Under Pressure
The State of Working Northern Virginia

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The Commonwealth Institute

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Executive Summary

Under Pressure

Northern Virginia’s dominance as a national and international business center contributes to its reputation as the great economic engine of Virginia. Parts of the region have some of the highest incomes in the nation, and the educational attainment rates of the workforce make it one of the most educated regions in the world. But a closer look at the dynamics of the Northern Virginia economy shows that not all workers and industries are benefitting from this success. While conditions have deteriorated for many workers – cuts in hours, reduced employment opportunities, income losses, and rising prices – even the most well-positioned workers in the region are operating under increased pressures brought on by the Great Recession and its lingering effects.

This report focuses on key measures of the economy critical to understanding how the workforce is faring in Northern Virginia. By examining the most recent data available from the Census Bureau and the Bureau of Labor Statistics, The State of Working Northern Virginia highlights where Northern Virginians are working and how much they earn, and then places that in the context of what it costs to live in this rapidly expanding metropolitan area. By casting light upon the challenges and opportunities facing workers in Northern Virginia, this report aims to advance the policy debate so that Northern Virginia can move beyond the downturn and continue to grow into a robust, thriving, and sustainable economy that produces a high quality of life for all.

Key Findings

Employment

• Employment levels in Northern Virginia grew at a strong pace in 2011, with the region adding 25,000 jobs between 2010 and 2011, a job creation rate of 1.9 percent.
• Northern Virginia’s “jobs gap”—the number of jobs needed to return to pre-recession employment levels, after considering the growing population of the region—remained high at almost 100,000 in 2011.
• Many of the industries that lost the most jobs during the recession continued to lose jobs beyond the official end of the recession in the summer of 2009.

Unemployment

• The unemployment rate more than doubled in Northern Virginia during the recession.
• Due to its large population, Northern Virginia is home to a very high number of unemployed workers. In 2011, Northern Virginia was home to more than one in four unemployed Virginians, which is more than any other region of the state.

Median Household Income and Earnings

• In 2010, households in Northern Virginia had a median income of approximately $88,747, over 60 percent above the statewide median but still below the region’s pre-recession level of $102,644.
• The recession had a disproportionate effect on lower-income households in Northern Virginia. The median household income of Virginia’s lowest 20 percent of households saw a decline of over 10.5 percent in real terms between 2007 and 2010. The area’s highest income households saw a decline of just over 3 percent.

• Northern Virginians are highly educated, and there is a substantial return to education in the Northern Virginia labor market, but between 2007 and 2010, both Northern Virginia’s most and least educated workers took a hit in terms of their median earnings. While those Northern Virginia workers with less than a high school degree experienced the greatest losses (a decline of roughly 17.54 percent between 2007 and 2010), those with a graduate or professional degree, experienced a 3.67 percent decline in real earnings over the course of the recession.
• The ratio between the median earnings of women and men age 16 and older was about 71 cents to the dollar in 2010 in Northern Virginia.

Wages and Work Hours

• Average weekly hours in Northern Virginia private-sector jobs fell to 33.1 hours by December 2009, down from 36.2 hours in December 2007. However, as average weekly hours fell, average hourly earnings in private-sector jobs grew.
• The largest increases in average weekly wages between 2007 and 2010 occurred in more “close-in” localities in Northern Virginia – those inside or bordering the Beltway.
• Of Northern Virginia’s six largest private-sector industries, wages grew most in the professional and business services sector between 2007 and 2010, rising six percent in inflation-adjusted terms. Wages in the financial activities; trade, transportation, and utilities; and leisure and hospitality sectors declined slightly.

Poverty

• Every Northern Virginia locality experienced an up tick in poverty since the onset of the Great Recession, with growth ranging from 12 percent (Loudoun) to 50 percent (Fauquier).

• The share of Northern Virginians living below the federal poverty level varied greatly across localities in 2010, ranging from a low of 3.5 percent in Loudoun to a high of 9.9 percent in Alexandria.
• Like the state and the nation as a whole, poverty rates in Northern Virginia are higher among children. The rates are highest in Arlington and Alexandria, where 13.9 percent and 13.7 percent of children, respectively, lived below the poverty level. Statewide the number is slightly higher at 14.5 percent.

Cost of Living

• Supporting a family in Northern Virginia is expensive. For a family of four, a minimal standard of living, without relying on public assistance, required, on average, an income of over $63,000 in 2010, assuming one preschool-age and one school-age child.
• The share of commuters with a travel time to work of 60 minutes or more was 14.8 percent in Northern Virginia in 2010, compared to a statewide share of just under 10 percent, and a national share of roughly 8 percent.

Rising Needs

• Despite the fact that Northern Virginia has weathered the recession relatively well compared to other Virginia localities, demand for public services has increased significantly since 2007.
• Since January 2007, Northern Virginia has seen a 131 percent increase in the number of people receiving SNAP benefits, while statewide participation only increased by 77 percent.
• The number of people receiving TANF benefits is up by more than 16 percent since 2007 in Northern Virginia but only 7 percent statewide.
Chapter One

Employment

Jobs

Employment losses in the region have been dramatic due to the recession. Northern Virginia lost 33,700 jobs between December 2007 and February 2010, the low point in terms of jobs for the region, Virginia, and the country as a whole. This loss represented 2.6 percent of all pre-recession employment (Figure 1.1). It was a smaller percentage loss than during the deep 1990-1991 recession, but was a higher number of total jobs due to the growth of the region’s employment base during the last 20 years. The loss of employment during the Great Recession meant tens of thousands of Northern Virginians were laid off during the recession.

Employment levels in Northern Virginia grew at a strong pace in 2011, with the region adding 25,000 jobs between 2010 and 2011, a job creation rate of 1.9 percent. This job growth rate was stronger than for the rest of Virginia: outside of Northern Virginia, the state added just 17,300 jobs during the year, a job creation rate of just 0.7 percent. Seen another way, in 2011, 59 percent of all Virginia job growth occurred in Northern Virginia.

However, just as Northern Virginia’s employment was expanding in 2011, its working age population continued to expand, creating a need for more employment for the new residents. The working age population of Northern Virginia grew by about 1.8 percent between 2010 and 2011, approximately the same growth rate as for employment in the region. This meant that Northern Virginia’s “jobs gap”—the number of jobs needed to return to pre-recession employment levels, after considering the growing population of the region—remained high at almost 100,000 in 2011 (Figure 1.2).
A major reason for the persistence of a large gap between available employment and the jobs needed to keep up with Northern Virginia's growing population is the slow growth of employment in the wake of the recession compared to prior recessions. As of December 2011, Northern Virginia employment levels were up 2.8 percent compared to pre-recession levels (Figure 1.3). However, by this point after the prior two recessions, employment growth had recovered at two to three times that pace. Seen another way, employment is up 5.5 percent from the low point of the Great Recession, while by this point after the prior two recessions jobs were up 9.0 percent.

Worse still, for many unemployed Northern Virginians, many of the industries that lost the most jobs during the recession continued to lose jobs beyond the official end of the recession in the summer of 2009. For example, the construction industry lost 18,700 jobs in Northern Virginia between 2007 and 2009, only to lose another 2,000 jobs between 2009 and 2011. Almost one in four jobs that existed in this industry in 2007 had disappeared by 2011. Overall, of the seven Northern Virginia industries that lost employment between 2007 and 2009, four lost additional jobs between 2009 and 2011 (Figure 1.4).

On the other hand, some industries that remained relatively unscathed during the recession added jobs at a strong pace during the recovery. Employment in the Federal Government and the education and Health Services industries are up 13 percent and 14.4 percent, respectively, since 2007. Employment in Professional and Business Services, Northern Virginia's largest sector, is up 7 percent, an addition of 24,300 jobs. Of the four Northern Virginia industries that added jobs between 2007 and 2009, all sustained their growth between 2009 and 2011.
Reliable employment data is not yet available by locality for 2011, but looking back to 2010 we can see that many Northern Virginia localities were struggling to regain employment, even as a few localities returned to pre-recession employment levels. In particular, employment in Alexandria, Fairfax City, and Fauquier County remained more than four percent below pre-recession levels, a bigger loss than in Virginia as a whole (Figure 1.5).

**Unemployment**

The loss of jobs in Northern Virginia and the rest of the region caused the unemployment rate to more than double in Northern Virginia during the recession as large numbers of workers were laid off. Furthermore, the long duration of the Great Recession meant many of those unemployed workers were unable to find new employment, resulting in an unusually long duration of very high unemployment. As of December 2011, the unemployment rate in Northern Virginia was 4.6 percent, 88 percent higher than pre-recession levels and higher than during the worst part of the 2001 recession (Figure 1.6).

Despite the persistently high unemployment rates in the aftermath of the Great Recession, Northern Virginia remained better off by many measures than other areas of the state. As of 2010, the four localities in Virginia with the lowest unemployment rates were all in Northern Virginia, and every large Northern Virginia locality had an unemployment rate at least one point below that of the state. In Virginia as a whole, the unemployment rate remained 5.9 percent in December 2011, 29 percent above the Northern Virginia rate.

However, while regional unemployment levels remained lower than statewide, the percent increase in unemployment rates from 2007 to 2010 was slightly higher in Northern Virginia (124%) than in the state as a whole (123%). This rapid rise in unemployment rates in communities that
Previously had very low unemployment rates creates different sorts of problems than those faced in persistently high unemployment localities (Figure 1.7).

Furthermore, due to its large population, Northern Virginia is home to a very high number of unemployed workers. In 2011, Northern Virginia was home to more than one in four unemployed Virginians, which is more than any other region of the state. And as of 2010, there were twice as many unemployed workers in Fairfax County as in any other Virginia locality and three of the 10 Virginia localities with the highest number of unemployed workers were located in Northern Virginia (Figure 1.8).

Northern Virginia did not escape huge increases in unemployment during the recession.
Chapter Two

Wages & Earnings

**Median Household Income**

Beyond the availability of good job opportunities, one of the most important measures of the well-being of the workforce in the Northern Virginian economy is whether workers are able to earn enough to make ends meet.

This chapter examines wage and income trends in Northern Virginia. Using the latest available full-year data on these topics, which is through 2010. We look at the impacts of the recession and first full year of the economic recovery on wages and income.

In 2010, households in Northern Virginia had a median income of approximately $98,747. This is over 60 percent above the statewide median household income of $60,674. However, it is still below the region’s pre-recession level of $102,644 (see Figure 2.1). Between 2007 and 2010, median household income in Northern Virginia declined by almost four percent. Even after the recession’s official end in 2009, median household income continued to decline in the region.

As shown in Figure 2.2, the recession had a disproportionate effect on lower-income households in Northern Virginia. The median household income of Northern Virginia’s lowest 20 percent of households along the income distribution saw a decline of over 10.5 percent in real terms between 2007 and 2010. This compares to a decline of just over 3 percent among Northern Virginia’s highest income households.
As a result of these trends, the gap between high- and low-income households in Northern Virginia has grown since the start of the recession. In 2010, the top 10 percent of households in Northern Virginia brought in at least 8.25 times the income of the bottom 10 percent of households (see Figure 2.3). Going into the recession, this ratio was smaller. In 2007, the top 10 percent of Northern Virginia households brought in 7.61 times the income of the bottom 10 percent.

Among localities with a population of at least 65,000 in 2010, five Northern Virginia localities ranked in the top 10 nationally in terms of median household income (Figure 2.4). The region boasts the highest income locality in the nation. With a 2010 median household income of $119,540, Loudoun County had the highest income in the nation for a locality with a population of at least 20,000. To put this number in perspective, consider that the difference between Loudoun and the nation’s next highest income locality, which happens to be Fairfax, is $16,500, representing roughly one-third of the median household income nationally ($50,046).

Despite the fact that so many localities in Northern Virginia rank among the highest earning in the country, there remains some variation in median income. As shown in Figure 2.5, Spotsylvania, the lowest income locality in Northern Virginia with a population of 65,000 or more, still earned a median household income of $72,217 in 2010 -- over 19 percent higher than the statewide median.

**Gender Pay Gaps**

Another way of looking at the data is through the lens of gender. Looking at the population age 16 and older with earnings in 2010, the labor market in Northern Virginia appears to look both more and less equal than the rest of the state and the nation. Statewide in 2010, women earned about 67 cents for every dollar earned by men (about 73 cents per dollar nationally).
In Northern Virginia, this gap was smaller: 71 cents to the dollar in 2010. The ratio grew slightly over the course of the recession, as both men and women in the group experienced a decline in their real earnings, but the decline experienced by women was slightly larger.

There is substantial variation across localities in the ratio of women’s to men’s earnings in 2010 (Figure 2.6). For instance, in Loudoun, the highest income locality in the nation, women earn roughly 56 cents for every dollar earned by men. This is the lowest ratio of the larger localities comprising Northern Virginia. The highest ratio was in Arlington where women earned roughly 81 cents for every dollar earned by men.

**The Educated Workforce**

Northern Virginians are highly educated, and there is a substantial return to education in the Northern Virginia labor market. Nationally, 28.1 percent of Americans age 25 and older had a bachelor’s degree or advanced degree in 2010. Of Northern Virginians in this age group, roughly 54 percent were college graduates or held advanced degrees. This compares to a statewide share of just 34 percent. Figure 2.7 shows individual localities in Northern Virginia by educational attainment. In Arlington County in 2010, for example, over 69 percent of the population 25 or older had a college degree or higher. This is nearly two and a half times the share of the population nationwide with a higher education.

There also is a substantial return to education in the Northern Virginia labor market. A college graduate, for instance, earned roughly 2.23 times what a high school graduate earned in 2010, and a worker with an advanced degree earned over three times as much (Figure 2.8). And all workers with less than a bachelor’s degree in Northern Virginia earned below the median earnings level for workers in that age group in 2010.
Yet both Northern Virginia’s most and least educated workers took a hit in terms of their median earnings during the recession, as shown in Figure 2.9. While Northern Virginia workers with less than a high school degree experienced the greatest losses (a decline of roughly 17.54 percent between 2007 and 2010), only those workers with an associate’s/vocational tech degree or a bachelor’s degree saw real -- though still modest -- gains in earnings over this time period. Even Northern Virginia’s most highly educated segment of the labor force, those with a graduate or professional degree, experienced a decline in real earnings, losing 3.67 percent over the course of the recession.

Wages and Work Hours

While household income and individual earnings measures give a good higher-level snapshot of what Northern Virginians are making, it can also be insightful to delve deeper into the factors that determine those levels – namely, what workers make per hour and the number of hours they usually work.

Those private-sector jobs that remained in Northern Virginia during the Great Recession provided fewer average hours of work per week. Average weekly hours in Northern Virginia private-sector jobs fell to 33.1 hours by December 2009, down from 36.2 hours in December 2007. Unlike employment levels, which did not return to pre-recession levels until the end of 2010, both average weekly hours and average hourly earnings in the private sector returned to almost pre-recession levels by mid-2010 (Figure 2.10).

The strong performance of private-sector average hourly earnings in Northern Virginia during the Great Recession stands in contrast to the experience of Virginia as a whole, which lost both average weekly hours and average hourly earnings (Figure 2.11), though the loss of average weekly hours was more pronounced in Northern Virginia.
Similarly, average weekly wages rose faster in Northern Virginia than in Virginia as a whole during the Great Recession. This growth widened the gap between Northern Virginia and the rest of Virginia as a whole. By 2010, that regional gap had grown to $308 per week, up from $292 per week in 2007.

Looking more closely at changes within Northern Virginia during the recession, by 2010 average weekly wages were above pre-recession levels in seven of nine large Northern Virginia localities, with the largest increases in those localities inside or near the Beltway (Figure 2.12). As with the growing gap between Northern Virginia and the rest of Virginia, this average weekly wage growth near and inside the Beltway accentuated pre-recession wage differences within the region. By 2010, the average weekly wage in Arlington was 2.4 times the average weekly wage in Spotsylvania.

While the high-wage professional and business services industry continued to grow during the recession and the recovery, other high-wage industries have not fared as well (Figure 2.13). For example, the relatively well-paid construction and financial activities industries were hit very hard during the recession and continued to shed employment in 2010.

Looking at wages within individual industries, most industries in Northern Virginia saw increases in inflation-adjusted average weekly wages during the recession. However, of Northern Virginia’s six largest private-sector industries, only three—Professional and Business Services; Education and Health Services; and Construction—saw growing wages between 2007 and 2010 (Figure 2.14). The large Financial Activities, Trade/Transportation/Utilities, and Leisure and Hospitality industries, had drops in pay ranging from 0.6 to 1.8 percent. Yet, these three falling-wage industries together only employ slightly more workers in Northern Virginia than the growing professional and business services sector.
Despite poverty levels that are well below Virginia and the national average, Northern Virginia is not immune from poverty, and poverty levels have been increasing here since the start of the recession back in 2007. The latest available poverty data shows that in 2010, the total number of Virginians living with incomes below the federal poverty line, about $22,000 a year for a family of four, represented about 11.1 percent of the state’s population. Northern Virginia poverty rates are all below the standard percentage. As shown in Figure 3.1, the share of Northern Virginians living below the federal poverty level varied greatly across localities in 2010, ranging from a low of 3.5 percent in Loudoun to a high of 9.9 percent in Alexandria.

Yet because Northern Virginia is home to so many Virginians, the number of Northern Virginians living below the poverty level is substantial. In Fairfax, alone, there were 62,278 individuals living in poverty in 2010. This represents over seven percent of all Virginians living in poverty across the state and means Fairfax is home to more Virginians living in poverty than any other locality. The difference between the number of Virginians living below poverty in Fairfax and those living below poverty in Richmond (home to the state’s second largest population of Virginians living below poverty) was 11,992 in 2010.

Like the state and the nation, poverty rates in Northern Virginia are higher among children. Figure 3.1 shows child poverty rates in 2010. The rates are highest in Arlington and Alexandria, where 13.9 and 13.7 percent of children, respectively, lived below the poverty level. Statewide, the number is only slightly higher at 14.5 percent.
More important, perhaps, is the fact that every Northern Virginia locality, even those such as Loudoun where poverty rates are extremely low, has experienced an uptick in poverty since the onset of the Great Recession. Figure 3.2, shows the percent growth in the share of the population living below poverty by Northern Virginia locality. Growth in poverty during this time period ranged from 12 percent (Loudoun) to 50 percent (Fauquier). These upticks in poverty rates in communities that previously had very low poverty rates create different sorts of challenges than those felt by areas of the state that face persistently high poverty.

**Rising Needs**

Despite the fact that Northern Virginia has weathered the recession relatively well compared to other Virginia localities, demand for public services has increased significantly since 2007 (see Figure 3.3). Since January 2007, Northern Virginia has seen a 131 percent increase in the number of people receiving Supplemental Nutrition Assistance Program (SNAP) benefits, while statewide participation only increased by 77 percent. During the recession, Falls Church City was the only Northern Virginia locality that experienced a decrease in the number of people receiving SNAP benefits and Manassas County led the pack with the highest increase of 165 percent.

Other measures of increased need are the share of residents claiming unemployment insurance benefits and the number of people using Temporary Assistance for Needy Families (TANF). With an unemployment rate of 6.9 percent, the number of people claiming unemployment insurance benefits in the Northern Virginia area doubled over the course of the recession. Over 60,000 people claim unemployment insurance benefits statewide and 20 percent of those claimants reside in the Northern Virginia area. The number of people using TANF is up by more than 16 percent since 2007 in Northern Virginia, but only 7 percent statewide.

Taking a closer look at localities, we see that Fauquier County had a 129 percent increase in the number of people receiving SNAP benefits, formerly known as food stamps, but a 3 percent decrease in the number of people using TANF. The Fairfax locality has the highest number of people using key public programs in the Northern Virginia area with over 46,000 people receiving SNAP benefits.
Chapter Four

Cost of Living

But for all the good news – strong wages and rebounding employment – Northern Virginia outpaces the rest of the state in terms of its cost of living.

The high cost of housing, transportation, and childcare in the Northern Virginia area creates significant challenges for even those families who in other parts of the country would be comfortably middle class. Supporting a family of four in Northern Virginia at a minimal standard of living and without relying on public assistance, requires, on average, an income of over $63,000 in 2010, assuming one preschool-age and one school-age child (Figure 4.1).

Another way to look at the cost of living in Northern Virginia is to look just at housing and transportation costs, which most experts say should not absorb more than 45 percent of a household’s income. In 2009, the Urban Land Institute’s Terwilliger Center for Workforce Housing released a study *Beltway Burden: The Combined Cost of Housing and Transportation in the Greater Washington, DC Metropolitan Area* that estimated average housing and transportation costs by locality in the Washington, DC region based on 2006 transportation and housing cost data from the Center for Neighborhood Technology. This study looked not only at housing and commuting costs, but also at non-commuting transportation costs. Though conducted in 2006, the study is unique, and its findings still provide useful insights into the challenges posed by the area’s high cost of living. As of 2006, the average cost of just these two expenses exceeded $35,000 in almost all of
Northern Virginia localities. At $35,000 a year for housing and transportation, and the 45 percent affordability standard, a household needs an income of over $75,000.

As a result, for lower-income households there are very few affordable options in Northern Virginia; in no Northern Virginia locality could a household making the median income for the bottom 40 percent of Northern Virginia households afford the average housing and transportation expenses (Figure 4.2).

Looking instead at housing and transportation affordability by locality median income—an indicator of whether individuals living in a particular locality can afford to live there comfortably—in only three of the eight largest Northern Virginia localities could the median household afford the average transportation and housing costs in 2006 (Figure 4.3).

While high housing costs are responsible for most of the lack of affordability in Northern Virginia, in exurban localities, where housing is often cheaper, there are fewer jobs available, requiring long—and expensive—commutes to other sections of Northern Virginia or the region to find employment. For example, there are almost exactly the same number of jobs as residents in Alexandria and Fairfax County. In Prince William, Stafford, and Spotsylvania counties, however, there are about twice as many employed residents as jobs in the locality (Figure 4.4).
Figure 4.5: Commuters w/ Travel Time to Work of 60 Minutes
Plus, 2010

<table>
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<tr>
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<th>United States</th>
<th>Virginia</th>
<th>Northern Virginia</th>
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<tr>
<td>60 minutes or more</td>
<td>8.0%</td>
<td>9.9%</td>
<td>14.8%</td>
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Source: TCI analysis of ACS PUMS.

Given that many Northern Virginians live in different communities than where they are employed, commute times represent another important cost of living variable for workers in the region. Looking at mean commute times, Northern Virginia commuters took an average of 33 minutes to get to work in 2010. Statewide, mean travel time in 2010 was 27.5 minutes; nationally, the average was 25.3 minutes. While these averages may not appear all that different, substantially more Northern Virginians face long commutes than do their peers across the Commonwealth and the country (Figure 4.5). The share of commuters with a travel time to work of 60 minutes or more was 14.8 percent in Northern Virginia in 2010. This compares to a statewide share of just under 10 percent, and a national share of roughly 8 percent.
The Northern Virginia economy deserves its reputation as one of the most robust and prosperous in the nation, but for substantial segments of the Northern Virginia workforce, its promises of opportunity and wealth are elusive, and overall Northern Virginians experience cost of living pressures higher than their peers in other parts of the state. Based on a number of economic indicators, the region managed to withstand the Great Recession with less damage than other areas of the state, but this factor should not detract from the reality of intensified pressures on Northern Virginia workers across the spectrum. Declining income and rising costs mean that workers and families are having a harder time making ends meet, and these forces hit moderate and low-income Virginians the hardest.