About Mangum Economics, LLC

Mangum Economics, LLC is a Richmond, Virginia based firm that specializes in producing objective economic, quantitative, and qualitative analysis in support of strategic decision making. Much of our recent work relates to IT & Telecom Infrastructure (data centers, terrestrial and subsea fiber), Renewable Energy, and Economic Development. Examples of typical studies include:

**POLICY ANALYSIS**
Identify the intended and, more importantly, unintended consequences of proposed legislation and other policy initiatives.

**ECONOMIC IMPACT ASSESSMENTS AND RETURN ON INVESTMENT ANALYSES**
Measure the economic contribution that businesses and other enterprises make to their localities.

**WORKFORCE ANALYSIS**
Project the demand for, and supply of, qualified workers.

**CLUSTER ANALYSIS**
Use occupation and industry clusters to illuminate regional workforce and industry strengths and identify connections between the two.

The Project Team

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Introduction

This report quantifies the likely economic consequences for Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach associated with key legislation included in the Virginia Chamber of Commerce’s “bills we are following” list from the 2019 General Assembly session. In the pages that follow, this legislation is organized by primary subject area.

Environmental

HB 1635 and HB 2500

Description

These bills would have required electric utilities to have 80 percent of the power that they sell generated by a renewable source by 2027 (in the case of HB 2500) or 2028 (in the case of HB 1635). In addition, HB 2500 would have required 20 percent generation from renewable sources by 2020 and HB 1635 would have required 100 percent generation from renewable sources by 2036. Both bills had additional requirements which cannot be addressed in this analysis. Importantly, neither bill allowed nuclear energy as a renewable energy source. According to the most recent statistics from the U.S. Energy Information Agency, nuclear power currently accounts for about 32 percent of Virginia’s electricity production.

Analysis

The cost of electricity impacts households directly through household utility bills and indirectly through the cost of all goods and services that are produced using electricity. The American Action Forum has estimated that the increased cost associated with achieving 100 percent renewable sourcing of electricity in the U.S. by 2029 would be approximately $39,000 per household over the period as a whole, or roughly $3,900 per household per year.

According to the U.S. Census Bureau, in 2017 there were almost 407,000 households in Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach. That implies that the total increased cost to Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach households from 100 percent renewable sourcing of electricity would be almost $1.6 billion annually. Assuming compete linearity in that relationship, that further implies that the total increased cost to Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach households from 80 percent renewable sourcing of electricity would be almost $1.3 billion annually.

It is important to note that as part of its estimate, the American Action Forum assumed that 50 percent of electrical power generated in states with nuclear facilities, such as Virginia, would come from nuclear power. This served to keep their cost estimate for 100 percent renewable sourcing of electricity lower than it would have been otherwise. Because both HB 1635 and HB 2500 would preclude the use of
nuclear power as a renewable energy source, that means that the cost estimate provided above likely under-estimates the total cost to Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach households of 80 percent renewable sourcing of electricity.

Minimum Wage

HB 1850, HB 2157, SB 1017, and SB 1200

Description

These bills would raise the minimum wage from its current federally mandated level of $7.25 per hour to, depending on the specific bill, between $10.10 and $15.00 per hour.

Analysis

We use U.S. Bureau of Labor Statistics’ data for occupational employment and wages in 2016 (the most recent data currently available) in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area. These 2016 hourly wages are then inflated forward using recent historic rates of average wage growth in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area as reported by the U.S. Bureau of Labor Statistics. After removing agricultural jobs that are not covered by the minimum wage, the difference in the inflation adjusted wage rate and the proposed new minimum wage is then used to identify the number of jobs affected by the proposed legislation and to compute total additional payroll cost.

In addition, consistent with the findings of Congress’ 1981 Minimum Wage Study Committee and numerous more recent studies, we apply the widely agreed upon rule that every 10 percent increase in the minimum wage is associated with a 1 to 2 percent decrease in the demand for labor to estimate the number of jobs that would have been lost. This calculation was performed on two representative bills – HB 2157 and SB 1200.

It should be noted that the estimates provided below are inherently conservative, as they are necessarily based on 2016 employment by occupation and do not reflect current or future employment levels.

- **HB 2157**: This bill would have raised the minimum wage to $10.10 on January 1, 2020. Based on the approach detailed above, we find that this legislation would have increased employers’ payroll cost in Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach by more than $197.7 million annually and caused a loss of approximately 6,752 jobs.

- **SB 1200**: This bill would have raised the minimum wage to $15.00 on July 1, 2021. Based on the approach detailed above, we find that this legislation would have increased employers’ payroll cost in Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach by more than $1.1 billion annually and caused a loss of approximately 42,977 jobs.
Paid Leave

HB 2130

Description

This bill would require employers to provide their employees with up to two hours of paid leave for time off to vote.

Analysis

We use data from the Virginia Board of Elections on votes cast in Virginia in the 2018 off-year federal election, the 2017 state election, and the 2016 presidential election. We then use U.S. Bureau of Census data for 2017 on the proportion of Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach’s total population that was voting-age and apply that percentage to the Weldon Cooper Center’s 2018, 2017, and 2016 estimate of total population in Virginia to derive an estimate of voting age population. Dividing the two provides an estimate of the percentage of Virginia’s voting-age population that participated in the most recent off-year federal election, state election, and presidential election. We then apply those percentages to total private sector employment in Virginia in 2017 and multiply them by the $21.01 average private sector hourly wage and two hours to derive an upward limit of the potential cost to private sector employers from this bill.

Based on that approach and based on 2017 employment data and wages, we find that potential cost to Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach private sector employers from this bill could have been up to:

- $9.0 million in a presidential election year.
- $5.8 million in an off-year federal election year.
- $7.3 million in a state election year.
HB 2120 and SB 1639

Description

Both bills would require the Virginia Employment Commission to establish and administer a paid family and medical leave program. Under the program, benefits are paid to eligible employees for family and medical leave. Funding for the program is provided through premiums assessed to employers and employees. The amount of a benefit is 70 percent of the employee's average weekly wage, not to exceed $850 per week. The measure caps the duration of paid leave at 12 weeks in any application year. HB 2120 includes self-employed individuals. SB 1639 would extend the duration of paid leave to 26 weeks if it is for a military care-giver.

Analysis

According to the Virginia Employment Commission, this bill would have increased state payroll taxes paid by employees and employers by approximately $2.26 billion annually statewide. Based on the number of employees in Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach, the cost to employees and employers in the region would be $276 million. In addition, it would have necessitated a $33.5 million increase in the agency’s annual budget to cover ongoing program costs and approximately $70.0 million in initial funding for associated startup costs.

HB 2261

Description

Effective July 1, 2019, this bill would have required private sector employers with 15 or more employees to provide employees with 0.46 hours of paid family and medical leave for every 40 hours worked, up to 24 hours annually.

Analysis

Although employment data from firms with 15 or more employees are not available from The Virginia Employment Commission, it does provide data on statewide private sector employment in firms with 20 or more employees. In 2017, about 73 percent of statewide employees were private sector employees in firms with 20 or more employees—about 281,700 employees in Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach. Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach employees received an average hourly wage of $21.01. While, according to data from the Bureau of Labor Statistics’ National Compensation Survey, 32 percent of private sector workers did not have access to paid medical leave as of March 2017.

Multiplying 281,700 private sector workers by the 32 percent of private sector workers who did not have access to paid sick leave, by an average hourly wage of $21.01, times 24 hours, indicates that the potential cost to private sector employers from this bill could have been approximately $45.5 million annually.
Right to Work

HB 1806

Description

This bill would repeal provisions of the Code of Virginia that prohibit making union membership a precondition of employment.

Analysis

In a recent comprehensive analysis of the economic consequences of right-to-work (RTW) laws, Jeffrey Eisenach, Ph.D. found that:

There is a large body of rigorous economic research on the effects of RTW laws on economic performance. Overall, that research suggests that RTW laws have a positive impact on economic growth, employment, investment and innovation, both directly and indirectly. Specifically:

- **RTW laws directly affect economic performance through their impact on business location decisions, especially in heavily unionized industries such as manufacturing. Other things equal, businesses are more likely to locate in states with RTW laws. There is also evidence that RTW laws have a direct, positive effect on employment, output and personal income.**

- **RTW laws do not lead to lower average wages in either unionized or non-unionized industries. There is some evidence that the long-run effect of RTW laws is to raise wage rates as a result of increased productivity.**

- **RTW laws also affect economic performance indirectly through lower rates of union density. The weight of the evidence indicates that lower union density is associated with higher levels of employment, increased investment and R&D spending and increased innovation.**

In his own comparative analysis of the economic performance of RTW and non-RTW states between 2001 and 2016, among other findings the author determined that “output has also grown faster in RTW than in non-RTW states, rising by 38 percent between 2001 and 2016, compared to 29 percent in non-RTW states.” This means that real (inflation adjusted) Gross State Product was determined to grow approximately 1.3 times faster in RTW states than in non-RTW states.

Applying that growth differential to the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area’s private sector real Gross Regional Product as reported by the U.S. Bureau of Economic Research shows that, all else equal, had the region not been under a RTW rule during the 2001 to 2017 period, its private sector real Gross Regional Product would have been $44.7 billion in 2017 instead of $58.1 billion – a loss of $13.4 billion in economic output over a 16 year period or roughly $838 million each year.
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