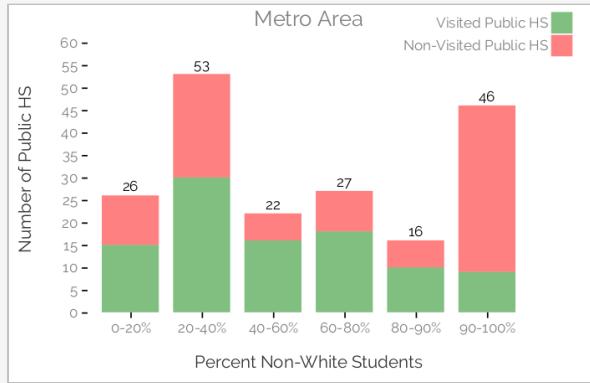
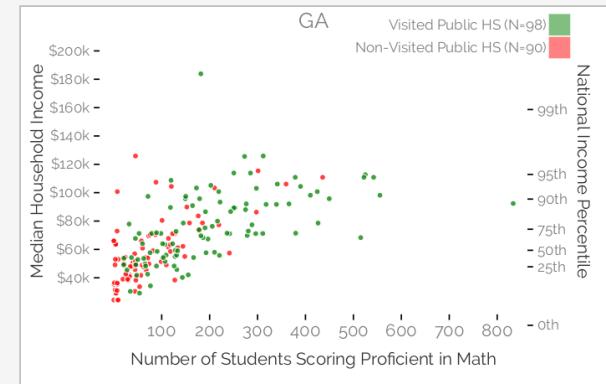
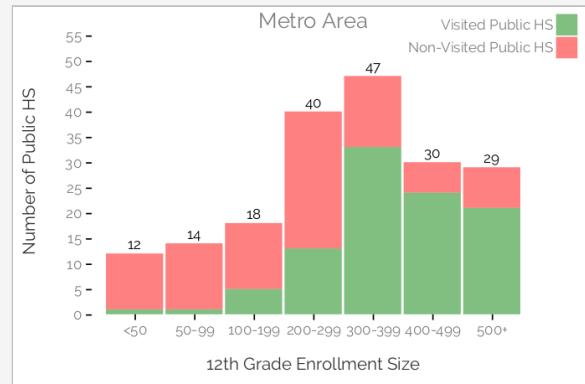
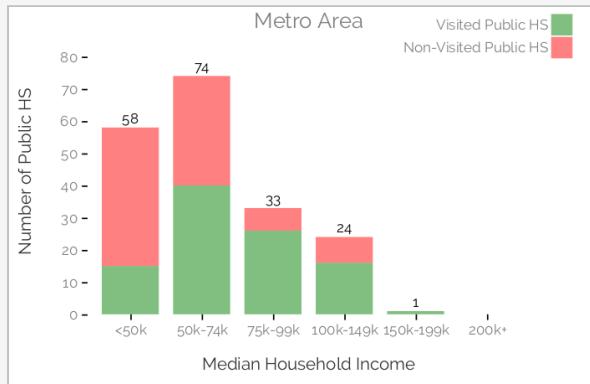
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Out-of-State Results

Atlanta-Sandy Springs-Roswell, GA

University of Alabama



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Out-of-State Results

Dallas-Fort Worth-Arlington, TX

University of Alabama



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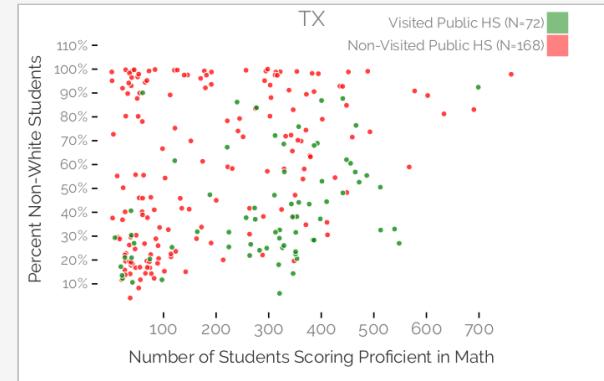
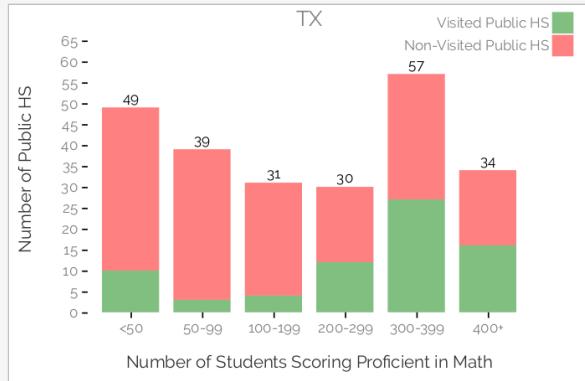
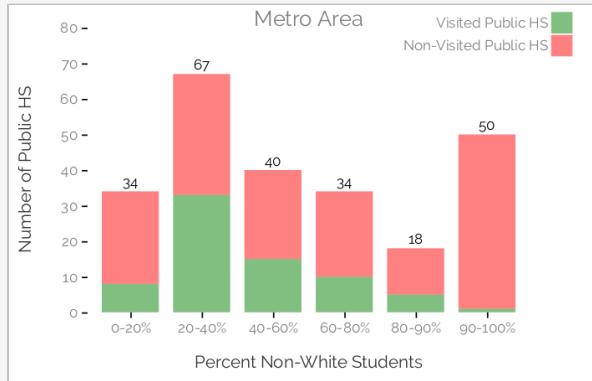
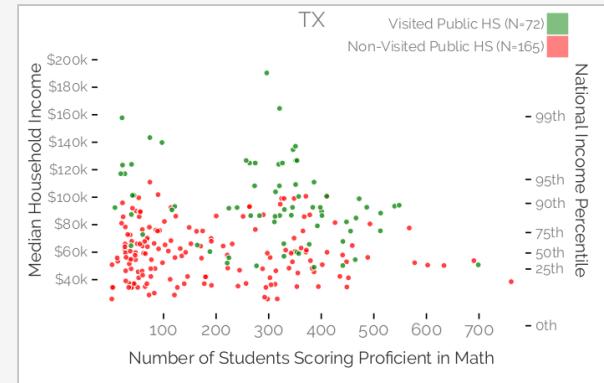
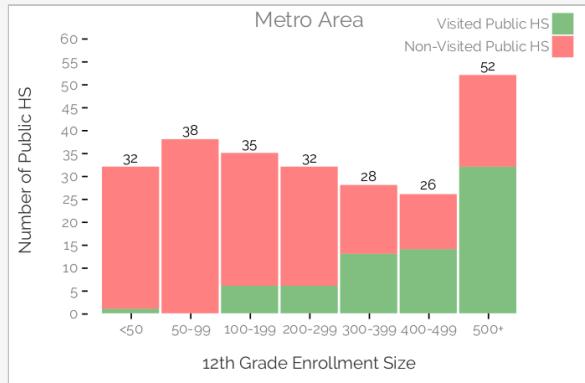
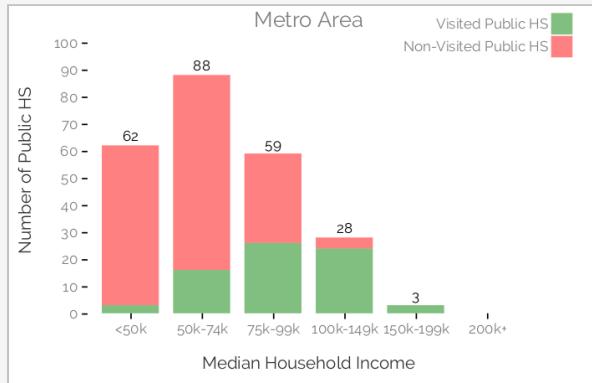
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Out-of-State Results

Dallas-Fort Worth-Arlington, TX

University of Alabama



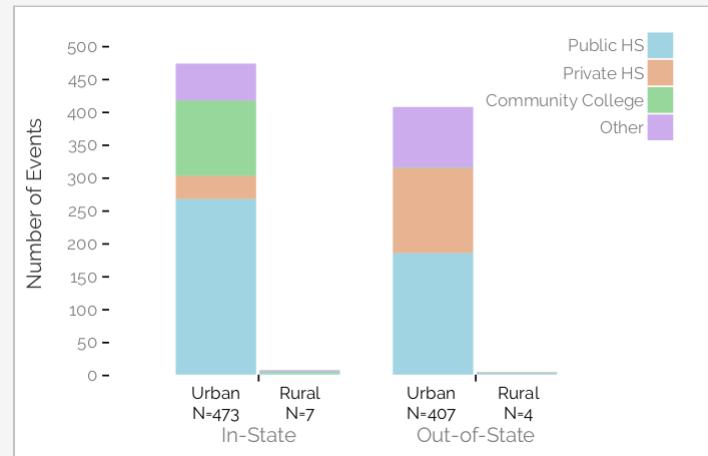
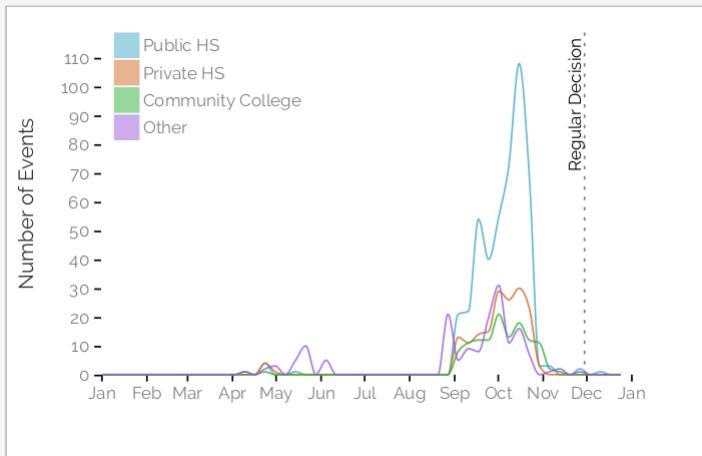
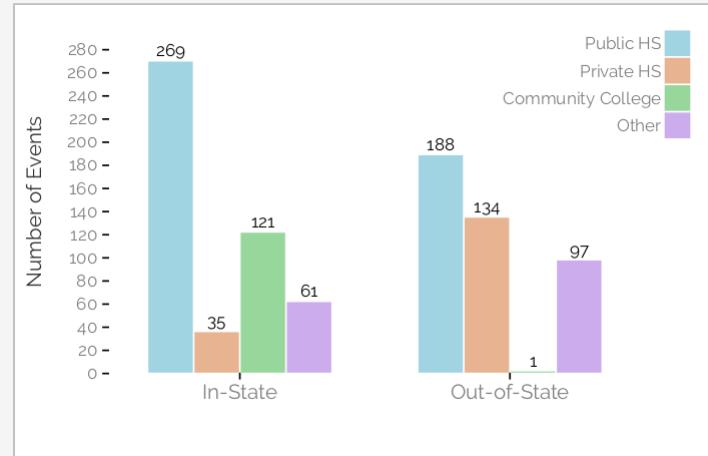
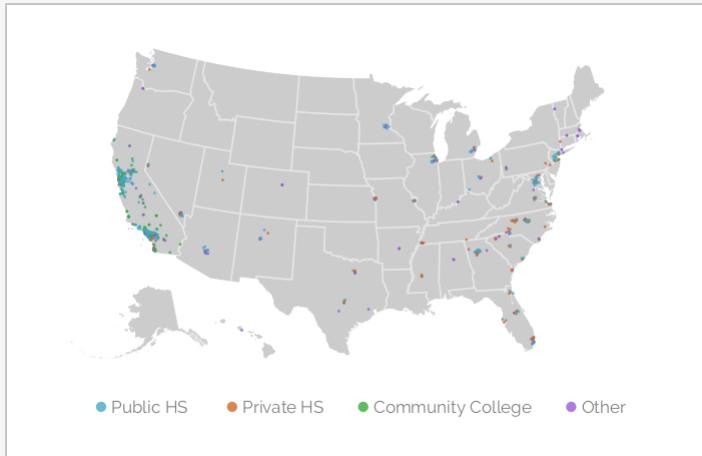
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National Overview

University of California-Berkeley



Select another university

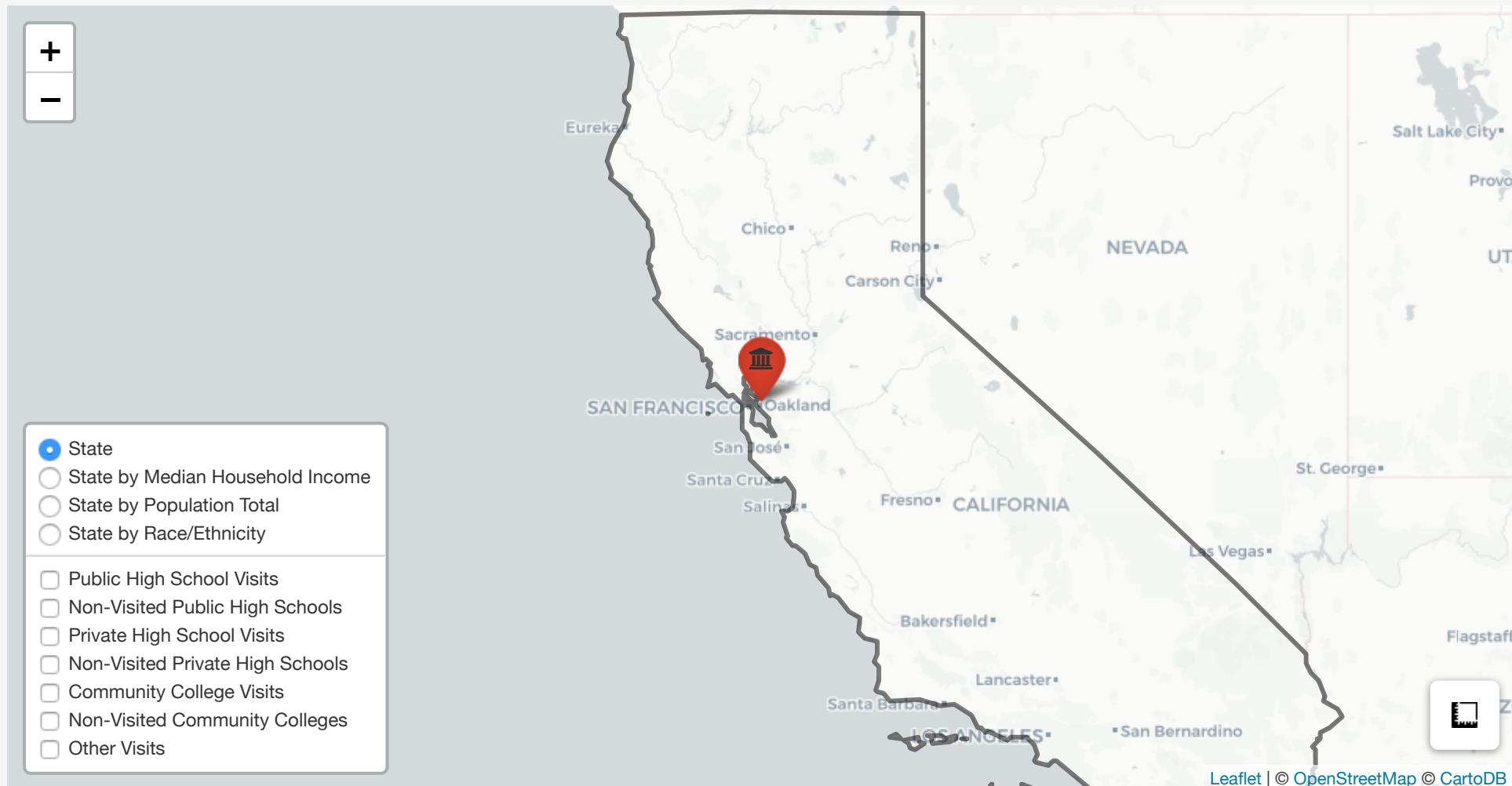
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In-State Results

California

University of California-Berkeley



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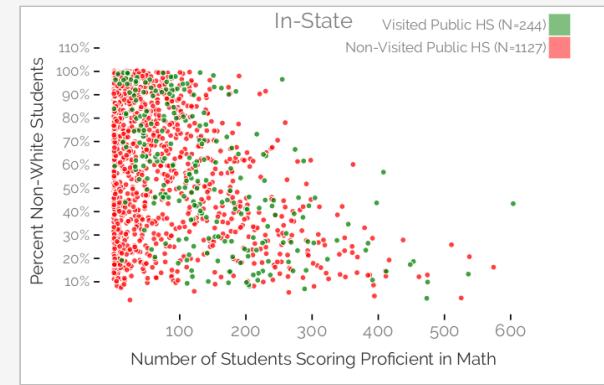
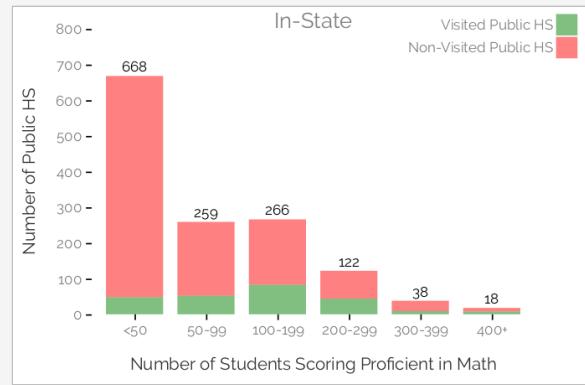
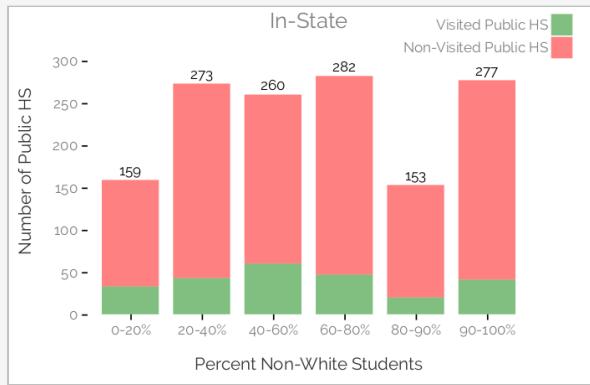
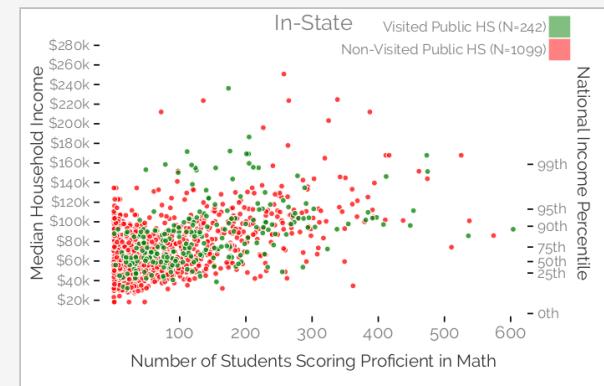
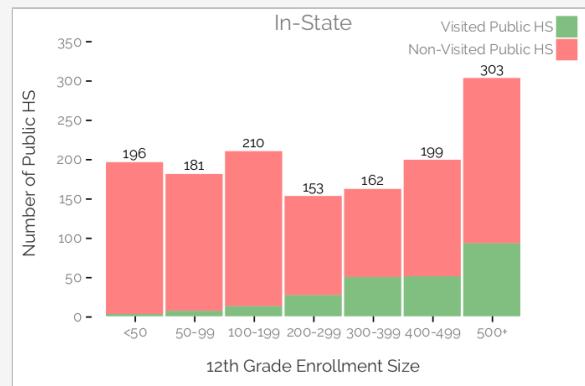
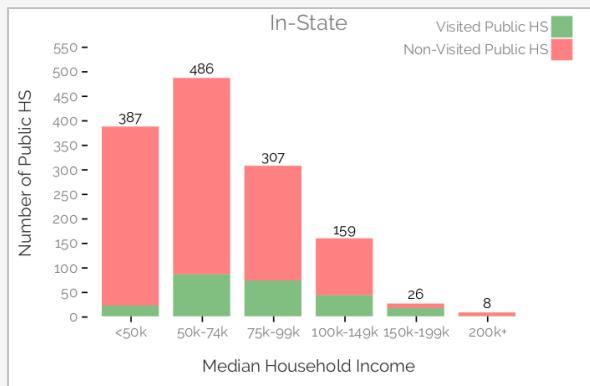
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In-State Results

California

University of California-Berkeley



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In-State Results

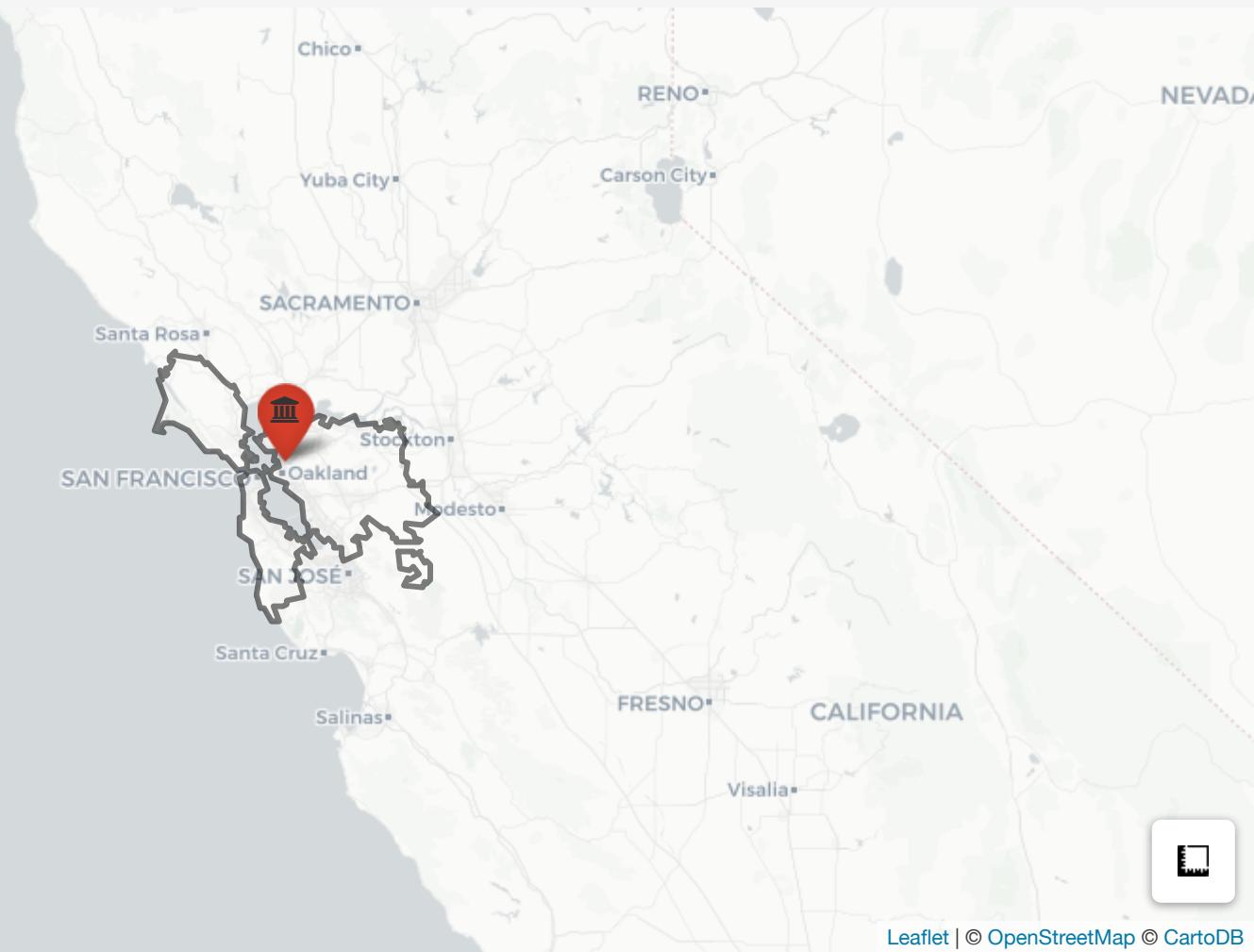
University of California-Berkeley

San Francisco-Oakland-Hayward, CA



- MSA
- MSA by Median Household Income
- MSA by Population Total
- MSA by Race/Ethnicity

- Public High School Visits
- Non-Visited Public High Schools
- Private High School Visits
- Non-Visited Private High Schools
- Community College Visits
- Non-Visited Community Colleges
- Other Visits



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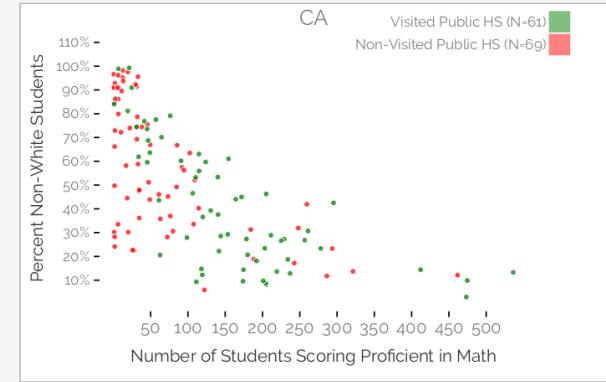
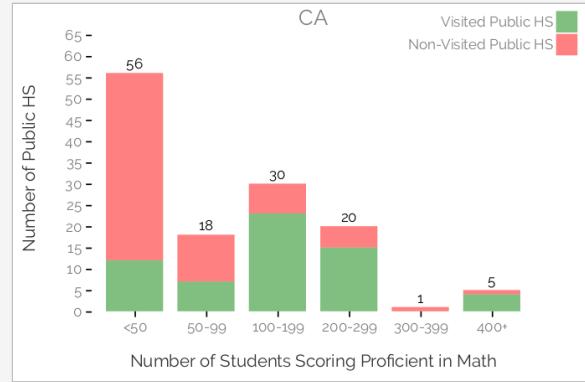
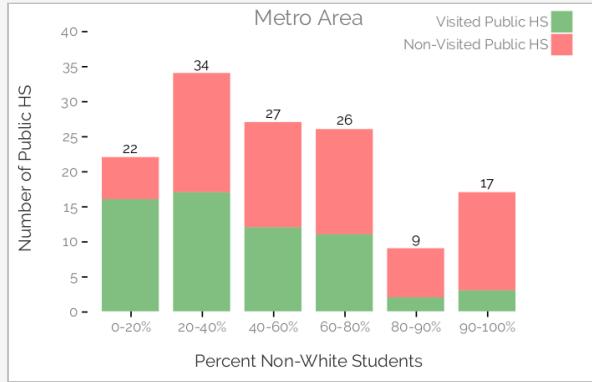
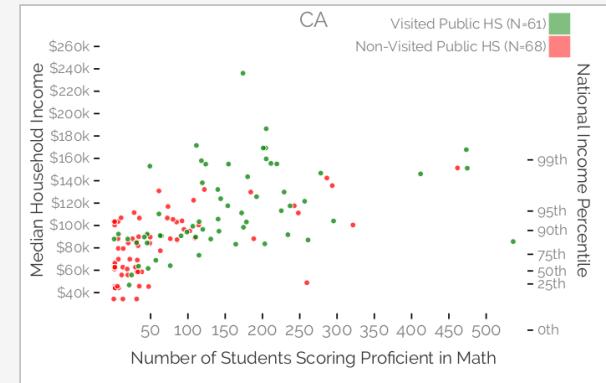
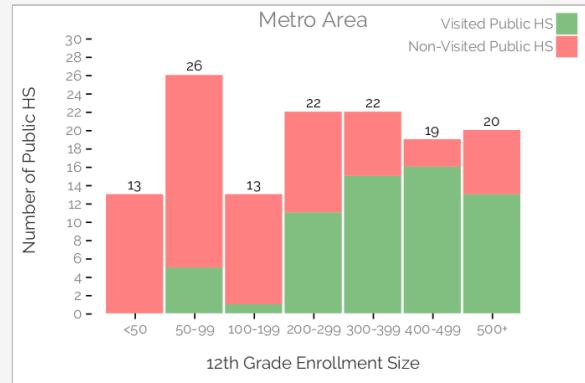
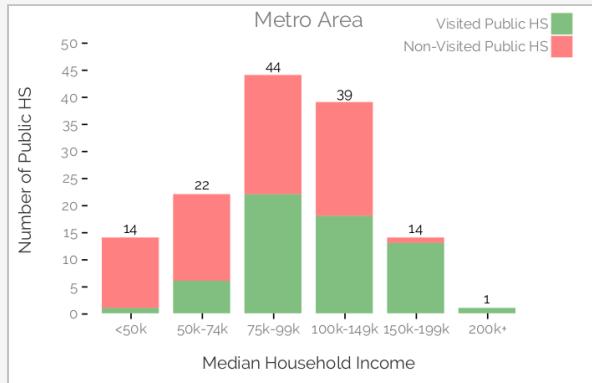
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In-State Results

San Francisco-Oakland-Hayward, CA

University of California-Berkeley



Select another university

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Out-of-State Results

University of California-Berkeley

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>
Los Angeles, Long Beach, Anaheim	CA	131	66	12	36	17
San Francisco, Oakland, Hayward	CA	123	77	11	24	11
Riverside, San Bernardino, Ontario	CA	49	27	0	13	9
Sacramento, Roseville, Arden-Arcade	CA	41	27	2	6	6
Washington, Arlington, Alexandria	DC, VA, MD, WV	39	24	10	0	5
San Jose, Sunnyvale, Santa Clara	CA	29	15	2	6	6
Atlanta, Sandy Springs, Roswell	GA	27	15	9	0	3
Chicago, Naperville, Elgin	IL, IN, WI	24	16	5	0	3
New York, Newark, Jersey City	NY, NJ, PA	19	11	6	1	1
Phoenix, Mesa, Scottsdale	AZ	19	10	4	0	5

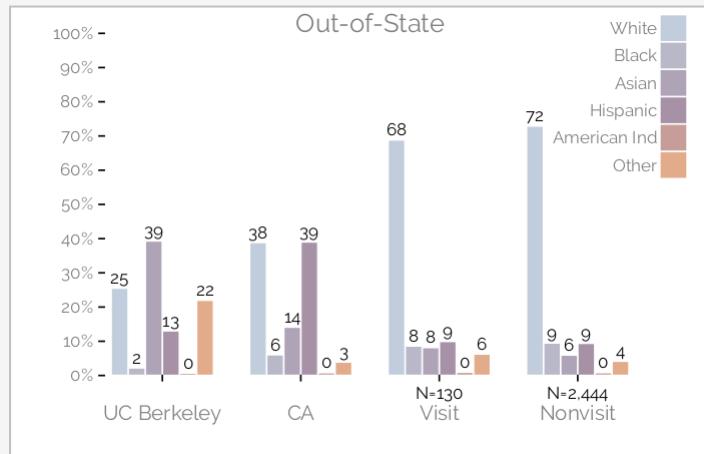
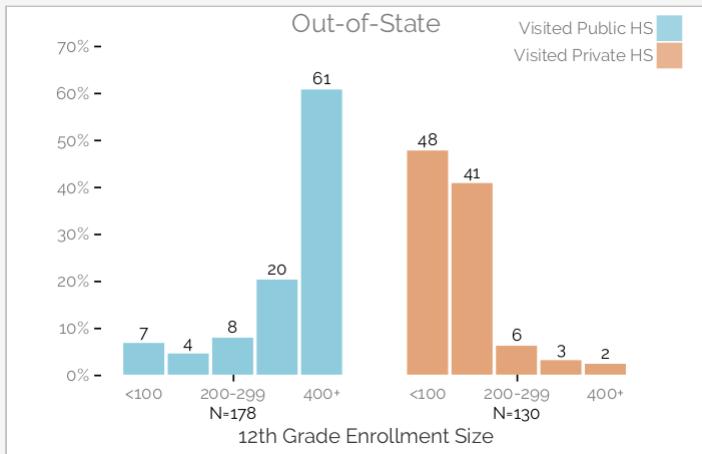
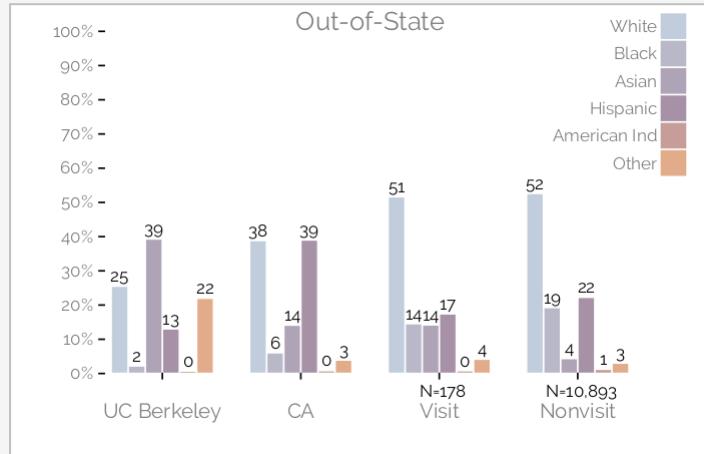
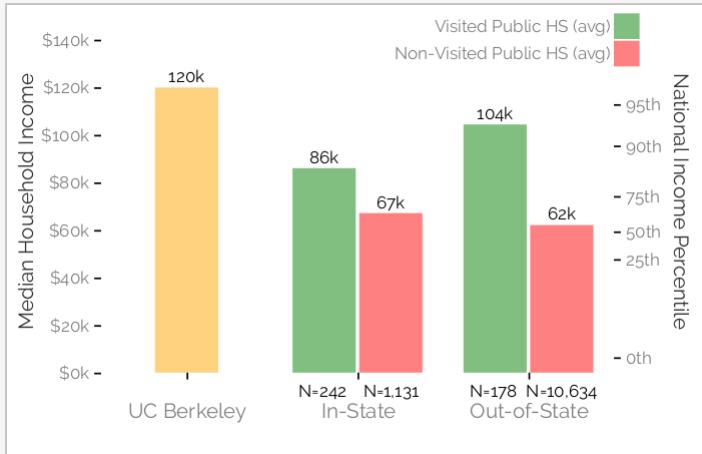
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Out-of-State Results

University of California-Berkeley



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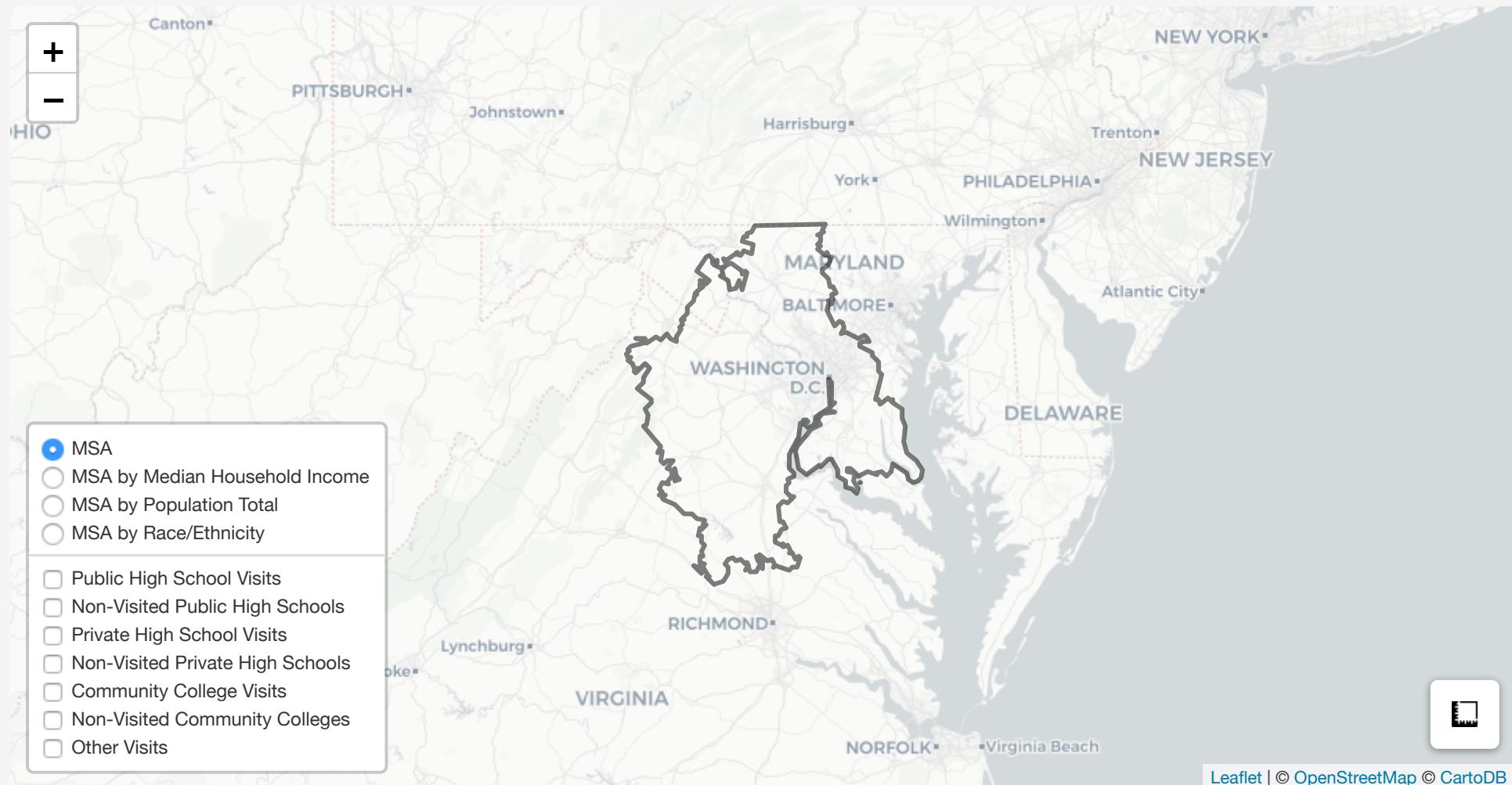
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Out-of-State Results

University of California-Berkeley

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



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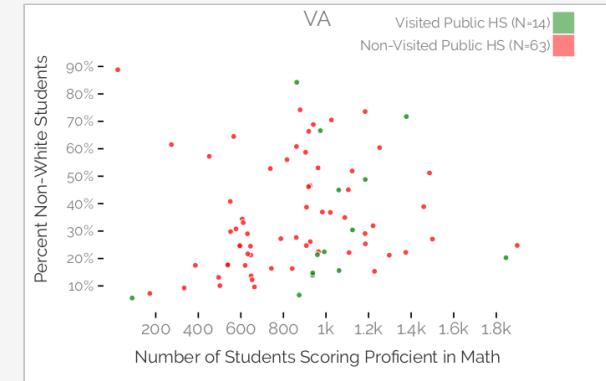
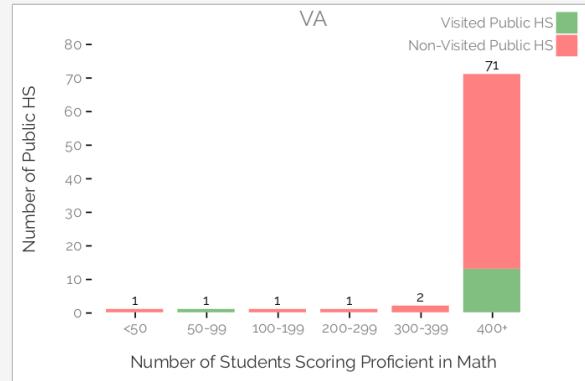
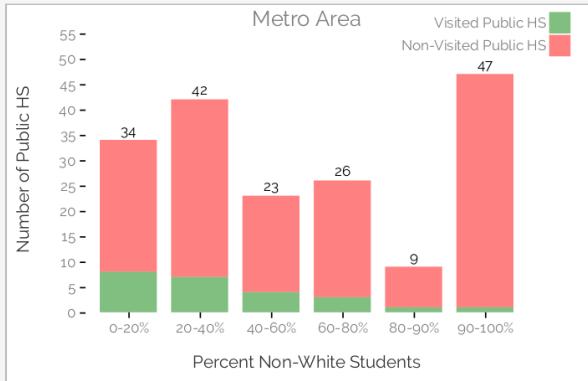
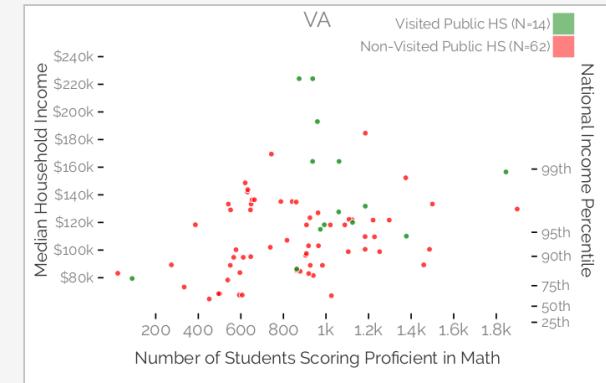
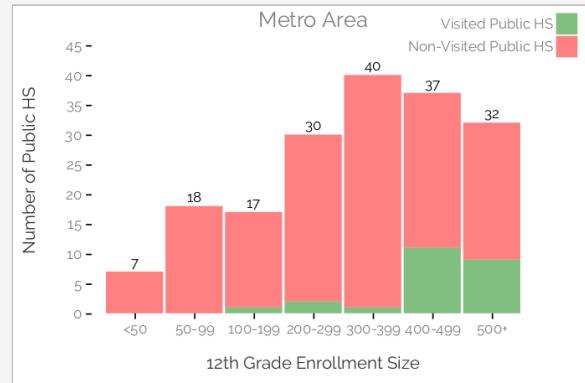
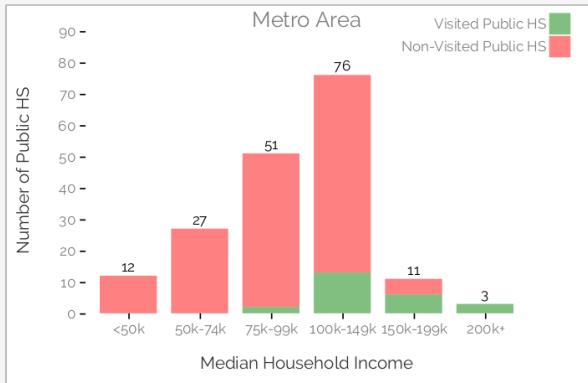
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Out-of-State Results

University of California-Berkeley

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



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Out-of-State Results

Atlanta-Sandy Springs-Roswell, GA

University of California-Berkeley



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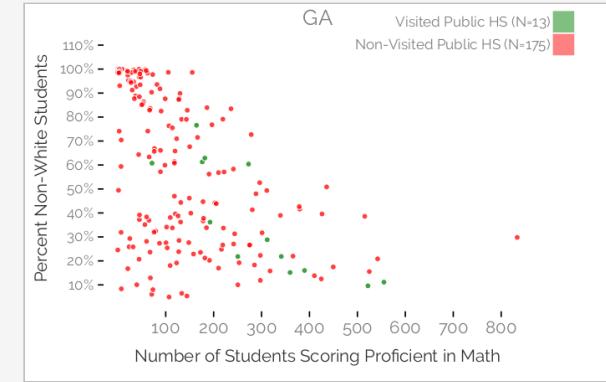
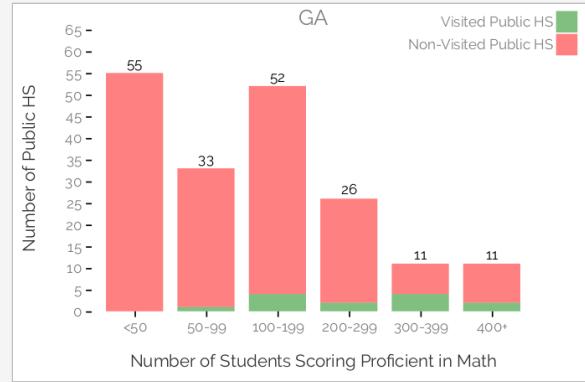
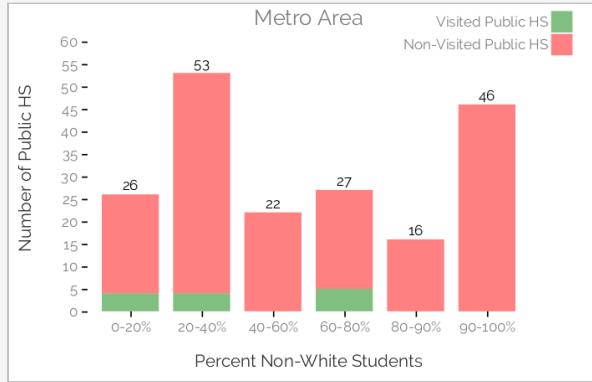
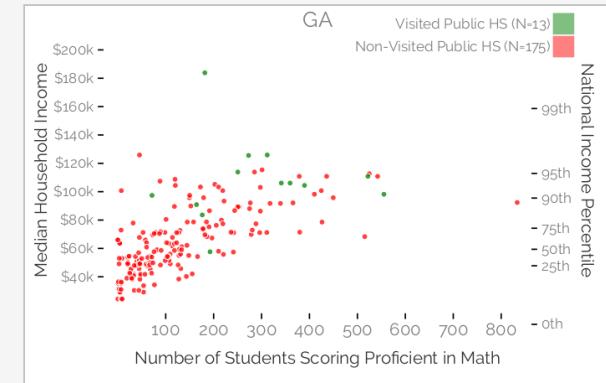
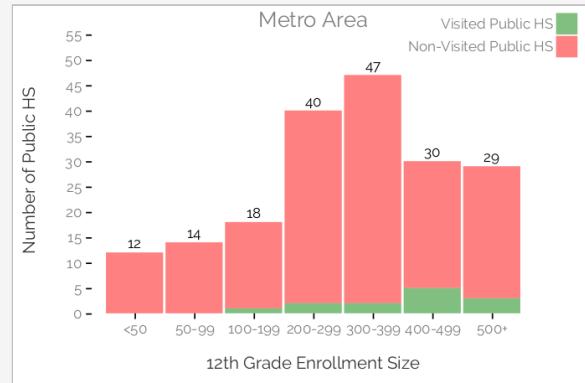
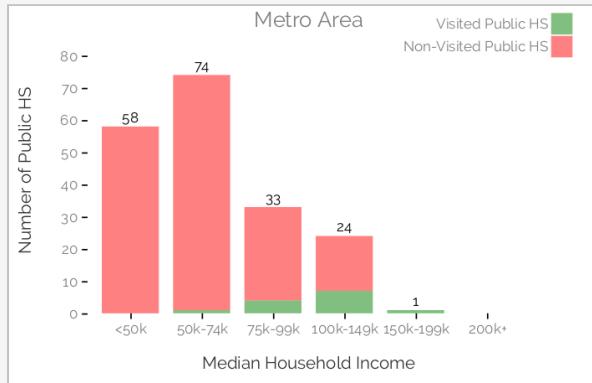
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Out-of-State Results

Atlanta-Sandy Springs-Roswell, GA

University of California-Berkeley



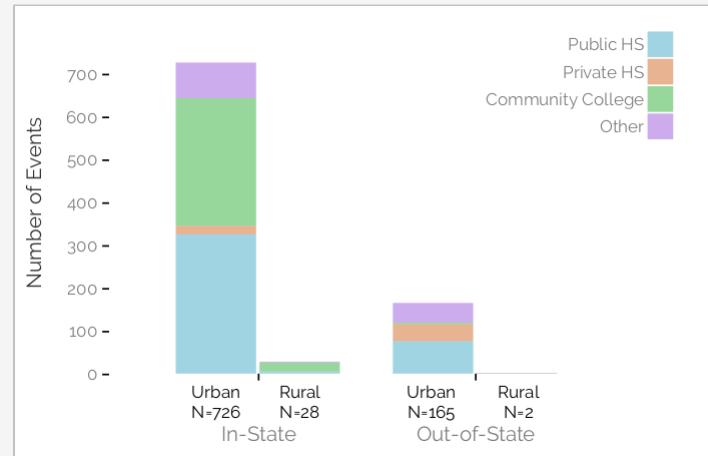
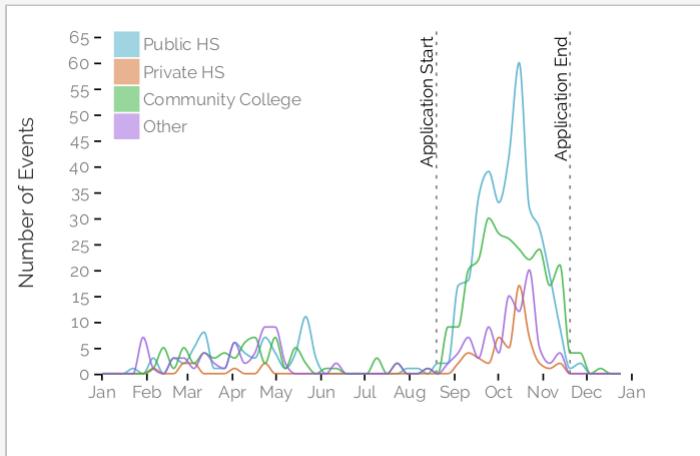
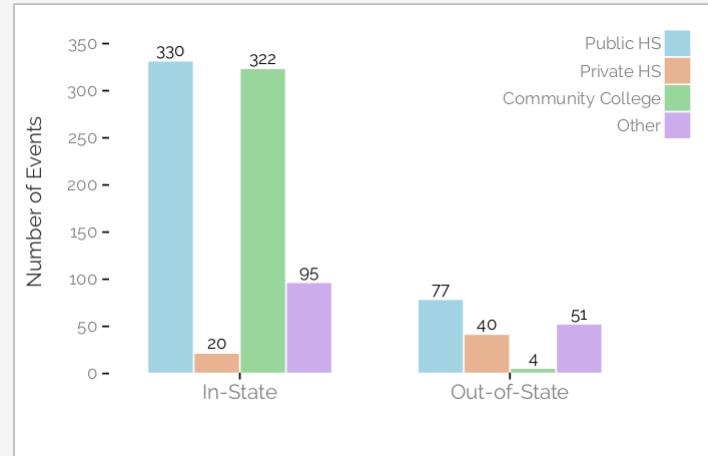
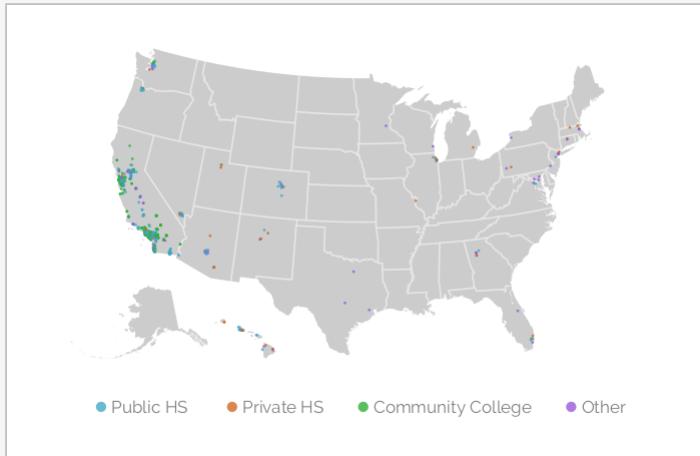
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National Overview

University of California-Irvine



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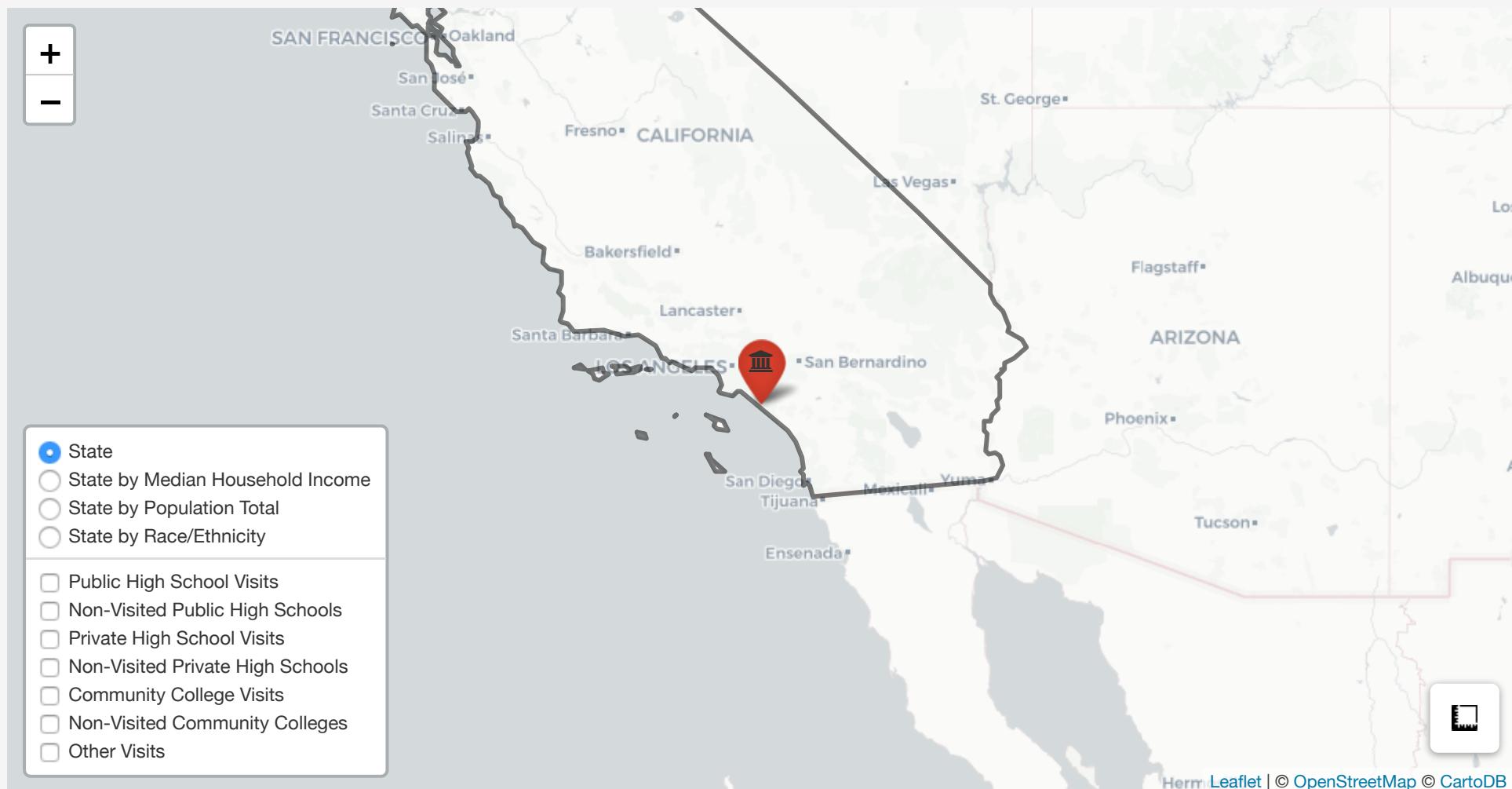
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In-State Results

California

University of California-Irvine



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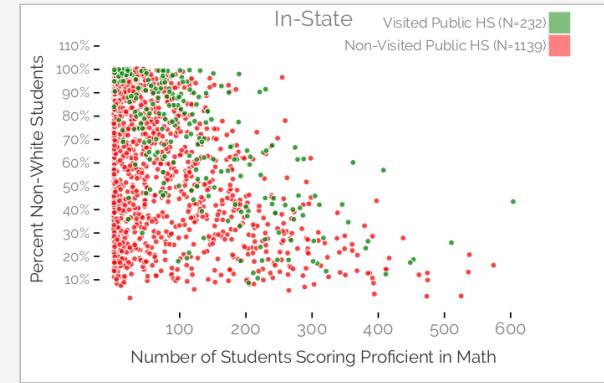
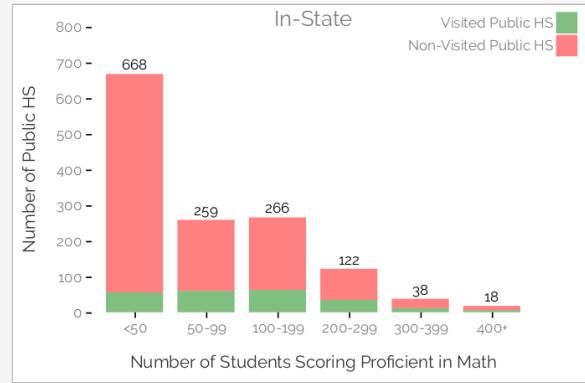
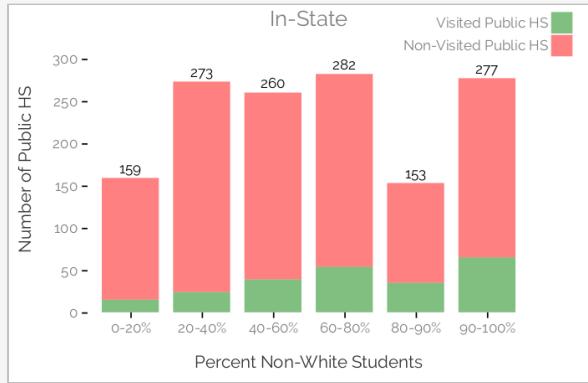
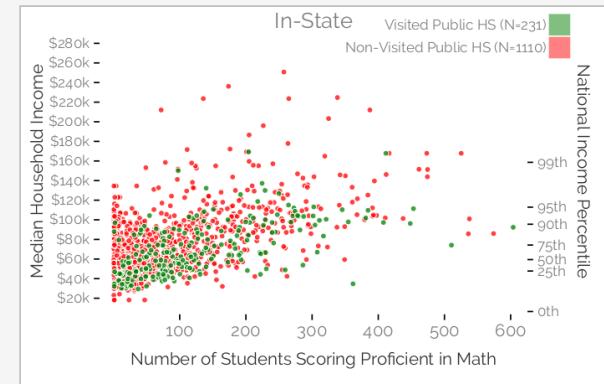
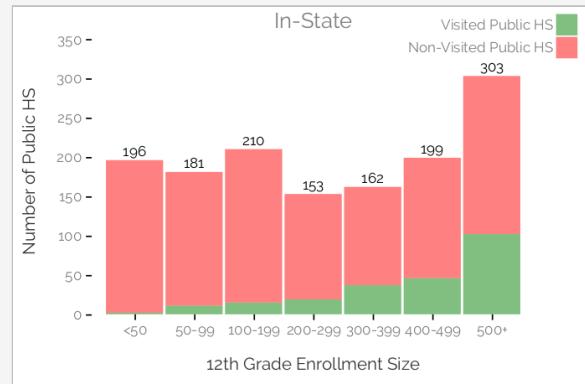
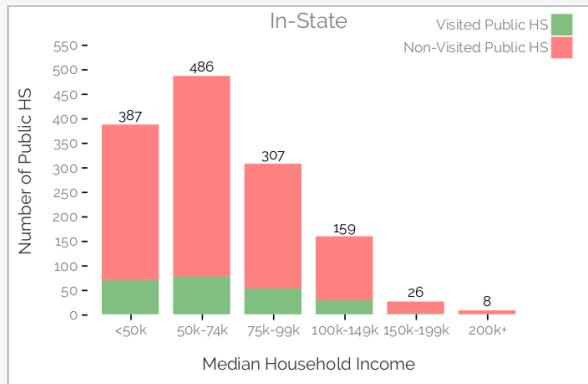
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In-State Results

California

University of California-Irvine



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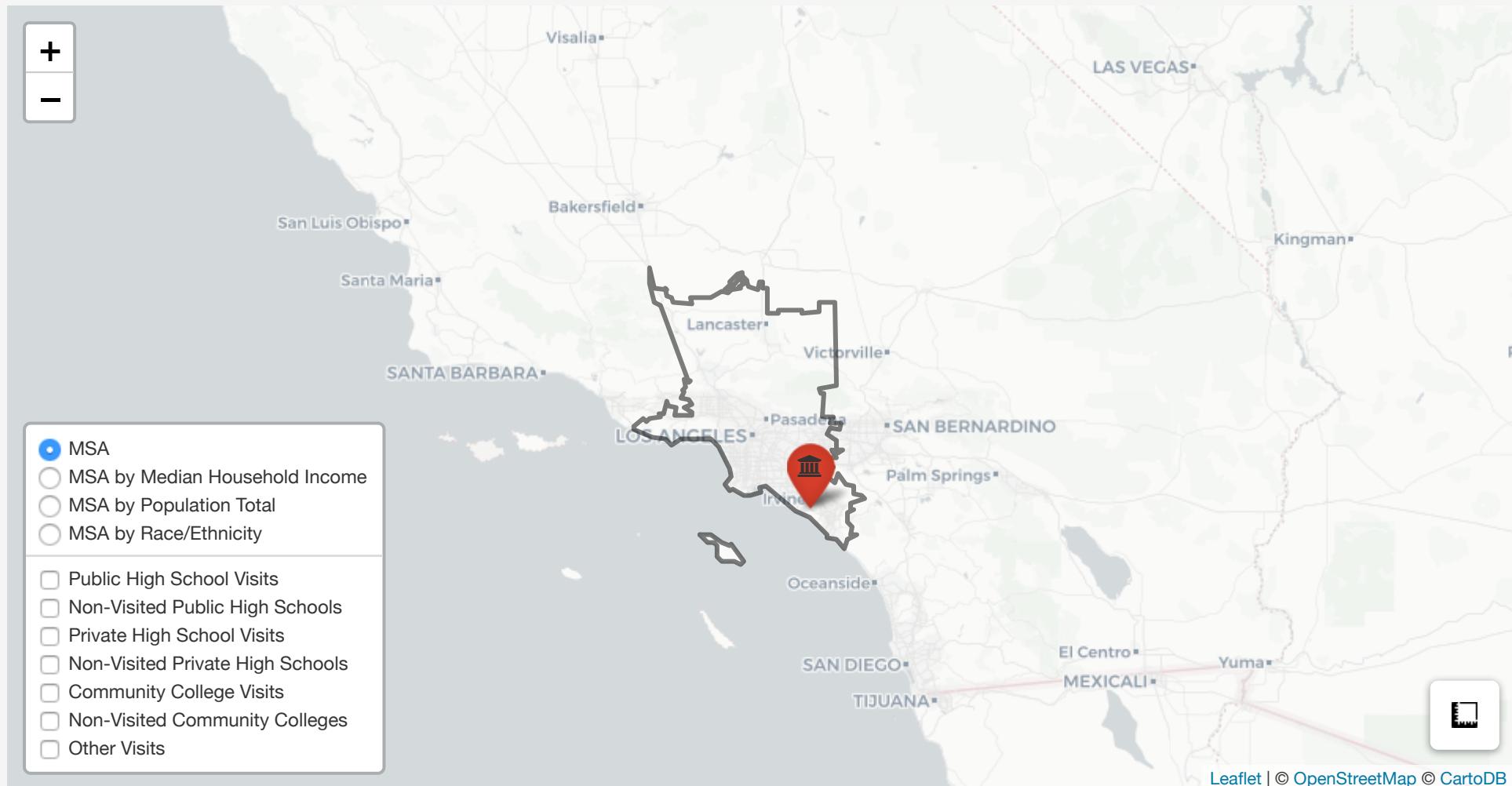
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In-State Results

Los Angeles-Long Beach-Anaheim, CA

University of California-Irvine



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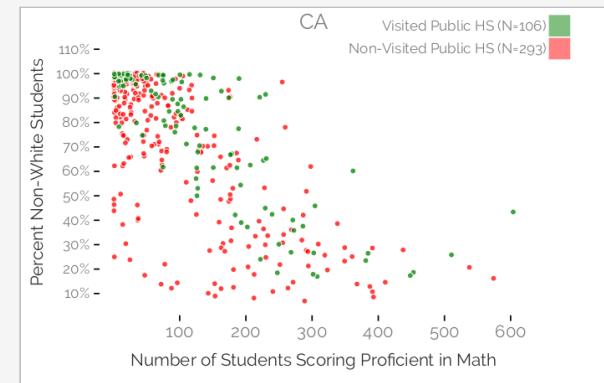
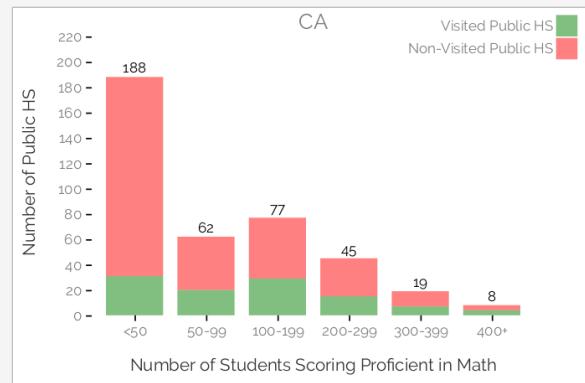
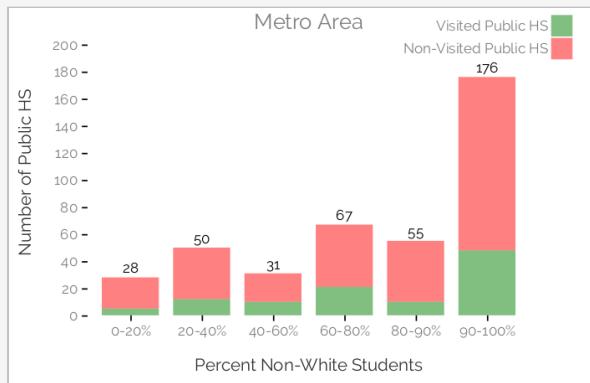
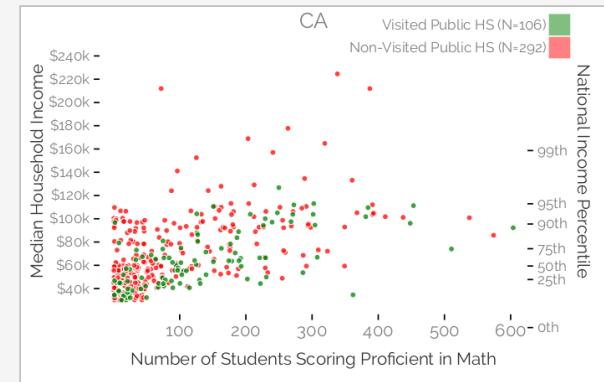
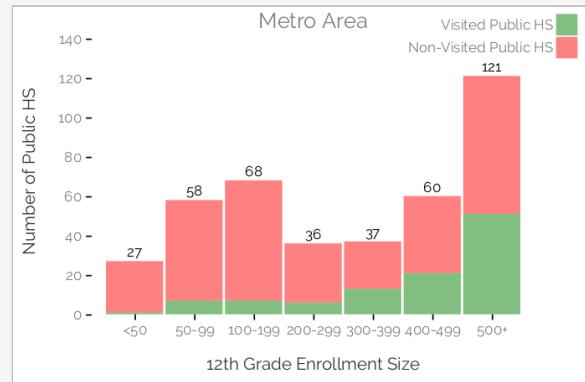
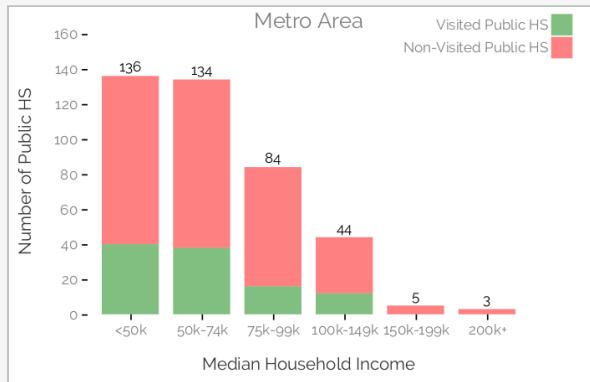
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In-State Results

Los Angeles-Long Beach-Anaheim, CA

University of California-Irvine



Select another university

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Out-of-State Results

University of California-Irvine

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>
Los Angeles, Long Beach, Anaheim	CA	354	155	14	142	43
Riverside, San Bernardino, Ontario	CA	139	49	0	78	12
Sacramento, Roseville, Arden-Arcade	CA	71	45	4	12	10
San Francisco, Oakland, Hayward	CA	49	15	1	27	6
San Diego, Carlsbad	CA	32	12	0	14	6
Urban Honolulu	HI	21	10	7	0	4
Seattle, Tacoma, Bellevue	WA	21	8	1	4	8
El Centro	CA	21	19	0	1	1
Las Vegas, Henderson, Paradise	NV	21	14	4	0	3
San Jose, Sunnyvale, Santa Clara	CA	20	8	0	10	2

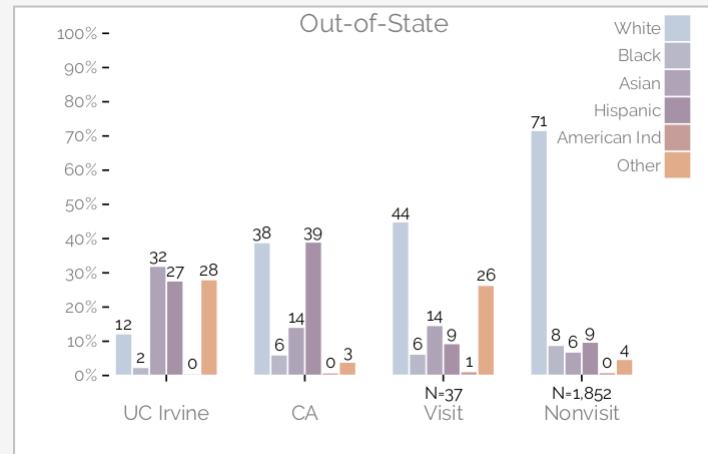
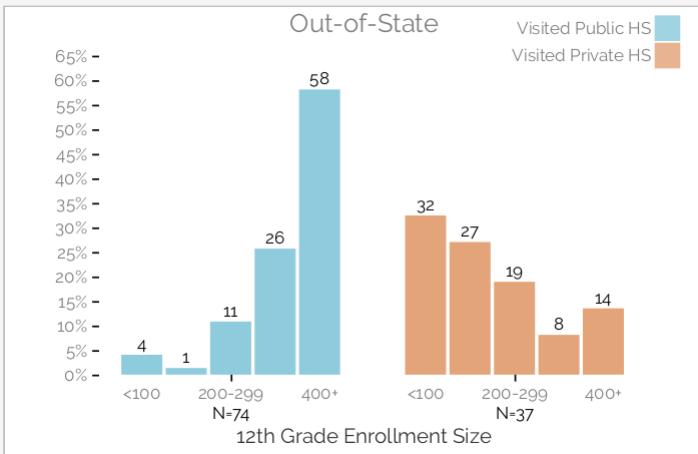
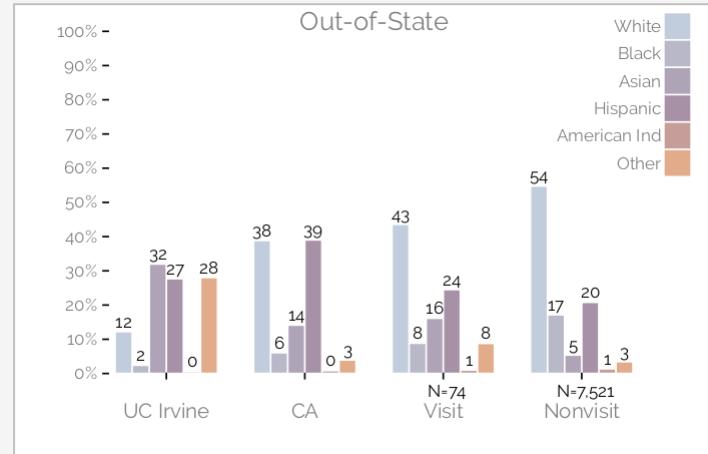
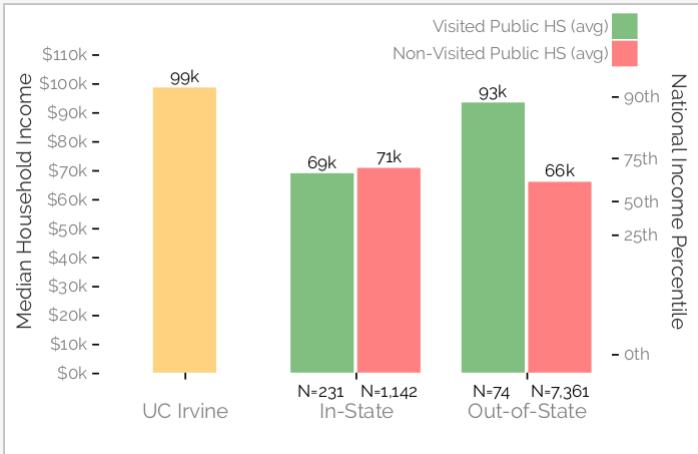
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Out-of-State Results

University of California-Irvine



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Out-of-State Results

Seattle-Tacoma-Bellevue, WA

University of California-Irvine



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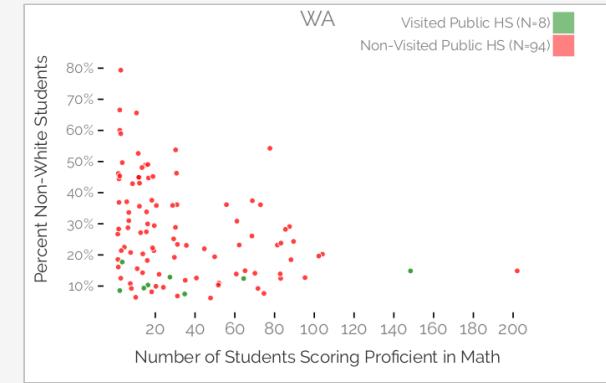
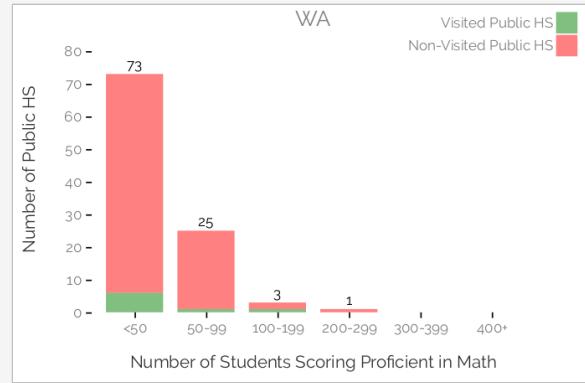
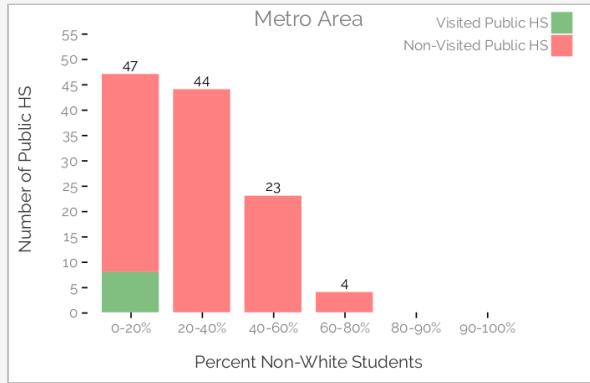
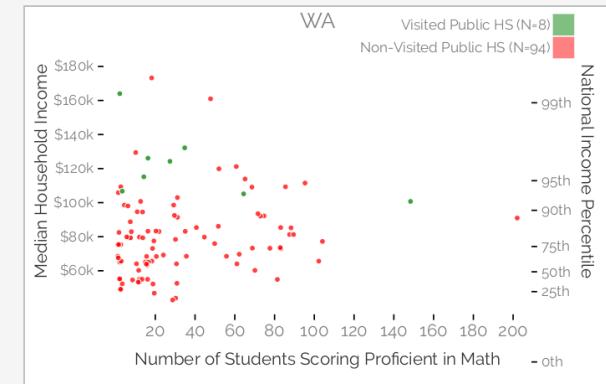
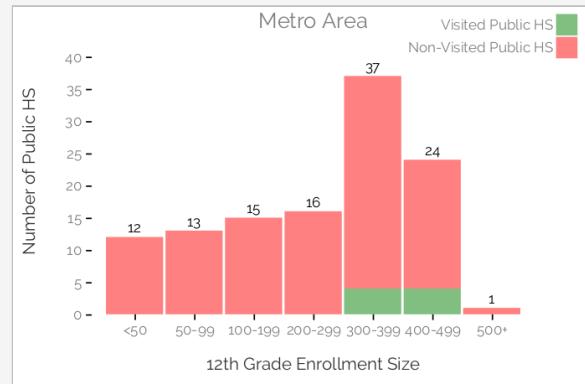
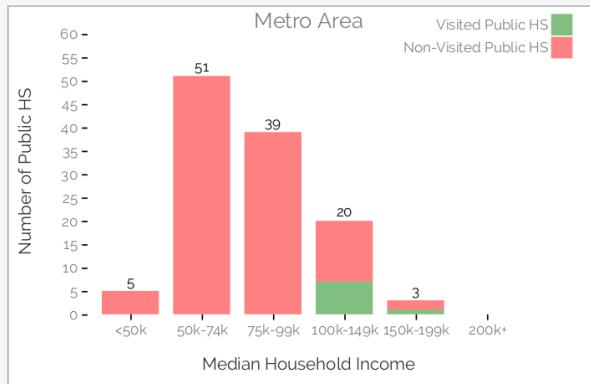
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Out-of-State Results

Seattle-Tacoma-Bellevue, WA

University of California-Irvine



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Out-of-State Results

Urban Honolulu, HI

University of California-Irvine

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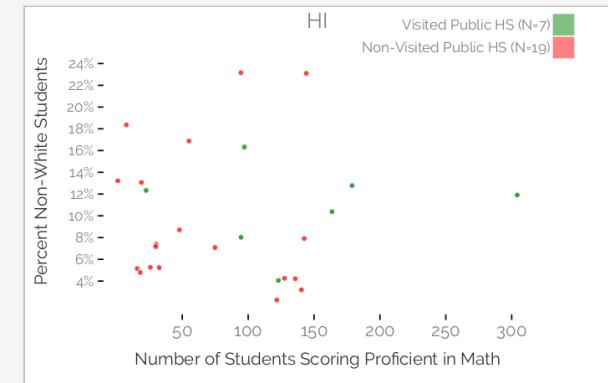
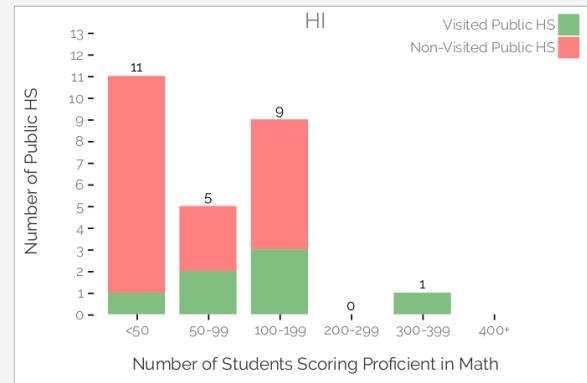
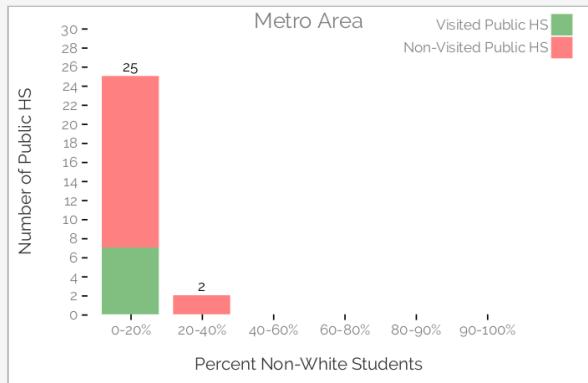
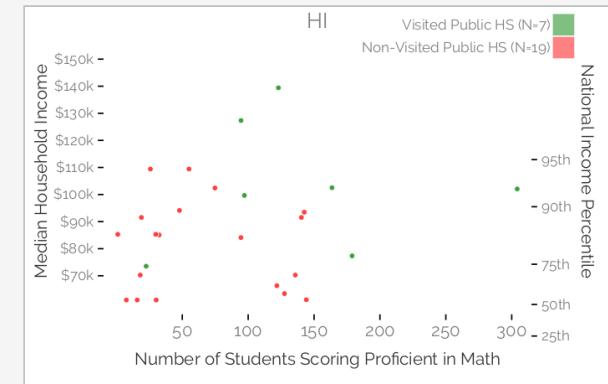
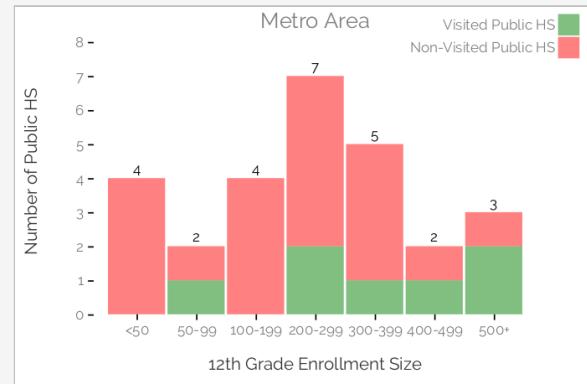
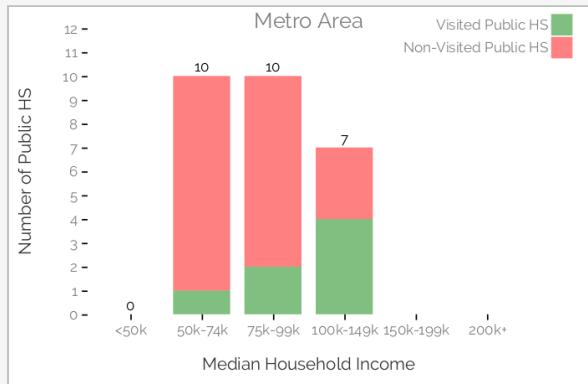
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Out-of-State Results

Urban Honolulu, HI

University of California-Irvine



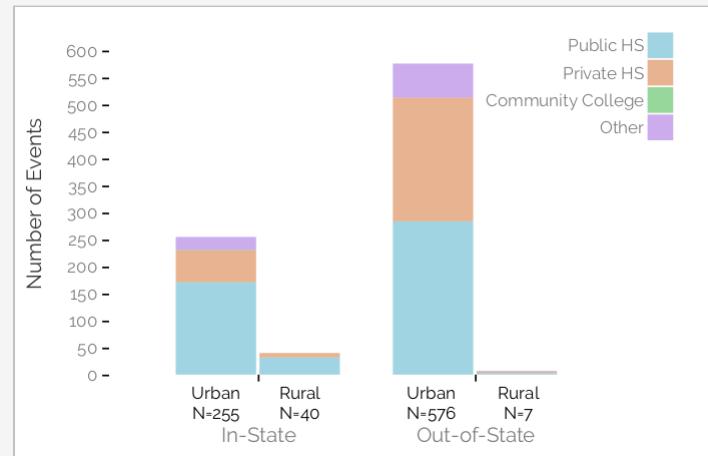
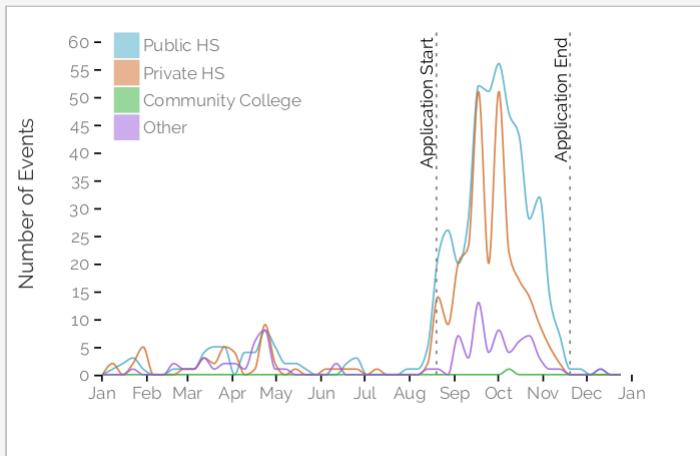
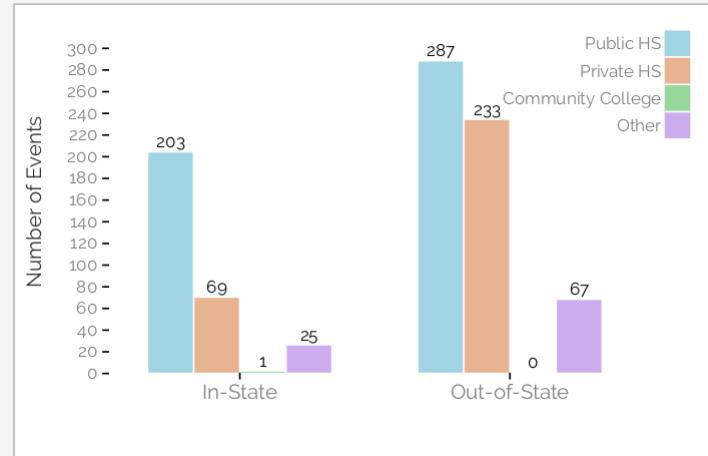
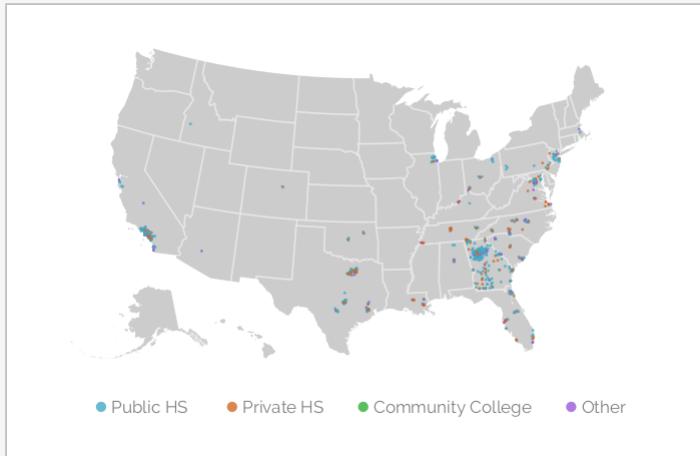
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National Overview

University of Georgia



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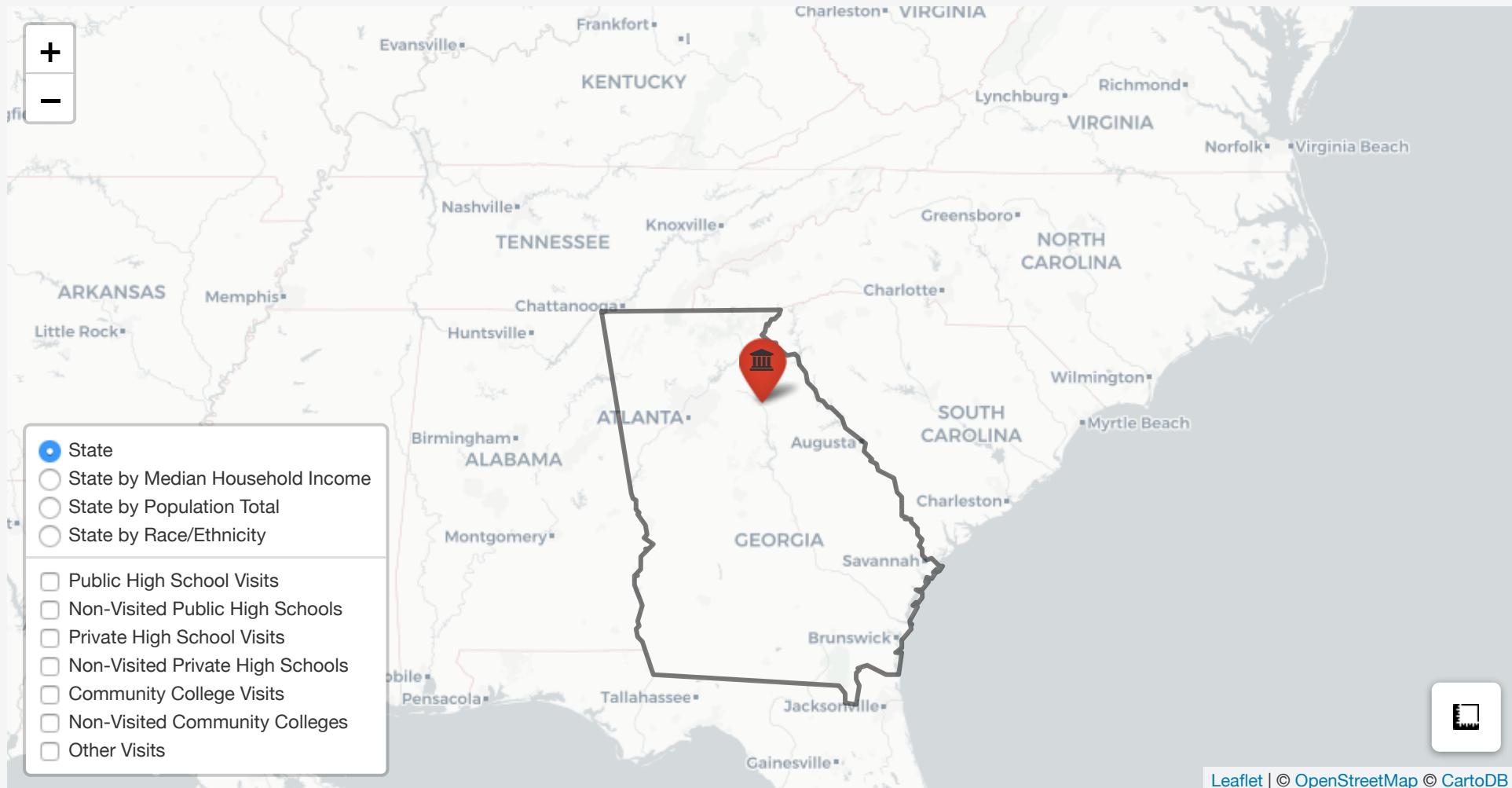
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In-State Results

Georgia

University of Georgia



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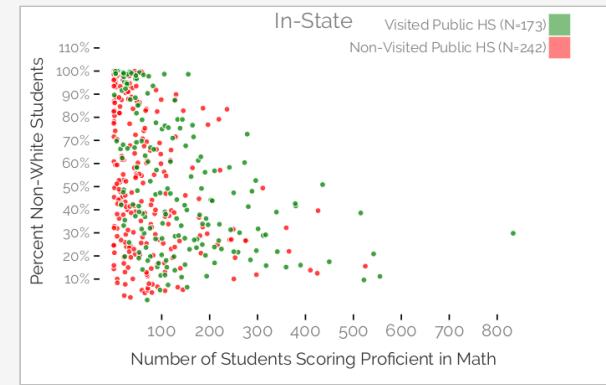
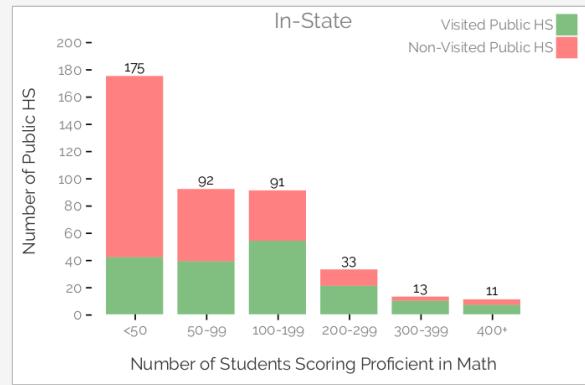
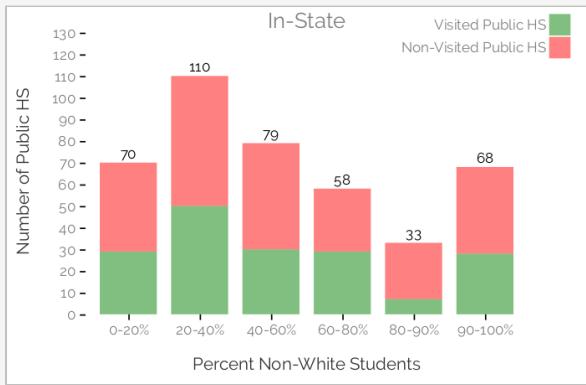
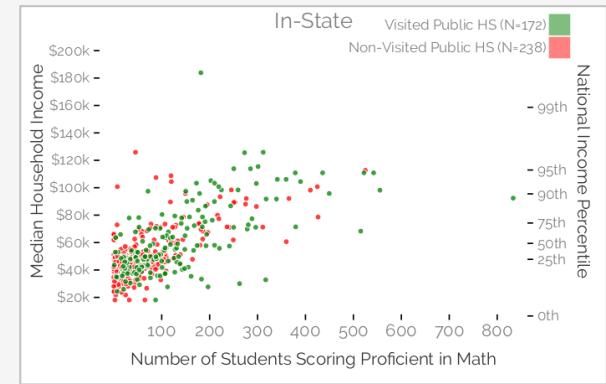
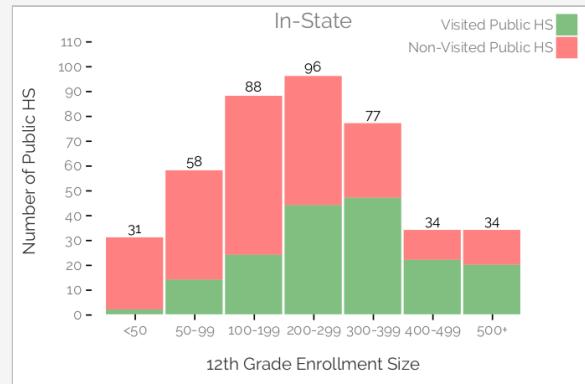
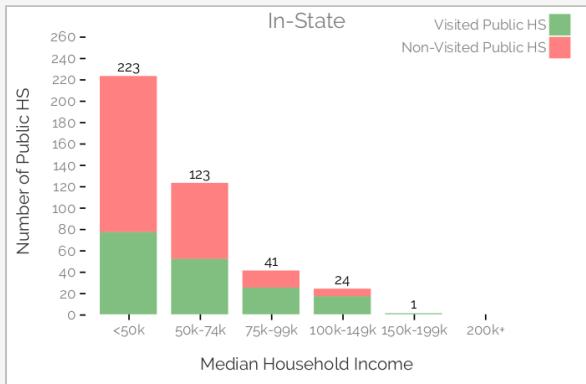
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In-State Results

Georgia

University of Georgia



Select another university

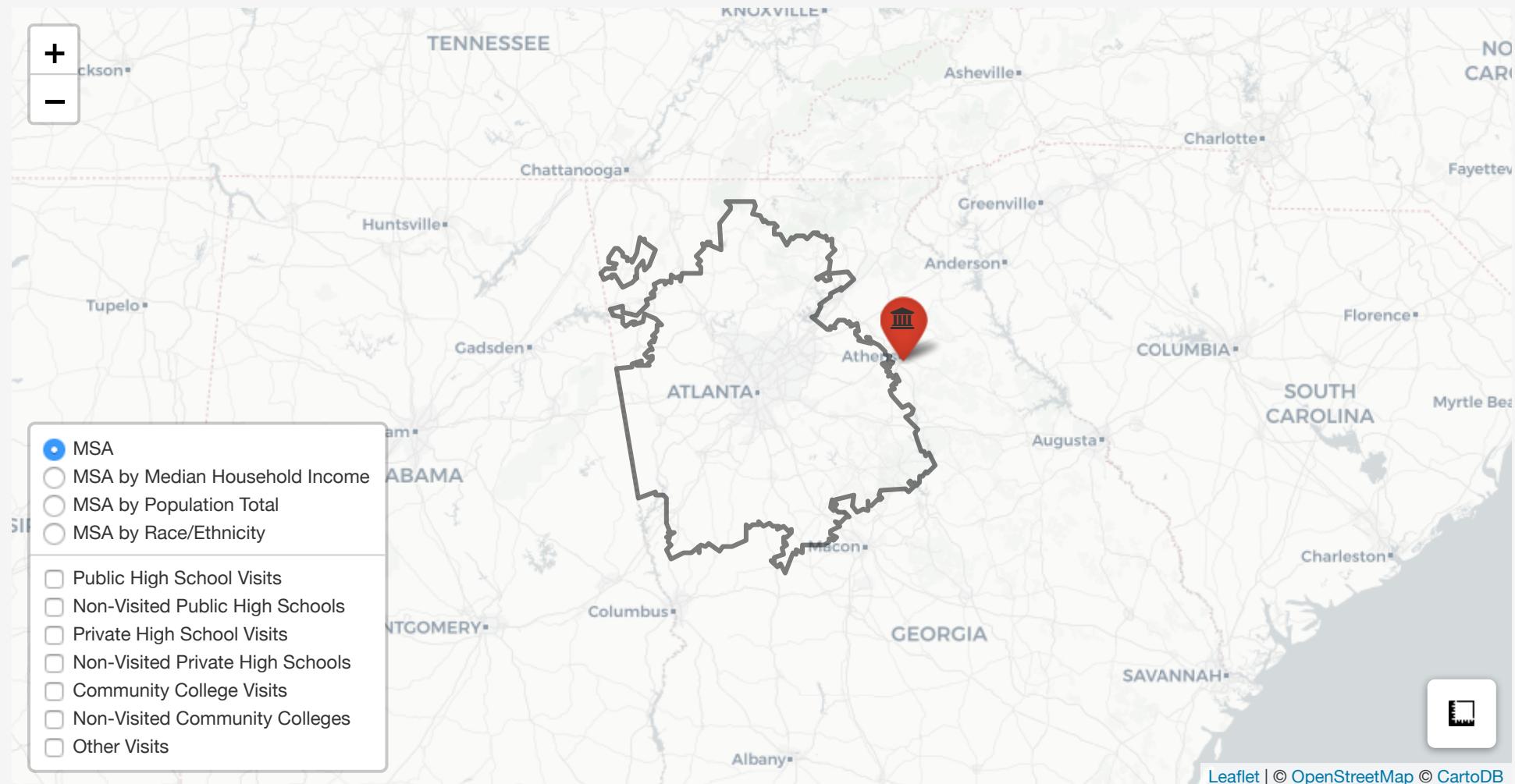
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In-State Results

Atlanta-Sandy Springs-Roswell, GA

University of Georgia



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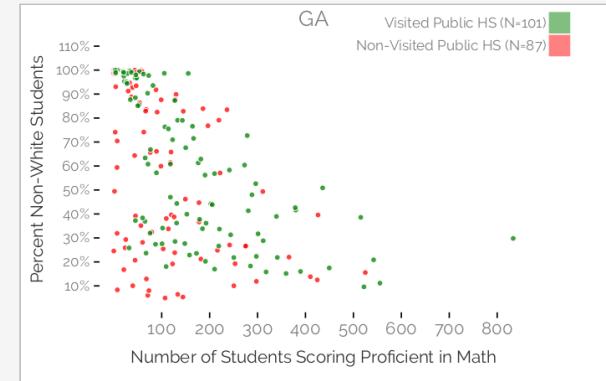
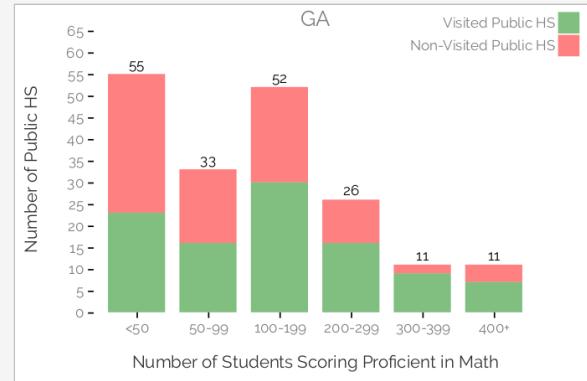
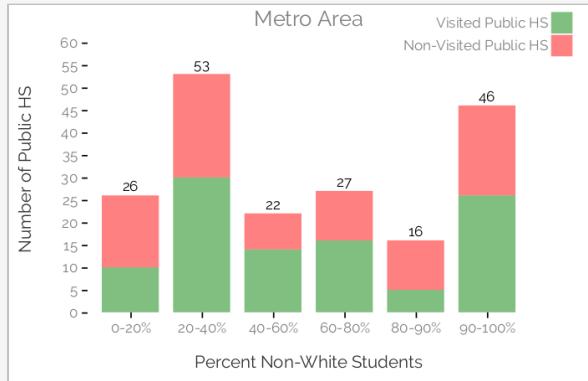
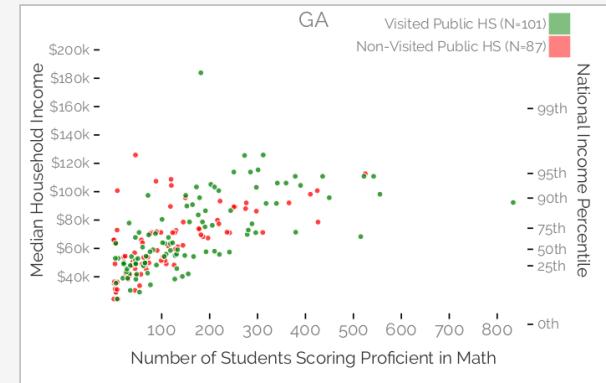
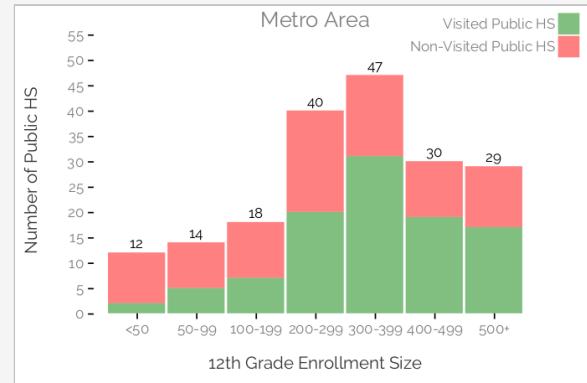
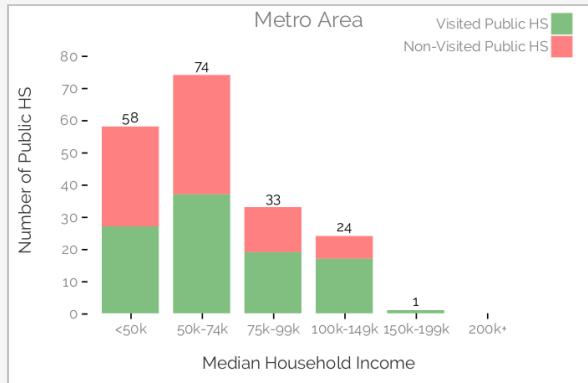
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In-State Results

Atlanta-Sandy Springs-Roswell, GA

University of Georgia



Select another university

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Out-of-State Results

University of Georgia

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	167	116	33	0	18
Los Angeles, Long Beach, Anaheim	CA	110	64	39	0	7
Dallas, Fort Worth, Arlington	TX	70	26	38	0	6
Washington, Arlington, Alexandria	DC, VA, MD, WV	46	19	21	0	6
New York, Newark, Jersey City	NY, NJ, PA	26	21	4	0	1
Austin, Round Rock	TX	23	18	4	0	1
Houston, The Woodlands, Sugar Land	TX	21	10	8	0	3
Athens, Clarke County	GA	17	11	3	0	3
Charlotte, Concord, Gastonia	NC, SC	16	6	8	0	2
Augusta, Richmond County	GA, SC	16	9	6	0	1

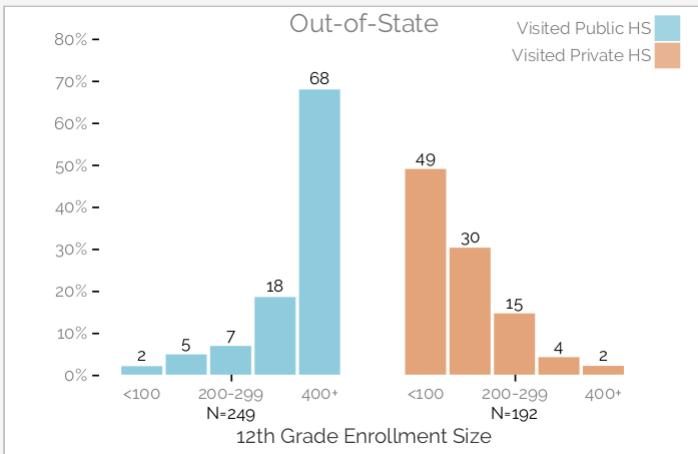
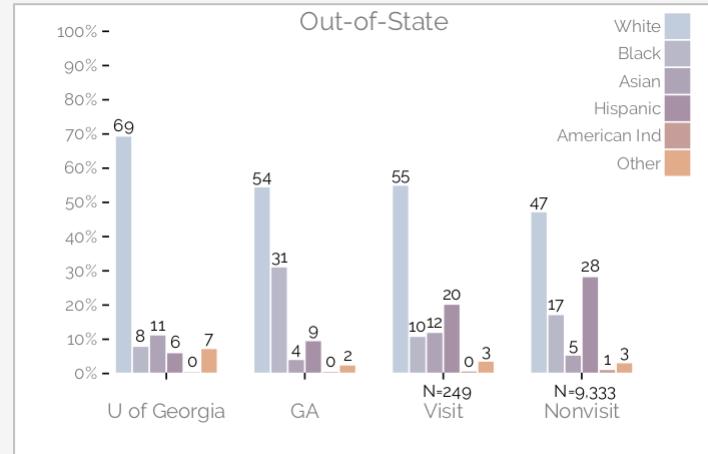
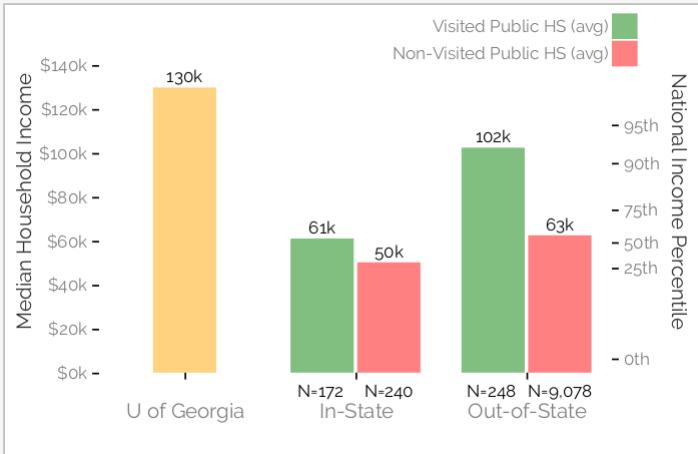
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Out-of-State Results

University of Georgia



Select another university

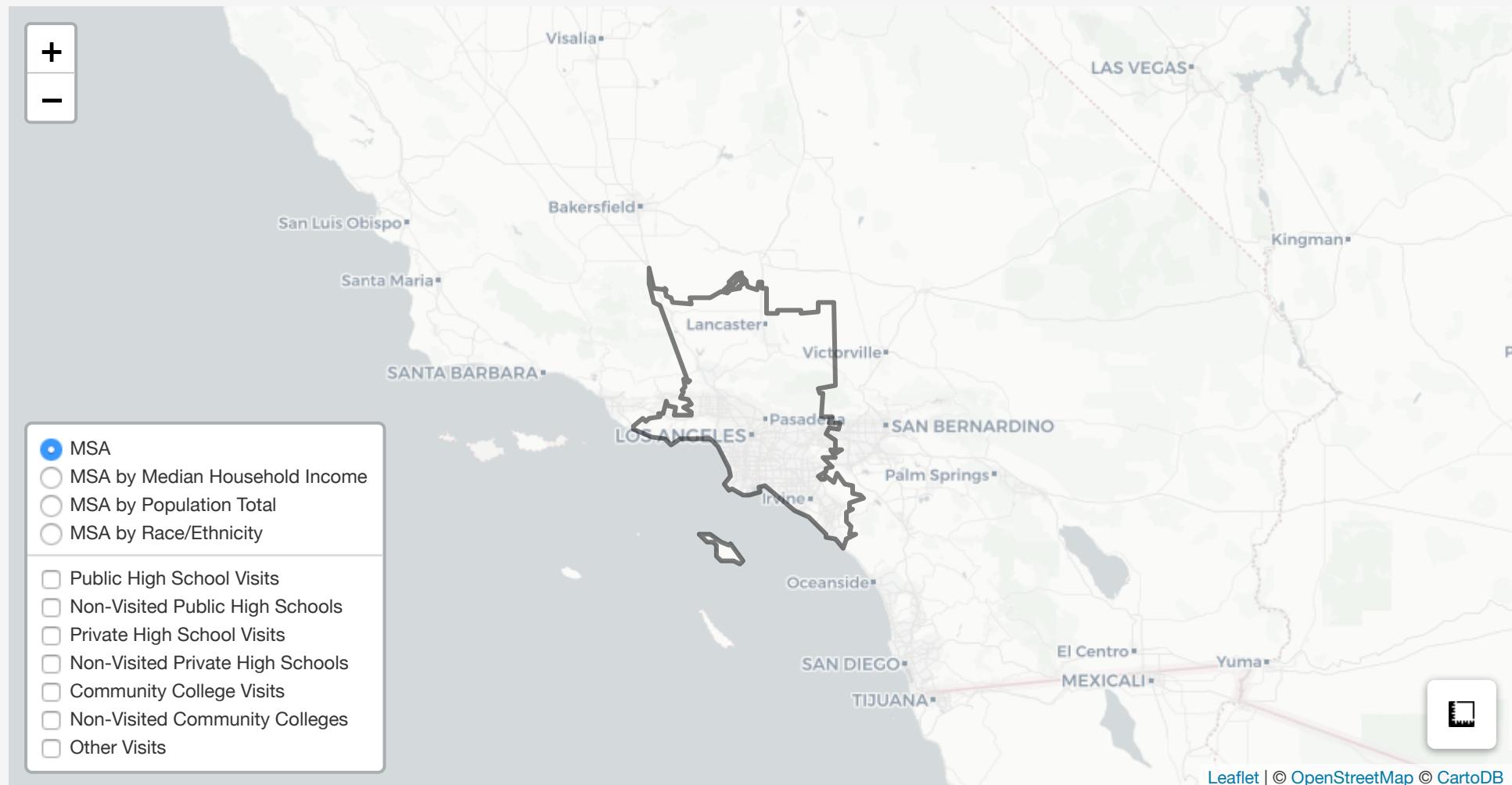
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Out-of-State Results

Los Angeles-Long Beach-Anaheim, CA

University of Georgia



Select another university

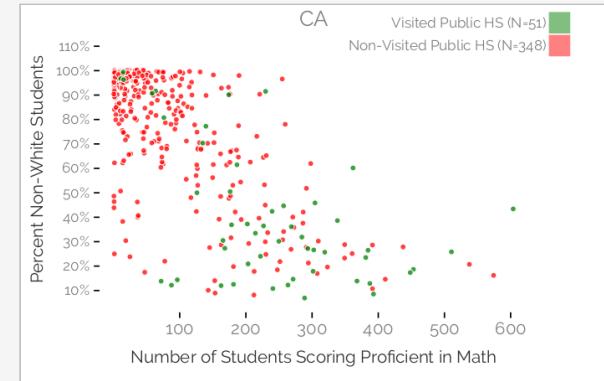
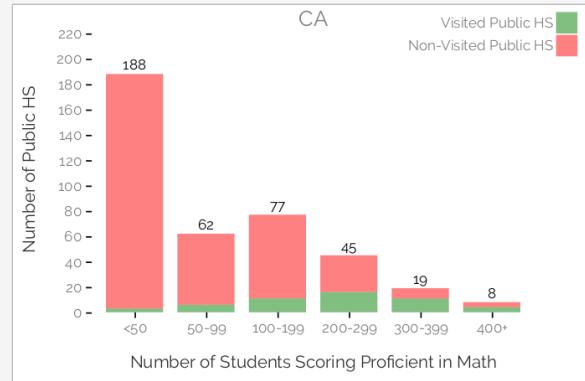
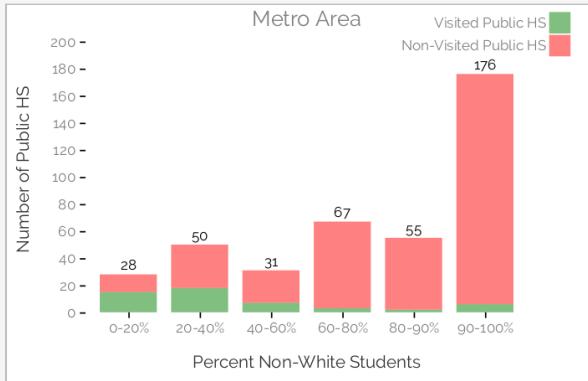
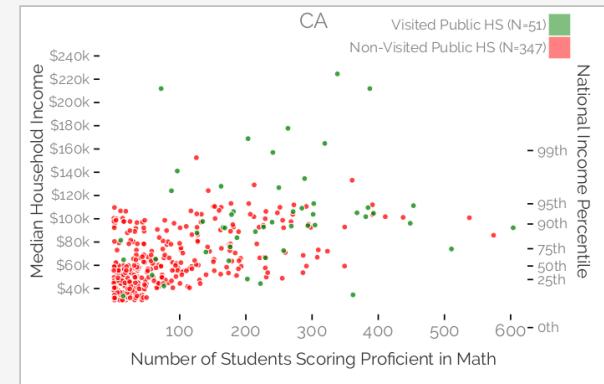
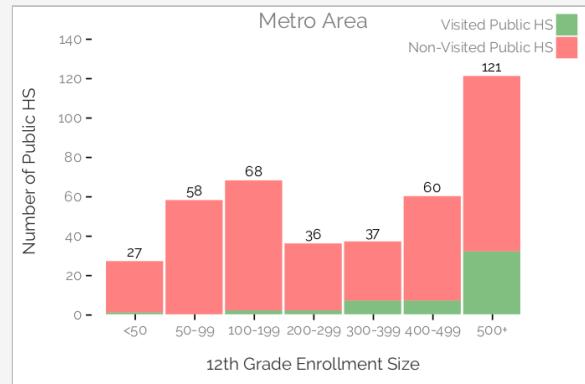
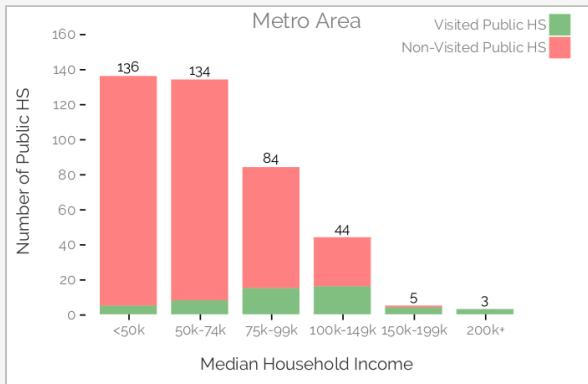
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Out-of-State Results

Los Angeles-Long Beach-Anaheim, CA

University of Georgia



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Out-of-State Results

Dallas-Fort Worth-Arlington, TX

University of Georgia



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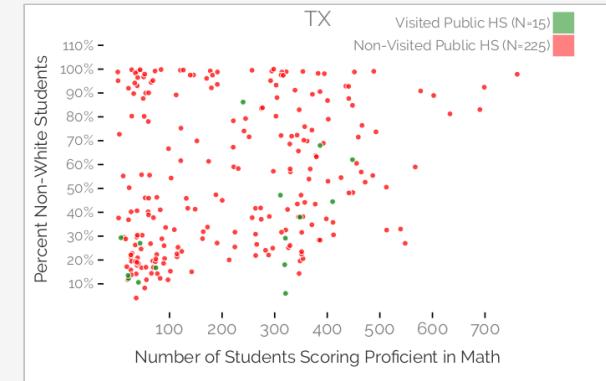
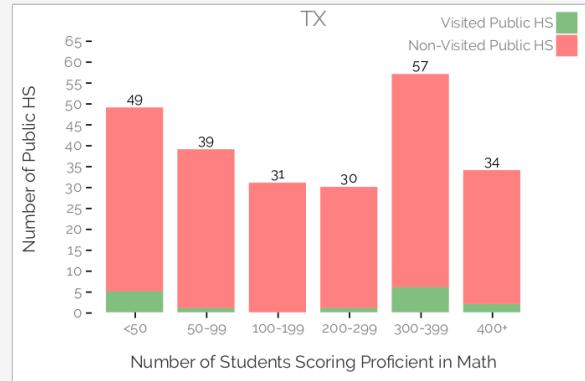
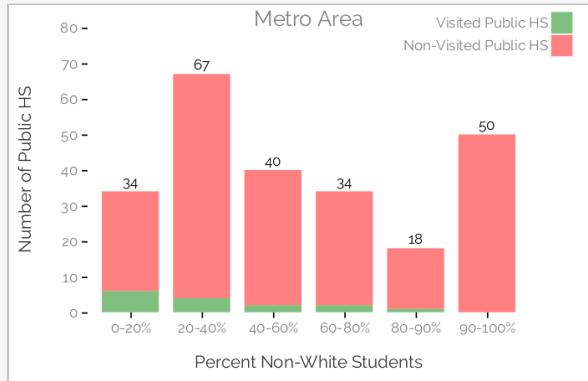
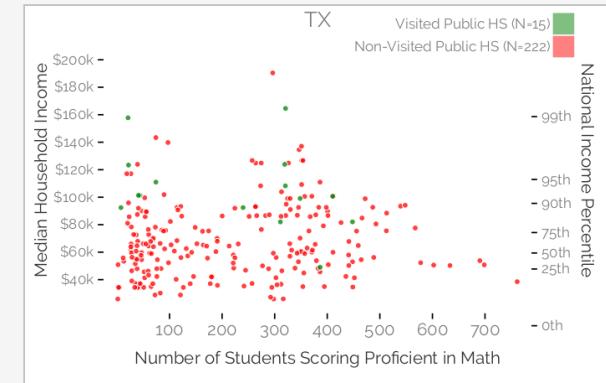
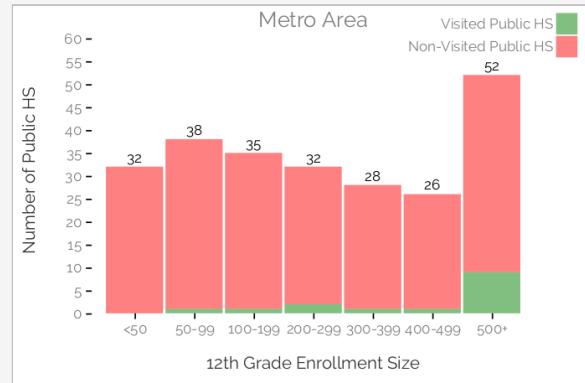
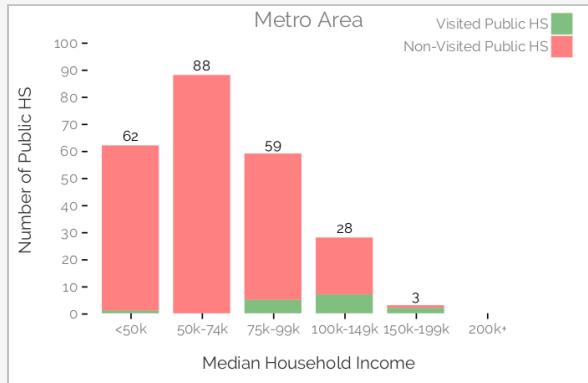
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Out-of-State Results

Dallas-Fort Worth-Arlington, TX

University of Georgia



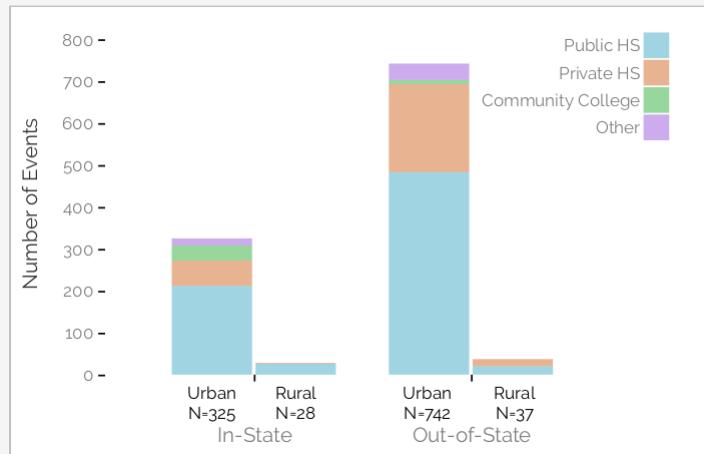
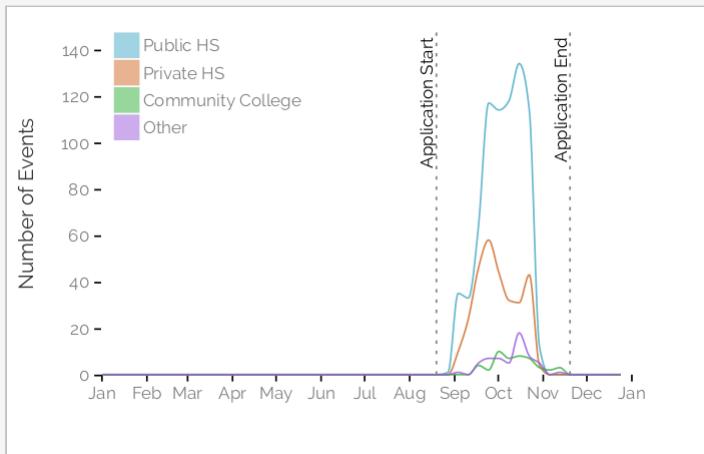
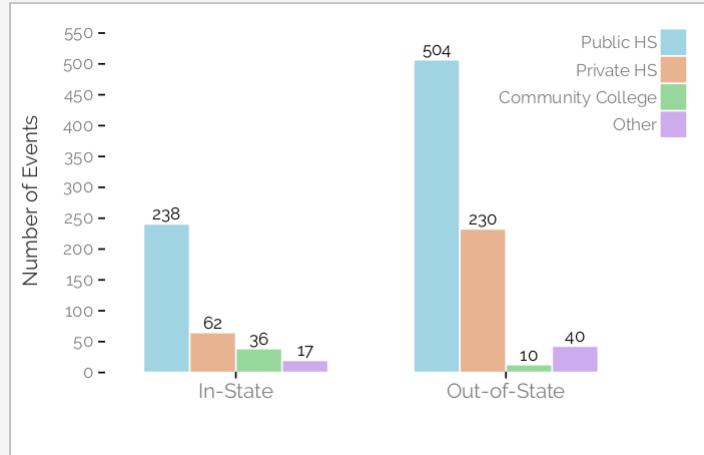
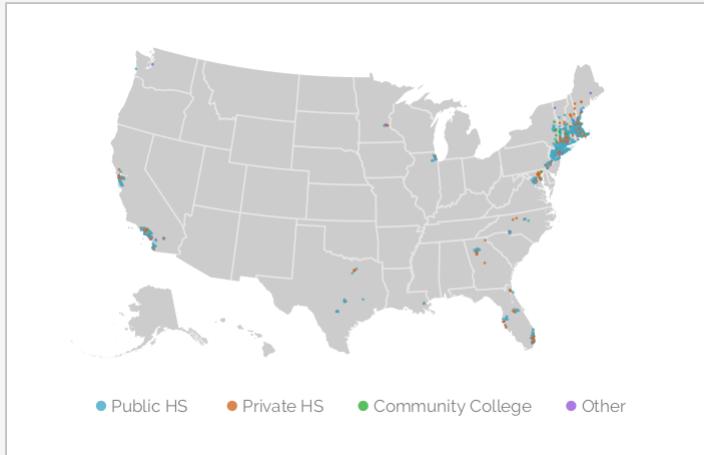
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University of Massachusetts-Amherst



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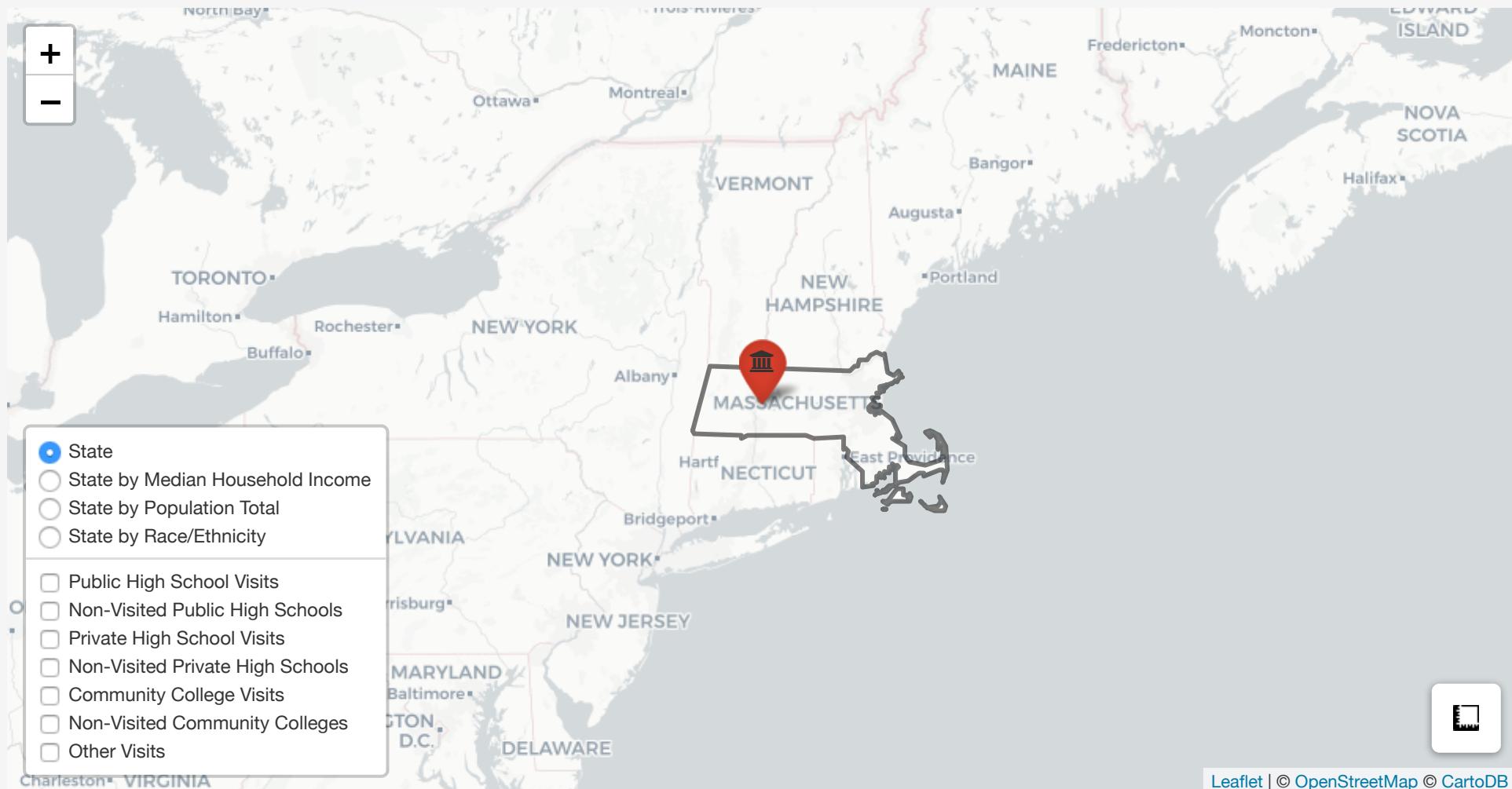
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In-State Results

Massachusetts

University of Massachusetts-Amherst



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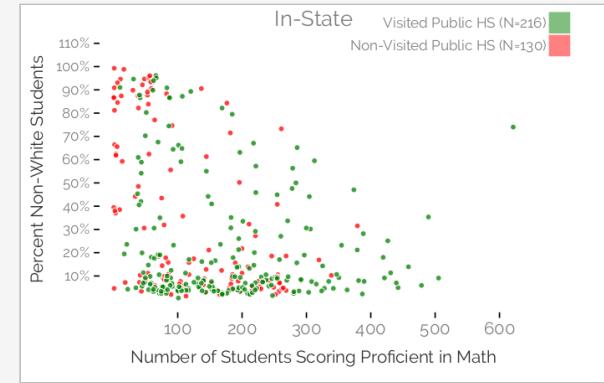
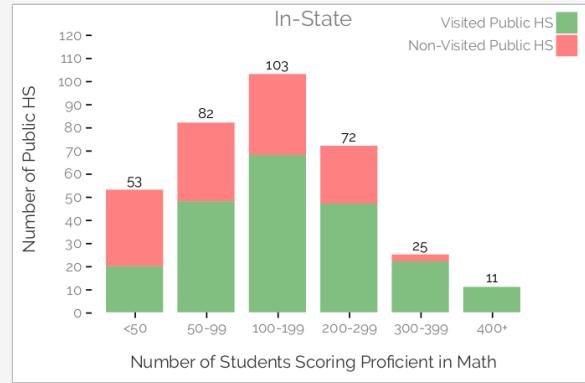
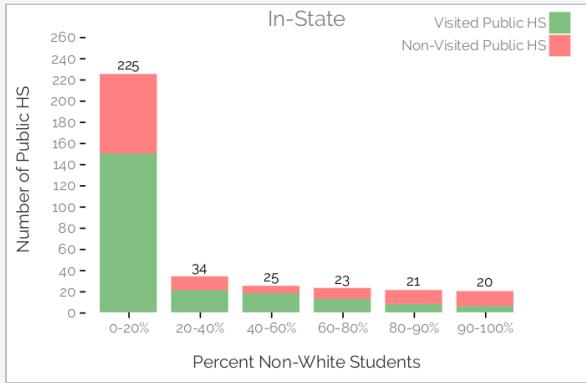
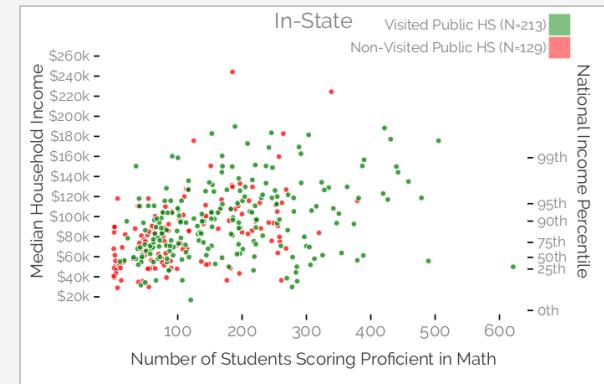
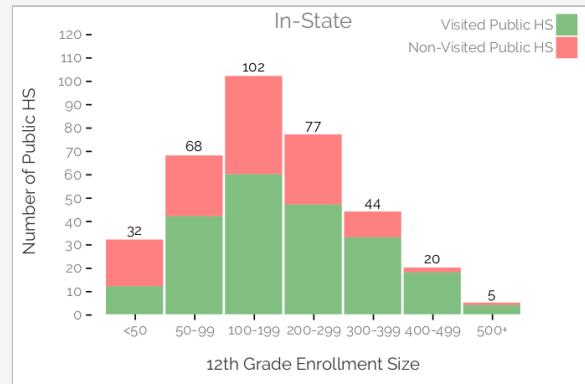
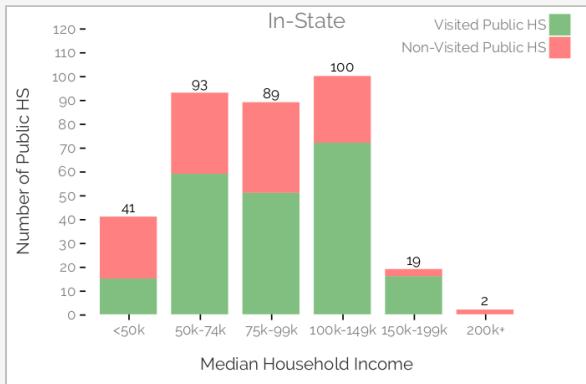
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In-State Results

Massachusetts

University of Massachusetts-Amherst



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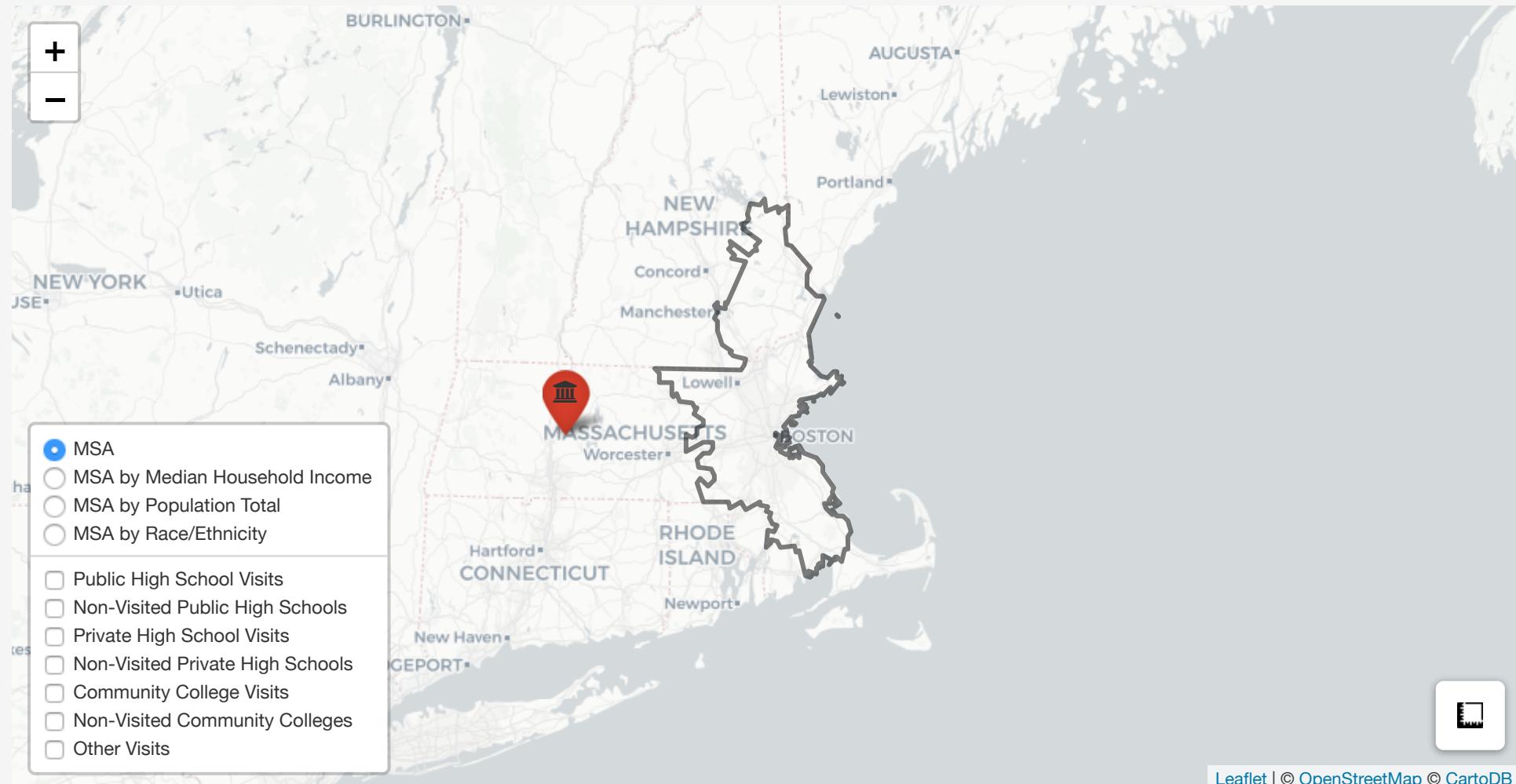
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In-State Results

University of Massachusetts-Amherst

Boston-Cambridge-Newton, MA-NH



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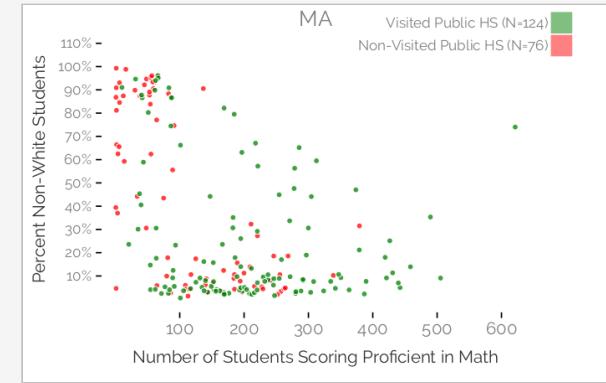
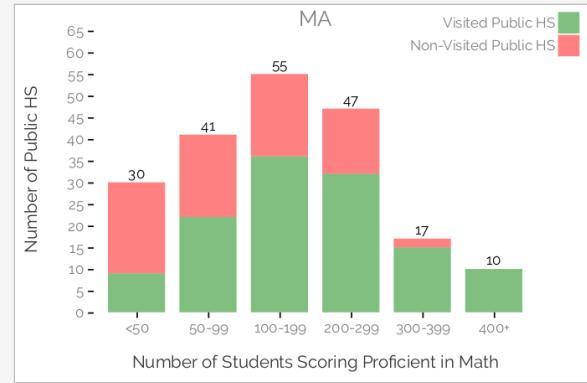
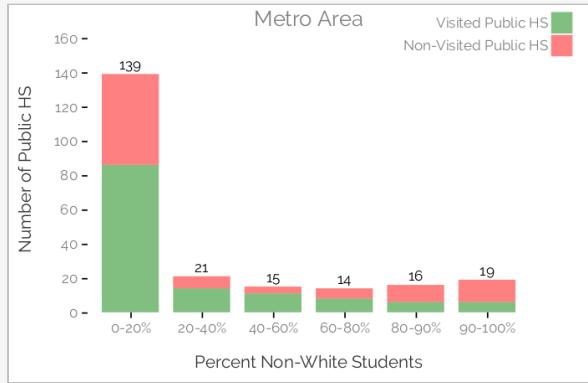
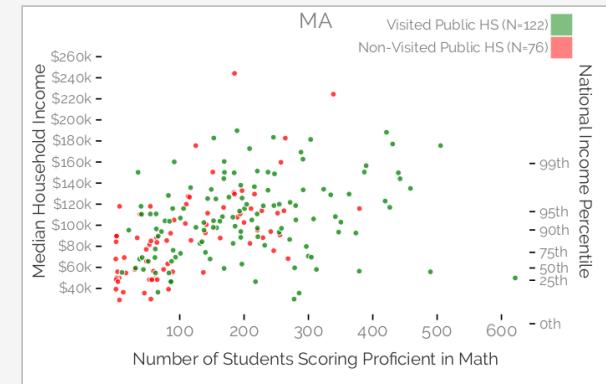
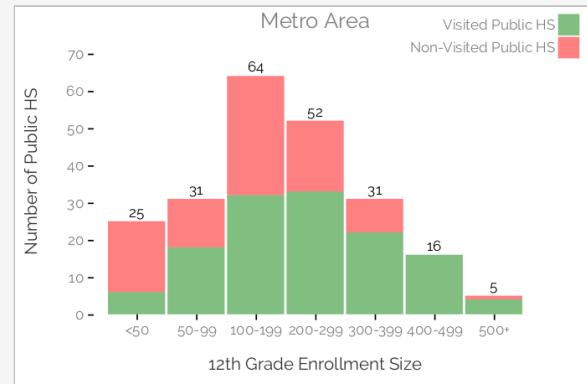
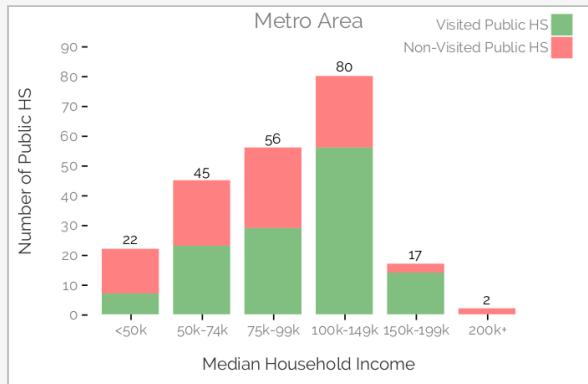
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In-State Results

Boston-Cambridge-Newton, MA-NH

University of Massachusetts-Amherst



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Out-of-State Results

University of Massachusetts-Amherst

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	237	178	36	3	20
Boston, Cambridge, Newton	MA, NH	207	139	45	12	11
Los Angeles, Long Beach, Anaheim	CA	72	39	30	1	2
Worcester	MA, CT	60	43	10	4	3
Hartford, West Hartford, East Hartford	CT	54	37	17	0	0
Springfield	MA	46	29	4	10	3
Washington, Arlington, Alexandria	DC, VA, MD, WV	38	23	14	0	1
Miami, Fort Lauderdale, West Palm Beach	FL	36	18	16	0	2
Providence, Warwick	RI, MA	31	19	9	1	2
Bridgeport, Stamford, Norwalk	CT	27	22	3	0	2

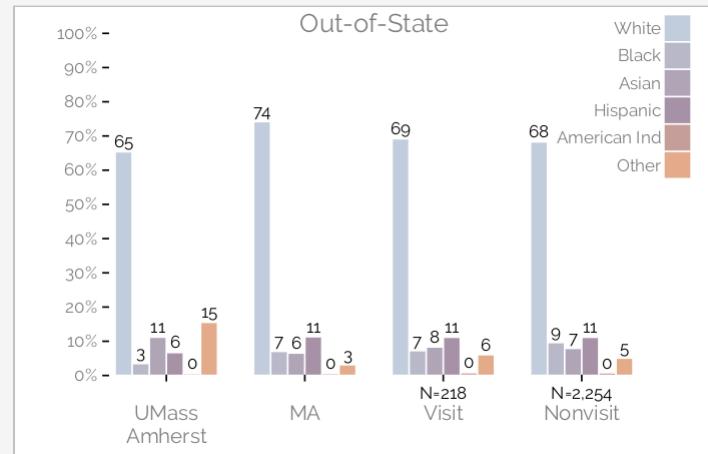
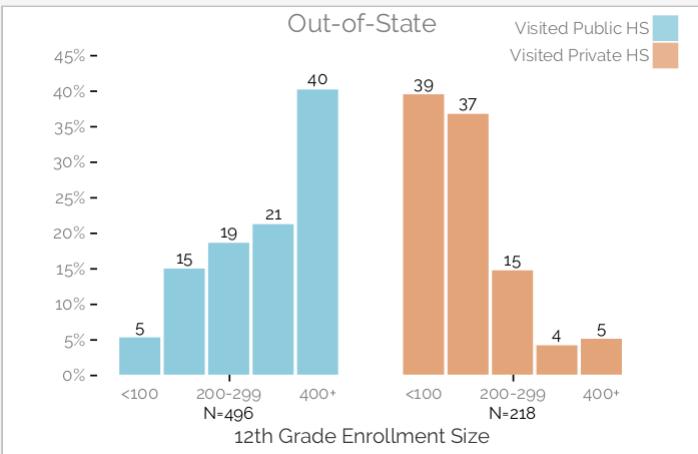
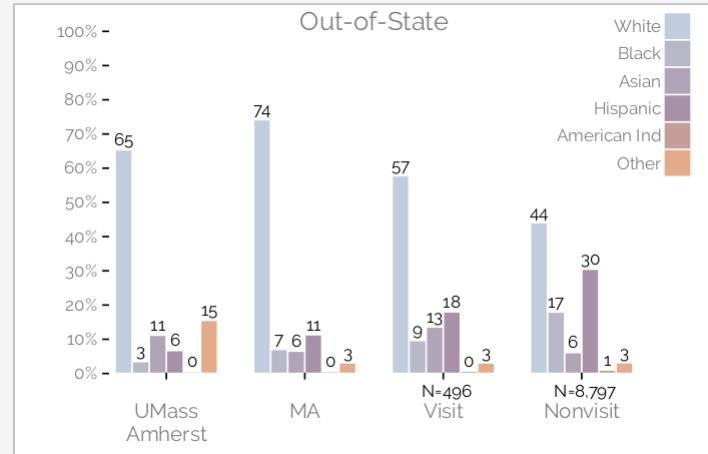
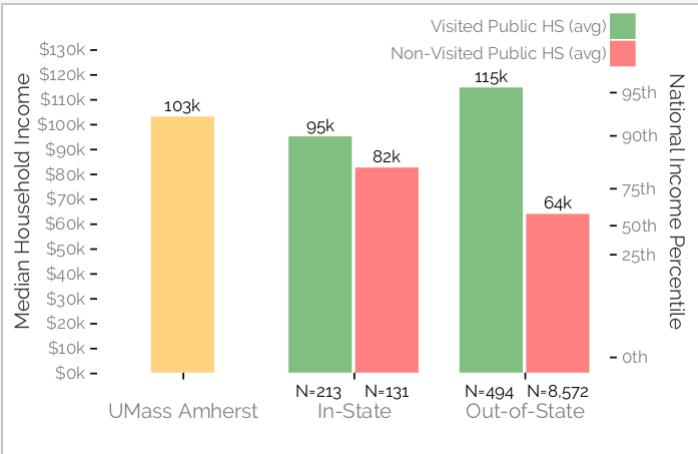
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Out-of-State Results

University of Massachusetts-Amherst



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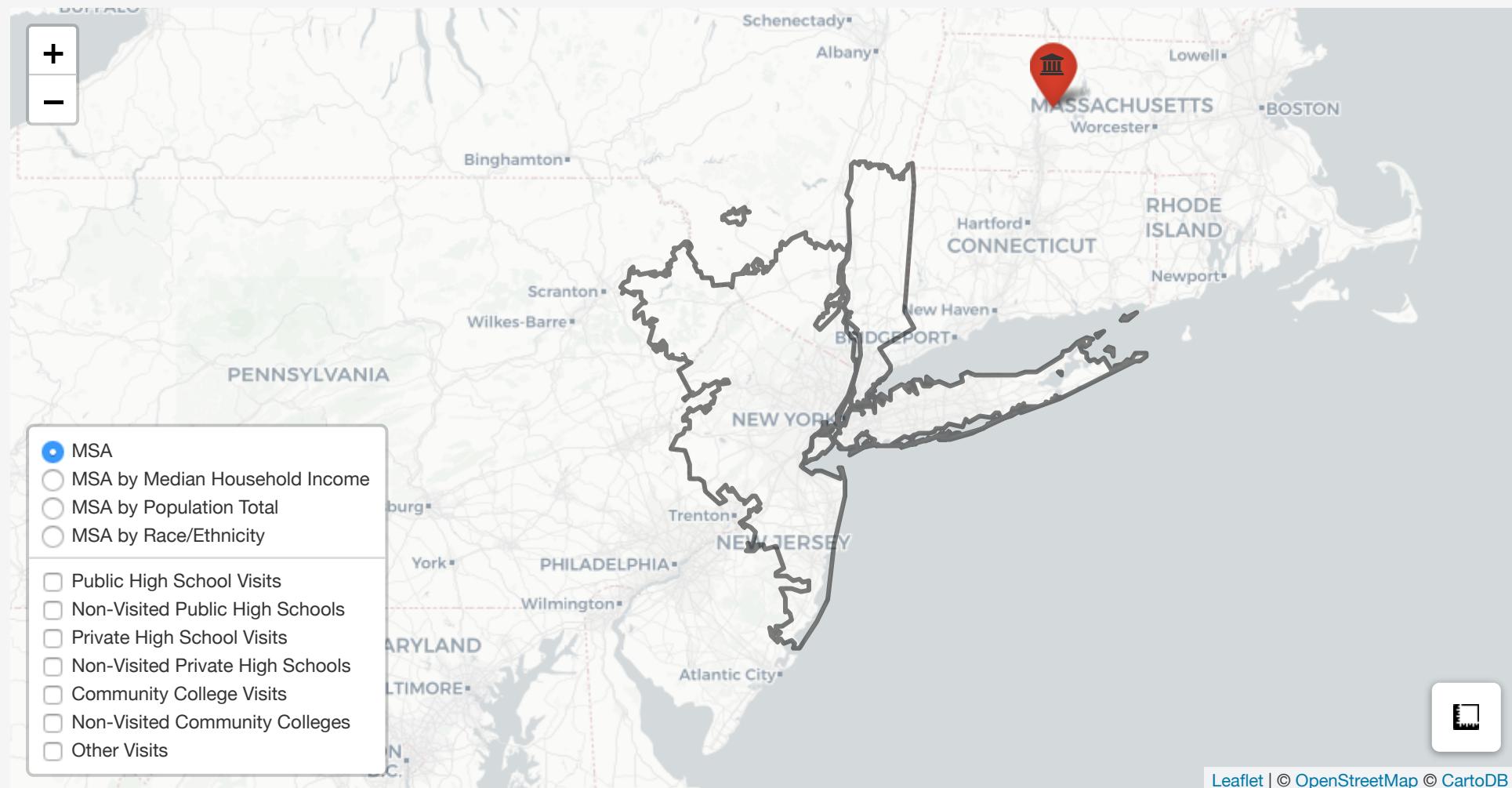
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Out-of-State Results

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

University of Massachusetts-Amherst



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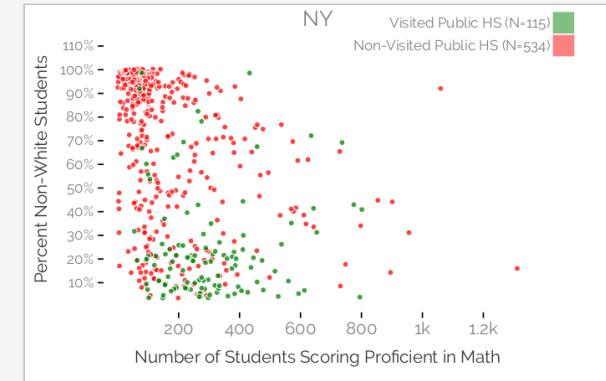
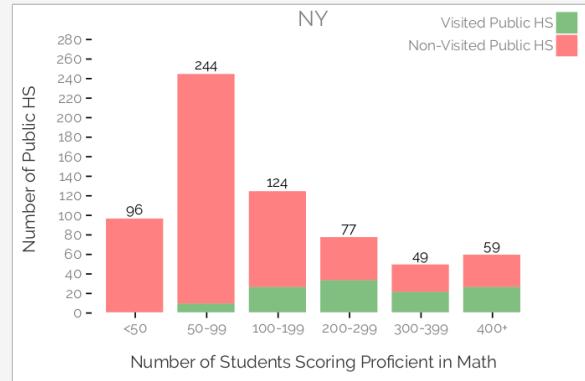
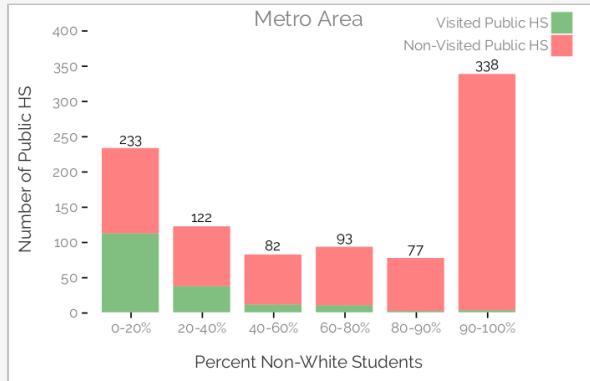
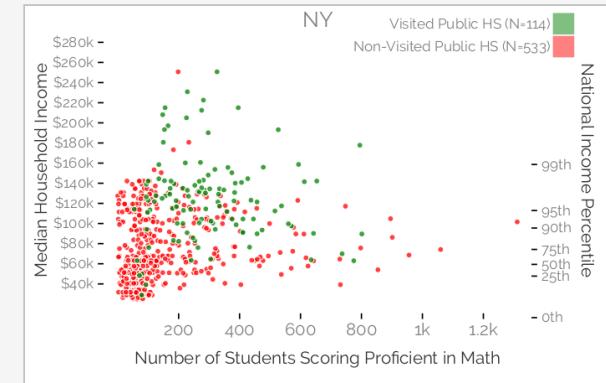
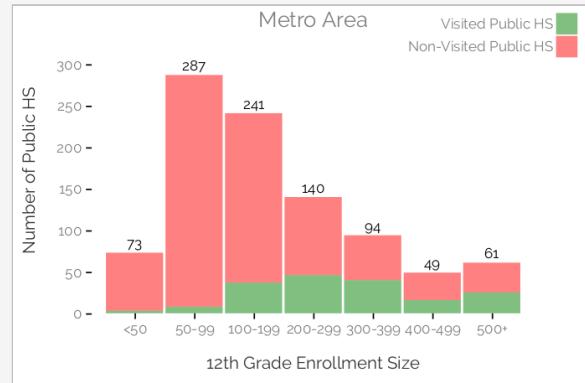
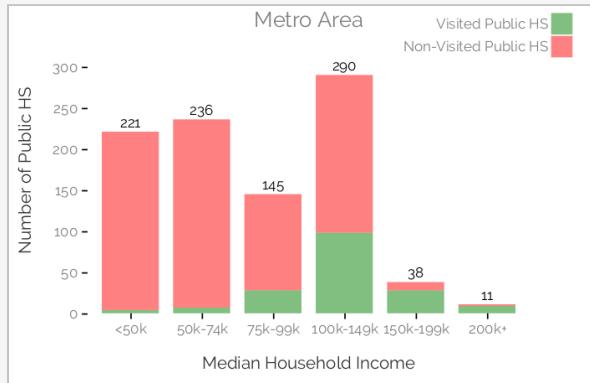
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Out-of-State Results

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

University of Massachusetts-Amherst



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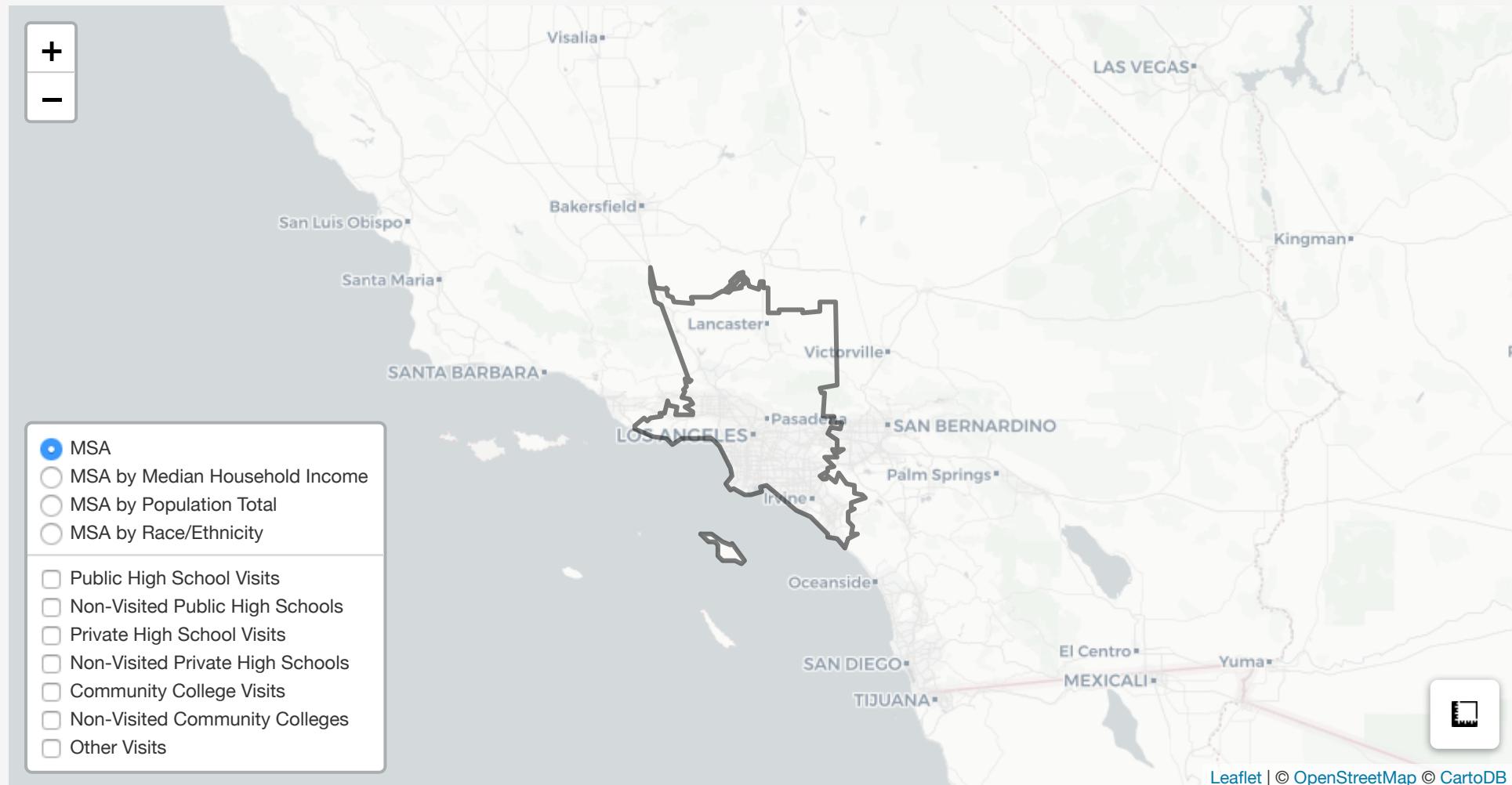
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Out-of-State Results

University of Massachusetts-Amherst

Los Angeles-Long Beach-Anaheim, CA



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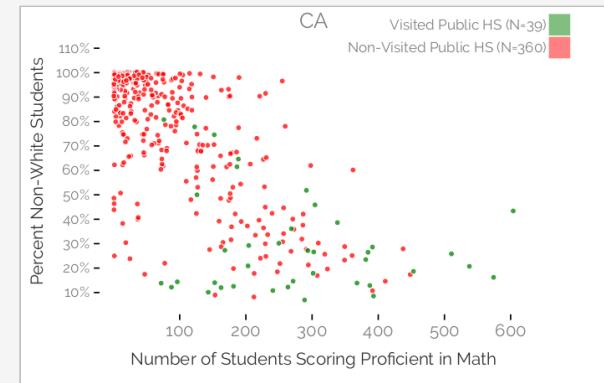
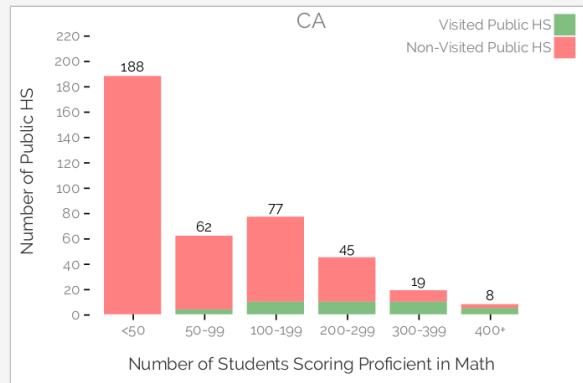
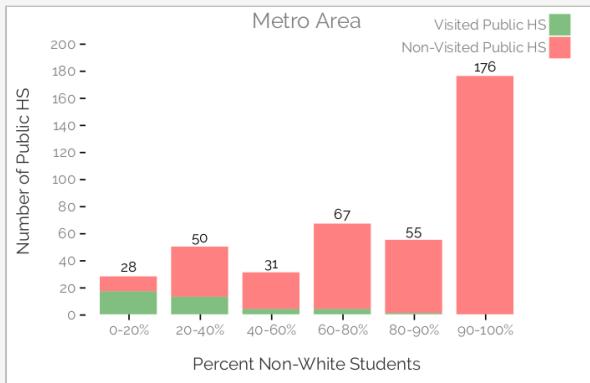
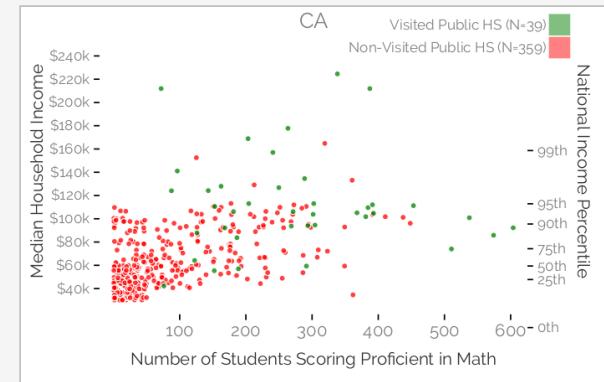
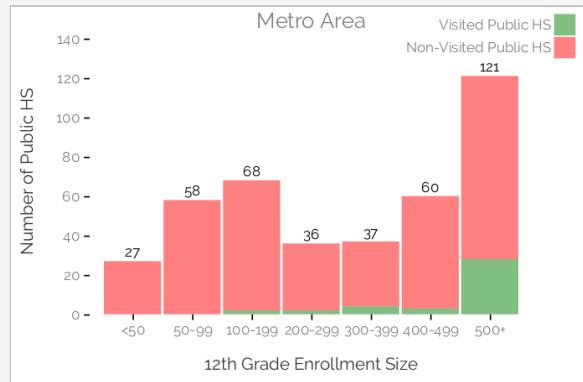
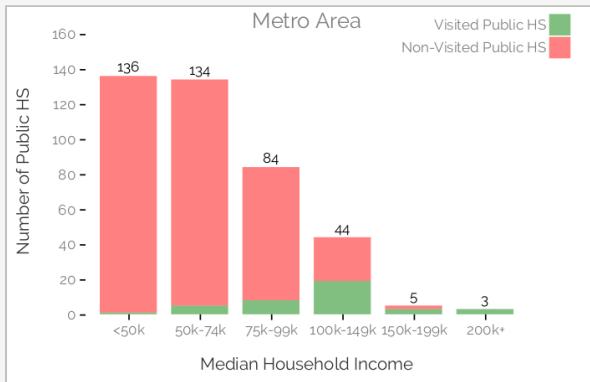
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Out-of-State Results

Los Angeles-Long Beach-Anaheim, CA

University of Massachusetts-Amherst



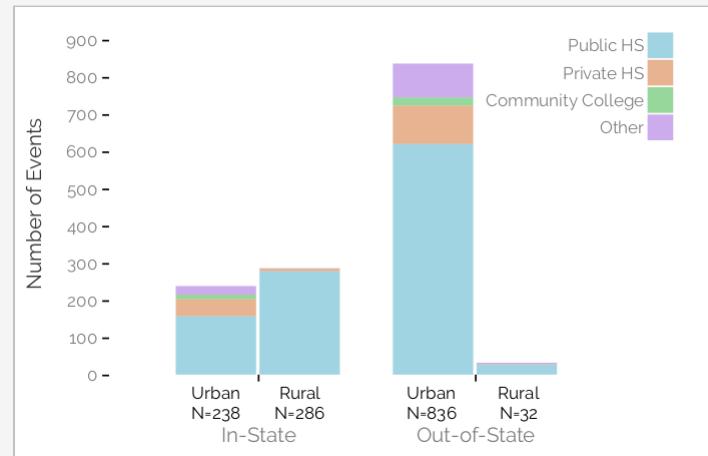
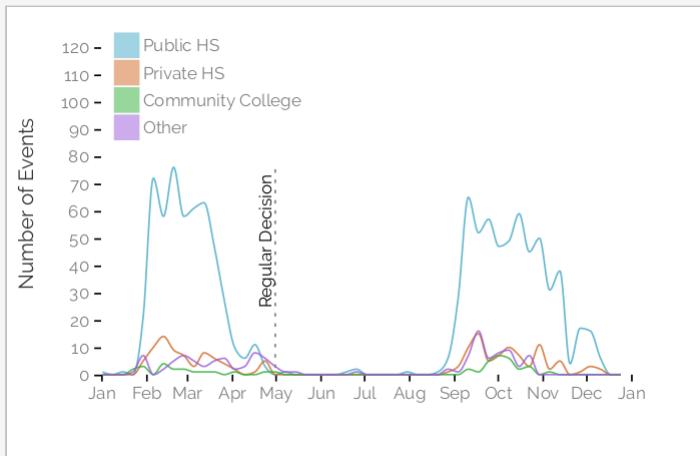
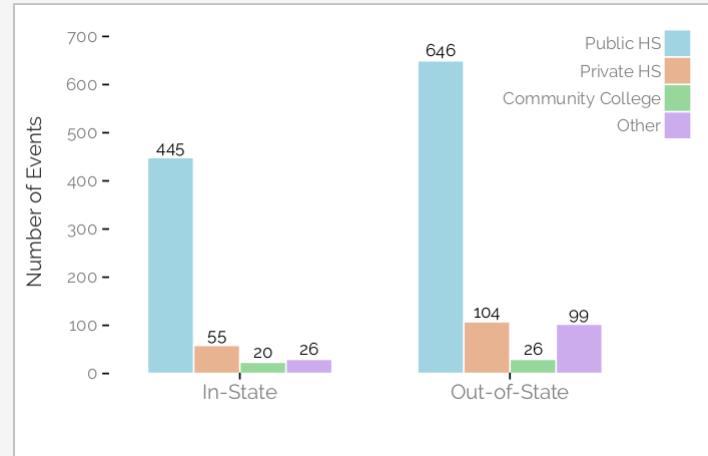
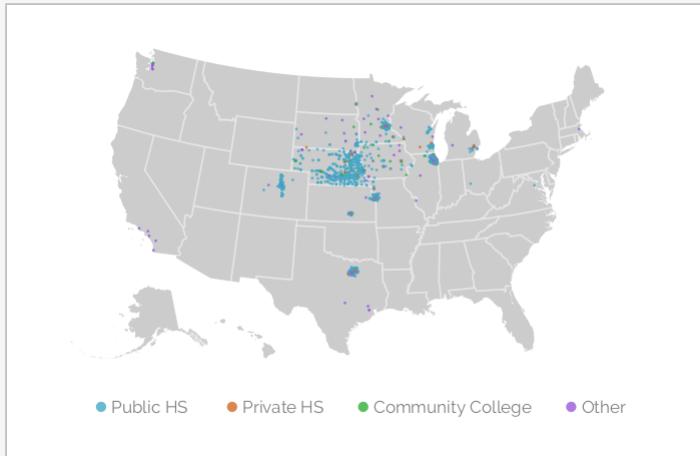
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National Overview

University of Nebraska-Lincoln



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In-State Results

Nebraska

University of Nebraska-Lincoln



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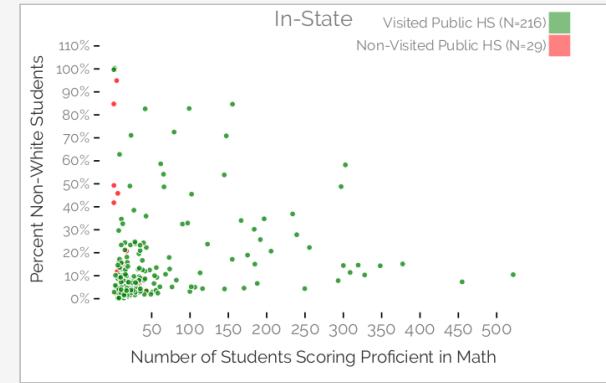
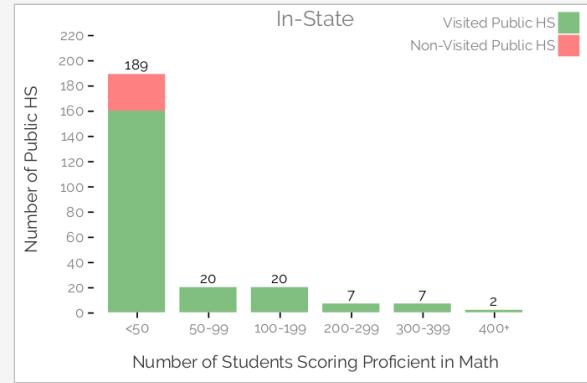
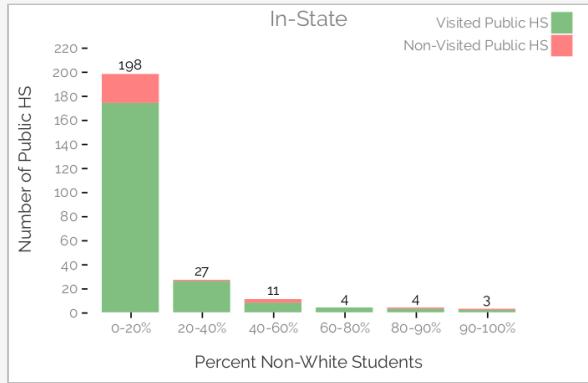
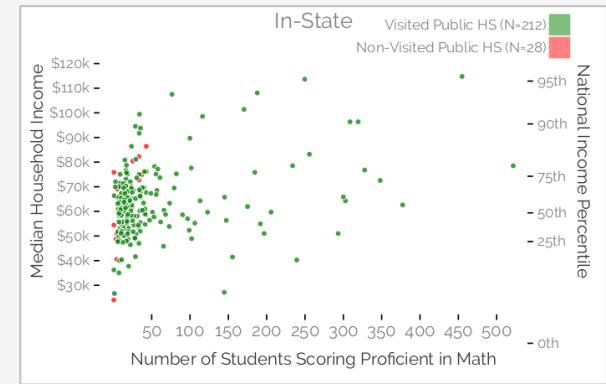
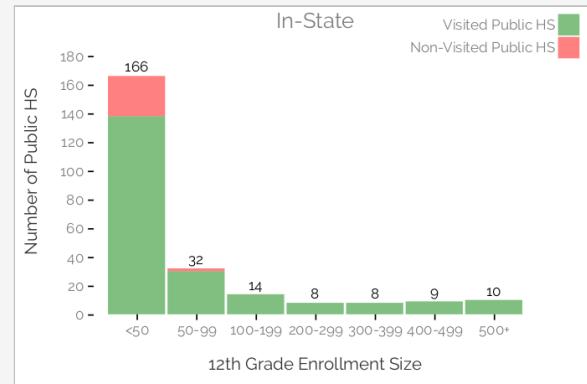
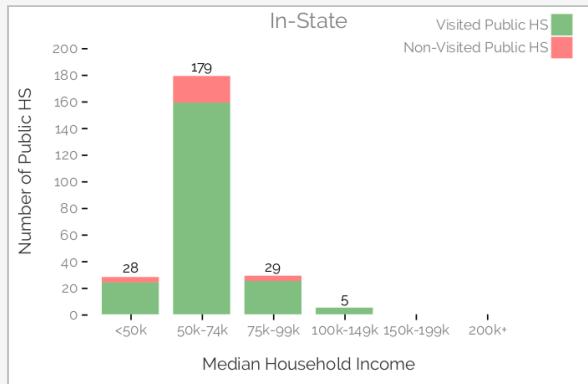
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In-State Results

Nebraska

University of Nebraska-Lincoln



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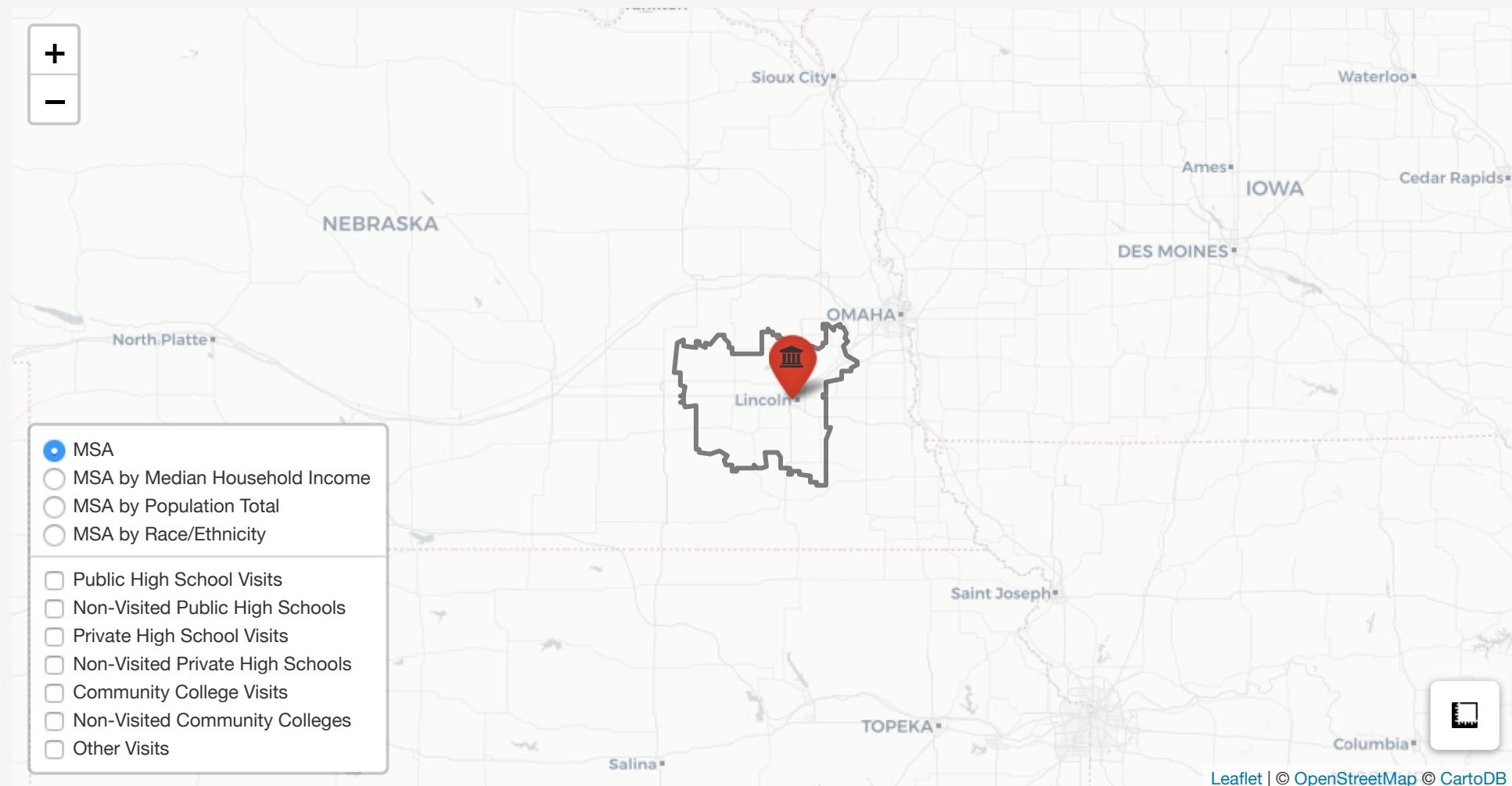
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In-State Results

Lincoln, NE

University of Nebraska-Lincoln



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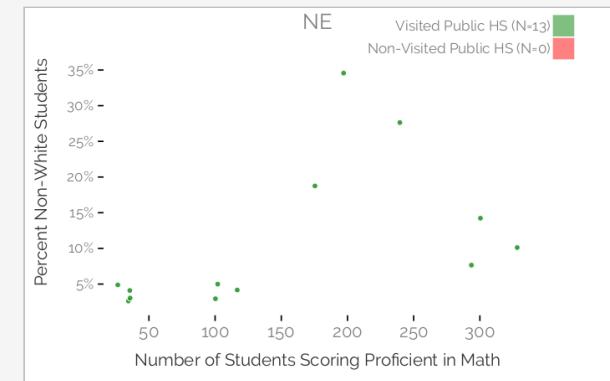
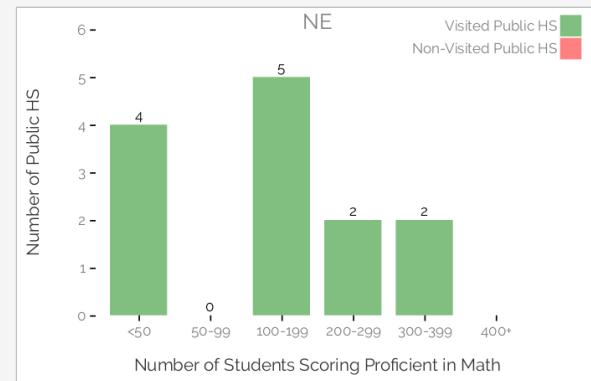
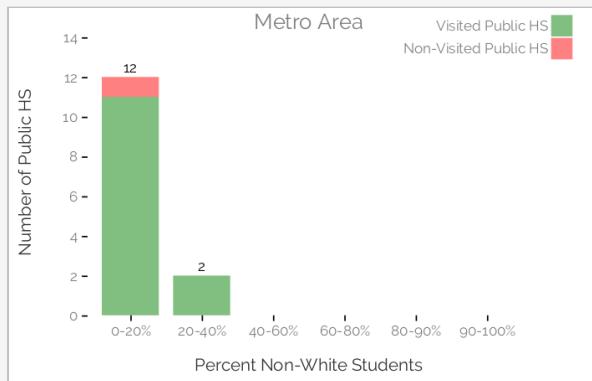
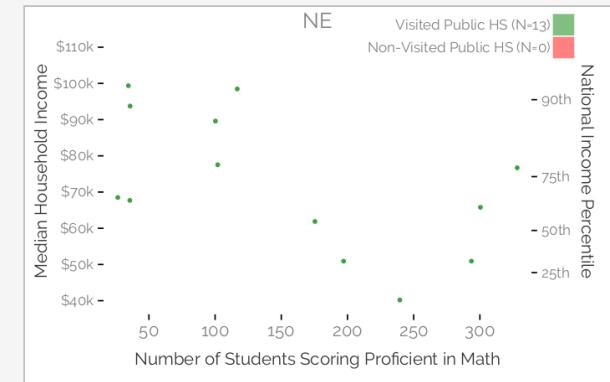
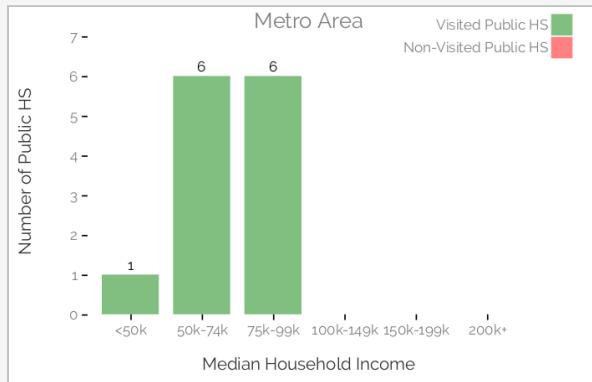
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In-State Results

University of Nebraska-Lincoln

Lincoln, NE



Select another university

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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	144	110	12	6	16
Dallas, Fort Worth, Arlington	TX	126	94	20	1	11
Minneapolis, St. Paul, Bloomington	MN, WI	123	99	21	0	3
Kansas City	MO, KS	98	76	14	1	7
Omaha, Council Bluffs	NE, IA	93	65	16	3	9
Denver, Aurora, Lakewood	CO	76	67	5	1	3
Lincoln	NE	61	45	7	5	4
Grand Island	NE	42	30	6	4	2
Norfolk	NE	38	28	6	4	0
Wichita	KS	35	22	12	0	1

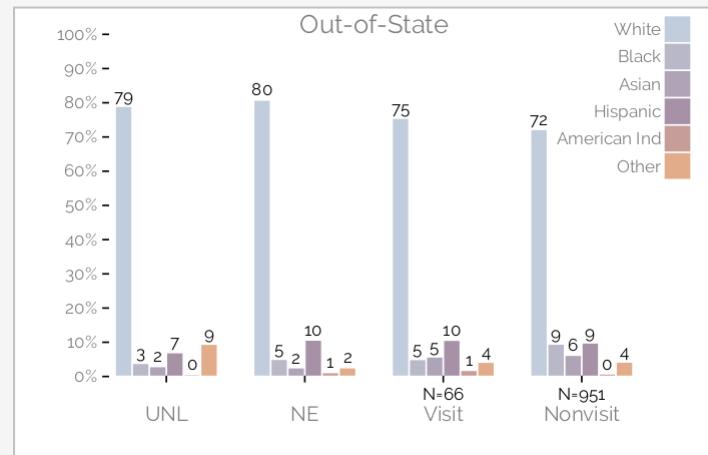
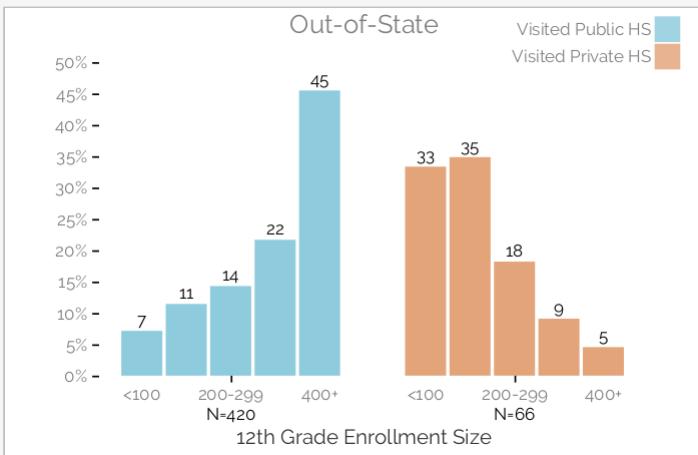
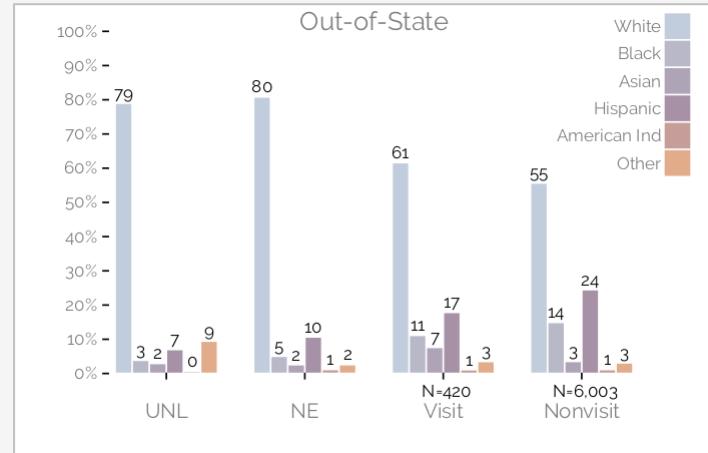
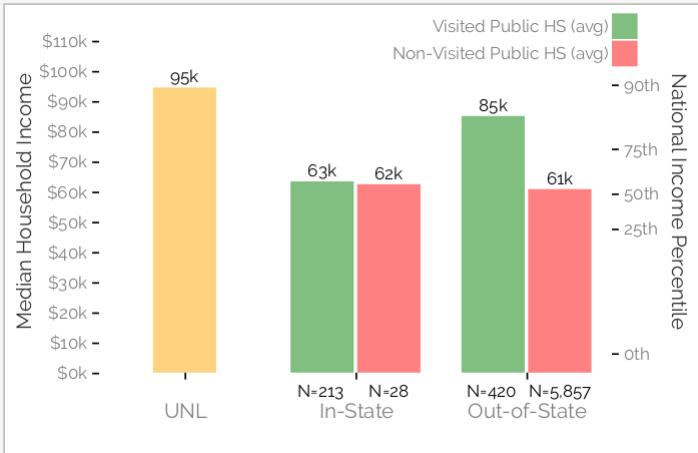
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Out-of-State Results

University of Nebraska-Lincoln



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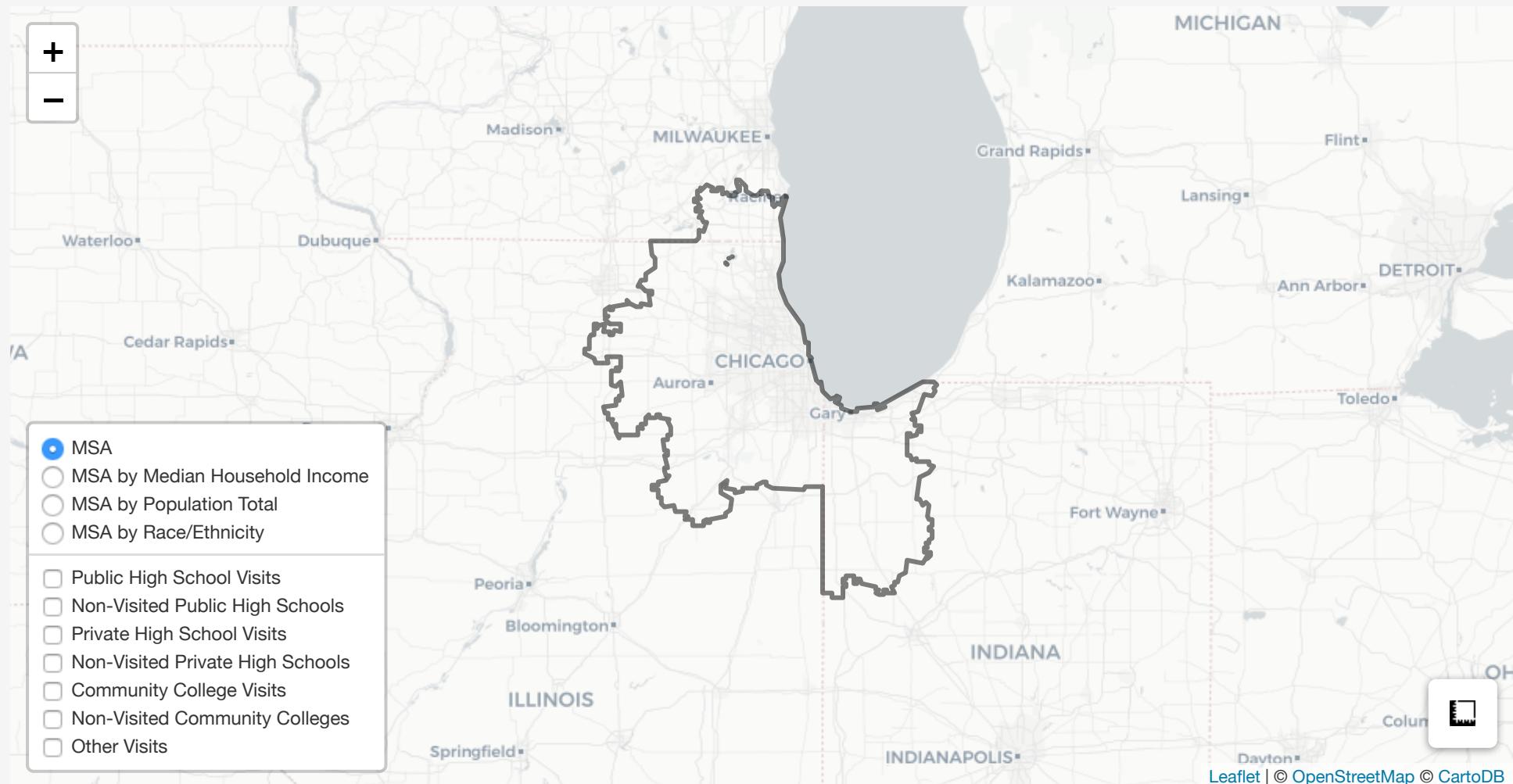
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Out-of-State Results

University of Nebraska-Lincoln

Chicago-Naperville-Elgin, IL-IN-WI



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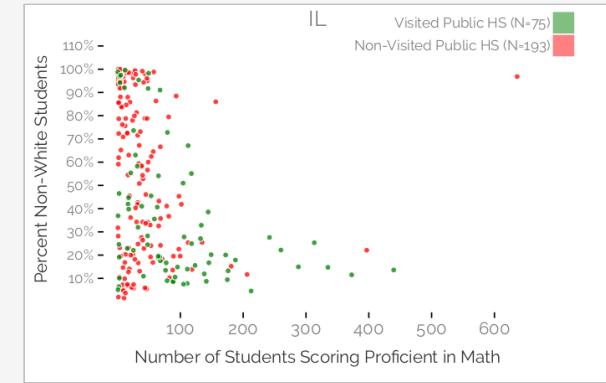
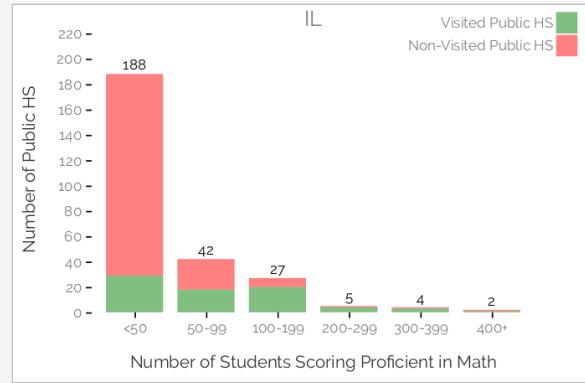
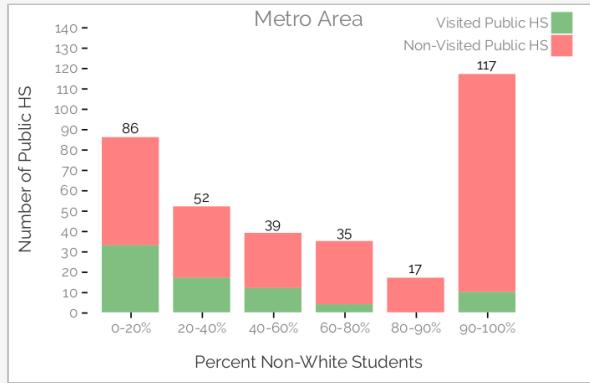
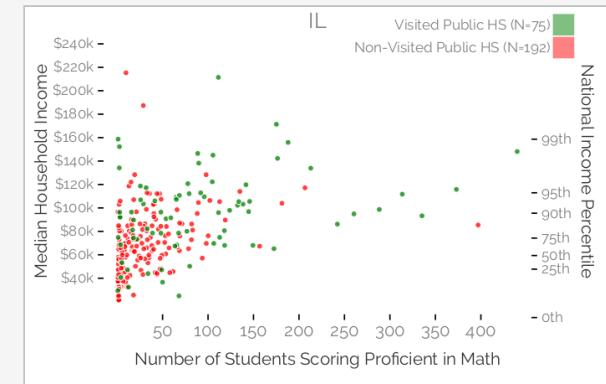
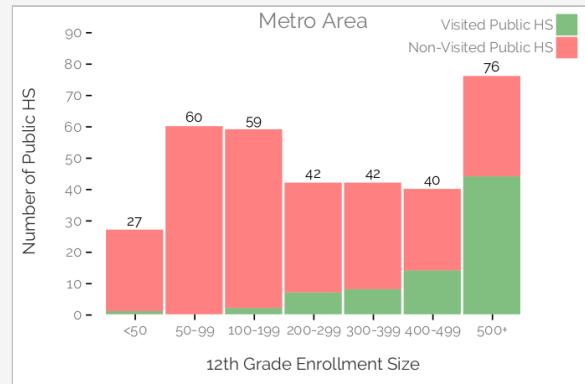
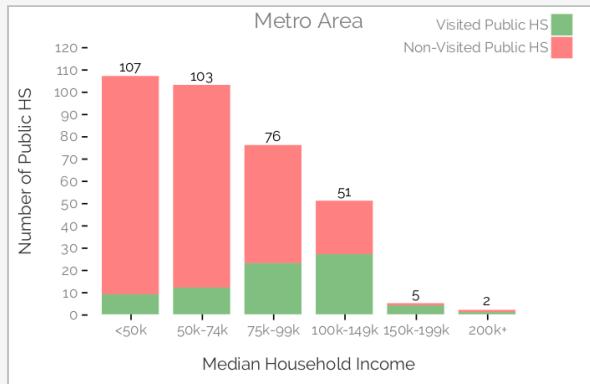
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Out-of-State Results

Chicago-Naperville-Elgin, IL-IN-WI

University of Nebraska-Lincoln



Select another university

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Out-of-State Results

University of Nebraska-Lincoln

Dallas-Fort Worth-Arlington, TX



Select another university

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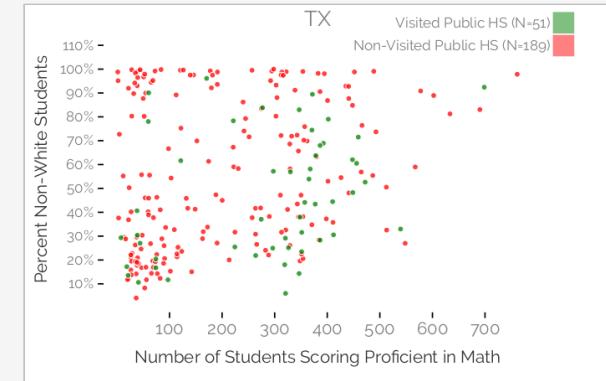
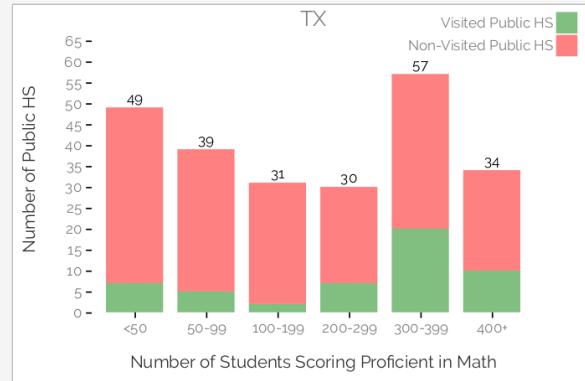
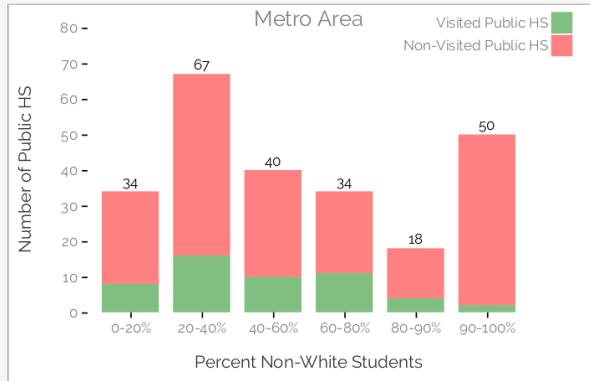
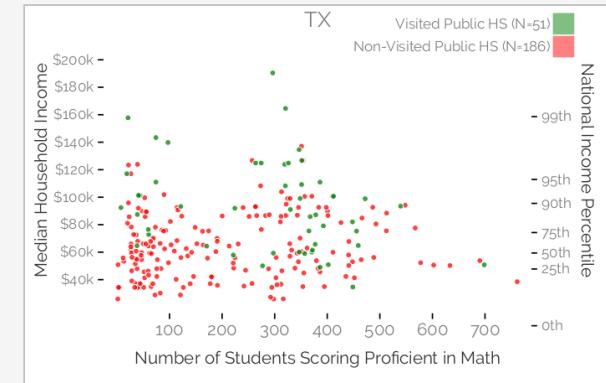
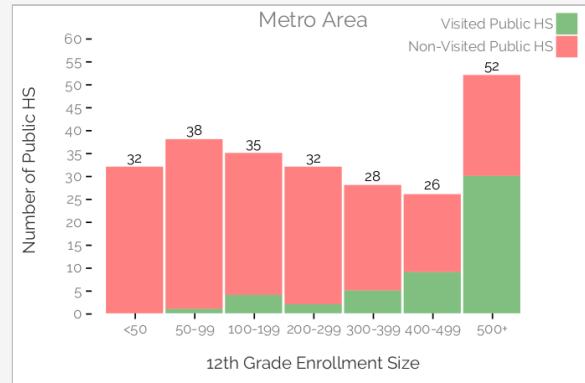
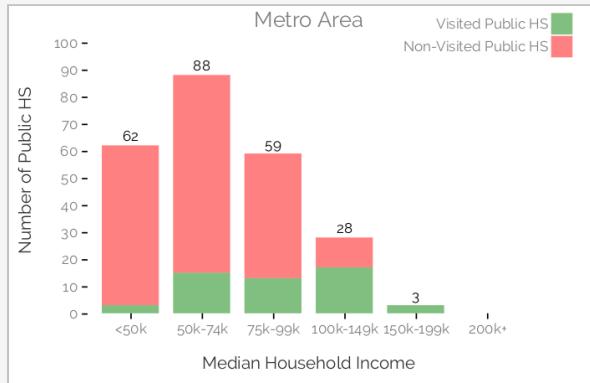
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Out-of-State Results

Dallas-Fort Worth-Arlington, TX

University of Nebraska-Lincoln



Select another university

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Cross-university results

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Number of events by type and in-state, out-of-state

	Total Events	Out-of-State			Other	Total	In-State			
		Total	Pub HS	Priv HS			Pub HS	Priv HS	CC	Other
Alabama	4,349	3,957	2,312	934	711	392	157	54	124	57
UC Berkeley	906	420	188	134	98	486	269	35	121	61
UC Irvine	939	172	77	40	55	767	330	20	322	95
Georgia	885	587	287	233	67	298	203	69	1	25
UMass	1,137	784	504	230	50	353	238	62	36	17
Nebraska	1,421	875	646	104	125	546	445	55	20	26
NC State	371	124	72	20	32	247	157	3	55	32
Rutgers	1,629	954	560	231	163	675	477	72	89	37
Stony Brook	1,101	666	496	107	63	435	326	39	33	37
Arkansas	1,013	788	483	204	101	225	162	21	16	26
Cincinnati	1,369	815	491	204	120	554	408	79	22	45
CU Boulder	1,568	1,102	607	362	133	466	256	17	154	39
Kansas	1,419	1,004	613	213	178	415	304	22	28	61
Pittsburgh	1,233	906	559	210	137	327	211	51	37	28
S.Carolina	1,495	1,245	676	328	241	250	197	22	2	29

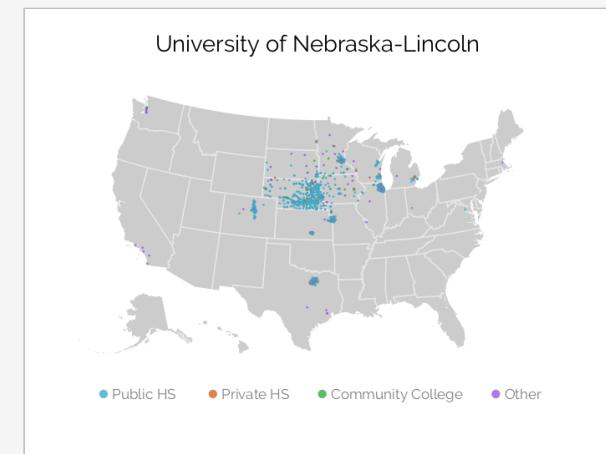
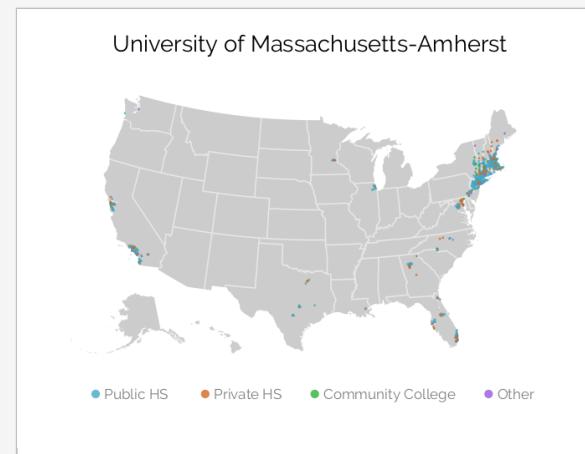
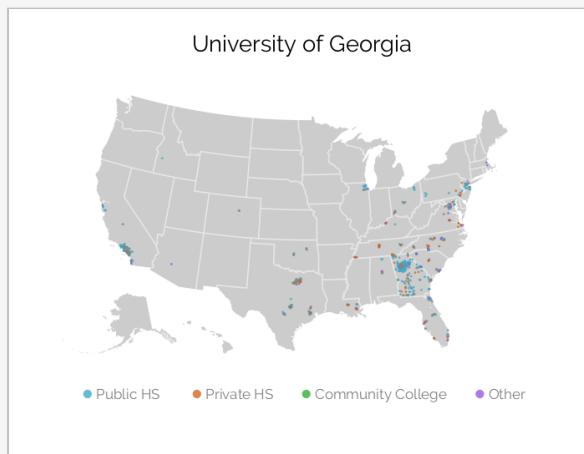
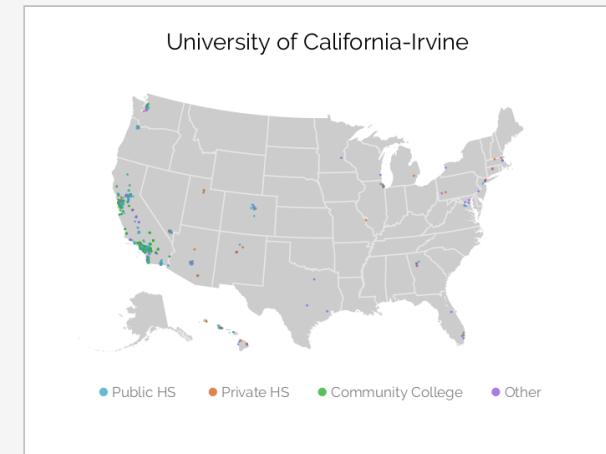
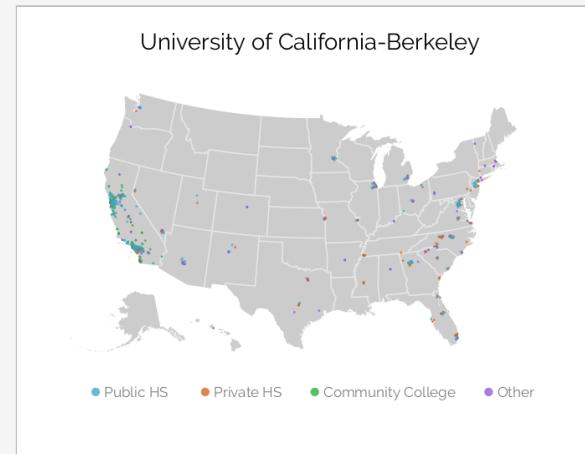
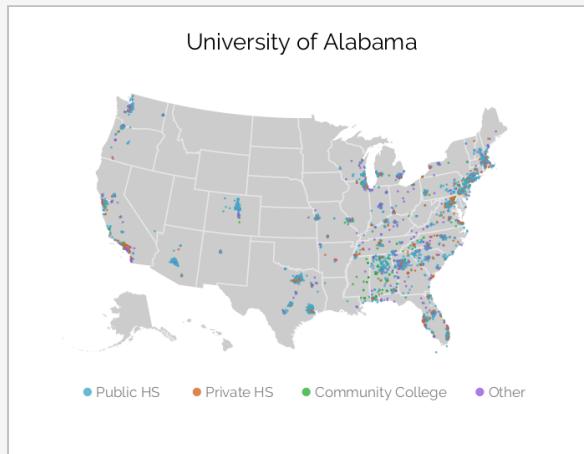
Note: Totals for schools include multiple visits to unique schools.

Deep-dive results

Cross-university results, out-of-state visits

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Small multiple map of recruiting visits



Deep-dive results

Cross-university results, out-of-state visits

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Descriptive statistics for public high school visits

	Alabama		UC Berkeley		UC Irvine		Georgia		UMass	
	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisit
Number of High Schools	1,711	13,255	178	10,893	74	7,521	249	9,333	496	8,1
Miles from University	831	836	1,933	1,917	1,155	1,805	920	808	675	1,1
Grade 12 Enrollment	384	169	459	183	471	191	490	201	380	2
Median Household Income (\$000)	\$90	\$60	\$104	\$62	\$93	\$66	\$102	\$62	\$115	\$
Percent Free or Reduced Lunch	30.4	51.7	23.1	49.2	29.3	46.9	22.6	51.2	21.4	5
Percent Enrollment by Race										
Black, Latinx, Native American	30.3	38.0	30.4	37.4	29.9	35.5	29.6	40.9	24.5	40
White	59.9	56.8	51.7	57.6	44.5	58.4	56.1	53.4	61.6	50
Black	13.8	16.3	15.0	18.1	8.1	15.7	10.3	17.1	8.5	1
Latinx	16.1	20.5	15.1	18.1	21.3	18.3	19.0	22.3	15.7	2
Native American	0.4	1.2	0.3	1.2	0.5	1.5	0.3	1.5	0.2	0
Asian	6.7	2.8	14.1	2.6	16.4	3.4	11.2	3.2	11.5	3
Other Race	3.2	2.4	3.8	2.3	9.1	2.7	3.1	2.6	2.4	2
School Type										
0/1 is a Charter School	0.04	0.11	0.06	0.08	0.03	0.10	0.05	0.10	0.02	0.
0/1 is a Magnet School	0.09	0.05	0.18	0.06	0.14	0.06	0.12	0.06	0.09	0.

Note: Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school. Non-visited schools include only out-of-state schools in states that received at least one high school visit.

Deep-dive results

Cross-university results, out-of-state visits

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Probability of out-of-state public high school receiving a visit

	Alabama	UC Berkeley	UC Irvine	Georgia	UMass	Nebraska	NC State
Income (ref=<\$50k)							
\$50k-\$74k	0.004 (0.004)	-0.003 (0.002)	-0.001 (0.002)	-0.004 (0.003)	-0.011*** (0.003)	0.001 (0.005)	-0.001 (0.002)
\$75k-\$99k	0.081*** (0.009)	0.006 (0.004)	0.006 (0.004)	0.008 (0.006)	0.022** (0.007)	0.049*** (0.010)	0.005 (0.005)
\$100k-\$149k	0.207*** (0.014)	0.060*** (0.009)	0.042*** (0.008)	0.068*** (0.011)	0.178*** (0.013)	0.191*** (0.025)	0.047*** (0.009)
\$150k-\$199k	0.415*** (0.041)	0.193*** (0.045)	0.033 (0.020)	0.168*** (0.041)	0.444*** (0.049)	0.225* (0.089)	0.166*** (0.047)
\$200k+	0.481*** (0.075)	0.241** (0.089)	0.005 (0.005)	0.362*** (0.108)	0.654*** (0.078)	0.084 (0.129)	0.104 (0.077)
BL, LX, NA Enrollment (ref=<20%)							
20-39%	0.030*** (0.008)	-0.002 (0.004)	-0.004 (0.004)	0.003 (0.005)	-0.016* (0.008)	0.023* (0.009)	0.002 (0.006)
40-59%	-0.011	-0.015***	0.002	-0.011* (0.005)	-0.030*** (0.008)	0.002	-0.012* (0.006)
Observations	14,966	11,071	7,595	9,582	9,293	6,423	5,255
Akaike Inf. Crit.	4,098.966	-15,443.180	-14,152.570	-9,137.670	-3,464.868	-1,616.831	-8,194.420

Note: *p<0.05; **p<0.01; ***p<0.001; Dependent Variable: Received a recruiting visit (0/1); Robust standard errors in parentheses; Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school. Non-visited schools include only out-of-state schools in states that received at least one high school visit.

Deep-dive results

Cross-university results, out-of-state visits

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Actual versus Proportional Visits to Out-of-State High Schools

	Number of Visits				Percentage of Visits			
	Actual		Proportional		Actual		Proportional	
	Public HS	Private HS	Public HS	Private HS	Public HS	Private HS	Public HS	Private HS
Alabama	1,711	681	1,942	450	72%	28%	81%	19%
UC Berkeley	178	130	250	58	58%	42%	81%	19%
UC Irvine	74	37	89	22	67%	33%	80%	20%
Georgia	249	192	354	87	56%	44%	80%	20%
UMass	496	218	564	150	69%	31%	79%	21%
Nebraska	420	66	420	66	86%	14%	86%	14%
NC State	70	19	69	20	79%	21%	77%	23%
Rutgers	445	188	498	135	70%	30%	79%	21%
Stony Brook	407	83	371	119	83%	17%	76%	24%
Arkansas	329	144	391	82	70%	30%	83%	17%
Cincinnati	401	167	457	111	71%	29%	80%	20%
CU Boulder	575	327	732	170	64%	36%	81%	19%
Kansas	438	150	497	91	74%	26%	85%	15%
Pittsburgh	433	172	481	124	72%	28%	79%	21%
S.Carolina	576	285	692	169	67%	33%	80%	20%

Deep-dive results

Note: Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not special education school, an alternative school, or a virtual school. Non-visited schools include only out-of-state schools in states that received at least one high school visit.

Cross-university results, out-of-state visits

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Descriptive statistics for private high school visits

	Alabama		UC Berkeley		UC Irvine		Georgia		UMass	
	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisi
Number of High Schools	681	2,788	130	2,444	37	1,852	192	2,152	218	2,254
Grade 12 Enrollment	125	55	123	64	188	69	134	62	149	63
Percent Enrollment by Race										
Black, Latinx, Native American	17.0	21.1	16.4	21.0	16.7	20.6	13.5	22.8	16.1	23.0
White	71.0	68.4	69.8	70.0	49.4	68.7	74.5	65.8	69.4	65.2
Black	7.1	11.0	7.8	11.4	5.6	10.8	5.9	11.3	6.6	11.3
Latinx	9.5	9.6	8.1	9.2	9.6	9.3	7.2	11.2	9.1	11.3
Native American	0.4	0.5	0.6	0.4	1.4	0.6	0.5	0.3	0.4	0.3
Asian	7.2	6.9	8.2	5.7	15.5	6.9	6.8	7.3	8.6	7.7
Other Race	4.9	3.6	5.6	3.3	18.5	3.8	5.2	4.1	5.9	4.1
Locale										
In a City	0.49	0.38	0.57	0.38	0.54	0.38	0.60	0.38	0.47	0.41
In a Suburb	0.41	0.38	0.36	0.40	0.30	0.45	0.33	0.41	0.42	0.40
In a Town	0.02	0.07	0.01	0.06	0.03	0.04	0.00	0.06	0.01	0.05
In a Rural Area	0.09	0.17	0.06	0.16	0.14	0.13	0.07	0.15	0.10	0.14

Deep-dive results

Note: Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not special education school, an alternative school, or a virtual school. Non-visited schools include only out-of-state schools in states that received at least one high school visit.

Cross-university results, in-state visits

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Descriptive statistics for public high school visits

	Alabama		UC Berkeley		UC Irvine		Georgia		UMass	
	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisit	Visit	Nonvisit	Visit	Nor
Number of High Schools	113	228	244	1,160	232	1,172	173	245	216	1
Percent of High Schools	33.1	66.9	17.4	82.6	16.5	83.5	41.4	58.6	62.1	3
Miles from University	98	101	171	250	131	216	85	98	61	6
Grade 12 Enrollment	204	97	446	272	467	269	313	207	214	1
Number Proficient-Math	53	14	143	74	129	77	141	71	179	1
Median Household Income (\$000)	\$54	\$44	\$86	\$67	\$69	\$71	\$61	\$50	\$95	\$
Percent Free or Reduced Lunch	44.3	60.3	50.6	58.4	61.6	56.2	55.5	68.0	32.9	48
Percent Enrollment by Race										
Black, Latinx, Native American	33.0	38.8	54.9	59.7	68.4	56.9	50.1	52.2	21.8	30
White	64.3	59.8	25.6	28.9	17.5	30.5	43.1	43.7	70.4	60
Black	27.2	33.4	6.1	6.5	8.6	6.0	40.3	42.2	8.6	12
Latinx	4.7	4.2	48.2	51.9	59.2	49.7	9.6	9.7	13.0	20
Native American	1.2	1.3	0.6	1.2	0.6	1.2	0.2	0.2	0.2	0
Asian	1.4	0.4	15.3	8.0	11.1	8.9	4.0	1.5	5.4	2
Other Race	1.2	1.0	4.2	3.4	3.0	3.7	2.8	2.6	2.4	2
School Type										

Note: Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school.

Deep-dive results

Cross-university results, in-state visits

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Regression: probability of in-state public high school receiving a visit

	Alabama	UC Berkeley	UC Irvine	Georgia	UMass	Nebraska	NC State	Rutger
Income								
(ref=<\$50k)								
\$50k-\$74k	-0.043 (0.057)	0.079*** (0.021)	-0.056* (0.024)	-0.058 (0.062)	0.181 (0.103)	-0.020 (0.076)	-0.131** (0.042)	-0.153 (0.106)
\$75k-\$99k	0.016 (0.117)	0.114*** (0.029)	-0.059* (0.030)	-0.010 (0.115)	0.114 (0.111)	-0.115 (0.107)	0.081 (0.102)	-0.140 (0.114)
\$100k-\$149k		0.097* (0.042)	-0.092* (0.041)	0.096 (0.133)	0.206 (0.112)	-0.049 (0.104)	-0.145 (0.135)	-0.067 (0.121)
\$150k-\$199k		0.352*** (0.097)	-0.251*** (0.062)	0.431*** (0.118)	0.288* (0.141)			0.131 (0.146)
\$200k+		-0.099 (0.131)	-0.292*** (0.056)		-0.625*** (0.137)			0.192 (0.156)
BL, LX, NA Enrollment								
(ref=<20%)								
20-39%	-0.046 (0.061)	0.005 (0.044)	0.020 (0.032)	0.045 (0.078)	0.024 (0.085)	0.052 (0.056)	-0.157** (0.059)	0.079 (0.072)
40-59%	-0.089	0.069	0.087* (0.062)		0.033	-0.172	-0.064	0.189* (0.189)
Observations	341	1,404	1,404	418	348	247	504	400
Akaike Inf. Crit.	364.784	994.316	1,033.760	563.412	475.712	166.755	575.111	541.53

Note: *p<0.05; **p<0.01; ***p<0.001; Dependent Variable: Received a recruiting visit (0/1); Robust standard errors in parentheses; Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school.

Deep-dive results

Summary

Summary of results

Out of State Recruiting

- Majority of visits are out-of-state (exceptions: UC Irvine, UC Berkeley); in populous metros
- Income bias; visits concentrated in highly affluent communities, in metropolitan areas
- Racial bias; less likely to visit schools with predominantly Black/Hispanic/Native students
- Disproportionate number of visits to private high schools

In-State Recruiting

- Variation in coverage of public high schools (e.g., Nebraska=88%; Alabama=33%)
- Income bias (most cases, but less than out-of-state) even after controlling for "rational" reasons
- Bias against schools with predominantly Black/Hispanic/Native in some cases (e.g., Alabama)
- Rural bias; in some cases even after controlling for other factors (e.g. UC Irvine)

Recruiting for Resources (RDT) or Recruiting Market Values (AC)

- RDT: focus on out-of-state recruiting is linked to declines in state funding
 - Universities with the worst state funding have the most out-of-state visits (Berkeley vs. Irvine)
- AC: out-of-state recruiting focus and biases are only partly a function of unfavorable environment
 - Cases with relatively more better environmental conditions do not have a lesser focus on out-of-state (e.g., UMass Amherst, Nebraska)

Discussion

Implications, future research

Implications

- Results suggest dramatic income bias in enrollment priorities of public research universities
 - Evidence of racial bias (especially in out-of-state recruiting), but patterns more nuanced
- Policy discourse should focus on enrollment priorities, rather than student, K-12 deficiencies
 - "Under-recruiting" as an alternative explanation for "under-matching"

Policy + Advocacy Reccomendations: how do we change university enrollment priorities?

- Increasing state appropriations and state need-based grant aid
- Nonresident enrollment caps
- Empower local access advocates

Future research

- Manuscript that focuses on spatial discrimination of communities of color
- Collect/analyze data on other means used to identify and target prospects
 - Characteristics universities prioritize when purchasing "prospect lists" from College Board/ACT?
 - Experimental audits of university responses to "inquiries" with different characteristics

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