

**MOTION:**

**July 21, 2020  
Regular Meeting**

**SECOND:**

**Res. No. 20-**

**RE:**

**AUTHORIZE THE DEPARTMENT OF SOCIAL SERVICES TO SUBMIT THE JUVENILE DETENTION CENTER PLANNING STUDY TO THE VIRGINIA DEPARTMENT OF JUVENILE JUSTICE BOARD FOR CONSIDERATION AND APPROVAL**

**ACTION:**

**WHEREAS**, beginning in Fiscal Year (FY) 17, the Board of County Supervisors (BOCS) appropriated funding for the purpose of conducting a Needs Assessment and Planning Study, which is a two-step process required by the Virginia Department of Juvenile Justice (DJJ) prior to a locality building a new or renovating an existing Juvenile Detention Center (JDC); and

**WHEREAS**, the Needs Assessment was completed and approved by the BOCS and DJJ in the spring/summer of 2018, and highlighted major areas of deficiencies including the need for improvements in security, health and safety, programming, and facility designs conducive for juvenile justice transformation efforts and determined that the existing facility was built in the 1970's using a "bars, walls, and security" model. The Needs Assessment also determined that the existing facility is functionally obsolete; and

**WHEREAS**, after the Needs Assessment was conducted, step two of the two-step process was completed, and a Planning Study generated a 121-page report which addresses the needs and deficiencies identified in the Needs Assessment while also providing recommendations for possible design standards when constructing a new JDC and juvenile services campus model; and

**WHEREAS**, DJJ requires the local governing body to pass a resolution indicating approval of the planned construction, enlargement, or renovation and intent to appropriate funding and proceed with the project before the DJJ Board and Virginia Secretary of Public Safety recommend approval of the Planning Study and in advance of a locality submitting a request for 50% reimbursement of construction costs to the Virginia General Assembly;

**NOW, THEREFORE, BE IT RESOLVED** that the Prince William Board of County Supervisors hereby authorizes the Department of Social Services to submit the Planning Study to the Virginia Department of Juvenile Justice Board for consideration and approval.

**July 21, 2020  
Regular Meeting  
Res. No. 20-  
Page Two**

**Votes:**

**Ayes:**

**Nays:**

**Absent from Vote:**

**Absent from Meeting:**

**For Information:**

Social Services Director

**ATTEST:** \_\_\_\_\_

**Clerk to the Board**



# STAFF REPORT

<b>Board Meeting Date:</b>	July 21, 2020
<b>Agenda Title:</b>	Authorize the Department of Social Services to Submit the Planning Study to the Virginia Department of Juvenile Justice Board for Consideration and Approval
<b>District Impact:</b>	Coles Magisterial District
<b>Requested Action:</b>	Approve the resolution and authorize submission of the Planning Study.
<b>Department / Agency Lead:</b>	Department of Social Services
<b>Staff Lead:</b>	Courtney Tierney, Director

## **EXECUTIVE SUMMARY**

Beginning in FY2017, the Board of County Supervisors (BOCS) appropriated funding for the purpose of conducting a Needs Assessment of the Department of Social Services’ (DSS) Juvenile Detention Center (JDC). A Needs Assessment is the first step in a formal, two-step process required by the Virginia Department of Juvenile Justice (DJJ) prior to a locality building a new or renovating an existing JDC. The Needs Assessment was conducted by a consultant (Moseley Architects) in conjunction with DSS and was approved by the BOCS and DJJ in the spring/summer of 2018.

The second phase of the two-step process required by DJJ is called the “Planning Study” phase. The Planning Study is an in-depth review of a locality’s existing detention facilities, programming, detention trends and needs, youth population, criminogenic factors and statistics, staffing needs, and physical building requirements. Once a locality completes the Planning Study, the local governing body is required to pass a resolution indicating approval of the planned construction, enlargement, or renovation and intent to appropriate funding and proceed with the project.

DJJ staff have reviewed DSS’ Planning Study and are recommending placement on the agenda for approval by the DJJ Board in September of 2020. A resolution approving the Planning Study by the local governing body is required prior to the item being placed on the DJJ Board’s agenda for consideration. Therefore, DSS is requesting the BOCS to approve the resolution and authorize submission of the Planning Study to the DJJ Board for consideration and approval.

## **BACKGROUND**

---

Given that the original JDC was constructed in the 1970's using a "bars, walls, and security model," the Needs Assessment determined that the existing JDC is functionally obsolete and is not consistent with current trauma-informed design standards. The Needs Assessment highlighted four major areas of deficiencies, including the need for improvements in security, health and safety, programming, and facility designs conducive for juvenile justice transformation efforts. A Planning Study was conducted and a 121-page report was produced which addresses the needs and deficiencies identified in the Needs Assessment. The Planning Study provides recommendations for possible design standards when constructing a new JDC and juvenile services campus model.

## **STAFF RECOMMENDATION**

---

DSS is requesting the BOCS to approve the resolution and authorize submission of the Planning Study to the DJJ Board for consideration and approval.

### **Service Level / Policy Impact**

If the BOCS authorizes DSS to submit the Planning Study to DJJ and assuming the DJJ Board and Virginia Secretary of Public Safety and Homeland Security recommend approval, DSS can begin developing the request for proposal requirements for the facility design phase (in conjunction with the Department of Facilities and Fleet Management).

### **Fiscal Impact**

To date, DSS has paid Moseley Architects \$266,000 to complete the Needs Assessment and Planning Study phases required by DJJ. If the BOCS authorizes DSS to submit the Planning Study to DJJ and assuming the DJJ Board and Virginia Secretary of Public Safety and Homeland Security recommend approval, Prince William County will then be eligible to submit a request for 50% reimbursement of construction costs to the Virginia General Assembly. For planning purposes, the County's 6-year Capital Improvement Program includes \$3M in annual debt service, beginning in FY23, to support the design and construction costs associated with a new juvenile services campus.

### **Legal Impact**

The Board has the legal authority to approve the resolution and authorize submission of the Planning Study to the DJJ Board for consideration and approval in accordance with § 16.1- 309.5 of the Code of Virginia.

## **STAFF CONTACT INFORMATION**

---

Courtney Tierney | (703) 792-7520  
ctierney@pwcgov.org

## **ATTACHMENTS**

---

- PowerPoint Presentation
- Needs Assessment
- Planning Study




**DSS' CIP Update:  
Juvenile Services  
Site Update  
July 14, 2020**

**Human Services: *Transforming Lives***




**DSS Transforming Lives: Safety, Support, Self-sufficiency**

**DSS Juvenile Services Division's Programs** 


**31<sup>st</sup> District Juvenile and Domestic Relations Court orders youth from PWC, Manassas and Manassas Park to pre-dispositional programs**

- Two detention alternatives
  - Molinari Shelter for Youth, non-secure, 15 beds, certified by the Department of Juvenile Justice (DJJ)
  - Pre-trial supervision at home, electronic monitoring option
- Juvenile Detention Center
  - 72 beds, certified by DJJ
  - Secure

DSS' CIP Update - March 17, 2020 3

**Juvenile Justice Continuum** 

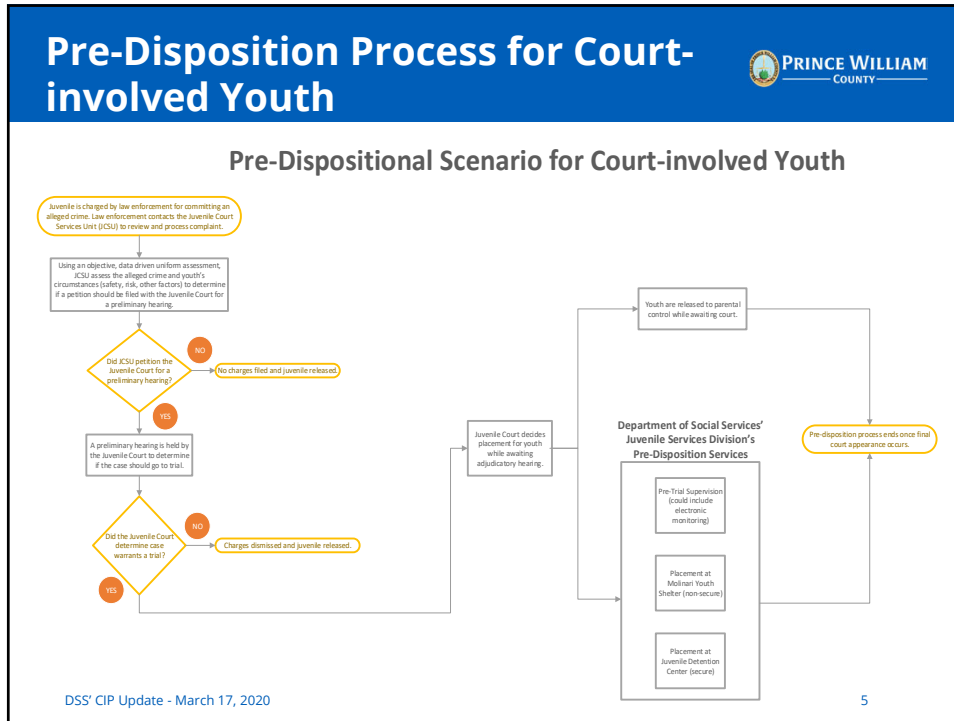
Pre-disposition Options	Post-disposition Options
-------------------------	--------------------------



**Juvenile Justice Continuum**

<ul style="list-style-type: none"> <li>• Pre-Trial Supervision</li> <li>• Molinari Youth Shelter (non-secure)</li> <li>• Juvenile Detention Center</li> </ul>	<ul style="list-style-type: none"> <li>• Probation</li> <li>• Commitment to a state juvenile correction facility or residential placement</li> <li>• Local Community Placement Program</li> <li>• Parole</li> <li>• Boys &amp; Girls Group Homes (eliminated in 2008)</li> <li>• Day Reporting Center (eliminated in 2008)</li> </ul>
---	---

DSS' CIP Update - May xx, 2020 4



- ## Characteristics of JDC detainees in FY19:
- **Top 3 criminal charges – Assault, Larceny, & Robbery**
  - **Average length of stay – 32 days**
  - **43% have prescribed Psychotropic Medication and receive Behavioral Health Services**
  - **Services provided – personal assessments/screenings, behavioral health screenings, life skills training, anger replacement therapy, pro-social skills**
  - **Education**
    - PWCS staff are embedded at the JDC and Molinari to educate students from PWC and the Cities of Manassas and Manassas Park
    - GED courses and testing are offered onsite along with NVCC classes for post-disposition youth
- DSS' CIP Update - March 17, 2020 6

## Racial Equity Lens

**Race/Ethnicity Data FY2018**

	JDC	Molinari	Pretrial
Asian	11	2	3
African American*	176 (43.5%)	62 (32%)	63 (33.5%)
Other	18	21	15
White/Caucasian**	53 (13%)	35 (18%)	28 (15%)
Hispanic ***	<u>146 (36%)</u>	<u>73 (38%)</u>	<u>79 (42%)</u>
<b>Total</b>	<b>404</b>	<b>193</b>	<b>188</b>

Source: Softech Juvenile Correctional System

**General Population ages 10-18 \*19% \*\*36% \*\*\*23%**

Source: PWC Demographic 2018 4thQ Report

DSS' CIP Update - March 17, 2020 7

## Juvenile Detention Center Funding

JDC Funding	
Local General Fund	<b>\$2,360,258</b>
Per Diem from Cities	<b>\$600,000</b>
State Funding CPP	<b>\$818,000</b>
Block Grant, USDA, DJJ	<b>\$2,065,470</b>
<b>Total</b>	<b>\$5,843,728</b>

DSS' CIP Update - March 17, 2020 8



## Current situation



- **57.1% of youth (post-dispositional) re-offend**

Source: According to The Department of Juvenile Justice Annual Data Guide (FY19), 12-Month Rearrest, Reconviction, and Reincarceration Rates by CSU for Parole Placements in FY 2017-2018, Tracked through FY 2019.

- **Entire system, both service delivery and facility design, needs to focus on reducing recidivism**
    - **Evidence-based “Missouri Model”**
    - **Facility design coupled with trauma-informed programming reduces juvenile recidivism**
- <https://www.aecf.org/resources/the-missouri-model/>


**Current JDC design is in direct conflict with trauma-informed and evidence-based design and programs**

## Evolution of Facility Designs...



- 1970's model was based on adult detention (bars, walls, security)
- Since the '70's, nationwide transformation has occurred in juvenile justice programming, which has led to a change in how juvenile detention facilities are designed
- Using the Missouri Model as a guide, the Commonwealth of Virginia began implementing statewide juvenile justice reform in 2014
- Modern facilities now include trauma-informed designs which are conducive for implementing evidenced-based programs
- Facility design characteristics impact treatment, education, and engagement


## Transformation Efforts in PWC DSS Juvenile Services



- Identified the need for a new or renovated facility to meet best practices in juvenile justice services – 2016
- Needs Assessment was completed in January 2018 required to start the process for up to 50% potential reimbursement from the Commonwealth (VAC 16.1/309.5)
- After completing the Needs Assessment for the JDC only, the scope was expanded to include the exploration of a Juvenile Services campus model to include Molinari and Pre-Trial staff and potentially JCSU Probation staff.
- Planning Study is now complete and with BOCS approval, is scheduled for review by DJJ Board in September of 2020

DSS' CIP Update - March 17, 2020 11

## Areas for Improvement



<p style="text-align: center;"><b><u>Security</u></b></p> <ul style="list-style-type: none"> <li>○ Separation of youth</li> <li>○ Lobby does not have room for metal detector or search/pat down of visitors</li> <li>○ Congestion in intake area</li> </ul>	<p style="text-align: center;"><b><u>Heath &amp; Safety</u></b></p> <ul style="list-style-type: none"> <li>○ Kitchen and laundry space is inefficient</li> <li>○ Needs a separate medical cell with a negative pressure ventilation system</li> <li>○ Poor shower design</li> </ul>
<p style="text-align: center;"><b><u>Programming</u></b></p> <ul style="list-style-type: none"> <li>○ Lack of private space for consultation with families, probation, legal, mental health/sub. abuse treatment</li> <li>○ Trauma-informed care</li> <li>○ Employment skills training</li> </ul>	<p style="text-align: center;"><b><u>Transformation Efforts</u></b></p> <ul style="list-style-type: none"> <li>○ Current design doesn't align with VA DJJ transformation trends</li> <li>○ Functional obsolescence – current design in direct conflict with trauma-informed and evidence-based designs</li> </ul>

DSS' CIP Update - March 17, 2020 12

## Planning Efforts and Associated Costs

- 2018: Needs Assessment – \$116,000
- 2018 to 2020: \$151,000 Purchase Order established for the JDC/Molinari Planning Study – \$145,000 has been liquidated as of May 2020
- The County's Five-Year CIP includes \$3M annually beginning in FY23 (from the general fund) to support debt service financing for juvenile services campus.

DSS' CIP Update - March 17, 2020 13

## Planning Study Recommendations

Facility	Current Bed Capacity	Proposed Bed Capacity	D.J.J. Formula R.S. Means	Downey & Scott's Regional Estimate
JDC	72	48	\$29,142,615	\$35,002,596
Molinari Youth Shelter	15	20	\$9,766,012	\$11,190,804
			\$38,908,627	\$46,193,400

DSS' CIP Update – May XX, 2020 14

## Anticipated Project Schedule



- July 2020: BOCS approval for Planning Study
- September 2020: submit the Planning Study to DJJ Board for approval and to the BOCS for review
- 2021 General Assembly Session: submit the request for 50% reimbursement of construction costs to the General Assembly
- October 2020 to December 2021: complete design process for BOCS decision and award construction contract
- January 2022 to June 2024: construction process
- July 2024: occupy new facilities

DSS' CIP Update - March 17, 2020

15

# Questions?



DSS' CIP Update - March 17, 2020

16

**Prince William County**  
**Juvenile Detention Needs Assessment**

PREPARED FOR THE

**County of Prince William**

**May 29, 2018**

**MOSELEY**ARCHITECTS  
A PROFESSIONAL CORPORATION

ARCHITECTURE • ENGINEERING • PLANNING • INTERIOR DESIGN • CONSTRUCTION SERVICES

RICHMOND, VA.

## **Executive Summary**

### **Scope**

This report represents the first phase of the planning process as prescribed by the Department of Juvenile Justice (DJJ) to expand or replace an existing Secure Detention facility in Virginia. The second phase of any future construction program is the preparation of a Program Design and Planning Study that will define the specific services needed for a functional continuum of juvenile justice services. The Planning Study will provide information associated with the size, physical layout, anticipated construction costs and estimated operating costs of the proposed facility.

This document provides historical perspective of the statistics that are influencing the need for Prince William County Juvenile Detention Center (JDC) bed space such as crime and arrest summaries, and changes in the general population and law enforcement resources; trends in court service intakes and detention admissions; a profile of detention residents, analysis of historical detention population changes; an assessment of the existing JDC physical plant, and a forecast of future JDC bed space needs. The report concludes with recommendations for decision making and long term planning.

### **Background**

Secure Detention is a temporary out-of-home placement of juveniles charged with or adjudicated of delinquent acts. For juveniles charged with committing delinquent acts, the purpose of detention is to assure appearances at appropriate court proceedings, to provide for public safety, and/or provide for the safety of the youth. For post-adjudicated youth, detention<sup>1</sup> is the most serious sanction that can be imposed prior to commitment to a State juvenile correctional facility. In recognition of the limitations associated with the existing Prince William County Juvenile Detention Center (JDC), County officials commissioned this Needs Assessment to quantify the need for appropriate space in the future. The purpose of this Needs Assessment is to document the contextual factors that impact secure detention resources, and to quantify the future capacity that is required in the County.

State funding for the construction or expansion of a detention facility requires the preparation of a Needs Assessment in accordance with the Regulations for State Reimbursement of Local Juvenile Residential Facilities Construction Cost adopted by the Board of Juvenile Justice. This document represents the first phase of the planning process as prescribed by the Department of Juvenile Justice (DJJ). The second phase of any future construction program is the preparation of a Program Design and Planning Study that will define the specific services needed for a functional continuum of juvenile justice services. The Planning Study will provide information associated with the size, physical layout, anticipated construction costs and estimated operating costs of the proposed facility.

### **Overview of the Prince William County Juvenile Detention Center**

The purpose of the JDC is to provide secure housing, education, and structured therapeutic activities for youth detained by the Prince William County Juvenile and Domestic Relations Court (J&DR). The existing facility is a 72-bed secure residential building for detained youth between 10 and 17 years of age. The original official capacity of the facility when originally constructed in

---

<sup>1</sup> In this report, the terms “secure detention” and “detention” are used interchangeably.

1978 was 24 beds/rooms. The 24 rooms are configured in two housing units with 12 rooms each. These units were designed in the “linear” fashion popular in the 1960s and 1970s with six rooms facing each other, and separated by a narrow hallway. There are no dayrooms or program areas and residents must travel to other areas of the facility for recreation, dining, educational and program activities. Residents sleeping in the housing units spend their “awake” hours within dayrooms included in more recent housing areas.

Two renovations have resulted in an additional 48 rooms within the existing 35,000 square feet building. A 1997 addition includes a single 16 room housing area, new classrooms, an indoor gymnasium, and renovated administrative support space. Housing space is configured in a “circular” podular design overlooking an open common area that incorporates appropriate dayroom/program space for the residents. A third addition, completed in 2000, resulted in 32 new sleeping rooms situated in three separate circular podular housing units, a single housing control room and accompanying dayroom/program areas within each unit.

A number of services are provided to admitted youth in a collaborative effort among County agencies. For example, the Department of Mental Health, Mental Retardation and Substance Abuse Services provides on-site mental health/substance abuse screening and referrals. Substance abuse programming and ongoing therapy groups are provided on a regular basis. Residents receive classroom instruction each day. JDC staff also work closely with Prince William Court Service Unit personnel to ensure appropriate programs and services.

The official certified capacity of the facility is 72 is somewhat misleading as the original 24 room housing areas – one third of the capacity - are simply sleeping areas that do not include any day rooms or living space. Current DJJ standards require a design where resident rooms are configured around a dayroom or living space, and require physical separation by normal sight and sound between male and female residents. The existing facility is approximately 8,000 square feet below the amount of space required by current standards for a 72 bed detention center.

While the current population of residents in the facility typically ranges between 40-50 at any given time, and as many as 63, the somewhat “haphazard” configuration of the facility does not allow for adequate separation of males and females, neither are there means to separate sex offenders and more violent youth from the very young. With continuing growth in County population, it is reasonable to expect ongoing pressure on available bed space needs.

### **Report Organization**

This document is organized in a manner which conforms to DJJ guidelines and presents information in the sections outlined below.

- |             |  |
|-------------|--|
| Section I   | Presents quantitative and qualitative changes in the demographic factors that will influence the need for additional detention space in the future.  |
| Section II  | Presents the historical perspective of the statistics that are influencing the need for Secure Detention bed space such as crime and arrest summaries, and increases in law enforcement resources. |
| Section III | Presents summaries of trends in court service intakes and JDC admissions.  |

Section IV	Presents an analysis of residential placement capacity in the County and a profile of JDC residents within the facility.
Section V	Presents an analysis of historical JDC population changes
Section VI	Presents a description of the statistical methodology used to project future bed space needs and a summary of the results of planning forecasts of JDC bed space needs over a 15 year forecast horizon.
Section VII	Presents an assessment of the existing JDC physical plant.
Section VIII	Presents Needs Assessment findings and conclusions.
Appendix	Presents an overview of the Prince William County Court Service Unit program matrix and continuum of services for youth.

## Findings

### ***Demographics***

- The Prince William County JDC service area continues to be among the fastest growing population areas in the Commonwealth. Population growth in Prince William County and the cities of Manassas and Manassas Park (combined) is projected to grow by 20.3% between 2010 – 2020. By comparison, the total population in the Commonwealth is projected to increase 10.1%.
- According to school enrollment statistics maintained by the Prince William County School system (statistics that exclude youth in private schools, home schools and school dropouts), the teenage population is growing at a faster rate than the overall population. Youth in Middle and High Schools are projected to increase from 47,018 in 2016, to 53,247 in the year 2021. Between fiscal year 2017 and fiscal year 2021 the County plans to open four new elementary schools; three new middle schools; one new high school and numerous additional classrooms through expansion at existing facilities.

### ***Criminal Justice Trends***

- While the general population in the County increased by 17% between 2011 – 2015, the overall crime incident rate per 100,000 persons declined by 17.1% from 4,045 in 2011, to 3,354 in 2015.
- Reported crime and crime rates in Virginia have, with some very few exceptions, declined over the past five years. This declining five-year trend is consistent with crime trends in Prince William County and the cities of Manassas and Manassas Park.
- Between 2011-2015, the number of juveniles arrested in Prince William County and the cities of Manassas and Manassas Park combined (JDC Service Area) decreased by 28.1%, from 2,824 in 2011, to 2,030 in 2015.



### **Court Service Intakes and Detention Admissions**

- By several measures of Court Service Unit (CSU) activity compiled by the Virginia Department of Juvenile Justice, regular and intensive probation caseloads as well as the number of pre-disposition and post-disposition reports generated by CSU 31 have all declined over the past five fiscal years.
- While the number of intake petitions decreased by approximately 500 cases between FY-12 and FY-16; the percentage of cases resulting in pre-dispositional detention increased from 705 in FY-12, to 786 in FY-16 - a five-year increase of 11.5%.
- When compared to Statewide data, Prince William CSU has a higher percentage of Felony complaints and technical violations, and a lower percentage of Class 2-4 Misdemeanor complaints.
- Between FY-14 and FY-16 the total number of detention admissions per year decreased by approximately the same rate as the State as a whole – between 6%-8% per year;
- Female admissions to detention are increasing. While the number of males declined between FY12 – FY16 (-8.8%), the number of females admitted each year increased by 25.8%.
- Just under 70% of charges associated with detention admissions recorded in FY-15 were associated with Violations of Supervision (25.0% of total charges), Assault (17.0%), Robbery (8.8%), Larceny (7.4%) and Gang related charges (7.0% of total charges). The large percentage of supervision violations suggests that there is a lack of detention alternatives in the County.
- In FY-15, a Probation Violation charge was the most frequent admitting charge (16.0% of the total), followed by the charges of Simple Assault (12.2% of the total), Robbery (8.8%), "Violation" (8.5% of total charges) and Larceny 7.4% of the total) – together these charges comprised just over half of all charges associated with secure detention admissions.

### **Secure Detention Capacity and Average Daily Population**

- Since the beginning of FY-12 between 75% - 79% of the population, on average, have been in pre-dispositional status, and an average of 16.2% of the population have been in post-dispositional status without a formal program.
- Of the 62 youth housed in the JDC in June 2016, 12 (19.4% of the total) were being held for probation or parole violations; 10 (16.6% of the total) were being held for robbery charges; 9 for miscellaneous court violations and 9 were in the facility for assault charges.
- In FY-16, just over 15% of youth admitted in pre-disposition status remained in the JDC for three days or less; 49.4% of released youth remained in detention for 4-21 days, and just under 35% of released youth were detained for 22 days or more.
- Despite fluctuating monthly population levels, through the first eight months of FY-18, the average monthly population in the JDC was lower than the average population reported in FY-11.

- The JDC was operating at an average of 49.9% of certified capacity at the end of FY-11; through the first eight months of FY-18, the JDC operated at 46.5% based on Average Daily Population.
- Based on the average population for each fiscal year the JDC population has varied between 34-52 residents since FY-11.
- Since FY-11 (through February 2018), the average annual population of the JDC increased by an average of 1.4% per fiscal year; in comparison the reported Statewide population declined by an average of 2.6% each year.

<b>JDC Average Annual Population Changes Prince William JDC Compared to Statewide JDCs</b>				
	Statewide JDC Population	Change	Prince William JDC Population	Change
FY-11	756		36	--
FY-12	749	-0.9%	38	4.4%
FY-13	727	-2.9%	34	-8.7%
FY-14	735	1.1%	52	52.7%
FY-15	708	-3.7%	47	-11.0%
FY-16	643	-9.2%	42	-10.7%
FY-17	644	0.2%	43	4.2%
FY-18(YTD)	--	--	34	-21.5%
Average		-2.6%		1.4%

### **JDC Population Projections**

- Based on historical monthly JDC population data upon which the forecasts presented in this report are based, the population is projected to stabilize at between 38-40 residents throughout the forecast horizon.
- The statewide forecast of the secure detention population in the Commonwealth suggests that the overall secure detention population will decline over the next six years by an average of 2.1% per year.
- Eight beds have been designated as Community Placement Program (CPP) beds in the existing JDC. Prince William County is interested in adding bed and program space to accommodate an additional eight CPP beds. Planning efforts will need to account for additional space within the JDC.

There are presently 87 CPP beds located in nine local facilities across the State. CPP programs are highly structured, residential programs that house residents committed to DJJ in local secure detention facilities. The goal of CPPs is to place residents closer to their home communities in order to facilitate an easier transition following their release. CPPs focus on

addressing specific treatment needs and risk factors and developing competency in the areas of education, job readiness, life and social skills.

- The table that follows displays forecast scenarios through fiscal year 2022 under different assumptions that take into account the official Statewide forecast as well as the potential addition of 8 – 16 Community Placement Program (CPP) beds in Prince William County in the future.

<b>Prince William County Juvenile Detention Center Bed Space Planning Scenarios</b>				
	(1)	(2)	(3)	(4)
Year	Prince William Forecast	Additional 8-16 CPP Beds	Prince William Forecast Based on Statewide Forecast Growth	Additional 8-16 CPP Beds
FY-18	34	42-50	--	--
FY-19	40	48-56	33	41-49
FY-20	41	49-57	33	41-49
FY-21	38	46-54	32	40-48
FY-22	39	47-55	31	39-47

Column (1) above displays projected bed space needs for Prince William County youth based on the forecast described in this document. Column (2) displays a scenario of projected need based on the forecast described in this report and the assumption that an additional 8 – 16 CPP beds are added to the population forecast.

Column (3) figures represent a forecast scenario where the JDC projected average population for each fiscal year is assumed to mirror Statewide projected growth applied to the FY-18 reported actual population. Column (4) presents a forecast scenario based on the assumption that the Prince William County JDC population growth mirrors Statewide growth in the future and an additional 8 – 16 CPP beds are planned.

- Based on the statistical forecast described in this report, the County should plan on a JDC which will accommodate approximately 40 residents. If the County elects to accommodate 8 – 16 additional CPP participants, decision makers should plan on a JDC accommodating between 50-55 residents. As a cautionary note, historical population trends in the JDC have been somewhat erratic, and growth in the JDC population has been above secure detention population trends reported across the State. With projected growth in the general population in Prince William County it is reasonable to assume that there will be a need to implement program options and detention alternatives in the County to accommodate continuing pressure on resource needs.

### **Existing Secure Detention Facility**

- The official certified capacity of the facility is 72 is somewhat misleading as the original 24 room housing areas – one third of the certified capacity - are simply sleeping areas that

do not include any day rooms or living space. Current DJJ standards require a design where resident rooms are configured around a dayroom or living space, and require physical separation by normal sight and sound between male and female residents. The existing facility is approximately 8,000 square feet below the amount of space required by current standards for a 72 bed detention center.

- While the current population of residents in the facility has typically ranged between 40-50 at any given time, and as many as 63, The somewhat “haphazard” configuration of the facility does not allow for adequate separation of males and females, neither are there means to separate sex offenders and more violent youth from the very young. With continuing growth in County population, it is reasonable to expect ongoing pressure on available bed space needs.

There are numerous inadequacies – areas that are undersized and do not meet guidelines and accepted Standards - associated with the existing JDC, including:

- The administrative wing of offices and public lobby.
- The facility does not have conference room space.
- The administrative office area does not have enough spaces for staff. Currently there are five single person offices and two of them are being shared by two people.
- The facility has a very small visitor lobby, which does not have adequate space for a metal detector or search/pat down of visitors.
- The staff lockers and toilet are shared with guests and are not within the secure area.
- The Computer room is a converted closet; is too small and does not have adequate HVAC.
- The intake/ processing area needs enlargement This area is often crowded and congested. There are often not enough separate holding cells to properly separate juveniles needing temporary holding space.
- Privacy for initial interviews at intake is compromised. Holding cells (often occupied by youth just arrived or awaiting transport) are in earshot of the initial intake screening desk which involves a detainee being asked personal and medical questions.
- There is not sufficient space for family visitation, private visitation or professional visitation with clergy, attorneys and Probation Officers.
- Program space for counseling and treatment programs is inadequate.
- Living unit configurations are not uniform in size or configuration. Two units are eight-beds each; two units are 12 beds each, and two units are 16 beds each. Four units have dayrooms, and two do not.
- Storage space is inadequate throughout the facility, and there are currently several outdoor “shed” type buildings which have been added over the years to meet storage

needs. Additional storage of various types and sizes throughout the facility is needed, plus a central storage room when deliveries arrive.

- Lack of required non-contact visitation space, and lack of visitation space for various types of contact visits.
- In one classroom, the classroom's secondary exit door leads into the administration wing exit, which poses a security risk.
- The medical area is required to have negative area exhausting to minimize infectious disease exposure within the intake processing area, and this is not present.
- Supervision space is inadequate. The original housing wings of the facility do not have staff space. Staff use chairs placed in the six foot wide corridors.
- Kitchen and kitchen storage is inadequate and undersized for the number of residents in the JDC.
- Original showers present safety hazard. The showers in the original housing wings have exposed piping which is a safety hazard and not anti-ligature.
- Narrow corridors. The corridors in the booking area and entrance into the rest of the facility are too narrow and pose security risks. In some areas, residents can reach between walls to kick up legs and push off.
- Existing laundry space was designed for 24 residents. The Laundry Room is located in the original portion of the building and does not have a door large enough for commercial laundry equipment, so residential type equipment is used.

## ***Conclusions and Recommendations***

### ***Replace the existing JDC***

- The existing JDC should be replaced with a design that meets current standards and facilitates the delivery of programs and services for youth. The County should consider co-locating the existing JDC and the Molinari Juvenile Shelter on the same site. The sharing of support services such as food service, laundry, recreation and office space would likely result in reduced operational costs and facilitate an improved continuum of care for youth in the County.
- The official certified capacity of the facility is 72, which is somewhat misleading as the original 24 room housing areas – one third of the capacity - are simply sleeping areas that do not include any day rooms or living space. Current DJJ standards require a design where resident rooms are configured around a dayroom or living space, and require physical separation by normal sight and sound between male and female residents. The existing facility is (at a minimum) approximately 8,000 square feet below the amount of space required by current standards for a 72 bed detention center.

- The somewhat “haphazard” configuration of the facility does not allow for adequate separation of males and females, neither are there means to separate sex offenders and more violent youth from the very young.
- Since the 1970’s, nationwide reform has occurred in juvenile justice both in program and facility designs to support education, treatment, recreation and the provision of a continuum of services and programs for youth. Current standards and “best practices” suggest that it is the role of a JDC to be only a single component of a system of prevention programming, graduated sanctions and service delivery options to meet the needs of youth. This reform has rendered the existing JDC design obsolete.
- To effectively provide programs and services to Prince William County youth, the County should construct a new JDC designed and constructed to support the education, treatment, recreation and other program needs with a community re-entry focus and within a continuum of program options, sanctions and alternatives.

#### Develop a comprehensive detention utilization plan

- While growth in the Prince William JDC population slowed in FY-18, historically the population trends have been much higher than many other localities in the Commonwealth.
- Increasingly across the State, localities are planning and implementing programs that most effectively serve the needs of youth within the justice system while at the same time control population growth within secure detention facilities.
- Based on a profile of historical annual JDC admissions, the two highest admitting charge categories were “supervision violation,” including probation violations, violation of court orders and conditions of release (25% of total charges) and “Simple Assault” (10% of charges). This suggests that judges in the County simply do not have sufficient program alternatives to secure detention.
- Decision makers should implement a formal planning process to assess options as well as costs and benefits associated with the need for secure detention with a framework of a continuum of youth programs, services and detention alternatives. This planning process should be ongoing with plans for constructing a new JDC.
- Primary responsibility for developing and implementing the plan may fall to the Juvenile Court presiding judge, the Court Service Unit Director or a task force comprised of key juvenile justice professionals. Because changes in program and policy development may take an extended period of time, the plan should take into account the possible turnover in key decision-making personnel. The plan should provide an objective assessment of the costs and benefits associated with each alternative.
- The implementation of those policy options judged to be in the best interest of meeting local objectives should be summarized in a comprehensive plan. To the extent possible the plan should identify the specific steps that should be taken to achieve the objectives. If new programs or policies are recommended then the mechanisms for achieving the changes should be identified with specific and realistic timelines and budgets. Federal, State and local funding options need to be identified.

Projected JDC Bed Needs

- Based on the statistical forecast described in this report, the County should plan on a JDC which will accommodate approximately 40 residents. If the County elects to accommodate 8 – 16 additional CPP participants, decision makers should plan on a JDC accommodating between 50-55 residents. With projected growth in the general population in Prince William County it is reasonable to assume that there will be a need to implement program options and detention alternatives in the County to accommodate continuing pressure on resource needs.

**Section I**  
**Demographic Trends**



## Demographic Trends in Prince William County and the JDC Service Area

### Scope

There are many factors that play roles in increasing or decreasing the number of youth who are admitted to detention facilities, and the relationships between the factors are often complex and difficult to understand. Among these factors are the number of young people in the community who are eligible for admission to secure detention. Increases or decreases in the population 10-17 years of age may lead to changes in the volume of intake to court service units and admissions to detention. While not necessarily a factor that “determines” detention bed needs, demographic growth can place enormous pressure on local systems due to the sheer volume of growth in County population.

*Significant Finding:* The Prince William County JDC service area continues to be among the fastest growing population areas in the Commonwealth. Population growth in Prince William County and the cities of Manassas and Manassas Park (combined) is projected to grow by 20.3% between 2010 – 2020. By comparison, the total population in the Commonwealth is projected to increase 10.1%.

Prince William County’s population has grown steadily due to the combined effects of migrant growth as well as natural growth. The County is the second largest and fourth fastest growing county in the state of Virginia by population. In the ten-year period ending in 2010, the County’s population increased by 43% from 280,813 in 2000 to 402,002 in 2010. Moreover, continued growth is anticipated and the County’s population is expected to approach 660,000 residents by 2040. Recent estimates suggest that as of July 2013, the County was home to 438,580 residents.

- Over the ten-year period 2000-2010, Prince William County population grew by 43% compared to the 18% in the Washington D.C Metro Area, 13% in the state of Virginia and 10% overall for the United States.

### General Demographical Information

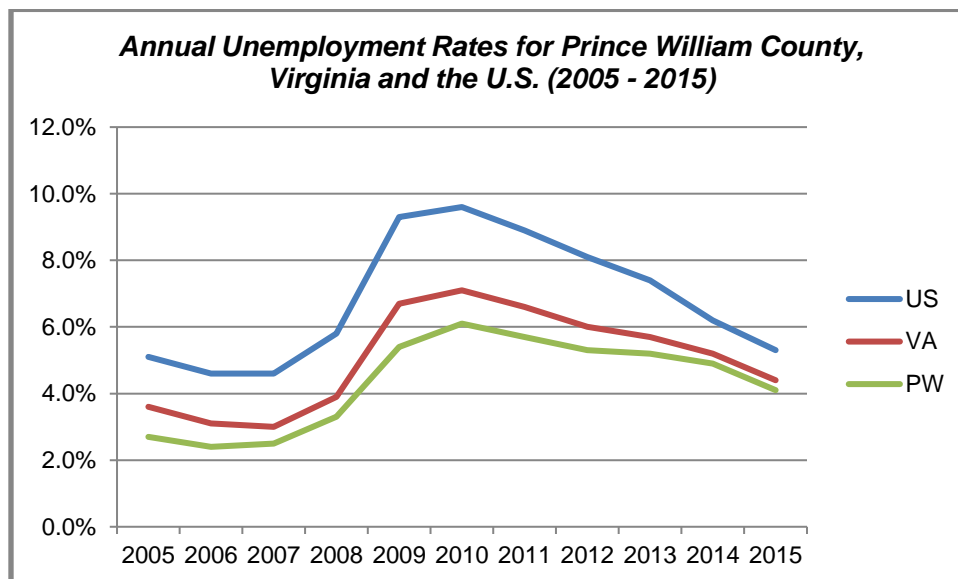
- A summary overview of the demographic composition of the localities participating in the in Juvenile Detention Center is displayed the following table.

<b>Prince William JDC Service Area</b>							
<b>Demographic Profile of Participating Localities</b>							
County	2000 Population	2010 Population	2000-10 Population Change	Area/Square Miles	Persons /Square Miles	% Pop Below the Poverty Level	Median Household Income
Prince William County	280,813	402,002	43.2%	336.4	202.6	5.6%	\$95,531
Manassas City	35,135	37,821	7.6%	9.9	3,827.6	13.8%	\$73,091
Manassas Park City	10,290	14,273	38.7%	2.5	5,632.6	4.3%	\$70,137
Virginia			13.0%				

- The 10 largest employers in Prince William County, City of Manassas and City of Manassas Park are displayed in the following table.

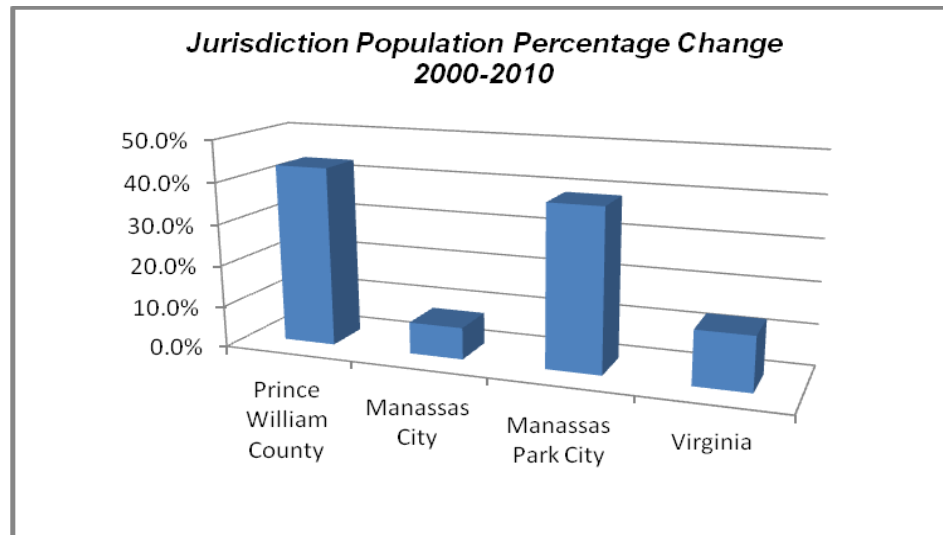
10 Largest Employers in the JDC Service Area			
Rank	Prince William County	Manassas City	Manassas Park City
1	PW County School Board	Micron Technology	Manassas Park School Board
2	County of Prince William	Prince William Hospital	City of Manassas Park
3	Wal Mart	Manassas School Board	Atlas Plumbing LLC
4	Morale Wel. and Recreation	Lockheed Martin	Labor Ready Mid-Atlantic
5	Sentara Health Care	City of Manassas	C.W. Strittmatter, Inc.
6	No. VA Community College	Personnel Staffing Group	QMT Associates
7	Wegmans Store #7	American Residential	Titan Erosion Control
8	Target Group	U.S. FBI	Alban Masonry, LLC
9	New Horizon Security Svs.	Digital Management	James River Equipment
10	Ulta	American Disposal Service	So Deep

- Northern Virginia unemployment rates have been consistently below those reported by other localities in Virginia. Historical unemployment rates are displayed in the following exhibit for Prince William County, the U.S. and Virginia.



**Historical Population Growth**

- According to the 2010, the Virginia population totaled 8 million, and grew by more than 900,000 between 2000 and 2010; 82% of this growth occurred in the Commonwealth’s three major metropolitan areas: Northern Virginia (55%), metropolitan Richmond (17%) and Hampton Roads (10%).
- 70 percent of Virginia’s population lives in these three areas: one-third in Northern Virginia, 16 percent in the Richmond metropolitan area and 21 percent in Hampton Roads.



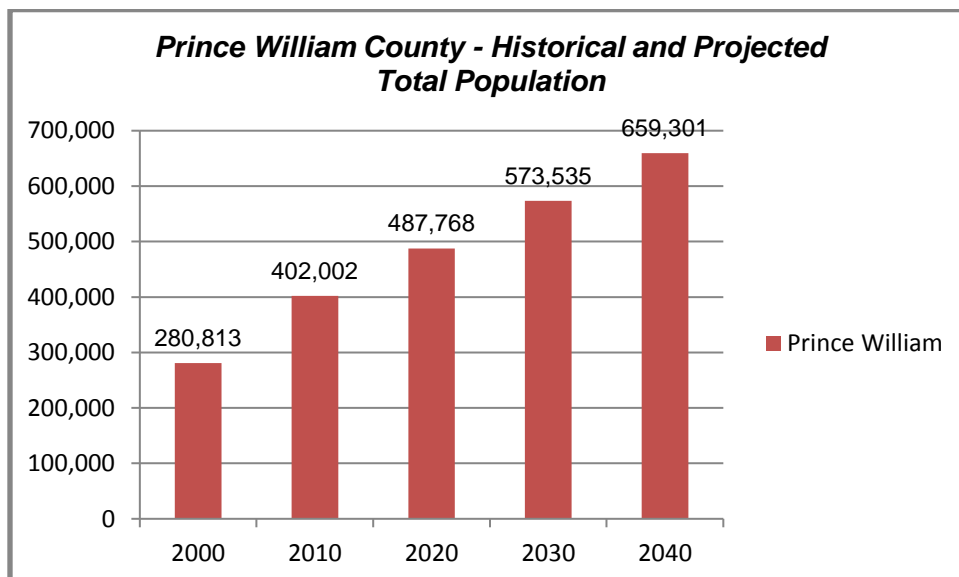
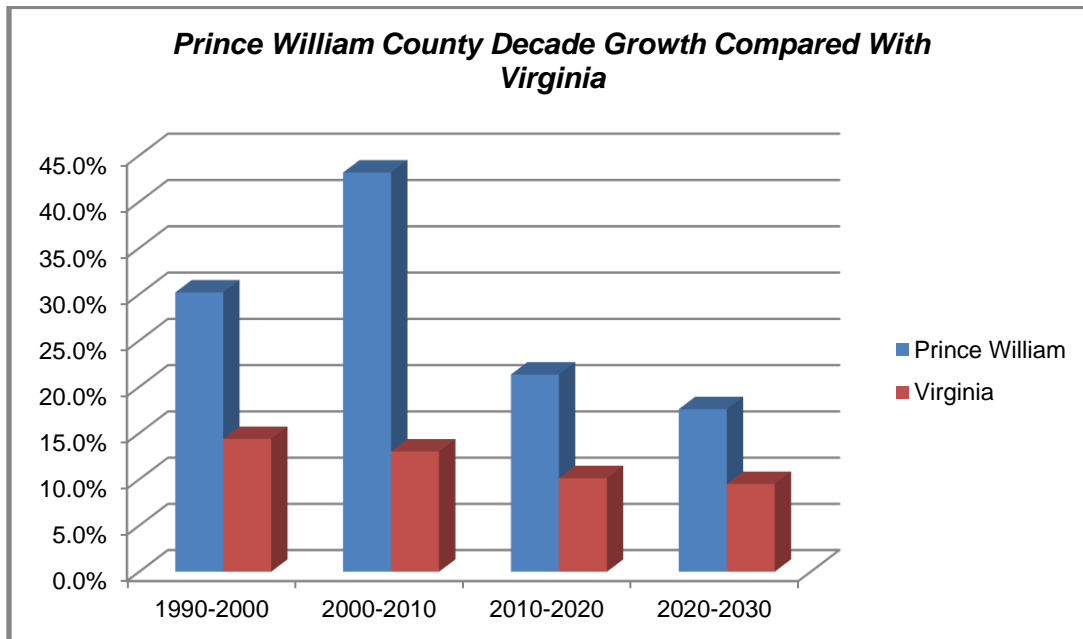
- Northern Virginia continues to lead in population size and growth. Fairfax County remains the largest locality in the state, growing by more than 85,000 between 2000-2010. Growth in Fairfax, Loudoun and Prince William counties accounts for 40 percent of Virginia’s total current growth.
- Between 2000 – 2010 reported population growth in Prince William County was the second highest in the State, behind Loudoun County; during the same time the City of Manassas reported the 6<sup>th</sup> fastest growing population.

Prince William JDC Service Area Population Change								
2000 - 2030								
Year	Prince William County	Percent Change	Manassas City	Percent Change	Manassas Park City	Percent Change	Virginia	Percent Change
2000	280,813	--	35,135	--	10,290	--	7,079,030	--
2010	402,002	43.2%	37,821	7.6%	14,273	38.7%	8,001,024	13.0%
2020	487,768	21.3%	42,105	11.3%	16,591	16.2%	8,811,512	10.1%
2030	573,535	17.6%	46,591	10.7%	18,436	11.1%	9,645,281	9.5%

Source: U.S. Census, Virginia Employment Commission

**Projected Total County Population Growth**

- The total population in Prince William is projected to increase from 402,002 in the year 2010 to 573,535 in the year 2030 – an increase of 171,533 people, and 42.7% growth.

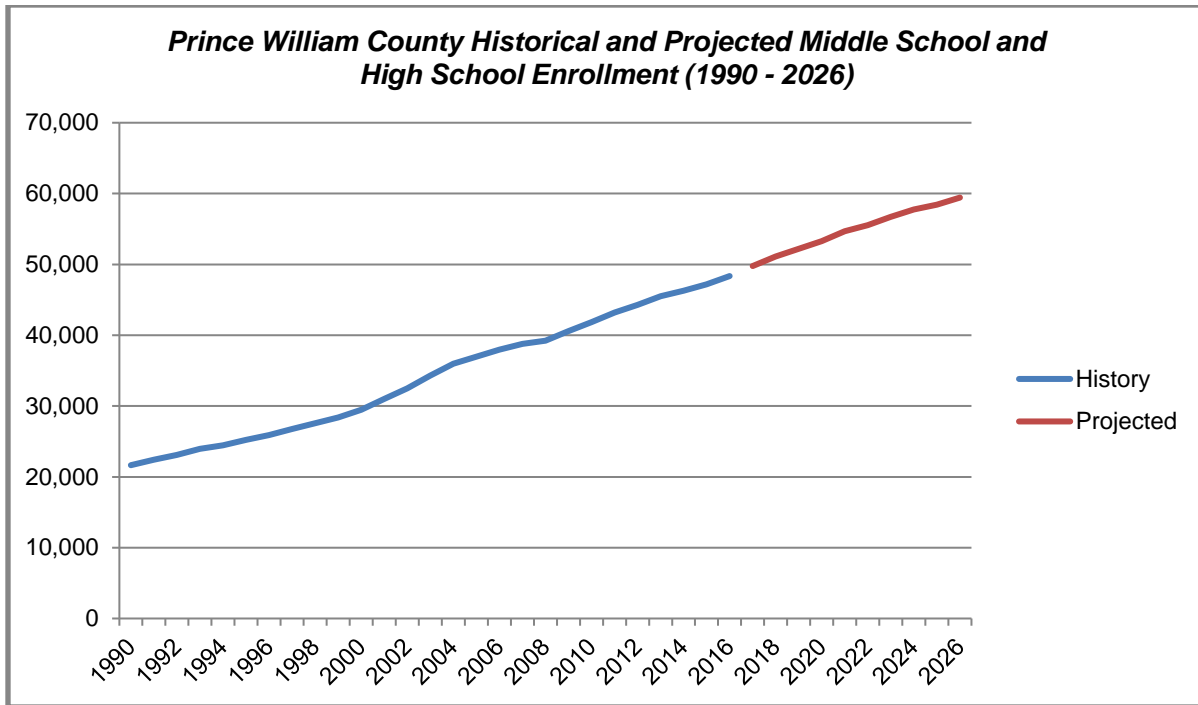


### *Growth in the County's Youth Population*

- According to school enrollment statistics maintained by the Prince William County School system (statistics that exclude youth in private schools, home schools and school dropouts), the teenage population is growing at a faster rate than the overall population. Youth in Middle and High Schools are projected to increase from 47,018 in 2016, to 53,247 in the year 2021.
- The number of Prince William County youth in Middle and High Schools is projected to increase by approximately 13% over the five-year period ending 2021.
- Between fiscal year 2017 and fiscal year 2021 the County plans to open four new elementary schools; three new middle schools; one new high school and numerous additional classrooms through expansion at existing facilities.

<b>Projected Prince William County Public School Enrollment (2016 - 2021)</b>						
School Type	Actual	School Year				
	2016	2017	2018	2019	2020	2021
Elementary School	40,569	40,869	41,153	41,600	42,060	42,757
Middle School	20,095	20,887	21,550	22,109	22,411	22,549
High School	26,923	27,541	28,223	28,710	29,459	30,698
<b>Total</b>	<b>87,587</b>	<b>89,297</b>	<b>90,926</b>	<b>92,419</b>	<b>93,930</b>	<b>96,004</b>

- An additional 10,000 students are projected to be in Prince William County Middle and High Schools by the year 2026.
- The County's Middle and High School population combined is projected to increase by an average of 2.1% per year between 2017 - 2026, and a total of 19.4% ten-year period.



## ***Section II***

### ***Criminal Justice System Trends***

## ***Trends in Reported Crime, Law Enforcement Personnel And Juvenile Arrests***

### **Scope**

Crime patterns, arrest trends and available law enforcement resources affect both adult jail and juvenile detention capacity needs. Demographic growth coupled with an increase in crime may have a ripple effect throughout the system. For example, as County population grows and reported crime increases, the number of arrests increase. As arrest volume grows, local systems may respond by hiring more police officers. As the number of police officers increase, the number of crimes that are cleared by arrests rises. Finally, as arrests increase, the number of persons placed in jails and detention facilities may increase. Conversely, when these factors are not growing or are decreasing any pressure these factors may place on a system are muted.

For this study, annual crime, arrest and law enforcement statistics for Prince William County, Manassas and Manassas Park were collected and analyzed for the years 2011 to 2015. A summary of this analysis is presented in this section of the Needs Assessment. Trends in reported crime and juvenile arrest trends are indicators (although not predictors) of increasing or decreasing demands on local justice resources.

- *Significant Finding:* While the general population in the County is estimated to have increased by 17% between 2011 – 2015, the overall crime incident rate per 100,000 persons declined by 17.1% from 4,045 in 2011, to 3,354 in 2015.

The data in this section was obtained primarily from the *Crime in Virginia* report published annually by the Virginia State Police based on information submitted by City, County and University Police Departments and Sheriff's Departments. This section is organized as follows:

Section A - presents an overview of crime trends and for a five year period and the growth in law enforcement personnel.

Section B - presents trends in juvenile arrests over a five year period for both Group A (more serious) and Group B (less serious) offenses.

### **Findings**

#### ***Section A – Reported Crime, Crime Rates & Law Enforcement Personnel***

The State Police reports both “Crime Incidents” and “Crime Offenses.” Multiple offenses can be associated with a single incident. When the number of incidents are expressed as a "rate/100,000 population", it is referred to as the incident rate. The difference is that the rate, by incorporating the civilian population into the calculation, allows comparisons with prior years (by adjusting for population changes) and to other jurisdictions (by adjusting for differences in the total civilian population).

*Significant Finding:* Reported crime and crime rates in Virginia have, with some very few exceptions, declined over the past five years. This declining five year trend is consistent with crime trends in Prince William County and the cities of Manassas and Manassas Park.



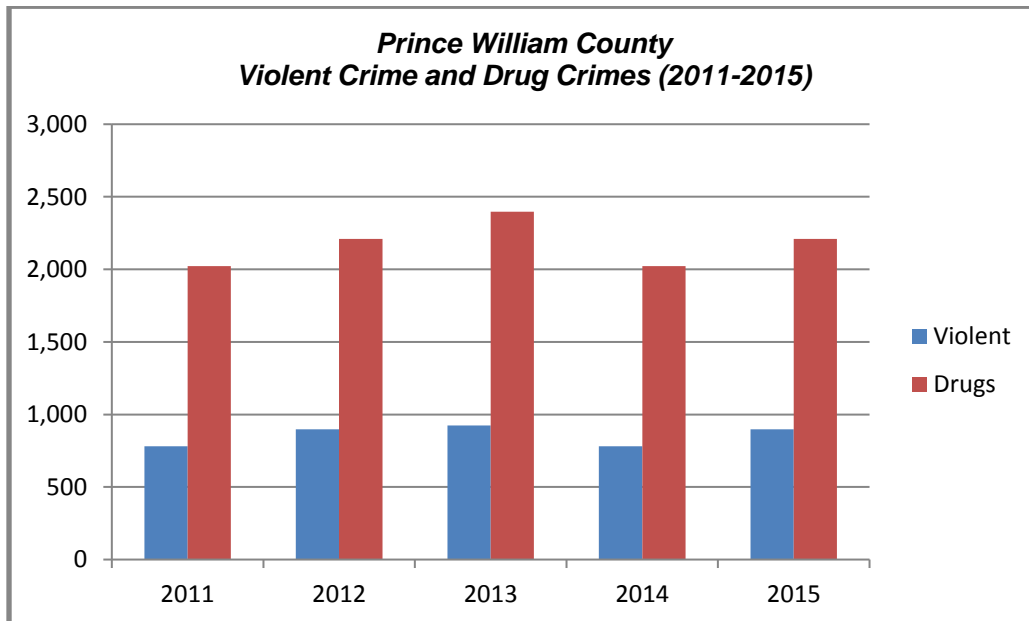
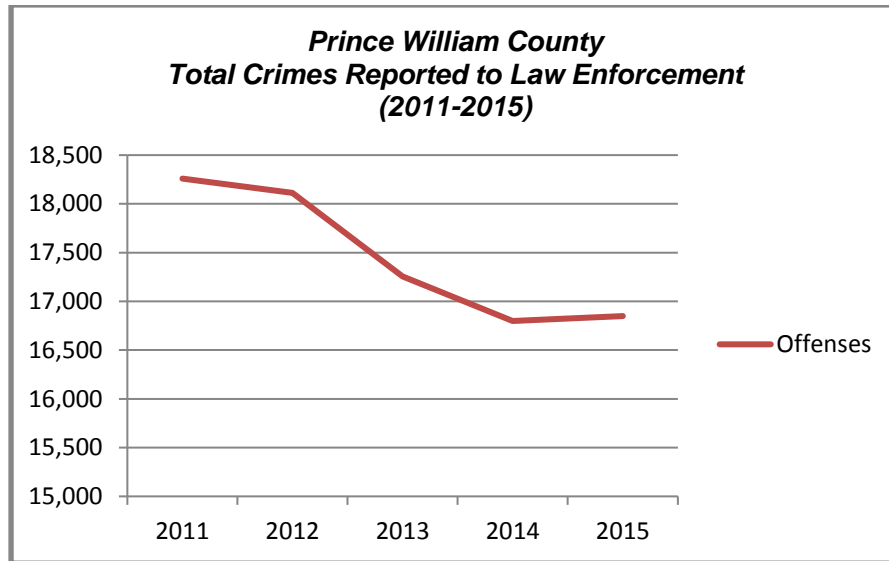
Summaries of crime trends for the year 2011-2015 (the last year for which data are available) are displayed for Prince William County, the cities of Manassas and Manassas Park, and the combined JDC service area, in the Tables and Exhibits that follow.

### *Reported Crime*

#### **Prince William County**

- The number reported crime incidents in Prince William County decreased by 10.8% between 2011 – 2015, from 16,583 incidents in 2011, to 14,784 in 2015.
- On average, law enforcement officers in the County reported 40.5 serious criminal incidents each day in 2015.
- While the number incidents declined by 10.8% between 2011 – 2015, the total number of offenses decreased by 7.7% between those years (multiple offenses may be associated with a single incident).
- While the general population in the County increased by 17% between 2011 – 2015, the overall crime incident rate per 100,000 persons declined by 17.1% from 4,045 in 2011, to 3,354 in 2015.
- Four offense categories represented approximately 74% of all reported crime in the Prince William County in 2015 – the most recent year for which data are available. The top five most frequently reported offenses in 2015 were: Larceny (27.7%); Simple Assault (21.5% of offenses); Drugs (14.5%), and Vandalism (10.3% of crimes).
- Reported drug and narcotic offenses represented 11.1% of offense in 2011, and 14.5% of total offenses in 2015.
- The largest percentage increases in reported crime (with at least 10 reports), by offense, are noted for the following categories: Pornography (+117.9%), “Other” forcible sex offenses (+86.5%), Extortion (+66.7%), Prostitution (65.0%) and Aggravated Assault (+55.4%)
- While “Other Forcible Sex” offenses increased by 86.5% (from 178 to 332 offenses), the overall number of violent crimes as measured by the categories of Murder, Rape, Robbery, Other Forcible Sex Crimes and Aggravated Assault increased by 46.6% during the five year period ending in 2015.
- By offense categories, noteworthy decreases over the last five years are reported in the following categories: Arson (-48.1%), Burglary (-36.9%), Vandalism (-28.2%) and Auto Theft (-21.3%).
- The total number of offenses reported to law enforcement increased modestly between 2014 – 2015; a total of 16,799 offenses were reported in the year 2014 compared to 16,849 offenses in 2015 – an increase of less than one percent.

<b>Prince William County</b>					
<b>2011 - 2015 Crimes Reported to Law Enforcement</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Population	406,374	412,661	422,716	428,994	434,754
Incident Rate/100,000	4,045.3	3,968.6	3,686.6	3,486.5	3,353.6
Total Incidents	16,583	16,541	15,783	15,153	14,784
Murder/Manslaughter	3	2	6	7	9
Kidnapping/Abduction	62	76	87	83	57
Forcible Rape	45	45	43	62	45
Other Forcible Sex Offenses	178	185	152	216	332
Robbery	181	214	244	206	217
Aggravated Assault	312	375	391	471	485
<b>Simple Assault</b>	<b>3,836</b>	<b>3,788</b>	<b>3,308</b>	<b>3,485</b>	<b>3,621</b>
Arson	27	57	13	16	14
Extortion	6	9	12	9	10
Burglary	976	925	707	646	616
<b>Larceny</b>	<b>5,778</b>	<b>5,666</b>	<b>5,548</b>	<b>4,991</b>	<b>4,672</b>
Auto Theft	400	359	316	292	315
Forgery	265	223	238	221	269
Fraud	1,198	1,233	1,326	1,451	1,466
Embezzlement	106	99	113	97	89
Stolen Property	106	123	105	95	70
<b>Vandalism</b>	<b>2,414</b>	<b>2,243</b>	<b>1,859</b>	<b>1,847</b>	<b>1,733</b>
<b>Drug/Narcotic Offenses</b>	<b>2,022</b>	<b>2,210</b>	<b>2,396</b>	<b>2,249</b>	<b>2,439</b>
Non-forcible Sex Offenses	15	16	9	11	21
Pornography	39	23	68	96	85
Gambling	29	1	1	0	0
Prostitution	20	21	19	39	33
Bribery	0	0	1	0	1
Weapon Law Violation	241	221	294	209	250
Total	18,259	18,114	17,256	16,799	16,849



<b>Prince William County</b>					
<b>2011 - 2015 Crimes Reported to Law Enforcement</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Population	406,374	412,661	422,716	428,994	434,754
Incident Rate/100,000	4,045.3	3,968.6	3,686.6	3,486.5	3,353.6
Total Incidents	16,583	16,541	15,783	15,153	14,784
Murder/Manslaughter	0.02%	0.01%	0.03%	0.04%	0.05%
Kidnapping/Abduction	0.34%	0.42%	0.50%	0.49%	0.34%
Forcible Rape	0.25%	0.25%	0.25%	0.37%	0.27%
Other Forcible Sex Offenses	0.97%	1.02%	0.88%	1.29%	1.97%
Robbery	0.99%	1.18%	1.41%	1.23%	1.29%
Aggravated Assault	1.71%	2.07%	2.27%	2.80%	2.88%
<b>Simple Assault</b>	<b>21.01%</b>	<b>20.91%</b>	<b>19.17%</b>	<b>20.75%</b>	<b>21.49%</b>
Arson	0.15%	0.31%	0.08%	0.10%	0.08%
Extortion	0.03%	0.05%	0.07%	0.05%	0.06%
Burglary	5.35%	5.11%	4.10%	3.85%	3.66%
<b>Larceny</b>	<b>31.64%</b>	<b>31.28%</b>	<b>32.15%</b>	<b>29.71%</b>	<b>27.73%</b>
Auto Theft	2.19%	1.98%	1.83%	1.74%	1.87%
Forgery	1.45%	1.23%	1.38%	1.32%	1.60%
<i>Fraud</i>	6.56%	6.81%	7.68%	8.64%	8.70%
Embezzlement	0.58%	0.55%	0.65%	0.58%	0.53%
Stolen Property	0.58%	0.68%	0.61%	0.57%	0.42%
<b>Vandalism</b>	<b>13.22%</b>	<b>12.38%</b>	<b>10.77%</b>	<b>10.99%</b>	<b>10.29%</b>
<b>Drug/Narcotic Offenses</b>	<b>11.07%</b>	<b>12.20%</b>	<b>13.89%</b>	<b>13.39%</b>	<b>14.48%</b>
Non-forcible Sex Offenses	0.08%	0.09%	0.05%	0.07%	0.12%
Pornography	0.21%	0.13%	0.39%	0.57%	0.50%
Gambling	0.16%	0.01%	0.01%	0.00%	0.00%
Prostitution	0.11%	0.12%	0.11%	0.23%	0.20%
Bribery	0.00%	0.00%	0.01%	0.00%	0.01%
Weapon Law Violation	1.32%	1.22%	1.70%	1.24%	1.48%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

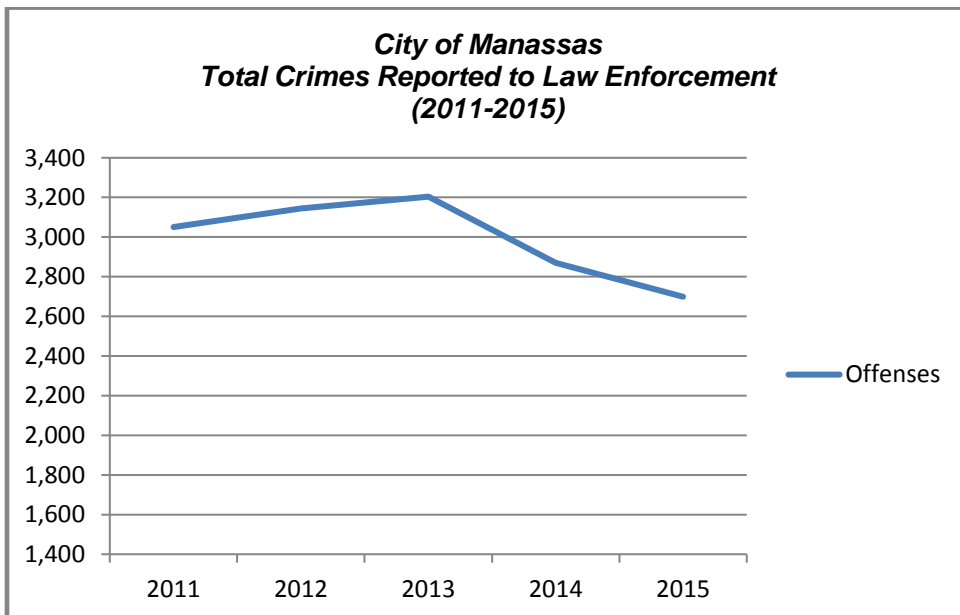
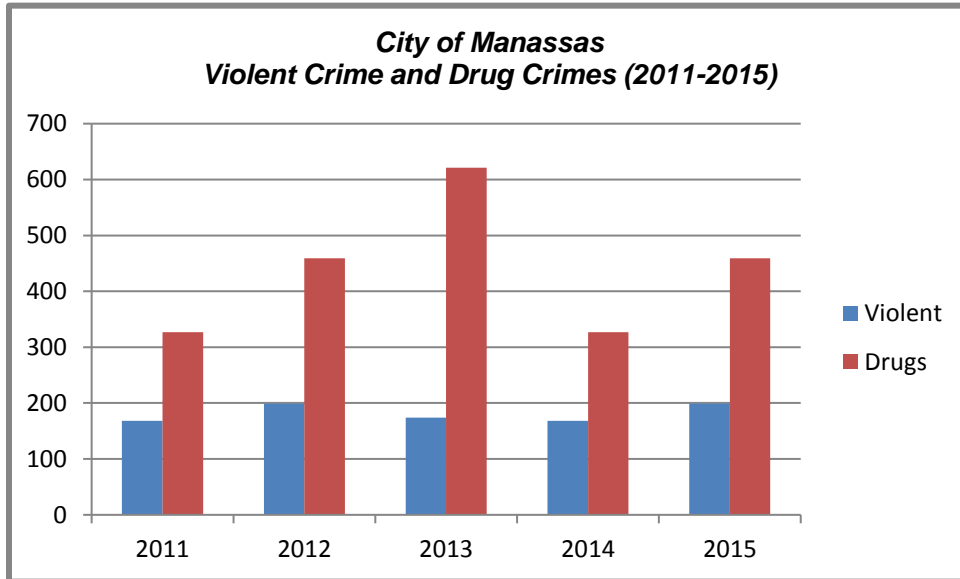
### **City of Manassas**

- The most commonly reported crimes in the City of Manassas in 2015 were Larceny, Simple Assault, Vandalism, Drug offenses - these crimes represented 77.0% of offenses reported in 2015.
- The total number of criminal offenses reported the City decreased from 3,051 in 2011, to 2,699 in 2015 – a decrease of 352 crimes and -11.5%.

- The incident rate per 100,000 population in the City of Manassas declined by 16.9% between 2011 – 2015.
- While the number of reported violent crimes, and reported drug crimes both increased between 2014-2015, the number of drug offenses reported in 2015 were below the number reported in 2013.

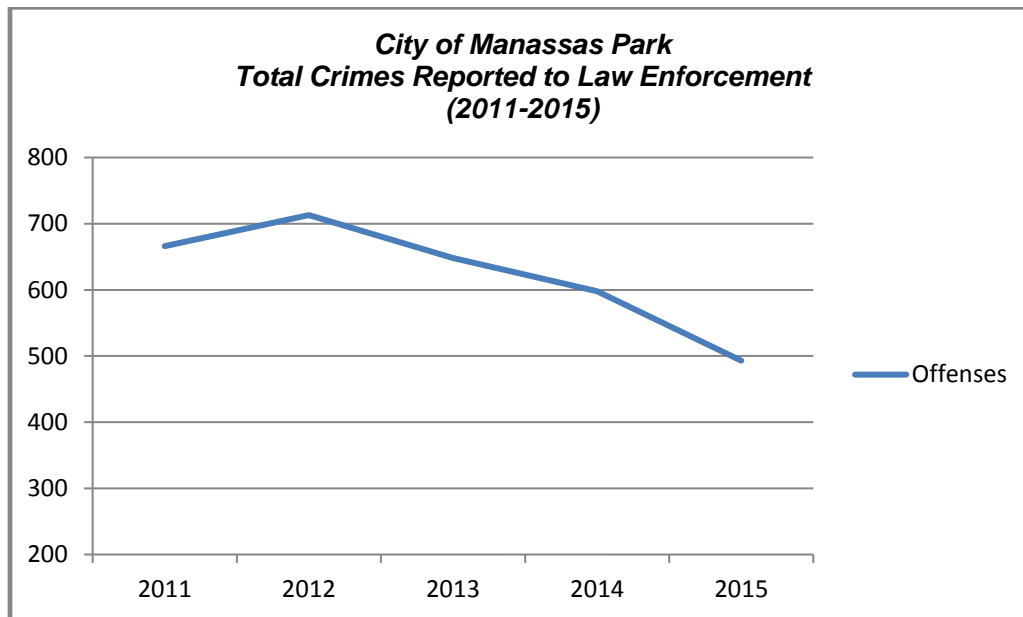
<b>City of Manassas</b>					
<b>2011 - 2015 Crimes Reported to Law Enforcement</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Population	39,060	39,902	40,690	41,830	41,577
Incident Rate/100,000	6,710.2	6,701.4	6,795.3	5,859.4	5,577.6
<b>Total Incidents</b>	<b>2,622</b>	<b>2,676</b>	<b>2,768</b>	<b>2,454</b>	<b>2,327</b>
Murder/Manslaughter	4	2	0	1	0
Kidnapping/Abduction	11	27	19	21	13
Forcible Rape	17	8	17	11	9
Other Forcible Sex Offenses	25	37	38	35	37
Robbery	52	51	38	44	32
Aggravated Assault	59	74	62	75	44
<b>Simple Assault</b>	<b>841</b>	<b>689</b>	<b>621</b>	<b>643</b>	<b>615</b>
Arson	4	7	7	6	3
Extortion	1	0	1	1	0
Burglary	122	116	96	99	83
<b>Larceny</b>	<b>674</b>	<b>761</b>	<b>710</b>	<b>607</b>	<b>648</b>
Auto Theft	58	50	51	29	29
Forgery	33	20	14	19	19
<i>Fraud</i>	235	237	331	296	285
Embezzlement	9	8	10	7	14
Stolen Property	4	5	3	5	8
<b>Vandalism</b>	<b>531</b>	<b>545</b>	<b>500</b>	<b>442</b>	<b>424</b>
<b>Drug/Narcotic Offenses</b>	<b>327</b>	<b>459</b>	<b>621</b>	<b>469</b>	<b>391</b>
Non-forcible Sex Offenses	7	1	2	4	2
Pornography	13	10	11	15	9
Gambling	0	0	0	1	0
Prostitution	1	3	10	8	4
Bribery	2	0	0	0	0
Weapon Law Violation	21	35	42	32	30
<b>Total</b>	<b>3,051</b>	<b>3,145</b>	<b>3,204</b>	<b>2,870</b>	<b>2,699</b>

<b>City of Manassas</b>					
<b>2011 - 2015 Crimes Reported to Law Enforcement</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Population	39,060	39,902	40,690	41,830	40,690
Incident Rate/100,000	6,710.2	6,701.4	6,795.3	5,859.4	6,795.3
Total Incidents	2,622	2,676	2,768	2,454	2,768
Murder/Manslaughter	0.13%	0.06%	0.00%	0.03%	0.00%
Kidnapping/Abduction	0.36%	0.86%	0.59%	0.73%	0.48%
Forcible Rape	0.56%	0.25%	0.53%	0.38%	0.33%
Other Forcible Sex Offenses	0.82%	1.18%	1.19%	1.22%	1.37%
Robbery	1.70%	1.62%	1.19%	1.53%	1.19%
Aggravated Assault	1.93%	2.35%	1.94%	2.61%	1.63%
<i>Simple Assault</i>	<i>27.56%</i>	<i>21.91%</i>	<i>19.38%</i>	<i>22.40%</i>	<i>22.79%</i>
Arson	0.13%	0.22%	0.22%	0.21%	0.11%
Extortion	0.03%	0.00%	0.03%	0.03%	0.00%
Burglary	4.00%	3.69%	3.00%	3.45%	3.08%
<i>Larceny</i>	<i>22.09%</i>	<i>24.20%</i>	<i>22.16%</i>	<i>21.15%</i>	<i>24.01%</i>
Auto Theft	1.90%	1.59%	1.59%	1.01%	1.07%
Forgery	1.08%	0.64%	0.44%	0.66%	0.70%
<i>Fraud</i>	<i>7.70%</i>	<i>7.54%</i>	<i>10.33%</i>	<i>10.31%</i>	<i>10.56%</i>
Embezzlement	0.29%	0.25%	0.31%	0.24%	0.52%
Stolen Property	0.13%	0.16%	0.09%	0.17%	0.30%
<i>Vandalism</i>	<i>17.40%</i>	<i>17.33%</i>	<i>15.61%</i>	<i>15.40%</i>	<i>15.71%</i>
<i>Drug/Narcotic Offenses</i>	<i>10.72%</i>	<i>14.59%</i>	<i>19.38%</i>	<i>16.34%</i>	<i>14.49%</i>
Non-forcible Sex Offenses	0.23%	0.03%	0.06%	0.14%	0.07%
Pornography	0.43%	0.32%	0.34%	0.52%	0.33%
Gambling	0.00%	0.00%	0.00%	0.03%	0.00%
Prostitution	0.03%	0.10%	0.31%	0.28%	0.15%
Bribery	0.07%	0.00%	0.00%	0.00%	0.00%
Weapon Law Violation	0.69%	1.11%	1.31%	1.11%	1.11%
Total	100.00%	100.00%	100.00%	100.00%	100.00%



**City of Manassas Park**

- The number of criminal offenses reported in the City of Manassas Park declined from 666 in 2011, to 493 in 2015 – a decrease of 26.0%.
- Larceny, Simple Assault and Drug Offenses were the most frequently reported crimes in 2012 – representing 70.2% of the total.
- Over the past five years the only increase in crime is reported to be in the category of Weapon Law violations
- The crime rate per 100,000 population in Manassas Park declined from 3,955 incidents per 100,000 population in 2011, to 2,745 incidents per 100,000 in 2015.





<b>City of Manassas Park</b>					
<b>2011 - 2015 Crimes Reported to Law Enforcement</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Population	14,540	14,838	15,174	15,427	15,700
Incident Rate/100,000	3,954.6	4,171.7	3,631.2	3,293.0	2,745.2
Total Incidents	575	619	553	509	431
Murder/Manslaughter	0	0	0	0	0
Kidnapping/Abduction	5	2	5	3	3
Forcible Rape	3	1	4	3	1
Other Forcible Sex Offenses	9	4	4	3	3
Robbery	4	1	3	7	0
Aggravated Assault	6	19	7	14	9
<b>Simple Assault</b>	<b>191</b>	<b>145</b>	<b>133</b>	<b>146</b>	<b>119</b>
Arson	0	0	2	0	1
Extortion	0	0	0	0	0
Burglary	14	20	24	24	11
<b>Larceny</b>	<b>152</b>	<b>203</b>	<b>174</b>	<b>124</b>	<b>120</b>
Auto Theft	13	13	14	8	10
Forgery	6	2	2	1	5
<i>Fraud</i>	40	35	23	26	27
Embezzlement	2	4	1	1	0
Stolen Property	4	12	7	5	4
<i>Vandalism</i>	94	97	97	79	58
<b>Drug/Narcotic Offenses</b>	<b>113</b>	<b>134</b>	<b>128</b>	<b>128</b>	<b>107</b>
Non-forcible Sex Offenses	0	1	0	2	0
Pornography	0	2	3	3	1
Gambling	0	0	0	0	0
Prostitution	1	0	0	0	0
Bribery	0	0	0	0	0
Weapon Law Violation	9	18	17	21	14
Total	666	713	648	598	493

<b>City of Manassas Park</b>					
<b>2011 - 2015 Crimes Reported to Law Enforcement</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Population	14,540	14,838	15,174	15,427	15,700
Incident Rate/100,000	3,954.6	4,171.7	3,631.2	3,293.0	2,745.2
Total Incidents	575	619	553	509	431
Murder/Manslaughter	0.00%	0.00%	0.00%	0.00%	0.00%
Kidnapping/Abduction	0.75%	0.28%	0.77%	0.50%	0.61%
Forcible Rape	0.45%	0.14%	0.62%	0.50%	0.20%
Other Forcible Sex Offenses	1.35%	0.56%	0.62%	0.50%	0.61%
Robbery	0.60%	0.14%	0.46%	1.17%	0.00%
Aggravated Assault	0.90%	2.66%	1.08%	2.34%	1.83%
<b>Simple Assault</b>	<b>28.68%</b>	<b>20.34%</b>	<b>20.52%</b>	<b>24.41%</b>	<b>24.14%</b>
Arson	0.00%	0.00%	0.31%	0.00%	0.20%
Extortion	0.00%	0.00%	0.00%	0.00%	0.00%
Burglary	2.10%	2.81%	3.70%	4.01%	2.23%
<b>Larceny</b>	<b>22.82%</b>	<b>28.47%</b>	<b>26.85%</b>	<b>20.74%</b>	<b>24.34%</b>
Auto Theft	1.95%	1.82%	2.16%	1.34%	2.03%
Forgery	0.90%	0.28%	0.31%	0.17%	1.01%
<i>Fraud</i>	<i>6.01%</i>	<i>4.91%</i>	<i>3.55%</i>	<i>4.35%</i>	<i>5.48%</i>
Embezzlement	0.30%	0.56%	0.15%	0.17%	0.00%
Stolen Property	0.60%	1.68%	1.08%	0.84%	0.81%
<i>Vandalism</i>	<i>14.11%</i>	<i>13.60%</i>	<i>14.97%</i>	<i>13.21%</i>	<i>11.76%</i>
<b>Drug/Narcotic Offenses</b>	<b>16.97%</b>	<b>18.79%</b>	<b>19.75%</b>	<b>21.40%</b>	<b>21.70%</b>
Non-forcible Sex Offenses	0.00%	0.14%	0.00%	0.33%	0.00%
Pornography	0.00%	0.28%	0.46%	0.50%	0.20%
Gambling	0.00%	0.00%	0.00%	0.00%	0.00%
Prostitution	0.15%	0.00%	0.00%	0.00%	0.00%
Bribery	0.00%	0.00%	0.00%	0.00%	0.00%
Weapon Law Violation	1.35%	2.52%	2.62%	3.51%	2.84%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

### Law Enforcement Personnel Trends

- The number of sworn officers in the Prince William County JDC Service Area increased from 696 officers in 2011, to 747 in 2015 – an increase of 51 officers and 7.4% growth.
- In Prince William County there were 33 more officers in the year 2015 than were reported in 2011.

<b>Prince William JDC Service Area</b>							
<b>Changes in Law Enforcement Resources (2011 - 2015)</b>							
						<b>Change</b>	
<b>Jurisdictions</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Number</b>	<b>Percent</b>
Prince William County							
Prince William PD	569	593	565	582	602	33	5.8%
Quantico PD	2	2	1	1	1	-1	-50.0%
Haymarket PD	5	5	6	8	9	4	80.0%
Dumfries PD	6	8	7	7	9	3	50.0%
Occoquan PD	0	0	1	1	1	1	--
Manassas PD	84	95	97	93	92	8	9.5%
Manassas Park PD	30	32	32	32	33	3	10.0%
<b>TOTAL</b>	<b>696</b>	<b>735</b>	<b>709</b>	<b>724</b>	<b>747</b>	<b>51</b>	<b>7.3%</b>

### Section B – Juvenile Arrest Data

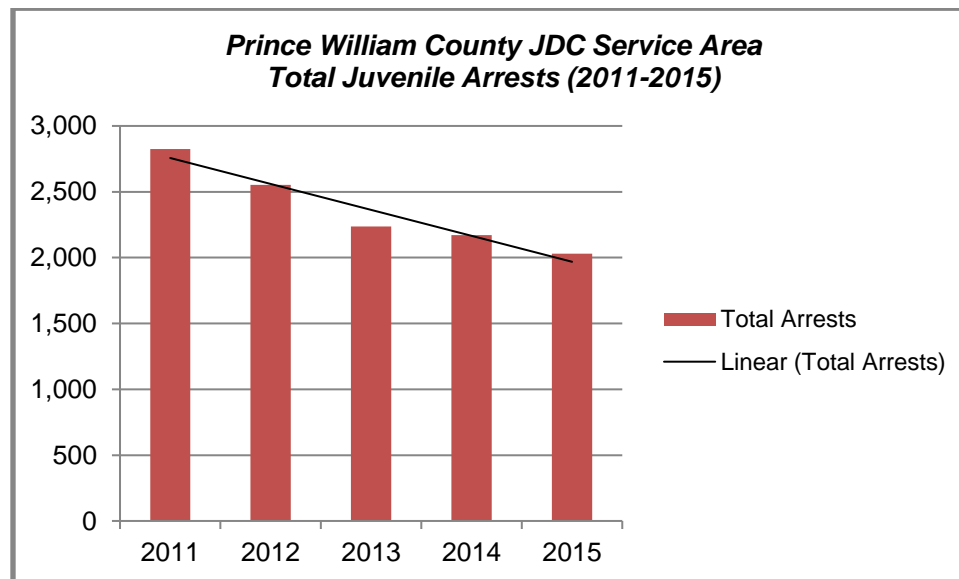
Arrest data for calendar years 2011 through 2015 for Prince William County and the cities of Manassas and Manassas Park were obtained from the *Crime in Virginia* reports issued by the VA State Police. The individual arrests, by locality and the combined Service Area are reported and summarized by Group A and Group B categories in the tables and exhibits that follow.

*Significant Finding:* Overall, recent trends in juvenile arrests are similar to the trend in crime rates; arrests for the more serious offenses involving crimes against persons (murder, manslaughter, forcible rape, robbery and aggravated assault) decreased by just over 15% over the last five years.

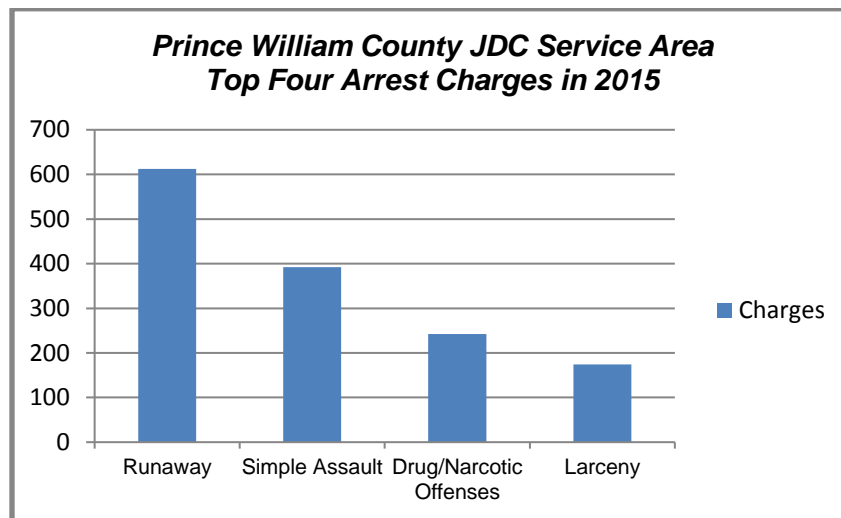
*Significant Finding:* Most of the decline in reported juvenile arrests can be attributed to declines in Group B Offenses, which decreased by 42.1% between 2011-2015; Group A Offenses declined by just under 10% over the five year period.

### Prince William County JDC Service Area

- Between 2011-2015, the number of juveniles arrested in Prince William County and the cities of Manassas and Manassas Park combined (JDC Service Area) decreased by 28.1%, from 2,824 in 2011, to 2,030 in 2015.



- Over the last five years the most frequently occurring juvenile arrest offense categories have been: (1) Runaway (32.3% of total offenses); (2) Simple Assault (15.3%); (3) Drug/Narcotic offenses (11.8% of the total); (4) Larceny (8.7%), and (5) Curfew/Loitering (5.3% of the total).
- As a percentage of total annual arrests, arrests for Group A offenses – more serious crime increased between 2011 – 2015 from 43.4% of total juvenile arrests in 2011, to 55.4% of total arrests in 2015.



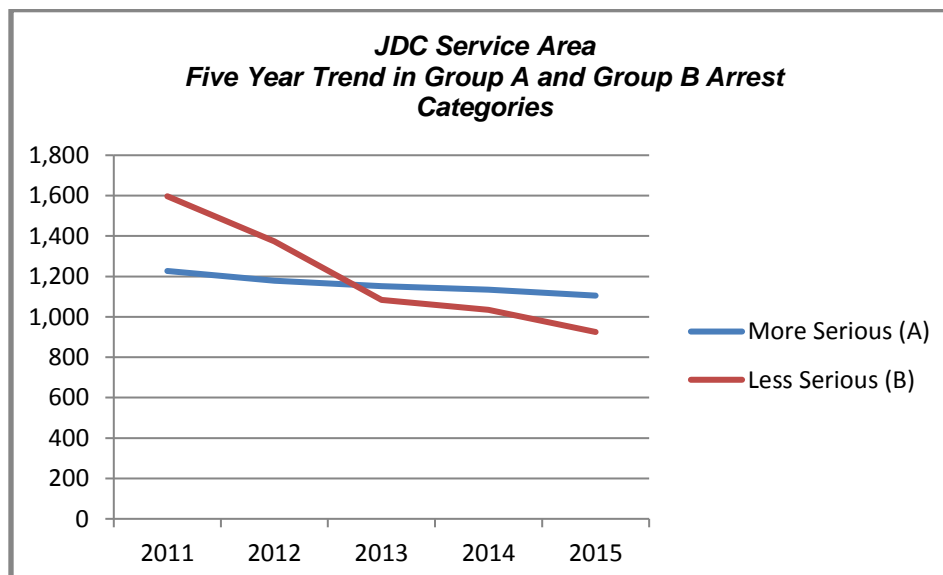
For ease of analysis and presentation, the juvenile arrests for years 2011-2015 are grouped into 10 broad categories.

- **Violent crimes** - *Murder/Manslaughter, Kidnapping/Abduction, Forcible Rape, Other Forcible Sex Offenses, Robbery and Aggravated Assault.*
- **Simple Assault**
- **Burglary**
- **Larceny**
- **Destruction/Damage/Vandalism of Property**
- **Drug/Narcotic Offenses**
- **Other Property** - *Arson, Extortion/Blackmail; Motor Vehicle Theft, Counterfeiting/Forgery, Fraud, Embezzlement, Stolen Property, Bribery, and Bad Checks.*
- **Other Sex Offenses** - *Nonforcible Sex Offenses, Pornography, Prostitution, and Family Offenses*
- **Alcohol Related** – *DUI, Drunkenness, and Liquor Law Violations*
- **All others** - *Gambling, Weapon Law Violations, Curfew, Disorderly Conduct, Peeping Tom, Runaway, Trespass, Conspiracy and all others (except traffic).*

The number of arrests and the percent of the total represented by each crime type are presented in the two tables and exhibits that follow.

<b>Prince William County JDC Service Area Juvenile Arrests by Category (2011-2015)</b>							<b>Number Change</b>	<b>Percent Change</b>
<b>Offense Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>		
Violent	93	93	78	120	79	463	-14	-15.1%
Simple Assault	398	368	321	327	392	1,806	-6	-1.5%
Weapon Law Violations	25	10	20	16	21	92	-4	-16.0%
Burglary	43	76	59	47	39	264	-4	-9.3%
Larceny	263	209	205	181	174	1,032	-89	-33.8%
Vandalism	76	69	73	69	64	351	-12	-15.8%
Drug/Narcotic Offenses	266	290	323	275	242	1,396	-24	-9.0%
Other Property	74	79	87	81	60	381	-14	-18.9%
Other Sex	8	10	14	32	52	116	44	550.0%
Alcohol	210	140	146	84	64	644	-146	-69.5%
Other	1,368	1,208	910	938	843	5,267	-525	-38.4%
<b>Total</b>	<b>2,824</b>	<b>2,552</b>	<b>2,236</b>	<b>2,170</b>	<b>2,030</b>	<b>11,812</b>	<b>-794</b>	<b>-28.1%</b>

- Arrests for the more serious offenses involving crimes against persons (murder, manslaughter, forcible rape, robbery and aggravated assault) decreased by just over 15% over the last five years.
- Most of the decline in reported juvenile arrests can be attributed to declines in Group B Offenses, which decreased by 42.1% between 2011-2015; Group A Offenses declined by just under 10% over the five year period.



- The percent of arrests by major category for the five year study period are depicted in the chart that follows. The “all other offense” arrest category, which accounts for 40%-48% of juvenile arrests in the Service Area, generally includes less serious offenses such as runaway and loitering as well as various “justice/warrant” arrests associated with supervision violations, failure to appear, contempt of court and miscellaneous violations.

<b>Prince William County JDC Service Area Juvenile Arrest Percentages (2011-2015)</b>						
<b>Offense Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>
Violent	3.3%	3.6%	3.5%	5.5%	3.9%	3.9%
Simple Assault	14.1%	14.4%	14.4%	15.1%	19.3%	15.3%
Weapon Law Violations	0.9%	0.4%	0.9%	0.7%	1.0%	0.8%
Burglary	1.5%	3.0%	2.6%	2.2%	1.9%	2.2%
Larceny	9.3%	8.2%	9.2%	8.3%	8.6%	8.7%
Vandalism	2.7%	2.7%	3.3%	3.2%	3.2%	3.0%
Drug/Narcotic Offenses	9.4%	11.4%	14.4%	12.7%	11.9%	11.8%
Other Property	2.6%	3.1%	3.9%	3.7%	3.0%	3.2%
Other Sex	0.3%	0.4%	0.6%	1.5%	2.6%	1.0%
Alcohol	7.4%	5.5%	6.5%	3.9%	3.2%	5.5%
Other	48.4%	47.3%	40.7%	43.2%	41.5%	44.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

- Detailed annual arrest data for the combined Service Area is presented in the two tables that follow.

<b>Prince William County JDC Service Area Juvenile Arrests by Offense (2011-2015)</b>						
<b>Offense</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>TOTAL</b>
Murder/Manslaughter	0	0	0	1	0	1
Kidnapping/Abduction	2	3	6	11	0	22
Sex Offenses, Forcible	19	25	21	30	16	111
Robbery	29	42	30	35	34	170
Aggravated Assault	43	23	21	43	29	159
<b>Simple Assault/Intimidation</b>	<b>398</b>	<b>368</b>	<b>321</b>	<b>327</b>	<b>392</b>	<b>1,806</b>
Arson	4	10	1	11	3	29
Extortion/Blackmail	0	2	1	1	2	6
Burglary	43	76	59	47	39	264
<b>Larceny</b>	<b>263</b>	<b>209</b>	<b>205</b>	<b>181</b>	<b>174</b>	<b>1,032</b>
Motor Vehicle Theft	14	6	14	17	8	59
Counterfeiting/Forgery	8	3	3	3	3	20
Fraud	18	15	24	24	10	91
Embezzlement	3	4	1	4	4	16
Stolen Property	8	14	17	9	14	62
Vandalism	76	69	73	69	64	351
<b>Drug/Narcotic Offenses</b>	<b>266</b>	<b>290</b>	<b>323</b>	<b>275</b>	<b>242</b>	<b>1,396</b>
Sex Offenses, Nonforcible	2	3	2	0	2	9
Pornography	6	7	10	31	47	101
Gambling	0	0	0	0	0	0
Prostitution	0	0	0	0	1	1
Bribery	0	0	0	0	0	0
Weapon Law Violations	25	10	20	16	21	92
<b>TOTAL GROUP A</b>	<b>1,227</b>	<b>1,179</b>	<b>1,152</b>	<b>1,135</b>	<b>1,105</b>	<b>5,798</b>
Bad Checks	0	0	0	0	0	0
<b>Curfew/Loitering/Vagrancy</b>	<b>272</b>	<b>151</b>	<b>83</b>	<b>65</b>	<b>56</b>	<b>627</b>
Disorderly Conduct	38	88	35	39	94	294
Driving Under the Influence	15	13	7	5	4	44
Drunkenness	50	35	20	12	22	139
Family Offenses, Nonforcible	0	0	2	1	2	5
<b>Liquor Law Violations</b>	<b>145</b>	<b>92</b>	<b>119</b>	<b>67</b>	<b>38</b>	<b>461</b>
Peeping Tom	0	0	0	0	0	0
<b>Runaway</b>	<b>920</b>	<b>831</b>	<b>702</b>	<b>748</b>	<b>612</b>	<b>3,813</b>
Trespass of Real Property	19	25	26	12	16	98
Conspiracy	0	0	2	0	0	2
All Other (except Traffic)	138	138	88	86	81	531
<b>TOTAL GROUP B</b>	<b>1,597</b>	<b>1,373</b>	<b>1,084</b>	<b>1,035</b>	<b>925</b>	<b>6,014</b>
<b>Grand Total</b>	<b>2,824</b>	<b>2,552</b>	<b>2,236</b>	<b>2,170</b>	<b>2,030</b>	<b>11,812</b>



<b>Prince William County JDC Service Area Juvenile Arrest Percentages by Offense (2011-2015)</b>						
<b>Offense</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>TOTAL</b>
Murder/Manslaughter	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kidnapping/Abduction	0.1%	0.1%	0.3%	0.5%	0.0%	0.2%
Sex Offenses, Forcible	0.7%	1.0%	0.9%	1.4%	0.8%	0.9%
Robbery	1.0%	1.6%	1.3%	1.6%	1.7%	1.4%
Aggravated Assault	1.5%	0.9%	0.9%	2.0%	1.4%	1.3%
<b>Simple Assault/Intimidation</b>	<b>14.1%</b>	<b>14.4%</b>	<b>14.4%</b>	<b>15.1%</b>	<b>19.3%</b>	<b>15.3%</b>
Arson	0.1%	0.4%	0.0%	0.5%	0.1%	0.2%
Extortion/Blackmail	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%
Burglary	1.5%	3.0%	2.6%	2.2%	1.9%	2.2%
<b>Larceny</b>	<b>9.3%</b>	<b>8.2%</b>	<b>9.2%</b>	<b>8.3%</b>	<b>8.6%</b>	<b>8.7%</b>
Motor Vehicle Theft	0.5%	0.2%	0.6%	0.8%	0.4%	0.5%
Counterfeiting/Forgery	0.3%	0.1%	0.1%	0.1%	0.1%	0.2%
Fraud	0.6%	0.6%	1.1%	1.1%	0.5%	0.8%
Embezzlement	0.1%	0.2%	0.0%	0.2%	0.2%	0.1%
Stolen Property	0.3%	0.5%	0.8%	0.4%	0.7%	0.5%
Vandalism	2.7%	2.7%	3.3%	3.2%	3.2%	3.0%
<b>Drug/Narcotic Offenses</b>	<b>9.4%</b>	<b>11.4%</b>	<b>14.4%</b>	<b>12.7%</b>	<b>11.9%</b>	<b>11.8%</b>
Sex Offenses, Nonforcible	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%
Pornography	0.2%	0.3%	0.4%	1.4%	2.3%	0.9%
Gambling	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Prostitution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bribery	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Weapon Law Violations	0.9%	0.4%	0.9%	0.7%	1.0%	0.8%
<b>TOTAL GROUP A</b>	<b>43.4%</b>	<b>46.2%</b>	<b>51.5%</b>	<b>52.3%</b>	<b>54.4%</b>	<b>49.1%</b>
Bad Checks	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Curfew/Loitering/Vagrancy</b>	<b>9.6%</b>	<b>5.9%</b>	<b>3.7%</b>	<b>3.0%</b>	<b>2.8%</b>	<b>5.3%</b>
Disorderly Conduct	1.3%	3.4%	1.6%	1.8%	4.6%	2.5%
Driving Under the Influence	0.5%	0.5%	0.3%	0.2%	0.2%	0.4%
Drunkenness	1.8%	1.4%	0.9%	0.6%	1.1%	1.2%
Family Offenses, Nonforcible	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%
Liquor Law Violations	5.1%	3.6%	5.3%	3.1%	1.9%	3.9%
Peeping Tom	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Runaway</b>	<b>32.6%</b>	<b>32.6%</b>	<b>31.4%</b>	<b>34.5%</b>	<b>30.1%</b>	<b>32.3%</b>
Trespass of Real Property	0.7%	1.0%	1.2%	0.6%	0.8%	0.8%
Conspiracy	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
All Other (except Traffic)	4.9%	5.4%	3.9%	4.0%	4.0%	4.5%
<b>TOTAL GROUP B</b>	<b>56.6%</b>	<b>53.8%</b>	<b>48.5%</b>	<b>47.7%</b>	<b>45.6%</b>	<b>50.9%</b>
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

The tables that follow display summary juvenile arrest data separately for Prince William County, the City of Manassas and the City of Manassas Park.

*Prince William County*

<b>Prince William County Juvenile Arrests by Category (2011-2015)</b>							<b>Number Change</b>	<b>Percent Change</b>
<b>Offense Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>		
Violent	86	77	65	110	67	405	-19	-22.1%
Simple Assault	374	347	300	302	370	1,693	-4	-1.1%
Weapon Law Violations	23	10	16	16	19	84	-4	-17.4%
Burglary	42	69	51	40	30	232	-12	-28.6%
Larceny	252	190	191	166	163	962	-89	-35.3%
Vandalism	73	65	68	58	59	323	-14	-19.2%
Drug/Narcotic Offenses	244	248	269	233	210	1,204	-34	-13.9%
Other Property	70	68	71	65	50	324	-20	-28.6%
Other Sex	7	10	12	29	51	109	44	628.6%
Alcohol	176	111	104	58	53	502	-123	-69.9%
All Other	1,339	1,161	872	917	816	5,105	-523	-39.1%
<b>Total</b>	<b>2,686</b>	<b>2,356</b>	<b>2,019</b>	<b>1,994</b>	<b>1,888</b>	<b>10,943</b>	<b>-798</b>	<b>-29.7%</b>

<b>Prince William County Juvenile Arrest Percentages (2011-2015)</b>						
<b>Offense Category</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
Violent	3.2%	3.3%	3.2%	5.5%	3.5%	3.7%
Simple Assault	13.9%	14.7%	14.9%	15.1%	19.6%	15.5%
Weapon Law Violations	0.9%	0.4%	0.8%	0.8%	1.0%	0.8%
Burglary	1.6%	2.9%	2.5%	2.0%	1.6%	2.1%
Larceny	9.4%	8.1%	9.5%	8.3%	8.6%	8.8%
Vandalism	2.7%	2.8%	3.4%	2.9%	3.1%	3.0%
Drug/Narcotic Offenses	9.1%	10.5%	13.3%	11.7%	11.1%	11.0%
Other Property	2.6%	2.9%	3.5%	3.3%	2.6%	3.0%
Other Sex	0.3%	0.4%	0.6%	1.5%	2.7%	1.0%
Alcohol	6.6%	4.7%	5.2%	2.9%	2.8%	4.6%
All Other	49.9%	49.3%	43.2%	46.0%	43.2%	46.7%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

## City of Manassas

<b>City of Manassas</b> <b>Juvenile Arrests by Category (2011-2015)</b>								
<b>Offense Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>	<b>Number Change</b>	<b>% Change</b>
Violent	6	16	11	8	8	49	2	33.3%
Simple Assault	13	20	16	18	14	81	1	7.7%
Weapon Law Violations	1	0	3	0	1	5	0	0.0%
Burglary	1	7	3	4	8	23	7	700.0%
Larceny	5	12	13	12	8	50	3	60.0%
Vandalism	3	4	3	5	5	20	2	66.7%
Drug/Narcotic Offenses	16	30	42	21	18	127	2	12.5%
Other Property	4	8	14	12	8	46	4	100.0%
Other Sex	1	0	1	2	1	5	0	0.0%
Alcohol	27	23	40	20	10	120	-17	-63.0%
All Other	15	28	22	9	17	91	2	13.3%
Total	92	148	168	111	98	617	6	6.5%

<b>City of Manassas</b> <b>Juvenile Arrest Percentages (2011-2015)</b>						
<b>Offense Category</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
Violent	6.5%	10.8%	6.5%	7.2%	8.2%	7.9%
Simple Assault	14.1%	13.5%	9.5%	16.2%	14.3%	13.1%
Weapon Law Violations	1.1%	0.0%	1.8%	0.0%	1.0%	0.8%
Burglary	1.1%	4.7%	1.8%	3.6%	8.2%	3.7%
Larceny	5.4%	8.1%	7.7%	10.8%	8.2%	8.1%
Vandalism	3.3%	2.7%	1.8%	4.5%	5.1%	3.2%
Drug/Narcotic Offenses	17.4%	20.3%	25.0%	18.9%	18.4%	20.6%
Other Property	4.3%	5.4%	8.3%	10.8%	8.2%	7.5%
Other Sex	1.1%	0.0%	0.6%	1.8%	1.0%	0.8%
Alcohol	29.3%	15.5%	23.8%	18.0%	10.2%	19.4%
All Other	16.3%	18.9%	13.1%	8.1%	17.3%	14.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

## City of Manassas Park

<b>City of Manassas Park Juvenile Arrests by Category (2011-2015)</b>								
<b>Offense Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>	<b>Number Change</b>	<b>Percent Change</b>
Violent	1	0	2	2	4	9	3	300.0%
Simple Assault	11	1	5	7	8	32	-3	-27.3%
Weapon Law Violations	1	0	1	0	1	3	0	0.0%
Burglary	0	0	5	3	1	9	1	--
Larceny	6	7	1	3	3	20	-3	-50.0%
Vandalism	0	0	2	6	0	8	0	--
Drug/Narcotic Offenses	6	12	12	21	14	65	8	133.3%
Other Property	0	3	2	4	2	11	2	--
Other Sex	0	0	1	1	0	2	0	--
Alcohol	7	6	2	6	1	22	-6	-85.7%
All Other	14	19	16	12	10	71	-4	-28.6%
<b>Total</b>	<b>46</b>	<b>48</b>	<b>49</b>	<b>65</b>	<b>44</b>	<b>252</b>	<b>-2</b>	<b>-4.3%</b>

<b>City of Manassas Park Juvenile Arrest Percentages (2011-2015)</b>							
<b>Offense Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>	
Violent	2.2%	0.0%	4.1%	3.1%	9.1%	3.6%	
Simple Assault	23.9%	2.1%	10.2%	10.8%	18.2%	12.7%	
Weapon Law Violations	2.2%	0.0%	2.0%	0.0%	2.3%	1.2%	
Burglary	0.0%	0.0%	10.2%	4.6%	2.3%	3.6%	
Larceny	13.0%	14.6%	2.0%	4.6%	6.8%	7.9%	
Vandalism	0.0%	0.0%	4.1%	9.2%	0.0%	3.2%	
Drug/Narcotic Offenses	13.0%	25.0%	24.5%	32.3%	31.8%	25.8%	
Other Property	0.0%	6.3%	4.1%	6.2%	4.5%	4.4%	
Other Sex	0.0%	0.0%	2.0%	1.5%	0.0%	0.8%	
Alcohol	15.2%	12.5%	4.1%	9.2%	2.3%	8.7%	
All Other	30.4%	39.6%	32.7%	18.5%	22.7%	28.2%	
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	

## ***Section III***

### ***Court Service Intakes Detention Admissions***

## Prince William County JDC Court Service Intakes and Detention Admissions,

### Scope

This report has presented data that show that the County's population is growing at unprecedented levels. Analysis of crime trends and recent trends in juvenile arrests reveals that in general these trends are consistent with those reported Statewide and both crime and arrests of juvenile have declined over the last five years. The number of law enforcement personnel in the service area has increased. This section of the Needs Assessment presents trends, court services activity, detention admissions and lengths of stay in detention.

### Findings

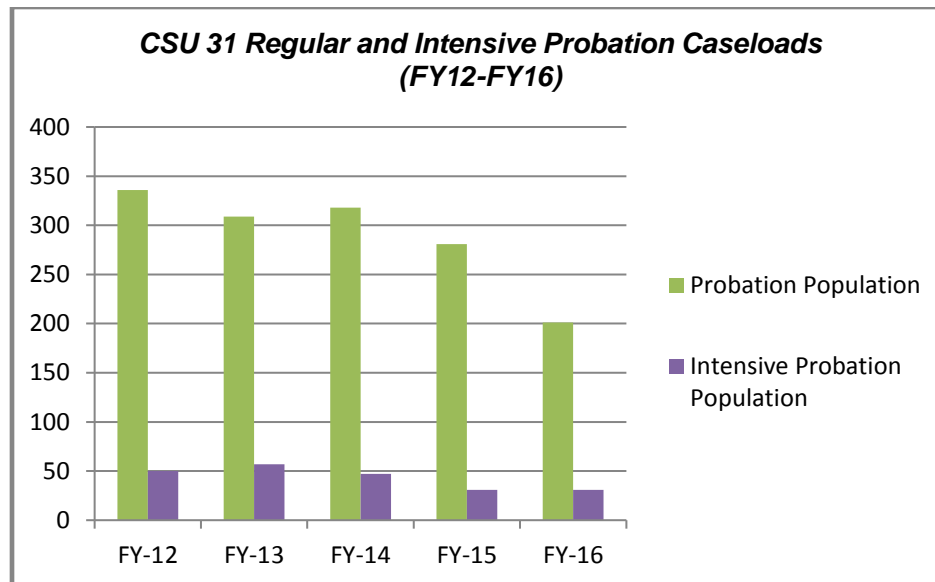
#### *Court Service Unit 31 Activity*

Juvenile Court Service data were available from the Virginia Department of Juvenile Justice for fiscal years 2012 through 2016.

- By several measures of Court Service Unit (CSU) activity compiled by the Virginia Department of Juvenile Justice, regular and intensive probation caseloads as well as the number of pre-disposition and post-disposition reports generated by CSU 31 have all declined over the past five fiscal years.

<b>Prince William County Court Service Unit 31 Workload Information and Supervision Population (FY12 - FY16)</b>						
	<i>FY-12</i>	<i>FY-13</i>	<i>FY-14</i>	<i>FY-15</i>	<i>FY-16</i>	<b>Change</b>
Pre-Disposition Reports	66	53	68	40	31	-53.0%
Post-Disposition Reports	169	162	134	83	59	-65.1%
Probation Population	336	309	318	281	201	-40.2%
Intensive Probation Population	50	57	47	31	31	-38.0%

- Reported juvenile probation caseloads declined between FY-12 and FY-16 by approximately 40%; the number of pre- and post- disposition reports generated by CSU 31 declined by 53% and 65% respectively.



- In FY-16, there were 3,380 reported juvenile intake complaints – excluding Domestic Relations and Child Welfare cases. Between FY-12 and FY-16, the overall number of complaints decreased by 6.1%, from 3,600 in FY-12, to 3,380 in FY-16.
- Juvenile complaints Statewide declined between FY-15 and FY-16 by 1.7%; complaints in Prince William County CSU 31 decreased by 2.8%.
- Between FY-15 and FY-16, there was a one year 2.8% decline in total intake complaints; the number of Felony complaints declined by 3.6%; Class 1 Misdemeanor complaints declined by 5.6%, and the number of Technical Violator complaints increased by 9.1%.

<b>Prince William County Court Service Unit 31 Juvenile Intake Complaints by Type (FY12 - FY16)</b>						
<b>Juvenile Complaints</b>	<b>FY-12</b>	<b>FY-13</b>	<b>FY-14</b>	<b>FY-15</b>	<b>FY-16</b>	<b>Change</b>
Felony	895	826	953	858	827	-7.6%
Class 1 Misdemeanor	1,600	1,333	1,306	1,392	1,314	-17.9%
Class 2-4 Misdemeanor	309	267	294	288	243	-21.4%
CHINS/CHINSup	265	295	322	336	342	29.1%
<b>Other:</b>						
Technical Violations	494	494	575	560	611	23.7%
Traffic	10	7	7	5	13	30.0%
Other	27	26	42	37	30	11.1%
<b>Total Juvenile Complaints</b>	<b>3,600</b>	<b>3,248</b>	<b>3,499</b>	<b>3,476</b>	<b>3,380</b>	<b>-6.10%</b>

- In FY-16, Felony complaints represented 24.5% of the total complaints (n=827); Class 1 Misdemeanors represented 38.9% of the total (n=1,314), and Technical Violations represented 18.1% (n=611).

A summary of an analysis of the percentage of complaints resulting in a pre-dispositional detention is displayed in the table that follows.

- While the number of intake petitions increased by approximately 500 cases between FY-12 and FY-16, the percentage of cases resulting in pre-dispositional detention increased from 705 in FY-12, to 786 in FY-16 - a five year increase of 11.5%.
- A petition was filed for 42.1% of juvenile complaints in FY-16 – petitions reported Statewide petitions were filed for 68.9% of complaints.

<b>Prince William County Court Service Unit 31</b>						
<b>Intake Disposition of Juvenile Complaints (FY12 - FY16)</b>						
Intake Dispositions	<b>FY-12</b>	<b>FY-13</b>	<b>FY-14</b>	<b>FY-15</b>	<b>FY-16</b>	<b>Change</b>
Petition Filed	1,918	1,544	1,530	1,432	1,424	-494
Successful Diversion	746	685	710	359	364	-382
Detention Order	705	782	971	956	786	81
Other	245	260	300	728	806	561
Total	3,614	3,271	3,511	3,475	3,380	-234
<b>Prince William County Court Service Unit 31</b>						
<b>Intake Disposition of Juvenile Complaints (FY12 - FY16)</b>						
Intake Dispositions	<b>FY-12</b>	<b>FY-13</b>	<b>FY-14</b>	<b>FY-15</b>	<b>FY-16</b>	<b>Change</b>
Petition Filed	53.1%	47.2%	43.6%	41.2%	42.1%	-10.9%
Successful Diversion	20.6%	20.9%	20.2%	10.3%	10.8%	-9.9%
Detention Order	19.5%	23.9%	27.7%	27.5%	23.3%	3.7%
Other	6.8%	7.9%	8.5%	20.9%	23.8%	17.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	--

- As seen in the following tables, when compared to Statewide data, Prince William CSU has a higher percentage of Felony and Class 1 Misdemeanor complaints, and a lower percentage of Class 2-4 Misdemeanor, CHINS/CHINup and Technical Violation complaints.



<b>Juvenile Intake Complaints CSU 31 Compared to Statewide</b>						
<b>Juvenile Complaints</b>	Prince William			Statewide		
	FY-14	FY-15	FY-16	FY-14	FY-15	FY-16
Felony	953	858	827	11,210	10,976	11,414
Class 1 Misdemeanor	1,306	1,392	1,314	23,044	22,574	21,464
Class 2-4 Misdemeanor	294	288	243	4,519	4,515	4,550
CHINS/CHINSup	322	336	342	8,388	8,377	8,839
Other:						
Technical Violations	575	560	611	8,461	7,811	6,964
Traffic	7	5	13	1,401	1,634	1,487
Other	42	37	30	1,641	1,739	1,950
<b>Total Juvenile Complaints</b>	<b>3,499</b>	<b>3,476</b>	<b>3,380</b>	<b>58,664</b>	<b>57,626</b>	<b>56,668</b>

<b>Juvenile Intake Complaints CSU 31 Compared to Statewide</b>						
<b>Juvenile Complaints</b>	Prince William			Statewide		
	FY-14	FY-15	FY-16	FY-14	FY-15	FY-16
Felony	27.2%	24.7%	24.5%	19.1%	19.0%	20.1%
Class 1 Misdemeanor	37.3%	40.0%	38.9%	39.3%	39.2%	37.9%
Class 2-4 Misdemeanor	8.4%	8.3%	7.2%	7.7%	7.8%	8.0%
CHINS/CHINSup	9.2%	9.7%	10.1%	14.3%	14.5%	15.6%
Other:						
Technical Violations	16.4%	16.1%	18.1%	14.4%	13.6%	12.3%
Traffic	0.2%	0.1%	0.4%	2.4%	2.8%	2.6%
Other	1.2%	1.1%	0.9%	2.8%	3.0%	3.4%
<b>Total Juvenile Complaints</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

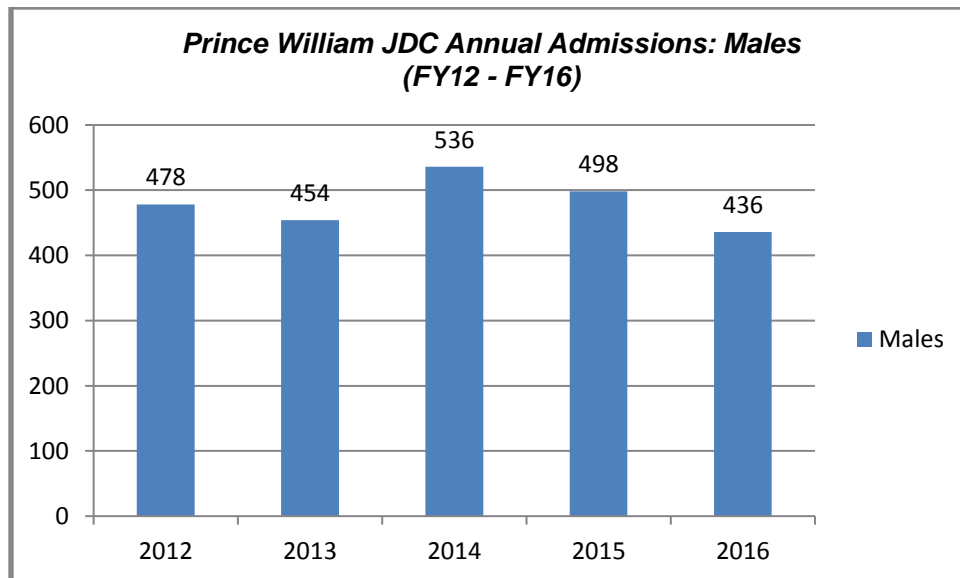
*Admissions to Secure Detention*

The demographic profile of JDC admissions is presented in tables and exhibits that follow.

- Between FY-14 – FY-16 the total number of detention admissions per year decreased by approximately the same rate as the State as a whole – between 6%-8% per year.

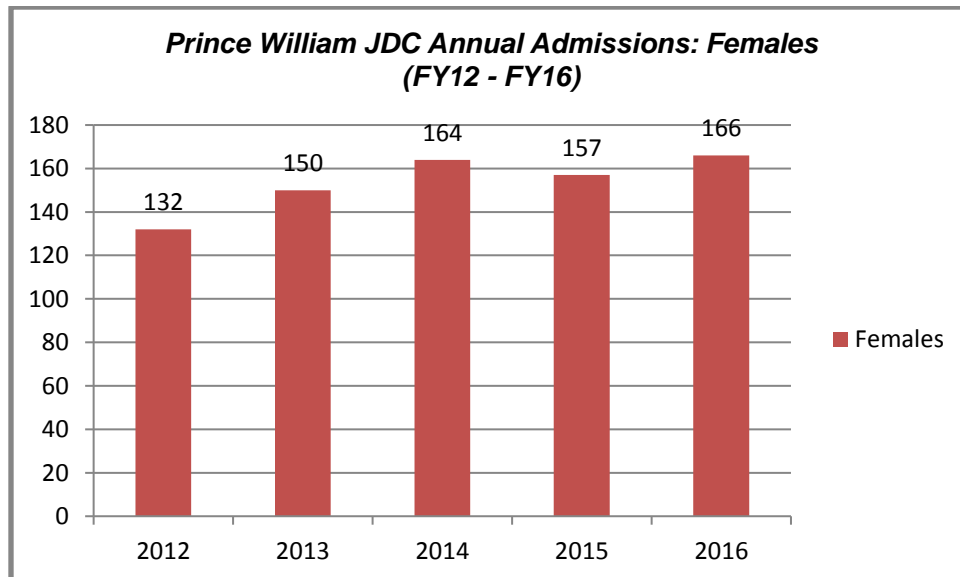
<b>Prince William JDC Admissions Detainments FY 2014 - 2016</b>				
	Prince William		Statewide	
FY	Number	Change	Number	Change
2014	700	--	10,034	--
2015	655	-6.4%	9,139	-8.9%
2016	602	-8.1%	8,400	-8.1%

- Of 602 total youth admitted to the JDC in FY-16, 436 (72.4%) were male, and 166 (27.6%) were female. Females represent an increasing proportion of detention admissions (as well as facility Average Daily Population).



- Since FY-12 the number of females admitted to the JDC has increased by 26%.

<b>Prince William County Detention Admissions FY-12 / FY-16</b>			
FY	Male	Female	Total
2012	478	132	610
2013	454	150	604
2014	536	164	700
2015	498	157	655
2016	436	166	602
Change			
Number	-42	34	-8
Percent	-8.8%	25.8%	-1.3%

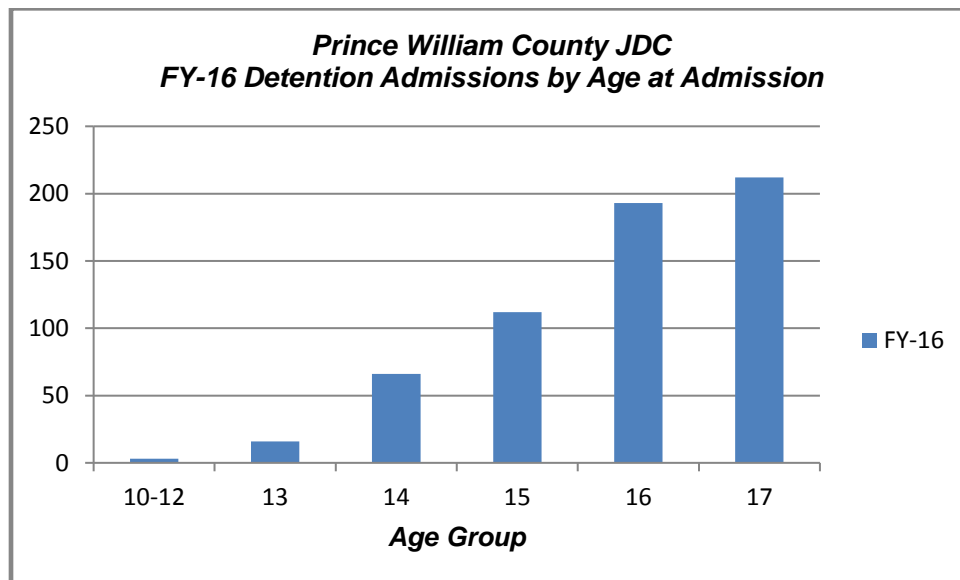


- Females represented 21.6% of total admissions in FY-12, and 27.6% of admissions in FY-16.

<b>Prince William County Detention Admissions FY-12 / FY-16</b>			
FY	Male	Female	Total
2012	78.4%	21.6%	100.0%
2013	75.2%	24.8%	100.0%
2014	76.6%	23.4%	100.0%
2015	76.0%	24.0%	100.0%
2016	72.4%	27.6%	100.0%

- While the number of males declined between FY12 – FY16 (-8.8%), the number of females admitted each year increased by 25.8%.
- Juveniles admitted to detention are somewhat older today than they were five years ago. The percentage of admissions who were 16 years old or greater at admission increased from 61% of the total in FY12, to just under 70% in FY16.

<b>Prince William County JDC</b>					
<b>Detention Admissions by Age: Number</b>					
Age	FY-12	FY-13	FY-14	FY-15	FY-16
10-12	7	9	12	9	3
13	37	31	32	25	16
14	67	79	91	85	66
15	125	145	162	162	112
16	170	157	184	181	193
17	204	183	218	193	212
18-20	0	0	0	0	0
Missing	0	0	1	0	0
<b>Total</b>	<b>610</b>	<b>604</b>	<b>700</b>	<b>655</b>	<b>602</b>

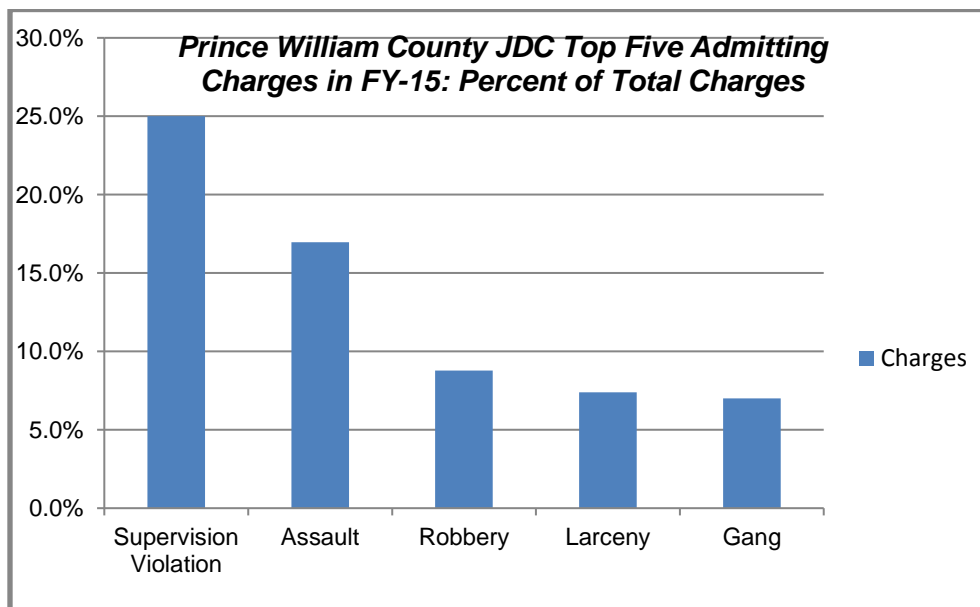


- In FY16, 473 (68.6% of total detention admissions) were admitted in Pre-Dispositional status, and 196 (28.4% of the total) were admitted in Post-Dispositional status.

<b>Prince William County JDC Detention Admissions Disposition Statuses (FY-12/FY-16)</b>					
Status	FY-12	FY-13	FY-14	FY-15	FY-16
Pre-Disposition	439	447	545	498	473
Post-Disposition	194	171	199	186	196
Other	36	31	41	47	21
Total	669	649	785	731	690

<b>Prince William County JDC Detention Admissions Disposition Statuses (FY-12/FY-16)</b>					
Status	FY-12	FY-13	FY-14	FY-15	FY-16
Pre-D	65.6%	68.9%	69.4%	68.1%	68.6%
Post-D	29.0%	26.3%	25.4%	25.4%	28.4%
Other	5.4%	4.8%	5.2%	6.4%	3.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

- Just under 70% of charges recorded in FY-15 were associated with Violations of Supervision (25.0% of total charges), Assault (17.0%), Robbery (8.8%), Larceny (7.4%) and Gang related charges (7.0% of total charges).



The detention admitting charges of youth admitted to the JDC in FY-15 are displayed in the following table.

<b>Prince William County Secure Detention FY15 Admissions by Admitting Charges</b>			
<b>Code</b>	<b>Charge</b>	<b>Number</b>	<b>Percent</b>
PRB	Probation Violation	162	16.0%
ASL	Simple Assault	103	10.2%
ROB	Robbery	89	8.8%
CON	Violation	86	8.5%
LAR	Larceny	75	7.4%
MOB	Gang	71	7.0%
ASL	Other Assault	69	6.8%
RAP	Rape/Sexual Assault	46	4.5%
VAN	Vandalism	44	4.3%
BUR	Burglary	42	4.1%
JUS	Resisting Arrest/Other	35	3.5%
--	Traffic/DWI/Other	29	2.9%
WPN	Weapons	25	2.5%
NAR	Narcotics	24	2.4%
--	Other/Misc	17	1.7%
ARS	Arson	16	1.6%
DIS	Disorderly Conduct	14	1.4%
TRS	Trespass	12	1.2%
FTA	FTA	11	1.1%
KID	Kidnapping	9	0.9%
FRD	Fraud	6	0.6%
JUV	Violate Conditions Release	6	0.6%
REC	Miscellaneous	6	0.6%
EXT	Threat	5	0.5%
MUR	Murder	5	0.5%
OBS	Obscenity	5	0.5%
PAR	Parole Violation	2	0.2%
	Total	1014	100.0%

- In FY-15, a Probation Violation charge was the most frequent admitting charge (16.0% of the total), followed by the charges of Simple Assault (10.2% of the total), Robbery (8.8%), “Violation” (8.5% of total charges) and Larceny 7.4% of the total) – together these charges comprised just over half of all charges associated with secure detention admissions.

## ***Section IV***

### ***Secure Detention Capacity and Population Profile***

## **Trends in Prince William County Secure Detention Population Profile and Capacity**

### **Scope**

This section of the report provides a review of trends in the number of juveniles housed in the County's Juvenile Detention Center (JDC).

### **Findings**

#### *Youth Shelter Facility*

The Molinari Juvenile Shelter provides temporary residential placement for delinquent youth and youth in need of services. The facility serves male and females ages 10-17 years from the 31<sup>st</sup> Judicial District who cannot remain in their homes while awaiting Court hearings or who are awaiting the development of plans to return home or to longer term placement.

The Shelter serves as both an "intermediate sanction placement" as well as a pre-dispositional placement alternative to secure detention to assure that residents appear for all court proceedings and refrain from delinquent activity while in custody. Generally operating at full capacity, the facility is designed to house up to 15 co-ed residents in a 6,500 square foot building situated on 2.2 acres less than three miles from the Court House in Manassas.

#### *Secure Detention*

With an original official capacity of 24 rooms, the original 11,860 square foot (SF) section of the Prince William County JDC was constructed in 1978. The 24 rooms are configured in two housing units with 12 rooms each. These units were designed in the "linear" fashion popular in the 1960s and 1970s with six rooms facing each other, and separated by a narrow hallway. There are no dayrooms or program areas and residents are must travel to other areas of the facility for recreation, dining, educational and program activities. Residents sleeping in the housing units spend their "awake" hours within dayrooms included in more recent housing areas.

Two renovations have resulted in an additional 48 rooms within the existing 35,000 square feet building. A 1997 addition includes a single 16 room housing area, new classrooms, an indoor gymnasium, and renovated administrative support space. Housing space is configured in a "circular" podular design overlooking an open common area that incorporates appropriate dayroom/program space for the residents. A third addition, completed in 2000, resulted in 32 new sleeping rooms situated in three separate circular podular housing units, a single housing control room and accompanying dayroom/program areas within each unit.

#### *Profile of Youth in the JDC*

The following tables display the annual average daily population (ADP) of the JDC by the dispositional status of the population.

- Since the beginning of FY-12 between 75% - 79% of the population, on average, have been in pre-dispositional status, and an average of 16.2% of the population have been in post-dispositional status without a formal program.



<b>Prince William County JDC Detention Dispositional Status ADP FY 2012 - FY2016</b>					
Status	FY-12	FY-13	FY-14	FY-15	FY-16
Pre-Dispositional	28	27	41	37	33
Post-Dispositional (No Programs)	7	6	8	6	7
Other	3	2	3	4	2
<i>Total</i>	37	35	52	47	42

<b>Prince William County JDC Detention Dispositional Status ADP FY 2012 - FY2016</b>					
Status	FY-12	FY-13	FY-14	FY-15	FY-16
Pre-Dispositional	75.7%	77.1%	78.8%	78.7%	78.6%
Post-Dispositional (No Programs)	18.9%	17.1%	15.4%	12.8%	16.7%
Other	8.1%	5.7%	5.8%	8.5%	4.8%
<i>Total</i>	100.0%	100.0%	100.0%	100.0%	100.0%

- Of the 62 youth in the facility in June 2016 (the last month for which data are available), 85.5% (N=53) were males and 14.5% (N=9) were females; when compared to the population in the facility in June 2012, the percentage breakout was very similar.

<b>Prince William JDC June 2016 ADP Characteristics</b>		
	Number	Percent
Male	53	85.5%
Female	9	14.5%
Total	62	100.0%

<b>Prince William JDC June 2012 ADP Characteristics</b>		
	Number	Percent
Male	34	77.1%
Female	10	22.9%
Total	44	100.0%

- By disposition or status, in June 2016 64.1% of the population were in pre-dispositional status (N=40); 24.5% were in post-dispositional status (N=15), and 10.2% of the population were State committed youth (N=6).

<b>Prince William JDC</b>		
<b>June 2016 ADP Characteristics: Status</b>		
Status	Number	Percent
Committed State	6	10.2%
Post-Dispositional	15	24.9%
Pre-Dispositional	40	64.1%
Total	62	100.0%

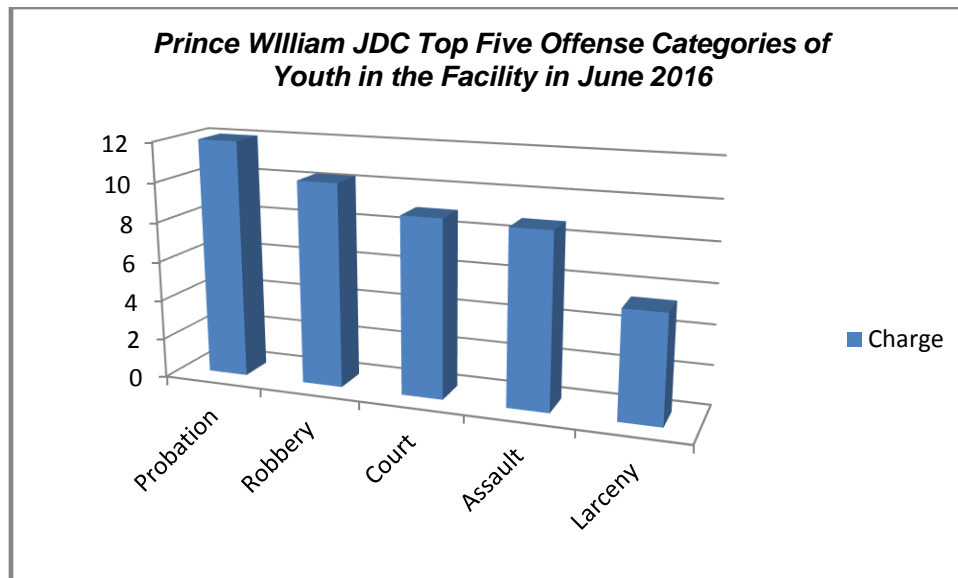
<b>Prince William JDC</b>		
<b>June 2012 ADP Characteristics: Status</b>		
Status	Number	Percent
Committed State	5	11.5%
Post-Dispositional	10	23.4%
Pre-Dispositional	27	62.2%
Transfer/Circuit	1	2.3%
Total	44	100.0%

- By age group, in June 2016, 40% of the population was at least 17 years old (N=25); an additional 29.4% were 16 years old (N=18); compared with the June 2012 JDC population, the current population is older.

<b>Prince William JDC</b>		
<b>June 2016 ADP Characteristics: Age</b>		
Age Group	Number	Percent
14 and Under	6	9.7%
15	12	20.0%
16	18	29.4%
17+	25	40.0%
Total	62	100.0%

<b>Prince William JDC</b>		
<b>June 2012 ADP Characteristics: Age</b>		
Age Group	Number	Percent
14 and Under	10	21.9%
15	8	19.0%
16	15	34.1%
17+	11	25.5%
Total	44	100.0%

- Of the 62 youth housed in the JDC in June 2016, 12 (19.4% of the total) were being held for probation or parole violations; 10 (16.6% of the total) were being held for robbery charges; 9 for miscellaneous court violations and 9 were in the facility for assault charges.



*Length of Stay (LOS) in Secure Detention*

- Lengths of stay (LOS) in the JDC approximate reported averages in the Northern Virginia region and the State as a whole.

<b>Prince William Juvenile Detention Average Length of Stay in Days by Fiscal Year</b>			
Year	Prince William	Northern Virginia	Statewide
FY-12	23.8	26.5	23.7
FY-13	21.4	26.1	22.8
FY-14	25.5	26.5	23.8
FY-15	27.9	29.3	25.9
FY-16	26.7	26.2	25.7

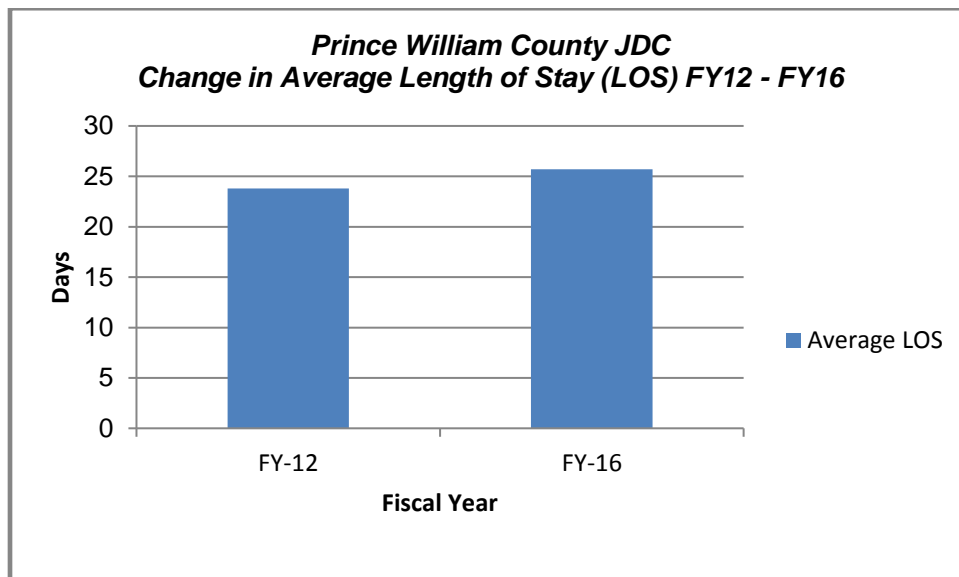
- Over the past five fiscal years, length of stay in secure detention increased modestly in Prince William County and Statewide.

The following table displays comparison of the Prince William JDC LOS by detention status with Statewide figures.

<b>Prince William County JDC Length of Stay in Days Comparison with Statewide Average</b>				
Detention Status	Statewide		Prince William	
	FY-15	FY-16	FY-15	FY-16
Pre-D	23.6	24.1	27.7	27
Post-D (No Programs)	13.3	13.6	12.8	14.8
Other	50.5	46.6	33.4	33.3

- In FY-16, just over 15% of youth admitted in pre-disposition status remained in the JDC for three days or less; 49.4% of released youth remained in detention for 4-21 days, and just under 35% of released youth were detained for 22 days or more.

<b>Prince William County Pre-Detention Length of Stay (LOS)</b>					
LOS/Days	FY-12	FY-13	FY-14	FY-15	FY-16
0-3	16.6%	16.5%	17.0%	18.5%	16.0%
4-21	48.2%	50.7%	49.4%	46.2%	49.4%
22-51	25.8%	25.4%	22.7%	24.0%	25.1%
52+	9.4%	7.4%	10.9%	11.3%	9.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%



### Prince William County JDC Facility Capacity

- The official capacity of the JDC is 72 residents, with six housing units as described in the following table.

<b>Prince William JDC Layout Housing Area Units</b>					
Housing Unit	Rooms	Constructed	Design	Dayroom?	Use
1	12	1978	Linear	No	Males/Overflow
2	16	1997	Podular	Yes	Males
3	8	2000	Podular	Yes	Females
4	16	2000	Podular	Yes	Males
5	8	2000	Podular	Yes	Community Placement Program
6	12	1978	Linear	No	Storage/Overflow
Total	72				

- Two of six housing units in the table above – 24 of the total 72 rooms – do not have any accompanying living space and do not meet current Standards.
- While the official room capacity of the facility is 72 rooms, the two original housing units are designed to be exclusively sleeping spaces most typically associated with modern segregation or isolation housing units designed to restrict movement and interaction.
- Residents in the two original housing units are distributed in the facility common areas and living space (day rooms) in the other housing areas - in many ways functionally the capacity of the JDC is 48.
- The following tables display official Secure Detention capacity comparisons between the Prince William JDC and other detention facilities across the State
- There are 1,445 certified secure detention beds across the State; the average certified capacity of secure detention facilities across the State is 60 beds; the Prince William JDC is ninth largest facilities based on certified capacity.
- When the total population in the County and the projected growth in County population is considered, available secure detention capacity in the Prince William County is among the smallest in the Commonwealth.
- In FY-16 the Prince William facility housed an average of 42 youth. Prince William County reported the fourth largest average secure detention population in the Commonwealth in FY-16.

<b>Virginia Secure Detention Facilities Ranked by Certified Capacity</b>		
Rank	Facility	Certified Capacity
--	Statewide	1,445
1	Fairfax	121
2	Newport News	110
3	Chesapeake	100
4	Chesterfield	90
5	Virginia Beach	90
6	Roanoke Valley	81
7	Norfolk	80
8	Rappahannock	80
<b>9</b>	<b>Prince William</b>	<b>72</b>
10	Northern Virginia	70
11	James River	60
12	Richmond	60
13	Shenandoah	58
14	Lynchburg	48
15	Merrimac	48
16	Blue Ridge	40
17	Highlands	35
18	Northwestern	32
19	Loudoun	24
20	New River	24
21	Crater	22
22	Henrico	20
23	Piedmont	20

Note: Population based on reported FY-16 average daily population.

<b>Virginia Secure Detention Facilities Ranked by Average Daily Population</b>		
Rank	Facility	Average Population
--	Statewide	643
1	Newport News	67
2	Chesapeake	52
3	Norfolk	49
<b>4</b>	<b>Prince William</b>	<b>42</b>
5	Richmond	40
6	James River	38
7	Fairfax	36
8	Rappahannock	29
9	Chesterfield	28
10	Merrimac	27
11	Northern Virginia	25
12	Roanoke Valley	25
13	Virginia Beach	24
14	Crater	16
15	Piedmont	16
16	Henrico	15
17	Lynchburg	15
18	Highlands	14
19	Shenandoah	14
20	New River	13
21	Loudoun	12
22	Northwestern	11
23	Blue Ridge	10

Note: Population based on reported FY-16 average daily population.

- In fiscal year 2016, detention facilities across the State operated at an average of 47.6% of capacity based on percentage of certified capacity and reported average annual daily population.

<b>Virginia Secure Detention Facilities Ranked by Percent of Crowding</b>		
Rank	Facility	Percent Crowding
--	STATEWIDE	44.5%
1	Piedmont	80.0%
2	Henrico	75.0%
3	Crater	72.7%
4	Richmond	66.7%
5	James River	63.3%
6	Norfolk	61.3%
7	Newport News	60.9%
<b>8</b>	<b>Prince William</b>	<b>58.3%</b>
9	Merrimac	56.3%
10	New River	54.2%
11	Chesapeake	52.0%
12	Loudoun	50.0%
13	Highlands	40.0%
14	Rappahannock	36.3%
15	Northern Virginia	35.7%
16	Northwestern	34.4%
17	Lynchburg	31.3%
18	Chesterfield	31.1%
19	Roanoke Valley	30.9%
20	Fairfax	29.8%
21	Virginia Beach	26.7%
22	Blue Ridge	25.0%
23	Shenandoah	24.1%

Note: Population based on reported FY-16 average daily population.

## ***Section V***

### ***JDC Population Trends and Average Daily Population***



### Historical JDC Population Changes

- Based on the average population for each fiscal year the JDC population has varied between 34-52 residents since FY-11.
- Since FY-11 (through February 2018), the average annual population of the JDC increased by an average of 1.4% per fiscal year; in comparison the reported Statewide population declined by an average of 2.6% each year.

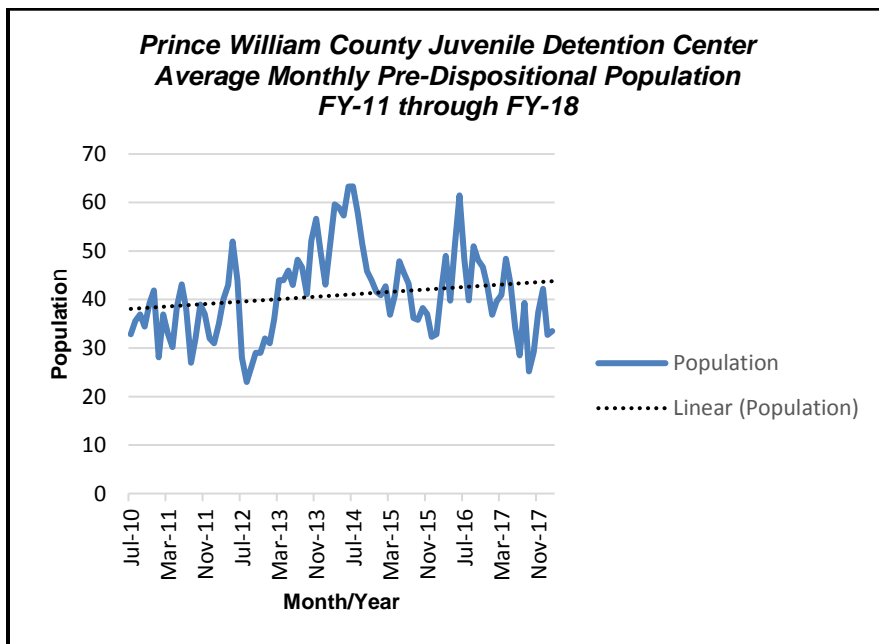
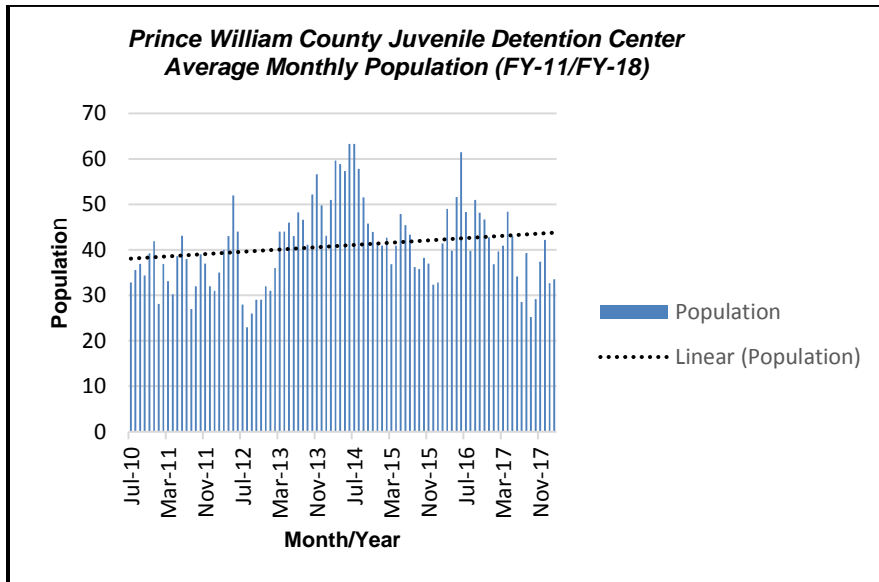
<b>JDC Average Annual Population Changes Prince William JDC Compared to Statewide JDCs</b>				
	Statewide Population	Change	Prince William Population	Change
FY-11	756		36	--
FY-12	749	-0.9%	38	4.4%
FY-13	727	-2.9%	34	-8.7%
FY-14	735	1.1%	52	52.7%
FY-15	708	-3.7%	47	-11.0%
FY-16	643	-9.2%	42	-10.7%
FY-17	644	0.2%	43	4.2%
FY-18(YTD)	--	--	34	-21.5%
Average		-2.6%		1.4%

- Despite fluctuating monthly population levels, through the first eight months of FY-18, the average monthly population in the JDC was lower than the average population reported in FY-11.

The average JDC population for each month between July 2010 – February 2018 is displayed in the table that follows.

<b>Prince William County Secure Detention Center Average Monthly Population Fiscal Year</b>									
Month	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	Change
Jul	33	38	28	48	63	43	48	29	-4
Aug	36	27	23	47	58	36	40	39	4
Sep	37	32	26	41	52	36	51	25	-12
Oct	34	39	29	52	46	38	48	29	-5
Nov	39	37	29	57	44	37	47	37	-2
Dec	42	32	32	50	42	32	43	42	0
Jan	28	31	31	43	41	33	37	33	5
Feb	37	35	36	51	43	41	40	34	-3
Mar	33	40	44	60	37	49	41	--	8
Apr	30	43	44	59	41	40	48	--	18
May	39	52	46	57	48	52	43	--	4
June	43	44	43	63	45	62	34	--	-9
Average	36	38	34	52	47	42	43	34	-2
High	43	52	46	63	63	62	51	42	-1
Low	28	27	23	41	37	32	34	25	-3

- Since end of fiscal year 2016, the monthly population in the JDC varied from a high of 51 in September 2016, to a low of 25 in September 2017.
- The average population declined from an average of 42 residents in FY-16, to 34 residents in February 2018 - a decrease of 19.2%.
- The eight year trend in JDC Average Daily Population is displayed in the charts that follow.



- The JDC was operating at an average of 49.9% of certified capacity at the end of FY-11; through the first eight months of FY-18, the JDC operated at 46.5% based on Average Daily Population.

<b>Prince William County Secure Detention Center</b>								
<b>Average Monthly Pre-Dispositional Population: Percent of Certified Capacity</b>								
<i>Fiscal Year</i>								
Month	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18
July	45.6%	52.8%	38.9%	67.0%	87.9%	60.1%	67.1%	39.6%
August	49.4%	37.5%	31.9%	64.8%	80.3%	50.3%	55.3%	54.6%
September	51.3%	44.4%	36.1%	57.1%	71.6%	49.7%	70.8%	35.0%
October	47.8%	54.2%	40.3%	72.4%	63.6%	53.1%	66.9%	40.6%
November	54.4%	51.4%	40.3%	78.7%	61.1%	51.3%	64.9%	51.9%
December	58.2%	44.4%	44.4%	69.2%	57.8%	44.9%	59.4%	58.6%
January	39.0%	43.1%	43.1%	59.8%	56.8%	45.6%	51.2%	45.4%
February	51.3%	48.6%	50.0%	70.8%	59.3%	57.5%	55.1%	46.5%
March	46.0%	55.6%	61.1%	82.8%	51.2%	68.1%	56.8%	--
April	41.9%	59.7%	61.1%	81.8%	56.8%	55.2%	67.2%	--
May	53.6%	72.2%	63.9%	79.6%	66.5%	71.7%	59.8%	--
June	59.9%	61.1%	59.7%	87.9%	63.1%	85.4%	47.5%	--
Average	49.9%	52.1%	47.6%	72.6%	64.7%	57.8%	60.2%	46.5%
High	59.9%	72.2%	63.9%	87.9%	87.9%	85.4%	70.8%	58.6%
Low	39.0%	37.5%	31.9%	57.1%	51.2%	44.9%	47.5%	35.0%

## ***Section VI***

### ***Secure Detention Population Projections***

### **Prince William County Secure Detention Center Statistical Population Forecast**

**Scope**

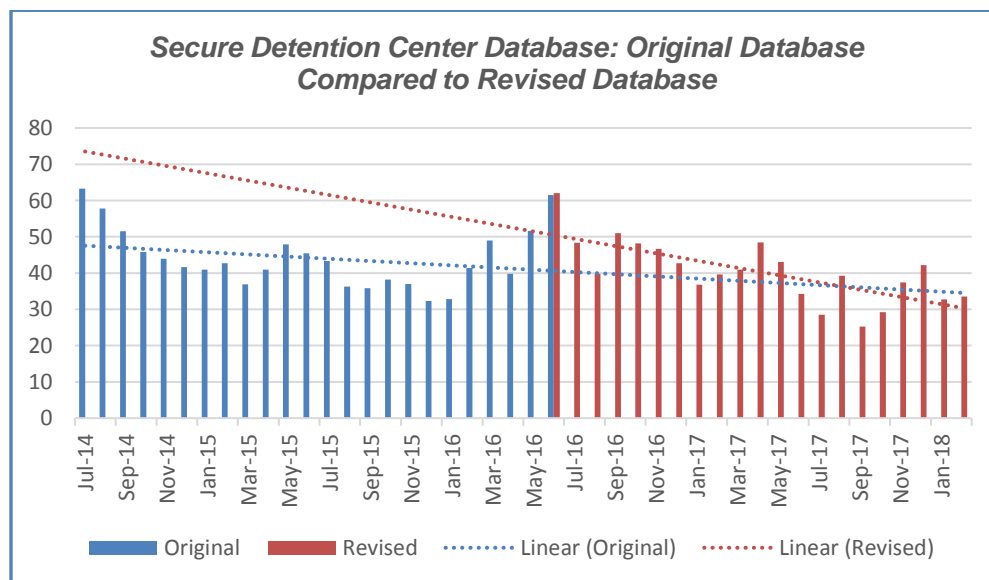
This section of the report presents the statistical forecasting methodology and a forecast of the Average Daily Population (ADP) for the Prince William JDC through the year 2030. This section describes the data upon which the statistical forecast is based, the methodology used and the outcomes of the forecasting procedures.

**Background**

In general detention populations increase or decline based on two key factors: (1) the number of youth admitted to the facility, and (2) the amount of time they remain in detention (length of stay). For example, if admissions decline and length of stay remains unchanged, capacity needs decrease. Historical detention population data (in the case of the enclosed forecast those conditions existing between 2011 and 2018) reflect a set of conditions that existed during a given time. A cautionary note is that a number of things outside of mathematical changes in monthly jail population figures influence changes in detention populations.

Forecasting most juvenile residential populations is at best a difficult task, and estimating future secure detention population levels is no exception. While forecasts that are too “high” can lead to costly and unnecessary construction projects, forecasts that are too “low” can result in poorly managed systems, overcrowding and facilities that are unsafe for youth and facility personnel. The goal of the forecasting effort is to provide a reasonable estimate of future population levels for planning purposes based on documented and defensible methods that minimize the probability of either under-projecting or over-projecting.

The following chart displays the trends in the historical data associated with the initial forecast and the updated forecasts described in the current report.



An initial forecast of the Prince William JDC was produced based on data through the end of fiscal year 2016. Monthly data used to produce this forecast indicated an increasing population trend in the later portion of the historical data. Between January 2016 - June 2016 (the last month of the original historical data base), the average monthly population in the JDC increased from an average of 33 in January, to an average of 62 in June 2016. This growth represented an increase of 29 youth and 87% growth. In FY 2016 - the last 12 months of historical data in the original forecast - the average monthly population in the Detention Center increased 35.5%, from 45 in June 2015, to 62 in June 2016.

Initial forecasts have been updated to include 20 recent months of data (July 2016 through February 2018). In FY 2017 – the first 12 months of the updated historical data in the revised forecast – the detention population declined from 62 in June 2016, to 34 in June 2017. Through the first eight months of FY-18 an average of 34 residents were housed in the facility.

## Findings

### Forecast Database

The forecast database consists of the average monthly pre-dispositional population by month, for the period July 2010 through February 2018. The following table displays the reported monthly average daily population (ADP) figures that make up the database.

<b>Prince William County Secure Detention Center</b>									
<b>Average Monthly Population</b>									
<b>Fiscal Year</b>									
Month	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	Change
Jul	33	38	28	48	63	43	48	29	-4
Aug	36	27	23	47	58	36	40	39	4
Sep	37	32	26	41	52	36	51	25	-12
Oct	34	39	29	52	46	38	48	29	-5
Nov	39	37	29	57	44	37	47	37	-2
Dec	42	32	32	50	42	32	43	42	0
Jan	28	31	31	43	41	33	37	33	5
Feb	37	35	36	51	43	41	40	34	-3
Mar	33	40	44	60	37	49	41	--	8
Apr	30	43	44	59	41	40	48	--	18
May	39	52	46	57	48	52	43	--	4
June	43	44	43	63	45	62	34	--	-9
Average	36	38	34	52	47	42	43	34	-2
High	43	52	46	63	63	62	51	42	-1
Low	28	27	23	41	37	32	34	25	-3

- Based on average monthly population figures for each fiscal year, the population in the JDC has varied between 34 – 52 residents each year between FY-11 and FY-18 (through February)
- On average, annual changes over the past eight fiscal years have varied from a high of +52.7%, to a low of -21.5%, and the average annual fiscal year population increased by 1.4% per year between FY-11 and FY-18.
- Between FY-11 and FY-18, the overall average population in the facility was 41 based on annual averages.



### Statistical Forecast Methodology

A number of different forecast models were developed for projecting the future confined population. Forecasts were generated using Exponential Smoothing models (Holt and Winters) and several different ARIMA models (commonly called Box Jenkins models). Using available diagnostic information, the three best models were selected and compared. In addition, a linear regression model was generated to provide a graphic long-term trend line. All models used to project the population are based upon the assumption that long term historical trends in population levels can be extrapolated into the future. The various models were developed using a software program titled Forecast Pro, developed by Business Forecast Systems

Three statistical methods were evaluated: Regression, Exponential Smoothing and ARIMA. A series of criteria were reviewed in selecting a method for forecasting the population. This criteria reviewed included the Adjusted R-squared value, the Durbin-Watson and the BIC (Schwarz Information Criterion), with primary emphasis on the BIC. The BIC measurement rewards goodness of fit to the historical data and penalizes model complexity. Empirical research seems to indicate that making a model more complex in order to obtain non-significant Durbin-Watson statistic does not result in increased forecasting accuracy. The model with a lower BIC will generally be the more accurate. For juvenile justice data, the BIC is generally a more appropriate statistic, upon which to base a selection, due to the less stable aspects in the justice data series caused by one-time events and other factors.

A series of criteria were reviewed in selecting a method and then a specific model for forecasting the inmate population. These criteria included the Adjusted R-squared value, the Durbin-Watson and the BIC (Schwarz Information Criterion), with primary emphasis on the BIC.

#### Interpretation of Comparative Statistical Measures

Adjusted R-Square: **higher values are desired**; this statistic measures “how certain” we can be in making predictions with a model; the proportion of variability in the data set that is accounted for by a model.

MAD (Mean Absolute Deviation): **lower values are desired**; this statistic measures the size of error (the difference between the predicted and actual historical monthly population in the database); measures “how accurate” a model predicts historical data; unlike the forecast error, this statistic does not take into account positive (+) and negative (-) signs.

Durban-Watson (DW): **values close to 2.0 are desired**; this statistic measures problems with a model’s capacity to result in good projections (it measures serial correlation problems); as a rule of thumb values of less than 1.2, or greater than 3.7 indicate serial correlation issues; however, empirical research seems to indicate that making a model more complex in order to obtain a non-significant Durbin-Watson statistic does not result in increased forecasting accuracy.

Standardized BIC: **lower values are desired**; rewards goodness of fit to the historical data and penalizes model complexity; the model with a lower BIC will generally be the more accurate. For criminal justice data, the BIC is generally a more appropriate statistic upon which to base a selection, due to the less stable aspects in the criminal justice data series caused by one-time events and other factors.

Diagnostic information associated with three ARIMA (Box Jenkins) models is presented below. These three models displayed superior diagnostic information and represent the three “best” models. For comparison purposes, information associated with a linear regression model is also presented. It should be stressed that the statistical properties associated with the regression model are extremely weak, and this model was not given any serious consideration. It is displayed in tables that follow merely to illustrate the long term straight trend in the historical data.

<b>Prince William County JDC</b>				
<b>Facility Population Forecast Model Options</b>				
Statistic	Linear Regression	Box-Jenkins		
		Alternate 1 (2,1,1)*(2,1,1)	Alternate 2 (0,1,2)*(1,1,2)	Alternate 3 (2,1,1)*(1,1,1)
Adj. R-Square	0.02	<b>0.76</b>	0.72	0.73
Durbin-Watson	0.51	1.95	1.95	1.93
Forecast Error	8.91	<b>4.44</b>	4.75	4.71
MAD	6.92	<b>3.21</b>	3.6	3.57
Standardized BIC	9.25	<b>4.98</b>	5.22	5.18

- Overall, based on the comparative statistics displayed in the table above, the Box-Jenkins (2,1,1)\*(2,1,1) model – Alternate 1 - demonstrated the superior diagnostic statistics, based on BIC, Adjusted R-Square statistics, Forecast Error and Mean Absolute Deviation (MAD).

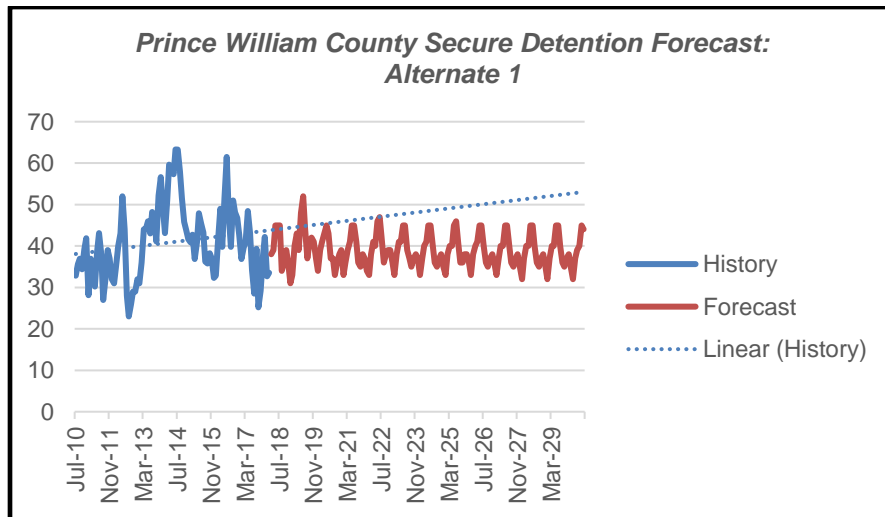
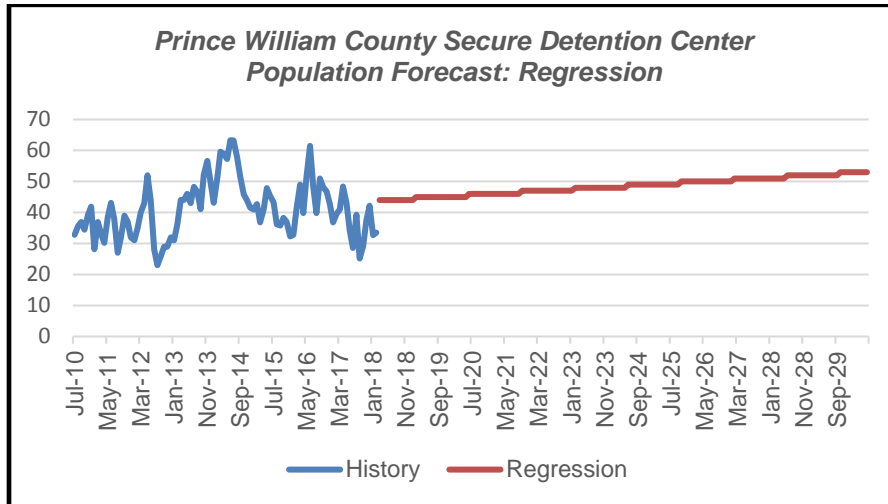
The resulting forecasts for each of the models are presented in three-year intervals, for June of the year identified in the table that follows.

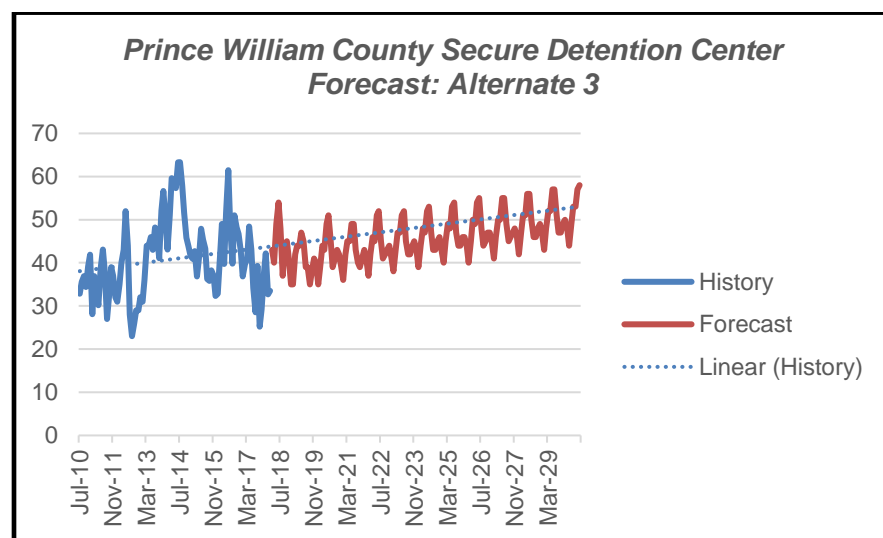
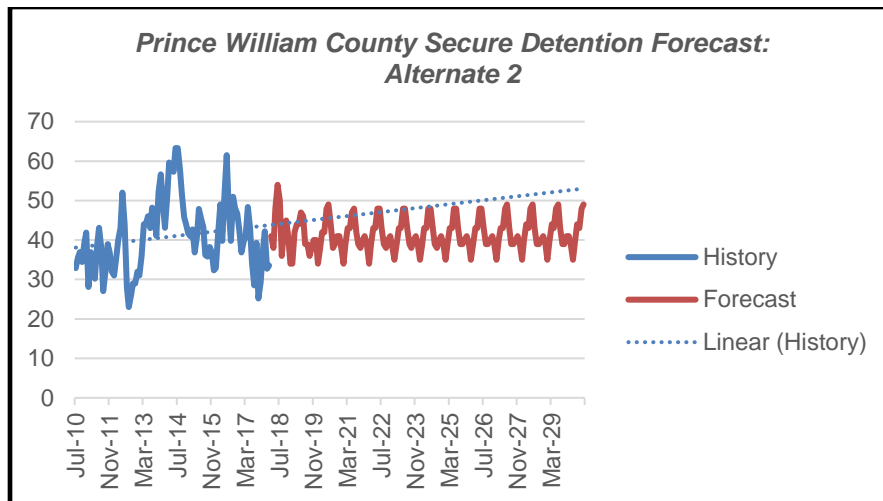
<b>Comparison of Model Forecasts</b>					
<b>Projected Secure Detention Population</b>					
June Each Year	Linear Regression	Box-Jenkins			Average (Excluding Regression)
		Alternate 1 (2,1,1)*(2,1,1)	Alternate 2 (0,1,2)*(1,1,2)	Alternate 3 (2,1,1)*(1,1,1)	
2018	44	45	54	54	51.0
2021	46	45	48	49	47.3
2024	49	45	48	53	48.7
2027	51	45	49	55	49.7
2030	53	44	49	58	50.3

- In the projected year 2024, the average projected ADP for June was 48.7, with the range from a low of 45, and a high of 53; in the projected year 2030, the

average projected ADP for June was 50.3, with the range from a low of 44, and a high of 58.

The resulting forecasts for each of alternative models is presented graphically in the following exhibits.





*Forecast Selection*

The diagnostic information for each of the three Box-Jenkins models presented in the preceding tables, suggests that the Box-Jenkins model (2,1,1)\*(2,1,1) – Alternative 1 is superior. As referenced above, this model has a better Adjusted R Square, Standardized BIC, smaller forecasting error and a superior MAD statistic than the alternative models.

- It is recommended that the resulting forecast from Alternative 1 be used for planning purposes.
- The actual historical monthly ADP and the forecast for future years are depicted in the table that follows.
- The average fiscal year population is projected to remain below 41 throughout the forecast period – with an average of 39 residents per year.

The recommended forecast is displayed in the following table.

<b>Prince William County Secure Detention Center Average Fiscal Year Population</b>		
Fiscal Year	Average FY Population	Change
Historical		
2011	36	--
2012	38	4.4%
2013	34	-8.7%
2014	52	52.7%
2015	47	-11.0%
2016	42	-10.7%
2017	43	4.2%
2018	34	-21.5%
Forecast		
2019	40	16.7%
2020	41	2.3%
2021	38	-5.7%
2022	39	1.5%
2023	39	1.5%
2024	39	-1.9%
2025	39	-0.2%
2026	39	0.9%
2027	39	-1.1%
2028	38	-0.4%
2029	38	0.0%
2030	38	-0.4%

Average 1.4%

Average 1.1%

### Statewide Juvenile Home Population Forecast

In October 2017, The Secretary of Public Safety released the Commonwealth's official forecast of statewide secure detention bed space needs through fiscal year 2022. The forecast is displayed in the following table.

<b>Secure Detention Statewide Bed Space Projections (FY-18 through FY-22)</b>		
FY-17	629	--
FY-18	618	-1.7%
FY-19	607	-1.8%
FY-20	591	-2.6%
FY-21	580	-1.8%
FY-22	568	-2.0%
Average Change		
		-2.1%

- The statewide forecast of the secure detention population in the Commonwealth suggests that the overall resident population will decline over the next several years by an average of 2.1% per year.

Prince William County is interested in adding bed and program space to accommodate a minimum of eight additional beds associated with the Community Placement Program (CPP). Should Prince William County pursue additional space for CPP beds within the JDC (in addition to eight CPP beds that have been approved), planning efforts will need to account for these additional beds.

There are presently 87 CPP beds located in nine local facilities across the State. CPP programs are highly structured, residential programs in local secure detention facilities. The goal of CPPs is to place residents closer to their home communities in order to facilitate an easier transition following their release. CPPs focus on addressing specific treatment needs and risk factors and developing competency in the areas of education, job readiness, life and social skills.

The table below displays forecast scenarios through fiscal year 2022 under different assumptions that take into account the official Statewide forecast as well as the addition of 8 – 16 Community Placement Program (CPP) beds in Prince William County in the future. FY-22 was selected for display since it is the last year in the official statewide projection horizon.

<b>Prince William County Juvenile Detention Center Bed Space Planning Scenarios</b>				
	(1)	(2)	(3)	(4)
Year	Prince William Forecast	Additional 8-16 CPP Beds	Prince William Forecast Based on Statewide Forecast Growth	Additional 8-16 CPP Beds
FY-18	34	42-50	--	--
FY-19	40	48-56	33	41-49
FY-20	41	49-57	33	41-49
FY-21	38	46-54	32	40-48
FY-22	39	47-55	31	39-47

Column (1) above displays projected bed space needs for Prince William County youth based on the forecast described in this document. Column (2) displays a scenario of projected need based on the forecast described in this report and the assumption that an additional 8 – 16 CPP beds are added to the population forecast.

Column (3) figures represent a forecast scenario where the JDC projected average population for each fiscal year is assumed to mirror Statewide projected growth applied to the FY-18 reported actual population. Column (4) presents a forecast scenario based on the assumption that the Prince William County JDC population growth mirrors Statewide growth in the future and an additional 8 – 16 CPP beds are planned.

- Based on the statistical forecast described in this report, the County should plan on a JDC which will accommodate approximately 40 residents. If the County elects to accommodate 8 – 16 additional CPP participants, decision makers should plan on a JDC accommodating between 50-55 residents. As a cautionary note, historical population trends in the JDC have been somewhat erratic, and growth in the JDC population has been above secure detention population trends reported across the State. With projected growth in the general population in Prince William County it is reasonable to assume that there will be a need to implement program options and detention alternatives in the County to accommodate continuing pressure on resource needs.

**Section VII**  
**Existing Building Assessment**



## ***An Assessment of the Existing JDC Physical Plant***

The Prince William County Juvenile Detention Center was opened almost forty years ago, and has remained in continuous operation. Its construction of masonry, concrete, and steel have lasted. Through the years, two major addition and renovation projects have increased the size of the original 11,860 square foot building to its current 34,970 square foot size. While well maintained over the years, signs of age and a building design for a different operational model are evident.

On October 13, 2016, architects and engineers from Moseley Architects met at the Juvenile Detention Home to conduct a meeting, and to tour and observe the facility. An assessment of the existing property was conducted to identify both physical plant and operational issues experienced at the Detention Center. This provided a baseline understanding of current conditions of the building regarding life safety systems, building code, structure, mechanical, electrical, and plumbing features, and overall site issues. Discussions with staff highlighted significant operational deficiencies of the facility.

The following items were noted from that day.

### ***Building Structural Assessment***

A site visit with limited visual inspection was performed to determine the structural systems of the existing Prince William County Juvenile Detention Center and assess their existing conditions. The original portion of the detention center has received two major additions, one in 1997 and another in 2000. The original portion of the detention center construction consists of precast roof planks supported on load bearing masonry walls. A few localized areas of steel framing and steel columns are also utilized for precast roof plank support. Concrete cast-in-place flat slabs are also utilized over corridors within the bedroom wings of the original facility.

The 1997 addition incorporated several construction types. The gym construction consists of long span open web steel joists bearing on exterior masonry walls. The gym entry corridor has a concrete cast-in-place flat roof slab bearing on exterior masonry walls. The dayroom construction includes steel trusses bearing on steel beam and column framing. Sloped precast roof planks are supported on load bearing masonry walls over bedrooms around the dayroom. The corridor and classroom areas have a combination of precast roof planks and cast-in-place flat roof slabs bearing on masonry walls.

The 2000 addition includes sloping open web steel joists bearing on exterior masonry walls above the administration/intake area. A corridor adjacent to the gym was added utilizing cold-formed steel roof joists bearing on masonry walls. A large area containing multiple dayrooms and housing units was also added. Construction above the dayrooms consists of sloping open web steel joists bearing on steel beams and columns at the center and masonry walls at the front of the bedrooms. Sloping cold-formed steel roof joists are supported on load bearing masonry walls above the bedrooms. Open web steel joists are supported on masonry bearing walls above two added classrooms and a corridor.

- The existing structural systems of the detention center visually appear to be in good condition. No visible signs of damage or deterioration were detected. The presence and conditions of continuous wall footings and isolated column footings could not be verified by the visual inspection. The existing slab on grade thickness could not be verified. However, if renovation of bearing wall construction is required, it often requires removal of portions of load bearing walls, which also may affect the lateral support system of the existing structure. Such structural modifications can often be costly. Also, a renovation may also require new HVAC units to be installed on the existing roof structure. Modifications to the existing structure below the units may be required, and careful consideration for unit locations should be considered.

### ***Mechanical Assessment***

HVAC is primarily served by packaged rooftop units (RTU's) and the entire facility is conditioned. This equipment ranges from 3-10 years old and appears to be in good to fair condition.

- Some rooftop curb weatherproofing is in need of repair and may be causing roof leaks. There is an older 7.5-ton Carrier rooftop heat pump unit above the dining room that is 13 years old and uses R-22 refrigerant, which is near the end of its normal service life.
- The HVAC system equipment is of minimum efficiency, and much of the heating is electric resistance which is a costly heating source and does not include energy recovery wheels or other energy reducing technology, where other newer systems can improve energy usage. The building used approximately 123 KBTU/SF of energy for the 2015 year, which is slightly above average for this buildings type. Upgrading the building to new systems (more efficient HVAC, lighting, water heating) could potentially reduce energy usage by 30-40% (~\$35-50K per year) at today's energy rates.
- There appears to be no smoke control for the original sleeping rooms (B1-12 and G1-12), which was not required during the original construction, however is now required for this type of building. Smoke control systems are now provided in buildings with I-3 occupancy due to it requiring more time to evacuate a building during the event of a fire. The intent of a smoke control system is to essentially buy more time for occupants to evacuate a building or smoke compartment. Not having smoke control for these two sections of sleeping rooms does potentially increase life safety concerns. Retrofitting smoke control into these two sections would be difficult and costly, where the electrical service would need to be extended all the way from the new addition service and 2000 era generator.

### ***Plumbing Assessment***

- The plumbing fixtures in the facility are in good to fair condition and appear to be functional, however many have higher flow rates than current code allows. The electric tank type domestic water heaters are 5-10 years old and there are several sets of them with multiple thermostatic mixing valves. Having water heating

centralized would reduce maintenance. There were no reported issues with the sanitary system and the domestic water piping appears to be in good condition.

- For the entire building, all detention plumbing controls were recently upgraded. This included flush valve, lavatory valve control panels, solenoid valves and the control system to operate the electronic controls for all detention plumbing fixtures in cells/ sleeping rooms.

### ***Fire Protection Assessment***

- The building is fully sprinkled and appears to be in good condition. There are portions of the retrofit original detention areas that do not have detention grade sprinkler heads with exposed piping. This was most likely done due to retrofit nature, however this is not ideal where it is possible for people to damage/ break sprinkler heads.

### ***Electrical Assessment***

- The electrical service was upgraded in 2000 addition, where the existing service was back fed from this new service.
- 600 KW generator provides backup power to the entire addition. The original 300 KW generator remains and it near the end of its normal service life.
- The Honeywell Knight fire alarm system was upgraded throughout during the 2000 addition.
- Lighting throughout appears to be original florescent fixtures. New LED fixtures would reduce energy usage and maintenance, especially in the high ceiling/ day room areas.
- There are a lot of exposed conduits from various upgraded and other projects after the building was completed. This is not ideal in detention centers.
- There is no lightning protection system on the building. This would be recommended.

### ***Civil (Site) Assessment***

The existing site includes large, well maintained open turf fields behind security fencing. The housing areas all have secondary exits to these fenced yards. The security fencing is topped with razor ribbon and meets current DJJ standards. The observations made during the field visit identified the following items regarding the site and exterior of the building.

- Due to site constraints and vehicle/truck access needs, the vehicle sallyport uses a vertical lift gate that cannot manually operated. The parts are very expensive and have a four week minimum lead time, and the gate is prone to frequent problems that cause operational issues. It is also not covered, which can be

difficult for staff and law enforcement to escort youth in and out of the facility in bad weather.

- The building has numerous roof, gutter, and drainage problems affecting the exterior façade. Many areas of the oldest brick walls have mold and dirt build up. Numerous portions of the building lack gutters and downspouts.
- The facility does not have a loading dock for deliveries of food and supplies.
- Multiple roof leaks are evident between the gym and the adjacent corridors and classrooms. The roof above the gymnasium has leaks at the main mechanical unit.
- The existing parking lot for staff and visitors is insufficiently sized, with not enough parking capacity at peak times. During several visits throughout the project, a number of cars were parallel parked at the entrance drive to the main parking lot.

#### ***Electronic Security Assessment***

- The electronic security system equipment was upgraded less than three years ago. During that upgrade, several cameras and intercoms were replaced. There were no reports of issues or problems with the new system.

***Section VIII***  
***Summary and Recommendations***

### ***The Existing JDC Design is Obsolete and Should be Replaced***

The current JDC, located at 14873 Dumfries Road, Manassas, is a 72-bed, 35,000 SF facility. The JDC was originally built in 1972 and was renovated in the mid-1990's (an addition 16 bed rooms, classroom and gymnasium) and again in the early 2000's (with the addition of 32 bed rooms). The original facility was built using an adult detention model which primarily focuses on bars, walls and security.

- To effectively provide programs and services to Prince William County youth, the County should construct a new JDC designed and constructed to support the education, treatment, recreation and other program needs with a community re-entry focus and within a continuum of program options, sanctions and alternatives.
- The existing JDC should be replaced with a design that meets current standards and facilitates the delivery of programs and services for youth. The County should consider co-locating the existing JDC and the Molinari Juvenile Shelter on the same site. The sharing of support services such as food service, laundry, recreation and office space would likely result in reduced operational costs and facilitate an improved continuum of care for youth in the County.

Since the 1970's, nationwide reform has occurred in juvenile justice both in program and facility designs to support education, treatment, recreation and the provision of a continuum of services and programs for youth. Current standards and "best practices" suggest that it is the role of a JDC to be only a single component of a system of prevention programming, graduated sanctions and service delivery options to meet the needs of youth. This reform has rendered the existing JDC design obsolete.

The official certified capacity of the facility is 72 is somewhat misleading as the original 24 room housing areas – one third of the capacity - are simply sleeping areas that do not include any day rooms or living space. Current DJJ standards require a design where resident rooms are configured around a dayroom or living space, and require physical separation by normal sight and sound between male and female residents. The existing facility is (at a minimum) approximately 8,000 square feet below the amount of space required by current standards for a 72 bed detention center.

- The somewhat "haphazard" configuration of the facility does not allow for adequate separation of males and females, neither are there means to separate sex offenders and more violent youth from the very young.

Touring the facility quickly brings to light the problems of circulation and building organization due to the building enlargements and remodels through the years, which solved needs for more beds, but inevitably created multiple corridors, different sizes and configurations of living units, and the dispersion of limited program and educational space throughout all parts of the building.

Some spaces originally designed for one purpose are being used for another, and functions that should be located adjacent to each other are not. This is the natural result of adding on to a building which must remain operational and functional during construction.

The best example of this is found in the location of the Master Control Room - the heart of the security system for the Center - and manned 24/7. During the 2000 addition, a new modern security system for the entire building was included, and the existing undersized, less secure

original control room which could not house the new system and its equipment needs was re-assigned as an office. It was replaced with a new correctly sized and more secure station in the new addition at the back of the building. The new Control Room handles the security for the whole building and was designed to have visual contact with the three housing units added at that time. However, there were some operational trade-offs that occurred. The Control Room Officer answers the phone, responds to intercoms, monitors cameras, and remotely unlocks doors of the building, including the front door to staff and visitors. Ideally, the Control Room would be located near the front lobby so that the Officer can see everyone who enters the lobby, be able to speak to them face to face, check ID's etc. before allowing anyone further into the facility through a secure sallyport. Staff should also be visually observed by the Control Room Officer each time they enter into the secure perimeter of the building. In the current arrangement, the Officer must rely on an intercom and camera to determine if the front door can be unlocked to allow someone into the lobby. Then, another staff member is called to the Lobby to further interact with the visitor.

- The Control Room should be the place for secure storage of keys, but in the current arrangement at the back of the building, a staff member must travel from the administration wing at the front of the building, through the secure portion of the building to the Control Room at the back to turn in or receive keys. This is another security weakness.
- A second issue stemming from the building design is the lack of space for rehabilitative programs, counseling, interviews, administrative staff and visitation by family and professionals.

The current building size is 34,970 square feet with 72 beds, which is 485 square feet per bed. Department of Juvenile Justice guidelines have long considered 600 square feet per bed as a minimum reasonable expectation to meet the living, educational, and program needs of a local Juvenile Detention Center. At 600 – 650 square feet per bed, the facility would require an additional 8,280 – 11,830 square feet.

Specific building areas in the JDC that are undersized and do not meet guidelines and accepted Standards for their need are:

- The administrative wing of offices and public lobby.
  - The facility does not have conference room space. Currently an office serves as an improvised conference room but it does not comply with accessibility or space planning guidelines for conference rooms.
  - The administrative office area does not have enough spaces for staff. Currently there are five single person offices and two of them are being shared by two people.
  - The administrative area lacks a reception desk or place for personnel to check in guests. This causes guests to lose 15 minutes of visitation time due to check-in procedures.
  - The facility has a very small visitor lobby, which does not have adequate space for a metal detector or search/pat down of visitors.
  - The staff lockers and toilet are shared with guests and are not within the secure area.

- The Computer room is a converted closet; is too small and does not have adequate HVAC.
- The intake/ processing area needs enlargement due to the following issues:
  - Privacy for initial interviews is compromised. Holding cells (often occupied by youth just arrived or awaiting transport) are in earshot of the initial intake screening desk which involves a detainee being asked personal and medical questions.
  - The intake file cabinets are in the open work space and are not secured.
  - The clothing storage and property storage rooms are undersized for the population.
  - There are often not enough separate holding cells to properly separate juveniles needing temporary holding space.
- There is not sufficient space for family visitation or private visitation with clergy, attorneys and Probation Officers.
- Program space for counseling and treatment programs is inadequate.
- Living unit configurations are not uniform in size or configuration. Two units are eight beds each; two units are 12 beds each, and two units are 16 beds each. Four units have dayrooms, and two do not. The Superintendent stated that the 72 beds would be more usefully arranged as six units of 12 beds each, with two staff assigned and working with the youth inside each unit. The units should be direct supervision style, and have a staff office with secure glass windows abutting into the dayroom.
- Program and counseling rooms should be located close to the housing units for treatment options, in addition to a centralized educational “school” area.
- Storage space is inadequate throughout the facility, and there are currently several outdoor “shed” type buildings which have been added over the years to meet storage needs. Additional storage of various types and sizes throughout the facility is needed, plus a central storage room when deliveries arrive.

While existing buildings are not required to meet all the regulations of Current Virginia Uniform Statewide Building Codes as they would under new construction, the following items were noted in the existing building as deficient, and would need to be addressed if an addition or renovation was done:

- There is a single, non-ADA compliant toilet for both men and women at the building entrance/administrative area.
- The undersized medical clinic has a single unisex, non-ADA compliant toilet room.
- There are no negative pressure rooms within the facility.



- Several showers are not ventilated and have ongoing problems with mold and air quality.

Most parts of the building appeared to comply with DJJ's construction standards for secure detention construction, but the following items were noticed that are either non-conforming to current DJJ standards or lack the operational functionality for the facility's needs.

The following items do not meet current Department of Juvenile Justice Standards and guidelines.

- Lack of dayroom space for the original two housing units, requiring existing dayrooms to be overcrowded in order to accommodate residents housed in the original units.
- Lack of required non-contact visitation space, and lack of visitation space for various types of contact visits.
- Lack of Staff lounge with toilets and showers.
- The ceiling height of the Serving area outside of the kitchen is too low to meet DJJ standards, and is not constructed with security materials.
- The food tray opening between the serving line and the kitchen is wider than 5 inches required by existing Standards - creating an opening through the secure perimeter that poses a security risk.
- In one classroom, the classroom's secondary exit door leads into the administration wing exit which poses a security risk.
- The medical area is required to have negative area exhausting to minimize infectious disease exposure within the intake processing area, and this is not present.
- The medical exam area is required to have a urinal, which is currently lacking.

Items noted as operationally deficient for secure detention operations include the following.

- Medicine is kept in a locked medicine cabinet in the dining area, and narcotics in a locked medicine cabinet in the nurse's office. The door to the nurse's office is not a detention door with a detention lock posing a security risk.
- The doors to the original two housing units open into the cells; allow residents to block the doors.
- *Supervision space is inadequate.* The original housing wings of the facility do not have staff space. Staff use chairs placed in the six foot wide corridors.
- *Original showers present safety hazard.* The showers in the original housing wings have exposed piping which is a safety hazard and not anti-ligature.
- The staff have indicated that a separate medical cell with a negative pressure ventilation system is crucially needed.

- *Narrow corridors.* The corridors in the booking area and entrance into the rest of the facility are too narrow and pose security risks. In some areas, residents can reach between walls to kick up legs and push off.
- *Congestion in intake area.* The pathway from booking area into the facility crosses paths and shares a sallyport with non-secure administrative functions. This area can become very congested with much activity, making secure door control challenging.
- *Existing laundry space was designed for 24 residents.* The Laundry Room is located in the original portion of the building and does not have a door large enough for commercial laundry equipment, so residential type equipment is used. The residential equipment does not meet the requirements for sanitizing laundry. Because this room is connected to the oldest electrical service, it lacks the electrical load capacity to have larger, more efficient equipment. Modern design typically includes laundry areas within housing areas.
- *Kitchen and kitchen storage is inadequate.* The kitchen is undersized for the population, and must use a separate freezer/cooler located outside the building for food storage; there is no office space for the dietician in the kitchen, who occupies a small area within the dry storage room, and the inadequate freezer storage area for the kitchen has ongoing issues with the frost heave.

### ***Develop a Comprehensive Detention Utilization Plan***

Traditionally, secure detention facilities are intended to serve as the functional equivalent of adult jails. Their purpose is to hold youth on a short-term basis between the point of arrest and the point of adjudication or disposition. National standards such as those established by the Institute of Judicial Administration and the American Bar Association suggest that detention is warranted only when a youth is likely to flee or represents a serious danger to his or her self, or to others. Increasingly, the financial and programmatic benefits of housing post-disposition youth locally for short periods of time in local detention facilities are being more clearly understood and accepted. Virginia has acknowledged these benefits by initiating its Community Placement Program (CPP) which is intended to place residents closer to their home communities in order to facilitate an easier transition following their release. CPPs focus on addressing specific treatment needs and risk factors and developing competency in the areas of education, job readiness, life and social skills.

Increasingly across the State, localities are planning and implementing programs that most effectively serve the needs of youth within the justice system while at the same time control population growth within secure detention facilities.

- While growth in the Prince William JDC population slowed in FY-18, historically the population trends have been much higher than many other localities in the Commonwealth.

Based on a profile of historical annual JDC admissions, the two highest admitting charge categories were "Supervision Violation," including probation violations, violation of court orders and conditions of release (25% of total charges) and "Simple Assault" (10% of charges). This

suggests that judges in the County simply do not have sufficient program options to secure detention.

- Decision makers should implement a formal planning process to assess options as well as costs and benefits associated with the need for secure detention with a framework of a continuum of youth programs, services and detention alternatives. This planning process should be ongoing with plans for constructing a new JDC.

Primary responsibility for developing and implementing the plan may fall to the Juvenile Court presiding judge, the Chief Probation Officer or a task force comprised of key juvenile justice professionals. Because changes in program and policy development may take an extended period of time, the plan should take into account the possible turnover in key decision-making personnel. The plan should provide an objective assessment of the costs and benefits associated with each alternative.

A general outline for a planning process follows below.

#### Phase 1 – Identify issues, problems and goals

The first step is for local officials to identify existing detention problems as well as establish the goals of future detention policies and procedures. These goals might include reducing the number of securely held juveniles; developing detention policies that utilize alternatives to secure custody; streamlining detention procedures; improving coordination of public agencies, community-based organizations and families to address the needs of youth in the County, and identifying gaps in services and programs.

Goal-setting should include key decision makers who have responsibility for making and implementing local juvenile justice policy. This usually includes involving the juvenile court, probation department, law enforcement agencies, elected officials, budget planners and representatives of community-based youth service agencies.

#### Phase 2 – Analyze the juvenile detention referral population

The purpose of this planning phase is to gain an understanding of how the JDC is used under existing policies and procedures. Who is being referred to the JDC? Why are they being referred? Who is being securely held the JDC? What are the chances of being admitted to the JDC for various type of referrals?

The primary planning questions include: How many juveniles are admitted to the JDC? How long do different types of youth remain in detention? How are detention admissions “different” from youth who are not admitted to the JDC? Where possible the reasons for detaining youth should be documented and understood.

#### Phase 3 – Identify program and policy options and costs

In the phase of the planning process local decision-makers identify specific changes to administrative practices, programs and policies necessary to control operational costs, improve youth service delivery and control future JDC population levels. Funding options must be identified and pursued. Program and policy options might include the following:

- Establishing or modifying existing home detention and home supervision programs and considering implementation/expansion of electronic home monitoring.
- Establishing shelter care options or a system for referral to existing community-based homes for low risk offenders.
- Establishing or improving existing police diversion programs or options that prevent referrals to the JDC.
- Establishing a stepladder of non-detention alternatives for probation violators routinely returned to the JDC under current practice.
- Recommending length of stay reductions for specific classes of detained youth, such as juvenile awaiting court hearings, probation violators, youth held on warrants or juveniles awaiting placements.
- Expanding capacity, mission, programs and services associated with the Molinari Juvenile Shelter.

#### Phase 4 – Develop a comprehensive JDC utilization plan

The implementation of those policy options judged to be in the best interest of meeting local objectives should be summarized in a comprehensive plan. To the extent possible the plan should identify the specific steps that should be taken to achieve the objectives. If new programs or policies are recommended then the mechanisms for achieving the changes should be identified with specific and realistic timelines and budgets. Federal, State and local funding options need to be identified.

#### Examples of Alternatives to Secure Detention

Several alternatives to secure detention are outlined here – from immediate release to supervised release to residential programs.

- Outright release – diversion
- Supervised release – youth judged to be too risky for outright release can be placed on supervised release rather than in secure detention. The cost of supervised release depends on caseload size, the programs and services available and the number of personnel required to supervise youth.
- Home detention – home detention requires youth to remain at home during specific time periods. Additional conditions such as drug testing may also be imposed. Home detention programs vary in the intensity of contact between supervisors and youth, but contacts are more frequent than traditional probation. Many home detention programs use paraprofessional outreach workers rather than probation officers to both mentor and supervise youth.
- Electronic (GPS) monitoring – Often used in conjunction with home detention, this program monitors youths' location via an electronic device attached to the wrist or ankle.

Costs associated with this monitoring varies depending on the device used and the number of personnel required to monitor/supervise the youth.

- Intensive Supervision – This program can take on many forms and costs vary depending on the caseload type, size of the caseload, personnel required to supervise youth and the services provided.
- Day and evening reporting centers – These programs are nonresidential programs that require youth to report daily activities to case managers. They are mechanisms for enhanced supervision of youth but differ from intensive supervision programs because they provide services such as drug treatment, job training referrals, life skill services and counseling. Costs associated with these Centers varies depending on the size of the program, services offered and the number of personnel required to operate them. In Virginia, it is reasonable to estimate costs varying between \$3,000 - \$5,500 per year for each youth in the program. Often costs are shared between State and local entities as well as between agencies.
- Residential programs – Not all youth can be reasonably or safely be returned to their homes but neither do they warrant secure detention. Often these programs combine the elements of home confinement, day or evening reporting centers and temporary non-secure shelters. Costs associated with non-secure residential programs vary widely.

### ***Statement Regarding Estimated Costs to Locality and the State***

#### **Cost of Alternative Programs**

Costs associated with funding community-based programs and services are dependent upon the program selected, the intensity of the services, the size of the program, the availability of program “space,” and the estimated operating costs. It is not unusual for alternative programs to receive federal, state and/or local funding through various funding streams and at different times in the life-cycle of a program, making cross-comparisons of true costs very difficult. In addition, programs often share personnel and services which are funded and administered by several different agencies.

#### **Cost of New JDC**

The cost of constructing a new JDC or renovating/re-configuring the existing JDC must be estimated within a range of costs at this time. Further study is required to assess the two options Prince William County is considering. Option one includes renovating/rebuilding the current JDC on the existing site, and option two involves building a new JDC on a separate site. Additional consideration is being given to co-locating an existing non-secure facility (Molinari Shelter) with a new JDC on an alternative site. Co-locating two facilities at an alternative site drastically affects the overall project cost, which is why a wide range in project costs is being given at this time.

Given that design, programming, and option decisions have not been determined and the timeline for a project’s start is unknown, the current project estimates are subject to change. All estimates are provided to assist Prince William County in evaluating their options and alternatives with the expectation that the price range will shrink as plans are solidified in the Planning Study phase. The lower end of the range represents the rebuilding/renovating the existing JDC on the current site, and the higher end of the range represents building a new JDC and potentially co-locating the

Molinari Shelter on a separate site. Given the two options being consider, the projected estimated cost is between \$24,000,000 to \$44,000,000.

***Statement Regarding Impact if a Proposed New JDC is Not Approved***

The impact of not approving a new JDC, in association with the implementation of a comprehensive detention utilization plan intended to control future growth in the JDC population, would be continued reliance on an obsolete secure detention facility and continued concerns for the ability of the County to meet the health, safety and programming needs its youth.

***Appendix***

***Prince William County Court Service Unit  
Program Matrix***

The Prince William County Court Service Unit program matrix is based on providing a continuum of service for based on perceived levels of risk and need. Three levels of risk are displayed in the following table.

Within each Risk level programs are available in the County for youth with three levels of needs – High, Medium and Low.

<b>Level of Risk</b>	<b>Defining Factors</b>
<b>High</b>	Current, ongoing pattern of crimes against people and/or property.
<b>Moderate</b>	Unstable home/school/community environment that puts youth at some risk of re-offense or intensifying existing risk behavior.
<b>Low</b>	No pattern of risk behavior, home/school/community reasonably stable, behavior does not reflect underlying issue that requires intervention.

<b>HIGH RISK YOUTH</b>		
<b>High Need</b>		
Mentoring	Recreational Services	HIDTA Prevention
DSS Foster Care	Post-dispositional Electronic Monitoring	JCSU Parole
Residential	Juvenile Pre-trial Supervision or Non Judicial Sanction	JCSU Intensive Supervision
Residential SA	Pre-dispositional Secure Detention	SHOCAP
Home-based SA	Post-dispositional Secure Detention	JCSU Probation
Private Mental Health Providers	Commitment to DJJ	ANYTRAX Electronic Monitoring
CSB Outpatient	Shelter (MJS)	SOBER Substance Abuse Education
Private home-based Educational Services (limited)	The House - Education Center	House Arrest
Drug Court/D.Ct PO	Gang Response Intervention Team - IPE Program	



<b>Moderate Need</b>		
Mentoring	Post-dispositional Electronic Monitoring	Shelter (MJS)
Cooperative Extension	Juvenile Pre-trial Supervision or Non Judicial Sanction	HIDTA Prevention
Alateen / Alanon	Pre-dispositional Secure Detention	JCSU Parole
Home-based SA	Commitment to State DJJ	JCSU Intensive Supervision
Private Mental Health Providers	ANYTRAX Electronic Monitoring	SHOCAP
CSB Clinic	Post-disp Secure Detention	JCSU Probation
Private home-based Educational Services (limited)	The House - Education Center	Drug Court/D.Ct PO
Recreational Services	Gang Response Intervention Team - IPE Program	SOBER Substance Abuse Education
House Arrest		
<b>Low Need</b>		
Mentoring	Recreational Services	Shelter (MJS)
Cooperative Extension	Post-dispositional Electronic Monitoring	HIDTA Prevention
Alateen/Alanon	Juvenile Pre-trial Supervision or Non Judicial Sanction	JCSU Parole
Home-based SA	Pre-dispositional Secure Detention	JCSU Probation
Private Mental Health Providers	Post-dispositional Secure Detention	SHOCAP
CSB Clinic	The House - Education Center	SOBER Substance Abuse Education
Private home-based Educational Services (limited)	ANYTRAX Electronic Monitoring	Gang Response Intervention Team - IPE Program
House Arrest		

<b>MODERATE RISK YOUTH</b>		
<b>High Need</b>		
Mentoring	Private Home-based Educational Services (limited)	Shelter (MJS)
Cooperative Extension	Recreational Services	HIDTA Prevention
DSS Foster Care	Post-dispositional Electronic Monitoring	JCSU Parole
Residential	Juvenile Pre-trial Supervision or Non Judicial Sanction	JCSU Intensive Supervision
CARE TIP	Pre-dispositional Secure Detention	SHOCAP
CARE EA	Post-dispositional Secure Detention	JCSU Probation
Home-based SA	Commitment to State DJJ	Restorative Justice/Restitution
Alateen/Alanon	ANYTRAX Electronic Monitoring	SOBER Substance Abuse Education
Private Mental Health Providers	House Arrest	Gang Response Intervention Team - IPE Program
CSB Clinic		The House - Education Center
Drug Court/D.Ct PO		
CSB Outpatient		

<b>Moderate Need</b>		
Mentoring	Richard Milburn High School	Shelter (MJS)
Cooperative Extension	Recreational Services	HIDTA Prevention
CARE TIP	Post-dispositional Electronic Monitoring	JCSU Parole
CARE EA	Juvenile Pre-trial Supervision or Non Judicial Sanction	JCSU Intensive Supervision
Alateen/Alanon	Pre-dispositional Secure Detention	JCSU Informal Supervision
Home-based SA	Post-dispositional Secure Detention	SHOCAP
Clinic-based SA	Commitment to State DJJ	JCSU Probation
Private Mental Health Providers	ANYTRAX Electronic Monitoring	Volunteer Prince William
CSB Clinic	House Arrest	Adopt-a-Highway
Private Home-based Educational Services (Ltd.)	The House - Education Center	Restorative Justice/Restitution
Drug Court/D.Ct PO		SOBER Substance Abuse Education

<b>Low Need</b>		
Mentoring	Richard Milburn High School	Shelter (MJS)
Cooperative Extension	Recreational Services	HIDTA Prevention
CARE TIP	Post-dispositional Electronic Monitoring	JCSU Informal Supervision
CARE EA	Juvenile Pre-trial Supervision or Non Judicial Sanction	JCSU Probation
Beacon/Linton Hall	Pre-dispositional Secure Detention	SHOCAP
Private Mental Health Providers	Post-dispositional Secure Detention	Volunteer Prince William
CSB Clinic	Private Home-based Educational Services (Ltd.)	Adopt-a-Highway
Clinic Based SA	ANYTRAX Electronic Monitoring	Restorative Justice/Restitution

JCSU Drug Awareness Program	House Arrest	SOBER Substance Abuse Education
The House - Education Center		

<b>LOW RISK YOUTH</b>		
<b>High Need</b>		
Mentoring	Private Home-based Educational Services (Ltd.)	Shelter (MJS)
Cooperative Extension	Recreational Services	SHOCAP
DSS Foster Care	Post-dispositional Electronic Monitoring	JCSU Probation Restorative Justice/Restitution
CASA	Juvenile Pre-trial Supervision or Non Judicial Sanction	SOBER Substance Abuse Education
Alateen/Alanon	ANYTRAX Electronic Monitoring	JCSU Drug Awareness Program
Private Mental Health Providers	The House - Education Center	
CSB Clinic		
House Arrest		

<b>Moderate Need</b>		
Mentoring	Private Home-based Educational Services (Ltd.)	JCSU Informal Supervision
Cooperative Extension	Richard Milburn High School	SHOCAP
Clinic-based SA	Recreational Services	JCSU Probation
Private Mental Health Providers	Post-dispositional Electronic Monitoring	Volunteer Prince William
CSB Outpatient	Juvenile Pre-trial Supervision or Non Judicial Sanction	Adopt-a-Highway
CSB Clinic	Shelter (MJS)	JCSU Probation Restorative Justice/Restitution
JCSU Drug Awareness Program	The House - Education Center	SOBER Substance Abuse Education
	ANYTRAX Electronic Monitoring	House Arrest

<b>Low Need</b>		
Mentoring	Richard Milburn High School	JCSU Informal Supervision
Cooperative Extension	Pre-dispositional Electronic Monitoring	JCSU Probation
Beacon/Linton Hall	Juvenile Pre-trial Supervision or Non Judicial Sanction	SHOCAP
CSB Clinic	SOBER Substance Abuse Education	Volunteer Prince William
Private Home-based Educational Services (Ltd.)	The House - Education Center	Adopt-a-Highway
JCSU Drug Awareness Program	ANYTRAX Electronic Monitoring	JCSU Probation Restorative Justice/Restitution
House Arrest		

# PROGRAM DESIGN AND PLANNING STUDY

FOR THE

## PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER AND MOLINARI JUVENILE SHELTER

14873 Dumfries Road  
MANASSAS, VIRGINIA 20112

June 4, 2020

**MOSELEY**ARCHITECTS  
A PROFESSIONAL CORPORATION

---

ARCHITECTURE • ENGINEERING • PLANNING • INTERIOR DESIGN • CONSTRUCTION SERVICES

RICHMOND, VA.

## TABLE OF CONTENTS

### EXECUTIVE SUMMARY

### INTRODUCTION

### PART 1 – PROGRAM DESIGN

- Program Goals and Objectives
- Prince William County Department of Social Services
- Education
- Existing Community Programs
- Potential Community Programs

### PART 2 – PLANNING STUDY - JUVENILE DETENTION CENTER, JUVENILE SHELTER, AND JUVENILE SERVICES

- SECTION 1 – Project Description
  - Introduction to Project
  - Design Concept and Operational Needs
- SECTION 2 – Construction Characteristics
  - Site
  - Code Requirements and Construction Standards for The Juvenile Detention Center
  - Security/Detention Approach
  - Code Requirements and Construction Standards for The Molinari Juvenile Shelter (MJS) and Jury Services
  - Special Building Design Considerations
- SECTION 3 – Architectural Programs
  - Introduction
  - Summary of Space Requirements

#### Architectural Program – Juvenile Detention Center

Reception/Lobby/Waiting  
Facility Administration/Staff Support  
Security/Control  
Reception/Release & VSP  
Medical Services  
Visitation  
Juvenile Housing  
Education  
Recreation and Programs  
Food Services  
Laundry  
Maintenance and General Storage  
Central Plant

Architectural Program – Molinari Juvenile Shelter

Reception/Lobby/Waiting  
Facility Administration/Staff Support  
Security/Control  
Reception/Release & VSP  
Medical Services  
Visitation  
Juvenile Housing  
Education  
Recreation and Programs  
Food Services  
Laundry  
Maintenance and General Storage  
Central Plant

Architectural Program – Juvenile Services Administration

Reception/Lobby/Waiting  
Facility Administration

• SECTION 4 – Staffing Analysis

Juvenile Detention Center

Staffing Summary  
Staffing Plan  
Organizational Chart

Molinari Juvenile Shelter

Introduction  
Staffing Plan  
Organizational Chart

Job Descriptions

• SECTION 5 – Project Costs

Juvenile Detention Center

Project Budget  
Facility Operation Budget  
Facility Start Up Costs  
State Reimbursement

Molinari Juvenile Shelter

Project Budget  
Facility Operation Budget  
Facility Start Up Costs  
State Reimbursement

- SECTION 6 – Project Schedule  
Proposed Schedule
  
- SECTION 7 – Drawings  
Site Plans  
First Floor Plan  
Exterior Renderings
  
- SECTION 8 – APPENDIX  
LCR-002  
Detailed Cost Estimate  
Geotechnical Report  
Program Design Questionnaire Responses

## **EXECUTIVE SUMMARY**

The Program Design and Planning Study presented in this report follows the March 2001 “Step-By-Step Procedures for Approval and Reimbursement for Local Facility Construction, Enlargement and Renovation”, a Department of Juvenile Justice (DJJ) publication. Planning Studies for both a replacement Juvenile Detention Center, and a replacement Juvenile Shelter (the County’s “non-secure” facility) are included herein. A previous Needs Assessment Report was prepared in 2018 and approved by the Board of Juvenile Justice. It proposed a need for 50-55 secure beds, which includes 8-16 beds for the Commonwealth’s Community Placement Program (CPP), of which Prince William County is a part, and currently has 8 beds for males in the CPP. Because of the continued decline in the Juvenile Detention Center (JDC) population, Prince William County has determined that their facility should be designed for 48 beds, with expansion space for a future housing pod.

The Molinari Juvenile Shelter (MJS) is an existing 15 bed facility in Prince William County (PWC) providing a non-secure detention facility, which is a temporary residential option for low risk juveniles awaiting court outcomes. The shelter is considered a detention alternative. While the approved Needs Assessment focused on the Juvenile Detention Center, it also made a recommendation for PWC to consider co-locating the existing Juvenile Detention Center and the Molinari Juvenile Shelter on the same site. Currently, the two facilities are approximately sixteen miles apart. The sharing of support services such as food service, laundry, and medical staff would likely result in reduced operational costs and facilitate an improved continuum of care for youth in the County. As part of Prince William County’s goals to keep their JDC population on the decline, they have determined that the MJS plays a key role, and part of the plan presented in this Study is to relocate the Molinari Juvenile Shelter adjacent to the Juvenile Detention Center and increase its capacity to 20 beds.

### **Program design**

The 2018 Needs Assessment Report showed the JDC service area population growing, with a projected growth in the County outpacing the same population growth in the Commonwealth. However, while the general population in the County increased, overall crime incident rate decreased, as have detention admissions to the JDC. Reported crime and crime rates in Virginia have, with some few exceptions, been declining. This declining trend is consistent with crime trends in Prince William County and the cities of Manassas and Manassas Park. With projected growth in the general population in Prince William County, it is reasonable to assume that there will be a need to implement program options and detention alternatives in the County to accommodate continuing pressure on resource needs. Average Daily Populations in JDC’s statewide have been declining due to a decrease in juvenile crime, an increase in the use of diversion and detention alternatives, and the introduction of structured Detention Assessment Instruments.

The research documented in the Program Design shows that Prince William County’s Department of Social Services shoulders most of the detention alternatives provided by the County. Youth will receive services from the Department of Social Services by either Court Order, arrest, referral from Juvenile Court Services Intake, a Shelter Care Order, or/and Emergency Placement Order. When this occurs, the County offers a continuum of program services and alternatives to secure detention based on the need.

When secure detention is needed, the Juvenile Detention Center exists to provide a safe, secure and structured environment that offers therapeutic programming and services which promote positive change, the overall well-being of the youth, and the protection of public safety.



### **Planning Study**

The purpose of this Planning Study is to describe the construction and cost necessary to meet specific needs identified in both the Needs Assessment and the Program Design. The study presents the County's forward-thinking approach to plan a campus for their juvenile justice services on one site, co-locating the JDC, the MJS, and Department of Social Service's Pre-trial program. Each of these three entities is detailed separately for size, cost, and staffing.

### **Site**

Prince William County determined that the County owned site adjacent to the existing Juvenile Detention Center is the preferred location for the new juvenile services campus.

### **Design Concept**

The driving factors for the new JDC are the lack of educational, program, staff, and support space, and the facility's interior configuration, neither of which are in line with the Prince William County's vision to provide a therapeutic, flexible, and operationally secure and safe facility for their County.

One of the guiding and distinguishing principles that is intended to set the new JDC apart is its awareness of and sensitivity to trauma informed design. Trauma informed design acknowledges and assumes that individuals being served at this facility are more likely than not to have a history of trauma in their lives, and to provide an environment that reduce the likelihood of exacerbating trauma-related symptoms. To contribute to the success of juvenile outcomes while at the Juvenile Detention Center or the Molinari Juvenile Shelter, both facilities will be designed with attention paid details such as providing connections to nature, natural light, and views to the outdoors, providing appropriate opportunities for social engagement, and selecting color palettes that are calming.

### **Building Construction and Special Considerations**

The exterior design proposes similar materials for the Juvenile Detention Center and the Molinari Juvenile Shelter but gives each building its own identity. The design gives the appearance of a campus with different buildings that complement each other, not one large building. The MJS will be residential in appearance, as the short-term alternative to secure detention, and its architectural detailing will be more refined, and a smaller scale. The JDC will have a more formal appearance, without being institutional. An angled, accent colored wall will cut across the site, through both buildings, tying them together. The building systems (architectural, structural, mechanical, electrical, plumbing, electronic security, and life safety) and materials will all be integrated, taking into consideration durability, life cycle cost, environmental, and aesthetic issues in order to provide best value for the capital investment.

---

### Architectural Space Programs – Juvenile Detention Center, Molinari Juvenile Shelter, and Juvenile Services Administration

Three separate space programs were prepared. One is for the 48-bed Juvenile Detention Center, the second is for the 20-bed Molinari Juvenile Shelter, and the third is for Juvenile Services Administration and Pre-Trial staff offices. The detailed breakdown is provided in Section 3, starting on page 47 with each program’s departmental and individual space program following. The total gross square footage of each space program is listed below.

Juvenile Detention Center	57,491 square feet
Molinari Juvenile Shelter	17,471 square feet
Juvenile Services Administration	2,178 square feet
<b>Total</b>	<b>77,140 square feet</b>

### Staffing Analysis – Juvenile Detention Center and Molinari Juvenile Shelter

#### Juvenile Detention Center:

The staffing operation of the Prince William County Juvenile Detention Center is divided into two 12-hour shifts providing 24-hour, 7-days per week security coverage. In addition, there is a standard “business shift” for clerical, program, and administrative staff. Just as they currently operate in the existing facility, staff will continue providing juvenile supervision in the housing pods by “direct supervision” methodology. The Juvenile Detention Center staffing plan for a full 48-bed facility consists of 63 total positions. The detailed breakdown is provided on page 83.

#### Molinari Juvenile Shelter:

The staffing operation of the Molinari Juvenile Shelter is divided into three 8-hour shifts providing 24-hour, 7-days per week security coverage. In addition, there is a standard “business shift” for clerical, program and administrative staff. Due to the size of the facility, staff are asked to perform or lend help with a variety of roles in addition to their primary job position. The Molinari Juvenile Shelter staffing plan for a full 20-bed facility consists of 21.5 total (FTE= full time equivalent) positions. The detailed breakdown is provided on page 86.

### Project Costs Juvenile Detention Center

#### Project Budget, Facility Operation Budget, Facility Start Up Costs, State Reimbursement

#### Project Budget:

The Department of Juvenile Justice’s “Step by Step” methodology for estimating reimbursable cost requires the use of R.S. Means cost estimating publications to establish the cost for the LCR 002 form. Basic nationwide square foot cost is used as a basis, then “additive” items are included to account for specific, unique design considerations for the building. Finally, the “location factor” found in R.S. Means is used to qualify the square foot cost based on where the project is located in the United States. Fairfax County, Virginia is the closest match for Prince William County.

The independent cost estimating firm, Downey and Scott, LLC, who prepared a schematic design construction cost estimate for the project, is located in Northern Virginia. They collect current data from construction projects in the area, rather than using a nation-wide average. They have an eye on local labor, the local General Contractors for different construction types, and what is being charged for general conditions, profit, overhead, and other construction related costs. Their estimate for this project is based on the actual building design, size, shape, and materials, while the R.S. Means estimate is based on a basic building type, three stories tall, and a rectangular shape. When there is an absence of an independent estimate, the R.S. Means publications are a good resource to use as a guide, but in this case, Prince William County took the extra step to obtain an independent cost estimate.

Due to the differences in the two methods, the building construction cost estimates vary. The LCR002 form was prepared using both estimates, and both are found in the Appendix of this study. It is the desire of Prince William County that DJJ use the LCR 002 form based on the independent estimate, rather than the LCR 002 based on R.S. Means, because the independent estimate is believed to be more accurate for the proposed design.

The construction contingency uses 3% as recognized and allowed by DJJ. Prince William County and Moseley Architects agree that a higher construction contingency is more prudent in the current construction market environment and recommend between 5% - 10% for a total project cost estimate for a project in the schematic design phase.

	R.S. Means	Downey & Scott
TOTAL ESTIMATED PROJECT COST	\$28,979,115	\$34,839,096

Facility Operation Budget:

It is anticipated that the juvenile population in the JDC will remain flat in the upcoming years, therefore the same amount of food and services that are used in FY2020 will be estimated for FY2025, but the cost for the food and services are inflated at a rate of 2% per year. Economic outlooks consistently predict between 2% – 3% inflation per year for the next few years. Staffing is anticipated to increase modestly in the new building over current levels, mainly as related to the smaller housing pods, and increased therapy, classroom education, and programs that will need therapeutic and security staff coverage. Many of these positions are already filled in the existing JDC, so the salaries and benefits calculated on page 98 are based on known existing conditions. The fiscal year 2025 (FY25) Salary and Benefits Budget for the 63 total positions is calculated to be \$5,434,400 with the JDC One Year Operational Budget for FY25 calculated to be \$6,371,410.

Facility Start Up Costs:

Start-up costs include free standing equipment and start-up costs for staffing and operations. Free standing furnishings, fixtures, and equipment (known as FF&E) includes items placed in the building that are not built in and are not part of the General Contractors scope of work. The start-up costs for staffing and operations includes staff training, staff uniforms, moving expenses, and similar staff costs to be incurred when the new building becomes operational and the youth are moved.

State Reimbursement:

Prince William County understands that there is currently a moratorium on state reimbursement for construction of local facilities. We are seeking approval of the Planning Study from the Board of Juvenile Justice in order to be compliant with the reimbursement process. We as a locality will seek reimbursement from the General Assembly.

Reimbursement is subject to the approval by the General Assembly based on the Board of Juvenile Justice approval of the Planning Study. As allowed by DJJ's "Formula for State Reimbursement of Local Projects", this secure detention project qualifies in the following ways:

1. The JDC is a replacement of the existing facility. At this time, there is not an intended re-use of the building once it is vacated. With the documented decline in youth population, and the intentional effort to re-design the new building differently with a more therapeutic, treatment based approach, Prince William County requests that DJJ look upon this facility as "new construction", as the renovation and expansion formula in the "Step by Step" manual does not apply. The County is requesting 50% of approved cost.
2. Current applicable reimbursement for staffing and operations.
3. Free Standing equipment: up to 50% of total cost. The cap in the 1997 "Step by Step" manual is out of date, and Prince William County requests a higher cap.

4. Start-up funding: up to 1/12 (30 days) of state's share of annual staffing and operating costs.

Consideration and approval from the Board of Juvenile Justice for the Planning Study will result in making us eligible for reimbursement funds for this project which will greatly benefit the localities in helping to offset their local share.

**Project Costs Molinari Juvenile Shelter  
Project Budget, Facility Operation Budget, Facility Start Up Costs, State Reimbursement**

Project Budget:

The Department of Juvenile Justice's "Step by Step" methodology for estimating reimbursable cost requires the use of R.S. Means cost estimating publications to establish the cost for the LCR 002 form. Basic nationwide square foot cost is used as a basis, then "additive" items are included to account for design considerations for the building. Finally, the "location factor" found in R.S. Means is used to qualify the square foot cost based on where the project is located in the United States. Fairfax County, Virginia is the closest match for Prince William County.

The independent cost estimating firm, Downey and Scott, LLC, who prepared a schematic estimate for the project, is located in Northern Virginia. Their estimate for this project is based on the actual building design, size, shape, and materials, while the R.S. Means estimate is based on a basic building type, three stories tall, and a rectangular shape. When there is an absence of an independent estimate, the R.S. Means publications are a good resource to use as a guide, but in this case, Prince William County again took the extra step to obtain an independent cost estimate.

Due to the differences in the two methods, the building construction cost estimates vary. The LCR002 form was prepared using both estimates, and both are found in the Appendix of this study. It is the desire of Prince William County that DJJ use the LCR 002 form based on the independent estimate, rather than the LCR 002 based on R.S. Means, because the independent estimate is believed to be more accurate for the proposed design.

The construction contingency uses 3% as recognized and allowed by DJJ. Prince William County and Moseley Architects agree that a higher construction contingency is more prudent in the current construction market environment and recommend between 5% - 10% for a total project cost estimate for a project in the schematic design phase.

	R.S. Means	Downey & Scott
TOTAL ESTIMATED PROJECT COST	\$9,766,012	\$11,190,804

Facility Operation Budget:

The capacity of the Molinari Juvenile Shelter is increased in the new design from 16 beds to 20 beds (25%). Therefore, the amount of food and some services that are used in FY2020 will be increased by 25% for FY2025, then the cost for the food and services are inflated at a rate of 2% per year. Economic outlooks consistently predict between 2% – 3% inflation per year for the next few years.

Staffing is anticipated to increase in the new building over current levels, due to the increase in the number of beds from 16 to 20. Personnel Services are the largest piece of the facility's operational budget. Many of these positions are already filled in the existing JDC, so the salaries and benefits calculated on page 103 are based on known existing conditions. The fiscal year 2025 (FY25) Salary and Benefits Budget for the 21.5 total FTE positions is calculated to be \$1,882,700 with the JDC One Year Operational Budget for FY25 calculated to be \$2,124,975.

Facility Start Up Costs:

Start-up costs include free standing equipment and start-up costs for staffing and operations. Free standing furnishings, fixtures, and equipment (known as FF&E) includes items placed in the building that are not built in and are not part of the General Contractors scope of work. The start-up costs for staffing and operations includes staff training, staff uniforms, moving expenses, and similar staff costs to be incurred when the new building becomes operational and the youth are moved.

State Reimbursement:

Reimbursement is subject to approval by the General Assembly based on the Board of Juvenile Justice approval of the Planning Study. As allowed by DJJ's "Formula for State Reimbursement of Local Projects", this "less-secure" detention project qualifies in the following way:

1. The Molinari Juvenile Shelter is a replacement and bed expansion of the existing facility. At this time, there is not an intended re-use of the building once it is vacated. With the documented decline in secure detention beds, the Molinari Juvenile Shelter is a secure detention alternative, designed with an educational, therapeutic, and rehabilitative approach. Prince William County requests that DJJ look upon this facility as "new construction". The County is requesting 50% of approved cost.

Consideration and approval from the Board of Juvenile Justice for the Planning Study will result in making us eligible for reimbursement funds for this project which will greatly benefit the localities in helping to offset their local share.

**Proposed Schedule**

A proposed project schedule is indicated on page 108 and replicated below for reference. The anticipated duration from award of design services contract to final completion of construction is approximately four years. The intended construction start is early spring 2022, with a 24-month construction schedule and move-in for both facilities in Summer 2024. In order to meet this schedule, the County is requesting approval from the Board of Juvenile Justice of these Program Design and Planning reports in Summer/Fall 2020.

**Concept Design Drawings**

Drawings are found starting on page 109 of the Planning Study.



## **INTRODUCTION**

The Program Design and Planning Study presented in this report follows the March 2001 “Step-By-Step Procedures for Approval and Reimbursement for Local Facility Construction, Enlargement and Renovation”, a Department of Juvenile Justice (DJJ) publication. In order for the Prince William County Juvenile Detention Center project to be approved by the Board of Juvenile Justice, the following study process must be followed:

1. Prepare Needs Assessment Study: in order to demonstrate the need for a particular service, program or facility.
2. Develop a Program Design: in order to explain why a specific response to a demonstrated need is the most appropriate and cost effective.
3. Prepare a Planning Study: in order to describe the renovation and construction necessary to meet a specific need.

A previous Needs Assessment Report was prepared by Moseley Architects, dated May 29, 2018. This report was submitted to the Department of Juvenile Justice and has been approved. It proposed a need for 50-55 secure beds which includes 8-16 beds for the Commonwealth’s Community Placement Program (CPP) of which Prince William County is a part, and currently has 8 beds for males in the CPP.

Because of the continued decline in the Juvenile Detention Center (JDC) population, even after the 2018 Needs Assessment was approved, Prince William County has determined that their facility should be designed for 48 beds, with space for a future housing pod sized between 8 and 12 beds.

The Molinari Juvenile Shelter (MJS) is an existing 15 bed facility in Prince William County which provides a non-secure detention facility, which is temporary residential option for low risk juveniles awaiting court outcomes. The shelter is considered a detention alternative. As part of Prince William County’s goals to keep their JDC population on the decline, they have determined that the MJS plays a key role, and part of the plan presented in this Study is to relocate the MJS adjacent to the JDC and increase its capacity to 20 beds. This Planning Study will describe in detail this plan and provide the justification, design, and costs associated.

To continue with the next step in the process, this report contains the Program Design and Planning Study, and contains a description of programs and services in the community, and at the existing facility, a proposed project description and design, a schedule, and project costs to meet the needs of the Prince William County JDC and MJS.

Members of the Prince William County Department of Social Services, overseeing this study are:

Courtney Tierney, Director  
Department of Social Services

Ian Sansoni, Deputy Director  
Department of Social Services

Leviticus Bass, Assistant Director of Social Services for Juvenile Services  
Department of Social Services

---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**PART 1  
PROGRAM DESIGN**

---

- **PROGRAM GOALS AND OBJECTIVES**
- **PRINCE WILLIAM COUNTY DEPARTMENT  
OF SOCIAL SERVICES**
- **EDUCATION**
- **EXISTING COMMUNITY PROGRAMS**
- **POTENTIAL COMMUNITY PROGRAMS**



---

## **PROGRAM GOALS AND OBJECTIVES**

The 2018 Needs Assessment Report showed the JDC service area population growing, with a projected growth in the County outpacing the same population growth in the Commonwealth. However, while the general population in the County increased, overall crime incident rate decreased, as have detention admissions to the JDC. Reported crime and crime rates in Virginia have, with some few exceptions, been declining. This declining trend is consistent with crime trends in Prince William County and the cities of Manassas and Manassas Park.

While the statistical forecast described in the approved Needs Assessment stated that the County should plan on a Juvenile Detention Center which will accommodate approximately 55 residents if the County elects to continue to accommodate 8 – 16 additional CPP participants, decision makers may plan on a JDC accommodating fewer residents to keep in line with their declining detention population. This decision would plan for space on site for future expansion. As a cautionary note, historical population trends in the JDC have been somewhat erratic. With projected growth in the general population in Prince William County, it is reasonable to assume that there will be a need to implement program options and detention alternatives in the County to accommodate continuing pressure on resource needs. Average Daily Populations in JDC's statewide have been declining due to a decrease in juvenile crime, an increase in the use of diversion and detention alternatives, and the introduction of structured Detention Assessment Instruments.

This Program Design will describe the program services with goals and objectives within the county for the target population, describing those under the purview of the Department of Social Services, and those in the community at large. The County has determined that a new facility with 48 beds, replacing their existing, is the appropriate response to meet their mission and vision as stated:

### **Mission Statement**

It is the mission of the JDC to **Protect** the community, the staff and youth we serve; **Provide** quality structured programs in a humane environment and **Promote** healthy emotional, educational, social and physical development.

### **Vision Statement**

It is the vision of the JDC to restore and improve public safety through a continuum of services and programs that: effectively supervise juvenile offenders, promote offender accountability to victims and communities by building skills and competencies to assist them in becoming responsible citizens.

Prince William County wants to be able to carry out its mission, and improve the educational, treatment, and rehabilitative programs it offers to the youth in its care, but the physical limitations of existing space make this goal difficult. The new construction project that is planned will improve the operational functions, safety, and security of the facility for both detainees and staff.

Main goals for this project that cannot be realized in the existing building are:

- A building focused on providing trauma informed design to meet residents' needs, and promote mental wellness of residents and staff
- Locating Central Control in front of the building (near the lobby) which will provide secure admission into the perimeter, safe processing of visitors and staff, and ensure proper sightlines to circulation inside the building
- Space for private visits with family/ counselors / attorneys
- Space for educators, classrooms, and vocational programs

- A secure reception area for detainees and law enforcement with secure temporary holding, interview, and adjacent medical screening, and medical isolation
- A secure outdoor activity area that can be easily supervised
- Staff areas for training and meetings
- Recognizing and planning the infrastructure for increased digital and electronic connections within the building
- Aligning with the DJJ standards for design and construction of a secure local detention facility using trauma-informed design standards

The action plan and target dates to achieve these objectives can be found in the “Project Schedule”, Section 7 of the attached “Planning Study.”

### **PRINCE WILLIAM COUNTY DEPARTMENT OF SOCIAL SERVICES**

Youth will receive services from the Department of Social Services by either Court Order, arrest, referral from Juvenile court Services Intake, a Shelter Care Order, or/and Emergency Placement Order. When this happens, the County has a continuum of program services based on the need.

#### **Pretrial Juvenile Program**

This program, considered a detention alternative, provides community supervision for juvenile offenders pending court disposition as an alternative to detention. In addition, the program provides evidence - informed, pro-social, life and decision-making skills that address the criminogenic needs of the participants. The program uses Truthought Training Curriculum as a guiding principle for cognitive behavioral approaches. The Truthought Curriculum is evidence based that encourages clients to evaluate barriers to thinking and to replace those barriers with responsible thinking and behavior. The program is also designed to ensure juveniles do not reoffend and are available to appear at all court appearances.

#### **Molinari Juvenile Shelter**

The shelter is a safe non-secure temporary residential care facility for moderate risk juveniles pending the outcome of their court hearing or pending long-term placement. The facility uses Truthought Training Curriculum as a guiding principle for cognitive behavioral approaches. The Truthought Curriculum is evidence based and teaches problem solving techniques through corrective think. This is considered a detention alternative.

#### **Juvenile Detention Center**

The JDC exists to provide a safe, secure and structured environment that offers therapeutic programming and services which promote positive change, the overall well-being of the youth and the protection of public safety. The facility provides evidence informed, pro-social, life and decision-making skills that address criminogenic needs of the participants. It should be noted that JDC offers a multitude of evidence-based interventions to meet the needs of the mixed population of committed and non-committed juveniles. They are as follows:

- Aggression Replacement Training (for social skill development, anger control and moral reasoning)
- Living in Balance (substance abuse)
- Managing Co-Occurring Disorders (the change process and responsible decision making)

- The Forward Thinking Journal series (juvenile justice topics and self-awareness)
- Boys' Council (male development and maturity)
- Girls Circle (designed to increase positive connection, personal and collective strengths, and competence in girls).

Currently, the existing JDC has a certified capacity for 72 youth, however this is somewhat misleading as the original 24 room housing areas – one third of the capacity - are simply sleeping areas that do not include any day rooms or living space. Currently the DJJ standards require a design where resident rooms are configured around a dayroom or living space and require physical separation by normal sight and sound between male and female residents. The existing facility is (at a minimum) approximately 8,000 square feet below the amount of space required by current standards for a 72-bed detention center. The configuration of the facility does not allow for adequate separation of males and females; neither are there means to separate sex offenders and more violent youth from the very young.

### **Foster Care and Adoptions**

A Resource Team is responsible for training of foster parents and placing foster children. The goal is to keep children safe and to provide families with tools necessary to assist them to parent effectively while maintaining safety for the children. The families are provided various services depending on their individual needs. It is the responsibility of the social worker to coordinate services and to maintain regular contact with the families and children.

Funding to operate these services come for a variety of sources: Through the Virginia Juvenile Community Crime Control Act (VJCCCA) administered by the Virginia Department of Juvenile Justice, Federal Funding (USDA), local resources, and on a per diem basis from the cities of Manassas and Manassas Park for youth in the MJS or the JDC.

### **EDUCATION**

The Education Program is a State Operated Program through the Virginia Department of Education and locally contracted through Prince William County Public Schools, providing 5.5 hours of instruction per day by certified education staff to all youth residing in the JDC or MJS.

The Education Program is defined in Virginia Code (8VAC 20-81-10). The Vision is: State Operated Programs is a collaborative community that empowers each child academically, socially, and emotionally. The stated mission is: A highly effective group of educators will provide safe, innovative, and individualized instruction to a unique group of students to encourage, support, inspire, and prepare them as confident, successful, global students.

All juveniles committed to the facility take part in this program while at the JDC or MJS, and the goal is to move all students towards graduation and celebrate each milestone. They work to empower each child academically, socially, and emotionally by providing a caring environment that serves the whole child. The ages served by this program are 12 – 22 and include services to youth who have graduated from high school or who have obtained a GED.

Deficiencies in the space at the current Juvenile Detention Center create challenges to both the students and educators. Space needs at the JDC include augmenting the Educational Program with adequate space to include a library, office, storage, and meeting space. In addition, more electrical and data connections are needed in the classrooms to have capabilities to support technology demands. Planning and conferencing space are needed for staff and students.

---

### **EXISTING COMMUNITY PROGRAMS**

While there remains a need for secure detention as one option in the continuum of juvenile justice services, there is also a need for community programs which are designed to divert youth from the justice system or from secure detention after they have reached the justice system. In order to gain a better understanding of the programs in the community, a questionnaire was developed to help identify and describe these programs which, in conjunction with secure detention, provide a full continuum of youth services. The questionnaire requested information on programs and stakeholders operating in the community, and in the 31st Court Services District. (A list of the questionnaire recipients and questionnaire can be found at the end of the Program Design. An asterisk next to the questionnaire recipient's name signifies a response was received.)

The following programs were identified:

#### **Prince William County Community Services Probation Program**

One therapist housed at the Juvenile Detention Center provides evaluations, crisis intervention, therapy, and groups. This person coordinates clients at the JDC that need to see a psychiatrist and acts as a liaison between the JDC and Emergency Services for youth that may need hospitalizations. Therapist also provides training to JDC staff.

Another Therapist is housed at probation office sites and provides individual, family, and group evaluations and consultations in conjunction with the local Community Services office that provides evaluations, Intensive Care Coordination, individual, family and group services. Both positions only serve those clients who are involved with DJJ.

#### **Prince William County Community Services Outpatient, Case Management, and School-based Programs**

Providing individual, family, group, and evaluations mainly to clients on probation, however they also serve other populations. Psychiatric Services are also provided to JDC youth.

#### **City of Manassas Intake Diversion Program**

This program is conducted by the City of Manassas for its citizens and youth. PWC has an agreement with the Cities of Manassas and Manassas Park to accept court-ordered youth at the JDC and Molinari. Consistent with PWC's approach to minimize the number of detained youth, the City of Manassas uses a diversion intake program

#### **DJJ Community Placement Program (CPP)**

Select youth are placed in the local CPP at the Prince William County JDC instead of the state correctional facility in Bon Air, VA. This allows CSU probation/parole officers to visit the youth weekly in the JDC and makes it easier for family visitation and participation in re-entry preparation closer to their communities. Currently, the JDC maintains 8 beds for boys for this program.

#### **Prince William County Police Department Administered Programs**

Funding for these programs is primarily through the County's general fund, and periodically through state and federal grants. The police department interacts with all youth on an ongoing basis, with focused

attention on school aged youth, which is estimated at 90,203, and is the second largest school division in the state and the 35th largest in the nation.

1. School Resource Officer: provides safety, security, education and prevention in the high schools, middle schools, and elementary schools.
2. Gang education, training, prevention and enforcement initiatives
3. Boys and Girls Club: Providing mentoring and engagement
4. Police Cadet Program: Provides mentoring and leadership skills to promote a future law enforcement career.

### **POTENTIAL COMMUNITY PROGRAMS**

The questionnaires distributed contained the question, "What type of program(s) would you like to see, that in your opinion, would have a positive impact on affording opportunities for reform or diversion?" The following answers were received:

- A Post-D program at the JDC as a second chance opportunity for some juveniles prior to commitment.
- Structured Transition Program. Re-entry should be considered for juveniles returning to the area who may need a smooth transition back into the community. Juveniles returning on parole status often have a high recidivism rate. This population needs assistance with employment, and GED, and continued training to address social skills.
- Day and/or Evening Reporting Center. Evidence-based detention alternatives provide better outcomes for youth, including a reduction in recidivism/re-arrest rates and failure-to-appear rates, improved educational outcomes, eliminating the need to unnecessarily institutionalize youth, maintaining ties to families and schools.
- Increased Pretrial Supervision and Juvenile Probation: Every juvenile involved in the court system would benefit enormously from having a trained social worker involved in their case management and access to services for the family that can support positive growth for the juvenile. Participation in projects that allow delinquent youth to see tangible success and involve positive re-enforcement for continued good behavior and increased mental health services for juveniles and their caregivers.
- Youth Leadership Development, tutoring, and mentoring, giving youth confidence to compete with their peers, achieve goals, and face common life challenges. Intensive mentoring services to support truancy abatement and increase attendance/achievement in school.
- Programs to teach life skills, family relationships, parenting, employability, and positive decision-making skills. These programs can enhance a juvenile's ability to cope and navigate through life stresses to improve their growth and development.
- Classes for Anger Management, Substance Abuse, and Shoplifting. These types of classes have proven to have positive results.
- Vocational training programs and job placement for older juveniles. Expanded services at the schools from organizations and the private sector that can provide learning experiences and exposure to positive adults/working environments.

- Residential Group Homes and Specialized Foster Care. Where the need arises to care for and improve the overall mental health of children.
- CSU and Juvenile meetings. These meetings are not a new program but are difficult to accomplish due to the space constraints in the existing building. The CSU would like to have a confidential private interview room in the Juvenile Detention Center large enough for a desk, chair and 2 additional chairs. The room should be wired for internet access to the DJJ BADGE data system. Additionally, there should be an intake interview room with storage space for forms and electronic monitoring equipment, in case of an emergency resulting in the closure of CSU offices and the implementation of the Continuity of Operations Plan (COOP) situation requiring processing of detention orders by CSU staff.
- Classification System. Space in the JDC to separate high risk, moderate risk, and gang involved youth from contact with each other
- Gang intelligence and intervention. A structured / proactive gang intelligence and intervention program which communicates with probation regularly.
- Gardening. Allow youth to work outside and learn gardening.
- Services for human trafficking victims.
- Expansion of GED program and the ability to provide access to trade certifications, i.e. auto cosmetics, nursing, etc.

The list above has been compiled from the questionnaires received. Thank you to those respondents for providing their insight and ideas. The full responses from all the questionnaires received are included in the Appendix of this Study.

**QUESTIONNAIRE RECIPIENTS**

(An asterisk \* following the name signifies a response to the questionnaire was received)

Court Services Unit 31\*

Jeffrey Homan  
Director  
9540 Center Street, Suite 200  
Manassas, Virginia 20110  
(703) 792-4785

Prince William County Sherriff's Office

Sheriff Glen Hill  
9311 Lee Avenue  
Manassas, Virginia 20110  
(703) 792-6070

DJJ Division of Community Programs

Dee Kirk  
Regional Manager for Northern Region  
Post Office Box 1110  
Richmond, Virginia 23218  
(703) 307-1072

Department of Community Services

Lisa Madron  
Director  
8033 Ashton Avenue  
Manassas, Virginia 20109

Department of Social Services

Courtney Tierney  
Director, Department of Social Services  
7987 Ashton Avenue  
Manassas, Virginia 20109

Juvenile Detention Center

Mr. John Dowdy  
Superintendent  
14873 Dumfries Road  
Manassas, Virginia 20112  
(703) 792-8282

Ian Sansoni \*

Deputy Director, Department of Social Services  
7987 Ashton Avenue  
Manassas, Virginia 20109

School District

Ms. Lisa Gray \*  
Principal of PWC JDC School  
14873 Dumfries Road  
Manassas, Virginia 20112  
(703) 792-8284

Leviticus Bass\*

Residential Services Division Chief  
7987 Ashton Avenue  
Manassas, Virginia 20109

Dara J. Dugger, M.Ed, Director  
Office of Student Management  
and Alternative Programs  
Post Office Box 389  
Manassas, Virginia 20108  
(703) 791-8595

Bridget Alston \*

Family Support Services Division Chief  
7987 Ashton Avenue  
Manassas, Virginia 20109

Prince William County Police Department \*

(Tom Pulaski for)  
Chief Barry Barnard  
Chief of Police  
5036 Davis Ford Road  
Woodbridge, Virginia 22192  
(703) 792-6650

Ms. Laurie Cooper \*

State Operated Programs Specialist  
Post Office Box 2120  
Richmond, Virginia 23219  
(804) 786-1812

Prince William County

Ms. Tanya Odell \*  
Prince William County Community Services  
Behavioral Health Program Manager

Mr. Hank Millward, Director  
Specialized Education Facilities & Family  
Engagement  
Post Office Box 2120  
Richmond, Virginia 23219

Ms. Betsy Young  
Supervisor of School Social Workers  
P.O. Box 289, Manassas, Virginia 20108

PROGRAM DESIGN AND  
PLANNING STUDY  
for the  
PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
AND MOLINARI JUVENILE SHELTER

---

PROGRAM DESIGN

Prince William Juvenile and Domestic Relations District Court  
31<sup>st</sup> Judicial District of Virginia  
9311 Lee Avenue  
Manassas, VA 20110

Honorable H. Jan Roltsch-Anoll, Presiding Judge, Chief Judge\*

Honorable Lisa Michelle Baird, Presiding Judge \*





How is the program(s) funded (VJCCCA, School Board, Grant, etc):

---

---

---

---

Number of youths served per month: \_\_\_\_\_

Past 12 months: \_\_\_\_\_

Past 3 months: \_\_\_\_\_

How many years has program(s) been in place: \_\_\_\_\_

Distance from your program to the Prince William County Juvenile Detention Home:

Miles: \_\_\_\_\_ Travel time: \_\_\_\_\_

Number of times per week: \_\_\_\_\_ Cost per trip: \_\_\_\_\_

How are juveniles placed in the program(s): \_\_\_\_\_

---

---

---

---

---

---

---

---

---

---

For programs that accept placement as a result of an order from a juvenile and domestic relations court, does the program, in your opinion, provide an alternative to secure detention: \_\_\_\_\_

---

---

---

---



---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**PART 2  
PLANNING STUDY  
JUVENILE DETENTION CENTER,  
MOLINARI JUVENILE SHELTER AND JUVENILE SERVICES**

---

- **SECTION 1 – PROJECT DESCRIPTION**
- **SECTION 2 – CONSTRUCTION CHARACTERISTICS**
- **SECTION 3 – ARCHITECTURAL PROGRAMS**
- **SECTION 4 – STAFFING ANALYSIS**
- **SECTION 5 – PROJECT COSTS**
- **SECTION 6 – PROJECT SCHEDULE**
- **SECTION 7 – DRAWINGS**
- **SECTION 8 - APPENDIX**

---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**SECTION 1  
PROJECT DESCRIPTION**

---

- **INTRODUCTION TO PROJECT**
- **DESIGN CONCEPT AND OPERATIONAL  
NEEDS**

---

## INTRODUCTION

The purpose of this Planning Study is to describe the construction necessary to meet specific needs identified in both the Needs Assessment and the Program Design. This will be done by describing the proposed project, creating conceptual plans and massing, providing an estimate of construction cost, as well as estimating the proposed facility's operational budget. While the approved Needs Assessment focused on the Juvenile Detention Center, it also made a recommendation for the County to consider co-locating the existing JDC and the Molinari Juvenile Shelter on the same site. The sharing of support services such as food service, laundry, and medical staff would likely result in reduced operational costs and facilitate an improved continuum of care for youth in the County. The existing 15 bed Molinari Juvenile Shelter is located at 8642 Wellington Road, Manassas, Virginia.

This planning study presents the County's forward-thinking approach to plan a campus for their juvenile justice services on one site, co-locating the JDC, the MJS, and Department of Social Service's Pre-trial and Probation programs. For the benefit of all readers, subsequent Sections of this study will address each of these three entities separately for size, cost, and staffing.

A previous study initiated by the County investigated available property county-wide to assess suitability for a future JDC and relocated MJS. That study also looked at the feasibility of the existing site and building to handle an addition and renovation. The complexities of phasing the project while maintaining secure operations in the existing facility, and the obstacles to design because of the renovation made this option undesirable.

Instead, the County has determined that relocating the Construction Services branch of the PWC Division of the Public Works, and the adjacent Mosquito and Forest Pest Management Building of Public Works (also known as the "Gypsy Moth" building) is the preferred direction, and the best location for the new juvenile services campus. Public Works would relocate permanently in order for the new buildings to be constructed on their current site. Upon completion, the existing JDC and MJS will close their existing facilities, and move to the new, causing limited disruption to operations, since they will be able to remain in place until the new facilities are ready. The map below provides an overview of the proposed site as described here.



### DESIGN CONCEPT AND OPERATIONAL NEEDS

The rated capacity of the Juvenile Detention Center will be in line with the 2018 Needs Assessment and will be designed for 48 beds. This is slightly below the Needs Assessment number of 55 and is a substantial decrease in the existing certified capacity of 72 in the existing JDC. The County recognizes that the lower population in the JDC will drive the need for additional “less secure” beds in the Molinari Juvenile Shelter. The County has requested that the proposed MJS capacity be increased from 15 to 20 beds.

According to the Center for Trauma Recovery and Juvenile Justice, 93% percent of juvenile offenders have reported experiencing a prior traumatic event. The average number of traumas reported was six. Youth involved in the juvenile justice system have rates of PTSD comparable to those of veterans returning from Iraq (Center for Trauma Recovery and Juvenile Justice).

To contribute to the success of juvenile outcomes while at the JDC or the MJS, both facilities will be designed with attention paid to Trauma Informed Design criteria, including the following:

- The JDC is designed as a facility that will allow youth to **replicate patterns of daily life**. The youth at the JDC will replicate patterns such as getting up and “going to school” in another part of the building and then “coming home” to their units at the end of the school day. There will be ample space for dining, recreation, and programs so that youth will have opportunities to successfully practice navigating daily routines in a structured environment;
- Each facility is designed with an increased **connection to nature and natural light**, as well as views to the outdoors while maintaining security requirements appropriate to the facility’s mission;
- Attention will be paid to **reducing background noise** by HVAC, and to reducing the reverberation caused by the hard surfaces typically found in a secure environment. Acoustical treatments will be added throughout the facility to address background noise and reverberation concerns;
- There are a few areas of different size that are available for supervised **social engagement**. For example, there are smaller recreation areas identified for each unit, as well as larger recreation areas that can be scheduled or shared between units for larger events. There are classrooms, a dining area, and a gymnasium that also offer opportunities for supervised social engagement;
- An important principle of trauma informed design is to offer opportunities to seek quiet **areas of refuge** for those times when a juvenile is having a hard time. At those moments, he or she might need to take some time to refocus. The design includes a reflection room for this purpose. Sleeping rooms and therapist rooms can also be used during these times;
- **Colors and patterns** that are visually appealing are important to provide a calming and not overly stimulating environment. Colors will be selected from a palette of cooler hues and will be applied using simple patterns;
- Exposure to large format images of **nature** will be introduced in appropriate locations as access to nature, even if presented as artwork, has been shown to produce positive health outcomes for incarcerated youth and those employed in justice settings;
- **Suicide resistant** fixtures and furnishings will be included in all areas accessed by youth in the JDC.

Through discussions with the staff of Prince William County Department of Social Services, the staff of the existing Juvenile Detention Center, and in agreement with the Department of Juvenile Justice standards, the following list identified certain operational issues that are a priority in the design of a new JDC facility.

- **Easily supervised and segregated housing units** which permit staff to work closely with youth of various classifications and engage in small group activities as a means of behavior management and positive intervention;
- **Recreation space** which can be used for group recreation and exercise in an easily supervised secure space (indoor and outside);
- **Classroom space** that allows small group educational activities with specific youth classifications;



- **Visiting areas** which provide for both large group and individual visiting outside of youth and program areas, and convenient to the public entrance;
- **Dining areas** which can accommodate residential capacity in one meal seating;
- **Medical services areas** which permit the provision of quality clinic services close to both reception and youth areas; and provide negatively pressurized overnight, temporary “sick” beds for youth when needed.
- **Reception and Release area** providing a secure entrance separated from the public entrance, and a covered vehicle sallyport for safe and secure transfers into the building;
- **Secure Central Control Room** housing a building wide security system of door locks, cameras, intercoms and card readers;
- **Easily managed youth circulation** between youth housing and service areas with sight lines from the Control Room as much as possible; and
- **Truck delivery** area which allows large trucks to enter the site, turn around, unload, and exit (and shared with the MJS).

The same operational discussions occurred for the Molinari Juvenile Shelter, and while some priorities were the same as found in the list above, there are several differences in the way that the MJS operates in a less-secure environment, and with the less-secure DJJ construction standards.

- **Easily supervised housing unit** which is flexible to accommodate any quantity ratio of boys and girls on any given day by having one sleeping dorm, with separate individual shower and toilet rooms, and both male and female staff supervising.
- **Recreation space and Community space** which can be used for group recreation and exercise (indoor and outdoor), visitation, and shared with other Department of Social Services community programs;
- **School** with a distinct entry, and a variety of classrooms to replicate a normal school day, while still meeting individual educational needs;
- **Dining area** which can accommodate residential capacity in one meal seating and have the option of adjacent patio dining experiences outdoors.
- **Reception and Medical area** providing an entrance separated from the public entrance, and including a clinic with a nurse’s station, and a negatively pressurized overnight, temporary “sick” beds for youth when needed.
- **Easily managed youth circulation** between youth housing and service areas.

---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**SECTION 2  
CONSTRUCTION  
CHARACTERISTICS**

---

- **SITE**
- **CODE REQUIREMENTS AND STANDARDS**
- **SECURITY/DETENTION APPROACH**
- **SPECIAL BUILDING DESIGN  
CONSIDERATIONS**

Beginning with the property, this section of the Planning Study describes the physical characteristics and requirements for the design and construction of the site and buildings. While the site characteristics are applicable to the Juvenile Detention Center (JDC), the Molinari Juvenile Shelter (MJS), and the Juvenile Services (JS) buildings of the campus, the codes, construction, and security requirements of the three different uses are not the same. The section of this study titled "Code Requirements and Standards" will describe the JDC separately from the MJS and JS.

## **SITE**

The existing JDC is located at 14811 Dumfries Road, Manassas, VA. This 1,062-acre parcel includes many Prince William County services including the landfill, the JDC, the Mosquito and Forest Pest Management Building (also referred to as the "Gypsy Moth Building"), and the Construction Drainage Maintenance Sign Shop (Public Works Building). The purpose of this feasibility study is to determine the potential for using the portion of the property occupied by the Public Works Building and the Forest Pest Management Building to construct a new combined JDC and MJS on the site. The Public Works Building and the Forest Pest Management Building will be demolished. The following will describe the requirements for the development based on the most current Zoning Ordinance, Comprehensive Plan, and Design and Construction Standards Manual (DCSM) of Prince William County.

### **Existing Conditions**

Currently, the Public Works Building site is enclosed by a fence and contains a warehouse building, an outdoor gravel storage yard, an aboveground diesel fuel tank and pump, and other accessory sheds/structures. The existing warehouse is approximately 14,000 square feet. There is an existing access road to the proposed subject site. Per instrument #200604250063481, portion of this road is maintained by Prince William County and the other portion is maintained by Prince William County Public Schools. The Forest Pest Management Building located to the south of the Public Works Building.

### **Zoning**

The Prince William County Board of County Supervisors site (GPIN 7991-09-6721) is zoned A-1. No zoning issues with the proposed development and use are identified at this time. According to Section 32-201.10 of the Prince William County Zoning Ordinance, public facilities may be located within any zoning district in Prince William County subject to the public facility review (PFR) requirements of the Code of Virginia 15.2-2232.

The maximum height for a building owned by a public use in the A-1 zone is 60 feet provided that all required yards and setbacks shall be increased one foot for each foot in height over 35 feet. The proposed building will meet all required setbacks (35 feet from front lot line, 25 feet from rear lot line, and 15 feet from the side lot lines).

A 50-foot-wide landscape buffer is required on the eastern side of the site along the property line, that adjoins the property owned by L&R Real Estate (GPIN 7991-25-7431). This property is zoned M/T (Industrial/Transportation) and per DCSM section 802.11, a type C buffer is required between these two uses.

### **Demolition**

To prepare for the site improvements, the existing buildings, diesel fuel tank, and accessory structures will need to be demolished and removed from the site. Since the site is currently occupied by the Construction Services branch of the PWC Division of the Public Works and the adjacent Mosquito and Forest Pest Management Building of Public Works, a soil and groundwater investigation is recommended to determine if any hazardous wastes, toxic substances, or petroleum products that require remediation are present on this site.

### **Grading and Topography**

The existing site is wooded with steep slopes and some grassy areas near previously developed parts of the property. There is a stream along the northern part of the property, which is a tributary of Powell's Creek. The stream flows into a wetland that appears to extend to another tributary. There is considerable fall from the south side of the site near Dumfries Road towards the stream on the northern portion of the site totaling approximately 38 feet of elevation change. There is also an existing ravine running between the Forest Pest Building and the Public Works site where the elevation drops approximately 20 feet from the access road to the east side of the site. It will be necessary to maintain a large, flat area to accommodate the proposed improvements that include the new JDC building and the MJS building, in addition to the associated parking areas. A retaining wall is anticipated along the northern side of the access road near the sallyport in order to avoid impacts to the Resource Protection Area. The JDC building itself may be able to act as a retaining wall along the rear of the building depending on where egress doors are located to lower the elevation of the access road behind the building.

A sump with a grate inlet will be needed in the open space between JDC and MJS, in order to prevent water from draining into the building because the building is lower than the road in this location. There is the potential for this to be a rain garden if it is needed to meet BMP requirements.

### **Waterline / Sanitary**

There is a 16" waterline located along Dumfries Road. There are also 6" waterlines running along the existing access road to the Public Works Building. An 8" waterline runs along the property line and serves the existing JDC. It is anticipated that the proposed JDC building will require a minimum of a 12" waterline. In order to meet fire hydrant remote distance of 300 feet, a waterline is anticipated to tap into the existing 16" waterline along Dumfries Road, loop around the rear access road, and tie into the existing 6" waterline running along the existing road. One fireline and one domestic service line are anticipated since the JDC and MJS are combined into one building.

An existing 8" sanitary sewer line is located along the access road and continues in a northeastern direction, becoming a 10" sewer line. There is also a 4" force main located near the southwest corner of the property along Dumfries Road and continues along the western property line, ending near the existing access road. The existing JDC is served by a 10" sanitary sewer line; however, it is anticipated that a 6" sanitary lateral will be sufficient.

### **Storm Drainage / Stormwater Management / BMP**

There are two SWM/BMP facilities located on the existing JDC site, but no facilities appear to exist on the proposed Public Works Building site area. The proposed buildings and the associated parking areas will require SWM/BMP facilities. This construction will need to meet the Virginia Runoff Reduction Method requirements for redevelopment in order to comply with the Prince William County MS-4 Program under the Virginia Stormwater Management Program (VSMP) MS-4 Permit #VA0088595. Several devices/facilities may be required which may include roof drain Modular Wetland Units, porous pavement, bioretention areas, or an underground detention facility. It is unlikely that a traditional dry pond can be utilized due to site constraints. Most of the existing site drains into an offsite dry detention facility. The preliminary site design proposes to drain the access road at the rear of the JDC into this facility. It is recommended to have all of the roof drains for the building to drain towards the front of the building in order to capture most of the site's impervious area into an underground facility located under the parking lot in the front of the building. Nutrient credits will also need to be purchased to meet the BMP requirements. The preliminary evaluation assumes 0.70 nutrient credits will need to be purchased in addition to a Stormtech Chamber underground facility (approximately 500 SC-740 chambers) to meet the SWM/BMP requirements.

### **Environmental**

There is a stream flowing west to east along the northern part of the parcel – a tributary to Powell's Creek. There is also a stream flowing south to north on the adjacent parcel to the east, which joins with the stream along the northern side of the Public Works Building site. That stream has been mapped by the County as perennial. A field reconnaissance and survey were performed in November 2017 in order to assess whether the stream along the northern side is perennial. Based on this study, the tributary is perennial and there are wetlands present. The state and County regulations require a Chesapeake Bay Resource Protection Area (RPA), namely a 100-foot buffer, around any water bodies with perennial flow and their contiguous wetlands. The RPA associated with this perennial stream has been delineated; however, a Perennial Flow Determination (PFD) and a Preservation Area Site Assessment (PASA) will need to be submitted to Prince William County for review and approval. The US Army Corps of Engineers will also need to review and approve the wetland delineation. Any loss of or changes to wetlands and/or streams will require some form of permit from the US Army Corps of Engineers and the Virginia Department of Environmental Quality, prior to actual construction. The smaller the impact, the smaller the effort that will be required to get those permits. If the impacts can be kept below 1,500 linear feet of stream and 1 acre of surface waters/wetlands, they will qualify for authorization under the US Army Corps of Engineers State Program General Permit and the Virginia Department of Environmental Quality Wetland Protection General Permit # 4. The current layout is not proposed to impact the stream or wetland areas.

### **Site Electrical / Communication**

There are existing overhead utility lines along Dumfries Road and along the western property line of the near the existing Juvenile Detention Center. Existing utilities serving the existing Public Works Building will need to be analyzed to determine if they can be reused. Otherwise, additional communication, electric, and phone lines will need to be installed to the new building.

### **Site Plan Processing**

According to Section 32-800.10 of the PWC Zoning Ordinance, a site plan is “required for nonresidential uses within the agricultural and residential districts. The purpose of this plan is the demonstrate compliance with state and local development regulations as well as the provisions of the zoning ordinance.” If this project moves forward, then a site plan will need to be prepared in compliance with the Prince William County Design and Construction Standards Manual. This plan will be submitted to Prince William County Development Services who, in turn, will distribute the plan to other agencies for their review and comment. The site plan approval process can typically take anywhere from 4-8 months depending on the complexity of the project.

### **CODE REQUIREMENTS AND CONSTRUCTION STANDARDS FOR THE JUVENILE DETENTION CENTER (JDC)**

The prevailing code at the time of this Planning Study is the Virginia Uniform State Building Code (VUSBC), 2015 edition, and the Virginia Construction Code (VCC) applies to new construction.

Prince William County Juvenile Detention Center is defined as a mixed-use building, which means there are differing use groups and occupancies in the building. The main use groups are I-3, Condition 4, institutional, and B business. The building code will allow for either a *separated mixed use*, with fire barriers separating the uses, or *non-separated mixed use*. The trade-offs will be studied further as the design progresses. The Construction Type will be either IB or IIA, both requiring fire protection of the structural frame.

In addition to the Virginia Uniform Statewide Building Code, the Juvenile Detention Center construction is guided by other state and federal standards, including the standards from the Virginia Department of Juvenile Justice, titled "Guidelines for Minimum Standards in Design and Construction of Juvenile Facilities", January 2001, and Department of Juvenile Justice's published 2014 Detention Regulations. This project will conform to these standards, except where exceptions may be granted. Many of the standards, as they relate to the space needs of the building, are described in the "Architectural Space Program" in Section 3 of this study. The project will also comply with applicable requirements of the current addition of ADAAG for accessibility and the federal "Prison Rape Elimination Act" (PREA).

Prince William County and the DJJ have discussed the inclusion of Trauma Informed Design principles in the design of the JDC. Sometimes Trauma Informed Design principles are not in strict adherence to the current security design standards published by the DJJ. In these cases, the DJJ has agreed to review the standards and work with PWC to adjust the design standards to incorporate Trauma Informed Design principles while still maintaining a secure environment. This work will inform DJJ's ongoing Transformation Plan and their effort to update their security design standards.

### **Size and Capacity**

The total gross floor area of the JDC as currently designed is approximately 58,300 square feet. The designed bed count is 48 beds, designed for both male and female juveniles. The housing units are configured as four-10 bed units, and one-8 bed unit. The 10 bed units are designed with flexibility to use as either one-10 bed unit, or two-5 bed units.

The building will be designed on a single level, eliminating the need for stairs and elevators inside the building, providing for operational efficiency, safety, and security.

### **Building Materials**

Both secure construction materials and methods, and non-secure, heavy duty commercial construction will be used in this building, depending on whether that portion of the building is within the secure perimeter, or outside the secure perimeter. The "secure perimeter" forms a boundary for the building consisting of walls, roof, and floor where the juveniles are held, and may be an interior or exterior wall, or an outdoor wall. Entry into the building's secure perimeter is through a secure interlocked vestibule (aka "sallyport"). Outside the secure perimeter are building functions that will not be built with the same security and detention grade materials. These areas include the main public lobby, the administration area, the maintenance shop, the mechanical and electrical plant, and the staff support area.

As described by the DJJ standards, the majority of interior and exterior walls within the secure perimeter of the building will be Concrete Masonry Units (CMU), reinforced and grouted solid. The exterior wall assembly of the building will consist of cavity wall construction, with CMU as the interior wythe of the wall and the secure barrier. Rigid insulation in the wall cavity will provide continuous insulation for the thermal barrier, and the exterior veneer of the building will be decorative brick, stone, and/or block.

To continue the secure perimeter at the roof, concrete will be used over steel deck. In the non-secure areas, the concrete may be eliminated. Both types of roofs will have rigid insulation and a membrane roof covering. Accent sloping roofs will have a standing seam metal roof over the deck and/or concrete. The floor will be slab on grade concrete throughout.

Doors and windows will have the same criteria – doors and windows inside the secure perimeter will be detention grade in all juvenile accessible areas with detention hardware, and the doors and windows outside the perimeter will be heavy-duty commercial grade. The administration wing and lobby has large expanses of glass, which is planned to be aluminum storefront and curtain wall with insulated glass.

The building has a unique design feature of trauma informed design to include not only daylight, but views to outside and nature. Glazed openings from the dayrooms, the main corridor, classrooms, and dining room will have with large glass openings into recreation yards and/or gardens. These outdoor spaces are designed to still be inside the secure perimeter, so the glazing does not necessarily need to be polycarbonate security glazing, nor does it need to have bars over the windows. Future discussions with DJJ about the appropriate glazing product will be planned as the design progresses.

**Finishes**

Preliminary finish selections are as follows:

SPACE	FLOOR	WALL	CEILING
Offices	VCT	Painted	Lay-in
Main Corridors	VCT	Painted	Lay-in*
Toilets (residents)	Exposed	Painted	Security Drywall
Showers	SS	SS	SS
Toilets (staff)	Ceramic Tile	Ceramic Tile/ Painted	Drywall (Security Drywall in Secure Perimeter)
Kitchen	Quarry Tile	Painted	Vinyl coated Lay-in*
Classrooms	VCT	Painted	Security Metal
Gymnasium	Wood	Painted	Exposed construction
Housing Dayrooms	Exposed/ Carpet	Painted	Acoustical Security Metal
Housing sleeping rooms	Exposed	Painted	Maximum Security concrete or steel
Dining	VCT	Painted	Security Metal
Mech/Elec/Storage	Exposed	Painted	Exposed

- VCT = Vinyl Composition tile
- Drywall = Gypsum Wallboard
- Security Drywall = Gypsum Wallboard with a layer of steel security mesh
- Lay-in = Suspended lay-in acoustical panels – 2 x 4 or 2 x 2
- Security Metal = Suspended perforated steel with acoustical batts or perforated steel planks for higher security areas
- SS = Stainless Steel

\* Lay-in ceilings in Juvenile areas will be limited to areas under supervision and above 10' in height. Impact clips will be used to hold acoustical panels in place.

**Structural:**

Structural Systems

The proposed Prince William County Juvenile Detention Center located in Manassas, Virginia shall be a one-story building founded on shallow foundations consisting of continuous strip footings for walls, as required. Foundations will be at minimum depth and shall be sized for allowable soil bearing pressure, contingent on the final geotechnical report. The building shall have a 4" reinforced concrete slab on grade. A 6" reinforced concrete slab on grade shall be utilized at the vehicle sallyport.

The building shall utilize exterior load-bearing masonry cavity walls with brick, stone, or block veneer, and interior masonry bearing walls. Inside the building's secure perimeter, the roof system shall be 1-1/2" composite steel deck with reinforced concrete slab, supported on open web steel joists and long-span open web steel joists at the gym, as required. Outside the building's secure perimeter, the roof system shall be 1-1/2" steel roof deck supported on open web steel joists. The proposed sloping clerestory elements shall utilize additional steel framing built off interior cmu bearing walls. All sleep rooms shall be constructed with masonry. Lateral forces shall be resisted by reinforced masonry shear walls and steel roof deck (with and without concrete slab) diaphragms in both directions.

Design Loads

Design live loads shall be in accordance with the Virginia Uniform Statewide Building Code, 2015 Edition (IBC 2015); Risk Category III.

Dead Loads: Actual calculated weight of permanent construction

Minimum Floor Live Loads:

Mechanical Rooms - 150 PSF  
Storage and Data Rooms - 125 PSF  
Lobbies/Vestibules and Corridors - 100 PSF  
Conference Rooms - 100 PSF  
Offices and Classrooms - 50 PSF  
Sleep Rooms - 40 PSF

Roof Loads: 20 PSF or Snow Load, whichever is greater

Snow Loads: Ground Snow Load,  $P_g = 30$  PSF  
Flat Roof Snow Load,  $P_f = 23.1$  PSF  
Sloped Roof Snow Load,  $P_s = 23.1$  PSF  
Snow Importance Factor,  $I_s = 1.10$   
Exposure Factor,  $C_e = 1.0$   
Thermal Factor,  $C_t = 1.0$

Wind Loads: Basic Wind Speed (3 second gust),  $V = 120$  MPH  
Exposure = Exposure Category B  
Internal Pressure Coefficient,  $GC_{pi} = +0.18, -0.18$

Seismic Loads: Site Class = D (assumed, pending geotechnical report)  
Seismic Importance Factor,  $I_e = 1.25$   
Seismic Design Category = B  
Spectral Response Acceleration



at short periods,  $S_s = 0.127$   
Spectral Response Acceleration  
at 1-second period,  $S_1 = 0.053$   
Basic Seismic Force-Resisting Systems:  
Bearing Wall Systems: Intermediate Reinforced Masonry Shear Walls  
Analysis Procedure: Equivalent Lateral Force Procedure

#### Applicable Codes and Standards

Virginia Uniform Statewide Building Code (VUSBC), 2015 Edition

Minimum Design Loads for Buildings and Other Structures/ASCE 7-10

American Concrete Institute (ACI) - Building Code Requirements for Structural Concrete and Commentary/318-14

American Concrete Institute (ACI) - Building Code Requirements and Specifications for Masonry Structures/530-13/530.1-13

American Institute of Steel Construction (AISC) – ASD Manual of Steel Construction/13th Edition

American Institute of Steel Construction (AISC) – Specification for Structural Steel Buildings/ AISC 360-10

Steel Joist Institute (SJI) – Standard Specifications, Load Tables and Weight Tables for Steel Joists and Joist Girders/44<sup>th</sup> Edition

Steel Deck Institute (SDI) – Floor and Roof Deck Design Manuals – No. FDDM and No. RDDM

#### **Mechanical:**

##### Code References

The proposed HVAC systems were analyzed, and recommendations made referencing design standards from the International Mechanical Code (2015), International Plumbing Code (2015), and NFPA. ASHRAE Standard 62.1 – 2013 was referenced to determine ventilation requirements and assumed occupancy loads for the facility.

##### Heating System

A central boiler plant utilizing multiple, natural gas-fired, modular condensing boilers in the mechanical room is recommended. The use of modular boilers provides increased efficiency at partial load and provides redundancy. The central boiler plant will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

It is recommended that three (3) 400 MBH boilers be provided to serve the facility. This quantity of boilers provides a level of redundancy so that if one boiler fails, the remaining boilers can satisfy 67% of the full load of the building. The boilers shall generate 140°F water, and the return water temperature shall be 100°F. This temperature differential increases boiler efficiency, reduces pump gpm, and reduces the required size of installed piping when compared to a traditional heating hot water distribution system.

The heating hot water distribution system will operate as a variable-primary system; however each boiler will be equipped with a dedicated boiler circulation pump to ensure minimum flow through each boiler.

Two (2) variable speed pumps operating in parallel will circulate water through the heating hot water loop. The use of variable speed pumps reduces energy consumption and provides proper temperature control.

#### Air Handling Units

Multiple air-cooled, packaged, variable air volume (VAV) rooftop air conditioning units will serve the JDC. These units will be equipped with direct expansion (DX) cooling and hot water heating coils. Terminal units will be equipped with hot water reheat coils to control temperature in the spaces they serve. Depending on the application, energy recovery may or may not be used. For example, energy recovery is typically not used in medical areas due to concerns of cross-contamination between the exhaust and ventilation air streams. Additionally, the medical areas will be under a negative pressure in relation to the remainder of the facility to mitigate the transmission of contagious diseases and viruses. The cells in the medical area will be under a negative pressure in relation to the remainder of the medical area to provide spaces to further isolate youth with contagious diseases and viruses. All units serving the JDC will include UV lights and filtration to provide additional measures to ensure required indoor air quality.

Numerous rooftop exhaust fans will exhaust air from bathrooms, janitor closets, electrical rooms, and similar areas. Shower areas will have local exhaust grilles to ensure moisture is removed from those areas to prevent indoor air quality issues. Exhaust fans will also serve various kitchen functions such as kitchen hood and dishwasher exhaust.

#### Smoke Management System

A smoke management system will be provided to maintain pressure differentials and exhaust smoke where required by code in the I-3 area. The strategy used will include a series of exhaust and supply fans along with smoke dampers to provide a negative pressure in the space where smoke is detected and to provide a minimum of 24 air changes per hour. Other spaces will be positively pressurized to prevent migration of smoke into a smoke free space. Corridors and egress elements will be pressurized with outside air to reduce the possibility of smoke entering egress elements. Dampers involved in the smoke management strategy will be UL listed smoke dampers and will be selected to fail in their smoke management position. Smoke management control sequences will be exclusively controlled by the Fire Alarm System.

#### Building Automation System

A web-based direct digital control (DDC) building automation system (BAS) is recommended for the facility. The system allows for control strategies that optimize performance and reduce energy costs of the various HVAC systems. A web-based BAS also allows for external monitoring as well as integration with the security and fire alarm systems. The BAS will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

#### **Plumbing/Fire Protection:**

##### Code References

The proposed plumbing and fire protection systems were analyzed, and recommendations made referencing design standards from the International Mechanical Code (2015), International Plumbing Code (2015), and NFPA.

### Plumbing Fixtures and Equipment

Plumbing fixtures accessible to the youths shall be vandal resistant, stainless steel penal fixtures. Showers accessible to youths will be pre-manufactured stainless-steel compartment type fixtures with integral controls. Plumbing fixtures in the single rooms shall be vandal resistant, stainless steel combi-type penal fixtures. It is recommended that penal fixtures employ electrically operated push buttons linked to Master Control and be coordinated with the security systems. Fixtures for staff use shall be standard commercial grade plumbing fixtures. Fixtures accessible to the physically handicapped shall be provided where required.

### Domestic Water Piping System

A flow test has yet to be conducted, however based on the existing infrastructure it is not anticipated that a domestic water booster pump package will be required. This will need to be confirmed during design. The domestic water service and hot water system will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

A 6" domestic water service will be fed from the site water main and will enter the building in the mechanical room. A reduced pressure zone (RPZ) backflow preventer shall be installed in the domestic water service to prevent potential contamination of the public water supply.

The domestic hot water system shall consist of multiple gas fired water heaters. The water heaters shall be zoned to serve common areas and use types (ex. – Food Service, Laundry, and Housing Units). This arrangement reduces the required pipe sizes and total length of domestic hot water piping. The domestic hot water temperature for non-inmate areas shall be 120°F. Tempered water (90°F) shall be provided to inmates by blending the 120°F water with domestic cold water. Gas fired water heaters shall generate 140°F for use in the Food Service and Laundry areas. Circulation pumps shall maintain the water temperature for each domestic hot water system. The temperature of each system will be monitored by the building automation system.

### Sanitary Piping System

Several sanitary mains shall serve various portions of the building and will exit the building before joining to form a common site sanitary main. The exterior site sanitary main shall connect to the municipal sanitary system. A grinder station will be provided on site prior to the connection to the municipal sanitary system. The grinder station will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

Piping systems for the proposed facility will be standard weight cast iron no-hub above floor and PVC below ground. Institutional waste fittings shall be installed at the fixture serving inmate areas and floor drains shall also be installed in the units.

The Kitchen shall be served by an independent drainage system. This system will be cast iron below the slab and shall lead to a grease interceptor prior to connecting to the primary sanitary system.

### Storm Water Piping System

The storm water piping system for the proposed facility will be designed to discharge by gravity to the site storm water system. Roof overflow will be accommodated by means of an independent safety overflow system discharging in readily visible locations.

### Natural Gas

A natural gas line will be extended to serve the building and enter in the mechanical room. Depending on the utilization rate of the facility, some or all of costs to extend the line could be waived by the gas company. Gas-fired equipment will likely consist of HVAC equipment, plumbing equipment, and kitchen equipment.

### Fire Protection

A flow test has yet to be conducted, however based on the existing infrastructure it is not anticipated that a fire pump will be required. This will need to be confirmed during design. The fire sprinkler service will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

A 6" sprinkler main shall feed off from the site water main. A double detector check valve shall prevent water from the sprinkler system from contaminating the public water supply. A hydraulically calculated wet type sprinkler system shall be designed in accordance with NFPA-13. Areas accessible to youths will employ institutional style sprinkler heads. The effectiveness of institutional style sprinkler heads varies depending on manufacturer where Moseley has experience with one manufacturer being considerably better than others. Discussion during design should occur concerning the possibility of sole sourcing the specifications of the sprinkler heads which would require a waiver. Areas subject to freezing will be served by dry-type pendant sprinkler heads. All other areas will have standard heads.

### **Electrical:**

#### General Provisions

The electrical portion of the work will consist of providing building power, lighting, communication raceways and boxes, and fire alarm systems for the facility.

All electrical work shall be in compliance with all applicable Federal, State, and local laws and regulations governing standards of design, construction, workmanship and material. Electrical work shall be in compliance with the latest-adopted National Electrical Code (NEC).

#### Electrical Service

Primary power will be distributed from the utility company underground line via a ductbank. This will be routed to pad-mounted transformers located adjacent to the building. Primary work will be by the utility company. The transformers will be pad-mounted and will supply secondary power to a main electrical room located in the building. Secondary services to the building will be 480/277 volt, three phase, four wire via underground ductbanks. The service size is estimated to be 2,000 amps. The electrical service will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

The service voltage (277/480V) will be used to power major equipment such as HVAC equipment, kitchen equipment, motor loads above ½ hp and lighting. The Main Distribution Switchboard will distribute power from the incoming service to smaller electrical rooms located throughout the building.

#### Electrical Distribution

A main switchboard, rated as indicated above, will be located in the main electrical room. The main service disconnect device will be power type circuit breakers. The feeder circuit breakers will be group mounted molded case circuit breakers. Ground fault protection will be provided at the main circuit breakers. Surge protection will also be provided at the main switchboard. There will be an emergency

switchboard fed by a transfer switch. Motor control centers (normal and emergency) will be provided for air handlers, fans and pumps for the heating system. The motor control centers will be located in the mechanical room(s).

Power will be distributed from the main electrical room at 277/480 volts to panelboards located in various areas of the facility. Power for receptacles, appliances, youth room lighting and other devices will be provided at 120/208 volts, three phase, four wire via dry type transformers. Large mechanical loads, such as rooftop air conditioning units, will be fed directly from the main switchboard. Other mechanical loads will be fed from local panels. Adjustable frequency drives will be furnished for select mechanical equipment as will be indicated in the HVAC documents.

Power and lighting circuits serving youth accessible areas shall be routed through relay panels to allow low-voltage remote control of these circuits by the security electronics system, either automatically by program or manually using the security system touch screens.

Motors 1/2 hp and lower will be supplied by 120V circuits. Motors above 1/2 hp will have individual 480V circuits. Motors will be the high efficiency type. Motors supplied by adjustable drives will be fabricated with cast iron frames.

#### Standby Power Generator System

The entire facility will be on emergency power supplied by two emergency diesel generators in parallel, approximately 500 KW each, located outdoors in the mechanical equipment yard. The emergency electrical equipment will be housed in a separate room from the normal power electrical equipment. The generators will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

The generator will have a sub-base fuel tank with a storage capacity for a minimum of 48 hours runtime. An option of providing a tank with a capacity of 72 hours will be evaluated during design. The generator will be housed in a weatherproof, sound attenuated enclosure. A platform may be required around the generator if the sub-base fuel tank height is 30" or more.

The generator shall carry the following life safety (NEC 700) loads via a dedicated automatic transfer switch and distribution system: emergency egress lighting, security control system, fire alarm notification system and other loads deemed life safety by the authority having jurisdiction (AHJ).

The generator shall carry the following legally required (NEC 701) loads via a dedicated automatic transfer switch and distribution system: smoke control system and other loads deemed as legally required standby systems by the authority having jurisdiction (AHJ).

The generator shall carry the remainder of the facility loads (optional standby NEC 702) via a dedicated automatic transfer switch and distribution system.

All automatic transfer switches will have a bypass isolation switch. If a fire pump is deemed to be necessary, then it will be fed from a dedicated breaker at the generator. The generator load size above does not include a fire pump.

#### Uninterruptable Power Supply System (Ups)

An uninterruptable power supply (UPS) system shall be provided for the security electronics power systems. These systems include the door locking system, CCTV system and security computer and control systems. For loads other than the security system, including telephone and computer network equipment, the owner will provide their own local UPS systems as required.

### Electrical Site Work

The electrical site work will consist of the trenching and backfilling required for underground distribution. The underground distribution will consist of Schedule 40 PVC conduits in a concrete ductbank. These will run from the service connection at the main switchboards to the utility transformers on the site. The utility transformers will be provided with a concrete base.

The underground communication conduit system shall consist of a ductbank of schedule 40 polyvinyl chloride (PVC) conduits embedded in concrete, from the property line to the communications MDF room. The ductbank shall contain sufficient conduits for incoming telephone, internet, and cable television services. If cable television is not available at the site, provisions will be made for satellite television dishes on the roof.

### Lighting

The lighting design will be in accordance with recommendations of the Illuminating Engineering Society of North America and DJJ standards for detention centers.

Lighting fixtures will primarily be LED fixtures. Other lamp types will be considered for specialty areas. LED fixtures have lamps rated at a minimum of 50,000 hours life.

Local switches for the control of lighting shall be provided to serve individual spaces, except youth areas which will be controlled through the security system via relays operated by a touch screen panel. Certain areas, such as conference rooms and offices, will be provided with occupancy sensors to turn off the lighting in the spaces when they are unoccupied.

Types and grades of fixtures for specific areas will be as follows:

- a. Offices and Corridors (non-youth areas): Recessed LED fixtures. Fixtures will be the recessed indirect type. Lighting levels shall be 50 FC in the offices and 20-30 FC in the corridors.
- b. Offices, corridors, Housing Units (youth areas): Surface and recessed LED vandal-resistant polycarbonate lens fixtures. Lighting levels shall be 50 FC in the offices and 20-30 FC in the corridors.
- c. Youth Rooms: Wall or ceiling mounted LED maximum-security type fixtures. Lighting levels shall be 20 FC minimum at youth desk and grooming areas with an average level of 6 FC in the room. Each room will have a night light which will be on emergency power (life safety branch). There will be controls to turn off lights in the youth areas from the control room.
- d. Mechanical, Electrical, Storage and other Utility Areas: Wraparound type LED fixtures either surface or pendant mounted. Lighting levels shall be 30 FC.
- e. Exterior and Site Lighting: LED wall and pole mounted outdoor fixtures that meet the requirements for "Dark Skies" compliance. The fixtures will be the cutoff type to prevent spill light and has a cutoff angle about 15 degrees below the horizontal. Site lighting will be controlled by the security system and photocells via lighting contactors or relays. Staff and visitor parking areas will be designed to provide an average light level of one (1) footcandles with a minimum of two-tenths (0.2) footcandles. Lighting levels to one-tenth (0.1) footcandles at the property line
- f. Exterior Lighting-Youth Areas: These fixtures will be LED. Lighting levels shall be 3 FC average with a minimum of 0.5 FC.
- g. Egress Paths: Lighting levels will be 1 FC average with a minimum level of 0.1 FC. The lighting uniformity (maximum to minimum) shall not exceed 40:1.
- h. Exit Signs: These fixtures shall be the LED type, single or double face as required. They will be vandal resistant in inmate areas.

All emergency lighting shall be powered by the normal and life safety power systems. The life safety system will energize in less than 10 seconds in the event of an outage. Battery packs or inverters will be provided in areas which require instant on lighting in the event of an outage on the normal system (where inmates and correctional staff may be in the same area).

#### Devices, Conduits and Conductors

All devices such as light switches and receptacles shall have a minimum rating of 20 amps, 120 volt for receptacles and 277 volt for switches. Device covers shall be security grade in youth accessible areas where such protection is deemed necessary and shall be constructed of stainless steel or plastic in other areas. Receptacles located in "wet" areas shall be GFI rated. Outdoor devices will be provided with cast metal weatherproof "in-use" covers.

Conduits shall be used for all systems 24 volts and higher. Minimum trade size conduit allowed shall be  $\frac{3}{4}$ ". All conduits shall be concealed where possible. The classification of conduit usage allowed shall be as follows:

- a. Underground/Under Floor Slab: PVC Schedule 40.
- b. Parking/Roadway, Heavy Traffic: PVC Schedule 80.
- c. Outside the Secure Perimeter: Electrical Metallic Tubing, Steel Fittings.
- d. Inside Secure Perimeter/Accessible Exposed Conduit: Rigid Steel.

Conduit shall run exposed in mechanical equipment and utility spaces. In all other spaces, it shall be concealed above ceilings, in shafts and in furred spaces. Flexible connections to light fixtures, devices and equipment within the secure perimeter may utilize liquidtight flexible conduit with a maximum length of four feet.

All screws and fasteners in electrical systems within the security perimeter shall be tamper resistant security screw type, requiring a special tool.

Branch circuit wiring for power and lighting shall generally be type THHN/THWN. All conductors No. 10 AWG and smaller shall be solid copper. All conductors No. 8 and larger shall be stranded copper. All power conductors shall be insulated for 600 volts.

#### Fire Alarm System

The fire alarm system will be fully addressable complying with the NFPA 72 and local codes. The fire alarm system will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter and be monitored by a third party.

The activation of a manual or automatic device will initiate audible and visual indicating functions. The system will include fire alarm programmed dry contacts or signals for security electronics and building automation system monitoring of the fire alarm system status. Fire alarm system device wiring will be UL-listed multi-conductor cable fire alarm cable run in a "daisy chain" to each device via conduit. Conduits will be kept separate from building power wiring and other systems such as telephone, building automation system (BAS), and data cabling.

Manual pull stations, smoke, heat and duct detectors, alarm horns and visual devices will be located at all required locations to provide full coverage of the facility. Horns and strobes will be located to provide the code required visual (flash rate and intensity) and audibility requirements. Duct detectors will also be provided in all return ducts for all air handling units greater than 2000 CFM. Smoke detectors and indicating devices shall be mounted as high as possible and be covered with heavy gauge wire mesh cages securely fastened to the surface if mounted lower than 12 feet above the floor in secure areas.

The system will interface with sprinkler flow and tamper valve switches and any other sprinkler components in the building, respectively. Fire protection systems are as identified as follows:

- Wet-pipe building-wide NFPA 13 sprinkler system with dry-pipe pre-action systems.
- Pump controllers (if pump required).

#### Telephone, Data and Cable Television Systems

The MDF/Entrance Room will serve as a demarcation room and main distribution room for the facility. The room will be provided with plywood backboards. All rooms and closets will have adequate space, ventilation, and cooling and active networking equipment in standard 22-inch racks provided by the owner. The telephone, data, and cable television systems will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

Intermediate distribution IDF rooms will be located throughout the facility and would require approximately 80 square feet of space each. IDF rooms will be equipped with two dedicated quad electrical circuits (120V 20A) installed. In addition, duplex receptacles will be provided at 4 foot intervals along the length of the four walls at 18" above the finish floor. Walls will be provided with plywood backboards as required.

Data and telephone boxes will be located throughout the facility. The outlet boxes will have conduit back to the nearest telephone data closet. Locations of outlets will be coordinated with the owner.

Cable television (TV) outlets will be provided to serve television outlets in housing units and other spaces as required by the owner. Coax cable will be run from the TV outlets to the nearest communication closet.

#### Lightning Protection System

A lightning protection system will be provided. Down conductors will be provided along with new ground rods and ground loop. The entire system will be UL Master labeled. A NFPA 780 assessment will be done to determine the lightning risk to the facility.

#### **SECURITY / DETENTION APPROACH**

Detention and security solutions shall follow both the Department of Juvenile Justice (DJJ) "Guidelines for Minimum Standards in Design and Construction of Juvenile Facilities" January 10, 2001, and specific details determined by the user to be applicable to this facility.

The security perimeter of the facility will be composed of interior and exterior security walls, grouted and reinforced to meet DJJ construction standards.

All entrances into the facility's security perimeter shall be through interlocked sallyports controlled from Master Control. All doors in sallyports will be detention doors (please note the Department of Juvenile Justice allows emergency exit doors to not be sallyported, upon their review and approval).



A Vehicle Sallyport (VSP) will provide additional security for law enforcement and transport vehicles that are moving youth in and out of the facility and will provide protection from the weather by being covered. The coiling doors of the Vehicle Sallyport should be interlocked with the building's security door entering the VSP.

The Master Control Room will be inside the secure perimeter next to the main Lobby, with windows allowing line-of sight into the Lobby, and into both the sallyport and hallway leading into the secure area. Master Control will be the hub of the security control system for the building. It shall utilize a touchscreen electronic control console to both remotely control and monitor the various security control devices (i.e., door locks, intercoms, CCTV cameras). This station should be staffed 24 hours per day, 7 days per week.

All holding areas and detention-related areas will be constructed utilizing detention-grade construction techniques, fixtures, and hardware. Security fasteners will be used in areas accessible to residents.

Doors and windows within the secure perimeter of the facility will be predominantly detention-grade hollow metal having appropriate hardware and glazing types to match their security applications. Door types, sidelites, and window frames will be designed and sized to afford as much visibility into youth areas for security supervision and still allow for required modesty for some youth activities.

The main goal for detention and security design is to provide a safe and secure facility for all of its users and to aid the facility's staff in performing their jobs and not to hamper them. This can be achieved through proper selections of individual products and systems.

### **CODE REQUIREMENTS AND CONSTRUCTION STANDARDS FOR THE MOLINARI JUVENILE SHELTER (MJS) AND JUVENILE SERVICES**

The prevailing code at the time of this Planning Study is the Virginia Uniform State Building Code (VUSBC), 2015 edition, and for new construction, the Virginia Construction Code (VCC).

Prince William County Molinari Juvenile Shelter is defined as a mixed-use building, which means there are differing use groups and occupancies in the building. The main use groups are I-1 Condition 1, institutional, B Business, and A-3 Assembly. The building code will allow for either a *separated mixed use*, with fire barriers separating the uses, or *non-separated mixed use*. The trade-offs will be studied further as the design progresses. The Construction Type will be either II A or II B.

In addition to the Virginia Uniform Statewide Building Code, the Juvenile Detention Center construction is guided by other state and federal requirements, including standards from the Virginia Department of Juvenile Justice, titled "Guidelines for Minimum Standards in Design and Construction of Juvenile Facilities", January 2001. The portion of these standards to apply to the Juvenile Shelter are in Part III, titled "Construction and Design Requirements for Pre & Post Dispositional Residential Facilities", also known as the "Less -Secure" construction standards. The requirements reflect a non-combustible restrained building classification, and the facilities are designed for durability. The project will also comply with applicable requirements of the current addition of ADAAG for accessibility and the federal "Prison Rape Elimination Act" (PREA).

As an I-1, Condition 1 building use, the code requires 1-hour fire partition construction between each sleeping room, and between sleeping rooms and other contiguous spaces. However, the emergency escape and rescue requirements for an operable window in the bedroom will not apply to the I-1 use group. In discussions with the facility operators, their preference is not to have an operable window in the bedrooms, due to elopement issues that have occurred in the past. The bedrooms will have a fixed window for daylight.

---

Prince William County and the Department of Juvenile Justice have discussed the inclusion of Trauma Informed Design principles in the design of the Molinari Juvenile Shelter. Sometimes Trauma Informed Design principles are not in strict adherence to the current security design standards published by the DJJ. In these cases, the DJJ has agreed to review the standards and work with PWC to incorporate Trauma Informed Design principles where possible.

### **Size and Capacity**

The total gross floor area of the MJS as currently designed is approximately 18,000 square feet, and the Juvenile Services is approximately 1,700 square feet. The designed bed count is 20 beds, designed for both male and female juveniles. The housing unit is configured as one 20 bed unit.

The building will be designed on single level, eliminating the need for stairs and elevators inside the building, providing for operational efficiency, safety, and security.

### **Building Materials**

Unlike the JDC, the MJS does not have the same security requirements to construct a secure perimeter, so the construction can be lighter. For example, the roof structure can be designed with steel deck, but the concrete over the deck is not required. Still, the MJS and the JDC are adjacent buildings, and will have the same architectural vocabulary, so the exterior walls and structural systems will be similar. For durability, the majority of interior and exterior walls will be Concrete Masonry Units (CMU). The exterior wall assembly of the building will consist of cavity wall construction, with CMU as the interior wythe of the wall. Rigid insulation in the wall cavity will provide continuous insulation for the thermal barrier, and the exterior veneer of the building will be decorative brick, stone, and/or block.

Roofs will be a combination of low slope membrane roofs and standing seam metal sloping roofs. The structural floor will be slab on grade concrete throughout. The windows at the facility will be heavy duty commercial grade, but not detention grade. Opportunities to provide daylight and views to the majority of spaces the youth will be during the day will be taken, as this is calming for emotional well-being, and part of Trauma Informed Design principles.

**Finishes**

Preliminary finish selections are as follows:

SPACE	FLOOR	WALL	CEILING
Offices	VCT	Painted	Lay-in
Main Corridors	VCT	Painted	Lay-in*
Toilets (residents)	VCT	Painted	Drywall
Showers	Fiberglass	Fiberglass	Drywall
Toilets (staff)	Ceramic Tile	Ceramic Tile/ Painted	Drywall
Kitchen	Quarry Tile	Painted	Vinyl coated Lay-in*
Classrooms	VCT	Painted	Lay-in
Community Room	VCT	Painted	Exposed
Housing Dayrooms	VCT/ Carpet	Painted	Drywall/ Lay-in
Housing sleeping rooms	VCT	Painted	Drywall
Mech/Elec/Storage	Exposed	Painted	Exposed

VCT = Vinyl Composition tile      Lay-in = Suspended lay-in acoustical panels – 2 x 4 or 2 x 2

Drywall = Gypsum Wallboard      Security Metal = Suspended perforated steel with acoustical batts or perforated steel planks for higher security areas

Security Drywall = Gypsum Wallboard with a layer of steel security mesh      SS = Stainless Steel

\* Lay-in ceilings in Juvenile areas will be limited to areas under supervision and above 10' in height. Impact clips will be used to hold acoustical panels in place.

**Structural:**

Structural Systems

The proposed Molinari Juvenile Shelter located in Manassas, Virginia shall be a one-story building founded on shallow foundations consisting of continuous strip footings for walls, as required. Foundations will be at minimum depth and shall be sized for allowable soil bearing pressure, contingent on the final geotechnical report. The building shall have a 4" reinforced concrete slab on grade.

The building shall utilize exterior load-bearing masonry cavity walls with brick, stone, or block veneer, and interior masonry bearing walls. The roof system shall be 1-1/2" steel roof deck supported on open web steel joists. The proposed sloping clerestory elements shall utilize additional steel framing built off interior cmu bearing walls. All sleep rooms shall be constructed with masonry. Lateral forces shall be resisted by reinforced masonry shear walls and steel roof deck diaphragms in both directions.

Design Loads

Design live loads shall be in accordance with the Virginia Uniform Statewide Building Code, 2015 Edition (IBC 2015); Risk Category III.

Dead Loads: Actual calculated weight of permanent construction

Minimum Floor Live Loads:

Mechanical Room - 150 PSF  
Storage and Data Rooms - 125 PSF  
Lobbies/Vestibules and Corridors - 100 PSF  
Conference/Living and Activity Rooms - 100 PSF  
Offices and Classrooms - 50 PSF  
Sleep Rooms - 40 PSF

Roof Loads: 20 PSF or Snow Load, whichever is greater

Snow Loads: Ground Snow Load,  $P_g = 30$  PSF  
Flat Roof Snow Load,  $P_f = 23.1$  PSF  
Sloped Roof Snow Load,  $P_s = 23.1$  PSF  
Snow Importance Factor,  $I_s = 1.10$   
Exposure Factor,  $C_e = 1.0$   
Thermal Factor,  $C_t = 1.0$

Wind Loads: Basic Wind Speed (3 second gust),  $V = 120$  MPH  
Exposure = Exposure Category B  
Internal Pressure Coefficient,  $GC_{pi} = +0.18, -0.18$

Seismic Loads: Site Class = D (assumed, pending geotechnical report)  
Seismic Importance Factor,  $I_e = 1.25$   
Seismic Design Category = B  
Spectral Response Acceleration  
at short periods,  $S_s = 0.127$   
Spectral Response Acceleration  
at 1-second period,  $S_1 = 0.053$   
Basic Seismic Force-Resisting Systems:  
Bearing Wall Systems: Intermediate Reinforced Masonry Shear Walls  
Analysis Procedure: Equivalent Lateral Force Procedure

#### Applicable Codes and Standards

Virginia Uniform Statewide Building Code (VUSBC), 2015 Edition

Minimum Design Loads for Buildings and Other Structures/ASCE 7-10

American Concrete Institute (ACI) - Building Code Requirements for Structural Concrete and Commentary/318-14

American Concrete Institute (ACI) - Building Code Requirements and Specifications for Masonry Structures/530-13/530.1-13

American Institute of Steel Construction (AISC) – ASD Manual of Steel Construction/13th Edition

American Institute of Steel Construction (AISC) – Specification for Structural Steel Buildings/ AISC 360-10

Steel Joist Institute (SJI) – Standard Specifications, Load Tables and Weight Tables for Steel Joists and Joist Girders/44<sup>th</sup> Edition

Steel Deck Institute (SDI) – Floor and Roof Deck Design Manuals – No. FDDM and No. RDDM

## **Mechanical:**

### Code References

The proposed HVAC systems were analyzed, and recommendations made referencing design standards from the International Mechanical Code (2015), International Plumbing Code (2015), and NFPA. ASHRAE Standard 62.1 – 2013 was referenced to determine ventilation requirements and assumed occupancy loads for the facility.

### Heating System

A central boiler plant utilizing multiple, natural gas-fired, modular condensing boilers in the mechanical room is recommended. The use of modular boilers provides increased efficiency at partial load and provides redundancy. The central boiler plant will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

It is recommended that three (3) 400 MBH boilers be provided to serve the facility. This quantity of boilers provides a level of redundancy so that if one boiler fails, the remaining boilers can satisfy 67% of the full load of the building. The boilers shall generate 140°F water, and the return water temperature shall be 100°F. This temperature differential increases boiler efficiency, reduces pump gpm, and reduces the required size of installed piping when compared to a traditional heating hot water distribution system.

The heating hot water distribution system will operate as a variable-primary system; however each boiler will be equipped with a dedicated boiler circulation pump to ensure minimum flow through each boiler. Two (2) variable speed pumps operating in parallel will circulate water through the heating hot water loop. The use of variable speed pumps reduces energy consumption and provides proper temperature control.

### Air Handling Units

Multiple air-cooled, packaged, variable air volume (VAV) rooftop air conditioning units will serve the Shelter. These units will be equipped with direct expansion (DX) cooling and hot water heating coils. Terminal units will be equipped with hot water reheat coils to control temperature in the spaces they serve. Depending on the application, energy recovery may or may not be used. For example, energy recovery is typically not used in medical areas due to concerns of cross-contamination between the exhaust and ventilation air streams. All units serving the Shelter will include UV lights and filtration to provide additional measures to ensure required indoor air quality.

Numerous rooftop exhaust fans will exhaust air from bathrooms, janitor closets, electrical rooms, and similar areas. Shower areas will have local exhaust grilles to ensure moisture is removed from those areas to prevent indoor air quality issues. Exhaust fans will also serve various kitchen functions such as kitchen hood and dishwasher exhaust.

### Building Automation System

A web-based direct digital control (DDC) building automation system (BAS) is recommended for the facility. The system allows for control strategies that optimize performance and reduce energy costs of the various HVAC systems. A web-based BAS also allows for external monitoring as well as integration

with the security and fire alarm systems. The BAS will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

### **Plumbing/Fire Protection:**

#### Code References

The proposed plumbing and fire protection systems were analyzed, and recommendations made referencing design standards from the International Mechanical Code (2015), International Plumbing Code (2015), and NFPA.

#### Plumbing Fixtures and Equipment

All fixtures for staff and youth use shall be standard commercial grade plumbing fixtures. Fixtures accessible to the physically handicapped shall be provided where required.

#### Domestic Water Piping System

A flow test has yet to be conducted, however based on the existing infrastructure it is not anticipated that a domestic water booster pump package will be required. This will need to be confirmed during design. The domestic water service and hot water system will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

A 6" domestic water service will be fed from the site water main and will enter the building in the mechanical room. A reduced pressure zone (RPZ) backflow preventer shall be installed in the domestic water service to prevent potential contamination of the public water supply.

The domestic hot water system shall consist of multiple gas fired water heaters. The water heaters shall be zoned to serve common areas and use types (ex. – Food Service, Laundry, and Housing Units). This arrangement reduces the required pipe sizes and total length of domestic hot water piping. The domestic hot water temperature for non-youth areas shall be 120°F. Tempered water (90°F) shall be provided to youths by blending the 120°F water with domestic cold water. Gas fired water heaters shall generate 140°F for use in the Food Service and Laundry areas. Circulation pumps shall maintain the water temperature for each domestic hot water system. The temperature of each system will be monitored by the building automation system.

#### Sanitary Piping System

Several sanitary mains shall serve various portions of the building and will exit the building before joining to form a common site sanitary main. The exterior site sanitary main shall connect to the municipal sanitary system. A grinder station will be provided on site prior to the connection to the municipal sanitary system. The grinder station will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

Piping systems for the proposed facility will be standard weight cast iron no-hub above floor and PVC below ground. Institutional waste fittings shall be installed at the fixture serving inmate areas and floor drains shall also be installed in the units.

The Warming Kitchen shall be served by an independent drainage system. This system will be cast iron below the slab and shall lead to a grease interceptor prior to connecting to the primary sanitary system.

#### Storm Water Piping System

The storm water piping system for the proposed facility will be designed to discharge by gravity to the site storm water system. Roof overflow will be accommodated by means of an independent safety overflow system discharging in readily visible locations.

#### Natural Gas

A natural gas line will be extended to serve the building and enter in the mechanical room. Depending on the utilization rate of the facility, some or all of the costs to extend the line could be waived by the gas company. Gas-fired equipment will likely consist of HVAC equipment, plumbing equipment, and kitchen equipment.

#### Fire Protection

A flow test has yet to be conducted, however based on the existing infrastructure it is not anticipated that a fire pump will be required. This will need to be confirmed during design. The fire sprinkler service will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

A 6" sprinkler main shall feed off from the site water main. A double detector check valve shall prevent water from the sprinkler system from contaminating the public water supply. A hydraulically calculated wet type sprinkler system shall be designed in accordance with NFPA-13. Areas subject to freezing will be served by dry-type pendant sprinkler heads. All other areas will have standard heads.

#### **Electrical:**

##### General Provisions

The electrical portion of the work will consist of providing building power, lighting, communication raceways and boxes, and fire alarm systems for the facility.

All electrical work shall be in compliance with all applicable Federal, State, and local laws and regulations governing standards of design, construction, workmanship and material. Electrical work shall be in compliance with the latest-adopted National Electrical Code (NEC).

##### Electrical Service

Primary power will be distributed from the utility company underground line via a ductbank. This will be routed to pad-mounted transformers located adjacent to the building. Primary work will be by the utility company. The transformers will be pad-mounted and will supply secondary power to a main electrical room located in the building. Secondary services to the building will be 480/277 volt, three phase, four wire via underground ductbanks. The service size is estimated to be 2,000 amps. The electrical service will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

The service voltage (277/480V) will be used to power major equipment such as HVAC equipment, kitchen equipment, motor loads above ½ hp and lighting. The Main Distribution Switchboard will distribute power from the incoming service to smaller electrical rooms located throughout the building.

##### Electrical Distribution

A main switchboard, rated as indicated above, will be located in the main electrical room. The main service disconnect device will be power type circuit breakers. The feeder circuit breakers will be group mounted molded case circuit breakers. Ground fault protection will be provided at the main circuit

breakers. Surge protection will also be provided at the main switchboard. There will be an emergency switchboard fed by a transfer switch. Motor control centers (normal and emergency) will be provided for air handlers, fans and pumps for the heating system. The motor control centers will be located in the mechanical room(s).

Power will be distributed from the main electrical room at 277/480 volts to panelboards located in various areas of the facility. Power for receptacles, appliances, youth room lighting and other devices will be provided at 120/208 volts, three phase, four wire via dry type transformers. Large mechanical loads, such as rooftop air conditioning units, will be fed directly from the main switchboard. Other mechanical loads will be fed from local panels. Adjustable frequency drives will be furnished for select mechanical equipment as will be indicated in the HVAC documents.

Power and lighting circuits serving youth accessible areas shall be routed through relay panels to allow low-voltage remote control of these circuits by the security electronics system, either automatically by program or manually using the security system touch screens.

Motors 1/2 hp and lower will be supplied by 120V circuits. Motors above 1/2 hp will have individual 480V circuits. Motors will be the high efficiency type. Motors supplied by adjustable drives will be fabricated with cast iron frames.

#### Standby Power Generator System

The entire facility will be on emergency power supplied by two emergency diesel generators in parallel, approximately 500 KW each, located outdoors in the mechanical equipment yard. The emergency electrical equipment will be housed in a separate room from the normal power electrical equipment. The generators will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

The generator will have a sub-base fuel tank with a storage capacity for a minimum of 48 hours runtime. An option of providing a tank with a capacity of 72 hours will be evaluated during design. The generator will be housed in a weatherproof, sound attenuated enclosure. A platform may be required around the generator if the sub-base fuel tank height is 30" or more.

The generator shall carry the following life safety (NEC 700) loads via a dedicated automatic transfer switch and distribution system: emergency egress lighting, security control system, fire alarm notification system and other loads deemed life safety by the authority having jurisdiction (AHJ).

The generator shall carry the following legally required (NEC 701) loads via a dedicated automatic transfer switch and distribution system: smoke control system and other loads deemed as legally required standby systems by the authority having jurisdiction (AHJ).

The generator shall carry the remainder of the facility loads (optional standby NEC 702) via a dedicated automatic transfer switch and distribution system.

All automatic transfer switches will have a bypass isolation switch. If a fire pump is deemed to be necessary, then it will be fed from a dedicated breaker at the generator. The generator load size above does not include a fire pump.

#### Electrical Site Work

The electrical site work will consist of the trenching and backfilling required for underground distribution. The underground distribution will consist of Schedule 40 PVC conduits in a concrete ductbank. These will run from the service connection at the main switchboards to the utility transformers on the site. The utility transformers will be provided with a concrete base.



The underground communication conduit system shall consist of a ductbank of schedule 40 polyvinyl chloride (PVC) conduits embedded in concrete, from the property line to the communications MDF room. The ductbank shall contain sufficient conduits for incoming telephone, internet, and cable television services. If cable television is not available at the site, provisions will be made for satellite television dishes on the roof.

#### Lighting

The lighting design will be in accordance with recommendations of the Illuminating Engineering Society of North America and DJJ standards for detention centers.

Lighting fixtures will primarily be LED fixtures. Other lamp types will be considered for specialty areas. LED fixtures have lamps rated at a minimum of 50,000 hours life.

Local switches for the control of lighting shall be provided to serve individual spaces. Certain areas, such as conference rooms and offices, will be provided with occupancy sensors to turn of the lighting in the spaces when they are unoccupied.

Types and grades of fixtures for specific areas will be as follows:

- i. Offices and Corridors: Recessed LED fixtures. Fixtures will be the recessed indirect type. Lighting levels shall be 50 FC in the offices and 20-30 FC in the corridors.
- j. Youth Rooms: Wall or recessed LED fixtures. Lighting levels shall be 20 FC minimum at youth desk and grooming areas with an average level of 6 FC in the room. Each room will have a night light which will be on emergency power (life safety branch). There will be controls to turn off lights in the youth areas from the control room.
- k. Mechanical, Electrical, Storage and other Utility Areas: Wraparound type LED fixtures either surface or pendant mounted. Lighting levels shall be 30 FC.
- l. Exterior and Site Lighting: LED wall and pole mounted outdoor fixtures that meet the requirements for "Dark Skies" compliance. The fixtures will be the cutoff type to prevent spill light and has a cutoff angle about 15 degrees below the horizontal. Site lighting will be controlled by the security system and photocells via lighting contactors or relays. Staff and visitor parking areas will be designed to provide an average light level of one (1) footcandles with a minimum of two-tenths (0.2) footcandles. Lighting levels to one-tenth (0.1) footcandles at the property line
- m. Exterior Lighting-Youth Areas: These fixtures will be LED. Lighting levels shall be 3 FC average with a minimum of 0.5 FC.
- n. Egress Paths: Lighting levels will be 1 FC average with a minimum level of 0.1 FC. The lighting uniformity (maximum to minimum) shall not exceed 40:1.
- o. Exit Signs: These fixtures shall be the LED type, single or double face as required. They will be vandal resistant in inmate areas.

All emergency lighting shall be powered by the normal and life safety power systems. The life safety system will energize in less than 10 seconds in the event of an outage. Battery packs or inverters will be provided in areas which require instant on lighting in the event of an outage on the normal system (where inmates and correctional staff may be in the same area).

Devices, Conduits and Conductors

All devices such as light switches and receptacles shall have a minimum rating of 20 amps, 120 volt for receptacles and 277 volt for switches. Device covers shall be plastic. Receptacles located in "wet" areas shall be GFI rated. Outdoor devices will be provided with cast metal weatherproof "in-use" covers.

Conduits shall be used for all systems 24 volts and higher. Minimum trade size conduit allowed shall be  $\frac{3}{4}$ ". All conduits shall be concealed where possible. The classification of conduit usage allowed shall be as follows:

- e. Underground/Under Floor Slab: PVC Schedule 40.
- f. Parking/Roadway, Heavy Traffic: PVC Schedule 80.
- g. Outside the Secure Perimeter: Electrical Metallic Tubing, Steel Fittings.
- h. Inside Secure Perimeter/Accessible Exposed Conduit: Rigid Steel.

Conduit shall run exposed in mechanical equipment and utility spaces. In all other spaces, it shall be concealed above ceilings, in shafts and in furred spaces. Flexible connections to light fixtures, devices and equipment within the secure perimeter may utilize liquid-tight flexible conduit with a maximum length of four feet.

All screws and fasteners in electrical systems within the security perimeter shall be tamper resistant security screw type, requiring a special tool.

Branch circuit wiring for power and lighting shall generally be type THHN/THWN. All conductors No. 10 AWG and smaller shall be solid copper. All conductors No. 8 and larger shall be stranded copper. All power conductors shall be insulated for 600 volts.

Fire Alarm System

The fire alarm system will be fully addressable complying with the NFPA 72 and local codes. The fire alarm system will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter and be monitored by a third party.

The activation of a manual or automatic device will initiate audible and visual indicating functions. The system will include fire alarm programmed dry contacts or signals for security electronics and building automation system monitoring of the fire alarm system status. Fire alarm system device wiring will be UL-listed multi-conductor cable fire alarm cable run in a "daisy chain" to each device via conduit. Conduits will be kept separate from building power wiring and other systems such as telephone, building automation system (BAS), and data cabling.

Manual pull stations, smoke, heat and duct detectors, alarm horns and visual devices will be located at all required locations to provide full coverage of the facility. Horns and strobes will be located to provide the code required visual (flash rate and intensity) and audibility requirements. Duct detectors will also be provided in all return ducts for all air handling units greater than 2000 CFM. Smoke detectors and indicating devices shall be mounted as high as possible and be covered with heavy gauge wire mesh cages securely fastened to the surface if mounted lower than 12 feet above the floor in secure areas.

The system will interface with sprinkler flow and tamper valve switches and any other sprinkler components in the building, respectively. Fire protection systems are as identified as follows:

- Wet-pipe building-wide NFPA 13 sprinkler system with dry-pipe pre-action systems.
- Pump controllers (if pump required).

#### Telephone, Data and Cable Television Systems

The MDF/Entrance Room will serve as a demarcation room and main distribution room for the facility. The room will be provided with plywood backboards. All rooms and closets will have adequate space, ventilation, and cooling and active networking equipment in standard 22-inch racks provided by the owner. The telephone, data, and cable television systems will serve both the Juvenile Detention Center and the Molinari Juvenile Shelter.

Intermediate distribution IDF rooms will be located throughout the facility and would require approximately 80 square feet of space each. IDF rooms will be equipped with two dedicated quad electrical circuits (120V 20A) installed. In addition, duplex receptacles will be provided at 4 foot intervals along the length of the four walls at 18" above the finish floor. Walls will be provided with plywood backboards as required.

Data and telephone boxes will be located throughout the facility. The outlet boxes will have conduit back to the nearest telephone data closet. Locations of outlets will be coordinated with the owner.

Cable television (TV) outlets will be provided to serve television outlets in housing units and other spaces as required by the owner. Coax cable will be run from the TV outlets to the nearest communication closet.

#### Lightning Protection System

A lightning protection system will be provided. Down conductors will be provided along with new ground rods and ground loop. The entire system will be UL Master labeled. A NFPA 780 assessment will be done to determine the lightning risk to the facility.

### **SECURITY / DETENTION APPROACH**

As noted earlier, the Molinari Shelter will be a less-secure facility, so detention-grade doors, hardware, and glazing will not be required.

Electronic security requirements will also be less stringent than for the Juvenile Detention Center. It is anticipated residents will be able move freely within the Shelter area and can leave the building if desired. Accordingly, an access control system (proximity card readers) and cameras are anticipated for monitoring the facility. Some cameras may also be monitored by the Central Control Room. A duress system is also anticipated.

---

### **SPECIAL BUILDING DESIGN CONSIDERATIONS**

The goal of the exterior design is to use similar materials for the Juvenile Detention Center and the Molinari Juvenile Shelter but give each building its own identity. It should have the appearance of a campus with different buildings that complement each other, not one large building. The MJS will be more residential appearing than the JDC, as a temporary youth home, so its architectural detailing will be more refined, and a smaller scale. The JDC will have a more serious appearance, without being institutional. A large angled wall in an accent color will cut across the site, through both buildings, tying them together. The building systems (architectural, structural, mechanical, electrical, plumbing, electronic security, and life safety) and materials must all be integrated, taking into consideration use and abuse, cost and availability, durability, life cycle, environmental, and aesthetic issues.

The federal Prison Rape Elimination Act (PREA) went into effect August 2012. Section 115.318 is applicable to the design of this project and must be a consideration in the final design layout. It states:

#### 115.318 Upgrades to Facilities and Technologies

When designing or acquiring any new facility and in planning any substantial expansion or modification of existing facilities, the agency shall consider the effect of the design, acquisition, expansion, or modification upon the agency's ability to protect residents from sexual abuse.

PREA has design guidelines and regulations that will be followed to comply, including space considerations.

To improve upon the JDH's recreational programs, individual outdoor recreation areas for each housing pod were a stated goal and a priority of the design. Not only does this give the facility the flexibility to allow more time for the youth outside in a manageable setting, it allows large windows in the dayroom onto a private yard for view and daylight. Currently the existing JDC's outdoor recreation fenced area is too large to supervise adequately. It is bordered by an open mesh fence, that allows the public to view the recreating youth. Another challenge is scheduling the time and having the correct amount of staffing for different classifications of youth to use the yard at different times. The outdoor recreation yards, both individual and group will be enclosed with a solid masonry fence.

The long-term sustainability of this facility will be considered through three lenses: wellness, decarbonization, and resilience. The wellness lens will focus primarily on the trauma informed design principles but will include additional elements such as indoor air quality, lighting quality and control in the administrative areas, and thermal comfort and controls in the administrative areas. The decarbonization lens will include an explicit focus on energy efficiency strategies and the planning for a future addition of photovoltaic panels on the site, should Prince William County choose to add renewable energy in the future. And the resilience lens will focus on planning for potential disruptions to operations, whether they be caused by natural disasters or human-induced events. Examples of natural disasters could include direct impacts from tornadoes, hurricanes, or flooding events, or the longer-term impacts of power, communications, or transportation infrastructure disruptions that may follow. Examples of human-induced disruptions could include the direct impacts from an armed intruder, or a power or communications cyber-attack. Planning for such events will improve the ability of the facility to defend and recover should such an event take place.

To comply with the High Performance Buildings Act in Virginia's CPSM (section 6.1.3 ) there are three compliance pathways:

A. Leadership in Energy and Environmental Design (LEED for New Construction & Major Renovations) Demonstrate compliance by submitting a copy of the USGBC LEED certification to DEB after receipt by the agency.

B. Green Globes Obtain a minimum of 2 Globes. Demonstrate compliance by submitting a copy of the Green Globes certification to DEB after receipt by the agency.

C. Virginia Energy Conservation and Environmental Standards (VEES) Comply with Appendix V - Virginia Energy Conservation and Environmental Standards (VEES). Virginia Energy Conservation and Environmental Standards is a prescriptive based compliance method based on the 2012 International Green Construction Code, published by the International Code Council, Inc. The 2012 International Green Construction Code is available online, subject to availability by the ICC.

Option "C" is the preferred pathway of DJJ's Capital Outlay.

PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER

SECTION 3  
ARCHITECTURAL PROGRAMS

JUVENILE DETENTION CENTER,  
MOLINARI JUVENILE SHELTER  
AND  
JUVENILE SERVICES ADMINISTRATION

---

- INTRODUCTION
- SUMMARY OF SPACE REQUIREMENTS

**Juvenile Detention Center**

RECEPTION / LOBBY / WAITING  
FACILITY ADMINISTRATION / STAFF SUPPORT  
SECURITY/CONTROL  
RECEPTION / RELEASE AND VSP  
MEDICAL SERVICES  
VISITATION  
JUVENILE HOUSING  
EDUCATION  
RECREATION AND PROGRAMS  
FOOD SERVICES  
LAUNDRY  
MAINTENANCE AND GENERAL STORAGE  
CENTRAL PLANT

**Molinari Juvenile Shelter**

RECEPTION / LOBBY / WAITING  
FACILITY ADMINISTRATION / STAFF SUPPORT  
SECURITY / CONTROL  
RECEPTION / INTAKE  
MEDICAL SERVICES  
VISITATION  
JUVENILE HOUSING  
EDUCATION  
RECREATION AND PROGRAMS  
FOOD SERVICES  
LAUNDRY  
MAINTENANCE AND GENERAL STORAGE  
CENTRAL PLANT

**Juvenile Services Administration**

RECEPTION / LOBBY / WAITING  
FACILITY ADMINISTRATION / STAFF SUPPORT

**INTRODUCTION**

Three separate space programs are presented here. One is for the 48 bed Juvenile Detention Center, the second is for the 20 bed Molinari Juvenile Shelter, and the third is for Juvenile Services Administration. Beginning with the summary pages for each entity there follows a chart showing the total programmed square foot area for the campus.

Following the summaries, each building's architectural program is organized by major functions. Within each function is a description of the function and an itemization of the spatial needs associated with each. Many building codes, life safety, and barrier free accessibility issues are addressed in the spaces represented in this program, as well as construction standards of the Department of Juvenile Justice. A column on the space program chart indicates when a space is required by either code or D.J.J. standards.

**SUMMARY OF SPACE REQUIREMENTS**

<b>SUMMARY OF SPACE REQUIREMENTS – Juvenile Detention Center</b>				
<b>COMPONENT</b>		<b>Base NSF Area (48 Bed)</b>	<b>Grossing Factor</b>	<b>Total GSF without Main Circulation</b>
<b>1</b>	Reception/Lobby/Waiting	999	1.30	1,299
<b>2</b>	Facility Administration/Staff Support	4,116	1.30	5,351
<b>3</b>	Security / Control	315	1.30	410
<b>4</b>	Reception/Release & VSP	2,000	1.40	2,800
<b>5</b>	Medical Services	380	1.40	532
<b>6</b>	Visitation	480	1.30	624
<b>7</b>	Juvenile Housing	8,444	2.0	16,888
<b>8</b>	Education	4,488	1.30	5,834
<b>9</b>	Recreation and Programs	10,280	1.30	13,364
<b>10</b>	Food Services	1,410	1.20	1,692
<b>11</b>	Laundry	460	1.20	552
<b>12</b>	Maintenance and General Storage	1,300	1.10	1,430
<b>13</b>	Central Plant	1,790	1.10	1,969
	<b>Subtotals</b>	<b>36,462</b>		<b>52,745</b>

**Building Gross Square Ft.** **52,744** **x** **1.09** **57,491**  
*Add 9% overall grossing factor for walls/main circulation corridors* **1,197 s.f. per youth**

<b>SUMMARY OF SPACE REQUIREMENTS – Molinari Juvenile Shelter</b>				
<b>COMPONENT</b>		<b>Base NSF Area (20 Bed)</b>	<b>Grossing Factor</b>	<b>Total GSF without Main Circulation</b>
1	Reception/Lobby/Waiting	330	1.30	429
2	Facility Administration/Staff Support	1,010	1.30	1,313
3	Security / Control (Not Provided)			-
4	Reception / Intake	400	1.40	560
5	Medical Services	255	1.20	306
6	Visitation (Not Provided)			-
7	Juvenile Housing	2,772	2.0	5,544
8	Education	1,200	1.30	1,560
9	Recreation and Programs	3,750	1.30	4,875
10	Food Services	405	1.20	486
11	Laundry	100	1.20	120
12	Maintenance and General Storage	100	1.10	110
13	Central Plant	660	1.10	726
	<b>Subtotals</b>	<b>10,982</b>		<b>16,029</b>

**Building Gross Square Ft.** **x** **1.09** **17,471**  
*Add 9% overall grossing factor for walls/main circulation corridors*

<b>SUMMARY OF SPACE REQUIREMENTS – JUVENILE SERVICES ADMINISTRATION</b>				
<b>COMPONENT</b>		<b>Base NSF Area</b>	<b>Grossing Factor</b>	<b>Total GSF without Main Circulation</b>
1	Reception/Lobby/Waiting	250	1.20	300
2	Facility Administration/Staff Support	1,306	1.30	1,698
	<b>Subtotals</b>	<b>1,556</b>		<b>1,998</b>

**Building Gross Square Ft.** **x** **1.09** **2,178**  
*Add 8% overall grossing factor for walls/main circulation corridors*



<b>COMBINED CAMPUS SUMMARY OF SPACE REQUIREMENTS</b>				
<b>COMPONENT</b>		<b>Base NSF Area</b>	<b>Grossing Factor</b>	<b>Total GSF without Main Circulation</b>
<b>1</b>	Reception/Lobby/Waiting	1,579	1.30	2,053
<b>2</b>	Facility Administration/Staff Support	6,432	1.30	8,362
<b>3</b>	Security / Control	315	1.30	410
<b>4</b>	Reception/Release & VSP	2,400	1.40	3,360
<b>5</b>	Medical Services	635	1.40	889
<b>6</b>	Visitation	480	1.30	624
<b>7</b>	Juvenile Housing	11,216	2.00	22,432
<b>8</b>	Education	5,688	1.30	7,394
<b>9</b>	Recreation and Programs	14,030	1.30	18,239
<b>10</b>	Food Services	1,815	1.20	2,178
<b>11</b>	Laundry	560	1.20	672
<b>12</b>	Maintenance and General Storage	1,400	1.10	1,540
<b>13</b>	Central Plant	2,450	1.10	2,695
<b>Subtotals</b>		<b>49,000</b>		<b>70847</b>

**Building Gross Square Ft.** **x** **1.09** **77,223**  
 Add 9% overall grossing factor for walls/main circulation corridors

**JUVENILE DETENTION CENTER**

**RECEPTION / LOBBY / WAITING**

The main entrance of the building will be for the public and staff. Detainees and law enforcement will use an alternate entrance. The Department of Juvenile Justice requires a place for visiting public to securely store their belongings before entering the secure perimeter, so designing the space to include lockers and coats is included. As part of the lobby, a visitor screening area, a metal detector and a reception desk for security staff will be included. Often during weekends, 20 or 30 visitors may arrive about the same time for family visits. A covered canopy for outdoor waiting should be designed into the main entry.

<b>1. JDC RECEPTION/ LOBBY/ WAITING</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Public Lobby	30	yes	20	600	Walk Through Metal Detector (Sized for 30). Staff enters through lobby. Control room watches.
Weather Vestibule	1		80	80	
Public Lockers	1	yes	20	20	Located in Lobby, 24 Lockers
Men's Restroom	1	yes	50	50	
Women's Restroom	1	yes	50	50	
Coat Racks	1		20	20	
Drinking Fountain	1	yes	15	15	
Receptionist	1		64	64	Newly staffed position with desk.
Security Screening	1		100	100	Newly staffed position with desk.
<b>TOTAL</b>				<b>999</b>	

*Need outdoor covered walkway/waiting area*

**FACILITY ADMINISTRATION / STAFF SUPPORT**

Administrative areas for the proposed facility include space for administrative offices, conference/meeting areas, records storage, and staff support. These areas are non-secure workspaces which may be located outside the secure perimeter of the facility but connected directly to detention areas (through a secure sallyport) for immediate access as required. DJJ requires space be provided within the secure perimeter for counseling. All services with youth involved will be conducted within secure areas of the facility. Shift Supervisors for the security staff have their office within the secure perimeter, so they are available to supervise the staff directly overseeing the youth, and to assist with youth activities. The Shift Supervisors can share an office and desk, as there is one assigned per shift.

2. JDC FACILITY ADMINISTRATION / STAFF SUPPORT	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
<b>Administration</b>					
Superintendent	1		160	160	Window, U-shaped desk, conference for four; office have sidelight or clerestory; occupancy sensor for lighting
Assistant Superintendent	2		120	240	U-shaped desk with two guest chairs; office have sidelight or clerestory; occupancy sensor for lighting
Financial Administrator/Office Manager	1		120	120	U-shaped desk with two guest chairs; office have sidelight or clerestory; occupancy sensor for lighting
Future Growth Office	1		100	100	
Multipurpose Room/ Conference Room/ Training/ Staff Lounge	1	yes	400	400	Accommodate 20 - Near Superintendent
Cubicle Area	3		64	192	Hoteling space, partition not higher than 66" with transparent panel for top 20"
File Room	1		120	120	Accommodates 12 vertical file cabinets; secured in a locked room
Storage Room	1		100	100	Storage for office supplies
Server room	1				Indicated in central plant
Storage for iPads / laptops	1				Indicated in pods
Work Area	1		64	64	Copier, cubicle
Admin Coffee Niche	1		40	40	Fridge, microwave, toaster, sink, coffee maker; shared with education
Staff Toilets	2		50	100	One male, one female; shared with education
<b>Security Staff</b>					

PROGRAM DESIGN AND  
PLANNING STUDY  
for the  
PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
AND MOLINARI JUVENILE SHELTER

ARCHITECTURAL PROGRAMS

Assistant Superintendent Security Operations	1		120	120	Within secure area; U-shaped desk and two guest chairs; office have sidelight or clerestory; occupancy sensor for lighting; located near shift supervisor; with tinted glazing to interior corridor
Security equipment storage	1		60	60	Within secure area; Located off the Shift supervisor office; Security equipment ; keypad and card reader; detention grade door
Shift Supervisor	1		200	200	Within secure area; three shared desks; small conference table; centrally located close to housing units; keypad and card reader
Muster room	1		300	300	Within secure area; Seat 20; can serve as roll call, muster, training, and conference room; counter for radio chargers; equipped with technology to be able to view CCTV cameras; copier
Staff toilets	3		50	150	Within secure area; two near housing units; one in security suite
Control room	1				Indicated in control area, keywatch system
<b>Support</b>					Outside secure area
Staff Lockers	70		5	350	Separate men's and women's, adjacent to fitness room; 12"x 18"x 30" H (half height)
Breakroom	1		300	300	Seating for 10; Fridge, microwave, toaster, sink, coffee maker; 70 mail slots each at 4" x 9" x 12" clear; two workstations 15 SF each - computer, printer and phone
Security screening	1				Same security screening for staff and visitors
Staff Toilet/shower	4	yes	100	400	Includes shower <sup>1</sup> ; off locker room; two male and two female or four unisex
Staff Toilets	2	yes	50	100	WC and lavatory only
Fitness	1		500	500	Sized for 5 stations. (Central District is 1,000 s.f.)
<b>TOTAL</b>				<b>4,116</b>	

Note:

- 1) DJJ requires a staff shower
- 2) Office sizes based on Prince William County Space Standards

**SECURITY / CONTROL**

The Control Room serves as the central electronic surveillance/remote monitoring component for the Juvenile Detention Center. Control panels for remote door release, emergency notification systems, and communications linkages between all staff and all portions of the facility are located here. The Control Room will be sized and located to allow visual observation to the interior of the secure perimeter as well as the main lobby. It should also be in close proximity to visiting. Additionally, Department of Juvenile Justice standards require that this room have access to toilet facilities without leaving the secure enclosure. Control room staff will also store, receive, and distribute keys used by on-duty staff.

Control room staff are responsible for control of access into secure areas (law enforcement at reception, staff, and the public at visiting). During evening hours, control room staff will be the first point of contact with members of the public who arrive at the main entry. They will not leave their station but will have a camera and intercom to be able to see and communicate with the public at the front door.

<b>3. JDC SECURITY</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Control Room	1	yes	160	160	Two workstations; one views lobby and one views secured area; radio storage with chargers; (similar to Central District PS); storage for restraints and other security equipment
Keywatch system	1		15	15	Accessed from sallyport to the secured part of the facility; adjacent to control room
Toilet	1	yes	50	50	D.J.J. 2.4 Adjacent to Control Room
Secure Electronics Equipment	1	yes	90	90	Radio, repeater, provide infrastructure for technology throughout
<b>TOTAL</b>				<b>315</b>	Want to have all digital CCTV cameras with wiring to accommodate growth and flexibility

**RECEPTION / RELEASE AND VEHICLE SALLYPORT**

The reception and release area of the facility will comprise several essential functions. The admissions process involves initial reception of juveniles from law enforcement, physical inspection and search of the juvenile, clothing distribution, interviews to obtain information regarding the juvenile, and orientation of the juvenile to explain facility operations and behavior requirements. Preliminary crisis intervention activities also begin during the admissions process. Holding rooms located at admissions are intended for temporary custody of youths at time of admissions. These rooms may also be used for youths who are awaiting transfer to other facilities. Juveniles who present a danger of self-harm or suicide may be temporarily held in an intensive watch room with cameras. A video arraignment room will be set up in this area with the equipment needed for such usage.

<b>4. JDC INTAKE, RELEASE, AND VEHICLE SALLYPORT</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Vehicle Sallyport	1	yes	625	625	Drive-thru, sized for vans, two wide, eye wash station; enclosed
Intake officer office	1		120	120	Two L-shaped workstations
Processing	1	yes	200	200	Staff desk - one workstation for Booking: photograph, fingerprint, classification, telephone call, computer, waiting bench, files
Holding Cell ADA	1	yes	80	80	With toilet; Negative pressure
Holding Cell	1	yes	80	80	TDO - temp detention order; with toilet; Negative pressure
Holding Cell	2	yes	80	160	With toilet; Negative pressure
Medical Holding Room	1		80	80	Overnight room w/toilet/lav. Negative pressure
Medical Holding Room ADA	1		90	90	Overnight room w/toilet/lav. Negative pressure
Video Arraignment	0		-	-	Combined with interview
Interview Room	1	yes	100	100	Seating for 4, camera and monitor on wall
Property Storage	1	yes	180	180	9 cuft/occupant lockers
Clothing Storage	1	yes	80	80	
Shower /Search / Toilet	1	yes	130	130	Separation of shower door from suite entry door
Sallyport	1	yes	75	75	To vehicle sallyport
Visitor Waiting Room	0	yes	-	-	Included in lobby outside secure perimeter
<b>TOTAL</b>				<b>2,000</b>	

NOTE:

- 1.) DJJ Standards require min 2 holding areas, and with 15 sf of holding area for ea 10 beds
- 2.) Holding cells shall have negative pressure

**MEDICAL SERVICES**

Medical services at the detention facility will consist primarily of routine examination, first aid, distribution of medications, and medical attention as a part of the reception / admission process. Trauma and emergency services will be provided by outside resources as required. The entire medical suite requires negative air pressure and direct exhaust in accordance with D.J.J. standards. The medical unit will provide a single examination room with office space for the nurse and doctor and locked storage areas. A small secure and locked refrigerator will be provided for temporary storage of specimens and the storage of medications requiring refrigeration. Desk space for nursing staff and visiting doctors should be provided within the exam room. Sufficient storage space for medical files on current and previous youth is also provided. Medical services should be accessible to central activity areas for sick call, and regular examinations and to the admissions area for initial medical exams, testing and minor first aid.

<b>5. JDC MEDICAL SERVICES</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Clinic/exam room	1	yes	150	150	Adjacent to Reception and Release area. Lockable cabinets, motion/lever sink, privacy screen, and eyewash station
Medical Holding Room	4		0	0	Refer in Intake
Physician/Nurse's Office w/ Record Storage	1	yes	120	120	Two workstations in one office
Secure Storage	1	yes	30	30	Medication - Secure door and wall, small refrigerator in clinic
Toilet - ADA	1	yes	50	50	Correctional type toilet
Bathtub - ADA	1	yes	30	30	Can include in toilet room
<b>TOTAL</b>				<b>380</b>	<b>Located next to Intake suite</b>

NOTE:

- 1) Medical area shall have negative pressure

**VISITATION**

Visiting at the Prince William County Juvenile Detention Center should take place away from housing areas. Family members, friends, legal counsel and others who come to the facility to visit or interview youth should have access to rooms near the point of entry so that they need not circulate further into secure areas. Visitors will enter visiting areas through a security foyer which prevents either access or egress except under the direct supervision of detention staff. Visitors should pass through metal detection equipment prior to entering secure visiting areas and need storage space available for personal belongings that will not be permitted in secure areas.

Several different types of visiting rooms will be available. A small interview room will provide a place for small group and individual visits on a requested basis and should accommodate family visits which for various reasons cannot take place during large group visiting sessions. It will also be useful for interviews with legal counsel, clergy, and other professional services staff who visit the facility. Per D.J.J. standards, a non-contact visitation space will also be provided. This space will provide for a private visit and will have a paper pass to facilitate legal paperwork.

Large group visits may be regularly scheduled during the week, where visitors and youth will make use of the Gymnasium space that will have observation from central control. All visiting areas will be easily supervised by staff outside of the rooms via direct visual contact or electronic methods.

<b>6. JDC VISITATION</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Non-Contact Visitation	1	yes	80	80	Private
Contact Visitation	5	yes	80	400	Private; also use for professional visitation
<b>TOTAL</b>				<b>480</b>	

NOTE:

- 1.) Large Group Family Visits will take place in the Gymnasium



---

## JUVENILE HOUSING

The existing facility consists of several sizes and configurations of housing units, however, the current JDC and DSS staff have expressed a desire for more uniform housing unit sizes, yet with flexibility to adequately separate fluctuating populations of gender, age, and other classifications. Staffing ratios were changed with PREA standards a few years ago and two staff in a housing unit where more than 8 youth are housed is required. The JDC staff have found two Detention Care Specialists for these larger groups allows them to interact with the youth individually and still maintain supervisory cover. To address these requests, housing units have been designed for one housing unit with 10 sleeping rooms plus the ability to split the unit in half and have two housing units with 5 sleeping rooms.

Direct supervision staff will be assigned to each unit with these staff supported by additional staff should the need arise (Shift Supervisor). If individual youth must be escorted to other areas for specific services or for special holding purposes, the shift supervisor or other available staff will help with youth movement. Movement of the entire housing unit will be the responsibility of the unit's Detention Care Specialists.

Each housing unit is designed to have natural daylight fill the dayroom and to allow views outdoors to see the changing weather. The colors and patterns within the housing units will be chosen to be calming and not overly stimulating. Windows at the end of the dayroom overlooking an outdoor rec area, high clerestory windows giving natural light to the dayroom, and windows in the bedroom doors capturing "borrowed light" from the dayroom will be the daylighting solutions used in the housing units.

The dayrooms are intended to encourage social engagement, as are each unit's rec yard, while individual sleeping rooms provide quiet areas of refuge for youth. Fixtures and furnishings will all be suicide resistant and inset industrial type carpeting may be used for portions of the dayroom.

Background noise will be addressed through HVAC design. Reverberation will be addressed through finishes and acoustical panel placement. The jarring acoustical impact of heavy doors closing will be mitigated through coordination with the structural design of the housing units to minimize the vibrations of the closing doors. Pneumatic locking systems are also quieter than electro-mechanical systems and will be considered for their acoustical benefits.

PROGRAM DESIGN AND  
 PLANNING STUDY  
 for the  
 PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
 AND MOLINARI JUVENILE SHELTER

ARCHITECTURAL PROGRAMS

7. JDC JUVENILE HOUSING	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
<b>Unit 1- 10 Beds</b> (Can be divided into 2 - 5 beds)					
Accessible (ADA) Sleeping Room	2	yes	90	180	10'-0" Ceiling Height, undecided about window in bedroom
Sleeping Rooms	8	yes	80	640	10'-0" Ceiling Height, undecided about window in bedroom
Day Room	10	yes	30	300	30 NSF/Bed, windows in dayroom
Toilet	2	yes	50	100	Access to Day Room
Shower / Drying	4	yes	40	160	4 Stalls - two ADA
Janitor closet	2		50	100	With mop sink; with shelf for general storage (toilet paper)
Resident supply	2		100	200	Clothing, supplies, hygiene
Resident Storage	10		3	30	Lockers or cubbies inside dayroom
Staff Station	2		50	100	
<b>Unit 2 – 10 Beds</b> (can be divided into 2-5 beds)					
Accessible (ADA) Sleeping Room	2	yes	90	180	10'-0" Ceiling Height
Sleeping Rooms	8	yes	80	640	10'-0" Ceiling Height
Day Room	10	yes	30	300	30 NSF/Bed
Toilet	2	yes	50	100	Access to Day Room
Shower / Drying	4	yes	40	160	3 Stalls - one ADA
Janitor closet	2		50	100	With mop sink; with shelf for general storage (toilet paper)
Resident supply	2		100	200	Clothing, supplies, hygiene
Resident Storage	10		3	30	Lockers or cubbies inside dayroom
Staff Station	2		50	100	
<b>Unit 3 – 10 Beds</b> (can be divided into 2-5 beds)					
Accessible (ADA) Sleeping Room	2	yes	90	180	10'-0" Ceiling Height
Sleeping Rooms	8	yes	80	640	10'-0" Ceiling Height
Day Room	10	yes	30	300	30 NSF/Bed
Toilet	2	yes	50	100	Access to Day Room
Shower / Drying	4	yes	40	160	3 Stalls - one ADA
Janitor closet	2		50	100	With mop sink; with shelf for general storage (toilet paper)
Resident supply	2		100	200	Clothing, supplies, hygiene

PROGRAM DESIGN AND  
 PLANNING STUDY  
 for the  
 PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
 AND MOLINARI JUVENILE SHELTER

ARCHITECTURAL PROGRAMS

Resident Storage	10		3	30	Lockers or cubbies inside dayroom
Staff Station	2		50	100	
<b>Unit 4 – 10 Beds</b> (can be divided into 2-5 beds)					
Accessible (ADA) Sleeping Room	2	yes	90	180	10'-0" Ceiling Height
Sleeping Rooms	8	yes	80	640	10'-0" Ceiling Height
Day Room	10	yes	30	300	30 NSF/Bed
Toilet	2	yes	50	100	W/C Access to Day Room - ADA
Shower / Drying	4	yes	40	160	3 Stalls - one ADA
Janitor closet	2		50	100	With mop sink; with shelf for general storage (toilet paper)
Resident supply	2		100	200	Clothing, supplies, hygiene
Resident Storage	10		3	30	Lockers or cubbies inside dayroom
Staff Station	2		50	100	
<b>Unit 5 – 8 Beds</b>					
Accessible (ADA) Sleeping Room	1	yes	90	90	10'-0" Ceiling Height
Sleeping Rooms	7	yes	80	560	10'-0" Ceiling Height
Day Room	8	yes	30	240	30 NSF/Bed
Toilet	1	yes	50	50	Access to Day Room
Shower / Drying	2	yes	40	80	One ADA
Janitor closet	1		50	50	With mop sink; with shelf for general storage (toilet paper)
Resident supply	1		80	80	Clothing, supplies, hygiene
Resident Storage	7		2	14	Lockers or cubbies inside dayroom
Staff Station	1		40	40	
<b>TOTAL</b>				<b>8,444</b>	

---

## EDUCATION

For the proposed youth population, the design accommodates all forty-eight youth to be engaged in school activities at the same time. Eight classrooms will provide adequate space for a full schedule of education services. A library to meet educational standards is also included. The student / teacher ratio will be smaller than the 1:12 maximum allowed and will give the school the flexibility it needs to provide customized educational plans for the varied ages and levels of the students in detention. Prince William County Public School System operates the school within the JDC, and provides the educators, as well as the supplies. A separate office space for School Administrator and assistant, and a dedicated educational storage room are provided in the program.

The classrooms will be designed with windows that allow the entry of daylight and a visual connection to nature for the youth and the teachers. Large format images of nature will be included in areas that are not on exterior walls and cannot include windows. Colors and patterns will promote a calming atmosphere. Attention to acoustics, particularly a reduction in background noise and noise transfer between spaces, will further provide a calm setting conducive to teaching and learning. Thermostats will allow +/- 2-degree temperature control in the classroom spaces.

Academic spaces will be oversized to accommodate youth who need extra personal space to succeed in the classroom. Counseling and sensory rooms to provide calming spaces in which to de-escalate a tense situation will be provided.

PROGRAM DESIGN AND  
 PLANNING STUDY  
 for the  
 PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
 AND MOLINARI JUVENILE SHELTER

ARCHITECTURAL PROGRAMS

8. JDC EDUCATION	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
School Administrator's office	1		160	160	Outside the secure perimeter; u-shaped desk with conference for four
Admin assistant/supplies	1		100	100	Outside secure perimeter; private office
Work area	1		64	64	Copier, cubicle, office supplies
Server room	1		50	50	PWCPS; confirm with County and PWCPS IT; AJ Phillips (phillias@pwcs.edu and Rob Rollins rrollins@pwcgov.org are contact)
Conference room	1		120	120	Outside secure perimeter; use classroom as conference for more than four
Teacher workspace	1		160	160	Inside secure perimeter; two - L-shaped workstations; Literacy coach, Special ed coordinator
Classroom	7		300	2,100	Have five classrooms now; one is a computer lab; one is post-secondary; all accommodate twelve student desks plus two workstations for instructor; indicate natural light
Classroom - storage	4		25	100	Locking closet of 25 SF (shared between classrooms; science has greatest need); graduation materials
Classroom - vocational	1		500	500	Vocational classroom, concrete floor, infrastructure for simulators
Art Classroom	1		300	300	Concrete floor
Library	1	yes	334	334	9-12, 3' length of five shelves high; six GED testing workstations (15 SF each); one teacher workstation
Workroom/breakroom	1		200	200	Seating for 8; refrigerator, sink, microwave, coffee maker, copier, base and wall cabinets; cart storage
Toilet - Students	2		50	100	
Toilet - Staff	2		50	100	
Reflection Room	1		100	100	For one student to regroup prior to rejoining classroom
Post-Secondary Classroom	1				One of the classrooms
<b>TOTAL</b>				<b>4,488</b>	

---

## RECREATION AND PROGRAMS

Various types of recreation will occur in several locations throughout the facility. Large muscle sports will be taking place in a large outdoor recreation yard and in the indoor gymnasium. The gymnasium will have a full size basketball court. The indoor gymnasium is used daily in the existing facility and was expressed to be a design priority in the new design. This large space is a valuable resource when the weather outside makes outdoor recreation unpleasant and is planned to be used for weekly family visitation and large graduation events.

Youth dining is considered a “program” space, as it can be used with flexibility as needed by the JDC to support its programs. The dining room shall be able to serve all residents a meal in one sitting. The dining space should support easy clean-up of all exposed surfaces and furnishings by youths. Acoustic controls to minimize noise associated with group dining are essential.

The Indoor Activity space is the third large group space in the building, situated in the center of the facility. This will be used as multi-purpose space, indoor recreation, and to support the facility’s rewards program for behavior and goal meeting.

A Department of Juvenile Justice standard of 100 SF per resident is needed for indoor recreation and activity space which will be achieved with the gymnasium, dining, activity space, and classrooms. For the outdoor space, a recreation yard that gives at least 200 SF per resident will be provided. Outdoor recreation space, per DJJ standards are required to be twice the indoor recreation space requirement.

Each housing unit will have its own recreation area that is intended to serve as a space for supervised social engagement based around physical activity. In addition, there is a larger outdoor recreation area between dining and education that will be landscaped as a small nature walk. This physical connection to nature is an important element of trauma informed design. The smaller outdoor rec area between education and the housing unit will also be landscaped and will provide an additional visual connection to nature.

The outdoor recreation yards will all be further normalized by treating security without the use of traditional measures like razor ribbon, security towers, and high mast lighting. Using the building’s walls as the security perimeter, as well as passive surveillance measures, will provide the same level of security without the traumatizing psychological effect of more aggressive measures.

PROGRAM DESIGN AND  
 PLANNING STUDY  
 for the  
 PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
 AND MOLINARI JUVENILE SHELTER

ARCHITECTURAL PROGRAMS

9. JDC RECREATION AND PROGRAMS	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
Outdoor Exercise (not counted in Bldg. S.F.)	48	yes	200	9,600	Would desire two yards, courtyard layout
Coordinator	2		100	200	Inside secure perimeter; <b>four staff</b> share two offices; staff are the case manager, volunteer coordinator, life skills coordinator, re-entry coordinator
Future program office	1		120	120	Inside secure perimeter; U-shaped desk with two guest chairs; occupancy sensor for lighting
Therapist (CPP)	1		100	100	Inside secure perimeter
Therapist (CSB)	1		100	100	Inside secure perimeter
Gymnasium	1		6800	6,800	Current gym approximately 3700 s.f.; used for graduation ceremonies; divider partition/curtain in gym; provide natural light; podium and AV infrastructure; acoustic treatment; low bleachers
Game Room	1		200	200	Windows to gym - Access from inside gym
Gymnasium - storage	1		100	100	Table and chair storage
PE Teacher workspace	1		100	100	Inside secure perimeter; one - L-shaped workstation; PE only; attached to gym
Dining	48	yes	20	960	Would desire courtyard seating adjacent to dining (20 seats)
Conference room	1		300	300	Seat 15; Inside secure perimeter
Activity Space / Commons	30	yes	40	1,200	Not divided - single space; to be used for "Level" events
Boy's Toilet Room - ADA	1	yes	50	50	
Girl's Toilet Room - ADA	1	yes	50	50	
<b>TOTAL</b>				<b>10,280</b>	Does not include outdoor exercise

NOTE:

- 1.) DJJ requires furniture bolted to structure in Dining, or of sufficient size & weight to prevent throwing
- 2.) Indoor Activity: in gym/multipurpose/dining and other leisure areas (except dayrooms) shall be minimum aggregate size of 100 S.F. per/occupant

**FOOD SERVICES**

Full food service capabilities will be available at the Prince William County Juvenile Detention Center, with three meals prepared for all youth each day using on-site personnel and facilities. Youth will not work in the kitchen and should not have direct access to kitchen spaces. Direct meal service to a central youth dining area is planned.

The co-location of the Molinari Juvenile Shelter provides the opportunity to efficiently have one main kitchen for both facilities, and transport meals by cart through a corridor to the shelter. There will be one delivery dock, one food storage area, one menu, and one Food Service director who will lead both facilities. The kitchen is sized to meet minimum DJJ Standards of 10 s.f. minimum per occupant served and satisfies the 200 S.F. minimum area requirement.

10. JDC FOOD SERVICE	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
<b>Kitchen</b>					
Office	1		100	100	
Kitchen and serving line	1		800	800	DJJ 2.98 requires a protective grille and a steel door with a secure detention lock
Dry Storage	1		120	120	
Refrigerator	1		90	90	
Freezer	1		90	90	
Staff Toilet	1	yes	50	50	
Janitor and Chem Storage	1	yes	60	60	
Receiving	1		50	50	
Waste/Refuse	1		50	50	
Outdoor Loading Dock	1			0	Not included in SF total
<b>TOTAL</b>				<b>1,410</b>	



**LAUNDRY**

Laundry services will be provided on-site by facility staff. Full-service laundry facilities, including a clothes washing/drying/sorting area along with associated soap storage, folding, and linen storage spaces are required. Youth will not be involved in the laundry function and no washers and dryers for youth use are to be provided in housing or other areas. Staff access to the laundry should occur directly from central program and services areas and should not require passage through food preparation and storage spaces.

The co-location of the Molinari Juvenile Shelter provides the opportunity to efficiently have one main laundry for both facilities. The laundry area should be located at the hub between the two buildings and is sized to accommodate the need for both buildings.

11. JDC LAUNDRY	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
Laundry	1		300	300	Two commercial size electric washers and two commercial gas dryers, a folding counter, utility sink
Linen/Laundry Store	1		80	80	
Supplies/Carts	1		80	80	
<b>TOTAL</b>				<b>460</b>	

NOTE:

- 1.) Clean linen will be folded on table and stored on carts

**MAINTENANCE AND GENERAL STORAGE**

General storage for bulk goods and maintenance/repair items is needed. Several small storage rooms are listed within the separate program components for specific needs, but the facility also has a need for central storage.

Prince William County is considering locating a “Maintenance Hub” at the Juvenile Detention Center. They have several hubs around the County where Public Works staff are stationed, and travel to the different County buildings where needed. This department will be located outside the secure perimeter of the JDC, and with a separate entrance and parking so that a County Maintenance hub would not disturb the ongoing operation or security of the JDC or MJS. Having the County public works personnel on site would be a benefit for the JDC and MJS when their services are needed.

<b>12. JDC MAINTENANCE AND GENERAL STORAGE</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
General Storage	1		500	500	Adjacent to loading dock; serves PWC maintenance hub
Outdoor Storage	1		200	200	
Maintenance Office	1		300	300	Adjacent to loading dock; three L-shaped workstations; serves PWC maintenance hub
Maintenance Workshop	1		200	200	Accessible from exterior
Janitor closets distributed around building	4		25	100	One at admin, one at gym/rec, one at education, one at activity/dining; each with mop sink. Each housing unit has own Janitor Closet
<b>TOTAL</b>				<b>1300</b>	

Note: Outside secure perimeter

Four Parking spaces for B&G staff

**CENTRAL PLANT**

The main central plant is planned to serve both the Juvenile Detention Center and the Molinari Youth Shelter, adding to the efficiency of co-locating the two buildings. Most of the Heating Ventilating and Air Conditioning (HVAC) equipment is on the roof and will be designed as roof top equipment. The JDC will have a smoke evacuation system as part of it's I-3 use group requirements, with rooftop exhaust and make-up air fans.

<b>13. JDC CENTRAL PLANT</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Generator (emergency power)	1				Outside; to feed both JDC and MYS; natural gas; investigate methane from landfill; with hookup for trailer mounted generator; consider two for redundancy; full power backup for all systems
Mechanical Room	1		700	700	
Main Electrical	1	yes	350	350	
Branch Electrical	1	yes	200	200	
Fire Pump Room	1	yes	100	100	Not yet determined if needed
Main Distribution Room	1		300	300	Main D-mark for phone, data, fiber
Branch I.T. Rooms	2		70	140	
<b>TOTAL</b>				<b>1,790</b>	

NOTE: Main Rooms outside secure perimeter, branch room may be inside perimeter

**MOLINARI JUVENILE SHELTER**

**RECEPTION / LOBBY / WAITING**

The main entrance of the building will be for the public and staff. Reception of new youth to the facility, and transport to court or other meetings off site will be conducted through a separate entrance. Security screening for visitors is not part of this building’s programming since it is designed as a “Less-Secure” facility and does not have a secure perimeter. The size of the lobby does not need to be large but will be a location to receive and control people coming and going.

<b>1. MYS RECEPTION/ LOBBY/ WAITING</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Public Lobby	8		20	160	Sized for 8
Weather Vestibule	1		70	70	
Men's Restroom	1		50	50	
Women's Restroom	1		50	50	
<b>TOTAL</b>				<b>330</b>	

NOTE: Separate lobby from JDC

**FACILITY ADMINISTRATION / STAFF SUPPORT**

Administrative areas for the proposed facility include space for administrative offices, conference/meeting areas, records storage, and administrative support. As part of co-locating the Molinari Juvenile Shelter with the Juvenile Detention Center, staff support spaces can be shared giving the MJS staff the same amenities that the JDC staff have. Staff support spaces include locker rooms, restrooms, showers, fitness room, and break room.

The Detention Specialists and Detention Supervisors of the MJS will have their workstation in the living/housing area of the building where residents spend their time, not in the administrative wing.

<b>2. MJS FACILITY ADMINISTRATION/ STAFF SUPPORT</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
<b>Administration</b>					Do not want the Admin suite to be the go between dormitory and recreation area; need 30 parking spaces
Manager/Assistant Superintendent	1		160	160	Window, U-shaped desk, conference for four; office have sidelight or clerestory; occupancy sensor for lighting
Admin Assistant	1		100	100	
Counselor (intake office)	1				Office in Intake
Therapist	1		100	100	Nurse is housed at JDC
<b>Support</b>					
Work Room	1		100	100	Copier and coffee
Lockers	0		0	0	Share with JDC
Staff Toilets	2	Yes	50	100	ADA accessible, men's & women's
File Room	0			0	Admin files split between offices
Conference Room	1		300	300	Accommodate 15
Staff Lockers	30		5	150	Separate men's and women's, adjacent to fitness room; 12"x 18"x 30" H (half height); to be located at JDC
Breakroom	0		-	-	Share with JDC
Staff Toilet/shower	0	yes	-	-	Share with JDC
Fitness	0		-	-	Share with JDC
<b>TOTAL</b>				<b>1,010</b>	

**RECEPTION / INTAKE**

The reception area of the facility will facilitate several essential functions. The admissions process involves initial reception of juveniles from law enforcement or Social Services, medical screening and search of the juvenile, clothing distribution, interviews to obtain information regarding the juvenile, and orientation of the juvenile to explain facility operations and behavior requirements. Preliminary crisis intervention activities also begin during the admissions process, and counseling may occur. This area may also be used for youth waiting to be picked up for court, release, or other meetings.

<b>4. MJS RECEPTION, INTAKE</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Counselor office	1		120	120	One L-shaped workstation with files and two guest chairs
Interview Room	1	yes	100	100	Seating for 4, camera and monitor on wall, video arraignment capable
Reflection Room	2				One on each side of building, accessible to staff
Property Storage	1	yes	50	50	9 cuft/occupant lockers
Clothing Storage	1	yes	50	50	
Shower /Search / Toilet	1				Not needed
Carport	1		-	-	Desired cover if site allows for van height
Visitor Waiting Room	1	yes	80	80	
<b>TOTAL</b>				<b>400</b>	

**MEDICAL SERVICES**

Medical services at the shelter will consist primarily of routine examination, first aid, distribution of medications, and medical attention as a part of the reception / admission process. Trauma and emergency services will be provided by outside resources as required. The medical area is within the same suite as intake/ reception, so the combined area will have negative air pressure and direct exhaust in accordance with DJJ standards for medical areas. The MJS will have a small clinic and will share staff and medical resources with the JDC as part of a co-locating efficiency. The clinic will have a desk for the medical staff, but no other office space. A small secure and locked storage room and refrigerator will be provided for temporary storage of specimens and the storage of medications requiring refrigeration. An overnight medical separation bedroom is provided to be used when a youth has a contagious disease and needs to be separated from the rest of the residents. This medical bedroom will have its own negative pressure ventilation system.

<b>5. MJS MEDICAL SERVICES</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Clinic	1		100	100	Locate adjacent to with intake
Medical separation bedroom	1		90	90	
Secure Storage	1		15	15	Medical supplies
Toilet - ADA	1		50	50	
Bathtub - ADA	0			0	Not needed
<b>TOTAL</b>				<b>255</b>	

**JUVENILE HOUSING**

The existing Molinari Juvenile Shelter serves both boys and girls, and the replacement facility will also. One of their ongoing challenges is a fluctuating population of boys and girls, and it rarely is a 50/50 split. The Department of Social Services has requested one flexible housing pod that can be managed by male and female staff and will serve the whole capacity of 20 bedrooms. With the staffing ratio of 1:8, they intend to always have at least one male and one female Detention Specialist working in the pod whenever they have both boys and girls in residence, and there is a space for a third staff if the population exceeds 16 during daytime.

The program below is showing 3 separate housing units however, the design has eliminated the walls between and combined these into one, using approximately the same space as shown below. While the DJJ standards allow for double, triple, or quadruple bunking in the Juvenile Shelter construction standards, the MJS has requested single sleeping quarters for each resident to control social problems, and provide each resident with a secure, private, calm space for sleeping. The open space outside the bedrooms will replicate a living room and bring some normalizing features of home-life to the facility. Like a home, the bathrooms and showers are separated from the bedrooms. The bedrooms do not have a toilet inside them like one would see in a cell, and the youth are not locked in their rooms at night.

<b>7. MJS JUVENILE HOUSING</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
<b>Unit 1 – Girls – 8 Beds</b>					
Sleeping Room - Singles	8	yes	80	640	
Living Room	8		20	160	
Toilet	2	yes	50	100	Access to Living Room - ADA
Shower / Drying	2	yes	40	80	
Shift staff	1		64	64	One U-shaped desk in the living room
<b>Unit 2 – Boys – 8 Beds</b>					
Sleeping Room- Singles	8	yes	80	640	
Living Room	8		20	160	
Toilet	2	yes	50	100	Access to Living Room - ADA
Shower / Drying	2	yes	40	80	
Shift staff	1		64	64	One U-shaped desk in the living room



PROGRAM DESIGN AND  
 PLANNING STUDY  
 for the  
 PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
 AND MOLINARI JUVENILE SHELTER

ARCHITECTURAL PROGRAMS

<b>Unit 3 – Swing – 4 Beds</b>					
Sleeping Room-Singles	4	yes	80	320	
Living Room	4		20	80	
Toilet	2	yes	50	100	Access to Living Room - ADA
Shower / Drying	2	yes	40	80	
Shift staff	1		64	64	One U-shaped desk in the living room
<b>Support</b>					
Janitor Closet	1		40	40	
<b>TOTAL</b>				<b>2,772</b>	

Notes:

- 1) Up to 4 juveniles per room is allowed
- 2) Dry Bedrooms

**EDUCATION**

Prince William County Public Schools will operate the school inside the MJS. It will be designed to have a separate entrance and be located in a distinct part of the building, to give the students a sense of “arriving” at school after breakfast. Two classrooms and a library will provide separate learning spaces for teachers and students. The classrooms will be designed with windows that allow the entry of daylight and a visual connection to nature for the youth and the teachers. Colors and patterns will promote a calming atmosphere. Attention to acoustics, particularly a reduction in background noise and noise transfer between spaces, will further provide a calm setting conducive to teaching and learning.

The student / teacher ratio will be smaller than the 1:12 maximum allowed and will give the school the flexibility it needs to provide customized educational plans for the varied ages and levels of the students in residence. Separate spaces for supplies, teacher work areas, and restrooms will also be provided.

<b>8. MJS EDUCATION</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Entry Foyer	1		40	40	A moment to indicate students have arrived and to trigger a learning mindset
Classroom	2		300	600	
Library	1		200	200	Indicate GED testing workstations
Teacher Workroom	1		160	160	Indicate between classrooms
Server Room	1		50	50	
Toilet - Students	2		50	100	Both unisex
Toilet - Staff	1		50	50	With Teacher Workroom
Storage Closet	0		25	-	
<b>TOTAL</b>				<b>1,200</b>	

**RECREATION AND PROGRAMS**

Indoor and outdoor recreation will be an important part of the daily schedule for youth. Large muscle sports will be taking place in a large fenced outdoor recreation yard, which will have basketball goals. Two smaller indoor activity rooms will also facilitate recreational activities, as well as other programs, and give MJS flexibility in planning for different groups of boys and girls.

Youth dining is another group gathering space which will be used for all meals, and large enough to serve all residents at one time. It will be designed to have large windows providing daylight and views of the outside. The dining space should support easy clean-up of all exposed surfaces and furnishings by youths. Acoustic controls to minimize noise associated with group dining are essential. This space can be used for other activities as well.

The Department of Social Services has need for a Community Room to facilitate diversionary programs and other community programs. Locating it at the MJS gives the opportunity for the Youth Shelter to take advantage of the space for their activities as well. The Community Room gives the MJS a large space they would not otherwise have, and opens the ability to plan family events and graduations on site.

<b>9. MJS RECREATION AND PROGRAMS</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Outdoor Exercise (not counted in Bldg. S.F.)	20	yes	100	2,000	Two basketball goals
Indoor Rec	20	yes	40	800	
Storage	1		50	50	
Dining	30		20	600	Seating for up to 20 kids, 10 staff
Activity Space / Commons	15		40	600	
Boy's Toil Room - ADA	1	yes	50	50	Off indoor rec
Girl's Toil Room - ADA	1	yes	50	50	Off indoor rec
Community Room	1		1500	1500	
Public Toilet – Men	1		50	50	Share with lobby
Public Toilet – Women	1		50	50	Share with lobby
<b>TOTAL</b>				<b>3,750</b>	Does not include outdoor exercise

NOTE:

- 1.) DJJ recommends each grouping of rooms has an adjacent outdoor recreation space.
- 2.) Indoor Recreation may be composed of classroom, and/or multi-purpose with combined minimum area 100 s.f./occupant.

**FOOD SERVICES**

Full food service capabilities will be available at the Juvenile Detention Center, and the JDC kitchen will also prepare meals for the Molinari Juvenile Shelter. The JDC program contains the loading dock, dry storage, freezers, coolers, and the commercial kitchen, so the MJS does not need to replicate those spaces and services. Food will be brought through an enclosed corridor on carts to the MJS, so their need is for a small warming kitchen. There is space to store carts, and small dry storage area so the MJS can prepare snacks without relying on the JDC.

10. MJS FOOD SERVICE	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
Prep Kitchen	0		0	0	Share with JDC
Warming Kitchen	1	yes	200	200	Refrigerator, kitchen, sink, dishwasher, microwave, with space for serving line steam table
Dining	1		0	0	Refer to Recreation
Dry Storage	1	yes	85	85	
Receiving/Carts	1		80	80	
Janitor Closet	1		40	40	
<b>TOTAL</b>				<b>405</b>	

NOTE:

- 1.) Food will be prepared at JDC and brought to Shelter.

**LAUNDRY**

Full-service laundry facilities, including a clothes washing/drying/sorting area along with associated soap storage, folding, and linen storage spaces are provided in the program for the JDC, and do not need to be replicated at the MJS. Co-locating the facilities will provide this efficiency of sharing the laundry function. At the MJS, a small area will be needed for laundry carts and clean linen storage. Dirty and clean laundry to be carted through the connecting corridor between the JDC and MJS.

11. MJS LAUNDRY	NO. OF SPACES	DJJ STDS REQ or CODE REQ	NSF	TOTAL NSF	COMMENTS
Laundry	0		0	0	Share with JDC
Linen/Cart Storage	1		100	100	
<b>TOTAL</b>				<b>100</b>	

**MAINTENANCE AND GENERAL STORAGE**

The maintenance spaces for the MJS will be housed at the JDC and are found in the JDC program. Central Storage will be shared between the buildings. Smaller storage areas are accounted for in the separate areas of the MJS program.

<b>12. MJS MAINTENANCE AND GENERAL STORAGE</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
General Storage	1		100	100	
Outdoor Storage	0		0	0	Share with JDC
Maintenance Office / workspace	0		0	0	Share with JDC
Maintenance Workshop	0		0	0	Share with JDC
<b>TOTAL</b>				<b>100</b>	

**CENTRAL PLANT**

It is planned that the JDC and MJS will share systems, providing efficiency for both buildings, but cutting down on the systems and connections needed. There is space in the MJS for branch equipment, but the main equipment is planned to be housed at the JDC. Rooftop mechanical equipment will also be used.

<b>13. MJS CENTRAL PLANT</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Mechanical Room	1		500	500	
Main Electrical	0		0	0	Share with JDC
Branch Electrical	1		80	80	
Branch IT	1		80	80	
<b>TOTAL</b>				<b>660</b>	

NOTE:

- 1.) Possibly share with JDC – to be determined
- 2.) Separate dumpster location from JDC

**JUVENILE SERVICES ADMINISTRATION**

**RECEPTION / LOBBY / WAITING**

Juvenile Services Administration is a separate program from the JDC and MJS. Prince William County Department of Social Services saw the advantages of locating some staff near this juvenile detention campus, as they routinely visit both buildings. Their function is separate from both the JDC and MJS, and they require a separate entry and lobby. This is a non-secure space, with commercial type construction.

<b>1. JUVENILE SERVICES RECEPTION/ LOBBY</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Public Lobby	1		100	100	Two seats
Weather Vestibule	1		50	50	Exterior door secured; intercom
Men's Restroom	1		50	50	
Women's Restroom	1		50	50	
<b>TOTAL</b>				<b>250</b>	

**FACILITY ADMINISTRATION / STAFF SUPPORT**

The Juvenile Services Admin area is part of the Prince William County Department of Social Services and will consist of offices and meeting space. Many programs for detention diversion and community service will be planned here.

<b>2. JUVENILE SERVICES ADMINISTRATION</b>	<b>NO. OF SPACES</b>	<b>DJJ STDS REQ or CODE REQ</b>	<b>NSF</b>	<b>TOTAL NSF</b>	<b>COMMENTS</b>
Office	1		160	160	Division Chief; u-shaped workstation, with conference for four; two files cabinets
Office	1		100	100	
Office	1		200	200	<b>Three</b> Pre-trial staff each with own desk
Juvenile Services Admin Asst	1		100	100	With window to lobby
Workstations	3		64	192	Hoteling workstations
<b>Support</b>					
Conference room	20		20	400	Seat 20
Coffee niche	1		40	40	Small refrig; coffee
Work Room	1		64	64	Copier
Staff Toilets	1		0	0	Counted in Lobby
File Room	1		50	50	
<b>TOTAL</b>				<b>1,306</b>	

---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**SECTION 4  
STAFFING ANALYSIS**

**JUVENILE DETENTION CENTER,  
MOLINARI JUVENILE SHELTER**

---

**JUVENILE DETENTION CENTER**

- **STAFFING SUMMARY**
- **STAFFING PLAN**
- **ORGANIZATIONAL CHART**

**MOLINARI JUVENILE SHELTER**

- **STAFFING SUMMARY**
- **STAFFING PLAN**
- **ORGANIZATIONAL CHART**

**JUVENILE DETENTION CENTER AND  
MOLINARI JUVENILE SHELTER JOB  
DESCRIPTIONS**



### **JUVENILE DETENTION CENTER STAFFING SUMMARY**

The staffing operation of the Prince William County Juvenile Detention Center is divided into two 12-hour shifts providing 24-hour, 7-days per week security coverage. In addition, there is a standard “business shift” for clerical, program and administrative staff. Due to the size of the facility, staff are asked to perform or lend help with a variety of roles in addition to their primary job position. The Shift supervisor, and program staff (Detention Specialists), will provide an additional level of supervision as needed at the housing units and other locations in the facility where youth may be present, and Detention Specialists are cross-trained to help with programs and activities planned for the youth population.

Just as they currently operate in the existing facility, staff will continue providing juvenile supervision in the housing pods by “direct supervision” methodology. The staffing ratio for the housing units is 1:8 during daytime, and 1:16 during nighttime hours when youth are in the bedrooms. These ratios are set by federal law known as PREA (Prison Rape Elimination Act). The 10-bed units will require supervision by two Detention Specialists when more than 8 juveniles are housed in the unit, and the 8-bed unit will require one Detention Specialist during waking hours. The Virginia Department of Juvenile Justice has a slightly less restrictive staffing requirement in their Compliance manual. Here it states that the supervision ratio during waking hours is 1:10, and sleeping hours is 1:16, however since PREA was enacted, the PREA staffing ratios are followed.

The facility will be managed by a Superintendent, who is overall responsible for day-to-day operations of the facility. The Superintendent reports to the Assistant Director of Social Services for Juvenile Services, and they are responsible for providing leadership and planning for the facility. Assistant Superintendents will assist the Superintendent in these duties and also have primary responsibility for programs, support staff, and oversight of security staff. The primary security position is a Shift Supervisor who is responsible for housing and non-housing security operations including intake, visiting, control room operations, searches, and housing security. Control Room Officers and Detention Specialists round out the security positions.

The following table illustrates the staffing requirements for the facility. Currently, at the beginning of fiscal year 2020, the JDC employed 63.5 full time equivalents. A total of 63 full time equivalent positions are anticipated, including relief staff for most security positions. Full time relief is calculated to include relief staff for the two shifts to be fully staffed 24 hours per day, 7 days per week. Relief staff are needed to cover weekends, holidays, sick time, training, vacation days, and other miscellaneous days off. A factor .65 is used to calculate the number of relief staff, and is based on experience of what is needed by the JDC. For this study, these positions were calculated as full-time employees, but the facility may choose to hire a combination of full time, part time, or temporary employees to make up the relief hours needed.

Day to day, there will be other non-facility-employed staff working at the JDC. These include teachers, medical care providers, counselors and volunteers; many from agencies described in the Program Design. Prince William County Public School District provides for public education in the facility, with teachers and administration to operate the program. These positions are not added into the totals, as they are not employed by the Detention Home.

**JUVENILE DETENTION CENTER STAFFING PLAN**

<b>STAFFING PLAN FOR FULL 48 BED FACILITY</b>				
Position	1st Shift 7am-7pm and 8am – 5pm	2nd Shift 7pm – 7am	Relief factor for security posts	Total Positions
Superintendent	1			1
Asst. Dir. of Social Services for Juvenile Services	.5			.5
Assistant Superintendent	3			3
Finance	1			1
Administrative Support	1.5			1.5
Program Therapist	2			2
Shift Supervisor	2			2
Sr. Detention Specialist-programs	3			3
Sr. Detention Specialist-team leader	2	1	1.5	4.5
Control Room Officer	2	2	2	6
Detention Specialist (pods)	9	5	10.5	24.5
Rover / Intake	2	1	1.5	4.5
Security Screening (Lobby)	1		.5	1.5
Nurse	1.5			1.5
Food Services	4			4
Maintenance/Custodian	2.5			2.5
<b>Total Positions</b>	<b>38</b>	<b>9</b>	<b>16</b>	<b>63</b>

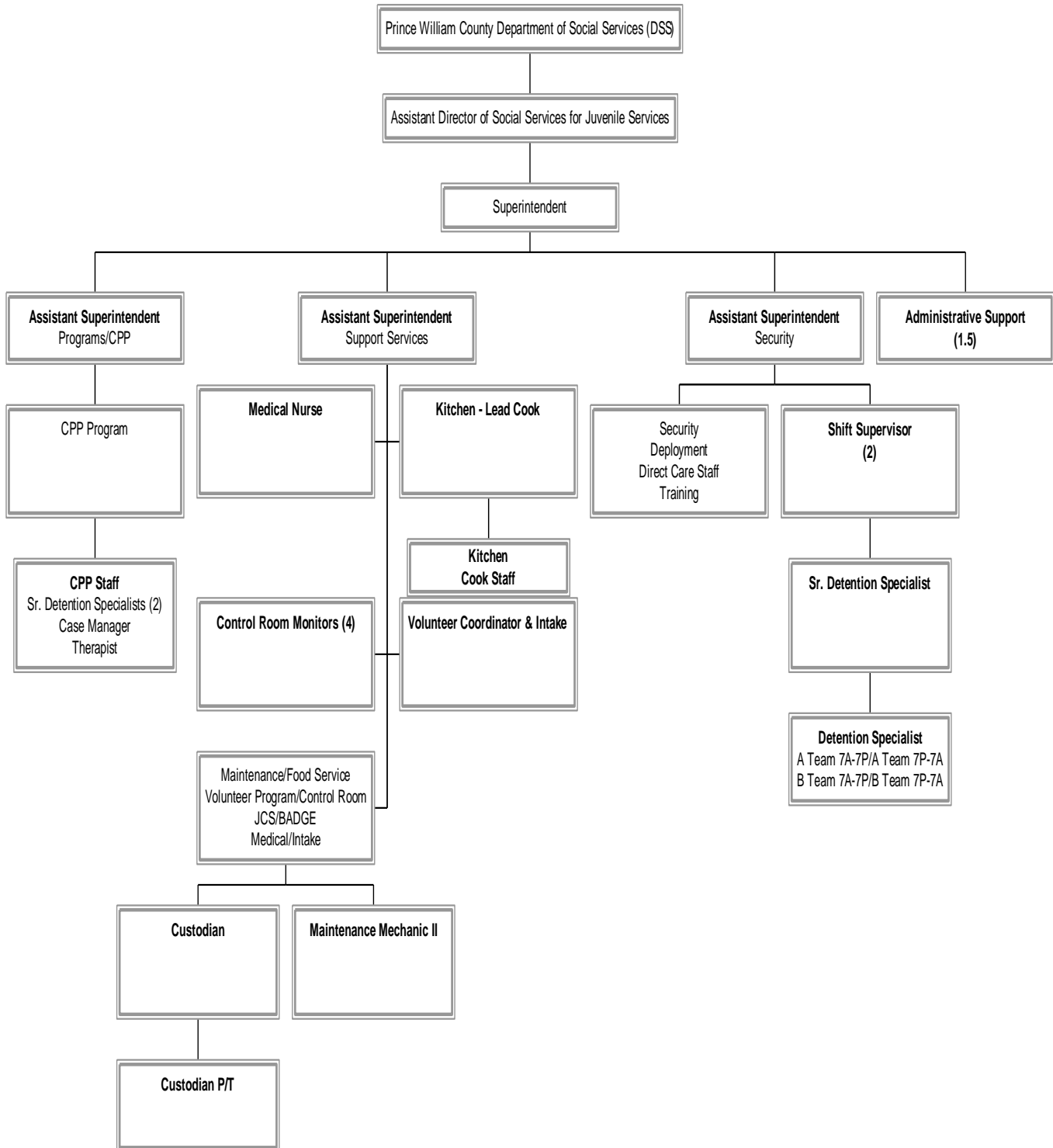
Source: Prepared by Moseley Architects, with input from PWC JDC, 2020

Notes:

1. Some positions have staggered shift beginning and end, but the chart above places them where the majority of their shift will occur.
2. A factor of .65 is used to calculate the need for "Relief" staff to post positions 24 hours per day
3. The Assistant Director of Social Services for Juvenile Services splits his time between the JDC and the Molinari Juvenile Shelter, so each chart shows the position as .5.

The following organizational flow chart shows the intended staff organization of the Detention Center.

**JUVENILE DETENTION CENTER ORGANIZATIONAL CHART**



### **MOLINARI JUVENILE SHELTER STAFFING SUMMARY**

The staffing operation of the Molinari Juvenile Shelter is divided into three 8-hour shifts providing 24-hour, 7-days per week security coverage. In addition, there is a standard “business shift” for clerical, program and administrative staff. Due to the size of the facility, staff are asked to perform or lend help with a variety of roles in addition to their primary job position. The Detention Supervisors and program staff provide an additional level of supervision as needed at the housing units and other locations in the facility where youth may be present. Detention Specialists are cross trained to help with programs and activities planned for the youth population.

Just as they currently operate in the existing facility, the staff will continue to provide juvenile supervision in the housing units by “direct supervision” methodology. The staffing ratio for the housing units is 1:8 during daytime, and 1:16 during nighttime hours when youth are in the bedrooms. These ratios are set by federal law known as PREA (Prison Rape Elimination Act). The 8-bed units will require supervision by one Detention Specialist. The Virginia Department of Juvenile Justice has a slightly less restrictive staffing requirement in their Compliance manual. Here it states that the supervision ratio during waking hours is 1:10, and sleeping hours is 1:16, however since PREA was enacted, the PREA staffing ratios are followed.

The facility will be managed by a Superintendent, responsible for day-to-day operations of the facility, future planning, and budget development. Detention Supervisors will assist the Superintendent in these duties and have primary responsibility for programs, education, support staff, and oversight of the housing units. Detention Specialists will provide daily monitoring and supervision for youth and their schedules and will have a staff station in the housing unit.

The following table illustrates the staffing requirements for the facility. Currently, at the beginning of fiscal year 2019, the Shelter employed 17.5 full time equivalent positions. The proposed design increases the bed space at the Molinari Juvenile Shelter, so the 24-hour Child Supervision staff will be increased. A total of 21.5 full time equivalent positions are anticipated, including full-time employee (FTE) relief for most 24-hour positions. Full time relief is calculated to include relief staff for the three shifts to be fully staffed 24 hours per day, 7 days per week. Relief staff are needed to cover weekends, holidays, sick time, training, vacation days, and other miscellaneous days off. A factor of about one relief for each 24-hour position is used and is based on experience of what is needed in the current facility. For this study, these positions were calculated as full-time employees, but the facility may choose to hire a combination of full time, part time, or temporary employees to make up the relief hours needed.

Day to day, there will be other non-facility employed staff working at the JDC. These include teachers, medical care providers, counselors and volunteers; many from agencies described in the Program Design. Prince William County Public School District provides for public education in the facility, with teachers to operate the program. These positions are not added into the totals, as they are not employed by the Detention Home.

**MOLINARI JUVENILE SHELTER STAFFING PLAN**

<b>STAFFING PLAN FOR FULL 20 BED FACILITY</b>					
Position	1st Shift 7am-3pm	2nd Shift 3pm – 11pm	3rd Shift 11pm-7am	Relief Staff	Total Positions
Superintendent	1				1
Detention Supervisor	1	1			2
Asst. Dir. S.S. for Juv. Services	.5				.5
Administrative Specialist	1				1
Human Services Caseworker	1				1
Program Therapist	1				1
Detention Specialist (housing)	3	3	2	3	11
Intake			1	.5	1.5
Nurse	.5				.5
Food Services	1	1			2
<b>Total Positions</b>	<b>10</b>	<b>5</b>	<b>3</b>	<b>3.5</b>	<b>21.5</b>

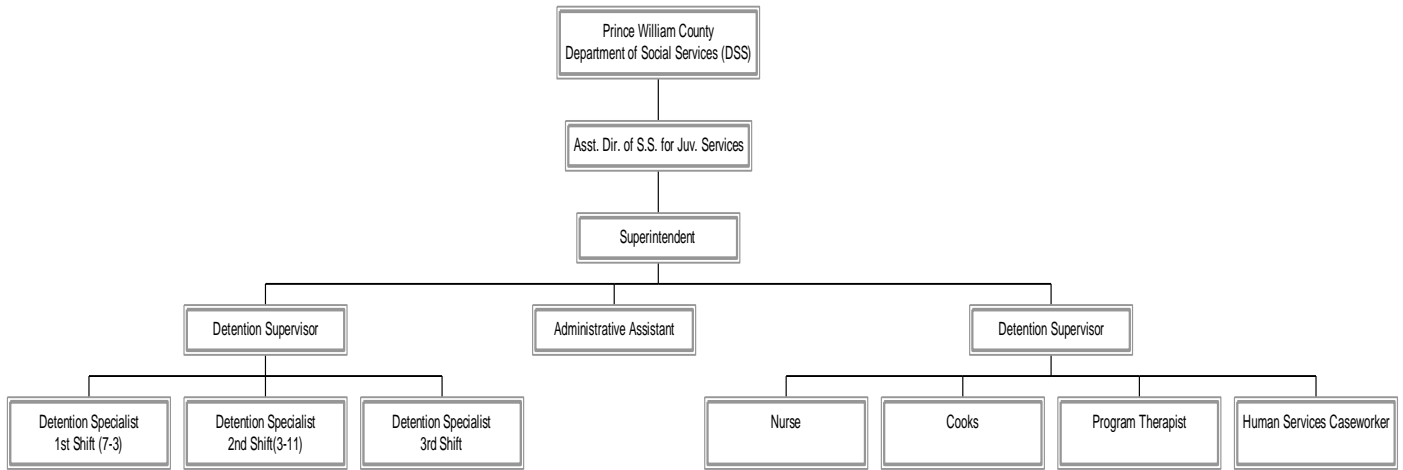
Source: Prepared by Moseley Architects, with input from PWC MJS, 2020

Notes:

1. Some positions have staggered shift beginning and end, but the chart above places them where the majority of their shift will occur.
2. A factor of 1 is used to calculate the need for “Relief” staff for a 24 hour per day position.
3. The Assistant Director of Social Services for Juvenile Services splits his time between the JDC and the Molinari Juvenile Shelter, so each chart shows the position as .5.

The following organizational flow chart shows the intended staff organization of the Molinari Juvenile Shelter.

### JUVENILE SHELTER ORGANIZATIONAL CHART



Following are job descriptions for the key positions listed in the charts above for both the Juvenile Detention Center and the Molinari Juvenile Shelter. In most cases, the County uses the same job description for both facilities, however, Molinari is a “Less- secure” facility, and those positions do not have all the “correctional” requirements that are needed for the JDC.

---

## JUVENILE DETENTION CENTER AND MOLINARI JUVENILE SHELTER JOB DESCRIPTIONS

### CLASS SPECIFICATION/TITLE:           **SUPERINTENDENT**

GENERAL DESCRIPTION OF DUTIES: Directs and manages the operational and administrative needs of the center through oversight and supervision of staff and operations.

NATURE OF WORK: Direct and manage operations. Responsibilities include supervising and evaluating staff, managing related programs, planning and managing operations and policies in accordance with applicable laws and guidelines and managing facility budget.

### EXAMPLES OF WORK PERFORMED:

- Supervises staff to include: prioritizing and assigning work; conducting performance evaluations; ensuring staff are trained; ensuring that employees follow policies and procedures;
- Maintaining a healthy and safe working environment;
- Making hiring, termination, and disciplinary recommendations;
- Directs and oversees the programs and activities in the facility;
- Serves as an advocate for juveniles to ensure they receive the necessary treatment and services during their stay;
- Manages the safety and security of juveniles, staff, and the community;
- Identifies problem areas and advises staff on difficult or unusual problems;
- Develops and allocates resources to programs or operations and ensuring compliance with laws and regulations;
- Develops and administers budget; prepares cost estimates for budget recommendations; monitors and controls expenditures;
- Oversees facilities, grounds, maintenance, and other related contract services;
- Selects staff and youth to participate in state funded Community Placement Program (CPP);

### KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of managerial procedures and practices; and budgetary principles;
- Knowledge of due process procedures and practices; applicable local, state and federal guidelines; correctional facility principles and practices, and facility emergency procedures;
- Knowledge and skill with conflict resolution, intervention techniques, positive youth development and evaluating behavior;
- Skills at management, program development, leadership, team building report preparation and communication, interpersonal skills as applied to interaction with coworkers, the general public, and the juveniles in custody

EDUCATION AND EXPERIENCE: Possession of a bachelor's degree in a behavioral science or social work-related field and eight (8) years of experience with children, teenage groups, or delinquent youth; or equivalent combination of education or experience. Must pass a pre-employment physical and must pass local, state, and federal background checks.

CLASS SPECIFICATION/TITLE:           **ASSISTANT SUPERINTENDENT**

GENERAL DESCRIPTION OF DUTIES: Assists in the management of operations and administrative duties through supervision of staff and operations in an assigned area.

NATURE OF WORK: Assist in managing operations. Responsibilities include performing assessments to determine juvenile progress toward goals; coordinating operations and maintaining communications with courts; adjusting treatment plans to enhance juvenile success; providing general supervision of daily operations; and performing program planning.

EXAMPLES OF WORK PERFORMED:

- Supervises staff to include: prioritizing and assigning work; conducting performance evaluations; ensuring staff are trained; ensuring that employees follow policies and procedures;
- Maintaining a healthy and safe working environment;
- Making hiring, termination, and disciplinary recommendations;
- Manages internal communications and operations to ensure compliance with rules, regulations, policies, division goals, and objectives;
- Oversees and arranges facility maintenance and repair work; determines inventory purchase needs and coordinates with agencies to facilitate operations;
- Supervises and assists in planning juvenile recreation and diversion services and programs;
- Adjusts programs and treatment plans to ensure positive results for the youth, the program, and the community.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of supervisory procedures and practices;
- Knowledge of due process procedures and practices; applicable local, state and federal guidelines; correctional facility principles and practices, and facility emergency procedures;
- Knowledge and skill with conflict resolution, intervention techniques, positive youth development and evaluating behavior;
- Knowledge of general physical search techniques and basic “handle-with-care” procedures to protect self and aggressor during conflict;
- Skills at managing individuals under duress by use of effective communication, program development, data entry, and interpersonal skills as applied to interaction with coworkers, the general public, and the juveniles in custody

EDUCATION AND EXPERIENCE: High School Diploma or G.E.D. and five (5) years of experience with children, teenage groups, or delinquent youth; or equivalent combination of education or experience. Must pass a pre-employment physical and must pass local, state, and federal background checks.

PHYSICAL REQUIREMENTS: The position requires balancing, stooping, kneeling, crouching, reaching, standing, walking, lifting, fingering, grasping, feeling, talking, hearing, seeing, and repetitive motions.

Light work: exerting up to 20 pounds of force occasionally, and up to 10 pounds of force frequently.



**CLASS SPECIFICATION/TITLE:           PROGRAM THERAPIST / CLINICAL SERVICES  
CASEWORKER**

**GENERAL DESCRIPTION OF DUTIES:** This position is responsible for developing, providing, and evaluating clinical treatment processes for clients.

**NATURE OF WORK:** Provide clinical evaluation, assessment, intervention, counseling, therapy, treatment and rehabilitation for clients. Coordinating with clients to identify treatment plan goals and needs; planning, teaching, and facilitating activities; providing crisis intervention; preparing and maintaining records and reports

**EXAMPLES OF WORK PERFORMED:**

- Evaluates and treats a range of clients and provides clinical consultation and intervention related to patient health needs;
- Performs clinical evaluations and assessments and educates clients on treatment options;
- Facilitates meetings and intervenes in conflict as needed;
- Assists with patient activities, including assisting in task completion and planning ongoing clinical activities;
- Develops and implements treatment plans; provides education, counseling and referral;
- Maintains clinical information documents and prepares reports outlining client treatment processes and outcomes

**KNOWLEDGE, SKILLS AND ABILITIES:**

- Knowledge of principles and practices of providing clinical services;
- Knowledge and skills of practices of record preparation and retention, preparing reports, and compiling data and information;
- Knowledge of applicable local, state and federal guidelines;
- Knowledge and skill of customer service principles and providing customer services
- Skills at using computers and related software applications;
- Skills at communication, and interpersonal skills as applied to interaction with coworkers, the general public, and the juveniles in custody

**EDUCATION AND EXPERIENCE:** Bachelor's degree in human services, social services, social work, or a related field and two (2) years of related experience; or equivalent combination of education or experience. Professional counselor accreditations or licenses are preferred. Valid driver's license.

**PHYSICAL REQUIREMENTS:** The position requires climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, feeling, talking, hearing, seeing, and repetitive motions.

Light work: exerting up to 20 pounds of force occasionally, and up to 10 pounds of force frequently.

**CLASS SPECIFICATION/TITLE:           SHIFT SUPERVISOR/ DETENTION SUPERVISOR**

**GENERAL DESCRIPTION OF DUTIES:** Maintains and controls the safety, security, and basic discipline of youth in custody following established guidelines; instructs juvenile activities; and supervises assigned staff.

**NATURE OF THE WORK:** Provide supervision for a group of employees on an assigned shift or supervise an assigned function. Responsibilities include instructing juvenile activities; coordinating operations and maintaining communications with courts; providing guidance in resolving unique issues that occur with juveniles and assisting in planning and conducting employee training.

**EXAMPLES OF WORK PERFORMED:**

- Supervises juvenile detention center activities during an assigned shift, which includes enforcing facility regulations, policies, and procedures;
- Recommends revisions to policies and procedures;
- Supervises staff to include: prioritizing and assigning work and conducting performance evaluations;
- Assists in planning and conducting employee training and ensuring employees follow policies and procedures;
- Maintains a healthy and safe working environment;
- Coordinates and maintains the daily operating functions and activities of an assigned division or function including communications with the courts;
- Ensures security of information and confidentiality of records and correspondence in compliance with laws and regulations.

**KNOWLEDGE, SKILLS AND ABILITIES:**

- Knowledge of supervisory procedures and practices;
- Knowledge of due process procedures and practices; correctional facility principles and practices, and facility emergency procedures;
- Knowledge and skill with conflict resolution, intervention techniques, positive youth development and evaluating behavior;
- Knowledge of general physical search techniques and basic “handle-with-care” procedures to protect self and aggressor during conflict;
- Skills at performing data entry and maintaining records and files;
- Skills at managing individuals under duress by use of effective communication;
- Skills at coordinating daily operations.

**EDUCATION AND EXPERIENCE:** High School Diploma or G.E.D. and four (4) years’ experience with children, teenage groups or delinquent youth; or equivalent combination of education or experience. Must pass a pre-employment physical and must pass local, state, and federal background checks and have a valid driver’s license.

**PHYSICAL REQUIREMENTS:** The position requires balancing, stooping, kneeling, crouching, reaching, standing, walking, lifting, fingering, grasping, feeling, talking, hearing, seeing, and repetitive motions. Heavy work.

**CLASS SPECIFICATION/TITLE: CONTROL CENTER OFFICER/ SECURITY ASSISTANT**

**GENERAL DESCRIPTION OF DUTIES:** Operates the central control room which is the "nerve center" for the entire facility. Control center activities include observing and controlling the institution's entrance and exits, monitoring fire and security alarm systems, CCTV, operating electrically controlled doors, and operating telephone equipment.

**NATURE OF THE WORK:** Provide general security support following established procedures. Responsibilities include monitoring security footage, dispatching units to respond to potential security threats; answering and routing calls; monitoring juvenile movement and controlling building access.

**EXAMPLES OF WORK PERFORMED:**

- Monitors surveillance cameras to determine unusual activity which may require unit response or additional action.
- Answers and routes incoming calls;
- Dispatches security units to required locations;
- Determines whether additional security is needed for juvenile transportation;
- Controls youth, staff, public access, and movement into and within the facility.
- Operates detention security doors by means of remote control.
- Ensures all control room equipment is operable, reports maintenance problems.
- Performs a variety of routine clerical functions, which includes monitoring inventory, faxing, and filing.

**KNOWLEDGE, SKILLS AND ABILITIES:**

- Knowledge of customer service principles;
- Knowledge and skill of multi-line phone system and two-way radio communications;
- Knowledge and skill of computers and related software applications;
- Knowledge of basic inventory management, filing, and record keeping principles;
- Skills at maintaining inventory items, records and supplies;
- Skills at communication, interpersonal skills as applied to interaction with co-workers, supervisor, and the general public;

**EDUCATION AND EXPERIENCE:** High School Diploma or G.E.D. and two (2) or related experience; or equivalent combination of education or experience. Must pass a pre-employment physical and must pass local, state, and federal background checks and have a valid driver's license.

**PHYSICAL REQUIREMENTS:** The position requires stooping, reaching, standing, walking, lifting, fingering, grasping, feeling, talking, hearing, seeing, and repetitive motions. Sedentary work.

CLASS SPECIFICATION/TITLE:           **DETENTION SPECIALIST**

GENERAL DESCRIPTION OF DUTIES: Maintains and controls the safety, security, and basic discipline of youth in custody following established guidelines.

NATURE OF THE WORK: Provide for the safeguarding, custody, and well-being of juveniles in a secure facility. Responsibilities include supervising conduct of juveniles, assisting with personal, emotional, and adjustment problems; mand maintaining security of the facility and residents.

EXAMPLES OF WORK PROVIDED:

- Monitors and controls movement of juveniles assigned to designated unit;
- Transports juveniles to and from court, programs, and other activities;
- Assists in intake and release procedures;
- Maintains the care, custody, and control of juveniles by judging appropriate situational de-escalation strategies; implements defensive tactics and physical restraint if necessary;
- Monitors and inspects secure areas to ensure safety and facilitate daily operations by inspecting locks, windows, doors, gates, and rooms;
- Monitors visitation and assists public/visitors;
- Reports maintenance problems, and the operation and testing of security monitors and equipment.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of correctional facility principles and practices, and facility emergency procedures;
- Knowledge and skill with conflict intervention techniques and positive youth development techniques;
- Knowledge of general physical search techniques and basic "handle-with-care" procedures to protect self and aggressor during conflict;
- Skills at performing data entry and maintaining records and files;
- Skills at managing individuals under duress by use of effective communication;
- Skills at communication and interpersonal skills applied to interaction with co-workers, supervisor, the general public, and the youth in custody.

EDUCATION AND EXPERIENCE: High School Diploma or G.E.D. and one (1) year experience with children, teenage groups or delinquent youth; or equivalent combination of education or experience. Must pass a pre-employment physical and must pass local, state, and federal background checks.

PHYSICAL REQUIREMENTS: The position requires balancing, stooping, kneeling, crouching, reaching, standing, walking, lifting, fingering, grasping, feeling, talking, hearing, seeing, and repetitive motions. Heavy work.

CLASS SPECIFICATION/TITLE:           **NURSE (RN)**

GENERAL DESCRIPTION OF DUTIES: The Nurse is responsible for coordinating and supervising staff and providing advanced-level patient care in accordance with established rules and protocols.

NATURE OF THE WORK: Conducting screening and mental/physical assessment; administering medication and treatments; implementing doctor's orders; providing patient education and counseling on diagnosis, treatment and medications; responding to emergencies. May lead or supervise staff.

EXAMPLES OF WORK PERFORMED:

- Evaluates and treats a range of clients and provides clinical consultation and intervention related to patient health needs;
- Performs advanced direct patient care tasks, including: administering medication and treatments; taking and recording vital signs; assisting patients with physical therapy; and implementing recommended medical procedures;
- Screens patients for mental and physical assessment by interviewing and performing diagnostic assessments;
- Provides educational overviews of patient conditions, including diagnosis; develops and implements treatment plans; provides counseling and referral;
- Maintains clinical information documents and prepares reports outlining client treatment processes and outcomes
- Provides emergency intervention and care related to patient health needs.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of nursing and mental health principles and practices, and medication protocols;
- Knowledge and skills of record preparation and retention;
- Knowledge of medical terminology;
- Knowledge and skill of customer service principles and providing exemplary customer services and healthcare services
- Skills at using computers and related software applications;
- Skills at performing medical testing and assisting with physical therapy.

EDUCATION AND EXPERIENCE: Bachelor's degree in nursing from an accredited program and one (1) year of related experience; or equivalent combination of education or experience. Registered nurse license. Must pass local, state and federal background checks and have a valid driver's license.

PHYSICAL REQUIREMENTS: The position requires climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, feeling, talking, hearing, seeing, and repetitive motions. Very heavy work.

---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**SECTION 5  
PROJECT COSTS**

**JUVENILE DETENTION CENTER,  
MOLINARI JUVENILE SHELTER**

---

**JUVENILE DETENTION CENTER**

- **PROJECT BUDGET**
- **FACILITY OPERATION BUDGET**
- **FACILITY START UP COSTS**
- **STATE REIMBURSEMENT**

**MOLINARI JUVENILE SHELTER**

- **PROJECT BUDGET**
- **FACILITY OPERATION BUDGET**
- **FACILITY START UP COSTS**
- **STATE REIMBURSEMENT**

**JUVENILE DETENTION CENTER PROJECT BUDGET**

Within the Appendix of this study is the required DJJ form, LCR 002, and a detailed cost estimate from an independent cost estimating and construction management firm, Downey & Scott, LLC. The Downey and Scott estimate are a construction cost estimate only and does not include other project costs (soft cost).

The Department of Juvenile Justice’s “Step by Step” methodology for estimating reimbursable cost requires the use of R.S. Means cost estimating publications to establish the cost for the LCR 002 form. Basic nationwide square foot cost for the most applicable building type is used as a basis, then “additive” items are included to account for a limited number of unique design considerations for the building. Finally, the “location factor” found in R.S. Means is used to qualify the square foot cost based on where the project is located in the United States. Fairfax County, Virginia is the closest match for Prince William County.

The independent cost estimating firm, Downey and Scott, LLC, who prepared a schematic estimate for the project is located in Northern Virginia, and they specialize in the Virginia/Northern Virginia market. They collect current data from construction projects in the area, rather than using a nation-wide average which is updated once per year. They have an eye on local labor, the local General Contractors for different construction types, and what is being charged for general conditions, profit, overhead, and other construction related costs. Their estimate for this project is based on the actual building design, size, shape, and materials, while the R.S. Means estimate is based on a basic building type, three stories tall, and a rectangular shape. When there is an absence of an independent estimate, the R.S. Means publications are a good resource to use as a guide, but in this case, Prince William County has taken the extra step to obtain an independent cost estimate.

Due to the differences in the two methods, the building construction cost estimates vary. They are listed side by side below for comparison. The LCR002 form was prepared using both estimates, and both are found in the Appendix of this study. It is the desire of Prince William County that DJJ use the LCR 002 form based on the independent estimate, rather than the LCR 002 based on R.S. Means, because it is believed to be more accurate for the proposed design that is required for the rehabilitative facility needed by the County.

Below the building construction cost subtotal, the estimates are similar for site and other costs. The construction contingency at the end of the estimate uses 3% as is recognized and allowed by DJJ Prince William County and Moseley Architects agree that a higher construction contingency is more prudent in the current construction market environment and recommend between 5% - 10% for a total project cost estimate for a project in the schematic design phase.

**Prince William County Juvenile Detention Center  
 Schematic Construction Cost Estimate**

Project Cost	D.J.J. Formula R.S. Means	Downey & Scott (includes 10% Design Contingency)
(1) <b>Acquisition</b>	\$ 0	\$ 0
(2) <b>New Construction</b> 58,300 s.f. @	@294.78/s.f. \$17,185,674	@361.26/s.f. \$21,061,868*
Downey & Scott Design contingency(10%)		\$ 2,106,187

PROGRAM DESIGN AND  
 PLANNING STUDY  
 for the  
 PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
 AND MOLINARI JUVENILE SHELTER

PROJECT COSTS

R.S. Means "additives":

Premium for one story construction 38000 s.f. @ \$37.09/s.f.	\$ 1,409,420	
CCTV Security System (based on 200 cameras)	107,125	
Emergency Generator	76,500	
Flagpoles	4,150	
Commercial Laundry Equipment	28,800	
Sound System (based on 200 speakers)	48,000	
<b>Subtotal New Construction</b>	<b>\$18,859,669</b>	<b>\$23,168,055</b>
(3) Site and Utility Construction Cost Refer to Downey & Scott estimate	\$ 3,291,742*	\$ 3,291,742*
<b>(2) and (3) Construction Subtotal</b>	<b>\$22,151,411</b>	<b>\$26,459,797</b>
(4) Architectural and Engineering Fees 7% allowed by D.J.J.	\$ 1,550,599	\$ 1,852,186
(5) Construction Contingency 3% allowed by D.J.J. of construction 5% recommended	\$ 664,542	\$ 1,322,990
(6) Project Inspection (Structural S.I. and A/E observations)	\$ 230,000	\$ 230,000
(7) Other Costs		
Quality Control Testing	\$ 140,000	\$ 140,000
Geotech Services	\$ 20,000	\$ 20,000
Topographic Survey	\$ 30,000	\$ 30,000
Warranty	\$ 10,000	\$ 10,000
Printing/Reproduction	\$ 10,000	\$ 10,000
Relocate Utilities (off site improvements)**	NIC	NIC
Tap Fees, Connection Fees, Permits	\$ 400,000	\$ 400,000
Permitting and Governmental (including FCM cost of services)***	\$ 850,000	\$ 850,000
Telecommunications and network infrastructure (2.5% of construction cost)	\$ 471,492	\$ 579,201
Building Commissioning	\$ 58,300	\$ 58,300
Construction Cost Estimate (today's dollars)	\$26,586,344	\$31,962,474
Escalation for two years ( 9% ) *	\$ 2,392,771	\$ 2,876,623
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>	<b>\$28,979,115</b>	<b>\$34,839,096</b>

Construction Cost Estimate Notes:

- \* From page 6 of the Downey & Scott estimate
- \*\* These costs are not expected at this time
- \*\*\* Includes Construction Management Services performed by Prince William County



**JUVENILE DETENTION CENTER FACILITY OPERATIONAL BUDGET**

Table 5.2 below is an estimate of one full year of operational costs for the facility upon completion of the proposed project described in this Planning Study. The completion date is based on the project schedule presented in Section 6 of this report, and will fall into budgeting for fiscal year 2025, running from July 1, 2024 to June 30, 2025. DJJ requires the budget includes costs related to the running and upkeep of the facility, excluding the cost of programs or activities operated within the facility to be included on the LCR-002 form (refer to this form in the Appendix). The breakdown below explains how this number is derived.

As previously stated, it is anticipated that the juvenile population in the JDC will remain flat in the upcoming years, therefore the same amount of food and services that are used in FY2020 will be estimated for FY2025, but inflated at a rate of 2% per year. Economic outlooks consistently predict between 2% – 3% inflation per year for the next few years.

Staffing is anticipated to increase modestly in the new building over current levels, mainly as related to the smaller housing pods, and increased therapy, classrooms, and programs that will need therapeutic and security staff coverage. Personnel Services are the largest piece of the facility’s operational budget. Table 5.1 below summarizes the staffing cost for the JDC and includes salaries and benefits by category. The full-time employee (FTE) numbers shown below relate directly to the Staffing Summary Chart in Section 4 of this Planning Study. Many of these positions are already filled in the existing JDC, so the salaries and benefits calculated below are based on known existing conditions.

<b>JDC Salary and Benefits for 1<sup>st</sup> Year of Operation FY25</b>		<b>Table 5.1</b>
<b>Staff Category</b>	<b># of FTE’s</b>	<b>FY25 Salary and Benefits Budget</b>
Leadership & Oversight	4.5	\$592,600.00
Administration	2.5	\$202,300.00
Therapists	2	\$222,700.00
Security	40	\$3,280,100.00
Control Room	6	\$450,200.00
Medical	1.5	\$198,000.00
Foodservice	4	\$296,200.00
Maintenance & Custodial	2.5	\$192,300.00
<b>Total</b>	<b>63</b>	<b>\$5,434,400.00</b>

Notes: Salaries and benefits were supplied by PWC Department of Social Services from their FY20 existing salary scheduling for the JDC. Salaries and benefits were increased 3% per year for five years to estimate the personnel costs in this chart.

<b>JDC One Year Operational Budget</b>		<b>Table 5.2</b>
Budget Category	4 Year Average FY17-FY20	FY25
Personnel Services	N/A	\$5,434,400.00
Food	\$173,833.00	\$191,925.00
Medical Services	\$174,450.00	\$192,605.00
Utilities, Telephone, & T.V.	\$139,247.00	\$153,740.00
Transportation	\$42,343.00	\$46,750.00
Maintenance and Repairs	\$7,219.00	\$7,970.00
Direct Support	\$100,214.00	\$110,645.00
Indirect Support and Miscellaneous	\$211,375.00	\$233,375.00
<b>Total</b>		<b>\$6,371,410.00</b>

A description for each of the budget category is provided below. Prince William County Department of Social Services provided costs for the last four years at the existing facility, and a four-year average cost. The average evens out the highs and lows and fluctuating juvenile populations and is generally used as the basis for the numbers in Table 5.2, unless noted below. To look forward to Fiscal Year 2025, an inflation factor of 2% per year for five years was used.

Personnel Services (salary and benefit costs) The method for calculating this cost is described and detailed above, and the total is copied from Table 5.1.

Food Services reflects all direct expenses related to providing food for the residents.

Medical Services reflects non payroll expenses related to providing medical services to the detainees and includes lab and supply costs.

Utilities, Telephone, and T.V.

The new HVAC and lighting systems will be more efficient than the systems found in the existing building, so while the building area will increase by 40%, the overall electric utility estimate will be increased by 20% for this Study. Water, sewer, telephone, and T.V., which are based less on building square footage will be estimated at the same level as existing usage.

Transportation reflects fleet maintenance, gasoline, and purchase of motor vehicles as needed. Vehicles are not purchased annually, so the four-year average is included in Table 5.2.

Maintenance and Repairs reflects non-payroll expenses related to maintenance and repairs, machinery, equipment, tools, and supplies. Janitorial and cleaning supplies are included in this category. Capital Improvements are not included in the FY-25 budget, as it is assumed that none would be needed in the year following the completion of the project.

Direct Support reflects facility expenses for uniforms and apparel, laundry/cleaning/ uniform alterations, office equipment (replacements), office supplies, stationery, postage and printing, and equipment rentals.

Indirect Support and Miscellaneous reflects business and governmental fees, technology hosting and support, professional memberships, staff training, staff travel and conference expenses, and other miscellaneous expenditures.

---

### JUVENILE DETENTION CENTER FACILITY START-UP COSTS

Start up costs include free standing equipment and start-up costs for staffing and operations. Free standing furnishings, fixtures, and equipment (known as FF&E) includes items placed in the building that are not built in and are not part of the General Contractors scope of work. These items can vary from an office desk and chair to a colander used in the kitchen. A categorical list of items for the JDC would include:

- office furnishings, office accessories, office equipment
- juvenile mattresses, pillows, and linens
- juvenile uniforms and clothing
- furnishings in the juvenile housing and activity areas that are not bolted down
- recreational equipment
- kitchen fit- out of dishes, trays, pots and pans
- laundry carts, laundry soap
- medical equipment
- window coverings

The start-up costs for staffing and operations includes staff training, staff uniforms, moving expenses, and similar staff costs to be incurred when the new building becomes operational and the youth are moved.

### JUVENILE DETENTION CENTER STATE REIMBURSEMENT

The capital and operational costs, which have been estimated and explained, did not take into account any reimbursement from the Commonwealth of Virginia, which may be granted. Reimbursement is subject to the approval by the Board of Juvenile Justice of the Program Design and the Planning Study. As allowed by DJJ's "Formula for State Reimbursement of Local Projects", this secure detention project qualifies in the following ways:

5. The JDC is a replacement of the existing facility. At this time, there is not an intended re-use of the building once it is vacated. With the documented decline in youth population, and the intentional effort to re-design the new building differently with a more therapeutic, treatment based approach, Prince William County requests that D.J.J. look upon this facility as "new construction", as the renovation and expansion formula in the "Step by Step" manual does not apply. The County is requesting 50% of approved cost.
6. Current applicable reimbursement for staffing and operations
7. Free Standing equipment: up to 50% of total cost. The cap in the 1997 "Step by Step" manual is out of date, and Prince William County requests a higher cap.
8. Start-up funding: up to 1/12 (30 days) of state's share of annual staffing and operating costs.

Consideration and approval from the Board of Juvenile Justice for reimbursement funds for this project will greatly benefit the localities in helping to offset their local share and is appreciated.

**MOLINARI JUVENILE SHELTER PROJECT BUDGET**

Within the Appendix of this study is the required DJJ form, LCR 002, and a detailed cost estimate from an independent cost estimating and construction management firm, Downey & Scott, LLC. The Downey and Scott estimate is a construction cost estimate only and does not include other project costs (soft cost).

Department of Juvenile Justice’s “Step by Step” methodology for estimating reimbursable cost requires the use of R.S. Means cost estimating publications to establish the cost for the LCR 002 form. Basic nationwide square foot cost for the most applicable building type is used as a basis, then “additive” items are included to account for a limited number of unique design considerations for the building. Finally, the “location factor” found in R.S. Means is used to qualify the square foot cost based on where the project is located in the United States. Fairfax County, Virginia is the closest match for Prince William County.

The independent cost estimating firm, Downey and Scott, LLC, who prepared a schematic estimate for the project is located in Northern Virginia, and they specialize in the Virginia/Northern Virginia market. They collect current data from construction projects in the area, rather than using a nation-wide average which is updated once per year. They have an eye on local labor, the local General Contractors for different construction types, and what is being charged for general conditions, profit, overhead, and other construction related costs. Their estimate for this project is based on the actual building design, size, shape, and materials, while the R.S. Means estimate is based on a basic building type, three stories tall, and a rectangular shape. When there is an absence of an independent estimate, the R.S. Means publications are a good resource to use as a guide, but in this case, Prince William County has taken the extra step to obtain an independent cost estimate.

Due to the differences in the two methods, the building construction cost estimates vary. They are listed side by side below for comparison. The LCR002 form was prepared using both estimates, and both are found in the Appendix of this study. It is the desire of Prince William County that D.J.J. use the LCR 002 form based on the independent estimate, rather than the LCR 002 based on R.S. Means, because it is believed to be more accurate for the proposed design that is required for the rehabilitative facility needed by the County.

Below the building construction cost subtotal, the estimates are similar for site and other costs. The construction contingency at the end of the estimate uses 3% as is recognized and allowed by DJJ. Prince William County and Moseley Architects agree that a higher construction contingency is more prudent in the current construction market environment and recommend between 5% - 10% for a total project cost estimate for a project in the schematic design phase.

**Prince William County Molinari Juvenile Shelter  
 Schematic Construction Cost Estimate**

Project Cost	D.J.J. Formula R.S. Means	Downey & Scott (includes 10% Design Contingency)
<b>(3) Acquisition</b>	\$ 0	\$ 0
<b>(2) New Construction</b> 18,885 s.f. @	@294.78/s.f. \$ 5,566,920	@345.06/s.f. \$ 6,516,420
Downey & Scott Design contingency(10%)		\$ 651,642

**Allowable RS Means adds:**

PROGRAM DESIGN AND  
 PLANNING STUDY  
 for the  
 PRINCE WILLIAM COUNTY JUVENILE DETENTION CENTER  
 AND MOLINARI JUVENILE SHELTER

PROJECT COSTS

Premium for one story construction 12,500 s.f. @ \$37.09/s.f.	\$ 463,625	
CCTV Security System (based on 50 cameras)	27,625	
Emergency Generator	76,500	
Flagpoles	4,150	
Sound System (based on 50 speakers)	13,500	
<b>Subtotal New Construction</b>	<b>\$ 6,152,320</b>	<b>\$ 7,168,062</b>
(3) Site and Utility Construction Cost Refer to Downey & Scott estimate	\$ 1,053,894	\$ 1,053,894
<b>(4) and (3) Construction Subtotal</b>	<b>\$ 7,206,214</b>	<b>\$ 8,221,956</b>
(5) Architectural and Engineering Fees 7% allowed by D.J.J.	\$ 504,435	\$ 575,537
(5) Construction Contingency 3% allowed by D.J.J. of construction 5% recommended	\$ 216,186	\$ 411,098
(6) Project Inspection (Structural S.I. and A/E observations)	\$ 75,000	\$ 75,000
(7) Other Costs		
Quality Control Testing	\$ 45,000	\$ 45,000
Geotech Services	\$ 10,000	\$ 10,000
Topographic Survey	\$ 20,000	\$ 20,000
Warranty	\$ 5,000	\$ 5,000
Printing/Reproduction	\$ 5,000	\$ 5,000
Relocate Utilities (off site improvements)**	NIC	NIC
Tap Fees, Connection Fees, Permits	\$ 200,000	\$ 200,000
Permitting and Governmental (including FCM cost of services)***	\$ 500,000	\$ 500,000
Telecommunications and network infrastructure (2.5% of construction cost)	\$ 153,808	\$ 179,202
Building Commissioning	\$ 19,000	\$ 19,000
Construction Cost Estimate (today's dollars)	\$ 8,959,644	\$10,266,793
Escalation for two years ( 9%)	\$ 806,368	\$ 924,011
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>	<b>\$ 9,766,012</b>	<b>\$11,190,804</b>

Construction Cost Estimate Notes:

- \* From page 6 of the Downey & Scott estimate
- \*\* These costs are not expected at this time
- \*\*\* Includes Construction Management Services performed by Prince William County

**MOLINARI JUVENILE SHELTER FACILITY OPERATIONAL BUDGET**

Table 5.4 below is an estimate of one full year of operational costs for the facility upon completion of the proposed project described in this Planning Study. The completion date is based on the project schedule presented in Section 6 of this report, and will fall into budgeting for fiscal year 2025, running from July 1, 2024 to June 30, 2025. Department of Juvenile Justice requests costs related to the running and upkeep of the facility, excluding the cost of programs or activities operated within the facility to be included on the LCR-002 form (refer to this form in the Appendix). The breakdown below explains how this number is derived.

The capacity of the Molinari Juvenile Shelter is increased in the new design from 16 beds to 20 beds (25%). Therefore, the amount of food and some services that are used in FY2020 will be increased by 25% for FY2025, then inflated at a rate of 2% per year. Economic outlooks consistently predict between 2% – 3% inflation per year for the next few years.

Staffing is anticipated to increase in the new building over current levels, due to the increase in the number of beds from 16 to 20. Personnel Services are the largest piece of the facility’s operational budget. Table 5.3 below summarizes the staffing cost for the JDC and includes salaries and benefits by category. The full-time employee (FTE) numbers shown below relate directly to the Staffing Summary Chart in Section 4 of this Planning Study. Many of these positions are already filled in the existing JDC, so the salaries and benefits calculated below are based on known existing conditions.

<b>Molinari Juvenile Shelter Salary and Benefits for 1<sup>st</sup> Year of Operation FY25</b>		
<b>Table 5.3</b>		
<b>Staff Category</b>	<b>#FTE's</b>	<b>FY 25 Salary &amp; Benefits Budget</b>
Leadership & Oversight	3.5	\$340,600.00
Administration	2	\$144,100.00
Therapists	1	\$144,000.00
Security	12.5	\$1,076,000.00
Medical	.5	\$55,700.00
Food Service	2	\$122,300.00
<b>Total</b>	<b>21.5</b>	<b>\$1,882,700.00</b>

Notes: Salaries and benefits were supplied by PWC Department of Social Services from their FY20 existing salary scheduling for the Molinari Juvenile Shelter. Salaries and benefits were increased 3% per year for five years to estimate the personnel costs above.

<b>MJS One Year Operational Budget</b>		<b>Table 5.4</b>	
Budget Category	4 Year Average FY17-FY20	FY25	
Personnel Services	N/A	\$1,882,700.00	
Food	\$59,326.00	\$81,875.00	
Medical Services	\$12,066.00	\$16,650.00	
Utilities, Telephone, & T.V.	\$23,612.00	\$32,590.00	
Transportation	\$3,546.00	\$3,915.00	
Maintenance and Repairs	\$19,112.00	\$21,100.00	
Direct Support	\$25,031.00	\$34,545.00	
Indirect Support and Miscellaneous	\$46,737.00	\$51,600.00	
<b>Total</b>		<b>\$2,124,975.00</b>	

A description for each of the budget category is provided below. Prince William County Department of Social Services provided costs for the last four years at the existing facility, and a four-year average cost. The average evens out the highs and lows and fluctuating juvenile populations and is generally used as the basis for the numbers in Table 5.2, unless noted below. To look forward to Fiscal Year 2025, an inflation factor of 2% per year for five years was used.

Personnel Services (salary and benefit costs) The method for calculating this cost is described and detailed above, and the total is copied from Table 5.1.

Food Services reflects all direct expenses related to providing food for the residents. This category was increased 25% over the 4-year average for increased bed capacity.

Medical Services reflects non payroll expenses related to providing medical services to the detainees and includes lab and supply costs. This category was increased 25% over the 4-year average for increased bed capacity.

Utilities, Telephone, and T.V.

The new HVAC and lighting systems will be more efficient than the systems found in the existing building, so while the building will be larger, the electric utility is not expected to increase proportionally with the building increase. Electric, water, sewer, telephone, and T.V. are increased 25% over the 4-year average for increased bed capacity and building enlargement.

Transportation reflects fleet maintenance, gasoline, and purchase of motor vehicles as needed. Vehicles are not purchased annually, so the 4-year average is included in Table 5.2.

Maintenance and Repairs reflects non-payroll expenses related to maintenance and repairs, machinery, equipment, tools, and supplies. Janitorial and cleaning supplies are included in this category. Capital Improvements are not included in the FY-25 budget, as it is assumed that none would be needed in the year following the completion of the project.

Direct Support reflects facility expenses for uniforms and apparel, laundry/cleaning/ uniform alterations, office equipment (replacements), office supplies, stationery, postage and printing, and equipment rentals. This category was increased 25% over the 4-year average for increased bed capacity.

Indirect Support and Miscellaneous reflects business and governmental fees, technology hosting and support, professional memberships, staff training, staff travel and conference expenses, and other miscellaneous expenditures.

### **MOLINARI JUVENILE SHELTER FACILITY START-UP COSTS**

Startup costs include free standing equipment and start-up costs for staffing and operations. Free standing furnishings, fixtures, and equipment (known as FF&E) includes items placed in the building that are not built in and are not part of the General Contractors scope of work. These items can vary from an office desk and chair to a colander used in the kitchen. A categorical list of items for the JDC would include:

- office furnishings, office accessories, office equipment
- juvenile mattresses, pillows, and linens
- juvenile uniforms and clothing
- furnishings in the juvenile housing and activity areas that are not bolted down
- recreational equipment
- kitchen fit- out of dishes, trays, pots and pans
- laundry carts, laundry soap
- medical equipment
- window coverings

The start-up costs for staffing and operations includes staff training, staff uniforms, moving expenses, and similar staff costs to be incurred when the new building becomes operational and the youth are moved.

### **MOLINARI JUVENILE SHELTER STATE REIMBURSEMENT**

The capital and operational costs, which have been estimated and explained, did not take into account any reimbursement from the Commonwealth of Virginia, which may be granted. Reimbursement is subject to the approval by the Board of Juvenile Justice of the Program Design and the Planning Study. As allowed by DJJ's "Formula for State Reimbursement of Local Projects", this "less-secure" detention project qualifies in the following ways:

1. The Molinari Juvenile Shelter is a replacement and bed expansion of the existing facility. At this time, there is not an intended re-use of the building once it is vacated. With the documented decline secure detention beds, the Molinari Juvenile Shelter is a secure detention alternative, designed with an educational, therapeutic, and rehabilitative approach. Prince William County requests that DJJ look upon this facility as "new construction". The County is requesting 50% of approved cost.

Consideration and approval from the Board of Juvenile Justice for reimbursement funds for this project will greatly benefit the localities in helping to offset their local share and is appreciated.



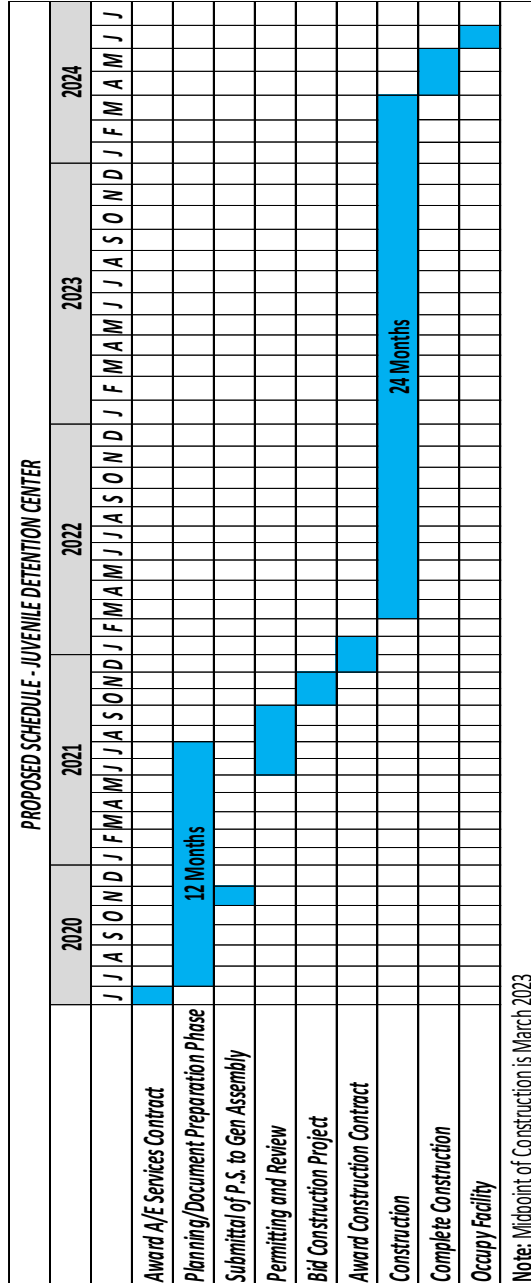
---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**SECTION 6  
PROJECT SCHEDULE**

---

- **PROPOSED SCHEDULE**



---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**SECTION 7  
DRAWINGS**

---

- **SITE PLAN**
- **FIRST FLOOR PLANS**
- **BUILDING SECTION**
- **EXTERIOR RENDERINGS**

---

**PRINCE WILLIAM COUNTY  
JUVENILE DETENTION CENTER**

**SECTION 8  
APPENDIX**

---

- **LCR 002**
- **DETAILED COST ESTIMATE**
- **GEOTECHNICAL REPORT**
- **PROGRAM DESIGN QUESTIONNAIRE  
RESPONSES**