

RVA THRIVES: AN UNTAPPED WORKFORCE

EMPLOYMENT ACCESS ON THE JEFFERSON-DAVIS
CORRIDOR

Dana M. Kiernan

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Thriving Cities Group

Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgements and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, University of Virginia, or by any other agency.

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Honor Pledge

On my honor, as a student, I have neither given nor received unauthorized aid on this assignment.

Signed: Dana Kiernan

Date: May 3, 2018

Executive Summary

Unemployment on the Jefferson-Davis Corridor (JDC) in Richmond, VA is too high, and is higher in this area than in the rest of the city. The JDC also experiences persistent poverty, lower amounts of full-time employment, and lower median income than the rest of Richmond. During a community listening process sponsored by the Thriving Cities Group, JDC residents identified lack of awareness about and connections to open jobs, and both workforce and economic development as barriers residents face when looking for employment. Unemployment negatively affects the economy, mental and physical health, crime, and lifetime earnings. Though Richmond has many workforce and economic development programs identified as best practices for reducing unemployment, these programs have not successfully assisted JDC residents. The policy alternatives provided below hope to address program gaps to provide JDC residents additional chances for employment.

This report provides both workforce and economic development strategies to assist JDC residents gain employment. These six policy alternatives are evaluated against the following criteria: cost-effectiveness, equity, full-spectrum employment, administrative feasibility, and political feasibility. Criteria are listed in order of importance. The outcomes matrix below provides the policy alternatives and their criteria scores. I recommend policy alternative two, expanding Richmond's BLISS program directly to the JDC using Charlottesville's peer networking model. This alternative scored the highest on equity and full-spectrum employment, and can help JDC residents both find employment and provide wrap-around support services to sustain employment. Thriving Cities Group also already uses a similar peer model for community engagement, helping with the ease of implementation.

Alternative	Cost-Effectiveness	Equity	Full-Spectrum Employment	Administrative Feasibility	Political Feasibility
Status Quo	\$14,880 per person to gain employment	Low	Low	High	Medium
Expand BLISS	+ \$3,570 per person to gain employment	High	High	Medium	Medium
Expand FastForward Outreach	--	Medium	Medium	High	High
Government Forum	- \$4,153 per person to gain employment	Medium	Unclear	Medium	Medium
City Redevelops Empty Warehouse	+ \$3,963 per person to gain employment	Medium	Unclear	Low	Low
Tax Vacant Commercial Properties	+ \$3,316 per person to gain employment	Medium	Unclear	High	Medium

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Glossary

BLISS	Building Lives to Self-Sufficiency
CCWA	Community College Workforce Alliance
CWI	The Center for Workforce Innovation
ECD	Economic and Community Development
FY	Fiscal Year
JDC	Jefferson-Davis Corridor
JLARC	Joint Legislative Action Committee
MBD	Minority Business Development
NSBA	National Small Business Association
OCWB	Office of Community Wealth Building
PVCC	Piedmont Virginia Community College
RRPDC	Richmond Regional Planning District Commission
RVA	Richmond, Virginia
WIOA	Workforce Innovation and Opportunity Act

Problem Statement

Unemployment along the Jefferson-Davis Corridor is too high. There are 1,042 individuals actively looking for work along the Jefferson-Davis Corridor (JDC) (American Community Survey, 2016). During a community listening project sponsored by the Thriving Cities Group, JDC residents identified both workforce and economic development as community challenges. The RVA Thrives Jobs Working Group identified workforce development challenges as lack of job training and job skills, soft skills, and connections to employment opportunities. The Working Group also identified the need for economic development along the JDC to both revitalize the neighborhood and bring jobs back to the corridor. The JDC once had a strong industry presence, employing many corridor residents. As industries closed or moved, the job rate and area investment declined. The lack of job access and economic development is bad for JDC residents' financial stability, personal well-being, and the overall longevity of the community.

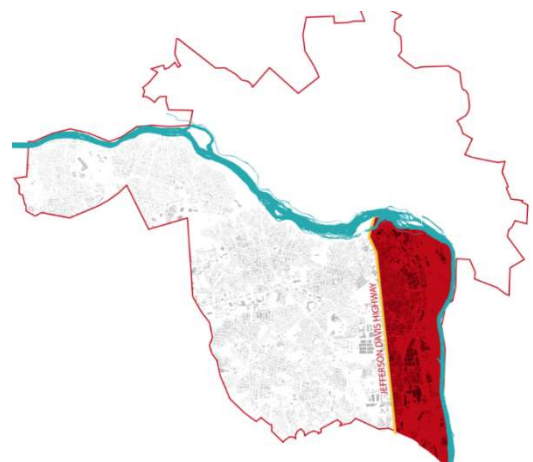
The JDC has a higher unemployment rate, at 8%, than the Richmond metro area (4.6%). Only 56% of adult Jefferson Davis Corridor residents are employed, compared to 62% of adults in Richmond. The JDC also has a lower full-time employment rate, at 42%, than the Richmond metro area (52%) (American Community Survey, 2016).

The JDC in the city of Richmond, VA continues to experience persistent poverty, even as other areas of Richmond are experiencing an economic revival. Approximately 79% of JDC residents live below 200% of the federal poverty line compared to only 34% in Richmond overall (American Community Survey, 2016). JDC residents are being left behind while the rest of Richmond begins to flourish.

The Jefferson Davis Corridor includes the following neighborhoods: Manchester, Bellemeade, Afton, Hillside Court, Jefferson Trace apartments, Davee Gardens, Blackwell, Rudd Trailer Park, Castlewood, Cullenwood, Oak Grove, and Cherry Gardens. The average median income for the Jefferson Davis Corridor is \$30,349 (American Community Survey, 2016), significantly lower than the median incomes for the city of Richmond (\$40,758), Richmond Metro area (\$59,919), and the Virginia (\$65,015) (Richmond City, VA, n.d.).

Figure 1 provides the geographic boundaries of the JDC.

Figure 1: The Jefferson-Davis Corridor



Source: Thriving Cities Group

Background

The Thriving Cities Group's goals for this community initiative are to authentically engage the community; use the knowledge gained from community engagement to define issues and solutions for the Working Groups; and ensure solutions align with what the community wants. Between May and August 2017, community advocates administered 700 in-person surveys on the JDC, and performed 50 in-depth interviews with residents. Quantitative and qualitative data pointed to job training, job connections and information mismatch, and soft skills as challenges residents wanted to address. Residents specified they did not know where to look for jobs, which jobs required training, or how or where to get training. The Thriving Cities Group identified and is working with key community members to obtain community trust and buy-in for proposed strategies to address job access. The Thriving Cities Group is teaching these residents to be leaders and create change within their communities.

Historical Context

Richmond has a long history of institutional discrimination, racism, and segregation, leading to many of the issues, including persistent poverty, residents face today. Though there were once-thriving African American communities in the city, disinvestment combined with urban renewal destroyed and split these neighborhoods. Richmond also faced periods of industry decline, white flight, and suburbanization of jobs, further depressing the urban economy (Hayter, 2015). Though Richmond has worked to revitalize some historically African American neighborhoods, the city continues to neglect the JDC.

Though the city acknowledged in their 2011 Anti-Poverty Commission report that Richmond's poverty is largely due to historical patterns of economic and racial segregation, and confined mostly to African American communities, few of their initiatives have decreased the city's poverty level. These economically vulnerable communities, such as the JDC, still face hurdles, including: few early childhood development programs; poorly funded public schools; low graduation rates; low SAT scores; low math and literacy rates; and low community investment. These individuals are being left behind and excluded from prospering (Hayter, 2015). Even economic reports recognize the Richmond region will not prosper unless significant cultural and institutional changes occur to ensure all residents can access training, improve skills, and obtain jobs (Go Virginia, 2017).

Societal and Economic Costs of Unemployment

Unemployment negatively affects the U.S. economy through reduced gross domestic product (GDP) and productivity. A widely accepted theory in macroeconomics is that every 1% increase in unemployment is associated with two percentage points of negative growth in real GDP (Guisinger, et. al., 2018). Recent research, however, suggests that this theory fluctuates across states depending on labor market indicators, such as population education levels, unionization

rates, and skilled labor (Guisinger, et. al., 2018). The government also faces income tax losses, as unemployed individuals are not contributing to the tax base.

Industry-based Unemployment

When industry jobs are eliminated in an area, workers face increased difficulty finding another good job that matches their skillsets. Losing a long-term job can lead to decades-long earnings reduction, even after reemployment (Greenstone & Looney, 2010). Industry decline is also associated with localized economic distress that affects entire communities; workers in these communities earn approximately \$164,000 less over their lifetimes than industry workers who did not lose their jobs (Greenstone & Looney, 2010).

Parental unemployment also has a generational effect. Children of individuals whose job loss is a result of industry decline have 9% lower annual earnings over their lifetimes than children whose parents did not experience unemployment shocks. Young adults entering the labor market during these times also face difficulty getting jobs and earn less than their peers in non-distressed areas (Greenstone & Looney, 2010).

Unemployment and Health Risks

Employment affects all aspects of an individual's life, from mental and physical health, crime and incarceration, and his or her family. An individual's health is inextricably tied to employment, foremost through access to health insurance. Individuals with stable and quality employment are more likely to have access to health insurance, and studies show that those with access to health insurance tend to use it. Unemployment, however, increases health risks by exacerbating chronic disorders and changing health-seeking behavior patterns, such as delaying primary care (Liem & Rayman, 1982).

Using insurance to visit primary care doctors benefits society, as preventative care reduces burdens on health systems. Unemployment affects mental health, causing anxiety, depression, and feelings of hopelessness. Even job quality affects health – individuals in low-paid, temporary, or insecure jobs may have jobs that are more physically taxing than other types of employment (Doyle, et. al., 2005).

Research finds unemployment-related stress increases infant mortality, alcohol-related diseases, and suicide rates (Liem & Rayman, 1982). Other studies find unemployment, especially long-term unemployment, increases overall mortality risks (Gary & Vågerö, 2012). For men, long-term unemployment is associated with a 60% increase for the overall risk of death, while short-term unemployment was associated with increased risk of alcohol-related deaths, traffic accident deaths, and suicide. For women, long-term unemployment was associated with a 13% increase in all-cause mortality, driven mostly by alcohol-related diseases and other external causes (Gary & Vågerö, 2012).

Unemployment and Communities

Local economic shocks often cause persistent unemployment and lower incomes for all individuals in the community. These shocks also cause demographic shifts in communities; they become older, with more retirees and fewer young people. This further causes employment and earnings to fall, decreases demand for housing, and decreases property values (Greenstone & Looney, 2010).

Areas with high unemployment usually have higher crime and incarceration rates.

Unemployment especially affects property crime. As unemployment increases, property crime increases. One study found when unemployment decreases by one percentage point, property crime decreases between 1.6% and 2.4%. The same study found with a one percentage point decrease in the unemployment rate, burglary decreases by 2%, larceny decreases by 1.5%, and auto thefts decrease by 1% (Raphael & Winter-Ebrner, 2001). Results analyzing the effects of unemployment on violent crime are mixed; some do not find strong associations between unemployment and violent crime while others do (Nordin & Almén, 2017). These studies looked at different unemployment lengths, which could account for the differing results.

Increased crime also leads to increased incarceration rates, which in turn lead to decreased educational opportunities (such as not being able to apply for student loans), and discrimination in the job market. Children are also affected by parental employment. Children whose parents work are better prepared for school, while losing a job increase's a child's chance of repeating a grade or dropping out of school. Children of unemployed parents are less likely to go to college, with this effect being three times stronger for Blacks than Whites, and these children earn less over their lifetime (Stevens & Schaller, 2011).

Safety Net for Low-Income Individuals

Unemployment causes increased reliance on government assistance programs, such as Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), unemployment benefits, Medicaid, and Social Services. Medicaid spending totaled \$553 billion in FY 2016, with the federal government paying 63% (Valentine & Rudowitz, 2017). Unemployed or low-income individuals may also rely on low-income housing, stretching federal and state resources thin.

Unemployed individuals are also more likely to rely on unemployment insurance between jobs. The Federal-State Unemployment Insurance Program provides unemployment benefits to eligible individuals who are unemployed through "no fault of their own" (Department of Labor, 2015). In 2017, the U.S. government spent a total of \$25 billion on unemployment insurance benefits, or approximately \$2.1 billion per month (Department of Labor, 2015).

Barriers to Employment

According to Myran & Ivery's 2013 peer-reviewed study, black unemployment is double the national average, with whites having 20 times the median household wealth of black households (Myran & Ivery, 2013). Certain factors, such as race, education level, and incarceration rates, influence employment. Stereotyping also prevents qualified individuals from being hired (Bertrand & Mullainathan, 2004). Differing education systems influence whether a child is college ready, and/or whether they are ready to enter the workforce. Being outside of an individual's control, these factors serve as a strong counter to the popular political argument that individuals in certain communities "don't work hard enough." Research further proves this argument to be false. This section details further barriers to employment.

Transportation

Richmond's transportation system does not serve all areas of the city equally, including along the JDC. JDC residents noted public transportation does not efficiently serve their community. Access to affordable transportation, whether private or public, is essential for overcoming poverty. Lengthy and difficult commutes are a significant factor in being unable to overcome poverty (DeGood & Schwartz, n.d.). In many locations, individuals face geographic mismatches between their residences, public transit stations, and their place of employment.

According to a 2011 study performed by the Brookings Institute, Richmond ranks 95th out of 100 for the number of working-age residents with access to transit, with only 30.8% of the city covered (Berube, et.al., 2011). In 2015, a University of Minnesota study ranked Richmond almost last in the U.S. for jobs accessible by transit (Owen, et. al., 2015). Furthermore, a mismatch exists between job access and transit coverage. According to the study, only 26.5% of available jobs are accessible by public transit (Berube, et.al., 2011). Finally, according to a 2017 Virginia Commonwealth University report, 55% of Richmond's modest wage jobs are inaccessible by transit, and 48% of lower-cost housing is inaccessible by transit, showing a mismatch between affordable housing and entry-level jobs (Jacobson, et. al., 2017).

The Richmond Regional Planning District Commission forecasts that the suburban and rural areas outside Richmond will experience more economic development and employment than within the city. The commission expects Powhatan to experience the largest growth in jobs at 183%, followed by Goochland (111%) and New Kent (72%) (RRPDC, 2015). Without investing in transportation and infrastructure to move individuals from the city to the suburbs, a portion of readily available workers with untapped potential will be unable to access these jobs.

Returning Citizens

Qualitative interviews performed by Community Advocates revealed returning citizens, or individuals with previous convictions and incarceration, have trouble finding employment. Some experts suggest between 40% and 60% of returning citizens are unable to find employment (Tahmincioglu, 2010). According to Richmond area non-profits, approximately 4,000 individuals return from prison to Richmond each year (OAR of Richmond, n.d.). In 2002, most

neighborhoods along the Jefferson Davis Corridor saw three to five returning citizens per 1,000 residents (Keegan & Solomon, 2004).

Ensuring returning citizens have stable employment is critical for reentry into society and is known to decrease recidivism (Wester & Pettit, 2010). Returning citizens are often restricted from working in certain industries and from obtaining professional licenses. These individuals are also barred from public housing and receiving government benefits. Without supportive services, these individuals face harsh economic conditions that often lead to recidivism. Despite these setbacks, returning citizens are an underutilized talent pool, who either already have employment qualifications or can be trained according to employer needs (Hiring Returning Citizens, n.d.).

Child Care

Childcare is a necessity for working families. A 2015 survey conducted by *The Washington Post* found more than half of fathers and three quarters of mothers did not accept job opportunities or quit or switched jobs due to lack of child care (Paquette & Craighill, 2015). Many studies argue that that ability of mothers with children under five to move from welfare to work depends on the availability of local childcare (Liu, 2015). The Center for American Progress recently adopted the phrase “child care deserts,” with a working definition of an area with at least 50 children under age five with one or less childcare provider, or an area where the ratio of children under age five to the total child care capacity is more than 3:1 (more than three children for every licensed childcare slot) (Malik & Hamm, n.d.). Though this term is not widely used, it provides at least a basis for thinking about child care availability for children under five.

According to American Fact Finder 2016 estimates, approximately 1,260 children under age five live along the JDC (American Community Survey, 2016). According to Virginia Childcare Aware Virginia Child Care Mapping Project, there are 13 child care facilities along the JDC (Child Care Aware of Virginia, 2017). These include four licensed child care centers, three licensed school-aged child care centers, three voluntarily registered family child care homes, one Head Start program, one licensed preschool, and one religious license exempt child care center. These child care facilities are clustered at the top of the JDC, not spread evenly along the corridor. The JDC fits The Center for American Progress’ working definition of “child care desert.”

The Center for American Progress study revealed two important findings about employment and childcare: maternal labor force participation rates in childcare deserts are three percentage points lower, on average, than communities with adequate childcare; and, the maternal employment gap is five percentage points lower, on average, where median family income falls below the national average. This means mothers are both working and earning less than their male and childless counterparts (Malik & Hamm, n.d.).

Educational Attainment

Several peer reviewed studies found associations between education and employment. Educational attainment strongly influences job prospects, and higher education levels are associated with higher labor force participation rates (National Center for Education Statistics,

2015). For example, men and women with a bachelor's degree or higher had labor force participation rates of 91.4% and 81.2%, respectively. Comparatively, men and women without a high school degree had lower labor force participation, 68% and 50% respectively (National Center for Education Statistics, 2015). Individuals with high school and higher education were more likely to be employed. Not only does education affect initial employability and duration of employment, but re-employability as well. Individuals with higher levels of education who have been outside the job market are more likely to be re-employed on a fulltime basis. One study found that for each year of schooling up to 12 years reduces the duration of unemployment by 4%, and by 12% for each year of higher education (Riddell & Song, 2011).

Projections made in peer reviewed studies suggest the future workforce will have more racial and ethnic minorities, but that these groups are generally less prepared for the future workforce. Students from these populations are also more likely to attend community college, suggesting community colleges will play a larger role in workforce development than they do now (Myran & Ivery, 2013). According to Anthony Carnevale, Director of the Georgetown University Center on Education and the Workforce, "Those who are not equipped with the knowledge and skills to get, and keep, good jobs are denied the genuine social inclusion that is the real test of citizenship. Those denied the education required for good jobs tend to drop out of the mainstream culture, polity, and economy" (Myran & Ivery, 2013, p. 46). Increasingly individuals, employers, and policy-makers are turning to community colleges to bridge the gap between higher education and workforce preparation.

Soft and Hard Skills

According to research done by the Federal Reserve, simply employing an individual does not lead to job retention, wage progression, or career advancement (Brazzell, 2007). Their research suggests that the following workforce investments have the best return for employee retention and advancement: job training and matching; targeted job placements; effective support services (childcare, transportation, etc.), financial incentives for firms, and peer support and mentoring. Employers that invest in their employees by supporting workplace learning and demonstrating how incremental skill acquisition benefits employees through career advancement and promotions are more likely to retain employees and grow their own skilled workforce. Sector-based approaches that build strong partnerships between community colleges, businesses, community groups, and public workforce institutions have helped create employment opportunities within regional clusters and marketplaces (Brazzell, 2007).

Soft skills also matter to employers. Unfortunately, employers sometimes believe minority communities lack soft skills, despite lack of evidence supporting this idea (Gilothe, 2009). Many soft skills are shaped by new forms of work organizations and technology, and communities isolated from these new structures do not have the opportunity to interact with and learn these new structures. As workforce development practitioners point out, these are skills and knowledge gaps rather than attitude problems, or lack of work ethic or interest (Gilothe, 2009).

Jefferson-Davis Corridor Profile

This section details demographic information about the JDC. **Table 1** shows demographic trends in both the JDC and Richmond in 2010 and 2016. The JDC has a higher concentration of African Americans than Richmond overall. The JDC also has more children under five than Richmond overall, though not significantly so. However, there are fewer resources for children under five along the JDC than in the rest of Richmond. Table 1 also shows African American median income is significantly lower than white median income in both the JDC and Richmond overall. This shows African American JDC residents earn less, and potentially suggests different employment types or quality.

Table 1: Jefferson-Davis Corridor (JDC) vs Richmond City Demographics 2010 and 2016								
Year	Location	Population Under 5	Median Age	Population Black	Population White	Median Income	Black Median Income	White Median Income
2010	JDC	9%	33.3	75%	14%	\$27,412	\$26,318	\$40,040
	Richmond	7%	32.6	51%	39%	\$38,266	\$28,621	\$53,906
2016	JDC	7%	31.6	70%	15%	\$30,672	\$28,628	\$35,586
	Richmond	6%	33.2	49%	40%	\$41,187	\$28,034	\$60,375
Sources: American Community Survey tables S1901, DP05 for years 2010 and 2016								

Figures 2 and 3 show employment and fulltime employment on The JDC and Richmond. **Figure 2** shows employment has increased on the JDC from 2010 to 2016, and just barely surpassed Richmond in 2016. However, **Table 1** shows median income is still much lower on the JDC compared to Richmond. This could be because JDC residents experience less full-time employment than Richmond overall. Individuals employed in fulltime positions generally have higher salaries, more opportunity for career growth, upward mobility, and health benefits than when employed in part-time positions.

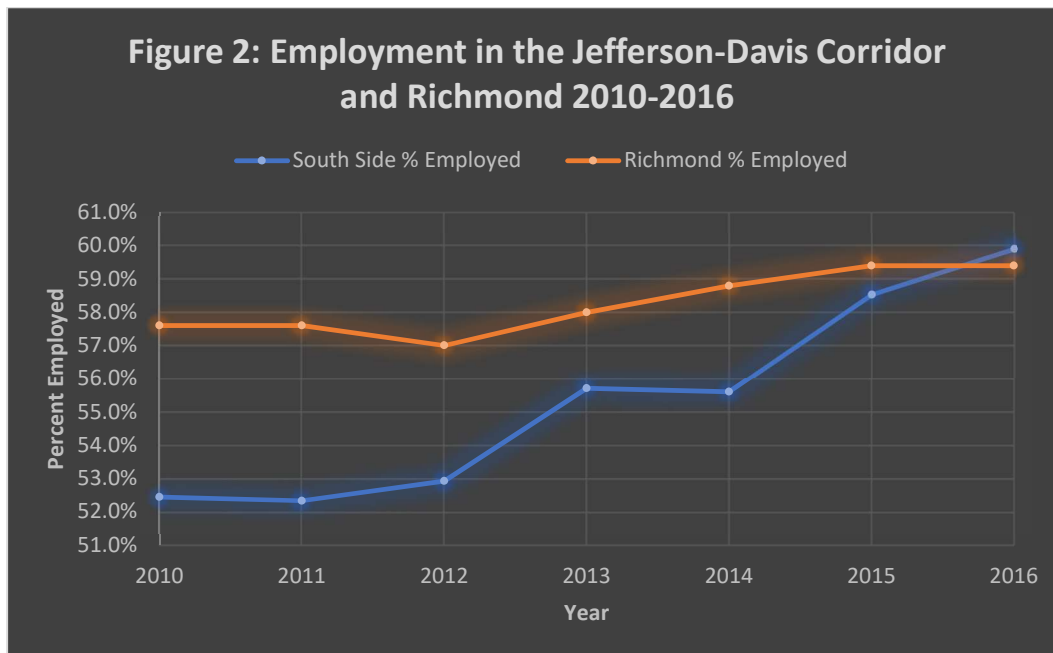


Figure 2 Source: American Community Survey 2010-2016

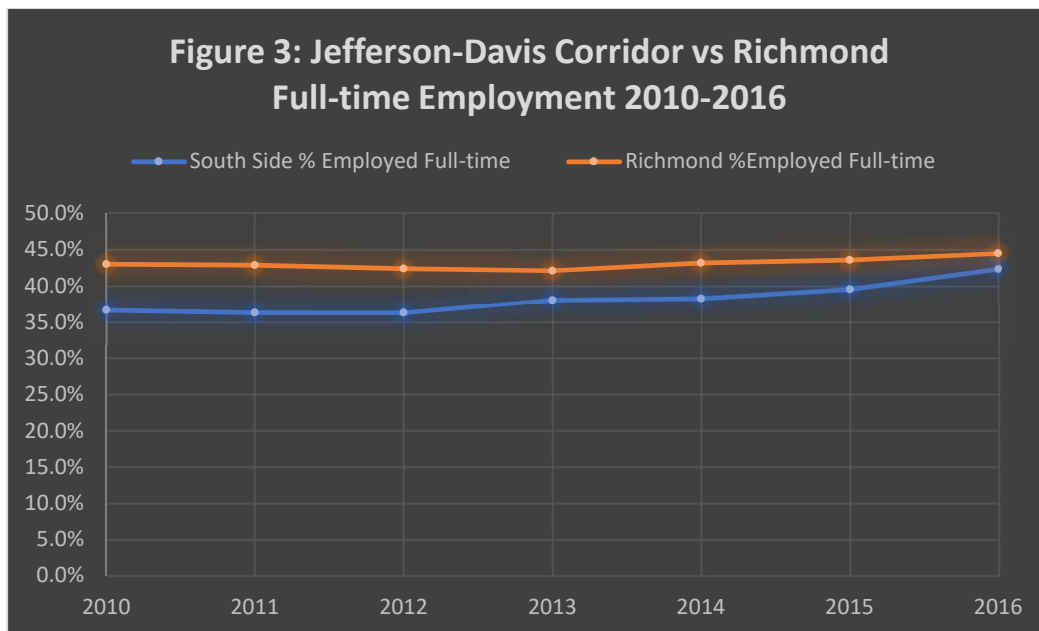


Figure 3 Source: American Community Survey 2010-2016

Figures 4 and 5 show educational attainment on the JDC and Richmond for ages 18-24 and over 25. JDC residents' educational attainment has increased since 2010, with fewer individuals with less than a high school degree, and more individuals with high school, some college, and bachelor's degrees. Yet, educational attainment on the JDC is still lower than educational attainment in Richmond overall. Most JDC residents have only a high school degree, or some college (no degree). The JDC also has significantly less residents with bachelor's degrees than Richmond overall (American Community Survey, 2010-2016).

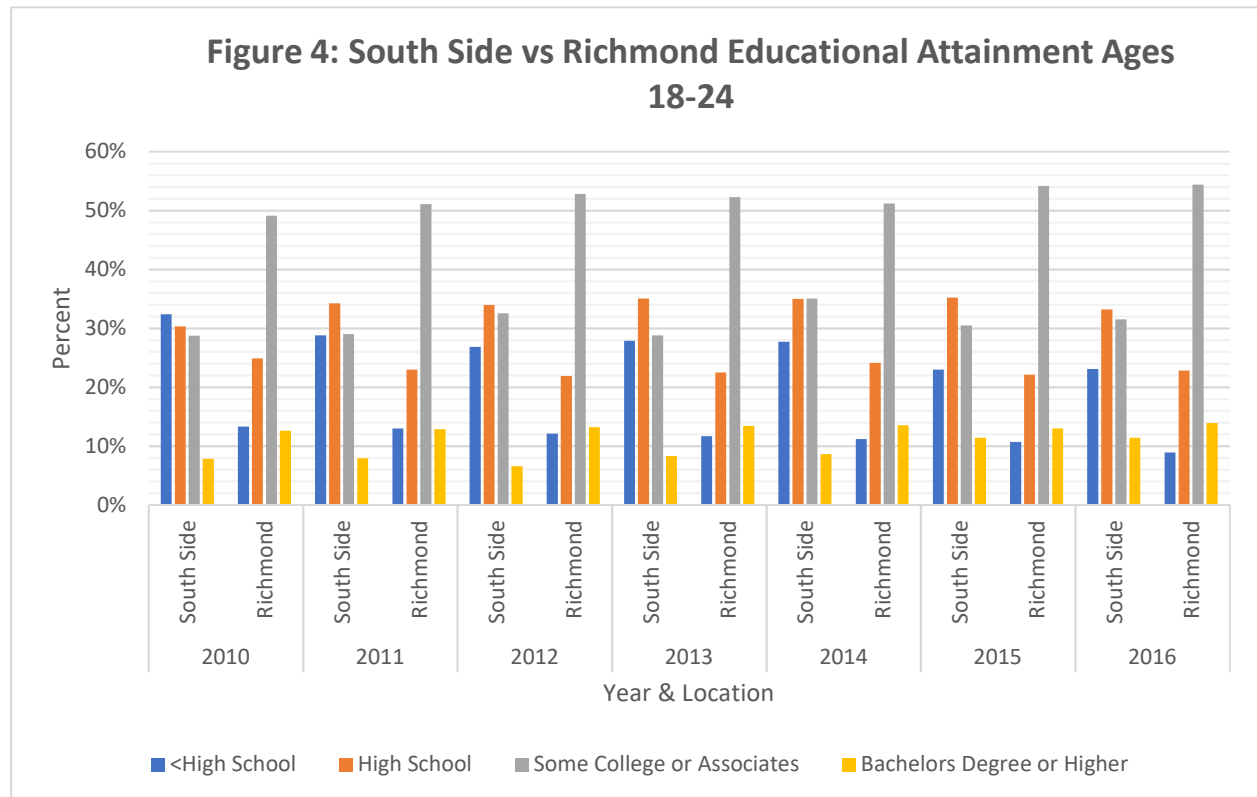


Figure 4 Source: American Community Survey 2010-2016

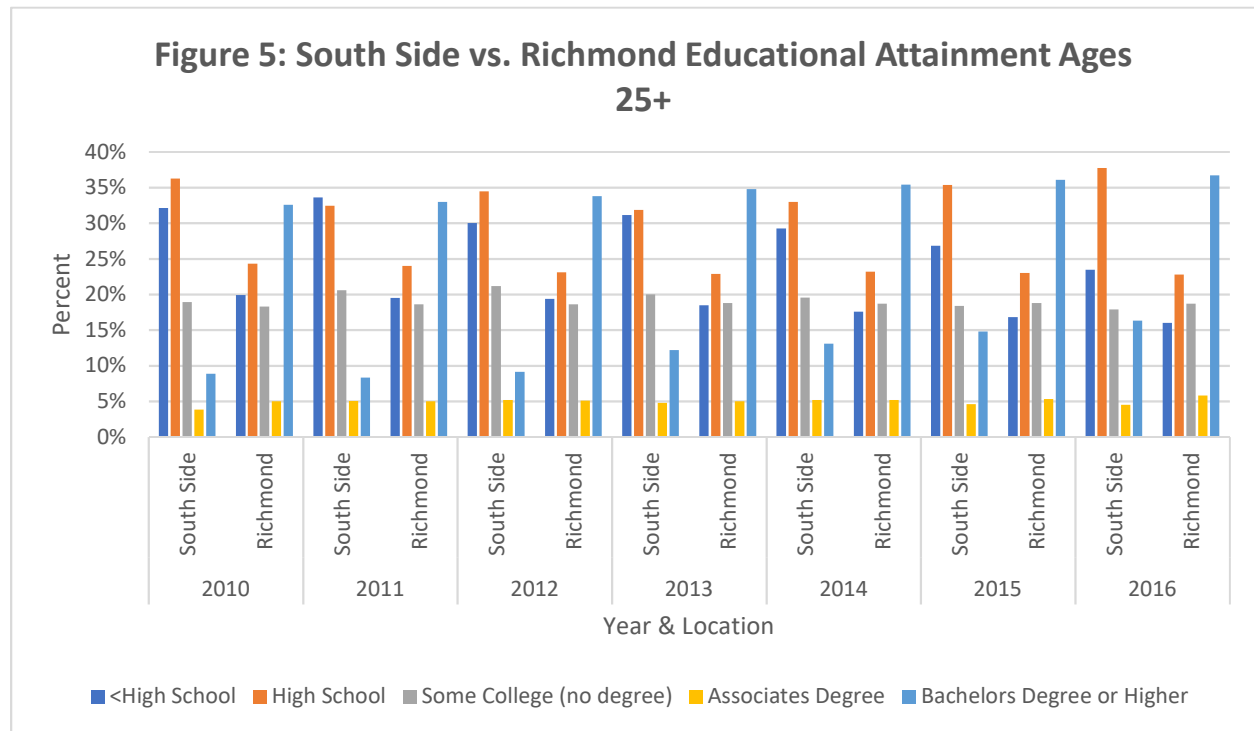


Figure 5 Source: American Community Survey 2010-2016

Figure 6 shows educational attainment on the JDC and Richmond by race for 2016. White individuals in both the JDC and Richmond are more likely to have a bachelor's degree or higher than African-American or Hispanic or Latino residents (American Community Survey, 2010-2016).

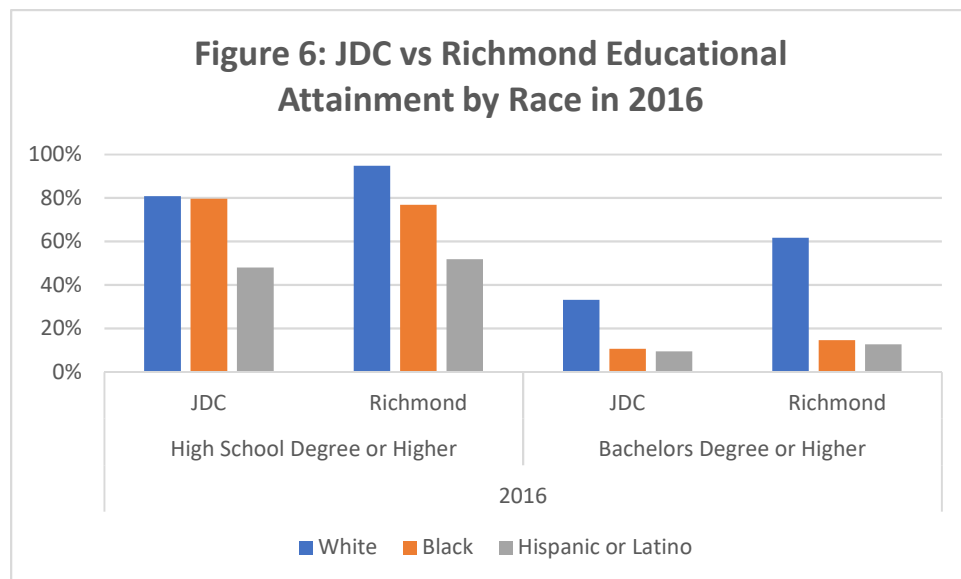


Figure 6 Source: American Community Survey 2016

JDC Businesses

In total, there are 746 verified businesses on the JDC. More than half (53.5%) of businesses employ between 1 and 4 individuals, followed by 21.7% of businesses employing 5 to 9 individuals. Only 2 businesses employ between 1000 and 10,000 people; UPS Freight employs between 1000 and 4999 individuals, while Philip Morris Manufacturing Plant employs between 5000-10,000 individuals (ReferenceUSA, n.d.). **Appendix 1** provides the breakdown of businesses along the JDC.

Richmond's Economic Profile

This section details employment and occupations in Richmond and provides information on different industry clusters.

Employment and Occupations Richmond

Richmond's 2016 overall employment rate is just under 60%, only slightly higher than in 2010. From 2014 to 2015, city employment grew by 2.86% (Richmond City VA, n.d.). African-American employment remains lower than both Hispanic/Latino and White employment. **Figure 7** shows Richmond's employment rate in both 2010 and 2016 by race. The Richmond Regional Planning District Commission (RRPDC) expects employment in the Richmond region to grow by 43%, while projecting 18% growth for the city of Richmond by 2040 (RRPDC, 2015). This suggests rural and suburban growth will outpace urban growth.

Richmond's top 10 employers in 2012 included Capital One, Virginia Commonwealth University (VCU), Henrico School Board, Chesterfield School Board, VCU Health System, Bon Secours Richmond Health System, HCA of Virginia, City of Richmond, City of Richmond School Board, and City of Henrico (RRPDC, 2015). Richmond residents most commonly hold administrative (12.5%), sales (10.5%), management (10%), food and serving (7.8%), and education (7.3%) positions (Richmond City VA, n.d.). **Figure 8** shows Richmond's overall employment percentage by race and industry. The management, businesses, sciences, and arts occupation category saw the most growth from 2010 to 2016. Please see **Appendix 2** for a summary of Richmond's employment clusters.

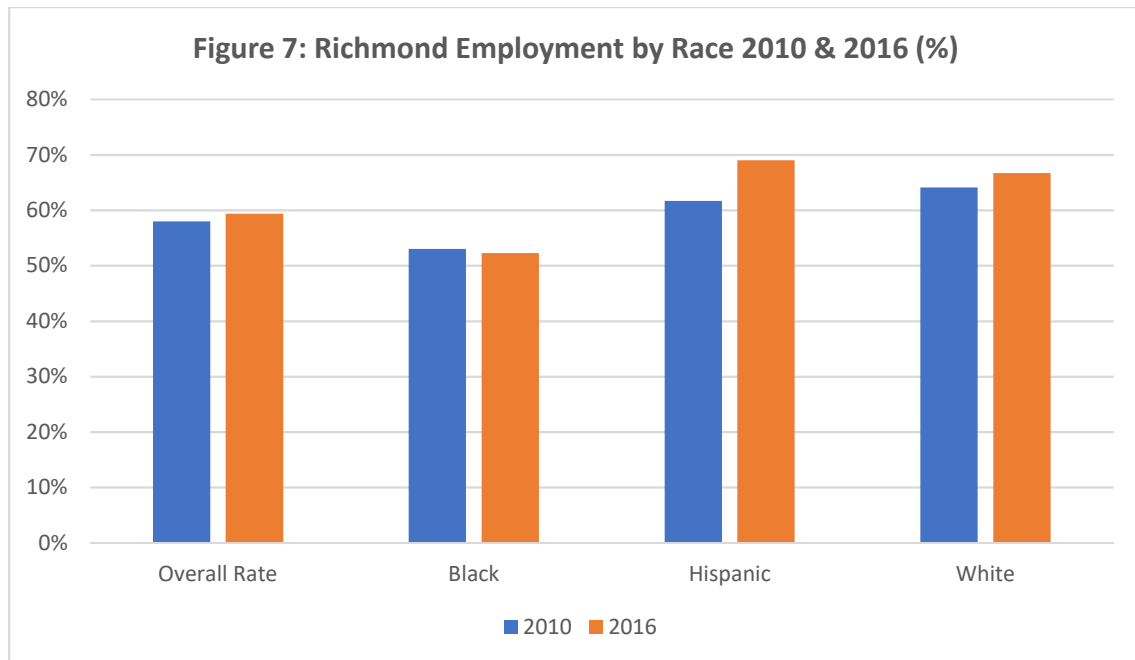


Figure 7 Source: American Community Survey 2010-2016

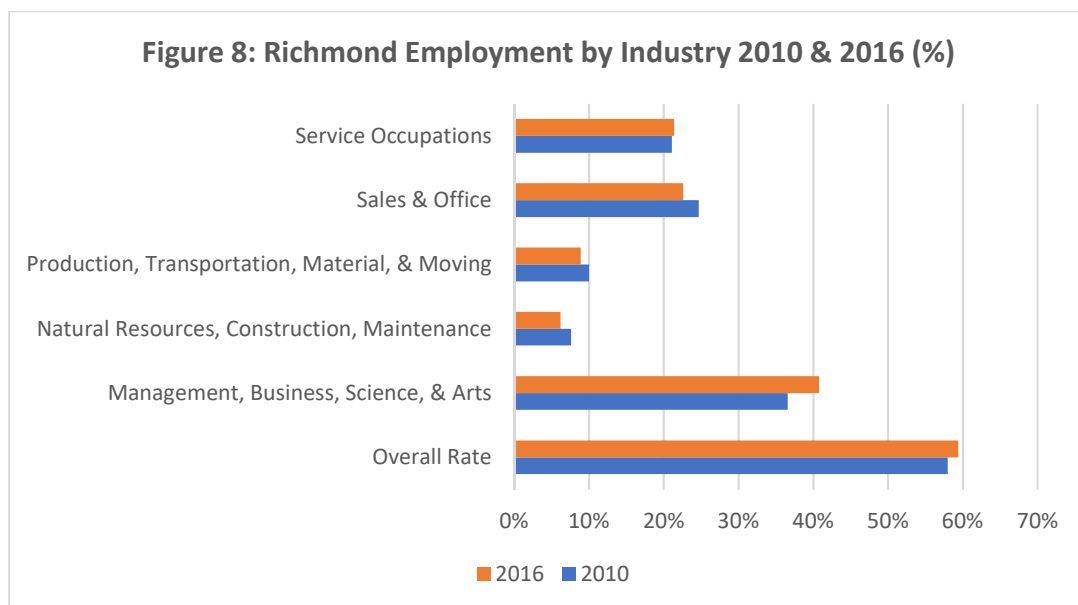


Figure 8 Source: American Community Survey 2010-2016

State and Local Programs: Skills, Training, and Incentives

This section provides a brief overview of available state of Virginia and city of Richmond programs already considered best practices by researchers and practitioners. The State of Virginia also provides business development incentives and workforce training. The programs detailed in this section directly relate to the presented policy alternatives. Additional federal, state, and local programs can be found in **Appendix 3**.

State Programs

Virginia has programs already considered best practices by workforce and economic development researchers and practitioners. These are laid out below. The San Francisco Federal Reserve identified grants as a best practice for using public funds. Some of Virginia's grants dedicated to job creation must be accessible by low- and middle- income and -skilled workers (Gilothe, 2009). These grants can take the form of Community Benefits Agreements – legally enforceable contracts requiring a range of community benefits developers agree to provide as part of a development project – or Partnerships for Working families. Many of Richmond's available grants already have this language included in their requirements.

Business Incentives

Virginia offers a range of incentives for businesses, from start to expansion. Virginia's business website explains the state works with new and expanding employers "that create a high standard of living for Virginians and enhance local and state economies through increased revenue growth" (Business Incentives, n.d.). Some incentive examples include: the Virginia Jobs Investment Program, offering customized recruiting and training assistance to companies creating new jobs or experiencing technical change; the Commonwealth's Opportunity Fund, which helps small businesses expand; and the Virginia Economic Development Incentive Grant, which encourages businesses to create new employment opportunities by locating significant headquarters, administrative, or service sector operations in Virginia (Business Incentives, n.d.). Many of the businesses Virginia hopes to attract will likely require highly educated or skilled employees. These requirements may leave the state's most disadvantaged populations behind.

Skills and Training

FastForward Credentials and Community College Workforce Alliance (CCWA): FastForward is a short-term (six to 12 weeks) workforce credential program that trains individuals for available, and often better-paying, jobs. This program partners with community colleges to offer training and certificate programs (Punch, n.d.). The CCWA is a partnership between John Tyler and J. Sergeant Reynolds Community Colleges aimed at supporting wage gains with workforce credentials. CCWA provides training for nationally-recognized industry credentials in logistics and warehousing, healthcare, manufacturing, construction and

transportation, education, and business services. Each community college provides credentials sought by industry leaders in the area and for jobs industries have available.

According to the CCWA website, the program has enrolled 1,162 students in training for workforce credentials since 2016 (these individuals received funding through the Workforce Credentials Grant). Over 700 students have already completed training and earned credentials (CCWA Supports Wage Gains, n.d.). A state grant is available for the workforce development program: **New Economy Workforce Credentials Grants**. The grant was created to sustain a supply of credentialed workers to fill high-demand occupations, and reduces students' cost of the Workforce Credential training programs by two-thirds (New Economy Workforce Credential Grant, n.d.). Students who use the grant are required to pay one-third of the cost of the training. Tuition costs vary by program. Many individuals that go through the program already have employment and want or need certifications for increased wages or other job prospects (C. Douglas, personal correspondence, April 5, 2018). Richmond was leading in credential awards, meaning that Richmond was getting most of the grant funding in the past two years (N. Sims, personal interview, April 19, 2018).

FastForward and CCWA Outreach: The CCWA and FastForward programs' primary advertising tool is the mailed community college course catalogue (20,000 are mailed each year). The program also advertises on their website, through television commercials, social media, and through partner or community organizations (N. Sims, personal interview, April 19, 2018).

According to the Marketing Director, participants usually hear about or enter the programs through partner organizations, like Goodwill or other community resource centers, rather than through advertisements. The Marketing Director also noted that, despite many employed individuals gaining additional credentials, employers do not play a large role in advertising the program. Word of mouth also plays a role in generating program participants. Program administrators also participate in community partner events, attending 30 in 2017. These events are aimed at educating partner organizations about CCWA and FastForward, rather than reaching participants directly. By targeting these groups, CCWA and FastForward leverage already existing organizations to help recruit participants (N. Sims, personal interview, April 19, 2018).

Barriers to FastForward and CCWA: Common barriers to CCWA and FastForward participation include transportation, cost, and course time. Despite FastForward and CCWA tuition costs being mostly covered by the Workforce Credentials Grant, the last third of the payment may still be prohibitive for low-income individuals. Furthermore, child care is not available for non-credit students, and most classes are held during the day, though some are scheduled for weekends or evenings (N. Sims, personal interview, April 19, 2018).

City of Richmond Programs

The city of Richmond also provides business incentives and economic development programs considered best practices by both researchers and practitioners.

Local Business Programs and Incentives

The city claims it has low business costs, a pro-business climate, and effective financial programs. For example, Richmond offers the Enterprise Zone Program, which provides financial incentives to qualifying businesses located in three Enterprise Zones throughout the city. This program provides site assessments, development fee grants and rebate, machinery and equipment, and employment assistance loans. The city also offers loan revolving loan programs to small businesses, entrepreneurs, developers, and non-profits seeking to stimulate and revitalize Richmond's neighborhoods and create permanent job growth (Incentives & Financial Tools, n.d.).

Local Skills and Training Programs

Richmond's Center for Workforce Innovation, Workforce Pipeline, and Building Lives to Self-Sufficiency (BLISS) programs are already considered best practices for matching employers and job seekers by both researchers and practitioners.

Richmond's Workforce Pipeline: Richmond offers workforce development for both individuals and businesses. One novel program offered is the Richmond Workforce Pipeline program, established in 2011. According to the City of Richmond's website, they are the only locality within the region that offers a "program to assist businesses recruit and develop the talent they need as well as work with the regional workforce to prepare and train them for new jobs" (Workforce Development, n.d.).

Individuals participate in a nine-week soft skills course, which provides instructions on how to dress for interviews and on the job, interview preparation, and interpersonal skills. Participants are then enrolled in training for their future career. The program pays for this training, and any future trainings that advance careers. Over 100 businesses have been served (Workforce Development, n.d.).

Local non-profits also partner with the city and the Workforce Pipeline to bring needed services to citizens. Through Embrace Richmond's partnership with the Workforce Pipeline, individuals receive screening and assessment, customized skills training, work readiness activities (like resume building), and mock interviews (McCaig, 2011).

Richmond's Center for Workforce Innovation (CWI): CWI is a part of the Office for Community Wealth Building (OCWB) working to expand and improve employment pathways by helping individuals find training and connect job seekers with employment. In FY2016, 75 CWI participants sustained themselves above the poverty line, and 212 CWI participants gained employment at an average hourly rate of \$9.95. In FY16 CWI received \$229,000 from the Special Fund (Department of Budget and Strategic Planning, 2018).

Richmond's Building Lives of Independence and Self-Sufficiency (BLISS) Program: This is a joint program from Richmond's Center for Workforce Innovation and the Office of Community Wealth Building designed to help families overcome poverty and become self-sufficient. BLISS targets heads of households to help identify and overcome barriers to success by

providing wrap-around, holistic support services. The program began in 2016, with 10 enrolled individuals and expenditures in FY16 of \$131,538. BLISS' FY2017 target for enrollees is 20 participants, along with 20 projected participants for FY2018 (Department of Budget and Strategic Planning, 2018).

Best Practices

Though Richmond has workforce development programs, these have been ineffective at helping JDC residents find full-time, full-spectrum employment. Richmond's economic development programs have also been ineffective at sparking economic development on the corridor. This section, therefore, provides best practices for workforce and economic development used in other states. A study done by the Lincoln Institute of Land Policy noted the most effective policy options for improving productivity are customized job training, labor market intermediaries, and regulatory assistance. Policies focusing on customized job training treat businesses as clients, with training designed to meet each firm's specifications. The most cost-effective trainings require firms to share training costs, ensuring they have a stake in the outcome (Kenyon, Langley, & Paquin, 2012).

Research shows certain program characteristics promote local business growth better than others. Rather than focusing on reducing business costs, policies should focus on increasing firm productivity – these programs are more cost effective than tax incentives or cash subsidies. Higher productivity may be more sustainable in promoting long-run economic growth for both the firm and the locality; localities collect taxes, thus increasing revenue, and firms increase productivity (Kenyon, et. al., 2012).

Governments can also provide regulatory assistance to firms. Regulations and taxes are often complex, and having a dedicated local government office to help resolve issues with state or federal agencies can help firms be more productive. Research shows this is a low-cost program with beneficial outcomes (Kenyon, et. al., 2012). Please see **Appendix 4** for additional best practices.

Workforce Supply Best Practices

Charlottesville Self-Sustainability Program

Piedmont Virginia Community College (PVCC)'s Division of Community Self Sufficiency Programs connects local employers with quality job seekers by recruiting, training, providing holistic support to individuals in the Charlottesville community. The goal of this program is to provide support for no- and low- wage workers who want upward economic mobility. The program does this by focusing on jobs where job skills can be gained within 8-12 weeks, and on jobs that pay \$25,000 per year with upward career trajectories (R. Schuyler, personal interview, April 12, 2018).

Program Overview: The program costs approximately \$1,800 per person to run (this number does not include the cost of wrap-around services provided by other organizations) (R. Schuyler, personal interview, April 12, 2018). The program partners with the Charlottesville Regional Chamber of Commerce and Virginia's Elevate Program. Network2Network developed a new technology to match job seekers and employers in real-time, and aligns wrap-around services for individuals seeking employment. The program relies on Peer connectors to identify friends, family members, and neighbors that they believe would be a good fit for available jobs. Through a phone app, the Peer connects the job seeker to available jobs, signs the seeker up for training, alerts them to available community services (such as child care or mental health services), makes the appointments, and tracks the job seeker's progress. The application provides tailored step-by-step plans for individuals to gain self-sufficiency. The program specifically ensures applicants are prepared for living-wage jobs. The program began in 2014 with 20 individuals enrolled. Now, 80 individuals who completed the program are employed, and 53 are earning over \$25,000 per year. Additionally, 91 have completed training, 92 are currently enrolled, and 81 enrolled individuals are single mothers (Lawrence, 2017).

Technology: This program uses a novel application developed by a Charlottesville company to provide real-time updates about job and service availability. The application is used by Peers, employers, and service providers. Employers input available job specifications. Peers can see available jobs and help individuals connect with the job. The Peer surveys each job seeker to see what additional support services the seeker needs. For example, the survey performed through the application will ask whether the job seeker has access to transportation or has a child in the house. The job seeker is then connected to wrap-around services, like a loaner car program or childcare assistance, depending on how they answer, job seekers' information is uploaded to multiple agencies, streamlining paperwork and decreasing the amount of time the individual and service providers spend filling out forms. This acts as an incentive for service providers to use the application. Support service appointments are made directly through the application, and Peers can see when a person goes to these appointments. If the job seeker does not go, the Peer can reach out and assist (R. Schuyler, personal interview, April 12, 2018).

Peers & Social Networks: Network2Network leverages individuals' social (peer) networks to connect previously disconnected individuals with available jobs. The program uses socially well-connected individuals (peers) to identify job candidates and match them with available jobs. This program recognizes that jobs are often gained by word of mouth and through social networks, rather than online advertisements. Individuals' social networks, however, need to overlap with the individuals doing the hiring. A job seeker looking to start in an entry-level position does not have the same social network as the hiring manager. This disconnect is often why companies are unable to fill open positions, and why employable individuals remain unemployed (R. Schuyler, Personal Interview, April 2018). Creating new and utilizing existing social networks has effectively connected job seekers to employers in Charlottesville. The program has one peer support coordinator and 112 trained peers. Peers

positions are unpaid and tap into individuals' intrinsic motivations for helping their communities (R. Schuyler, personal interview, April 12, 2018).

Employers: First, the employer coordinator identifies potential employers, available jobs, and whether the available jobs pay a living wage. The employer coordinator then works with employers to understand exact job specifications, such as required trainings, whether available positions are eligible for benefits, and whether available positions are full- or part-time. Employers enter job information into the application where peers can quickly see job specifications. There are 20 active employers participating in Charlottesville's program. Network2Network helps mitigate employer risk by working with area hiring managers to perform 15-minute exit interviews to trainees. Trainees demonstrate learned soft skills, such as shaking hands and making eye contact with interviewers. Trainees that pass this phase are "vouched for" by real hiring managers, thus lowering the perception of risk for hiring these job seekers (R. Schuyler, personal interview, April 12, 2018).

Support Services: The provider network coordinator recruits and works with local service providers, such as child care centers, social services, or mental health counselors. Support services are provided by community and government organizations. Support service personnel are alerted to new job seekers being signed up by Peers for services, such as mental health or substance abuse programs (R. Schuyler, personal interview, April 12, 2018).

Challenges: One past challenge was that small fees could derail program participants' success. For example, one participant needed to print copies of her resume but did not have sufficient funds for printing. Another individual needed interview clothing but could not afford them, while another could not make rent that month and faced eviction. To mitigate these costs, Mr. Schuyler set up the emergency fund for individuals that had fees associated with gaining employment that they could not afford. On average, individuals going through the program will use \$662 of the emergency fund (R. Schuyler, personal interview, April 12, 2018).

Current challenges also exist, such as identifying and filling gaps in services and within the program. Some service providers are resource-constrained and are unable to help additional individuals. Different, secure, and flexible funding mechanisms need to be identified and utilized to be able to continue providing needed services (R. Schuyler, personal interview, April 12, 2018).

Returning Citizens: Returning citizens are not excluded from this program. The program's administrator looks for and works with a broad range of employers to find suitable employment matches for individuals with criminal records. He will even work with employers who may not normally hire individuals with past crimes. For example, an individual convicted of property crime may have been excluded from the healthcare field simply because of the record. However, with risk-mitigating tactics, such as the exit interviews, returning citizens have an increased chance of gaining living-wage employment in previously closed professions (R. Schuyler, personal interview, April 12, 2018).

Demand-Side Best Practices

This section provides examples and explanations of demand-side best practices. These practices help increase jobs by targeting employers.

Brownfield Redevelopment in Waterbury, CT

Waterbury, CT's industrial legacy left a contaminated, structurally unsound, 600,000 square foot property uninhabitable for new businesses. Recognizing the disincentives for the private sector to develop the land and pushed by a long-term property tenant, the city obtained the property and renovated the buildings. During construction the tenant signed a new long-term lease, ensuring some return on investment. The city also immediately renovated space for four new manufacturing tenants and negotiated with other companies to lease spaces or renovate other areas. The city used Department of Defense (DOD) [\$15 million], an Environmental Protection Agency (EPA) grant [\$4.8 million], and a city bond [\$23.5 million]. Total investment was approximately \$40 million.

The public-private partnerships resulted in the renovation or construction of the original 600,000 square foot main site, 48,000 square feet of new manufacturing space, and 14,400 square feet of office space. The original company inhabiting the site added as many as 180 new employees. With the original tenant and four new manufacturing companies, the city expects \$1.1 million annually from the leases and \$2 million annually from taxes.

Identified challenges include establishing trust with the community and business partners; receiving buy-in from these parties; leveraging city capital; and working with current and potential tenants to understand facility needs (ICIC Case Study, 2015).

Mixed-Use Development of Former Textile Mill in Lawrence, MA

Lawrence, MA was one once of the country's leading producers of textiles, but as the industry moved south, the number of abandoned buildings increased. Lawrence's poverty rate also grew, with nearly a quarter of all residents falling below the poverty line.

In 2003, a business owner wanted to expand his business and decided to invest in former textile mills to create a mixed-use complex designed for businesses, residents, shops, and restaurants. The mills had access to the river, were right off a major highway, and there were plans to open a commuter rail station across the street to connect directly to Boston. The business owner targeted businesses first, including state agencies, educational institutions, medical companies, energy companies, and startups. By working with and targeting companies, the businessowner was able to renovate buildings to companies' specific needs. He also targeted similar companies, creating a mini-cluster in his development. The property also has 260 one- and two-bedroom apartments and a large fitness facility, making the complex an attractive place to live. Approximately 25% of residents also work at the new industrial complex.

Investment in this property resulted in positive results for the local economy. The redevelopment resulted in over 4,000 new jobs in the city and a variety of commercial rents (between \$13,000 to \$30,000), with over 200 businesses occupying the property (ICIC Case Study, 2015).

Reforming Regulations

While regulations play an important role in protecting consumers, workers, and the environment, and can spur innovation, regulations are known to hurt the economy. In 2016, federal regulations and interventions cost the U.S. \$1.9 trillion dollars (Crews, 2002). Regulations also hurt business growth, especially for small businesses. According to the National Small Business Association (NSBA), “the average small business owner is spending at least \$12,000 every year dealing with regulations,” and that “more than half of small businesses have held off hiring a new employee due to regulatory burdens” (Day, 2017). The report also notes firms’ average first year start-up costs exceeded \$83,000 (Day, 2017).

Small businesses spend more than \$2,000 annually on state and local regulations (both direct and indirect costs). Representatives from the NSBA used these figures as evidence that regulatory burdens stem job growth and prevent entrepreneurs from starting their own businesses. Over 40% of small business owners also reported spending 40 hours or more per year dealing with federal regulations, while one-third spend over 80 hours. Almost 30% of small business owners report spending 40 hours or more each year on state and local regulation compliance (NSBA, 2017).

According to the Joint Legislative Action Committee (JLARC), the financial impact of regulations is higher for manufacturers than for other industries. Specifically, environmental, economic, workplace, and tax regulations are all estimated to be higher for manufacturers than for other sectors (JLARC, 2016). This is important to understand in the context of the JDC, as many of the empty commercial buildings are by-products of the manufacturing industry. Understanding the financial burdens of regulations on the manufacturing industry may help explain why industry left and has not returned to the JDC. Some of these regulations are in place, however, to protect the environment and residents from toxic waste products, consumers from unsafe products, and workers working in the plants (JLARC, 2016). Protective regulations should remain, while overly-burdensome financial regulations can be adjusted or repealed.

Streamlining Business Permitting in Chicago

Hoping to create jobs and increase economic vitality, Chicago reformed its business permitting and licensing processes to stimulate Chicago’s small business sector. Small businesses employed almost half of Chicago’s workforce. However, business owners felt burdensome processes and regulations prevented business and job growth. New business growth was also inhibited inefficient bureaucratic processes. In 2012, Chicago reduced the number of license types by 60%, from 117 to 49. This saved over 10,000 small businesses over \$2 million in license fees and technical fines each year. Businesses could reinvest in their businesses or communities and create jobs (Regulatory Reform Team, 2015).

To understanding which regulatory processes were harmful to businesses, the city government first mapped the licensing process for small businesses, demonstrating flaws in the process. For example, small business owners needed to call or visit with multiple departments during the application process; departments did not communicate with each other; there were duplicative applications for different departments; and the city had ineffective data management systems (Regulatory Reform Team, 2015).

Chicago then conducted 25 roundtables with small business owners and managers, frontline staff working in city licensing departments, the chamber of commerce, and local economic development organizations. These meetings helped the city government better understand the issues and eliminate burdens on small businesses (Regulatory Reform Team, 2015).

Taxing Commercial Vacant Properties

Cities have tried taxing commercial vacant properties to reduce vacant and blighted properties and to spur economic development. Some notable cities include Pittsburgh, Vancouver, Berkeley, Wilmington, and Washington, D.C. In 1913, Pittsburgh implemented a land value tax that taxed vacant properties higher than land with structures as an incentive to develop vacant land. Pittsburgh ended the program in 1981 because the tax had achieved its purpose to drive downtown development; there was little vacant property left within the city (Povich, 2017). Experts believe both the tax and a demand for additional commercial space helped spur economic growth and development within Pittsburgh (Oates, 1997).

Wilmington, DE's vacant commercial property tax has been in effect since 2005. The program was originally designed to discourage speculators who bought properties and held them, rather than develop or rent them to businesses. Both landlords and investors pushed back on implementing the tax. Wilmington hired one individual at less than \$80,000 to administer the program. The administrator noted the program was "fairly effective" at reducing vacant commercial properties (C. Ferguson, personal interview, April 4, 2018).

The program faced challenges after 2008 when property owners defaulted on mortgages, and banks did not pay the taxes to the city. Estate properties are sometimes caught in the vacant commercial property tax programs, and disputes between owners or other legal barriers make challenges around these properties difficult to resolve (C. Ferguson, personal interview, April 4, 2018).

Table 2 provides Wilmington, DE's yearly reductions between December 2004 and November 2009, and revenue for 2009 and 2010.

Table 2: Wilmington, DE Vacant Commercial Property Tax			
Year	Buildings Taxed	Vacancy Reduction	Revenue
2004	1405	-	-
2005	1235	170	-
2006	1112	123	-
2007	1053	59	-
2008	1125	-72	-
2009	1089	36	\$1.2M
2010	863	226	\$1.7M
*Revenue information on hand only for 2009 and 2010			
*Numbers from Cynthia Ferguson, Program Administrator (April 2018)			
Source: C. Ferguson, personal interview, April 4, 2018			

Stakeholders

The RVA Thrives Working Group should consider the following stakeholders when considering the policy alternatives in this report.

Jefferson Davis Corridor Residents: These stakeholders are most affected by the policy alternatives presented in this report, as employment directly affects all aspects of their lives. Residents have a strong interest in addressing unemployment on the corridor, but have low or moderate political capital to advocate for assistance. The Thriving Cities Group, who is supporting the RVA Thrives Working Group, hopes the working group initiatives will continue without their assistance in the future.

Richmond City Council: Policy alternatives will likely need buy-in from Ellen F. Robertson (6th voter district) and Reva M. Trammell (8th voter district), city council representatives for the Jefferson Davis Corridor. These individuals will be instrumental in working with Richmond city government to implement policy alternatives.

Mayor's Office: Mayor Levar Stoney will ultimately approve any budgetary changes resulting from the policy alternatives. Mayor Stoney should be interested and engaged with helping previously marginalized communities gain access to employment and self-sufficiency.

Richmond-Area Non-Governmental Organizations: Non-profits assist residents throughout the city access needed services or help residents directly. Some non-profits may be directly affected by the policy alternatives by being called on to provide additional services. Alternatively, as more residents gain employment, their services may be less needed.

Area Employers: Area employers have an interest in developing an untapped workforce. Employers will benefit from a diverse, skilled, local employee pool of JDC residents.

Evaluative Criteria

The proposed policy alternatives will be evaluated against the below criteria. Each criterion is assigned a weight signifying its value in the analysis.

1. Cost Effectiveness

This criterion provides the cost-effectiveness evaluation of the policy alternative; we hope to maximize effectiveness while minimizing costs. The outcome measure for this analysis is the number of individuals employed along the JDC (census tracts 602, 607, 608, 609, 610). Costs for program implementation will include technological infrastructure, physical space, publicity, personnel, and training costs. Costs will be calculated over a ten-year period, with a discount rate of 3%, an inflation rate of 2%, and presented in present value. This criterion is weighted at 35%.

2. Equity

Each policy option aims to increase employment for JDC residents. However, these policies may unintentionally affect other individuals, including non-residents, or may disproportionately affect certain groups. This criterion assesses increased employment for all JDC residents, regardless of age, sex, race, family structure, and criminal record status. However, we want to specifically target unemployed or underemployed individuals with incomes below the median average for the JDC. This criterion is weighted at 25%. Equity will be scored as low, medium, and high.

3. Full-Spectrum Employment

This criterion seeks to capture the type of employment an individual obtains. We want individuals to obtain employment that allows for upward employability, a living wage, and benefits. This would be accounted for through qualitative assessments of employment obtained by individuals that benefitted or used the policy alternative. This criterion is weighted at 20%. Full-spectrum employment will be scored as low, medium, and high.

4. Administrative Feasibility

This criterion assesses the administrative feasibility (to include expanding existing programs, updating or acquiring technology, personnel, updating existing structures or creating new structures), administrative costs, and the government's ability to implement the change. This criterion is weighted at 10%. Implementation ability will be scored with low, medium, and high.

5. Political Feasibility

This criterion assesses the political feasibility of implementing the policy alternatives, including whether the option is likely to receive support from Richmond city's government, including the city council, the mayor's office, and residents. This criterion will be evaluated on likely, unlikely, or uncertain support. This criterion is weighted at 10%. Political feasibility will be scored as low, medium, and high.

List of Policy Alternatives and Outcomes Matrix

There are two main categories of policy alternatives; workforce development and economic development. Both workforce and economic development strategies have been named by experts and practitioners as best practices for creating jobs and reducing unemployment. The first alternative provided is the status quo; all other alternatives will be measured against it. Please find the other policy alternatives listed below, with analysis beginning on the next page.

Workforce Development

1. Status quo
2. Expand BLISS program
3. Expand Community College Workforce Alliance and FastForward outreach to the JDC

Economic Development

4. Host a government-industry forum
5. Richmond redevelops a vacant warehouse
6. Tax vacant commercial properties

Alternative	Cost-Effectiveness	Equity	Full-Spectrum Employment	Administrative Feasibility	Political Feasibility
Status Quo	\$14,880 per person to gain employment	Low	Low	High	Medium
Expand BLISS	+ \$3,570 per person to gain employment	High	High	Medium	Medium
Expand FastForward Outreach	--	Medium	Medium	High	High
Government Forum	- \$4,153 per person to gain employment	Medium	Unclear	Medium	Medium
City Redevelops Empty Warehouse	+ \$3,963 per person to gain employment (\$183 revenue per person)	Medium	Unclear	Low	Low
Tax Vacant Commercial Properties	\$3,316 per person to gain employment (\$81 revenue per person)	Medium	Unclear	High	Medium

Policy Alternatives and Analysis

This section provides both explanations and analysis of the policy options. Each policy alternative is analyzed using the criteria and compared to the status quo.

1. Status Quo

This policy alternative lets present trends continue without any intervention. This section will detail projected population, labor force participation, employment, and unemployment for Richmond and the JDC to 2030. Unlike the graphs in the background section which provide percentage employed for out of the entire labor force, employment calculations are only for individuals 16-64 in the labor force. This section will also provide the cost estimate per individual to gain employment. Each policy alternative will be measured against the status quo. Please see **Appendix 5** for population, employment, and cost breakdowns.

Cost-Effectiveness

This criterion shows the cost per person to gain employment. Continuing with the status quo will cost the City of Richmond **\$14,880 per individual to gain employment**. Cost is calculated over total employment gained, not just JDC residents. Please see **Appendix 5** for the breakdown of the cost-effectiveness analysis.

Equity

This policy alternative earned a **low** equity score. The JDC community faces economic hardship and disinvestment from the city of Richmond. Without intentionally targeted programs, there will be no change in unemployment along the JDC, and individuals will continue to struggle to find employment.

Full-Spectrum Employment

This policy alternative earned a **low** full-spectrum employment score. Currently, JDC residents have less full-time employment than the rest of the Richmond. Without intervention, residents are unlikely to obtain employment with a living wage, that offers benefits, that is full-time, and where individuals can grow within the company.

Administrative Feasibility

This policy alternative earned a **high** administrative feasibility score. Getting buy-in from city of Richmond personnel to have existing programs continue without additional changes is winnable.

Political Feasibility

This policy alternative earned a **medium** political feasibility score. Normally it would be easy for most members of the government to say they are working to alleviate poverty and increase employment with existing programs. However, if enough JDC residents demand additional changes from their city council representatives keeping the status quo might not be politically feasible.

Workforce Development Options

2. Expand Building Lives of Independence and Self-Sufficiency (BLISS) to the JDC

Richmond's Center for Workforce Innovation (CWI) BLISS both assists individuals become self-sufficient and obtain employment by providing wrap-around support services in conjunction with job training and readiness. The BLISS program plans to expand in FY2018 and beyond. Program expansion could mimic Charlottesville's Network2Network model and use community members and technology to match JDC residents and employment.

The application puts job seekers in touch with wrap-around services, such as training, education classes, childcare, and mental/physical health services. Service providers are also linked to the app, and are alerted an individual will need services. Service providers' forms are pre-populated with individuals' information, entered by the Peer. This streamlines service providers' work and allows the individual to get multiple services quickly, without filling out duplicative paperwork. The Center for Workforce Innovation (CWI), part of the OCWB, would need to purchase the license for the application, which costs approximately \$17,000. Two individuals in the BLISS office will act as Peer support and employer support coordinators.

The CWI would also need to hire four Peers from the JDC to serve the JDC. To start, these individuals could be hired as contractors to facilitate quickly implementing this program. Using the median pay for the city of Richmond employees, I assume each Peer would be paid an annual salary of \$45,673. After two years as contractors these individuals would be hired as full-time employees for the city of Richmond. CWI would also need to purchase equipment for these individuals, including either tablets or laptops, and set aside reimbursement for gas and use of private vehicles. I recommend purchasing either iPads or small, lightweight laptops for ease of portability and use. Either costs around \$400.00 per person. These four individuals would serve the neighborhoods previously listed in the problem statement.

Included in the expanded services could be a Certificate of Employability program provided by BLISS to returning citizens. Many occupations require licensing or certifications, and returning citizens are often denied licenses based on their prior conviction, even if the conviction is unrelated to the licenses. This often excludes qualified individuals from obtaining a license. Proving employability through a certificate may mitigate potential employers' fears and remove perceived risks about hiring a returning citizen.

Cost-Effectiveness

This policy alternative will cost **\$18,450 per person to gain employment**. This is an increase of \$3,570 from the status quo. Approximately 1,317 JDC residents should gain employment by 2030. Please see **Appendix 6** for the cost-effectiveness breakdowns.

Equity

Since this alternative focuses directly on the JDC by both employing and targeting JDC residents, the alternative gets a **high** equity score. At the very start of this alternative four individuals from the JDC neighborhoods are hired as community Peers. Hiring local, trusted individuals is one reason why this model is successful in Charlottesville (and why other peer-modeled programs, like community health workers, are successful). Hiring community members also provides the city insights into the community and gives voice to community members. Peers then target the individuals they know need the most assistance getting wrap-around services with the ultimate goal of securing employment. Peers can target unemployed or underemployed individuals, rather than individuals currently employed. Targeting the JDC with this model this ensures JDC community members go through the program, without spillover into other areas of Richmond.

This alternative may become less equitable if Richmond does not hire the Peers as full-time equivalents at the end of two years. Hiring the Peers as contractors first often decreases bureaucratic hiring processes and helps programs start quickly. Then, during the two-year period, the city can allocate funding and resources to hire the Peers directly. However, if the Peers are not transitioned to full-time equivalents, they will not have the same access to employee benefits, such as healthcare, retirement, or vacation time, as city employees. This is less equitable for the Peers.

Full-Spectrum Employment

This policy alternative earned a **high** full-spectrum employment score. This policy alternative targets living-wage jobs that offer benefits or upward employability. JDC residents participating in the BLISS program will have increased opportunities to gain full-time employment that offers benefits and upward mobility.

Administrative Feasibility

This policy alternative earned a **medium** administrative feasibility score. This model simply expands and focuses the BLISS program. Hiring Peers as contractors first limits administrative and bureaucratic difficulties, such as requiring competitive hiring or allocating funding for additional full-time equivalents. Any bureaucratic or administrative challenges can be worked out during the two-year transition period from contractor to full-time equivalent.

Political Feasibility

This policy alternative earned a **medium** political feasibility score. Richmond established the OCWB in 2014, after the Mayor's Anti-Poverty Commission Report was released in 2013. Since 2014 the OCWB has established and implemented different programs to combat poverty. Despite mixed results, these events show Richmond's willingness to act to lift city residents out of poverty. Since this program targets individuals in a community that, historically, has had high poverty, the city may be more willing to implement this program than keep the status quo.

3. Expand Outreach for FastForward Credentials and Community College Workforce Alliance (CCWA)

Richmond already has a robust community college workforce pipeline program throughout the state, including in the two community colleges near the JDC – J. Sergeant Reynolds and John Tyler. As previously mentioned, this program acts as its own pipeline; area businesses have partnered with the community college network to develop courses or training needed for different careers. The program assists individuals earn certificates wanted by area employers. However, residents along the JDC may not know about the program or that they can apply for grants to help pay for courses.

CCWA and FastForward outreach already leverages community organizations' connections to provide outreach for their programs. Program administrators will continue providing outreach to community partners, but with a focus on organizations that exist on and serve the JDC. Explanation of available grants and other financial aid should be included in the outreach. Furthermore, community partners may be able to furnish the last portion of payment for CCWA and FastForward courses, making the credentialing programs more accessible to JDC residents.

Included in this program expansion could be targeted outreach to returning citizens and providing returning citizens a "Certificate of Employability." Though traditionally done through judicial courts, the community college network could establish their own certificate program for returning citizens that complete training classes, earn their GED or Associates degree, or obtain certifications. Returning citizens could be assigned a college counselor that will assess their employability. Certificates of Employability signal to employers a returning citizen meets employment criteria.

Cost-Effectiveness

Since the program began in 2016, cost-effectiveness data was not available. CCWA and FastForward program outreach already occurs; therefore, targeting outreach to JDC residents should not make the current program more expensive. However, targeting the outreach may increase JDC residents' participation and ultimately their employment.

Equity

This policy alternative earned a **medium** equity score. Targeting outreach to JDC-specific partner organizations ensures that mostly JDC residents gain knowledge and awareness of the CCWA and FastForward programs. This may result in increased program participation and ultimately increased employment. However, simply expanding outreach does not mitigate known participation barriers, such as child care, transportation, or cost. These challenges may be too difficult for unemployed residents to overcome.

Full-Spectrum Employment

This policy alternative earned a **medium** full-spectrum employment score. CCWA and FastForward utilize industry input when developing and offering credentials, specifically developing courses for well-paying, in-demand, local jobs. These may also be full-time positions, with benefits, and upward employment mobility. However, there is no guarantee JDC residents will obtain jobs, even with credentials. Furthermore, some of the jobs may still be shift jobs that do not offer benefits.

Administrative Feasibility

This policy alternative earned a **high** for administrative feasibility. Increasing and targeting outreach should not be difficult for the CCWA and FastForward programs. Currently there is only one individual in the marketing department, meaning she provides all outreach. Therefore, increasing outreach may require hiring another individual, or shifting existing personnel to the marketing department, to be successful.

Political Feasibility

This policy alternative earned a **high** for political feasibility. This option does not require buy-in from the Richmond government, as outreach would occur outside their purview. However, it does require buy-in from the CCWA and FastForward Marketing Director and the Virginia Community College System. The Marketing Director indicated she is interested in providing additional outreach to community organizations and wants to foster increased connections (Sims, Personal Interview, 2018).

Economic Development Options

4. Establish Biannual Government-Industry Forums to Discuss Business Growth Barriers

Research identifies helping businesses navigate regulations as a best practice to helping industries grow. Removing obstacles, eliminating inefficiencies, and relaxing constraints that impede productivity can help develop different industries (Porter, 2000). Heavily regulated industries have fewer new firms enter the market and experience slower employment growth in small firms (compared to large firms). Studies find small businesses are especially hurt by regulations, often preventing market entry and employment growth. One study found a 10% increase in regulations leads to a 0.5% decrease in new firms, a 0.9% hiring decrease among all firms, and a 0.5% hiring decrease in small firms (Bailey & Thomas, 2017). The Small Business Association (SBA)'s 2015 Small Business Profile Report found that of all small businesses, firms with fewer than 100 employees employ the highest number of workers. Small businesses also predominantly minority-owned, increasing diversity in the business world (U.S. SBA, 2016).

Though the SBA's definition of a small business is one with fewer than 500 employees, for this report I will assume a small business is anything less than 50 employees. The National Federation of Independent Businesses (NFIP) estimates small businesses spend \$12,000 per year, on average, in federal, state, and local regulation costs (NFIP, 2017). For the purpose of this paper, I will focus on state and local costs, which cost businesses an average of \$2,000 per year (NSBA, 2017). According to ReferenceUSA.com, a database that contains information on businesses in the U.S., there are 21,282 small, medium, and large businesses in Richmond. Most of these are small businesses with 1-49 employees (20,242 businesses). Medium-sized businesses with 50-249 employees account for 3.4% of the total, while large employers with 250-10,000+ employees make up 0.7% of businesses (ReferenceUSA, n.d.).

Anecdotally, business owners have said working with the city of Richmond to get permitting and incentives (like Enterprise Zone) approval is difficult and time consuming. For example, one JDC business owner expressed frustration at the April 5, 2018 RVA Thrives Jobs Working Group meeting at the onerous process for registering his business in an Enterprise Zone. Not only was the paperwork time-consuming, but he has not heard back about the status of his business being in an Enterprise Zone for almost two years. The business owner noted many businesses do not even bother applying for funding because they never hear back from the city (Community Meeting, April 5, 2018). Both response and funding delays will deter businesses from moving to, or entrepreneurs from starting businesses in, Richmond. These inefficient government services disincentivize and prevent business development and growth in both Richmond and especially along the JDC.

Forum Structure: The City of Richmond's Economic Development and Small and Minority Business Authorities will host a business forum to help identify regulatory and procedural barriers plaguing businesses. The forum will occur twice a year with business owners, city

residents, area non-profit and non-governmental organizations, and city officials. In each meeting business owners will tell city officials which regulations and/or processes are preventing new businesses from starting, delaying businesses' start-up time, and preventing business growth. City officials will provide solutions at the meeting, such as creating a "one-stop shop" for permitting, streamlining applications, and providing feedback within a reasonable amount of time for applications. For example, the city should provide approval for permits within three business days, and should let business owners know the status of their Enterprise Zone applications within 30 business days.

The government will be held accountable to city residents and business owners by providing process improvement and regulation updates at each meeting. Identifying exact causes for difficulty with investing or establishing businesses will push the city government to address these issues and could lead to public-private investment partnerships. This forum will increase city accountability to business owners and residents by finding solutions and promoting investment. City officials should especially encourage business investment along the Jefferson-Davis Corridor, rather than promoting already successful areas, such as the downtown area.

This forum should include representatives from:

- Industries and business owners already on the corridor;
- Growing traded industry clusters, such as the business services, financial services, and education and knowledge creation industries;
- Growing local clusters, such as healthcare and hospitality/food and beverages;
- Local small, medium, and large business owners;
- Non-profit and workforce development partners;
- Community residents and representatives.

Regulations: The City of Richmond's Economic Development and Small and Minority Business Authorities will host a business forum to help businesses identify regulatory barriers preventing businesses from expanding or moving to the JDC. Once regulations are identified, the Economic Development Authority will work with the Mayor's office to determine which regulations could be relaxed or removed. If needed, the city could advocate on behalf of businesses in the state of Virginia or the federal government to adjust prohibitive regulations. This alternative requires Richmond's Economic Development Authority to actively recruit both small and large business owners, and the corridor's vacant commercial property owners, to participate.

City Processes: This forum will also allow business owners to tell city officials which business processes are preventing new businesses from starting and established businesses from expanding. By streamlining business needs, more businesses will look to Richmond to establish themselves. More entrepreneurs from the city will be able to start businesses more quickly and employ city residents, increasing Richmond's employment rate. Streamlining incentive programs for areas that have the most economic development need, such as the JDC, can help revitalize the areas.

Cost-Effectiveness

This alternative will **cost \$10,727 per person to gain employment**. This is \$4,153 less than the status quo. Approximately 253 JDC residents can be expected to gain employment by 2030. Please see **Appendix 7** for the cost-effectiveness calculations and assumptions.

Equity

This alternative earned a **low** for equity. This forum is open to the entire city of Richmond, not just the JDC. Any process improvements or repealed regulations will help all businesses in Richmond, and not exclusively on the JDC. By streamlining and fixing business programs, more businesses will be able to open in the whole city. Some programs, like the Enterprise Zone program, are designated only for certain geographic areas, such as along the JDC. Promoting and fixing this specific program may help establish and grow businesses along the JDC. If this option succeeds in sparking new development and investment along the JDC, residents may also benefit from related services, such as transportation, or recreational activities, such as shops and restaurants.

This alternative's goal is to help businesses develop on the JDC. JDC community members may have a hiring advantage because of their proximity to the businesses. JDC residents hired into the businesses may also have a better chance of keeping the job since it removes one of the known barriers to gaining and keeping employment – transportation. There is no guarantee, however, that currently unemployed individuals will be those hired into the jobs, or those who most need employment will be hired (such as those below the poverty line). Employed individuals applying for jobs closer to their homes may “look better on paper,” thus inadvertently excluding currently unemployed individuals from obtaining employment.

Furthermore, business owners rather than residents may benefit most from this alternative. This may be mitigated by the fact that more JDC residents could become small business owners, or that businesses moving onto the JDC will employ JDC residents.

Full-Spectrum Employment

This alternative earned an **unclear** score for full-spectrum employment. This alternative's goal is to spur economic development along the JDC by making it easier for business owners to start and expand their businesses. JDC residents hired into any firm may have the opportunity to move up in the company. However, this is not guaranteed. Furthermore, small businesses may not be able to offer benefits or full-time salaried positions. These uncertainties make it difficult to project this outcome.

Administrative Feasibility

This alternative earned a **medium** administrative feasibility score. Setting up the forum and performing outreach to all stakeholders may be time-consuming but should not be too difficult. Ensuring representatives from the appropriate government offices attend should also not be difficult. However, implementing suggested changes resulting from the forum may be more difficult. For example, if Richmond decides to house all the different permitting offices in one building, city workers may be temporarily displaced, and normal work may be interrupted.

Finding space for all the necessary individuals may also be difficult. Richmond may need to hire additional personnel to streamline and shorten response times to business owners applying for different city incentive programs (e.g. Enterprise Zone status).

Political Feasibility

This alternative earned a **high** political feasibility score. Hosting a forum promoting business development should be an easy sell for city officials and Richmond's Economic Development office. Richmond's Office of Economic Development promotes Richmond as Virginia's working and business capital. Making the business climate more favorable by listening to, and fixing, businesses' needs will ultimately make the city more profitable.

5. City of Richmond Redevelops Empty Warehouse Space Along the Corridor

Like the brownfield site in Connecticut, many warehouses along the JDC are sitting empty. Though Richmond provides economic incentives to businesses to locate on the JDC, such as designating the corridor an Enterprise Zone, offering grants, capital loans, and wage assistance, businesses have not moved onto the corridor. To jumpstart development, the city of Richmond will purchase one building, located at 700 Gordon Ave, with 130,000 square feet available warehouse and office space using Capital Improvement Program funding, public-private partnerships, and federal or state economic development grants. The property and building cost \$3,250,000. Expected building renovation cost is \$15.9 million. (S. Snyder, personal interview, April 11, 2018).

The city will also actively recruit and negotiate with businesses to move or expand to the sites. Warehouses and office space will be renovated to a minimum standard with negotiable specifications from recruited businesses. This ensures buy-in and increased satisfaction from future tenants. Tenants may have the option to purchase the newly renovated buildings or sign long-term leases with the city.

Cost-Effectiveness

This policy alternative will cost **\$18,843 per person to gain employment**. This is \$3,963 more than the status quo. This alternative expects to provide 130 jobs for JDC residents by 2030. However, it will also bring in \$183 in revenue per person to gain employment. Please see **Appendix 8** for the breakdown of the costs.

Equity

This alternative earned a **low** equity score. Though this policy alternative will create jobs, it remains unclear whether individuals along the JDC will gain employment because of this alternative. This alternative does not guarantee only currently unemployed JDC residents will gain employment. Currently employed individuals have an advantage over unemployed individuals; they “look better on paper.”

Furthermore, the business that takes over the newly developed space cannot be required to hire individuals from the surrounding neighborhoods, though there are incentives for hiring individuals from enterprise zones. These incentives will only work if the city government streamlines their application process and reduces response times.

Overall, if this alternative sparks economic development along the JDC, we can assume that some residents will gain employment. But without being able to guarantee employment will go to JDC residents, currently unemployed individuals, or individuals that are underemployed, this alternative’s equity score remains low.

Full-Spectrum Employment

This alternative earned an **unclear** rating for this criterion. This is a large space to redevelop, which can ultimately house many individuals. As such, a large firm may decide to relocate to this space. Large firms are more likely to offer full-time positions with benefits, and the ability for employees to grow within the company. If many small firms lease the space, JDC residents may also be able to grow with the business and gain full-time employment, but small firms may not be able to offer healthcare or retirement benefits.

Administrative Feasibility

This alternative earned a **medium** rating for this criterion. Though new individuals do not need to be hired to administer the program, as the city already has an economic development office, these individuals will need to put aside other work and initiatives to focus on this one. Furthermore, this alternative requires the city government to put in a lot of work for success. Richmond needs to allocate money from other projects to pay for this one, place proposal requests for redevelopment, review the proposals, and actively find/recruit one or more businesses to lease the building.

Political Feasibility

This alternative earned a **low** score for this criterion. This alternative requires the Richmond city government to advocate for a neighborhood which has been disinvested in by both city institutions and private corporations. Though the city should recognize the need for development along the JDC, historically, it has not been motivated to direct resources to these residents.

Since the city has not invested as strongly in these communities as others, the city has lost the trust of corridor residents. With residents looking beyond the city government for assistance (e.g. to non-profits and other community organizations), this alternative may not gain enough traction with residents to push their city council representatives for development. Even if this alternative had support from residents and the JDC's city council representatives, the city may find it involves too much work or risk to be feasible.

6. Tax Vacant Commercial Properties

Like other cities, Richmond could tax vacant commercial properties after they remain vacant for more than 12 months. To model the tax after Washington, D.C.'s, I adjust for the cost of living: Richmond's cost of living is 37% lower than D.C. (Cost of Living Calculator, n.d.) Therefore, Richmond should impose a tax rate 37% lower than D.C. [D.C. assessed tax - \$5.00 per \$100.00 of assessed value. Blighted \$10.00 per \$100.00 of assessed value]. The tax would be collected by City of Richmond's Finance Agency and would require hiring one more person to administer the program. I will assume the individual will be hired at the City of Richmond's median yearly salary, \$45,673. The building would have to be occupied by 10% of the square footage to be considered not vacant. Tax on the commercial property would end when the property owner has a signed lease for an occupant, if the owner shows they are occupying the space, or redevelopment or construction has begun on the building. Building owners would provide leases, occupancy, and construction information to the City of Richmond Property Maintenance Division.

Tax rates would differ depending on whether the building was blighted; blighted buildings would be taxed at a higher rate.

- Tax rate vacant commercial property: \$3.15 per \$100 assessed value
- Tax rate blighted vacant commercial property: \$6.30 per \$100 assessed value

Currently, vacant buildings are identified by the City of Richmond Property Maintenance Division inspectors during daily inspections. The building is taken off the Vacant Building List once it is occupied. However, vacant building property owners are required to register their building with the city when it has been continually vacant for over 12 months and is considered "derelict" as found in the state Code 15.2.907.1. To implement the tax, the Vacant Building List will need to categorize vacant properties by commercial and residential, and track vacancy length. Once commercial properties reach vacancy for six months, the tax will begin. The Property Maintenance Division will need to coordinate with the Finance Department, who will collect the tax.

Cost-Effectiveness

This policy alternative will cost **\$18,196 per person to gain employment**. This is \$3,316 more than the status quo. However, it will bring in **\$81 in revenue per person** to gain employment. Please see **Appendix 9** for the cost breakdown for this alternative.

Equity

This policy alternative earned a **medium** equity score. This criterion measures the extent to which JDC residents are beneficially affected by the proposed policy alternative, specifically whether a vacant commercial building tax will help JDC residents gain employment. By taxing vacant commercial properties, the city hopes to reduce vacant properties and spur economic development, returning these buildings to purposeful use. Based on proximity, JDC residents may be best poised to gain employment. However, there is no guarantee this policy option will

increase employment for JDC residents. Businesses that do move into the area may not hire JDC residents. However, businesses to do enter the corridor could bring jobs with high multipliers (jobs that create more supporting jobs), thus creating more jobs for the area. Additional spill-over effects may also occur, such as demands for amenities close to businesses, may increase the number of shops or restaurants. Therefore, even if residents do not get the jobs directly from businesses that move into the vacant buildings, they may be able to find employment in supporting jobs or in shops and restaurants.

Full-Spectrum Employment

This criterion measures the type of employment an individual obtains. Vacant buildings along the JDC range from warehouses, to storefronts, to office buildings, suggesting a wide range of employment options for JDC residents. This makes projecting this criterion difficult. The overall rating for this alternative is **unclear**.

Administrative Feasibility

This alternative earned a **high** administrative feasibility score. This criterion assesses the administrative feasibility of implementing a vacant commercial property tax. This program may require hiring one more individual to administer the program and increased coordination between two offices. Any associated costs with implementing the program will likely be offset by the revenues gained from vacant buildings throughout the city.

Political Feasibility

This alternative earned a **high** political feasibility score. This criterion assesses the political climate and whether there is support for a commercial vacant property tax. Since this criterion will likely bring in more revenue than costs, this political feasibility is high. Resistance is expected from speculators, current vacant commercial property owners, and real estate investors, as this alternative would cause them to lose money. Depending on their lobbying efforts, passing and implementing the tax may not happen. Yet, the revenue gained and business development may outweigh the protests.

Recommendation

Implement Policy Alternative 2 – expanding BLISS using the peer network model. This program scores the highest for equity and full-spectrum employment. These two criteria are the second- and third- most-important criteria, ensuring JDC residents find meaningful employment. Alternative 2 earned a medium for both administrative and political feasibility. By hiring residents as peers as contractors first and transitioning them to city employees helps the program start quickly. Richmond’s political climate is favorable to reducing poverty, as evidenced by the recent creation and funding of the Office of Community Wealth Building.

Benefits of the Peer Model

The peer model already fits the Working Groups and Thriving Cities Group current model of community outreach. Thriving Cities Group supports the RVA Thrives mission through employing Community Advocates that are well-known along the JDC. The Community Advocates are members of the RVA Thrives Steering Committee and run the Neighborhood Safety, Beautification, and Jobs Access working groups. It would be easy to turn these well-known individuals into community peers to connect individuals to jobs. Alternatively, community advocates could recommend other well-connected residents from the JDC as peers.

JDC Community residents lack trust in the Richmond government to deliver the same services to them as other areas of Richmond. This lack of trust in city institutions is another reason why the peer model is also a good fit. Peers are more trusted than the city government, and can better serve the residents of their own community.

Challenges

This alternative requires considerable work up-front for success. Individuals in the OCWB will need to act as peer, support services, and employer coordinators. The coordinators will have the most work to do before the program is initiated. The peer coordinator will need to train community peers to use the application and be able to answer questions as they arise. The support service coordinator will need to identify and work with non-governmental organizations on the JDC that can provide wrap-around services, like transportation, childcare, or mental health. These supporting organizations may need to scale their operations to handle increased service demand. This may be difficult for small, grant-funded programs.

The Services Coordinator will also have to work with VCCS, specifically the CCWA and FastForward programs. These CCWA and FastForward are integral for program participants to receive training for in-demand jobs. I recommend first reaching out to the Marketing Director to gain an understanding of the program and available grants.

The employer coordinator will also need to identify and work with employers from all around Richmond that have open positions. Furthermore, the coordinator may have to work especially hard to find employers willing and able to hire returning citizens, as returning citizens should not

be excluded from program participation. The coordinator will need to get employer buy-in to ensure they use and update the app in real-time.

Ensuring funding for support services and the emergency fund may also be difficult, though not impossible. The emergency fund is a crucial part of the program to provide extra support to individuals that have unforeseen expenses.

Workforce Development vs Economic Development

Both workforce and economic development are best practices for increasing employment. I recommended a workforce development option because economic development cannot happen without an employable workforce. Ideally, these two strategies should occur simultaneously. Therefore, as a secondary recommendation, I suggest the City of Richmond hosts the government-industry forum to address business owners' concerns or hesitations about expanding or moving to the JDC. Simplifying tax incentive programs and responding to businesses will reduce regulatory burdens on businesses and potentially help spur economic growth along the JDC. Increased economic growth along the JDC will increase employment of JDC residents.

Additional Considerations

The Jobs Working Group does not exist in a vacuum, and actions taken should consider the progress of the other working groups. The Beautification Working Group has already hosted one successful neighborhood clean-up day, with two more scheduled for 2018. In addition to increasing neighborhood pride and unity, improving neighborhood aesthetics may also increase economic development. Similarly, the Safety Working Group is working to reduce crime and improve youth outcomes for JDC residents. Improving safety may also increase economic development. Businesses want to move to communities that are safe and look nice, as it increases their economic viability. Therefore, businesses often develop Business Improvement Districts (BIDs) that pay for additional security or landscaping. When businesses look nice and the area feels safe, they will have more customers and a better chance at success.

Appendix 1: Businesses Along the Jefferson Davis Corridor

Table 3 provides the breakdown of businesses along the JDC.

Table 3: Businesses Along the JDC		
Size Business Employs	Number Along JDC	Business Type or Name
1-4 individuals	399	-
5-9 individuals	162	-
10-19 individuals	95	-
20-49 individual	52	-
50-99 individuals	19	
100-249 individuals	15	
250-499 individuals	2	Acme Paper, Sitter Barfoot Veteran Center
1,000-4,999 individuals	1	UPS Freight
5,000-10,000 individuals	1	Philip Morris Manufacturing Plant

Appendix 2: Richmond's Industry Clusters

According to the U.S. Economic Development Administration, a cluster is a regional concentration of related industries in a specific area. Clusters consist of companies, service providers, suppliers, and institutions that provide specialized training, education, and/or research. Companies in clusters benefit from the area's skilled labor, shared infrastructure, and have specialized access to institutions and suppliers. Clusters can have positive spillover effects for workers, including higher wages, specialized skills, and improvements in technology (Harvard Business School, n.d.). Clusters can be both basic (traded) and non-basic (local). Traded cluster industries provide services to people outside of the regional market and bring money into the economy. These businesses are not restricted by low incomes in a local area, as their target markets are outside regions. Local clusters recycle money within the community and are the foundations of local economies (Harvard Business School, n.d.).

Richmond's strongest traded clusters for the past 17 years include: financial services; education and knowledge creation; marketing, design and publishing; tobacco; and performing arts. These are considered strong because of high location quotients – a location quotient greater than one demonstrates a high concentration of workers in that industry in the region compared to the rest of the U.S. Between 1998 and 2015, Richmond lost the following high-performing, traded clusters: medical devices; insurance services; biopharmaceuticals; and apparel. While these industries still exist, they no longer have high location quotients in Richmond (Harvard Business School, n.d.).

Richmond's Traded Clusters by Employment

Historically, the tobacco industry was one of Richmond's strongest clusters, employing over 7,700 individuals annually. From 1998-2000, the tobacco industry was Richmond's second largest employer, though tobacco's position has steadily declined over the past 15 years. In 2015, tobacco was Richmond's sixth largest industry, employing only 1,750 individuals (compared to the largest sector – financial services – employing over 9,500 individuals) (Harvard Business School, n.d.).

The business services, financial services, and education and knowledge creation industries are consistently Richmond's top employers. See **Figure 9** for Richmond's top industries by the number of people employed from 1998-2015.

The Richmond area is also focusing on building other clusters. According to the Region 4 Economic Growth and Development Plan¹, the region's priority clusters include logistics, advanced manufacturing, health/life/biosciences, and information technology. Industries with above-average wages that grew faster in Richmond over the last 10 years than the rest of the U.S. include: financial services, defense and security, and bioscience/life sciences (Go Virginia, 2017).

¹ Region 4 includes the following areas: Cities- Colonial Heights, Emporia, Hopewell, Petersburg, Richmond. Counties- Charles City, Chesterfield, Dinwiddie, Goochland, Greensville, Hanover, Henrico, New Kent, Powhatan, Prince George, Surry, and Sussex.

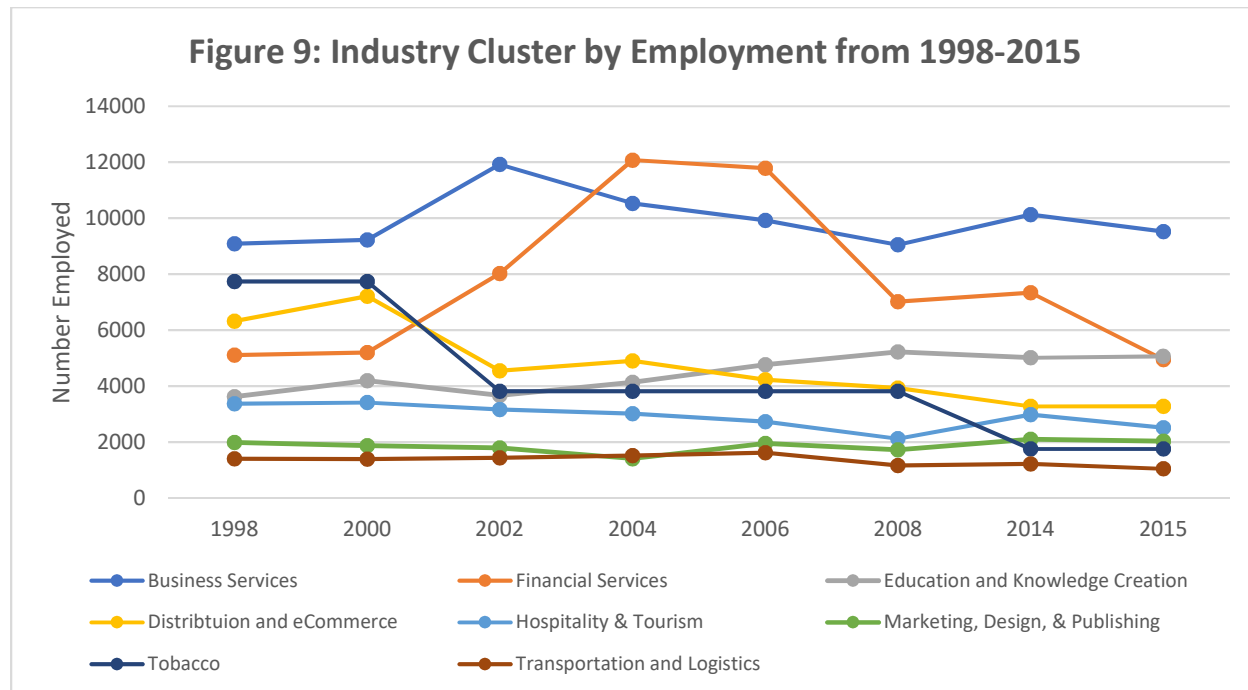


Figure 10 Source: Harvard Business School Cluster Mapping

Logistics, warehousing, and distribution clusters also grew faster in the Richmond region over the past 10 years than the rest of the U.S. but have below-average wages (Go Virginia, 2017). Some manufacturing categories, including advanced materials, glass and ceramics, chemicals, and food and beverage, have regional historical economic significance but are expected to grow below the regional rate or even decline (Go Virginia, 2017).

Richmond's Local Clusters by Employment

Local clusters make up a large portion of Richmond's economy. Richmond's largest local cluster from 1998 to 2015 is local health services. The next largest clusters are local hospitality establishments, local commercial services, local community and civic organizations, and local real estate, construction, and development. **Figure 10** shows Richmond's top local clusters by employment between 2000 and 2015.

From 1998-2015, local hospitality services, local health services, and local education and training created the most job growth for Richmond's economy. Healthcare is projected to continue to grow throughout the U.S., suggesting Richmond should continue to invest in its healthcare industry. Richmond is also being recognized as a foodie destination. In 2014, Richmond was named "The Next Great American Food City" (Peifer, 2014). In 2016, National Geographic named Richmond a top destination for food travel, in 2017, Zagat named Richmond in its list of 30 most exciting food cities in America, and in 2018, Fodor's named Richmond one of 19 U.S. cities with an "unexpected international food scene" (Zagat, n.d.)

(Edlund, 2018). These accolades and recognitions suggest Richmond's hospitality sector will continue to grow.

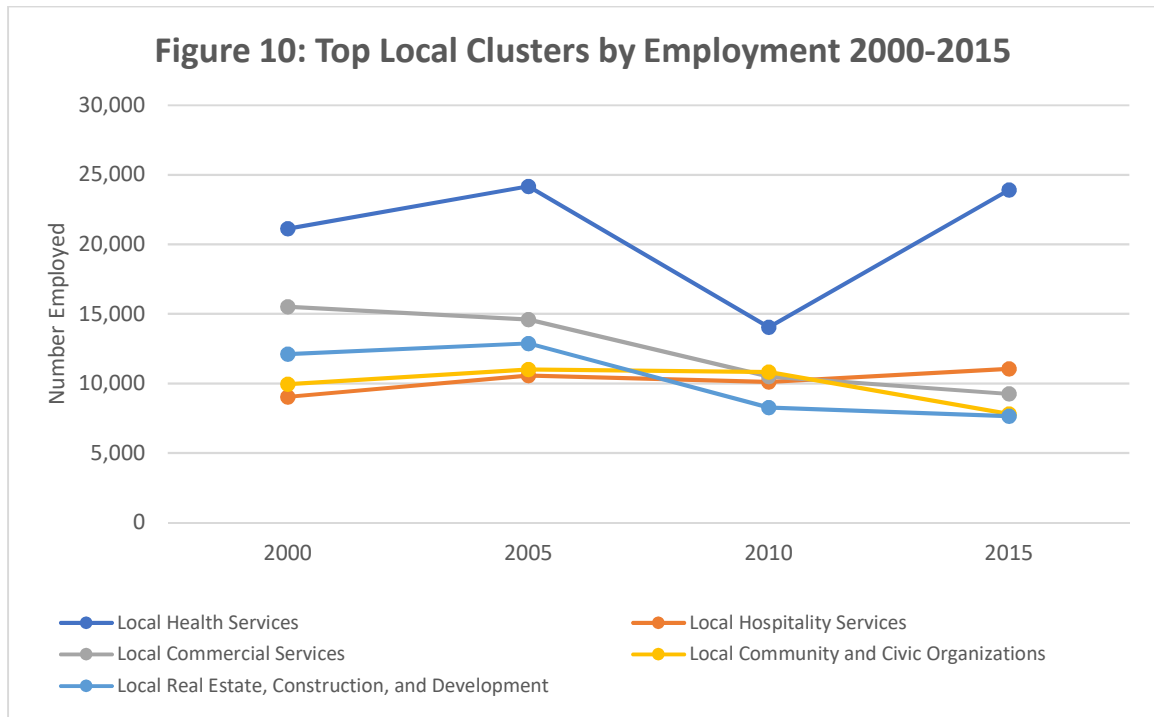


Figure 10 Source: Harvard Business School Cluster Mapping

Appendix 3: Additional Federal, State, & Local Programs

Federal Programs

The federal government provides programs to localities for workforce development. For example, the **Workforce Innovation and Opportunity Act (WIOA)** is the primary federal job training program and is sponsored by the U.S. Department of Labor Employment and Training Administration. The legislation provides funding and resources to states to ensure job seekers have the education, skills, and training needed to find employment. It also assists employers access a network of qualified candidates that meet current and future job demands. Resource VA administers this program in Richmond.

WIOA: The program's goal is to increase employment, job retention and earnings, and provide occupational skills and training for employment in target industries (Piedmont Workforce Network, n.d.). In 2016, the number of individuals in Virginia that received training services (as opposed to educational services) through WIOA was 63.8%. As of the quarter ending March 31, 2017, Virginia had spent 41.9% of WIOA funding (Piedmont Workforce Network, n.d.).

Resource VA: Resource is a federally funded (WIA), local workforce investment board working to connect individuals and private sector employers. Resource also provides integrated services to prepare individuals to meet employer needs in the Richmond region. Resource works to maintain a quality workforce by serving as a focal point for integrated local and regional workforce development initiatives. Due to projected high growth, and current high demand for employees, Resource targets the following four industries in which to place individuals: manufacturing; transportation and warehousing; professional, scientific and technical services; and healthcare (Resource VA, n.d.).

City of Richmond Programs

Citywide Revolving Loan Program

The Citywide Revolving Loan Program provides access to capital for small businesses, entrepreneurs, developers, and non-profits that want to stimulate and revitalize Richmond's neighborhoods and create permanent jobs for low- to moderate- income residents. The maximum loan amount is up to \$250,000 with interest rates up to 9% (Citywide Revolving Loans, n.d.).

Economic Development Revolving Loan Program

The Economic Development Revolving Loan Program is a new program that provides financing to local developers and small businesses pursuing Section 108-eligible projects. Section 108 projects include affordable housing developments, public infrastructure improvements and facilities, and commercial/industrial developments. The loan requires permanent job creation for low- and moderate- income individuals. Maximum loans are available for up to \$500,000, with varied interest rates (Economic Development Revolving Loans, n.d.).

Appendix 4: Other Best Practices

Additional Supply-Side Best Practices

Seattle Jobs Initiative (SJI)

SJI provides low-income individuals training that leads to college credentials in local industry sectors. SJI helps low-income individuals align support services, such as college navigation, housing, childcare, and transportation, to ensure individuals can complete college or certificate programs and obtain/retain well-paying jobs. Local industries benefit by having a larger skilled workforce pool. The program also conducts labor market research to ensure education and training programs are tailored and connected to middle-wage job opportunities while simultaneously meeting local employer needs.

The total number of low-income individuals served between 1997-2013 was 16,764 individuals. Of those, the total number placed in jobs was 7,146 individuals. The average hourly wage of program graduates was \$14.05, while the average hourly wage of program participants in jobs after long-term career training was \$16.85. Approximately 61% were employed after one year, and 42% were able to advance their earnings.

Additional Demand-Side Best Practices Development

The National Fund for Workforce Solutions

The National Fund for Workforce Solutions is a national nonprofit that uses an employer-driven model to steer practices, policies, and investments to enable workers to succeed in good jobs and provide employers with a skilled workforce. The National Fund uses industry partnerships to enable communities to train individuals for, and connect individuals to, employment. Since 2007, The National Fund has supported 33 regional funding collaboratives across the U.S., supported over 2,000 employers, helped 67,000 job seekers, and sparked \$315 million in matched or aligned investments. Virginia's National Fund regional partnership is the Dan River Region Collaborative. The Dan River Region Collaborative is using a sector strategy approach to attract and sustain the following industries by addressing the skill needs of regional employers: energy and utilities, green services and energy efficiency, manufacturing, and information technology. In 2015, out of 1,400 job seekers, The Dan River Region Collaborative helped 120 job seekers find jobs, connected 65 job seekers with training, and helped over 400 individuals get certifications.

North Carolina Customized Training Program

North Carolina provides training programs customized to individual businesses' needs. These programs are designed as an incentive to attract new plants, encourage business expansion, and to encourage businesses to hire more disadvantaged individuals for entry-level jobs. North Carolina's community college network provides the training, education, and support services for new, expanding, and existing businesses and industries in North Carolina. North Carolina's training program is able to target expanding traded industries, specified as those that create at least 12 jobs. The college advertises for new hires and screens trainees. The

firm then chooses trainees from the previously screened and provides training equipment. The community college provides the facilities and trainers, and the firm then decides which trainees are hired. Case studies suggest this training program is especially beneficial to disadvantaged individuals by getting them employed in manufacturing.

Baltimore Alliance for Careers in Healthcare (BACH)

This best practice is an example of a career pathway program. These programs provide job seekers with clear pathways to sector employment. BACH is a nonprofit that partners with healthcare providers and hospitals in the Baltimore region to provide qualified healthcare workers. BACH founders realized the healthcare industry faced a critical shortage of qualified workers, and that many individuals in Baltimore were under- or unemployed. This program addressed both industry/employer and job seeker needs. Now, BACH has over 80 partners, including healthcare providers, foundations, education institutions, federal agencies, and other nonprofit organizations. Their metrics include the number of people that have gained employment through the program, the number of people who have completed technical training through the program, and average wage increases after program participation. Since 2015, BACH has helped 92 people find healthcare jobs, and over 100 people complete technical training. Over 400 entry level employees in five hospitals participate in BACH.

Certificates of Rehabilitation/Employability

Returning citizens can obtain a certificate of rehabilitation to remove bars to licensure and employment. Furthermore, certificates of employability signal to employers that a returning citizen meets employment criteria. Returning citizens can argue in court that they are rehabilitated, can bring character witnesses, and present evidence of completed training programs to judges. Judges, with detailed knowledge about applicants' histories, can objectively decide whether to issue these certificates. Research from the University of South Carolina found that individuals with a criminal record and a certificate were called back at equal rates as those without a criminal history (Doleac, 2017).

In 2017, Ohio removed the requirement that a returning citizen list a specific job for which they are applying before pursuing a certificate (Beitsch, 2017). This expanded Ohio's certificate program and allowing more these individuals greater flexibility in applying for jobs. Researchers also find positive spillover effects into other areas, such as housing. Returning citizens have better chances for finding stable housing with an employability certificate. Researchers speculate the certificate indicates to landlords this person has a steady income and can pay rent on time (Doleac, 2016). These certificates may also protect employers from negligent hiring lawsuits. Virginia does not have a formal or standardized process for obtaining a certificate of rehabilitation or certificate of employability (Virginia Department of Correctional Education, 2006).

Appendix 5: Policy Alternative 1 – Status Quo Projections and Cost-Effectiveness Breakdown

This appendix provides population, employment, and cost projections for the status quo.

Employment Projections to 2030

Richmond

Yearly population projects were calculated using data from the Weldon Cooper Center. **Table 4** below shows Richmond population and employment projections for 2030.

Table 4: Richmond Population Projections for 2030	
Total Population	242,451
Population 16-64	180,405
Labor Force Participation	118,346
Employment	70,297
Unemployment	10,769
Employment Gained	2,369

Source: Weldon Cooper Center

Jefferson-Davis Corridor

Richmond's 2016 total population is 216,773 individuals, while the JDC's total population is 17,283. The JDC makes up 8% of the City of Richmond's total population. I will assume the percentage of the JDC's population relative to Richmond will remain constant at 8% over the next 10 years. The Weldon Cooper Center projects Richmond's total population in 2030 will be 242,451 individuals. Therefore, I assume the JDC's 2030 population will be 19,397 individuals.

The total number of individuals older than 16 living on the JDC is 13,358 (77.3% of the total JDC population). The JDC's 2016 total labor force participation (age 16+) is 9,195 individuals. These projections, however, will only look at JDC individuals ages 16-64 as this group makes up most of the working-age population. We should keep in mind, however, that low-income individuals often continue working past age 64. The total JDC population for ages 16-64 is 9,766 (56% of total population), while total labor force participation for residents ages 16-64 is 8,940 individuals (91% of population 16-64).

Of those ages 16-64 in the labor force, 6,127 are employed (68.5% of labor force) and 1,054 are unemployed (12% of labor force). Without intervention, I will assume both the employment and unemployment rates will remain constant. Two-percent of Richmond's labor force gained employment. I assume the same percentage for the JDC. Table 5 provides projections for 2030.

Table 5: Jefferson-Davis Corridor Population and Employment 2016 Actuals and 2030 Projections		
	2016 Actual Total Number	2030 Estimates Total Number
Total Population	17,283	19,397
Population 16-64	9,766	10,863
Labor Force Participation	8,940	9,886
Employed	6,127	6,772
Unemployed	1,053	1,187
Employment Gained	178	197
Sources: Weldon Cooper Center, American Community Survey tables S0101, S2301, DP03		

Current Costs (FY16)

The status quo policy alternative's costs show the Fiscal Year 2016 (FY16) actual expenditures for programs that directly relate to employment through workforce and community development. Included are FY16 expenditures from the General Fund² for the following City of Richmond Departments or Offices: Office of Community Wealth Building (OCWB), Minority Business Development (MBD), and the Office of Economic and Community Development (ECD). Also included are the costs to small businesses (less than 50 employees) for regulations and permitting per year. These 2016 costs provide the baseline for the status quo cost projections. Effectiveness is measured by how many individuals gained employment in FY2016 through programs provided by these offices. Similarly, this provides the basis for effectiveness projections.

The next sections provide details for calculations for cost per individual to gain employment. These expenditures and employment numbers are from the City of Richmond's Proposed Annual Fiscal Policy for Fiscal Year 2018.

Office of Community Wealth Building (OCWB)

Costs from the OCWB include personnel, benefits, and other services. The programs included in the costs for FY2016 actual spending include administration, workforce development, building lives to self-sufficiency (BLISS), and social enterprise. Social enterprise expenditures include "activities which support the development of business entities specifically designed to advance a social purpose, such as employing individuals living in poverty" (Adopted Annual Fiscal Plan, 2018).

Table 6 provides the effectiveness of OCWB programs for FY16, showing the total number of individuals who either gained employment or are now able to sustain themselves above the poverty line. I included the sustainment metric because it implies these individuals have employment.

² This analysis does not include funding from the Special Fund. The Special Fund comes from user fees, assessments, and grants (as opposed to property taxes). Funds are appropriated either at the time the Fiscal Plan is adopted by City Council or through mid-year ordinances approved by City Council (Adopted Annual Fiscal Plan, 2018). In FY16, the OCWB used \$36,615 from the Special Fund, while the ECD used \$9,910,877 from the Special Fund. This likely increases the amount the city spends per person.

Table 6: FY16 Effectiveness of OCWB Expenditures - Number of Jobs Attained		
Program	Metric	# of Individuals Employed
Workforce Development (BLISS)	# of CWI Participants assisted with sustaining themselves above the poverty line	75
Workforce Development (BLISS)	# of CWI Participants that Gained employment	212
Total Employment Gained		287

Minority Business Development (MBD)

Minority Business Development programs “facilitate, produce, and advance opportunities that enable minority, disadvantaged, and emerging small businesses to successfully participate in the full array of contracting opportunities available in the City of Richmond” (Adopted Annual Fiscal Plan, 2018). This office is included because most individuals on the Jefferson Davis Corridor are individuals of color and would qualify for MBD programs that assist minority-owned businesses begin or expand. Included in FY16 MBD costs are administration, business and project development, and contract administration. This accounts for the total budget for personnel, benefits, and other services. Employment gained through the MBD was not provided in Richmond’s budget.

Economic and Community Development (ECD)

The ECD department promotes and stimulates economic growth by creating and retaining jobs, stimulates investments in neighborhoods and businesses, and generates revenue to fund municipal services. I included all general fund expenditures in this analysis, but did not include special fund expenditures, as those change yearly.

For the effectiveness measures, I assumed the following ECD programs created and retained jobs: Commercial Area Revitalization Effort (CARE); Enterprise Zone, and Business Retention & Expansion Services. The following were not included in the effectiveness measures as they do not directly relate to job attainment: housing and neighborhood revitalization.

Though the City of Richmond has metrics for the number of jobs created or retained for the CARE, Enterprise Zone, and Business Retention & Expansion Service programs, it does not separate the two. Therefore, I will assume a conservative amount of jobs were created through these programs, at 10% each. The final effectiveness metric is the number of new jobs created through the business attraction services. Table 7 provides the ECD effectiveness for FY16.

Table 7: FY16 ECD Effectiveness Measures

Program	Actual # of Jobs Created or Retained	Estimate of Jobs Created	Actual # of Jobs Created	Total Jobs
ECD CARE Program	127	12.7	-	12.7
ECD Enterprise Zone Program	778	77.8	-	77.8
ECD-Business Retention & Expansion Services	903	90.3	-	90.3
ECD-Business Attraction Services	-	-	1381	1381
Total Employment Gained				1561.8

Source: Adopted Annual Fiscal Plan 2018

Small Businesses

Small business costs were provided by the 2017 NSBA Small Business Regulations Survey, which states local and state regulations cost small businesses an average of \$2,000 per year. Richmond also requires businesses to get yearly permits to operate legally within Richmond. Per the business website, I assumed the permit cost was \$30 per year for all small businesses. I assume the number of small businesses remains constant over time, and that business costs remain constant except for inflation (2%).

According to the Bureau of Labor Statistics, all employment sectors added jobs between 2016 and 2017 (Richmond Area Employment, 2017). However, this does not mean that each new job created went to an unemployed individual. As such I estimate that 5% of all jobs added from mining, logging, construction, and professional and business services went to previously unemployed individuals. Almost all businesses in Richmond employ less than 50 individuals, so I will assume all the businesses are small businesses. I also assume small businesses will add this same number of new employees over time. Table 8 provides the effectiveness for small business growth in FY2016-FY2017.

Table 8: Effectiveness of Small Business Growth FY2016-2017

Industry	Total Jobs	Newly Employed (5%)
Mining, Logging, Construction	2,400	120
Professional & Business Services	2300	115
Total		235

Source: Adopted Annual Fiscal Plan 2018

Community College Workforce Alliance and FastForward Programs

These programs are new as of 2016 and do not yet have cost-effectiveness data available.

Cost and Employment Projections to 2030

This section shows the cost and employment projections to 2030 without policy alternative interventions. Table XX provides cost projections, while table XX provides employment projections. **For the status quo and all policy alternatives I used an inflator of 2% and a social discount rate of 3% (Department of Energy, 2017).**

Net Present Value	\$528,068,596
Total jobs to 2030	35488
Cost per job	\$14,880.37

Yearly Cost Projections

Table 9 provides the yearly cost projections for the status quo for FY2019-FY2030. Costs include OCWB, MBD, ECD, and costs to small businesses (<50 employees).

Table 9: Status Quo Yearly Cost Projections FY2019-FY2030 in Dollars								
		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
	Total	47,797,352	48,753,299	49,728,365	50,722,932	51,737,391	52,772,139	53,827,582
City of Richmond	OCWB							
	Personnel	786,944	802,683	818,737	835,111	851,814	868,850	886,227
	Benefits	235,373	240,080	244,882	249,780	254,775	259,871	265,068
	Operating	356,196	363,319	370,586	377,998	385,557	393,269	401,134
	Subtotal	1,378,466	1,406,035	1,434,156	1,462,839	1,492,096	1,521,937	1,552,376
	MBD							
	Personnel	417,824	426,180	434,704	443,398	452,266	461,311	470,538
	Benefits	152,876	155,934	159,052	162,233	165,478	168,787	172,163
	Operating	48,449	49,417	50,406	51,414	52,442	53,491	54,561
	Subtotal	619,182	631,566	644,197	657,081	670,222	683,627	697,299
	ECD							
	Personnel	1,613,336	1,645,602	1,678,514	1,712,085	1,746,326	1,781,253	1,816,878
	Benefits	680,936	694,554	708,445	722,614	737,067	751,808	766,844
	Operating	1,593,514	1,625,384	1,657,892	1,691,050	1,724,871	1,759,368	1,794,555
	Subtotal	3,886,619	3,964,351	4,043,639	4,124,511	4,207,002	4,291,142	4,376,964
Costs to Businesses	Regulatory	40,484,000	40,484,000	40,484,000	40,484,000	40,484,000	40,484,000	40,484,000
	Permitting	607,260	607,260	607,260	607,260	607,260	607,260	607,260
	Subtotal	41,913,085	42,751,347	43,606,374	44,478,501	45,368,071	46,275,433	47,200,941
Source: Adopted Annual Fiscal Plan 2018								

Table 9: Status Quo Yearly Cost Projections FY2019-FY2030 in Dollars						
		FY2026	FY2027	FY2028	FY2029	FY2030
	Total	54,904,133	56,002,216	57,122,260	58,264,705	59,429,999
City of Richmond	OCWB					
	Personnel	903,951	922,030	940,471	959,280	978,466
	Benefits	270,370	275,777	281,293	286,918	292,657
	Operating	409,157	417,340	425,687	434,200	442,884
	Subtotal	1,583,424	1,615,092	1,647,394	1,680,342	1,713,949
	MBD					
	Personnel	479,948	489,547	499,338	509,325	519,512
	Benefits	175,607	179,119	182,701	186,355	190,082
	Operating	55,652	56,765	57,900	59,058	60,240
	Subtotal	711,245	725,470	739,980	754,779	769,875
	ECD					
	Personnel	1,853,215	1,890,280	1,928,085	1,966,647	2,005,980
	Benefits	782,181	797,825	813,781	830,057	846,658
	Operating	1,830,447	1,867,055	1,904,397	1,942,484	1,981,334
	Subtotal	4,464,504	4,553,794	4,644,870	4,737,767	4,832,522
Costs to Businesses	Regulatory	40,484,000	40,484,000	40,484,000	40,484,000	40,484,000
	Permitting	607,260	607,260	607,260	607,260	607,260
	Subtotal	48,144,960	49,107,859	50,090,017	51,091,817	52,113,653

Source: Adopted Annual Fiscal Plan 2018

Yearly Employment Projections (Effectiveness)

Table 10 provides Richmond's yearly projections for population, employment, and employment gained. Each policy alternative's projected employment gained is added to expected yearly employment gained from the status quo. Table 11 provides population and employment projections for the JDC, though it does not attempt to project employment gained for the JDC without interventions.

Table 10: Richmond Yearly Projections for Total Population, Population 16-64, Labor Force Participation, Employed, Unemployed, and Employment Gained

Year	Total Population	Pop 16-64	Labor Force Participation	Employed	Unemployed	Employment Gained
2016	216,773	157811	103524	61079	9421	2084
2017	218607	159425	104583	61738	9517	2121
2018	220457	161055	105652	62403	9614	2159
2019	222322	162702	106733	63076	9713	2198
2020	224203	164366	107824	63756	9812	2237
2021	226100	166047	108927	64443	9912	2277
2022	228013	167746	110041	65138	10014	2318
2023	229942	169461	111166	65840	10116	2359
2024	231888	171194	112303	66550	10220	2401
2025	233850	172945	113452	67267	10324	2444
2026	235828	174714	114612	67992	10430	2488
2027	237824	176501	115784	68725	10536	2532
2028	239836	178306	116968	69466	10644	2577
2029	241865	180129	118165	70215	10753	2623
2030	242451	180405	118346	70297	10769	2670

Sources: Weldon Cooper Center, ACS Tables S0101, S2301, DP03

Table 11: Jefferson Davis Corridor Yearly Projections for Total Population, Labor Force Participation, Employed, and Unemployed

Year	Total Population	Pop 16-64	Labor Force Participation	Employed	Unemployed
2016	17283	9766	8940	6127	1053
2017	17434	9844	9008	6170	1063
2018	17586	9923	9076	6212	1072
2019	17740	10003	9144	6255	1082
2020	17895	10083	9213	6299	1092
2021	18051	10164	9283	6342	1102
2022	18209	10246	9353	6386	1112
2023	18368	10328	9424	6431	1122
2024	18529	10411	9495	6475	1132
2025	18690	10494	9567	6520	1142
2026	18854	10578	9639	6566	1153
2027	19018	10663	9712	6611	1163
2028	19185	10749	9785	6657	1174
2029	19352	10835	9859	6703	1184
2030	19397	10863	9886	6772	1195

Sources: Weldon Cooper Center, ACS Tables S0101, S2301, DP03

Appendix 6: Policy Alternative 2 – Expanding BLISS Cost-Effectiveness Breakdown

Table 12 shows the cost per year of expanding the BLISS program. Four individuals from the JDC will be hired as contractors to specifically target the JDC. I am assuming these individuals will be hired at the median yearly salary for Richmond, \$45,673. After two years, the JDC Peers will transition to full-time employees for the City of Richmond, with the same salary. The new program requires new software (\$17,000 over 10 years), and laptops or tablets (\$400 per person over 10 years). Table XX provides the cost breakdown for personnel, benefits, and operations until 2030 for the additional personnel and equipment.

Table 12 also provides the cost-effectiveness breakdown for policy alternative 2. This program also has the added benefit of moving individuals out of poverty, rather than simply helping residents find employment.

Table 12: Alternative 2 Cost Effectiveness

Year	Number JDC of Participants	Number Employed through Program (JDC)	Total Number of Employment Gained	Total Cost	Net Present Value
FY2019	8	7	2205	\$ 49,360,108	\$ 49,360,108
FY2020	28	26	2263	\$ 50,347,310	\$ 48,880,883
FY2021	48	45	2322	\$ 51,346,875	\$ 48,399,355
FY2022	68	63	2381	\$ 52,373,813	\$ 47,929,458
FY2023	88	82	2441	\$ 53,421,289	\$ 47,464,123
FY2024	108	100	2502	\$ 54,489,715	\$ 47,003,307
FY2025	128	119	2563	\$ 55,579,509	\$ 46,546,964
FY2026	148	138	2625	\$ 56,691,099	\$ 46,095,052
FY2027	168	156	2688	\$ 57,824,921	\$ 45,647,527
FY2028	188	175	2752	\$ 58,981,420	\$ 45,204,347
FY2029	208	193	2817	\$ 60,161,048	\$ 44,765,470
FY2030	228	212	2882	\$ 61,364,269	\$ 44,330,854
Total			30440		\$ 561,627,446
Cost per job					\$ 18,450.22

*Assumptions:

Each Peer will add 5 people to the program each year. (Based off Charlottesville's rate)

JDC BLISS participants will have the same employment rate as Charlottesville's program (93%).

Appendix 7: Policy Alternative 4 - Hosting Government-Industry Forum Cost-Effectiveness Breakdown

The costs in this calculation include the additional costs of 10 firms being established in, and employing individuals from, Enterprise Zones. However, I only included costs for wage supports, not other Enterprise Zone tax credits. These wage supports are paid out to firms at a maximum rate of \$7,500 every two years.

I also assume there will be a \$1,000 yearly decrease in the costs to all small businesses with less than 50 employees for reducing regulatory burdens. There are 20,242 small firms in Richmond. This alternative does not account opportunity costs or other cost savings to businesses. I also do not account for additional costs to the city government resulting from this alternative.

For effectiveness, I found the number of businesses with less than 50 employees on the JDC corridor, and multiplied the total number by \$1,000 to get the cost saved per small business. I then took the cost saved and divided it by the JDC median income to get the approximate number of additional individuals that will be hired based on cost savings to businesses. Table 13 provides the cost-effectiveness breakdowns.

Ave median income	\$30,349
Small businesses JDC	708
Total JDC small business savings	\$70,8000
Employed based on savings	23

Table 13: Policy Alternative 4: Biannual Government-Industry Business Forum					
Year	Increase in Enterprise Zone Costs	Decrease in Business Costs	Total	Present Value	Jobs Gained
FY2019	\$ 75,000	\$ 20,242,000	\$ 7,630,352	\$ 27,630,352	2221
FY2020		\$ 20,646,840	\$ 28,106,459	\$ 27,287,824	2260
FY2021	\$ 75,000	\$ 21,051,680	\$ 28,751,685	\$ 27,101,221	2300
FY2022		\$ 21,456,520	\$ 29,266,412	\$ 26,782,913	2341
FY2023	\$ 75,000	\$ 21,861,360	\$ 29,951,031	\$ 26,611,103	2382
FY2024		\$ 22,266,200	\$ 30,505,939	\$ 26,314,691	2424
FY2025	\$ 75,000	\$ 22,671,040	\$ 31,231,542	\$ 26,155,924	2467
FY2026		\$ 23,075,880	\$ 31,828,253	\$ 25,879,282	2511
FY2027	\$ 75,000	\$ 23,480,720	\$ 32,596,496	\$ 25,731,975	2555
FY2028		\$ 23,885,560	\$ 33,236,700	\$ 25,473,163	2601
FY2029	\$ 75,000	\$ 24,290,400	\$ 34,049,305	\$ 25,335,881	2647
FY2030		\$ 24,695,240	\$ 34,734,759	\$ 25,093,129	2693
Total				\$ 315,397,459	29403
Cost per job gained				\$ 10,727	

Appendix 8: Policy Alternative 5 – Redeveloping the Warehouse Cost-Effectiveness Breakdown

Costs:

The costs included in this alternative are the initial property and renovation costs, spread over 30 years (but only showing 10 as that is the scope of this report). Also included in the costs are Enterprise Zone tax credits given to the (one) company who moves in and hires individuals from the JDC. Tax credits are \$400 per employee or a maximum of \$7,500 over two years.

Rent will off-set the cost of this alternative. Based on other commercial property rents along the JDC, which range from \$10 to \$15 per square foot per year, I will assume the rent will be \$10 per square foot per year. Even though the building is newly renovated, the goal is to jump-start development along the corridor. Having a low yearly rent will help incentivize new businesses to move in. At 130,000 square feet, yearly rent is \$1,300,000. Table 14 shows the costs.

Table 14: Policy Alternative 5 Costs for City Redevelopment of Warehouse

Year	Property	Total Renovation	EZ Tax Credit to Business	Subtotal Cost	Total Cost	Yearly Rent	Cost with rent	Present Value	Revenue
FY2019	108,333	528,667		637,000	637,000			637,000	
FY2020	110,608	539,769	2,000	652,377	652,377	1,300,000	(647,623)	633,376	647,623
FY2021	112,931	551,104	3,600	667,635	667,635	1,300,000	(632,365)	629,310	632,365
FY2022	115,303	562,677		677,980	677,980	1,300,000	(622,020)	620,447	622,020
FY2023	117,724	574,493	7,500	699,717	699,717	1,300,000	(600,283)	621,690	600,283
FY2024	120,196	586,558		706,754	706,754	1,300,000	(593,246)	609,652	593,246
FY2025	122,720	598,875	7,500	729,096	729,096	1,300,000	(570,904)	610,606	570,904
FY2026	125,297	611,452		736,749	736,749	1,300,000	(563,251)	599,044	563,251
FY2027	127,929	624,292	7,500	759,721	759,721	1,300,000	(540,279)	599,731	540,279
FY2028	130,615	637,402		768,017	768,017	1,300,000	(531,983)	588,621	531,983
FY2029	133,358	650,788	7,500	791,646	791,646	1,300,000	(508,354)	589,059	508,354
FY2030	136,159	664,454		800,613	800,613	1,300,000	(499,387)	578,380	499,387

Initial Costs:

Property: \$ 3,250,000

Total Renovation: \$ 15,860,000

Square feet: 130,000

Square foot per person: 130-150

Cost of renovation per square foot: \$ 122

Enterprise Zone tax credit: \$400 per individual or \$ 7,500 every other year

Initial costs over 30 year period, inflation rate over 30 years is 2.1% (Department of Energy, 2017)

Effectiveness:

Table 15 provides the cost-effectiveness breakdown for jobs gained on the JDC.

Table 15: Cost-Effectiveness - Jobs Gained on JDC			
Year	Employment Gained	Total Employment Gained	Total Cost (at Present Value)
FY2019	20	2218	\$ 48,434,352
FY2020	10	2247	\$ 47,966,676
FY2021	10	2287	\$ 47,503,063
FY2022	10	2328	\$ 47,039,116
FY2023	10	2369	\$ 46,589,691
FY2024	10	2411	\$ 46,131,362
FY2025	10	2454	\$ 45,690,358
FY2026	10	2498	\$ 45,241,129
FY2027	10	2542	\$ 44,808,397
FY2028	10	2587	\$ 44,368,077
FY2029	10	2633	\$ 43,943,472
FY2030	10	2680	\$ 43,511,876
Total		29253	\$ 551,227,570
Cost per job created			\$ 18,843
Revenue Per Job at NPV			\$ 183

Construction: While some cities and states have policies that require local hiring for publicly-funded construction projects, Richmond does not have this requirement. However, to understand how many local individuals could be hired during renovation and construction, I looked at cities with these programs. Some cities require 20%-70% of the construction team to be local workers. Without this requirement, I will assume 10% of the construction team will be from Richmond's unemployed population. If it takes 200 workers to redevelop the site, 40 workers will be from the city of Richmond, and 20 will be from the JDC and gain employment. These 20 individuals will be employed for six months, or the average time it takes to redevelop a site (S. Snyder, personal correspondence, March 31, 2018).

Office Employees: The newly renovated space can hold 800-1000 individuals [130-150 square feet per person] S. Snyder, personal correspondence, March 31, 2018). Based on the Waterbury, CT case, I will assume the new business will bring at least 180 new jobs immediately to the corridor. I will assume 30% (54) of the new jobs will go to JDC residents over 5 years. I will assume the business will hire 10 new JDC residents per year from year 5-10. By beginning to economically redevelop this area, more businesses may decide to relocate to the JDC. The Massachusetts case study saw over 200 businesses moving into one industrial site, creating over 4,000 new jobs for the city. Though the Lawrence, MA case cannot be directly

translated to Richmond, it does show the potential that economic redevelopment has for this neighborhood and the city. Businesses that move in may bring jobs with multiplier effects, or they may create demand for currently unavailable goods, such as restaurants and cafes.

Appendix 9: Policy Alternative 6 – Taxing Vacant Commercial Properties Cost-Effectiveness Breakdown

Table 16 provides a list of vacant commercial properties along the JDC.

Table 16: JDC Vacant Commercial Properties			
Property	Sq Foot	Assessed Value	Tax (\$3.15 / \$100 assessed value)
501 Commerce Rd	7,505	\$3,10,000	\$9,765
1641 Commerce Road	13,608	\$831,000	\$26,176.5
1100 Dinwiddie Ave	102,000	\$1,526,000	\$48,069
326 E 6th St	7,700	\$3,11,000	\$9,796.5
700 Gordon Ave	130,000	\$21,41,000	\$67,441.5
1120 Gordon Ave	5,000	\$4,270,000	\$134,505
220 Hull St	3,450	\$3,101,000	\$97,681.5
1401 Hull St	1,400	\$117,000	\$3,685.5
1417 Hull	3,080	\$173,000	\$5,449.5
1618 Hull St	8,910	\$493,000	\$15,529.5
803 Jefferson Davis Highway	4,719	\$43,000	\$1,354.5
1100 Jefferson Davis Highway	524,169	250000	\$7875
Total			\$427329
Assumptions: These properties are assumed vacant based on for sale or lease from this website: http://www.loopnet.com/for-sale/2/?sk=77ee0df51892d8029452158d71c2f2b9&bb=gqn_1_t1wHw03hiM . This is not an exhaustive list and may not accurately reflect the total commercial vacant properties along the Jefferson Davis Corridor. Assessment amounts are from the City of Richmond Real Estate search program at http://eservices.ci.richmond.va.us/applications/PropertySearch/default.aspx .			

Costs:

Based on Wilmington, DE's program, only one additional person needs to be hired to run this program. I will assume this person will be hired at the City of Richmond's median yearly salary of \$45,673. Table XX shows the additional cost per year for hiring one additional person. However, this is offset by potential yearly revenue from the tax. This option assumes a reduction of one vacant property per year. After FY2030, all currently vacant properties are assumed to be in productive use. This does not account for properties that may become vacant in the future. This analysis does not account for other vacant properties throughout Richmond that will be put back into productive use and/or generate additional revenue. Revenue and/or jobs created could be much higher than portrayed below.

Effectiveness:

Based on Pittsburgh's and Wilmington's successes with their vacant commercial property tax, I assume Richmond's will also effectively reduce vacant commercial properties and sparking economic redevelopment along the JDC. The vacant commercial properties along the JDC range from stores, to warehouses, to office buildings. This range of businesses makes it difficult to determine how many individuals from the JDC could be hired. To make these determinations, I took the average square feet of vacant buildings (see Table 17) and assumed 140 square feet per person, getting an average amount of individuals for each building. I then assumed 15% of the available space will be new jobs created for individuals along the JDC.

Table 17: Costs and Effectiveness for Vacant Commercial Property Tax in Dollars							
Year	Costs			Effectiveness			
	Personnel	Total Cost	Total Cost (PV)	Vacant Properties on JDC	Average Revenue from JDC	JDC Jobs Created	Total Jobs Created
FY2019	45,673	47,843,025	47,843,025	12	427,332	0	2198
FY2020	46,586	48,799,885	47,378,530	11	391,721	72	2309
FY2021	47,518	49,775,883	46,918,544	10	356,110	72	2349
FY2022	48,469	50,771,401	46,463,024	9	320,499	72	2390
FY2023	49,438	51,786,829	46,011,927	8	284,888	72	2431
FY2024	50,427	52,822,565	45,565,209	7	249,277	72	2474
FY2025	51,435	53,879,017	45,122,828	6	213,666	72	2516
FY2026	52,464	54,956,597	44,684,743	5	178,055	72	2560
FY2027	53,513	56,055,729	44,250,910	4	142,444	72	2604
FY2028	54,583	57,176,844	43,821,290	3	106,833	72	2650
FY2029	55,675	58,320,380	43,395,840	2	71,222	72	2696
FY2030	56,789	59,486,788	42,974,521	1	35,611	72	2743
Total			544,430,390		2,777,658		29920
Cost per job created							18,196
Revenue per job					81		

Assumptions:

Hiring one person to run the program at median salary of 45,673.

Jobs created based off of 140 SQ ft per person and average square footage of buildings listed in Table XX; 15% of space will be for new jobs for JDC residents.

These properties are assumed vacant based on for sale or lease from this website:

http://www.loopnet.com/for-sale/2/?sk=77ee0df51892d8029452158d71c2f2b9&bb=gqn_1_t1wHw03hiM.

This is not an exhaustive list and may not accurately reflect the total commercial vacant properties along the Jefferson Davis Corridor. Assessment amounts are from the City of Richmond Real Estate search program at <http://eservices.ci.richmond.va.us/applications/PropertySearch/default.aspx>.

Revenue: I used the average yearly tax (35,611) for buildings from FY2019 and multiplied it by the number of vacant properties on the JDC to get the tax revenue per year.

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