

Analyzing the Social and Economic Impact of Broadband Investment

Regional Economic Models, Inc.

Agenda



Introduction

Background

Methodology

Notable Results

Conclusion

Q&A

*what does **REMI** say?sm*

About Us



At REMI, we're inspired by a single goal: *improving public policies.*

Our models are built for any state, county, or combination of counties in the United States.

Our Representative Clients

Our model users and consulting clients use REMI software solutions to perform rigorous economic analysis that critically influences policy.



NORTH CAROLINA
Department of Commerce



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Agenda



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Objectives of the Infrastructure Deal



Primary Goals



Workforce Development

Create good-quality jobs that pay prevailing wages while ensuring workers have the agency to organize, join a union, and bargain collectively.

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Rebuild Competitive Edge

Revitalize manufacturing, secure U.S. supply chains, invest in R&D, and train Americans for jobs of the future.



Improve Infrastructure

Fix highways, rebuild bridges, upgrade ports, airports, transit systems, and implement digital integration.



Incentivize Domestic Job Creation

Implement incentives that stop the shifting of jobs and profits abroad, and ensures corporations pay their fair share.

Benefits of Universal Broadband Access



Economic Competitiveness

Internet access enables gains in labor and commodity access and its impact on the economy



Linking Economics and Social Impacts with Policy

Enhanced connectivity will mitigate costs associated with congestion.



Socioeconomic Impact

Impacts to socioeconomic classes (income, race, gender, etc.) to understand equity

Objectives of Broadband Investment Deployment



Funding Appropriations

- \$65 Billion for Universal Broadband Access
 - \$42.5 Billion for direct spending for state funding to improve infrastructure
 - \$14.2 Billion for internet subsidies
 - \$2.75 Billion for Digital Equity Strategy

Policy Adjustments

- Addresses issues related to transparency, affordability, and accessibility
 - Increased access to low-cost internet plans
 - Transparent pricing and details relating to connectivity
 - Equal access to internet for historically underserved communities

Agenda



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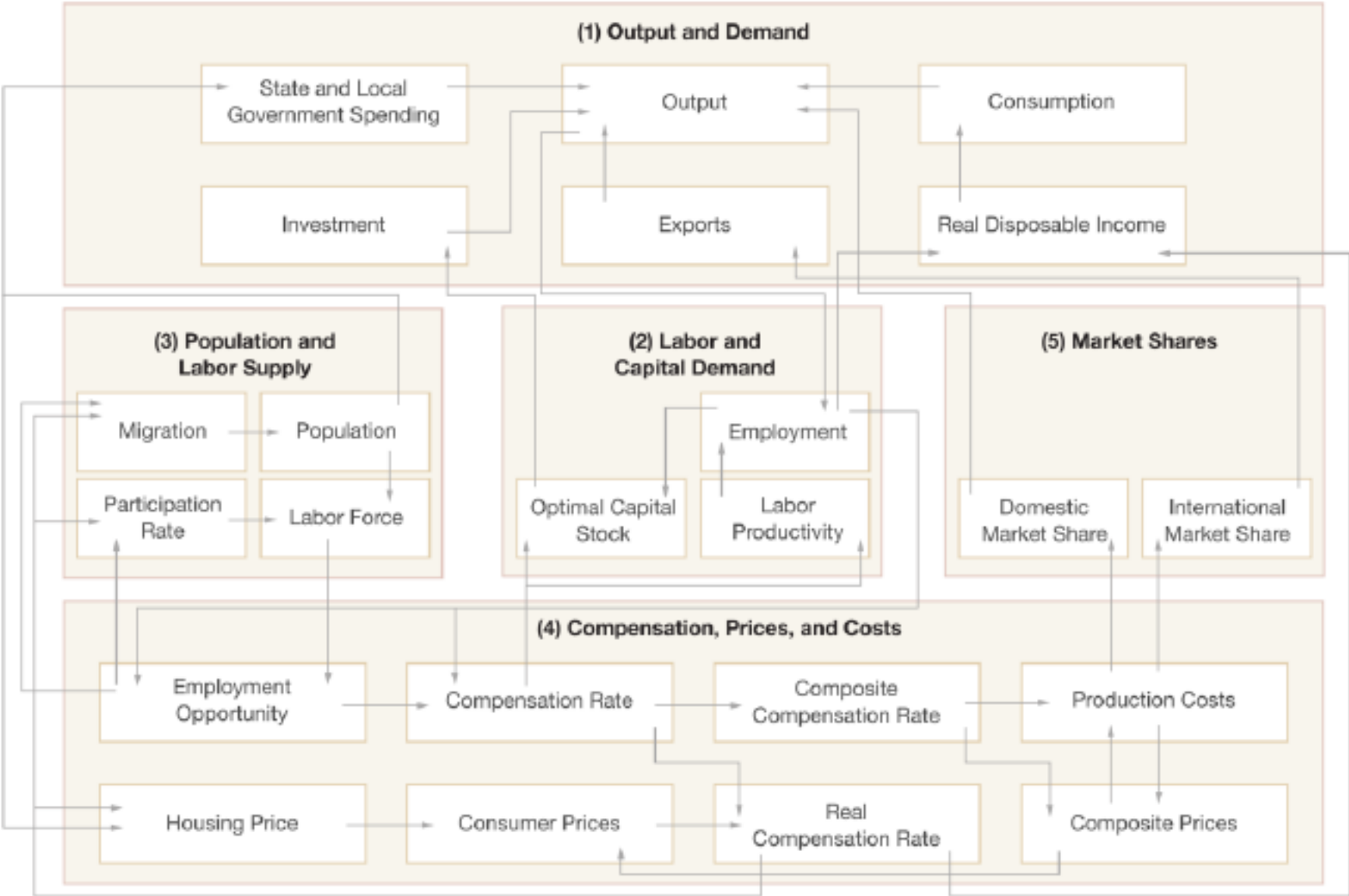
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Why Economic Modeling?



- Economic modeling can clarify, calculate, and communicate a *quantitative narrative* to policy makers and the general public about policies for your economy.
- Economic policy modeling can help agencies forecast the effects of policies before they are implemented
- Guide Policy-making Process
 - *Formalize your decision-making process*
 - *Get policy right*
 - *Pass/Block legislation*
 - *Modernize and advance your agency*
- Bidders for grants, contracts from the Infrastructure Bill will want to demonstrate that their proposals will have a positive economic and equity impact in host communities and remain competitive
- Policy organizations and regional planners can use models to add quantitative rigor to their proposals, making the benefits clearer to stakeholders and decision-makers

REMI Model Linkages



Broadband Simulation Overview



- Consists of a hypothetical scenario where broadband is expanded in the state of Louisiana and the economic impacts are evaluated
- Inputs to the simulation involve the following components:
 - Construction of the broadband infrastructure, including spending on the telecommunications and professional services industries
 - Annual repair and maintenance expenditures
 - Labor access increases as a result of the broadband expansion
 - Commodity access index

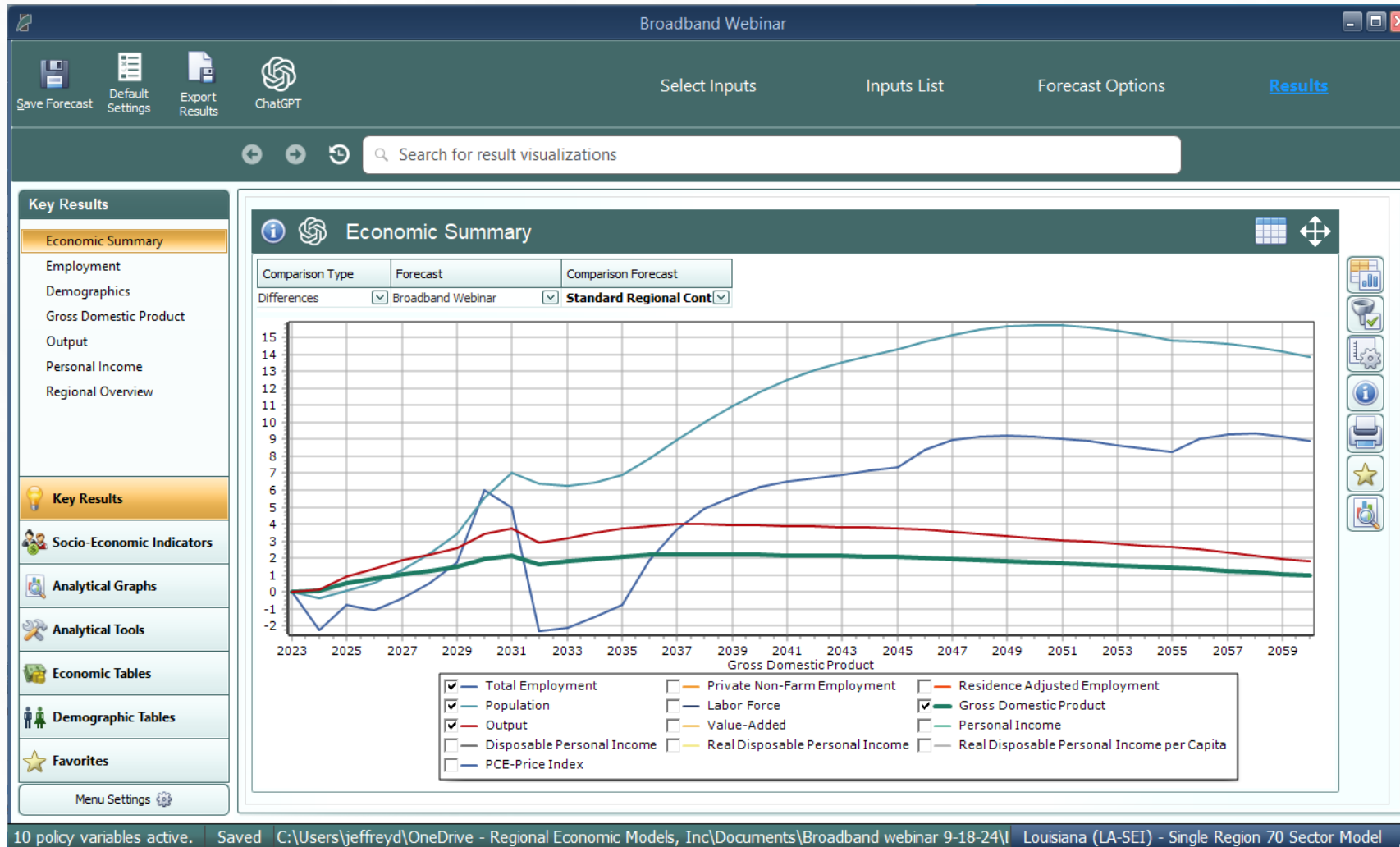
Model Simulation Overview: Broadband Internet Access in Louisiana



Policy Variable Inputs					
	Active	Edit		Group	
▶	<input checked="" type="checkbox"/>				New Industries - Construction
	<input checked="" type="checkbox"/>				New Industries - Telecommunications
	<input checked="" type="checkbox"/>				New Industries - Professional, scientific, and technical services
	<input checked="" type="checkbox"/>				New Industries - Repair and maintenance
	<input checked="" type="checkbox"/>				New Labor Access Index (Fixed broadband service (residential) 1
	<input checked="" type="checkbox"/>				New Labor Access Index Fixed broadband service (residential) 2
	<input checked="" type="checkbox"/>				New Labor Access Index Fixed broadband service (business)
	<input checked="" type="checkbox"/>				New Labor Access Index Fixed broadband service (employees)
	<input checked="" type="checkbox"/>				New Consumer Commodities - Internet access

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Results Overview – Economic Impact



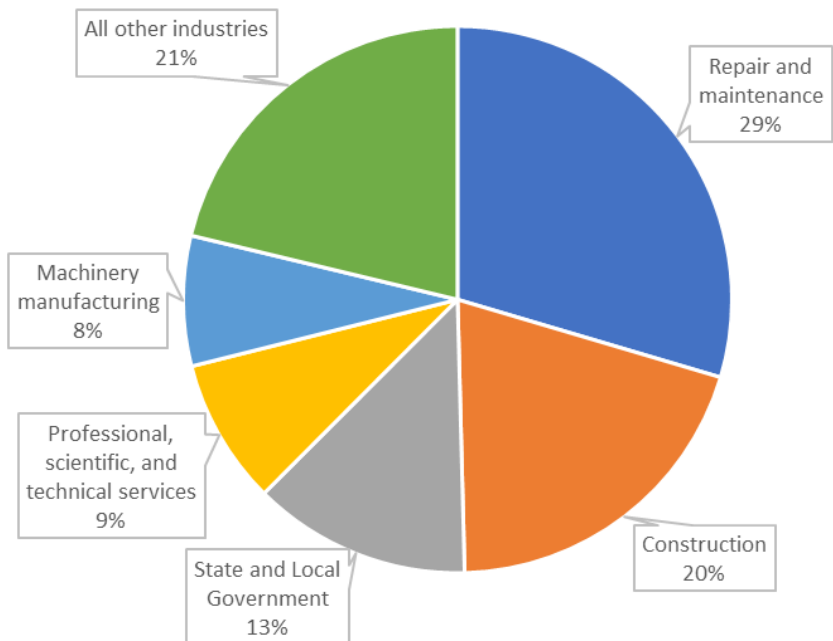
- GDP, output, and population show large positive impacts
- Employment, however, is initially negative as a result from the increased labor productivity from access to broadband
- The long-term employment impacts are all positive (2036 onward), as the economy benefits from a more productive labor force

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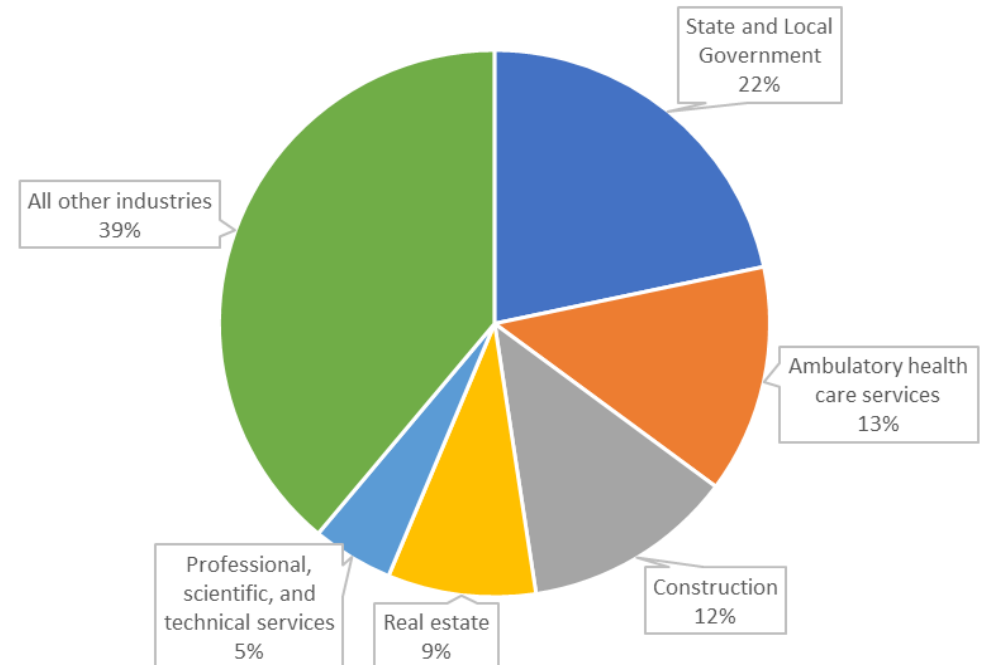
Results Overview – Employment Impact



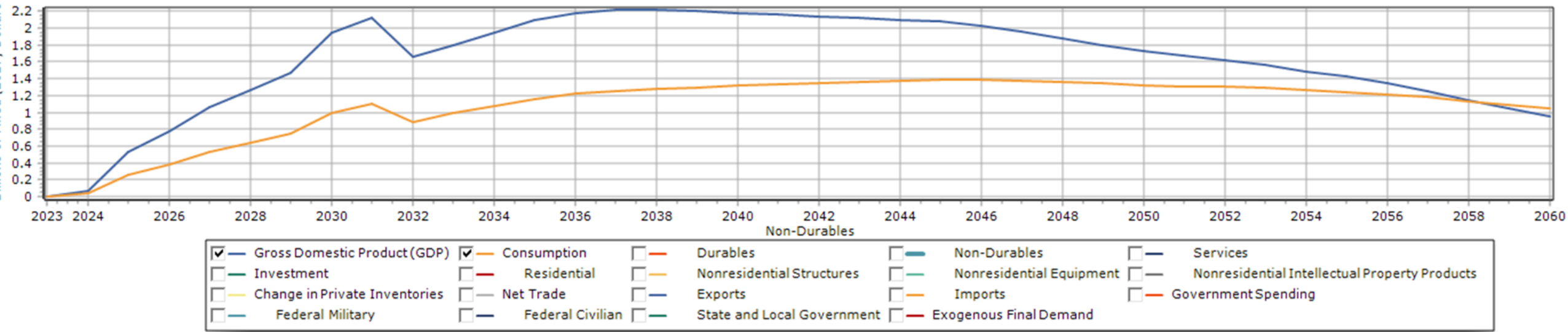
Largest Employment Impacts in 2030



Largest Employment Impacts in 2040

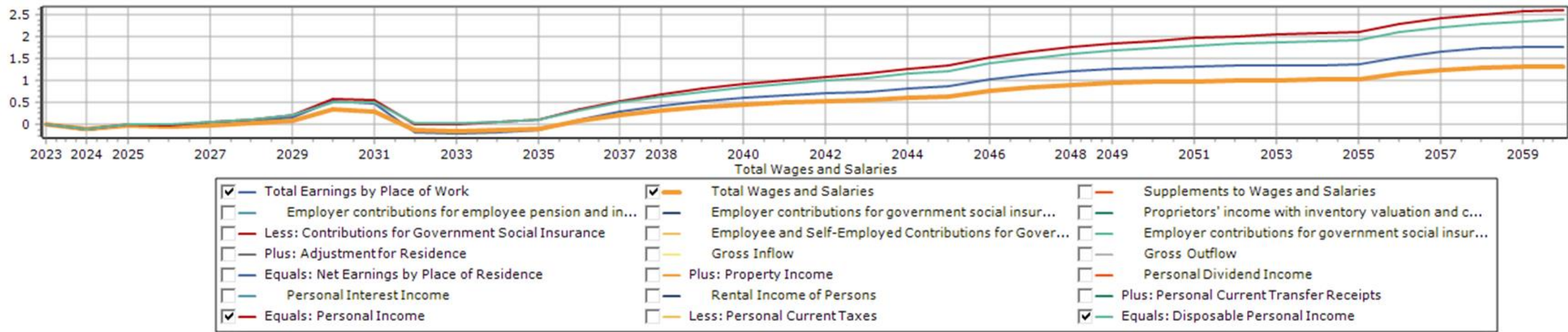


GDP and Consumption



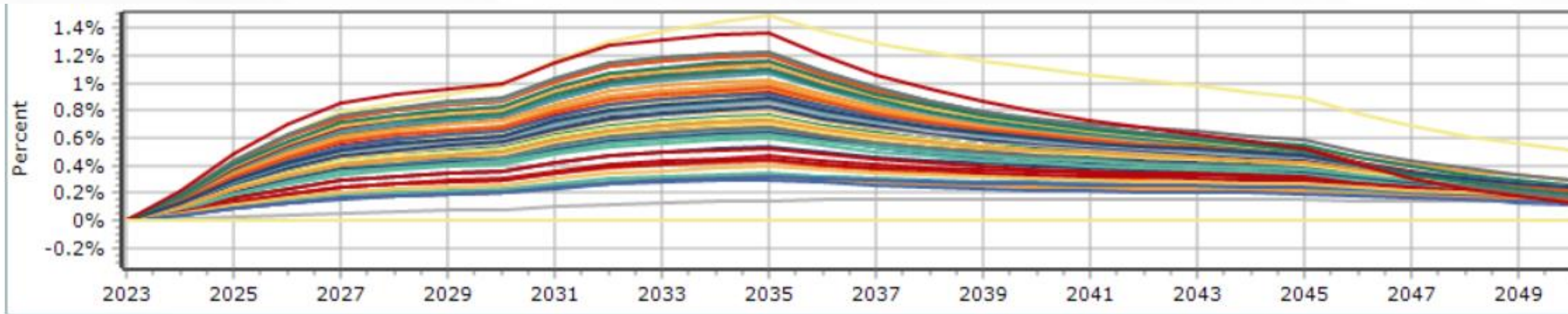
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Earnings, Wages and Salaries, and Personal Income



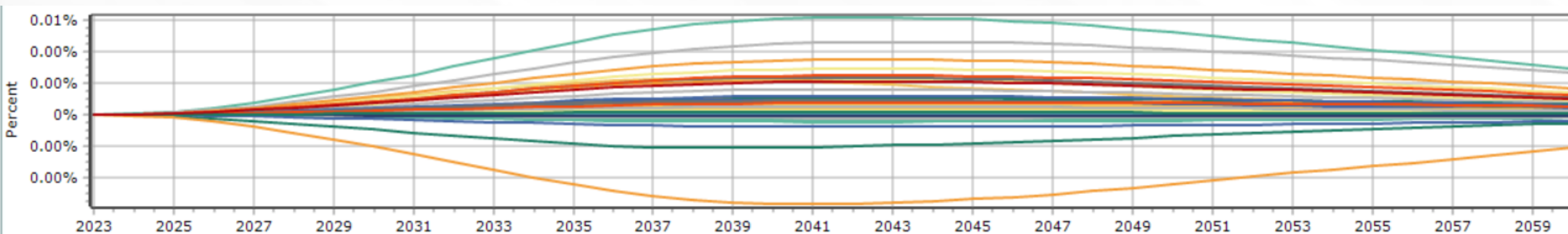
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Labor Productivity by Industry



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Commodity Access Index



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REMI Socioeconomic Indicators



Compensation
Distribution



Employment Changes
by Earnings Quintile



Consumption Price
by Earnings Quintile
and Range



Inequality
Coefficient



Employment by
Race & Gender



Employment by
Educational
Attainment



Labor Force
Participation
by Race & Gender



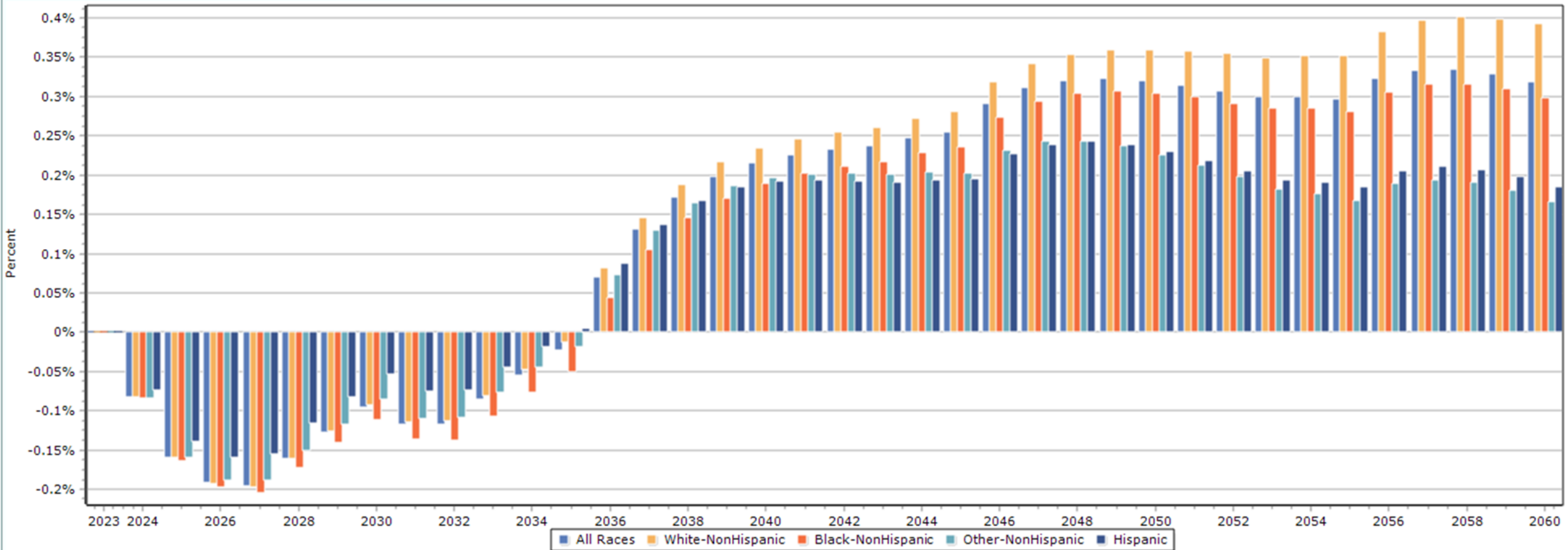
Unemployment



Per Capita
Income

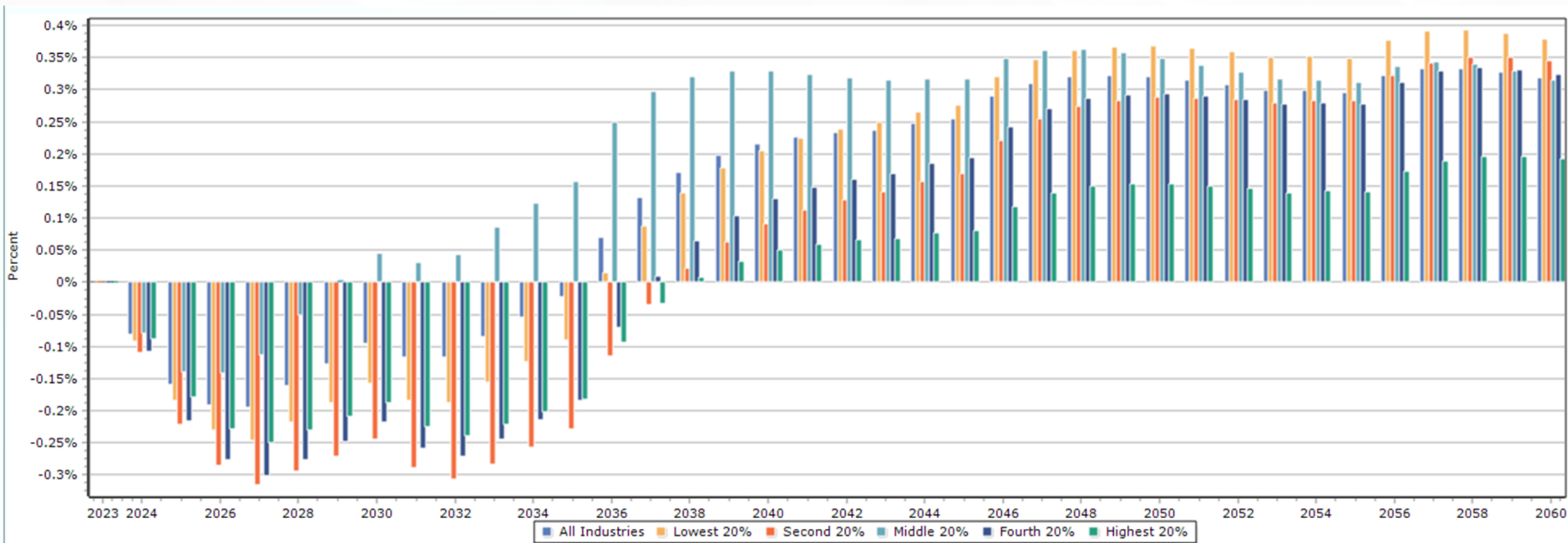
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Socioeconomic Impact - Employment by Race



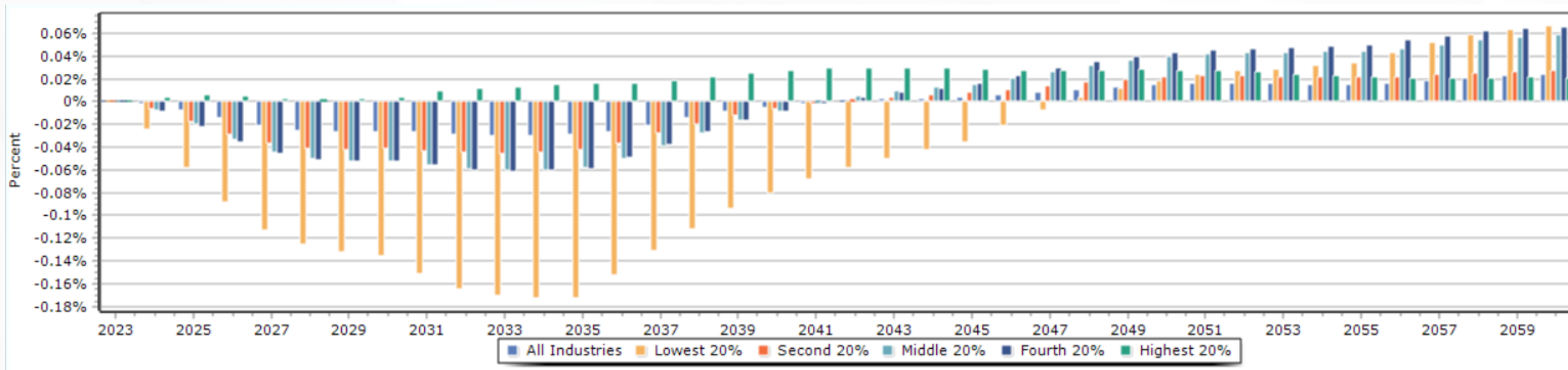
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Socioeconomic Impact - Employment by Income Quintile



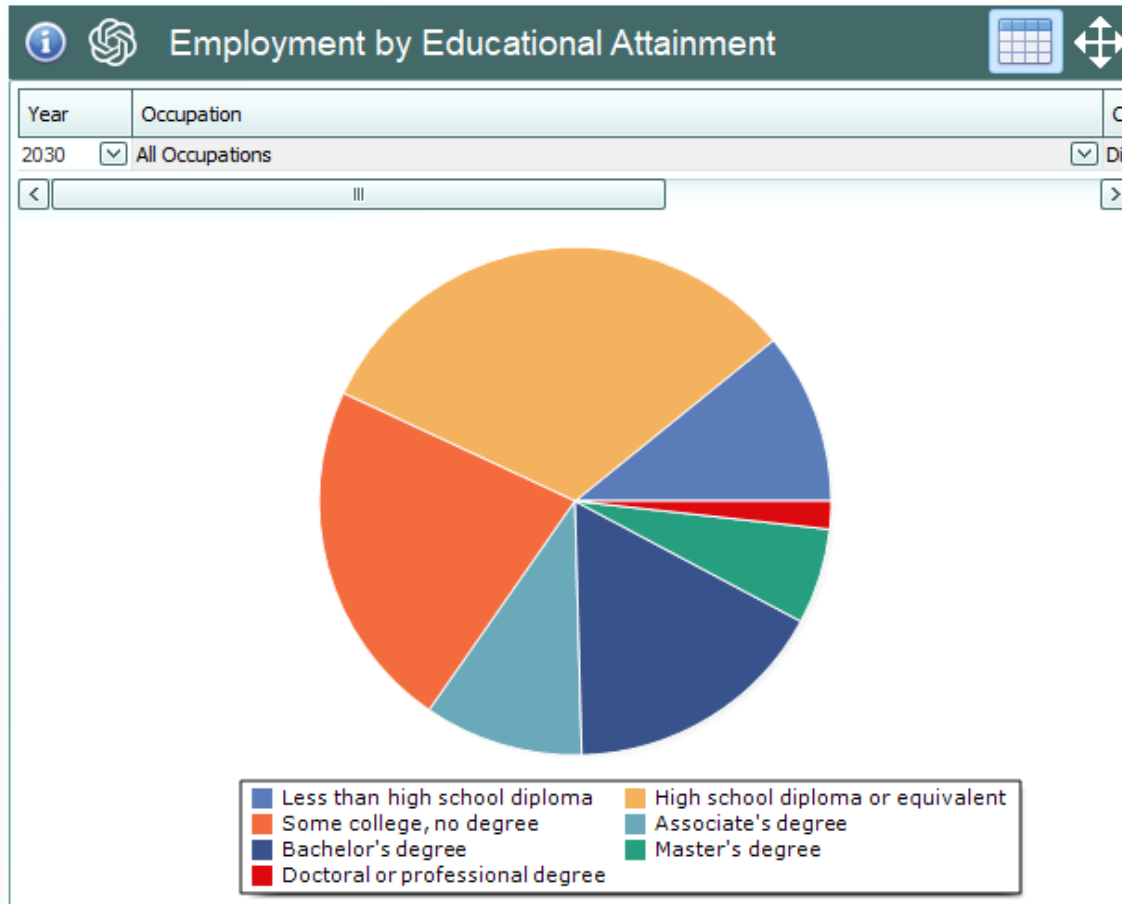
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Socioeconomic Impact - Compensation Rate by Income Quintile



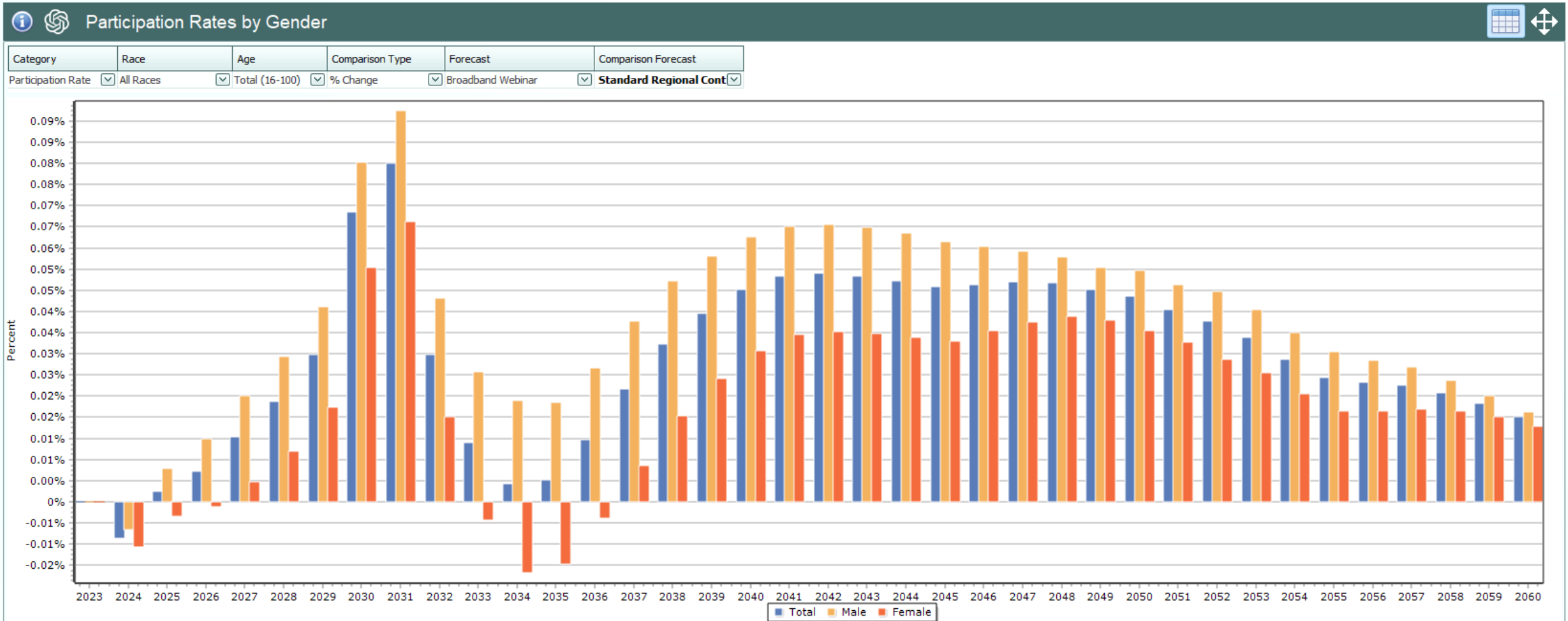
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Socioeconomic Impact – Educational Attainment (2030)



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Socioeconomic Impact – Participation Rate by Gender



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Economic Impacts Summary



Employment:
+8,898 jobs

Labor force:
+7,262

Population:
+13,830

Personal income:
+260 billion

GDP:
+\$196.2 billion

Output:
+\$376.2 billion

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Agenda



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Conclusion



- The expansion of broadband led to a net benefit in jobs, GDP, output, personal income, and other indicators
- Increased productivity will cause a short-term drop in employment
- A strong GDP may not be reflected in employment and SEI components
- Although GDP is positive in all years, employment takes additional time to grow because of increases in labor productivity
- An increase in labor force without a substantial increase in jobs may lead to lower compensation rates

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Thank you for attending!

For more information, please contact
info@remi.com