



# COMMONWEALTH of VIRGINIA

*Department of Corrections*

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June 24, 2008

## MEMORANDUM

To: John W. Marshall  
Secretary of Public Safety

From: Gene M. Johnson (Signature on file)

Subject: Department of Corrections Labor Force Projections

The Appropriations Act (Chapter 847) Item 386.H requires the Department of Corrections to develop a report on ensuring an adequate labor supply for current and future state correctional facilities. The Department's final report is attached for your review.

The collaborative process of completing this report and pursuit of the initiatives it requires has strengthened our strategic partnerships with other agencies. We are well on our way to developing tools for labor force projections and workforce development that can be brought to bear on a site-by-site basis to help us attract and retain a quality workforce necessary to sustain our public safety mission.

Upon your review, Item 386.H calls for this final report to be sent to the Chairmen of the Senate Finance and House Appropriations Committees. Please advise when you would like us to make, as required, that electronic submission on your behalf.

If you have specific questions concerning the plan, please contact Paul Broughton, Deputy Director for Human Resources at 674-3449. We appreciate your support of our efforts to plan for our workforce needs, both now and in the future.

Virginia Department of Corrections

**Labor Force Projection & Workforce Development Initiative  
For State Correctional Facilities**

Final Report—June 24, 2008

## **Executive Summary**

### Background

Ensuring an adequate labor supply for the security workforce at current and future state correctional facilities is a priority for the Director of Corrections and the Secretary of Public Safety. It is the focus of this report as required by the General Assembly.

### Workforce Adequacy

Weldon Cooper Center for the Public Service at the University of Virginia completed workforce profiles of five state correctional sites (Current sites: Fluvanna, Greensville, Haynesville. Future sites: Grayson County, Charlotte County). In all five cases, Weldon Cooper confirms that an adequate labor supply exists today but that some shrinkage is indicated over time. It will remain feasible to staff state correctional facilities but the Department must remain competitive by making its jobs appealing to local workers.

### Staffing Challenges

- Even beyond the November 2007 initiative for security staff compensation, competitive salary and benefits are key external factors for the Department's recruitment and retention success in the face of increased employer competition for workers with at least a high school education.
- The turnover rate of Corrections Officer increased from 15% in Fiscal Year 2004 to 20% for Fiscal Year 2007. Vacancy rates at some sites persistently detract from orderly operation.

### Recruit-to-Retain Focus

The Department's review of current human resource management practices confirms that it must recruit to retain, making human capital investments in its security workforce to sustain its public safety mission into the future.

- "Fit" is the key internal factor for the Department's recruitment success—tools are under development to improve assessment of the compatibility of applicants to the job (Corrections Officer), workplace (correctional facilities) and organization (Department of Corrections).
- "Engagement" is the key internal factor for the Department's retention success—resources are being identified to support the deployment of new Officers, motivate the development of certified Officers, and draw on the

experience of seasoned Officers to serve as role models and mentors for their peers. The Master Corrections Officer proposal is an essential component.

#### Workforce Development Actions

- System-level proposals that will require budget support to pilot or fully implement are already under development.
- However, site-by-site initiatives, customized for external labor market conditions and partner agencies as well as internal mission will be required.
- The Department will continue to collaborate and learn with external partner agencies as it prioritizes and makes inroads to impact individual sites.

## **Background**

The Virginia General Assembly and the Virginia Department of Corrections share a concern over the agency's capacity to attract and retain the talented workforce necessary to staff its facilities and sustain its public safety mission.

Under leadership of the Secretary of Public Safety, a proposal was advanced in the fall of 2006 to address compensation for Corrections Officers and Security Supervisors. Faced with rising turnover rates for Corrections Officers, which jumped to nearly 20% in Fiscal Year 2006, attention focused on improving the agency's near-term posture with regard to:

- External equity—narrowing the gap by which Corrections security salary levels lag behind local and regional jails.
- Internal equity—reducing salary compression within and between the Corrections security ranks.

The ensuing \$13.7 million budget amendment enacted by the Legislature in 2007 enables the agency to take a first step to enhance its external recruitment efforts. It also allowed the agency to improve its internal pay distribution and set the stage for incremental, skill-based pay initiatives in the future.

Corrections Officer turnover continued to creep higher in Fiscal Year 2007, topping 20%. It is nearly 19% for the first nine months of Fiscal Year 2008.

The 2007 General Assembly went on to task the Department with a new initiative to focus and report on ensuring an adequate labor supply for current and future state correctional facilities in partnership with other agencies.

In tandem with its strategic partners, the Department used its October 2007 interim report to commit to develop a deeper understanding of the labor force dynamics that affect its facilities:

- Determine labor force challenges facing Corrections institutions now and into the future (demographic and labor market analysis).
- Clarify personal success criteria for applicants and incumbents who work/will work in Corrections facilities (workplace readiness analysis).
- Configure a set of site-based options for workforce cohorts external or internal to the Department (workforce development initiatives).

This reporting commitment reflects on actions the Department initiated through its 2006-2008 strategic plan in support of its goal to improve employees' and organizational performance. One key objective in this area is to review all of its career groups, or occupational areas, to enhance the job

structure, pay structure and pay practices needed to attract, motivate and retain the talented workforce it needs to sustain its public safety mission in service to the Commonwealth. This initiative focuses on the Security Services career group that includes the role of Corrections Officer.

Partnerships in place for this initiative include the Weldon-Cooper Center for Public Service at the University of Virginia (WCC); the Virginia Community College System (VCCS), and within it the Community College Workforce Alliance (CCWA) and Southside Virginia Community College (SVCC); and, Corrections Evaluation and Testing Associates, Inc (CETA). Linkages with the Virginia Department for Human Resource Management (DHRM) are in place and are anticipated with the Virginia Employment Commission (VEC) as case study efforts continue.

## **Workforce Adequacy**

The Weldon Cooper Center for the Public Service was engaged by the Department as required by the General Assembly to assess the workforce adequacy for five correctional facility sites.

At this point in its development process, the Department focused solely on the Corrections Officer workforce at its facilities. This job is the dominant one and the one which experiences turnover and vacancy rates that most greatly affect the orderly operations at the facilities. A case study approach, limited to five sites, was also adopted given the time frame specified and available resources. This report provides a foundation to consider expanded scope and resources for the future.

Three of the five sites selected were current facilities. Haynesville Correctional Center represented a baseline site where normal turnover and vacancy rate conditions are present. Fluvanna Correctional Center for Women and Greensville Correctional Center are two sites where the Department has experienced elevated turnover or vacancy rates.

Two other sites selected were future facilities. Grayson County will host a new state correctional facility slated to begin operations in 2010. Charlotte County is considered the next locality host for a facility which may be operated by a private contractor.

Together, the five sites offer policy makers and the Department insights into a range of venues where workforce development activities can be tailored to local conditions.

The Department completed a six-month review of personnel records for all its Corrections Officers in January 2008 to provide Weldon Cooper with internal workforce demographics related to education, tenure, residency and personal characteristics. Weldon Cooper integrated this data with its own to produce a study for each site that attempted to answer four questions:

- What are the characteristics of current Corrections Officers?
- What are the commuting patterns of Corrections Officers?
- What are the demographic characteristics of the local area?
- What is the employment outlook in the target regions?

Appendix A contains the complete text of the Weldon Cooper report. Here is a synopsis of its findings for the five sites. The Department adds commentary of the Weldon Cooper report here in this section.

### Haynesville Correctional Center

- Haynesville is competitive with its biggest competitors (2005 data) in the area; however, the area seems to include only a small number of young workers.
- Significant number of officers will be of retirement age by 2030 and will need to be replaced.
- Blacks are significantly over-represented in the facility's workforce in comparison to the area.

*DOC Commentary:* Haynesville is one of the Department's pilot human capital sites where a site-based organizational development initiative has been underway since 2006. During this process, the Department invested over \$150,000 in internal alignment salary adjustments within the Corrections Officer ranks. These adjustments addressed salary compression experienced in attempting to make competitive salary offers to attract applicants in excess of salary levels of current staff. Combined, these steps have had a favorable impact on the turnover and vacancy rates for Corrections Officers.

### Fluvanna Correctional Center for Women

- DOC entry level salary was approximately \$2,000 less than the average (2005 data) for the area.
- It is a very competitive area where DOC may need to offer additional incentives and higher salaries to recruit.
- Significant number of officers will be of retirement age by 2030 and will need to be replaced.
- Blacks are significantly over-represented in the facility's workforce in comparison to the area.
- A larger number of employees commute from the Augusta/Staunton area than would be expected.

*DOC Commentary:* The 2002 closure of Staunton Correctional Center during a budget reduction period resulted in displacement of notable numbers of staff to Fluvanna. This explains the commuting pattern detected. An example of the competitive conditions in this area is the 2008 salary range for Corrections Officers at the Albemarle/Charlottesville Regional Jail (\$31,131 to \$49,809) compared to the Department's salary range (\$27,485 to \$40,959) at Fluvanna. Fluvanna is also a DOC human capital pilot site and ripe for internal alignment salary adjustments within its Corrections Officer ranks pending identification of necessary funds. This would be the most beneficial, tangible step the Department could take. As in the Haynesville case, these adjustments would address salary compression experienced in attempting to make competitive salary offers to attract applicants in excess of salary levels of current staff.



### Greensville Correctional Center

- Greensville is competitive with its biggest competitors (2005 data) in the area.
- The population in the area will decrease dramatically over the next 20 years.
- Significant number of officers will be of retirement age by 2030 and will need to be replaced.
- Both women and Blacks are significantly over-represented in the facility's workforce in comparison to the area.
- The proximity of I-95 allows the center to draw from a larger geographic population.
- 40% of its Corrections Officers commute from two North Carolina counties.

*DOC Commentary:* Greensville remains a special case for the Department due to its sheer size and range of special missions including Death Row.

### Grayson County Facility

- DOC will be offering competitive entry level salaries with its biggest competitors (2005 data) in the area; however, the area seems to include only a small number of young workers.
- Two-thirds of Grayson County residents work outside of Grayson County.
- The area's applicant pool is expected to shrink both in the short and long term; the prime working-age population will shrink by 4,500 by 2030.
- 5.2% of the area's labor force was unemployed in 2005.
- DOC will not be able to rely on hiring a large number of Blacks to fill its positions (as is the case in the other facilities studied) since there is only a 2% Black population in the area.

*DOC Commentary:* This 2010 start-up site offers the Department an ideal setting to introduce new elements to its recruitment process in tandem with local partner agencies. The economic development and workforce development orientation in the area are evident.

### Charlotte County Facility

- DOC will be offering competitive entry level salaries (2005 data) with its biggest competitors in the area.
- About half of the Charlotte County residents work within the county.
- The applicant pool in the area will slightly decrease over the next 20 years with the prime working-age population projected to decline by 5% by 2030.
- There is a high unemployment rate (6.11%).

*DOC Commentary:* A start-up date for a Charlotte County site has not been established at this time. This location may be operated by an outside

contractor. Data for this site is useful for policy makers as they address expected increases in the Department's offender population. Additional workforce projection cases for other state correctional facilities located in Southside Virginia may also be indicated to better understand the commuting patterns among staff at Nottoway, Lunenburg, Brunswick, Lawrenceville, Mecklenburg, Baskerville, Southampton and Deerfield.

### Additional DOC Commentary

The lens of the demographer introduces a new and valuable perspective to the Department as it continues to address its workforce development needs. It is a unique perspective from which to surface strategies that can be actively pursued to enhance the Department's recruitment and retention efforts.

In this initial collaboration between the Department and Weldon Cooper, a range of topics present themselves as each organization enters into the data collection, analysis and conclusions. Both organizations gain the opportunity to learn and strengthen their processes.

Here are topics impacted by the analysis that supports this report:

- *Applicant flow data*—the Department's current applicant flow data requires manual keying of individual data for each employment application received. HR staffing levels and workload impact the quality of data. Aggregate reporting for the agency requires a labor-intensive compilation process.

Weldon Cooper notes the limitation of applicant data provided for the three current sites. For some sites and/or for some months, applicant numbers are identical to hires. The Department is commencing use of the Commonwealth's Recruitment Management System in July 2008 with all units operational by January 2009. RMS will automate applicant flow data tracking and reporting.

- *Demographic areas*—the areas reported in the Weldon Cooper data are tied to combinations of localities used by the U.S. Bureau of Labor Statistics and other federal agencies. This geographic orientation is one that gives pause to understanding general references to the "area" surrounding a facility.

Locations of state correctional facilities are not necessarily in the center of these areas. And, commuting patterns profiled by Weldon Cooper shows that interstate road access impacts each facility.

- *Policy on Corrections Officer hiring age*—the Department has a policy and practice of hiring applicants who are at least 21 years old for these

positions. There is an exception provided that requires suitable applicants aged 18-21 to be personally interviewed by the Regional office.

In some cases, this workforce practice could skew comparison in demographics of current Corrections Officers and general workers available in the corresponding labor market.

- *Corrections Officer tenure*—Weldon Cooper’s report has been instructive for the Department in working on specifications to describe and monitor the tenure of Officers at the time of their termination.

Planning is underway to develop some new report formats for the agency’s annual Workforce Development Plan, which is published when data is available at the end of each fiscal year.

- *Exit interviews*—Weldon Cooper recommends active exit processes to gain information from employees leaving the organization. Insights to external and internal factors may be revealed.

The Department is reviewing two exit processes for implementation later this year.

- *Employee referral programs*—Weldon Cooper recommends use of an employee referral program to enhance recruitment efforts.

The Department concurs and has had a program in place for several years. It includes Corrections Officer referrals and other selected occupations (i.e., skilled trades and nurses) depending on site-by-site vacancy and turnover criteria.

## **Staffing Challenges & Recruit-to-Retain Focus**

### Staffing Challenges

Even beyond the November 2007 initiative for security staff compensation, competitive salary and benefits are key external factors for the Department's recruitment and retention success in the face of increased employer competition for workers with at least a high school education.

The turnover rate for Corrections Officers increased from 15% in Fiscal Year 2004 to 20% for Fiscal Year 2007. Vacancy rates at some sites persistently detract from orderly operation.

In all five cases analyzed in its workforce availability report, Weldon Cooper confirms that an adequate labor supply exists today but that some shrinkage is indicated over time. It will remain feasible to staff state correctional facilities but the Department must remain competitive by making its jobs appealing to local workers.

The combination of elevated turnover trends and a shrinking labor supply underscore the Department's need to effectively compete for its share of adequate applicants for the Corrections Officer job.

### Recruit-to-Retain Focus

The Department's review of current human resource management practices confirms that it must recruit to retain, echoing the conclusion set forth by Weldon Cooper. This will require the Department to make human capital investments in its security workforce to sustain its public safety mission into the future.

Appendix B presents the Department's review of current human resource management practices. A summary follows:

- "Fit" is the key internal factor for the Department's recruitment success—tools are under development to improve assessment of the compatibility of applicants to the job (Corrections Officer), workplace (correctional facilities) and organization (Department of Corrections).
- "Engagement" is the key internal factor for the Department's retention success—resources are being identified to support the deployment of new Officers, motivate the development of certified Officers, and draw on the experience of seasoned Officers to serve as role models and mentors for their

peers. The Master Corrections Officer (MCO) proposal is an essential component.

The MCO proposal is the only portion of the Department's request for Corrections Officer compensation that was not authorized in the November 2007 security staff compensation initiative. The value of the MCO proposal is two-fold:

#### MCO Proposal and External Applicants

Newly hired Corrections Officers face a challenging period as they learn and adapt to working in the corrections environment. At present, the Department's resources are invested in the learning aspect of their first year to ensure success in completing mandated training requirements and completion of their probationary period. The four-phase Basic Corrections Officer (BCO) curriculum governs this certification process. Certified instructors and Field Training Officers (FTOs) assist in the knowledge and skill attainment generally over a 12- to 16-week process.

However, adapting to the corrections environment is an individualized experience for a new Officer that extends beyond the first 16 weeks. While security supervisors take steps to work with new officers there are limitations to the contact time with any individual Officer. The MCO proposal creates a new resource—at the peer rather than supervisor level—to recognize an exemplar whom new officers may approach for support with confidence and whom supervisors may pair with new officers for specific post assignments.

The proposed MCO fills the void during the period that newly hired Corrections Officers can evolve from “novice” to “veteran.” The MCO provides additional support to retain new Officers who might otherwise abandon the development process and end their employment with the Department. Turnover during the first year of employment is the most detrimental that the Department experiences.

#### MCO Proposal and Internal Advancement

Seasoned Corrections Officers have only promotion through the security ranks as a means of advancement. Typically, there is less than 1 Corrections Sergeant position for every 15 Corrections Officer positions at a major institution. Some Officers do not have interest in a supervisory role; those that do must compete.

The current mechanism for pay-for-performance salary adjustments grants eligible employees a common increase. At that same time, the Commonwealth's salary structure is adjusted by the same percentage. Individual Corrections Officers, like employees in any other state job, are

unable to advance through their salary range in recognition of highly proficient even masterful, performance over time.

The proposed MCO designation provides a means to engage Officers who have been successful in adapting to the Corrections environment and contributing at a high level. It shifts their focus back to active, purposeful learning in the workplace. Their success could lead to recognition (and incremental compensation) as a MCO and provide their institution with a valuable peer resource to newly hired Officers.

In the proposal, MCO slots would be limited by the number of officers, variety of posts and institutional operations at each site. A self-nomination process similar to other professional personal development programs in the agency (i.e., Corridors, LEAD) would be a familiar and accepted feature. Reliance on WorkKeys assessments that could be administered by community colleges across the state simplifies logistics for verification of key workplace skills. Introduction of on-the-job assessment tools similar to ones already introduced in other career groups within the Department's workforce enables consistent and fair assessment of key contributions.

All components of the MCO proposal have been identified, are actively under development with external partners and await only commitment to a timetable for implementation on a pilot or system-wide basis by key policy makers of the Commonwealth.

## **Workforce Development Actions**

### Occupational Enhancement

The Department has drawn on dialogue with the Virginia Department of Human Resource Management (DHRM) for its support and guidance in shaping its career group review process, an effort made challenging by the sheer size of the agency and occupational diversity of its workforce.

This report reflects on actions the Department initiated through its 2006-2008 strategic plan in support of its goal to improve employees' and organizational performance. One key objective in this area is to review all of its career groups, or occupational areas, to enhance the job structure, pay structure and pay practices needed to attract, motivate and retain the talented workforce it needs to sustain its public safety mission in service to the Commonwealth. This initiative focuses on the Security Services career group that includes the role of Corrections Officer.

At this point, the Department focused solely on the Corrections Officer workforce at its facilities. This job is the dominant one and the one which experiences turnover and vacancy rates that most greatly affect the orderly operations at the facilities.

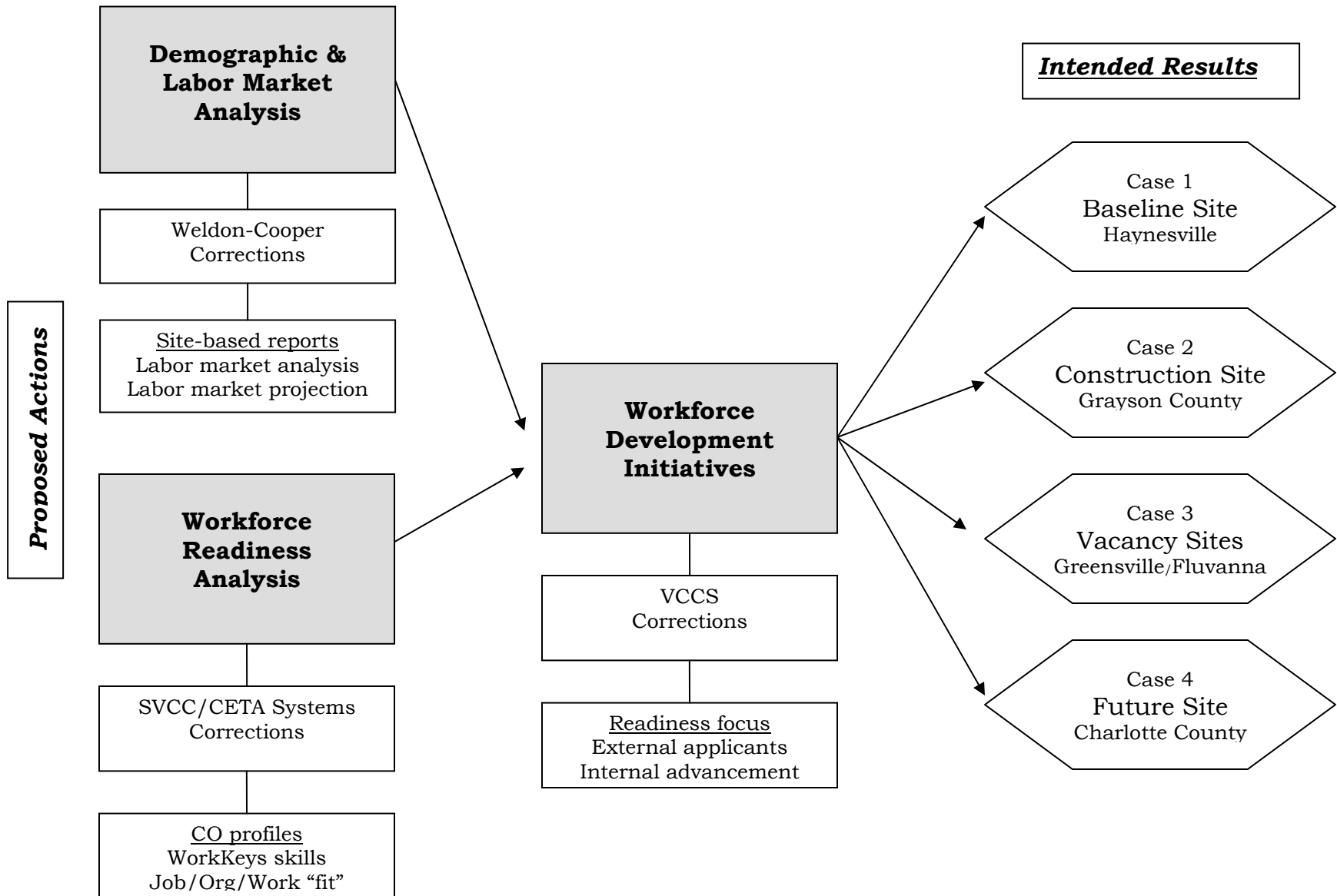
### Framework for Development Initiatives

Figure 1 presents the Department's framework for this workforce development initiative. It consists of three major activities:

- *Demographic and Labor Market Analysis*—this has been provided by the Weldon Cooper Center for Public Service at the University of Virginia.
- *Workforce Readiness Analysis*—under two grants funded by the Department of Criminal Justice Services, original research is being conducted to develop assessment tools and techniques to enhance Corrections Officer selection and advancement. The Department has also partnered with Southside Virginia Community College to profile an entry and advanced performance profile of the Corrections Officer job using the WorkKeys system.
- *Workforce Development Initiatives*—the Department entered into a Memorandum of Understanding with the Virginia Community College System for assessment services using the WorkKeys System to shape more expansive pilot of multiple Virginia community colleges as testing centers for WorkKeys assessments for current Corrections Officers or applicants for Corrections Officer positions.

A fuller presentation of these activities follows.

**Figure 1: Labor Force Projection & Workforce Development Initiative for State Correctional Facilities**





## Demographic and Labor Market Analysis

The Department of Corrections initiated dialogue with the Weldon Cooper Center for Public Service at the University of Virginia for this analysis. The two agencies confirmed that they had the expertise to complete site-based demographic, labor market, local economy and unemployment analysis for any current or planned correctional facility.

Weldon Cooper produced a preliminary report for the October 2007 interim reporting assigned to the Department by the General Assembly. Its final reported has been addressed in an earlier section and the complete text appears in Appendix A.

In support of this area of activity, the Department:

- Completed a six-month review of personnel records for all its Corrections Officers in January 2008 to provide Weldon Cooper with internal workforce demographics related to education, tenure, residency and personal characteristics.
- Accelerated internal introduction of the Commonwealth's Recruitment Management System (RMS) to automate monitoring of applicant flow data for Corrections Officers (and all other positions). This is a three phase process where all DOC facilities will begin RMS use as early as July 2008 but no later than January 2009.
- Continued development of automated reporting of tenure, turnover and tenure at time of turnover trends using DHRM's HURMAN reporting facility. Fiscal Year 2008 data will be the first period for preliminary reporting.

## Workforce Readiness Analysis

*External Applicants.* The Department obtained funding (less than \$20,000) under the Byrne Memorial Justice Assistance Grant Program administered by the Virginia Department of Criminal Justice Services. Corrections Evaluation & Testing Assessment Systems, Inc., (CETA) is the external research partner. Richard Sheppard, Jr., Ph.D., a personnel psychologist, is managing the project to pilot assessment tools and techniques to enhance Corrections Officer selection.

The two partner organizations confirmed they have the expertise necessary to create original research that will inform the Department with a "readiness" baseline of cognitive abilities, personal (personality) attributes, work values and workplace preferences needed for employees to work successfully in the Corrections institutional environment.

Survey instruments have been administered to Corrections Officers and factor analysis has been undertaken to confirm the validity and reliability of the proposed measures. As is the case with any validation study, limitations of the sample size and integrity of the incumbents' response can be problematic and desired degree of significance for findings can be elusive.

Dr. Sheppard's work will give Corrections key insights to "person-job", "person-organization" and "person-workplace" fit. These constructs will help create a profile of favorable employment characteristics that external candidates bring with them as applicants for Corrections Officer jobs. It will also provide familiarization with assessment (testing) and behavioral interviewing tools that Corrections may consider for adoption.

The Department anticipates its current Memorandum of Understanding with CETA Systems will ensure that key steps are completed to develop a "fit" profile (person- to -job, -organization, and -workplace) that serves the agency well.

In support of this area of activity, the Department:

- Administered combinations of four survey instruments to more than 300 new and seasoned Corrections Officers.
- Delivered behavioral interview training for management staff at four pilot major institutions.
- Delayed behavioral interview interviewing update training at pilot sites until constructs are ready for use in a new interview tool and collect assessment data on applicants for Corrections Officers in the second half of 2008.
- Planned to convene a management roundtable to interpret descriptive research findings of the external research partner in the second half of 2008.

*Internal Advancement.* The Department also received continuation funding (less than \$20,000) under the Byrne Memorial Justice Assistance Grant Program administered by the Virginia Department of Criminal Justice Services. Southside Virginia Community College, supported by the Virginia Community College System, is the external partner through its Workforce Development Center and Administration of Justice Program.

The two partner organizations confirmed they have the expertise necessary to create original research that will inform the Department with a "readiness" baseline of workplace skills needed for employees to work successfully in the Corrections institutional environment.

This joint effort has adopted the WorkKeys System, a set of universal employability skills, to profile the Corrections Officer role. The profile is intended to identify baseline workplace skills for external use to assist in the

screening or readiness development suitable employment candidates. More importantly, and internally, it will also be used to identify advanced skills to support role development design for the proposed Master Corrections Officer (MCO) designation. The profile is a powerful tool with promise to advance the Department's insight of resource availability (attracting external candidates with good "fit" to the Corrections Officer job) and resource utilization (engaging and retaining seasoned staff).

A certified WorkKeys profiler from Southside Virginia Community College has already conducted profiling sessions with Corrections Officers based on six different clusters of security posts manned within the Department's facilities. Distinct profiles have been established to guide the advanced proficiency for each cluster in terms of WorkKeys skill areas such as Observation, Teamwork, Listening, Applied Mathematics, Business Writing, and Locating Information. Administration of WorkKeys assessments to new and seasoned officers has begun to confirm a WorkKeys skills baseline for external applicants and proposed advancement of seasoned staff into the MCO designation.

The post cluster profiles can also support future assessment of the Department's Basic Correctional Officer curriculum and integration of basic and supplemental courses at the community college level suitable for external candidates seeking entry into the Corrections Officer job and for current Corrections Officers Senior seeking internal advancement into the proposed MCO designation.

In support of this area of activity, the Department:

- Completed skill block design to support on-the-job assessment of Corrections Officer proficiency in each of the six post clusters.
- Conducted WorkKeys assessments on samples of new and seasoned Corrections Officers who work primarily on posts in each of the six clusters of posts. Over 100 assessments will have been administered by the end of June 2008.
- Developed prototype Master Corrections Officer eligibility and recognition criteria.
- Completed on-the-job assessment instruments for one of the six post clusters.

At this time, the Department has a set of activities scheduled for completion in the second half of 2008:

- Identify community college curriculum options including WorkKeys computer-based, internet-based and classroom-based and distance learning to support learning in basic WorkKeys skill areas by applicants for Corrections Officers.

- Identify additional community college curriculum options to support learning in advanced task specialization by current Corrections Officers Senior.
- Develop a task sequence and implementation scenarios to support community college services that could be made available on a pilot basis through Southside Virginia Community College to a state correctional facility.

### Workforce Development Initiatives

The Department of Corrections has entered into a Memorandum of Understanding with the Virginia Community College System for assessment services using the WorkKeys System. A pilot project supporting another of its career group reviews (Probation and Parole Services) was conducted in January 2008 involving field support staff in probation and parole districts.

This provided a learning opportunity to shape more expansive pilot of multiple Virginia community colleges as testing centers for WorkKeys assessments for current Corrections Officers or applicants for Corrections Officer positions.

Meanwhile, the Department has used a train-the-trainer approach to ensure a core group of Human Resources staff who will be able to train and support management staff at its facilities in the behavioral interviewing techniques and tools to focus on enhanced assessment of “fit” for applicants for Corrections Officer vacancies.

### Intended Results

This labor force projection and workforce development initiative relies on a comprehensive approach, drawing on external partners to share in developing expertise to yield pragmatic positive results with these characteristics—feasible, targetable and actionable.

*Feasible*—demographic and labor market conditions will support an adequate labor supply for the Department although a competitive environment can be anticipated. Vigilant attention will be necessary to ensure that the Department has an adequate budget to successfully recruit.

*Targetable*—tangible “fit” characteristics for person-job, person-organization and person-workplace for Corrections Officers are within the grasp of the Department based on initiatives underway. Persistence will be necessary to select, orient, train and support new officers to engage them as Corrections workers who will remain for longer periods of employment. The proposed Master Corrections Officer is a key resource in this effort as well as a recognition path that will enhance retention of staff.

*Actionable*—expertise, resources and processes of the partnering agencies are available to confirm availability and readiness of workforce development services to support state correctional facility sites dispersed across the Commonwealth. The activities clustered under this initiative demonstrate that tools under development and the external agencies partnering with the Department are in place to produce favorable results at each of the five sites used as cases in this report. The Department must rely on continued partnership with key policy makers in the Commonwealth to make available additional, incremental resources to move to implementation. This is especially true of the Master Corrections Officer proposal.

Virginia Department of Corrections  
Labor Force Projection & Workforce Development Initiative  
For State Correctional Facilities

Final Report—June 24, 2008

Appendix A:

**Workforce Profile of Selected Correctional Facilities in Virginia**

Prepared by:

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# **Workforce Profile of Selected Corrections Facilities in Virginia**

Prepared by

Demographics and Workforce Section  
Weldon Cooper Center for Public Service

## **EXECUTIVE SUMMARY**

This study provides a comprehensive assessment of local demographics and workforce availability of three existing Department of Corrections sites - the Fluvanna Women's Correctional Center, the Greensville Correctional Center, and the Haynesville Correctional Center - to assist the DOC in understanding the future sites of new facilities, specifically Grayson County and Charlotte County. Matching a profile of currently employed corrections officers with regional population demographics and workforce statistics allowed us to determine whether there is a sufficient supply of workers in the local areas with the qualifications and characteristics desired for corrections officers.

For the three existing facilities, we first analyzed the characteristics and commuting patterns of current corrections officers to gain an understanding of the current workforce. Analyzing the characteristics of the current corrections officers helped us to determine if the local area has a sufficient supply of workers with the desired demographics and qualifications. Additionally, we examined the commuting patterns of current corrections officers to determine what counties should be included in our analysis of the local demographics and workforce. Finally, we analyzed the demographics and workforce of the local geographic areas to better understand the future employment outlook for corrections officers in the surrounding area.

When we examined the three existing facilities we identified existing factors that enable them to maintain a sufficient number of workers, including a high percentage of young workers in the local labor force, a high local unemployment rate, an expected decline of competing industries such as manufacturing, competitive salaries, a high hiring rate, and proximity to interstates. Table 1 provides a summary of our findings for each facility and shows which of the above factors apply to each facility. Additionally, the table shows the characteristics of DOC facilities that work against staffing efforts. While these results show that the workforce availability for many facilities will decline between now and 2030, we found that overall there will be an ample supply of people available to fill vacant corrections officer positions. The key to maintaining sufficient staffing levels is that the DOC remains competitive and makes corrections positions appealing to local workers. In this report we provide recruitment, selection, and retention strategies that the DOC should incorporate in the near future.

Effective recruitment and selection strategies are important because they serve to attract many quality candidates who are well suited to the responsibilities and tasks of corrections positions. Recruitment tools often attract many applicants, but when the recruits only stay within the organization for a short time because of a mismatch between their talents and the position, the funds, time, and energy spent on recruiting, hiring, and training them have essentially been wasted. The second and arguably more important area requiring DOC attention is retention of current employees. Turnover among corrections officers is a significant problem across Virginia and the rest of the country. For two of the three existing Virginia correctional sites included in this study, high vacancy and turnover rates were reported. The potential effects of turnover in all

current and future facilities should be of concern because they are costly, and breed factors in remaining employees that may perpetuate the cycle of turnover. The strategies we recommend at the end of this report will help ensure that the DOC can recruit and retain sufficient numbers of corrections officers from the ample supply of workers.



**Table 1 - Characteristics of DOC Facilities that Affect Staffing**

	Fluvanna Women's Correctional Center	Greensville Correctional Center	Haynesville Correctional Center	Future Grayson Correctional Facility	Future Charlotte Correctional Facility
Labor Force Participation in 2005	103,000 workers, 18% aged 25-34	46,000 workers, 18% aged 25-34	23,000 workers, 10% aged 25-34	30,000 workers, 10% aged 25-34	33,000 workers, 14% aged 25-34
Local Unemployment Rate in 2005	3.2%	6.5%	4.6%	5.2%	6.1%
Competing Industries	- Health care and social assistance - Educational services - Retail trade - Construction - Manufacturing	- Manufacturing - Public administration - Health care and social assistance	- Health care and social assistance - Retail trade - Manufacturing - Educational services - Construction	- Manufacturing - Health care and social assistance - Retail trade	- Manufacturing - Retail trade - Educational services
Entry-level Salaries	<b>Not</b> competitive, \$2000 below average annual entry-level salary for young workers	Competitive, \$6000 above average annual entry-level salary for young workers	Competitive, \$9000 above average annual entry-level salary for young workers	Competitive, \$10,000 above average annual entry-level salary for young workers	Competitive, \$8,000 above average annual entry-level salary for young workers
Hiring Rate based on DOC Administrative Data	1 in 5 applicants hired as corrections officers	All applicants hired as corrections officers	All applicants hired as corrections officers	N/A	N/A
Future Workforce Availability	Prime working-age population expected to <b>increase</b> by 14% from 2010 to 2030	Prime working-age population expected to <b>decrease</b> by 19% from 2010 to 2030	Prime working-age population expected to <b>increase</b> by 13% from 2010 to 2030	Prime working-age population expected to <b>decrease</b> by 12% from 2010 to 2030	Prime working-age population expected to <b>decrease</b> by 5% from 2010 to 2030
Retirement	One-third of current corrections officers will be eligible to retire at some point in the next 20 years	One-third of current corrections officers will be eligible to retire at some point in the next 20 years	Over one-third of current corrections will be eligible to retire at some point in the next 20 years	N/A	N/A
Transportation/Interstates	Interstate nearby	Interstate nearby	No interstate nearby	No interstate nearby	No interstate nearby
Advantages for staffing facility	-Percent of young workers in labor force -Future workforce availability -Proximity to interstate	-Percent of young workers in labor force -Unemployment rate -Expected decline of competing industries -Salaries -Hiring Rate -Proximity to interstate	-Salaries -Hiring Rate -Future workforce availability	-Unemployment rate -Expected decline of competing industries -Salaries	-Percent of young workers in labor force -Unemployment rate -Expected decline of competing industries -Salaries
Disadvantages for staffing facility	-Unemployment rate -Salaries -Hiring Rate -Retirement	-Future workforce availability -Retirement	-Percent of young workers in labor force -Retirement	-Percent of young workers in labor force -Future workforce availability	-Future workforce availability

## **BACKGROUND**

The Virginia Department of Corrections (DOC) requested that this study include analyses of three existing sites: the Fluvanna Women's Correctional Center, the Greenville Correctional Center, the Haynesville Correctional Center. Both Fluvanna and Greenville Correctional Centers have an elevated vacancy rate and the Haynesville Correctional Center has a normal vacancy rate. The DOC also requested an analysis of two future sites: Grayson County and Charlotte County. Ground was recently broken for a prison near Independence in Grayson County; construction is expected to be completed by 2010. The DOC is also considering a proposal for a privately operated prison in Charlotte County.

This study provides a comprehensive assessment of local demographics and workforce availability to assist the DOC in assessing potential sites of new facilities. Matching a profile of currently employed corrections officers with regional population demographics and workforce statistics will help to determine if there is a sufficient supply of workers in a specified local area with the qualifications and characteristics desired for corrections officers.

Our analysis begins with the characteristics and commuting patterns of current corrections officers. Before we can assess the local demographics and workforce, understanding the current correctional workforce is critical. Analyzing the characteristics of current corrections officers helps us to determine if the local area has a sufficient supply of workers with the desired demographics and qualifications. Additionally, we use the commuting patterns of current corrections officers to determine what areas should be included in our analysis of the local demographics and workforce. Finally, we analyze the local demographics and workforce to better understand the future employment outlook for corrections officers in the surrounding area. More specifically, we answer the following questions:

- (1) What are the characteristics of current corrections officers?
  - What is the age and gender composition of current corrections officers?
  - What is the racial and ethnic composition?
  - What is the educational attainment?
  - How many officers have prior military, state, or law enforcement experience?
  - How many officers have a limited amount of stable work history?
- (2) What are the commuting patterns of corrections officers?
  - How far do most corrections officers live from their place of employment?
  - Do many live near a major highway or interstate?
  - Do most corrections officers work at the facility that is closest to their residence?
- (3) What are the demographic characteristics of the local area?
  - What is the age and gender composition of the prime working-age population?
  - What is the racial and ethnic composition?
  - How is the prime working-age population expected to change in the future?
  - What is the educational attainment of the local population?

(4) What is the employment outlook in the target regions?

- What are the labor force participation and unemployment rates?
- What industries will be the biggest competitors?
- Does the DOC offer competitive entry-level salaries?

**DATA AND METHODS**

This study provides a demographic and workforce profile of five selected areas: Fluvanna, Greensville, Haynesville, Grayson, and Charlotte. These profiles are based on data obtained through the Virginia Department of Corrections (DOC), the U.S. Census Bureau, the Bureau of Labor Statistics (BLS), the Weldon Cooper Center for Public Service, the Virginia Employment Commission (VEC), and the North Carolina State Demographics Unit. Below are the specific data sources, outlined in more detail:

- **DOC:** Data included demographic and employment information on corrections officers employed statewide as of January 31, 2008. All data was analyzed using descriptive statistics and worker-commuting patterns were analyzed using the Geospatial Information System (GIS).
- **U.S. Census Bureau:** Data included the 2006 population estimates by age, sex, and race and the 2000 Decennial Census. Quarterly workforce data, known as Local Employment Dynamics (LED) was also used in this study. For this study, the data is averaged over all quarters in 2005 and excludes any North Carolina counties. All data was analyzed using descriptive statistics.
- **BLS:** Data included labor force and unemployment statistics and entry-level salary figures for corrections officers for 2005-2006. All data was analyzed using descriptive statistics.
- **Weldon Cooper Center:** Data included the 2006 population estimates by age and sex. All data was analyzed using descriptive statistics.
- **VEC:** Data included population projections for 2010-2030 for counties in Virginia. All data was analyzed using descriptive statistics.
- **NC State Demographics Unit:** Data included population projections for 2010-2030 for counties in North Carolina. All data was analyzed using descriptive statistics.

Our analysis of each area is divided into five parts: (a) Profile of Corrections Officers, (b) Commuting Patterns, (c) Local Demographics, (d) Workforce Profile, and (e) Hiring Process. A detailed outline of our analysis can be found below:

**Figure 1. Outline of Data Analysis**

<i>Section</i>	<i>Data Item</i>	<i>Why is it important?</i>	<i>Data Source</i>
<i>Profile of Corrections</i>	Age Distribution	Tells us if a large portion of the current workforce will be eligible for retirement in the	DOC

<i>Officers</i>		next 20 years. This would indicate an increase need for recruitment.	
	Gender Distribution	Tells us if there is a substantially higher percentage of males or females working as corrections officers than in the overall workforce. This may indicate a reliance on one particular gender.	DOC
	Racial Distribution	Tells us if there is a substantially higher percentage of Whites or Blacks working as corrections officers than in the overall workforce? This may indicate a reliance on one particular race.	DOC
	Educational Attainment	Indicates the most desired education for corrections officers.	DOC
	Relevant Experience	Do a high percentage of officers have prior state, law enforcement, or military experience? This may indicate a potential target audience for marketing and recruitment.	DOC
	Stable Work History	A large portion of officers with an unstable work history may indicate an unstable workforce.	DOC
	Time in Current Position	Does the percent of officers that are between the ages of 18-34 vary by the amount of time employed by the DOC? This may indicate problems with retention.	DOC
<i>Commuting Patterns</i>	County of Residence	Indicates county from which the majority of corrections officers are commuting and tells us size of the geographic area from which the DOC recruits corrections officers for each facility. Results were also used to define the local area for each facility.	DOC
	Distance to Facility	Indicates how far officers travel to get to work. Provides an additional measure of the size of the geographic area from which the DOC recruits corrections officers for each facility.	DOC
	Distance from Residence to Nearest Highway	Interstates provide convenient commuting routes, which may lead to a larger recruitment area.	DOC

<i>Local Demographics</i>	Age Structure	Indicates whether there is sufficient supply of workers between the prime working ages of 20-54.	U.S. Census Bureau, Weldon Cooper Center
	Population Projections	Helps to determine whether the applicant pool will shrink, remain steady, or grow over the	VEC, NC State Demographics

		next 20 years. Also indicative of the competitiveness of the future workforce.	Unit
	Educational Attainment	Helps to determine if there is a sufficient supply of workers with the desired degree for corrections officers.	U.S. Census Bureau
	Number of Veterans in Area	Prior military service may be associated with longer DOC employment. A large veteran population may be beneficial in terms of hiring and retention.	U.S. Census Bureau
<i>Workforce Profile</i>	Labor Force	The size of the labor force is likely to affect hiring and retention. Additionally, a small labor force may be a more competitive labor force.	BLS
	Unemployment Rate	A low unemployment rate may be indicative of a competitive workforce. However, if the unemployment is high, it could serve as an advantage for the DOC, in terms of attracting a wide range of applicants.	BLS
	Employment by Industry for Young Workers	Tells us if young workers make up a small portion of the total labor force, which may indicate difficulty in attracting young workers. Also indicates which industries are the DOC's biggest competitors.	U.S. Census Bureau
	Turnover & New Hire Earnings by Industry for Young Workers	Indicates which industries are successfully retaining young workers and offering them competitive salaries.	U.S. Census Bureau
	Entry-Level Salaries for Corrections Officers	Allows us to determine if the DOC is offering competitive entry-level salaries in the local area.	BLS
<i>Hiring Process</i>	Applicant Flow	Helps to determine if the DOC is attracting qualified candidates and how attractive the position is to those who are made an offer.	DOC

As mentioned in the previous section, we determined the local area based on the commuting patterns of corrections officers for existing sites and the commuting patterns of the overall local workforce for future sites. Based on those analyses, the following localities were included in the local area:

**Fluvanna Area:** Albemarle County, Buckingham County, Charlottesville City, Fluvanna County, and Louisa County.

**Greensville Area:** Brunswick County, Emporia City, Greensville County, Halifax County (NC), and Northampton County (NC).

**Haynesville Area:** Essex County, Northumberland County, Richmond County, and Westmoreland County.

**Grayson Area:** Alleghany County (NC), Carroll County, Galax City, and Grayson County.

**Charlotte Area:** Charlotte County, Lunenburg County, Mecklenburg County, and Prince Edward County.

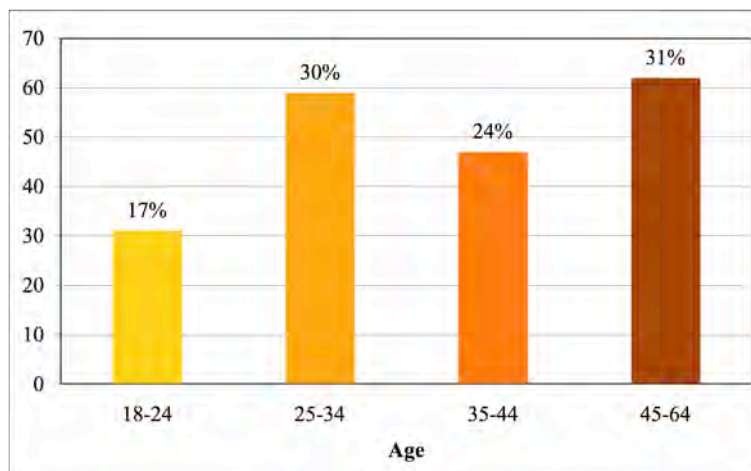
## RESULTS

### *Fluvanna*

#### *(a) Profile of Corrections Officers*

Our analysis of primary data provided by the DOC indicates, that among nearly 200 corrections officers employed at the Fluvanna Correctional Center, almost half are less than 35 years of age, with the median being 37 (a point which indicates that half of the officers are older and half are younger). All officers are less than 65 years of age.

**Figure 2. Age Distribution of Corrections Officers**



\*Source: Virginia Department of Corrections

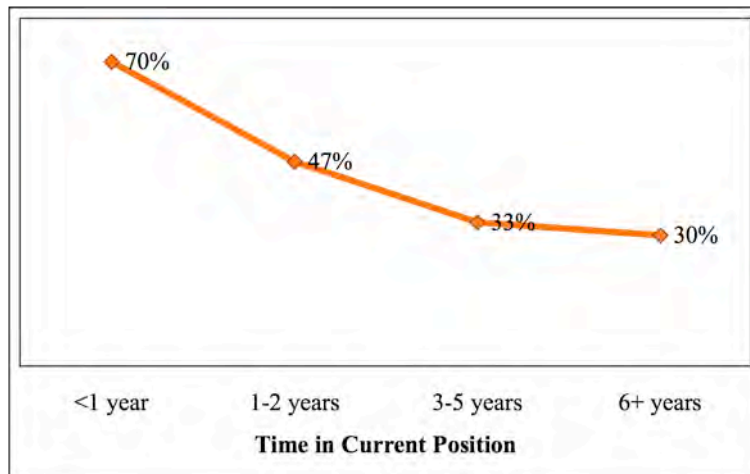
We also found that approximately 55 percent of corrections officers are female and 45 percent are male. Nearly half of all corrections officers are White and about 48 percent are Black. The high

percentage of female officers can be attributed to the fact that this particular facility is a women's correctional center.

In terms of education and relevant experience, all officers have at least a high school diploma and 3 percent have an Associates Degree or higher. Furthermore, nearly 3 in 10 officers have prior military, state, or law enforcement experience. However, over 45 percent of officers have less than 6 months of stable work history.

The following figure illustrates retention for young workers. Assuming that most officers are employed for a year, approximately 70 percent of new hires are between the ages of 18-34. However, for those officers who have been employed for 1-2 years, only 47 percent are between the ages of 18-34. For 3-5 years, this number decreases to 33 percent. Although these figures are not technically retention rates, assuming that the hiring trends in terms of age have not changed significantly over the past few years, these figures can be used as a proxy.

**Figure 3. Percent of Corrections Officers Age 18-34 by Time in Current Position**

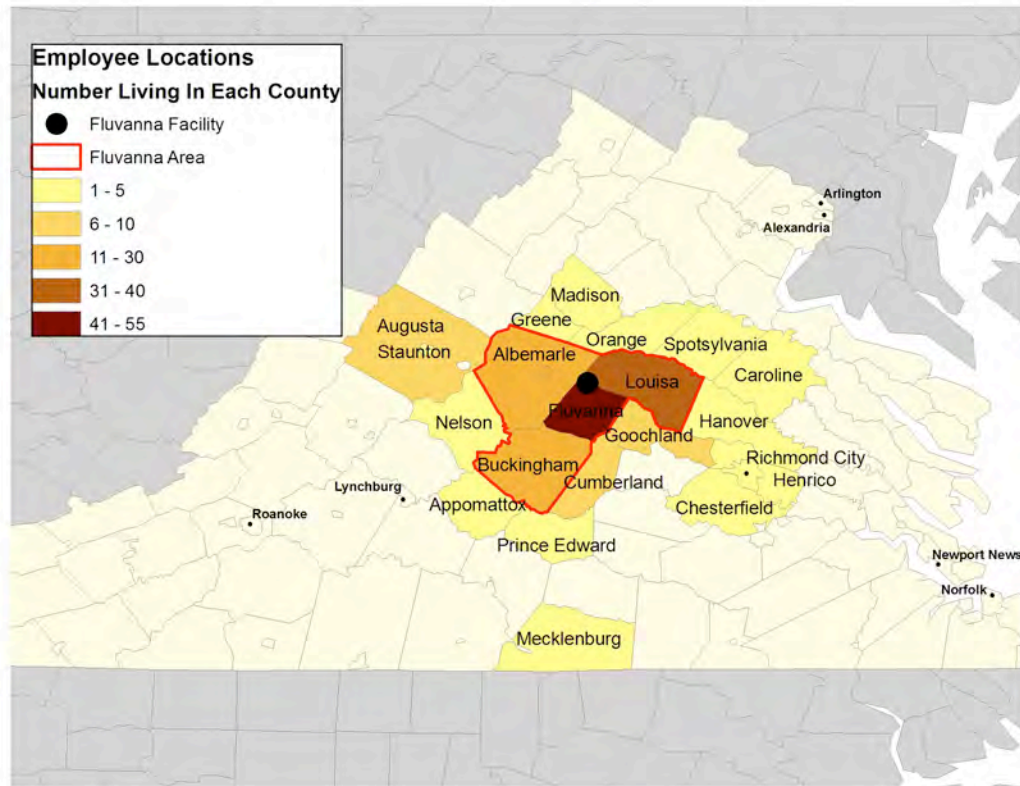


\*Source: Virginia Department of Corrections

*(b) Commuting Patterns*

In order to identify the local area, we examined the commuting patterns of current corrections officers to understand where the workforce comes from geographically. Using GIS analysis and data provided by the DOC, we were able to map the location home address for the officers who work at the Fluvanna Correctional Center.

**Figure 4. Number of Employees Living in Each County**



\*Source: Virginia Department of Corrections

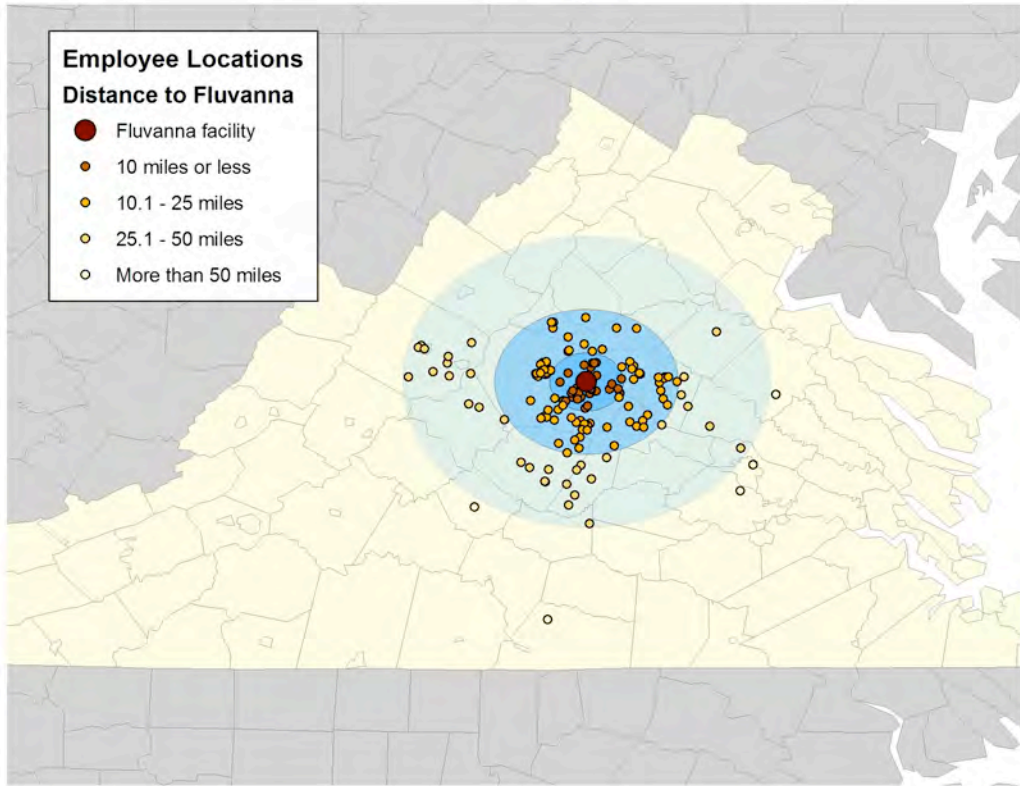
The home address data show that the officers commute from twenty-two counties across Central Virginia. A little over 75 percent of the officers commute from the Fluvanna Area, which includes Albemarle County, Buckingham County, Charlottesville City, Fluvanna County, and Louisa County. The county with the most officer residences is Fluvanna, with twenty-six percent of officer homes located there.

In the figure above we see that, with the exception of Augusta and Staunton, the commuting pattern follows what we would expect. Most of the officers who work at the Fluvanna Correctional Facility live in the counties that are closest to the facility.

In the next figure, we can see the distance from each officer's house to the Fluvanna Correctional Center. Note that we are using the distance between the two points and not the driving distance.



**Figure 5. Distance of Residences to Fluvanna Facility**

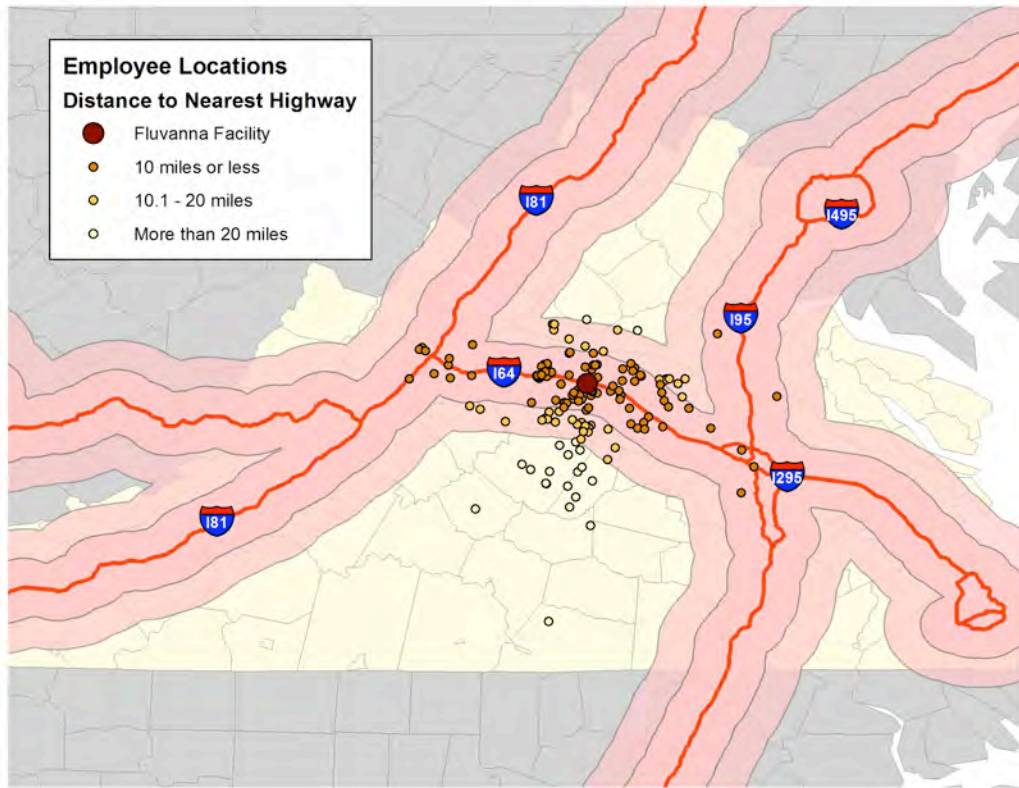


\*Source: Virginia Department of Corrections

The large dot in the center of the blue circles shows the location of the Correctional Center. The smaller dots show the location of each officer's residence. Almost a quarter of the officers live within 10 miles of the facility, and almost three quarters of the officers live within 25 miles of the facility. The mean distance from home to work for the officers is 19.4 miles. All but five of the 199 total officers live within 50 miles of the facility.

Since Virginia's interstate system provides the fastest commuting route for many Virginians, we also examined the distance from each officer's residence to the nearest highway.

**Figure 6. Distance of Residences to Nearest Highway**

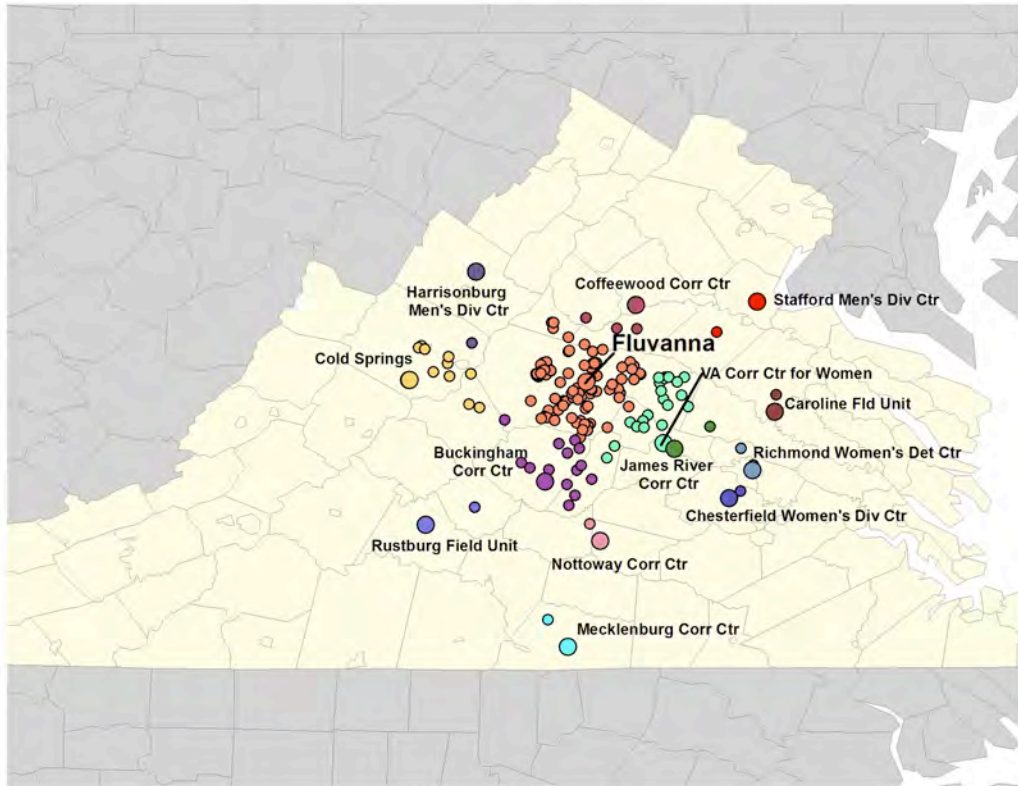


\*Source: Virginia Department of Corrections

In the figure above, we see red lines showing the location of Virginia's major interstates. The two pink shaded regions show the areas within 10 miles and 20 miles of the highway. Again, the large dot in the center of the map shows the location of the Correctional Center, and the smaller dots show the location of each officer's residence.

This figure shows that a large portion of the officers live close to an interstate. Almost 60 percent live within 10 miles of an interstate, and a little over 80 percent live within 20 miles of an interstate. This may largely be due to the location of the facility, which is very near an interstate, but this map explains why the number of officers living in Augusta and Staunton is greater than we would expect based only on the distance of these localities from the facility. Interstate 64 provides a convenient route for these officers to commute to work quickly.

**Figure 7. Closest Correctional Facility to Residence**



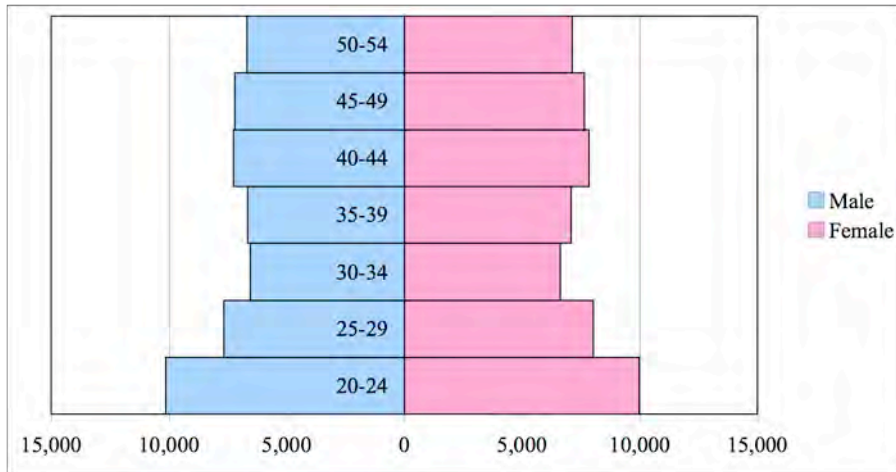
\*Source: Virginia Department of Corrections

Lastly, we examine the officers' residences to see if the Fluvanna facility is the closest correctional facility to their homes. In this picture, all of the small dots again represent the residence of each officer at the Fluvanna Correctional Center. The larger dots represent several correctional facilities throughout the state. The orange dots in the center show the officers for whom the closest facility is in fact the Fluvanna facility. All of the other small dots are different colors to show that there is another facility closer to that officer's residence. For example, at the bottom of the map we see a light blue dot showing the residence of one Fluvanna officer. When we match this color to the larger dots we see that the closest facility to this officer's home is the Mecklenburg Correctional Center. We do not have data showing why an officer may choose to work at a facility different from the one closest to his residence, but possible reasons could include job availability, salary differences, and commuting preferences.

*(c) Local Demographics*

Our analysis of the U.S. Census Bureau's and the Weldon Cooper Center's population estimates indicates that there were nearly 107,000 men and women between of prime working-age (ages 20-54) living in the Fluvanna area in 2006. Approximately 46 percent of the prime working-age population is less than 35 years old. Additionally, 51 percent of the prime-working-age population is female and 49 percent is male.

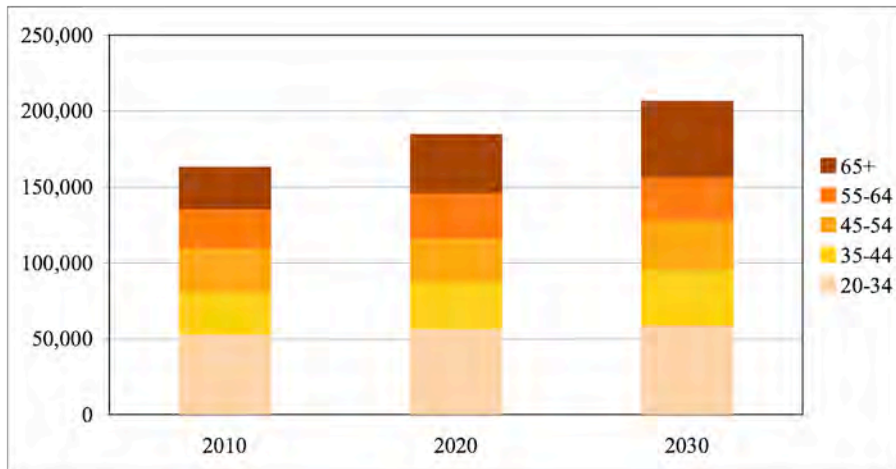
**Figure 8. Age Structure**



\*Source: 2006 U.S. Census Bureau and Weldon Cooper Center Population Estimates

Since at least one-third of corrections officers in the Fluvanna facility will be of retirement age by 2030, population projections are very crucial in determining workforce availability for the future. According to the VEC’s population projections, the prime working-age population is expected to increase from 110,000 people in 2010 to 128,000 people in 2030, or by 14 percent. Therefore, it appears as though applicant pool will be growing over the next 20 years; however, the DOC should be aware that over 60 officers are expected to reach retirement age by 2030, as well.

**Figure 9. Population Projections**



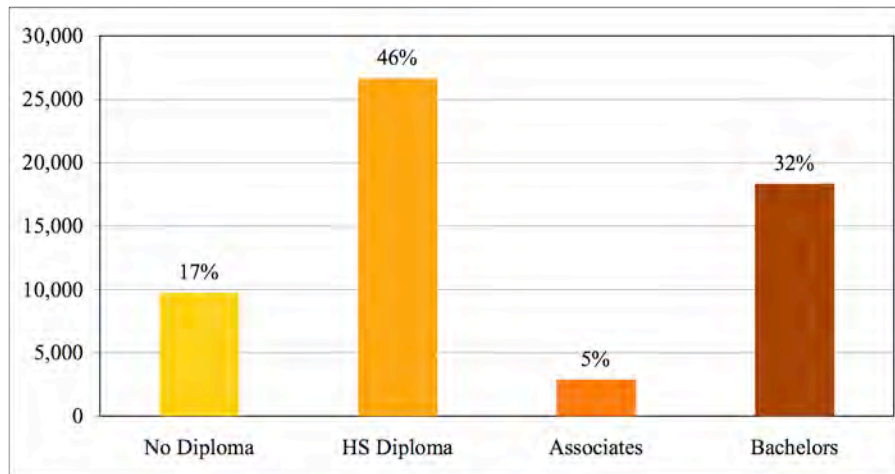
\*Source: Virginia Employment Commission Projections

In terms of racial and ethnic composition, an overwhelming majority of prime working-age people in the Fluvanna area is White; 79 percent are White, 16 percent are Black, and 4 percent are Asian. Hispanics account for approximately 3.2 percent of the prime working-age population, regardless of race. If we compare these figures with the racial composition of corrections officers, we find that Blacks are significantly over-represented at the Fluvanna Correctional Center.

According to the 2000 Decennial Census, there were approximately 30,000 people (51 percent) in the Fluvanna area between the ages of 18-44 with a High School Diploma or Associates Degree.

We also found that there were over 10,000 veterans between the ages of 18-64 living the Fluvanna area in 2000.

**Figure 10. Educational Attainment (Ages 18-44)**



\*Source: 2000 Decennial Census

*(d) Workforce Profile*

According to the Bureau of Labor Statistics, there were approximately 103,000 workers in the labor force in 2005 for the Fluvanna area and about 3.2 percent of those workers were unemployed. Combine this data with the Local Employment Dynamics (LED) data for the Fluvanna area and we find that young workers (ages 25-34) account for 18 percent of the labor force.

Further analysis of the LED data for the Fluvanna area indicates that the DOC's biggest competitors are employers in the industries of health care and social assistance, educational services, and retail trade. These leading industries employ over 40 percent of young workers. Additionally, construction and manufacturing are major competitors as well; they employ a large number of young workers and have relatively high earnings for new hires in this age group.

We also found that the average monthly earnings for newly hired, young workers in the Fluvanna area was \$2,250 in 2005, which translates to an annual salary of approximately \$27,000. According to the Bureau of Labor Statistics, the entry-level salary (25th percentile) for corrections officers in the Charlottesville metropolitan area is about \$25,000 in 2005. The Charlottesville metropolitan area includes Charlottesville City, Albemarle County, Fluvanna County, Greene County, and Nelson County. Thus, the DOC is not offering competitive salaries in the Fluvanna area; the entry-level salary for corrections officers falls short of the average for newly hired, young workers by about \$2,000.



**Figure 11. Workforce Statistics by Industry Sector (Ages 25-34)**

<i>Fluvanna Area</i>	<i>Employment</i>	<i>Turnover</i>	<i>New Hire Earnings</i>
Health Care and Social Assistance	3,036	10.4%	2,382
Educational Services	2,853	10.2%	1,960
Retail Trade	2,244	14.3%	1,626
Accommodation and Food Services	1,712	18.4%	1,254
Professional, Scientific, and Technical Services	1,581	12.2%	4,153
Construction	1,323	14.4%	2,244
Manufacturing	962	11.9%	2,503
Administrative and Support Services	751	18.5%	1,580
Other Services (except Public Administration)	659	13.1%	2,195
Information	592	9.7%	2,826
Finance and Insurance	464	10.9%	3,052
Public Administration	456	6.7%	1,859
Management of Companies and Enterprises	433	7.1%	3,549
Wholesale Trade	338	11.9%	2,732
Arts, Entertainment, and Recreation	326	13.7%	1,854
Real Estate and Rental and Leasing	320	26.6%	2,137
Transportation and Warehousing	266	13.5%	1,707
Utilities	151	4.2%	4,137
Agriculture, Forestry, Fishing and Hunting	125	18.3%	1,858
Mining	27	12.1%	--
All Sectors	18,617	12.4%	2,252

\*Source: 2005 Local Employment Dynamics

*(e) Hiring Process*

The DOC provided data on applicant flow for July 2007 through December 2007. The following table shows the total number of applicants, and the number of applicants offered an interview, offered a position, and hired.

**Figure 12. Applicant Flow Data for Fluvanna Facility**

	<i>Jul-07</i>	<i>Aug-07</i>	<i>Sep-07</i>	<i>Oct-07</i>	<i>Nov-07</i>	<i>Dec-07</i>	<i>Total</i>
<b>Number of Applicants</b>	7	-	12	109	27	-	<b>155</b>
<b>- Number Offered Interview</b>	7	-	12	100	20	-	<b>139</b>
<b>- Number Offered Position</b>	5	-	12	19	9	-	<b>45</b>
<b>- Number Hired</b>	5	-	12	10	6	-	<b>33</b>

\*Source: Virginia Department of Corrections (no data were provided for August and December)

We do not have enough data to identify trends in applicant flow over time, but we can discuss what we see over this six-month period. In July and September, there was a relatively small applicant pool and all of them were offered an interview. Five applicants were offered the position and hired in July, and in September all 12 applicants were ultimately hired. There were a substantially higher number of applicants in October, and therefore a large number of interviews offered in that month. In spite of the large applicant pool, the number of applicants offered a position and hired was only slightly higher than in previous months, and the number that were ultimately hired was lower than in September. The data do not explain why there were so many more applicants during this month, but the number ultimately offered a position and hired indicates that the demand for employees was probably similar to previous months. In November,

we see the lowest interview rate with 20 of the 27 applicants (74 percent) being offered an interview. Again, we see that the number offered a position and hired is similar to previous months, indicating that the job demand in November was probably similar to previous months. Overall, there were 155 applicants in the four months reported. Ninety percent of the applicants were offered an interview; 29 percent were offered a position; and 21 percent, or about 1 in 5 applicants, were hired as corrections officers.

*(f) Summary*

We found that Blacks are significantly over-represented in the Fluvanna Correctional Center; Blacks account for 14 percent of the prime working-age population, but they represent nearly 48 percent of corrections officers. As for worker commuting patterns, we found that about 75 percent of the officers who work at this facility commute from the Fluvanna Area, with the highest percentage of corrections officers living in Fluvanna County. Additionally, Interstate 64 provides a convenient commuting route for many of the officers, including ones who live in areas that are farther out, such as Augusta and Staunton.

In terms of future workforce availability, population projections indicate that size of the applicant pool should remain steady over the next 20 years; however, we should note that a significant number of corrections officers will be of retirement age by 2030 and, therefore, will need to be replaced. Accordingly, approximately five applicants are needed for every one corrections officer position that needs to be filled, based on the four months of applicant flow data reported for this particular facility.

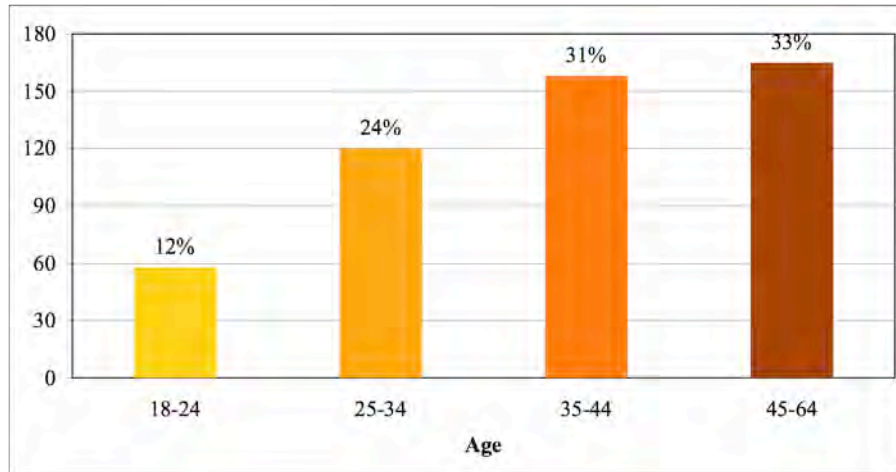
Analysis of workforce data indicates that the DOC's biggest competitors in the Fluvanna area are employers in the industries of health care and social assistance, educational services, and retail trade. Furthermore, the entry-level salary for corrections officers in the Fluvanna area falls short of the average for all newly hired, young workers by about \$2,000. These salary shortcomings may be due to the fact that Virginians living in the Fluvanna area are more educated than other Virginians in nearby suburban and rural areas. Therefore, the Fluvanna area workforce is very competitive and the DOC may need to offer additional incentives and higher salaries to recruit and retain corrections officers in this area.

***Greensville***

*(a) Profile of Corrections Officers*

Our analysis of the primary data provided by the DOC indicates, that among 500 corrections officers employed at the Greensville Correctional Center, about one-third are less than 35 years of age, with the median being 40 (a point which indicates that half of the officers are older and half are younger). Only one officer is 65 years or older.

**Figure 13. Age Distribution of Corrections Officers**



\*Source: Virginia Department of Corrections

In terms of gender composition, we found that an overwhelming majority (65 percent) of corrections officers at the Greenville facility are female. As for racial composition, 93 percent are Black or African-American and 6 percent are White.

In terms of educational attainment, most officers have at least a high school diploma. Only one officer lacked a high school diploma. As for officers with post-secondary degrees, almost 5 percent had earned an Associates Degree or higher. In terms of relevant experience, 1 in 4 officers have prior military, state, or law enforcement experience; however, 1 in 3 officers have less than 6 months of stable work history.

The following figure illustrates retention for young workers at the Greenville facility. Assuming that most officers are employed for a year, approximately 59 percent of new hires are between the ages of 18-34. However, for those officers who have been employed for 1-2 years, only 43 percent are between the ages of 18-34. For 6 or more years, this number decreases to 14 percent. Although these figures are not technically retention rates, assuming that the hiring trends in terms of age have not changed significantly over the past few years, these figures can be used as a proxy.



**Figure 14. Percent of Corrections Officers Age 18-34 by Time in Current Position**

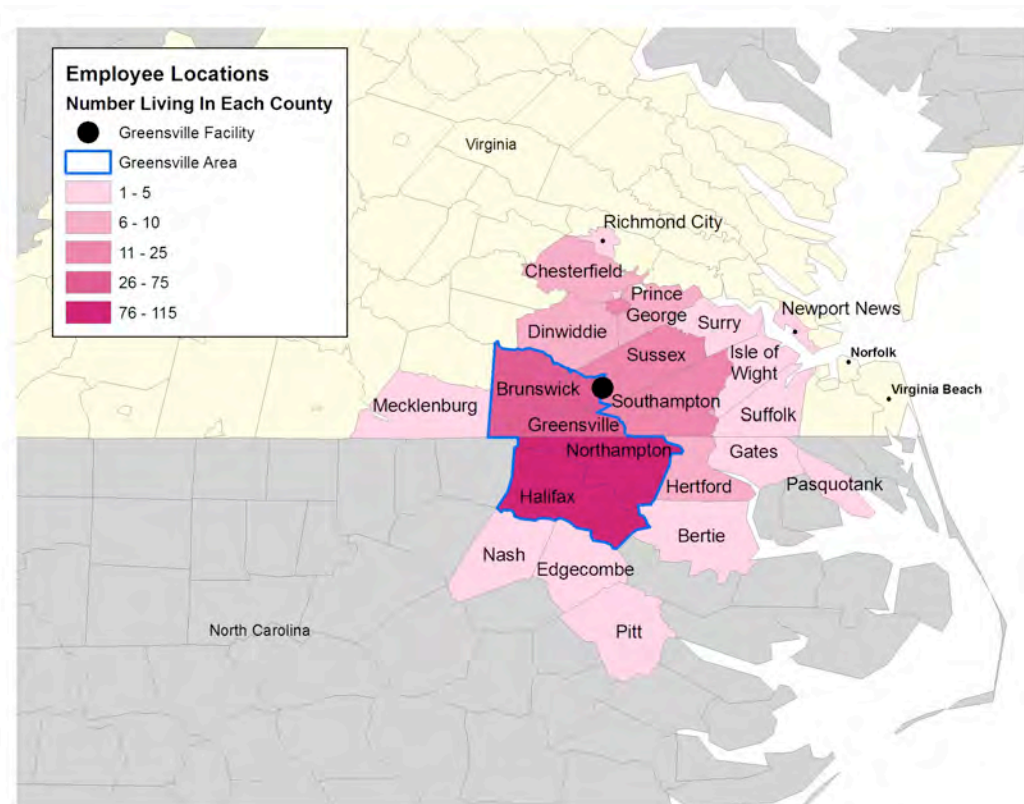


\*Source: Virginia Department of Corrections

*(b) Commuting Patterns*

In this section, we use GIS analysis again to examine the commuting patterns for the officers who work at the Greenville Correctional Center.

**Figure 15. Number of Employees Living in Each County**



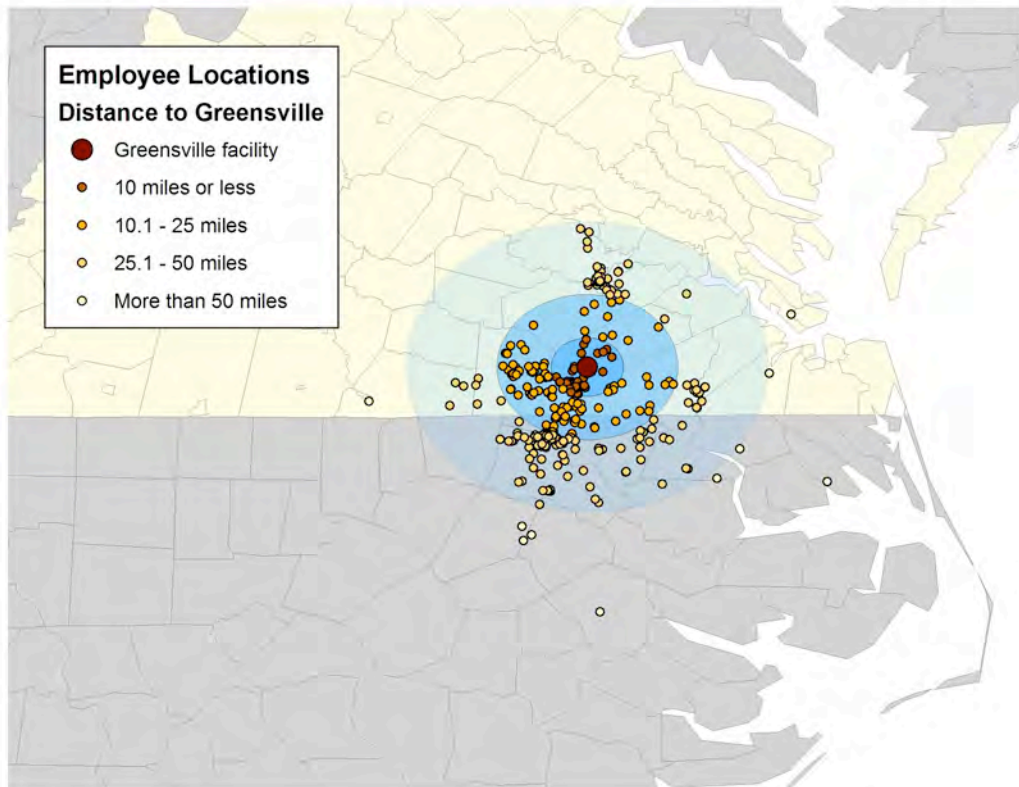
\*Source: Virginia Department of Corrections

The officers at this facility commute from 17 counties across Southeastern Virginia and 9 counties across Northeastern North Carolina. About 43 percent of the corrections officers who work at this facility live in North Carolina. Additionally, it is interesting to see that Northampton and Halifax counties in North Carolina are home to the highest number of corrections officers, with 40 percent of all the officers commuting from these two counties. Three fourths of the officers commute from the Greenville area, which includes Greenville County, VA; Brunswick County, VA; Emporia City, VA; Halifax County, NC; and Northampton County, NC.

We saw earlier in the report that most of the officers who work at the Fluvanna Correctional Facility live in the counties that are closest to the facility. For the Greenville facility, we see that the commuting pattern is different. In the picture above, we see that the Greenville Corrections Facility is right on the boundary of the Greenville Area. While a fairly high number of officers do live in Sussex and Southampton counties, the counties that are home to the highest number of officers are skewed toward the southwesterly direction. This is likely due to the proximity of the facility to Richmond and Newport News, which offer many employment opportunities that may be desirable to people who live in the counties northeast of the facility.

In the next figure we examine the distance from each officer's house to the Greenville Correctional Center. Note again that this is the distance between the two points and not the driving distance.

**Figure 16. Distance of Residences to Greenville Facility**

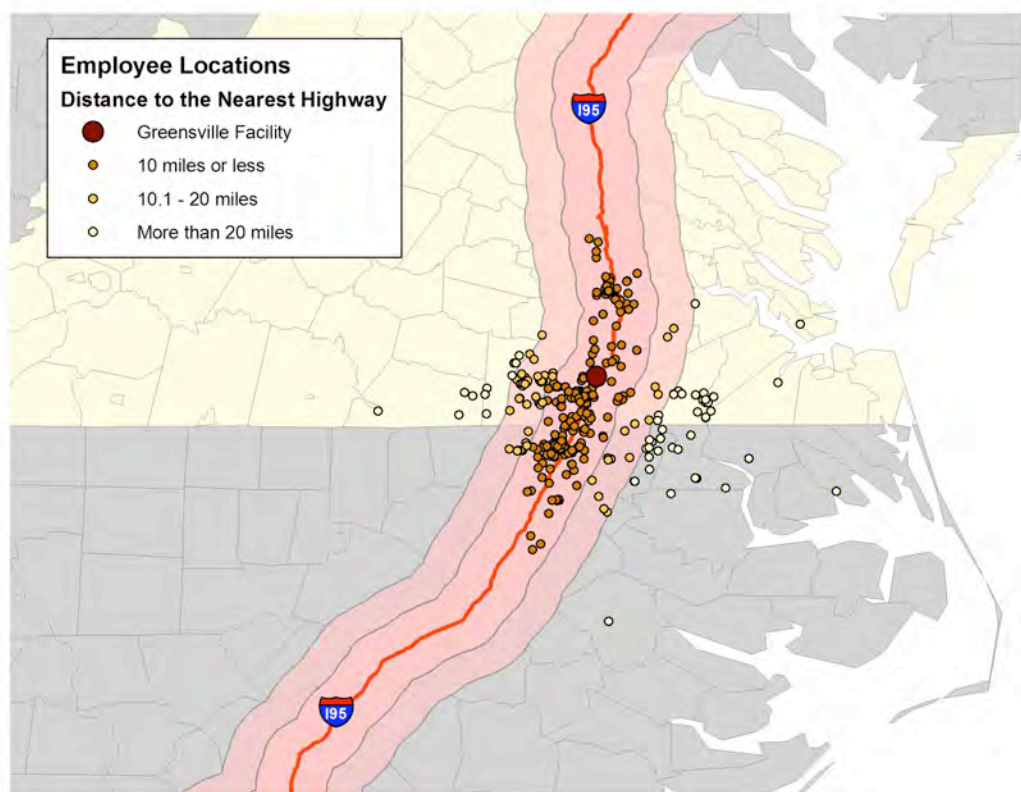


\*Source: Virginia Department of Corrections

In the center of the blue circles above we see the large dot showing the location of the Greenville Correctional Center. The smaller dots show the location of each officer's residence. We can see in the figure above that the commuting area for this facility is more spread out than Fluvanna's commuting area. Like Fluvanna, almost a quarter of the officers live within 10 miles of the facility. But where Fluvanna had three quarters of its officers living within 25 miles of the facility, only a little over half of the Greenville officers live within 25 miles of the facility. Likewise, the mean distance from home to work for these officers is 22.2 miles, which is 2.8 miles more than the mean distance for the Fluvanna facility. All but ten of the 502 total officers live within 50 miles of the facility.

Next, we examine the distance from each officer's residence to the nearest highway.

**Figure 17. Distance of Residences to Nearest Highway**

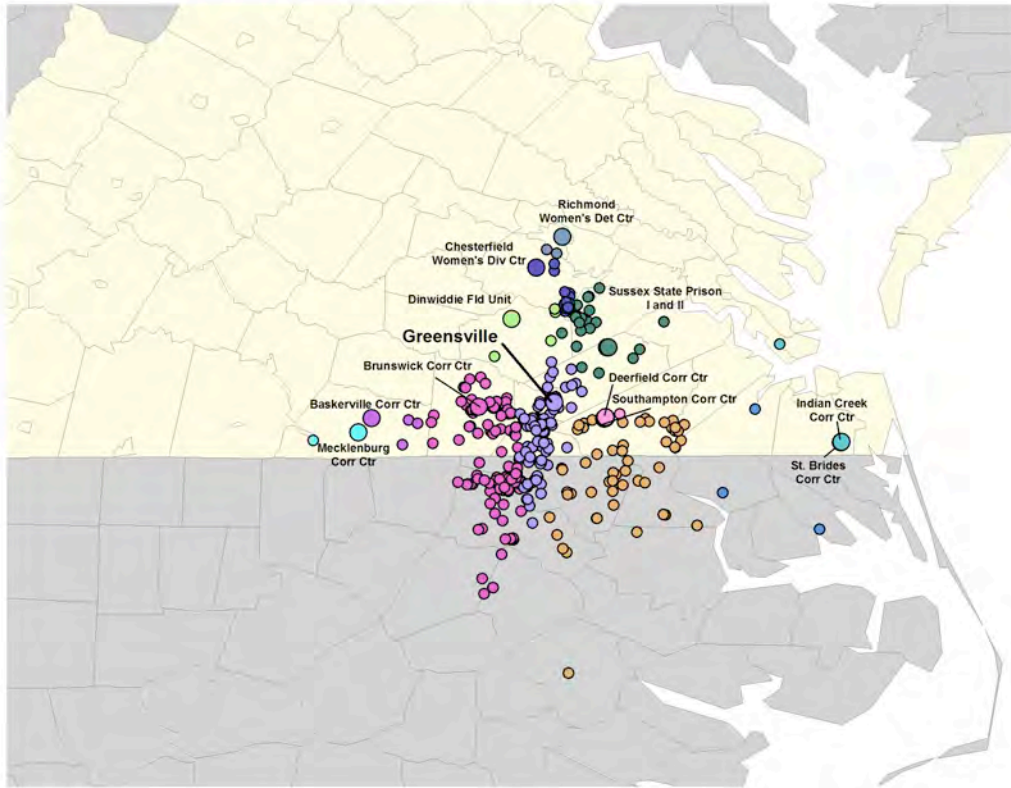


\*Source: Virginia Department of Corrections

The red line in the figure above shows the location of Virginia's major interstate in the area, Interstate-95. The pink shaded regions show the areas within 10 miles and 20 miles of the interstate. As in the previous figure, the large dot shows the location of the Correctional Center, and the smaller dots represent the officers' residences.

Arguably, the most important quality helping this facility draw in its workforce is its proximity to Interstate-95. As we see in the figure above, the areas closest to the interstate are densely populated with officers' residences. About 75 percent of the officers live within 10 miles of I-95, and nearly 90 percent live within 20 miles of the interstate. The interstate provides an excellent route for commuting to the Greenville facility, which allows the facility to employ workers from a broader geographic area.

**Figure 18. Closest Correctional Facility to Residence**



\*Source: Virginia Department of Corrections

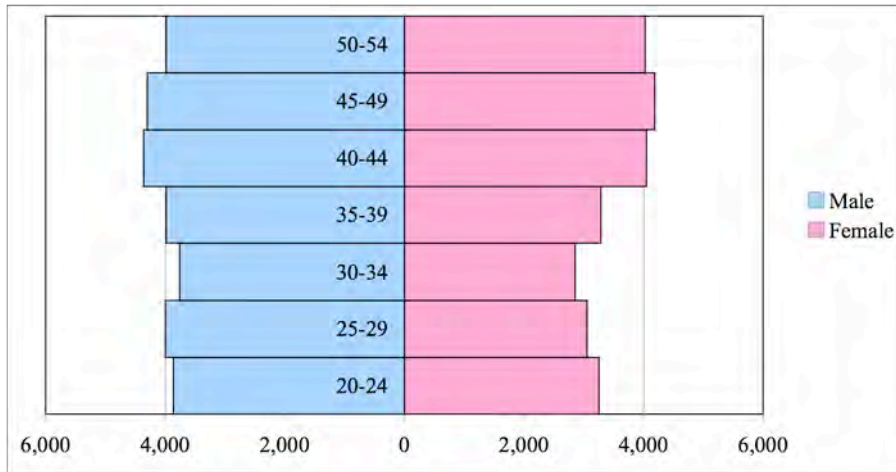
The last analysis we did for this section was to examine the officers' residences to determine whether the Greenville facility is the closest correctional facility to which they could commute. Again, all of the small dots in the map above represent the residence of each officer at the Greenville Correctional Center. The larger dots show where several correctional facilities are located. In the center we see the large purple dot representing the Greenville facility, and the small purple dots that represent all officers for whom the closest facility is the Greenville facility. The other dots on the map are different colors because there is a facility closer to the given officer's residence. To determine which facility is the closer one, we look for the large dot of the same color. For example, the westernmost dot on the map is light blue and represents one officer's residence. The closest facility to his residence is the Mecklenburg Correctional Center. We do not have data to explain why the officers chose to work at Greenville when there are closer correctional facilities, but as explained in the previous section, possible reasons could include job availability, salary differences, and commuting preferences.

*(c) Local Demographics*

According to U.S. Census Bureau's and the Weldon Cooper Center's population estimates, there were nearly 53,000 men and women between of prime working-age (ages 20-54) living in the Greenville area in 2006. Almost 40 percent of the prime working-age population is less than 35 years old. In terms of gender composition, 53 percent of the prime working-age population is male and the remaining 47 percent is female. Notice that the percentage of the population that is female is significantly less than the percentage of corrections officers that are female.



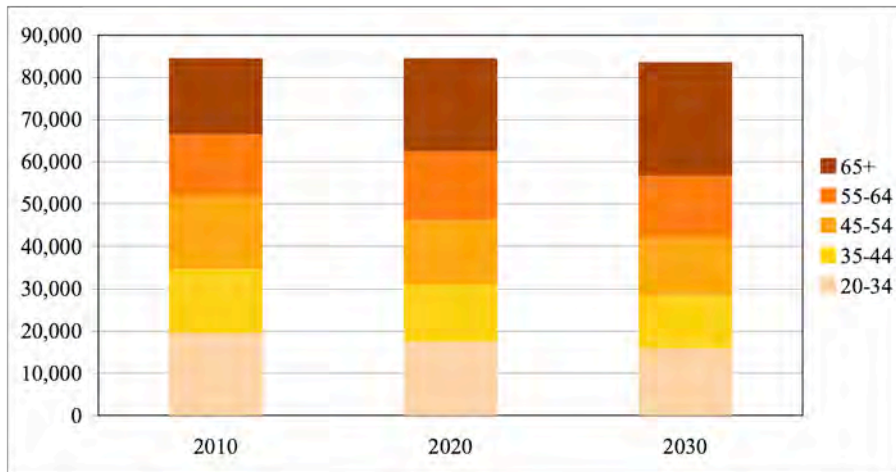
**Figure 19. Age Structure**



\*Source: 2006 U.S. Census Bureau and Weldon Cooper Center Population Estimates

Since one-third of corrections officers in the Greenville facility will be of retirement age by 2030, population projections are very crucial in determining workforce availability for the future. According to population projections, the prime working-age population in the Greenville area is expected to decrease dramatically. Projections indicate that the prime working-age population will decrease from 52,000 people in 2010 to 42,000 people, or by 19 percent. Therefore, it appears as though the applicant pool will shrink substantially over the next 20 years, making the replacement of the 165 officers that are expected to reach retirement age by 2030 even more difficult.

**Figure 20. Population Projections**

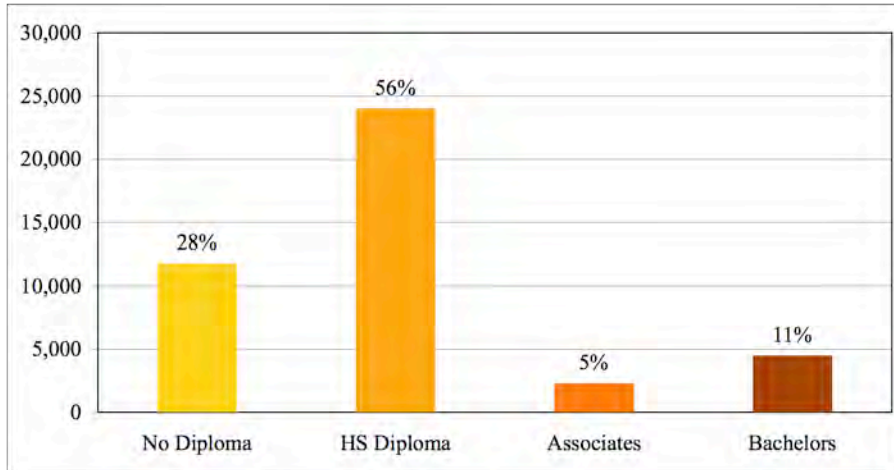


\*Source: Virginia Employment Commission and North Carolina Demographics Unit Population Projections

In terms of racial and ethnic composition, the majority of the prime working-age population is Black or African-American in the Greenville area; 58 percent are Black, 39 percent are White, and 1 percent is Asian. Hispanics account for less than 2 percent of the prime working-age population, regardless of race. If we compare these figures with the racial composition of corrections officers, we find that Blacks are significantly over-represented at Greenville Correctional Center.

Our analysis of the 2000 Decennial Census indicates that there were approximately 26,000 people (61 percent) in the Greenville area between the ages of 18-44 with a High School Diploma or Associates Degree. We also found that there were over 6,500 veterans between the ages of 18-64 living in the Greenville area.

**Figure 21. Educational Attainment (Ages 18-44)**



\*Source: 2000 Decennial Census

*(d) Workforce Profile*

According to the BLS, there were approximately 46,000 workers in the labor force in 2005 for the Greenville area and about 6.5 percent of those workers were unemployed. Combine this data with LED data for the Greenville area and we find that young workers (ages 25-34) account for 18 percent of the labor force.

Further analysis of the LED data indicates that the DOC's biggest competitors in the Greenville area are employers in the manufacturing, public administration, and health care and social assistance. These industries employ nearly half of all young workers. Notice that the health care and social assistance industry has a high turnover rate for this age group; however, newly hired, young workers in this industry earn, on average, over \$350 more per month, compared to all newly hired, young workers. This difference in monthly earnings translates to a substantial difference in annual salaries -- over \$4,000.

Even though the health care and social assistance industry seems to offer competitive salaries in this area, they do not surpass the salaries of corrections officers. According to the BLS, the entry-level salary for corrections officers in the Southside non-metropolitan area for 2006 was approximately \$29,000. The Southside non-metropolitan area includes Brunswick County, Buckingham County, Charlotte County, Emporia City, Franklin City, Greenville County, Halifax County, Lunenburg County, Mecklenburg County, Nottoway County, Prince Edward County, and Southampton County. Even after adjusting for inflation, the entry-level salary for corrections officers exceeds the average for all newly hired, young workers by about \$6,000 and exceeds the average for all newly hired, young workers in the health care and social assistance industry by about \$2,000. Thus, it seems that the DOC is offering very competitive entry-level salaries in the Greenville area.

**Figure 22. Workforce Statistics by Industry Sector (Ages 25-34)**

<i>Greensville Area</i>	<i>Employment</i>	<i>Turnover</i>	<i>New Hire Earnings</i>
Manufacturing	490	9.6%	1,590
Public Administration	351	6.0%	1,961
Health Care and Social Assistance	296	17.6%	2,181
Retail Trade	198	16.2%	1,173
Administrative and Support Services	192	11.8%	2,224
Transportation and Warehousing	173	19.0%	2,496
Accommodation and Food Services	165	19.2%	889
Educational Services	158	8.8%	1,145
Construction	68	13.2%	2,617
Wholesale Trade	66	13.7%	1,976
Agriculture, Forestry, Fishing and Hunting	59	13.6%	2,732
Other Services (except Public Administration)	43	11.8%	994
Professional, Scientific, and Technical Services	32	11.5%	4,555
Finance and Insurance	30	11.0%	2,236
Arts, Entertainment, and Recreation	18	13.7%	446
Real Estate and Rental and Leasing	11	17.7%	1,488
Information	8	10.3%	--
Utilities	5	5.8%	--
Management of Companies and Enterprises	0	--	--
Mining	--	--	--
All Sectors	2,358	11.9%	1,823

\*Source: 2005 Local Employment Dynamics

*(e) Hiring Process*

The DOC provided data on applicant flow for July 2007 through December 2007. The following table shows the total number of applicants, and the number of applicants offered an interview, offered a position, and hired at the Greensville facility.

**Figure 23. Applicant Flow Data for Greensville Facility**

	<i>Jul-07</i>	<i>Aug-07</i>	<i>Sep-07</i>	<i>Oct-07</i>	<i>Nov-07</i>	<i>Dec-07</i>	<i>Total</i>
<b>Number of Applicants</b>	5	37	8	17	7	2	<b>74</b>
<b>- Number Offered Interview</b>	5	37	8	17	7	2	<b>74</b>
<b>- Number Offered Position</b>	5	37	8	17	7	2	<b>74</b>
<b>- Number Hired</b>	5	37	8	17	7	2	<b>74</b>

\*Source: Virginia Department of Corrections

We do not have the amount of data that is required to identify trends in applicant flow over time, but we can discuss what this table tells us about the given six-month period. Aside from the fluctuation in the number of applicants, the data tell us that all six months were very similar. All 74 of the applicants at this facility were interviewed, offered the position, and ultimately hired. There were more applicants in August and October, and a very small number of applicants in December. Overall, this data could indicate that the demand for employees was high during this six-month period and therefore all applicants were hired, that all of the employees who applied for the available positions were highly qualified for the job, or that some combination of factors resulted in the hiring rates we see above.

*(f) Summary*

We found that both women and Blacks are significantly over-represented in Greenville Correctional Center. Women account for 47 of the prime working-age population, but they represent 65 per cent of corrections officers and although Blacks hold the majority (58 percent) in the Greenville area, almost all (93 percent) of the corrections officers employed in Greenville are Black.

In terms of worker commuting patterns, we found that the officers' residences are spread over a larger geographic area than the Fluvanna officers. Many of the officers who work at this facility live in North Carolina, with 40 percent of all the officers commuting in from Northampton County and Halifax County. We found that a little of over half of the Greenville officers live within 25 miles of the facility and the average distance from home to work is 22.2 miles. One very important characteristic of this facility is its proximity to Interstate-95. Three-fourths of the officers live within 10 miles of I-95, and only 10 percent are more than 20 miles from the interstate. The proximity to this busy interstate allows the facility to draw its workforce from a larger geographic area.

As for future workforce availability, population projections indicate that the applicant pool will decrease dramatically over the next 20 years. Additionally, over 150 of the officers employed in the Greenville Correctional Center will reach retirement age by 2030, making the adequate recruitment of corrections officers that much more necessary.

Analysis of workforce data indicates that the DOC's biggest competitors in the Greenville area are employers in the industries of manufacturing, public administration, and health care and social assistance. In this area, the DOC seems to be offering competitive entry-level salaries and the high unemployment rate (6.5 percent) may serve as an advantage to the DOC in terms of attracting potential applicants.

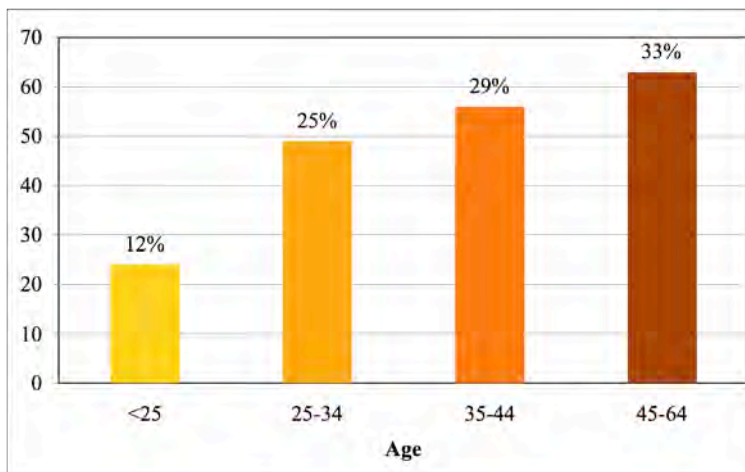
***Haynesville***

*(a) Profile of Corrections Officers*

Our analysis of the primary data provided by the DOC indicates, that among 200 corrections officers employed at the Haynesville Correctional Center, just over one-third are less than 35 years of age, with the median being 39 (a point which indicates that half of the officers are older and half are younger). Only one officer is 65 years or older.



**Figure 24. Age Distribution**



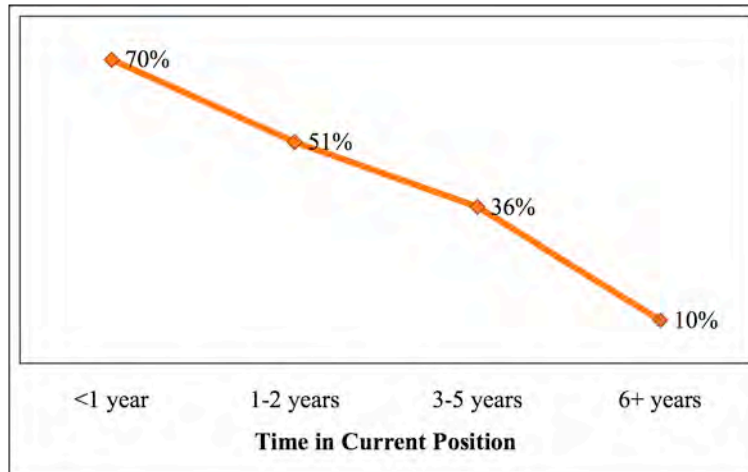
\*Source: Virginia Department of Corrections

In terms of gender composition, we found that women corrections officers are the minority at the Haynesville facility; about 38 percent of corrections officers are female and 62 percent are male. As for racial composition, 60 percent are Black or African-American and 39 percent are White.

In terms of educational attainment, all officers have at least a high school diploma. As for officers with post-secondary degrees, about 8 percent had earned an Associates Degree or higher. In terms of relevant experience, 1 in 4 officers have prior military, state, or law enforcement experience; however, 2 in 5 officers at the Haynesville Correctional Center have less than 6 months of stable work history.

The following figure illustrates retention for young workers at the Haynesville facility. Assuming that most officers are employed for a year, approximately 70 percent of new hires are between the ages of 18-34. However, for those officers who have been employed for 1-2 years, only 51 percent are between the ages of 18-34. For 3-5 years, this number decreases to 36 percent. Although these figures are not technically retention rates, assuming that the hiring trends in terms of age have not changed significantly over the past few years, these figures can be used as a proxy.

**Figure 25. Percent of Corrections Officers Age 18-34 by Time in Current Position**

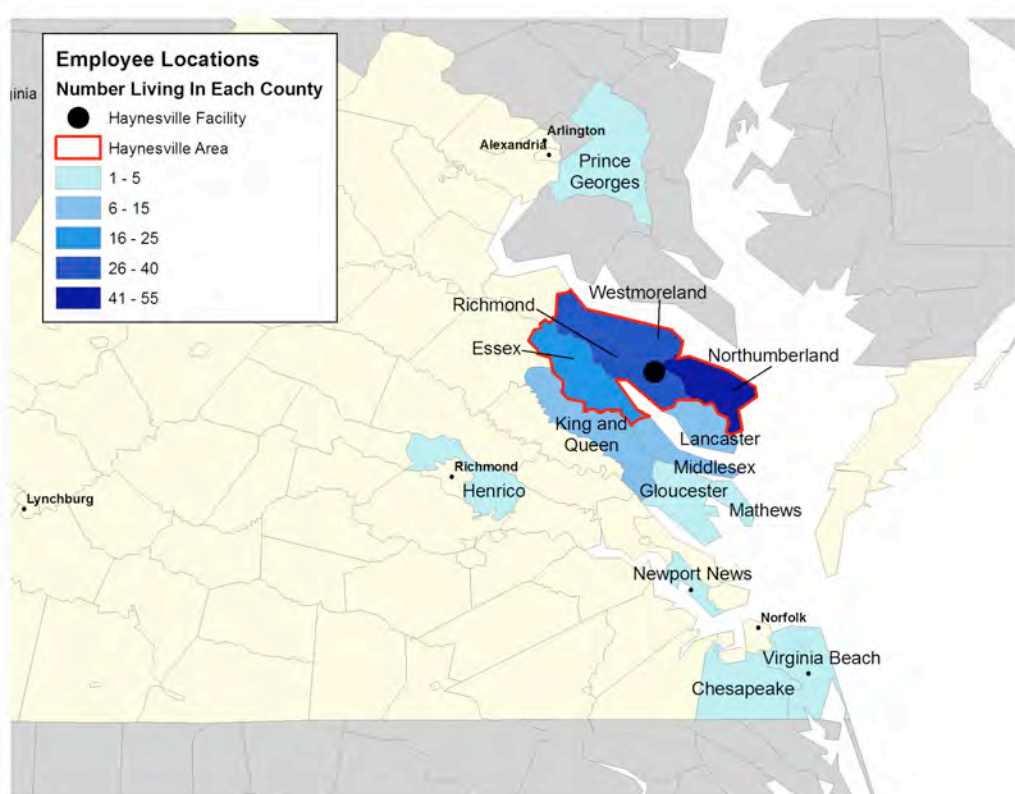


\*Source: Virginia Department of Corrections

*(b) Commuting Patterns*

Throughout this section, we used GIS analysis to map the residences of the officers who work at the Haynesville Correctional Center.

**Figure 26. Number of Employees Living in Each County**

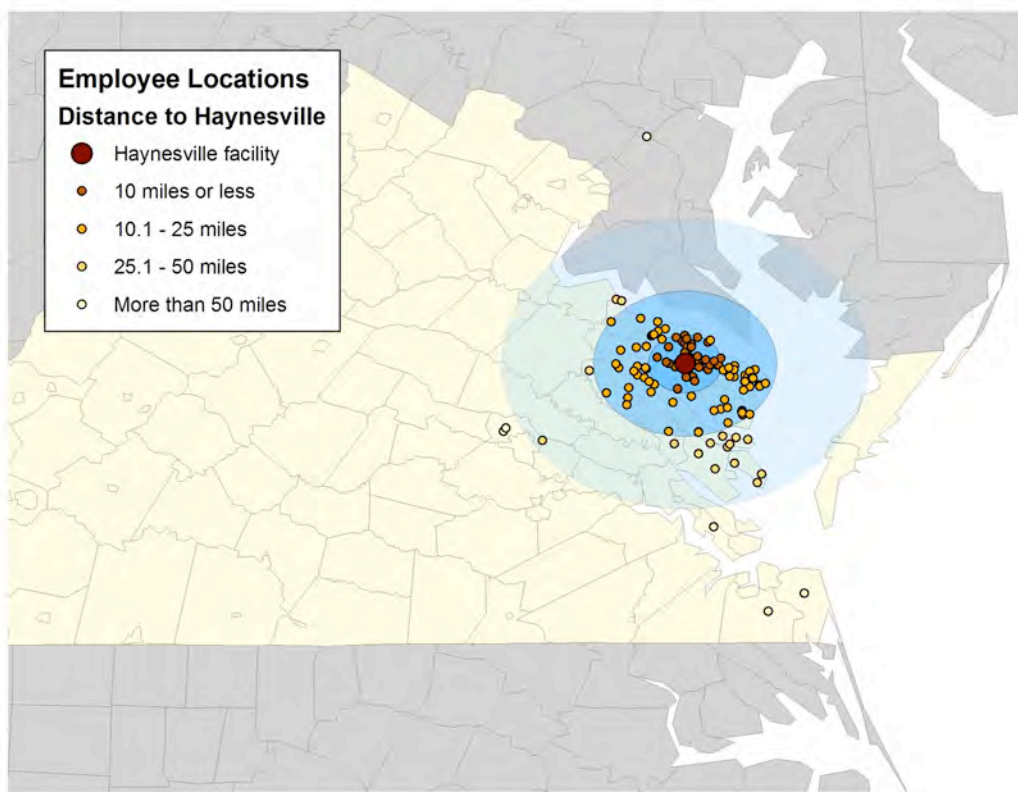


\*Source: Virginia Department of Corrections

The officers who work at the Haynesville facility commute from 14 counties in Virginia and 1 county in Maryland. Seventy nine percent of the officers commute from Northumberland County, Richmond County, Westmoreland County, and Essex County, which comprise the Haynesville area outlined in red on the map above. Northumberland County is home to the highest number of officers, with 28 percent of the facility’s officers living there.

In the map we can see that the commuting pattern is mostly condensed to seven counties in Virginia, namely the Haynesville area plus King and Queen County, Lancaster County, and Middlesex County. Only 12 of the 192 officers who work at the facility live in the other 7 counties that are shaded on the map.

**Figure 27. Distance of Residences to Haynesville Facility**

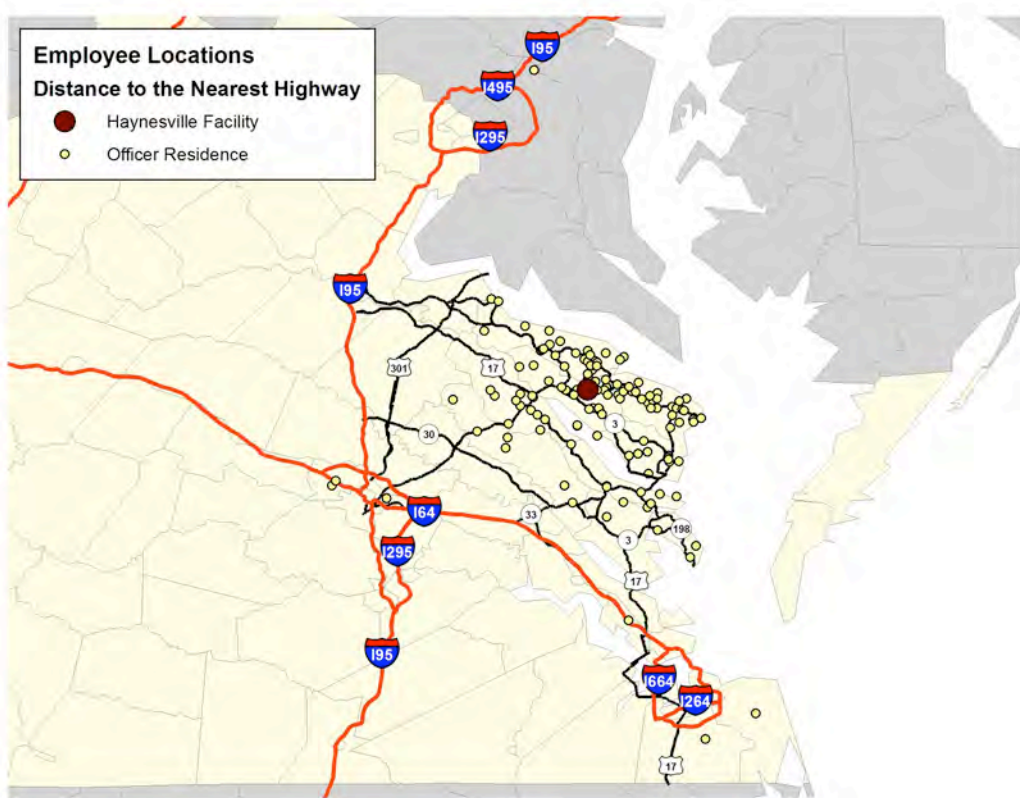


\*Source: Virginia Department of Corrections

In the map above we see a large dot representing the location of the Haynesville Correctional Center. The smaller dots represent the residence of each officer who works at the facility. We can see in the map that the commuting area for this facility is relatively condensed. Almost 40 percent of the corrections officers live within 10 miles of the facility, compared to the 25 percent who lived within 10 miles of the Fluvanna and Greensville facilities. Likewise, the percent of officers who live within 25 miles of the facility is highest for Haynesville at 89 percent. Additionally, the mean distance from officer residence to the facility is 15.0 miles, which is 4.4 miles less than the mean distance for the Fluvanna facility, and 7.2 miles less than mean distance for the Greensville facility. We can see above that six of the 192 total officers live outside the 50-mile radius around the facility.

In the next map, we examine the highway system surrounding the Haynesville Correctional Center and discuss how it affects the commuting patterns for the facility.

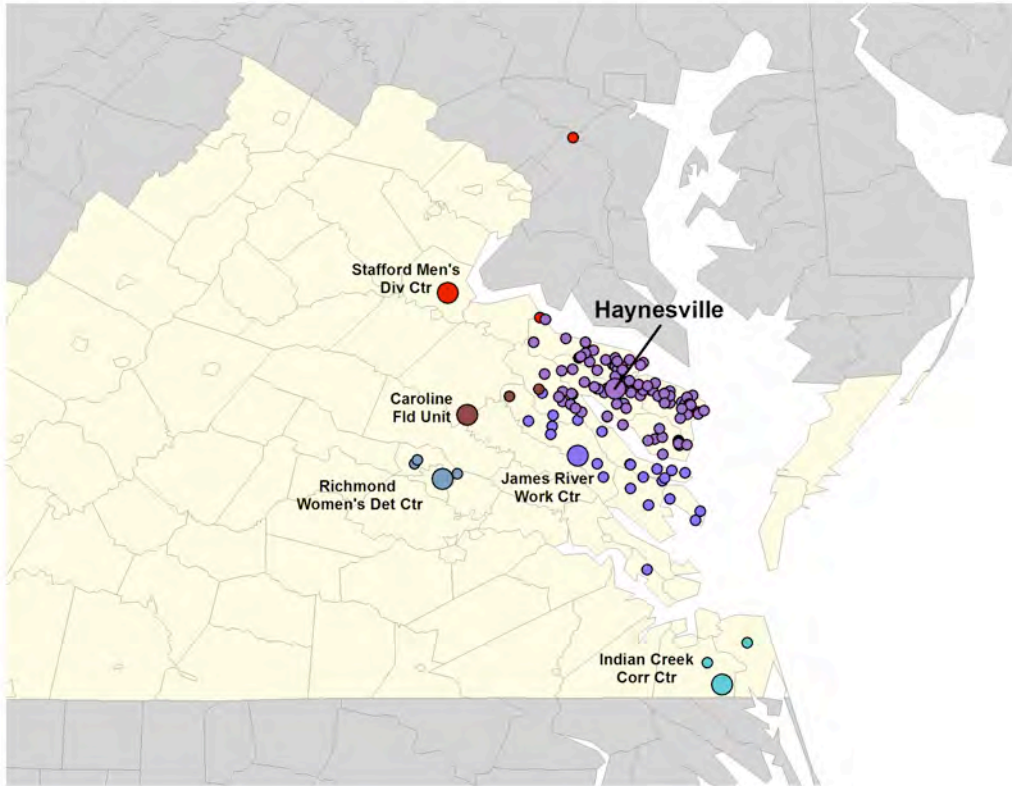
**Figure 28. Distance of Residences to Nearest Highway**



\*Source: Virginia Department of Corrections

Since this facility is not located near any major interstates, we examine the local highway system around the facility instead. We did not produce quantitative data about the distance from these officers' residences to the nearest highway; instead, we do qualitative analysis by looking at the map above. We can see that almost all of the small dots, which represent officers' residences, are located on, or very near, a U.S. or State Highway. These roads provide the fastest commuting routes for the corrections officers. Still, the local highway system is not as fast as the interstate system, which helps to explain why the workforce for this facility is more condensed to the areas closest to the facility.

**Figure 29. Closest Correctional Facility to Residence**



\*Source: Virginia Department of Corrections

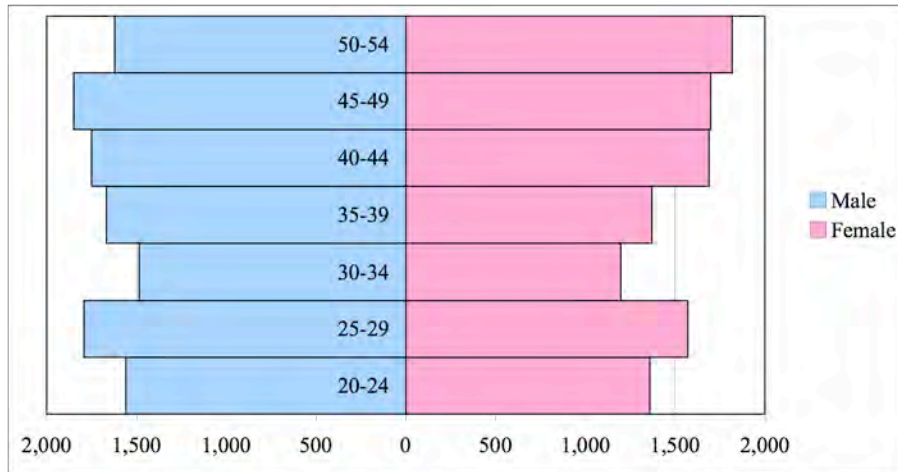
Finally, we look at the residences of the officers to determine whether they are working at the facility nearest to their houses. The small dots in this map once again represent the officer residences, and the large dots show where other facilities throughout the state are located. When we look at the map, the purple dots around the Haynesville facility show us that the majority of the officers working there do not live closer to any other corrections facility.

*(c) Local Demographics*

According to U.S. Census Bureau's and the Weldon Cooper Center's population estimates, there were approximately 22,000 men and women of prime working-age (ages 20-54) living in the Haynesville area in 2006. Nearly 40 percent of the prime working-age population is less than 35 years old. In terms of gender composition, 52 percent of the prime working-age population is male and the remaining 48 percent is female.



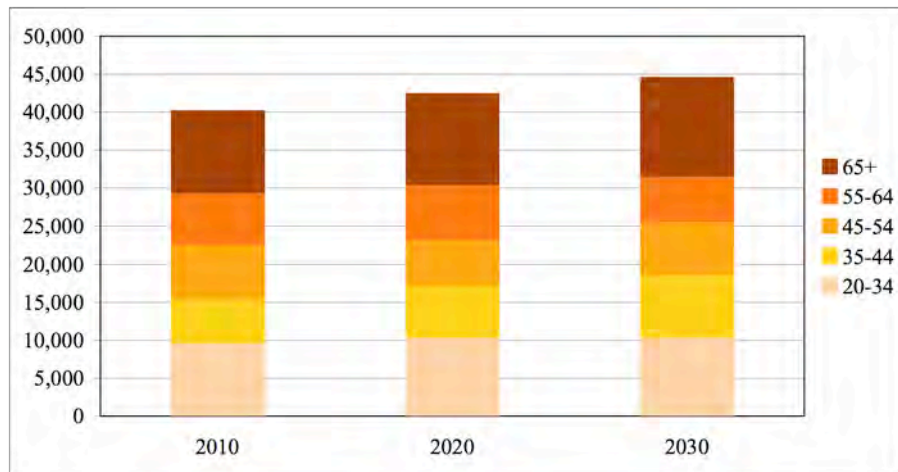
**Figure 30. Age Structure**



\*Source: 2006 U.S. Census Bureau and Weldon Cooper Center Population Estimates

Like the Fluvanna and Greensville facilities, over one-third of corrections officers will be of retirement age by 2030; as a result, population projections are crucial in determining future workforce availability. Accordingly, the prime working-age population in the Haynesville area is expected to increase by only a small amount. From 2010-2030, the prime working-age population is expected to increase by only 3,000 or by 13 percent. Therefore, it appears as though the applicant pool will remain steady over the next 20 years; however, the DOC should be mindful that over 60 officers are expected to reach retirement age by 2030, as well.

**Figure 31. Population Projections**

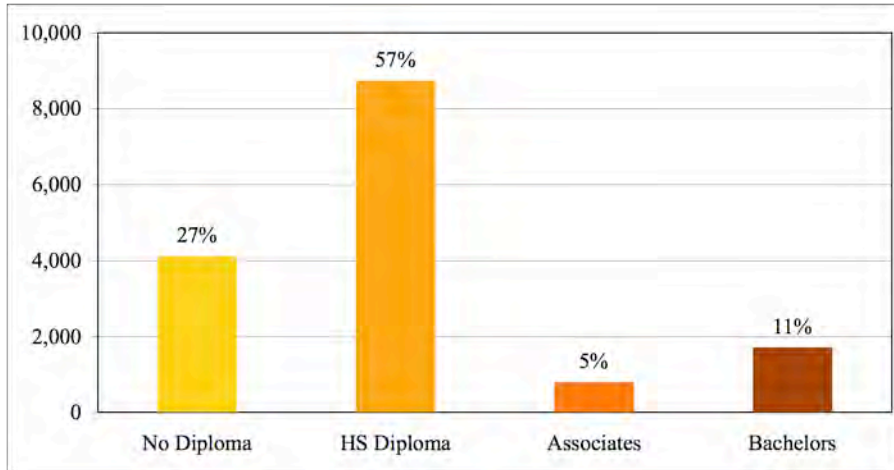


\*Source: Virginia Employment Commission Projections

As for the racial and ethnic composition, approximately 64 percent of prime working-age people in the Fluvanna area are White and 34 percent are Black. Hispanics account for nearly 3.2 percent of the prime working-age population, regardless of race. Notice that, once again, the percentage of the population that is Black is significantly less than the percentage of corrections officers that are Black.

According to the 2000 Decennial Census, there were approximately 9,500 people (62 percent) in the Haynesville area between the ages of 18-44 with a High School Diploma or Associates Degree. We also found that there were over 3,000 veterans between the ages of 18-64 living the Haynesville area in 2000.

**Figure 32. Educational Attainment (Ages 18-44)**



\*Source: 2000 Decennial Census

*(d) Workforce Profile*

According to the BLS, there were approximately 23,000 workers in the labor in 2005 for the Haynesville area and about 4.6 percent of those workers were unemployed. Combine this data with LED data for the Haynesville area and we find that young workers (ages 25-34) account for only 10 percent of the labor force.

Further analysis of the LED data indicates that the DOC’s biggest competitors in the Haynesville area are employers in the industries of health care and social assistance, retail trade, manufacturing, and educational services. Although these industries also have relatively high turnover rates for young workers, together, they employ over half of all workers in this age group. Additionally, construction is another major competitor as well; this industry employs a large number of young workers and the average monthly earnings for new hires are nearly \$350 more than the overall average.

We also found that the average monthly earnings for newly hired, young workers in the Haynesville area was approximately \$1,600 in 2005, which translates to an annual salary of about \$19,000. According to the BLS, the entry-level salary (25th percentile) for corrections officers in the Northeastern non-metropolitan area was nearly \$29,000 in 2006. The Northeastern non-metropolitan area includes Accomack County, Essex County, King George County, Lancaster County, Middlesex County, Northampton County, Northumberland County, Richmond County, and Westmoreland County. Even after adjusting for inflation, the entry-level salary for corrections officers in the Northeastern non-metropolitan area is still \$9,000 higher than the average salary for newly hired, young workers in the Haynesville area. Thus, the DOC seems to be offering competitive entry-level salaries in the Haynesville area.

**Figure 33. Workforce Statistics by Industry Sector (Ages 25-34)**

<i>Haynesville Area</i>	<i>Employment</i>	<i>Turnover</i>	<i>New Hire Earnings</i>
Health Care and Social Assistance	335	16.2%	1,393
Retail Trade	331	13.2%	1,364
Manufacturing	319	21.4%	1,694
Educational Services	253	25.3%	1,318
Accommodation and Food Services	184	19.4%	950
Public Administration	182	5.5%	1,986
Construction	176	13.4%	1,923
Finance and Insurance	93	6.8%	2,158
Administrative and Support Services	88	22.1%	1,206
Other Services (except Public Administration)	82	13.2%	1,182
Agriculture, Forestry, Fishing and Hunting	79	19.8%	1,000
Wholesale Trade	60	15.9%	2,196
Professional, Scientific, and Technical Services	52	8.5%	3,158
Arts, Entertainment, and Recreation	39	18.0%	1,646
Transportation and Warehousing	26	15.3%	3,447
Real Estate and Rental and Leasing	17	18.9%	1,420
Information	14	15.7%	2,862
Utilities	3	--	--
All Sectors	2,387	14.1%	1,584

\*Source: 2005 Local Employment Dynamics

*(e) Hiring Process*

**Figure 34. Applicant Flow Data for Haynesville Facility**

	<i>Jul-07</i>	<i>Aug-07</i>	<i>Sep-07</i>	<i>Oct-07</i>	<i>Nov-07</i>	<i>Dec-07</i>	<i>Total</i>
<b>Number of Applicants</b>	9	-	-	7	6	5	22
<b>- Number Offered Interview</b>	9	-	-	7	6	5	22
<b>- Number Offered Position</b>	9	-	-	7	6	5	22
<b>- Number Hired</b>	9	-	-	7	6	5	22

\*Source: Virginia Department of Corrections (no data were provided for August and September)

The data provided by the DOC were not enough to identify any trends in applicant flow over time, but we will discuss what we learned about the four months of hiring data shown in the table above. It is clear when we look at the data that all four months are very similar. All 22 of the applicants at this facility were interviewed, offered the position, and ultimately hired, and the number of applicants was very similar over all four months. When we compare this data to that of the other two facilities, we can see that this facility has the lowest number of applicants. We do not know if this occurred because there were not many job openings, or because there were many vacancies for which few people applied. Since all of the applicants were hired, we suspect the latter is more likely to be the case.



*(f) Summary*

Like the Fluvanna and Greensville Correctional Centers, Blacks are significantly over-represented in the Haynesville Correctional Center; Blacks account for 34 percent of the population, but 60 percent of corrections officers. But unlike the previous facilities, men hold the majority in the Haynesville facility.

When we looked at the commuting patterns of the corrections officers, we found that the officers' residences are condensed to a comparatively small geographic area. Almost all of the officers (89 percent) live within 25 miles of the facility and the average distance from officer residence to the facility is 15.0 miles, which is lower than the average distance for the other two facilities examined in this report. This facility is not accessible by the interstate system; therefore we examined the local highway system and found that most of the officers live very near a U.S. or State Highway.

In terms of future workforce availability, population projections indicate that applicant pool for in the Haynesville area will remain steady over the next 20 years; however, the DOC should be mindful that one-third of corrections officers are expected to reach retirement age by 2030.

Analysis of workforce data indicates that the DOC's biggest competitors in the Greensville area are employers in the industries of health care and social assistance, retail trade, manufacturing, and educational services. In this area, the DOC seems to be offering competitive entry-level salaries; however, this area seems to attract only a small number of young workers.

***Grayson***

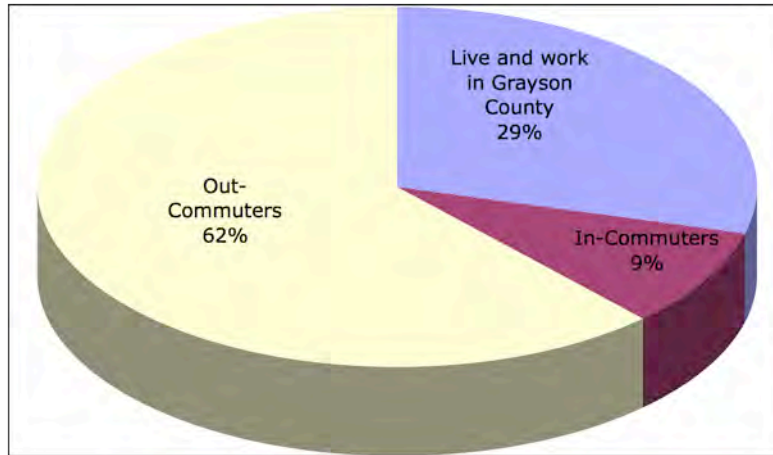
*(a) Profile of Corrections Officers*

Since the Grayson facility is a future site, no data concerning corrections officers is currently available.

*(b) Commuting Patterns*

To assess what the commuting patterns might look like for the future Grayson Correctional facility, we use the community profiles produced by the Virginia Employment Commission. These profiles present Census 2000 data showing the number of people who commute into and out of the county (in-commuters and out-commuters), and also the number that live and work in Grayson County.

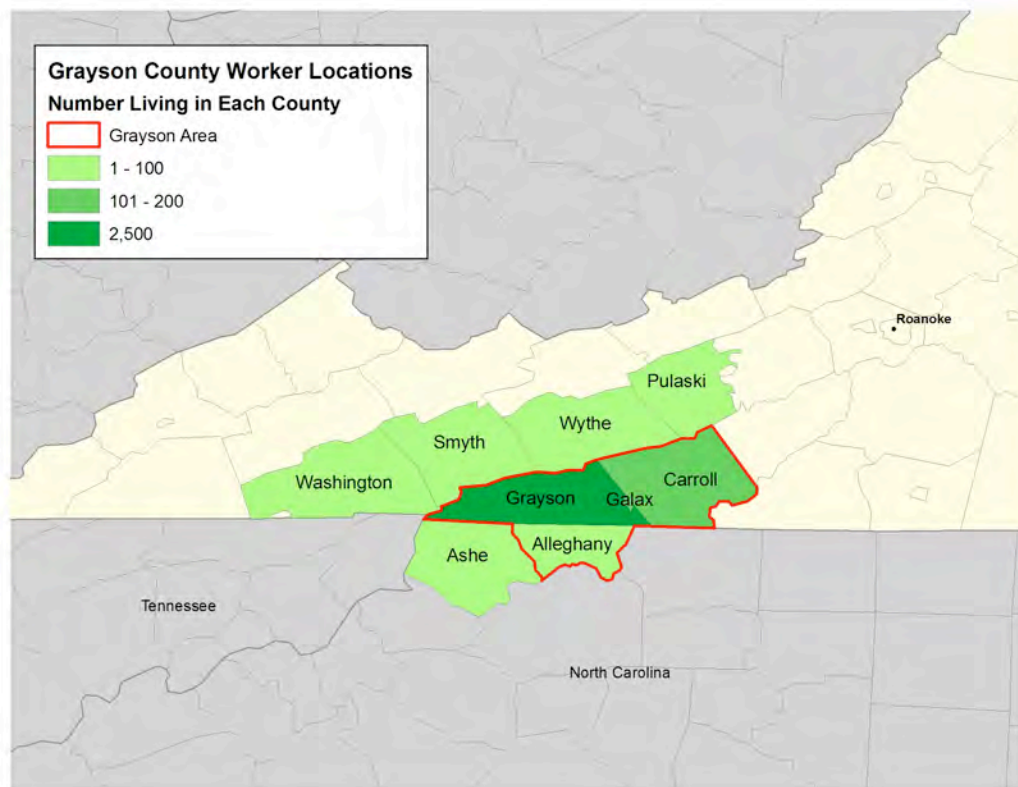
**Figure 35. Commuting Patterns of Grayson County**



\*Source: Virginia Employment Commission

In the figure above, it is clear that most of the Grayson County population (over two thirds) works outside of Grayson County. Additionally, one in five people who work in Grayson County commute in from elsewhere. In the map below, we use GIS analysis to further analyze these in-commuters.

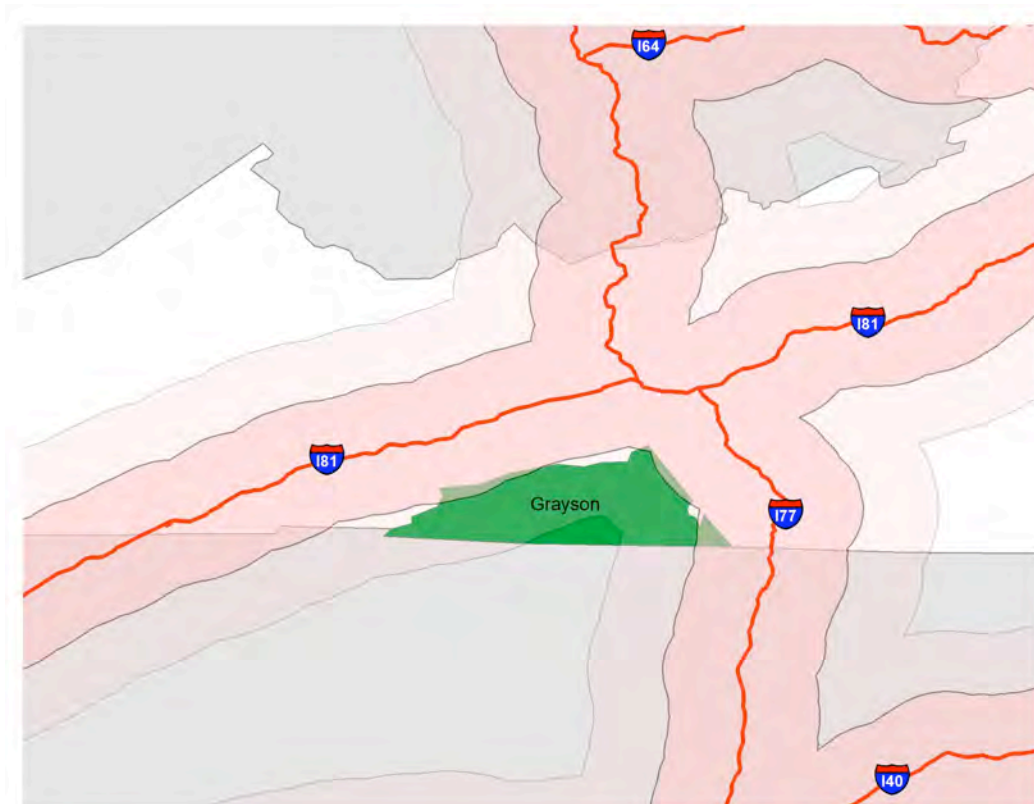
**Figure 36. Number of Grayson County Employees Living in Each County**



\*Source: Virginia Employment Commission

The Virginia Employment Commission provides the county of residence for all of Grayson County's in-commuters. This data is shown on the map above. Clearly, Grayson County residents make up a very large portion (80 percent) of all Grayson County workers, but a fairly large number of workers also commute in from Alleghany County, NC; Carroll County, VA; and Galax City, VA. These four entities make up the Grayson area, which contributes over 90 percent of the entire Grayson County workforce.

**Figure 37. Proximity of Interstates to Grayson County**

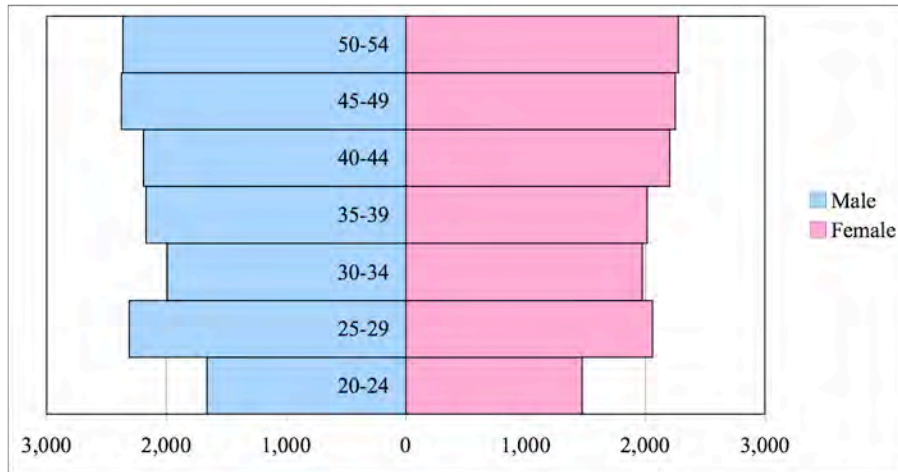


In the figure above we look at the proximity of major interstates to Grayson County. We see that, although most of the county is within 20 miles of an interstate, it is not likely that the future facility will draw a workforce from a large geographical area because the facility will not be right next to a major interstate. It is likely that future corrections officers will rely on the local highways for their commuting routes.

*(c) Local Demographics*

Our analysis of the U.S. Census Bureau's and the Weldon Cooper Center's population estimates indicates that there were over 29,000 men and women of prime working-age (ages 20-54) living in the Grayson area in 2006. Less than 40 percent of the prime working-age population is less than 35 years old. Additionally, 49 percent of the prime-working-age population is female and 51 percent is male.

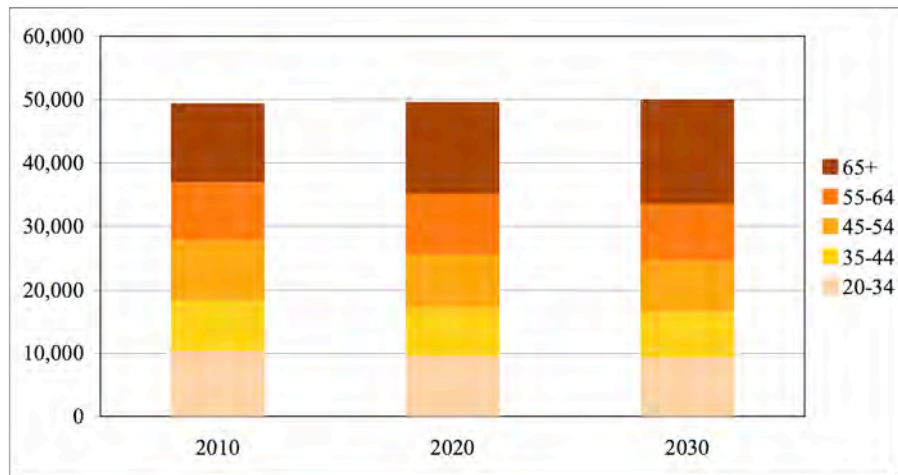
**Figure 38. Age Structure**



\*Source: 2006 U.S. Census Bureau and Weldon Cooper Center Population Estimates

The Grayson facility is expected to be completed by 2010 and, according to population projections, the prime working-age population is expected to decline by approximately 1,500 people from 2006-2010. Additionally, projections indicate a further decline of over 3,000 people, or by 12 percent, from 2010-2030 for the prime working-age population. Therefore, the Grayson area applicant pool is expected to shrink both in the short-term and long-term.

**Figure 39. Population Projections**

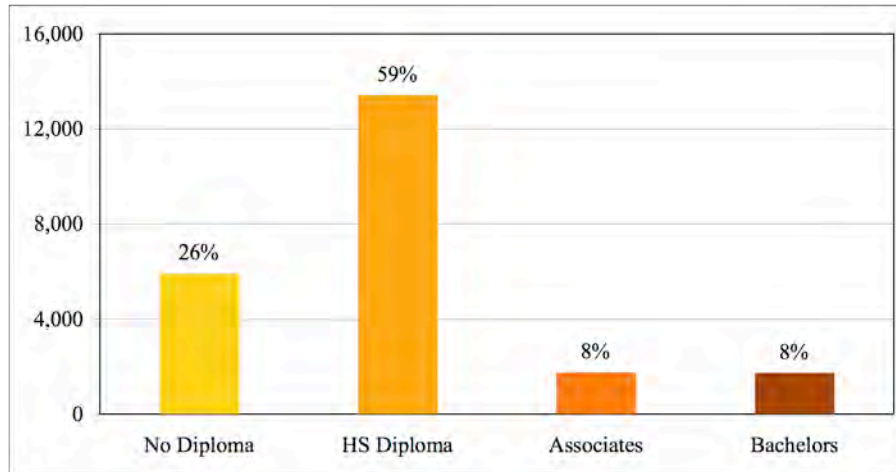


\*Source: Virginia Employment Commission and North Carolina Demographics Unit Population Projections

In terms of racial and ethnic composition, the prime working-age population in the Grayson area is primarily White; 97 percent are White and 2 percent are Black. Additionally, Hispanics comprise about 5.4 percent of the prime working-age population, regardless of race.

According to the 2000 Decennial Census, there were approximately 15,000 people (67 percent) in the Grayson area between the ages of 18-44 with a High School Diploma or Associates Degree. We also found that there were almost 3,500 veterans between the ages of 18-64 living in the Grayson area in 2000.

**Figure 40. Educational Attainment (Ages 18-44)**



\*Source: 2000 Decennial Census

*(d) Workforce Profile*

According to the BLS, there were approximately 30,000 workers in the labor in 2005 for the Grayson area and about 5.2 percent of those workers were unemployed. Combine this data with LED data for the Grayson area and we find that young workers (ages 25-34) account for only 10 percent of the labor force.

Further analysis of the LED data indicates that the DOC's biggest competitors in the Grayson area are employers in the manufacturing, health care and social assistance, and retail trade industries. Together, these industries employ nearly 60 percent of young workers. Furthermore, the manufacturing and the health care and social assistance industries have relatively low turnover rates and high new hire earnings for young workers compared to the average overall.

We also found that the average monthly earnings for newly hired, young workers in the Grayson area was approximately \$1,600 in 2005, which translates to an annual salary of about \$19,000. The entry-level salary (25th percentile) provided by the BLS for corrections officers in the Southwestern non-metropolitan area was approximately \$30,000 in 2006. The Southwestern non-metropolitan area includes Bland County, Buchanan County, Carroll County, Dickenson County, Floyd County, Galax City, Grayson County, Henry County, Lee County, Martinsville City, Norton City, Patrick County, Russell County, Smyth County, Tazewell County, Wise County, and Wythe County. Even after adjusting for inflation, the entry-level salary for corrections officers in the Southwestern non-metropolitan area is still \$10,000 higher than the average salary for newly hired, young workers in the Grayson area. Thus, the DOC seems to be offering competitive entry-level salaries for existing facilities located in and around the Grayson area.

**Figure 41. Workforce Statistics by Industry Sector (Ages 25-34)**

<i>Grayson Area</i>	<i>Employment</i>	<i>Turnover</i>	<i>New Hire Earnings</i>
Manufacturing	879	12.0%	1,617
Health Care and Social Assistance	470	8.5%	1,730
Retail Trade	458	13.8%	1,522
Educational Services	298	7.8%	1,417
Accommodation and Food Services	240	26.9%	781
Construction	187	16.4%	1,729
Administrative and Support Services	101	32.8%	930
Finance and Insurance	88	6.8%	2,298
Transportation and Warehousing	79	13.1%	2,305
Public Administration	69	10.6%	2,101
Professional, Scientific, and Technical Services	55	12.6%	2,274
Other Services (except Public Administration)	50	10.1%	1,157
Arts, Entertainment, and Recreation	40	20.5%	1,964
Information	39	9.2%	1,666
Wholesale Trade	28	14.8%	4,180
Real Estate and Rental and Leasing	22	19.1%	2,271
Agriculture, Forestry, Fishing and Hunting	14	13.3%	1,812
Utilities	9	21.5%	1,993
Mining	0	--	--
All Sectors	3,122	12.9%	1,587

\*Source: 2005 Local Employment Dynamics

*(e) Hiring Process*

Since the Grayson facility is a future site, no applicant flow data is currently available.

*(f) Summary*

Looking at the commuting patterns of Grayson County workers, we find that two thirds of the Grayson County residents work outside of Grayson County, and that a fifth of the Grayson County workforce commutes in from outside the county. Overall, the Grayson area, which includes Grayson County, VA; Alleghany County, NC; Carroll County, VA; and Galax City, VA, is home to over 90 percent of the Grayson County workforce. Additionally, when we examine the proximity of interstates to Grayson County, we find that most of the county is within 20 miles of a major interstate, but that future corrections officers will likely rely on the local highways for their commuting routes.

In terms of future workforce availability, we expect the applicant pool to shrink both in the short-term and long-term. According to population projections, the prime working-age population will decrease by 4,500 people by 2030. Additionally, analysis of facilities located in rural areas, indicates that the DOC relies heavily on the Black population to fill their positions; however, the Grayson area has an extremely small Black population (2 percent).

Analysis of workforce data indicates that the DOC's biggest competitors in the Grayson area will be employers in the industries of manufacturing, health care and social assistance, and retail trade. In this area, the DOC seems to be offering competitive entry-level salaries; however, this area seems to attract only a small number of young workers.

**Charlotte Area**

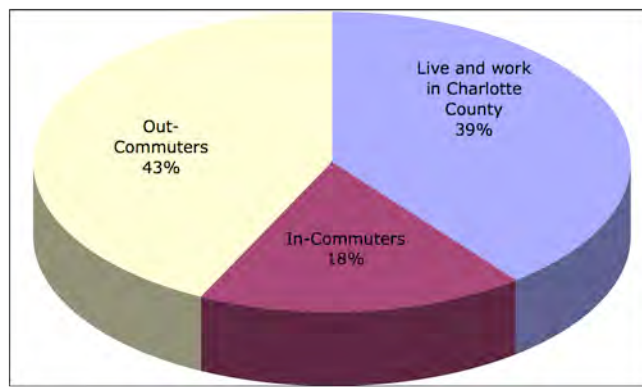
*(a) Profile of Corrections Officers*

Since the Charlotte facility is a potential future site, no data concerning corrections officers is currently available.

*(b) Commuting Patterns*

Again, we use the community profiles from the Virginia Employment Commission to assess what the commuting patterns might look like if a future corrections facility is placed in Charlotte County.

**Figure 42. Commuting Patterns of Charlotte County**

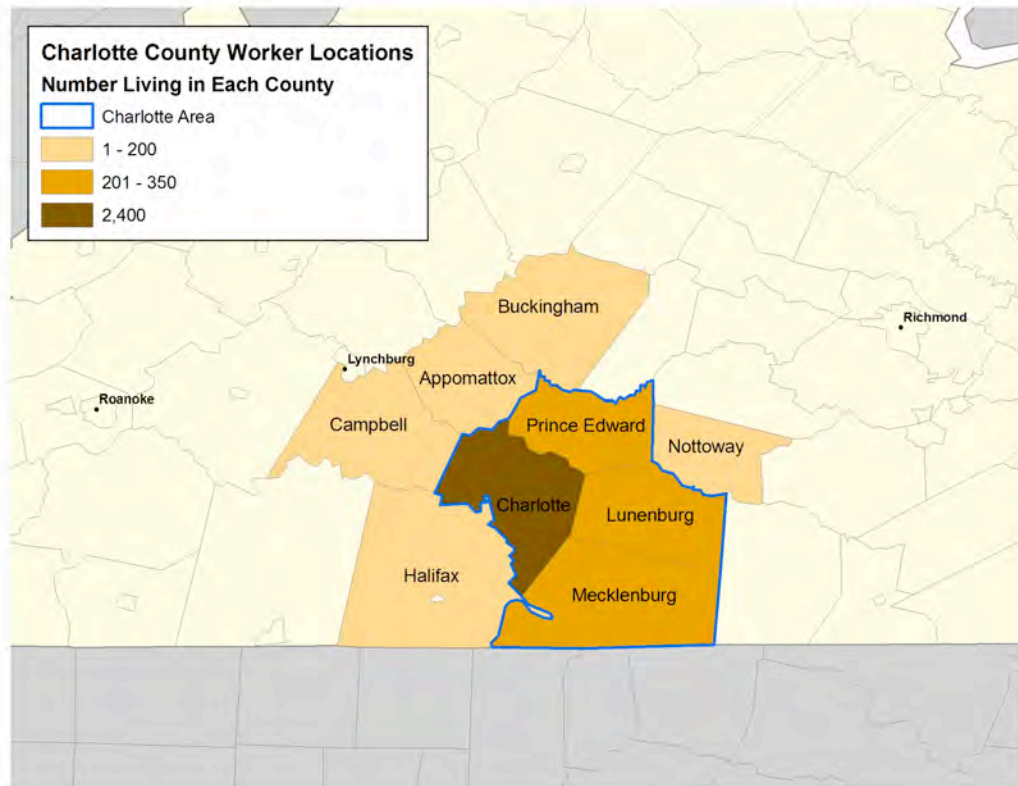


\*Source: Virginia Employment Commission

In the figure above, we see data from Census 2000 showing the number of people who commute into and out of the county, and also the number of people who live and work in Charlotte County. When compared to Grayson county, we can see that a higher percentage (almost half) of Charlotte County residents stay in the county to work. Also, a higher percentage (about 30 percent) of Charlotte County workers are in-commuters. Again, we use GIS analysis in the figure below to further examine the in-commuters.



**Figure 43. Number of Charlotte County Workers Living in Each County**

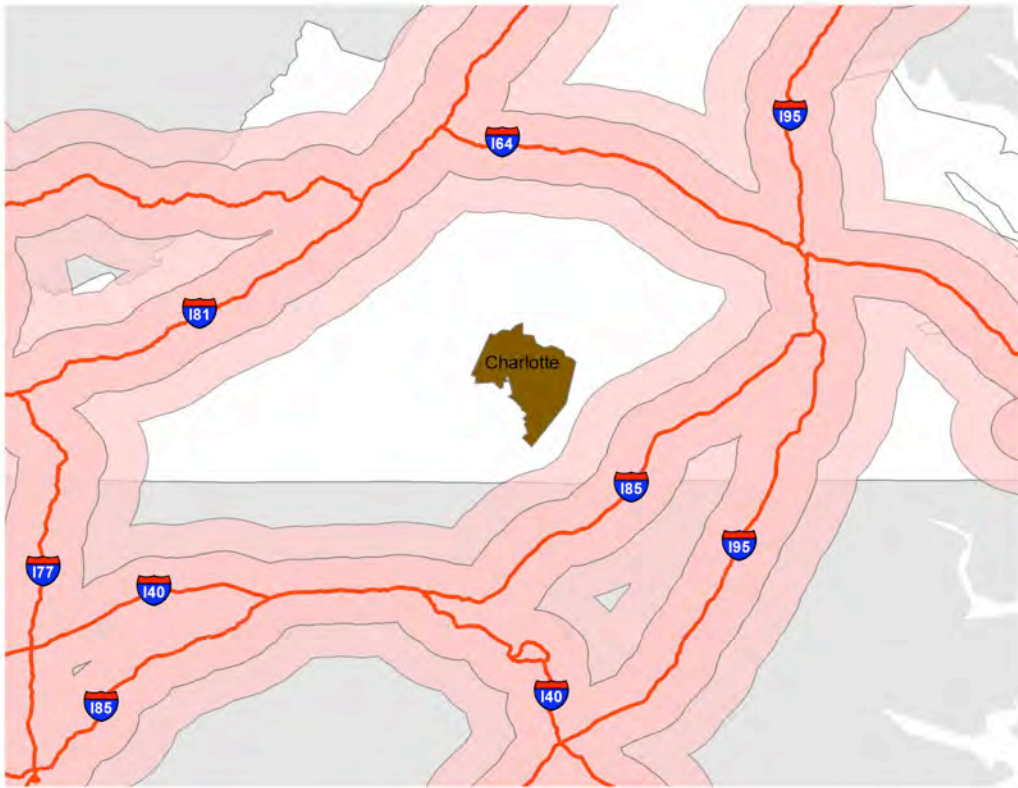


\*Source: Virginia Employment Commission

In the map above, we look at the county of residence for the people working in Charlotte County. Similar to Grayson County, the largest proportion of Charlotte's workers (about 70 percent) are also Charlotte residents. When we look at the Charlotte area, which includes Charlotte County, Prince Edward County, Lunenburg County, and Mecklenburg County, we find that almost 93 percent of Charlotte's workforce lives within these boundaries.



**Figure 44. Proximity of Interstates to Charlotte County**



In Figure 44, it is clear that there are no interstates near Charlotte County that could serve as commuting routes for corrections officers. Therefore, we look more closely at the local highways in the Charlotte County area.

**Figure 45. Proximity of Highways to Charlotte County**

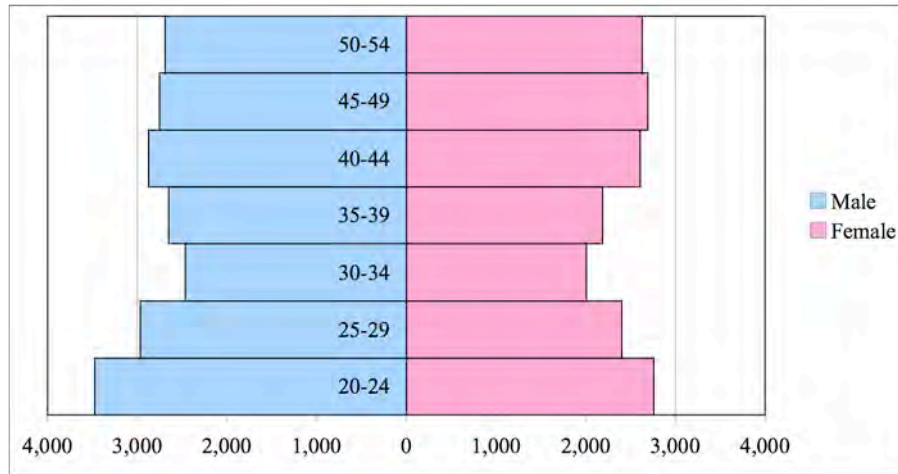


In this map, we see the major highways near Charlotte County. There are U.S. and State Highways available for commuting, but most of the major highways in the area are entirely outside of Charlotte County. Based on the highway system seen above, we expect that a corrections facility in this county would draw its workforce from a localized geographic area.

*(c) Local Demographics*

According to U.S. Census Bureau's and the Weldon Cooper Center's population estimates, there were approximately 37,000 men and women of prime working-age (ages 20-54) living in the Charlotte area in 2006. About 43 percent of the prime working-age population is less than 35 years old. In terms of gender composition, 53 percent of the prime working-age population is male and the remaining 47 percent is female.

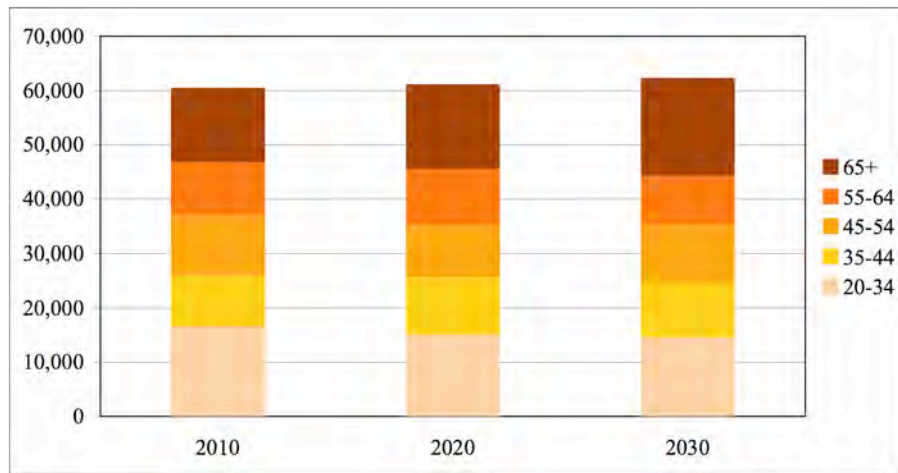
**Figure 46. Age Structure**



\*Source: 2006 U.S. Census Bureau and Weldon Cooper Center Population Estimates

Based on the VEC's population projections, we expect the prime working-age population to decrease in the Charlotte area, as well, but at a slower rate than in the Grayson area. Projections indicate that the prime working-age population should decline by only 200 people from 2006-2010. However, projections indicate a further decline of nearly 1,700 people, or by 5 percent, from 2010-2030 for the prime working-age population. Therefore, the Charlotte area applicant pool is expected to shrink at a relatively slow rate over the next 20 years.

**Figure 47. Population Projections**

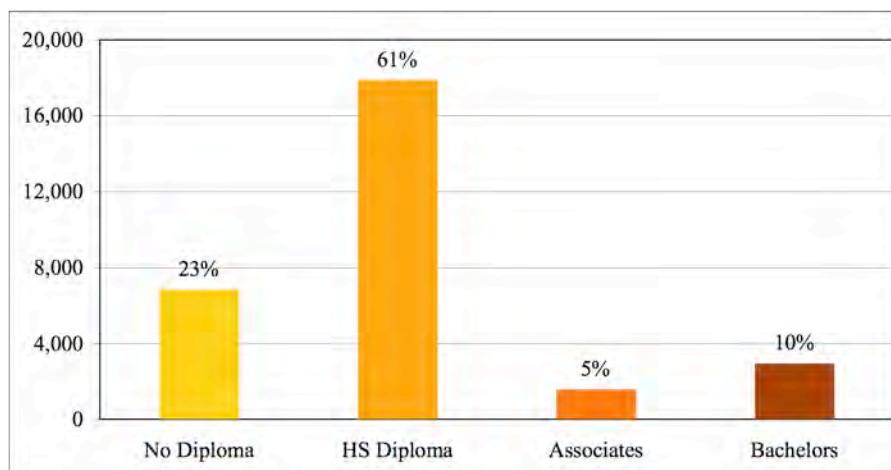


\*Source: Virginia Employment Commission Projections

As for the racial and ethnic composition, approximately 61 percent of prime working-age people in the Charlotte area are White and 37 percent are Black. Hispanics account for nearly 2.5 percent of the prime working-age population, regardless of race.

According to the 2000 Decennial Census, there were approximately 19,500 people (66 percent) in the Charlotte area between the ages of 18-44 with a High School Diploma or Associates Degree. We also found that there were over 4,500 veterans between the ages of 18-64 living the Haynesville area in 2000.

**Figure 48. Educational Attainment (Ages 18-44)**



\*Source: 2000 Decennial Census

*(d) Workforce Profile*

According to the BLS, there were approximately 33,000 workers in the labor in 2005 for the Charlotte area and about 6.1 percent of those workers were unemployed. Combine this data with LED data for the Charlotte area and we find that young workers (ages 25-34) account for about 14 percent of the labor force.

Further analysis of the LED data indicates that the DOC's biggest competitors in the Charlotte area are employers in the industries of manufacturing, retail trade, and educational services. Together, these industries employ over 40 percent of all young workers. However, manufacturing and retail trade have relatively high turnover rates for this area and age group and the average monthly earnings for newly hired young workers in retail trade are about \$300 less than the average overall.

We also found that the average monthly earnings for newly hired, young workers in the Charlotte area was approximately \$1,700 in 2005, which translates to an annual salary of about \$21,000. The entry-level salary (25th percentile) provided by the BLS for corrections officers in the Southside non-metropolitan area was approximately \$29,000 in 2006. The Southside non-metropolitan area includes Brunswick County, Buckingham County, Charlotte County, Emporia City, Franklin City, Greenville County, Halifax County, Lunenburg County, Mecklenburg County, Nottoway County, Prince Edward County, and Southampton County. Even after adjusting for inflation, the entry-level salary for corrections officers in the Southside non-metropolitan area is still \$8,000 higher than the average salary for newly hired, young workers in the Charlotte area. Thus, the DOC seems to be offering competitive entry-level salaries for existing facilities located in and around the Charlotte area.

**Figure 49. Workforce Statistics by Industry Sector (Ages 25-34)**

<i>Charlotte Area</i>	<i>Employment</i>	<i>Turnover</i>	<i>New Hire Earnings</i>
Manufacturing	715	12.8%	1,640
Retail Trade	624	12.7%	1,341
Educational Services	615	8.6%	1,780
Health Care and Social Assistance	527	12.6%	1,692
Accommodation and Food Services	374	17.9%	823
Public Administration	349	6.2%	1,887
Construction	300	16.5%	1,891
Administrative and Support Services	204	36.5%	1,015
Transportation and Warehousing	190	12.0%	1,578
Wholesale Trade	136	8.5%	3,412
Professional, Scientific, and Technical Services	131	12.7%	2,920
Other Services (except Public Administration)	104	16.9%	1,382
Finance and Insurance	103	10.4%	2,119
Agriculture, Forestry, Fishing and Hunting	82	9.0%	2,427
Real Estate and Rental and Leasing	67	29.1%	1,879
Information	44	11.1%	913
Management of Companies and Enterprises	44	32.8%	1,728
Arts, Entertainment, and Recreation	18	12.2%	1,397
Utilities	18	3.5%	1,351
Mining	--	--	--
All Sectors	4,643	12.8%	1,648

\*Source: 2005 Local Employment Dynamics

*(e) Hiring Process*

Since the Charlotte facility is a potential future site, no applicant flow data is currently available.

*(f) Summary*

Looking at the commuting patterns of Charlotte County workers, we find that almost half of Charlotte County’s residents work within the county lines. Additionally, almost a third of the workforce in Charlotte County are in-commuters who live outside of the county boundaries. Overall, almost 93 percent of the workers in Charlotte live in the Charlotte area, which includes Charlotte County, Prince Edward County, Lunenburg County, and Mecklenburg County. When we examined the interstate system we found that there were no interstates near Charlotte County that could serve as commuting routes for corrections officers. Like the Haynesville facility officers, the corrections officers at a Charlotte County facility would be likely to use the local highway system to get to work, and therefore would likely live in a comparatively localized geographic area.

In terms of future workforce availability, we expect the applicant pool decrease slightly over the next 20 years; the prime working-age population is projected to decline by about 5 percent from 2010-2030.

Analysis of workforce data indicates that the DOC’s biggest competitors in the Charlotte area will be employers in the industries of manufacturing, retail trade, and educational services. In this area, the DOC seems to be offering competitive entry-level salaries and the high unemployment rate (6.1 percent) may serve as an advantage to the DOC in terms of attracting potential applicants.

## STRATEGIES

Workforce availability for many new and existing corrections facilities is likely to shrink between now and 2030. In order to curb the effects of this decline, the DOC will need to focus on two specific areas:

- Recruiting and selecting enough qualified candidates to fill agency vacancies, and
- Sustaining retention of individual officers already within the organization.

Some general strategies for recruitment, selection and retention are outlined in the sections below. They are suggested mainly for the Grayson County facility that will open in 2010, but are also useful for all corrections facilities. Given the budgetary, political, and logistic limitations that many corrections institutions face, this set of strategies may not all be pursued at once; yet many of these strategies require some time to produce quantifiable results and should be started, at least incrementally, as soon as possible.

### *1) Recruitment and Selection*

The goal of effective recruitment and selection strategies is to attract many quality candidates well suited to the responsibilities and tasks the position entails. If a new recruitment tool attracts many more applicants, but those recruits only stay within the organization for a short time because of a mismatch between their talents and the position, then the funds, time, and energy spent on recruiting, hiring, and training them has essentially been wasted. Recruitment strategies to improve results for the DOC include:

- Improve marketing
- Establish internship/work-study/scholarship programs
- Set up an employee referral system

a.) Efforts to advertise available positions can be expanded by increasing presence at career fairs, supporting local organizations, and establishing an Internet presence, including the creation of a career section on the agency website. Focusing on Internet marketing may be particularly useful in attracting younger, more technologically inclined candidates, who are increasingly relying on web-based tools to search for career opportunities. An advantage to attracting an increasingly younger pool of applicants is the potential to retain them for more years as workers.

Correctional institutions should also consider targeting marketing efforts at workers who fall outside the typical corrections officers' demographic group, that is to say females, young white males, and older people seeking work. Adopting a flexible work schedule to accommodate employee needs and offering part-time opportunities would help make the corrections officer career more appealing for women who have children and for older persons (Lommel 2004). The adoption of flexible schedules could also appeal to employees who have a long commute to a remote, rural facility. Another potential group to be targeted by marketing efforts is workers in declining industries in the area. Our analysis of workforce data indicates that the DOC's biggest competitor in the Grayson area, for example, is the manufacturing industry. Currently, this industry is declining and it is expected to continue declining in the near future. As manufacturing workers lose jobs, the DOC must ensure that the job prospects as corrections officers are seen as a viable career path by these newly unemployed people who are looking for work and that they know about position openings in corrections.

b.) Scholarship programs are also a useful recruitment and selection strategy because they attract a more highly educated applicant pool. Additionally, internship or work-study programs allow potential recruits to gain experience in the field as well as exposure to the work environment (Lommel 2004). Finally, through internships or work study programs the DOC will have an opportunity to assess the future success of applicants by observing them in the program.

c.) Finally, an employee referral system is also a useful recruitment strategy. By providing incentives to current employees to actively enlist new recruits, the DOC may also increase current employees' investment and job satisfaction in the organization, potentially lessening their potential for turnover, and allow recruits to gain valuable insight about the position and what it entails from the employee, who is in the field every day.

## **2) Retention**

The second and arguably more important area requiring DOC attention is retention of current employees. Turnover among corrections officers is a significant problem across Virginia and the rest of the country. For two of the three existing Virginia correctional sites included in this study, high vacancy and turnover rates were reported. The potential effects of turnover in all current and future facilities should be of concern because they are costly, and breed factors in remaining employees that may perpetuate the cycle of turnover.

The corrections field faces significant tangible and intangible costs as a result of corrections officer turnover. It is estimated that nationally an average of about \$20,000 is spent on each new correctional staff member (Lambert, 62, 2001). The monetary costs of turnover include recruiting; hiring; training; pre-departure productivity losses; and separation, vacancy, selection, and replacement costs.

The costs involved with turnover at a corrections facility also include those that are intangible, but which can considerably affect the remaining employees and may even contribute to the cycle of turnover, such as disruption of social networks and contacts between corrections officer colleagues and between corrections officers and inmates, understaffed conditions, decreased sense of security and safety among remaining officers, burnout, lower morale, increase in overall stress.

The state of corrections institutions is changing. Projected aggregate state budget shortfalls may cause state correctional budgets to have limited potential for growth in the area of staffing or workforce development. Nationally, the incarcerated population has grown an annual average of 3.7 percent between 1995 and 2003, with state prisoners increasing an average of 2.6 percent and federal prisoners up an average of 5.4 percent (MTC, 2, 2004). Therefore, corrections management will need to be both creative and efficient in addressing the problem of high turnover.

Retention strategies can be implemented:

- 1) During the hiring process,
- 2) In the area of pay and benefits, and
- 3) In other areas, such as career development.

### **1) Retention Strategies during Hiring**

Two retention strategies that can be implemented during the hiring process are background investigations and pre-employment contracts.

a) The aim of background investigations is to uncover past behavior as a predictor of future behavior. Often background investigations focus on past criminal offenses, past issues with substance use or abuse, or past problems with discipline or authority. An emphasis on certain aspects of behavior, such as truthfulness and self-respect, may be better true predictors of applicant ability, motivation, and potential for problematic behavior (Harris 1994). Not only can incorporating these characteristics into background screening of applicants be helpful in limiting behavioral problems and turnover, both voluntary and involuntary, it can also be manager's show of support for the existing officers by bringing in new officers with the proper ability and motivation to conduct their jobs successfully.

b) Pre-employment contracts are also combat turnover because they commit corrections officer recruits to a specific term of service. Pre-employment contracts are a less costly solution than monetary bonuses and incentives; however, they are also more controversial and potentially require additional resources to check and enforce compliance (Young 1988). The military education model, a variation on the pre-employment contract, may be a better solution because it works to incentivize the contract signatories. A new corrections officer recruit would make a service commitment to the corrections agency in exchange for some level of college tuition support (Shaffer 1997). This system would hold new recruits accountable, while still allowing them to take advantage of potential educational benefits.

## 2) *Retention Strategies Related to Pay and Benefits*

A study by the Workforce Associates, Inc. (Lommel et. al. 2004) conducted for the American Correctional Association in 2000 shows a statistically significant inverse relationship in 44 states between the average compensation paid to corrections officers and those states' turnover rates in the same year. We found that two of the three current facilities in this report currently offer competitive entry-level salaries, and we expect that the Grayson facility will offer competitive entry-level salaries as well. It is critical that the DOC continue this practice and improve in areas where entry-level salaries are not competitive. Additionally, the pay and benefits must remain competitive throughout a corrections officer's career. In many cases, the DOC may need to increase pay and benefits beyond those of other industries to remain competitive because of the stressful and demanding nature of corrections officer work.

The financial resources to bolster pay for all officers are limited; therefore implementing or expanding the following retention strategies that are related to compensation and benefits but often more economical may be warranted:

- Differential pay scales
- Promotional pay structures
- Bonuses conditional on service commitments
- Reconfiguration of holiday pay (roll-over holiday pay)
- Subsidies for child-care or offering a facility-run daycare center
- Subsidies for transportation or opportunities like vanpools and carpools
- Tuition payback or continuing education opportunities
- Flexible schedules and part-time opportunities

## 3) *Other Retention Strategies*



Retention strategies that focus on training, career development and advancement, and overall improvement of the work environment can be helpful tools in combating retention roadblocks. Building a strong foundation among corrections management is a vital step in creating a supportive environment for employees; various programs that enhance officers' skills and investment in the organization also impart room for growth and advancement, such as:

- Improving management
- Establishing team-building workshops and exercises
- Starting mentorship programs
- Creating professional specialty niches and job enlargement techniques

Effective practices that value employee participation will establish avenues for corrections officer to become dedicated to their own career, to their fellow officers, and to the organization as a whole.

Tactics to improve the general work environment would also serve to increase job satisfaction. Improving the work environment in an agency or at a specific facility does not necessarily require significant capital outlay or restructuring, but merely some simple changes in protocol and attention to three main areas that have been shown to impact job satisfaction and retention:

- Improved internal communication
- Job performance recognition
- Employee support (support groups, flexible schedules, part-time opportunities, tuition benefits, childcare subsidies, transportation)

These discussion points provide several strategies for improving recruitment, selection, and retention. Again, we do not expect that the DOC will be able to implement all of them, but we do believe that efforts to put any of our suggestions into practice will help ensure that the necessary workforce is available for the Grayson County corrections facility and other corrections facilities throughout Virginia.

## **RECOMMENDATIONS FOR DATA COLLECTION**

Our recommendations for improving DOC's data-driven management in the future are:

- Retain data that was collected on former employees for at least 10 years;
- Attempt to collect exit data from employees leaving their positions, including:
  - Reasons for leaving,
  - Description of subsequent position, and
  - Satisfaction with corrections officer employment;
- Ensure that applicant flow data are collected for each facility every month;
- Expand applicant flow data to include reasons that the interview or position was denied by the DOC or declined by the applicant

With this additional information, the DOC will be able to monitor its workforce compositions, change, and the mechanism that influence the change. It will facilitate informed decision making in recruiting and retaining its workforce.

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Virginia Department of Corrections  
Labor Force Projection & Workforce Development Initiative  
For State Correctional Facilities

Final Report—June 24, 2008

Appendix B:  
**Workforce Planning Framework**

In presenting this final report, the Department confirmed the direction and vitality of this workforce planning initiative through review of current human resource management practices related to:

- Workforce planning approach
- Changing workforce dynamics
- Skill gap deficiencies
- Human capital investment

Workforce Planning Approach

The International Public Management Association—Human Resources (IPMA-HR) is the prominent public sector human resource management association in this country. It notes three options for workforce planning available to public sector organizations. There is a workforce approach based on occupational needs, a competency approach based on key sets of knowledge, skills, abilities and personal attributes that are critical to successful work and organizational success, and a workload approach based on critical tasks and processes. It is not uncommon to combine elements of more than one approach.

In planning for the sustained operation of its correctional facilities, the Department is integrating all three approaches to ensure that its intended results meet the success criteria set forth in its October 2007 interim report—a feasible, targeted and actionable course of action.

The analysis of this report is:

- Grounded in the demographics of the current and future workforce around individual DOC sites to confirm the feasibility of continued operation. The occupational focus is the Security Services career group, specifically the Corrections Officer job.
- Focused on “fit” considerations of key competencies that support applicants truly suited for employment as Corrections Officers and their successful contributions and extended tenure on-the-job. Person-job, person-

organization and person-workplace characteristics target personal attributes that enhance DOC's recruitment-to-retain process.

- Linked to the critical tasks and processes that make up the workload of the Corrections Officer job to assure that the expertise and resources are in place to support incumbents. This includes external partner agencies to source suitable applicants as well as internal practices to orient, train, mentor, motivate and develop Officers on-the-job.

### Changing Workforce Dynamics

The U.S. Department of Labor monitors the productivity and soundness of the nation's workforce. It concludes that America has a labor force that learns in a changing economy where the portion of workers with a bachelor's degree or higher has more than doubled between 1970 and 2006 (12% to 28%).

Still, 30% of American jobs required a high school education (diploma, GED) or less in 2006. The portion of the workforce population (ages 25 to 64) without a high school education has dropped from 36% in 1970 to 10% in 2006. Over the same period, the portion of the workforce that has a high school education remains fairly constant (38% in 1970, 36% in 2006).

Overall, employment growth in the United States was reported for the 2001-2006 period, a trend expected to continue during a 2004-2014 projection period. However, production jobs were a notable area of job decline for both periods.

In 2006, 26% of American workers available to work did not look for jobs due to discouragement over job prospects. This is more than double the workers who did not look due to ill health/disability, enrollment in school/or training, or family responsibilities.

To the extent that Virginia shares in the national workforce experience, key factors present themselves for the Department:

- The relationship between production jobs and workers with a high school education is obvious. Manufacturing is a segment of the economy that remains in decline.
- High school education, or its equivalent, is a preferred qualification for Corrections Officer applicants. Corrections may represent an alternative employment avenue for workers with high school education.
- A notable cohort of workers available for employment experience discouragement over job prospects and may not be aware of employment opportunities in alternate avenues such as Corrections.

## Skill gap deficiencies

The American Society for Training and Development (ASTD) has a Public Policy Council that publishes white papers on topics relevant to workplace learning and performance. One of its current areas of attention is skill gaps of workers where a shortage is reported in four key areas (ASTD, 2006, p. 6):

- Basic skills—the “three Rs” (reading, writing and arithmetic, customer service, communications, basic business acumen).
- Technical/professional skills—computer/technology skills, and skills for specialized industries (i.e., automotive, construction).
- Management and leadership—skills in areas such as supervision, team-building, goal-setting, planning, motivation, decision-making, and ethical judgment.
- Emotional intelligence—skills such as self-awareness, self-discipline, persistence and empathy.

ASTD goes on to set out six key organizational responses to address workplace skill shortage (ASTD, 2006, p. 15):

- Invest in employee development and commit resources to learning initiatives that support business goals and strategies.
- Create an environment of continuous learning and provide appropriate learning and development opportunities.
- Benchmark organization-wide learning against best practices.
- Recognize and reward learning and development that support current and future skill needs.
- Provide working conditions and an atmosphere that help retain mature workers, so that highly skilled and knowledgeable workers stay in the workforce.
- Reframe retirement as an opportunity for experienced employees to help close skill gaps through mentoring, coaching, or other activities.

All four of the skills gap areas cited by ASTD are relevant to Corrections and responses of the Department.

- Basic skills can be addressed by the WorkKeys system which supports the Department in profiling the skill set for the Corrections Officer job, screening external applicants for employment and internal candidates for advancement, and focusing development of current employees. DOC’s partner here is the Virginia Community College System.
- Emotional intelligence can be addressed by the “fit” competencies being identified by the Department’s current research into person-job, person-organization and person-workplace. DOC’s partner here is CETA Systems.

- Technical/professional skills unique to Corrections and the Officer job are covered by the four-phase Basic Correctional Officer (BCO) training curriculum which is used to certify all newly hired Officers during their first year of employment.
- Management and leadership are skills outside this initiative but related to the Department's larger succession planning and management development efforts.

### Human Capital Investments

ASTD's Public Policy Council recently published another white paper on the challenge of acquiring and preserving talent—human capital—in today's highly competitive and changing workplace environment. The council notes the “new reality” of the workplace environment (ASTD, 2002, p. 8):

- Organizations need people.
- Talented people are the competitive advantage
- Talented employees are essential to success.
- Talented people are in demand.
- People are mobile and their commitment is short term.
- People demand much more.

The Society for Human Resource Management (SHRM) is the largest professional association in this country and the world and offers the most comprehensive resources in the human resources profession. Its SHRM Foundation is specifically chartered to maximize HR decision making in organizations by promoting innovation, education, research and use of research-based knowledge.

In 2007, the foundation issued a report on survey results in partnership with the Hay Group to determine the most pressing human capital challenges facing the chief HR officer and top level executives in organizations here in the U.S. and worldwide.

Two of the top challenges and associated issues cited by over 60% of the respondents included these findings (SHRM Foundation, 2007, p. 26):

#### *Recruiting and Selecting Talented Employees*

- There is a great deal of competition to get talented employees with the right skill sets.
- Small companies have particular challenges competing for talent.
- Geography can be a hindrance.
- Companies without a successful track record have particular issues attracting talent.

### *Engaging and Retaining Talented Employees*

- Remaining competitive with pay and benefits is a crucial step in retaining employees.
- Providing developmental opportunities is a challenge and a key step in engaging and retaining talent.
- The competition for talent means that employees have greater choices and therefore are more likely to leave for new opportunities.

SHRM Foundation published a subsequent guide on retaining employees, advocating tangible steps to strengthen employee engagement in the organization (SHRM Foundation, 2008, p. 26):

#### *Job design*

- Increase meaningfulness, autonomy, variety and co-worker support in jobs.

#### *Recruitment & selection*

- Use clear communication to achieve person-job and person-organization fit.
- Hire internally where strategically and practically feasible.

#### *Training & development*

- Provide orientation that communicates how jobs contribute to the organization's mission and that helps new hires establish relationships with colleagues.
- Offer ongoing skills development.

#### *Compensation & performance management*

- Consider competency-based and pay-for-performance systems.
- Define challenging goals.
- Provide positive feedback and recognition of all types of contributions.

These three resources published by ASTD and the SHRM Foundation confirm the Department's focus on:

- Competitive labor market conditions where workers have higher expectations for salary, benefits and satisfying work.
- "Fit" is a key perceptive that helps explain how new employees are successfully brought on board, engaged and retained.



- Ongoing opportunities, challenging work, communication, support, feedback and recognition are essential to engage and retain talent.

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