



# Annual Economic Outlook Report for Albemarle County, Virginia September 2023

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# **Table of Contents**

I.	EXECUTIVE SUMMARY	7
II.	METHODOLOGY AND APPROACH	10
III.	GLOBAL CONTEXT FOR THE UNITED STATES ECONOMY	11
IV.	NATIONAL ECONOMIC OVERVIEW AND OUTLOOK	13
A.	ECONOMIC GROWTH OVERALL	13
В.	LABOR MARKET TRENDS	14
C.	CONSUMER ACTIVITY	19
D.	CONSUMER PRICES	
E.	FEDERAL RESERVE POLICY ACTIONS AND FINANCIAL MARKET STABILITY	
F.	BUSINESS ACTIVITY	
G.	LEADING INDICATORS AND THE YIELD CURVE	
Н.	National Economic Outlook	37
V.	VIRGINIA ECONOMIC OVERVIEW AND OUTLOOK	40
A.	VIRGINIA'S ECONOMIC GROWTH OVERALL	40
В.	VIRGINIA'S LABOR MARKET TRENDS	41
C.	Virginia's Consumer Activity	44
D.	Virginia's Housing Activity	45
E.	Multistate Regional Trends	
F.	VIRGINIA'S ECONOMIC OUTLOOK	48
VI.	ALBEMARLE COUNTY, VIRGINIA ECONOMIC OVERVIEW AND OUTLOOK	49
A.	OVERALL ECONOMIC GROWTH IN ALBEMARLE COUNTY, VIRGINIA	49
В.	LABOR MARKET TRENDS IN ALBEMARLE COUNTY, VIRGINIA	50
C.	CONSUMER ACTIVITY IN ALBEMARLE COUNTY, VIRGINIA	
D.	HOUSING MARKET ACTIVITY IN ALBEMARLE COUNTY, VIRGINIA	
E.	BUSINESS ACTIVITY IN ALBEMARLE COUNTY, VIRGINIA	
F.	ECONOMIC OUTLOOK FOR ALBEMARLE COUNTY, VIRGINIA	71
VII.	ADDITIONAL COMMUNITY FACTORS FOR ALBEMARLE COUNTY, VIRGINIA	72
A.	INCOME AND POVERTY	72
В.	HOUSING PATTERNS AND COSTS	77
C.	EDUCATIONAL ATTAINMENT	82
VIII.	CONCLUSIONS AND RECOMMENDATIONS	83
IX.	REFERENCES	86
v	ADDENIDIY	02



## **List of Tables**

Table 1. U.S. and Selected World Real GDP 2022 and Forecasts 2023-2024 (%y/y)12
Table 2. U.S. Federal Open Market Committee (FOMC) Actions January 2022–September 2023
27
Table 3: Selected U.S. Economic Forecasts for 2023–2024
Table 4: Selected U.S. Inflation Forecasts for 2023-2024
Table 5. Employment Status as a Percent of Population 16 and Older, U.S., Virginia, and
Albemarle County, Virginia, 2017-202155
Table 6. Employment by Occupation as a Percent of the Civilian Employed Population 16 years
and Older, U.S., Virginia, and Albemarle County, Virginia, 2017-202155
Table 7. Employment by Industry: U.S., Virginia, and Albemarle County, Virginia, 2017-2021.57
Table 8. Establishments, Employees and Annual Payroll by Industry: Virginia and Albemarle
County, Virginia 2021(in 2021 dollars)64
Table 9. Household Income and Benefits 2011-2021: U.S., Virginia, and Albemarle County,
Virginia (in 2021 dollars)74
Table 10. Percentage of Families Below the Poverty Level 2017-2021: U.S., Virginia, and
Albemarle County, Virginia75
Table 11. Housing Occupancy and Tenure: U.S., Virginia, and Albemarle County, Virginia 2017-
202177
Table 12. Housing Value: U.S., Virginia, and Albemarle County, Virginia 2017-202178
Table 13. Housing Selected Monthly Owner Costs (SMOC); U.S., Virginia, and Albemarle
County, Virginia 2017-2021 (in 2021 dollars)
Table 14. Housing Selected Monthly Owner Costs (SMOC) as a Percentage of Household
Income: U.S., Virginia, and Albemarle County, Virginia 2017-2021 (in 2021 dollars) 80
Table 15. Gross Rent and Gross Rent as a Percentage of Household Income: U.S., Virginia, and
Albemarle County, Virginia 2017-2021 (in 2021 dollars)81
Table 16. Educational Attainment 2017-2021: U.S., Virginia, and Albemarle County, Virginia 82
Table 17: Selected Virginia Statistical Area Delineations, 202092
, ,
List of Figures
List of Figures
Figure 1. U.S. Real Gross Domestic Product, Q1:2000 – Q2:2023
Figure 2. U.S. Total Nonfarm Payroll Jobs, January 2000 – August 2023
Figure 3. U.S. Monthly Change in Nonfarm Payroll Jobs, January 2021 – August 2023
Figure 4. U.S. Unemployment Rate: BLS U-3 (Official Rate), BLS U-6, and Federal Reserve Non-
Employment Index, January 2000 -August 2023
Figure 5. U.S. Average Hourly Éarnings March 2007 – August 2023 (%y/y)17
Figure 6. U.S. Total Compensation (Employment Compensation Index), Q1:2002 – Q2:2023
(%y/y)
Figure 7: U.S. Job Openings and Unemployment Level January 2000–June 2023
Figure 8. U.S. Labor Force Participation Rate January 1948 – August 2023
Figure 9. U.S. Labor Force Participation Rate by Age January 1948 – August 2023 19 Figure 10. U.S. Personal Consumption Expenditures Contribution to Real Gross Domestic Product,
Q1:2000 – Q4:2023 (%q/q)20
Figure 11. U.S. Real Disposable Income and Real Personal Consumption Expenditures January 2019 –
July 2023 (%y/y)



	U.S. Real Personal Consumption Expenditures: Goods and Services, July 2019 – July 2022	
	/)	
	U.S. Retail Sales January 2020 – August 2023 (%m/m)	
	U.S. Consumer Confidence Index (OECD), January 2000 – August 2023	
Figure 15.	U.S. Consumer Sentiment Index, January 2000 – July 2023	23
Figure 16.	U.S. Personal Savings and Consumer Loans, January 2000 – August 2023	24
Figure 17:	Household Debt Service Ratio Q1:2000 – Q2:2023	24
Figure 18.	Credit Card Delinquency Rate, Q1:2000 – Q2:2023	25
Figure 19.	U.S. Monthly Change in Consumer Prices, January 2000 – August 2023 (%y/y)	25
	U.S. Federal Funds Rate and Federal Reserve Total Assets, January 1, 2000 - September 13	
2023		27
Figure 21.	U.S. Real Private Business Spending, Q1:2002 – Q2:2023 (%q/q)	29
Figure 22.	U.S. Industrial Production, January 2000 – August 2023 (%y/y)	29
	U.S. Industrial Production: Manufacturing, January 2000 – August 2023 (%y/y)	
	U.S. Manufacturing Durable Goods New Orders, January 2000 – July 2023	
	U. S. Business Confidence Index: Manufacturing, January 2000 – August 2023	
	U.S. New Home Sales, January 2000 – July 2023	
	U.S. Existing Home Sales, July 2022 – July 2023	
	U.S. House Price Index Purchase Only (Single-Family), January 2000 – June 2023 (%y/y)	
	U.S. Residential and Nonresidential Construction Spending, January 2003 – July 2023 (%y/y	
		•
Figure 30.	U.S. Housing Starts and Building Permits, January 2000 – August 2023	
	U.S. Leading Indicator Index, January 2000 to August 2023 (%y/y)	
	U.S. Treasury Monthly Yield Curve (10-Year Maturity Minus 2-Year Maturity Rate), June 197	
	gust 2023	
	U.S. and Virginia GDP, Q1:2005 to Q2:2023 (%q/q)	
	Total Nonfarm Payroll Jobs: U.S. & Virginia January 2000 to August 2023	
	Labor Force Participation: U.S. and Virginia January 1976 to August 2023	
	Unemployment Rate (U-3 Official Rate): U.S. and Virginia, January 2000 – August 2023	
	Unemployment Rate: Virginia BLS U-3 (Official Rate) and BLS U-6, Q3:2003 – Q2:2023	
	Average Hourly Earnings: U.S. and Virginia January 2008 – August 2023	
	Real Per Capita Personal Income: U.S. and Virginia 2008 - 2021	
	Consumer Spending: U.S. and Virginia 2000 – 2022 (%y/y)	
	Retail Trade: U.S. and Virginia Q4:2005 – Q1:2022	
	Existing Home Sales: Virginia January 2020 – July 2023 (%y/y)	
	House Price Index (Single-Family): U.S. and Virginia, Q1:2000 – Q2:2023 (%y/y)	
	New Residential Building Permits: Virginia January 2000 – August 2023	
	GDP: U.S., Virginia, and Albemarle County + Charlottesville, Virginia, 2000-2022 (%y/y)	
	Employment Level: U.S., Virginia and Albemarle County, Virginia, Q1:2000 – Q2:2023 (%y/y)	
-	Employment Level. 0.5., Virginia and Alberhane County, Virginia, Q1.2000 – Q2.2023 (70/7)	
	Unemployment Rate: U.S., Virginia, and Albemarle County, Virginia, January 2000 – August	
	Total Nonfarm Payroll Jobs: Virginia and Charlottesville, Virginia MSA January 2000 to Augu	
-	Total Normanni Payron Jobs. Virginia and Chanottesvine, Virginia MSA January 2000 to Augu	
	Average Hourly Earnings: U.S., Virginia, and Charlottesville, Virginia MSA, January 2007 –	JI
	st 2023	52
	Average Hourly Earnings: Charlottesville, Staunton-Waynesboro, Harrisonburg, and	JZ
	mond, Virginia MSAs, January 2007 – August 2023	52
Figure 51	Labor Force Participation Rate: U.S., Virginia and Albemarle County, Virginia, 2010 – 2021.	53
	Real Per Capita Personal Income: U.S., Virginia, and Charlottesville, Virginia MSA 2008 –	J <del>4</del>
•		58
/ / / /		. 1( )



Figure 53. Monthly Change in Existing Home Sales: Virginia and Albemarle County, Virginia January 2020 to July 2023 (%y/y)
Figure 54. House Price Index (Single-Family): U.S., Virginia, and Charlottesville, Virginia MSA, Q1:2000 – Q2:2023 (%y/y)
Figure 55. House Price Index (Single-Family): Charlottesville, Staunton, Harrisonburg, and Richmond, Virginia MSAs, Q1:2000 – Q2:2023 (%y/y)
Figure 56. Median Listing Price per Square Foot: U.S., Virginia, and Albemarle County, Virginia, July 2016 – August 2023
Figure 57. Median Listing Price per Square Foot: Albemarle County, Virginia, and Charlottesville, Staunton, Harrisonburg, and Richmond, Virginia MSAs, July 2016 – August 2023
Figure 58. Total Annual Gross Receipts Albemarle County, Virginia, CY2017 -CY2023:YTD as of September 14, 2023
Figure 59. Annual Gross Receipts – Contractors, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023
Figure 60. Annual Gross Receipts – Financial, Real Estate, Professional Services, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023
Figure 61. Annual Gross Receipts – Rental and Leasing, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023
Figure 62. Annual Gross Receipts – Repair, Personal and Business Services, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023
Figure 63. Annual Gross Receipts – Research and Development, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023
Figure 64. Annual Gross Receipts – Retail Sales, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023
Figure 65. Annual Gross Receipts – Wholesale, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023
Figure 66. Annual Gross Receipts – All Other Categories, Albemarle County, Virginia, CY2017– CY2023:YTD as of September 14, 2023
Figure 67. Annual Changes in Poverty: U.S., Virginia, and Albemarle County, Virginia, 2000 – 2021 76



## I. Executive Summary

This Annual Economic Outlook Report for Albemarle County, Virginia, provides a comprehensive review of the current intricate and unique economic circumstances globally and in the United States (U.S.) that present the framework for assessing the economic conditions for Albemarle County and the Commonwealth of Virginia.

The U.S. economy is the largest in the world and while it is a dominant global player, the U.S. economy also routinely benefits from and is dependent on global economic markets and growth. The global economic interconnectedness affects everyone in the U.S. daily. American consumers demand and enjoy goods manufactured and shipped from other countries and U.S. businesses are dependent on global supplies and sell globally. Moreover, what happens elsewhere affects U.S. consumers and businesses quickly in a global economy where goods and services are produced and shipped all over the world.

The global economic interconnectedness has been felt poignantly recently. In fact, the U.S. economy, along with other countries' economies, has been whipsawed by major global events for over three-and-a-half years since early 2020. It is to our advantage to understand the dynamic circumstances and interconnections that appear quickly on our doorsteps to foster proactive and defensive action to protect our bottom lines and advance our strategic missions and goals.

Therefore, to better frame and understand the local and regional economy, the report first establishes the context of the global economic conditions and then proceeds with a comprehensive analysis of national, state, and local economic trends and outlook.

Both the global and U.S. economies currently are registering mixed signals of resiliency and slowing activity. The global economy has experienced continued disruptions from the lingering effects of the pandemic, persistent inflation, ongoing geopolitical shocks, shifting trade flows, and residual supply chain challenges. Notwithstanding these factors, global economic growth is projected to continue to slow but remain positive in 2023 and 2024 with median forecasts of 2.9% and 2.6%, respectively, as compared to annual average economic growth of 3.3% in the decade before the pandemic.

The U.S. economy also has proved more resilient than earlier projections, heavily fueled by consumer spending on services and in-person experiences. Consumers have been the firewall to the U.S. economy since mid-2020 with consumer spending positively contributing to real gross domestic product (GDP) for 12 consecutive quarters from Summer 2020 to Summer 2023, despite a series of pandemic and geopolitical disruptions and wavering consumer confidence and sentiment. Consumer spending has been bolstered by strong nominal wage growth in a tight job market (though eroded by inflation until recently), drawdowns in excess savings accumulated earlier in the pandemic (largely due to sheltering in place and significant government support), and increases in consumer debt. Recent signs of a loosening job market, slowing (but still solid) wage growth, softening real disposable personal income, almost exhausted excess personal



savings, increasing household debt burdens, and tightening credit conditions point to likely cautionary and selective consumer spending.

Business activity has displayed mixed signals in the U.S. in 2023. Total private business spending contributed positively to real GDP in the second quarter of 2023 after contributing negatively to real GDP growth in three of the four preceding quarters, heavily weighed down by housing market declines. Industrial production in 2023 has generally slowed below 2022 levels in manufacturing, mining, and electric and gas utilities, with a brighter spot in the service sector where orders, prices, and employment continued to grow in January–August 2023. While new home sales turned up starting in Spring 2023 after steep declines year-over-year since Summer 2021, existing home sales mostly continued to decline. However, housing prices remained sturdy with continued, but slower, monthly increases in home sale prices due to limited inventory, continued buyer demand, and developer incentives.

Inflation has significantly improved but persists worldwide after aggressive monetary tightening by central banks across the globe. The U.S. Federal Reserve likewise raised the benchmark interest rate 11 times between March 2022 and September 2023 which has markedly slowed but not yet tamed U.S. inflation, with core inflation remaining well above the Federal Reserve's long-term 2% target. Global inflation shares a similar profile. Thus, the Federal Reserve has consistently reiterated its commitment to maintain its monetary tightening policy until persistent inflation is checked, projecting higher interest rates for longer and only modest tapering in the benchmark rate in 2024.

As 2023 continues to unfold, key factors impacting the U.S. economic outlook are persistent inflation in the U.S. and abroad, rising interest rates worldwide, tight credit conditions and lending standards, tight labor market and labor wage pressures, pressured real disposable income, cooling consumer and business demand, continued supply chain challenges, shifting trade flows, geopolitical risks, and slower global growth. The possibility of an extended U.S. government shutdown in Fall 2023 with a delayed federal budget also warrants close monitoring given the importance of federal installations and jobs in the nation, state, and regions. Overall, as of this writing U.S. real GDP (the primary barometer of economic growth) is generally projected to experience below-normal-trend to moderate growth in 2023 with a median forecast of 2.1 growth. In 2024, continued below-normal-trend growth is projected with a median forecast of 1.3% growth. While unexpected consumer resiliency buoyed the economy in the first eight months of the year, prevailing thought at this writing is that caution flags lie ahead and the U.S. economy will continue to slow through the remainder of 2023 and possibly experience a mild, shallow recession in late 2023 to early 2024, and then emerge sometime in 2024 into a new era of muted annual growth relative to prepandemic trends.

Along with the global and national reviews, the report provides a detailed analysis of Virginia's economy and its relationship to the national economy, including overall economic growth, labor market trends, and consumer and housing activity. Since the report finds that Virginia's key economic indicators generally follow the patterns of the related national indicators except for slower but improving jobs growth, albeit sometimes at different levels, the national economic



outlook is a relevant barometer for the state's economic outlook for 2023–2024 with especially close monitoring of state job growth, labor market patterns, and any other trend deviations.

For Albemarle County, Virginia, the report provides a detailed analysis of the County's economic trends and outlook, including overall economic growth, labor market trends, and consumer, housing, and business activity, as well as the relationship between the County's economic indicators and those of the state and nation.

The report also provides detailed analysis of Albemarle County's additional community factors related to income and poverty, housing patterns and costs, and educational attainment based on the rich data released in the U.S. Census Bureau's most recent American Community Survey (ACS) 2017–2021. This examination is intended to highlight key characteristics and provide information to support effective policy analysis and decision-making for the community.

The report finds that Albemarle County has a strong economy with a history of mostly solid economic and job growth, high real per capita personal income, low unemployment, strong hourly wages regionally, significant employment in relatively higher-income occupations and industries, and strong local business activity.

Given the identified history of Albemarle County's economic indicators generally following the overall pattern of state and national economic trends, albeit sometimes at different levels, the report further recommends it prudent for Albemarle County to also anticipate an economic cooling with the accumulating signals of a likely economic slowdown in the U.S., state, and globally, with the caveat that closer monitoring of local economic trends is required due to the longer reporting lag for local economic statistics and the different levels and paces of change of local economic indicators while still generally following national and state trends. Additionally, Albemarle County's overall solid economic base provides more scope within which to effectively plan and act defensively as compared to many other communities that face major, chronic economic issues.

To facilitate continued financial resiliency and agility, the report also provides organizational recommendations in the face of the rapidly changing environment and emerging new economic reality and identifies some areas for additional consideration during policy reviews based on the economic and community review.

Albemarle County's history of prudent financial management and its overall solid economic base provide a foundation and community capacity for strategic initiatives. Many other communities struggle with strategic initiatives because their economic foundations are not solid and repeatedly require significant organizational resources to maintain effective operations.

As always is the case, we "have to run hard to break even and run even harder to get ahead." Thus, the County's strategic and methodical analysis, review, and policymaking are commended and will continue to advance the community toward its strategic objectives.



## II. Methodology and Approach

The methodological approach of this study was custom-tailored to support the financial and strategic planning of Albemarle County, Virginia, and builds on the comprehensive research and findings of the 2022 Annual Economic Outlook Report and the Quarterly Economic Monitoring Reports of February, May, and September 2023. Myriad economic and community indicators were researched and carefully selected to maximize the insights regarding the County's economic foundation and history; the relationship between the County's economic indicators and those for the state, nation and surrounding Metropolitan Statistical Areas (MSAs); current economic trends and outlook; and frequency of available data for quarterly and interannual monitoring. In many instances, alternative versions of indicators were researched to maximize comparisons between the County and the state, nation or surrounding MSAs (e.g., per capita, or annual, quarterly, or monthly data).

Each table and graph also was custom-built for this report in the Federal Reserve Economic Data (FRED) interactive database tool or Excel to effectively visualize the relevant economic trends and relationships. For continuity and cohesiveness through the report, a consistent coloring scheme was used for graphs, with the U.S. data presented in blue, Virginia data in red, and Albemarle County, Virginia, data in green.

The prepandemic and pandemic experience provide important context for interpreting current economic data, especially given the standard practice of reviewing emerging economic data with a one-year look back. As such, the period of 2017–2019 is referenced throughout the report for perspective on the more stable period before the pandemic and other global turbulence brought significant volatility to global economic events. Additionally, since the U.S. and global economies are still working to normalize after the series of global disruptions of 2020–2022, it also is important to review current economic data considering the roller coaster of impacts from which we are working to emerge. As such, numerous references to the 2017–2019 period also are included to effectively interpret current economic trends.



## III. Global Context for the United States Economy

When we think of the economy, it is natural to think of our experiences at our jobs, the grocery and retail stores, and the gas pump. Yet, all those elements are impacted by the global economy. The U.S. economy is the largest in the world and while it is a dominant global player, the U.S. economy routinely benefits from and is dependent on global economic markets and growth. The global interconnectedness affects everyone in the U.S. daily. Just as an example, many of the items we purchase at grocery and retail stores are manufactured and shipped from other countries. And our American businesses are dependent on global supplies and sell globally. While we are blessed with a large land mass in the United States (U.S.) that stretches from "sea to shining sea" that causes us to feel somewhat removed from events around the world, what happens elsewhere affects us quickly in a global economy where goods and services are produced and shipped all over the world.

The global interconnectedness has been felt poignantly recently. In fact, the U.S. economy, along with other countries' economies, has been whipsawed by major global events for over three-and-half years since early 2020. It is to our advantage to understand the dynamic circumstances and interconnections that appear quickly on our doorsteps to foster pro-active and defensive action to protect our bottom lines and advance our strategic missions and goals.

Therefore, to better frame and understand the local and regional economy, this report first establishes context with the global economic conditions and then proceeds with a comprehensive analysis of national, state, and local economic trends and outlook.

The global economy has experienced continued disruptions from the lingering effects of the pandemic, persistent inflation, ongoing geopolitical shocks, shifting trade flows, and residual supply chain challenges. Global economic growth registered approximately 3.3% in 2022, weighed down by the Russian invasion of Ukraine and global inflation, after growing approximately 6.2% in 2021 in the initial rebound from the pandemic. World growth is projected to continue to slow but remain positive in 2023 and 2024 with median forecasts of 2.9% and 2.6%, respectively, based on the prominent forecasts in Table 1 below, due to continued persistent inflation and global monetary policy tightening, a faltering China economic recovery, and waning activity in global housing, bank lending, and industrial sector (World Bank, International Monetary Fund, Organisation for Economic Co-operation and Development, S&P Global, and the Conference Board). Moreover, the Conference Board expects a relatively muted global economic growth environment in the coming years, projecting average annual global growth of 2.6% during 2024–2035, as compared to 3.3% average annual growth in the decade before the pandemic in 2011 – 2019, and 4.0% average annual growth in 2000–2008 before the Great Financial Crisis of 2007–2009 (Conference Board).



Table 1. U.S. and Selected World Real GDP 2022 and Forecasts 2023-2024 (%y/y)

U.S. and Selected World Real GDP Annual % Change 2022 - 2024												
	United States		World			Euro Area			China			
Forecast Organization	2022	2023 <sup>f</sup>	2024 <sup>f</sup>	2022	2023 <sup>f</sup>	2024 <sup>f</sup>	2022	2023 <sup>f</sup>	2024 <sup>f</sup>	2022	2023 <sup>f</sup>	2024 <sup>f</sup>
World Bank, June 2023	2.1	1.1	0.8	3.1 <sup>e</sup>	2.1	2.4	3.5 <sup>e</sup>	0.4	1.3	3.0 <sup>e</sup>	5.6	4.6
IMF, July 2023	2.1	1.8	1.0	3.5 <sup>e</sup>	3.0	3.0	3.5 <sup>e</sup>	0.9	1.5	3.0 <sup>e</sup>	5.2	4.5
OECD, September 2023	2.1	2.2	1.3	3.3	3.0	2.7	3.4	0.6	1.1	3.0	5.1	4.6
S&P Global July 2023	2.1	1.7	1.3	n/a	2.9	2.9	3.5	0.6	0.9	n/a	5.2	4.7
Conference Board, September 2023	2.1	2.2	0.8	3.3	2.9	2.5	3.3	0.7	0.9	3.0	4.8	4.1
Wells Fargo Economics, Aug. & Sept. 2023	2.1	2.2	0.5	3.5	2.6	2.3	3.7	0.6	1.3	3.0	4.8	4.2
Federal Reserve, June 2023*	2.1	2.1	1.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Moody's Analytics, September 2023	2.1	2.1	1.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
KPMG Economics, September 2023	2.1	2.3	1.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University of Michigan, August 2023	2.1	2.1	1.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Forecast; "Estimate, *Federal Open Market Committee												

China's role in global manufacturing and its stumbling economic recovery after shifting in late 2022 from its zero-covid policy also are impacting the global economy and outlook. While the United States has the largest economy in the world, China's economy is second largest, well ahead of the remaining world economies, and was a major driver of global economic growth in the two decades before the recent pandemic. The Conference Board reports that China produced average annual growth of 7.3% in the decade before the pandemic in 2011 – 2019, and 10.4% average annual growth in 2000–2008 before the Great Financial Crisis, and projects 4.1% - 4.4% average annual economic growth in China in 2024–2035, a significant stepdown. By comparison, the mature economies, including the United States, Europe, and Japan, posted an estimated 1.9% annual average economic growth in the decade before the pandemic in 2011 – 2019, and 2.4% in 2000–2008 before the Great Financial Crisis, and are projected to grow an average 1.3%–1.4% annually in 2024–2035. While India and some other developing economies are projected to have stronger future growth than China, the size of these high growth, developing economies are still significantly less than China's and not yet able to fully offset the effect of a continued slowing in the Chinese economy on global growth (Conference Board).

Another major change impacting the global economy is the reshuffling of global trade flows resulting from the pandemic and the Russian-Ukrainian war. The pandemic revealed issues regarding the reliability, fragmentation, and fragility of global trade and proved that global trade was not "frictionless" as previously assumed with major supply disruptions and escalating costs impacting consumers and businesses worldwide. The Russian invasion of Ukraine in early 2022 and the associated dramatic food and energy supply and price shocks further highlighted the insecurity of previous trade and supply lines. As such, global trade flows are shifting to increase reliability and security of supply lines and this transition will take time and carry transitional costs as industrial capacity and supply and trade relationships rebalance.

Risks to the global forecast include continued persistent global inflation; monetary tightening by central banks worldwide to arrest inflation; geopolitical risks; disruptions to food, energy, and other markets from geopolitical risks; further weakening of the Chinese economy; and reshuffling trade flows. A major negative movement in any one of these factors, or an



accumulation of smaller negative movements across multiple factors, could have a significant downward impact on global growth.

### IV. National Economic Overview and Outlook

Overall, the U.S. economy currently is presenting mixed results with headwinds and tailwinds portending different trends and meaningful bands of uncertainty. This analysis will walk through an overview of the U.S. economy through August 2023 and an outlook for 2023–2024.

The U.S. economy continues to work toward normalizing after being on a roller coaster the last three years due to the global pandemic and global economic impacts of the Russian-Ukrainian war. The U.S. and world economies are still working through the impacts of those major, global historic events with a new reality expected to emerge by 2024, barring any new disruptive events. The U.S. economy reflected notable resilience through the recurring waves of disruption in 2020–2022, bolstered by aggressive monetary and fiscal policy during the early phases of the pandemic, and that resiliency continued to manifest through August 2023 with cautionary signs.

#### A. Economic Growth Overall

The U.S economy proved more resilient in the first half of 2023 (H1:2023) than consensus forecasts, posting 2.0% growth in real<sup>1</sup> gross domestic product (GDP) at a seasonally adjusted annual rate in the first quarter (Q1:2023) and 2.1% growth in the second quarter (Q2:2023), based on the standard series of monthly data revisions through August 30, 2023 (Figure 1; U.S. Bureau of Economic Analysis (BEA)).



Figure 1. U.S. Real Gross Domestic Product, Q1:2000 – Q2:2023

Seasonally adjusted annual rate

Consumer spending, which comprises over 70% of real GDP, was a strong contributor to the resilient real GDP growth in H1:2023, with consistent spending on services and tepid goods

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<sup>&</sup>lt;sup>1</sup> "Real" represents inflation-adjusted data.



spending except for motor vehicle purchases in the first quarter. Solid wage growth, continued drawdowns of savings accumulated during the onset of the pandemic, inflation easing, and increased consumer debt bolstered the enduring consumer spending of H1:2023. However, consumers slowed down their spending for both services and goods in the second quarter as compared to the first quarter (BEA).

For real GDP growth in Q2:2023, improvements in overall business spending, solid government spending, and lower imports (positive impact on GDP) compensated for the slowdown in consumer spending and reduction in exports (negative subtraction from GDP) as compared to the first quarter. Business spending in Q2:2023 was led by increases in private fixed investment in nonresidential structures, equipment, and intellectual property, while business inventories declined slightly, and residential investment (housing) continued to decrease more slowly than the stiff drawdown pace of April–December 2022 (BEA).

Total government spending's contribution to real GDP growth in Q2:2023 was on par with that of overall business spending, led by state and local government spending and gross investment with a small contribution from federal government spending. Exports decreased more than imports decreased, resulting in negative net exports and a drag on real GDP growth in the second quarter (BEA).

#### B. Labor Market Trends

After an extremely tight labor market in 2021–2022, the labor market continued to normalize in 2023 starting the year with solid job growth and the pace gradually slowing through August 2023. The year began strong with an average monthly addition of 287,000 new jobs in January–May 2023, well above the average monthly pace in 2017–2019 before the pandemic yet appearing subdued compared to the red-hot pace of 2021–2022. Based on recently revised BLS data, monthly job growth noticeably dropped in June and picked up somewhat in July–August 2023 with monthly job growth averaging a slower 150,000 in June–August 2023, below the prepandemic monthly average pace of 182,000 in 2017–2019 (Figures 2 and 3; U.S. Bureau of Labor Statistics (BLS) household survey).



Figure 2. U.S. Total Nonfarm Payroll Jobs, January 2000 – August 2023

Establishment survey; seasonally adjusted





Figure 3. U.S. Monthly Change in Nonfarm Payroll Jobs, January 2021 – August 2023

Establishment survey; seasonally adjusted

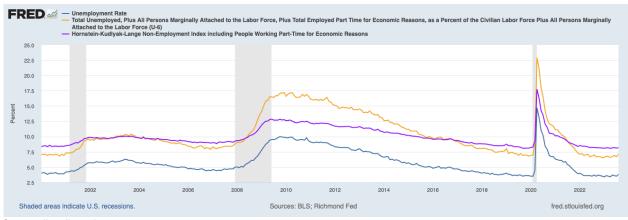
For a wider lens on unemployment, looking below the headline unemployment statistics provides a fuller view of labor market conditions. Both the BLS and the Federal Reserve System publish additional indicators to assess labor underutilization (BLS) and non-employment (Federal Reserve), with the BLS monthly publishing six measures of unemployment or labor underutilization. Three indicators are reviewed in this section.

The most widely cited unemployment statistic is U-3, the official unemployment rate published by BLS, which includes those persons that actively looked for work in the four weeks prior to the monthly BLS household survey. Among the six unemployment measures that BLS releases monthly, U-6 is the fuller measure of labor underutilization that also includes marginally attached workers who actively looked for work within the last 12 months and workers that settled for part-time schedules for economic reasons but want and are available for a full-time job.

After being historically low and essentially flat for most of 2023, the BLS unemployment metrics ticked up slightly in August 2023. In January–July 2023 the unemployment rate remained at historically low levels measured both by the official unemployment rate, U-3, and the broader U-6 rate (averaging 3.5% and 6.7%, respectively) (Figure 4) (BLS). Both indicators increased in August 2023 with U-3 rising to 3.8% and U-6 listing at 7.1% primarily due to an increased number of persons coming into the civilian labor force.



Figure 4. U.S. Unemployment Rate: BLS U-3 (Official Rate), BLS U-6, and Federal Reserve Non-Employment Index, January 2000 -August 2023



As another relevant unemployment statistic, the Federal Reserve also conducts a broader monthly assessment of non-employment based on the microdata in the BLS monthly household survey. The Hornstein-Kudlyak-Lange Non-Employment Index (NEI) considers both unemployed persons and those out of the labor force and weights different non-employed groups based on historical rates of transitioning back into the job market (e.g., marginally attached to the labor force, students, retirees, the disabled, and those not retired, disabled, or in school). The Federal Reserve's NEI+PERT index also includes those who have settled for a part-time schedule for economic reasons and is a companion measure to the BLS U-6 unemployment rate. The Fed's NEI+PERT index spiked early in the pandemic to 17.7% in April 2020, gradually decreased beginning in April 2020, and registered at 8.2% in June 2022 where it generally remained through August 2023, which is the general range reported in the six months before the pandemic. (Richmond Fed, August 2023)

U-6 and NEI+PERT indicate there is persistent labor underutilization and non-employment exists in the economy beyond the headline, official employment rate. A key element to note is that persons not actively looking for work in the last four weeks are not included in the monthly official unemployment rate or civilian labor force calculation. From a policy perspective, it is prudent to closely examine both the official unemployment rate and those persons classified as out of the labor force. Local government social services typically are keenly aware of the persons not included in the official unemployment and civilian labor force statistics.

Wage growth gradually slowed but remained robust with monthly growth averaging 4.4% during April—August 2023, noticeably below the brisk 5.3% monthly average wage growth in 2022 yet still well above the 3.0% average annual growth in 2017–2019 before the pandemic (Figure 5).



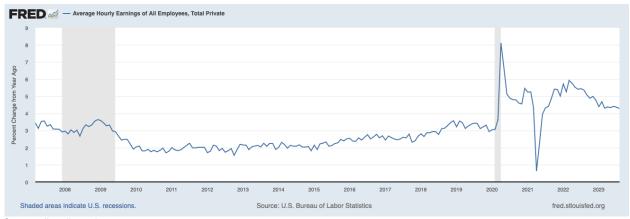
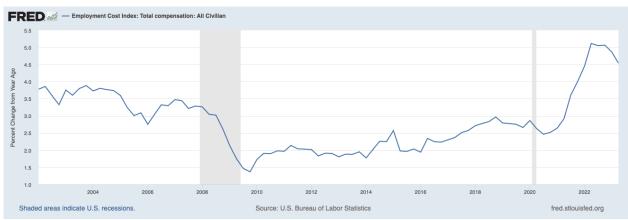


Figure 5. U.S. Average Hourly Earnings March 2007 – August 2023 (%y/y)

Total compensation, including wages, salaries, and benefits, similarly slowed but remained robust with 4.5% quarterly year-over-year growth in Q2:2023, below the 4.9% average quarterly year-over-year growth in 2022 yet still well above the 2.7% prepandemic annual average in 2017–2019 (Figure 6).

Figure 6. U.S. Total Compensation (Employment Compensation Index), Q1:2002 – Q2:2023 (%y/y)



Seasonally adjusted

Even with the recent loosening in the labor market, there were still 1.5 job openings for every unemployed person in July 2023, down from the monthly 2.0 ratio of March–April 2022, but still above the historic average ratio of 1.1 in 2017–2019 before the pandemic (Figure 7) (BLS).



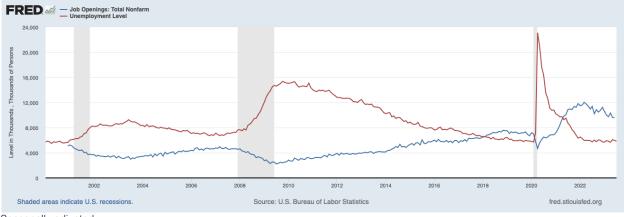


Figure 7: U.S. Job Openings and Unemployment Level January 2000–June 2023

While gradually slowing, this still solid jobs growth and robust wage growth helped fuel consumer spending in January—August 2023. Moreover, the aging of the U.S. workforce was accelerated by a wave of early retirements during the pandemic and is expected to continue to impact the labor market even with a cooling economy.

Labor force participation continued to recover in January–August 2023 from the dramatic drop at the onset of the pandemic with older workers noticeably not returning to the workforce at the same pace as younger workers. In August 2023 the U.S. labor force participation rate reached close to its prepandemic level (62.8% in August 2023 as compared to 63.3% in February 2020) (Figure 8). Two trends have impacted the overall labor force participation rate thus far in 2023. Stronger recovery in the 25-54 age group with its labor force participation rate reaching 83.5% in August 2023, surpassing its prepandemic level (plus 0.5% over its February 2020 level), and partially offsetting the persistently lower rate in the 55 and over age group. Contrastingly, the labor force participation rate for the 55 and over age group was 38.8% in August 2023, -1.5% below the respective February 2020 rate of 40.3% (Figure 9). Limiting consideration to only the 55-64 age subset, which comprised 13% of the U.S. civilian noninstitutionalized population in 2022, the -1.5% lower labor force participation rate for older workers translates into over 632,000 fewer workers aged 55-64 in the labor market in August 2023 than would have been available with the respective prepandemic participation level (BLS and Census).



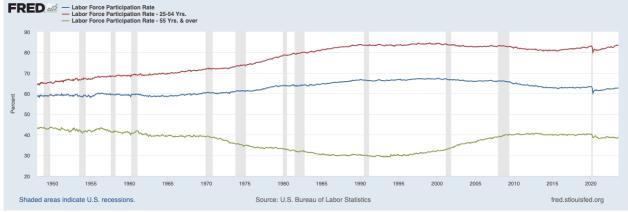
ERED — Labor Force Participation Rate

68
67
66
65
63
62
61
60
59
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020

Shaded areas indicate U.S. recessions.

Figure 8. U.S. Labor Force Participation Rate January 1948 – August 2023

Figure 9. U.S. Labor Force Participation Rate by Age January 1948 – August 2023



Seasonally adjusted

## C. Consumer Activity

## Personal Income and Consumer Spending

Consumer spending comprises over 70% of U.S. real GDP and has served as a firewall to the U.S. economy since Summer 2020. Despite the volatility in real disposable income, real personal consumption expenditures positively contributed to real GDP in 12 consecutive quarters from Q3:2020 to Q2:2023 (Figure 10). Consumer spending proved resilient through repeated major disruptions since the pandemic and the Russian invasion of Ukraine, despite consumer confidence and consumer sentiment plummeting from Spring 2021 to mid-2022 and then seesawing from Fall 2022 into early 2023. Consumer spending has been bolstered by strong nominal wage growth in a tight job market (though eroded by inflation until recently), drawdowns in excess savings accumulated earlier in the pandemic (largely due to sheltering in place and significant government support), and increases in consumer debt (BEA, Conference Board, University of Michigan).



Figure 10. U.S. Personal Consumption Expenditures Contribution to Real Gross Domestic Product, Q1:2000 – Q4:2023 (%q/q)

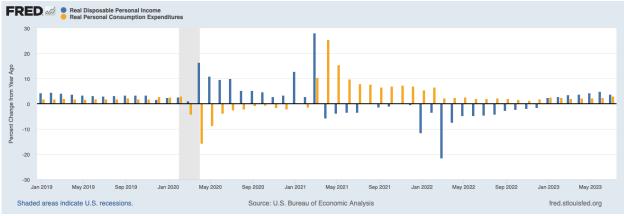


Seasonally adjusted annual rate

Real disposable income (inflation-adjusted) represents household purchasing power and monthly year-over-year growth softened slightly to 3.8% in July 2023 after 12 consecutive months of steadily improving year-over-year growth, emerging out of negative territory in January 2023 and reaching a monthly high of 4.9% in June 2023 (Figure 11). The steady improvements in real disposable income monthly year-over-year growth in July 2022–June 2023 reflected continued monthly growth in wages and salaries along with declining inflation taking decreasing bites out of income during that period. However, in July 2023, consumers experienced slower monthly growth in employee compensation (wages, salaries, and supplementary compensation), drops in personal current transfer receipts, and increases in personal taxes that were only partially offset by increased proprietors' and rental income for relevant persons. For context, real disposable income grew an average 3.2% annually during 2017–2019, and then fluctuated broadly with average annual growth postings of 6.2% in 2020 (reflecting significant pandemic dislocations and government supports to avoid economic collapse), 1.9% in 2021 (reflecting initial pandemic economic rebound and increasing inflation impacts) and fell -6.2% in 2022 (reflecting continued rising inflation in the first half of 2022) (BEA).



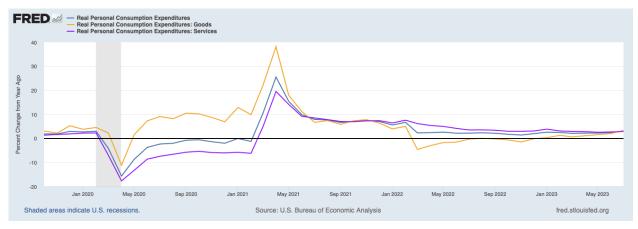
Figure 11. U.S. Real Disposable Income and Real Personal Consumption Expenditures January 2019 – July 2023 (%y/y)



Seasonally adjusted annual rate

Despite softening real disposable income, consumers spent actively in June–July 2023. Real consumer spending increased 2.4% year-over-year in June 2023 followed by another 3.0% monthly year-over-year increase in July 2023, primarily driven by increased purchases of services and a slight increase in nondurable goods purchases that were partially offset by reductions in durable goods purchases (Figures 11 and 12). Consumers' increased purchases of nondurable goods is likewise reflected in consecutively monthly increases in retail sales in April–August 2023 (Figure 13).

Figure 12. U.S. Real Personal Consumption Expenditures: Goods and Services, July 2019 – July 2022 (%y/y)





Advance Retail Sales: Retail Trade and Food Services

20
15
10
5
-10
-15
Jan 2020 May 2020 Sep 2020 Jan 2021 May 2021 Sep 2021 Jan 2022 May 2022 Sep 2022 Jan 2023 May 2023

Shaded areas indicate U.S. recessions.

Source: U.S. Census Bureau fred.stlouisfed.org

Figure 13. U.S. Retail Sales January 2020 - August 2023 (%m/m)

This active spending in April–August 2023 followed a period in which real consumer spending and retail sales declined month-over-month or remained flat in four out of the five months during November 2022–March 2023, excluding January 2023, with the spending and retail reductions during that period primarily driven by decreases in goods spending. The January 2023 bump in spending and retail sales was likely impacted by cost-of-living adjustments instituted at the beginning of the year based on inflation in 2022 (BEA).

#### Consumer Confidence and Sentiment

Consumers' perspective on the economy is so important that it is monitored in many ways. Two widely used indicators are the U.S. Consumer Confidence Index published monthly by OECD and the University of Michigan Consumer Sentiment Index. The two indicators track closely and reflect the consumers' bumpy ride on the pandemic roller coaster that also was exacerbated by global price shocks in early 2022 (Figures 14 and 15).



Figure 14. U.S. Consumer Confidence Index (OECD), January 2000 – August 2023

Seasonally adjusted. Long-term average is 100.





Figure 15. U.S. Consumer Sentiment Index, January 2000 – July 2023

Not seasonally adjusted. Historical average is 86.

Like the overall economy, consumers are sending mixed signals in Summer 2023. Although several consumer surveys indicate consumer confidence and sentiment moderately improved through the summer of 2023 (Figures 14 and 15), recent surveys indicated consumers are concerned about continued inflation and elevated interest rates, job prospects, and family finances. Notwithstanding the wavering consumer confidence and sentiment, real consumer spending continued to bolster real GDP from Spring 2020 through June 2023. However, consumers are signaling additional caution while also continuing to spend in certain categories. Moreover, the resumption of student loan repayments in Fall 2023 with the end of the pandemicera moratorium is expected to be a drag on consumer spending going forward (BEA, Conference Board, University of Michigan, McKinsey).

### Consumer Personal Savings and Household Debt

The mixed consumer signals of both caution and continued spending are supported by the trends in household balance sheets. Consumers' throughline of spending was supported by (a) exceptional drawdowns starting in early 2022 in personal savings that built up during the early part of the pandemic due to consumers' decreased in-person activities and government support payments, and (b) steady increases in consumer debt starting in Spring 2021 (Figure 16; BEA).



Personal Saving (left)

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Figure 16. U.S. Personal Savings and Consumer Loans, January 2000 – August 2023

Personal savings: seasonally adjusted annual rate. Consumer loans: seasonally adjusted.

Yet household balance sheets in Q2:2023 were still strong overall with household debt service ratios (total debt service payments on mortgage and consumer loans as a percent of disposable income) still registering slightly below the average annual levels of 2017–2019 (excluding differentials across household income groups) (Figure 17; Federal Reserve).

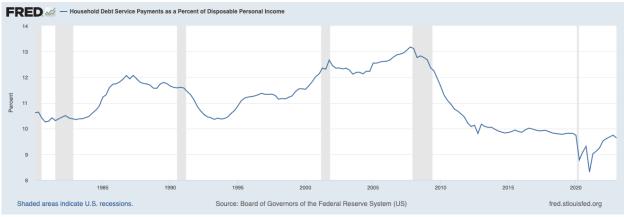


Figure 17: Household Debt Service Ratio Q1:2000 – Q2:2023

Seasonally adjusted

On the other hand, credit card delinquency rates increased significantly from early 2022 through Q2:2023, returning to prepandemic levels in Q2:2023 after steadily declining in 2020 2021 (Figure 18: Federal Reserve). Increasing household debt ratios and credit card delinquency rates along with continued solid household balance sheets overall augur likely increasing consumer caution with selective spending.



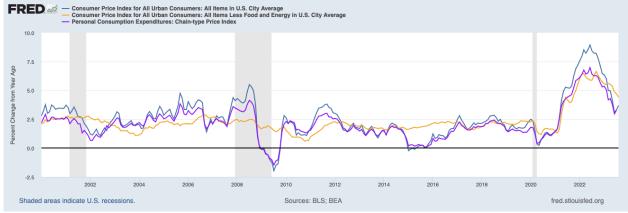
FRED 🥁 — Delinquency Rate on Credit Card Loans, All Commercial Banks Shaded areas indicate U.S. recessions Source: Board of Governors of the Federal Reserve System (US) fred.stlouisfed.org

Figure 18. Credit Card Delinquency Rate, Q1:2000 – Q2:2023

#### D. Consumer Prices

Recent inflation trends bring both good and challenging news with simultaneous downward overall trends and "sticky" persistence. The mixed news is reflected in headline inflation, as measured by the Consumer Price Index including food and energy (CPI), which steadily decreased to 3.1% in June 2023 after peaking in June 2022, but ticked up slightly in July and August 2023 to 3.3% and 3.7%, respectively. Moreover, while core inflation, CPI less the volatile food and energy components, similarly declined to 4.4% in August 2023 from its peak in Spring 2022, it remained more persistent and noticeably higher than the headline consumer price gauge (BLS).

Figure 19. U.S. Monthly Change in Consumer Prices, January 2000 – August 2023 (%y/y) 10.0



Seasonally adjusted

The mixed inflation picture repeats with the Federal Reserve's preferred indicator, PCE Inflation or the personal consumption expenditure index, which incorporates the substitutions that consumers typically make in their market baskets in response to higher prices (e.g., switching from name brand products to store brands) and is issued by BEA a few weeks behind the BLS



releases for CPI. After peaking in June 2022, PCE Inflation registered at 3.0% in June 2023 and Core PCE Inflation (excluding food and energy) recorded at 4.1%, again noticeably higher than the companion PCE Inflation figure that month. However, in July 2023 both PCE Inflation and Core PCE Inflation increased slightly to 3.3% and 4.2%, respectively. The Federal Reserve's long-term target is 2.0% for PCE Inflation (BEA).

Both the good and challenging news on inflation provides evidence that the Federal Reserve's aggressive monetary tightening since early 2022 is slowing inflation but there is still a ways to go to break the back of inflation.

### E. Federal Reserve Policy Actions and Financial Market Stability

#### Federal Reserve Policy Actions Since 2022

In response to the rapid increase in inflation in Spring 2021 to Spring 2022, the Federal Reserve decisively tightened monetary policy beginning in March 2022 by steadily raising the federal funds rate and aggressively drawing down its balance sheet holdings of U.S. Treasury, federal agency debt, and mortgage-backed securities after greatly increasing its securities holdings during the pandemic to support financial market liquidity and stability. The Federal Reserve's committed goal is to cool consumer and business demand to tame inflation (Federal Reserve).

Starting in March 2022, the Federal Open Market Committee (FOMC)<sup>2</sup> instituted 11 increases to the federal funds rate through September 2023, reaching the range of 5.25%-5.50% in July 2023 and the FOMC held that rate steady at its September meeting. Only one prior pause in rate increases occurred at the June 2023 meeting (Table 2 and Figure 20 below). As such, the federal funds rate increased a total of 5.25% between March 2022 and September 2023. Similarly, the Federal Reserve reduced its balance sheet holdings by 9% during the period of March 2022 to mid-September 2023, including a brief uptick in March 2023 with the new Bank Term Funding Program instituted in response to selected bank failures in March–April 2023 (Figure 20; Federal Reserve). This monetary tightening led to higher mortgage, consumer, and commercial interest rates, quickly impacting interest rate-sensitive sectors such as housing and technology, and eventually beginning to slow down consumer and business behavior.

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<sup>&</sup>lt;sup>2</sup> The Federal Open Market Committee (FOMC) is the official rate-setting body comprised of the seven members of the Board of Governors of the Federal Reserve System, the New York Federal Bank President, and a rotating set of four of the remaining 11 Federal Reserve Bank presidents.



Table 2. U.S. Federal Open Market Committee (FOMC) Actions January 2022– September 2023

Meeting	Fed Funds Lower	Fed Funds Upper	Delta	Midpoint			
Jan. 2022	0.00	0.25	0.00	0.125			
Mar. 2022	0.25	0.50	0.25	0.375			
May. 2202	0.75	1.00	0.50	0.875			
Jun. 2022	1.50	1.75	0.75	1.625			
Jul. 2022	2.25	2.50	0.75	2.375			
Sept. 2022	3.00	3.25	0.75	3.125			
Nov. 2022	3.75	4.00	0.75	3.875			
Dec. 2022	4.25	4.50	0.50	4.375			
Feb. 2023	4.50	4.75	0.25	4.625			
Mar. 2023	4.75	5.00	0.25	4.875			
May 2023	5.00	5.25	0.25	5.125			
Jun. 2023	5.00	5.25	0.00	5.125			
Jul. 2023	5.25	5.50	0.25	5.375			
Sept. 2023	5.25	5.50	0.00	5.375			

Federal Reserve

Figure 20. U.S. Federal Funds Rate and Federal Reserve Total Assets, January 1, 2000 – September 13, 2023



Weekly, not seasonally adjusted

## Financial Market Stability

The higher interest rates resulting from tight monetary policy also impacted the banking sector. In March–May 2023 four idiosyncratic, regional banks with poor risk management policies (misalignment of balance sheet assets and liabilities) and closely aligned with the technology and



crytocurrancy industries voluntarily liquidated (Silvergate Bank) or failed (Silicon Valley, Signature, and First Republic Banks). These selected bank insolvencies were contained and addressed by decisive federal action by the Federal Reserve, Federal Deposit Insurance Corporation (FDIC), and the U.S. Treasury, and financial markets have remained stable since the initial concern of March–May 2023. (Federal Reserve, FDIC, U.S. Treasury).

A small, four-branch bank, Heartland Tri-State Bank of Elkhart in Kansas, also failed in July 2023 due to a fraudulent bank scam, with little resemblance to the earlier bank failures of Spring 2023. The Kansas Bank Commissioner emphasized that the bank became insolvent due to a "huge scam" and was not related to interest rates increases, balance sheet asset quality, or the Federal Reserve. (Bailey, S. 2023 (Kansas Reflector), and Gandel, S, 2023).

The narrow bank failures of Spring 2023 illuminated the impact of reduced federal regulatory oversight since 2018 of "midsized" regional banks (under \$250 million in total assets) and the importance of bank executives taking responsibility for proactive risk management as higher interest rates squeeze banks by lowering the value of their assets (securities and investments) and increasing the costs of their liabilities (deposits). Several federal investigations were thereby launched, and both the Federal Reserve and FDIC issued reports in late-April 2023 promising increased regulatory oversight of banks by their organizations and forthcoming policy recommendations for Congress and other agencies, and proposed new banking capital and debt management rules were jointly issued in July-August 2023. The small, community Kansas bank failure in July 2023 illustrated the importance of bank management and comprehensive internal controls, including lending procedures, administration and monitoring, legal and regulatory compliance, audit programs, and third-party examiners<sup>3</sup> (Federal Reserve, FDIC, S&P Global).

Overall, tighter credit conditions are expected to impact both the consumer and commercial banking sectors with downward pressure exerted on the economy, which began to appear in the July 2023 survey of senior loan officers on bank lending practices (Federal Reserve, S&P Global).

## F. Business Activity

### **Private Business Spending**

Real private business spending (gross private domestic investment) accounted for 19% of real GDP in 2022 and is comprised of nonresidential spending on structures, equipment, and intellectual property; residential construction spending; and changes in private inventories. While private business spending contributed negatively to real GDP growth in three of the four quarters between Q2:2022–Q1:2023, total private business spending contributed positively to real GDP growth in Q2:2023 (Figure 21). The uptick in total private business spending in Q2:2023 was led by increases in private fixed investment in nonresidential structures and equipment which were partially offset by slight declines in business inventories and a small drag from reductions in residential investment (housing). The reductions in residential investment

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<sup>&</sup>lt;sup>3</sup> S&P Global (2023, August 10).



continued to lessen in Q2:2023 as compared to the stiff drawdown pace of Q2:2022 to Q4:2022 (BEA, 2023, August 30; GDP Second Estimate, Second Quarter 2023).

Real Private Pixed Investment
Real Private Residential Fixed Investment

20
40
40
40
50
204
206
2008
2010
2012
2014
2016
2018
2020
2022

Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Economic Analysis

Figure 21. U.S. Real Private Business Spending, Q1:2002 – Q2:2023 (%q/q)

Seasonally adjusted annual rate

#### Industrial Production

In terms of the industrial sector overall, the Federal Reserve produces the Industrial Production Index that measures real output in manufacturing, mining, and electric and gas utilities. While the Federal Reserve's industrial production index posted a 3.4% increase overall in 2022, softening appeared in late 2022 with a noticeable slowdown in monthly year-over-year growth declining to flat or negative growth in May – July 2023, followed by a slight improvement in August 2023, indicating slower industrial activity as compared to most of 2022 (Figure 22; Federal Reserve).

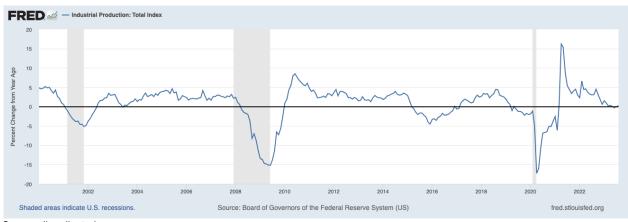


Figure 22. U.S. Industrial Production, January 2000 – August 2023 (%y/y)

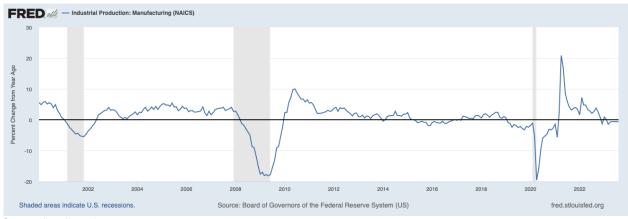
Seasonally adjusted

Looking below the overall index, the three components of the Industrial Production Index likewise softened in late 2022–early 2023 after posting solid increases in 2022. The manufacturing component of the index increased 2.9% in 2022 but softened in late 2022 and



experienced eight months of negative or flat year-over-year monthly growth during the nine months of December 2022–August 2023 (Figure 23). Mining output grew 6.9% in 2022, but steadily slowed starting in late 2022 down to a three-month average of 3.6% monthly year-over-year growth in August 2023. The output of utilities advanced 3.1% in 2022 yet dropped significantly in January 2023 and mostly declined monthly in January–August 2023 to reach a three-month average of -1.3% monthly year-over-year growth in August 2023. (Federal Reserve).

Figure 23. U.S. Industrial Production: Manufacturing, January 2000 – August 2023 (%y/y)



Seasonally adjusted

#### Manufacturing

Taking a closer look at manufacturing given its importance to the economy, the Institute of Supply Management (ISM) PMI Manufacturing Index also recorded a tenth consecutive month of contraction in manufacturing activity in August 2023 following 28 consecutive months of growth. While manufacturing continued to shrink in August 2023, a slight uptick in the index in July–August 2023 as compared to June 2023 indicates a modestly slower rate of contraction. The ISM PMI Manufacturing Index also reported a twelfth consecutive monthly decline in new manufacturing orders in August 2023, and the eleventh monthly consecutive decline in the backlog of manufacturing orders. Of note, the ISM reported a third consecutive decline in manufacturing employment in August 2023, with the pace of contraction slowing a bit as compared to the prior month (ISM).

Looking ahead for manufacturing, durable goods new orders decreased -5.2% in July 2023 after four consecutive monthly increases during March–June 2023 and a 4.4% increase in June 2023. The decrease in July 2023 reflected a reversal in aircraft orders after a temporary spike a month earlier while durable goods orders excluding transportation increased a more stable 0.5% (Figure 24; Census). Relatedly, the U.S. Business Confidence Index for Manufacturing dropped below its long-term average in July 2022, mostly declined further during August 2022–June 2023, and improved slightly in July–August 2023 while still remaining below the long-term average (Figure 25; OECD).



Figure 24. U.S. Manufacturing Durable Goods New Orders, January 2000 – July 2023

Figure 25. U. S. Business Confidence Index: Manufacturing, January 2000 – August 2023



Long-term average is 100.

#### Services Sector

For a closer look at the services sector, the Institute for Supply Management (ISM) Services PMI Index registered continued growth in August 2023 for the eighth consecutive month. The ISM Services PMI indicates the sector grew in 38 of the previous 39 months with December 2022 as the only month of contraction. New orders, prices, and employment in the services sector continued to grow in August 2023, while the backlog of orders began contracting that month (ISM).

#### Residential Real Estate Market Trends

#### Home Sales and Prices

Given the importance of housing to the overall national economy and local government economies, a closer examination of the housing market is warranted. Housing is a major component of the U.S. economy. Residential investment (structures-related) comprised



approximately 18% of total business spending and 3% of overall real GDP on average in 2017–2019, adjusted for inflation. Residential investment incorporates the construction of new single-family and multifamily structures, residential remodeling, production of manufactured homes, and brokers' fees. These residential investment figures exclude consumer spending on housing services (renters' and owners' imputed rent and utility payments) which accounted for another 11% of overall real GDP in 2017–2019 and is typically reported as part of total consumer spending (BEA, Census, and National Association of Home Builders).

The housing market experienced tremendous increases in 2020-2021 as people dramatically changed their housing preferences due to the coronavirus pandemic, and then was strongly impacted by the higher mortgage and interest rate environment that began in early 2022.

New home sales were on a roller coaster, markedly increasing in mid-2020 to mid-2021, then registering steady year-over-year declines during July 2021–March 2023. Overall new home sales increased 21.5% in 2020, then declined of -7.6% and -17.2% in 2021 and 2022, respectively. In Spring 2023 new home sales appeared to turn the corner, recording positive monthly year-over-year improvements in April–July 2023 (Figure 26; Census). It remains to be seen if this trend persists. However, existing home sales continued to drop in all but one month in January–July 2023, significantly constrained by existing inventory (Figure 27; National Association of Realtors).



Figure 26. U.S. New Home Sales, January 2000 – July 2023

Seasonally adjusted annual rate





Figure 27. U.S. Existing Home Sales, July 2022 – July 2023

Seasonally adjusted annual rate

While U.S. home sales declined, national housing prices proved sturdy throughout 2020 into May 2023, with the Housing Price Purchase Only Index (HPI Purchase Only) increasing 7.9% in 2020, 16.7% in 2021, and 14.0% in 2022. However, the pace of monthly home price increases began to steadily slow beginning in March 2022, and the HPI Purchase Only recorded monthly average increases of 3.8% year-over-year in January–June 2023, the lowest monthly pace since Spring-Summer 2012 (Figure 28; U.S. Federal Housing Finance Agency (FHFA)).

Figure 28. U.S. House Price Index Purchase Only (Single-Family), January 2000 – June 2023 (%y/y)



Seasonally adjusted

Demand and supply dynamics and higher mortgage rates and prices underly the patterns exhibited in the housing market. Demand for housing remained strong as compared to supply despite higher mortgage rates and home prices in 2020—early 2023. After the Great Financial Crisis of 2007-2009 housing production lagged the pace of new household formation, especially since 2016 among millennials ((Harvard Joint Center for Housing Studies, Federal Reserve, U.C. Berkley Terner Center for Housing Innovation, VAR). Also, existing homeowners are currently

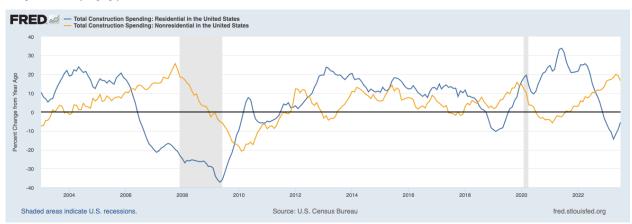


reluctant to sell their existing homes given higher prevailing mortgage rates as compared to their existing mortgage rates and economic uncertainty. As such, home buyers increasingly turned to new homes and home builders responded through 2023 thus far (Wells Fargo, VAR). The future outlook is uncertain with continued higher mortgage and interest rates and a generally slowing economy.

#### Residential Construction

Total residential construction spending also rose and fell during the course of the pandemic, increasing 16.5% in 2020, 25.5% in 2021, and 14.6% in 2022, then turned negative on a year ago basis starting in December 2022. In January–July 2023, total residential construction spending declined 9.5% year-over-year (Figure 29; Census).

Figure 29. U.S. Residential and Nonresidential Construction Spending, January 2003 – July 2023 (%y/y)



Seasonally adjusted annual rate

Looking ahead, housing starts and building permits are standard harbingers of future residential construction activity. Housing starts and building permits declined overall in 2022 (-3.4% and -4.2%, respectively) and continued to mostly slide in January–August 2023 with year-over-year decreases of -12.4% and -16.9%, respectively, with the pace of contraction easing somewhat in May–August 2023 (Figure 30). However, despite these declines the average seasonally adjusted annual rate of housing starts and building permits in April–August 2023 (1,412 and 1,468, respectively) still exceeded the average rates of 2017–2019 before the pandemic (1,248 and 1,335, respectively) (Census).





Figure 30. U.S. Housing Starts and Building Permits, January 2000 – August 2023

#### Nonresidential Construction

Nonresidential construction spending steadily advanced in January–July 2023 with monthly year-over-year increases of 16.3% to 20.1% (Figure 29). In 2022 total nonresidential construction spending increased 9.0%. While the recent data imply that the pace of year-over-year monthly growth in nonresidential construction had slowed somewhat, nonresidential construction spending was still up 17.8% year-over-year in January–July 2023 (Figure 29; Census).

## G. Leading Indicators and the Yield Curve

In July 2023, standard indicators of future economic activity point to an economic slowdown and a possible shallow recession with different indicators having been found to have different predictive records across different time frames. Based on research, leading indicator indices that combine several macroeconomic measures have been found to perform better in a one-year horizon than those with fewer measures. Over a longer time horizon, the yield curve inversion also has been found to perform as an effective advance signal of recession within 12 to 24 months in past business cycles (Federal Reserve).

Given these research findings, two indicators are referenced in this section that both generally suggest an economic slowdown and a possible shallow recession with some mixed signals in recent data: (a) the U.S. Composite Leading Indicator (CLI) which combines several U.S. macroeconomic measures as published by the Organisation for Economic Co-operation and Development (OECD), and (b) the yield curve inversion as measured by the difference between the 10-year maturity and 2-year maturity rates on Treasury notes.

Based on recently revised data, the OECD U.S. CLI peaked in June 2021, and registered 20 straight monthly reductions in the index in July 2021–February 2023, with steady deepening into negative territory in March 2022–December 2022, flatlining in January–April 2023, slight improvement with slower negative year-over-year declines in May–July 2023, and no change (0.0%) in August 2023 (Figure 31; OECD).



FRED 🧀 — Leading Indicators OECD: Leading Indicators: Composite Leading Indicator: Amplitude Adjusted for United States 7.5 2.5 0.0 -7.5 2016 Source: Organization for Economic Co-operation and Development fred.stlouisfed.org

Figure 31. U.S. Leading Indicator Index, January 2000 to August 2023 (%y/y)

Inversion of the yield curve has mostly preceded recessions in the last 50 years, with shorter term rates exceeding longer term rates because investors are less optimistic about economic prospects in the near term and move more money into longer-term investments. Often measured by the yield on the 10-year treasury note minus the yield on the 2-year treasury note, this yield curve measure entered negative territory in July 2022 reflecting inversion, and remained negative through August 2023, with a progressive monthly slide in July 2022 through February 2023, slight improvement in March–May 2023 with modestly less inversion, further declines to the lowest negative readings in over 20 years in June–July 2023, and a small uptick in August 2023 while remaining deeply inverted (Figure 32; Federal Reserve).

Figure 32. U.S. Treasury Monthly Yield Curve (10-Year Maturity Minus 2-Year Maturity Rate), June 1976 - August 2023 FRED 🧀 — 10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity



Not seasonally adjusted

These two leading indicator indices are used cautiously given the unique circumstances of the current economic conditions which are characterized by reformation from the myriad effects and byproducts of a global pandemic and relatively low unemployment grounded in an aging workforce. The efficacy of applying past, conventional barometers of business cycles, mostly developed in the last 40-50 years, to the current, still emerging post-pandemic period is untested.



Hence, close monitoring and ongoing analysis is warranted and will be maintained going forward.

#### H. National Economic Outlook

As 2023 continues to unfold, key factors impacting the U.S. economic outlook are persistent inflation in the U.S. and abroad, rising interest rates worldwide, tight credit conditions and lending standards, tight labor market and labor wage pressures, pressured real disposable income, cooling consumer and business demand, continued supply chain challenges, shifting trade flows, geopolitical risks, and slower global growth. Overall, as of this writing U.S. real GDP (the primary barometer of economic growth) is generally projected to experience belownormal-trend to moderate growth in the 1.7%-2.3% range in 2023 with a median forecast of 2.1% among the prominent forecasts noted in Table 3 below. In 2024, continued below-normaltrend growth is projected in the 0.5%-1.5% range with a median forecast of 1.3% among the prominent forecasts in Table. 3. Current forecasts are limited for 2025 and project continued below-normal-trend to moderate growth. While unexpected consumer resiliency buoyed the economy in the first half of the year, prevailing thought at this writing is that caution flags lie ahead and the U.S. economy will continue to slow through the remainder of 2023 and possibly experience a mild, shallow recession in late 2023 to early 2024, and then emerge sometime in 2024 into a new era of muted annual growth relative to prepandemic trends (Federal Reserve, Moody's Analytics, S&P Global, KPMG Economics, Wells Fargo, Conference Board, National Association for Business Economics (NABE), and University of Michigan).

At this writing Congress has not established a U.S. federal government budget for Federal Fiscal Year 2024 that begins in a few days on October 1, 2023, with a resolution not yet identified in Congress. Moody's Analytics included a two-week shutdown in its September 2023 economic forecasts for the U.S. that did not modify its overall forecasts for the U.S. economy for 2023 and 2024. This situation warrants close monitoring given the importance of federal installations and jobs in the nation, state, and regions.

Additionally, Conference Board analyses indicate that the U.S. economy experienced average annual growth of 2.4% in 2000–2008 (before the Great Financial Crisis) and 2.2% in 2011–2019 (between the Great Financial Crisis and the coronavirus pandemic). However, the Conference Board projects that U.S. average annual growth will be 1.6%-1.7% during 2024–2035 primarily due to smaller contributions from labor with an aging demographic that will be partially offset by accelerated digital transformations resulting from the pandemic and current investments in infrastructure (Conference Board, Global Economic Outlook, 2023, August).



Table 3: Selected U.S. Economic Forecasts for 2023–2024

	Forecast U.S. Real GDP (% change, annual)				
Organization	2023	2024	2025		
Federal Open Market Committee (Federal Reserve), September 20, 2023	2.1%	1.5%	1.8%		
Moody's Analytics, September 14, 2023	2.1%	1.4%			
S&P Global, July 18, 2023	1.7%	1.3%	1.5%		
KPMG Economics, September 2023	2.3%	1.3%			
Wells Fargo, Monthly U.S. Economic Outlook, September 7, 2023	2.2%	0.5%			
Conference Board, September 14, 2023	2.2%	0.8%			
National Association for Business Economics,					
May 2023	1.2%	1.2%			
University of Michigan, August 2023	2.1%	1.1%	2.1%		

Inflation and interest rates are substantial factors impacting consumers and businesses and the course of the economy in 2023. Economic conditions in January–August 2023 provided evidence that the Fed's restrictive monetary policies were cooling the U.S. economy as intended but inflation remained sticky and there is still a ways to go to fully tame it. While the Fed's preferred inflation measure, PCE Inflation, steadily declined from its mid-2022 peak through June 2023, it registered an increase to 3.3% in July 2023, well over the Fed's long-term target of 2%, and Core PCE Inflation (excluding food and energy) was recorded at 4.2% in July 2023 (BEA). Thus, the Fed has consistently reiterated its commitment to use tight monetary policy to break inflation.

As of September 2023, the Federal Reserve raised the federal funds rate to 5.25%-5.50% not quite reaching the upwardly revised 5.6% projected for calendar year 2023 in the Fed's latest Summery of Economic Projections (SEP) of September 20, 2023. The September 2023 SEP also projected that the Fed will only lower the rate to 5.1% in 2024 and then to 3.9% in 2025, both higher projections than were contained in the June 2023 SEP. Along with strongly signaling higher rates for longer, the Fed also consistently repeated that going forward it will evaluate emerging economic and financial data and decide about future rate actions on a meeting-by-meeting basis (Federal Reserve).

With continued tight monetary policy, prominent forecasts for 2023 expect inflationary pressures from supply-side frictions, shelter (rents), and labor market conditions to continue to gradually soften through the remainder of 2023. It is not expected to be a smooth ride since goods and energy commodity (not energy services) prices led inflation moderation in late 2022—early 2023 (especially the actual drop in used car prices) and services prices have not shown deceleration to a similar degree yet (BLS and BEA). Moreover, recent global oil supply cuts and price increases have exerted upward pressure on prices. Going forward, U.S. inflation overall is currently



forecasted to be generally in the 3.2%-4.2% range in 2023 and 2.4%-2.8% range in 2024 (Table 4; KPMG Economics, Wells Fargo, Moody's Analytics, NABE, and University of Michigan).

Table 4: Selected U.S. Inflation Forecasts for 2023-2024

	Forecast U.S. CPI (% change)				
Organization	2023 2024				
KPMG Economics, September 2023	4.1%	2.6%			
Wells Fargo, Monthly U.S. Economic Outlook,					
September 7, 2023	4.1%	2.2%			
Moody's Analytics, July 20, 2023	3.2%	2.4%			
National Association for Business Economics,					
May 2023	4.2%	2.5%			
University of Michigan, August 2023	4.1%	2.8%			

However, the demographics of an aging workforce and accelerated retirements triggered by the pandemic are expected to continue to exert tightness on the labor market and partially mitigate the employment impacts of a slowing or briefly declining economy.

While the labor market loosened some in 2023 with mostly slowing job growth and job openings through August 2023, it still remained tight in August 2023 with a relatively low unemployment rate and 187,000 new jobs added, which is a monthly pace of job growth slightly above the monthly average of 2017–2019. Additionally, there were 1.5 jobs for each unemployed person in July 2023, still well above the average 1.1 ratio in 2017–2019 before the pandemic (BLS).

With consumer spending comprising over 70% of the U.S. economy, as goes the American consumer goes the economy. Consumers expressed concerns in recent consumer surveys about the currently loosening job market as compared to the "red hot" labor market of 2021–2022. As such, consumer confidence and sentiment recently wobbled this summer after slightly improving in early 2023. Although consumers generally remained "cranky" with consumer confidence and sentiment remaining below their long-term averages despite some improvements in the spring, active consumer spending plowed on with continued solid jobs and wage growth, lower prices, drawdowns of the remaining savings accumulated during the pandemic, and increased consumer debt (BEA, BLS, University of Michigan, Federal Reserve).

The outlook is uncertain with several dynamics operating. On the one hand, consumer spending, while cautious, could possibly continue as it did in 2022 and January–August 2023 to provide a foundation while the U.S. economy continues to work toward normalizing after the series of global disruptions of 2020–2022 and related impacts. However, the sustainability of the recent active level of consumer spending remains to be seen with continued labor market loosening, increased household debt burdens, almost exhausted excess personal savings, and the end of the



pandemic moratorium on student loan repayments in Fall 2023. Further, slow reductions in core inflation could push the Federal Reserve to raise interest rates higher to ultimately tame inflation.

#### Risks to the U.S. Economic Outlook

As of August 2023, the economy is in a delicate position with projections of a continued slowdown in economic growth through the remainder of 2023 into early 2024 and a potentially mild, shallow recession, a gradual recovery sometime in 2024 with a below-normal-trend pace of annual growth, and a still muted, but closer to normal pace of growth in 2025. There are many swirling winds at this writing, both headwinds and tailwinds.

Headwinds and downside risks to the forecasts include potentially persistent or higher inflation, monetary policy uncertainty or hard landings, an extended U.S. government shutdown in Fall 2023 with a delayed federal budget, weakening consumer confidence and consumption spending, labor shortages and wage pressures, increasing unemployment with a hard landing, greater than expected housing price corrections, financial market tightening (e.g., credit crunch with banks pulling back on lending), supply chain disruptions, shifting trade flows, intensification of the Russian-Ukrainian war, other geopolitical risks, and slower global growth.

Tailwinds and upside risks to the forecast include potentially lower inflation to a material degree; a soft landing to tight monetary policy (e.g., jobs, wages, housing, manufacturing, and services); uplift to the global, slower growth outlook; an end to the Russian-Ukrainian war; reduced other geopolitical risks; increased business investment; and faster productivity growth.

Again, close monitoring is warranted as the U.S. economy moves through the current economic inflection point.

#### V. Virginia Economic Overview and Outlook

This section provides a detailed analysis of the Virginia economy and its relationship to the national economy, including overall economic growth, labor market trends, and consumer and housing activity.

#### A. Virginia's Economic Growth Overall

Based on revised BEA data, Virginia's overall quarterly pattern of real GDP was similar to the national pattern, with two consecutive quarters of negative real GDP growth in the first half of 2022 followed by three consecutive quarters of positive growth (Figure 33). Unlike the national pattern, there was little variation in Virginia's growth in real GDP between the third and fourth quarter of 2022, whereas there was broader variation at the national level, and Virginia's growth in real GDP in Q1:2023 was half the national growth rate that quarter. Based on the latest revised BEA data, Virginia's real GDP seasonally adjusted annual growth rates were below that of the nation throughout 2022 into Q1:2023. Given the significant revisions in state and national



data that can occur with the BEA ongoing routine reviews, close monitoring will continue with the next quarterly BEA update to state GDP data released in Fall 2023 (BEA).

Figure 33. U.S. and Virginia GDP, Q1:2005 to Q2:2023 (%q/q)

Seasonally adjusted annual rate

#### B. Virginia's Labor Market Trends

In the labor market, Virginia posted consistent monthly job growth in January–August 2023, although at a slower pace than the similar national trend during that period based on recently revised BLS data. In April 2023, Virginia added over 3,300 total nonfarm payroll jobs, followed by an additional 3,500 monthly jobs in May 2023, 2,200 jobs in June 2023, 1,400 jobs in July 2023, and 6,700 jobs in August (Figure 34). While the national pattern of job growth was generally followed, Virginia's pace of monthly job growth on a year-over-year basis trailed the corresponding U.S. monthly job growth in all but one month during April 2021–August 2023, with the difference in the monthly job growth rates gradually narrowing such that the rates were almost the same in June 2023 (2.4% in the U.S. and 2.3% in Virginia) but remained about 0.4% apart in the surrounding months. Moreover, based on revised BLS data, the U.S. recovered all of the jobs lost nationwide at the onset of the pandemic in June 2022, while it took Virginia until August 2022 to recover the total number of jobs lost statewide at the pandemic's onset. Further, as of August 2023 the U.S. had surpassed the February 2020 prepandemic level of total nonfarm payroll jobs by 2.7 % as compared to Virginia's 1.7% (BLS).



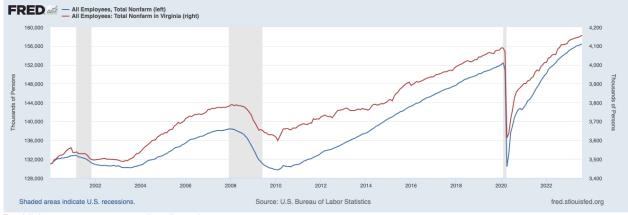


Figure 34. Total Nonfarm Payroll Jobs: U.S. & Virginia January 2000 to August 2023

Establishment survey; seasonally adjusted

Additionally, Virginia's labor force participation rate began a steady march back in 2022 from the lows of 2020–2021, reaching 66.7% in August 2023, a full 1.0% or more above the prepandemic level of 65.7% in February 2020 and the 65.6% annual average of 2017–2019 (Figure 35). The increased labor participation rate is reflected in the pattern of Virginia's unemployment and wage growth as further analyzed below (BLS).

FRED Labor Force Participation Rate for Virginia

T2.5

T0.0

67.5

60.0

1980

1985

1990

1995

2000

2005

2010

2015

2020

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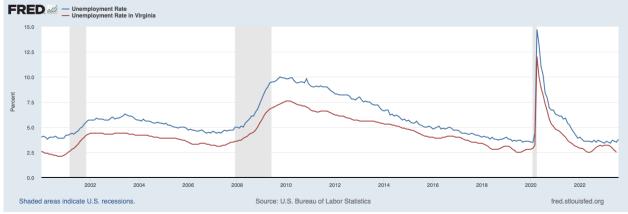
Figure 35. Labor Force Participation: U.S. and Virginia January 1976 to August 2023

Establishment survey; seasonally adjusted

Virginia's official unemployment rate (U-3) registered below the nation's official unemployment rate throughout 2022 into July 2023, similar to the prevailing historical pattern (Figure 36). However, with steady increases in Virginia's labor force participation rate, Virginia's unemployment rate ticked up in Summer 2022 and remained essentially flat during October 2022–April 2023, while the nation's official unemployment continued to trend down slightly during that period. In May 2023, Virginia's official unemployment rate resumed a downward monthly trend through July 2023 posting 2.5% in that month, while the nation's rate generally ticked up slightly. Even with the increase toward the end of 2022 that prevailed through April 2023, Virginia's official unemployment in the January–July 2023 registered in the same general range as the average annual unemployment rate experienced in 2017–2019 (BLS).



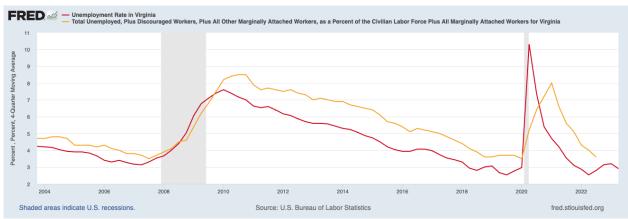
Figure 36. Unemployment Rate (U-3 Official Rate): U.S. and Virginia, January 2000 – August 2023



Household survey; seasonally adjusted

Virginia's fuller measure of unemployment, U-6 which is available quarterly as four-quarter moving averages for states on a lagged release schedule, remained below the respective U-6 national level in 2003–2020, trended above the national level in 2021, then returned below the national level in 2022 through Q3:2022 (the latest available data) (BLS). While Virginia's U-6 unemployment reading increased with the onset of the pandemic, the reading declined back to 3.6% by Q3:2022, similar to the prepandemic range of 2019 (Figure 37; BLS).

Figure 37. Unemployment Rate: Virginia BLS U-3 (Official Rate) and BLS U-6, Q3:2003 – Q2:2023



Household survey; not seasonally adjusted

Despite generally low unemployment rates, Virginia's monthly wage growth presented a bumpy pattern, companion with increasing labor force participation rates in the state. Monthly year-over-year wage growth was strongly positive in early 2022, weakened and became uneven but remained positive in Summer 2022 into Spring 2023, turned negative in May–June 2023, and recovered posting positive monthly year-over-year growth in July–August 2023 (Figure 38). The pace of monthly wage growth in Virginia in January–August 2023 is noticeably below its



year-ago level and significantly behind a pace that would match the prepandemic annual wage growth rates of 2.2%-3.2% in 2017–2019. Since state wage data is not seasonally adjusted, Virginia's monthly wage growth registered thus far in the year will continue to be closely monitored through 2023 (BLS).

FRED Average Hourly Earnings of All Employees, Total Private

Average Hourly Earnings of All Employees: Total Private in Virginia

Figure 38. Average Hourly Earnings: U.S. and Virginia January 2008 – August 2023

Not seasonally adjusted

# 27.5 Sources: BLS: St. Louis Fed Shaded areas indicate U.S. recessions fred.stlouisfed.org

#### C. Virginia's Consumer Activity

Virginia's real per capita personal income has been historically higher than that of the U.S., but to a lesser degree in 2020–2021, and the state's real per capital personal income followed the national pattern of increasing during 2008–2021 (Figure 39; BEA).



Figure 39. Real Per Capita Personal Income: U.S. and Virginia 2008 - 2021

Not seasonally adjusted

Virginia's consumer spending closely mirrored national annual growth trends through 2022 based on available data (Figures 40; BEA). The quarterly growth in Virginia's retail trade spending generally followed respective national growth trends in 2000–2022, with Virginia posting a stronger quarterly growth rate in Q1:2023 based on the latest BEA data (Figure 41; BEA).



Personal Consumption Expenditures: Total for Virginia

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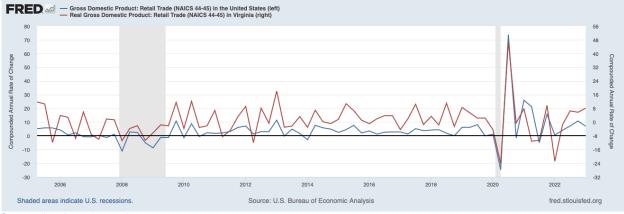
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Figure 40. Consumer Spending: U.S. and Virginia 2000 – 2022 (%y/y)

Not seasonally adjusted

Figure 41. Retail Trade: U.S. and Virginia Q4:2005 – Q1:2022



Seasonally adjusted annual rate

#### D. Virginia's Housing Activity

Looking to housing, Virginia's total existing home sales decreased in January–July 2023 as compared to the same period in 2022, continuing the overall decline in total home sales recorded in 2022 as compared to both 2021 and 2020 (Figure 42). Although lower than the preceding two years, Virginia's 123,459 total home sales in 2022 was on par with the 123,473 average annual home sales registered in 2017–2019 in the state (Virginia Association of Realtors (VAR)). However, if the lower trend of the first seven months of 2023 continues for the remainder of the year, the state may post total home sales in 2023 below the prepandemic average levels of 2017–2019.



Monthly Change in Existing Home Sales Virginia 40.0% 30.0% 20.0% 10.0% 0.0% -10.0% -20.0% -30.0% -40.0% -50.0% 2021.Mar 2021.1404 2021.1024 2022:1811 2020,404 2021:1811 2021-589 2022.1021 2023-1811 2023.Mar Virginia % Change Y/Y

Figure 42. Existing Home Sales: Virginia January 2020 – July 2023 (%y/y)

Source: Virginia Association of Realtors

While Virginia total home sales declined monthly year-over-year in January 2022–July 2023, home prices mostly increased during that period, posting monthly year-over-year increases in all but one month. In March 2023 the median home price in Virginia dropped below its prior year level (-1.3%) for the first time in seven years. However, this one-time drop was quickly followed by consecutive monthly year-over-year increases in the median home price in April-July 2023 (VAR).

Moreover, looking at home values based on both purchases of new and existing homes and refinancing appraisals as reported by the Federal Housing Finance Agency (FHFA House Price Index All Transactions), Virginia posted continued quarterly year-over-year growth in home values in 2020 through Q2:2023 (Figure 43). Virginia's quarterly year-over-year growth in the HPI All Transactions peaked in the second quarter of 2022 with the pace of quarterly growth remaining positive but steadily slowing through Q2:2023, recording as 6.1% in the second quarter of this year. (FHFA). Given the slowing in the pace of home value growth reflected in the FHFA data and the softness in some home prices reported in the VAR monthly data, future quarterly FHFA and monthly VAR data will be monitored closely.



Figure 43. House Price Index (Single-Family): U.S. and Virginia, Q1:2000 – Q2:2023 (%y/y)

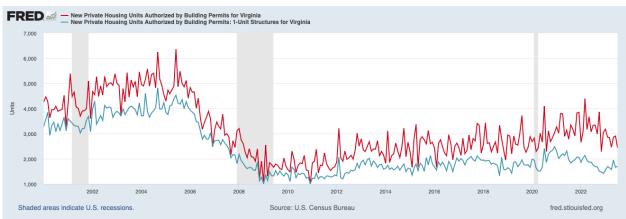


All single-family transactions and refinancings; not seasonally adjusted

As a standard indicator of future home building, Virginia's new residential building permits data in the not seasonally adjusted format is used for comparability with the corresponding monthly Charlottesville MSA and annual Albemarle County data. Since the data are not seasonally adjusted, comparisons to relevant periods in the prior year are used to minimize seasonal variations in the data. While the Federal Reserve also provides a seasonally adjusted format for Virginia's building permit data which is more comparable with the national data, the not seasonally adjusted format for Virginia is used for comparability with local and regional data (Census).

In January–July 2023, Virginia's new residential building permits generally posted year-over-year declines in six of those seven months, except for January 2023, based on revised Census data. In July 2023 building permits were 28% below the July 2022 level (Figure 44). As background, in 2022 Virginia's new residential building permits registered an annual average of 3,260, close to the 2021 annual average of 3,309, and above the prepandemic annual average of 2,656 total new residential building permits during 2017–2019. The generally lower monthly trends in building permits in recent months will be closely monitored throughout 2023 (Census).

Figure 44. New Residential Building Permits: Virginia January 2000 – August 2023



Seasonally adjusted



#### E. Multistate Regional Trends

For multistate regional trends, the Federal Reserve Bank of Richmond (FRB Richmond) reported that the economy grew slightly in August 2023 in its Fifth District (District of Columbia, Maryland, North Carolina, South Carolina, Virginia, and most of West Virginia). Similar to national trends, FRB Richmond reported that manufacturing activity remained sluggish in August 2023, with continued declines in new orders, shipments and order backlogs, and somewhat slower increases in prices paid and received. The Fifth District's manufacturing employment index also declined in August 2023. Also similar to national trends, FRB Richmond reported slight improvement in service sector activity in its district in August 2023, with the revenue index increasing after two consecutive monthly declines and the demand index posting a third consecutive monthly increase. In July-August 2023, FRB Richmond reported steady to modest growth in consumer spending on retail goods and food services despite lower foot traffic, solid auto sales, but declines in other consumer durables. Travel and tourism increased modestly in the district. FRB Richmond also indicated that price growth continued to ease in its district but remained above prepandemic levels. Similar to national and Virginia trends, FRB Richmond reported home sales were constrained by limited inventory in its district in July-August 2023 which put upward pressure on sales prices. Commercial real estate activity slowed overall in July-August 2023 in the FRB Fifth District with office and multifamily rents starting to soften but the retail and industrial segments remaining strong with rents continuing to escalate (Federal Reserve Board of Governors and Federal Reserve Bank of Richmond).

#### F. Virginia's Economic Outlook

Based on the Virginia data available for 2022 through August 2023 (some monthly, quarterly, and annual state data are reported with varying lags), Virginia's key economic indicators generally followed the patterns of the related national indicators, albeit sometimes at different levels, with notable labor market exceptions. Virginia's monthly job growth mostly trailed the nation's in April 2021–August 2023 such that Virginia's total nonfarm jobs in August 2023 exceeded its prepandemic level of February 2020 by 1.7% as compared to 2.7% overall in the U.S. Additionally, with steadily increasing labor force participation rates, Virginia's official unemployment rate increased in Fall 2022–Spring 2023 before declining in May–July 2023. Relatedly, the state's wage growth was bumpy from mid-2022 to July 2023 with negative growth in some months and distinctly below national levels (BLS).

The comprehensive analysis of the 2022 Annual Economic Outlook Report found historically Virginia's economic trends generally follow that of the nation, albeit sometimes at different levels, which is mostly corroborated with the available data as of August–September 2023 except for the slower job growth. Thus, it is prudent at this writing to rely on the historical trend findings and use the national economic outlook as the relevant barometer for the state's economic outlook for 2023–2024 with especially close monitoring of state job growth, labor market patterns, and any other trend deviations. This analysis of generally close trends between Virginia and the nation based on a broad range of economic data is corroborated by a recent Richmond Fed study that found that Virginia's business cycle generally tracked closely with the nation's based on an evaluation of payroll employment fluctuations (Richmond Fed, 2023).



Headwinds to the state's economic outlook overlap those of the national economy: uncertainties regarding the path of inflation, interest rates, credit tightening, the housing market, cooling consumer and business demand, supply disruptions, shifting trade flows, and continued geopolitical risks and impacts (such as supply and price shocks). The possibility of an extended U.S. government shutdown with a delayed federal budget also warrants close monitoring given the importance of federal installations and jobs in the state and regions. As with the nation, more muted growth is anticipated for Virginia in 2024 and 2025 as compared to prepandemic trends.

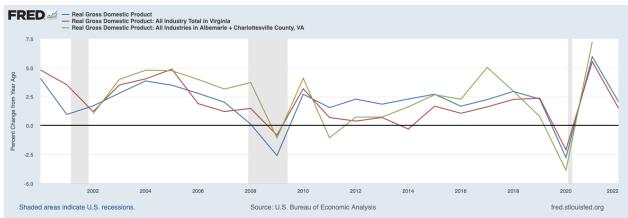
## VI. Albemarle County, Virginia Economic Overview and Outlook

This section provides a detailed analysis of several components of the economy of Albemarle County, Virginia, including overall economic growth, labor market trends, and consumer, housing and business activity.

#### A. Overall Economic Growth in Albemarle County, Virginia

BEA data is available for annual real GDP growth in Albemarle County + Charlottesville, Virginia, for the period of 2002 to 2021, which has been mapped along with similar national and state data for 2000–2022. As seen in Figure 45 below, Albemarle County + Charlottesville's growth in annual Real GDP generally outpaced the corresponding growth rates for the U.S. and/or Virginia in many years during the period of 2002–2018, placed below the U.S. and Virginia growth rates in 2019–2020, and returned to distinctly outpacing the state and nation in 2022. (BEA).

Figure 45. GDP: U.S., Virginia, and Albemarle County + Charlottesville, Virginia, 2000-2022 (%y/y)



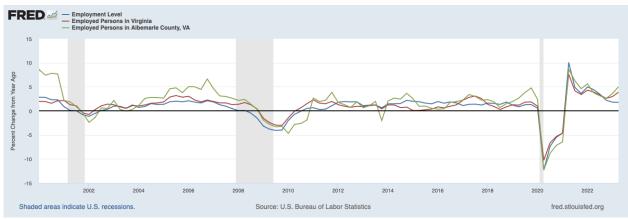
Current dollars; not seasonally adjusted



#### B. Labor Market Trends in Albemarle County, Virginia

In terms of employment, the total number of employed persons residing in Albemarle County consistently grew monthly in January–July 2023, recording 59,865 employed persons in July 2023, based on the most recently revised BLS household survey data (the BLS monthly household survey that tracks employment and unemployment is separate from its monthly establishment survey that tracks payroll jobs) (Figure 46). On a year-over-year basis, the monthly employment of Albemarle County residents in January–July 2023 registered gains over each of the corresponding readings in 2022. Based on the latest BLS data, total employment of Albemarle County residents increased to an annual average of 56,633 in 2022, comparable to the level recorded for 2019 and higher than the annual averages in both 2020–2021 and 2017–2018 (BLS household survey data on residents of Albemarle County) (BLS).

Figure 46. Employment Level: U.S., Virginia and Albemarle County, Virginia, Q1:2000 – Q2:2023 (%y/y)

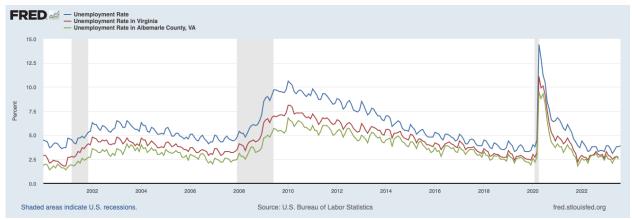


Household survey; not seasonally adjusted

Albemarle County recorded lower or equivalent U-3 official unemployment rates as compared to the state in all but one month in January–July 2023, with both the state and County registering U-3 unemployment rates of 2.5% in July 2023 (Figure 47). The state's unemployment rate generally declined in May–July 2023 into the more stable range of the County's unemployment rate, dipping below the County's rate in June 2023, based on the latest BLS data. Also, Albemarle County's unemployment rate exceeded that of the state in May–August 2022 which was a break from the historic pattern of Albemarle County recording lower unemployment rates as compared to the state and nation (BLS). In 2022, Albemarle County posted a 2.7% annual average unemployment rate as compared to 3.3% in 2021 and 5.6% in 2020, and the 2022 rate was on par with the 2.5%-2.7% average annual rates posted in 2018–2019. While on an annual basis Albemarle County continued the historic pattern of recording unemployment rates below that of the state, the 2022 annual average of 2.7% was only slightly below the 2.8% registered for the state (BLS).



Figure 47. Unemployment Rate: U.S., Virginia, and Albemarle County, Virginia, January 2000 – August 2023



Household survey; not seasonally adjusted

Total nonfarm jobs data is available for the Charlottesville, Virginia MSA, whereas it is not available for Albemarle County alone<sup>4</sup>. The latest BLS data indicates that the Charlottesville MSA lost a greater percentage of its jobs at the pandemic's onset as compared to Virginia and registered steady monthly job growth on a year-over-year basis in April 2021–August 2023 that was greater than the state's comparable measure in all but two months during that period, registering equivalent monthly growth rates in the two exceptions to the pattern (Figure 48). As of August 2023, the Charlottesville MSA registered 123,400 jobs, about 600 jobs above its February 2020 level based on the latest BLS data, reflecting that the region had recovered the total number of jobs lost at the pandemic's onset. It took the Charlottesville MSA until May 2023 to recover the total number of jobs lost in the region at the pandemic's onset (BLS).

Figure 48. Total Nonfarm Payroll Jobs: Virginia and Charlottesville, Virginia MSA January 2000 to August 2023



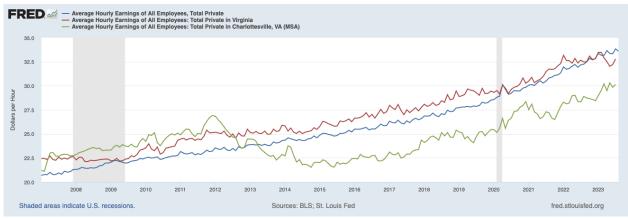
Establishment survey; seasonally adjusted

<sup>&</sup>lt;sup>4</sup> See Table 17 in the Appendix for the counties and cities assigned by the U.S. Census to each MSA which also is equivalent to the Core-Based Statistical Area (CBSA) for each of the areas examined in this report.



Companion with the County's low unemployment rate, the Charlottesville, Virginia MSA registered monthly wage growth on a year-over-year basis throughout January 2022–July 2023 and significantly exceeded that of the state in 15 of the 16 months in April 2022 –July 2023 (except July 2022 which was only slightly below the companion state growth level) (Figure 49). Based on the latest BLS data, the monthly year-over-year wage growth ticked up noticeably in five of the six months in February–July 2023, with five months recording monthly year-over-year growth of 4.5%-7.1% and one month registering 1.9% monthly year-over-year growth. This wage growth trend in the Charlottesville MSA was opposite to the slowing in wage growth in the state in the same period. Overall, in 2022 the Charlottesville MSA's annual average wages grew 5.1% on top of 1.8% wage growth in 2021. Given the recent uptick in the MSA's wage growth while the state's wage growth slowed, close monitoring throughout 2023 is prudent to detect if the trend persists and/or regularly scheduled federal data revisions reflect another pattern (BLS).

Figure 49. Average Hourly Earnings: U.S., Virginia, and Charlottesville, Virginia MSA, January 2007 – August 2023



Establishment survey; not seasonally adjusted

From a regional perspective, different historical and recent patterns in hourly wages are revealed for the Charlottesville, Staunton, Harrisonburg, and Richmond MSAs as reported by BLS (BLS establishment survey; Figure 50). During 2000–early 2013, the hourly wages in the Charlottesville MSA generally trended above those of the Staunton, Harrisonburg, and Richmond MSA's, after which the hourly wages in the Richmond MSA registered the highest among these four MSAs with the Charlottesville MSA ranking second.

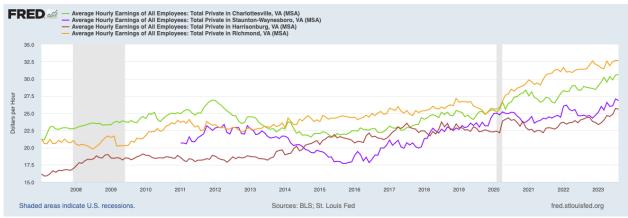
A deeper look reveals that the hourly wages in the Charlottesville and Staunton MSAs turned downward year-over-year in 2012 and declined through 2015 for the Charlottesville MSA and through 2016 for the Staunton MSA, after which both hourly wages began increasing year-over-year again and continued mostly through 2019 with only the Charlottesville MSA experiencing a five-month stretch of negative year-over-year growth in Spring—Summer 2019. With the pandemic's appearance in early 2020, the hourly wages of the Charlottesville and Staunton MSAs have generally fluctuated up and down with those of the Charlottesville MSA experiencing longer and higher year-over-year upswings (Figure 50; BLS establishment survey).



Before the pandemic the hourly wage patterns of the Harrisonburg and Richmond MSAs varied broadly with periods of year-over-year increases and decreases and a generally upward trajectory in 2014–2018 until stalling just before the pandemic in mid-2019. During Summer 2014–early 2019, the hourly wages in the Harrisonburg MSA consistently exceeded those in the Staunton MSA and exceeded those in the Charlottesville MSA in a few months. In early 2019 the Staunton MSA hourly wages overtook those in the Harrisonburg MSA and have remained higher through August 2023 (BLS establishment survey; Figure 50).

After dipping in Summer 2019–early 2020, the Richmond MSA's hourly wages experienced a generally upward year-over-year path through August 2023 (BLS establishment survey; Figure 50).

Figure 50. Average Hourly Earnings: Charlottesville, Staunton-Waynesboro, Harrisonburg, and Richmond, Virginia MSAs, January 2007 – August 2023



Establishment survey; not seasonally adjusted

During 2011–2021, Albemarle County's labor force participation rate was distinctly higher than the corresponding rates for Virginia and the U.S., except for the period of 2017 – 2018 (BLS household survey, Virginia Employment Commission (VEC); Figure 51). The labor force participation rate reflects the percentage of the population that is either employed or unemployed. Albemarle County's higher labor force participation rate indicates the County had a greater portion of its population in the labor force than the state or nation for all but two years during 2011–2021. The BLS labor force calculation is comprised of those employed and those officially classified as unemployed. The BLS classifies persons as unemployed if they are laid off and awaiting recall or have actively looked for work in the last four weeks. The BLS labor force calculation excludes those persons that are not employed or officially classified as unemployed.



Labor Force Participation Rate 74% 72% 70% 68% 66% 64% 62% 60% 58% 56% 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 **United States** Virginia Albemarle County, Virginia

Figure 51. Labor Force Participation Rate: U.S., Virginia and Albemarle County, Virginia, 2010 – 2021

Source: Bureau of Labor Statistics and Virginia Employment Commission; household survey; seasonally adjusted

The U.S. Census Bureau annually issues the American Community Survey (ACS) with 1-year and 5-year estimates of numerous social, economic, housing, and demographic data for geographic areas with populations over 65,000 (only 5-year estimates are issued for smaller geographic areas). The ACS is based on extensive address-based (household) surveys and the 5-year estimates have higher statistical reliability since they include data collected over a longer period (60 months). The annual ACS 5-year estimates contain overlapping periods, and the latest 5-year estimates are for the period of 2017-2021 (Census). While it is tempting to compare adjoining, rolling 5-year ACS estimates, the U.S. Census Bureau recommends *not* drawing comparisons between 5-year ACS estimates with overlapping years. Therefore, comparisons will not be made in this report with the ACS-related findings identified in last year's annual report.

The ACS reports employment status information as part of its rich suite of data. In 2017–2021 the ACS indicated that 59.9% of Albemarle County's residents were employed, 37.8% were not in the labor force, 2.1% were unemployed and 0.3% were in the Armed Forces. During this five-year period, Albemarle County had a lower unemployment rate among its residents as compared to the state and nation, a lower proportion of its residents in the labor force as compared to the state and nation, and the proportion of its residents employed was on par with the nation but below that for the state (Table 5; Census).

Albemarle County's higher percentage of persons 65 and older in its population (19.7%) in 2021 as compared to the state (16.3%) and nation (16.8%) is one possible explanation for its lower proportion of residents in the labor force in Albemarle County in 2017-2021 (Census). Additional demographic analysis could shed further insight on this finding.



Table 5. Employment Status as a Percent of Population 16 and Older, U.S., Virginia, and Albemarle County, Virginia, 2017-2021

Employment Status as a Percent of Population 16 and Older									
	United States	Virginia	Albemarle County, VA						
Population 16 years and over	264,087,642	6,903,607	91,542						
In labor force	63.6%	65.9%	62.2%						
Civilian labor force	63.1%	64.1%	61.9%						
Employed	59.6%	61.1%	59.9%						
Unemployed	3.5%	2.9%	2.1%						
Armed Forces	0.5%	1.9%	0.3%						
Not in labor force	36.4%	34.1%	37.8%						

Source: U.S. Census Bureau, ACS 5-year estimates 2017-2021

Analyzing the occupational data in ACS, Albemarle County residents were primarily employed in 2017–2021 in management, business, science, and arts occupations (56.8%); sales and office occupations (17.2%); and service occupations (14.7%) (Table 6; Census). The predominance of the management, business, science, and arts occupations among County residents with above average compensation is reflected in County household income figures reviewed in Section VII below.

Table 6. Employment by Occupation as a Percent of the Civilian Employed Population 16 years and Older, U.S., Virginia, and Albemarle County, Virginia, 2017-2021

Employment by Occupation as a Percent of the Civilian Employed Population 16 years and over, 2017-2021									
Occupation	United States (%)	Virginia (%)	Albemarle County, Virginia (%)						
Civilian employed population 16 years and over	157,510,982	4,219,781	54,797						
Management, business, science, and arts occupations	40.3%	46.3%	56.8%						
Service occupations	17.0%	16.2%	14.7%						
Sales and office occupations	20.9%	19.1%	17.2%						
Natural resources, construction, and maintenance occupations	8.7%	7.8%	5.9%						
Production, transportation, and material moving occupations	13.1%	10.5%	5.5%						

Source: U.S. Census Bureau, ACS 5-year estimates 2017-2021



The ACS also looks at employment in broad industry groups based on the North American Industry Classification System (NAICS), combining some NAICS 2-digit industry codes together. Based on the ACS data for 2017–2022, the top five industries of employment for the civilian residents that live in Albemarle County (16 and over) were: educational services, and health care and social assistance (35.0%); professional, scientific, and management, and administrative and waste management services (15.9%); arts, entertainment, and recreation, and accommodation and food services, (8.4%); retail trade (7.8%), and finance and insurance, and real estate and rental and leasing (6.3%) (Table 7; Census).

In reviewing comparable Virginia ACS data, two industries had notably higher proportions of Albemarle County's resident employment as compared to the state: educational services, and health care and social assistance (35.0% vs. 22.2% for Virginia); and agriculture, forestry, fishing and hunting, and mining (1.4% vs. 0.8% for Virginia). Moreover, four industries had notably lower proportions of Albemarle County's resident employment as compared to the state: public administration (4.6% vs. 8.9% for Virginia); manufacturing (4.5% vs. 7.0% for Virginia); retail trade (7.8% vs. 9.9% for Virginia); and transportation and warehousing, and utilities (2.7% vs. 4.7% for Virginia) (Table 7; Census).



Table 7. Employment by Industry: U.S., Virginia, and Albemarle County, Virginia, 2017-2021

Industry	United States (%)	Virginia (%)	Albemarle County, Virginia (%)
Civilian employed population 16 years and over	157,510,982	4,219,781	54,797
Agriculture, forestry, fishing and hunting, and mining	1.7%	0.8%	1.4%
Construction	6.8%	6.5%	5.2%
Manufacturing	10.0%	7.0%	4.5%
Wholesale trade	2.5%	1.7%	1.3%
Retail trade	11.0%	9.9%	7.8%
Transportation and warehousing, and utilities	5.7%	4.7%	2.7%
Information	1.9%	1.8%	1.4%
Finance and insurance, and real estate and rental and leasing	6.7%	6.4%	6.3%
Professional, scientific, and management, and administrative and waste management services	11.9%	16.2%	15.9%
Educational services, and health care and social assistance	23.3%	22.2%	35.0%
Arts, entertainment, and recreation, and accommodation and food services	9.1%	8.5%	8.4%
Other services, except public administration	4.8%	5.2%	5.4%
Public administration	4.7%	8.9%	4.6%

Source: U.S. Census Bureau, ACS 5-year estimates 2017-2021.

#### C. Consumer Activity in Albemarle County, Virginia

Real per capita personal income is defined as the total personal income of the residents of a given area divided by its total population (BEA) and can be used to generally gauge the standard of living in an area. It is important to note that real per capita personal income does not consider the distribution of income across members or income inequality within a geographic area since it is based only on total real personal income and total population (aggregate figures). Yet, as a per



person metric, real per capita personal income can be compared across geographic areas at a given point in time.

The real per capita personal income in the Charlottesville, Virginia MSA trended above that for Virginia and the U.S. in 2008–2021, indicating an overall higher standard of living in the Charlottesville MSA (Figure 52; BEA). The indicator increased steadily since 2013 for the Charlottesville MSA, and the state and nation. Notably, while Virginia's real per capita personal income has exceeded that for the U.S. by a relatively constant amount during 2013–2021, the Charlottesville MSA's real per capita personal income increased more sharply to \$66,728 in 2021, as compared to \$56,238 for Virginia and \$55,477 for the U.S. that year.

Figure 52. Real Per Capita Personal Income: U.S., Virginia, and Charlottesville, Virginia MSA 2008 – 2021



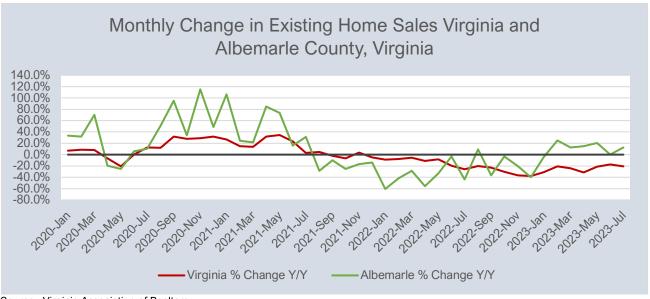
Not seasonally adjusted

#### D. Housing Market Activity in Albemarle County, Virginia

Looking at housing, home sales in Albemarle County declined monthly in November 2022—February 2023 on a month-over-month basis, then increased monthly in March 2023—June 2023, and then declined in July 2023. However, home sales declined on a year-over-year basis in almost every month but one in January 2022—July 2023, increasing year-over-year only in February 2022 (Figure 53). Total home sales in Albemarle County were 1,913 in 2022 as compared to 2,204 total sales in 2021, 1,944 total sales in 2020, and 1,969 total sales in 2019. While below the pace recorded during 2019—2021, the total home sales in 2022 falls within the range of an earlier, prepandemic period of 1,904 total sales registered in 2018 and 1,834 total sales in 2017. Given the downward trend on home sales in January—July 2023 as compared to 2022, close monitoring throughout 2023 is prudent (VAR).



Figure 53. Monthly Change in Existing Home Sales: Virginia and Albemarle County, Virginia January 2020 to July 2023 (%y/y)



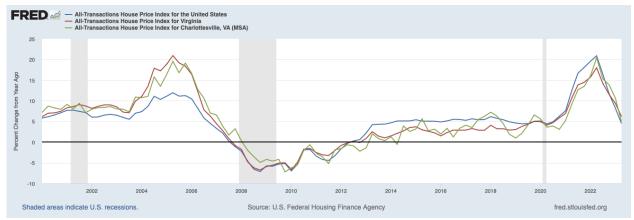
Source: Virginia Association of Realtors

In terms of home prices, Albemarle County's median home sales price posted year-over-year declines in January–March 2023 with only a slight decrease in March 2023 (-3.0% in January, -15.2% in February, and -0.1% in March 2023) then returned to monthly year-over-year increases in April–July 2023 (7.7% in April, 12.8% in May, 10.9% in June, and 1.5% in July). This mixed pattern in January–July 2023 followed solid monthly home price growth in the County in 2022 that yielded another annual increase in median home prices in 2022 on top of notable annual increases in both 2020 and 2021, based on Virginia Tech's approximate estimates (Virginia Tech and VAR).

Likewise, the House Price Index All Transactions for the Charlottesville MSA (including new and home purchases and refinancing appraisals) posted strong quarterly increases throughout 2022, registering 16.3% annual average growth in 2022 on top of the 10.1% annual average growth posted in 2021, based on the latest revised FHFA data. (FHFA). In January–June 2023, the HPI All Transactions for Charlottesville MSA continued quarterly year-over-year growth trends but at a slowing pace as compared to 2022 (10.6% in Q1:2023 and 4.9% in Q2:2023) (Figure 54; FHFA).



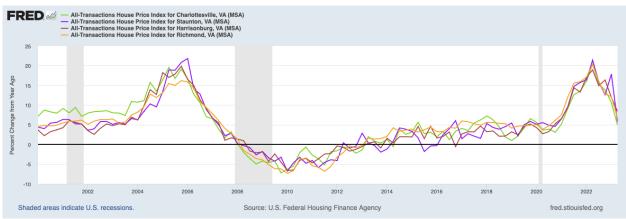
Figure 54. House Price Index (Single-Family): U.S., Virginia, and Charlottesville, Virginia MSA, Q1:2000 – Q2:2023 (%y/y)



Not seasonally adjusted

Looking regionally, changes in the House Price Index All Transactions in the Staunton, Harrisonburg and Richmond MSAs followed patterns similar to that of the Charlottesville, Virginia MSA, likewise experiencing steady and sharp increases from mid-2020 to mid-2022, then gradually slowing through Q2:2023. The year-over-year increase in HPI All Transactions in Q2:2023 for the Charlottesville MSA (4.9%) was lower than those for the Staunton MSA (5.9%), Harrisonburg MSA (8.4%) and Richmond MSA (6.7%) during that quarter (Figure 55; FHFA).

Figure 55. House Price Index (Single-Family): Charlottesville, Staunton, Harrisonburg, and Richmond, Virginia MSAs, Q1:2000 – Q2:2023 (%y/y)



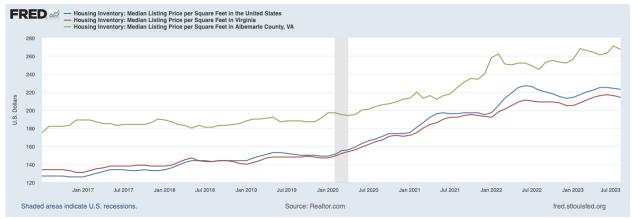
Not seasonally adjusted

As another barometer of housing activity, there are two main observations regarding the median listing price per square feet in Albemarle County, Virginia. This metric has been consistently higher in Albemarle County than those for the state, nation and surrounding MSAs since 2016, and this metric began to decline noticeably in Summer 2022 through early 2023 after sharply rising in Spring 2020 – Spring 2022, and mostly resumed increasing in March–August 2023 except for a one-month drop in May 2023 (Realtor.com; Figures 56 and 57).



Examining Albemarle County's median listing price per square foot more closely, January—August 2023 saw 4.9% average monthly year-over-year growth in the County, with a wide range of -0.8% to 9.0% monthly year-over-year growth and only one month posting negative (Figure 56). By comparison the median listing price per square foot in Albemarle County increased 13.4% in 2022, 10.6% in 2021, and 6.6% in 2020, 2.9% in 2019, and declined -1.2% in 2018. Overall, the pace of monthly year-over-year growth mostly slowed in the median listing price per square feet in Albemarle County from February 2022—February 2023. After starting 2022 with over 20% monthly growth, the monthly year-over-year growth in the median listing price per square foot gradually declined to a monthly average in the low-single digits in Q1:2023 and mostly ticked up monthly in all but one month in March—August 2023 with the three-month average rising to 7.4% in June—August 2023. This pattern reflects overall softening but still positive median listing price growth with a recent pickup in monthly price growth (Realtor.com). Given the continued shifting winds in the housing market, all monthly and quarterly housing data through 2023 will be closely monitored.

Figure 56. Median Listing Price per Square Foot: U.S., Virginia, and Albemarle County, Virginia, July 2016 – August 2023

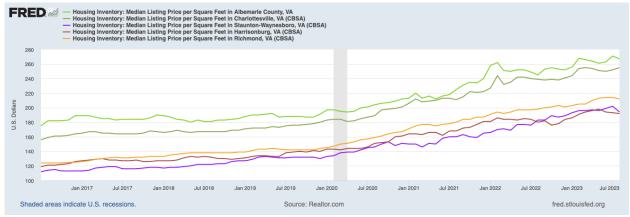


Not seasonally adjusted

Looking at the surrounding MSAs (equivalent to Core-Based Statistical Areas (CBSAs) for the selected MSAs), the median listing price per square feet in Albemarle County was recorded by Realtor.com as higher than those for the Charlottesville, Staunton, Harrisonburg, and Richmond MSAs from 2016 through August 2023 (Figure 57; Realtor.com). In August 2023, Albemarle County's median listing price per square feet (\$267) remained slightly higher than that for the Charlottesville MSA (\$255) and exceeded the comparable metrics for the Staunton MSA (\$194), Harrisonburg MSA (\$192) and Richmond MSA (\$212) at that time.



Figure 57. Median Listing Price per Square Foot: Albemarle County, Virginia, and Charlottesville, Staunton, Harrisonburg, and Richmond, Virginia MSAs, July 2016 – August 2023



Not seasonally adjusted

In terms of future home building activity, new residential building permits in the Charlottesville MSA declined monthly on a year-over-year basis in April–July 2023, continuing the trend of the first quarter. This slower pace of building permits in the first seven months of 2023 follows the annual total of 1,613 reported for 2022, which was above the 1,427 recorded for 2021 and below the 1,673 posted for 2020. For comparison, new residential building permits ranged from 1,276 to 1,615 in 2017–2019 in an up-and-down pattern similar to that exhibited in 2020–2022 (Census). Again, close monitoring is prudent given the crosswinds in the housing market and the varying demand for multifamily and new single family (vs. limited existing home inventory) housing nationally.

#### E. Business Activity in Albemarle County, Virginia

#### County Business Patterns

Through its County Business Patterns (CBP) program, the U.S. Census Bureau provides annual economic data by industry for the U.S., states, counties, MSAs, zip codes and Congressional Districts. The annual CBP series provides the number of establishments, industry classification, employment during the week of March 12<sup>th</sup>, and first quarter and annual payroll amounts, and is released approximately 16 months after the reference year (Census). This establishment-based data provides a useful profile of the businesses and people who work in a community, which adds an additional perspective beyond the U.S. Census Bureau's household-based ACS survey of the people who reside in a community. The ACS surveys the people that live in Albemarle County and the CBP surveys the businesses in Albemarle County regarding several aspects of their operations.

For this analysis, Albemarle County's business community profile in the CBP was examined in terms of establishments (business locations), employees, and payroll for each industry sector. Industry 2-digit level NAICS classifications were used for the analysis whereas the ACS (household survey) combined some industry sectors.



Based on the CBP data for 2021, the top five 2-digit NAICS industries with the largest proportion of establishments in Albemarle County were: professional, scientific, and technical services (14.4%), health care and social assistance (13.7%), retail trade (11.7%), construction (9.8%), and other services (except public administration) (9.0%). These five industries accounted for 58.6% of the total business establishments in Albemarle County, roughly the same proportion as in 2020 (59%) (Table 8; Census).

In terms of jobs based on the payroll survey, the CBP 2021 reports that the top five 2-digit NAICS industries with the largest proportion of employees in Albemarle County were: health care and social assistance (22.4%), retail trade (16.3%), accommodation and food service (9.8%), professional, scientific, and technical services (11.9%), and manufacturing (6.8%). These five industries accounted for 67.2 % of the total jobs in Albemarle County in 2021 based on the payroll survey, a slightly larger share than in 2020 (66%) (Table 8; Census).

In terms of annual payroll, the CBP 2020 reports that the top six 2-digit NAICS industries with the largest total annual payrolls were: (1) health care and social assistance, (2) professional, scientific, and technical services, (3) finance and insurance, (4) retail trade, (5) manufacturing, and (6) construction. These six industries accounted for 78% of the aggregate total annual payrolls in Albemarle County in 2021, the same proportion as in 2020 (Table 8; Census).

As compared to Virginia's CBP 2021 data, a few key differences emerge in Albemarle County's business profile in 2021:

- Health care and social assistance continued to account for a distinctly higher proportion of total business establishments, payroll jobs, and annual payroll in Albemarle County as compared to the state.
- Despite again providing the second largest annual payroll in the county in 2021, professional, scientific, and technical services continued to account for a lower proportion of total business establishments, jobs, and annual payroll in Albemarle County as compared to the state.
- Finance and insurance continued to account for a higher proportion of total business establishments, payroll jobs, and annual payroll in Albemarle County as compared to the state.
- Retail trade continued to account for a higher proportion of jobs and annual payroll in Albemarle County as compared to the state, while accounting for a slightly lower proportion of business establishments in the county in 2021 (Table 8; Census).



Table 8. Establishments, Employees and Annual Payroll by Industry: Virginia and Albemarle County, Virginia 2021(in 2021 dollars)

Meaning of			Virginia			Albemarle County, Virginia				
NAICS code	Establis	hments	Emplo	yees	Annual	Establishments		Emplo	Annual	
	Number	Percent	Number	Percent	payroll (\$1,000)	Number	Percent	Number	Percent	payroll (\$1,000)
Total for all sectors	206,271	100.0%	3,340,509	100.0%	217,594,826	2,874	100.0%	40,409	100.0%	2,451,763
Agriculture, forestry, fishing and hunting	654	0.3%	3,869	0.1%	228,091	20	0.7%	115	0.3%	4,526
Mining, quarrying, and oil and gas extraction	241	0.1%	4.717	0.1%	370,489	6	0.2%	48	0.1%	4,491
						-	-!	-	-	
Construction	20,677	10.0%	196,104	5.9%	12,616,711	281	9.8%	2,293	5.7%	125,118
Manufacturing	4,924	2.4%	240,699	7.2%	14,815,867	90	3.1%	2,741	6.8%	168,785
Wholesale trade	6,643	3.2%	101,693	3.0%	8,457,660	59	2.1%	421	1.0%	25,566
Retail trade	25,776	12.5%	419,876	12.6%	13,447,811	335	11.7%	6,567	16.3%	243,743
Transportation and warehousing	5,924	2.9%	124,268	3.7%	6,588,047	52	1.8%	704	1.7%	28,543
Information	3,996	1.9%	93,022	2.8%	11,902,530	66	2.3%	815	2.0%	63,153
Finance and insurance	10,899	5.3%	165,632	5.0%	18,848,337	193	6.7%	2,183	5.4%	229,800
Real estate and rental and leasing	11,198	5.4%	54,978	1.6%	3,750,263	181	6.3%	967	2.4%	50,224
Professional, scientific, and technical	21 071	15 50/	510 502	15 60/	55 G55 741	415	14.40/	4 704	11.00/	449,246
	Total for all sectors Agriculture, forestry, fishing and hunting Mining, quarrying, and oil and gas extraction Utilities Construction Manufacturing Wholesale trade Retail trade Transportation and warehousing Information Finance and insurance Real estate and rental and leasing Professional, scientific, and	NAICS code    Establis     Number     Total for all     sectors   206,271     Agriculture, forestry, fishing and hunting     Mining, quarrying, and oil and gas extraction   241     Utilities   384     Construction   20,677     Manufacturing   4,924     Wholesale trade   6,643     Retail trade   25,776     Transportation and warehousing   5,924     Information   3,996     Finance and insurance   10,899     Real estate and rental and leasing   11,198     Professional, scientific, and technical	NAICS code           Establishments           Number         Percent           Total for all sectors         206,271         100.0%           Agriculture, forestry, fishing and hunting         654         0.3%           Mining, quarrying, and oil and gas extraction         241         0.1%           Utilities         384         0.2%           Construction         20,677         10.0%           Manufacturing         4,924         2.4%           Wholesale trade         6,643         3.2%           Retail trade         25,776         12.5%           Transportation and warehousing         5,924         2.9%           Information         3,996         1.9%           Finance and insurance         10,899         5.3%           Real estate and rental and leasing         11,198         5.4%           Professional, scientific, and technical         10,899         5.4%	NAICS code         Establishments         Employ           Number         Percent         Number           Total for all sectors         206,271         100.0%         3,340,509           Agriculture, forestry, fishing and hunting         654         0.3%         3,869           Mining, quarrying, and oil and gas extraction         241         0.1%         4,717           Utilities         384         0.2%         13,920           Construction         20,677         10.0%         196,104           Manufacturing         4,924         2.4%         240,699           Wholesale trade         6,643         3.2%         101,693           Retail trade         25,776         12.5%         419,876           Transportation and warehousing         5,924         2.9%         124,268           Information         3,996         1.9%         93,022           Finance and insurance         10,899         5.3%         165,632           Real estate and rental and leasing         11,198         5.4%         54,978           Professional, scientific, and technical         4,978         54,978	NAICS code	NAICS code	NAICS code         Establishments         Employees         Annual payroll (\$1,000)         Real estate and renal range           Number         Percent         Number         Percent         Mumber         Percent (\$1,000)         Number         Number	NAICS code         Establisments         Emplores         Annual payroll (\$1,000)         Establisments           Total for all sectors         206,271         100.0%         3,340,509         100.0%         217,594,826         2,874         100.0%           Agriculture, forestry, fishing and hunting         654         0.3%         3,869         0.1%         228,091         20         0.7%           Mining, quarrying, and oil and gas extraction         241         0.1%         4,717         0.1%         370,489         6         0.2%           Utilities         384         0.2%         13,920         0.4%         1,710,967         -         -!           Construction         20,677         10.0%         196,104         5.9%         12,616,711         281         9.8%           Manufacturing         4,924         2.4%         240,699         7.2%         14,815,867         90         3.1%           Wholesale trade         6,643         3.2%         101,693         3.0%         8,457,660         59         2.1%           Retail trade         25,776         12.5%         419,876         12.6%         13,447,811         335         11.7%           Information         3,996         1.9%         93,022	NAICS code	NaicS code



Final 9-25-23

2017	Meaning of			Virginia			Albemarle County, Virginia				
NAICS code	NAICS code	Establis	hments	Emplo	yees	Annual			Establishments Employees		
		Number	Percent	Number	Percent	payroll (\$1,000)	Number	Percent	Number	Percent	payroll (\$1,000)
55	Management of companies and enterprises	1,251	0.6%	81,060	2.4%	8,829,608	21	0.7%	414	1.0%	29,748
- 55	Administrative and support and waste management and remediation	1,201		·							20,110
56	services	11,679	5.7%	262,314	7.9%	13,335,859	153	5.3%	1,884	4.7%	78,252
61	Educational services	3,175	1.5%	76,162	2.3%	3,394,268	69	2.4%	811	2.0%	42,745
62	Health care and social assistance	21,929	10.6%	464,373	13.9%	27,815,045	394	13.7%	9,057	22.4%	699,940
71	Arts, entertainment, and recreation	3,225	1.6%	48,072	1.4%	1,496,608	58	2.0%	1,131	2.8%	38,490
72	Accommodation and food services	18,671	9.1%	313,250	9.4%	7,047,894	216	7.5%	3,964	9.8%	104,952
81	Other services (except public administration)	22,871	11.1%	156,537	4.7%	7,272,984	260	9.0%	1,497	3.7%	64,169

Source: U.S. Census Bureau, County Business Patterns, 2021 (in 2021 dollars)



#### **Gross Receipts by Category**

Albemarle County's gross receipts broken down into individual categories provide another view of business activity in the County as depicted in Figures 58–66 below. This analysis includes total annual gross receipts comprised of eight sub-categories: (1) contracts; (2) financial, real estate and professional services; (3) rental and leasing, (4) repair, personal and business services, (5) research and development, (6) retail sales, (7) wholesale, and (8) all other categories. Additionally, in consultation with the Albemarle County Department of Finance and Budget, flat fees and ABC licenses are excluded from this analysis.

Total gross receipts exhibited an overall upward trend during CY2017 – CY2022, with slight decreases in CY2019 and CY2021. The two categories that contributed to the dips in total gross receipts in both CY2019 and CY2021 were contractors and wholesale. Research and development and all other categories also contributed to the dip in CY2019, and retail sales and repair, personal and business services also contributed to the dip in CY2021. Only two categories displayed consecutive annual increases in CY2017 – CY2022, financial, real estate and professional services and rental and leasing, while the other categories fluctuated up and down over that period. Total gross receipts in CY2023:Year-to-Date (YTD) as of September 14, 2023 (70% of the year) were already exceeding the total for CY2022 (Albemarle County Department of Finance and Budget; Figures 58–66).

Four categories together comprised 80% of total gross receipts in CY2022: repair, personal and business services (31%); retail sales (20%), contractors (17%); and finance, real estate and professional services (12%). While the top four categories were the same as CY2021, repair, personal and business services shifted to the top spot ahead of retail sales in CY2022, which corresponds to U.S. consumers' stronger spending on services vs. goods in 2022. Also, the top four categories together accounted for a higher proportion of total gross receipts in CY2021 (87%) (Figures 58-66; Albemarle County Department of Finance and Budget).

Figure 58. Total Annual Gross Receipts Albemarle County, Virginia, CY2017 - CY2023:YTD as of September 14, 2023





Figure 59. Annual Gross Receipts – Contractors, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023



Source: Albemarle County, Virginia, Department of Finance and Budget

Figure 60. Annual Gross Receipts – Financial, Real Estate, Professional Services, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023

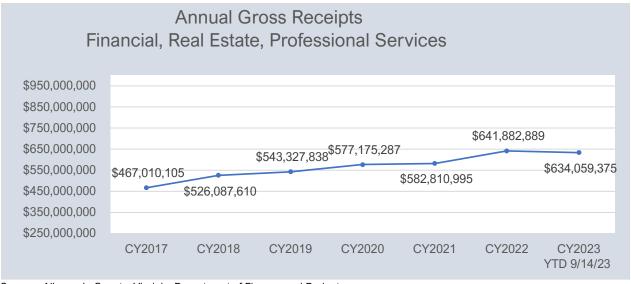




Figure 61. Annual Gross Receipts – Rental and Leasing, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023



Figure 62. Annual Gross Receipts – Repair, Personal and Business Services, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023

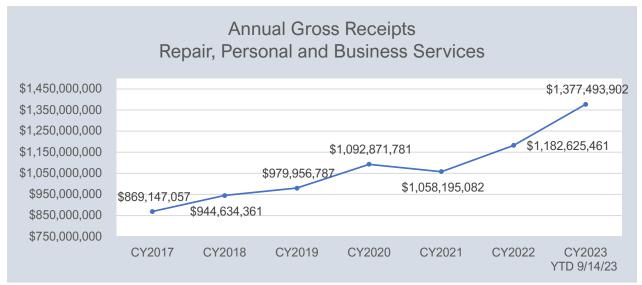




Figure 63. Annual Gross Receipts – Research and Development, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023

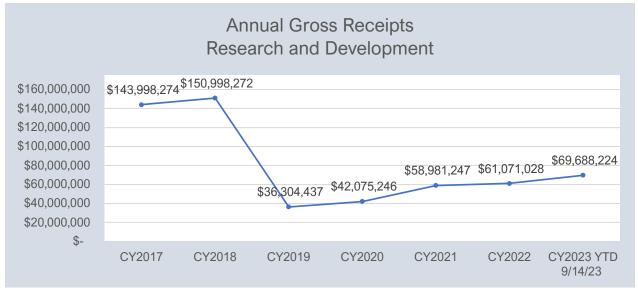


Figure 64. Annual Gross Receipts – Retail Sales, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023

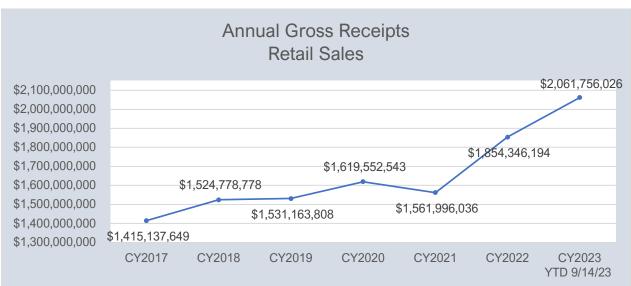
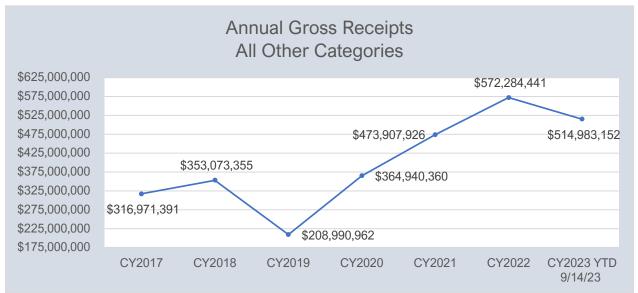




Figure 65. Annual Gross Receipts – Wholesale, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023



Figure 66. Annual Gross Receipts – All Other Categories, Albemarle County, Virginia, CY2017–CY2023:YTD as of September 14, 2023





### Key Takeaways from County Business Patterns, Gross Receipts by Category, and the American Community Survey 2017-2021

While the gross receipts categories in the Commonwealth of Virginia combine various 2-digit NAICS codes and therefore report in broader categories than the CBP, the two sources correspond regarding the overall profile of business activity in Albemarle County. In terms of jobs and annual payroll based on the CBP and the County's gross receipts overall, key industries for Albemarle County include (1) health care, (2) repair, personal and business services; (3) retail trade; (4) construction; and (5) financial, real estate and professional, technical, and scientific services.

As noted earlier this report, the ACS 5-year estimates for 2017–2021 also combined certain 2-digit NAICS codes and reported the employment of county residents in broader categories based on household surveys. Again, there is overlap with the primary business categories for jobs, annual payroll, and gross receipts. Based on the ACS 2017–2021 data, the top five industries of employment for the civilian residents that live in Albemarle County (16 and over) were: (1) educational services, and health care and social assistance; (2) professional, scientific, and management, and administrative and waste management services; (3) arts, entertainment, and recreation, and accommodation and food services; (4) retail trade; and (5) finance and insurance, and real estate and rental and leasing.

#### F. Economic Outlook for Albemarle County, Virginia

This economic analysis continues to support the findings in the 2022 Annual Economic Outlook Report and subsequent monitoring reports. Albemarle County has a strong economy with a history of mostly solid economic and job growth, high real per capita personal income, low unemployment, strong hourly wages regionally, significant employment in relatively higher-income occupations and industries, and strong local business activity.

As with the state, it is prudent at this writing to rely on the historical trend findings of the 2022 Annual Economic Outlook Report based on the available monthly, quarterly, and annual local and regional data (given denser indicator coverage at the national level and some monthly, quarterly, and annual local and regional data are reported with varying lags). Namely, Albemarle County's economic indicators have generally followed the overall patterns of the related state and national indicators, albeit sometimes at different levels, Thus, the national and state economic outlooks are relevant barometers generally in framing Albemarle County's economic outlook, with the caveat that closer monitoring of local economic trends is required due to the longer reporting lag for local economic statistics and the different levels and paces of change of local economic indicators while still generally following national and state trends.

As noted in Sections IV.H. and V.F. above, the national and state economic outlooks anticipate continued economic cooling with the risk of a possible recession in late 2023 to early 2024, below-normal-trend growth in 2024, and muted growth in 2025 as compared to prepandemic trends, with both headwinds and downside risks as well as tailwinds and upside risks to the forecasts, and wide bands of uncertainty. Thus, it is prudent to likewise expect continued slower



economic growth with the possibility of a recession in the County in late 2023 to early 2024 with elevated interest rates, continued inflation until tight monetary policy can dampen inflation, tighter credit conditions, higher unemployment, cooling consumer demand and spending, slower growth in real disposable income, continued softness in the real estate market, and slower business activity due to higher interest rates and lower real consumer spending (inflation-adjusted). The possibility of an extended U.S. government shutdown in Fall 2023 with a delayed federal budget also warrants close monitoring given the importance of federal installations and jobs to the state and region. Similar to the state and nation, it is also prudent to expect below-normal-trend economic growth in 2024 and muted growth in 2025 as compared to prepandemic trends based on the changing fundamentals in the economy. The timing of different potential economic impacts will vary with those business sectors more sensitive to interest rates and consumer activity likely exhibiting impacts sooner.

Given the rapidly changing environment, close monitoring to support early detection of changing circumstances and agile adjustment are recommended going forward. Additional overall recommendations based on the County's economic outlook and other findings are provided in Section VIII below.

## VII. Additional Community Factors for Albemarle County, Virginia

Beyond the economic analysis and outlook in the previous section, additional analysis is provided on community factors related to income and poverty, housing patterns and costs, and educational attainment based on the rich data released in the U.S. Census Bureau's most recent American Community Survey (ACS) 2017–2021. The examination of these additional community factors will highlight key characteristics and provide information to support effective policy analysis and decision-making for the community.

#### A. Income and Poverty

#### Household Income

As compared to Virginia, Albemarle County's median household income is 12% greater than that for the state (\$90,568 in Albemarle County vs. \$80,615 in the state). Further, Albemarle County has a greater portion of high-income households (\$150,000 and above) and a lower portion of very low-income households (under \$15,000) than the state. Also note that the distribution of household incomes is not symmetrical and skews positive with values that are significantly higher than the rest of the data set, as reflected by the mean (average) household income (\$125,809) being significantly higher than the median household income (\$90,568) (Table 9; Census). (Since the mean (average) is influenced by positive or negative "outliers," observations significantly above or below the rest of the data set, the median is a more reliable measure of "central tendency.")



Regarding the components of household income, 77% of households in Albemarle County received earnings in 2017–2021, slightly behind the state's nearly 80% rate, which can be expected given the County's proximity to a major university and a higher incidence of households receiving retirement income in the County as found in the ACS data. In terms of benefits, a slightly higher portion of Albemarle County households received Social Security income as compared to the state in 2017–2021 (32% in Albemarle vs. 30% for the state) and a higher portion of County households received retirement income (27% in Albemarle vs. 25% for the state). Additionally, the proportion of Albemarle County's households receiving Supplementary Security Income (3%), cash public assistance (1%), and Food Stamps/SNAP benefits in the past 12 months (3%), were below the companion figures for the state (Table 9; Census).



Table 9. Household Income and Benefits 2011-2021: U.S., Virginia, and Albemarle County, Virginia (in 2021 dollars)

HOUSEHOLD INCOME AND BENEFITS 2017-2021 (IN 2021 INFLATION-ADJUSTED DOLLARS)						ARS)
	United States		Virginia		Albemarle County, Virginia	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total households	124,010,992	124,010,992	3,248,528	3,248,528	43,066	43,066
Less than \$10,000	6,835,028	5.5%	150,800	4.6%	1,215	2.8%
\$10,000 to \$14,999	4,848,344	3.9%	98,723	3.0%	906	2.1%
\$15,000 to \$24,999	9,620,321	7.8%	207,675	6.4%	2,497	5.8%
\$25,000 to \$34,999	10,140,962	8.2%	223,457	6.9%	2,839	6.6%
\$35,000 to \$49,999	14,162,768	11.4%	328,320	10.1%	4,173	9.7%
\$50,000 to \$74,999	20,845,331	16.8%	513,547	15.8%	6,593	15.3%
\$75,000 to \$99,999	15,895,589	12.8%	414,535	12.8%	5,488	12.7%
\$100,000 to \$149,999	20,237,972	16.3%	572,333	17.6%	7,829	18.2%
\$150,000 to \$199,999	9,694,986	7.8%	315,040	9.7%	5,286	12.3%
\$200,000 or more	11,729,691	9.5%	424,098	13.1%	6,240	14.5%
Median household income (dollars)	69,021	(X)	80,615	(X)	90,568	(X)
Mean household income (dollars)	97,196	(X)	111,013	(X)	125,809	(X)
With earnings	96,520,674	77.8%	2,593,211	79.8%	33,246	77.2%
Mean earnings (dollars)	98,893	(X)	110,685	(X)	121,707	(X)
With Social Security	38,585,633	31.1%	960,384	29.6%	13,690	31.8%
Mean Social Security income (dollars)	21,046	(X)	21,447	(X)	24,217	(X)
With retirement income	27,294,149	22.0%	816,809	25.1%	11,474	26.6%
Mean retirement income (dollars)	29,743	(X)	35,387	(X)	37,636	(X)
With Supplemental Security Income	6,426,771	5.2%	136,893	4.2%	1,253	2.9%
Mean Supplemental Security Income (dollars)	10,466	(X)	10,160	(X)	10,875	(X)
With cash public assistance income	3,248,323	2.6%	70,198	2.2%	569	1.3%
Mean cash public assistance income (dollars)	3,875	(X)	3,647	(X)	4,167	(X)
With Food Stamp/SNAP benefits in the past 12						
months	14,105,231	11.4%	260,305	8.0%	1,322	3.1%

Source: U. S. Census Bureau, ACS 5-year estimate 2017-2021 (in 2021 dollars)



## **Poverty Rates and Trends**

In 2017–2021, poverty rates for families in Albemarle County were significantly below the companion rates for Virginia and the U.S., both overall and in all but one of the sub-categories examined in the ACS 2017–2021. The one sub-category exception was the percentage of Albemarle County's single female-headed households with children only below 5 years old that were living below the poverty level in 2017–2021 which was comparable to the state percentage (34%) but still below that for the nation (38%) (Table 10; Census).

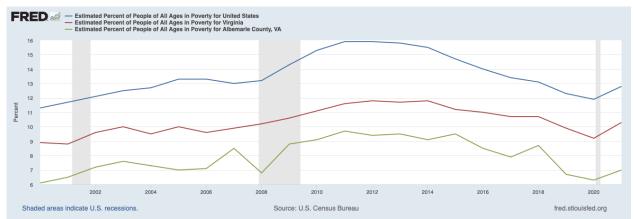
Table 10. Percentage of Families Below the Poverty Level 2017-2021: U.S., Virginia, and Albemarle County, Virginia

PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS					
IS BELOW THE POVERTY LEVEL 2017-2021					
Label	United States	Virginia	Albemarle County, Virginia		
All families	8.9%	6.8%	3.4%		
With related children of the householder under 18 years	13.9%	10.8%	6.1%		
With related children of the householder under 5 years only	13.1%	9.9%	7.7%		
Married couple families	4.5%	3.2%	1.1%		
With related children of the householder under 18 years	6.0%	4.2%	1.9%		
With related children of the householder under 5 years only	4.7%	3.2%	1.1%		
Families with female householder, no spouse present	24.5%	21.3%	16.4%		
With related children of the householder under 18 years	33.6%	30.1%	22.2%		
With related children of the householder under 5 years only	37.8%	33.7%	33.6%		
All people	12.6%	9.9%	6.9%		
Under 18 years	17.0%	13.0%	7.8%		
Related children of the householder under 18 years	16.7%	12.7%	7.4%		
Related children of the householder under 5 years	18.5%	14.0%	11.3%		
Related children of the householder 5 to 17 years	16.1%	12.2%	6.0%		
18 years and over	11.3%	9.1%	6.6%		
18 to 64 years	11.8%	9.4%	7.4%		
65 years and over	9.6%	7.6%	4.2%		
People in families	9.9%	7.3%	4.0%		
Unrelated individuals 15 years and over	23.9%	21.0%	17.1%		



Historically, the poverty rate for people of all ages in Albemarle County has been distinctly below those of the state and nation. However, Albemarle County's poverty rate for people of all ages displayed more annual variation (up and down) than the state's figure just before, during, and after the Great Financial Crisis of 2007-2009, with the difference between the county's and state's poverty rates generally narrowing somewhat during that period. By 2016, Albemarle County's poverty rate began declining faster than the state's, except for an uptick in 2018, and the County's poverty rate for people of all ages in 2021 was 3.3% below that of the state, the second widest margin since 2000 despite the pandemic (7.0% in Albemarle County vs. 10.3% in Virginia) (Figure 67; Census).

Figure 67. Annual Changes in Poverty: U.S., Virginia, and Albemarle County, Virginia, 2000 – 2021



Not seasonally adjusted



# B. Housing Patterns and Costs

In this section, five features of housing patterns and costs are examined using the ACS 2017–2021 data.

Albemarle County had a higher proportion of occupied housing units (92%) as compared to the state and nation in 2017–2021, a lower proportion of vacant housing, and lower homeowner and rental vacancy rates as compared to the state and nation (Table 11; Census). Regarding housing tenure, Albemarle County's proportion of owner-occupied housing and renter-occupied housing was generally comparable to the state's with insignificant differences of only about a half-percentage point. Both housing tenure metrics compared favorably to the nation in 2017–2021 (Table 11; Census).

Table 11. Housing Occupancy and Tenure: U.S., Virginia, and Albemarle County, Virginia 2017-2021

HOUSING OCCUPANCY AND TENURE 2017-2021							
Label	United States		Virg	inia		Albemarle County, Virginia	
	Estimate	Percent	Estimate	Percent	Estimate	Percent	
HOUSING OCCUPANCY					'		
Total housing units	139,647,020	139,647,020	3,596,100	3,596,100	46,661	46,661	
Occupied housing units	124,010,992	88.8%	3,248,528	90.3%	43,066	92.3%	
Vacant housing units	15,636,028	11.2%	347,572	9.7%	3,595	7.7%	
Homeowner vacancy rate	1.2	(X)	1.2	(X)	0.5	(X)	
Rental vacancy rate	5.7	(X)	5.2	(X)	2.3	(X)	
HOUSING TENURE							
Occupied housing units	124,010,992	124,010,992	3,248,528	3,248,528	43,066	43,066	
Owner-occupied	80,152,161	64.6%	2,164,967	66.6%	28,425	66.0%	
Renter-occupied	43,858,831	35.4%	1,083,561	33.4%	14,641	34.0%	
Average household size of owner-occupied unit	2.69	(X)	2.66	(X)	2.54	(X)	
Average household size of renter-occupied unit	2.42	(X)	2.39	(X)	2.12	(X)	



In 2017–2021, the median value of housing in Albemarle County (\$386,400) was significantly higher than that for the state (\$295,500), with a greater portion of its owner-occupied units being valued above \$300,000 as compared to the state. Also fewer of the owner-occupied units in Albemarle County held mortgages (63%) as compared to the state (68%) (Table 12; Census).

Table 12. Housing Value: U.S., Virginia, and Albemarle County, Virginia 2017-2021

HOUSING VALUE 2017-2021 (IN 2021 DOLLARS)						
Label	United States		Virginia		Albemarle County, Virginia	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
VALUE						
Owner-occupied units	80,152,161	80,152,161	2,164,967	2,164,967	28,425	28,425
Less than \$50,000	5,009,191	6.2%	88,780	4.1%	711	2.5%
\$50,000 to \$99,999	7,945,627	9.9%	125,461	5.8%	320	1.1%
\$100,000 to \$149,999	9,029,536	11.3%	178,608	8.2%	953	3.4%
\$150,000 to \$199,999	10,384,287	13.0%	251,096	11.6%	1,977	7.0%
\$200,000 to \$299,999	16,082,523	20.1%	458,341	21.2%	5,682	20.0%
\$300,000 to \$499,999	17,514,271	21.9%	568,400	26.3%	9,696	34.1%
\$500,000 to \$999,999	10,929,818	13.6%	420,441	19.4%	7,465	26.3%
\$1,000,000 or more	3,256,908	4.1%	73,840	3.4%	1,621	5.7%
Median (dollars)	244,900	(X)	295,500	(X)	386,400	(X)
MORTGAGE STATUS						
Owner-occupied units	80,152,161	80,152,161	2,164,967	2,164,967	28,425	28,425
Housing units with a						
mortgage	49,759,315	62.1%	1,477,713	68.3%	17,910	63.0%
Housing units without a		<b>0-</b> 65:		0.4 ===:	40 = 1 =	o= os:
mortgage	30,392,846	37.9%	687,254	31.7%	10,515	37.0%



In 2017–2021, median selected monthly owner costs (SMOC) for housing units with a mortgage was \$1,939 in Albemarle County and the median SMOC was \$576 for those units without a mortgage, both slightly higher than the state and nation, based on the ACS 2017–2021 data (Table 13; Census).

Table 13. Housing Selected Monthly Owner Costs (SMOC); U.S., Virginia, and Albemarle County, Virginia 2017-2021 (in 2021 dollars)

HOUSING SELECTED MONTHLY OWNER COSTS (SMOC) 2017-2021 (IN 2017 DOLLARS)							
Label	United	States	Virginia			Albemarle County, Virginia	
	Estimate	Percent	Estimate	Percent	Estimate	Percent	
Housing units with a mortgage	49,759,315	49,759,315	1,477,713	1,477,713	17,910	17,910	
Less than \$500	493,362	1.0%	14,881	1.0%	91	0.5%	
\$500 to \$999	7,075,877	14.2%	156,358	10.6%	1,839	10.3%	
\$1,000 to \$1,499	12,699,743	25.5%	315,851	21.4%	3,395	19.0%	
\$1,500 to \$1,999	10,722,625	21.5%	316,647	21.4%	4,141	23.1%	
\$2,000 to \$2,499	6,993,376	14.1%	228,522	15.5%	2,699	15.1%	
\$2,500 to \$2,999	4,394,486	8.8%	167,684	11.3%	2,638	14.7%	
\$3,000 or more	7,379,846	14.8%	277,770	18.8%	3,107	17.3%	
Median (dollars)	1,697	(X)	1,891	(X)	1,939	(X)	
Housing units without a mortgage	30,392,846	30,392,846	687,254	687,254	10,515	10,515	
Less than \$250	2,990,668	9.8%	74,503	10.8%	482	4.6%	
\$250 to \$399	6,219,558	20.5%	161,762	23.5%	1,639	15.6%	
\$400 to \$599	8,423,860	27.7%	191,835	27.9%	3,546	33.7%	
\$600 to \$799	5,377,780	17.7%	114,306	16.6%	2,235	21.3%	
\$800 to \$999	2,989,426	9.8%	65,076	9.5%	962	9.1%	
\$1,000 or more	4,391,554	14.4%	79,772	11.6%	1,651	15.7%	
Median (dollars)	538	(X)	501	(X)	576	(X)	



In terms of the impact on household income, 30% is the threshold beyond which HUD defines a household as cost-burdened (HUD). Based on the ACS 2017–2021 data, 23% of Albemarle County's households with mortgages exceeded the HUD 30% affordability threshold, which was lower than the related metrics for the state and nation. For households in owner-occupied housing without mortgages, 10% in Albemarle County exceeded the HUD 30% affordability threshold which was generally the same as the state but lower than the nation (Table 14; Census).

Table 14. Housing Selected Monthly Owner Costs (SMOC) as a Percentage of Household Income: U.S., Virginia, and Albemarle County, Virginia 2017-2021 (in 2021 dollars)

SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI) IN 2017-2021						
Label	United States		Virginia		Albemarle County, Virginia	
	Estimate	Estimate Percent		Percent	Estimate	Percent
Housing units with a mortgage (excluding units where SMOCAPI cannot be						
computed)	49,524,905	49,524,905	1,471,930	1,471,930	17,854	17,854
Less than 20.0 percent	23,335,775	47.1%	707,393	48.1%	9,604	53.8%
20.0 to 24.9 percent	7,651,709	15.5%	243,221	16.5%	2,829	15.8%
25.0 to 29.9 percent	5,061,301	10.2%	152,767	10.4%	1,377	7.7%
30.0 to 34.9 percent	3,328,626	6.7%	100,999	6.9%	1,355	7.6%
35.0 percent or more	10,147,494	20.5%	267,550	18.2%	2,689	15.1%
Not computed	234,410	(X)	5,783	(X)	56	(X)
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	29,980,557	29,980,557	679,590	679,590	10,478	10,478
Less than 10.0 percent	13,823,361	46.1%	358,738	52.8%	6,163	58.8%
10.0 to 14.9 percent	5,768,577	19.2%	124,854	18.4%	1,593	15.2%
15.0 to 19.9 percent	3,222,277	10.7%	65,216	9.6%	905	8.6%
20.0 to 24.9 percent	1,940,580	6.5%	37,994	5.6%	462	4.4%
25.0 to 29.9 percent	1,246,171	4.2%	23,444	3.4%	309	2.9%
30.0 to 34.9 percent	837,525	2.8%	15,856	2.3%	189	1.8%
35.0 percent or more	3,142,066	10.5%	53,488	7.9%	857	8.2%
Not computed	412,289	(X)	7,664	(X)	37	(X)

Source: U.S. Census Bureau, ACS 5-year estimate 2017-2021

The median gross rent for occupied rental housing was \$1,434 in Albemarle County in 2017–2021, higher than the companion figures for the state (\$1,326) and nation (\$1,163). Based on the ACS 2017–2021 data, 47% of renting households in Albemarle County exceeded the HUD 30% affordability threshold, which was the same as the state (47%) but less than the nation (49%) (Table 15; Census).



Table 15. Gross Rent and Gross Rent as a Percentage of Household Income: U.S., Virginia, and Albemarle County, Virginia 2017-2021 (in 2021 dollars)

HOUSING GROSS RENT AND GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI) 2017-2021 (IN 2021 DOLLARS)						
Label	United States		Virginia		Albemarle County, Virginia	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
GROSS RENT						
Occupied units paying rent	41,729,931	41,729,931	1,029,733	1,029,733	13,605	13,605
Less than \$500	3,363,941	8.1%	66,346	6.4%	296	2.2%
\$500 to \$999	12,713,367	30.5%	242,411	23.5%	1,795	13.2%
\$1,000 to \$1,499	12,853,602	30.8%	305,047	29.6%	5,441	40.0%
\$1,500 to \$1,999	6,999,395	16.8%	225,609	21.9%	4,038	29.7%
\$2,000 to \$2,499	3,063,749	7.3%	107,721	10.5%	1,263	9.3%
\$2,500 to \$2,999	1,287,657	3.1%	43,487	4.2%	381	2.8%
\$3,000 or more	1,448,220	3.5%	39,112	3.8%	391	2.9%
Median (dollars)	1,163	(X)	1,326	(X)	1,434	(X)
No rent paid	2,128,900	(X)	53,828	(X)	1,036	(X)
GROSS RENT AS A PERCENTAGE OF						
HOUSEHOLD INCOME (GRAPI)						
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI						
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI cannot be computed)	40,811,805	40,811,805	1,009,827	1,009,827	13,383	13,383
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI cannot be computed)  Less than 15.0 percent	5,413,588	13.3%	130,825	13.0%	2,022	15.1%
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI cannot be computed)						15.1% 16.6%
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI cannot be computed)  Less than 15.0 percent	5,413,588	13.3% 12.8% 12.9%	130,825	13.0% 13.9% 13.7%	2,022 2,220 1,573	15.1% 16.6% 11.8%
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI cannot be computed)  Less than 15.0 percent 15.0 to 19.9 percent	5,413,588 5,240,201	13.3% 12.8%	130,825 140,359	13.0% 13.9%	2,022 2,220	15.1% 16.6%
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI cannot be computed)  Less than 15.0 percent 15.0 to 19.9 percent 20.0 to 24.9 percent	5,413,588 5,240,201 5,248,722	13.3% 12.8% 12.9%	130,825 140,359 138,065	13.0% 13.9% 13.7%	2,022 2,220 1,573	15.1% 16.6% 11.8%
HOUSEHOLD INCOME (GRAPI)  Occupied units paying rent (excluding units where GRAPI cannot be computed)  Less than 15.0 percent 15.0 to 19.9 percent 20.0 to 24.9 percent 25.0 to 29.9 percent	5,413,588 5,240,201 5,248,722 4,739,892	13.3% 12.8% 12.9% 11.6%	130,825 140,359 138,065 123,328	13.0% 13.9% 13.7% 12.2%	2,022 2,220 1,573 1,230	15.1% 16.6% 11.8% 9.2%

Source: U.S. Census Bureau, ACS 5-year estimate 2017-2021

Key findings in this section for additional consideration during policy reviews include (a) housing affordability given the notable higher median price of homes in the County, and (b) housing cost-burden for 47% of renters of occupied unites, 23% of owner-occupied units with a mortgage, and 10% of owner-occupied unites without a mortgage in 2017–2021, according to the U.S. Census ACS.



#### C. Educational Attainment

Regarding educational attainment, the proportion of Albemarle County's residents 25 years and over holding bachelor's (30%) and graduate or professional degrees (29%) significantly exceeded the companion figures for the state and nation in 2017–2021. As a result, 59% of Albemarle County residents 25 years an over held a bachelor's degree or higher as compared to 40% for Virginia and 34% for the U.S. in 2017–2021 (Table 16; Census).

Table 16. Educational Attainment 2017-2021: U.S., Virginia, and Albemarle County, Virginia

EDUCATIONAL ATTAINMENT 2017-2021						
	United	States	Virg	inia	Albemarle County, Virginia	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total households	124,010,992	124,010,992	3,248,528	3,248,528	43,066	43,066
Population 25 years and over	225,152,317	225,152,317	5,882,521	5,882,521	75,879	75,879
Less than 9th grade	10,793,507	4.8%	217,549	3.7%	1,675	2.2%
9th to 12th grade, no diploma	14,256,849	6.3%	322,050	5.5%	3,394	4.5%
High school graduate (includes equivalency)	59,636,386	26.5%	1,402,487	23.8%	11,146	14.7%
Some college, no degree	45,042,031	20.0%	1,102,111	18.7%	10,704	14.1%
Associate's degree	19,614,710	8.7%	465,927	7.9%	4,256	5.6%
Bachelor's degree	46,354,331	20.6%	1,338,831	22.8%	22,930	30.2%
Graduate or professional degree	29,454,503	13.1%	1,033,566	17.6%	21,774	28.7%
High school graduate or higher	200,101,961	88.9%	5,342,922	90.8%	70,810	93.3%
Bachelor's degree or higher	75,808,834	33.7%	2,372,397	40.3%	44,704	58.9%



### VIII. Conclusions and Recommendations

This report has outlined the current intricate and unique circumstances of the U. S. and global economies that continue to provide the framework for assessing the economic conditions for Albemarle County and the Commonwealth of Virginia. The current economic indicators continue to be mixed at this writing with slowing activity in some sectors along with resiliency in other sectors, including a continued solid job but loosening market. While inflation gradually declined in July 2022–June 2023 in response to tight monetary policy, inflation increased slightly in July–August 2023 and still remained high in August 2023 relative to the Federal Reserve's preferred benchmark and core inflation remained persistent. As such, the Federal Reserve has consistently reiterated its commitment to tight monetary policy to break inflation which is a predominant factor impacting the economic outlook for 2023.

The findings of the 2022 Annual Economic Outlook Report and subsequent monitoring reports still hold at this writing, especially until the lagged impacts of the Federal Reserve's continuing tight monetary policy, the aftereffects of the financial bank turmoil in Spring 2023, and the resumption of student loan repayments in Fall 2023 more fully manifest. Current signals portend that an economic slowdown is likely unfolding in the U.S. with the potential for a mild, shallow recession in late 2023 to early 2024. Swirling winds, positive and negative, are impacting economic forecasts. There are several headwinds and downside risks to economic forecasts with wide bands of uncertainty regarding the path of inflation, interest rates, consumer confidence and consumption spending, labor shortages and wage pressures, the housing market and extent of housing price corrections, financial market stability (e.g., credit crunch with banks pulling back on lending), continuing supply challenges, shifting trade flows, intensification of the Russian-Ukrainian war, other geopolitical risks and impacts (such as supply and price shocks), and slower global growth. The possibility of an extended U.S. government shutdown in Fall 2023 with a delayed federal budget also warrants close monitoring given the importance of federal installations and jobs in the state and region. The evolving circumstances and wide bands of uncertainty led to repeated revisions to economic forecasts throughout 2022 and the first eight months of 2023 with more revisions expected.

On the other hand, tailwinds and upside risks to the forecasts include potentially lower inflation to a material degree; a soft landing to tight monetary policy (e.g., jobs, wages, housing, manufacturing, and services); uplift to the global, slower growth outlook; increased business investments; and faster productivity growth. Again, close monitoring is recommended with more data revisions (based on standard federal schedules) and forecast revisions expected.

With the accumulating signals of a likely continued economic slowdown in the U.S., state, and globally, and the swirling economic winds and wide bands of uncertainty, it is prudent for Albemarle County to likewise anticipate a continued economic cooling given its history of generally following state and national economic trends, albeit sometimes at different levels.

As found in the 2022 Annual Economic Outlook Report and subsequent monitoring reports, Albemarle County has a strong economy with a history of mostly solid economic and job growth, high real per capita personal income, low unemployment, strong hourly wages



regionally, significant employment in relatively higher-income occupations and industries, and strong local business activity. This overall solid economic base provides more scope within which to effectively plan and act defensively as compared to many other communities that face major, chronic economic issues.

To facilitate continued financial resiliency and agility in the face of the rapidly changing environment, this writer's enduring organizational recommendations include:

- 1. Detailed assessment of the organization's financial foundation, including strengths, weaknesses, and vulnerabilities.
- 2. Clearly-defined and refined strategic goals.
- 3. Long-run financial planning and robust scenario planning to illuminate potential chokepoints and develop shopping lists of potential response options.
- 4. Continued close monitoring to detect early warning signals and emerging trends.
- 5. Staff engagement to advance early detection, scenario planning, and response.
- 6. Adaptive decision-making practices and augmented communication.
- 7. Agility in action.

The current environment adds additional complexity to implementing the first and third recommendations above, i.e., developing a detailed assessment of the organization's financial foundation and long-run financial and scenario planning, both of which are being closely watched by rating agencies as the economy moves through what is effectively an economic inflection point. As the economy works to normalize to a "new reality" after three years of profound disruptions due to the pandemic and the Russian invasion of Ukraine, substantial monetary and fiscal government supports to avoid economic collapse during the pandemic, and permanently changed consumer and business landscapes, governments are encouraged to carefully examine their financial foundations as follows:

- Thoroughly scrutinize current budgets and financials and drill down to the underlying economic and budgetary fundamentals versus those factors driven by significant, time-limited government supports and/or transitory pandemic impacts.
- Clinically dissect recurring revenues from one-time or time-limited revenues and those revenues reflecting transitory pandemic impacts. Similarly dissect recurring expenses from one-time or time-limited expenses and those expenses reflecting transitory pandemic impacts. This untangling is crucial.
- Closely evaluate the structural balance of the government's budget, i.e., recurring revenues greater than or equal to recurring expenses, to assess its financial sustainability (Government Finance Officers Association Best Practice).
- Evaluate inflation's line-item impact on expenses in the FY2022 and FY2023 actuals and the FY2024 year-to-date budget and expect some price stickiness going into FY2025 and beyond.
- Although the initial effects of inflation may have benefited FY2022 actual revenues, it is prudent to expect cautious consumer spending in 2023–2024 as household budgets continue to be pinched by inflation, especially in middle- and lower-income households, wage growth likely continues to slow as the impacts of tight monetary policy continue to unfold, and the pandemic-era student loan repayment moratorium ends.



• To enhance resiliency, enhance long-term financial and scenario planning by combining financial forecasting with strategizing, thereby projecting revenues, expenses, and cash for a minimum of three-to-five years and longer, if possible; anticipating the future impacts of costs increases, contracts, revenue trends, service demands, and liabilities; and developing robust, alternative scenarios with documented assumptions.

As noted in the 2022 Annual Economic Outlook Report and subsequent monitoring reports, Albemarle County's prudent financial management and overall solid economic base provide a foundation and community capacity for strategic initiatives. Many other communities struggle with strategic initiatives because their economic foundations are not solid and repeatedly require significant organizational resources to maintain effective operations. Further, the County's strategic and methodical analysis, review, and policymaking are commended and will continue to advance the community toward its strategic objectives.



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# X. Appendix

Table 17: Selected Virginia Statistical Area Delineations, 2020

Selected Virginia Statistical Areas 2020				
CBSA/MSA Title*	Counties and Cities			
Charlottesville, Virginia	Albemarle County, Fluvanna County, Greene County, Nelson County, Charlottesville City			
Staunton, Virginia	Augusta County, Staunton City, Waynesboro City,			
Harrisonburg, Virginia	Rockingham County, Harrisonburg City			
Richmond, Virginia	Amelia County, Charles City County, Chesterfield County, Dinwiddie County, Goochland County, Hanover County, Henrico County, King and Queen County, King William County, New Kent County, Powhatan County, Prince George County, Sussex County, Colonial Heights City, Hopewell City, Petersburg City, Richmond City			

Source: U.S. Census Bureau; \*U.S. Census defines CBSA as the Core-Based Statistical Area and MSA as the Metropolitan Statistical Area which are the same for the selected statistical areas.