

Virginia Economic Insights

2019 Outlook

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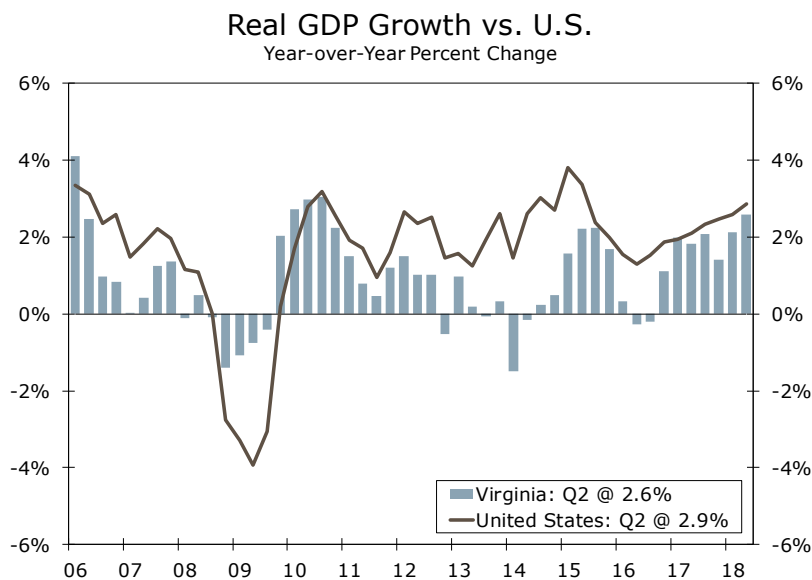
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- Virginia's economy has strong momentum heading into 2019.
 - Tax reform and the bi-partisan budget deal have dramatically improved Virginia's economic landscape. Every region is showing improvement.
 - After underperforming the nation for the past six years, nonfarm employment is now rising slightly faster than the national average. Job gains are broad-based, although the federal government continues to trim payrolls. The state's unemployment rate has plummeted to just 2.8%.
 - Industrial development efforts shifted into overdrive this past year, and Amazon's decision to develop a second headquarters in Northern Virginia validates many of the state's most positive attributes, possibly paving the way for more relocations and expansions.
 - Rural economic development remains challenging, but many areas, including several with long-running challenges, have seen an influx of new investment and are now seeing solid job and income growth.

Virginia's Economy Has Rebounded

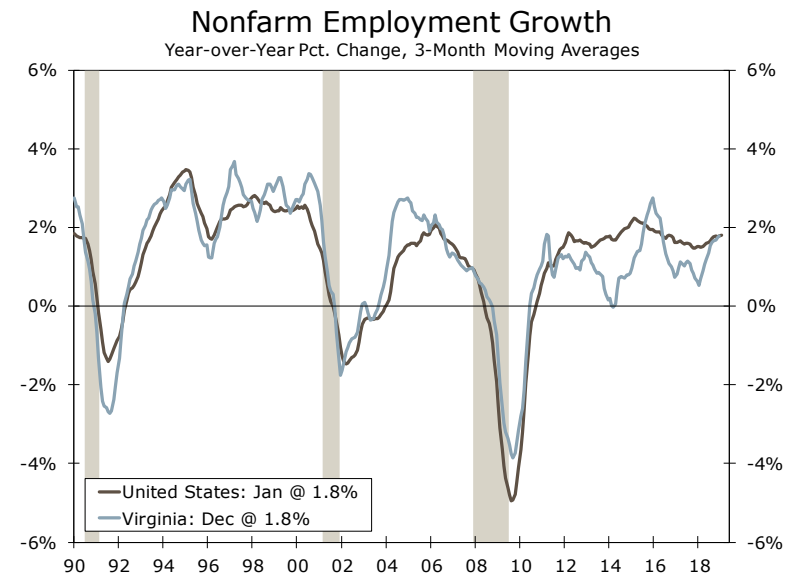
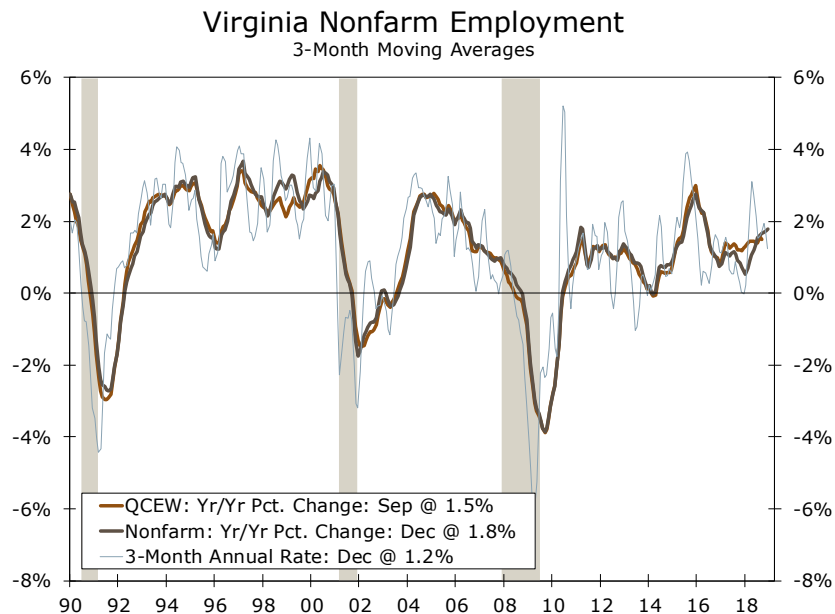
- Following years of underperformance, **economic growth has ramped up over the past couple of years**. Virginia's real GDP growth has nearly closed the long-running gap with the nation, thanks largely to a turnaround in the public sector and continued strong gains in the technology sector.
- Manufacturing, construction and logistics are all posting solid gains, which is helping generate stronger wage and salary growth.
- Growth in retail trade and the leisure & hospitality sector has moderated.



Source: U.S. Department of Commerce and Wells Fargo Securities

Virginia Employment

- Preliminary nonfarm employment growth has rebounded this past year and is now running roughly even with the nation.
- Data through September from the Quarterly Census of Employment and Wages show a steadier improvement over the past year but put year-over-year job growth slightly below the latest reported preliminary employment series.
- The mix of jobs is now somewhat more heavily weighted toward higher-paying industries, but wage and salary growth still slightly trails the nation.



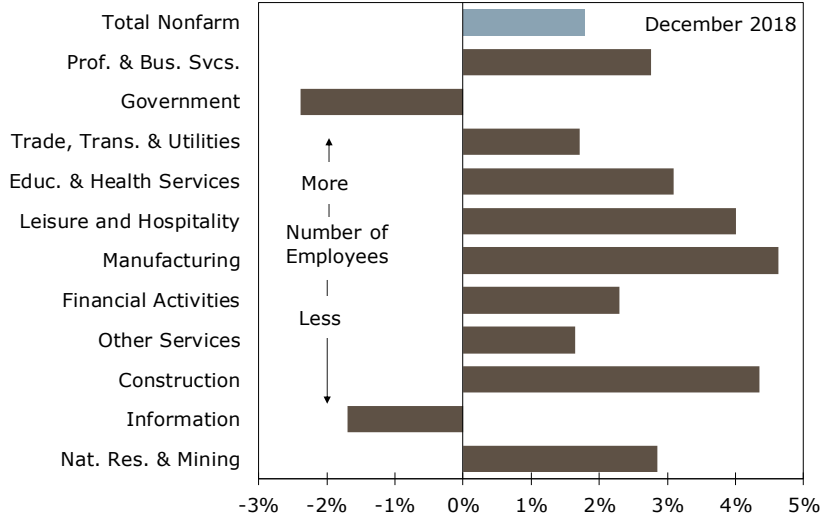
Source: U.S. Department of Labor and Wells Fargo Securities

Virginia Employment

- **Hiring has risen in most major industries**, with the exception of government and information—the two sectors most impacted by sequestration.
- Construction employment has surged this past year, reflecting a stronger recovery in homebuilding and commercial development.
- Success at recruiting new industry and a rebound in defense spending have helped drive manufacturing employment higher over the past year.
- Virginia's unemployment rate fell sharply this past year and is now just 2.8%.

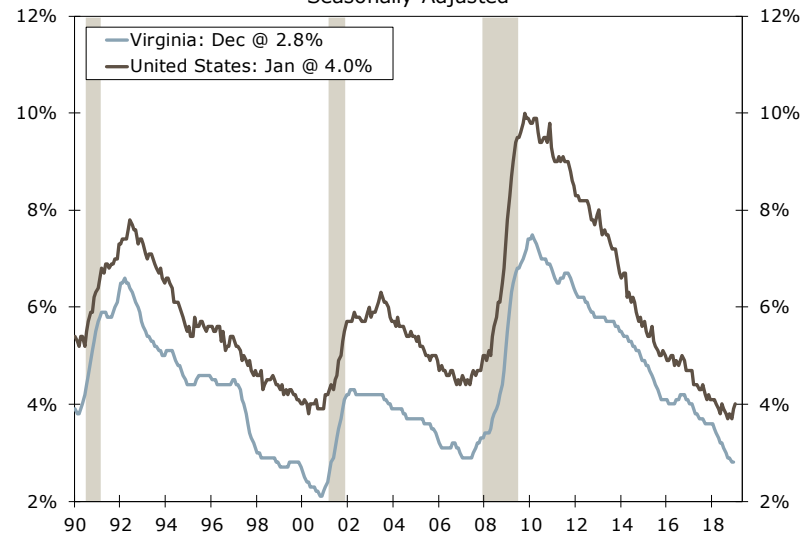
Virginia Employment Growth By Industry

Year-over-Year Percent Change, 3-MMA



Virginia vs. U.S. Unemployment Rate

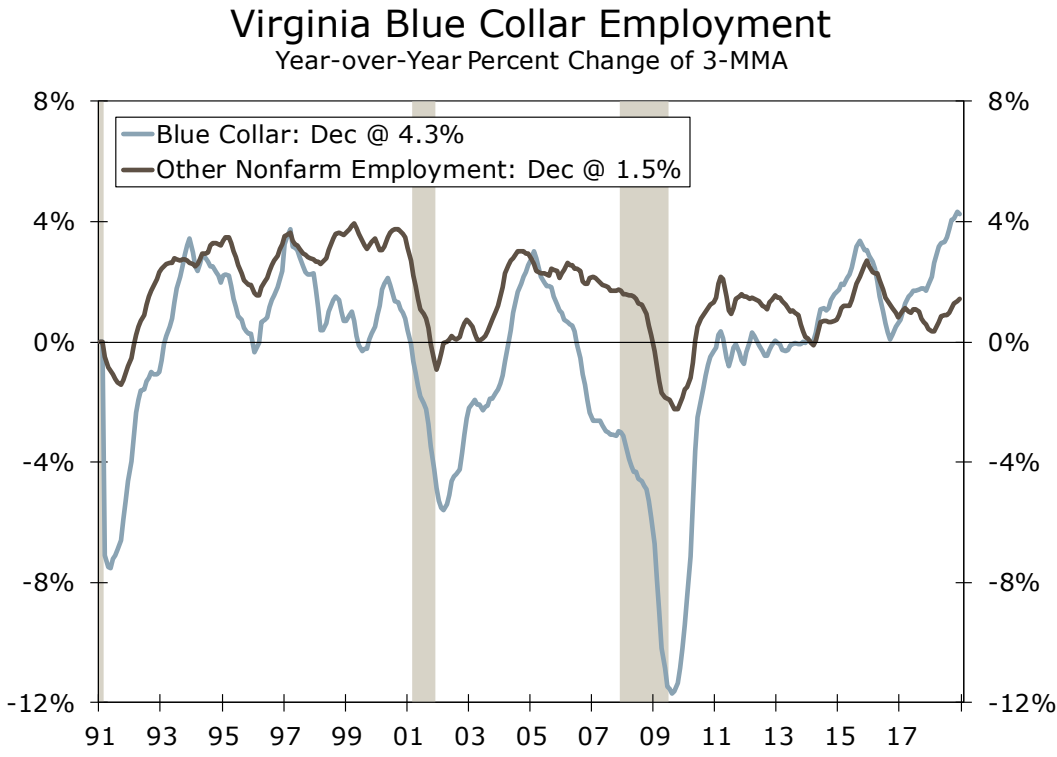
Seasonally Adjusted



Source: U.S. Department of Labor and Wells Fargo Securities

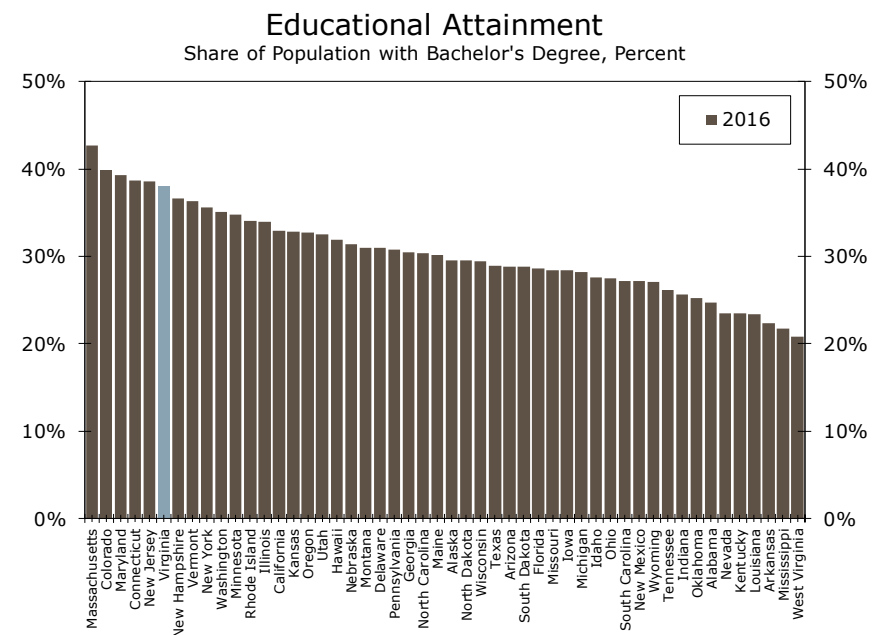
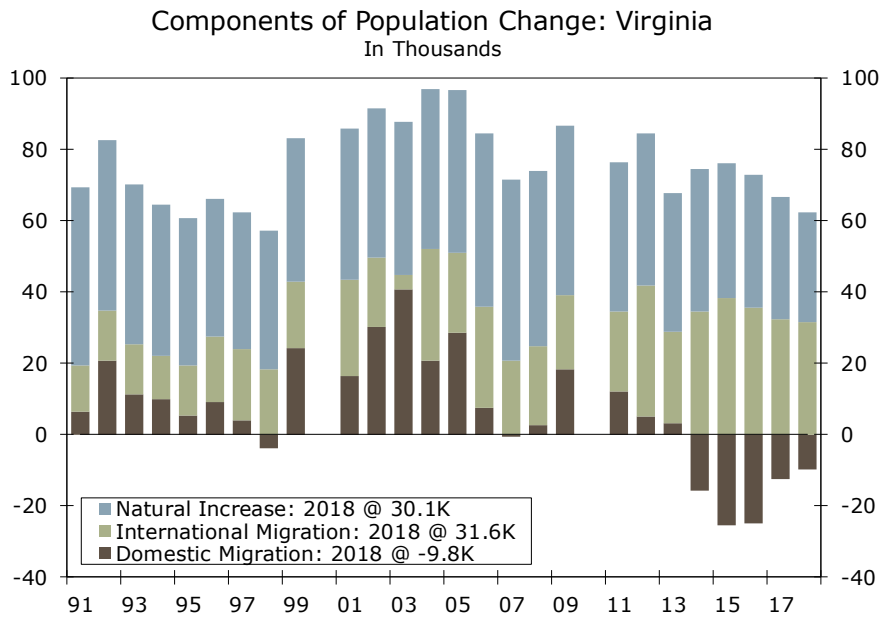
Virginia Blue Collar Employment

- Manufacturing, construction and logistics together account for 15% of Virginia’s employment base, but 30% of job growth over the past year.
- The improvement in these relatively high-paying industries has helped pull job seekers back into the workforce, particularly in rural areas.



Source: U.S. Department of Labor and Wells Fargo Securities

- Demographics have become more challenging for Virginia.
- Net domestic migration has been negative the past five years, with losses most evident in Hampton Roads and the state's rural areas. The weakness largely reflects diminished employment prospects, which are now turning.
- Virginia boasts one of the nation's most highly educated workforces, the bulk of which is in Northern Virginia, Richmond and Charlottesville.

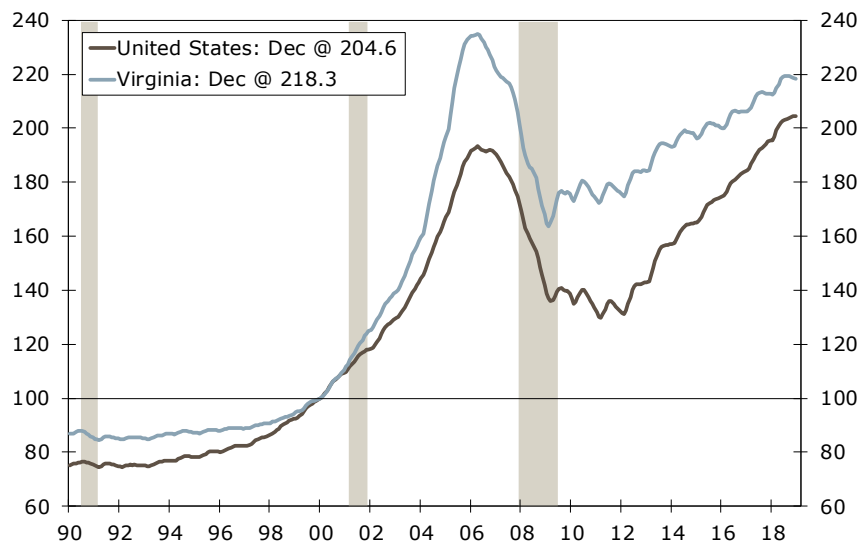


Source: U.S. Department of Commerce and Wells Fargo Securities

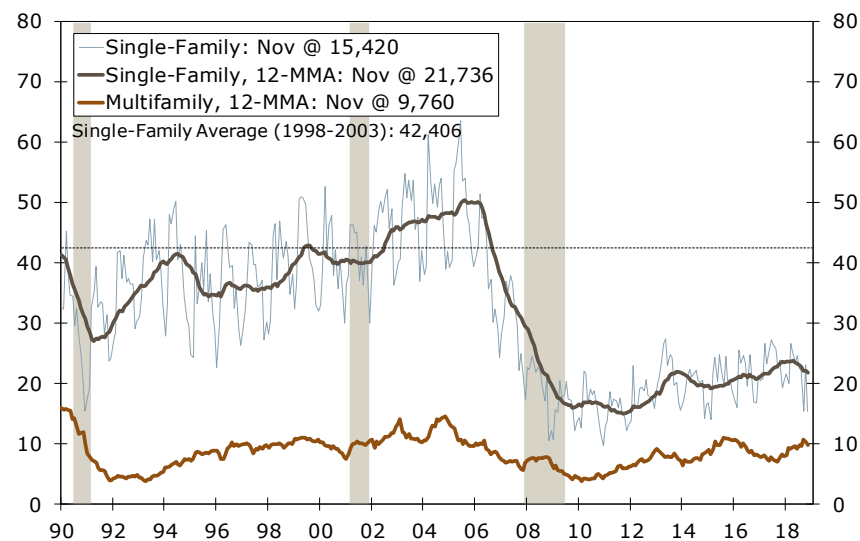
Virginia Housing

- Virginia's housing market continues to slowly recover.
- Years of restrained building have allowed home prices to recover. Prices remain slightly below their previous peak in nominal terms and well below that level in real terms. Affordability in Northern Virginia remains stretched.
- Apartment construction has picked up in most of Virginia's large metro areas, while single-family construction remains closer to its recession lows.

CoreLogic HPI: VA vs. U.S.
Index, 2000=100, Not Seasonally Adjusted



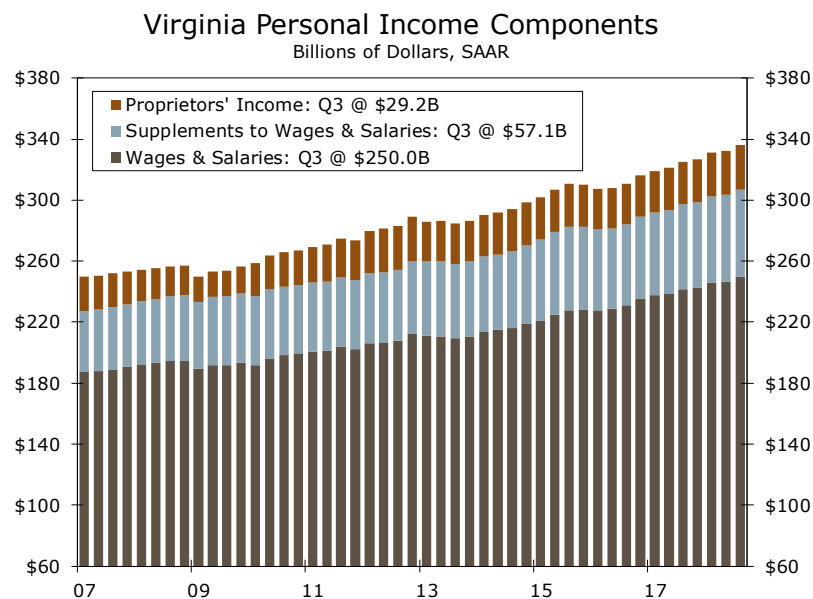
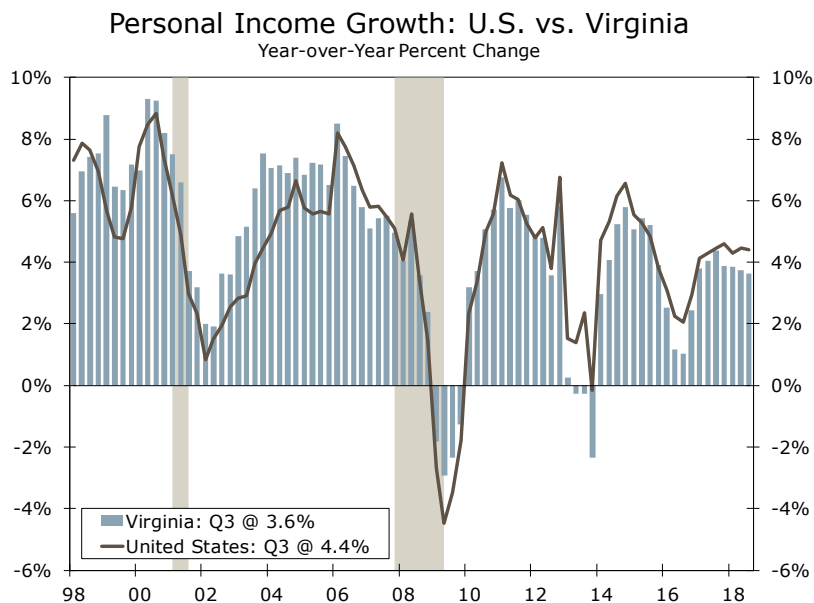
Virginia Housing Permits
Thousands of Permits, Seasonally Adjusted Annual Rate



Source: U.S. Department of Commerce, CoreLogic, Inc. and Wells Fargo Securities

Virginia Personal Income

- With hiring picking up in higher-paying industries, personal income growth has been solid this past year, although it still slightly trails the nation.
- After a slow couple of years, wage and salary growth ramped up this past year, reflecting a better mix of job gains.
- Proprietors' income growth has accelerated and may have been bolstered by changes to the tax law that encouraged firms to recognize more income.



Source: U.S. Department of Commerce and Wells Fargo Securities

Virginia Exports

- Virginia's exports range from coal and tobacco products to jet engine parts and circuit boards. Top export markets include Canada, China and Mexico.
- China is one of Virginia's fastest growing export markets. **Increased trade frictions this past year appear to have slowed exports in a significant way.**
- More fundamentally, slower global economic growth has weighed on shipments, particularly of capital goods.

VA Top Export Countries

Country	Export Value in 2017 (\$B)	% of Total
All Exports	16.51	100.0%
Exports: Total to Canada	2.97	18.0%
Exports: Total to China	1.72	10.4%
Exports: Total to Mexico	1.05	6.4%
Exports: Total to United Kingdom	0.92	5.6%
Exports: Total to Germany	0.82	5.0%
Exports: Total to Belgium	0.57	3.5%
Exports: Total to Taiwan	0.50	3.0%
Exports: Total to Japan	0.44	2.7%
Exports: Total to Netherlands	0.44	2.6%
Exports: Total to Singapore	0.41	2.5%
Exports: Total to South Korea	0.37	2.2%
Exports: Total to Brazil	0.30	1.8%
Exports: Total to India	0.27	1.6%
Exports: Total to Switzerland	0.26	1.6%
Exports: Total to France	0.26	1.6%
Exports: Total to Australia	0.25	1.5%
Exports: Total to Hong Kong	0.23	1.4%

Source: U.S. Department of Commerce and Wells Fargo Securities

VA Top Export Industries

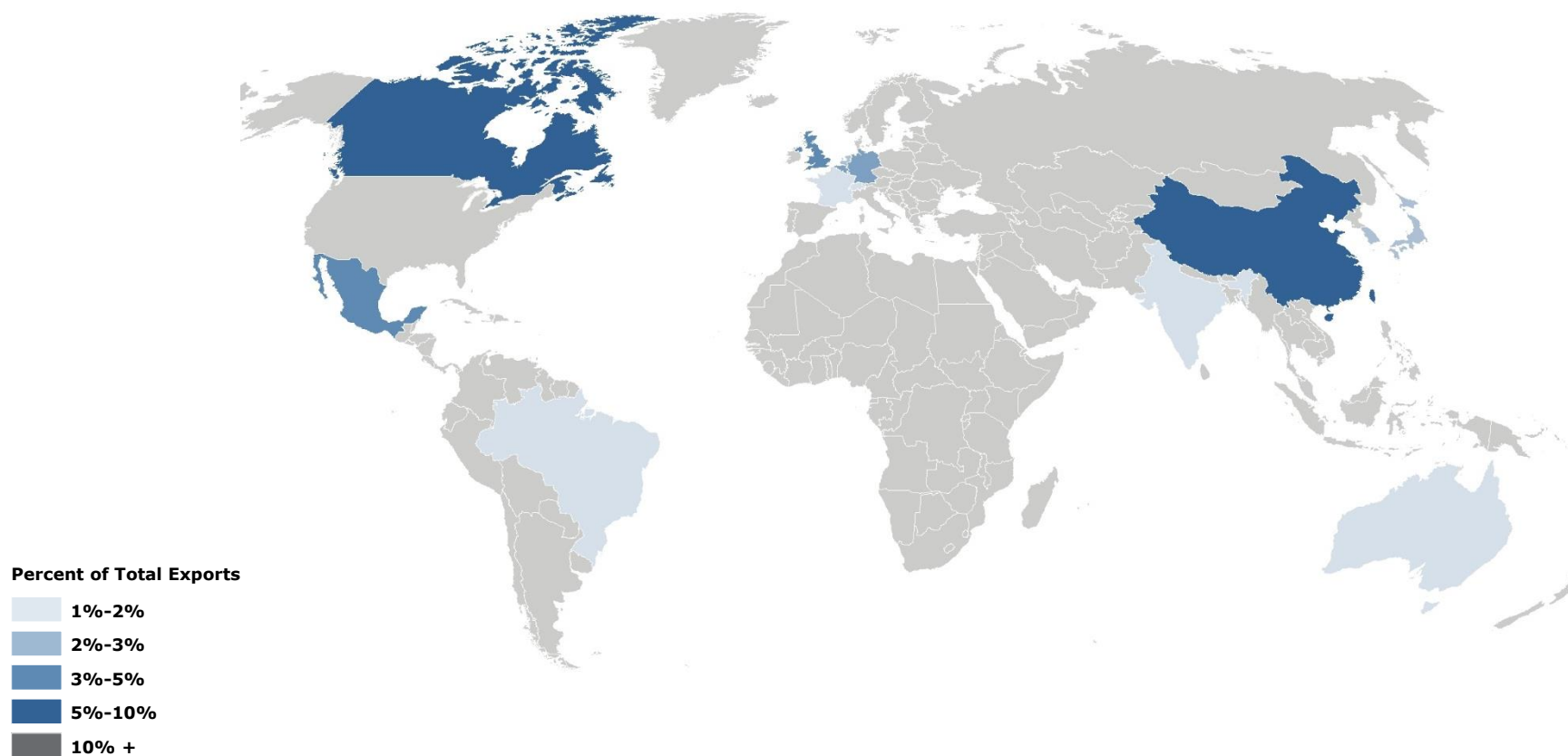
Export	Export Value in 2017 (\$Bil)	% of Total
All Exports	17.37	100.0%
Chemical Manufacturing	2.36	13.6%
Computer and Electronic Product Manufacturing	2.03	11.7%
Transportation Equipment Manufacturing	1.90	10.9%
Machinery Manufacturing	1.46	8.4%
Agriculture Forestry Fishing and Hunting	1.16	6.7%
Paper Manufacturing	1.10	6.3%
Food Manufacturing	1.02	5.9%
Mining	1.01	5.8%
Crop Production	1.01	5.8%
Mining (except Oil and Gas)	0.96	5.5%
Plastics and Rubber Products Manufacturing	0.50	2.9%
Miscellaneous Manufacturing	0.49	2.8%
Fabricated Metal Product Manufacturing	0.48	2.7%
Electrical Equipment; Appliance; and Component Manuf	0.47	2.7%

Source: U.S. Department of Commerce and Wells Fargo Securities

Source: U.S. Department of Commerce and Wells Fargo Securities

Virginia Exports

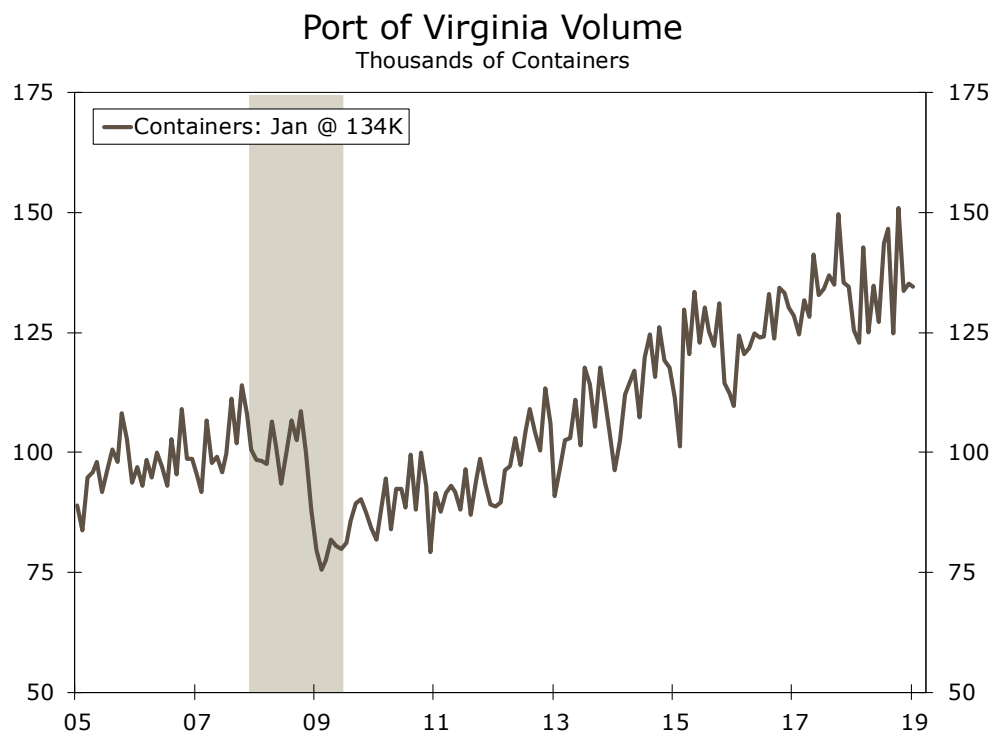
- Canada is the top destination for Virginia's \$16.5 billion of exports. Exports have declined since peaking at \$19.4 billion in 2014.



Source: U.S. Department of Commerce and Wells Fargo Securities

Port of Virginia

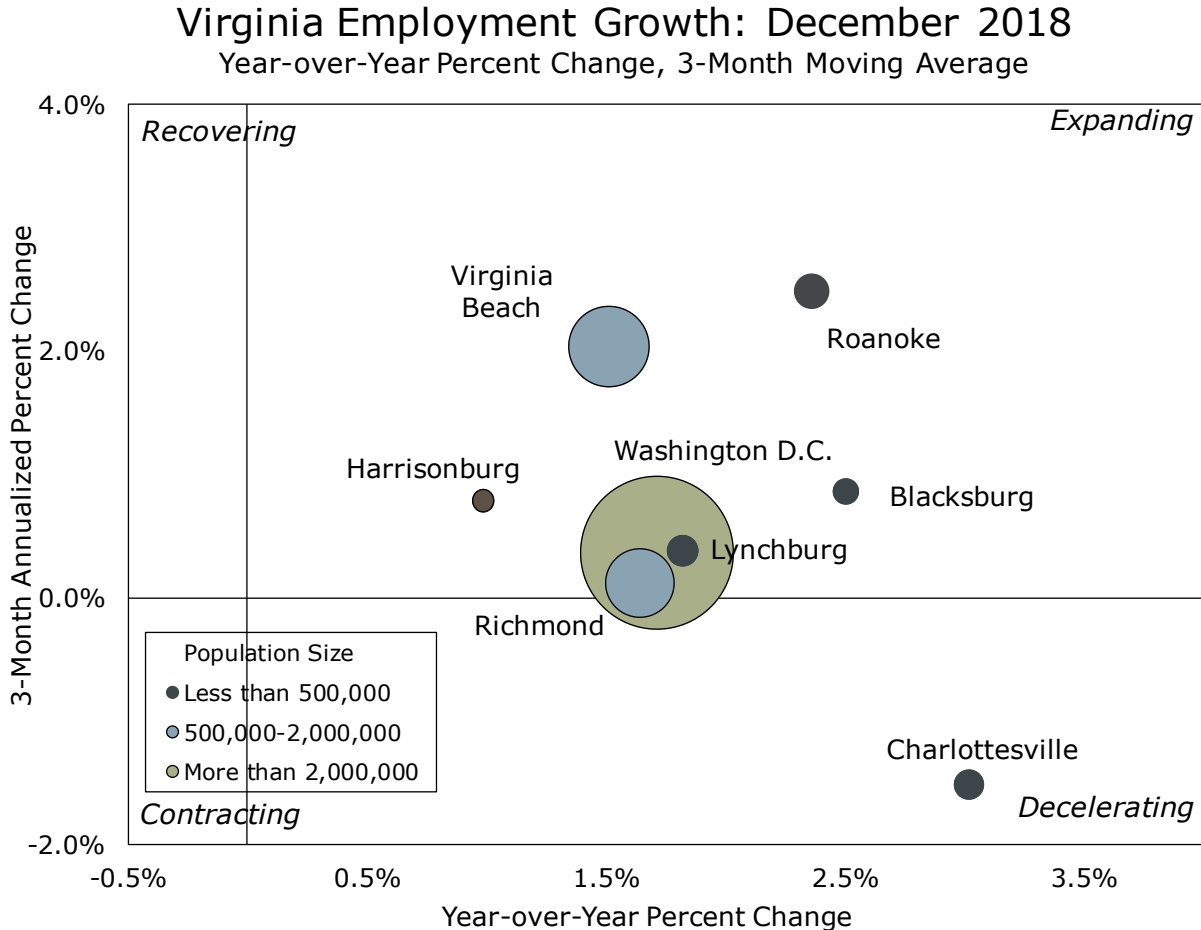
- Container traffic through the Port of Virginia hit a new high on a monthly basis late this year but has largely stagnated over the past two years.
- Volumes shipped through the Inland Port continue to grow, reflecting supply constraints in the trucking sector and the desire for increased efficiencies. The Inland Port remains a key driver for development along the I-81 corridor.



Source: Virginia Port Authority and Wells Fargo Securities

Virginia MSA Employment Growth

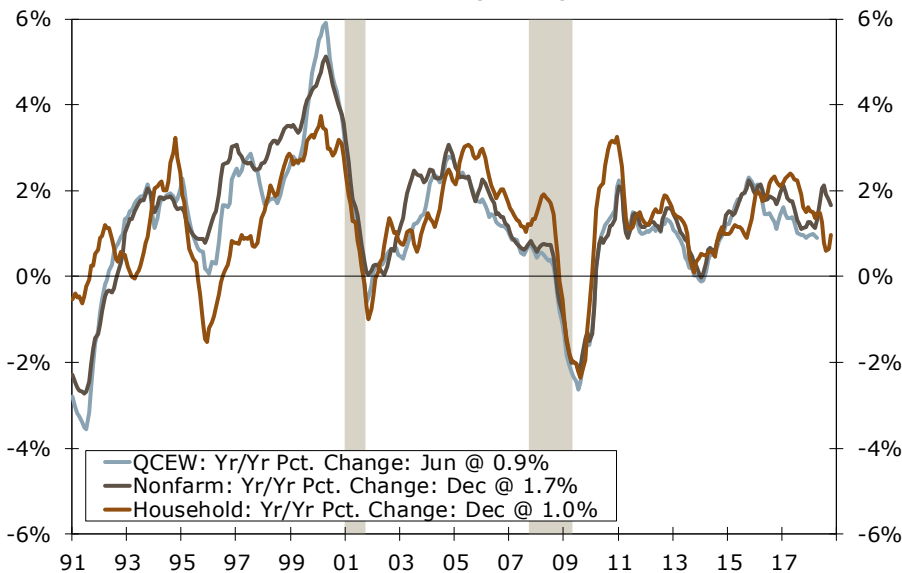
- All of Virginia's metropolitan area have added jobs over the past year, marking a significant broadening of growth.



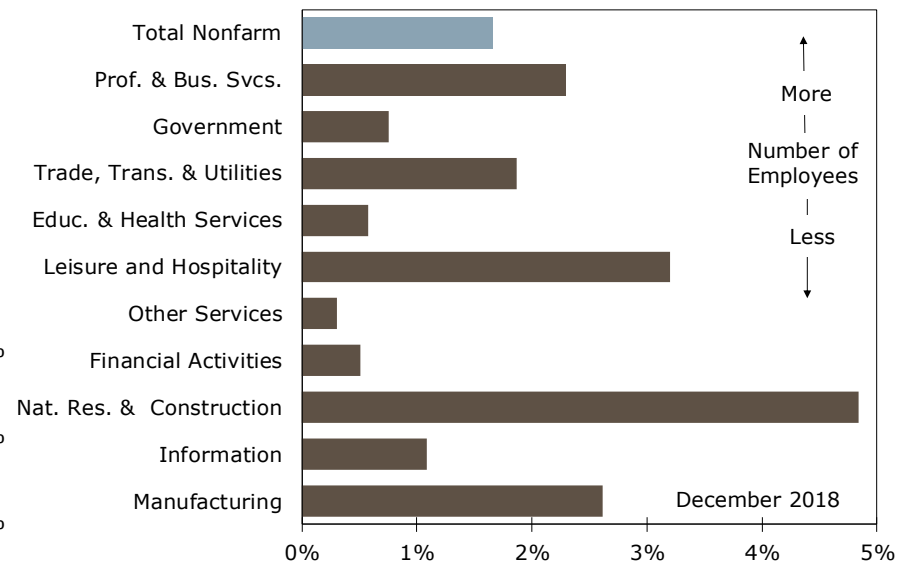
Source: U.S. Department of Labor and Wells Fargo Securities

- The Washington D.C. economy appears to have posted solid job gains over the past year, but the monthly CES data have been running above the generally more accurate QCEW data for the past five quarters.
- Employment has increased in every major industry category, with the largest gains coming in construction, education & health services, leisure & hospitality and professional & business services.

Washington, D.C. MSA Nonfarm Employment
3-Month Moving Averages



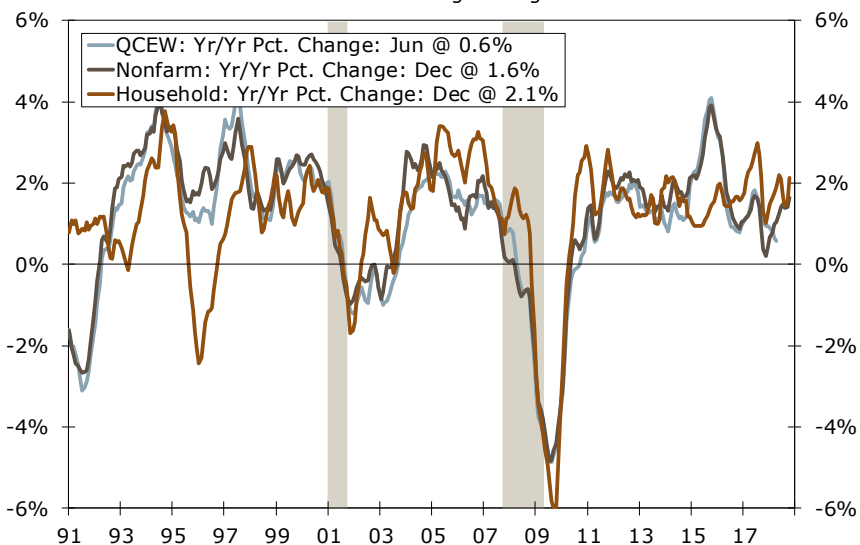
Washington, D.C. MSA Employment Growth By Industry
Year-over-Year Percent Change, 3-MMA



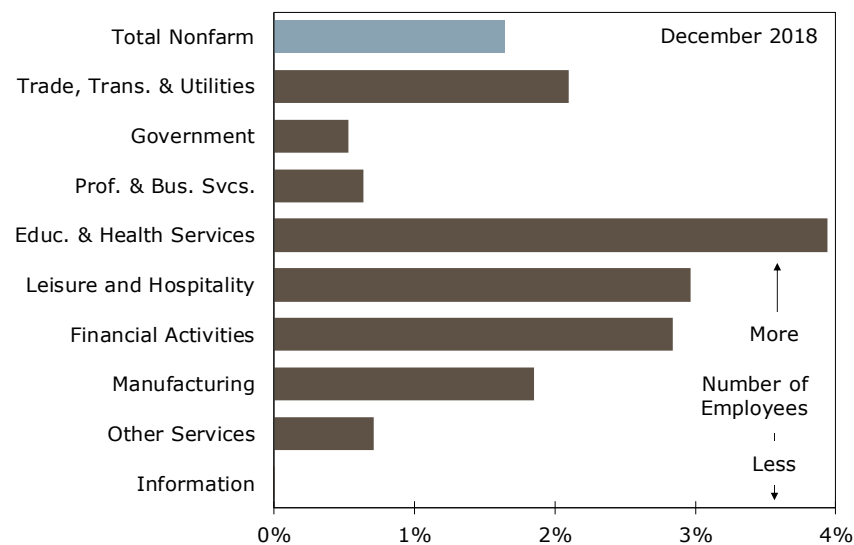
Source: U.S. Department of Labor and Wells Fargo Securities

- Richmond has also seen broad-based job gains. Once again, however, reported job growth is significantly stronger than the latest QCEW data indication, suggesting job growth will be revised lower.
- Richmond's highly educated workforce and the redevelopment of downtown Richmond have helped the region attract technology firms, which is further diversifying the region's economy.

Richmond MSA Nonfarm Employment
3-Month Moving Averages



Richmond MSA Employment Growth By Industry
Year-over-Year Percent Change, 3-MMA

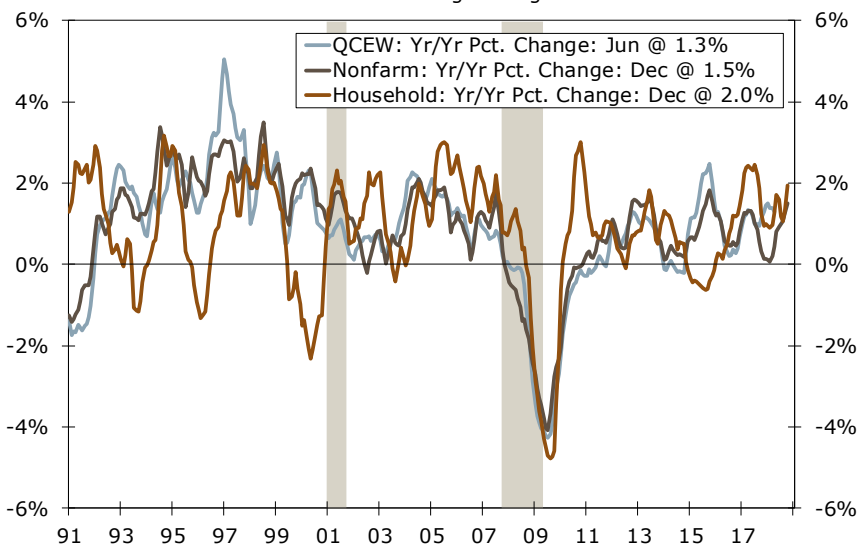


Source: U.S. Department of Labor and Wells Fargo Securities

Virginia Beach-Norfolk-Newport News MSA

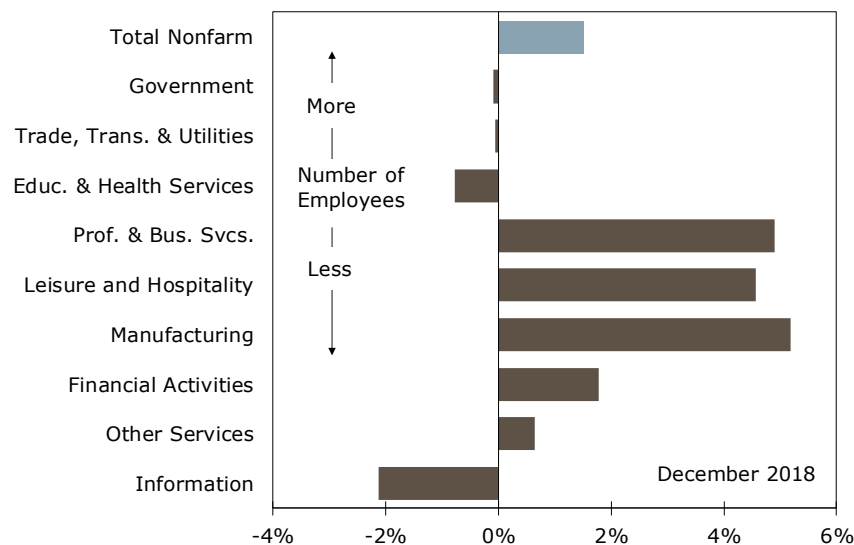
- The Hampton Roads region was impacted more by sequestration than any other part of the country. Conditions have improved over the past year and the local economy appears to have gained momentum in recent months.
- A turnaround in shipbuilding and ship repair has substantially boosted manufacturing employment. The tech sector has also strengthened, while cutbacks in government payrolls have slowed significantly.

Virginia Beach-Norfolk MSA Nonfarm Employment
3-Month Moving Averages



Source: U.S. Department of Labor and Wells Fargo Securities

Virginia Beach-Norfolk MSA Employment Growth By Industry
Year-over-Year Percent Change, 3-MMA



Virginia Economic Outlook

	Actual						Forecast		
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real Gross Domestic Product by State, \$ Millions	444,950	446,560	445,527	454,156	455,232	463,564	475,715	487,135	498,100
Annual Rate	0.8%	0.4%	-0.2%	1.9%	0.2%	1.8%	2.6%	2.4%	2.3%
Nominal Personal Income, \$ Millions	404,772	402,065	420,236	440,824	448,684	466,743	484,480	505,800	529,100
Nominal Personal Income, Percent Change	4.8%	-0.7%	4.5%	4.9%	1.8%	4.0%	3.8%	4.4%	4.6%
Real Median Household Income, \$	69,132	69,467	68,567	63,618	67,880	71,293	73,788	76,592	79,426
Population, Thousands	8,185	8,253	8,312	8,363	8,411	8,465	8,518	8,573	8,628
Change in thousands	85	68	59	51	48	54	52	55	55
Percent Change	1.0%	0.8%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Nonfarm Employment, Thousands	3,736	3,762	3,783	3,859	3,914	3,951	4,005	4,055	4,100
Change in thousands	43	26	21	76	55	37	54	50.0	45.0
Percent Change	1.2%	0.7%	0.6%	2.0%	1.4%	0.9%	1.4%	1.2%	1.1%
Unemployment Rate, Annual Average	6.1%	5.7%	5.2%	4.5%	4.1%	3.8%	3.1%	2.8%	2.6%
Total Housing Permits	26,666	31,367	28,762	30,033	31,067	33,417	32,100	32,710	34,000
Single-Family Permits	17,674	20,927	19,134	20,594	21,314	23,266	21,600	22,000	23,200
Multi-Family Permits	8,992	10,440	9,628	9,439	9,753	10,151	10,500	10,710	10,800
FHFA Home Price Index, Percent Change	-0.2%	1.6%	2.6%	2.9%	2.8%	3.7%	4.4%	4.5%	4.5%

Sources: National Association of Realtors, Federal Housing Finance Authority, U.S. Department of Commerce, U.S. Department of Labor, Moody's Analytics & Wells Fargo Securities
Forecast as of: February 22, 2019

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