

# Economic Outlook for the State of Alabama

May Lin, *Economic Analyst*

Julia Wacker, *Associate I*

Julian Brubaker, *Associate I*

# Welcome and Introductions

- REMI models
- Big Picture: REMI Regional Growth Matrix
- Economic outlook
  - Short-term forecast
  - Long-term forecast
- Model demonstration

# Model



Regional Economic Models, Inc. (REMI) was founded in 1980 on a transformative idea: *government decision-makers should test the economic effects of their policies before they're implemented.* We are the nation's leader in dynamic local, state and national policy modeling. Our clients use REMI models to perform rigorous economic analysis that critically influences local, state and national policies.

## OUR CLIENTS:

Business Roundtable • Sandia National Laboratories • Ernst & Young • Texas Comptroller  
University of Michigan • Tennessee Valley Authority • National Education Association  
South Coast Air Quality Management District • Florida Legislature  
North Carolina Department of Commerce • Wyoming Department of Administration & Information  
California Environmental Protection Agency • U.S. Army Corps of Engineers

# Alabama State Economy

- Alabama is the 23<sup>rd</sup> most populous and the 30<sup>th</sup> most expansive of the 50 United States.
- Population of 4.89 million; median age of 39.3; and a median household income of \$49,861.<sup>1</sup>
- Largest contributors to GSP by sector include manufacturing, real estate and rental leasing, health care and social assistance, and retail trade.<sup>2</sup>
- Major industries include auto manufacturing, aerospace and defense, biotechnology, steel and chemical manufacturing, forestry, food processing, and tourism.<sup>3</sup>

<sup>1</sup>DataUSA.com

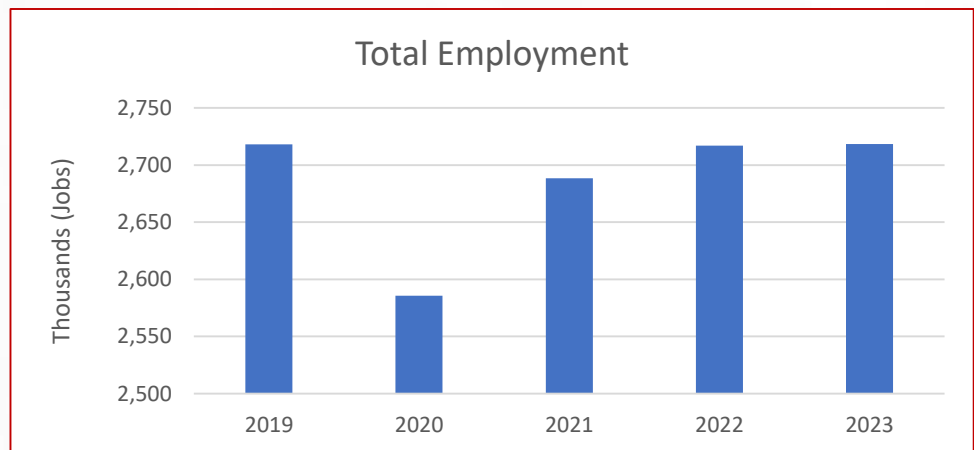
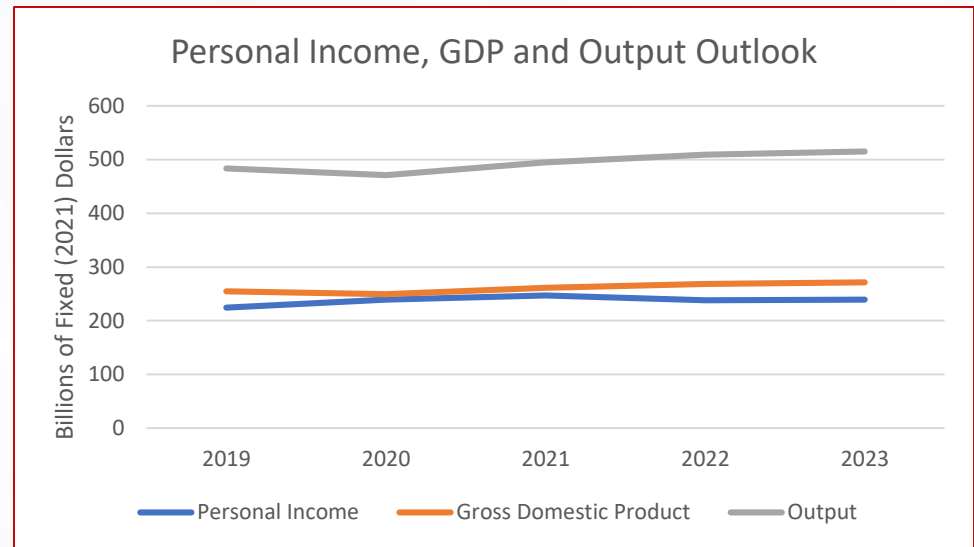
<sup>2</sup>IBIS World

<sup>3</sup>Reference.com

# Short-Term Outlook: Alabama



- Years 2019-2023
- Growth 2020-2021
  - Personal income : 3.4%
  - GDP: 4.8%
  - Output: 5.0%
  - Employment: 103 thousand jobs
- Uncertainty



# REMI Regional Growth Matrix: Economic & Demographic Factors



## Economic Factors

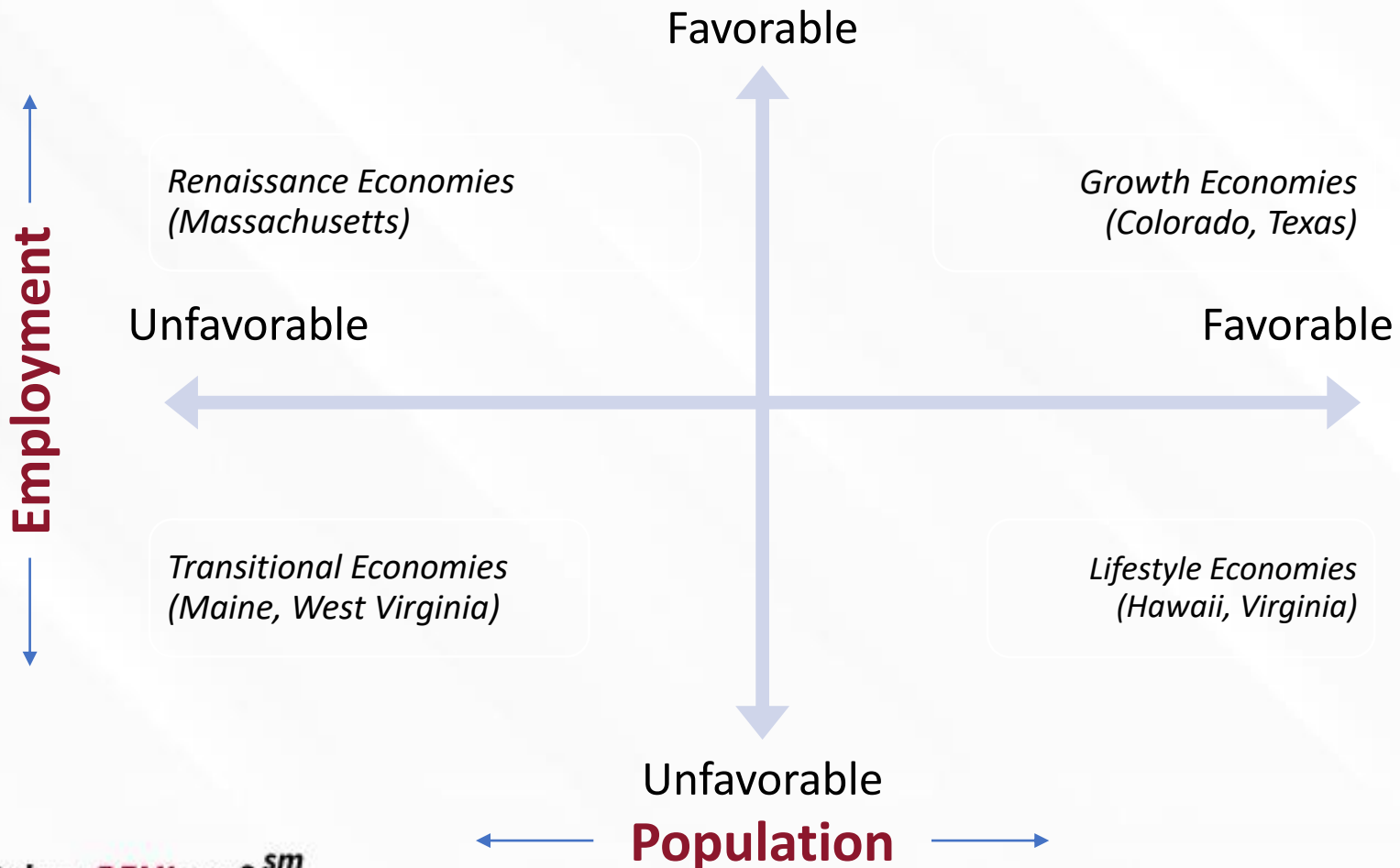
	Industry Growth	Industry Clusters	Pay	Productivity	Business Cost
Favorable	Growing	Strong	High-paid industries	High	Low
Unfavorable	Declining	Weak	Low-paid industries	Low	High

## Demographic Factors

	Population Age	Retirees	Immigration	Amenities	Housing Cost
Favorable	Younger	Gains retirees	Immigration gateway	High	Low
Unfavorable	Older	Loses retirees	Low internat'l immigration	Low	High

what does **REMI** say? <sup>sm</sup>

# Regional Growth Matrix



# Growth Matrix

## Difference in Growth from US Average (2021-2022)





# Data Sources

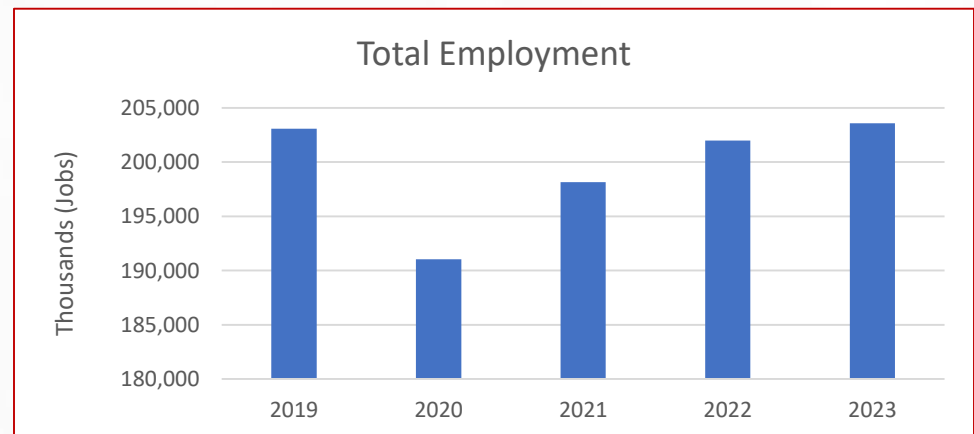
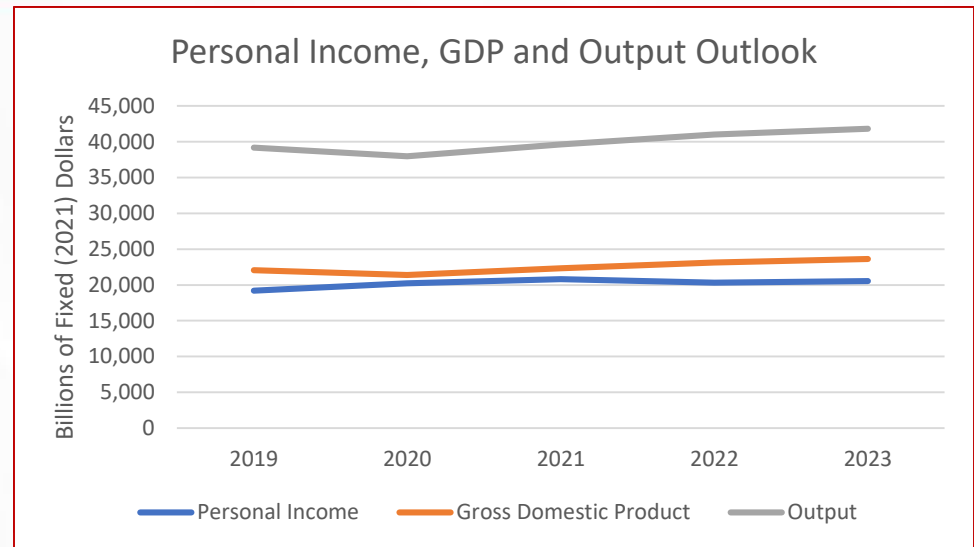
- Baseline (Standard National Control)
  - BLS Forecast Data
- Economic Forecast Update March 2021
  - 2019-2020 historical data from BEA
  - The U.S. Economic Outlook for 2020-2022 from the University of Michigan's Research Seminar in Quantitative Economics (RSQE)
  - An update to the Economics Outlook from CBO
  - Includes \$1.6 trillion stimulus, additional vaccination, and additional consumer spending<sup>1</sup>

# National Outlook

# Short-Term Outlook: the U.S.

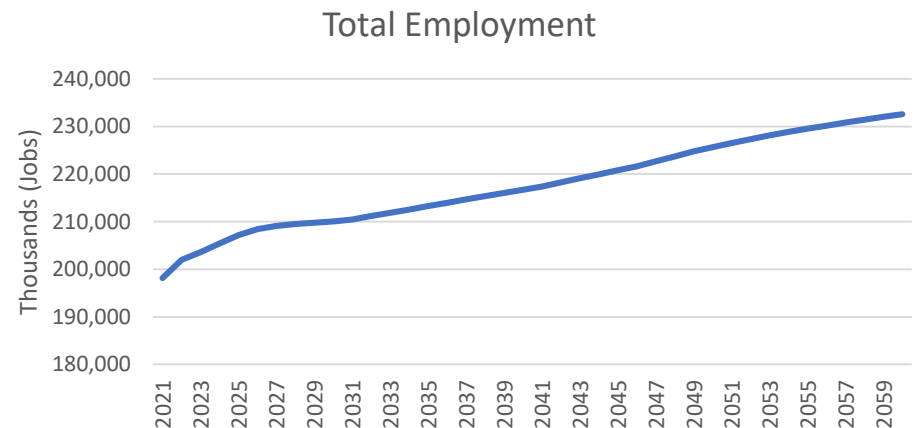
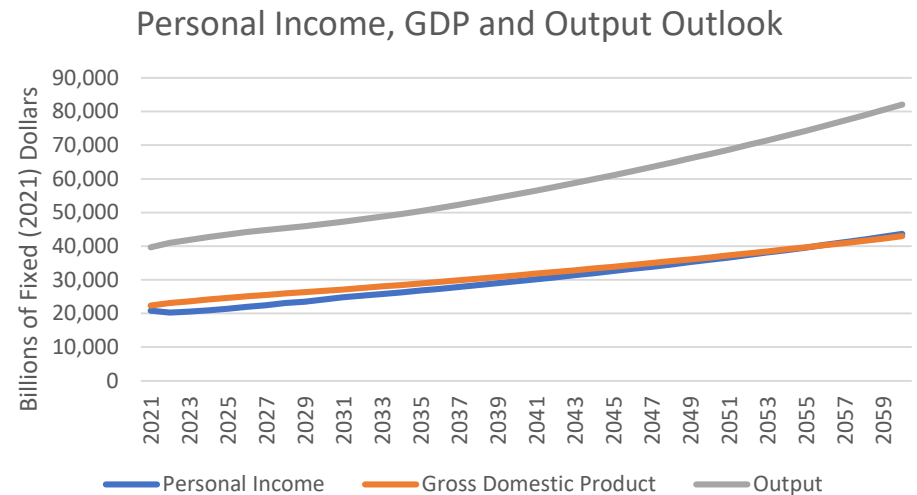


- Years 2019-2023
- Growth 2020-2021
  - Personal income (nominal dollars): 2.9%
  - GDP: 4.4%
  - Output: 4.4%
  - Employment: +7 million jobs



# Long-Term Outlook: The U.S.

- Years 2021-2060
- Average growth / year
  - Personal income: 1.9%
  - GDP: 1.8%
  - Output: 1.9%
- Total employment: +1,038 thousand jobs



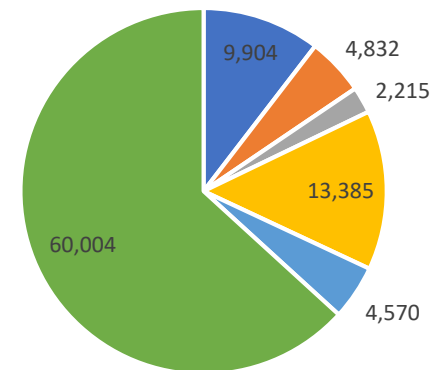
# Regional Outlook: Alabama

# Short-Term Outlook: Employment by Industry



- Industries with largest employment growth rates in 2021
- 2020 - 2021: 34,906 jobs increasing in the top 5 fast growing industries

Job Increase in The Fastest Growing Industries  
in 2021

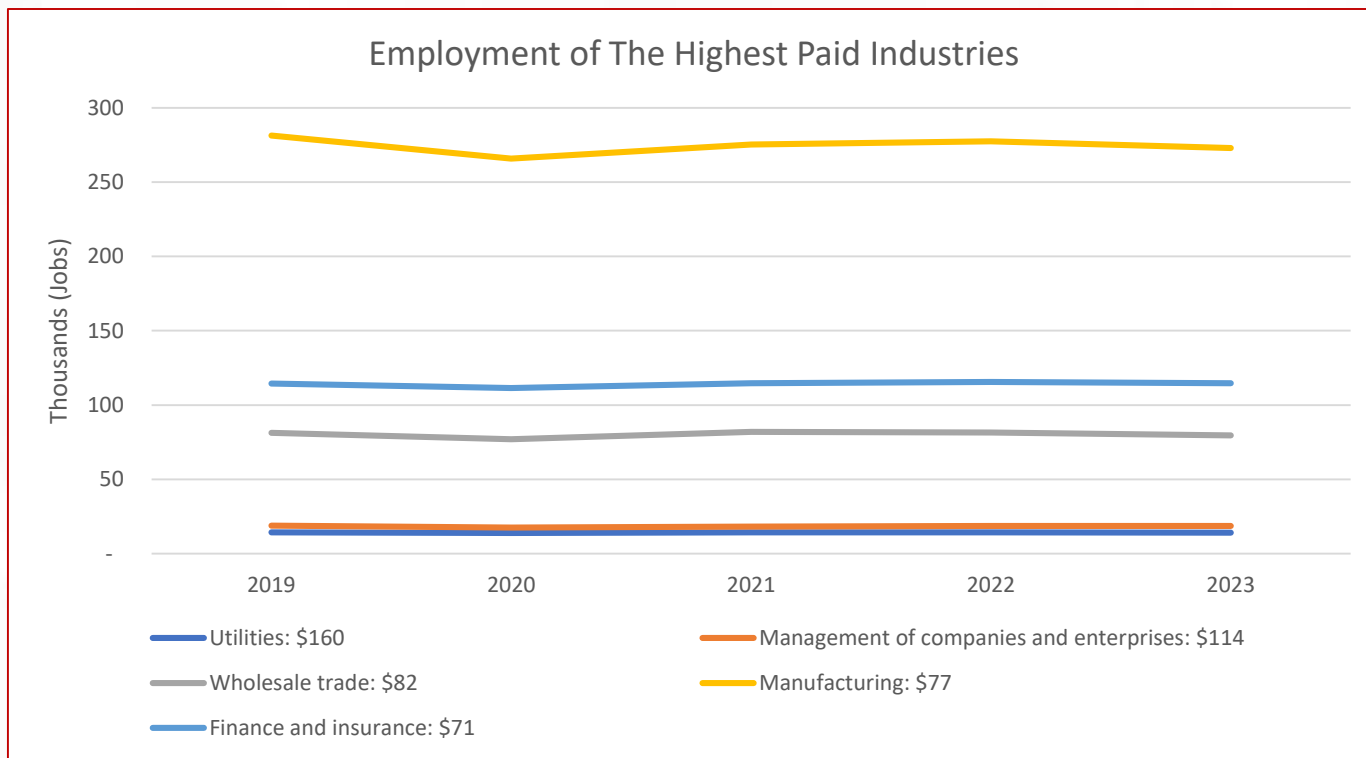


- Construction: 6.68%
- Wholesale trade: 6.27%
- Educational services; private: 5.71%
- Health care and social assistance: 5.68%
- Transportation and warehousing: 5.22%
- All other industries

# Short-Term Outlook: Employment by Industry

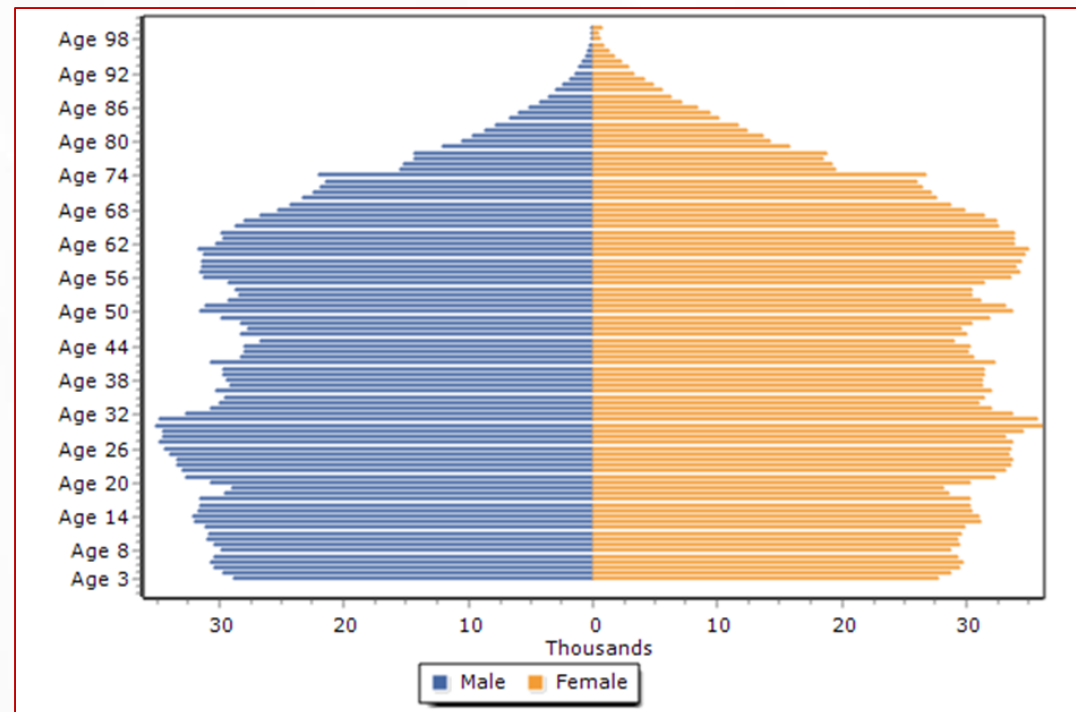


- Industries with highest average annual compensation rates in 2021



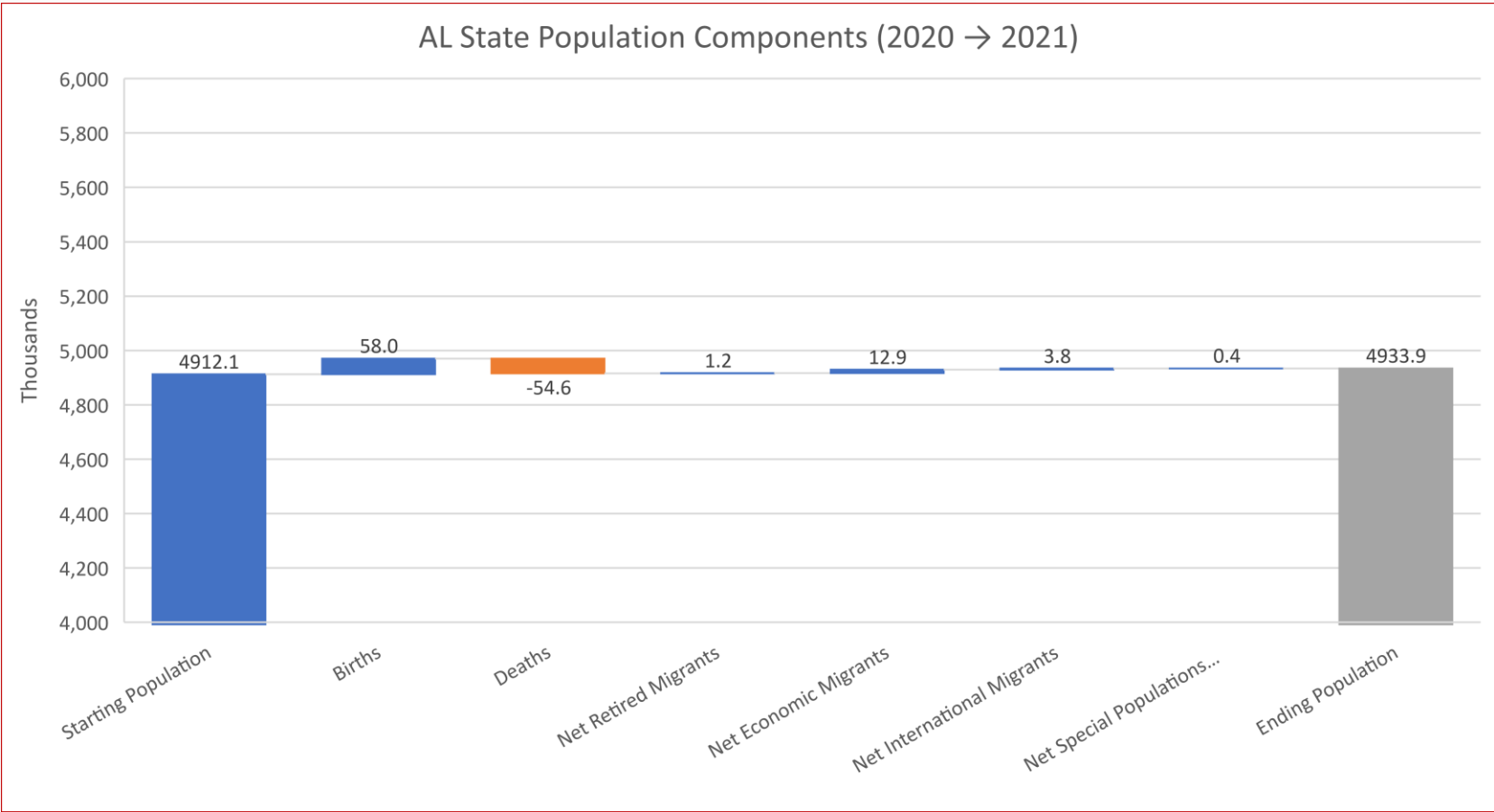
# Short-Term Outlook: Population Pyramid (2021)

- Year 2021
- Stationary
  - Population not growing
  - Low birth rates
  - High quality of life



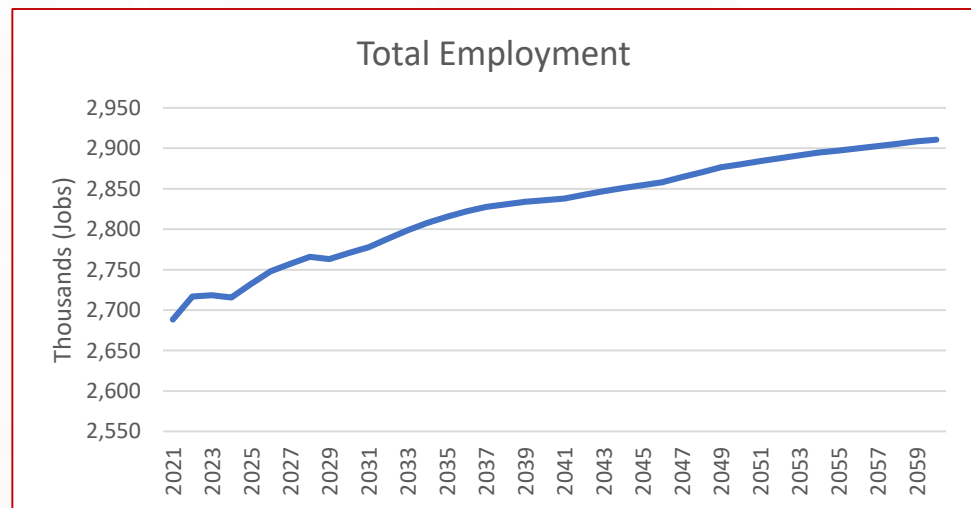
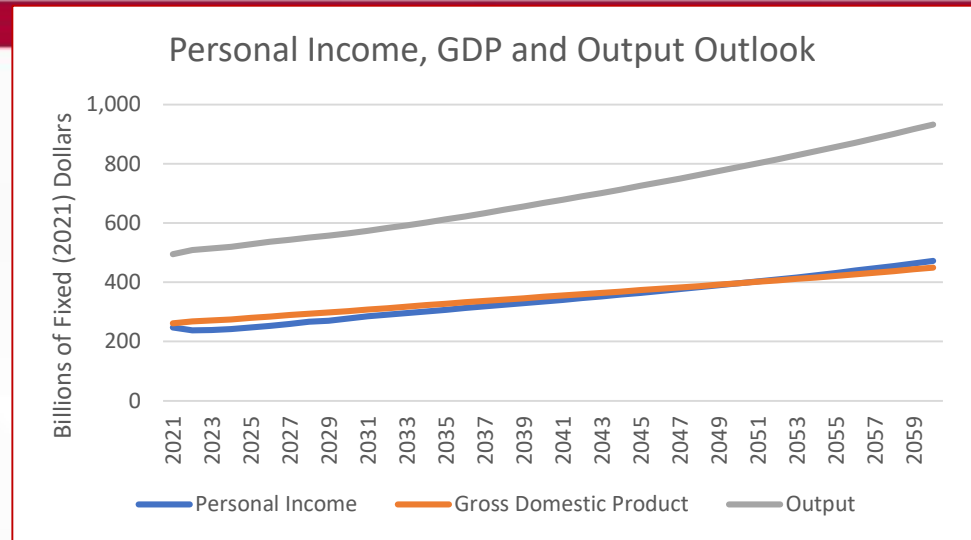


# Short-Term Outlook: Population Components



# Long-Term Outlook: Alabama

- Years 2021-2060
- Average growth / year
  - Personal income: 1.7%
  - GDP: 1.5%
  - Output: 1.7%
  - Total employment: +8 thousand jobs

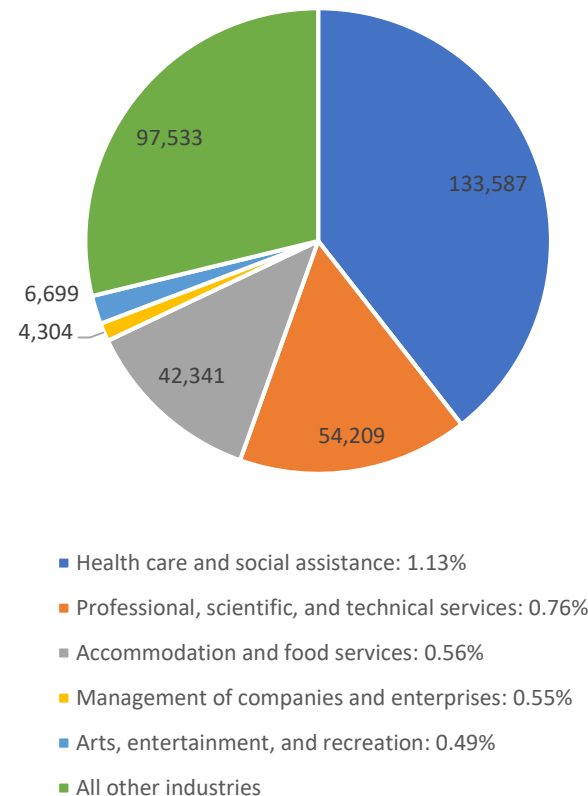


# Long-Term Outlook: Employment by Industry



- Industries with fastest employment increasing
- 2020 - 2060: 241,140 jobs increasing in the top 5 fast growing industries

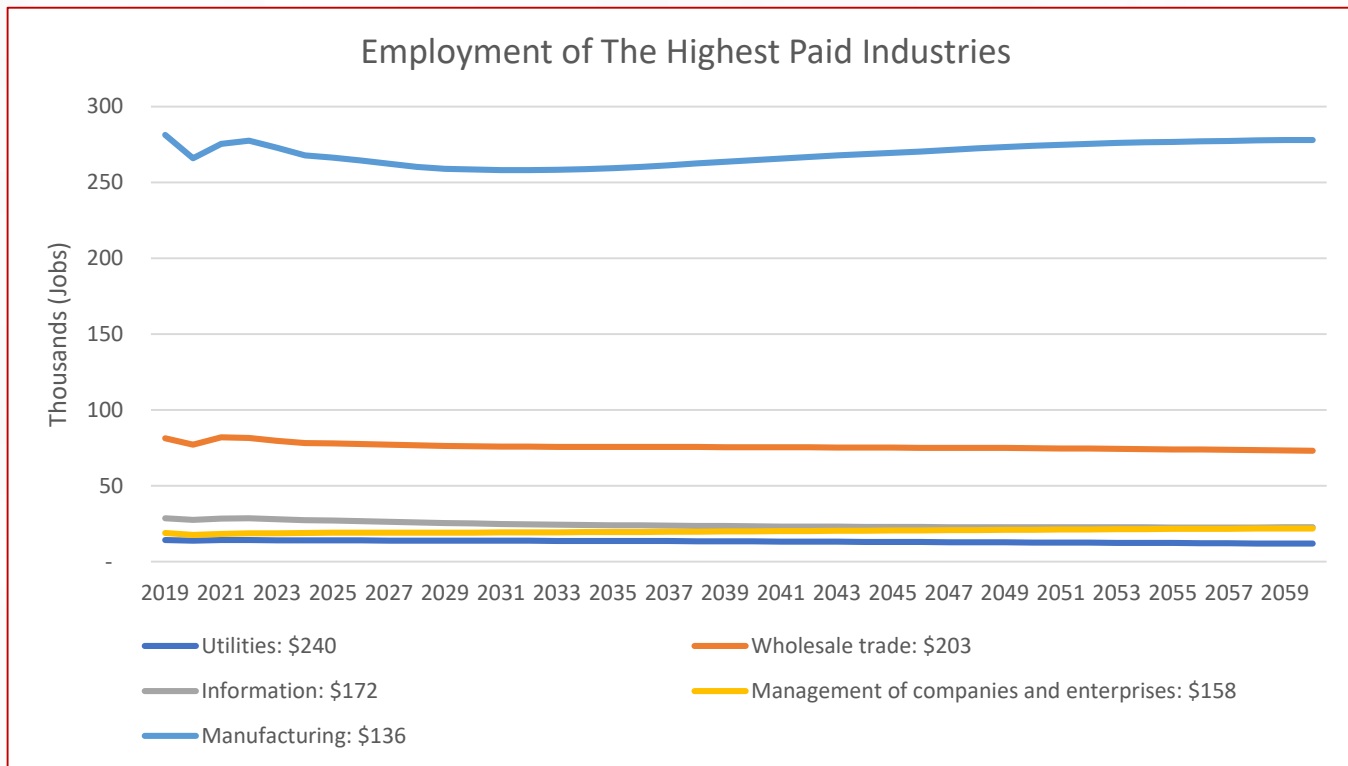
Job Increase in The Fastest Growing Industries  
(2020 → 2060)



# Long-Term Outlook: Employment by Industry



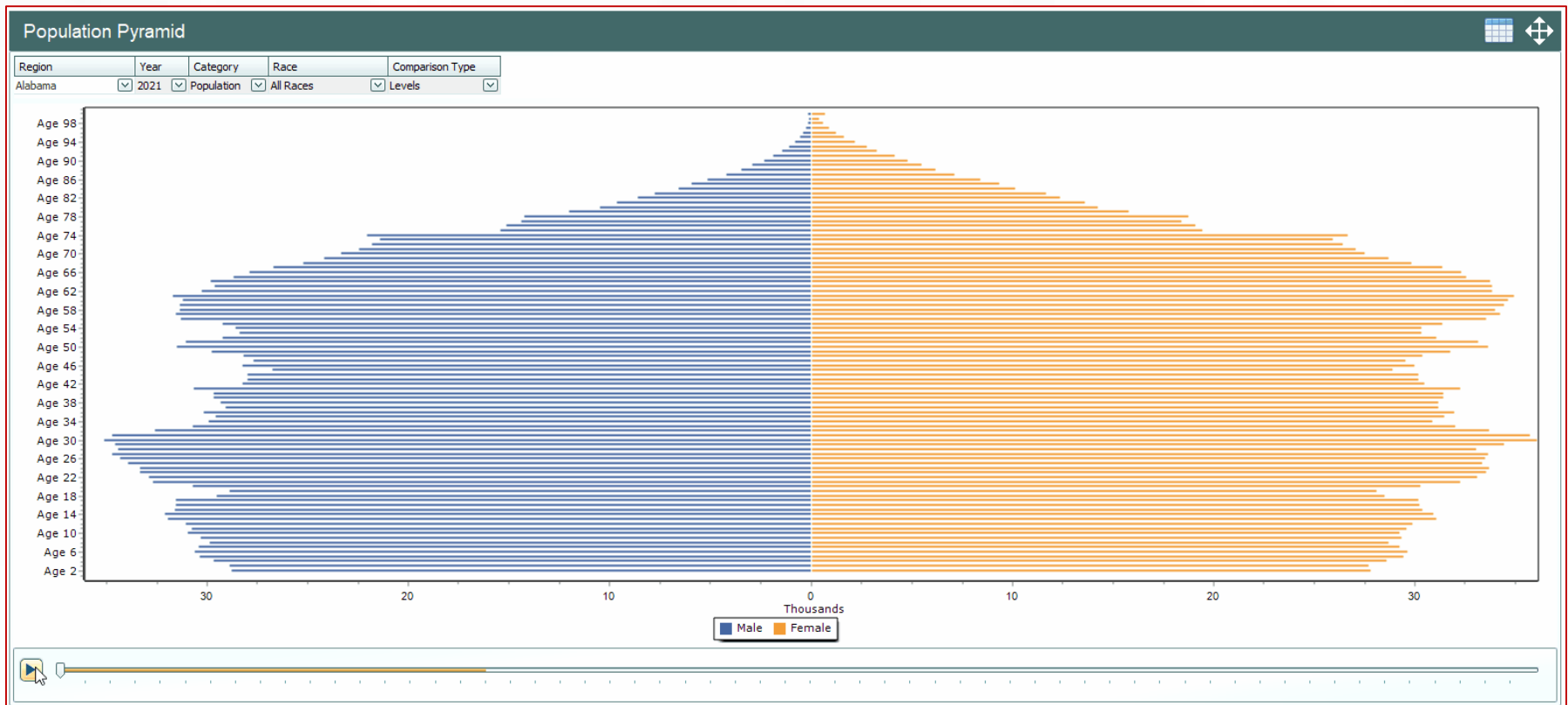
- Employment of industries with highest average annual compensation rates in 2060



# Long-Term Outlook: Population Pyramid



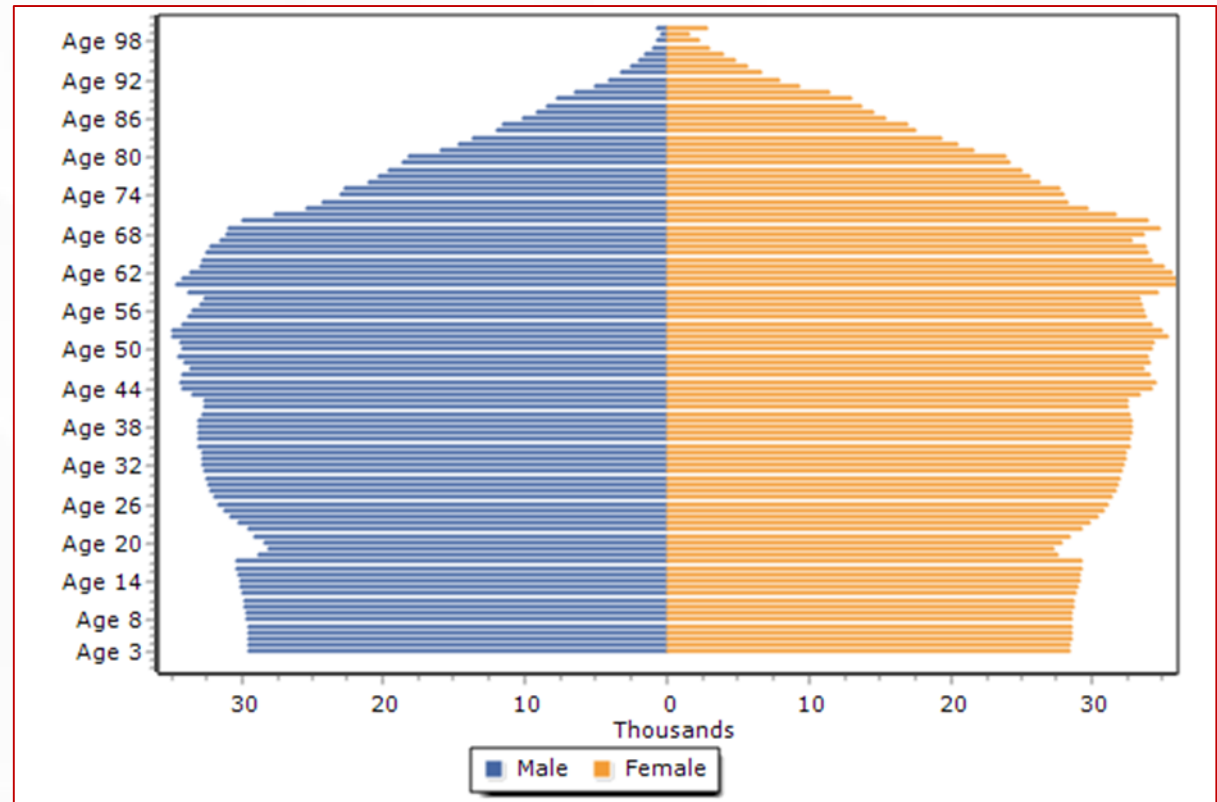
- Year 2060



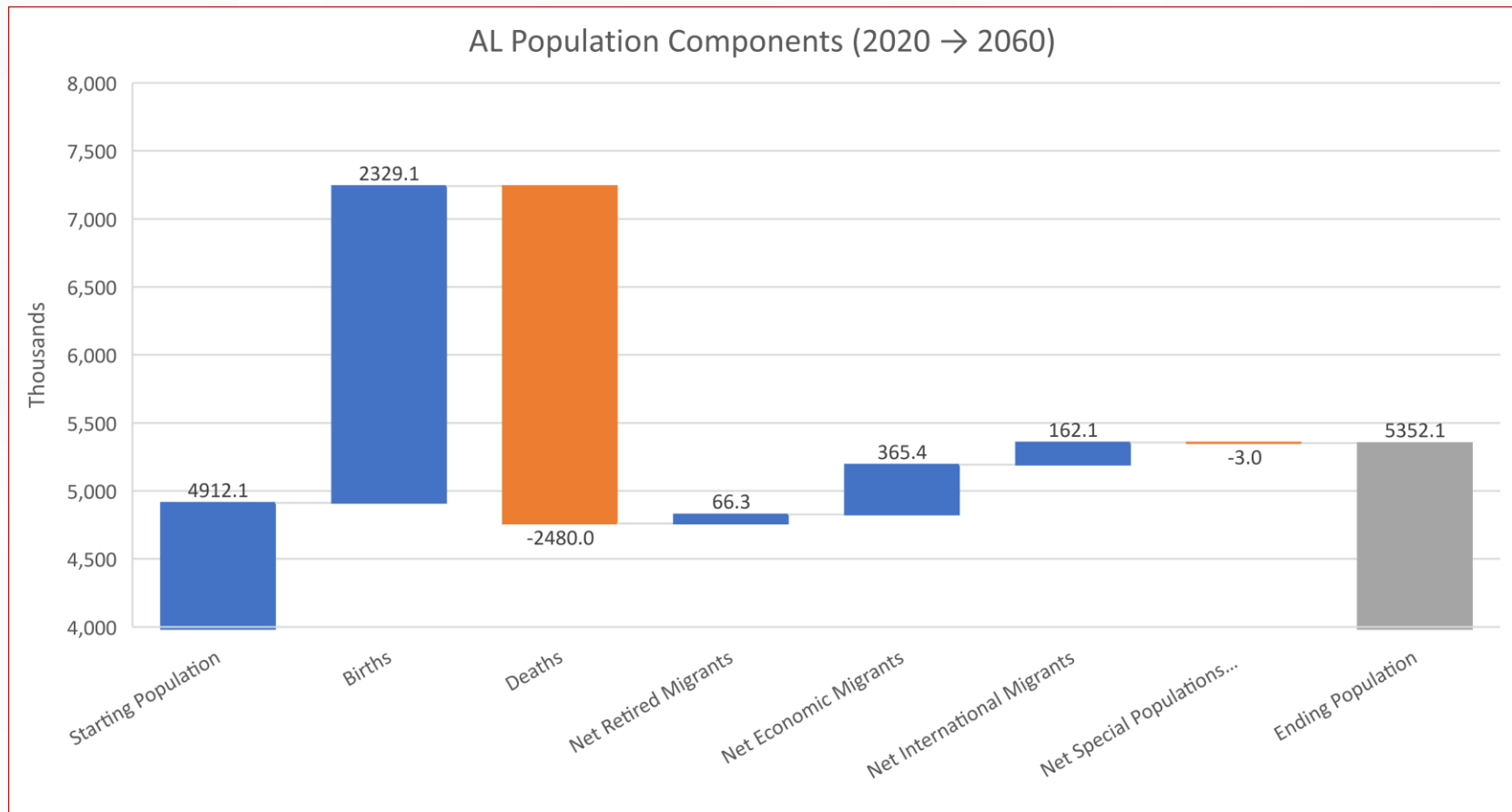
what does **REMI** say? <sup>sm</sup>

# Long-Term Outlook: Population Pyramid

- Year 2060
- More Constrictive
  - elderly and shrinking



# Population Components



# Model Demonstration



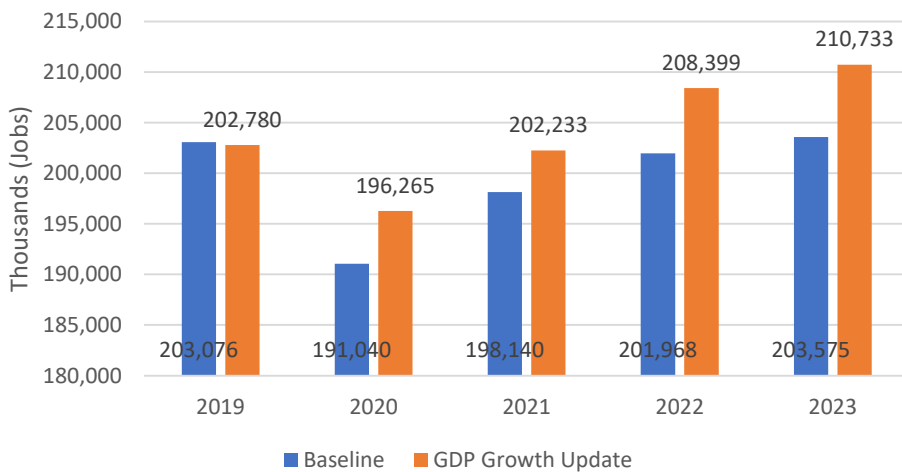
# The Scenario

- Optimistic Outlook
  - Baseline – Total employment slowly comes back accompanied by steady growth
  - Uncertainty
    - large pent-up consumer demand
    - supports of vaccine
    - stimulus checks
- Macroeconomic update
  - Increase GDP growth rate by 2%
- Total Employment
  - The US vs Alabama

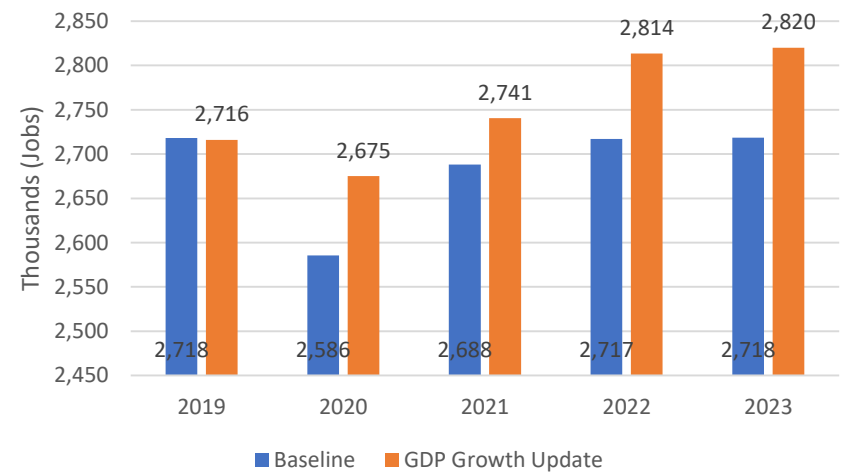
# Optimistic Outlook

- Year 2019-2023

Total Employment of the US



Total Employment of Alabama



# Conclusion

- Economic forecasts can be difficult
  - The outbreak of COVID-19
  - The election of a new president
  - General uncertainty about the economy
- REMI can help
  - Forecasts: Macro modeling used to clarify, calculate, and communicate
  - Simulations: What-if scenarios
  - Dynamic results

# Citations

1. Ehrlich, Gabriel M. "The U.S. Economic Outlook for 2021-2022 -- Executive Summary: February 2021." *College of Literature, Science, and the Arts, University of Michigan*, Research Seminar of Quantitative Economics, University of Michigan, 19 Feb. 2021, [lsa.umich.edu/content/dam/econ-assets/Econdocs/RSQE%20PDFs/Exec\\_Sum\\_Feb\\_2021.pdf](https://lsa.umich.edu/content/dam/econ-assets/Econdocs/RSQE%20PDFs/Exec_Sum_Feb_2021.pdf).

# Q & A

May Lin, Economic Analyst  
[May.Lin@remi.com](mailto:May.Lin@remi.com)

Julia Wacker, Associate I  
[Julia.Wacker@remi.com](mailto:Julia.Wacker@remi.com)

Julian Brubaker, Associate I  
[Julian.Brubaker@remi.com](mailto:Julian.Brubaker@remi.com)