



Estimating HUD Assisted Household Employment by Industry Through Matched ACS Data

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This research is my own and should not be attributed to the Department.





Background

- HUD's main rental assistance programs* assist over 9 million people in over 4 million low-income households annually
- The programs are administered by local Public Housing Agencies or property owners, who collect required administrative data on households and report the data to HUD
- HUD has provided its administrative data to the Census Bureau's Center for Administrative Records Research and Applications (CARRA) for a number of years

*Housing Choice Voucher, Public Housing, and Project Based Rental Assistance Programs



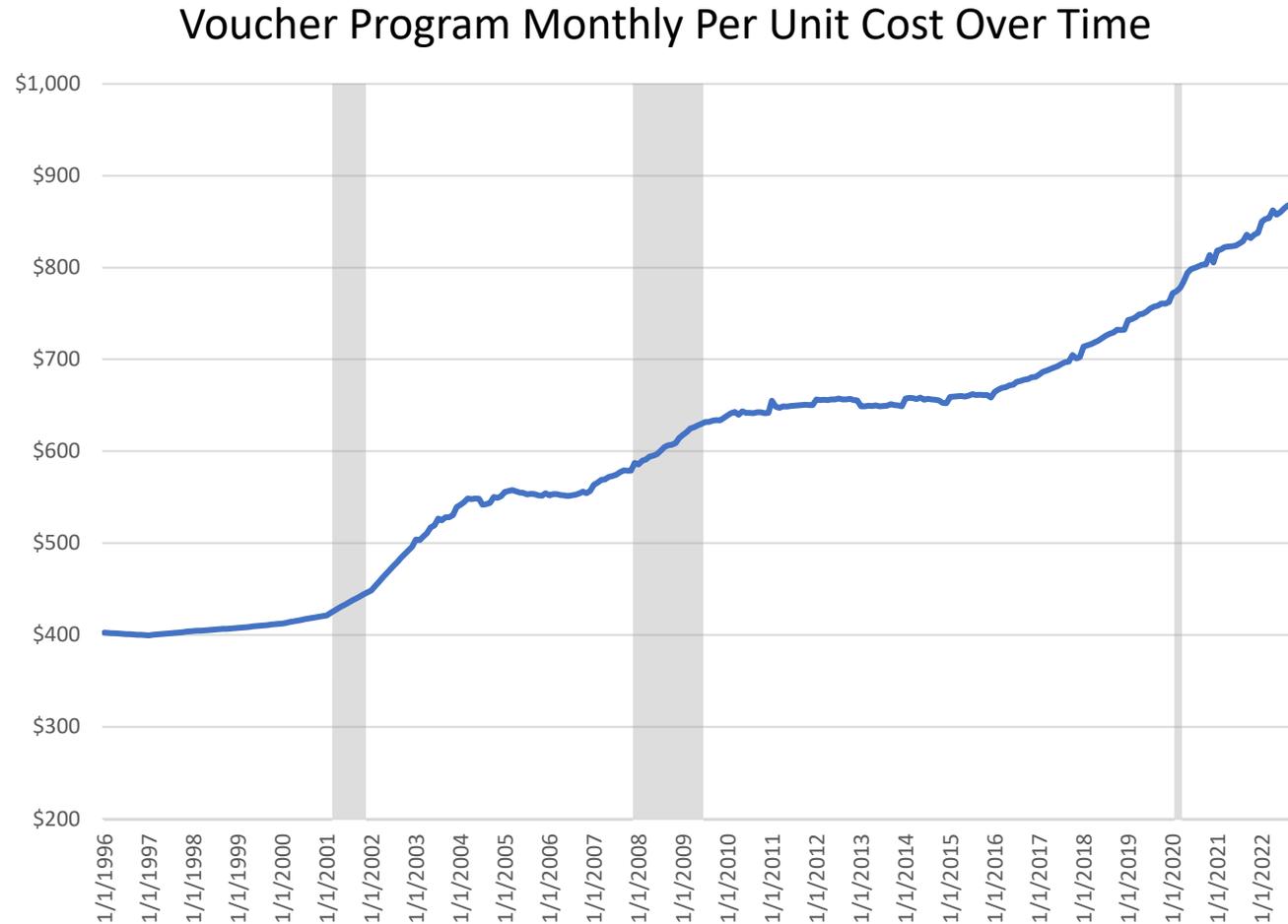
Background

- HUD's administrative data include total household income as well as source of income (wages, benefits, etc.)
- About 22% of HUD assisted households have wages as their major source of income (2021 *Picture of Subsidized Households*)
- Under program rules, households generally pay 30% of their income towards rent, with a subsidy making up the remainder



Background

- Program costs are therefore sensitive to economic condition



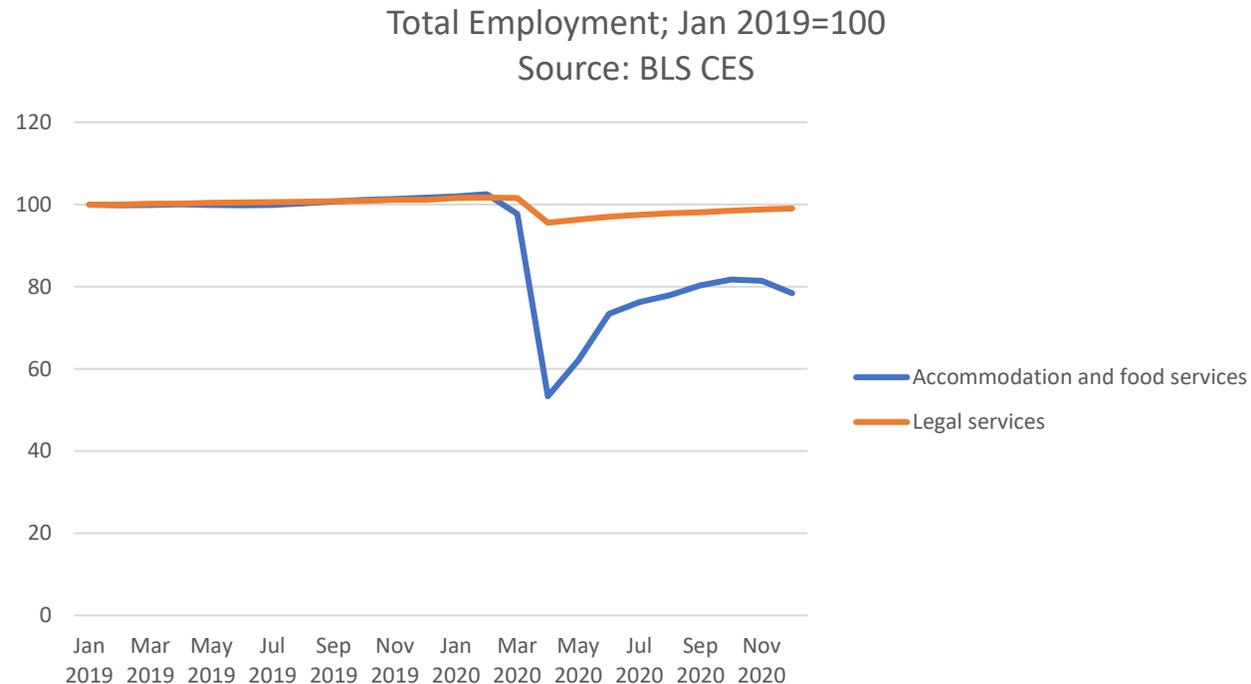
Shading indicates official recession.





Background

- The Covid-19 induced recession in 2020 lead to a sharp downturn in employment
- Because of the nature of the shock, different industries experienced sharply different effects





Background

- The ACS asks respondents for their industry and occupation, if employed

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.)?

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Background

- The Census Bureau uses its Person Identification Validation System to assign a unique identifier, a Protected Identification Key (**PIK**) based on Social Security Numbers, Dates of Birth and Names, to the microdata in both the ACS and HUD's administrative tenant data.
- The Census also assigns a Master Address File Identification code (**MAFID**) based on the address of a housing unit.



Analysis

HUD Housing Choice Voucher Program
Participants



PIK

HUD Public Housing Program
Participants



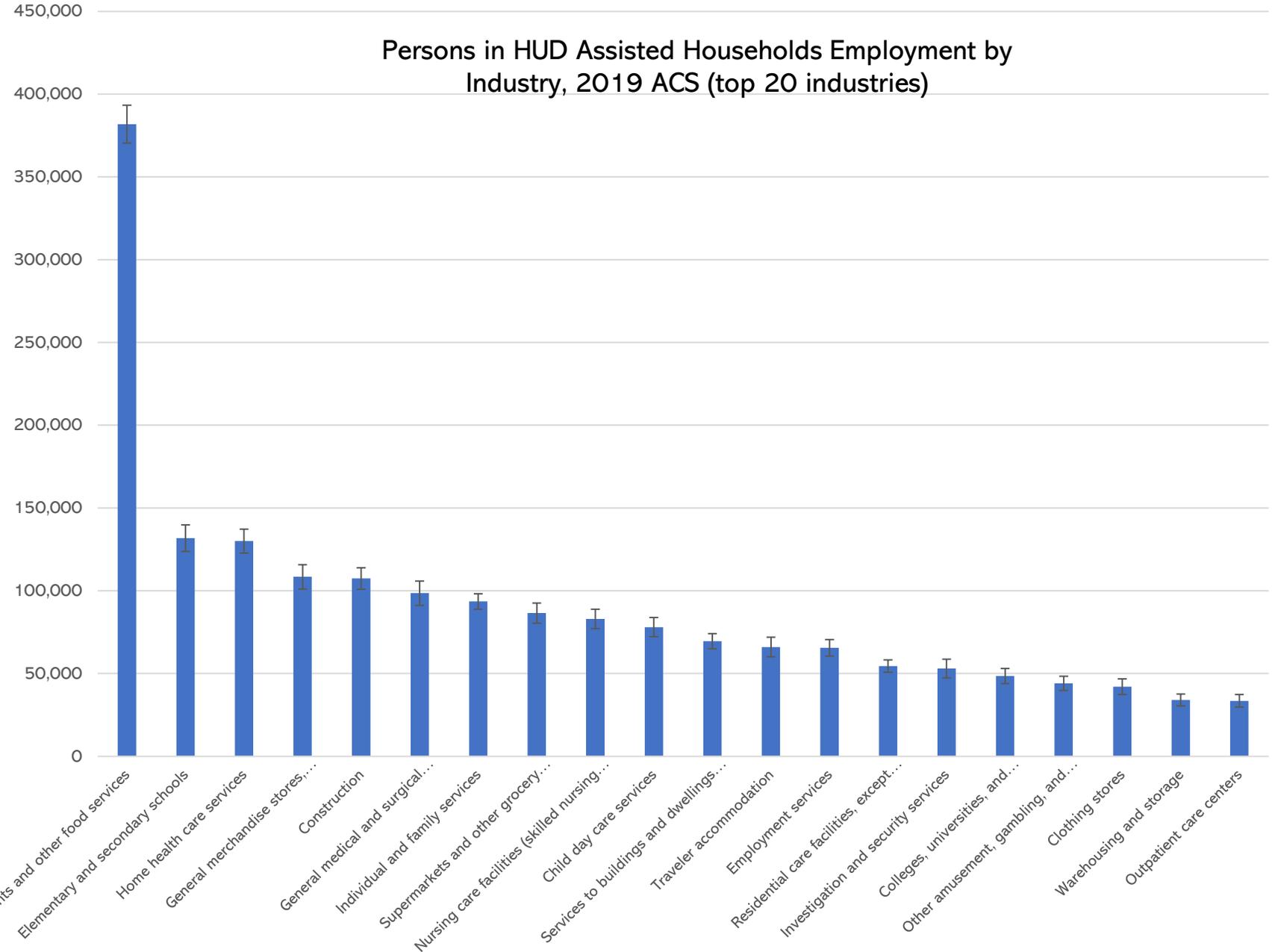
MAFID

HUD Project Based Rental Assistance
Program Participants

ACS
Microdata



Results

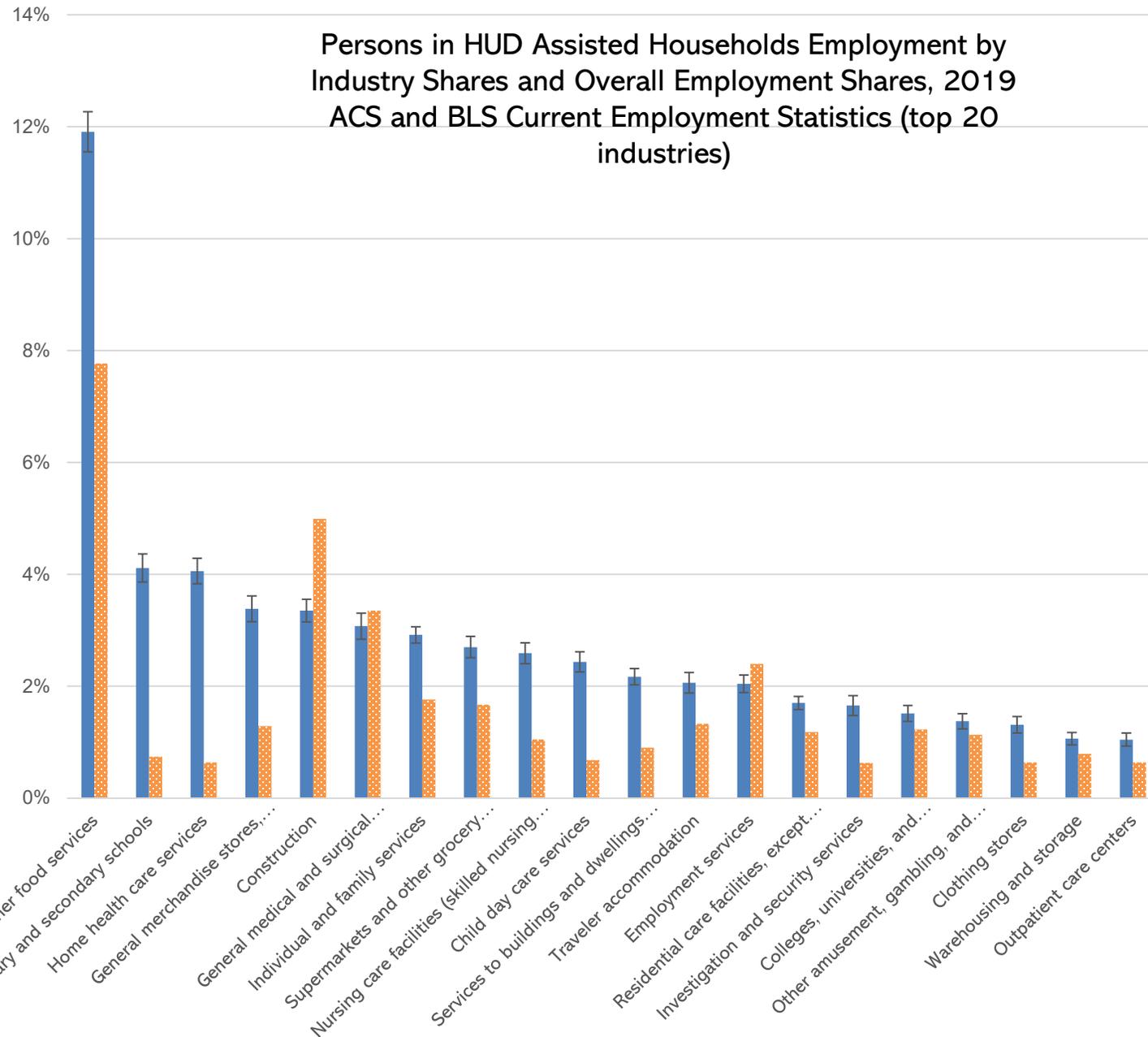


The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY21-POP001-0059





Results



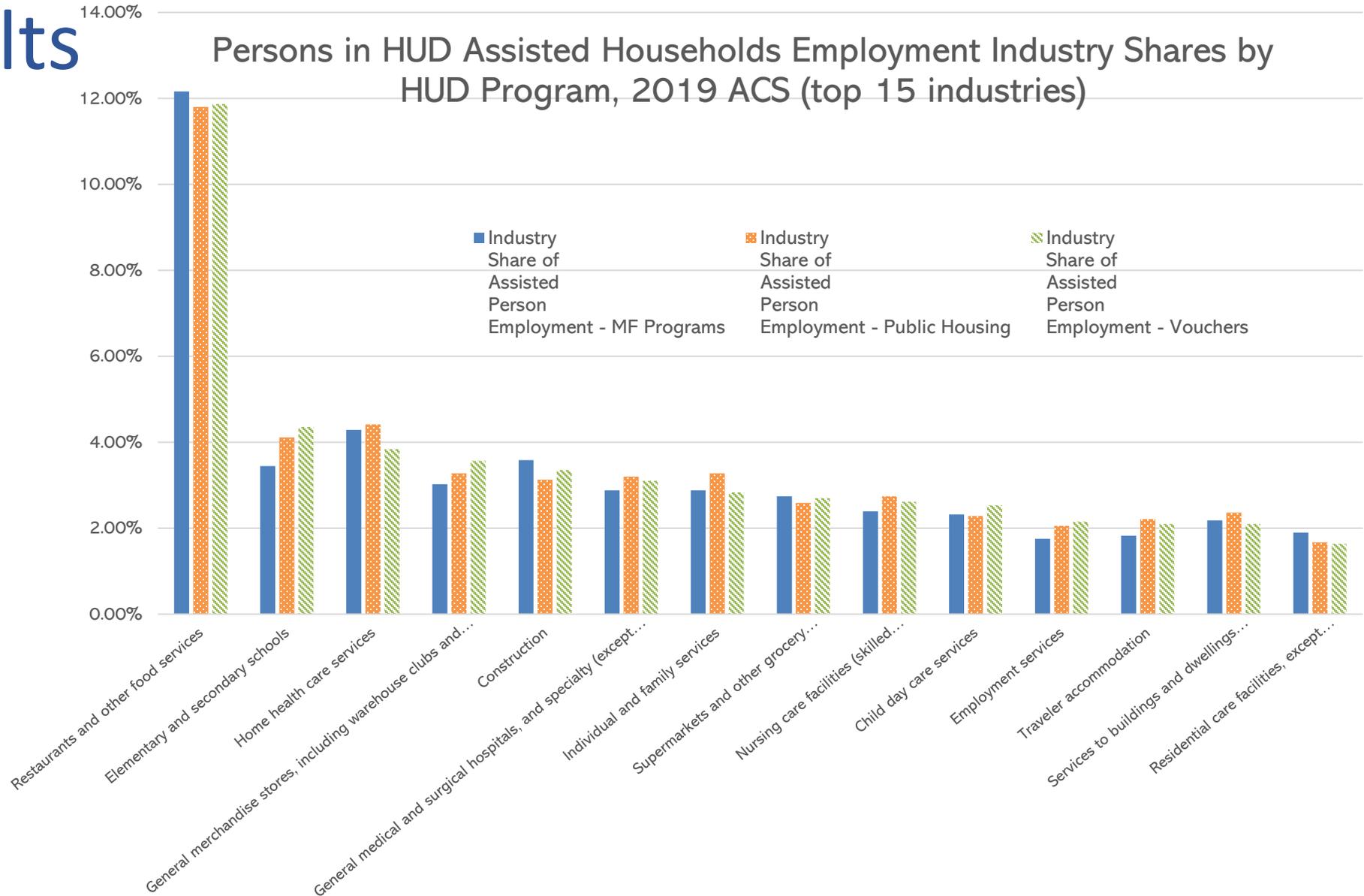
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Results

Persons in HUD Assisted Households Employment Industry Shares by HUD Program, 2019 ACS (top 15 industries)



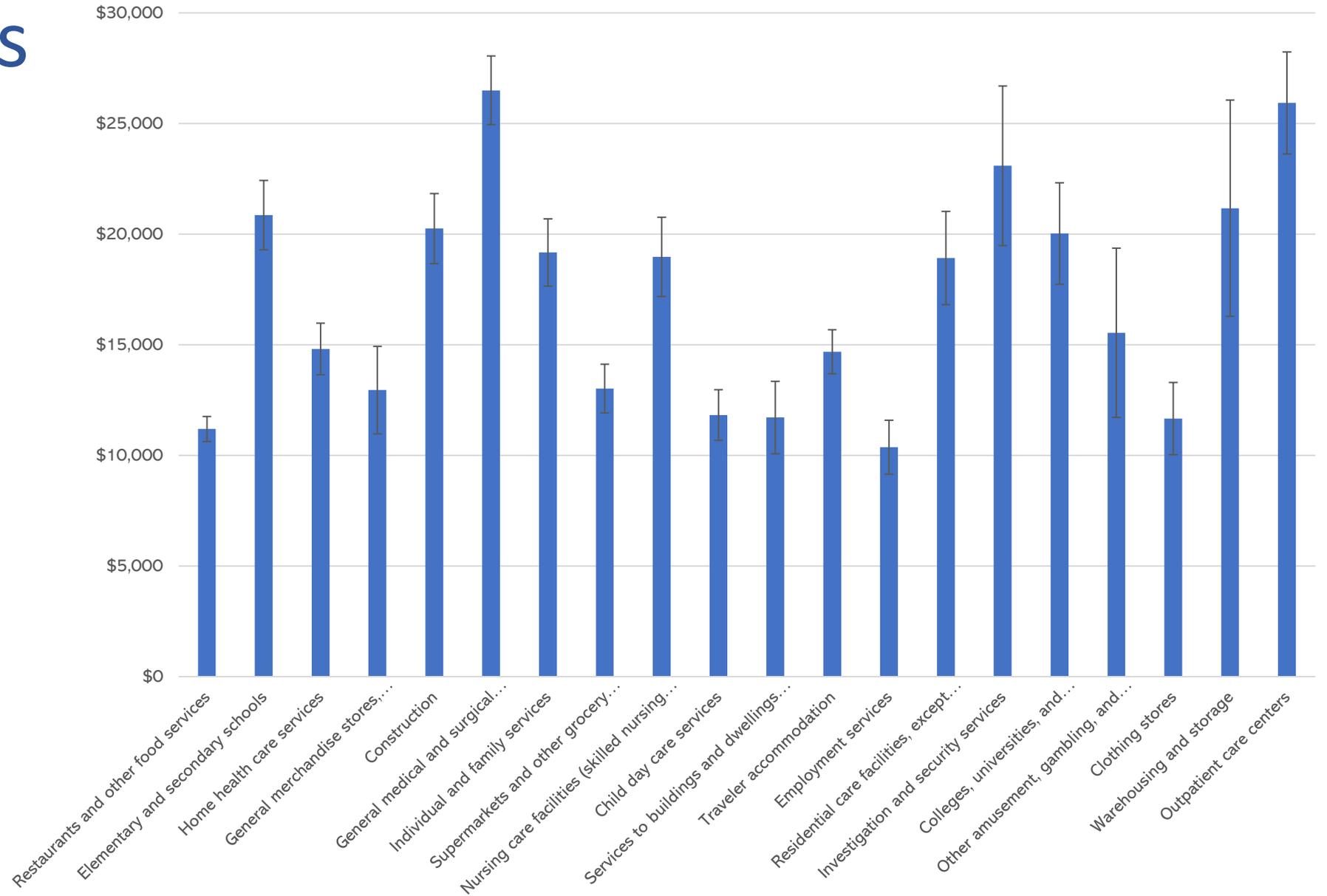
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Results

Persons in HUD Assisted Housing Average Annual Wage by Industry, 2019 ACS



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Results

| | Change in Per Unit Cost in the Housing Choice Voucher Program |
|------|---|
| 2013 | -1.0% |
| 2014 | 1.0% |
| 2015 | 0.6% |
| 2016 | 2.0% |
| 2017 | 3.0% |
| 2018 | 4.3% |
| 2019 | 4.0% |
| 2020 | 5.4% |
| 2021 | 4.2% |
| 2022 | 4.4% |



Challenges

- Non-standard (i.e., not NAICS) Industry Codes used by Census
- Learning curve for working in Integrated Research Environment at Census



Next Steps

- Continue tracking over time
- Other applications of matched ACS-HUD data?
 - Or other Census surveys like the COVID Pulse survey