

Economic Outlook for the State of Kansas

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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.

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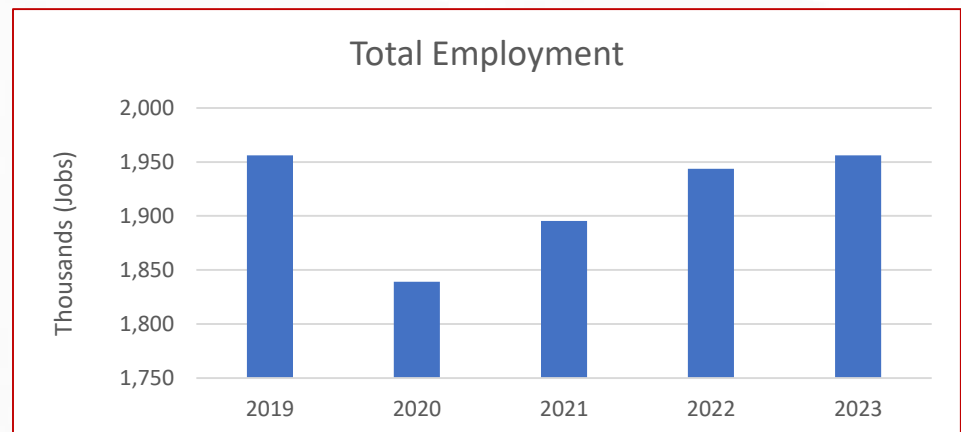
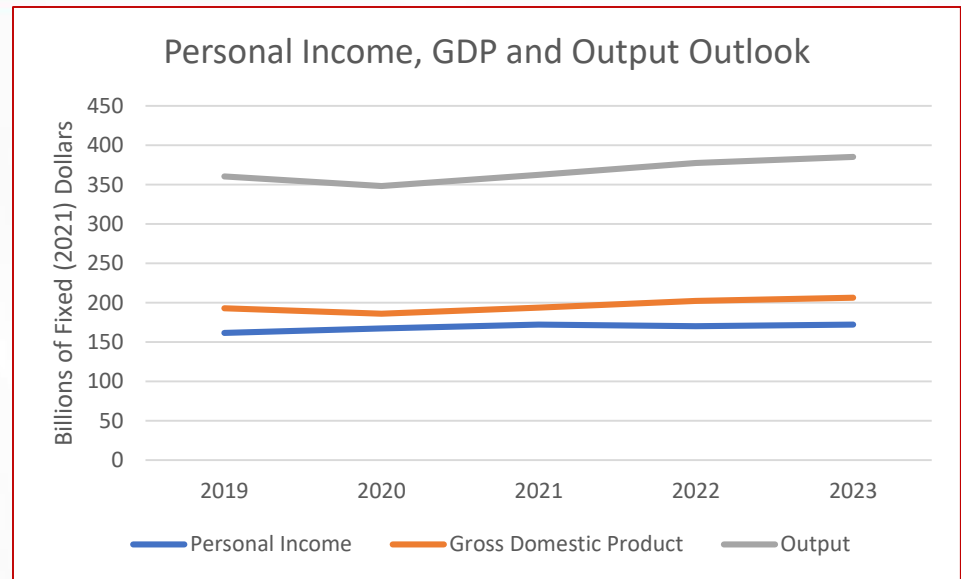
Kansas State Economy

- Kansas is the 35th most populous and the 15th most expansive of the 50 United States.¹
- Population of 2.917 million; median age of 36.7; and a median household income of \$59,597.¹
- Largest contributors to GSP by sector include manufacturing, real estate, rental and leasing, health care and social assistance, and wholesale trade.²
- Kansas is the leading state for the agricultural industry.³
- Ranked 7th for best infrastructure, ranked 8th for best natural environment, and ranked 15th among the 50 United States for its education system.³

Short-Term Outlook: Kansas



- Years 2019-2023
- Growth 2020-2021
 - Personal income : 2.9%
 - GDP: 4.2%
 - Output: 4.1%
 - Employment: 56 thousand jobs
- Uncertainty



REMI Regional Growth Matrix: Economic & Demographic Factors



Economic Factors

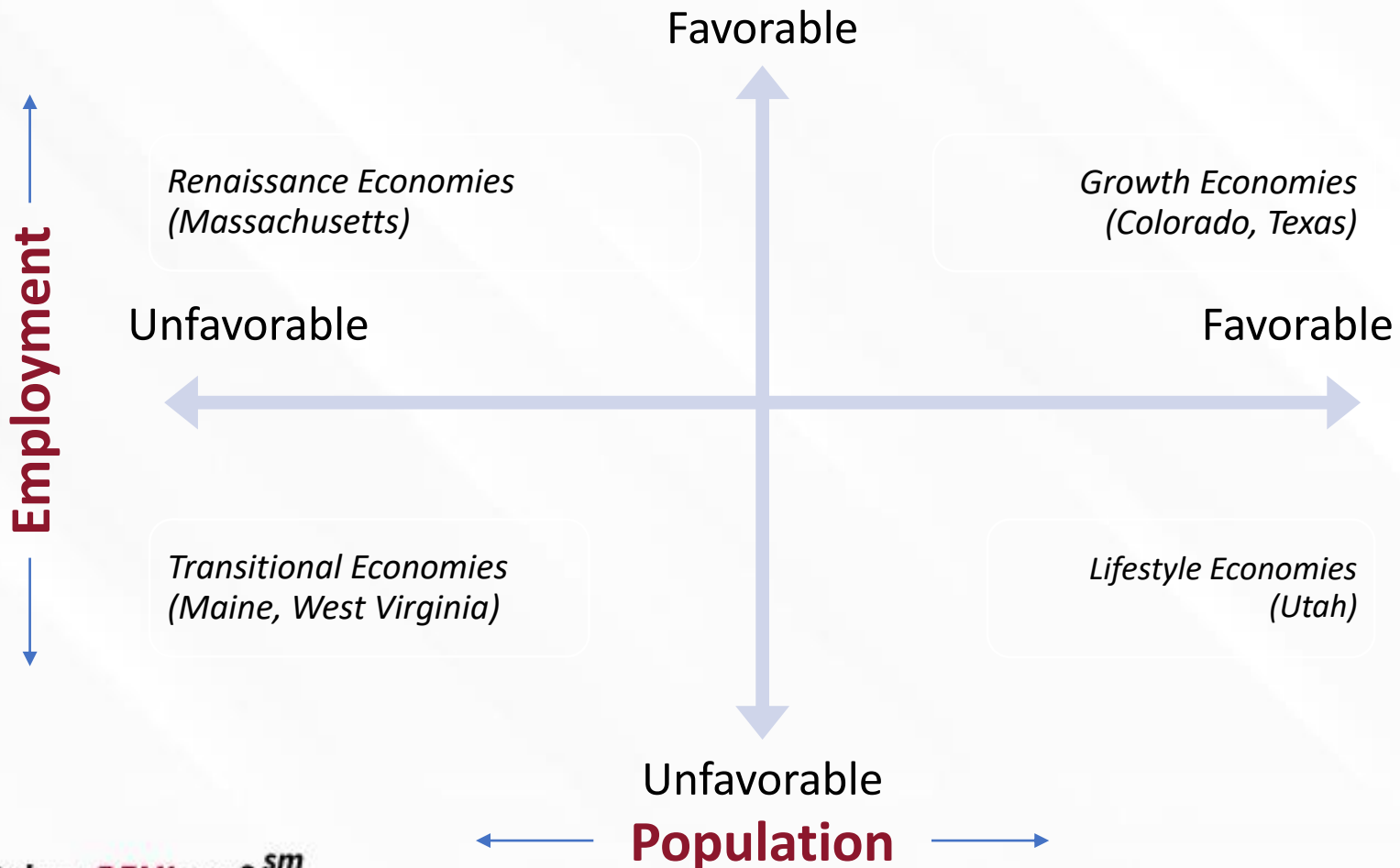
	Industry Growth	Industry Clusters	Pay	Productivity	Business Cost
Favorable	Growing	Strong	High-paid industries	High	Low
Unfavorable	Declining	Weak	Low-paid industries	Low	High

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

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Regional Growth Matrix



Growth Matrix

Difference in Growth from US Average (2021-2022)



Data Sources

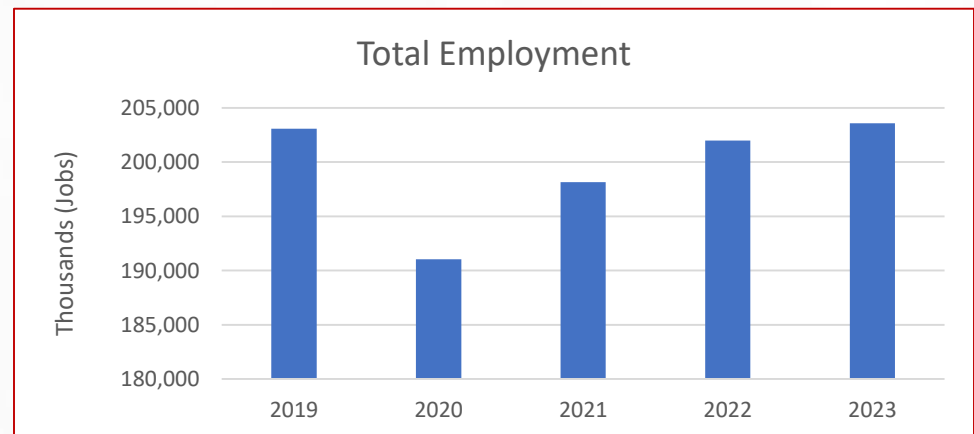
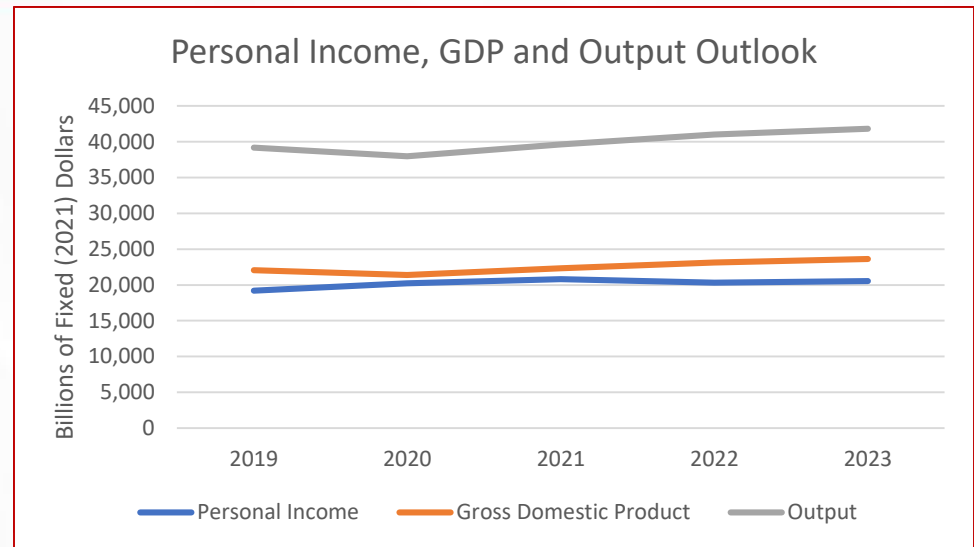
- Baseline (Standard National Control)
 - BLS Forecast Data
- Economic Forecast Update March 2021
 - 2019-2020 historical data from BEA
 - The U.S. Economic Outlook for 2020-2022 from the University of Michigan's Research Seminar in Quantitative Economics (RSQE)
 - An update to the Economics Outlook from CBO
 - Includes \$1.6 trillion stimulus, additional vaccination, and additional consumer spending¹

National Outlook

Short-Term Outlook: the U.S.

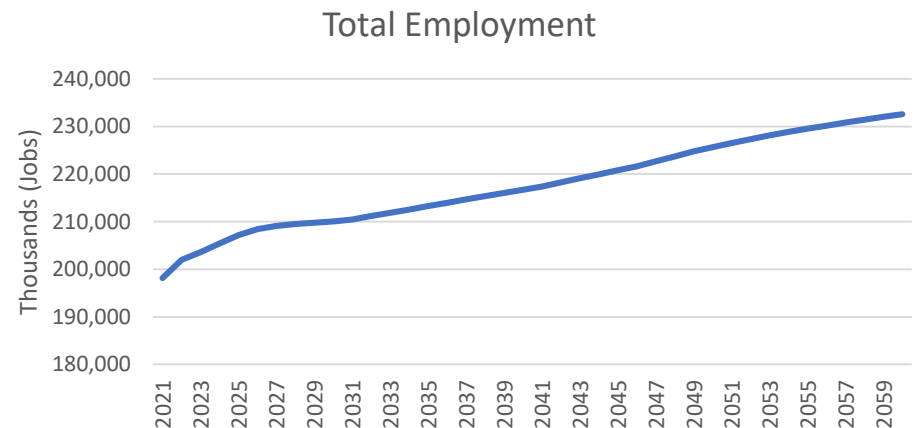
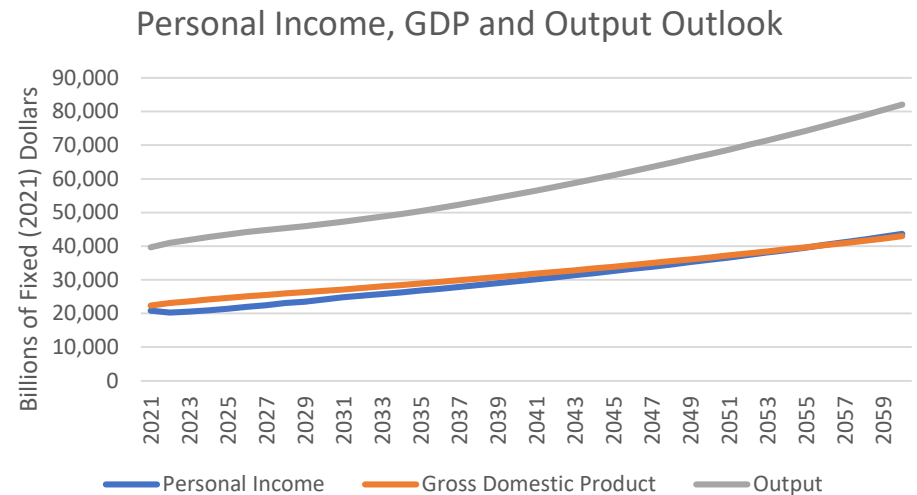


- Years 2019-2023
- Growth 2020-2021
 - Personal income: 2.9%
 - GDP: 4.4%
 - Output: 4.4%
 - Employment: +7 million jobs



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



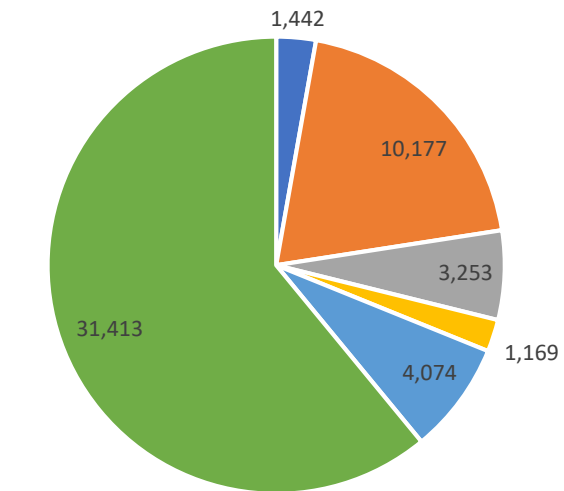
Regional Outlook: Kansas

Short-Term Outlook: Employment by Industry



- Industries with largest employment growth rates in 2021
- 2020 - 2021: 20,115 jobs increasing in the top 5 fast growing industries

Job Increase in The Fastest Growing Industries in 2021

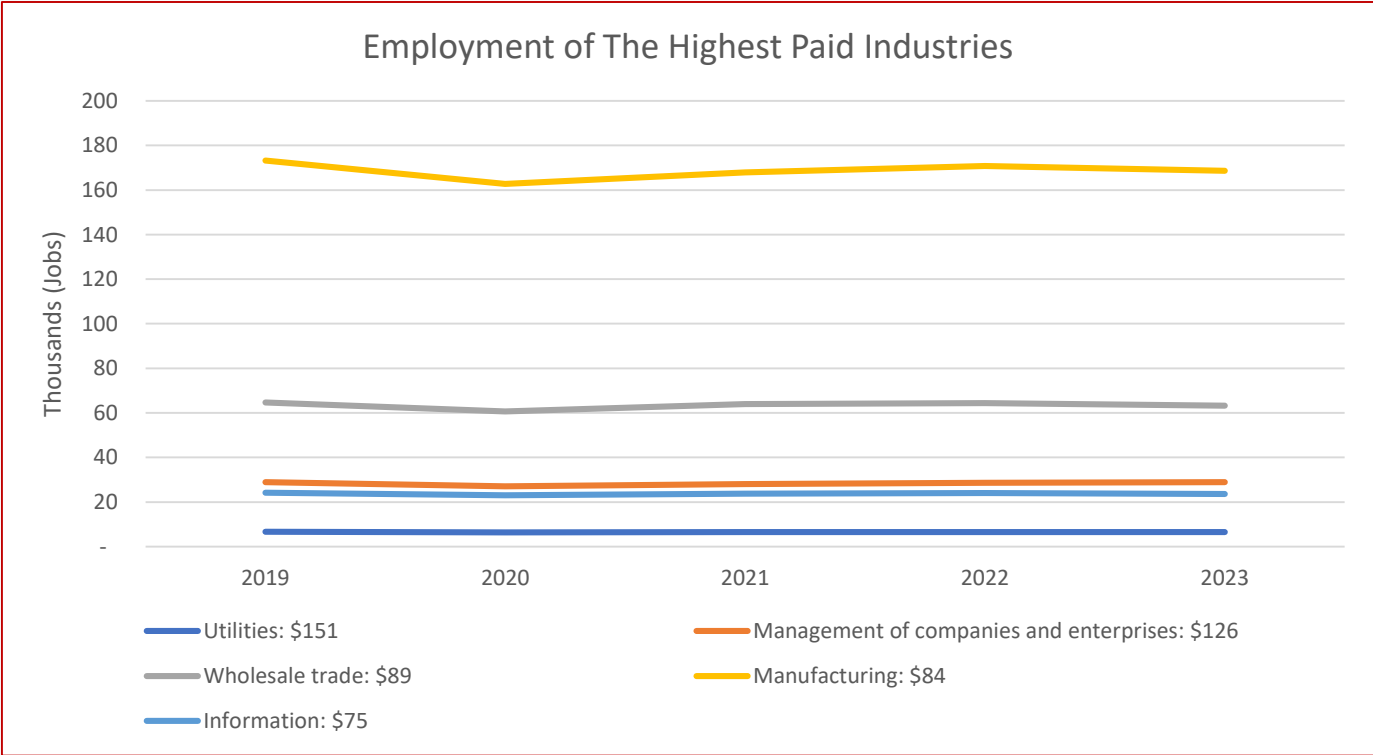


- Educational services; private: 5.52%
- Health care and social assistance: 5.42%
- Wholesale trade: 5.36%
- Arts, entertainment, and recreation: 4.81%
- Other services (except public administration): 4.72%
- All other industries

Short-Term Outlook: Employment by Industry



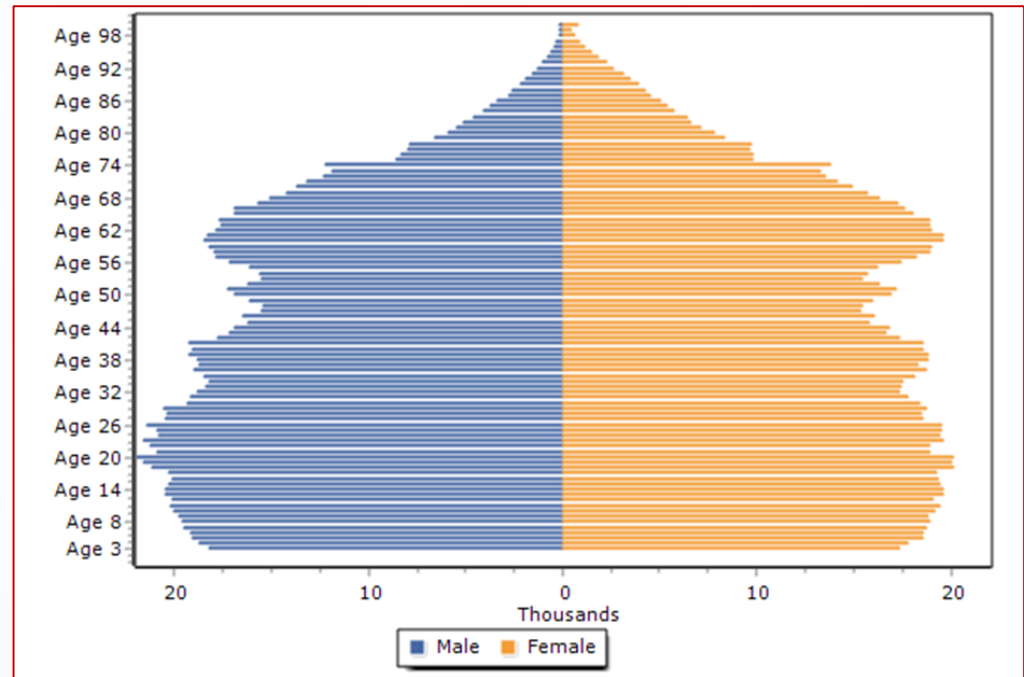
- Industries with highest average annual compensation rates in 2021



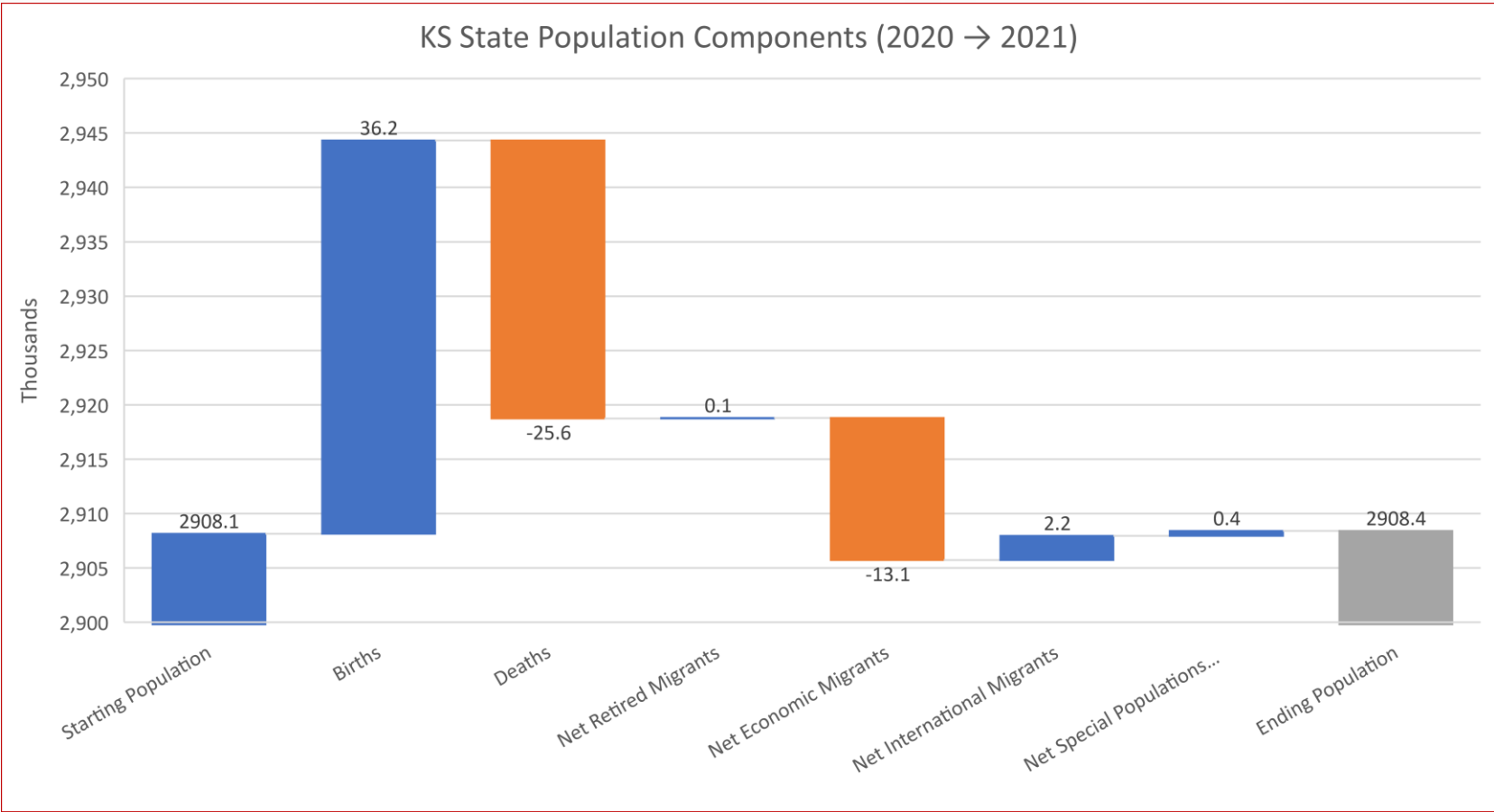
Short-Term Outlook: Population Pyramid (2021)



- Year 2021
- Expansive / near stationary



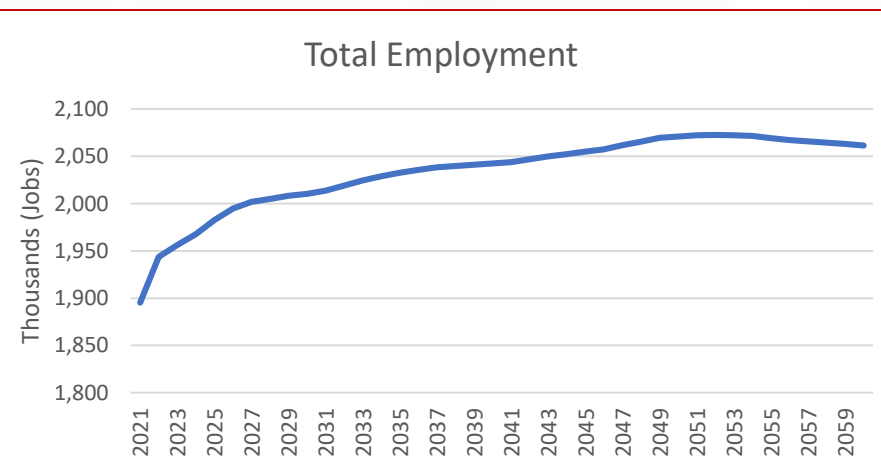
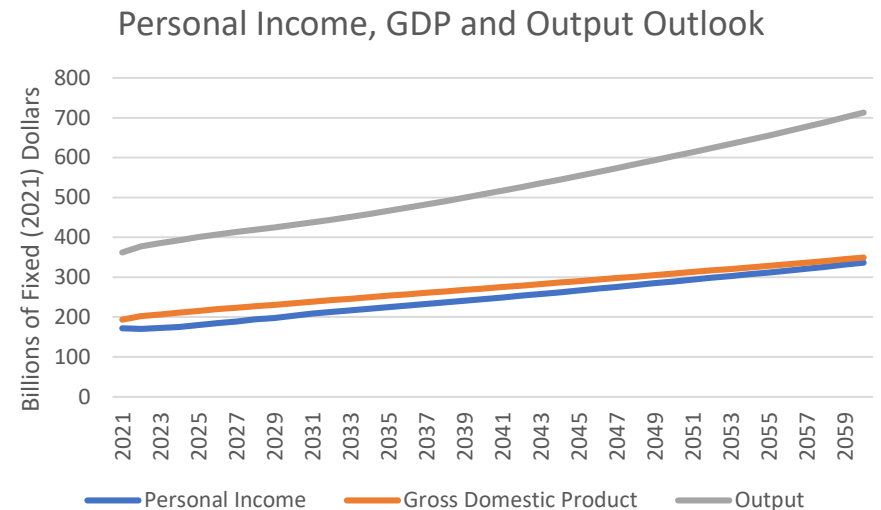
Short-Term Outlook: Population Components



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Long-Term Outlook: Kansas

- Years 2021-2060
- Average growth / year
 - Personal income: 1.8%
 - GDP: 1.6%
 - Output: 1.8%
- Total employment: 6 thousand jobs

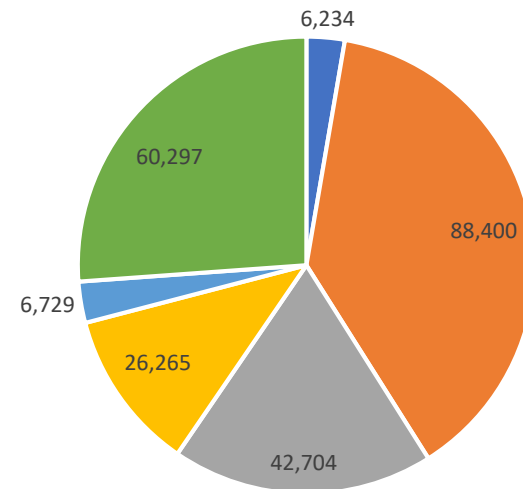


Long-Term Outlook: Employment by Industry



- Industries with fastest employment increasing
- 2020 - 2060: 170,332 jobs increasing in the top 5 fast growing industries

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

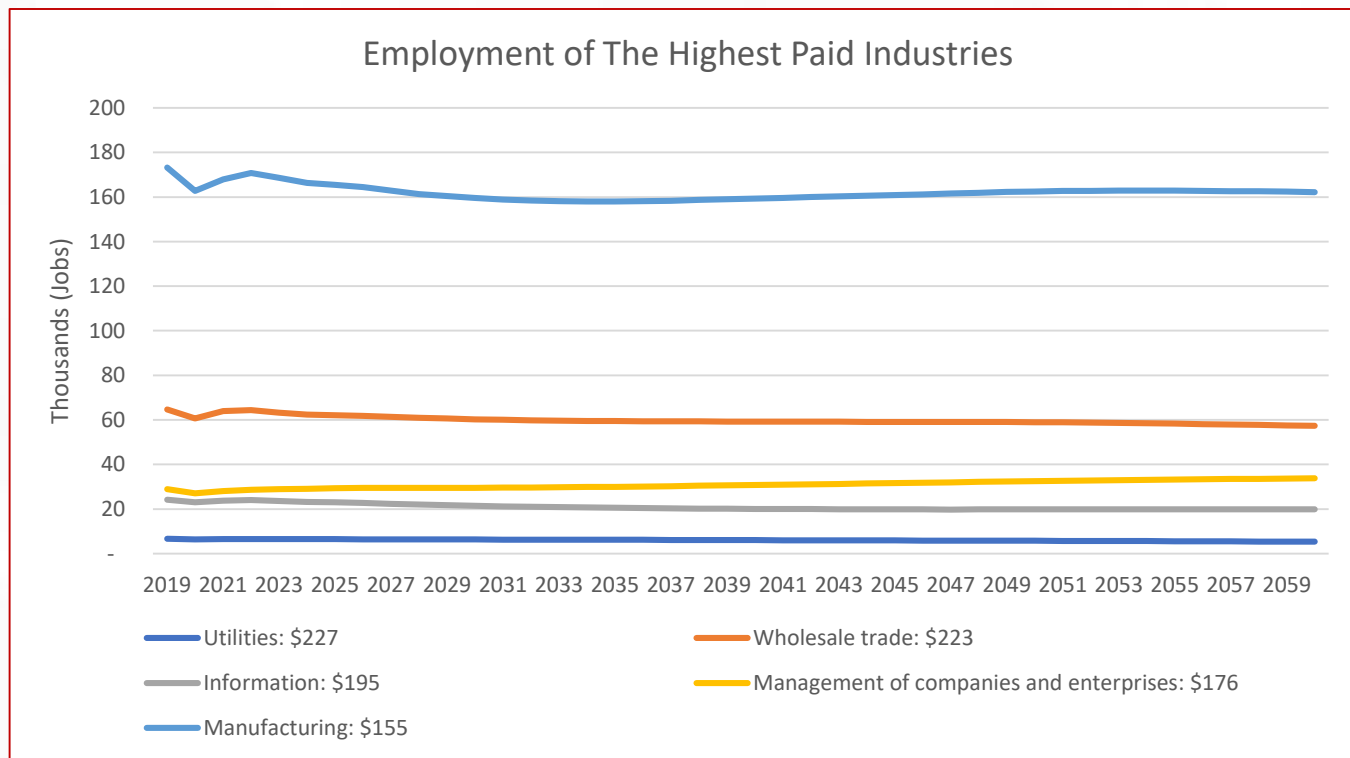


- Forestry, fishing, and hunting: 1.04%
- Health care and social assistance: 0.97%
- Professional, scientific, and technical services: 0.84%
- Accommodation and food services: 0.57%
- Management of companies and enterprises: 0.56%
- All other industries

Long-Term Outlook: Employment by Industry



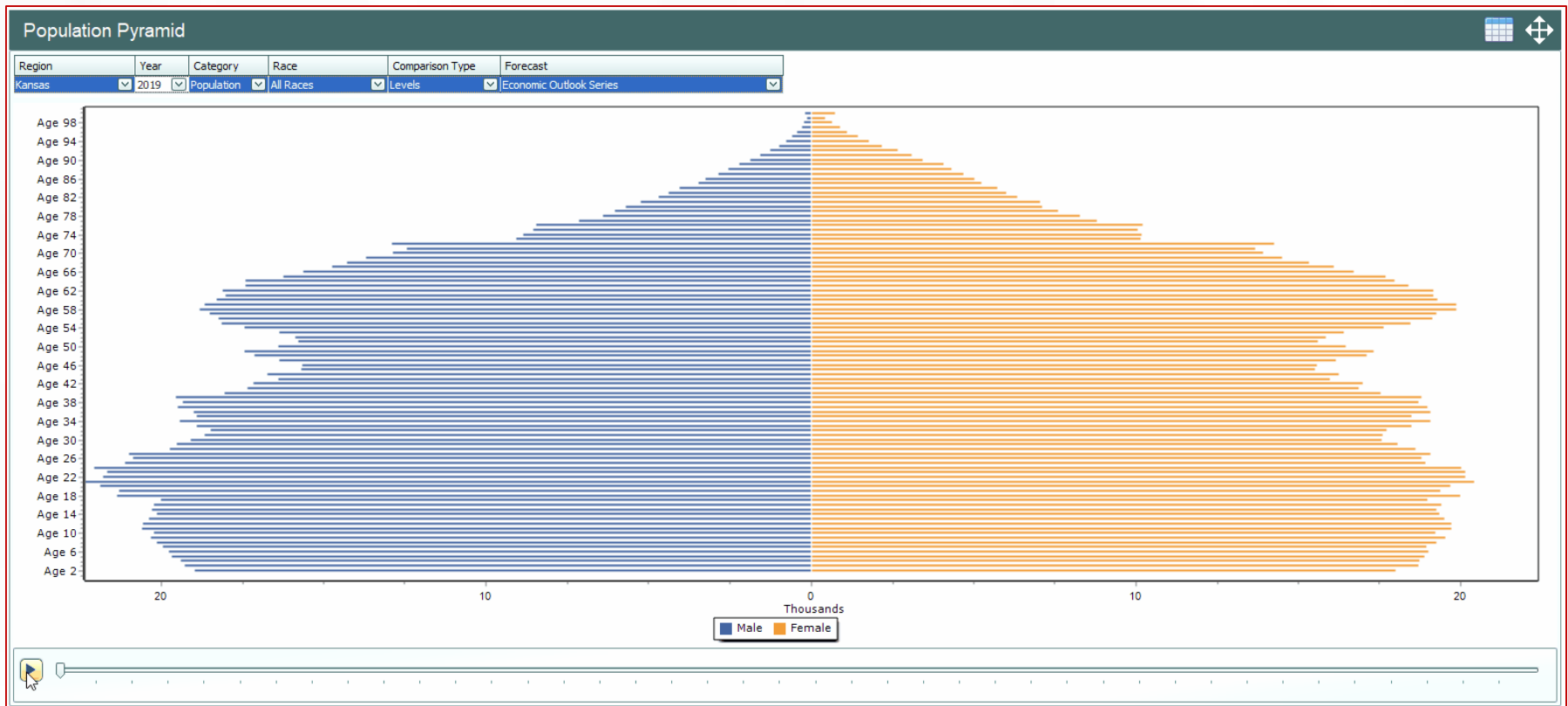
- Employment of industries with highest average annual compensation rates in 2060



Long-Term Outlook: Population Pyramid



- Year 2060

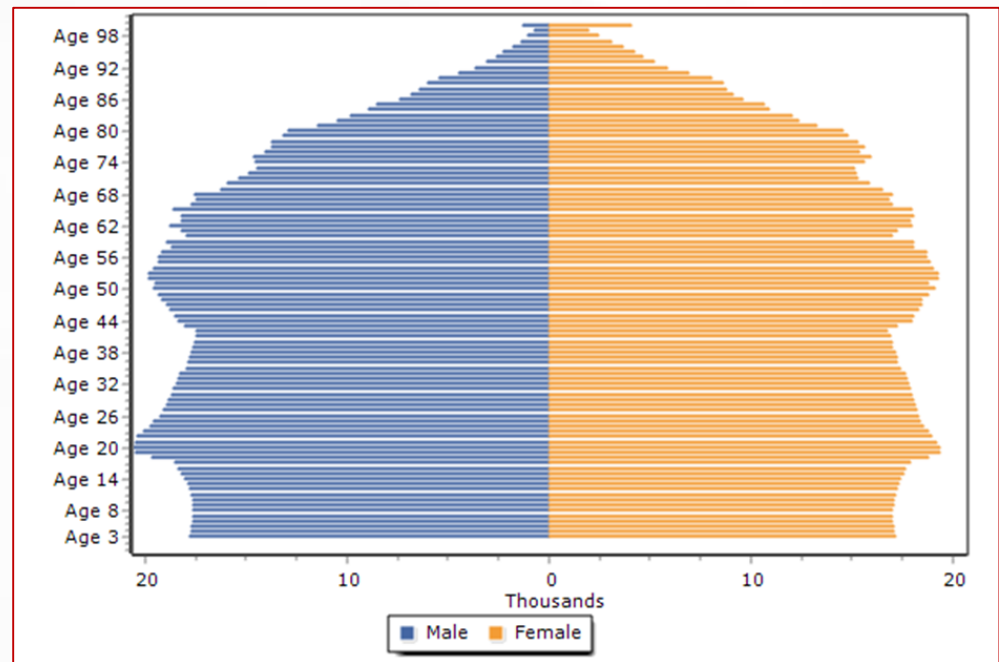


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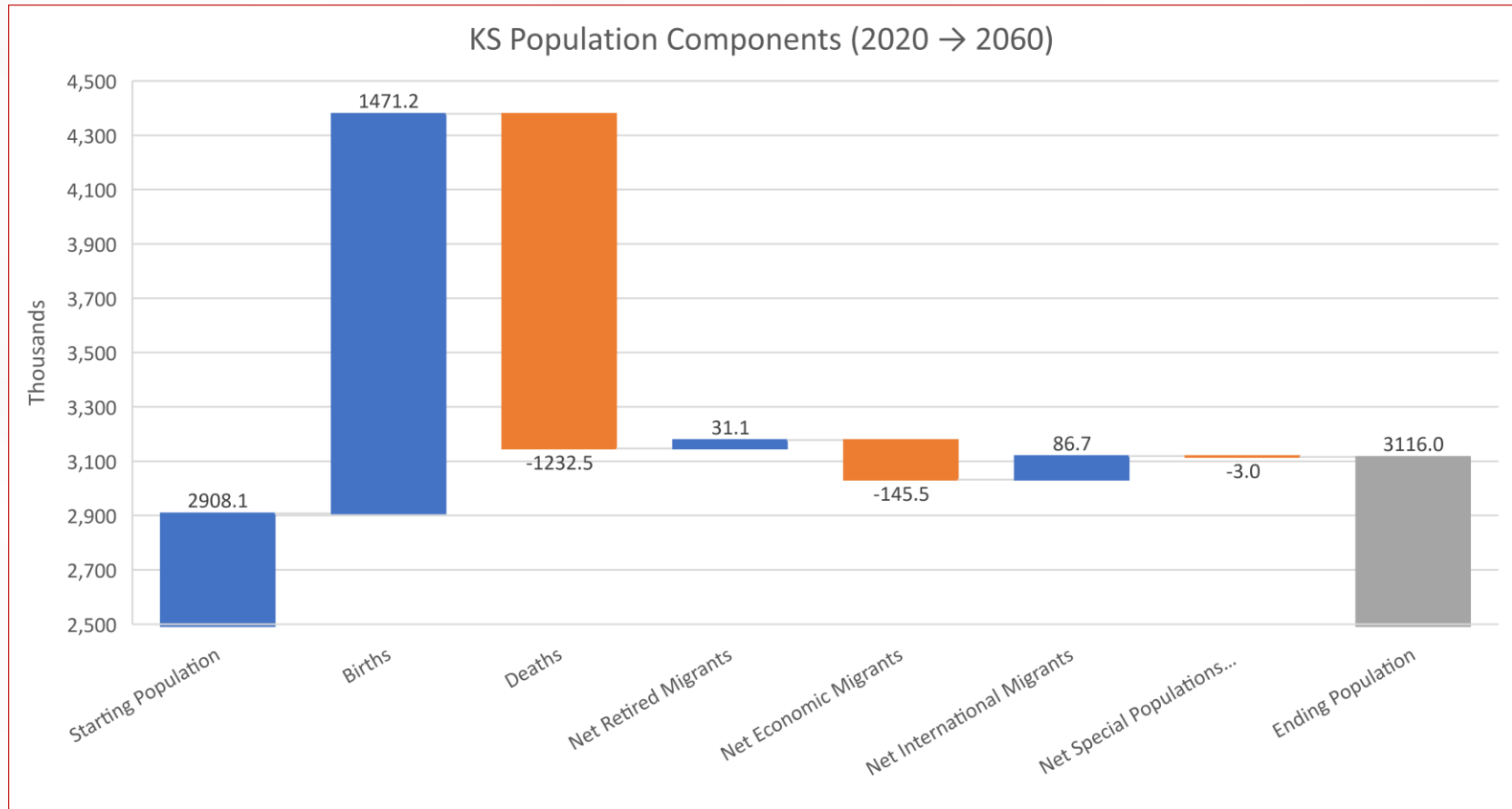
Long-Term Outlook: Population Pyramid



- Year 2060
- Stationary



Population Components



Model Demonstration

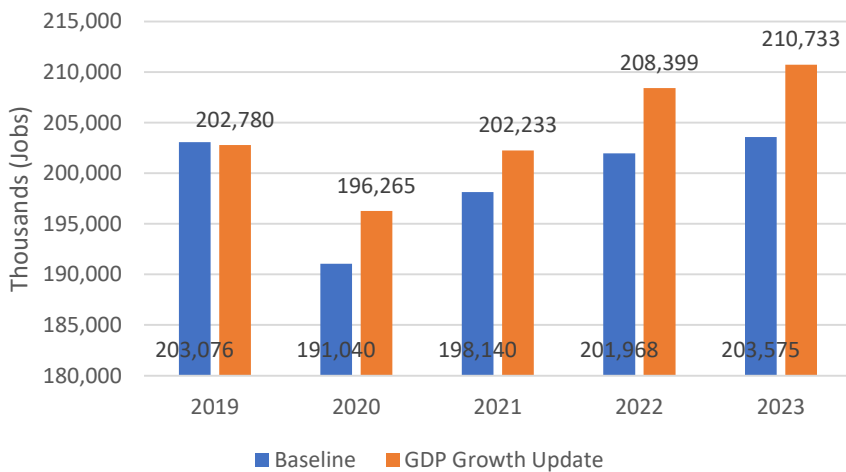
The Scenario

- 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 Kansas

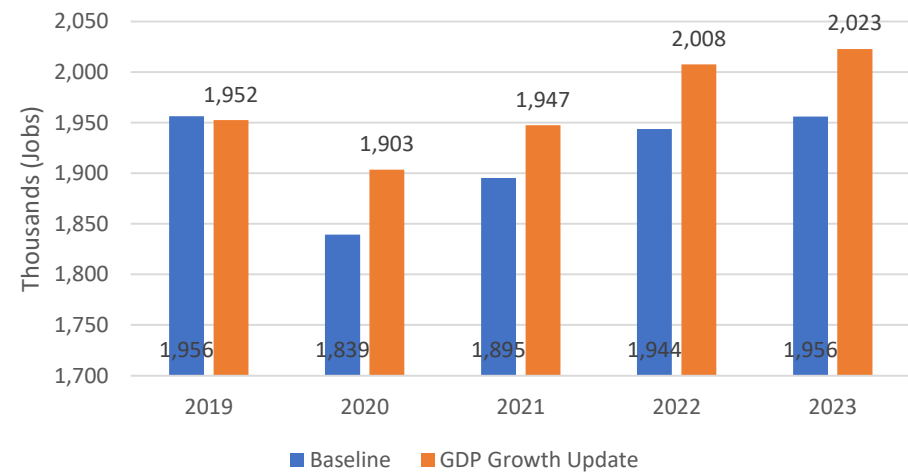
Optimistic Outlook

- Year 2019-2023

Total Employment of the US



Total Employment of Kansas



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

Q & A

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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.