2021 Economic Forecast Update

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Agenda

- ## Moody's Analytics Economic Forecast Update

- ## Forecast Implications and Energy Trends

New York ISO

Economic Forecast Update

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January 2021 Economic Forecast Summary

- The Moody's forecast assumes that the ongoing economic recovery will be boosted as vaccines become widely available by midyear.

- The forecast contains more aggressive assumptions about planned federal stimulus relative to prior iterations. Trends in personal real income in 2021 have significantly increased due to the assumed federal stimulus.

- The economic recovery is complete by early 2023, when Gross State Product is projected to match the pre-COVID level.

- Total employment returns to the pre-COVID forecast trend by 2024. The long term level remains lower than the pre-COVID projection throughout the forecast horizon.

- There is a significant downward revision in the long term population forecast.

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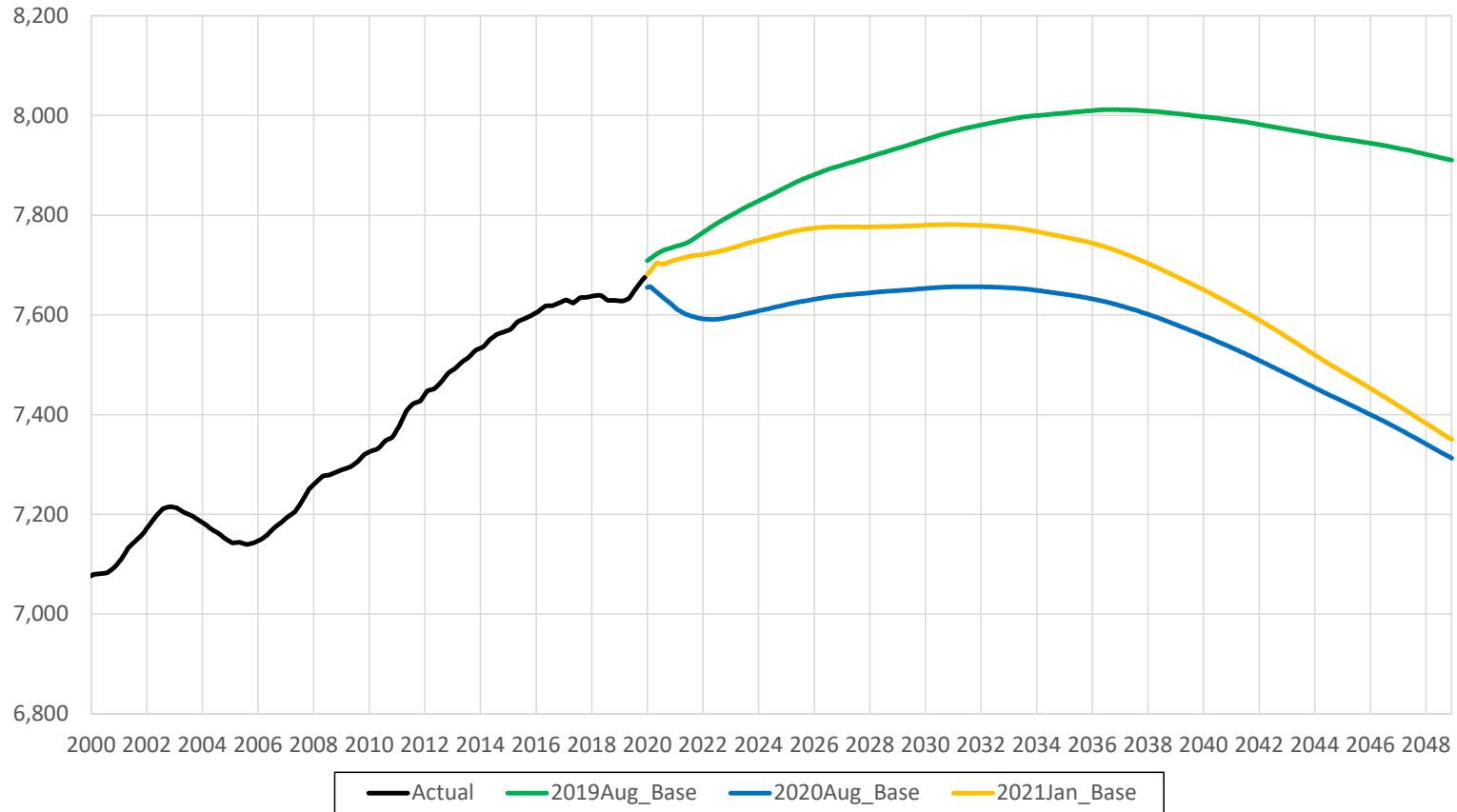
Statewide Population - Actual & Forecast (Thousands)
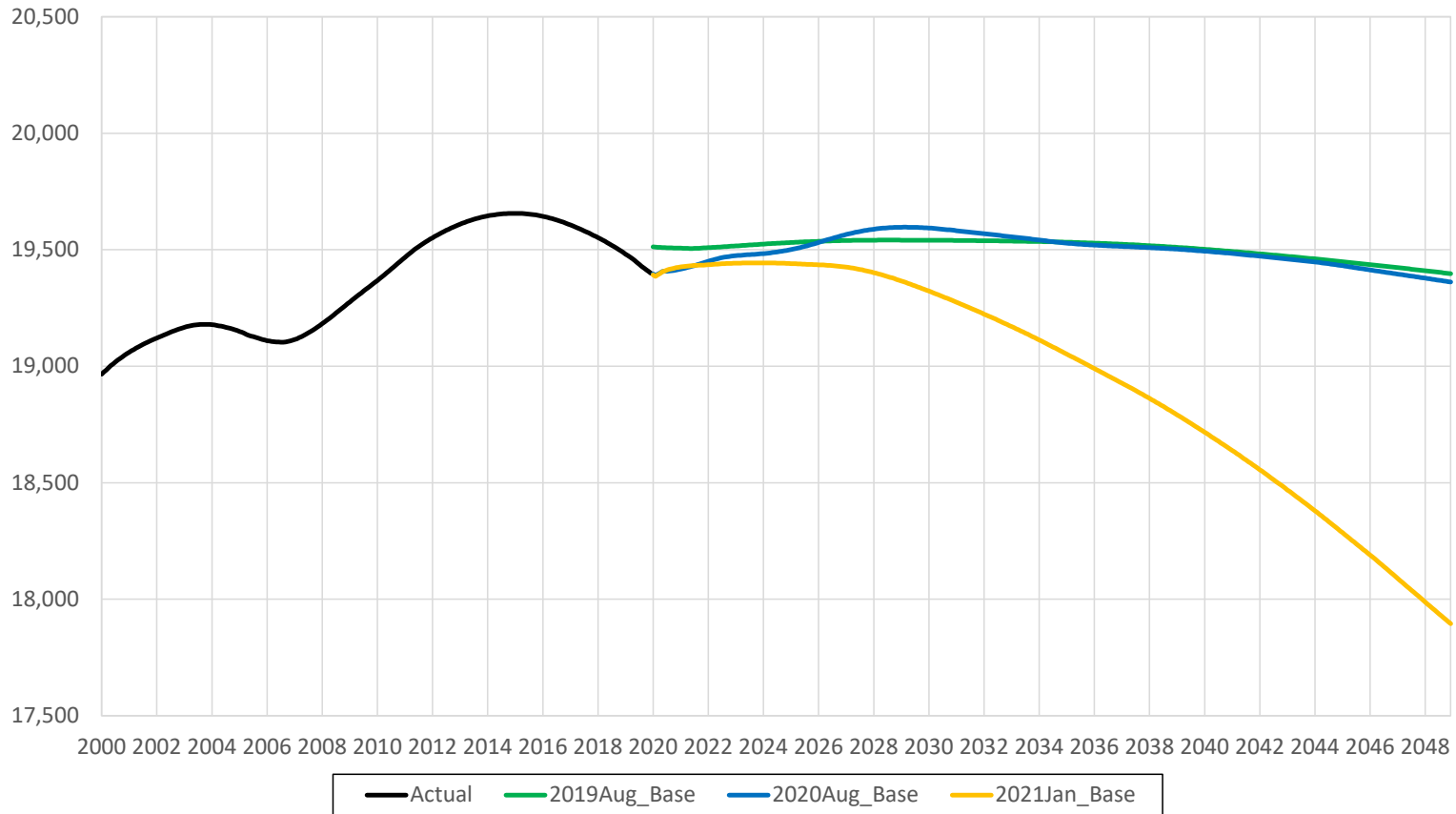
Period	Average Annual Growth
2000-04	0.2%
2005-09	0.2%
2010-14	0.3%
2015-19	-0.3%
2020-24	0.1%
2025-29	-0.1%
2030-34	-0.3%
2035-39	-0.4%
2040-44	-0.5%
2045-49	-0.5%

Data from Moody's Analytics

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Statewide Households - Actual & Forecast (Thousands)

Period	Average Annual Growth
2000-04	0.2%
2005-09	0.5%
2010-14	0.7%
2015-19	0.3%
2020-24	0.2%
2025-29	0.0%
2030-34	-0.1%
2035-39	-0.3%
2040-44	-0.4%
2045-49	-0.5%

Data from Moody's Analytics

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Statewide Real Income - Actual & Forecast (2012 $M)
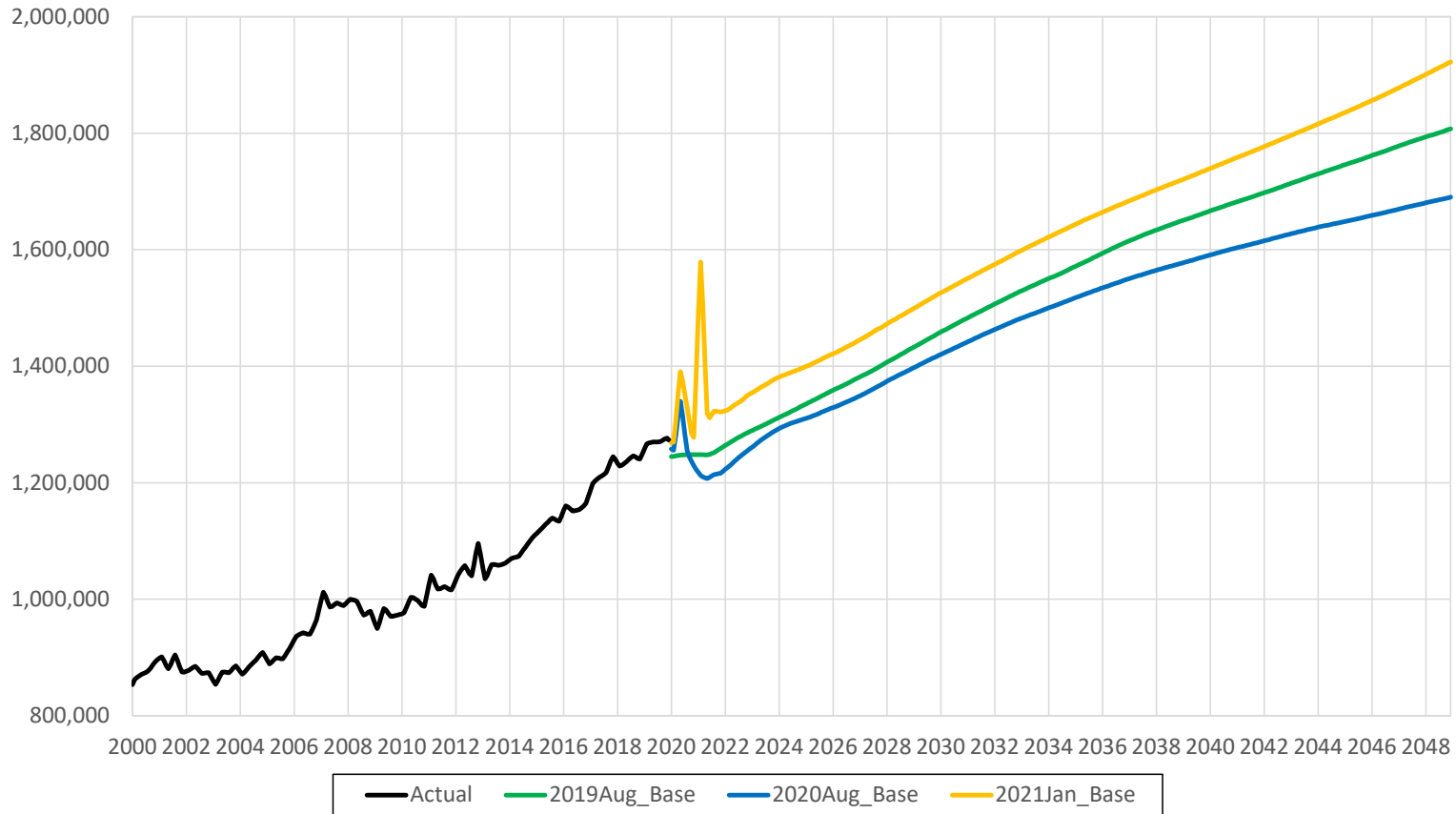
Period	Average Annual Growth
2000-04	1.0%
2005-09	1.8%
2010-14	2.8%
2015-19	2.8%
2020-24	2.1%
2025-29	1.8%
2030-34	1.5%
2035-39	1.2%
2040-44	1.1%
2045-49	1.2%

Legend: Actual, 2019Aug_Base, 2020Aug_Base, 2021Jan_Base

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Statewide Employment - Actual & Forecast (Thousands)
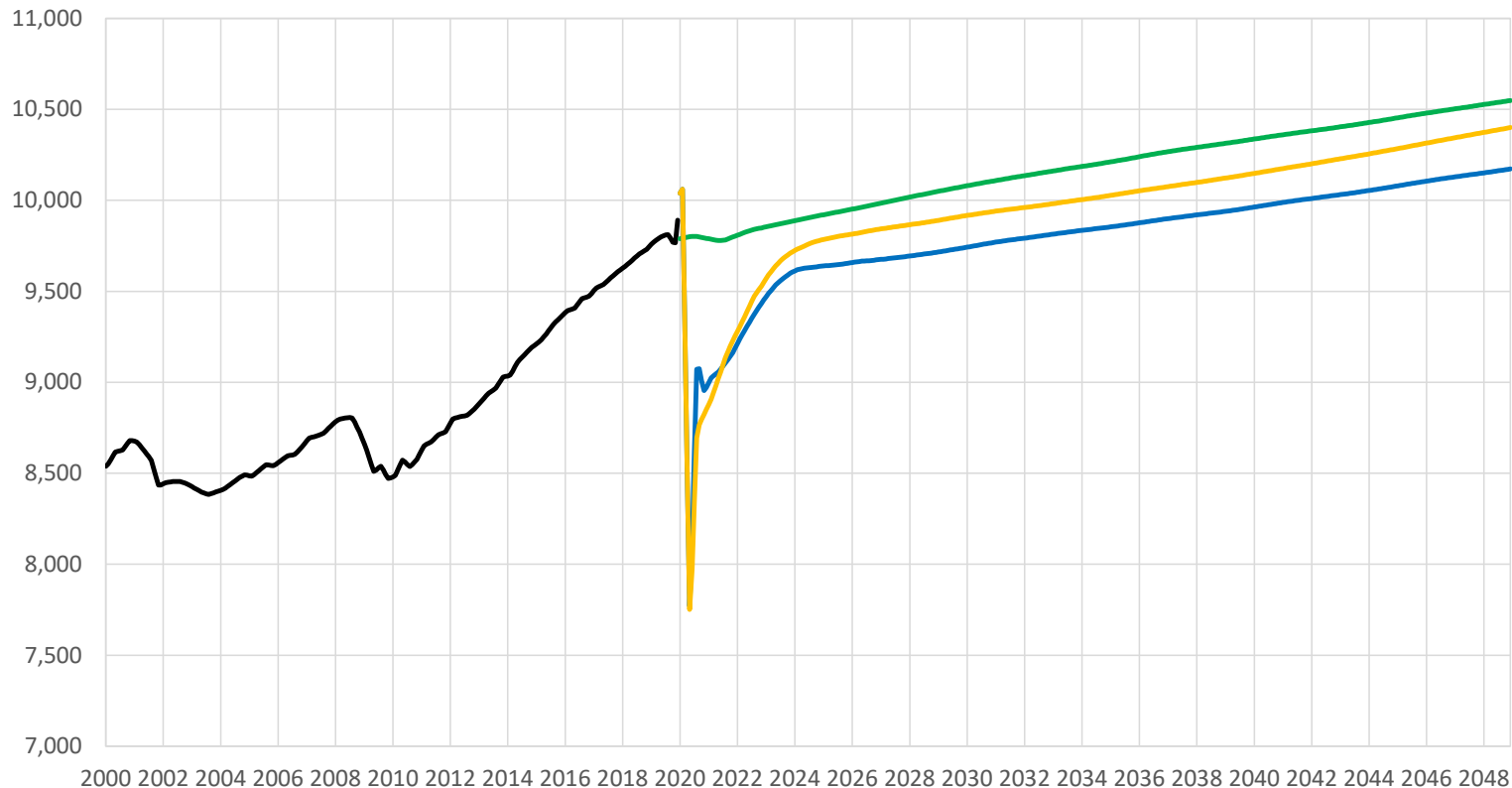
Period	Average Annual Growth
2000-04	-0.1%
2005-09	0.0%
2010-14	1.7%
2015-19	1.8%
2020-24	-0.5%
2025-29	0.3%
2030-34	0.2%
2035-39	0.2%
2040-44	0.3%
2045-49	0.3%

Data from Moody's Analytics

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Gross State Product - Actual & Forecast (2012 $M)
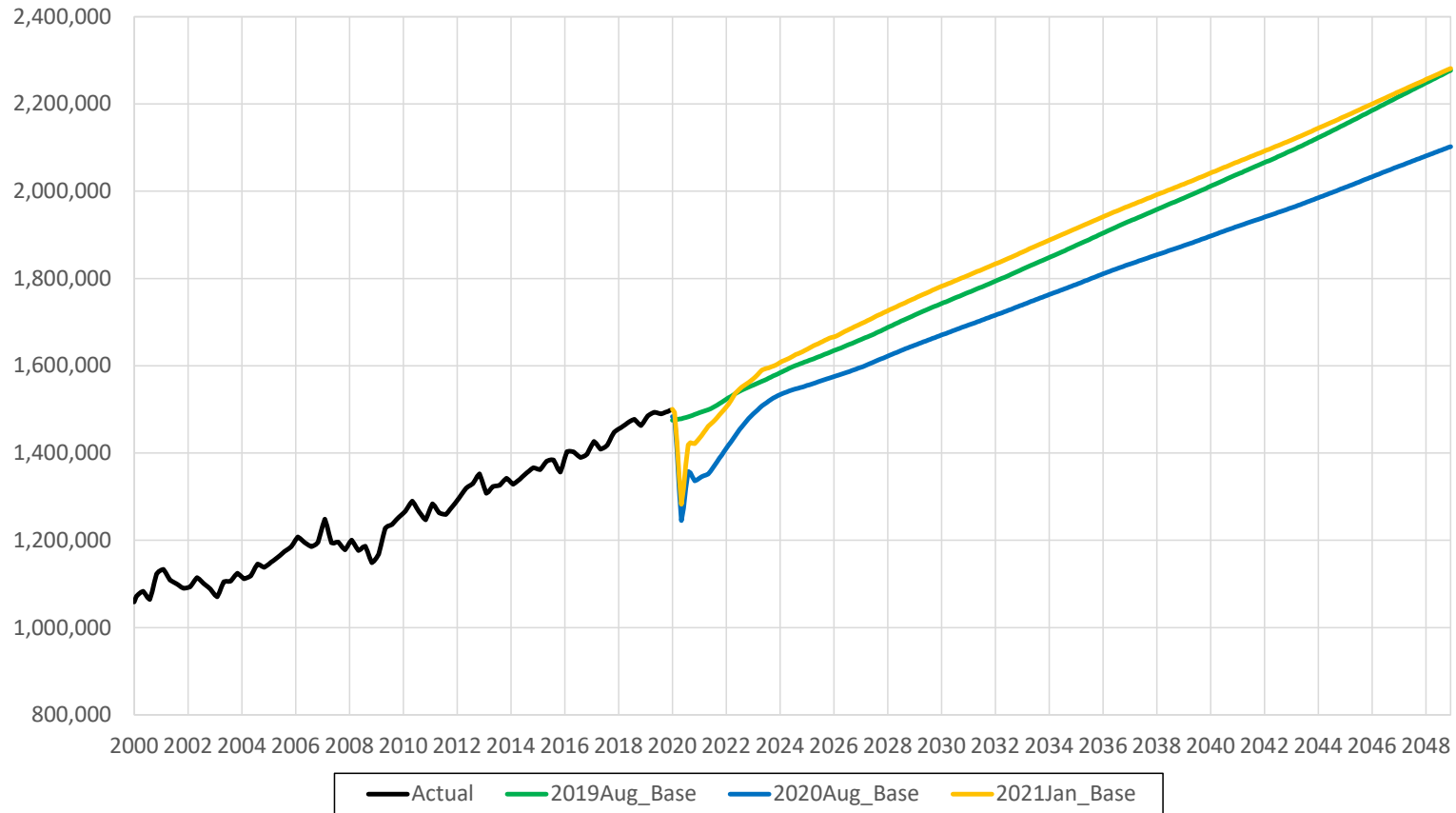
Period	Average Annual Growth
2000-04	1.6%
2005-09	2.0%
2010-14	1.6%
2015-19	2.0%
2020-24	1.8%
2025-29	1.8%
2030-34	1.5%
2035-39	1.3%
2040-44	1.3%
2045-49	1.3%

Data from Moody's Analytics

New York ISO

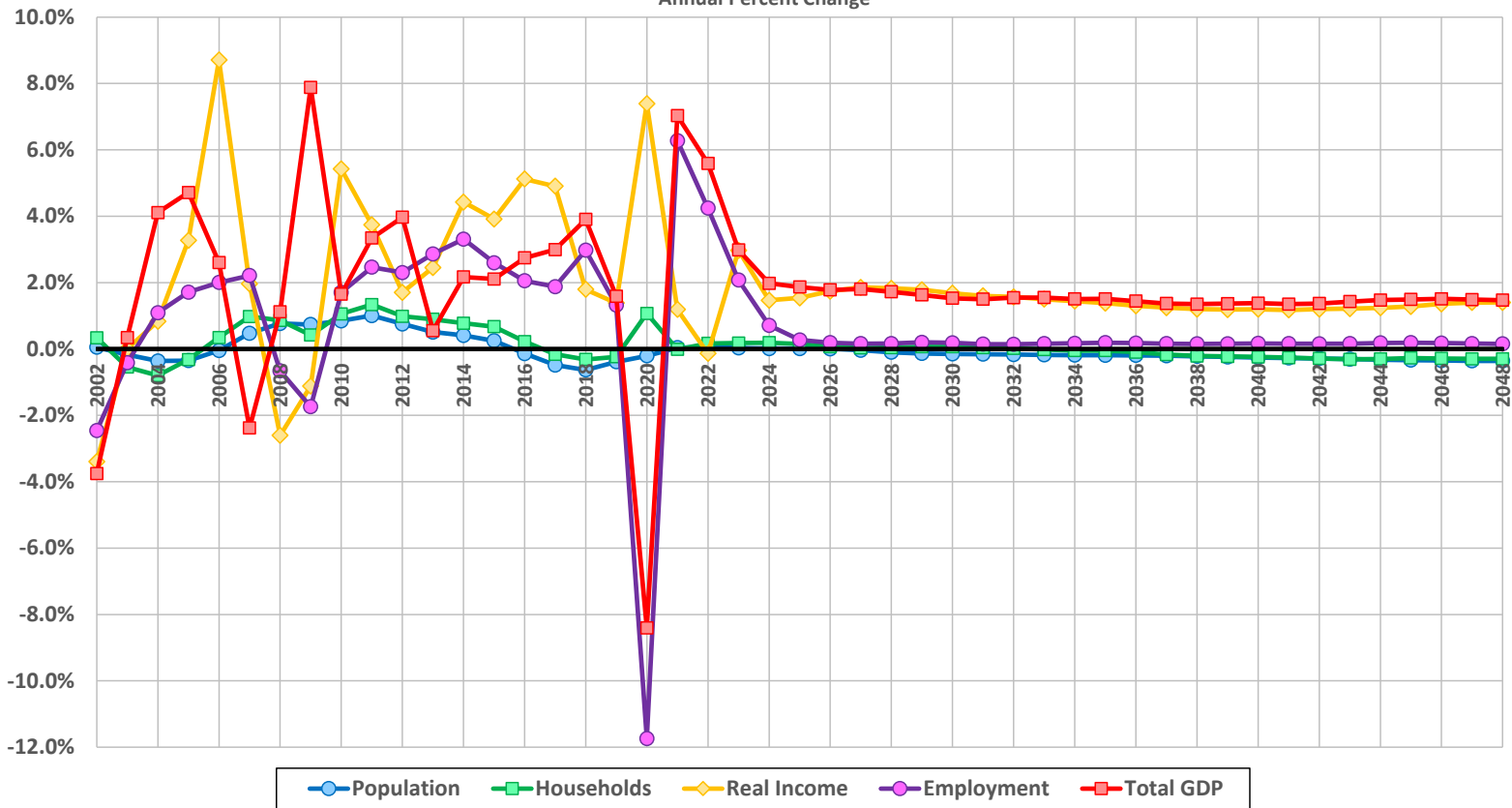Growth Rates for Selected Economic Indices - Statewide Baseline Forecast

Annual Percent Change

Legend: Population, Households, Employment, Gross State Product, Real Income

Data from Moody's Analytics

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New York ISO
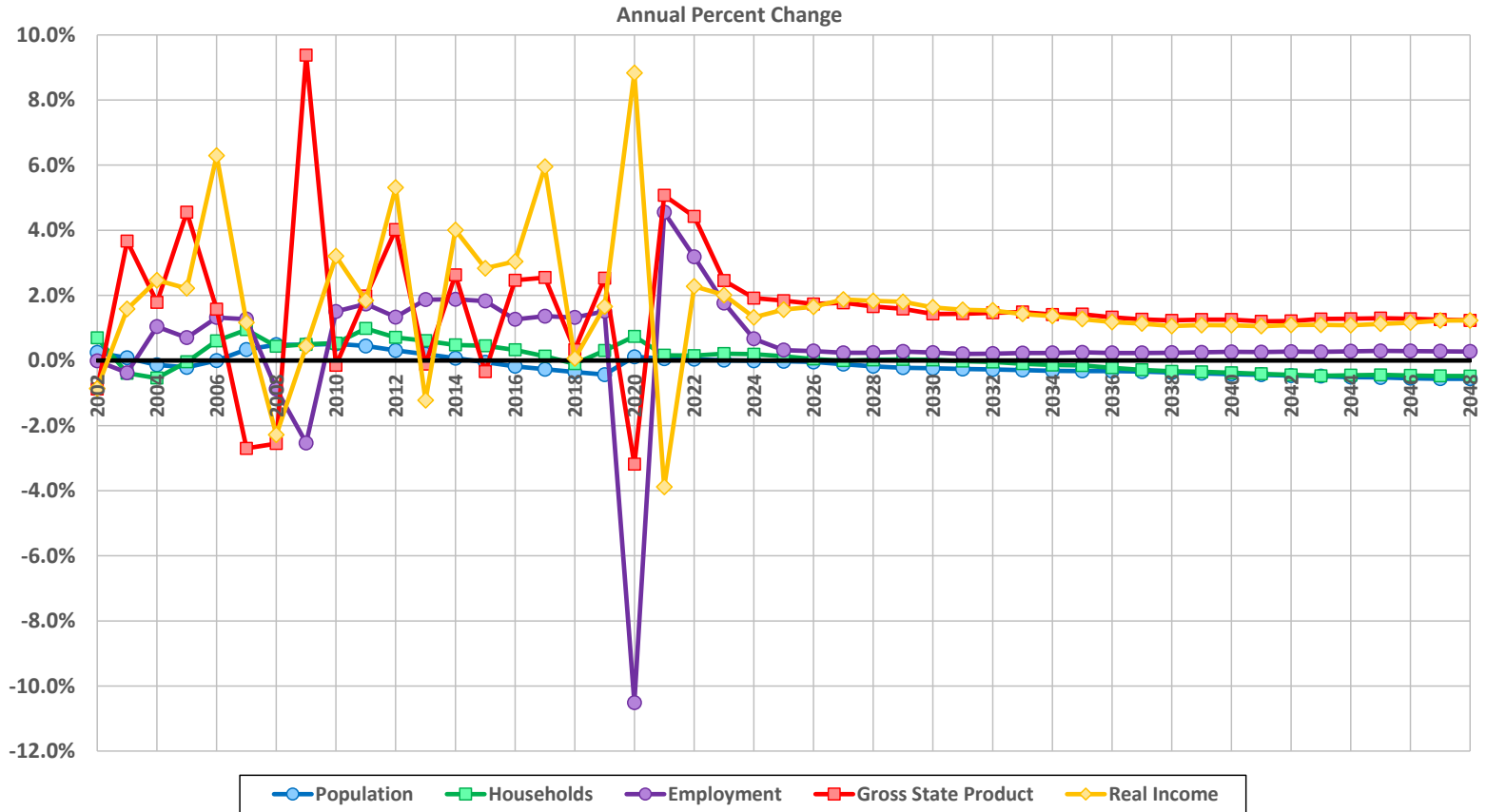
Growth Rates for Selected Economic Indices - Zone J

Annual Percent Change

Legend: Population, Households, Real Income, Employment, Total GDP

Data from Moody's Analytics

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Growth Rates for Selected Economic Indices - Zone K

Annual Percent Change

Legend: Population, Households, Real Income, Employment, Total GDP

Data from Moody's Analytics

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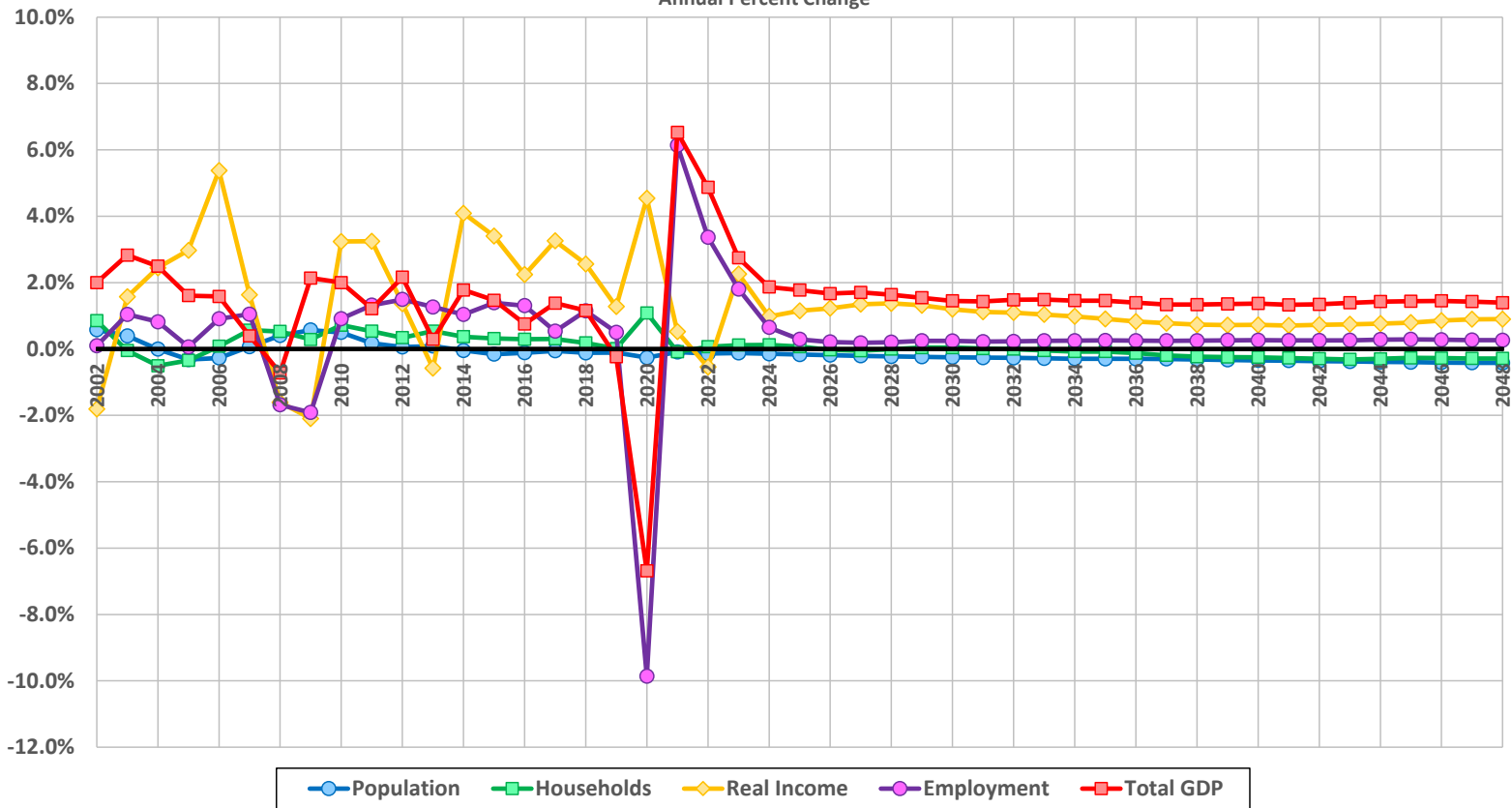
Growth Rates for Selected Economic Indices - Zones H&I

Annual Percent Change

Legend: Population · Households · Real Income · Employment · Total GDP

Data from Moody's Analytics

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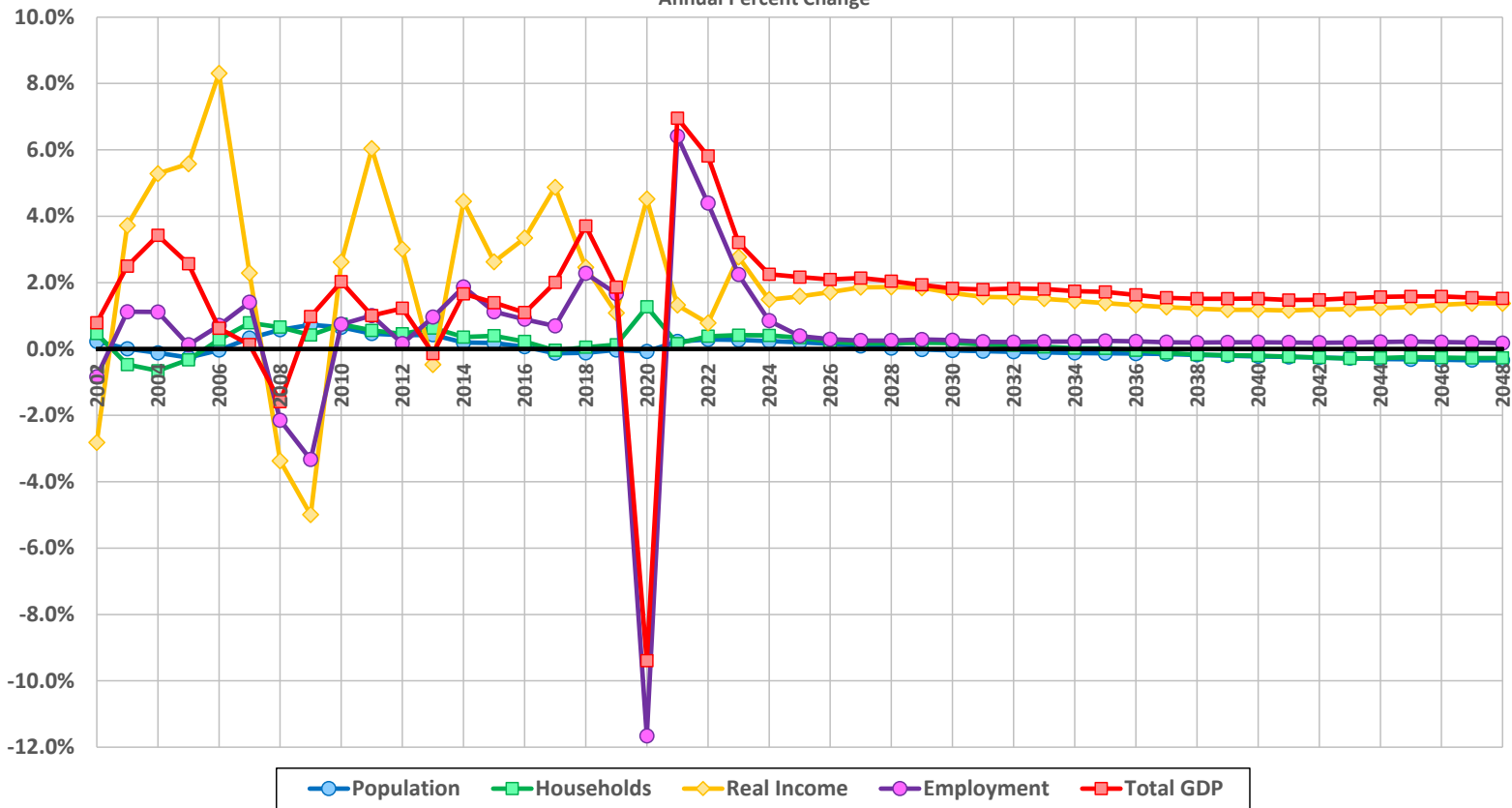
Growth Rates for Selected Economic Indices - Zone G

Annual Percent Change
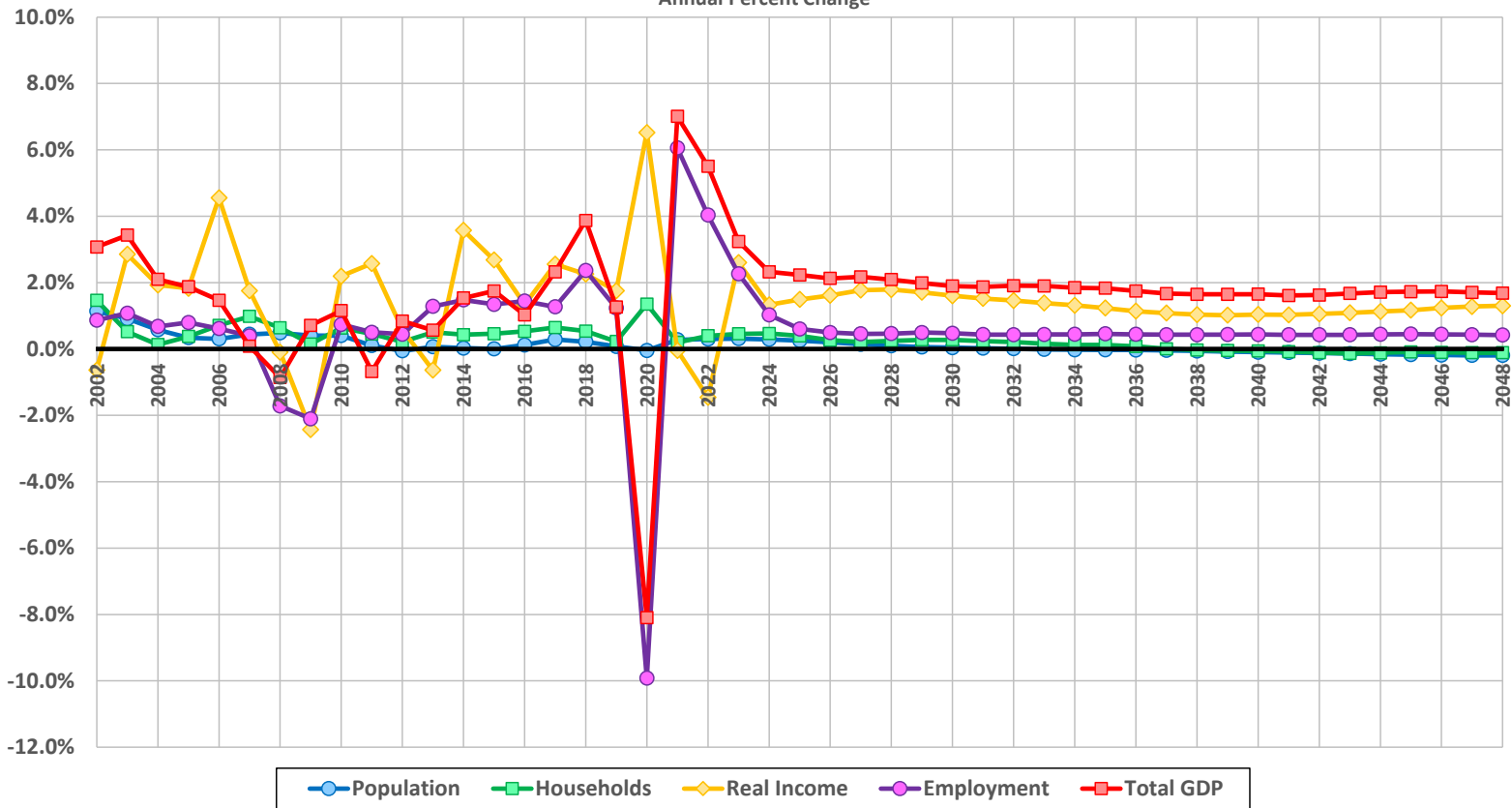
Legend: Population, Households, Real Income, Employment, Total GDP

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Growth Rates for Selected Economic Indices - Zone F

Annual Percent Change

Legend: Population, Households, Real Income, Employment, Total GDP

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Growth Rates for Selected Economic Indices - Zone C

Annual Percent Change

Growth Rates for Selected Economic Indices - Zone B

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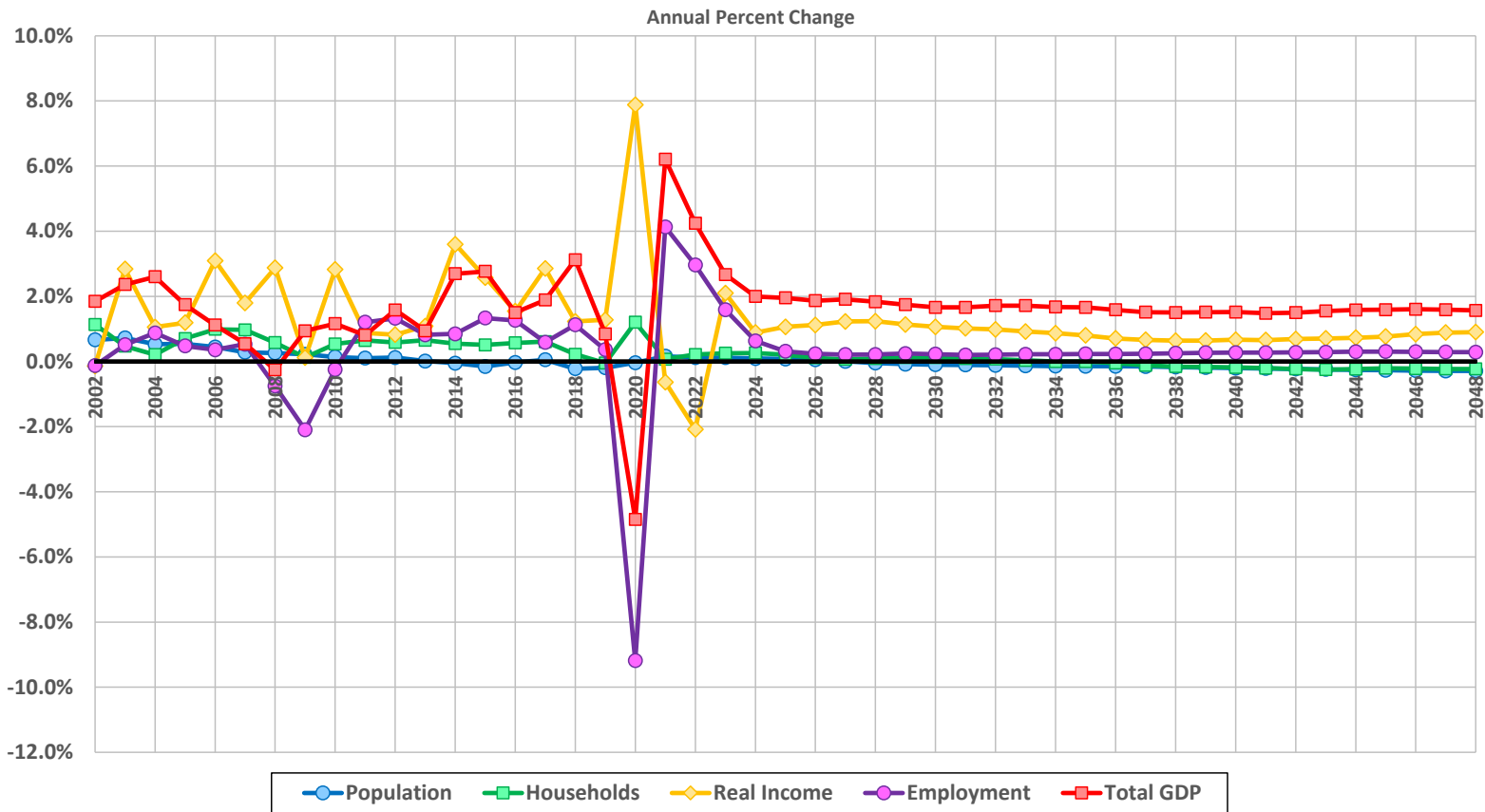
Growth Rates for Selected Economic Indices - Zone A

Annual Percent Change

Legend: Population, Households, Real Income, Employment, Total GDP

Data from Moody's Analytics

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Forecast Implications and Energy Trends

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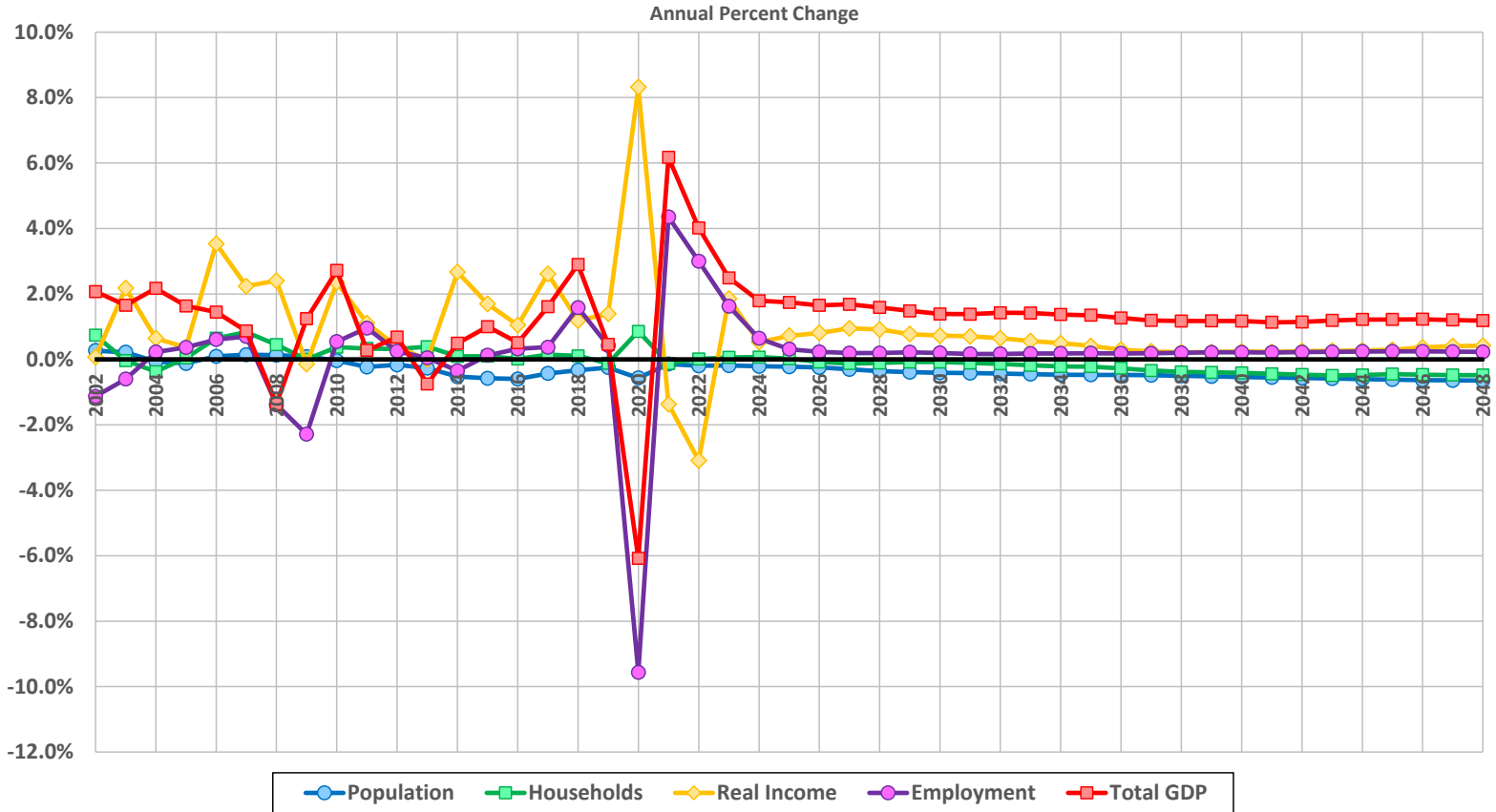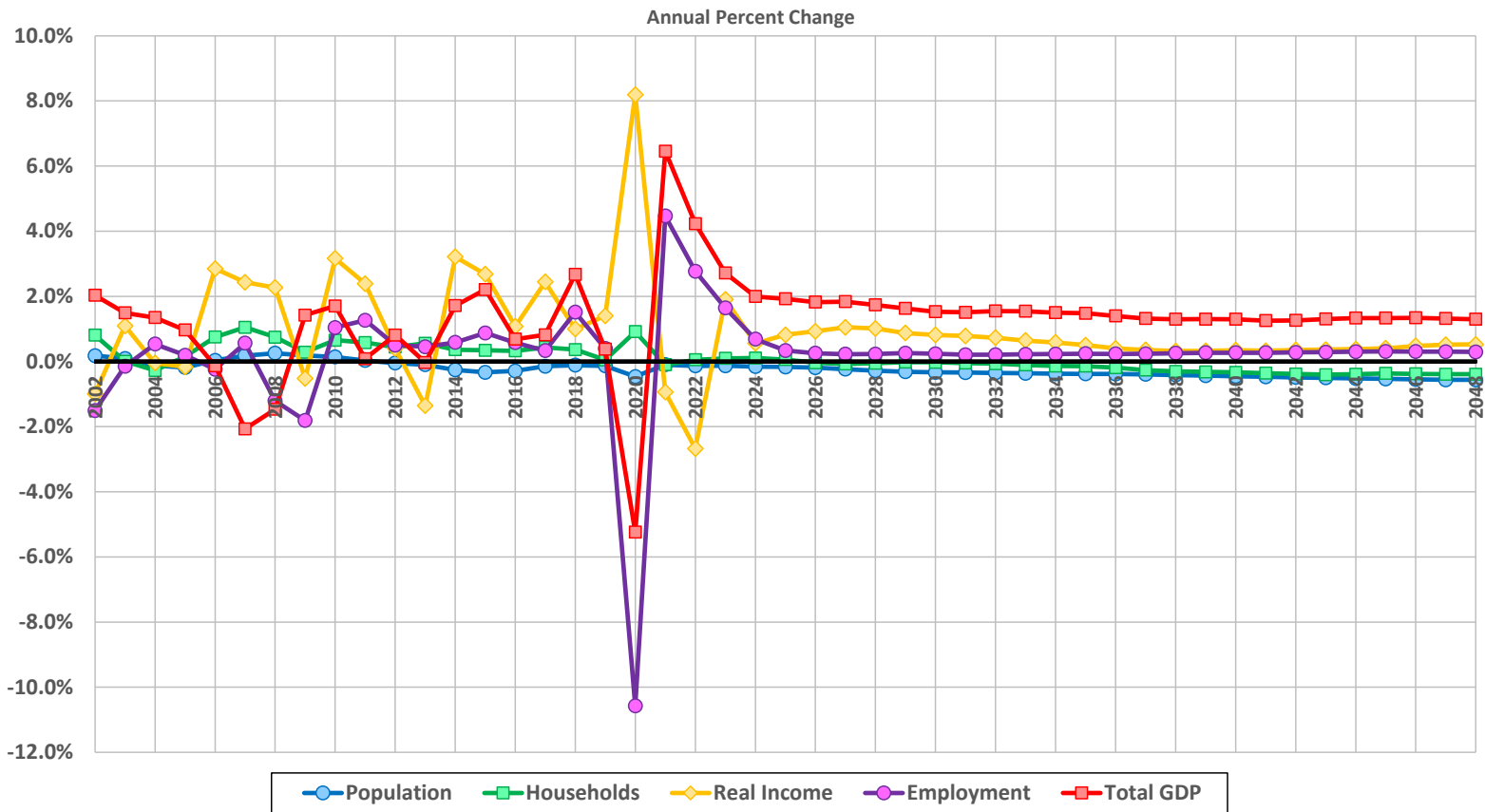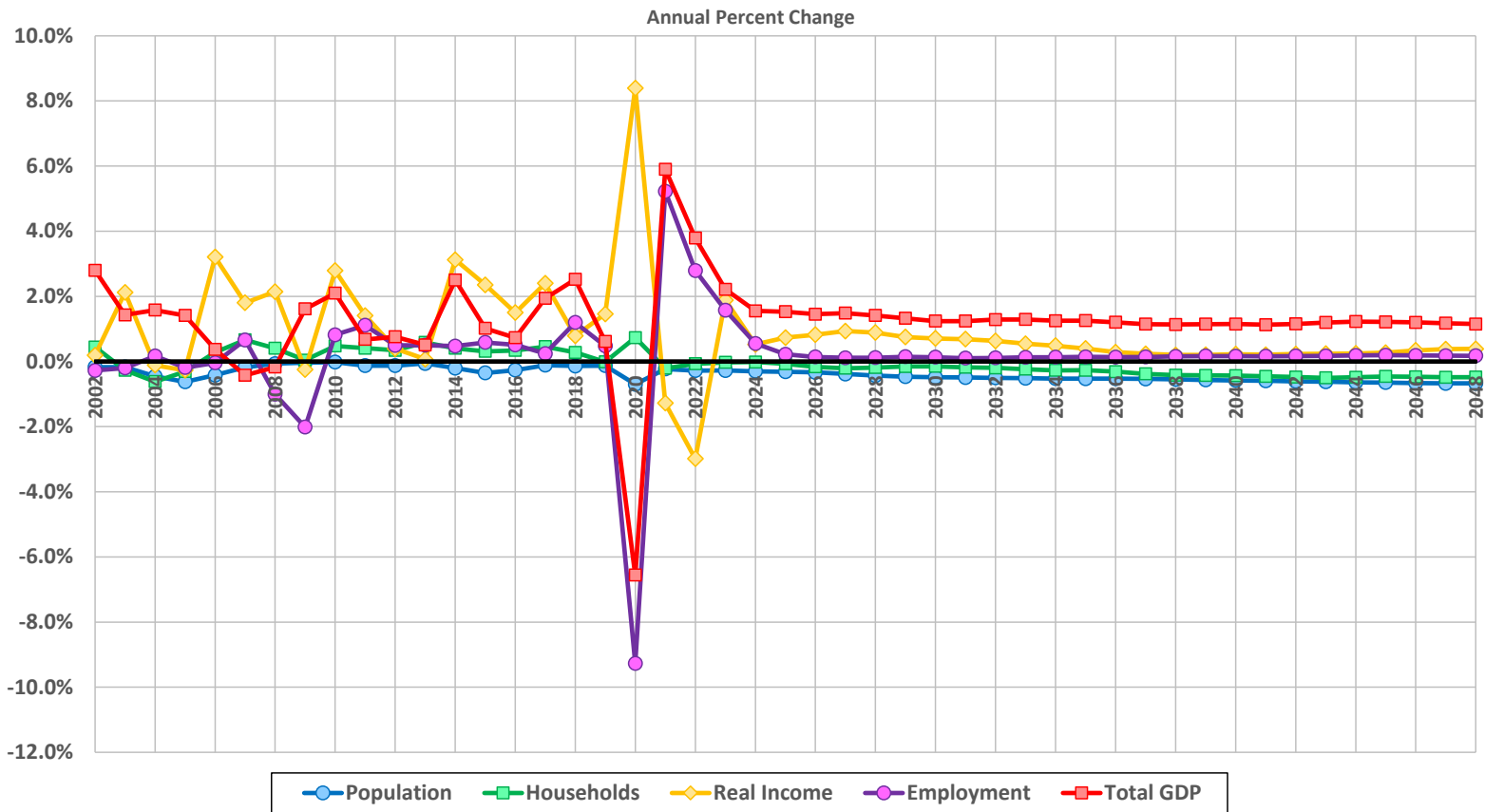
Long Term Forecast Implications

- In the near term, the economy is one of the major drivers in the energy forecast. The NYISO end-use regional models typically include either population or households, and one or two of employment, real income, and GDP.

- In the long term, economic trends remain a forecast input. However, over the longer forecast horizon, the impacts due to the economy tend to be outweighed by the significant effects of other forecast drivers. These include the effects of policy driven energy efficiency and codes & standards impacts, and the impacts of growing penetration of electric heating and electric vehicles.

- Other long-term energy and peak forecast drivers include end-use technology saturation and efficiency trends, behind-the-meter solar PV impacts, behind-the-meter energy storage and distributed generation impacts, and the assumed climate trend.

- The impacts of the economy on energy usage are not always direct and one-to-one. For example, the vast majority of the 2020 summer peak impact was localized in New York City, as the rest of the state remained relatively close to expected peak load levels. Recent energy trends through the fall and winter show continued negative impacts in Zone J, while other areas have been generally at or above expected energy levels.

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2020 Weather Normalized Monthly Energy Use - % Versus Expected (Areas)
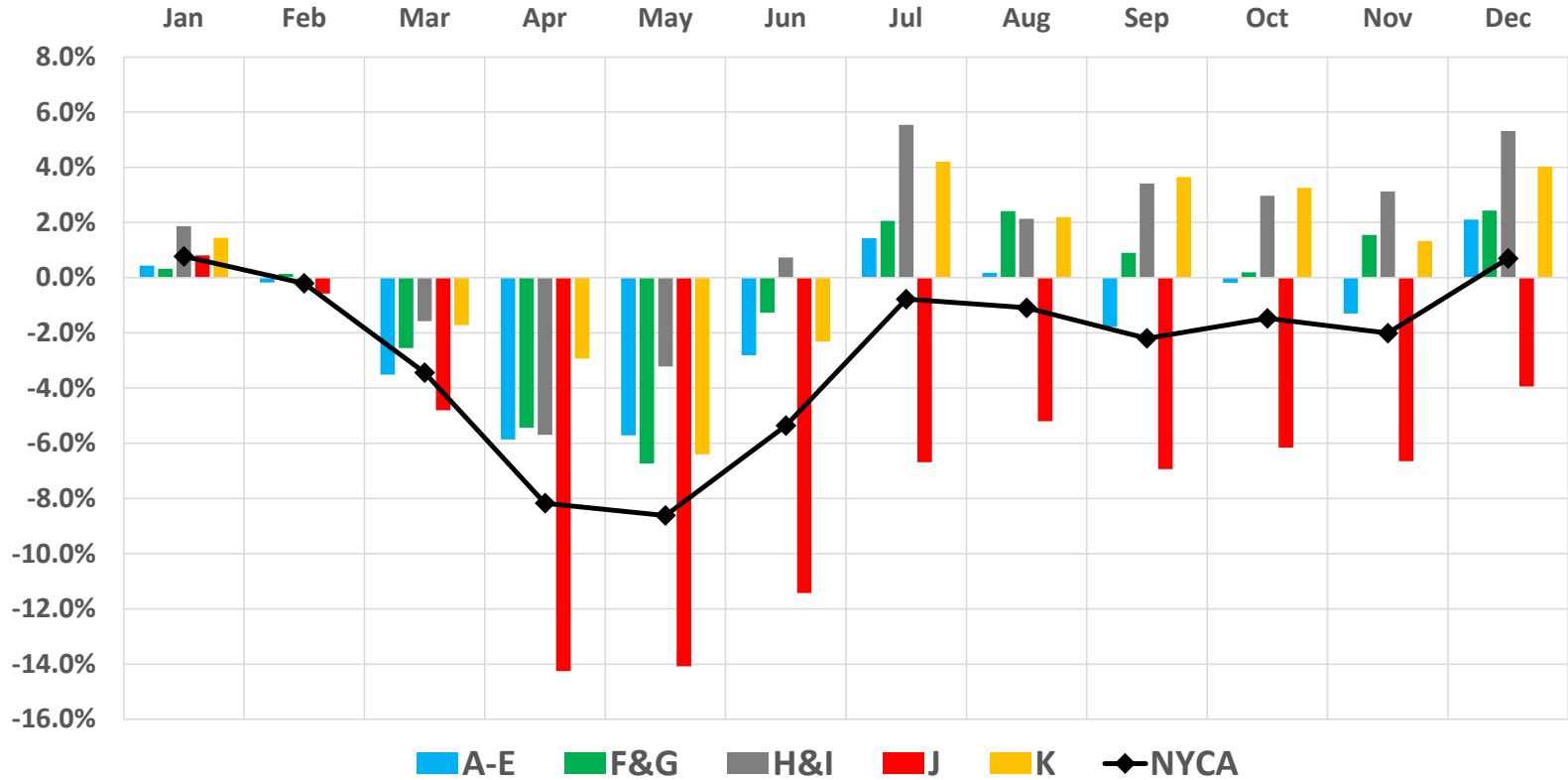
Note: These values represent the difference in total energy relative to the pre-Covid forecast.

Questions?

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Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability

- Operating open, fair and competitive wholesale electricity markets

- Planning the power system for the future

- Providing factual information to policymakers, stakeholders and investors in the power system

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