Economics and Country Risk

Rhode Island Outlook

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Summary of Year-To-Date Employment Growth in 2021

- Rhode Island economic recovery has continued to progress despite headwinds this year related to the Delta surge, supply chain disruptions, and inflation pressures.
- Monthly nonfarm payrolls in Rhode Island have reported a cumulative net increase of 22,500 though September as the recovery continued
 - Average annualized monthly growth of 6.6% was fastest in New England (Massachusetts ranked #2 at 6.4%) and outpaced national growth of 4.8%
- Unemployment rate down to 5.2% in September, down from 7.9% in December 2020

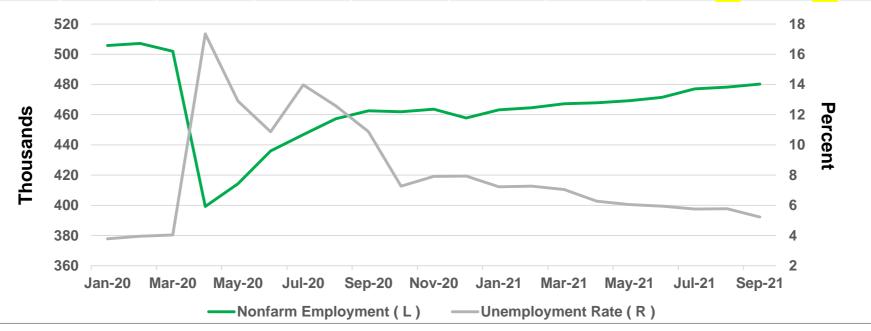
Septembe	er 2021 Employme	nt Growth by Sector, Year-to-Date	
Sector	Change*	Sector	Change*
Accommodation and Food Services	6.6	Retail Trade	0.4
State and Local Government	4.4	Federal Government	0.2
Manufacturing	2.4	Information	0.2
Healthcare and Social Assistance	2.2	Real Estate, Rental, and Leasing	0.0
Construction	1.4	Management of Companies	0.0
Arts, Entertainment, Recreation	1.2	Utilities	-0.1
Wholesale Trade	1.1	Finance and Insurance	-0.2
Education Services	1.1	Professional, Scientific, Technical Svcs.	-0.3

*Level, Thousands

Tracking the recovery - RI labor market since "full" reopening

- With few exceptions, the state lifted essentially all COVID-19 restrictions in May 2021
- Employment growth picked up in June and surged in July, before decelerating to a more modest pace.

				Monthly To	tal Nonfarm	Employment	: Change				
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
%Chg, SAAR	4.5	-14.0	15.1	3.7	6.9	1.8	3.7	<mark>5.8</mark>	<mark>15.2</mark>	<mark>3.1</mark>	<mark>5.1</mark>
Lvl Chg, Thous.	1.7	-5.8	5.4	1.4	2.6	0.7	1.4	<mark>2.2</mark>	5.6	<mark>1.2</mark>	2.0



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Post-July employment growth slowdown affects all US Regions

Private sector employment, month-over-month % change (annualized)

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep
United States	3.2	5.1	7.4	1.7	3.6	5.4	<mark>7.6</mark>	<mark>2.6</mark>	<mark>3.8</mark>
Northeast	6.5	4.9	7.5	1.7	3.3	2.7	<mark>8.0</mark>	<mark>1.9</mark>	<mark>3.1</mark>
Midwest	6.4	3.8	6.2	-1.0	0.2	4.4	<mark>7.3</mark>	<mark>0.9</mark>	<mark>2.6</mark>
South	2.0	2.0	6.5	0.4	3.9	6.2	<mark>7.8</mark>	<mark>2.4</mark>	<mark>5.0</mark>
West	-0.7	11.8	10.0	6.7	6.8	7.1	<mark>7.3</mark>	<mark>5.0</mark>	<mark>3.5</mark>

Source: BLS

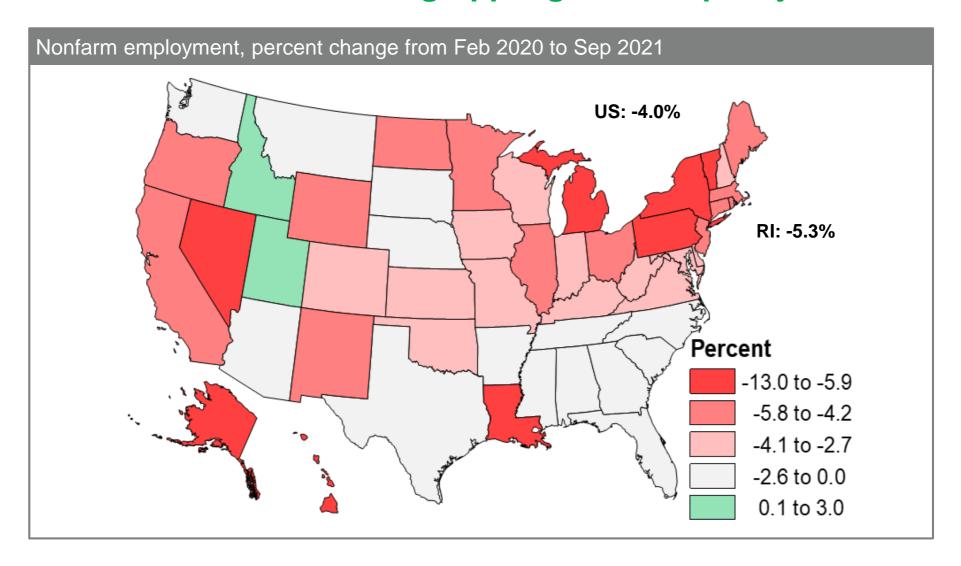
Tracking the recovery – RI labor market overall progress

- Between April 2020 and September 2021, Rhode Island nonfarm payrolls increased by 81,100
 - Accounts for 75% of the total net loss observed between February and April (108,000 jobs)
- Unemployment rate down to 5.2% in September 2021 from a peak of 17.4% last April
 - Still elevated above pre-recession level of ~4% (February 2020)
- Largest gains over the entire recovery period months concentrated in the sectors hardest-hit:
 - Accommodations/Food Services, Healthcare, Retail Trade

Changes in Mon	Changes in Monthly Payroll Employment (Level, Thousands) – Apr-20 to Sep-21 vs Feb-20 to Apr-20											
Sector	Apr20 - Sep21	Feb20 - Apr20	Sector	Apr20 - Sep21	Feb20 - Apr20							
Accommodations and Food Services	25.1	32.6	Wholesale Trade	2.6	-2.2							
Healthcare and Social Assistance	11.7	-17.4	Professional, Scientific, Technical Svcs.	1.3	-2.6							
Retail Trade	9.3	-11.2	Education Services	0.3	-3.2							
Manufacturing	6.9	-6.6	Finance and Insurance	0.2	-0.4							
Construction	5.0	-4.2	Utilities	0.1	. 0.0							
Other Services	4.9	-7.7	Real Estate, Rental, and Leasing	0.1	1.5							
Administrative Support Services	4.7	-6.3	Management of Companies	0.1	0.5							
Transportation and Warehousing	3.1	3.6	Information	0.0	-0.6							

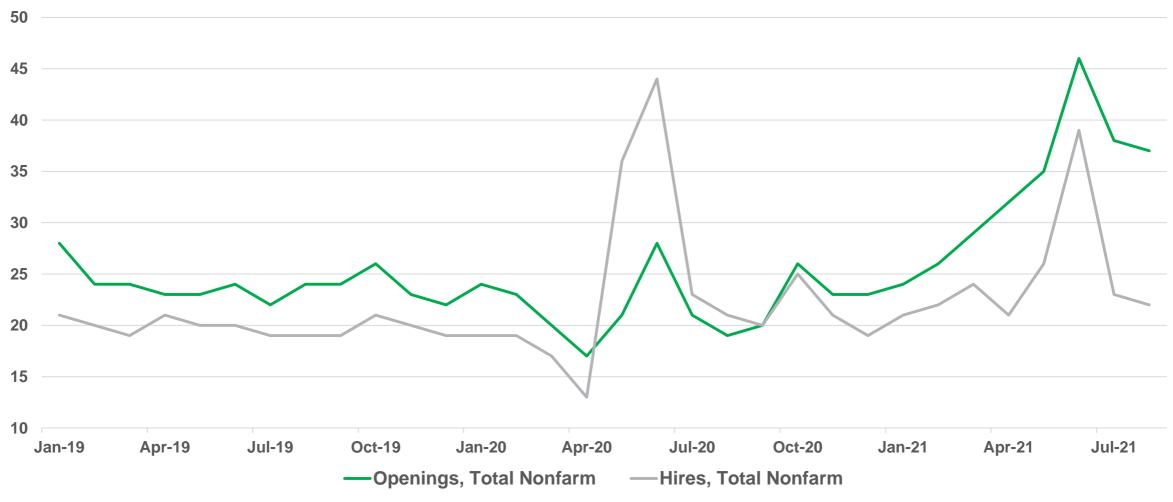
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The Northeast and West Coast are grappling with deepest job deficits



An alternative look at the Rhode Island labor market – JOLTS* data

Rhode Island Monthly Job Openings and Hires



*Job Openings and Labor Turnover Survey, Bureau of Labor Statistics

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More state and local data released from Census 2020

- In the spring, the first state apportionment and resident population counts from Census 2020 were released
- The Census population count for Rhode Island came in much higher than the previously released Census Bureau July 1st, 2020 population <u>estimates</u> (resident population) indicated at the time
 - Census count was more than 40,000 persons (3.8%) higher than the July 1, 2020 population estimate
- Similarly, the Census 2020 counts of the number of households in Rhode Island (released late Summer) came higher than previous estimates

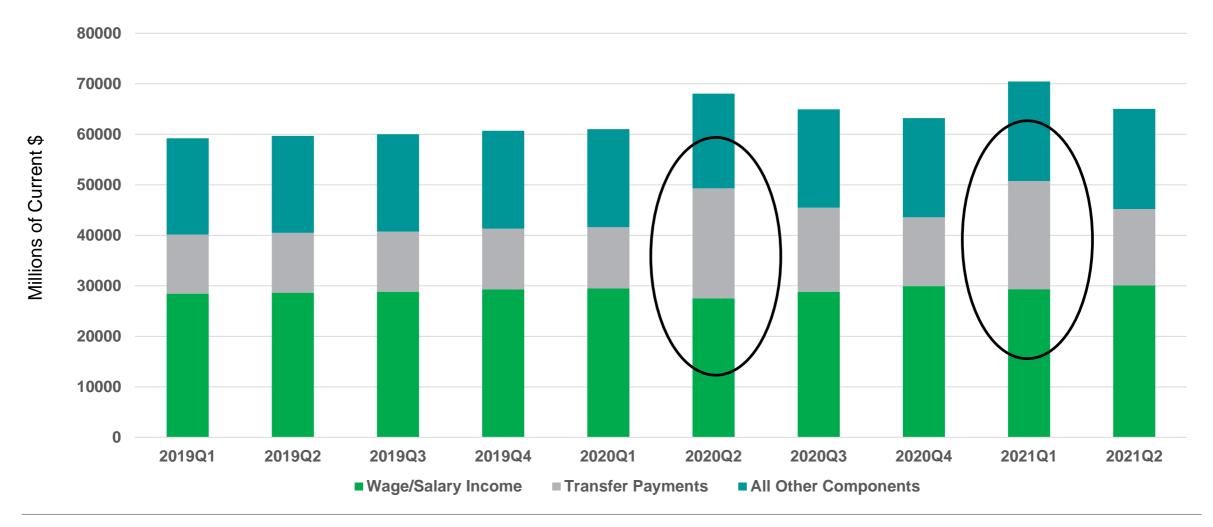
	Rhode Island State Hous	sehold Counts, April 1,2020	
Source	Census 2020	ACS*/IHSM Estimate	Difference
Level	441,270	416,900	24,370

 As of the October vintage, this new population and household data have been incorporated into the forecast

*American Community Survey

The continued evolution of personal income composition in Rhode Island

Rhode Island Total Personal Income by Key Components



Recent data revisions

BEA State Personal Income:

• "The annual estimates of state personal income for 1998 to 2020 and the quarterly estimates of state personal income for the first quarter of 1998 through the first quarter of 2021 were revised. The update incorporates revised source data that are more complete and more detailed than previously available, updates to seasonal factors, and the results of the July 2021 annual update of the National Income and Product Accounts."

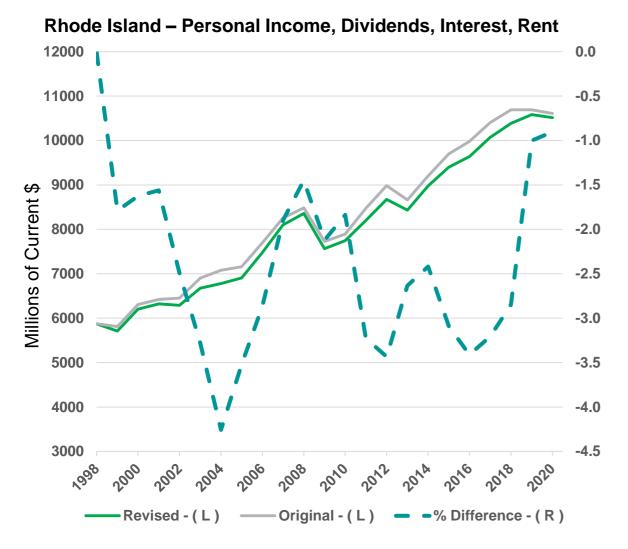
BEA State Personal Consumption Expenditures:

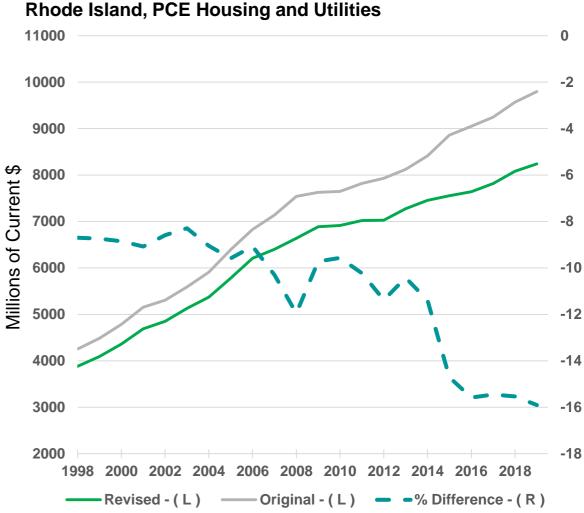
• "BEA released revised statistics for 1997 to 2019 as well. The update incorporates revised source data that are more complete and more detailed than previously available. The update includes the results of the July 2021 annual update of the NIPAs and the September 2021 annual update of the state personal income statistics."

Personal Income Growth	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Pre-revised data	4.0	3.7	-0.1	4.3	3.7	1.5	3.8	3.7	3.7	7.7
Revised data	3.7	3.7	0.1	4.3	3.6	1.5	3.9	3.7	4.4	7.3
Change	-0.3	-0.1	0.2	0.0	-0.1	0.0	0.1	0.1	0.8	-0.4

PCE Growth	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pre-revised data	2.9	1.9	2.5	4.2	3.9	2.7	3.6	4.2	3.2
Revised data	2.9	1.1	2.6	3.4	2.9	2.5	3.2	4.2	2.8
Change	0.0	-0.8	0.1	-0.8	-1.0	-0.3	-0.5	0.0	-0.4

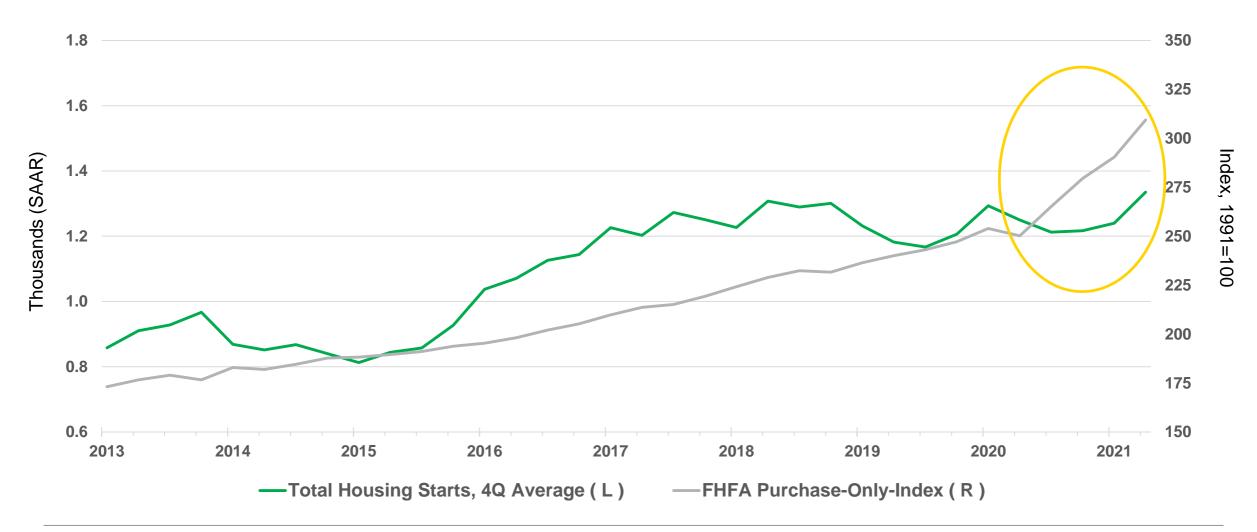
Additional note on revisions – Rhode Island dividends, interest, and rent





Rapid home price appreciation continues into 2021

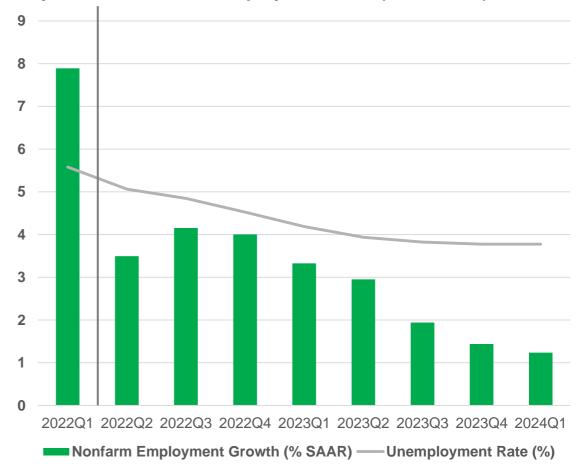
Housing Starts and Home Prices



Rhode Island labor market over the next two years (FY22q1-23q4)

- Employment growth will proceed at a steady, yet decelerating pace over time as the recovery continues
- Overall, quarterly annualized gains average 3% over this period, for an overall net gain of ~25,800 jobs by FY23Q4
 - FY2022q1 employment data is now history
- At the sectoral level, accommodations and food services accounts for the largest share of projected employment gains (+7,800) as it continues to recover
- Other major contributors will include:
 - Administrative Support Services (+3,100)
 - Healthcare and Social Assistance (+2,900)
 - Professional, Scientific, and Technical Svcs. (+2,800)
 - Other Services (+2,100)
- Unemployment rate falls from 5.6% in FY22Q1 to 3.8% by FY23Q4

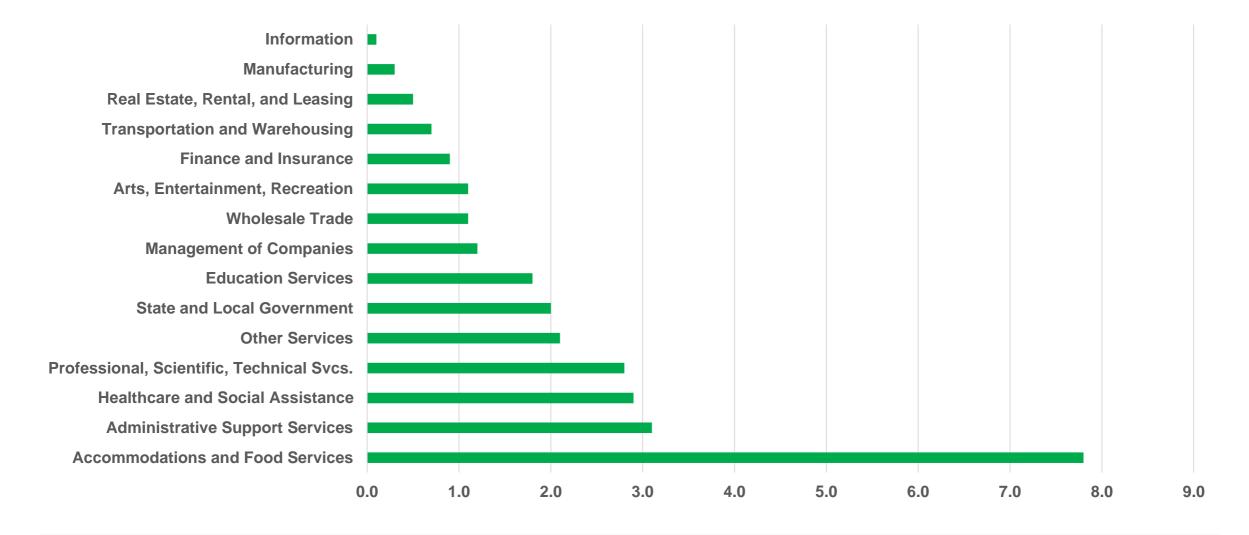
Payroll Growth and Unemployment Rate (Fiscal Year)



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Projected employment growth by sector (FY22q1-23q4)

Thousands



Rhode Island key economic indicators, 2021-2024

November 2021 Forecast – A	nnual Perce	nt Change				
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Employment, Total Nonfarm	0.7	-3.9	-4.1	4.9	3.2	1.3
Real GSP, (2012\$)	0.1	-1.1	0.7	3.7	3.2	2.2
Total Personal Income (\$)	3.9	6.5	5.6	-0.1	4.7	4.8
Wages and Salaries (\$)	2.8	1.5	2.7	8.1	6.6	5.2
Transfer Payments (\$)	2.8	25.2	15.5	-16.4	0.1	3.7
Personal Consumption Exp.	3.5	-1.0	3.1	9.3	5.0	4.3
Unemployment Rate (%, Level)	3.8	6.2	8.4	5.0	3.9	3.8

Key Takeaways:

- Nonfarm employment surpasses pre-COVID peak in early FY2024
- Real gross state product surpasses pre-COVID peak around mid-FY22
- State unemployment rate remains above pre-COVID level of ~4% until second half of FY23

Rhode Island key economic indicators, 2021-2024 (Continued)

November 2021 Forecast – P	Percent Chan	ge Q4/Q4				
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Employment, Total Nonfarm	0.6	-17.3	12.7	4.9	2.4	1.0
Real GSP, (2012\$)	0.7	-8.6	9.8	3.9	2.4	2.2
Total Personal Income (\$)	4.5	14.0	-4.4	2.6	5.0	4.9
Wages and Salaries (\$)	3.2	-3.9	9.2	9.2	5.9	4.9
Transfer Payments (\$)	5.1	83.4	-30.4	-9.5	3.2	4.4
Personal Consumption Exp.	2.8	-9.9	17.2	6.9	4.2	4.6
Unemployment Rate (%, Level)	3.5	13.7	6.1	4.5	3.8	3.7

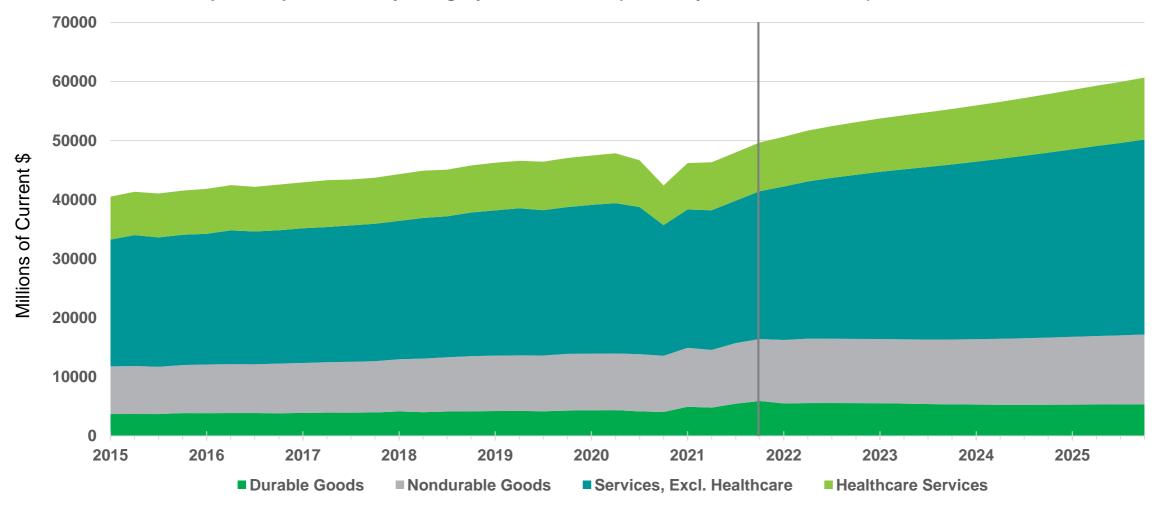
Personal income composition in the near-term forecast

Rhode Island Total Personal Income by Key Components (Annual, Fiscal Year Terms)



Consumer spending composition in the forecast

Personal consumption expenditures by category, Rhode Island (Quarterly, Fiscal Year Basis)



Forecast changes in selected concepts: 1121 vs. 0521

Nonfarm Employment (Level)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
IHS May 2021	498.9	502.6	482.8	463.9	487.4	498.9	504.8	508.0	509.4
IHS November 2021	498.9	502.6	482.8	462.8	485.3	500.9	507.6	511.0	512.3
Change – May to Nov	0.0	0.0	0.0	-1.1	-2.1	1.9	2.8	3.0	2.9

Nonfarm Employment Growth	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
IHS May 2021	0.7	0.7	-3.9	-3.9	5.1	2.4	1.2	0.6	0.3
IHS November 2021	0.7	0.7	-3.9	-4.1	4.9	3.2	1.3	0.7	0.3
Change – May to Nov	0.0	0.0	0.0	-0.2	-0.2	0.8	0.2	0.0	0.0

Unemployment Rate (Level)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
IHS May 2021	4.4	3.8	6.2	8.4	4.8	3.9	3.7	3.7	3.8
IHS November 2021	4.4	3.8	6.2	8.4	5.0	3.9	3.8	3.8	4.0
Change – May to Nov	0.0	0.0	0.0	-0.1	0.2	0.0	0.0	0.1	0.1

Forecast changes in selected concepts: 1121 vs. 0521 (Continued)

Total Personal Income Growth	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
IHS May 2021	4.6	3.4	5.8	7.1	-1.8	3.6	4.0	4.4	4.5
IHS November 2021	4.4	3.9	6.5	5.6	-0.1	4.7	4.8	4.9	4.8
Change – May to Nov	-0.2	0.4	0.6	-1.5	1.7	1.1	0.8	0.5	0.3

Wage/Salary Disbursement Growth	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
IHS May 2021	4.1	2.9	-0.2	3.7	5.8	4.5	4.7	4.6	4.5
IHS November 2021	3.6	2.8	1.5	2.7	8.1	6.6	5.2	4.7	4.5
Change – May to Nov	-0.5	-0.2	1.6	-1.1	2.3	2.1	0.5	0.1	-0.1

Personal Consumption Expenditure Growth	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
IHS May 2021	4.0	3.6	-0.8	2.6	7.9	5.1	4.5	4.4	4.6
IHS November 2021	3.9	3.5	-1.0	3.1	9.3	5.0	4.3	4.8	4.9
Change – May to Nov	-0.1	-0.2	-0.2	0.5	1.4	-0.2	-0.2	0.3	0.3

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Alternative Scenarios: Risks to the US forecast

Scenario	Characteristics
Pessimistic: Recovery stumbles as supply issues persist and consumers slow spending splurge (Probability = 30%)	 Resurgent virus and alarming rise in cases and hospitalizations impose a drag on consumer spending. Consumers turn more cautious and government officials delay reopening efforts, especially for daycares and schools. Deterioration in the ongoing supply-chain issues leads to a prolonged delay in the production and shipment of consumer durable goods. Real GDP rises at a 0.4% annual rate in the third quarter and 2.0% pace in the fourth. The unemployment rate declines at a gradual pace, eventually declining to 4.1% by early 2024. Core PCE inflation starts out elevated, but gradually declines below 1.0% through 2023 and remains below the FOMC's 2% target through 2025.
Optimistic: Return to "normal", still more stimulus, and improving supply issues drive faster growth (Probability = 20%)	 We assume the consumer and business response to the upcoming Infrastructure Investment and Jobs act is more robust than in the baseline. Consumers spend down some of the excess savings that accumulated over 2020 more quickly than in the baseline thanks to vastly improved confidence amid declining COVID-19 cases. Business fixed investment rises more quickly and remains elevated relative to baseline thanks to an acceleration in productivity. Real GDP rises at a 2.4% annual rate in the third quarter and 8.0% pace in the fourth. The unemployment rate quickly falls to below 4.0% by mid-2022. Core PCE inflation settles slightly above the FOMC's target by late-2023. The Fed begins to raise the federal funds rate in early 2022, four quarters earlier than in the base forecast.
Baseline forecast (Probability = 50%)	 COVID-19 cases continue to decline gradually as more Americans become vaccinated, resulting in far fewer deaths and hospitalizations. Real GDP rises 5.4% in 2021 as annualized growth slows from 6.7% in the second quarter to 1.4% in the third and 5.1% in the fourth. Core personal consumption (PCE) price inflation remains elevated at 3.2% in 2021 and 3.1% in 2022 as supply chains are stretched, but ticks down to 2.3% in 2023. The federal funds rate is held near zero until March 2023.

Rhode Island Alternative Scenarios: Key Indicators

Real Gross State Product, Annual Percent Change (FY)											
	2019	2020	2021	2022	2023	2024	2025	2026			
Optimistic	0.1	-1.1	0.7	4.7	4.1	2.4	1.9	1.5			
Baseline	0.1	-1.1	0.7	3.7	3.2	2.2	2.1	1.9			
Pessimistic	0.1	-1.1	0.7	2.8	3.0	2.6	2.3	2.0			
Optimistic vs. Baseline	0.0	0.0	0.0	0.9	0.9	0.2	-0.2	-0.4			
Pessimistic vs. Baseline	0.0	0.0	0.0	-0.9	-0.2	0.4	0.3	0.1			

Unemployment Rate, Annual Level (FY)											
	2019	2020	2021	2022	2023	2024	2025	2026			
Optimistic	3.8	6.2	8.4	4.8	3.8	3.7	3.7	3.9			
Baseline	3.8	6.2	8.4	5.0	3.9	3.8	3.8	4.0			
Pessimistic	3.8	6.2	8.4	5.3	4.5	4.3	4.2	4.3			
Optimistic vs. Baseline	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.1	-0.1			
Pessimistic vs. Baseline	0.0	0.0	0.0	0.3	0.6	0.5	0.4	0.3			

Rhode Island Alternative Scenarios: Key Indicators (Continued)

Personal Consumption Expenditures, Annual Percent Change (FY)											
	2019	2020	2021	2022	2023	2024	2025	2026			
Optimistic	3.5	-1.0	3.1	11.9	6.9	4.6	4.8	4.5			
Baseline	3.5	-1.0	3.1	9.3	5.0	4.3	4.8	4.9			
Pessimistic	3.5	-1.0	3.1	8.5	3.9	3.7	4.2	4.5			
Optimistic vs. Baseline	0.0	0.0	0.0	2.6	1.9	0.3	0.0	-0.4			
Pessimistic vs. Baseline	0.0	0.0	0.0	-0.8	-1.0	-0.6	-0.6	-0.5			

Total Nonfarm Employment, Annual Percent Change (FY)											
	2019	2020	2021	2022	2023	2024	2025	2026			
Optimistic	0.7	-3.9	-4.1	5.3	2.9	1.2	0.6	0.2			
Baseline	0.7	-3.9	-4.1	4.9	3.2	1.3	0.7	0.3			
Pessimistic	0.7	-3.9	-4.1	4.7	2.9	1.2	0.6	0.3			
Optimistic vs. Baseline	0.0	0.0	0.0	0.4	-0.3	-0.2	-0.1	0.0			
Pessimistic vs. Baseline	0.0	0.0	0.0	-0.2	-0.3	-0.1	-0.1	0.0			

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