Better Board Decisions with Better Data

Vermont's Census State Data Center

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uvm.edu/crs/vtsdc



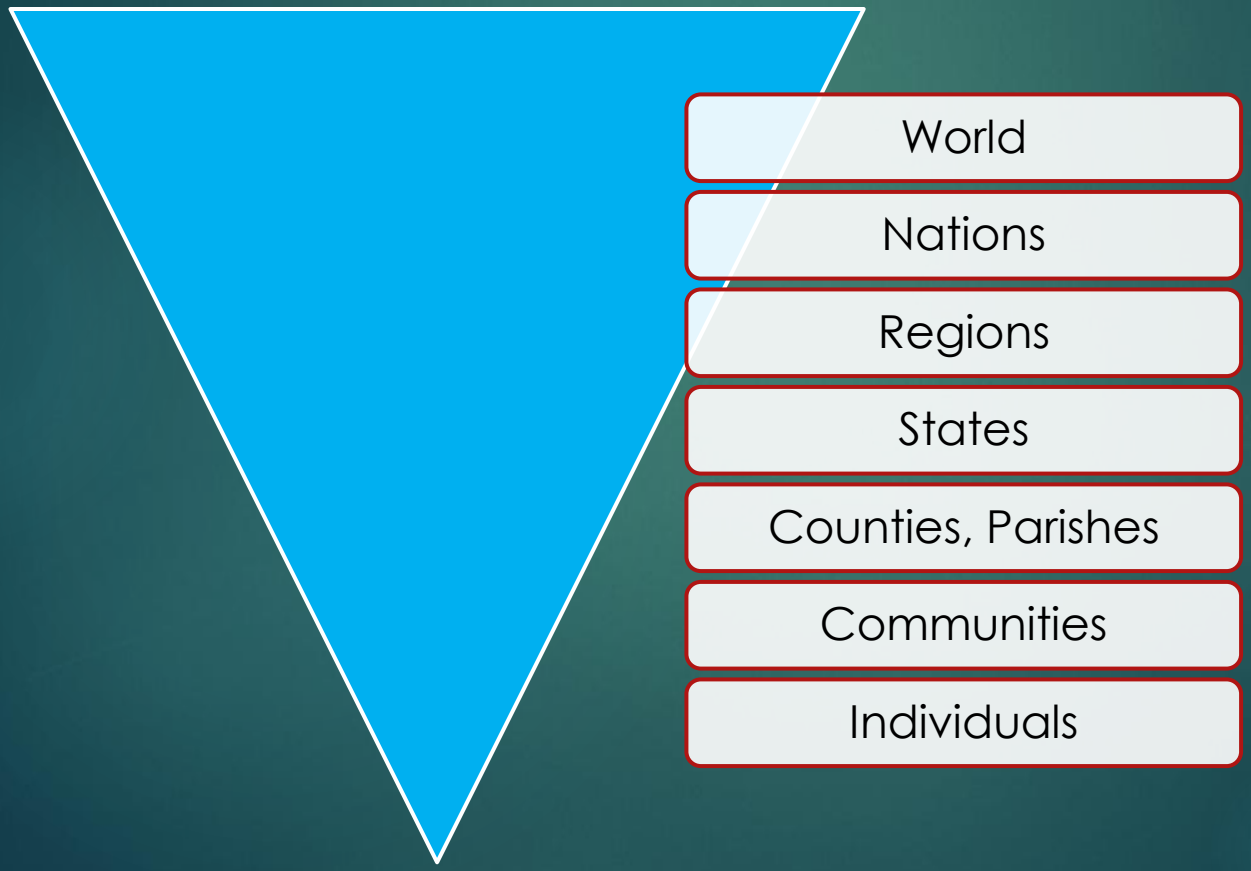
The State Data Center Program

- A National network of local data centers that:
  - Disseminate Census Bureau data to local data users
  - Assist in Census Bureau data collection programs
  - Conduct data education and outreach efforts



Indicator Data Concepts

Units of Analysis



Vermont State Data Center
uvm.edu/cra/VTSDC

Indicator Analysis Concepts

Analysis Tools

- **Median**- Mid point of a data set
- **Mean**- Average value of a data set
- **Mode**- Most common value of a data set
- **Percentage**- Standardized proportion
- **Rate**- Standardized quantity
- **Ranking**- An ordered list
- **Comparative** and **Longitudinal** analysis



Indicator Analysis

- A number by itself doesn't tell us much.
- Analysis techniques provide the context, the data story.

- Two primary forms of community data analysis:
  - Longitudinal/Trend analysis (Over Time)
  - Comparative analysis

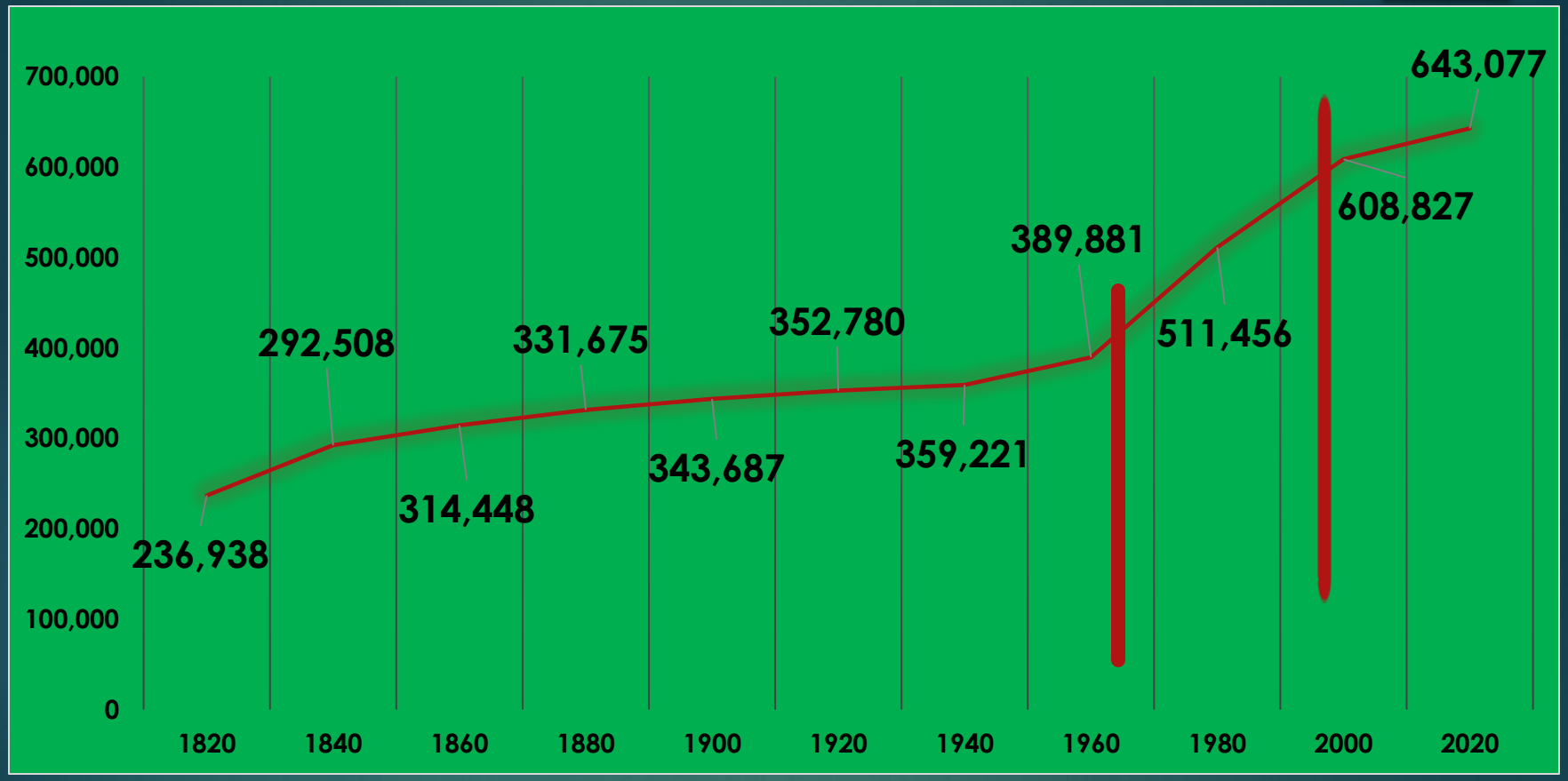


Trend Analysis

- Vermont's Population in 2020 was 643,077
- So what?
- What does this mean?



200 Years of Vermont Population



Trend Analysis gives us a better understanding of where we currently are by allowing us to look back at where we've come from.



Comparative Analysis

- We have analyzed Vermont's population over time.
- So, what is the greater context?
- Vermont's Population in 2020 was 643,077
- Comparative Analysis provides more of the story.



2020 Residential Populations- Ranked			
California	39,538,223	Oregon	4,237,256
Texas	29,145,505	Oklahoma	3,959,353
Florida	21,538,187	Connecticut	3,605,944
New York	20,201,249	Puerto Rico	3,285,874
Pennsylvania	13,002,700	Utah	3,271,616
Illinois	12,812,508	Iowa	3,190,369
Ohio	11,799,448	Nevada	3,104,614
Georgia	10,711,908	Arkansas	3,011,524
North Carolina	10,439,388	Mississippi	2,961,279
Michigan	10,077,331	Kansas	2,937,880
New Jersey	9,288,994	New Mexico	2,117,522
Virginia	8,631,393	Nebraska	1,961,504
Washington	7,705,281	Idaho	1,839,106
Arizona	7,151,502	West Virginia	1,793,716
Massachusetts	7,029,917	Hawaii	1,455,271
Tennessee	6,910,840	New Hampshire	1,377,529
Indiana	6,785,528	Maine	1,362,359
Maryland	6,177,224	Rhode Island	1,097,379
Missouri	6,154,913	Montana	1,084,225
Wisconsin	5,893,718	Delaware	989,948
Colorado	5,773,714	South Dakota	886,667
Minnesota	5,706,494	North Dakota	779,094
South Carolina	5,118,425	Alaska	733,391
Alabama	5,024,279	District of Columbia	689,545
Louisiana	4,657,757	**Vermont**	**643,077**
Kentucky	4,505,836	Wyoming	576,851

Comparative Analysis provides context.



Location	People Sq. Mile	Land	RANK	Location	People Sq. Mile	Land
D.C.	11,131	61				
New Jersey	1,263	7,354		Louisiana	106	43,204
Rhode Island	1,060	1,034		Alabama	101	50,645
Puerto Rico	936	3,424		Missouri	90	68,742
Massachusetts	898	7,800		West Virginia	74	24,038
Connecticut	747	4,842		Minnesota	72	79,627
Maryland	637	9,707	33	Vermont	70	9,217
Delaware	529	1,949		Arizona	65	113,594
Florida	422	53,625		Mississippi	63	46,923
New York	415	47,126		Oklahoma	59	68,595
Pennsylvania	290	44,743		Arkansas	59	52,035
Ohio	288	40,861		Iowa	57	55,857
California	250	155,779		Colorado	57	103,642
Illinois	226	55,519		Maine	45	30,843
Hawaii	223	6,423		Oregon	44	95,988
North Carolina	223	48,618		Utah	42	82,170
Virginia	221	39,490		Kansas	36	81,759
Georgia	192	57,513		Nevada	29	109,781
Indiana	192	35,826		Nebraska	26	76,824
South Carolina	179	30,061		Idaho	24	82,643
Michigan	178	56,539		New Mexico	17	121,298
Tennessee	173	41,235		South Dakota	12	75,811
New Hampshire	157	8,953		North Dakota	11	69,001
Washington	118	66,456		Montana	7.8	145,546
Texas	117	261,232		Wyoming	6	97,093
Kentucky	115	39,486		Alaska	1.3	570,641
Wisconsin	109	54,158				

Indicator Reporting.

- Consider the audience
- Tell a compelling story
- Be creative
  - And make good Visuals
- Provide context
- Keep it simple
- Get to the point



Example Education Indicators

- Population change over time
- Youth population change over time
- Enrollment over time
- Student-teacher ratios

- **What indicators do you need?**



VT Indicator Resources

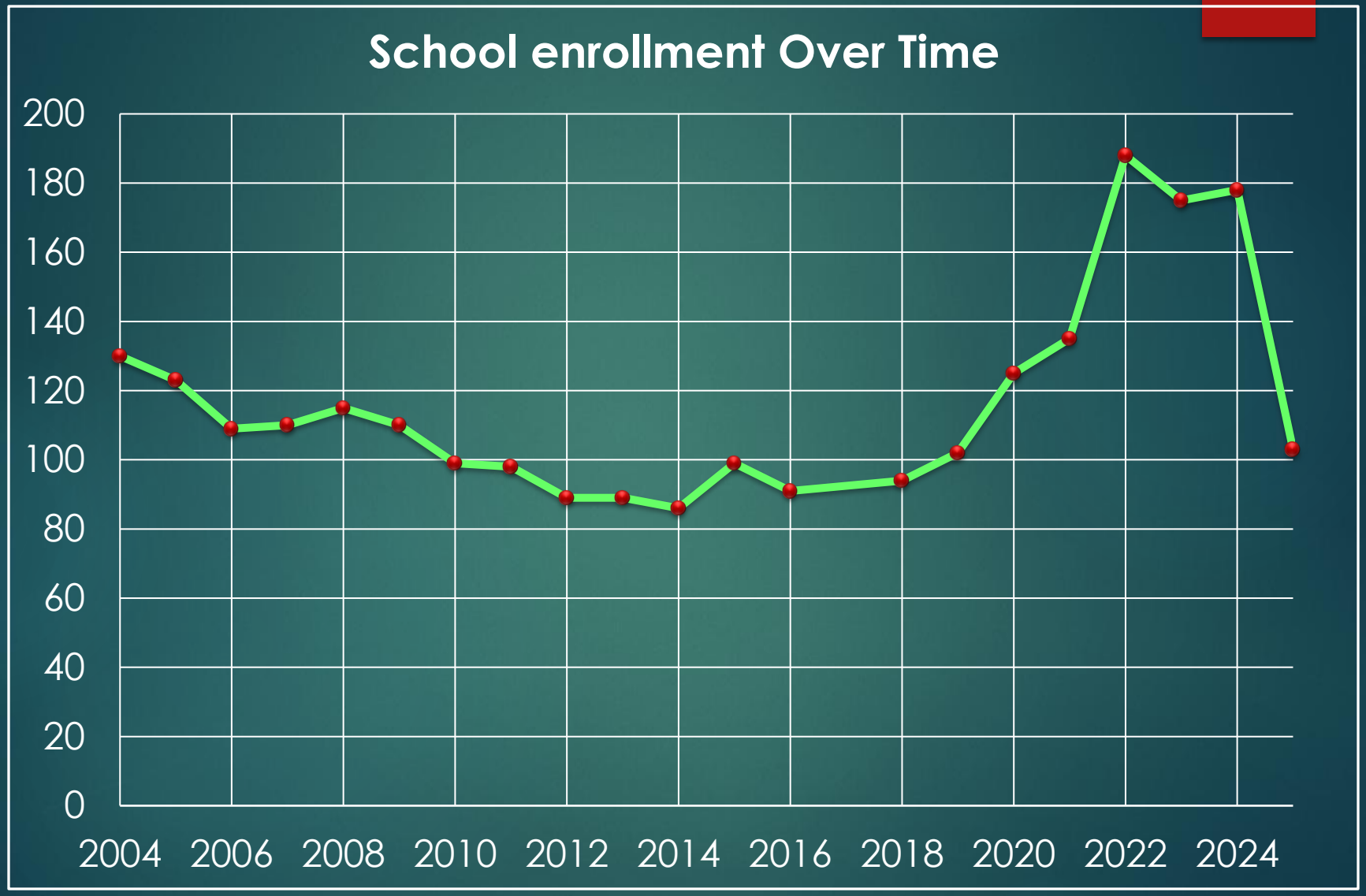
- Employment:
  - Vermont Department of Labor
- Health:
  - Vermont Department of Health
- Environment:
  - Vermont Agency of Natural Resources
- Education:
  - Vermont Agency of Education



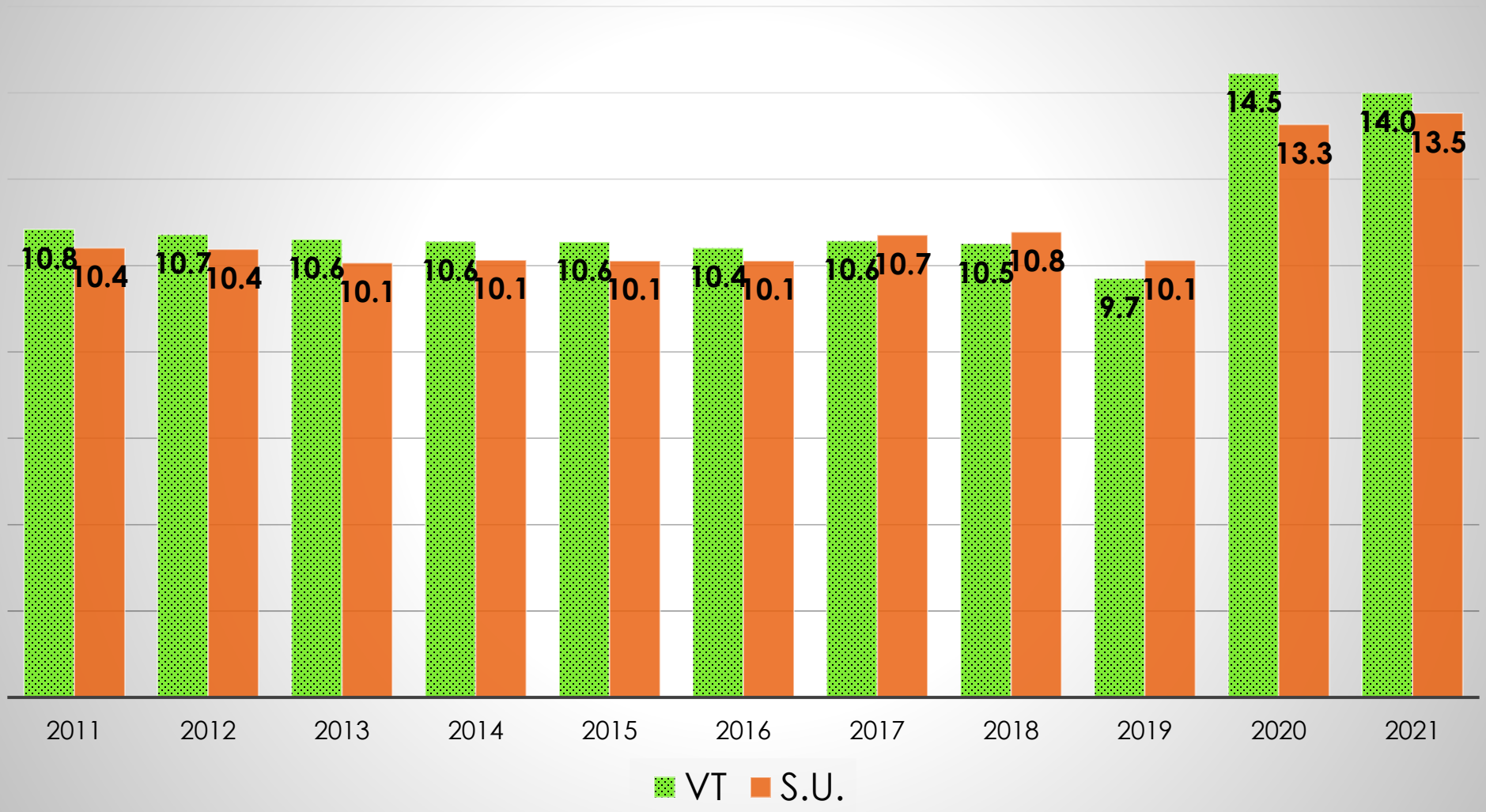
Data Resource Tutorials

Vermont Education Dashboard




School enrollment Over Time
200
180
160
140
120
100
80
60
40
20
0
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024

Comparative Student-Teacher Ratios Over Time



Thank You

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Better Board Decisions Start with Better Data

Vermont School Boards Association

October 30, 2026

Nicole McKenzie
U.S. Census Bureau
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How Can Census Data Support School Boards?

Reliable community insights for smarter planning and better student support

Forecast enrollment

Use population and migration trends to anticipate future enrollment demand.

Plan budgets & funding

Support resource allocation and strengthen grant proposals with community data.

Guide facilities decisions

Evaluate housing growth and demographic shifts to inform school investments.

Understand student needs

Analyze socioeconomic, language, disability, and household characteristics.

Support educational equity

Identify disparities and target resources where they can have the greatest impact.

Plan for the future

Leverage demographic and economic trends for long-term strategic planning.

Census Bureau data helps school boards make informed, evidence-based decisions for students, families, and communities.

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What's in your data?

Your internal data tells you what HAS happened.

- ✓ October enrollment counts
- ✓ Last year's budget and aid runs
- ✓ State test results
- ✓ Building condition surveys
- ✓ Cost-per-pupil trends

Census already measured your community. Learn how to access it to answer questions.

Census shows what's ABOUT TO happen.

- ✗ How many children under 5 live here?
- ✗ Who is moving in and out?
- ✗ Where are special needs centered?
- ✗ Who can afford a tax increase?
- ✗ Where do residents actually work?

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Why Census Data?

Five reasons for school boards to use Census Bureau data and tools

1	2	3	4	5
FREE	**AUTHORITATIVE**	**ANNUAL**	**PREDICTIVE**	**DEFENSIBLE**
No subscriptions. No vendor contracts. Just open a browser.	The same source behind Title 1	ACS and SAIPE update every year, for every school distri(V T	See the under-5 population today → know enrollment in five years.	Answer community pushback with facts, not feelings.

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4 Census Indicators for Enrollment Planning

1 Child Population by Age

B09001

Your enrollment pipeline. Children under 5 already living here are next decade's kindergartners.

2 Public vs. Private Enrollment

S1401

Fewer children, or children enrolled elsewhere?

3 Year Structure Built

B25034

How much housing has been built since 2010 and since 2020, inside your district's boundaries?

4 Geographic Mobility

S0701

Who moved in during the past year, and from where? Are you attracting or losing families?

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4 Census Indicators for Student Needs

1 School-Age Poverty

SAIPE

Annual estimate for every district.

2 Language at Home

S1601

Which languages, and how many households? Do materials and interpreters match?

3 Disability

S1810

Children with a disability, compared with your county and the state of Vermont.

4 Household Type

S1101

Single-parent households and households with children: who needs flexible supports?

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4 Census Indicators for Tax Base Analysis

1 Household Income Distribution

B19001

Not just the median — the full range. How many earn under $35K? How many over $150K?

2 Housing Cost Burden

B25070 & B25091

How many homeowners and renters already pay 30%, 40%, 50% of income just for housing?

3 Age of Householder & Income

B19037

How many seniors are on fixed incomes? They cannot absorb increases like working families.

4 Geographic Variation

DP04

Does burden fall evenly across the district, or are some neighborhoods already at the breaking point?

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4 Census Bureau Tools for the Local Economy

1 OnTheMap

LEHD

Where residents work, and who commutes in and out.

2 QWI Explorer

LEHD

Which industries hire young workers, and what they pay (county).

3 PSEO Explorer

LEHD

What graduates of participating Vermont colleges earn, by field.

4 Census Business Builder

CBB

How many employers could host work-based learning students?

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Accessing Census Bureau Data



Census.gov data tools and applications

- Data Visualizations
- Interactive Maps
- Data Tools (data.census.gov, SAIPE *and more!)*

API (Application Programming Interface)

- developers and researchers
- raw statistical data from various Census Bureau data programs.

Census Bureau Website

Data Tools

Interactive Maps

Visualizations

API

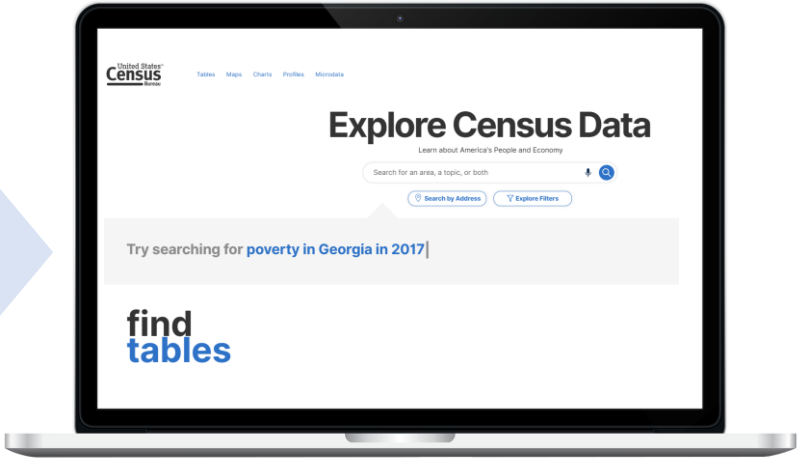
Geographic flexibility – Nation to Neighborhoods!

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Data.census.gov

- Filter by geography, surveys, topics, and years.
- Create customized data tables, maps, and charts.
- Directly download data files from the tool.

- American Community Survey
- Community Resilience Estimates
- Decennial Census
- Decennial Census of Island Areas
- Economic Census
- Economic Census of Island Areas
- Economic Surveys
- Population Estimates
- Public Sector



https://data.census.gov/

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The American Community Survey

Content Overview

POPULATION		
Social	**Economic**	**Demographic**
• Ancestry • Citizenship Status • Citizen Voting-Age Population • Disability Status • Educational Attainment • Fertility • Grandparents as Caregivers • Language Spoken at Home • Marital History and Status • Migration/Residence 1 Year Ago • Place of Birth • School Enrollment • Undergraduate Field of Degree • Veterans Status; Period of Military Service • Year of Entry	• Class of Worker • Commuting and Place of Work • Employment Status • Food Stamps (SNAP) • Health Insurance Coverage • Income and Earnings • Industry and Occupation • Poverty Status • Weeks Worked Last Year	• Age • Group Quarters Population • Hispanic or Latino Origin • Race • Relationship to Householder • Sex • Total Population

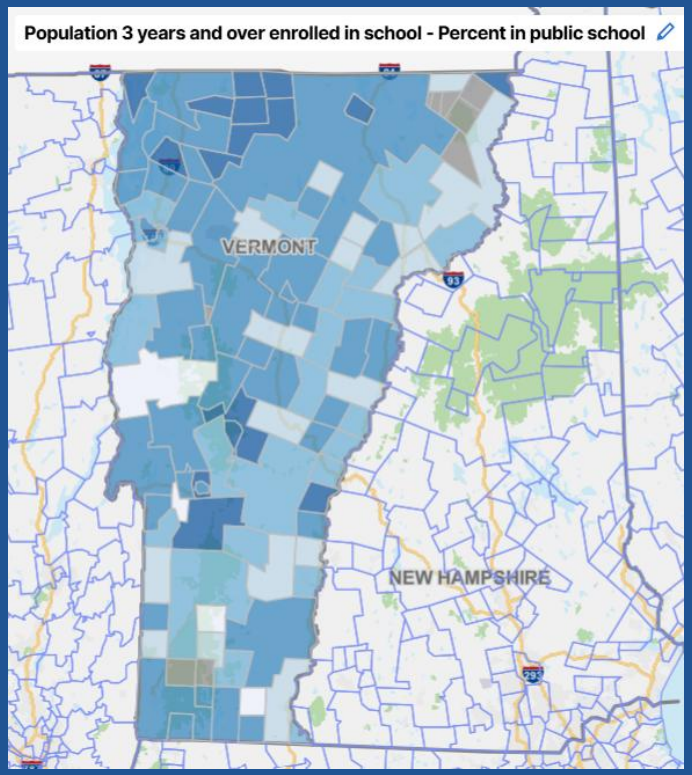
HOUSING
• Bedrooms • Computer & Internet Use • Costs (Mortgage, Rent, Taxes, Insurance) • Electric Vehicles • House Heating Fuel • Kitchen/Plumbing Facilities • Occupancy/Vacancy Status • Occupants per Room • Rooms • Solar Panels • Telephone Service Available • Tenure (Owner/Renter) • Units in Structure • Value of Home • Vehicles Available • Year Householder Moved Into Unit • Year Structure Built

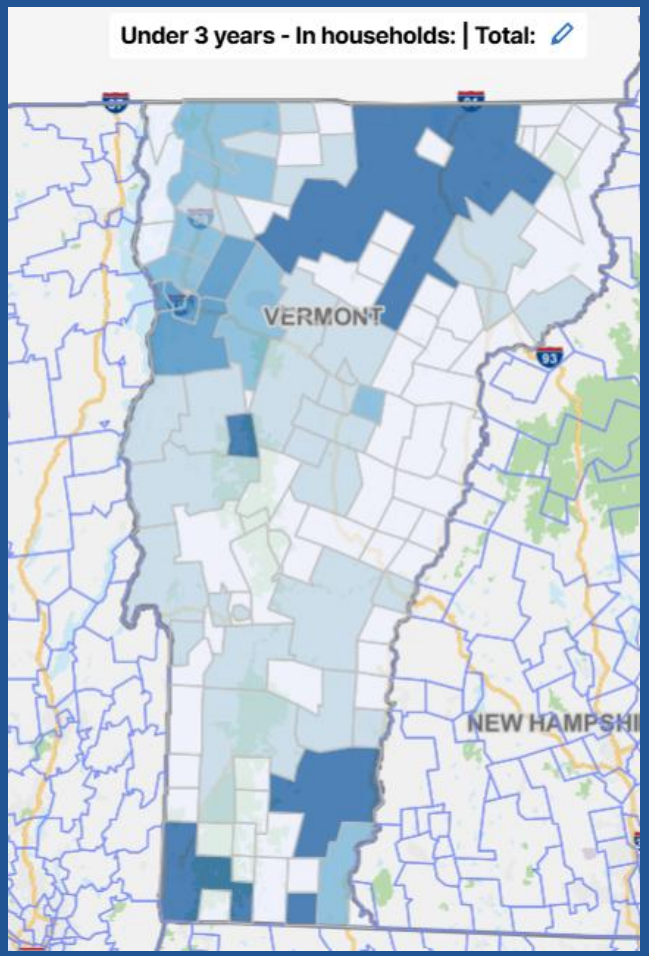
Link to the 4 Data Profile Tables in data.census.gov

data.census.gov

Data tables
Maps
Charts

https://data.census.gov/map/040XX00US50$9700000/ACSST5Y2024/S1401/S1401_C04_001E?q=S1401:+SCHOOL+ENROLLMENT&layer=VT_2024_970_00_PY_D1&basemap=detailed&loc=43.9138,-72.2770,z6.8389



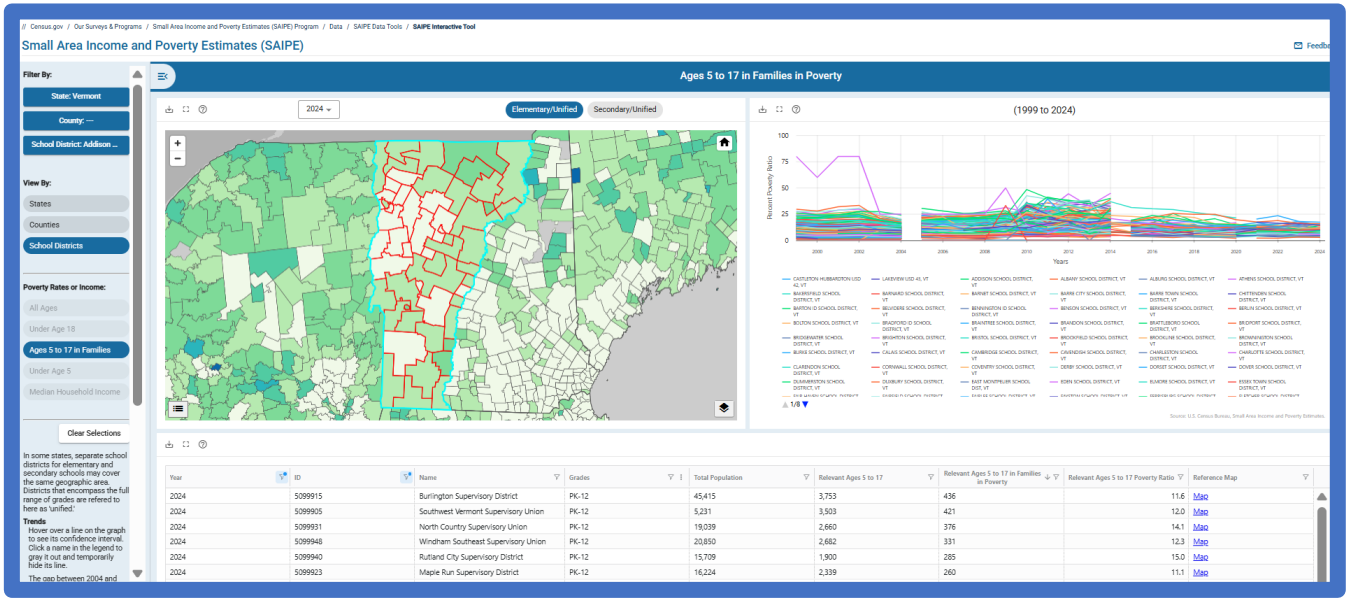


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SAIPE (Small Area Income and Poverty Estimates)

Supports data lookup, downloading, mapping, and trend visualization for the following:

- Poverty estimates at the School District, County, and State levels.
- Median Household Income estimates at the County and State levels.



https://www.census.gov/data-tools/demo/saipe/#/

School districts:

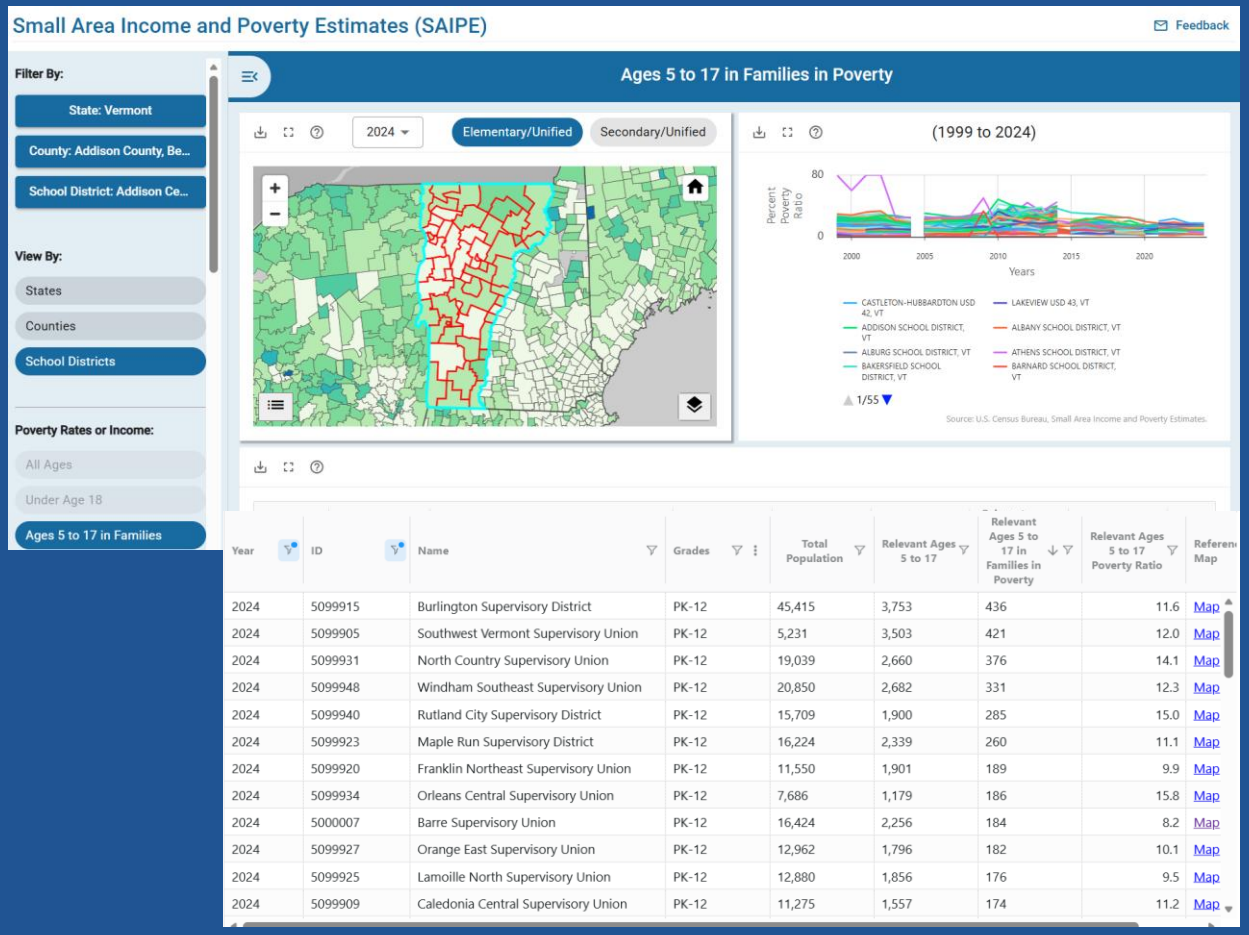
- Total population
- Children ages 5 - 17
- Related children ages 5 - 17 in families in poverty

Counties and states:

- Children under age 5 in poverty (states only)
- Related children ages 5 - 17 in families in poverty
- Children under age 18 in poverty
- All people in poverty
- Median household income

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SAIPE



Year	ID	Name	Grades	Total Population	Relevant Ages 5 to 17	Relevant Ages 5 to 17 in Families in Poverty	Relevant Ages 5 to 17 Poverty Ratio	Map
2024	5099915	Burlington Supervisory District	PK-12	45,415	3,753	436	11.6	Map
2024	5099905	Southwest Vermont Supervisory Union	PK-12	5,231	3,503	421	12.0	Map
2024	5099931	North Country Supervisory Union	PK-12	19,039	2,660	376	14.1	Map
2024	5099948	Windham Southeast Supervisory Union	PK-12	20,850	2,682	331	12.3	Map
2024	5099940	Rutland City Supervisory District	PK-12	15,709	1,900	285	15.0	Map
2024	5099923	Maple Run Supervisory District	PK-12	16,224	2,339	260	11.1	Map
2024	5099920	Franklin Northeast Supervisory Union	PK-12	11,550	1,901	189	9.9	Map
2024	5099934	Orleans Central Supervisory Union	PK-12	7,686	1,179	186	15.8	Map
2024	5000007	Barre Supervisory Union	PK-12	16,424	2,256	184	8.2	Map
2024	5099927	Orange East Supervisory Union	PK-12	12,962	1,796	182	10.1	Map
2024	5099925	Lamoille North Supervisory Union	PK-12	12,880	1,856	176	9.5	Map
2024	5099909	Caledonia Central Supervisory Union	PK-12	11,275	1,557	174	11.2	Map

SAIPE Interactive Data Tool

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Statistics in Schools

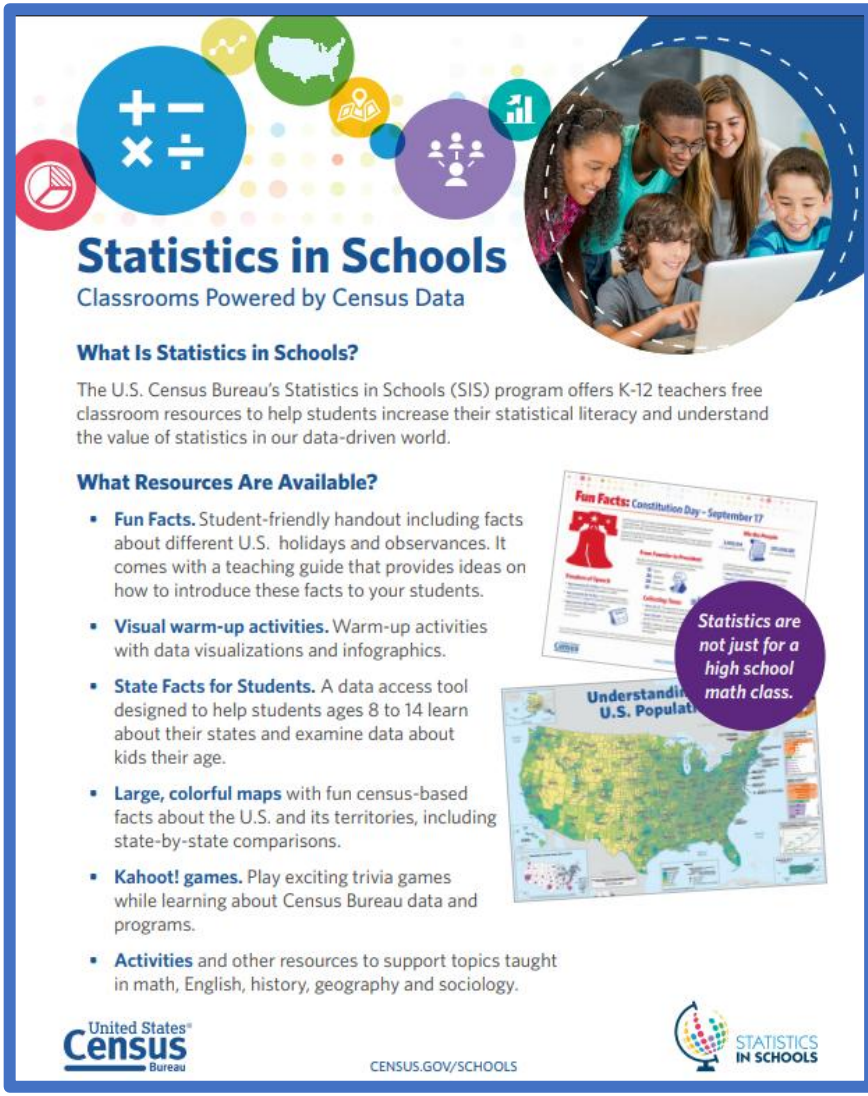
Benefits for Teachers

- Offers a wide choice of resources and tools including activities, maps, videos, infographics, data tools, news articles and more.
- The classroom activities supplement the teacher's curriculum.

Benefits for Students

- SIS helps prepare students for college and careers in an increasingly data-driven world.
- Students learn more about nearly every subject like math, English, history, social studies, geography, and sociology.
- The use of real-life data helps keep students engaged in school.

https://www.census.gov/programs-surveys/sis/about.html



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Thank You!

Census data won't make your board's decisions.
But it WILL help you see what's coming, ask better questions and plan ahead.

You're doing important work.
Census data and the Data Dissemination Team are free, reliable, powerful tools, here to help.

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