



Exploring Census Data Webinar Series: Webinar #2 – Employment

A Look into Demographic and Public Sector Employment Data

Tuesday, May 21st, 2019

Presented by: Melinda Caskey and Chase Sawyer

U.S. Census Bureau



Exploring Census Data Webinar Series

- Monthly webinars on key topics
- Topics may change based on attendee feedback
- Will follow real-life use cases
- Presented by Census subject matter experts
- Will include Q&A
- Will be recorded and posted for later reference
- Learn more at <https://www.census.gov/data/training-workshops.html>



Interested in finding business data and valuable resources from the Census Bureau? If you answered yes, then this webinar series is for you!

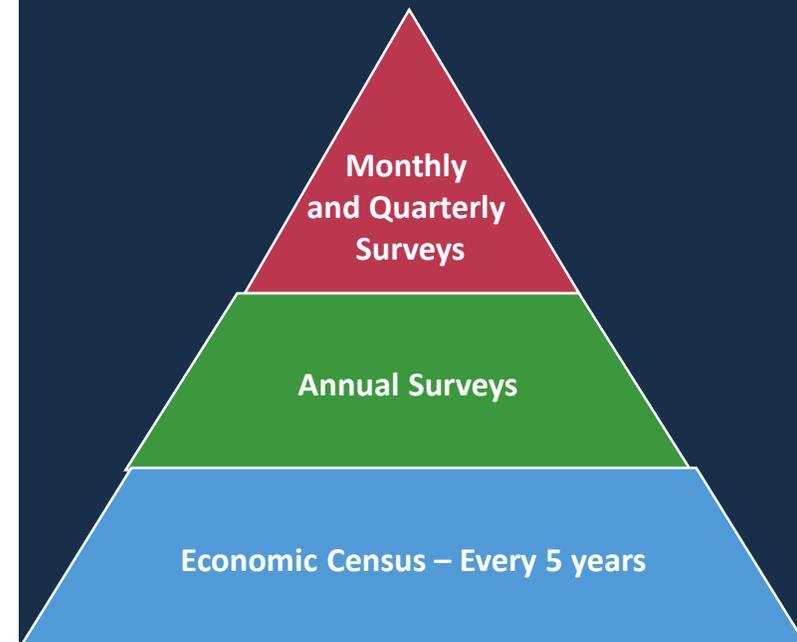
During this webinar series, you will explore our data with Subject Matter Experts. Each session will dive into the value of our data through illustrations and use cases. We will share helpful information and resources to show you how to access the data. This webinar series is for anyone looking for data and not sure where to begin. Discover the possibilities! Here are the topics:

Topic:	Session Date:
International Trade	April 25, 2019
Employment	May 21, 2019
Emergency Management	June 5, 2019
Healthcare	July 25, 2019
Small & Minority-owned Businesses	August 22, 2019
Hidden Gems	September 25, 2019

SAVE THE DATE: All webinars are FREE and start 2:00pm ET
No registration required – Log in details will be provided 24-48 hours prior to the event
For more information about the Exploring Census Data Webinar Series, please contact the Data User Outreach & Education Branch at 800-242-2184 or ewd.outreach@census.gov

About the Census Bureau

- The U.S. Census Bureau is the federal government's largest statistical agency.
- We conduct more than 100 censuses and surveys each year, including
 - **The Decennial Census** – the once-a-decade population and housing count of all 50 states and U.S. territories
 - **The American Community Survey** – the ongoing annual survey of the nation's population
 - **The Economic Census** – the official five-year measure of American businesses
- Our mission is to serve as the leading source of quality data about America's people, places, and economy.



Census Bureau Economic Surveys are a key source for official statistics companies can use:

- Monthly and Quarterly are small sample surveys that provide the most **TIMELY** data available
- Annual surveys have larger samples and provide the most up-to-date **TREND** data available
- Every 5 years, the Economic Census measures all businesses and provides the most **COMPREHENSIVE** data available

These surveys set the standard for U.S. economic statistics, and are fueled by the data provided by individual businesses

The Decennial Census

Purpose:

To conduct a census of population and housing and disseminate the results to the President, the States, and the American People



Apportion representation among states as mandated by Article 1, Section 2 of the U.S. Constitution:

Representatives and direct Taxes shall be apportioned among the several States which may be included within this union, according to their respective Numbers ...

*The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and **within every subsequent Term of ten years**, in such Manner as they shall by Law direct.*

Primary Uses of Decennial Census Data:

- Apportion representation among states as mandated by Article 1, Section 2 of the U.S. Constitution
- Draw congressional and state legislative districts, school districts, and voting precincts
- Distribute more than \$675 billion federal dollars annually to states
- Inform federal, tribal, state, and local government planning decisions
- Inform business and nonprofit organization decisions (e.g., where to locate, size of the market)

2020 Census

What to Expect in the Mail

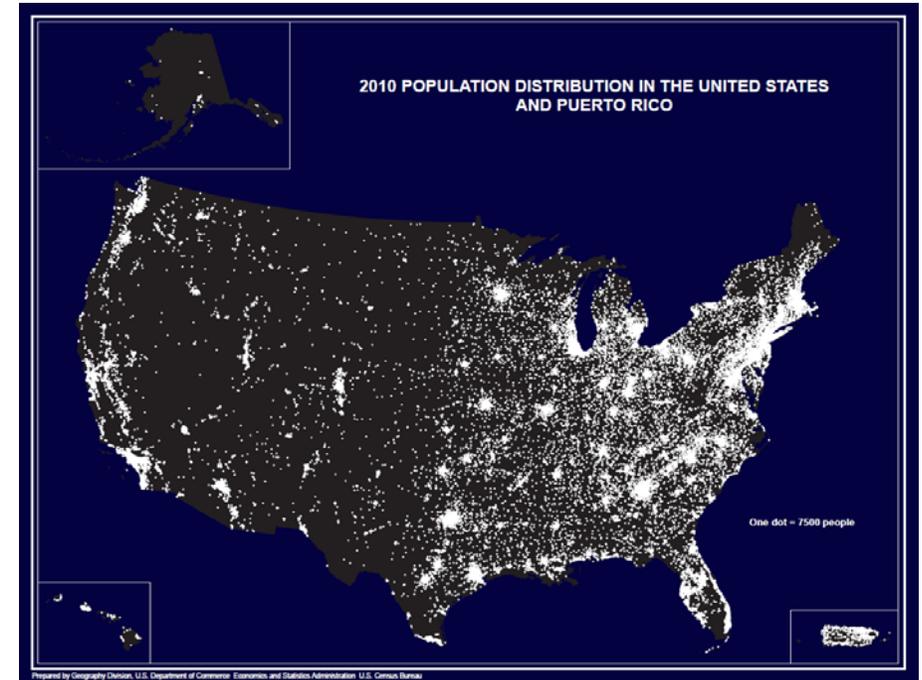
When it's time to respond, most households will receive an invitation in the mail (some will be delivered by a census taker).

Every household will have the option of responding online, by phone, or by mail.

WHAT WE WILL SEND IN THE MAIL	
On or between	You'll receive:
March 12-20	An invitation to respond online to the 2020 Census. (Some households will also receive paper questionnaires.)
March 16-24	A reminder letter.
	If you haven't responded yet:
March 26-April 3	A reminder postcard.
April 8-16	A reminder letter and paper questionnaire.
April 20-27	A final reminder postcard before we follow up in person.

What You Can Do To Get Involved to Help Make the 2020 Census a Complete and Accurate Count Of the Nation's People

- Actively support a complete and accurate count for the 2020 Census.
- Spread the word about more than 500,000 temporary census jobs that peak in the spring of 2020.
- <https://2020census.gov/jobs>
- Research the characteristics and projected self-response rates for your own neighborhood and strategically think through how you can improve the count among your family, friends, and neighbors.
<https://www.census.gov/roam>
- Urge everyone you are connected with to self-respond to the census in late March and April 2020.
 1. The Census is Important
 2. The Census is Easy
 3. The Census is Safe
- Join your local Complete Count Committee and lend your expertise to ensure all segments of your community are accurately counted in 2020.
- <https://2020census.gov>



How will our country look in 2020?

Today's Webinar

- Census Bureau data on Employment
 - Using State and Local Government Employment
 - Scope and Composition
 - Payroll
 - Using the American Community Survey employment data
 - Examine industry patterns
 - Occupational differences

Our use case: New York

Employment in the U.S.

The Annual Survey of Public Employment & Payroll (ASPEP)

- Provides number of public employees and their gross payroll for the month of March
- Data shown at the local government and state government levels
- First collected in 1957
- Full census conducted every 5 years (last in 2017)

<https://www.census.gov/programs-surveys/apes.html>

Key stats from the 2017 Census State & Local data:

March total payroll
\$80.3 Billion

Full-time Employment
14.6 million

Part-time Employment
4.9 million

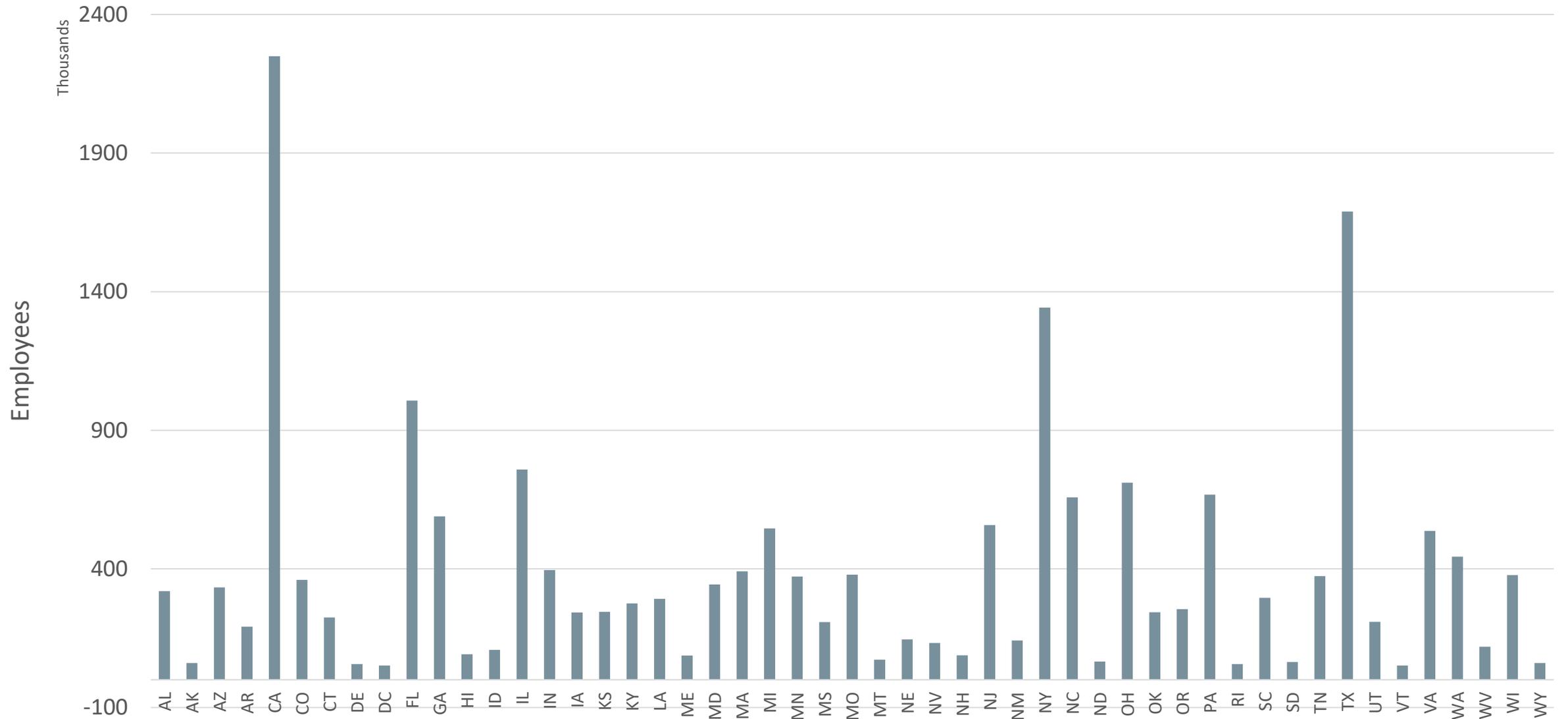
Part-time Hours Worked
341.6 million

Full-time Equivalent Employment
16.6 million

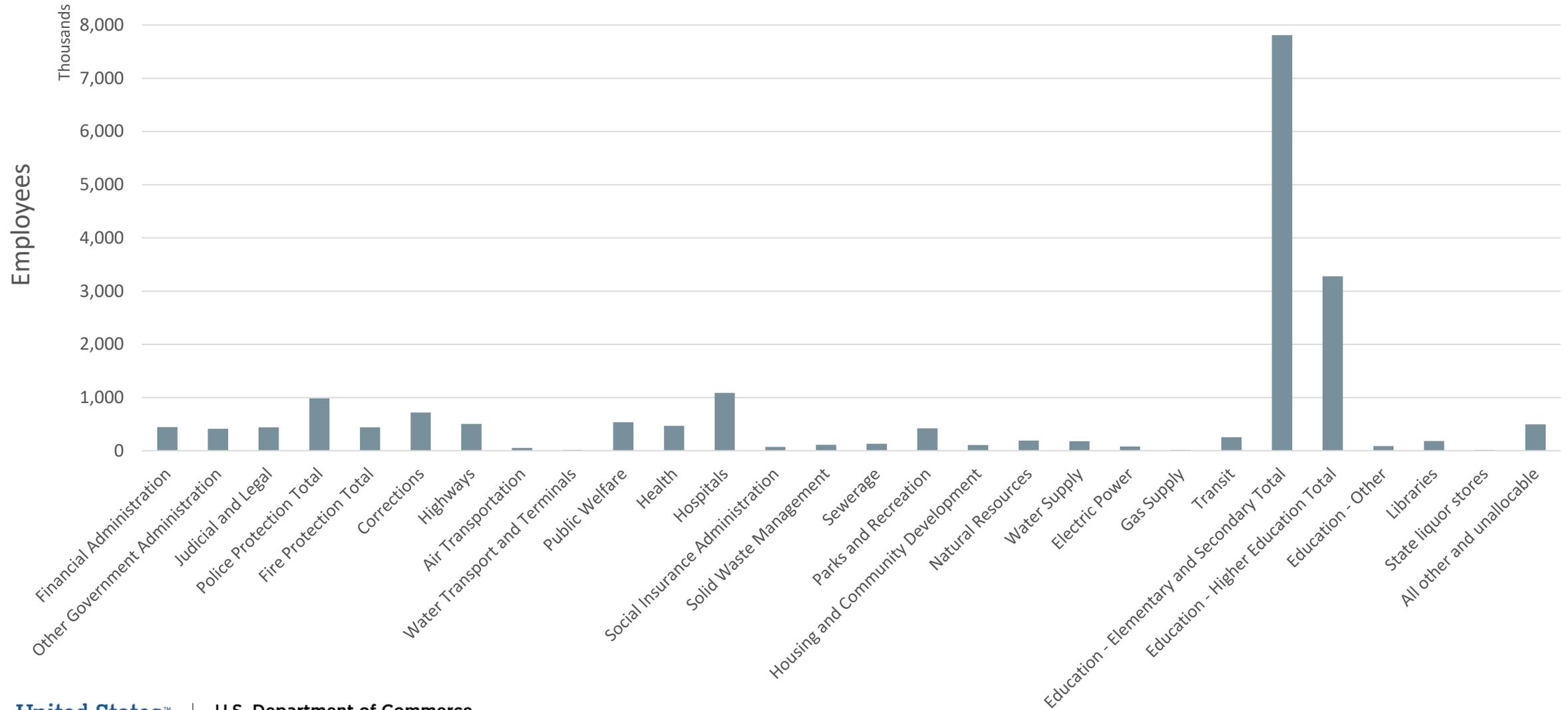
Important Details

- ASPEP differs from American Community Survey data in that we survey governments directly. ACS is self-reported by individuals.
- NAICS does have a code for Public Administration: Sector 92
 - Does not always include all government functions
 - Might find Sector 92 in Economic Datasets
 - Can find more about Sector 92 on page 591 of the 2017 classification manual at <https://www.census.gov/eos/www/naics/>

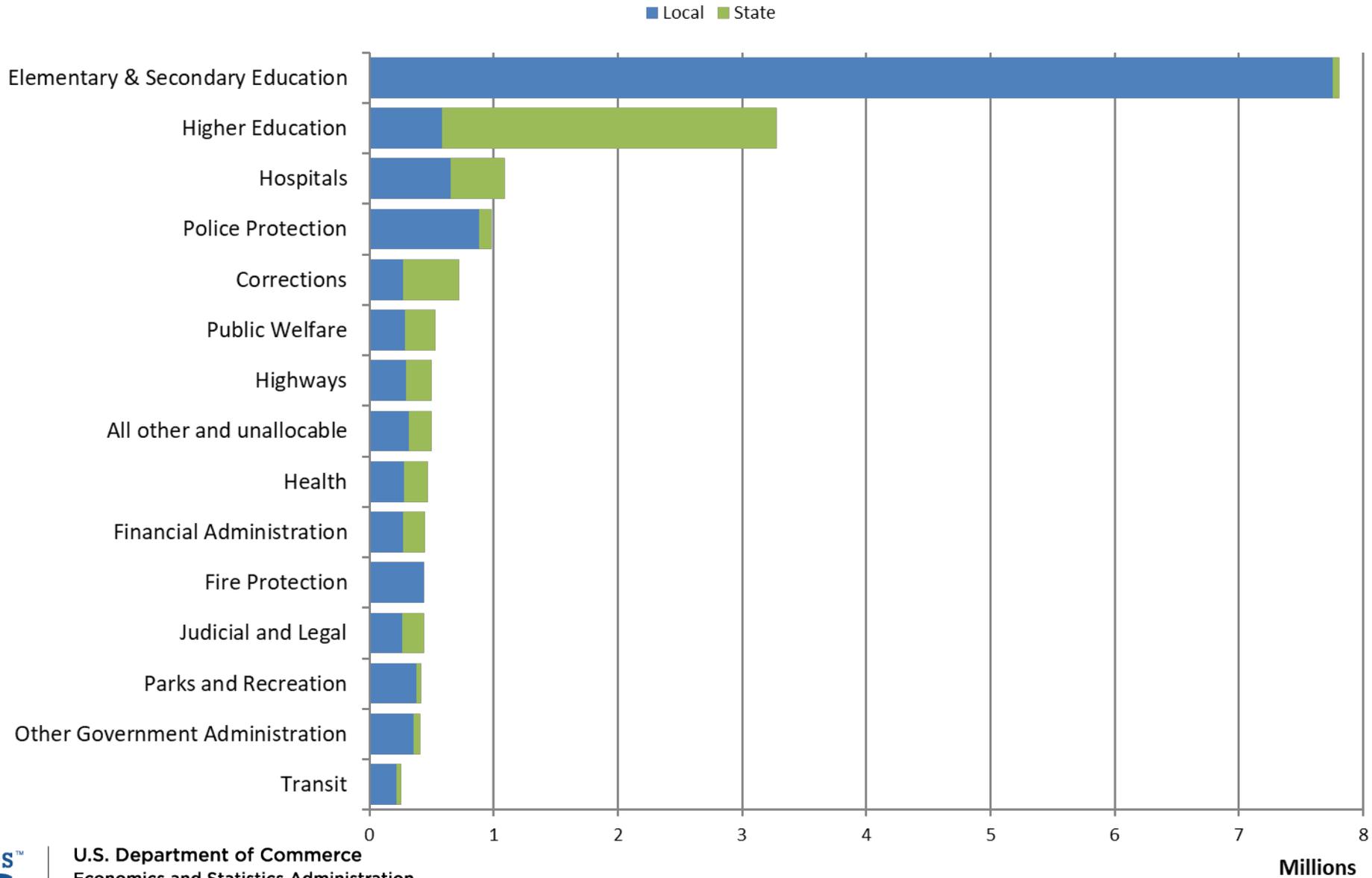
Total Full Time & Part Time, State & Local Employees by State



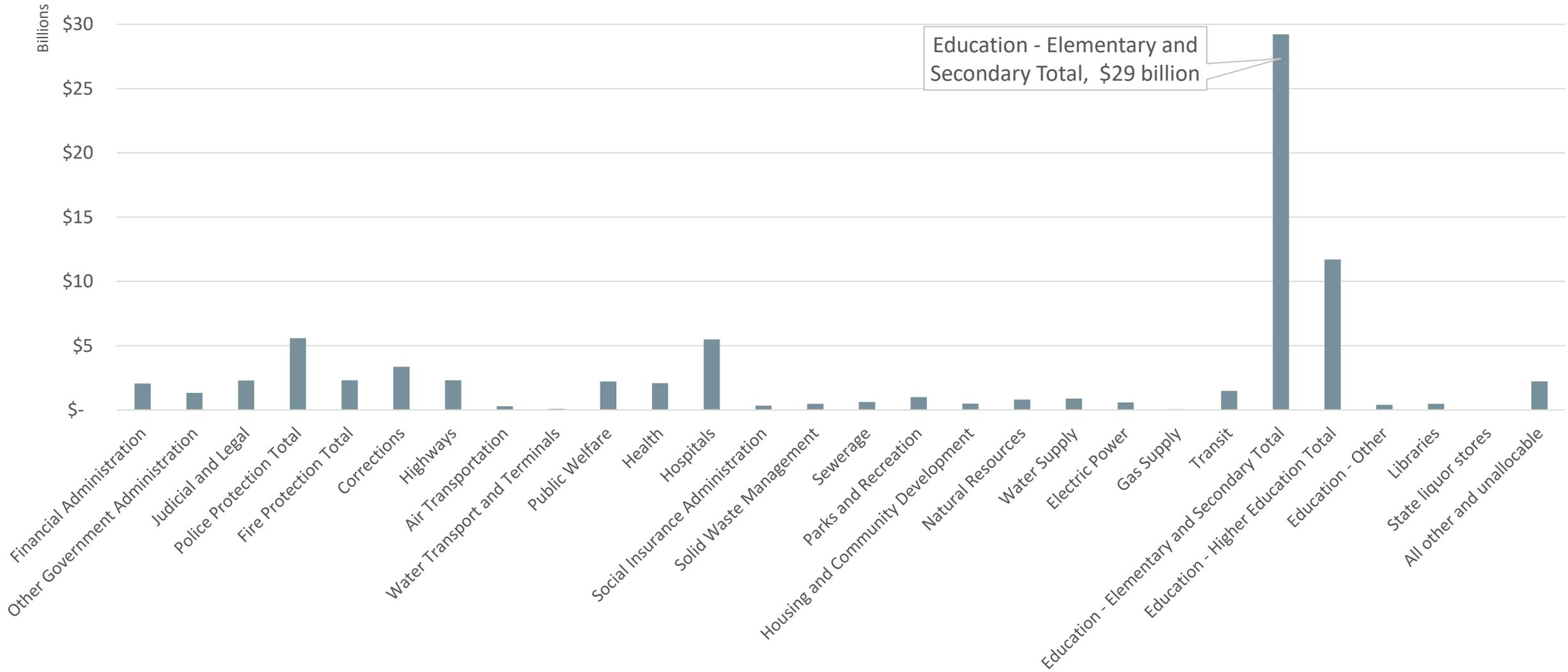
Total State & Local Employees by Function



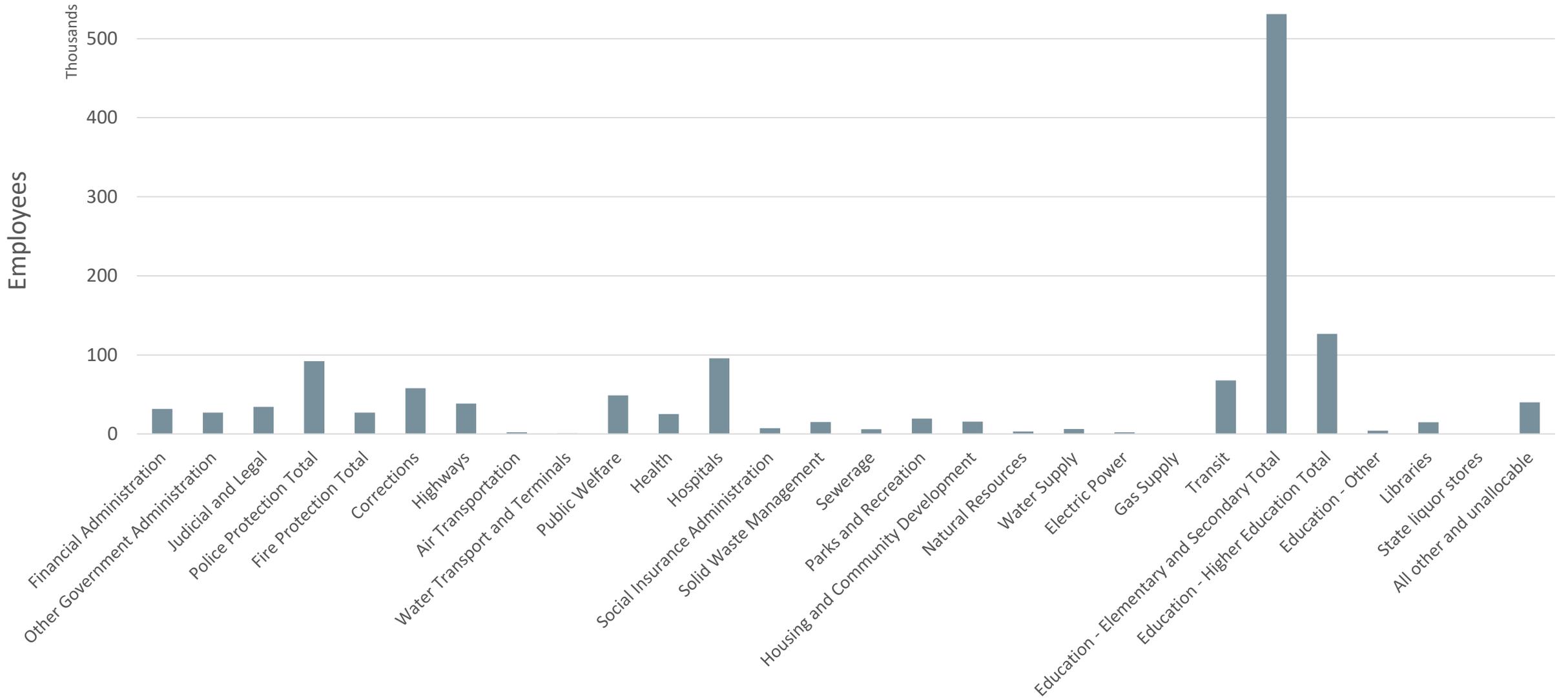
Top 15 Functions: Total Employment



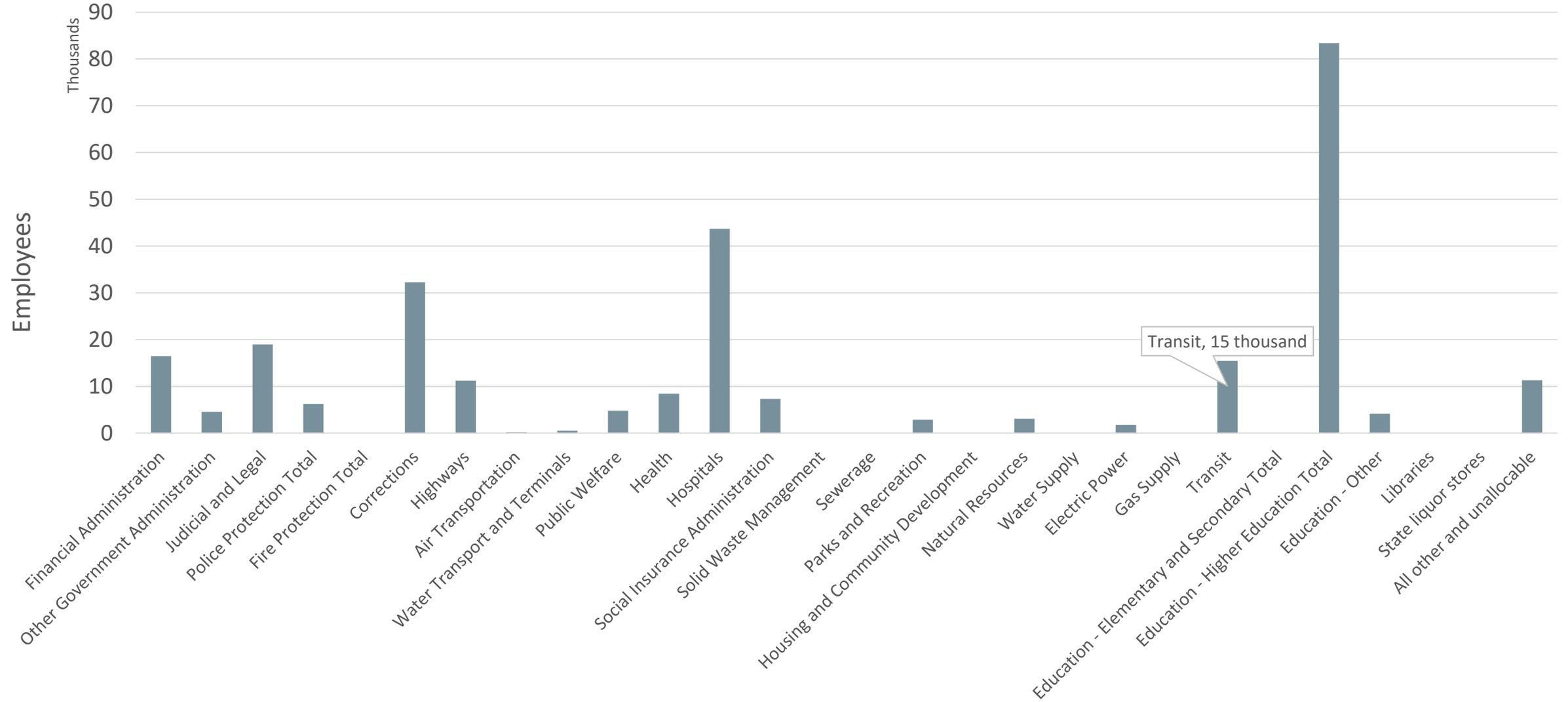
Total State & Local March Payroll by Function (whole dollars)



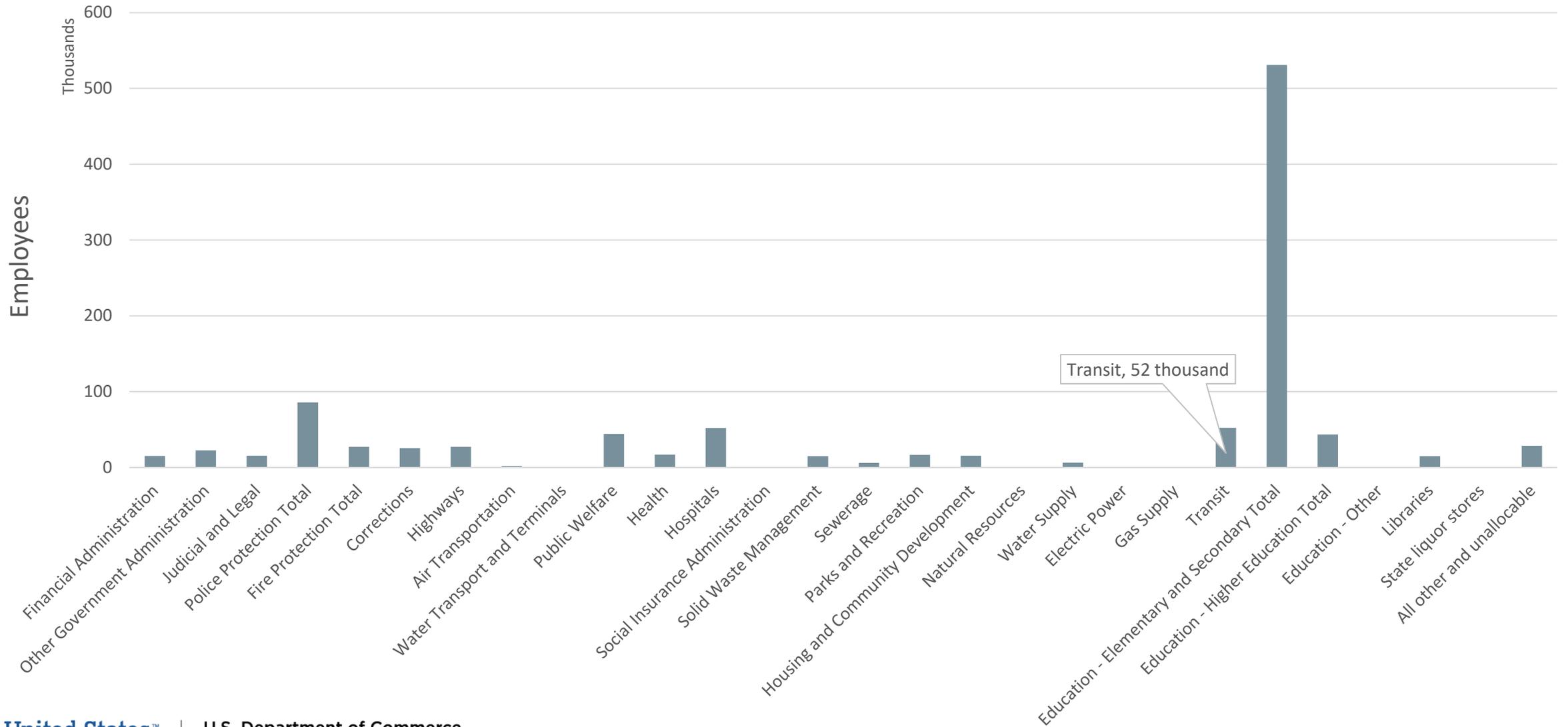
New York Total State & Local Employees



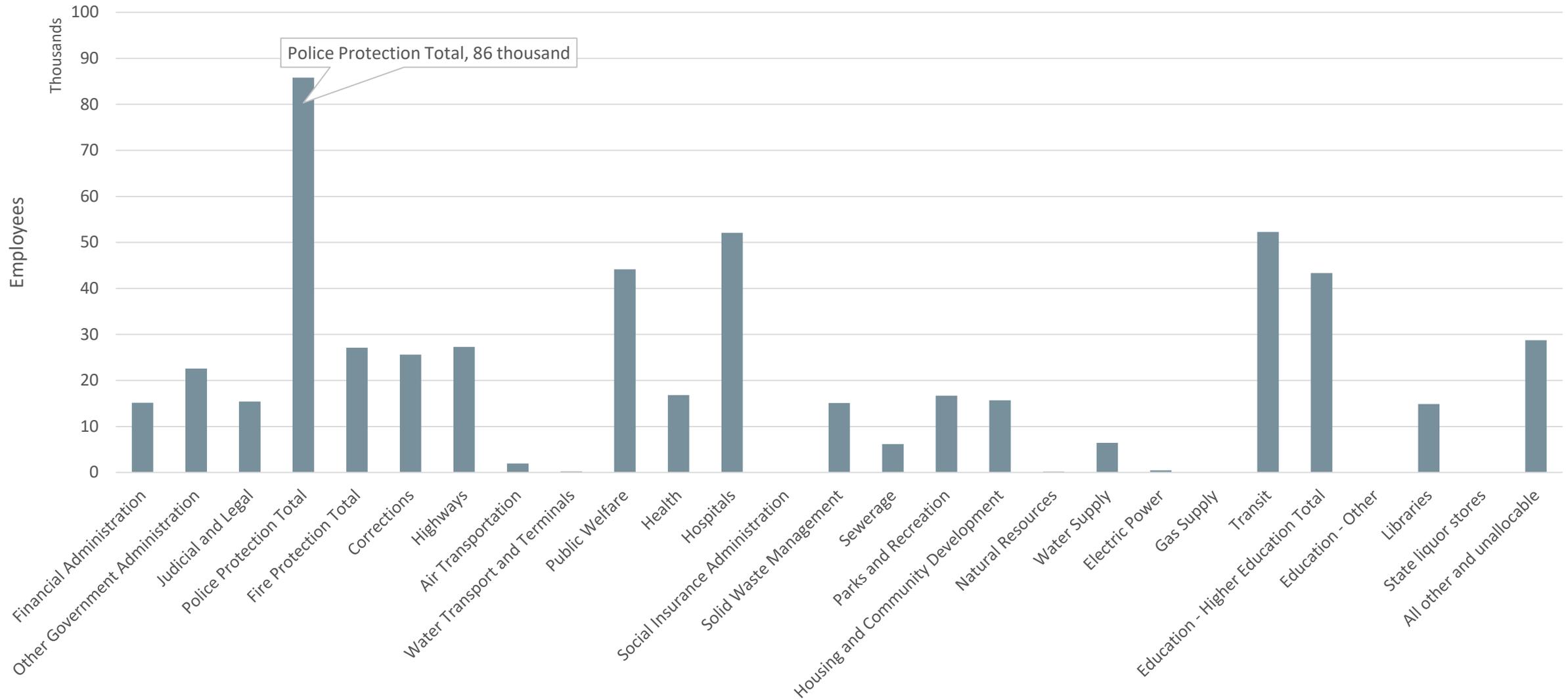
New York Total State Employees



New York Total Local Employees

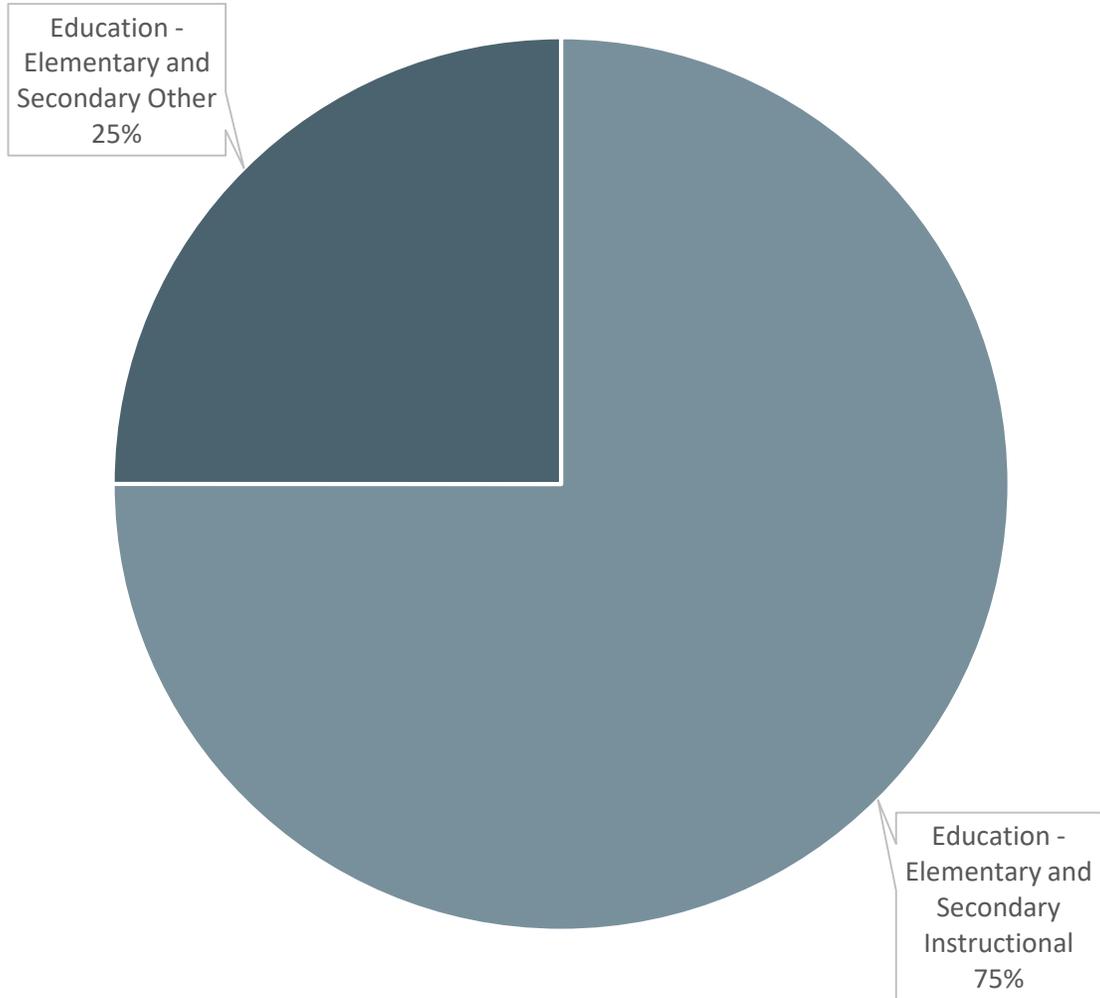


New York Total Local Employees (minus the Elementary and Secondary Education Function)

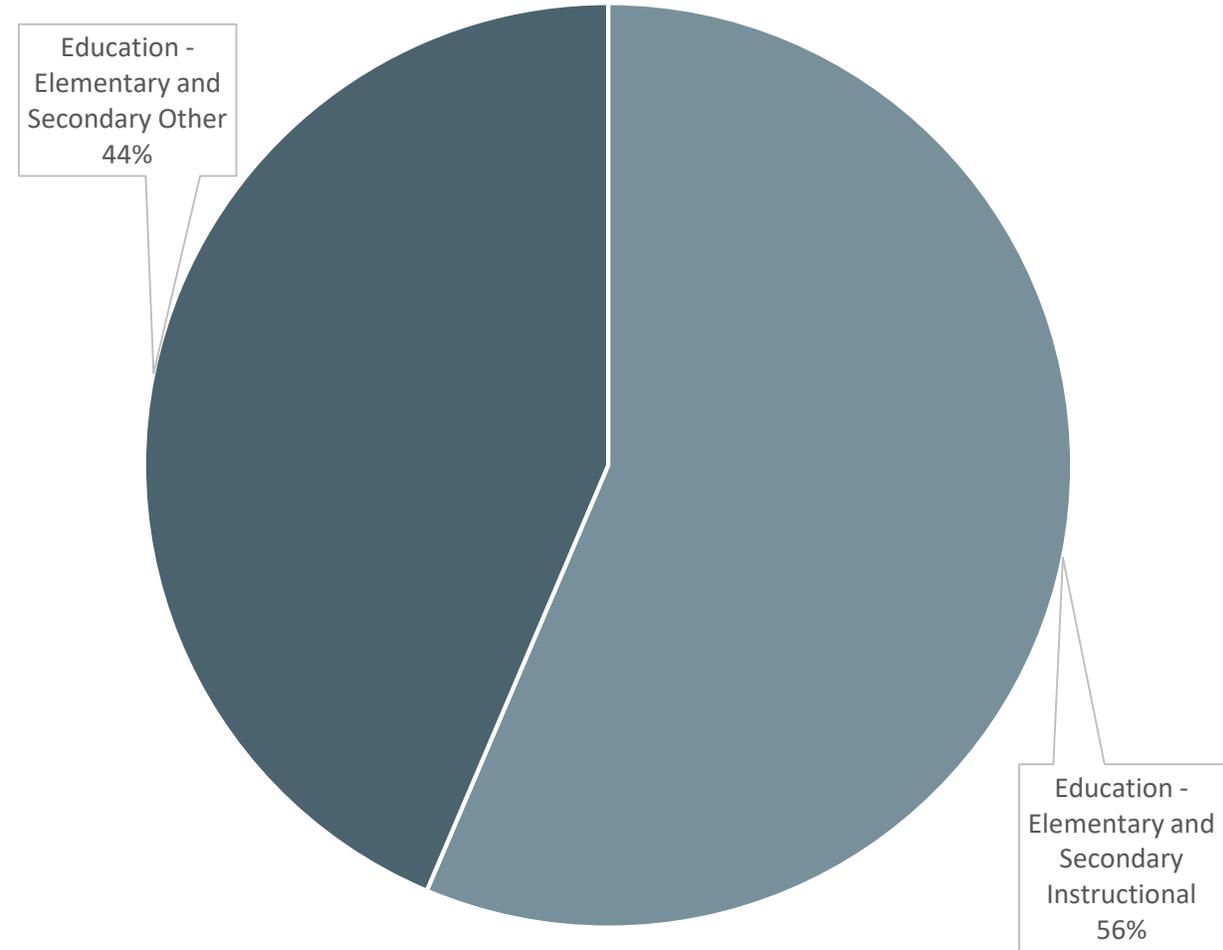


New York State & Local Elementary and Secondary Education

Full Time

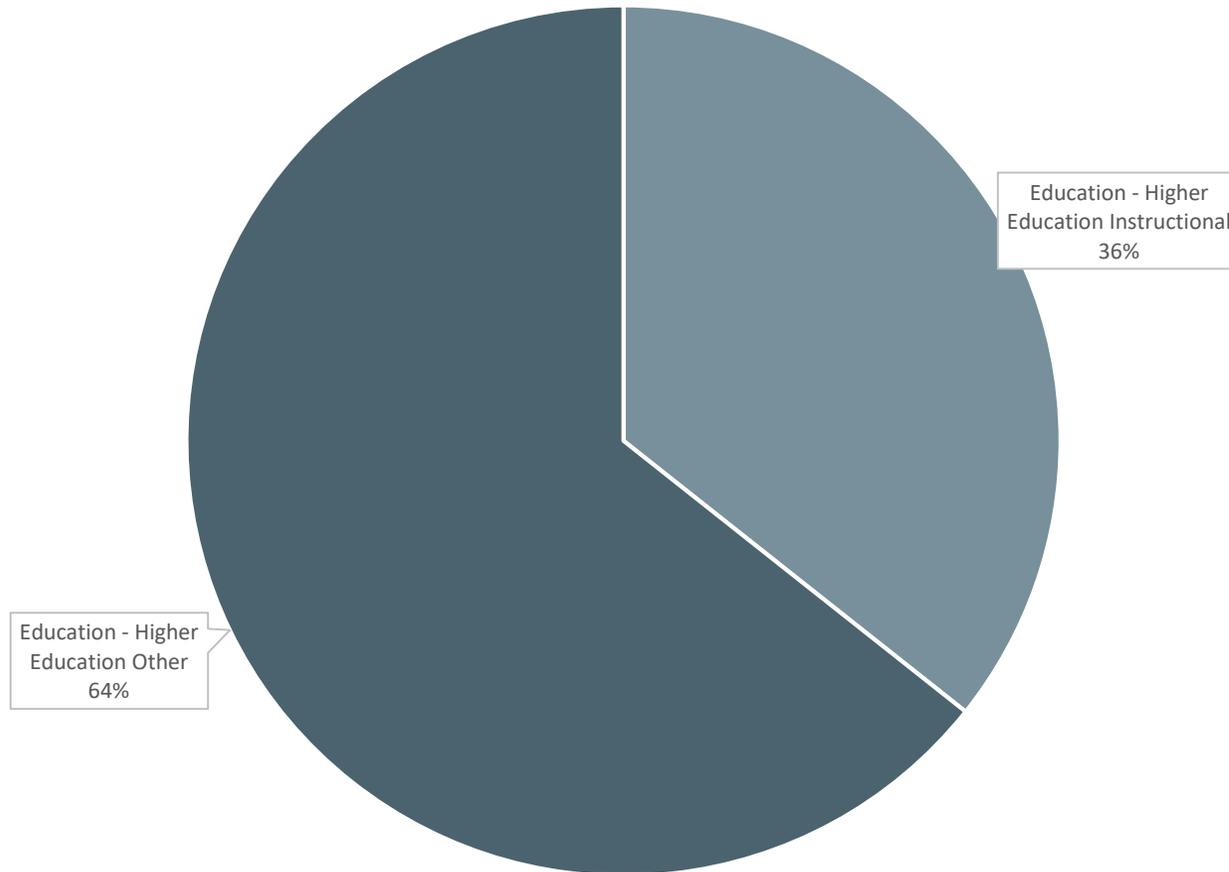


Part Time

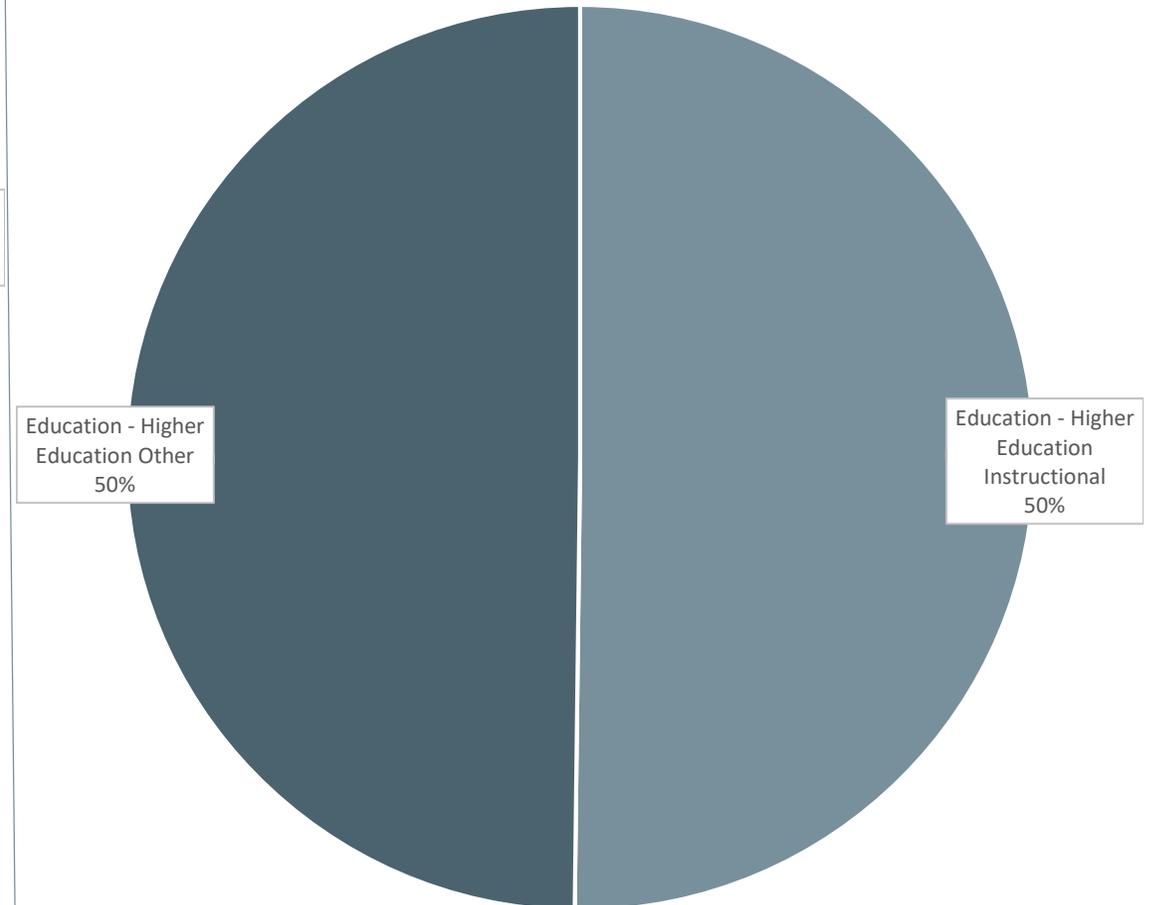


New York State & Local Higher Education

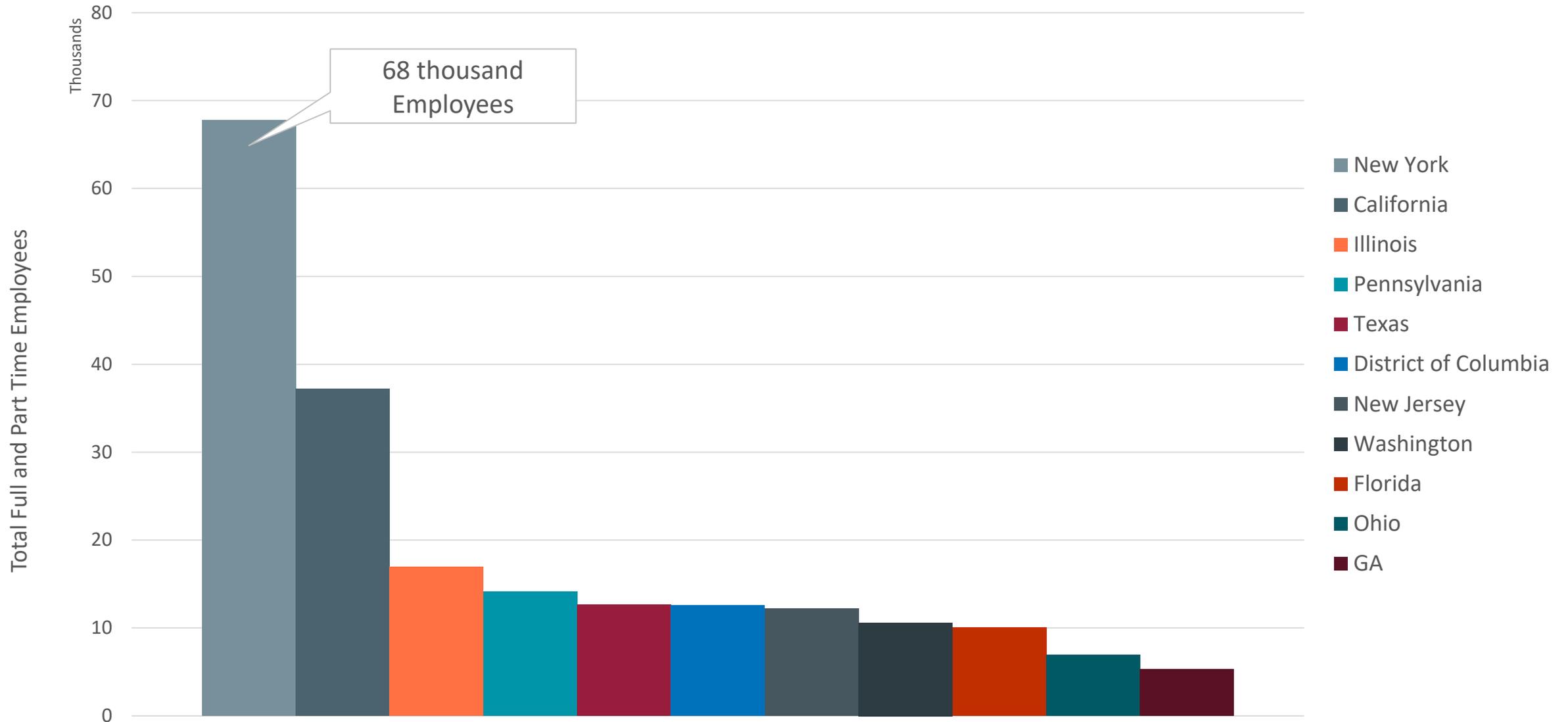
Full Time Employment



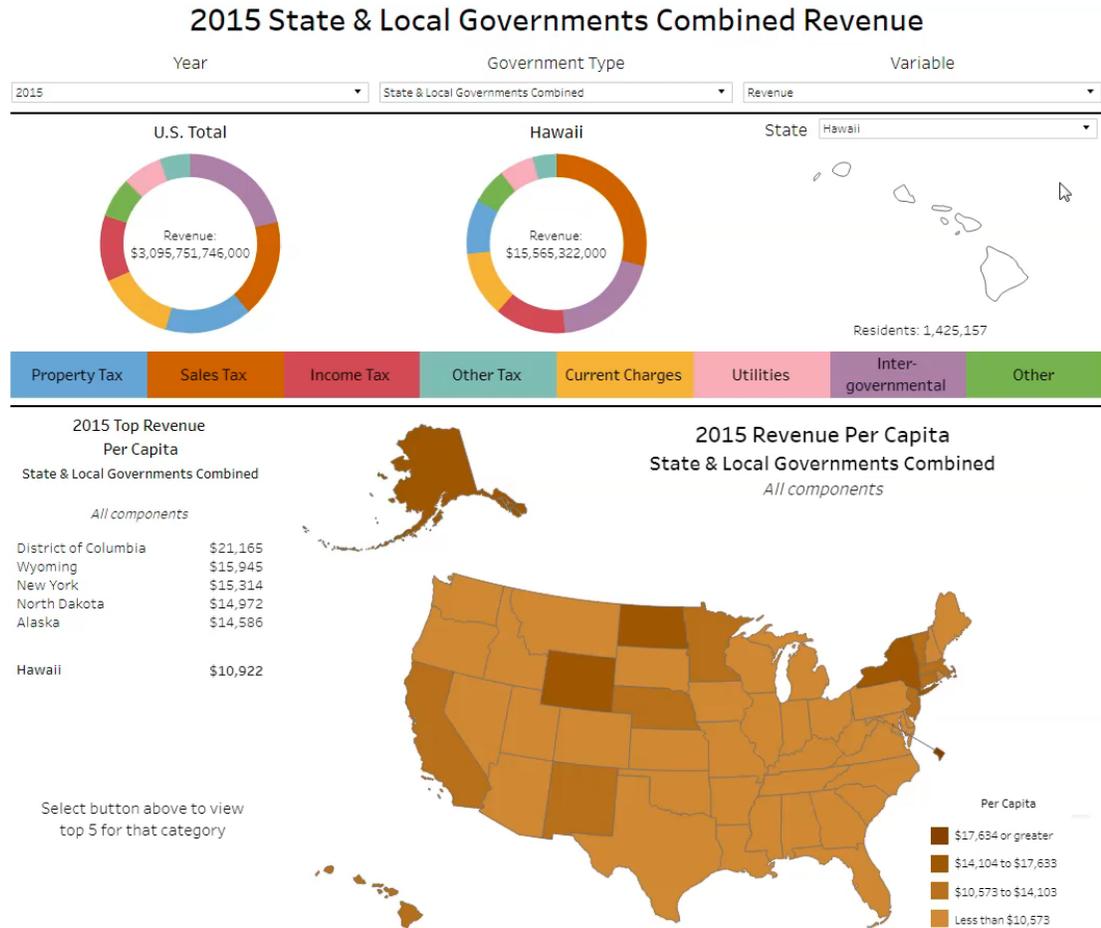
Part Time Employment



State & Local Full-time Equivalent Transit Employees for Select States



State & Local Government Snapshot



Link to the Snapshot Tool

<https://www.census.gov/library/visualizations/interactive/state-local-snapshot.html>

Others Actions to Change the Tool Display

- Select different years
- Select State, Local or State and Local Governments
- Select Variable to Display; Revenues, Expenditures, or Employment
- Select a State

Webinar on the Snapshot Tool

https://www.census.gov/data/training-workshops/recorded-webinars/listing.html#par_textimage_1007352740

American Community Survey

The American Community Survey (ACS)

- Provides nation's most current, reliable, and accessible data source for local statistics on critical planning topics such as age, children, veterans, commuting, education, income, and employment
- Provides data for many different geographies
- For more information on the ACS, see census.gov/acs

Our industry:

Educational Services and Health Care and Social Assistance

- *Educational Services*

Key stats from the ACS for Educational Service Workers in 2017:

Employment: 14,172,748

Full-Time Workers: 8,652,743

Private company workers: 2,827,801

Self-employed: 317,229

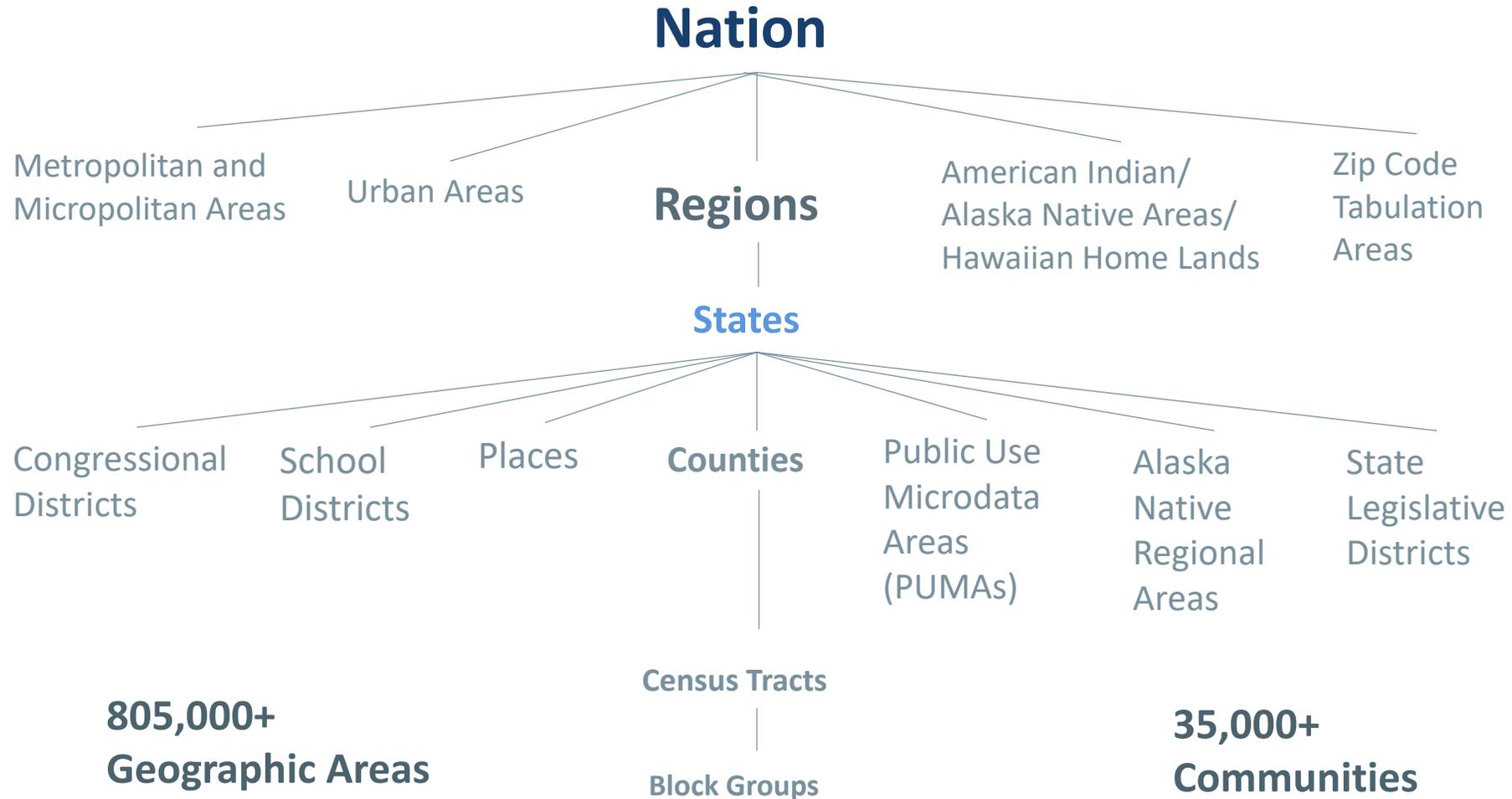
Private non-profit workers: 2,530,363

Government Workers: 8,497,355

Median Earnings in the Past 12

Months: \$40,250

Selected Census Geographies



Considerations for ACS Data

- Demographic/Household Based Survey
- All Types of Workers
 - Employer Businesses
 - Self-Employed
 - Government
- Most Tables are Based on Where Someone Lives
- 1-Year and 5-Year Estimates
- Industry Breakout Using Census Codes, not NAICS
 - https://www2.census.gov/programs-surveys/acs/tech_docs/code_lists/2017_ACS_Code_Lists.pdf?#

Industry and Occupation

Industry

b. What was the name of this person's employer, business, agency, or branch of the Armed Forces?

c. What kind of business or industry was this?
Include the main activity, product, or service provided at the location where employed. (For example: elementary school, residential construction)

d. Was this mainly – Mark (X) ONE box.

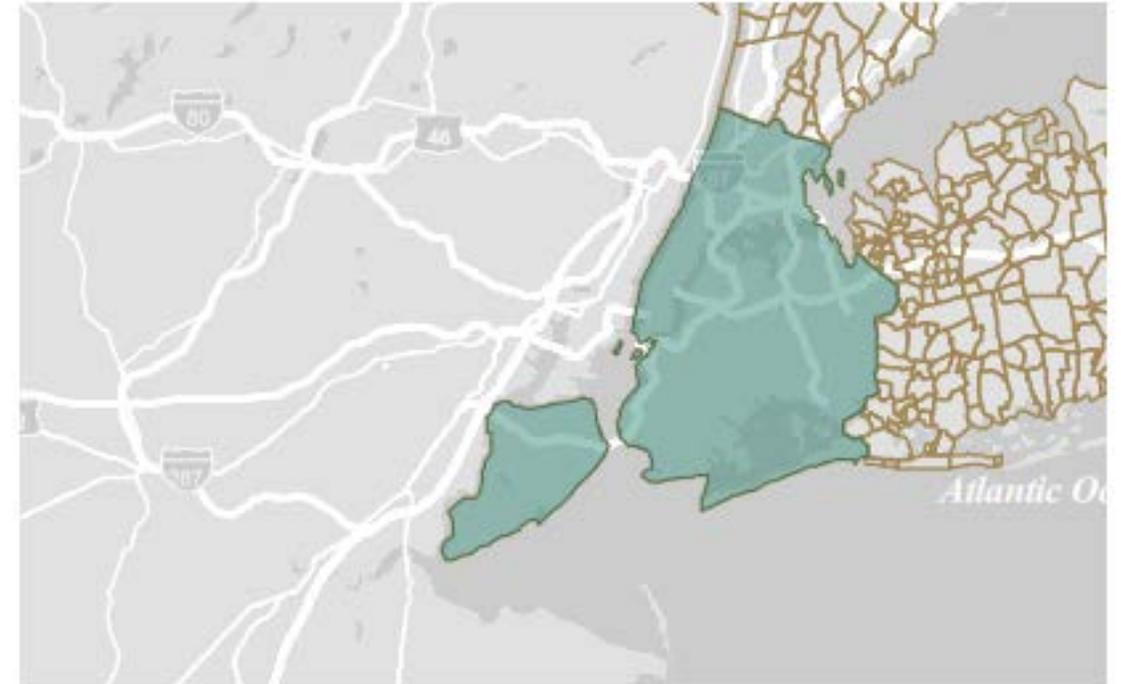
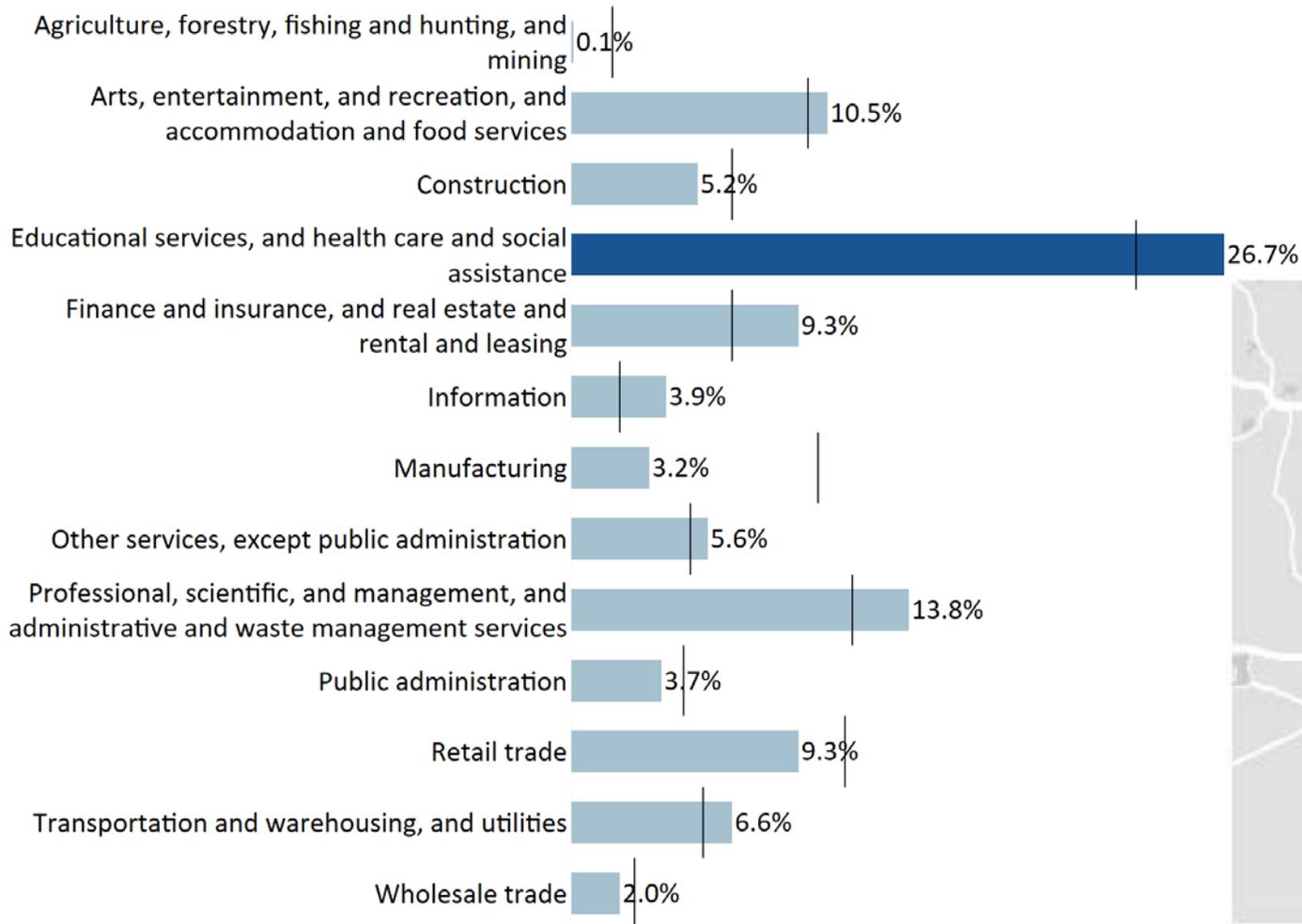
- manufacturing?
- wholesale trade?
- retail trade?
- other (agriculture, construction, service, government, etc.)?

Occupation

e. What was this person's main occupation?
(For example: 4th grade teacher, entry-level plumber)

f. Describe this person's most important activities or duties. *(For example: instruct and evaluate students and create lesson plans, assemble and install pipe sections and review building plans for work details)*

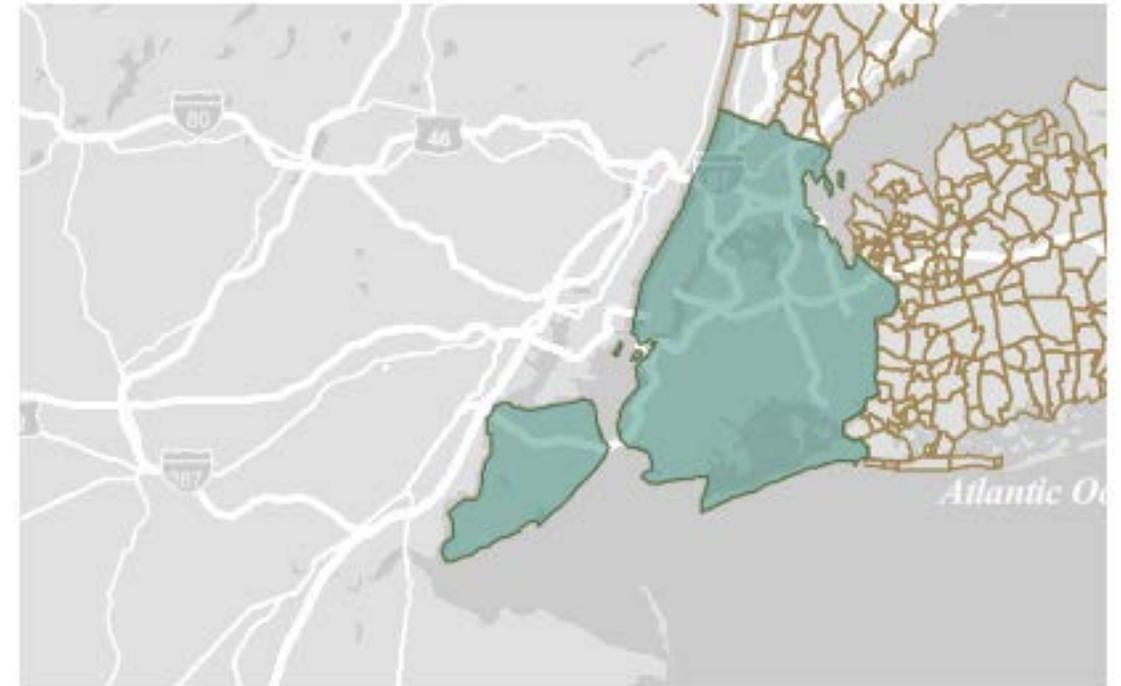
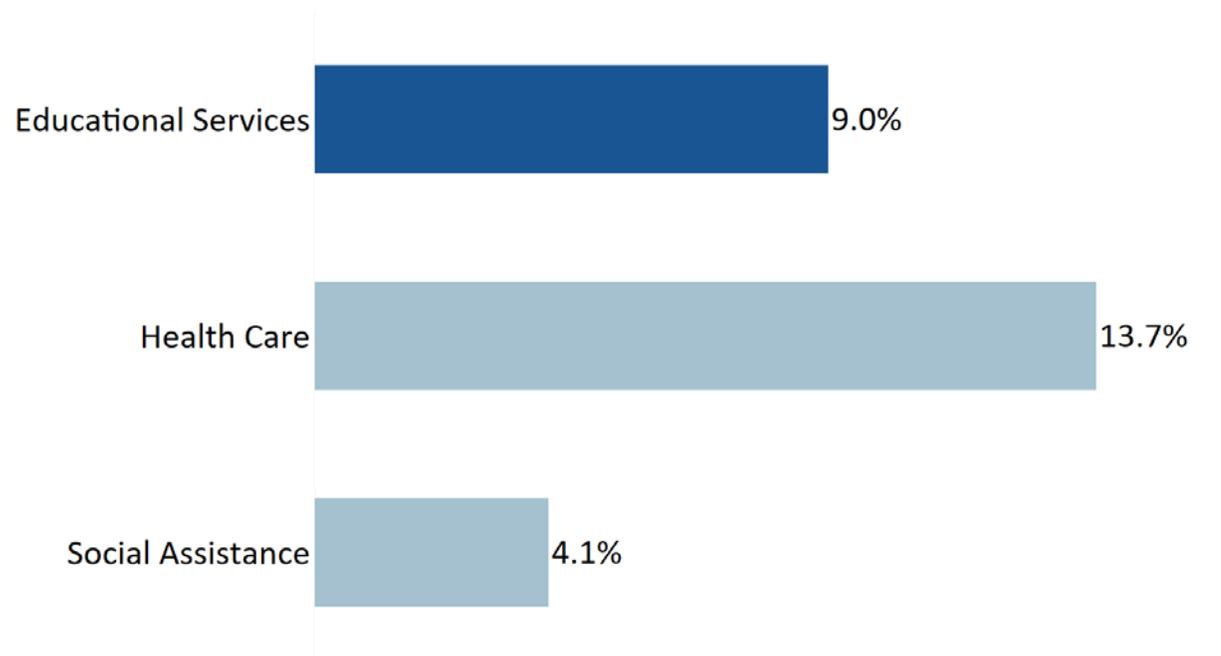
Industry Overview



Source: 2017 ACS 1-Year Estimates, Table DP03 New York City
 Note: Line represents national estimates

Industry Overview

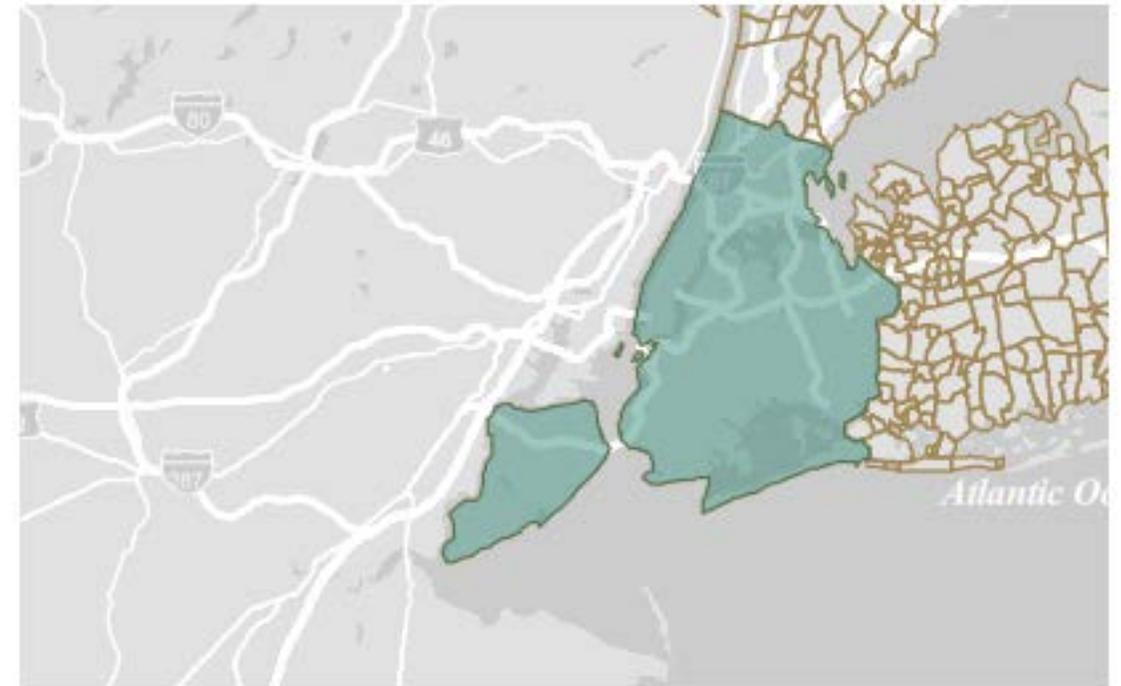
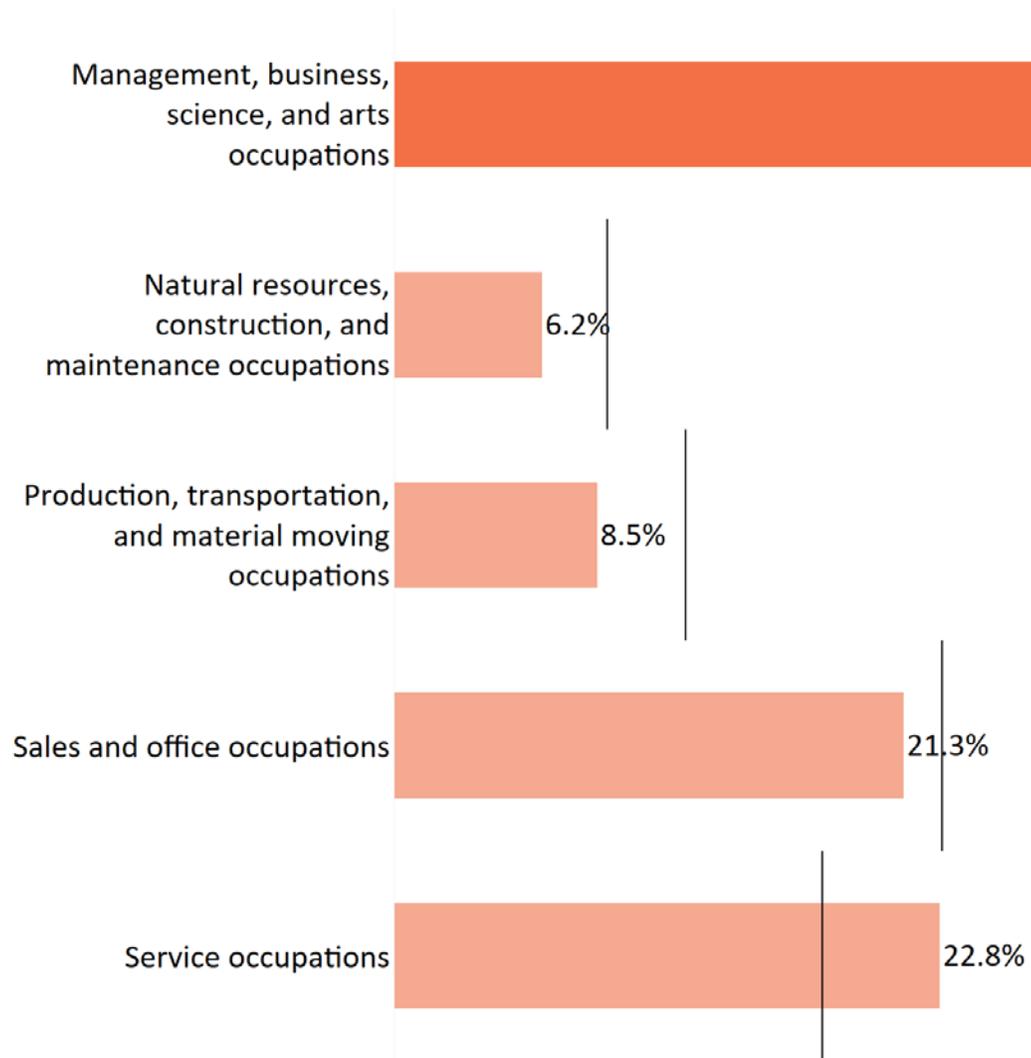
Educational Services, and Health Care, and Social Assistance



Source: 2017 ACS 1-Year Estimates, Table DP03 New York City

Note: Line represents national estimates

Occupation Overview

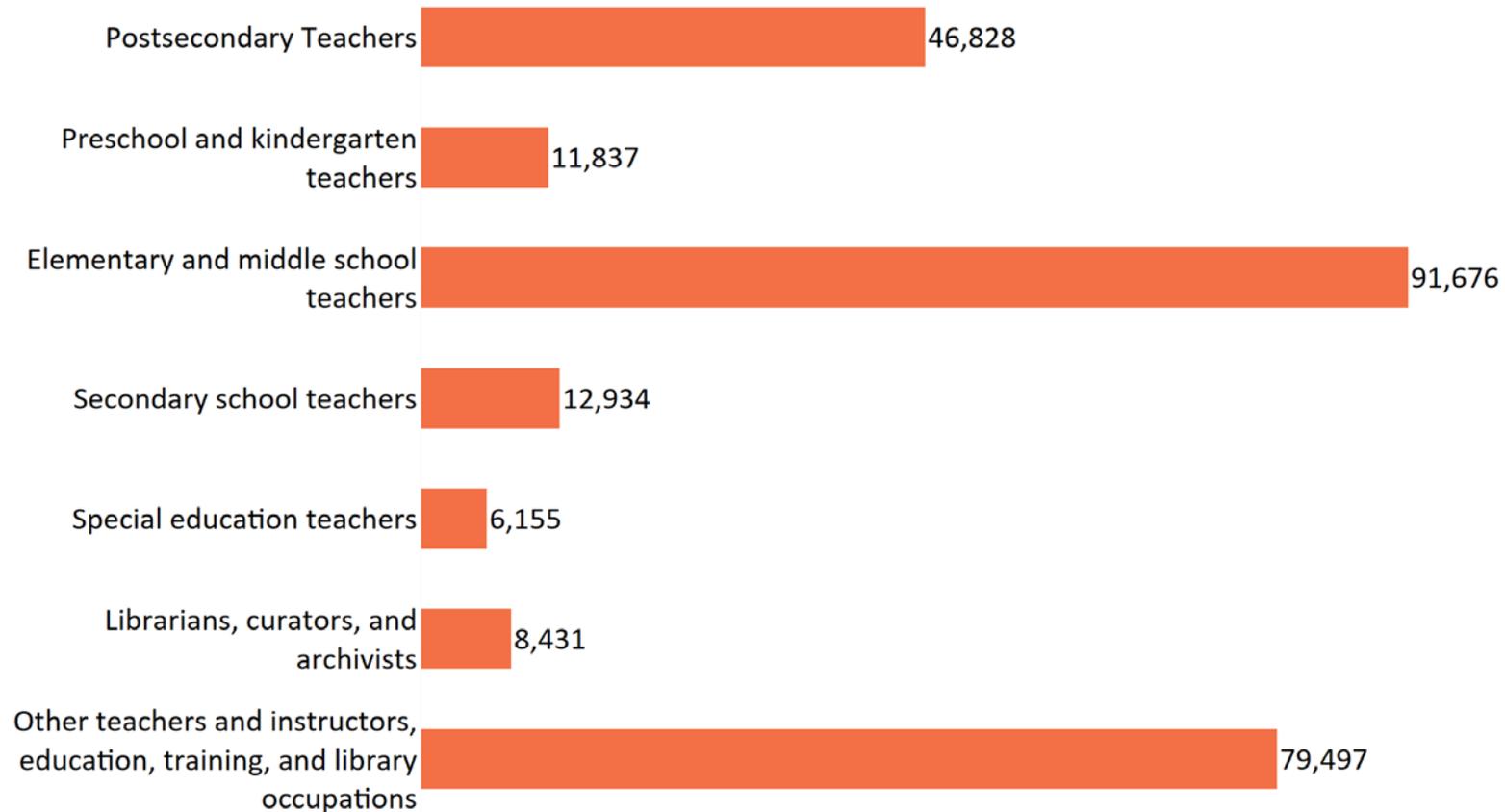


Source: 2017 ACS 1-Year Estimates, Table DP03 New York City
Note: Line represents national estimates

Management, business, science and arts occupations

-Education, legal, community service, arts, media

-Education, training, and library occupations



Industry and Occupation Breakouts

Industry	Occupation				
	Service occupations	Management, business, science, and arts occupations	Sales and office occupations	Production, transportation, and material moving occupations	Natural resources, construction, and maintenance occupations
Agriculture, forestry, fishing and hunting, and mining	0.0	1.2	0.3	0.5	1.9
Arts, entertainment, and recreation, and accommodation and food services	260.0	103.4	57.7	15.6	3.2
Construction	2.9	31.5	8.5	7.9	166.5
Educational services, and health care and social assistance	332.1	644.0	128.5	9.0	6.3
Finance and insurance, and real estate and rental and leasing	41.6	203.4	129.7	4.0	10.0
Information	4.4	118.0	28.3	2.9	7.5
Manufacturing	4.3	42.0	21.6	61.8	5.8
Other services, except public administration	115.7	52.3	24.6	21.5	19.4
Professional, scientific, and management, and administrative and waste management services	98.9	359.9	91.2	19.7	7.7
Public administration	58.8	61.3	31.9	2.2	2.8
Retail trade	22.8	61.6	267.1	31.7	7.4
Transportation and warehousing, and utilities	12.8	24.2	59.3	164.0	16.1
Wholesale trade	1.2	21.2	44.6	14.8	3.1

Industry and Occupation Breakouts (Cont.)

Additional Breakouts

- Race and Ethnicity
- Sex
- Class of Worker
- Earnings
- Commuting/Journey to Work

Earnings by Occupation

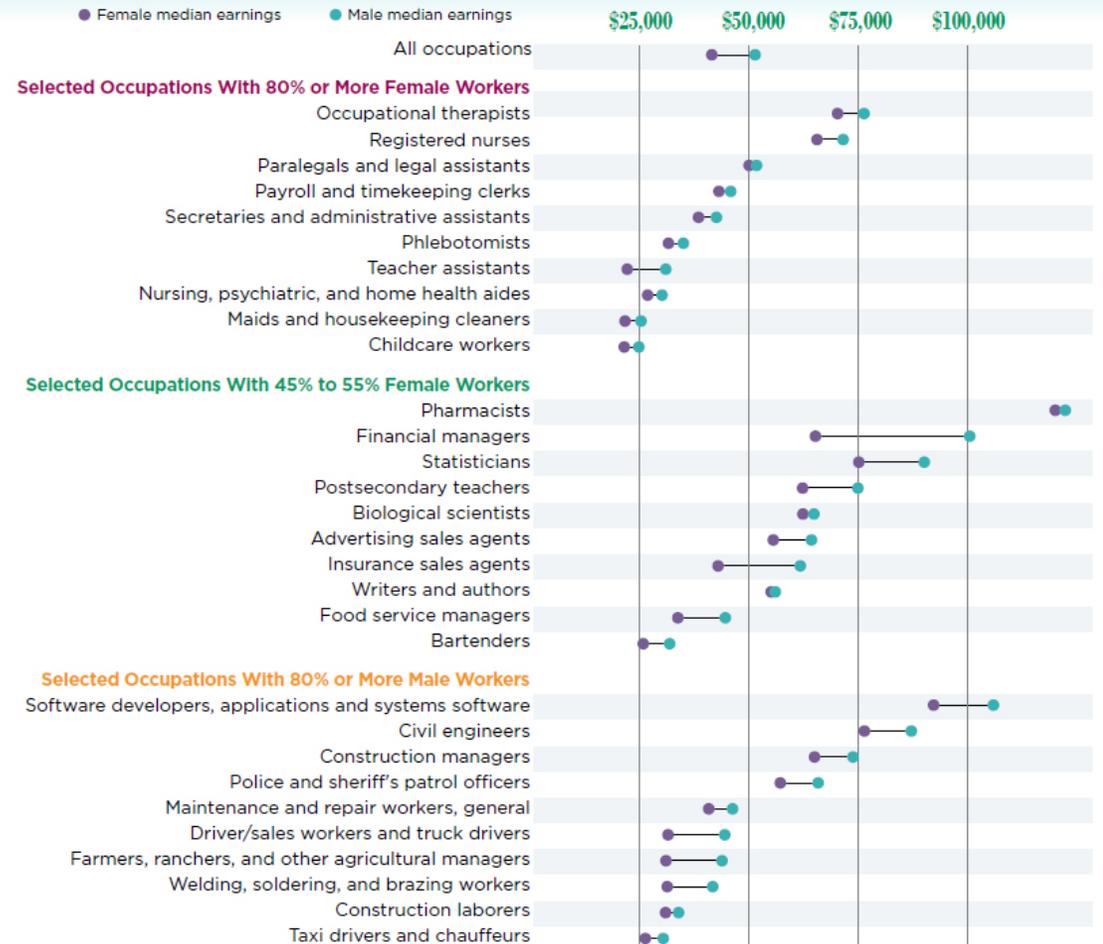
Education, training, and library occupations

- United States
 - \$50,307 (+/-142)
- New York
 - \$62,046 (+/-681)
- New York City
 - \$61,230 (+/-987)

Source: 2017 ACS 1-Year Estimates, Table B24021

Women's Earnings by Occupation

Median Earnings of Full-Time, Year-Round Workers in the Past 12 Months by Sex and Occupation



Commuting / Journey to Work

32 How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?

Person(s)

33 What time did this person usually leave home to go to work LAST WEEK?

Hour Minute

a.m. p.m.

34 How many minutes did it usually take this person to get from home to work LAST WEEK?

Minutes

31 How did this person usually get to work LAST WEEK? *If this person usually used more than one method of transportation during the trip, mark (X) the box of the one used for most of the distance.*

Car, truck, or van Motorcycle

Bus or trolley bus Bicycle

Streetcar or trolley car Walked

Subway or elevated Worked at home → SKIP to question 39a

Railroad Other method

Ferryboat

Taxicab



Average One-Way Commuting Time by Metropolitan Areas

Ten metros with some of the longest average commutes



Ten metros with some of the shortest average commutes



Note: Data are based on a sample and are subject to sampling variability. The differences in percentages in this table may not be statistically different from one another, or other metro areas not shown.

Health Insurance



Upcoming Webinar:

Exploring Census Data Webinar Series:
Healthcare – Key Census Data on Healthcare

More Information:

[census.gov/programs-surveys/acs/news/events/acs-healthcare-2019.html](https://www.census.gov/programs-surveys/acs/news/events/acs-healthcare-2019.html)



U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
[census.gov](https://www.census.gov)

16

Is this person **CURRENTLY** covered by any of the following types of health insurance or health coverage plans? Mark "Yes" or "No" for EACH type of coverage in items a – h.

- | | Yes | No |
|---|--------------------------|--------------------------|
| a. Insurance through a current or former employer or union (of this person or another family member) | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Insurance purchased directly from an insurance company (by this person or another family member) | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Medicare, for people 65 and older, or people with certain disabilities | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability | <input type="checkbox"/> | <input type="checkbox"/> |
| e. TRICARE or other military health care | <input type="checkbox"/> | <input type="checkbox"/> |
| f. VA (including those who have ever used or enrolled for VA health care) | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Indian Health Service | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Any other type of health insurance or health coverage plan – <i>Specify</i> | <input type="checkbox"/> | <input type="checkbox"/> |



Summary

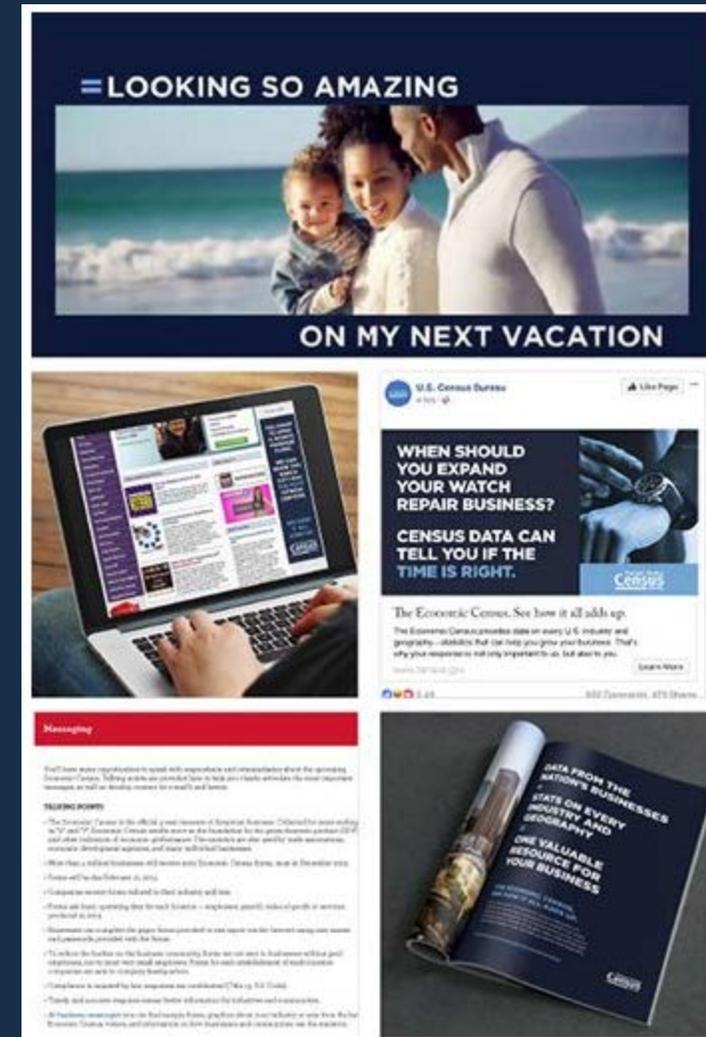
How can local business and economic development organizations utilize these data to help make businesses in their areas more successful?

- State and Local Government Employment data to understand the scope and composition of government employment.
- American Community Survey data to examine employment patterns across the United States.

Where did all this great data come from, and how can we help ensure it's high quality?

- Promote usage of the data from our ongoing Monthly, Quarterly, and Annual businesses surveys
- Promote response to these same surveys, including the baseline/benchmark *Economic Census*

Response Promotion



LOOKING SO AMAZING
ON MY NEXT VACATION

WHEN SHOULD YOU EXPAND YOUR WATCH REPAIR BUSINESS? CENSUS DATA CAN TELL YOU IF THE TIME IS RIGHT.

DATA FROM THE NATION'S BUSINESSES STATE ON EVERY INDUSTRY AND GEOGRAPHY ONE VALUABLE RESOURCE FOR YOUR BUSINESS

Exploring Census Data Webinar Series

- Next webinar scheduled for June 5, 2019
- Will cover key Emergency Management data available from the Census Bureau
 - Learn more at <https://www.census.gov/data/training-workshops.html>



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Q & A and Thank You!

Contact Me At:

melinda.d.caskey@census.gov

301-763-6432

robert.c.sawyer@census.gov

301-763-8688

For detailed questions concerning the Employment data, contact:

301-763-1487

For detailed questions concerning the 2020 Decennial, contact:

301-763-INFO or 800-923-8282

To schedule additional training with a Census Data Dissemination Specialist in

your area, please call 844-Ask-Data

Or email us at: census.askdata@census.gov



Reference Materials

North American Industry Classification System (NAICS)

www.census.gov/eos/www/naics

- A hierarchical classification system that groups establishments into industries based on the business activities in which they are primarily engaged.
- A comprehensive system covering the entire field of business activities.
- Used to collect, tabulate, analyze, and disseminate statistics.
- A common language used among the United States, Canadian, and Mexican statistical agencies
- Updated every five years

NAICS Structure - 20 Sectors

11	Agriculture, Forestry, Fishing and Hunting		53	Real Estate and Rental and Leasing	
21	Mining, Quarrying, and Oil and Gas Extraction		54	Professional, Scientific, and Technical Services	
22	Utilities		55	Management of Companies and Enterprises	
23	Construction		56	Administrative and Support and Waste Management and Remediation Services	
31-33	Manufacturing		61	Educational Services	
42	Wholesale Trade		62	Health Care and Social Assistance	
44-45	Retail Trade		71	Arts, Entertainment, and Recreation	
48-49	Transportation and Warehousing		72	Accommodation and Food Services	
51	Information		81	Other Services (except Public Administration)	
52	Finance and Insurance		92	Public Administration	

NAICS Hierarchy

Level	Code	Description
Sector	51	Information
Subsector	515	Broadcasting (except Internet)
Industry Group	5151	Radio and Television Broadcasting
Industry	51511	Radio Broadcasting
U.S. Industry	515112	Radio Stations



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Explore Census Data

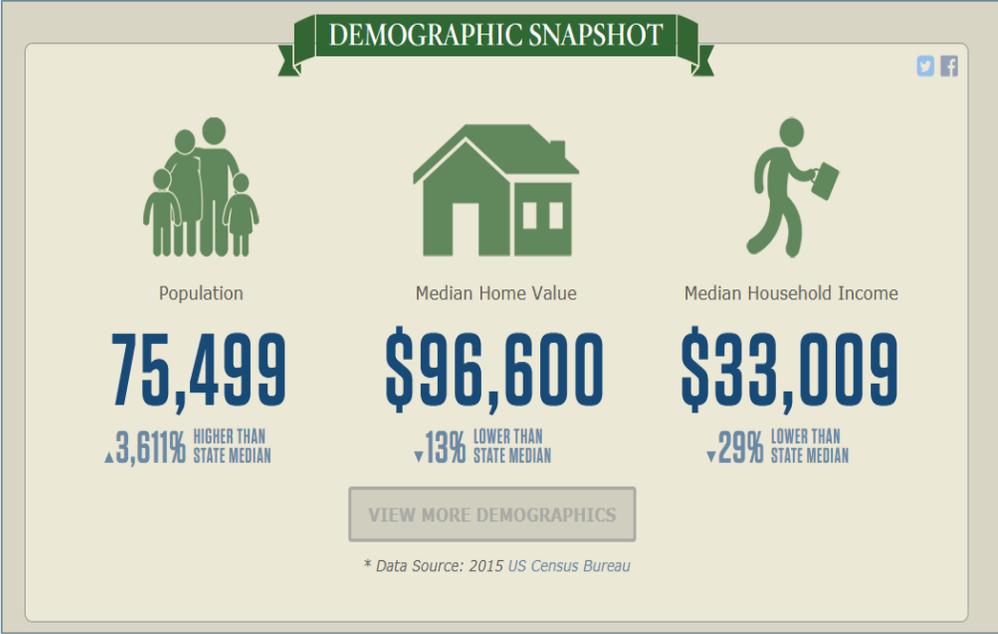
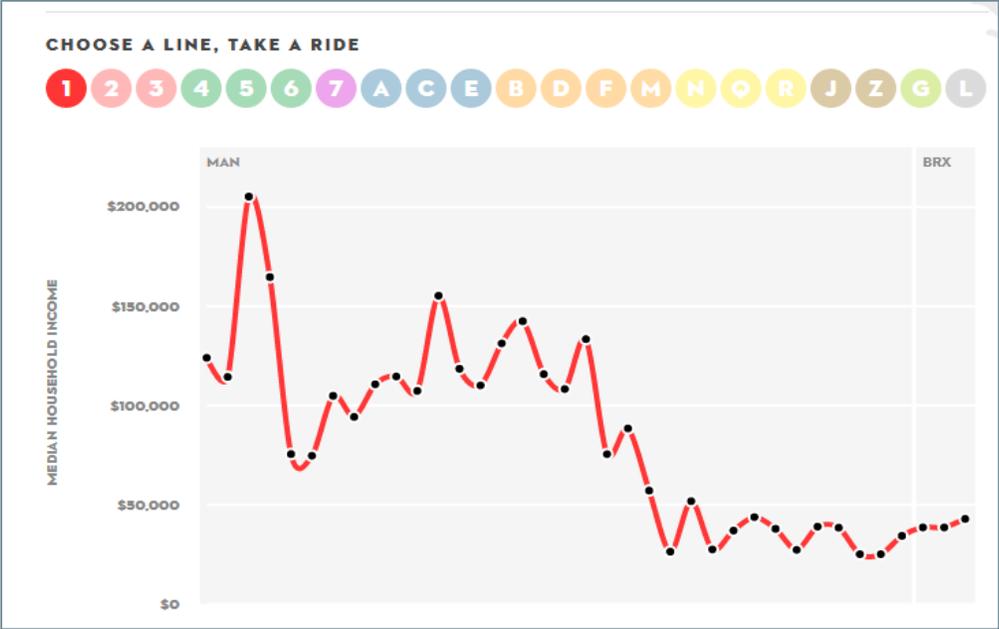
The Census Bureau is the leading source of quality data about the nation's people and economy.

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Send Feedback
cedsci.feedback@census.gov

Application Programming Interface (API)



census.gov/developers

Public Use Microdata Sample (PUMS)

Public Use Microdata Sample

Anonymized

Downloadable

- SAS and CSV
- AFF, FTP, DataFerrett

Individual Responses

- Must be tabulated and weighted by user

Representative Sample of the

Population

- 1-year (1%)
- 5-year (5%)

census.gov/programs-surveys/acs/data/pums.html

Handbooks

- Understanding and Using American Community Survey Data:
 - What All Data Users Need to Know – *available now*
 - What the Business Community Needs to Know – *available now*
 - What State and Local Governments Need to Know – *available now*

<https://census.gov/programs-surveys/acs/guidance/handbooks.html>