National and Regional Economic Outlook

Montgomery County Chamber of Commerce
August 3, 2017

Sonya Ravindranath Waddell
Director of Regional Economics
Overview

The National Economy

• Measures of output
• Labor markets
• Residential investment
• Business investment

The Virginia and Local Economies

• Business activity
• Labor markets
• Housing markets
National Economic Trends
U.S. Real Gross Domestic Product

% Change, SAAR

Source: Bureau of Economic Analysis via Haver Analytics

Q2: 2017
US: 2.6%
U.S. Real Gross Domestic Product

% Change, SAAR

Q1-17
Q2-17

Real GDP
PCE
Residential Investment
Nonresidential Investment: Structures
Nonresidential Investment: Equipment

1.2 2.6
1.9 2.8
11.1
14.8
4.9
4.4
8.2

-6.8

Source: Bureau of Economic Analysis/Haver Analytics
Personal Consumption Expenditures

% Change, SAAR

Source: Bureau of Economic Analysis via Haver Analytics

2Q:2017
2.8%
Retail Sales

YoY % Change
June: 2.8%
May: 4.1%
April: 4.5%

Source: Census Bureau via Haver Analytics
Total Employment Growth

Average Monthly Change, Thous.

Monthly Change
June: 222
May: 152
April: 207

Source: Bureau of Labor Statistics/Haver Analytics
Average Hourly Earnings

Source: Bureau of Labor Statistics/Haver Analytics

June: 2.5%
Source: Bureau of Labor Statistics/Haver Analytics
Residential Fixed Investment

% Change, SAAR

Source: Bureau of Labor Statistics/Haver Analytics
Multi-Family Housing Starts & Permits

June 2017
Permits: 0.443 million
Starts: 0.340 million

90's Average Permits: 0.313
90's Average Starts: 0.268

Source: Census Bureau via Haver Analytics
Non-residential Fixed Investment

Source: Bureau of Economic Analysis via Haver Analytics

% Change, SAAR

2Q:2017 5.2%
Regional Economic Trends
Economic Activity in the Fifth District Manufacturing Sector

Richmond Manufacturing Survey and ISM Manufacturing Survey

Source: The Federal Reserve Bank of Richmond/Institute of Supply Management
Economic Activity in the Fifth District Service Sector

Richmond Service Sector Survey and ISM Nonmanufacturing Survey

Source: The Federal Reserve Bank of Richmond/Institute of Supply Management
Fifth District Wage Index

Source: The Federal Reserve Bank of Richmond/ Haver Analytics
Payroll Employment

Source: Bureau of Labor Statistics/Haver Analytics

June 2017
US: 1.6%
VA: 1.3%

Source: Bureau of Labor Statistics/Haver Analytics
Payroll Employment Growth

YoY% Change, SA

United States  |  Virginia  |  Blacksburg MSA


June 2017
US: 1.6%
VA: 1.3%
Blacksburg: 2.1%

Source: Bureau of Labor Statistics/Haver Analytics
MSA Employment Growth

June 2017

<table>
<thead>
<tr>
<th>Location</th>
<th>YoY% Change (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlottesville</td>
<td>2.4</td>
</tr>
<tr>
<td>Blacksburg</td>
<td>2.1</td>
</tr>
<tr>
<td>Harrisonburg</td>
<td>1.9</td>
</tr>
<tr>
<td>Richmond</td>
<td>1.8</td>
</tr>
<tr>
<td>US</td>
<td>1.6</td>
</tr>
<tr>
<td>Winchester</td>
<td>1.5</td>
</tr>
<tr>
<td>Roanoke</td>
<td>1.4</td>
</tr>
<tr>
<td>Virginia</td>
<td>1.3</td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>1.1</td>
</tr>
<tr>
<td>Lynchburg</td>
<td>-0.2</td>
</tr>
<tr>
<td>Virginia Beach</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics/Haver Analytics
Employment Growth in Virginia’s Counties & Cities

Total Employment Growth
December 2016, YoY% Change,

-9.0 - -2.5
-2.4 - -0.8
-0.7 - 0.0
0.1 - 2.0
2.1 - 12.1

Source: Bureau of Labor Statistics, QCEW
Virginia Industry Structure

![Chart showing employment share by industry for Virginia and the U.S. in 2016. Key industries include:
- Natural Resources & Mining: 0.5% (U.S.), 0.2% (Virginia)
- Construction: 4.7% (U.S.), 4.8% (Virginia)
- Manufacturing: 8.6% (U.S.), 5.9% (Virginia)
- Trade, Transportation & Utilities: 18.9% (U.S.), 16.9% (Virginia)
- Information: 1.9% (U.S.), 1.7% (Virginia)
- Financial Activities: 5.7% (U.S.), 5.1% (Virginia)
- Professional & Business Services: 14.0% (U.S.), 15.7% (Virginia)
- Education & Health Services: 10.8% (U.S.), 13.6% (Virginia)
- Leisure & Hospitality: 10.2% (U.S.), 10.2% (Virginia)
- Other Services: 3.9% (U.S.), 5.1% (Virginia)
- Government: 15.4% (U.S.), 18.2% (Virginia)]

Source: Bureau of Labor Statistics/Haver Analytics
Virginia Industry Growth

June 2017

<table>
<thead>
<tr>
<th>Industry</th>
<th>U.S. YoY % Chg (SA)</th>
<th>Virginia YoY % Chg (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources &amp; Mining</td>
<td>-2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Construction</td>
<td>-6.4</td>
<td>-0.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-2.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Trade, Transportation &amp; Utilities</td>
<td>-3.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Information</td>
<td>-0.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>-0.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>-0.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>-0.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>-8.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Other Services</td>
<td>-0.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Government</td>
<td>1.6</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics/Haver Analytics
VA Job Change in Recession by Industry (QCEW)

Job Change in Recession (December 2007 to December 2009)

- Natural Resources & Mining: -55
- Construction: -50
- Manufacturing: -42
- Trade, Transportation & Utilities: -3
- Information: -12
- Financial Activities: -11
- Professional & Business Services: -11
- Educational & Health Services: -8
- Leisure & Hospitality: -2
- Other Services: -1
- Total Government: -1
- Unclassified: -1

Job Change in Recovery (December 2009 to December 2016)

- Natural Resources & Mining: 5
- Construction: 38
- Manufacturing: 16
- Trade, Transportation & Utilities: 12
- Information: 77
- Financial Activities: 60
- Professional & Business Services: 61
- Educational & Health Services: 31
- Leisure & Hospitality: 13
- Other Services: 14
- Total Government: 7
- Unclassified: 14

Total: -157

Thousands

Source: Bureau of Labor Statistics/Haver Analytics
VA Average Weekly Wage by Industry

2016 Q4

- Natural Resources and Mining: $874
- Construction: $1,134
- Manufacturing: $1,111
- Trade, Transportation, and Utilities: $802
- Information: $1,824
- Financial Activities: $1,506
- Professional, and Business Services: $1,649
- Education and Health Services: $976
- Leisure & Hospitality: $398
- Other Services: $831
- Unclassified: $925
- Government: $1,120

Source: Bureau of Labor Statistics/Haver Analytics
Industry Employment Growth

June 2017

<table>
<thead>
<tr>
<th>Category</th>
<th>United States</th>
<th>Virginia</th>
<th>Blacksburg MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1.5</td>
<td>1.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Private Goods Producing</td>
<td>1.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Private Service Providing</td>
<td>1.5</td>
<td>1.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Government</td>
<td>0.6</td>
<td>0.3</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics/Haver Analytics
Virginia Industry Growth

Source: Bureau of Labor Statistics/Haver Analytics

Index, 100 = December 2007

Professional & Business Services
Education & Health Services
Total

Source: Bureau of Labor Statistics/Haver Analytics
Virginia Industry Growth

Source: Bureau of Labor Statistics/Haver Analytics

Index
December 2007 = 100

- **Total**
- **Manufacturing**
- **Construction**
- **Mining & Logging**

Source: Bureau of Labor Statistics/Haver Analytics
Employment Concentration by County
Education and Health Services

Education and Health Services
December 2016 (% of employment)

- 0.2 - 8.8
- 8.9 - 12.0
- 12.1 - 14.3
- 14.4 - 17.7
- 17.8 - 34.8

Source: Bureau of Labor Statistics, QCEW
Employment Concentration by County
Goods Producing

County Goods Producing Concentration
December 2016 (% of employment)
0.9 - 8.6
8.7 - 14.0
14.1 - 19.0
19.1 - 27.3
27.4 - 40.4

Source: Bureau of Labor Statistics, QCEW
Virginia Unemployment Rate

Source: Bureau of Labor Statistics/Haver Analytics

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>Virginia</th>
<th>Blacksburg MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>9.5%</td>
<td>8.0%</td>
<td>7.0%</td>
</tr>
<tr>
<td>2008</td>
<td>8.8%</td>
<td>7.2%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2009</td>
<td>8.2%</td>
<td>6.9%</td>
<td>6.1%</td>
</tr>
<tr>
<td>2010</td>
<td>7.7%</td>
<td>6.5%</td>
<td>5.9%</td>
</tr>
<tr>
<td>2011</td>
<td>7.0%</td>
<td>6.2%</td>
<td>5.8%</td>
</tr>
<tr>
<td>2012</td>
<td>6.4%</td>
<td>5.9%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2013</td>
<td>6.1%</td>
<td>5.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td>2014</td>
<td>5.9%</td>
<td>5.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>2015</td>
<td>5.7%</td>
<td>5.3%</td>
<td>5.2%</td>
</tr>
<tr>
<td>2016</td>
<td>5.6%</td>
<td>5.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td>2017</td>
<td>5.5%</td>
<td>5.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2018</td>
<td>5.4%</td>
<td>5.1%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

June US: 4.4%
June VA: 3.7%
May Blacksburg: 4.1%
Housing Starts

Source: Bank of Tokyo-Mitsubishi UFJ / Haver Analytics
CoreLogic Home Price Index

YoY% Change, SA

United States
Virginia
Blacksburg MSA
Montgomery County

May 2017
US: 6.6%
VA: 2.4%
Blacksburg MSA: 5.7%
Montgomery County: 3.2%

Source: CoreLogic Information Solutions/ Haver Analytics
Summary

- National economic growth continued along its slow but steady growth path, with solid economic activity in the second quarter of 2017.
- The consumer remained strong, with growth in employment and wages as well as a declining unemployment rate. Employment growth has been somewhat slower in Virginia than in the U.S.
- Activity in the housing sector remained steady, despite a recent slowdown in national residential investment.
- Economic activity in the Blacksburg MSA generally tracks the state, with particular growth in employment in the private service providing sector.
Each month we ask for feedback from business executives located in our District. Respondents provide information on current business activity and expected changes for the next six months.

These data paint a picture of industry trends and help the Federal Reserve Bank of Richmond to be better informed about business conditions in our District. (Washington, D.C., Maryland, W.Virginia, Virginia, N. Carolina, and S.Carolina)

Your business is an integral part of our Fifth District community and we hope you will contribute.

**If you would like to sign up please contact:**
Jeannette.Plamp@rich.frb.org
804-697-8152

**View our survey data and reports online:**
https://www.richmondfed.org/research/regional_economy/surveys_of_business_conditions
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