

NC DEPARTMENT
of COMMERCE
LABOR & ECONOMIC
ANALYSIS

LMI TUESDAYS!

Session 2025-13: Crash Course on Occupational Data

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Jeff Rosenthal
Manager, Occupational Analysis Team
NC Department of Commerce

Josh DeLaTorre
Social Research Specialist
NC Department of Commerce

Overview of Session

- What do we mean by occupation?
- Occupational data sources and strengths/how to use each
 - OEWS
 - Projections
 - ACS
 - Public Use Data: PUMS and IPUMS USA
 - *3rd* Party
- Helpful resources

What is an Occupation?

- Merriam-Webster defines as...pretty broad
 - activity in which one engages
 - principal business of one's life: VOCATION
 - (and 2 others relating to holding land/position or control over a place)
- "Cultural constructions based on structural realities of jobs having wide societal relevance." Grouping of work activities that are general and transferable among employers and often among industries (Kalleberg & Berg 1987, p. 36)
- Easy example: Cashier
- Easy examples?: Nurse, Teacher

What is it about Occupations?

- Occupations often associated with different concepts/topics
 - Groupings of tasks and skills
 - Social class and Occupational Prestige
 - Income and Non-economic job rewards
 - General social trends like polarization (routine x cognitive), and differing impacts of automation

Occupational Employment and Wage Statistics (OEWS)

- **Large Representative Sample**
- **Comprehensive Geographic Coverage**
- **Extensive Range of Business Industries**
- **Publicly Available Estimates**

U.S. Bureau of Labor Statistics



Occupations

- The OEWS program uses the Standard Occupational Classification (SOC) system to classify jobs into occupations based on job duties.

Standard Occupational Classification System

AA-BCCD

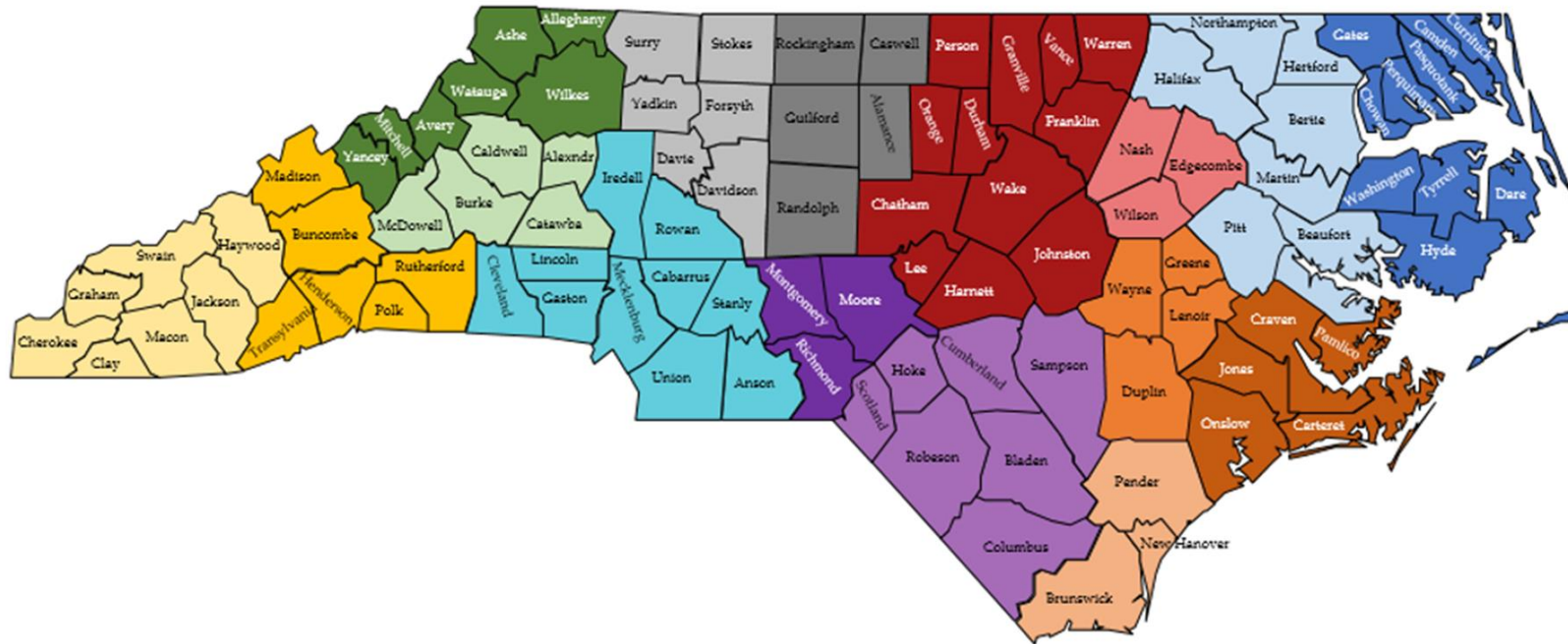
- **AA** = Major Group
- **B** = Minor Group
- **CC** = Broad Occupation
- **D** = Detailed Occupation

Occupation Classification

- **Fast Food Cooks 35-2011**
 - **35**: Major Group-
 - **35**-0000 **Food Preparation & Serving Related**
 - **2**: Minor Group-
 - 35-**2**000 **Cooks & Food Preparation Workers**
 - **01**: Broad Occupation-
 - 35-2**01**0 **Cooks**
 - **1**: Detailed Occupation-
 - 35-201**1** **Cooks, Fast Food**

Projections Data

Opportunity to look at job trends for the future
(2022-2032)



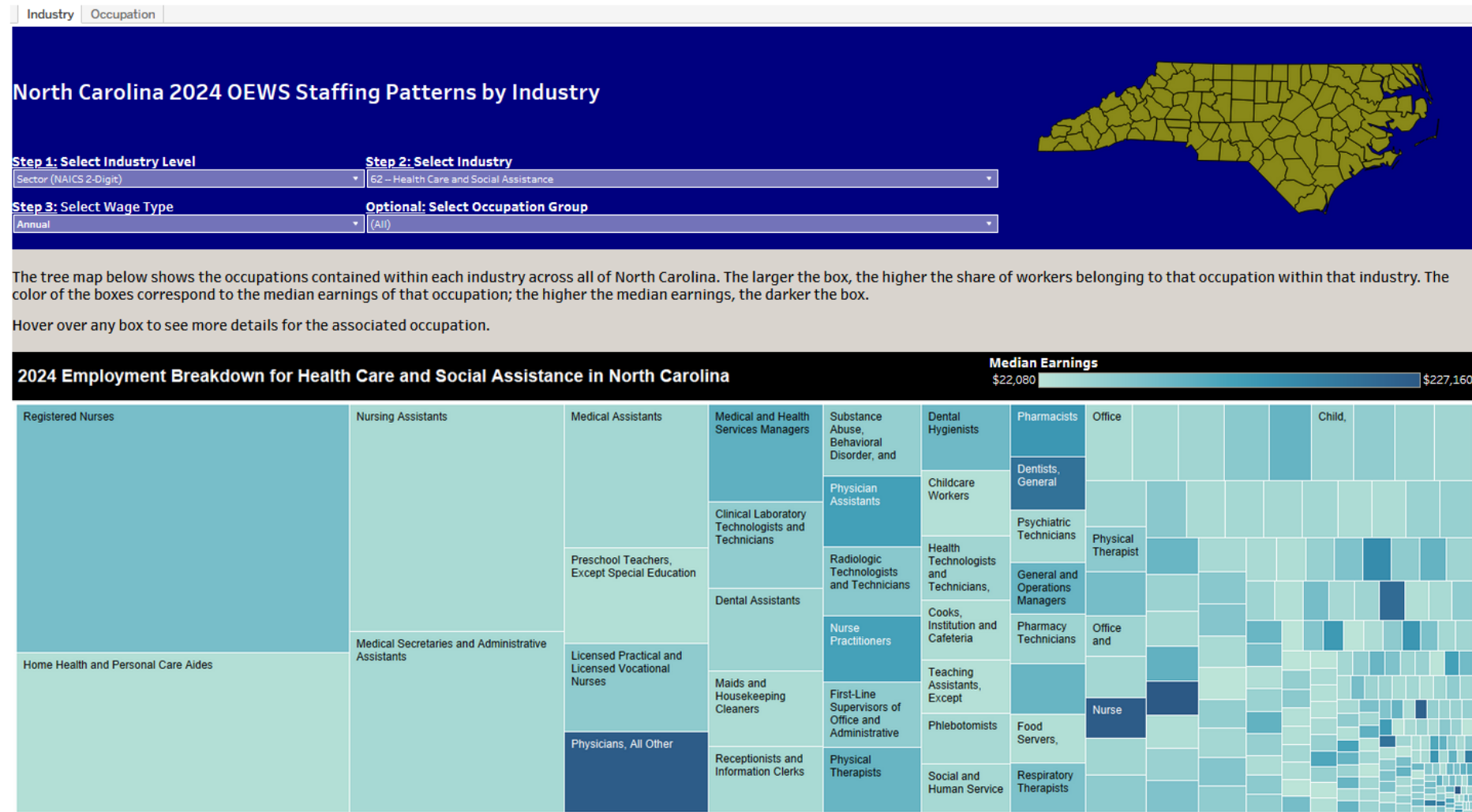
Projections Data

- Made largely by applying Industry Projections through Industry-Occupation Matrix (~ staffing pattern)

Staffing Patterns Data

(<https://analytics.nccommerce.com/Staffing-Patterns/>)

Staffing Pattern Data by Industry

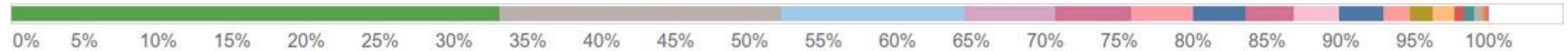


Staffing Pattern Data by Occupation

2024 Statewide Employment for Financial Managers

21,170

Statewide Industry Shares of Financial Managers Employment



Industry Legend											
Finance and Insurance	Management of Companies and Enterprises	Professional and Technical Services	Manufacturing	Unclassified	Wholesale Trade						
Occupation	Industry	Naics Code	Employment	Industry Share of Occ.	Earnings -- 10th Percentile	Earnings -- 25th Percentile	Earnings -- mean	Earnings -- Median	Earnings -- 75th Percentile	Earnings -- 90th Percentile	Total Occ. Employment
Financial Managers	Finance and Insurance	52	7,000	33.1%	\$80,480	\$119,070	\$183,540	\$163,240	\$216,740		21,170
	Management of Companies and Enterprises	55	4,030	19.0%	\$108,610	\$133,920	\$194,990	\$168,160	\$217,240		21,170
	Professional and Technical Services	54	2,630	12.4%	\$99,040	\$125,580	\$178,770	\$165,610	\$216,300		21,170
	Manufacturing	31-33	1,300	6.1%	\$99,150	\$122,650	\$162,200	\$152,150	\$195,490	\$238,400	21,170
	Unclassified	99	1,090	5.1%	\$95,770	\$107,700	\$142,340	\$134,360	\$163,500	\$192,290	21,170
	Wholesale Trade	42	880	4.2%	\$97,880	\$123,850	\$177,520	\$161,400	\$212,980		21,170
	Administrative and Waste Services	56	750	3.5%	\$74,070	\$106,330	\$156,820	\$146,760	\$201,260	\$231,450	21,170
	Health Care and Social Assistance	62	690	3.3%	\$90,150	\$108,560	\$162,620	\$136,680	\$188,980	\$234,530	21,170
	Construction	23	650	3.1%	\$84,620	\$105,580	\$154,740	\$151,520	\$189,900	\$220,680	21,170
	Educational Services	61	640	3.0%	\$83,110	\$106,550	\$154,810	\$136,290	\$178,300	\$226,450	21,170

Projections Data

- Made largely by applying Industry Projections through Industry-Occupation Matrix (~ staffing pattern)
- Published at overall, occupational family (2-digit), and detailed (6-digit) levels
- Information like growth rate and openings are key
- Feed into career information like 'Star Jobs'

American Community Survey (ACS)

Produced by the [U.S. Census Bureau](#)

Household [Survey](#) of U.S. (over 3.5 million households)

For occupations: (after asking about class of worker and industry):

e. What was this person's main occupation? <i>(For example: 4th grade teacher, entry-level plumber)</i>
<input type="text"/>
f. Describe this person's most important activities or duties. <i>(For example: instruct and evaluate students and create lesson plans, assemble and install pipe sections and review building plans for work details)</i>
<input type="text"/>
<input type="text"/>
<input type="text"/>

American Community Survey (ACS)

Data is Annual

- 1-year 2024 to release in September 2025
- 5-year 2024 (2020, 2021, 2022, 2023, 2024) to release in December 2025

Uses Census Occupational Codes

- Roughly 475 detailed occupations
 - <https://www.census.gov/topics/employment/industry-occupation.html>
 - <https://www.census.gov/topics/employment/industry-occupation/guidance/code-lists.html>
- Based on [SOC manual](#)
 - **Census** Marketing and Sales Managers: 0050
 - **SOC** Marketing and Sales Managers: 11-2020
 - Marketing Managers 11-2021
 - Sales Managers 11-2022

American Community Survey (ACS)

Strengths/when to use

- When you are focused on households/workers rather than jobs
 - Can see by Sex and race/ethnicity ([B24010](#)), Industry ([B24032](#)), Class of Worker ([B24091](#))
- When you want a more detailed geographical area
 - Can get more levels of data including county level data (with Margins of Error)
- Can be found: <https://data.census.gov/>

Public Use Files: Census PUMS, IPUMS USA

Census Public Use Microdata Sample (PUMS)

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

Integrated Public Use Microdata Series (IPUMS)

<https://usa.ipums.org/usa/about.shtml>

Strengths/when to use

- When you need more than one variable
- Historical analysis

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Strengths/when to use

- When you need more than one variable
- Historical analysis
- **Warning! You will need to know how to work with data/statistics**

3rd Party Sources: Lightcast, JobsEQ, etc.

Provides Labor Market Data including occupational information

- Can be useful in places/examples where governmental sources do not publish.
- Requires subscriptions

Helpful Resources

- Occupational Wage Lookup Tool (<https://analytics.nccommerce.com/Occupational-Wage-Lookup/>)
- OEWS Staffing Patterns (<https://analytics.nccommerce.com/Staffing-Patterns/>)
- OEWS National Data (<https://www.bls.gov/oes/tables.htm>)
- Occupational Projections Interactive Tables (<https://analytics.nccommerce.com/projections/occ/>)
- Occupational Projections Dashboard (<https://analytics.nccommerce.com/Occupation-Projections/>)
- D4 (<https://d4.nccommerce.com/OESSelection.aspx>)
- O*NET (<https://www.onetonline.org/>)
- NCcareers.org (<https://nccareers.org/>)



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Thank You!

Josh DeLaTorre

joshua.delatorre@commerce.nc.gov

Jeff Rosenthal

jeff.rosenthal@commerce.nc.gov