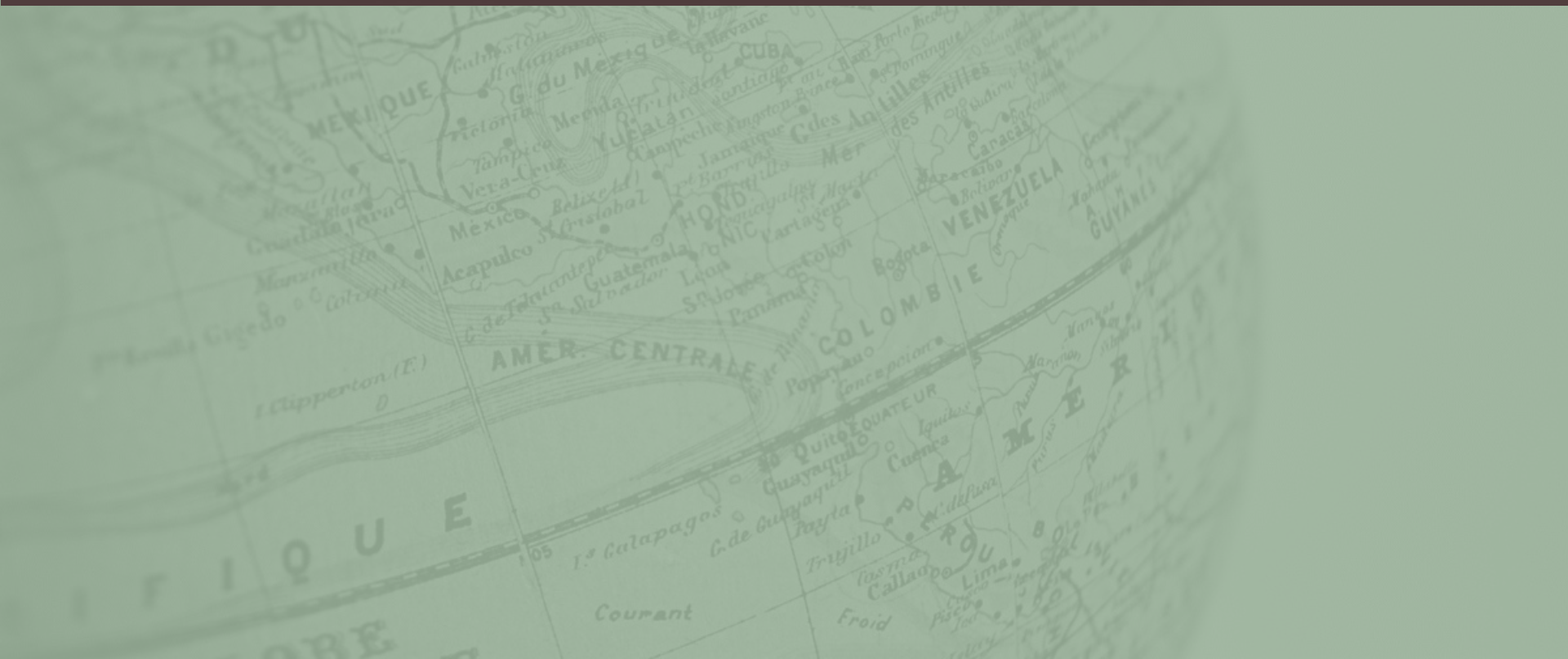# EXAMINING DIFFERENCES IN DEMOGRAPHIC VARIABLES BETWEEN MARYLAND'S RESIDENTS AND WORKERS: A COMPARISON BETWEEN GROUPS AND ACROSS THE STATE
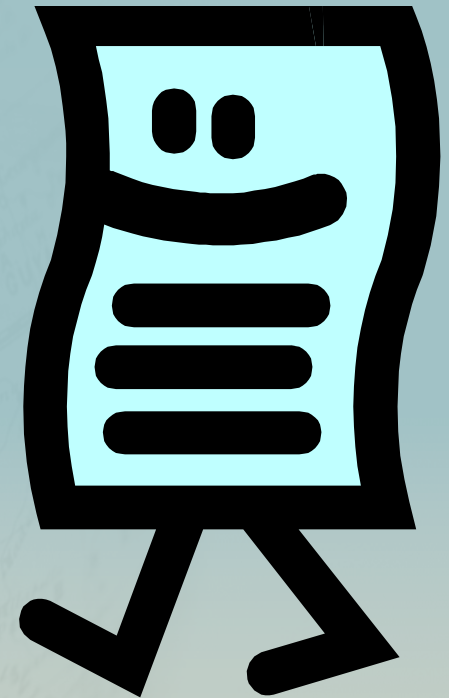
Hillary Huffer - Economist/LMI Manager

Office of Workforce Information and Performance

2014 Esri Mid-Atlantic User Conference – Baltimore, MD – 12/4/14
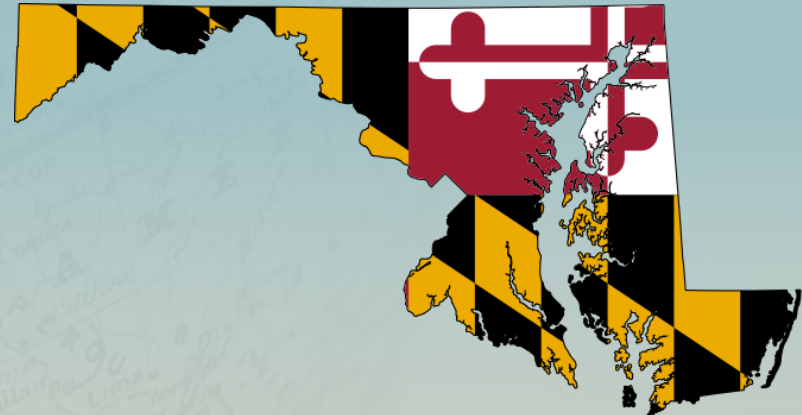
OUTLINE

- Quick Facts
- Why Important
  - State Level
  - County Level
- State Level
  - Race
  - Education
- County Level
  - Education
- Other Boundaries
- Conclusion/Questions

MARYLAND QUICK FACTS

- Population of 5.9 million
    - 2.9 m civilian, employed – at work residents
    - 200k unemployed residents
- Approximately 2.6 million jobs in MD
- Approximately 166,000 reporting units

NOTE ABOUT THE DATA

- Data used in this presentation stems from the U.S. Census Bureau

- Part of the data is 2012 PUMS data from the ACS
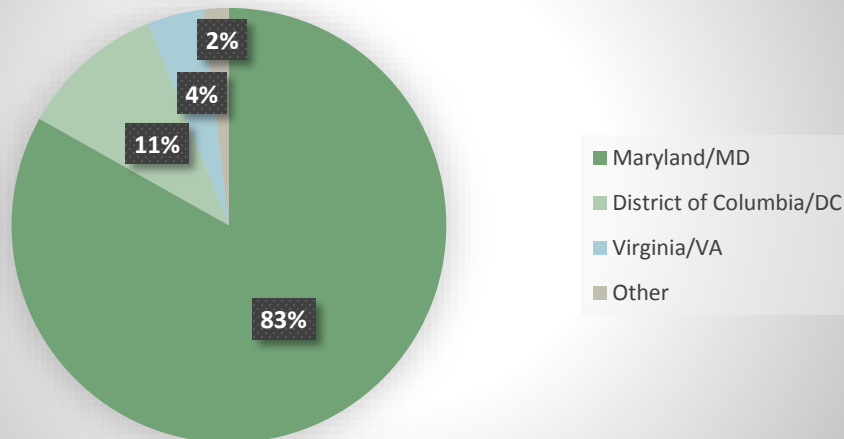
- Part of the data is 2011 from LEHD

WHY IS THIS DISTINCTION IMPORTANT?

- Important to distinguish groups
  - 1) Not all residents work in same county or state(e.g., some Marylanders commute to DC for work)
  - 2) Not all workers reside in same county or state(e.g., some people employed in MD commute from VA)
  - 3) Differences exist among employed vs. unemployed MD residents
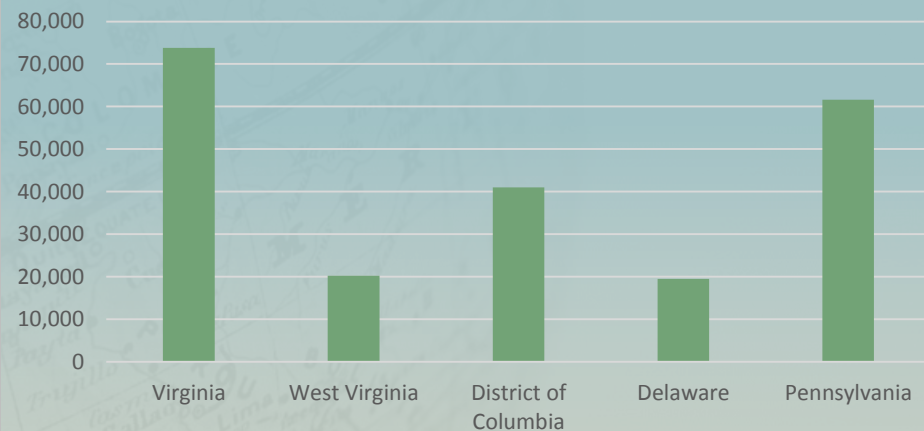- Can have important policy implications

IS THE NUMBER OF PEOPLE COMMUTING ON A STATE LEVEL LARGE ENOUGH TO MATTER?

- YES!
  - Approximately 500,000 Marylanders commute elsewhere
  - More than 200,000 commute to MD from VA, DC, PA, DE, and WV
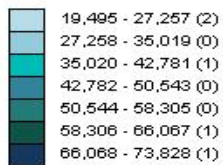
MD Residents: Place of Work

- 2%
- 4%
- 11%
- 83%

Legend:
- Maryland/MD
- District of Columbia/DC
- Virginia/VA
- Other

MD Workers: # of Commuters in Neighboring States

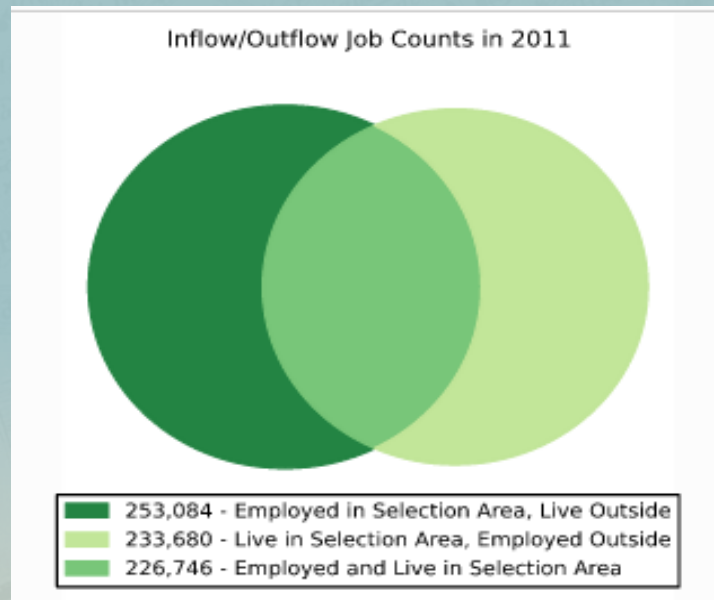| State	Commuters
Virginia	~74,000
West Virginia	~20,000
District of Columbia	~41,000
Delaware	~20,000
Pennsylvania	~61,000

AN ASIDE

- Although mapping capabilities available in data retrieval tool (see below) , more visually appealing maps are easily made in ArcMap

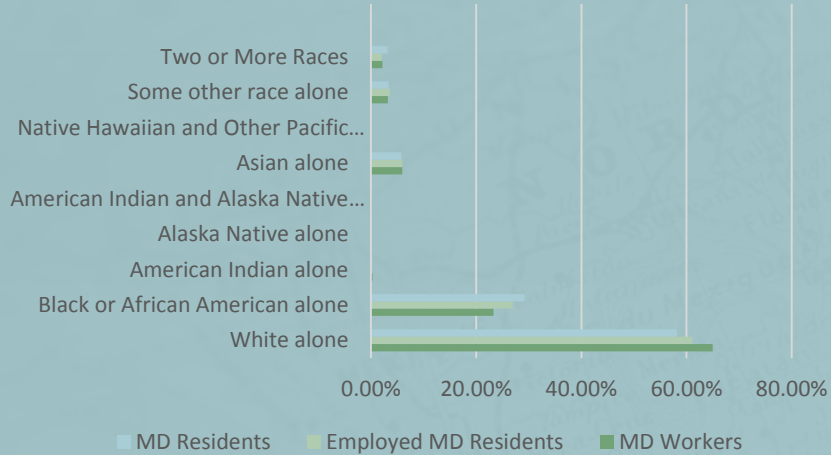|	
	19,495 - 27,257 (2)
	27,258 - 35,019 (0)
	35,020 - 42,781 (1)
	42,782 - 50,543 (0)
	50,544 - 58,305 (0)
	58,306 - 66,067 (1)
	66,068 - 73,828 (1)

DC

WHAT ABOUT ON A COUNTY LEVEL?

- YES!
  - For example in Montgomery County, approximately 1/3 commute in, 1/3 work and live in, 1/3 commute elsewhere
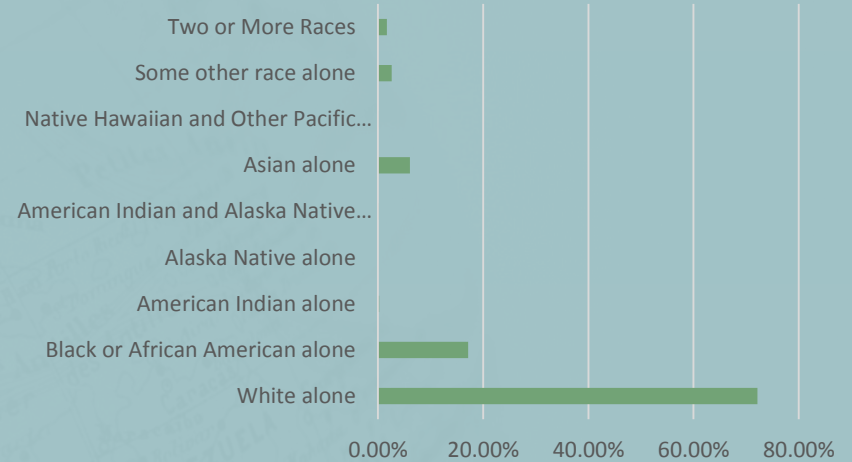
Inflow/Outflow Job Counts in 2011
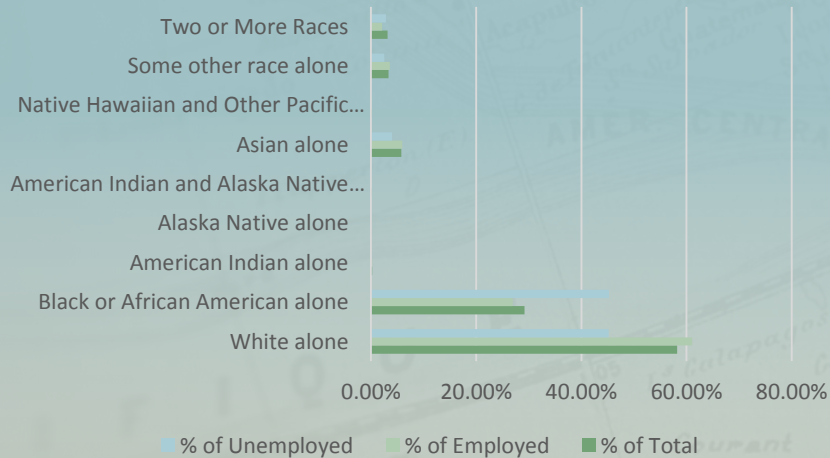
253,084 - Employed in Selection Area, Live Outside
233,680 - Live in Selection Area, Employed Outside
226,746 - Employed and Live in Selection Area

STATEWIDE ANALYSIS: RACE

Education Across Groups
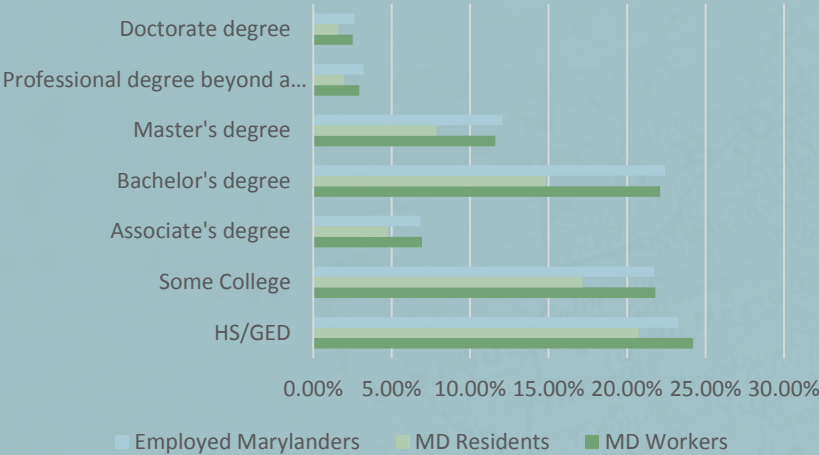
Education of Commuters from Neighboring States
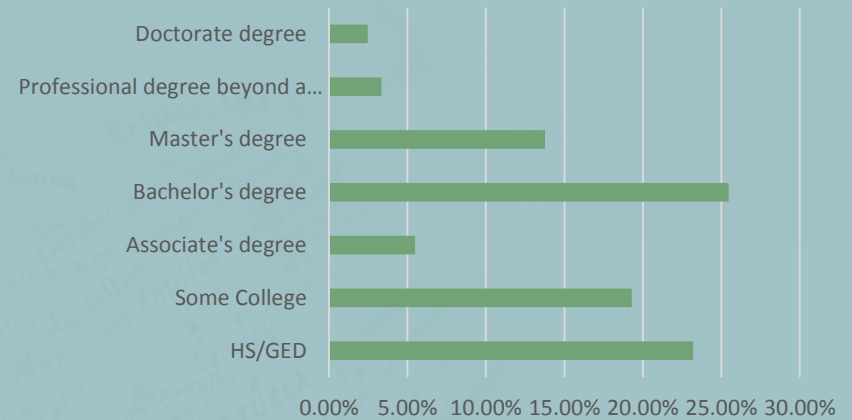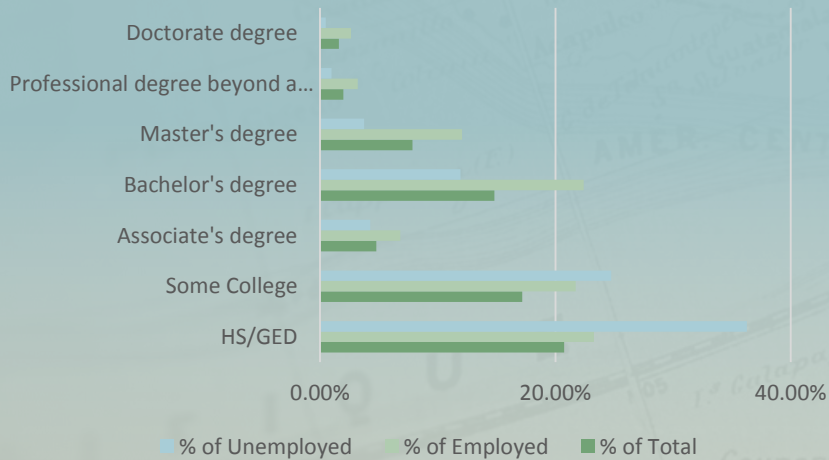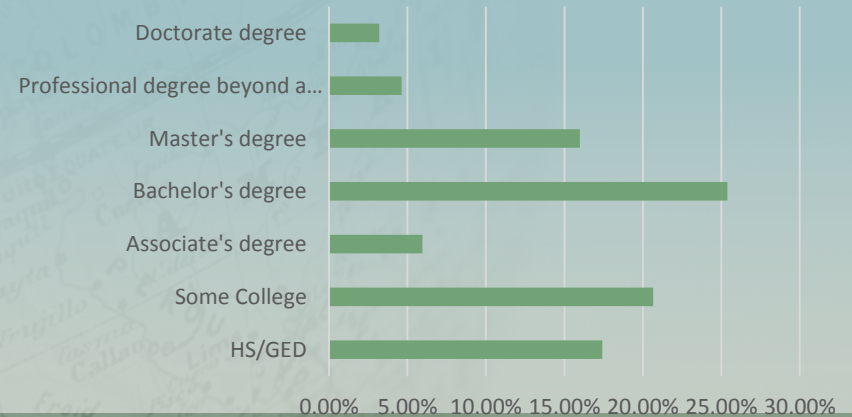
Marylanders: Education Across Groups

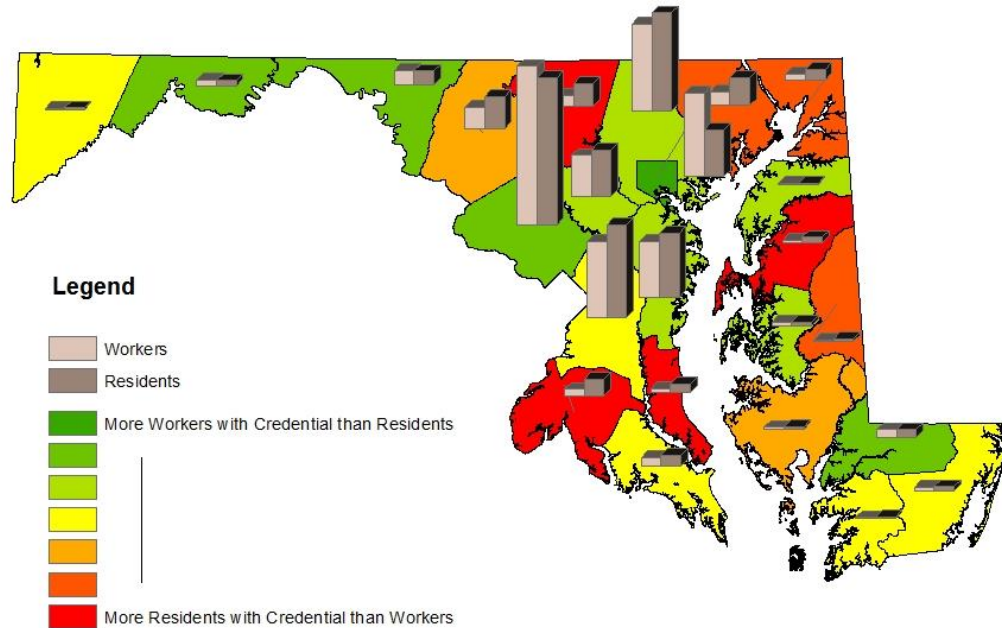Education of Maryland Residents Commuting Outside

HOW CAN GIS HELP?

- As you probably gathered based on the state analysis the charts can be a bit dry

- With 24 counties there would be many charts, data overload

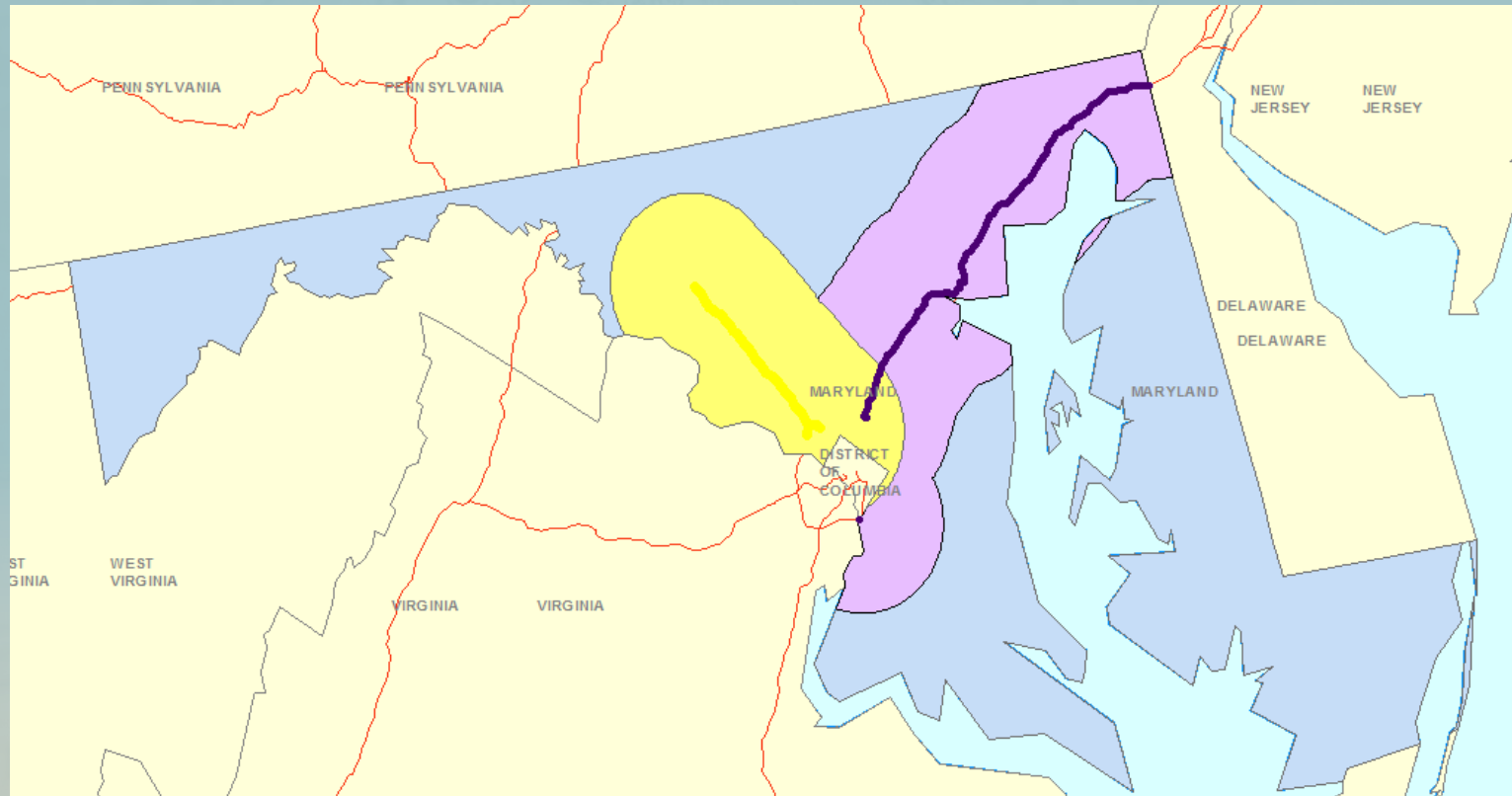- Also, with just charts regional trends could not be detected

STATEWIDE COUNTY-LEVEL EXAMPLE: EDUCATION

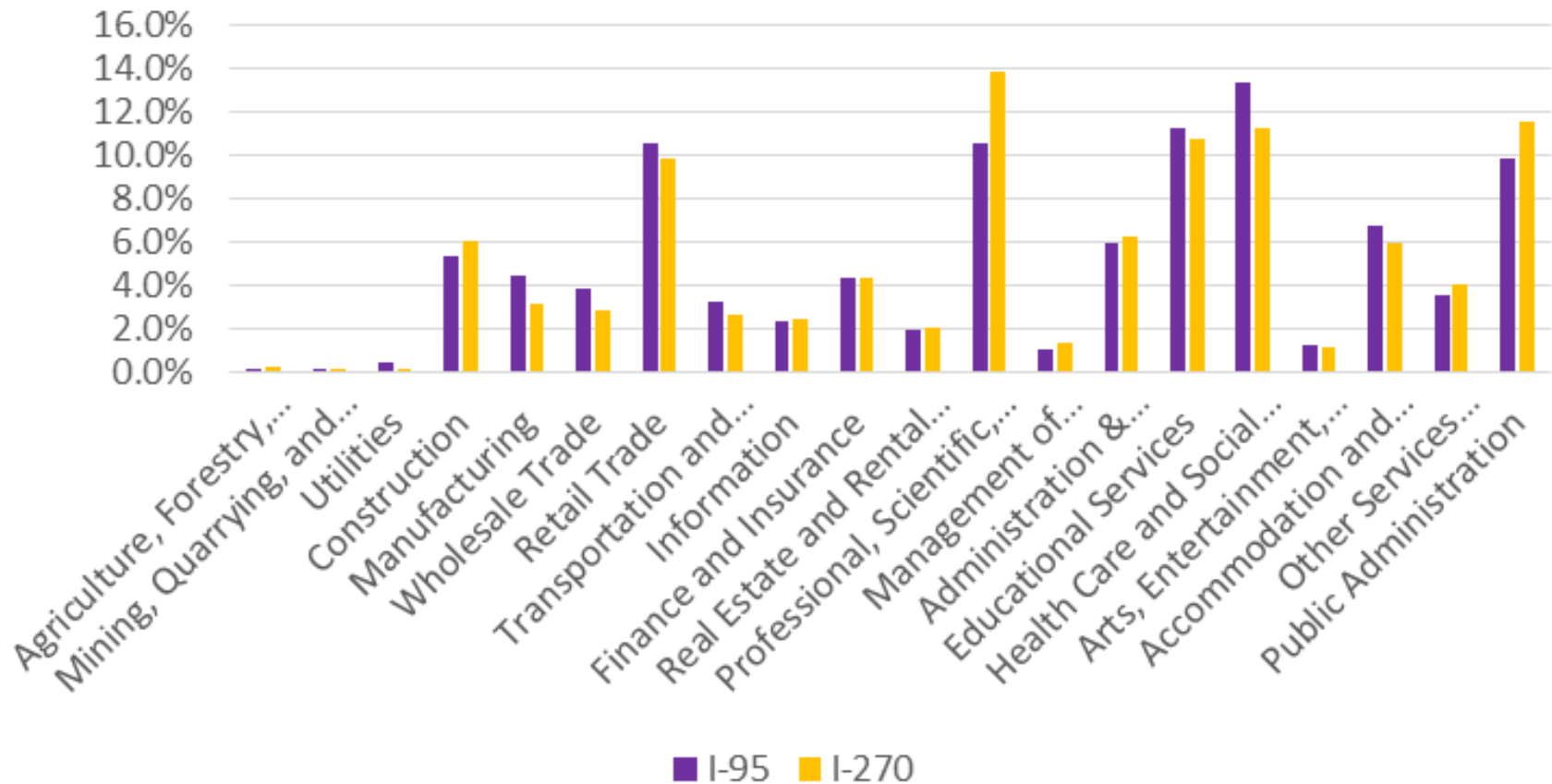# WHAT ELSE DOES GIS DO?

- Allows us to easily do analyses within custom areas, not confined to do analyses at county– level

Share of Jobs by Industry

NEXT STEPS

- Investigating creating an interactive version that would allow:
  - Users to toggle on and off different groups (e.g., Residents, workers)
  - Allow users to select or deselect variables of interest (e.g., age, education)
  - Allow users to pick which areas are displayed (e.g., Eastern MD)
  - Have access to different years of data

CONCLUSION

- Looking at distinct groups in MD is key and can have important policy implications

- There is a good deal of commuting across state lines and county borders

- By visualizing data with maps greater understanding of patterns is possible

- Using GIS various shapes can be used to analyze various data on MD residents and workers

QUESTIONS

- Hillary Huffer
  Economist/LMI Manager

- Office of Workforce Information and Performance
  Division of Workforce Development and Adult Learning
  Maryland Department of Labor, Licensing & Regulation

- Office : 410-767-2253

- Cell: 410-746-1722

- E-mail: hillary.huffer@maryland.gov