

Sussex County, NJ

Final Report Presentation

December 4, 2014



Sussex County, NJ

Presentation Team

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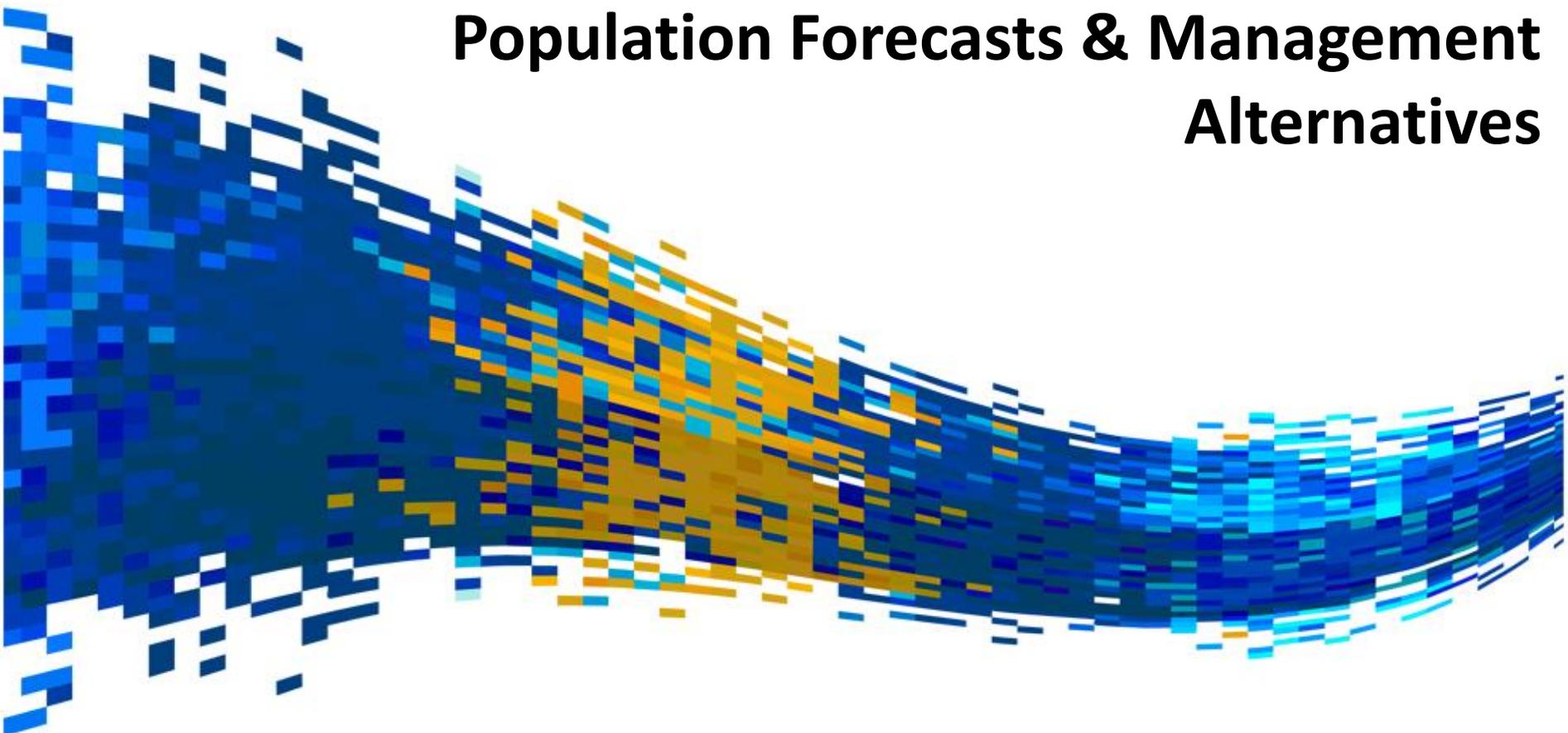


Scope of Project and Agenda

- » **Jail Population Forecasts & Management Alternatives**
- » **Jail Operations and Healthcare Assessment**
- » **Operational and Architectural Programming**
- » **Staffing and Operating Costs**
- » **Jail Physical Plant Analysis**
- » **Design Concepts and Capital Costs**

Sussex County, NJ

Population Forecasts & Management Alternatives



Sussex County, NJ

Population Forecasts & Management Alternatives

Patrick Jablonski, Ph.D., *Senior Researcher, Luminosity*



Outline

- » **Factors Driving Jail Population Dynamics**
 - **Commitments**
 - **Average Length of Stay**
- » **Population Forecasts**
- » **Recommendations**
- » **Conclusion**

Jail Population Factors



Jail Population Factors

Two Factors Drive Jail Populations:

- 1. Commitments – How many people enter the jail**
- 2. Average Length of Stay (ALOS) – How long those people stay**

Jail Population Factors

If a jail takes in 2 people a day every day and they stay 2 days each, the Average Daily Population (ADP) will be 4

	Day 1	Day 2	Day 3	Day 4	Day 5
Inmate 1	X	X			
Inmate 2	X	X			
Inmate 3		X	X		
Inmate 4		X	X		
Inmate 5			X	X	
Inmate 6			X	X	
Inmate 7				X	X
Inmate 8				X	X
Total	2	4	4	4	4

Jail Population Factors

However, if a jail takes in 2 people a day every day and they stay **3** days each, the ADP becomes 6

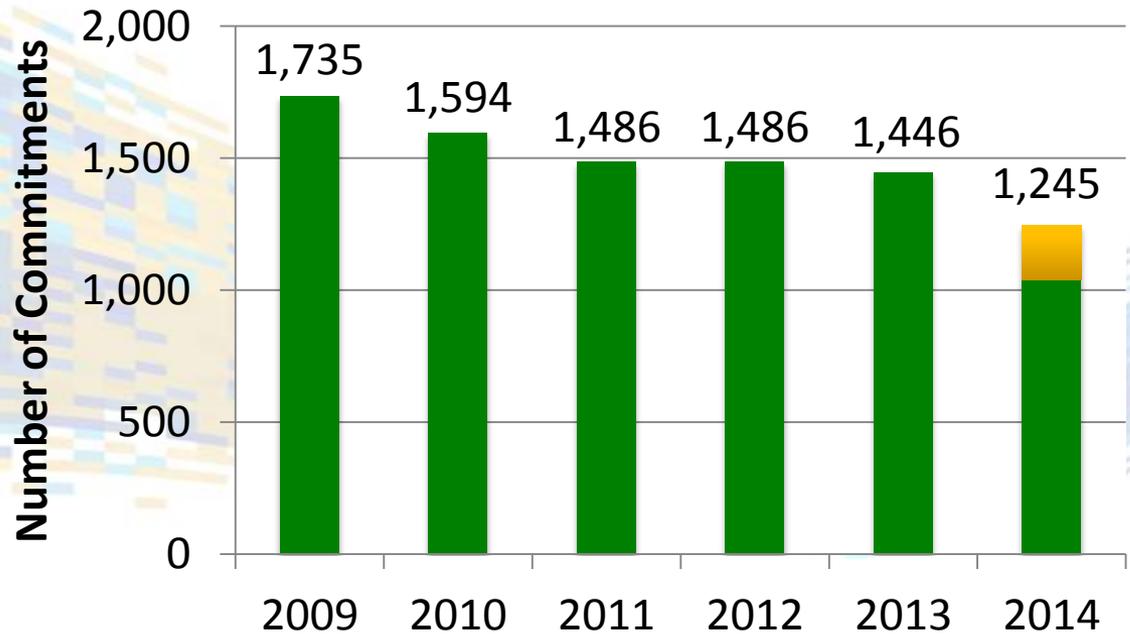
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Inmate 1	X	X	X			
Inmate 2	X	X	X			
Inmate 3		X	X	X		
Inmate 4		X	X	X		
Inmate 5			X	X	X	
Inmate 6			X	X	X	
Inmate 7				X	X	X
Inmate 8				X	X	X
Total	2	4	6	6	6	6

Jail Population Factors

» Factor 1: Commitments

▪ Annual Commitments, 2009 – October 2014*

▪ Commitments stable, 2010–2013



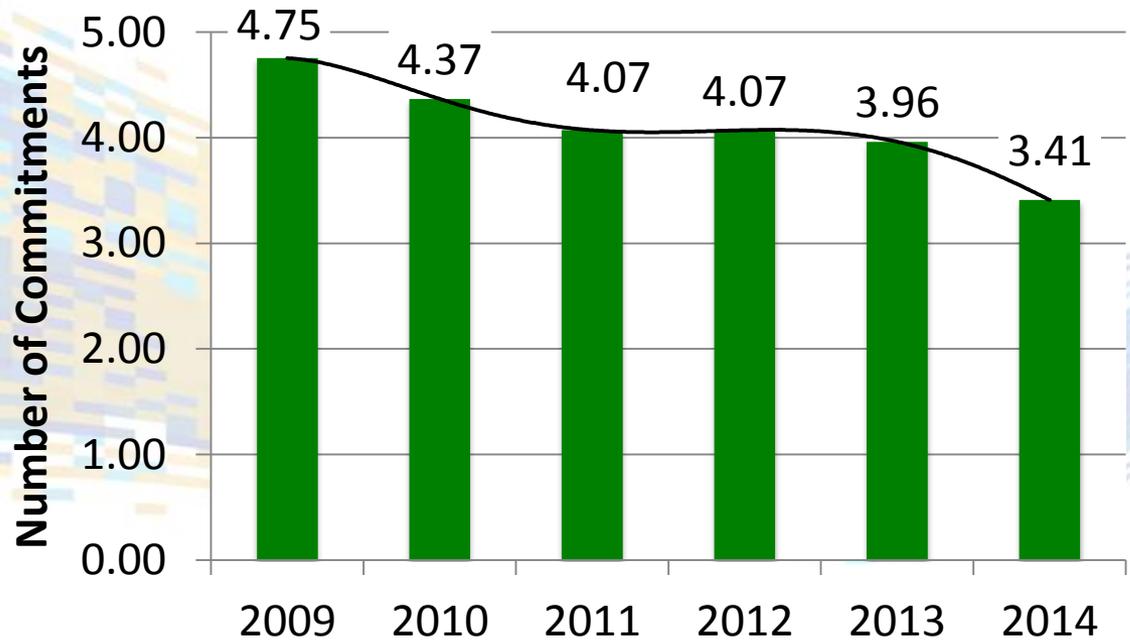
*2014 Is Annualized

Jail Population Factors

» Factor 1: Commitments

▪ Annual Average Daily Commitments, 2009 – October 2014

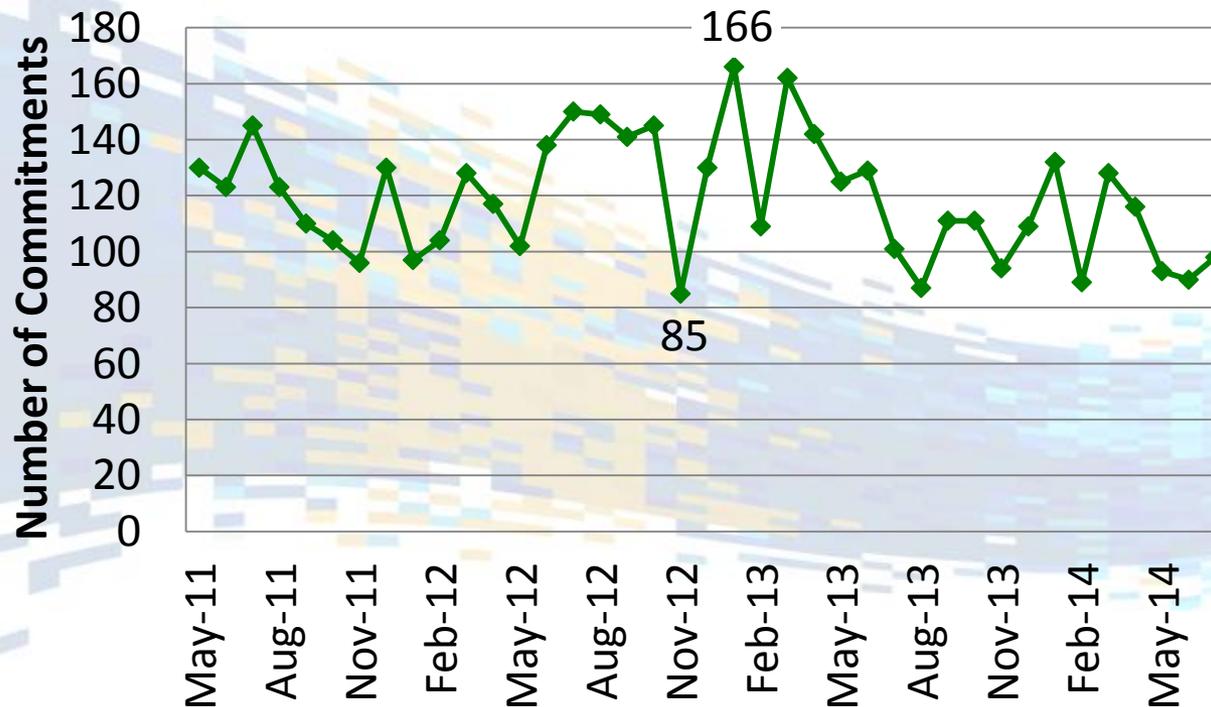
- Declined 28.2% since 2009



Jail Population Factors

» Factor 1: Commitments

▪ Monthly Commitments, May 2011 – July 2014



Jail Population Factors

» Factor 2: Average Length of Stay (ALOS)

- **Estimated ALOS = Annual ADP x 365 ÷ Annual Commitments**
 - For example, the annual ADP in 2013 was 180 and the commitments totaled 1,446. As a result, the estimated ALOS for 2013 was 45.5 days ($180 \times 365 \div 1,446 = 45.5$)

Jail Population Factors

» Factor 2: Average Length of Stay (ALOS)

- ALOS in 2014 YTD decreased 6.5% from 2013
- ALOS increased 14% from 2009

Year	Total Commitments	Daily Commitments	ADP	ALOS	IF ALOS	THEN ADP
2009	1,735	4.75	177	37.2		
2010	1,594	4.37	171	39.0		
2011	1,486	4.07	169	41.6		
2012	1,486	4.07	185	45.4		
2013	1,446	3.96	180	45.5		
2014 (First 10 Months)	1,245 (1,037)	3.41	151	44.4	37.2	127
Difference (2009 - 2014)		-28.2%	-14.7%	+19.2%		

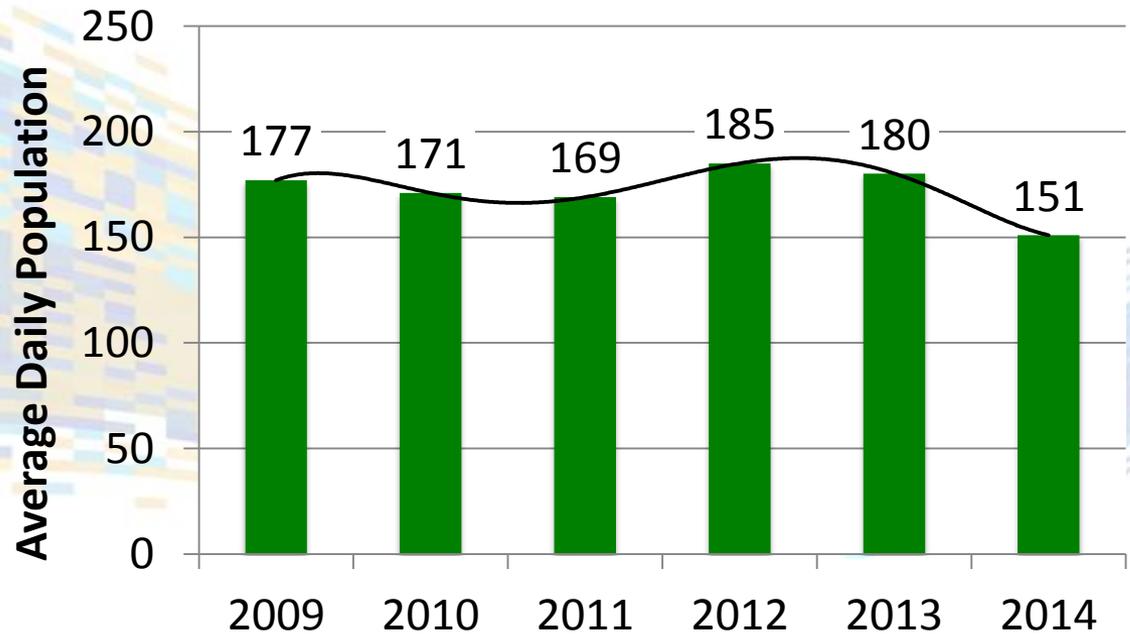


Jail Population Factors

» Average Daily Population

▪ Annual ADP, 2009 – October 2014

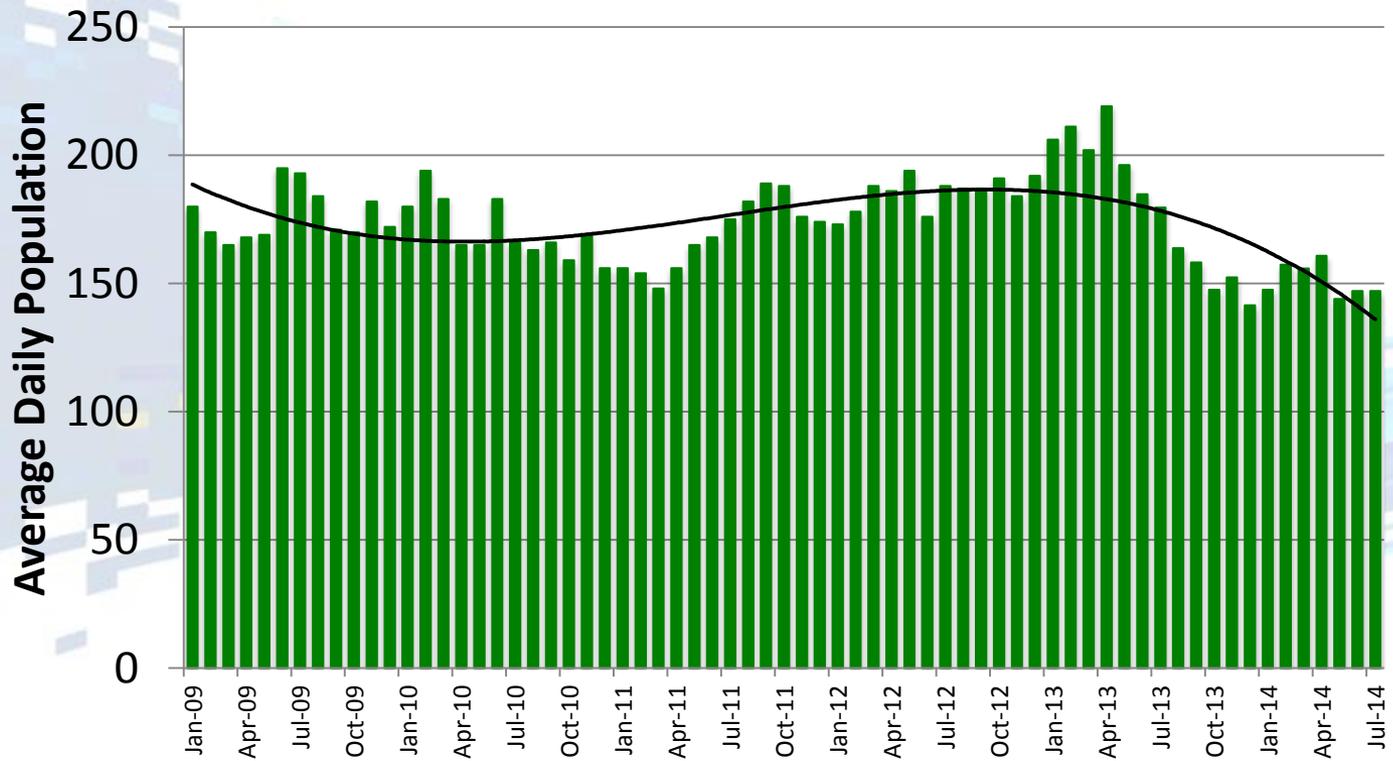
- Does NOT include ICE detainees
- Declined 14.7% since 2009



Jail Population Factors

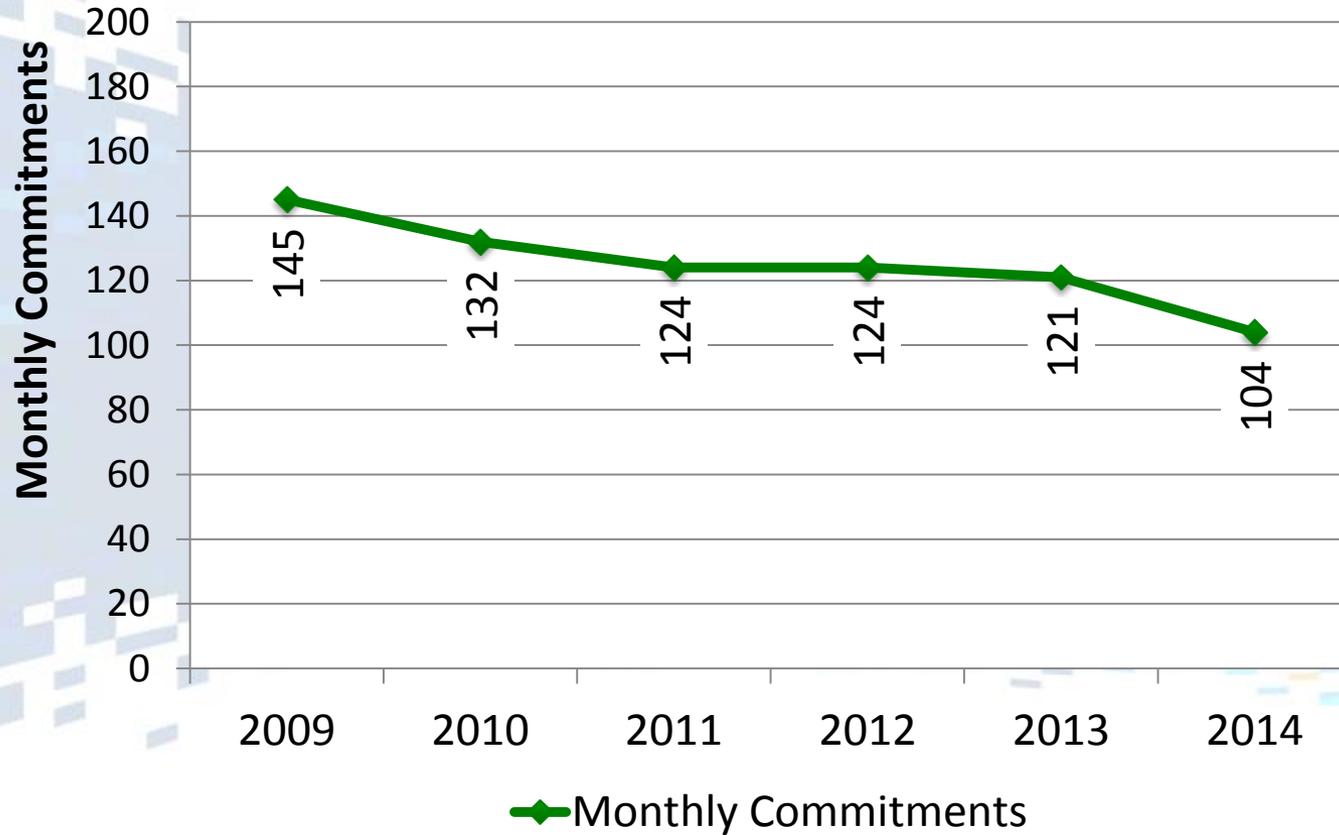
» Average Daily Population

- ADP by Month, January 2009 – July 2014



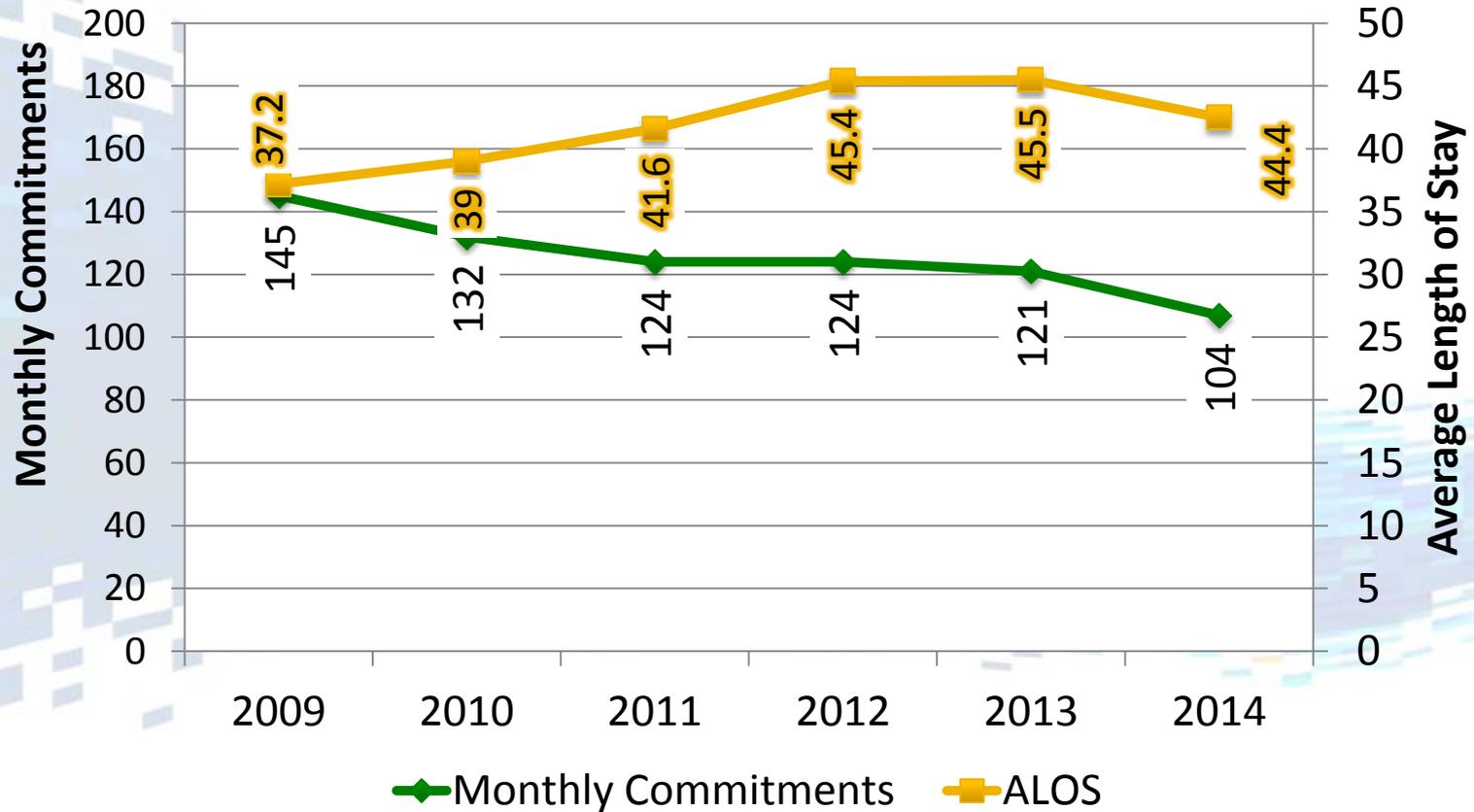
Jail Population Factors

» Commitments



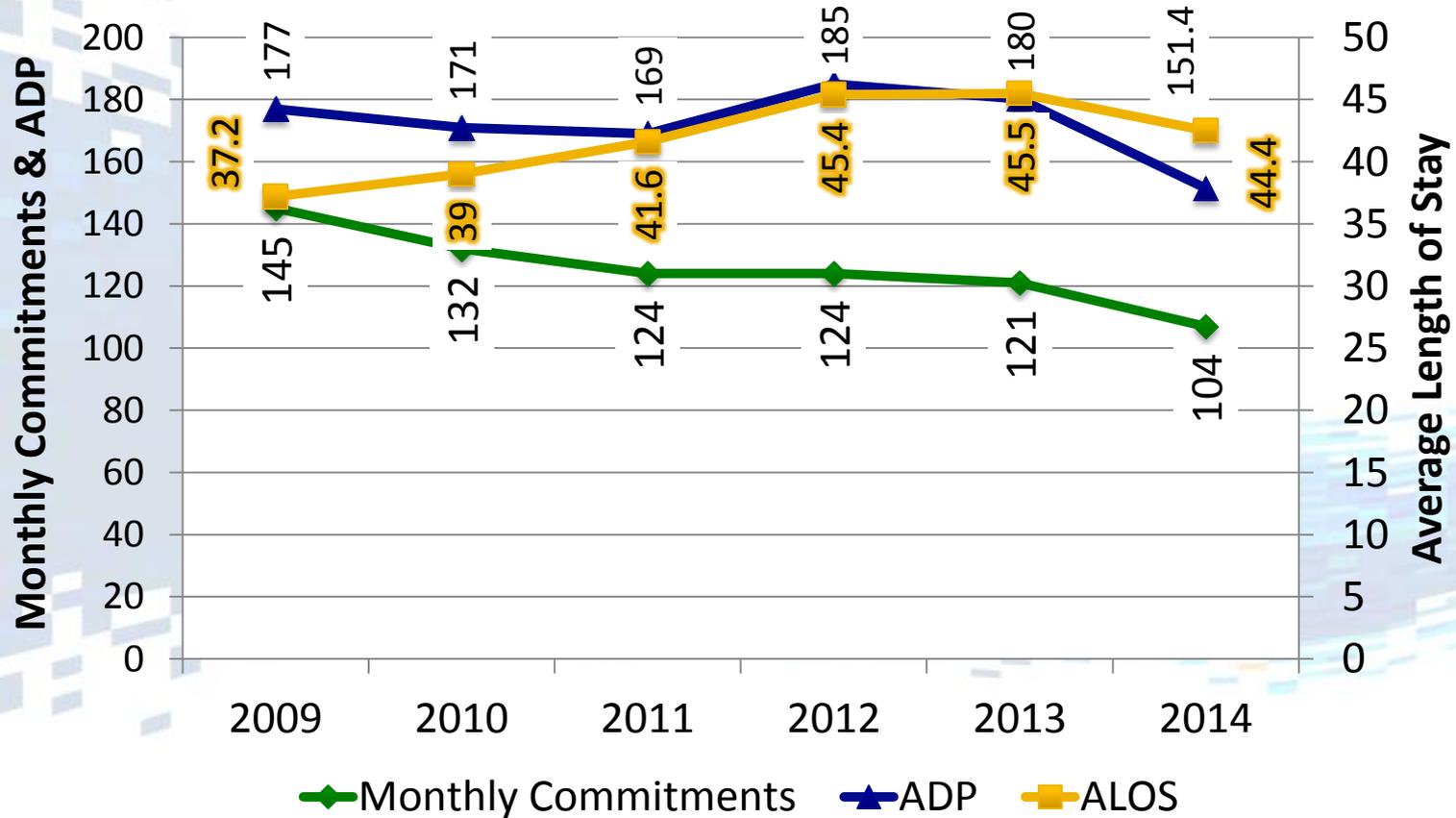
Jail Population Factors

» Commitments & ALOS



Jail Population Factors

» Commitments, ALOS & Average Daily Population



Population Forecasts



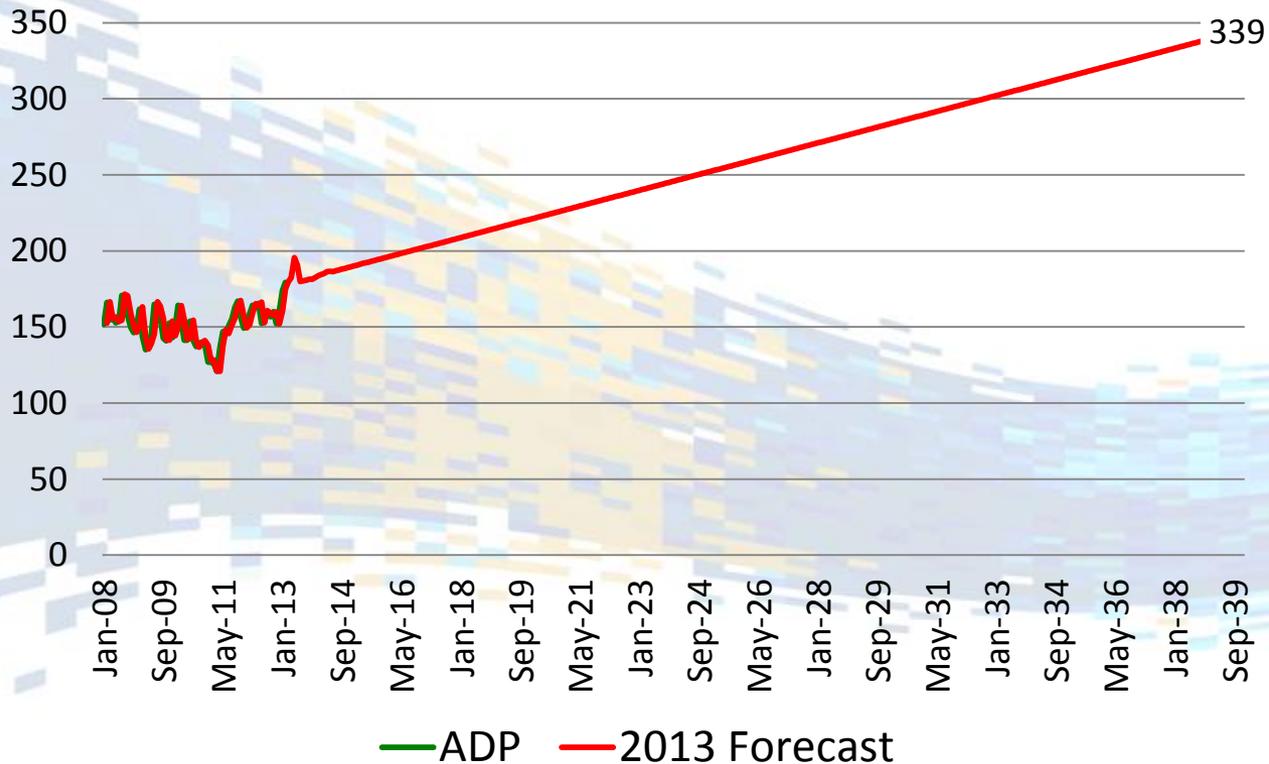
Population Forecast

» Best Predictor of a Trend's Future Pattern is that Trend's Past Pattern

- Autoregressive Integrated Moving Averages (ARIMA)
- Assumes status quo remains in place
- Long-term accuracy affected by
 - Changes in public policy or law
 - Changes in law enforcement practices
 - Criminal justice resource changes
 - Socioeconomic factors
 - Other influences

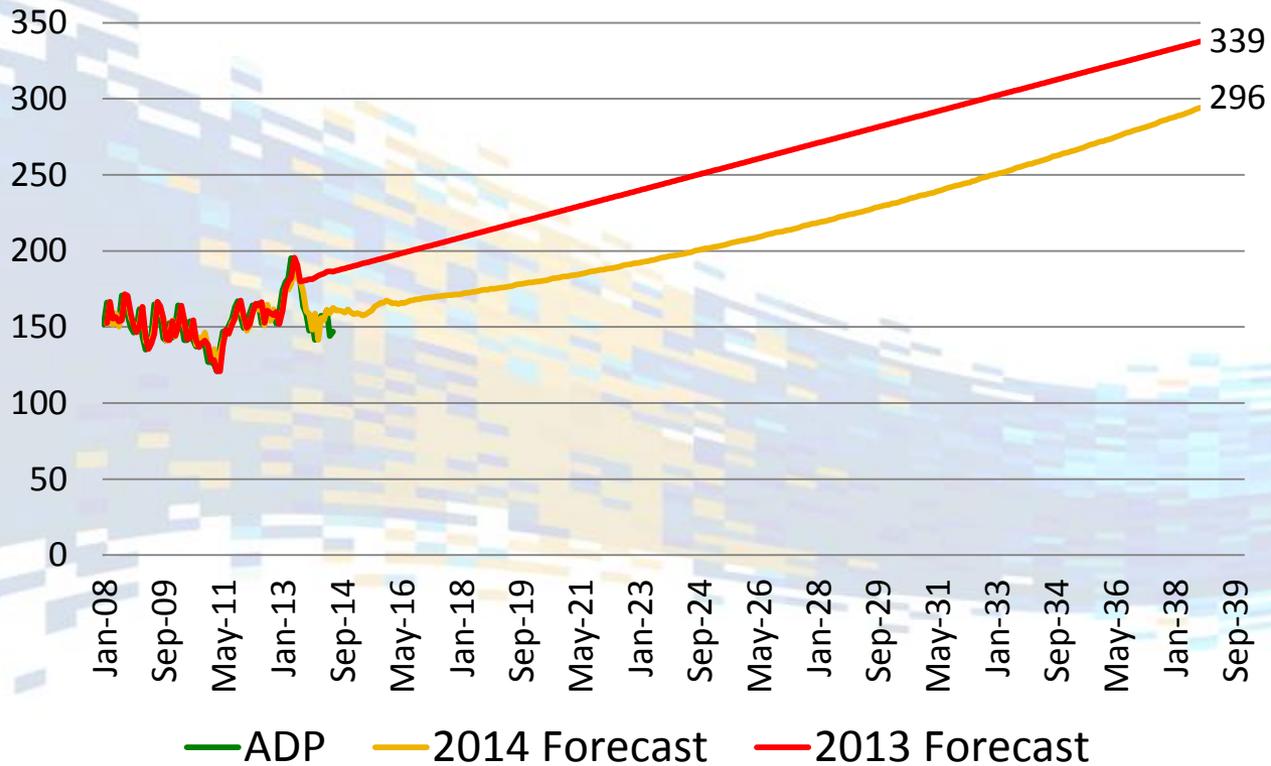
Population Forecast

» Average Daily Population Forecast Through 2038



Population Forecast

» Average Daily Population Forecast Through 2039



Population Forecast

Year	Forecast ADP	Males	Females	Peaking Maintenance Factor (19.1%)	Classification Factor (10%)	Total Bedspace Needs
2015	161.6	135.8	25.9	30.9	16.2	208.6
2017	170.3	143.1	27.2	32.5	17.0	219.9
2019	177.2	148.9	28.4	33.8	17.7	228.8
2021	185.4	155.8	29.7	35.4	18.5	239.4
2023	194.5	163.4	31.1	37.2	19.5	251.1
2025	204.5	171.8	32.7	39.1	20.5	264.0
2027	215.4	181.0	34.5	41.1	21.5	278.1
2029	227.3	190.9	36.4	43.4	22.7	293.4
2031	240.0	201.6	38.4	45.8	24.0	309.9
2033	253.7	213.1	40.6	48.5	25.4	327.5
2035	268.3	225.4	42.9	51.2	26.8	346.3
2037	283.8	238.4	45.4	54.2	28.4	366.3
2039	300.2	252.2	48.0	57.3	30.0	387.5



Findings and Recommendations



Findings and Recommendations

- » **The jail's population decrease is accounted for by a decrease in both commitments (both ICE and non-ICE) and ALOS**
- » **The jail's projected ALOS is a key component of the projected population increase**
- » **Managing ALOS may help control population growth**
- » **There exist 3 main types of opportunities to responsibly reduce ALOS:**
 - **Criminal justice system management**
 - **Case processing efficiency**
 - **Alternatives to detention**

Findings and Recommendations

Criminal Justice System Management Recommendations:

- 1. Increase jail population information sharing**
- 2. Establish a jail population manager position**
- 3. Establish a criminal justice coordinating committee**

Findings and Recommendations

Case Processing Recommendations:

- 1. Reduce Superior Court case backlog: pre-indictment**
- 2. Reduce Superior Court case backlog: post-indictment**
- 3. Priority scheduling/case processing for in custody pretrial defendants**
- 4. Increase municipal court case processing efficiency**

Findings and Recommendations

Alternatives To Detention:

- » After those 7 recommendations are fully implemented, there may still be opportunities to decrease the jail's population
- » Can implement alternatives to pretrial detention via a pretrial services program
 - Currently Have Home Detention
 - GPS Monitoring When Appropriate

Findings and Recommendations

Impact of Responsibly Managing ALOS:

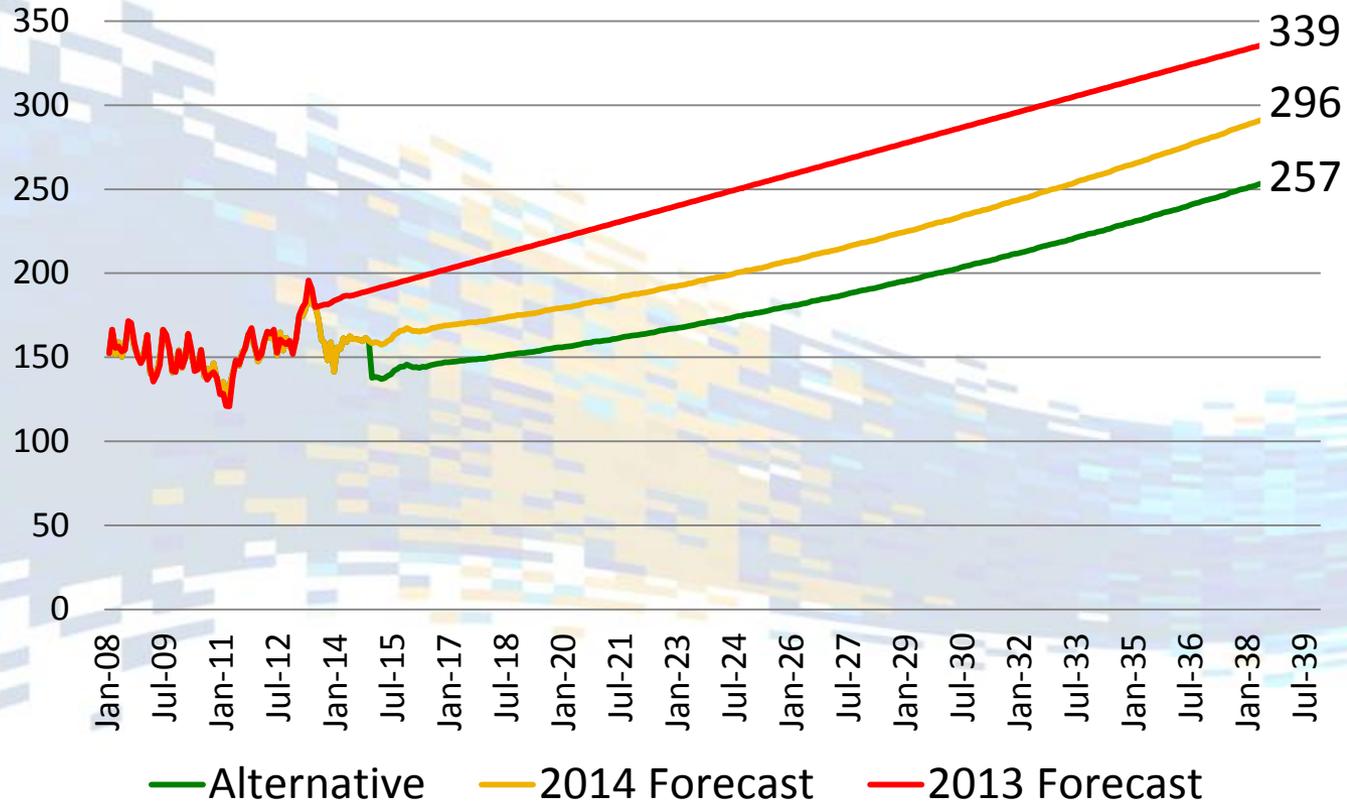
- » Fully implementing the recommendations may help manage future jail population growth by limiting ALOS
- » In the first 10 months of 2014, the Jail received 1,037 admissions with an ALOS of 44.4 days – resulting in an ADP of 152 inmates
 - If admissions remained the same, but the ALOS was reduced by 19% to 37.2 days (as it was in 2009), the ADP would have been 127

Summary

- » **Commitments into the jail have decreased**
- » **The jail's ALOS has decreased**
- » **As a result, the jail's population has decreased**
- » **Opportunities remain to manage the ALOS and further reduce the jail population in the future**

Conclusion

» Alternate Forecast From Reduced ALOS



Sussex County, NJ

Operational Assessments and Recommendations



Sussex County, NJ

Operational Assessment and Recommendations

» **Curtiss Pulitzer, *Pulitzer/Bogard & Associates, LLC***



Key Findings: Operations

- » Physical plant does not support separation of the inmate populations according to the classification plan.
- » Female housing configuration limits their access to programs and services.
- » Housing 3 inmates to a cell at times is a significant concern for inmate safety and welfare.
- » Classification system and inmate safety is compromised by the lack of separate housing for special populations.
- » Work opportunities are limited for female inmates.

Key Findings: Operations

- » **Current staffing coverage does not provide for optimum management and direct supervision of the inmate population.**
- » **A crowded Intake area hinders necessary privacy and male/female separation.**
- » **The jail configuration and numerous blind spots makes PREA compliance difficult to achieve.**
- » **Lack of program space limits the ability to provide treatment programming.**
- » **Greater collaboration with community resources is needed to enhance reentry services.**

Key Findings: Staffing and Operating Costs

- » Correctional salaries and benefits are 87.6% of the budget which is high comparatively.
- » Per diem calculated at \$197.10 for an ADP of 185

Functional Area	Total Cost	Per Inmate
Operations	\$11,906,797.60	\$176.33
Health Care	\$1,097,913.41	\$16.26
Food Service	\$696,003.59	\$9.30 ⁶⁶
Laundry	\$2,552.75	\$0.04
Maintenance	\$375,286.54	\$5.56
Utilities	\$306,554.90	\$4.54
Programs	\$3,365.62	\$0.05
Total	\$14,388,474.41	\$197.10

Per Diem Cost Analysis Comparison

» Per diem comparison with other NJ Counties

	Sussex	Warren	Somerset	Burlington	Bergen
Operations	\$176.33	\$113.8	\$202.40	\$141.83	\$178.36
Health Care	\$16.26	\$16.8	\$12.29	\$19.14	\$19.51
Food Service	\$9.30	\$5.6	\$8.00	\$5.43	\$6.62
Laundry	\$0.04	\$0.0	\$0.04	\$0.00	\$0.02
Maintenance	\$5.56	\$0.7	\$1.68	\$1.68	\$4.95
Utilities	\$4.54	\$3.5	\$2.55	\$0.02	\$5.70
Programs	\$0.05	\$0.0	\$2.86	\$3.24	\$3.07
Total	\$197.10	\$140.5	\$229.82	\$171.35	\$218.21
ADP	185	205	235	525	784



Operating Cost Savings Recommendations

- » **Reduce the food service cost by 25%**
- » **Consider the benefits of submitting RFPs for several functional areas to determine if contracted services may yield a decreased cost and improved service delivery.**
- » **Update the Jail's HVAC system to be energy and staff efficient**

Sussex County, NJ

Health Care Assessment and Recommendations



Key Findings

- » Existing space for health care services is inadequate.
- » There are no dedicated medical observation, medical housing or ADA compliant beds
- » There is no designated mental health housing with the exception of camera observation cells for suicide watch.
- » Having only paper health care records instead of EMR is problematic.
- » Use of independent contract medical, mental health and dental providers has resulted in fragmentation, inconsistency and inefficient provision of health care services.
- » The lack of a single health authority to provide leadership and greater accountability may be contributing to excessive costs.

Key Findings: Costs

- » **The pharmaceuticals cost have in the past far exceeded the estimated cost in the contract.**
- » **More than 77% of the inmates are prescribed medications which is high for a jail population.**
- » **More than 42% of the jail population is prescribed psychiatric medication, higher than the national average of 16.6% for male inmates and 31% for female inmates.**
- » **55% of the medication costs are for psychiatric medications.**
- » **The number of prescriptions per inmate per month (PIPM) not only increases operational costs (the costs of the medications themselves), but increases the time for medication administration by nursing staff.**



Recommendations

- » **Potential approaches to reduce health care costs include:**
 - **Use of telemedicine (where appropriate)**
 - **Reduce nursing time administering medications**
 - **Use a jail-based formulary**
 - **Base new health care contracts on inmate population size**
 - **Actively monitor that contracted services are provided**
 - **Audit costs**
 - **Measure the outcomes of costs on inmates' health.**
- » **Develop a nursing staffing plan that uses a mix of LPN and RN positions that would expand coverage to 24 hours.**

Correctional Health Care Models

- » There are a number of correctional health care staffing models:
 - Blended Public Employee and Contracted Services
 - Public Employee Model
 - Contracted Services Model

Recommendations

- » **There are significant potential advantages to the Contracted Services Model.**
 - **The vendor will typically subcontract for certain services such as hospitalization and certain clinical specialties**
 - **The vendor is responsible for all care and costs**
 - **The vendor indemnifies the county for any legal liabilities that may arise.**
 - **Greater opportunities for alliances and cooperation with the local health department necessary for effective reentry**
 - **Significantly decreases a county's legal exposure, if the county also maintains active contract monitoring**



Sussex County, NJ

Operational and Architectural Programming



Programming Objectives

- » **Direct Supervision of inmates where appropriate**
- » **Exercise yards adjacent to housing**
- » **Provide expanded program spaces with direct access from housing creating decentralized services**
- » **Provide appropriate medical and health care spaces & services**
- » **Provide appropriate Intake and Release spaces & services, including “open booking”**
- » **Provide video-visitation in housing areas to minimize inmate movement**
- » **Provide opportunities for operating savings through efficient staff deployment and reallocation of existing staff**



Space Program Summary: 293 Beds

SUSSEX COUNTY JAIL EXPASION PROJECT Preliminary Macro Space Program				
Component Section	Component	Net Square Feet.	Gross Square Feet	Exterior Square Feet
1.000	PUBLIC LOBBY	1,800	2,400	0
2.000	ADMINISTRATION	2,100	2,700	0
3.000	STAFF SUPPORT	3,400	4,600	0
4.000	SECURITY OPERATIONS	1,600	2,200	0
5.000	INTAKE PROCESSING CENTER	7,700	10,000	0
6.000	HOUSING			
6.100	-Unit 1 (GP: Male Max/High Med)	6,100	10,100	750
6.200	-Unit 2 (GP: Male Medium)	6,200	10,200	750
6.300	-Unit 3 (GP: Male Minimum)	6,100	9,200	750
6.400	-Housing Support	2,500	3,500	
6.500	-Unit 4 (Male Pre-Class/Seg)	6,800	11,100	750
6.600	-Unit 5 (Female - All Class)	6,100	10,100	750
6.700	Shared Housing Support	3,000	4,200	
7.000	HEALTH CARE			
7.100	Clinic	1,900	2,900	
7.200	Medical Housing	1,700	2,700	750
7.300	Mental Health Housing	4,200	6,900	750
7.400	Shared Housing Support	1,700	2,500	
8.000	VISITATION	1,800	2,500	
9.000	PROGRAMS AND SERVICES	1,200	1,600	
10.000	INDUSTRIES	3,400	4,800	600
11.000	FOOD SERVICE	3,300	4,300	
12.000	COMMISSARY	600	700	
13.000	LAUNDRY	1,300	1,950	
14.000	WAREHOUSE	5,400	6,500	
15.000	MAINTENANCE/CENTRAL PLANT	4,400	5,200	
16.000	SITE / PARKING			54,000
	SUBTOTAL	84,300	122,850	59,850
	Gross Factor (10%)		12,285	
	TOTAL		135,135	59,850



Comparison—Current and Future Per Diem Costs

» Per Diem Comparison of proposed expansion with current Jail

??	Current??	Future??
Operations	\$176.33	\$142.95
Health Care	\$16.26	\$21.00
Food Service	\$9.30	\$4.80
Laundry	\$0.04	\$0.00
Maintenance	\$5.56	\$4.00
Utilities	\$4.54	\$4.54
Programs	\$0.05	\$3.00
Total	\$197.10	\$180.29
ADP	185	293

-
- » **Staff to Inmate ratio comparison with current Jail**
 - » **Assumes elimination of control booths and converting to direct supervision**
 - » **Improves staff efficiency by 63%**

	Staff	Capacity	Staff/100 Inmates
Baseline	108	185	58.4
Projected	104	293	35.5



Sussex County, NJ

Physical Plant Analysis, Design Concepts and Capital Costs



Sussex County, NJ

Physical Plant Analysis and Recommendations



Physical Plant Analysis

» Key Findings

- Life Safety and Risk Evaluation
- Suicide Risk Mitigation
- Architectural/Structural Systems
- HVAC Systems
- Plumbing
- Fire Protection
- Electrical
- Security Electronics and Control Systems

Physical Plant Analysis

» Facility Improvement Recommendations

▪ Within 1 year

▪ Infrared imaging of switchgear	\$12,000
▪ Security review of existing locks and controls	\$15,000
▪ Roofing condition inspection	\$4,000
▪ Building Sewers (Cost for major replacement scope)	\$160,000
▪ Replace Kitchen System Ventilation System	\$95,000
▪ Move and replace UPS, provide air conditioned space	\$25,000
▪ Repair any diagnosed problems from switchgear infrared analysis	\$10,000
▪ Repair or schedule any diagnosed problems from roof inspection	\$TBD (Allow \$50,000)
▪ Replace generator & transfer switches & main distribution switchboard	\$250,000
▪ Fire Alarm System	\$60,000
▪ TOTAL.....	\$681,000

Physical Plant Analysis

» Facility Improvement Recommendations

▪ Within 3 Years

▪ Exterior Sealant Replacement	\$60,000
▪ Start Housing Unit Renovations / Cell Renovations <i>(\$315,00 per 8 cells)</i>	\$630,000
▪ Provide Fire Sprinklers in Housing Areas	\$50,000
▪ Panelboards	\$25,000 - 50,000
▪ Light fixture replacements	\$20,000
▪ Occupancy sensors	\$5,000
▪ Special Needs Housing Improvements	\$TBD in next Study Phase
▪ Building Reorganization and/or Expansion	\$TBD in next Study Phase
▪ Mechanical System Replacement	\$1,800,000
➤ <i>Replace Air Handling Units, Exhaust Fans, VAV Units.</i>	
➤ <i>Heating Boiler Replacement including Pumps and Piping</i>	
➤ <i>Replace Chilled Water System, Pumps, Piping</i>	
➤ <i>Replace Mechanical Systems Control System</i>	
➤ <i>Testing and Balancing</i>	
➤ <i>Commissioning</i>	
▪ Replace Exercise Yard Roof Deck	\$80,000
▪ TOTAL	\$2,695,000

Physical Plant Analysis

» Facility Improvement Recommendations

▪ Within 3 to 10 years

▪ Complete Housing Unit Renovations / Cell Renovations	\$2,520,000
▪ Provide Fire Sprinklers in Housing Areas	\$100,000
▪ Laundry Ventilation System/ Control System, Test and Balance	\$29,000
▪ Replace Motor Control Panel	\$30,000
▪ Wiring Device Replacement	\$50,000
▪ Light Fixture Replacement with LED Fixtures Throughout	\$50,000
▪ Replace Roofing, Parapet Covers, and Wall Copings <i>Based upon inspection, this item may move up in priority</i>	\$400,000
▪ Window Replacement. Any windows not replaced <i>Any window not replaced as a part of the housing unit renovations should be replaced within 10 years, though performance of this work with other windows will provide the best value.</i>	\$892,000
▪ Replace Domestic Hot Water Heater System with Instantaneous Heater	\$76,000
▪ Supplement with Solar Hot Water Heating Collectors <i>(Curbs must be installed when new roofing installed.)</i>	\$450,000
▪ TOTAL	\$4,597,000

10 Year Program Costs

» Program Costs

➤ Within Year 1

- Base Cost: \$681,000
- + 18% Soft Cost: \$804,000
- + 15% Contingency: \$924,000

➤ Within 1 to 3 Years

- Base Cost: \$2,695,000
- + 18% Soft Cost: \$3,180,000
- + 15% Contingency: \$3,657,000

➤ Within 3 to 10 Years

- Base Cost: \$4,597,000
- + 18% Soft Cost: \$5,424,000
- + 15% Contingency: \$6,238,000

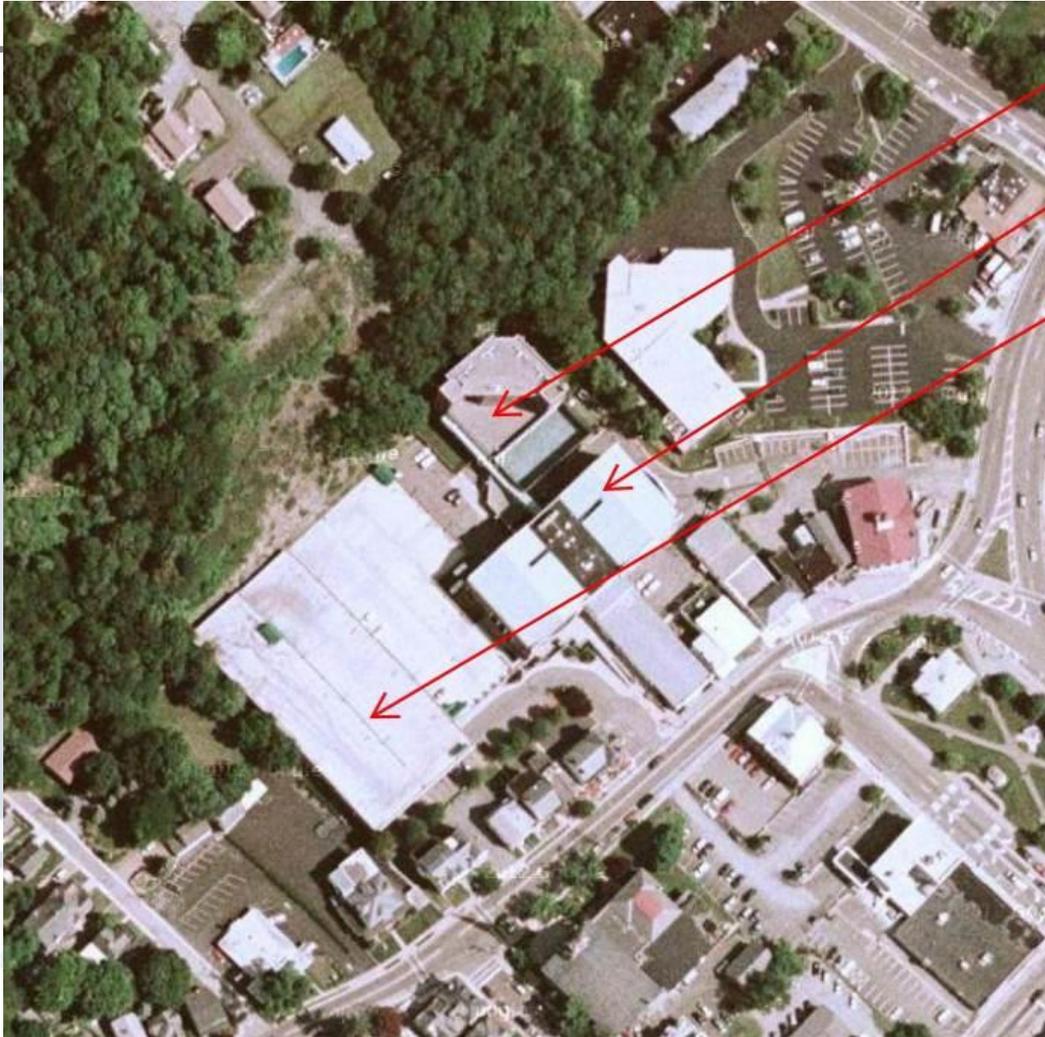
Sussex County, NJ

Design Concepts and Capital Costs



Design Concepts and Capital Costs

Overview



Correctional Facility

Courts

Parking Structure

Design Concepts and Capital Costs

The most pressing needs include:

- Addressing **suicide prevention** in housing areas as well as the deteriorating physical plant.
- Diminish the **escape potential** of inmates.
- Improve **observation and oversight** of inmates.
- Creating appropriate **medical and mental health** treatment space and housing.
- Creating an appropriate **booking and intake** area
- Replacing the existing **HVAC systems with a new energy and cost-efficient** system.
- Create more **efficient decentralized services** for the inmate population to minimize escorted movement within the jail
- Create more **efficient and effective inmate supervision** in housing areas with the introduction of **direct supervision** in housing pods.
- Enhance the **safety of inmates, staff and the public.**

Design Concepts and Capital Costs



LEGEND

- EGRESS
- HOUSING
- INDUSTRIES
- INTAKE
- MAIN LOBBY
- MECHANICAL
- MEDICAL
- PROGRAMS
- PUBLIC
- RECREATION
- SALLYPORT
- SECURITY
- SERVICES
- STAFF
- VISITATION
- WAREHOUSE

**FIRST FLOOR PLAN
PHASE 1**

Design Concepts and Capital Costs



Design Concepts and Capital Costs



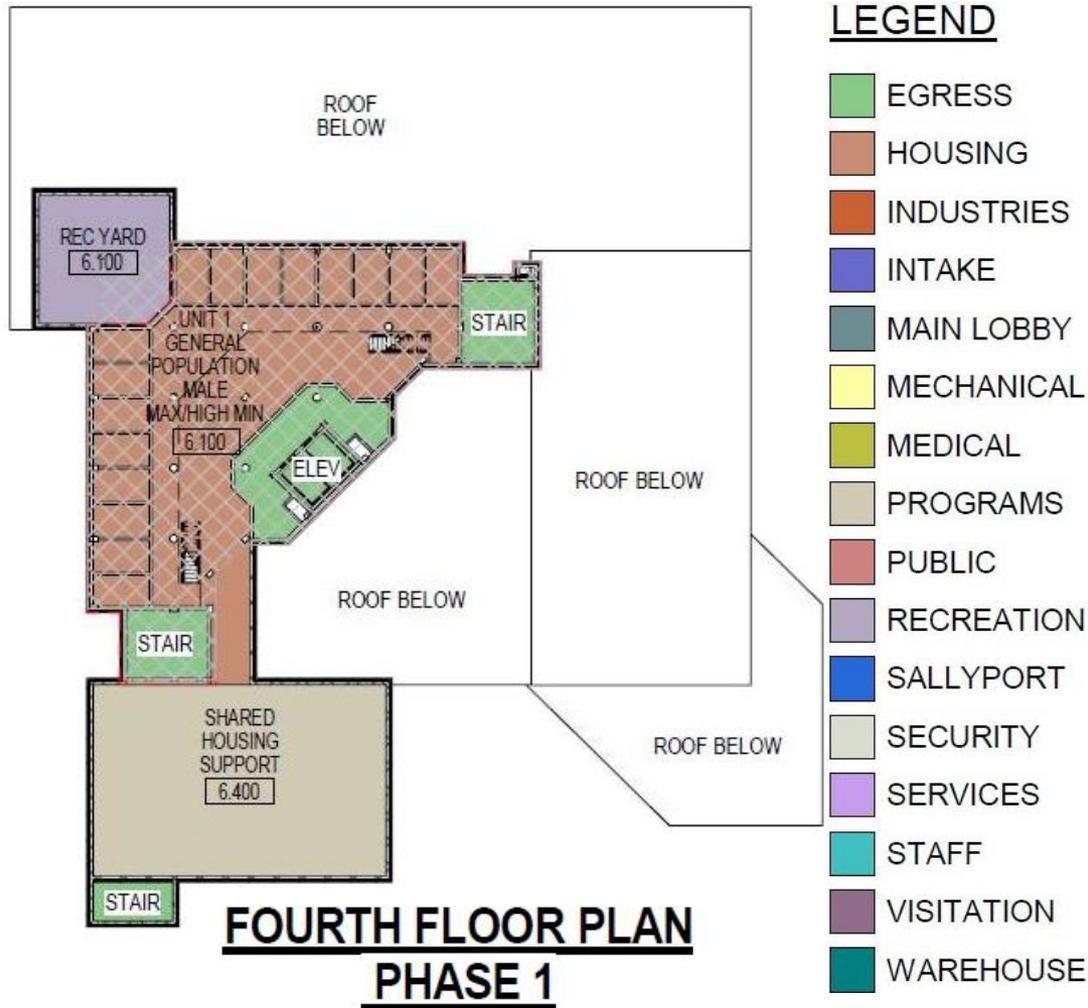
LEGEND

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- WAREHOUSE

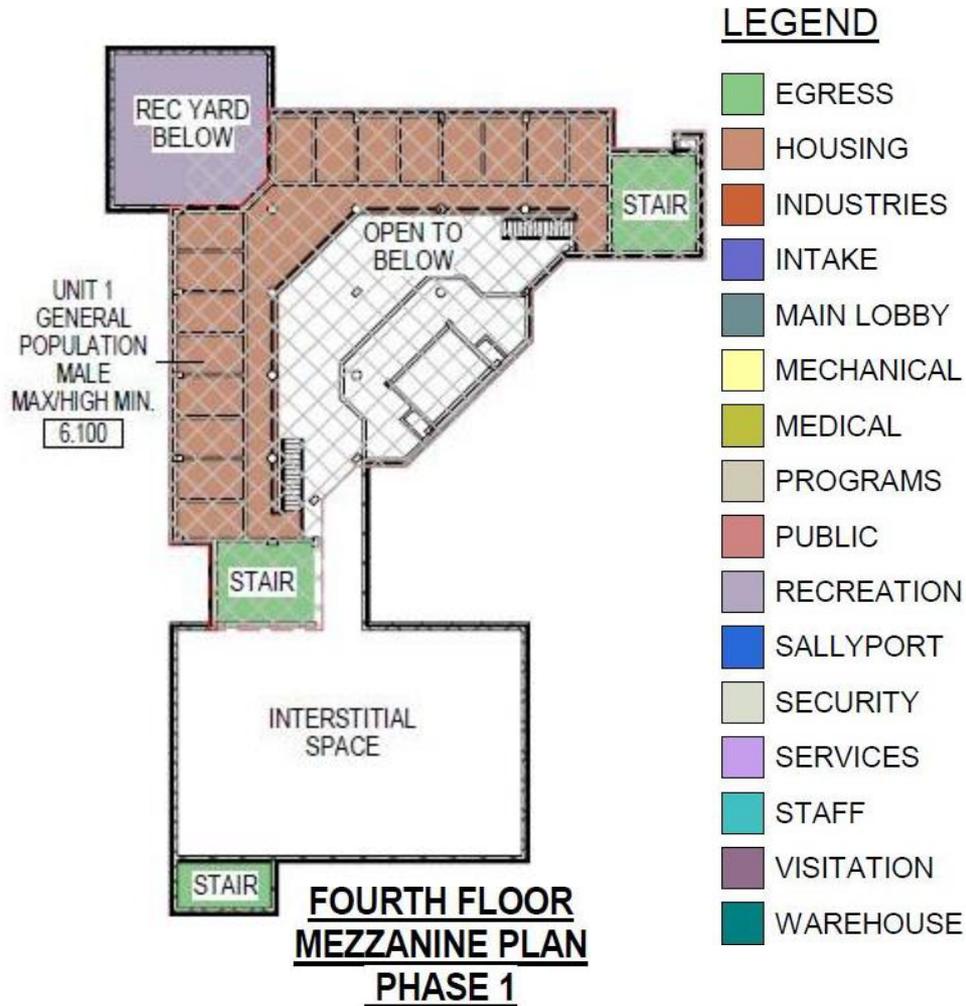
**THIRD FLOOR PLAN
PHASE 1**



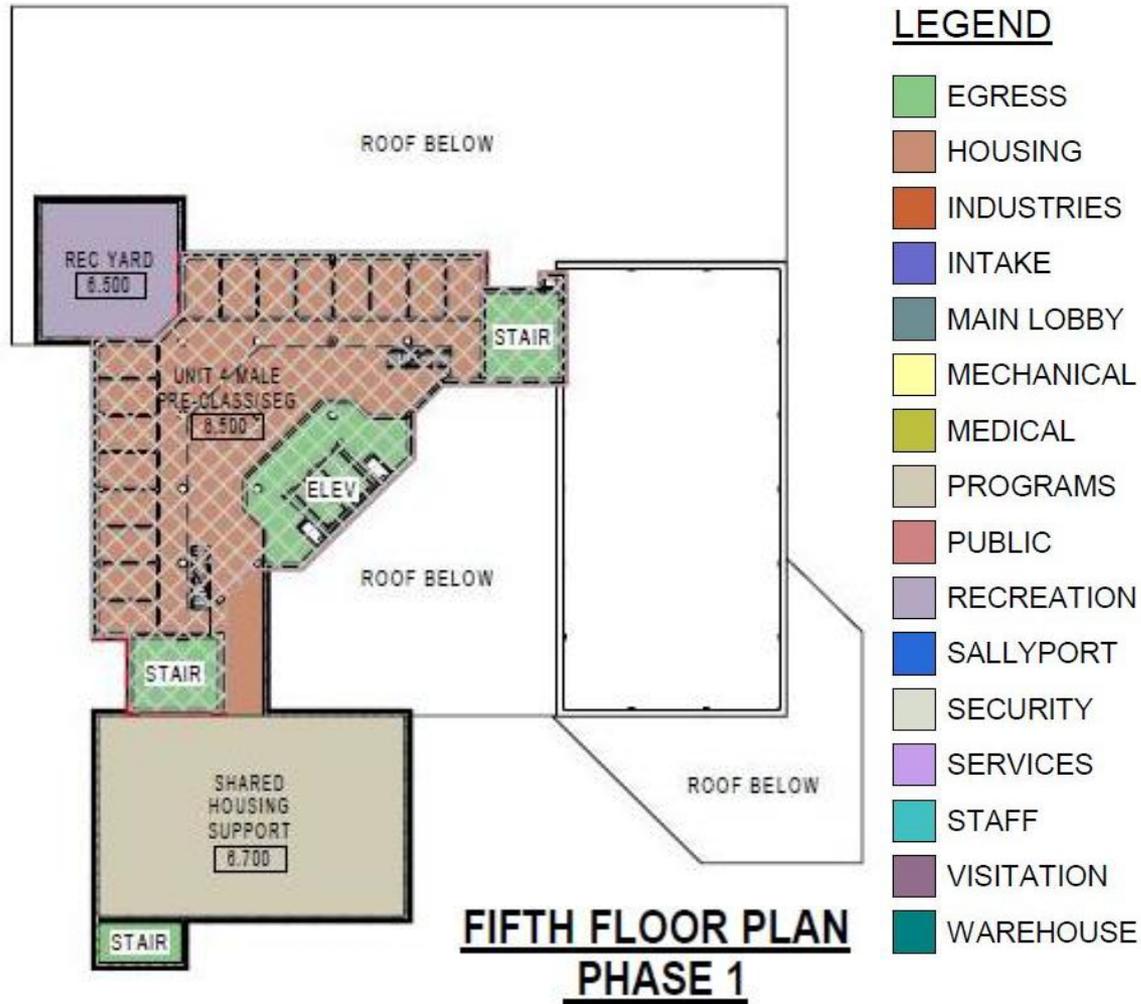
Design Concepts and Capital Costs



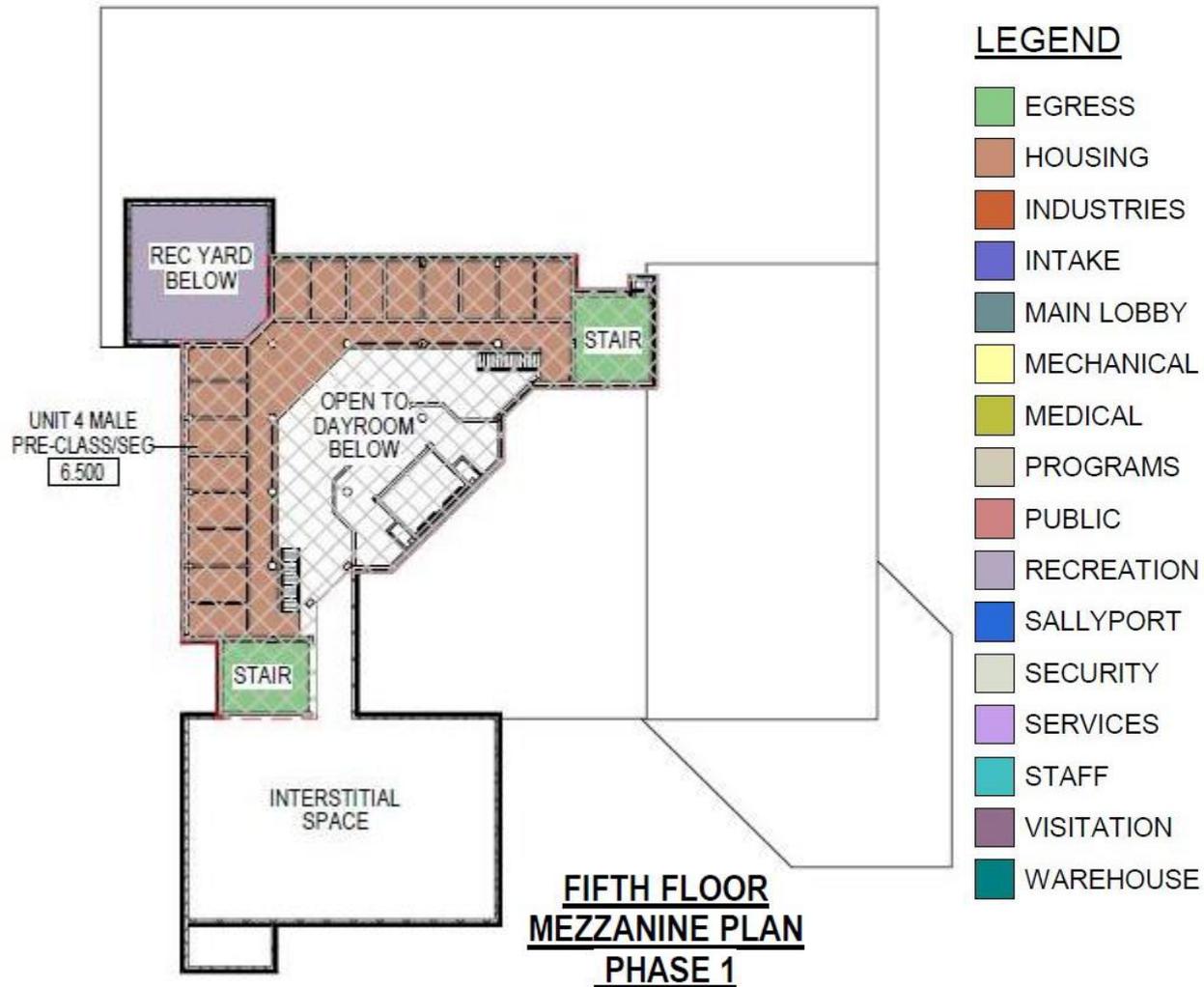
Design Concepts and Capital Costs



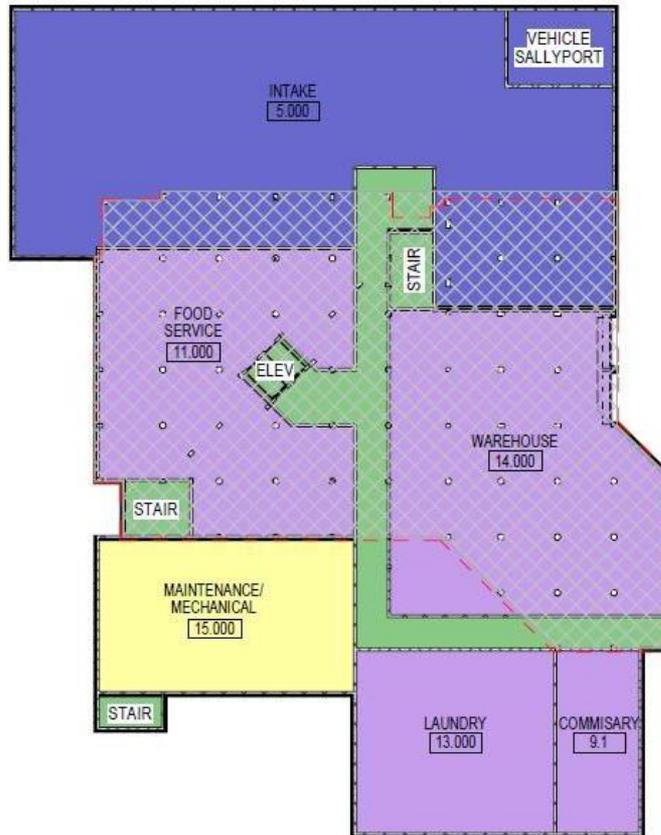
Design Concepts and Capital Costs



Design Concepts and Capital Costs



Design Concepts and Capital Costs



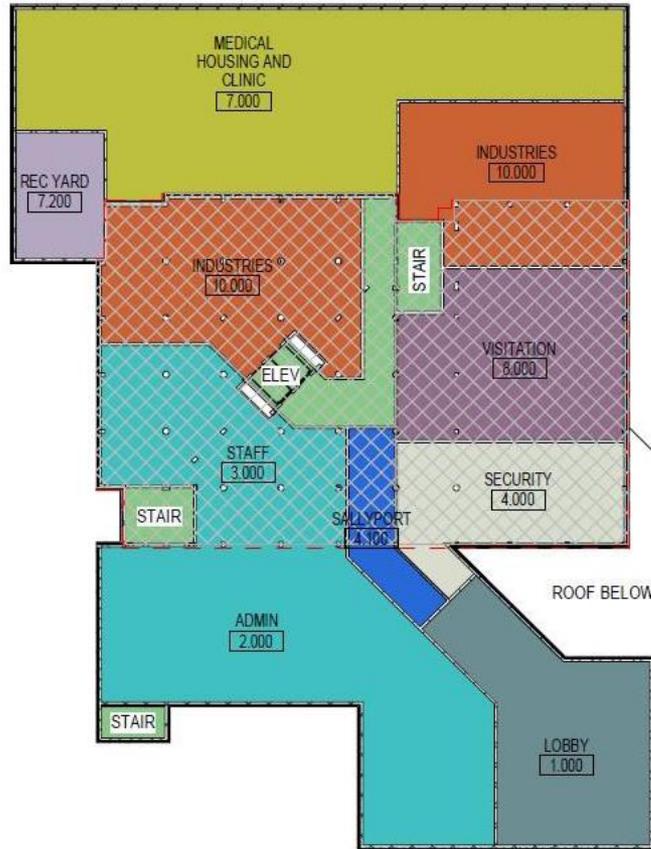
**FIRST FLOOR PLAN
PHASE 2**

LEGEND

- EGRESS
- HOUSING
- INDUSTRIES
- INTAKE
- MAIN LOBBY
- MECHANICAL
- MEDICAL
- PROGRAMS
- PUBLIC
- RECREATION
- SALLYPORT
- SECURITY
- SERVICES
- STAFF
- VISITATION
- REPRESENT EXISTING CONSTRUCTION



Design Concepts and Capital Costs

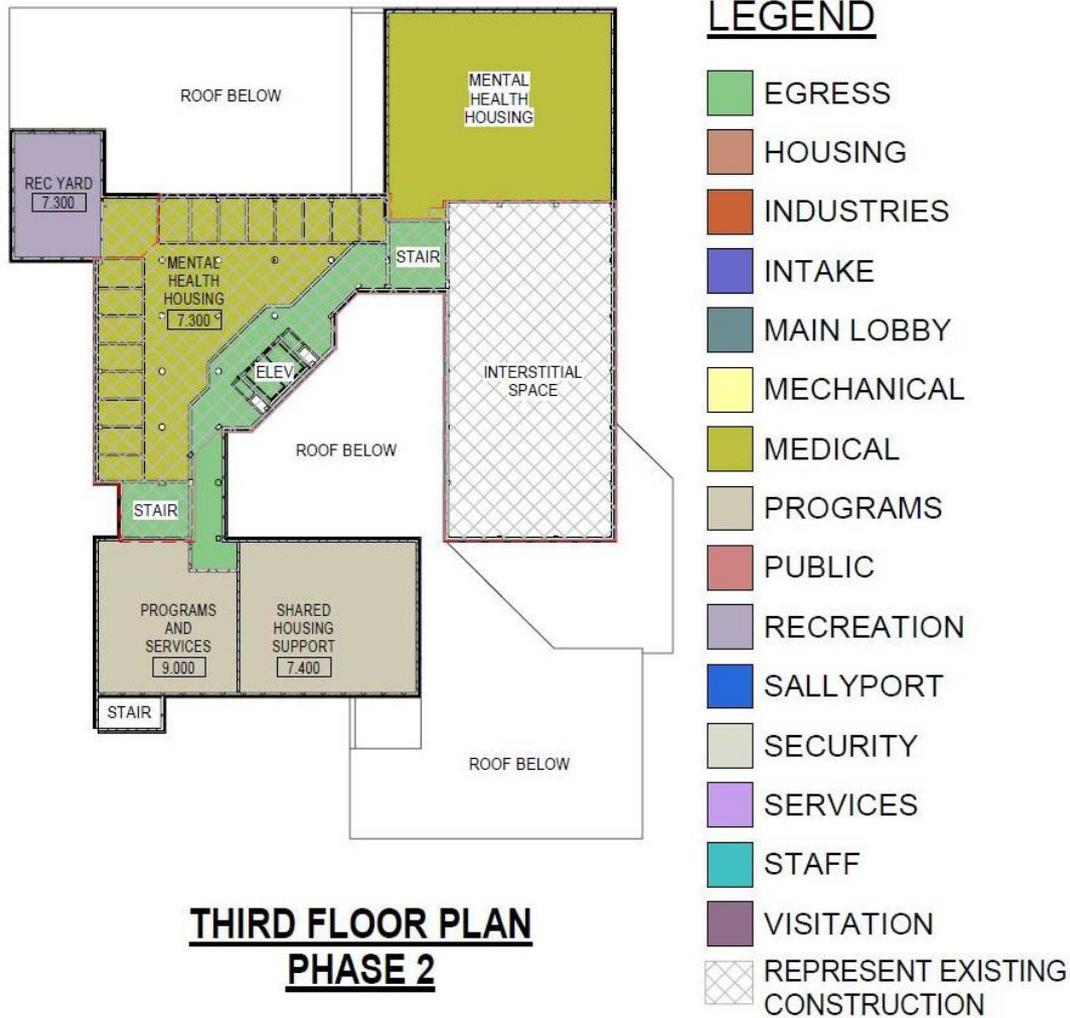


**SECOND FLOOR PLAN
PHASE 2**

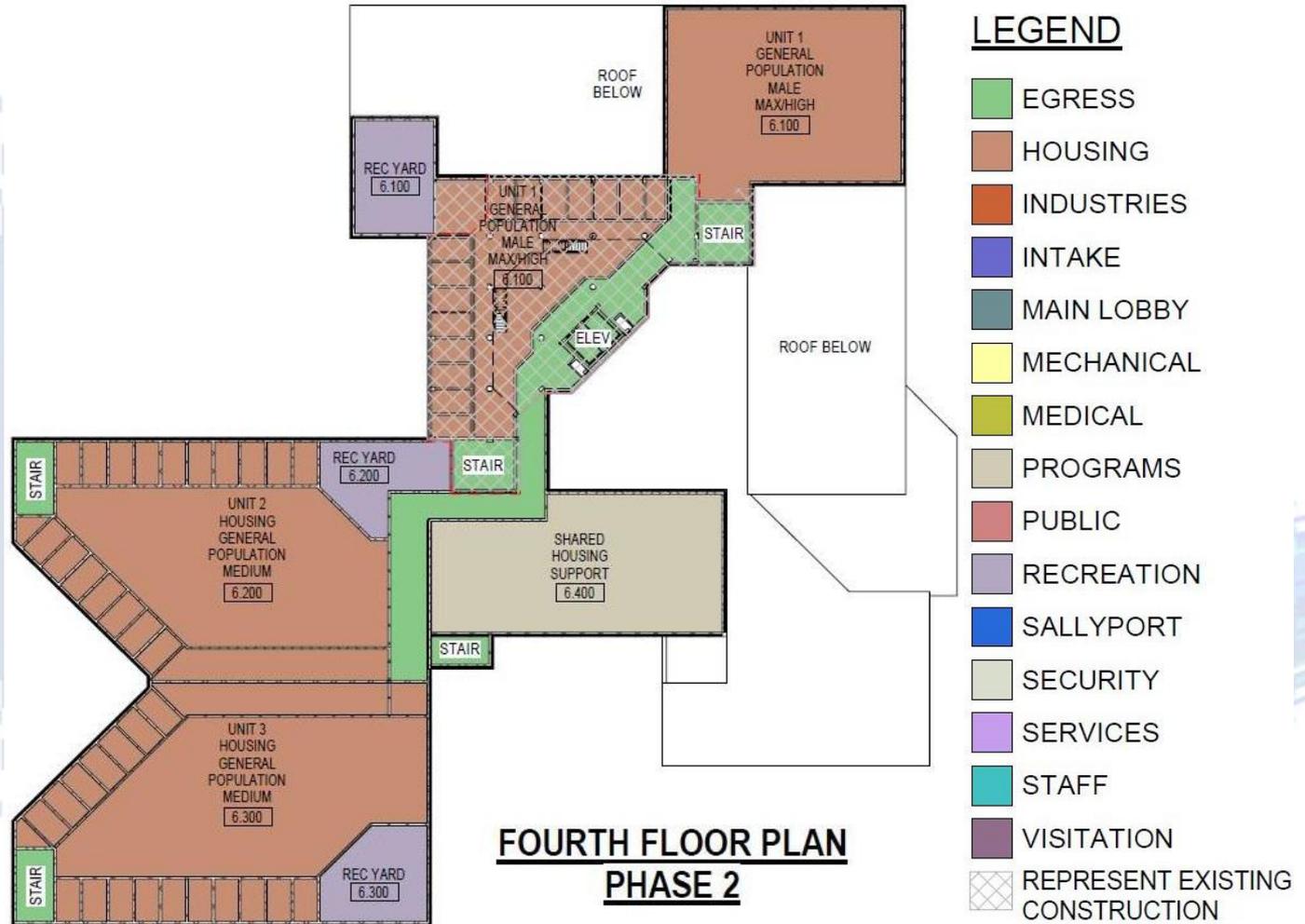
LEGEND

- EGRESS
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- MEDICAL
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- PUBLIC
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- SECURITY
- SERVICES
- STAFF
- VISITATION
- REPRESENT EXISTING CONSTRUCTION

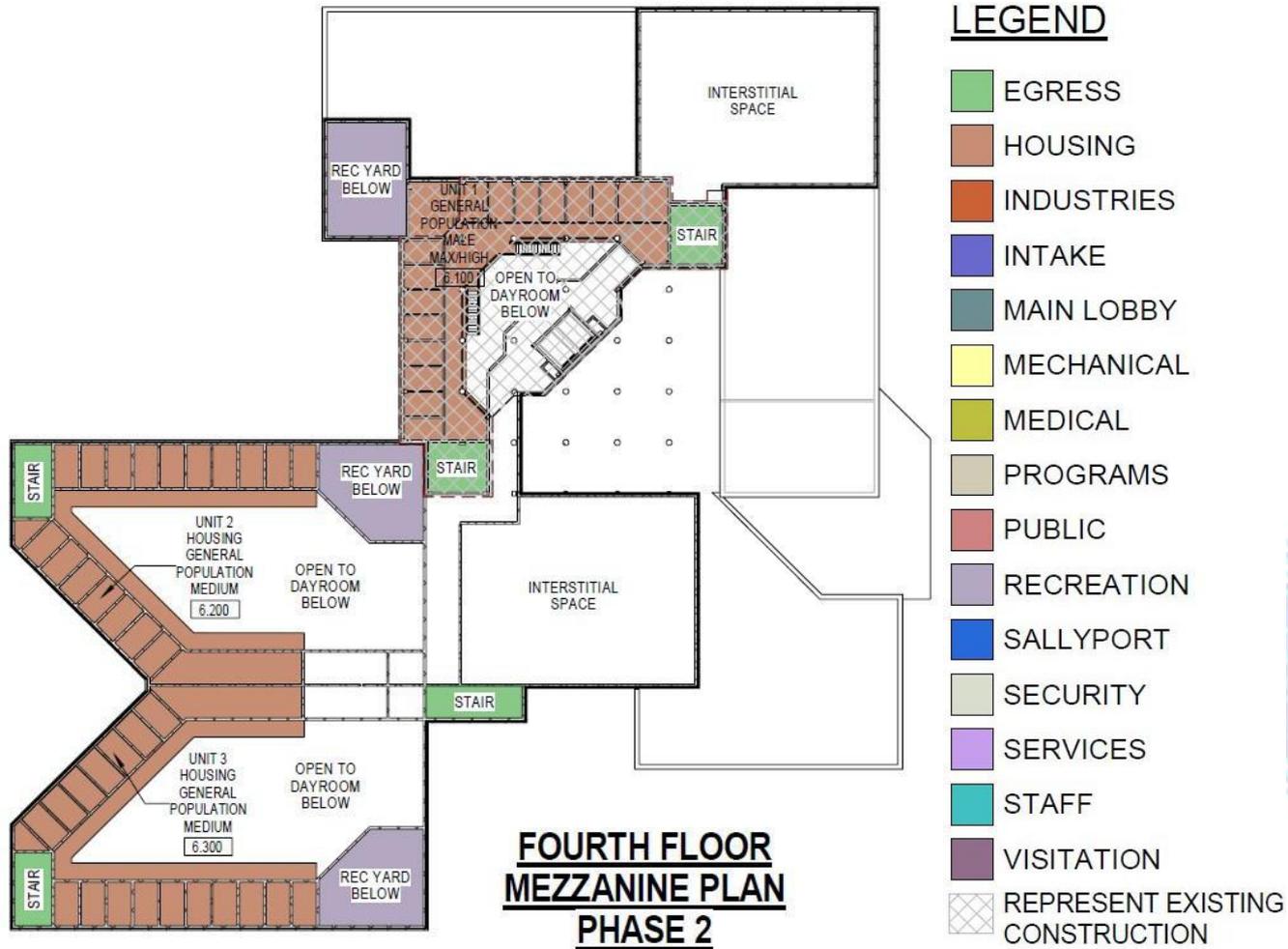
Design Concepts and Capital Costs



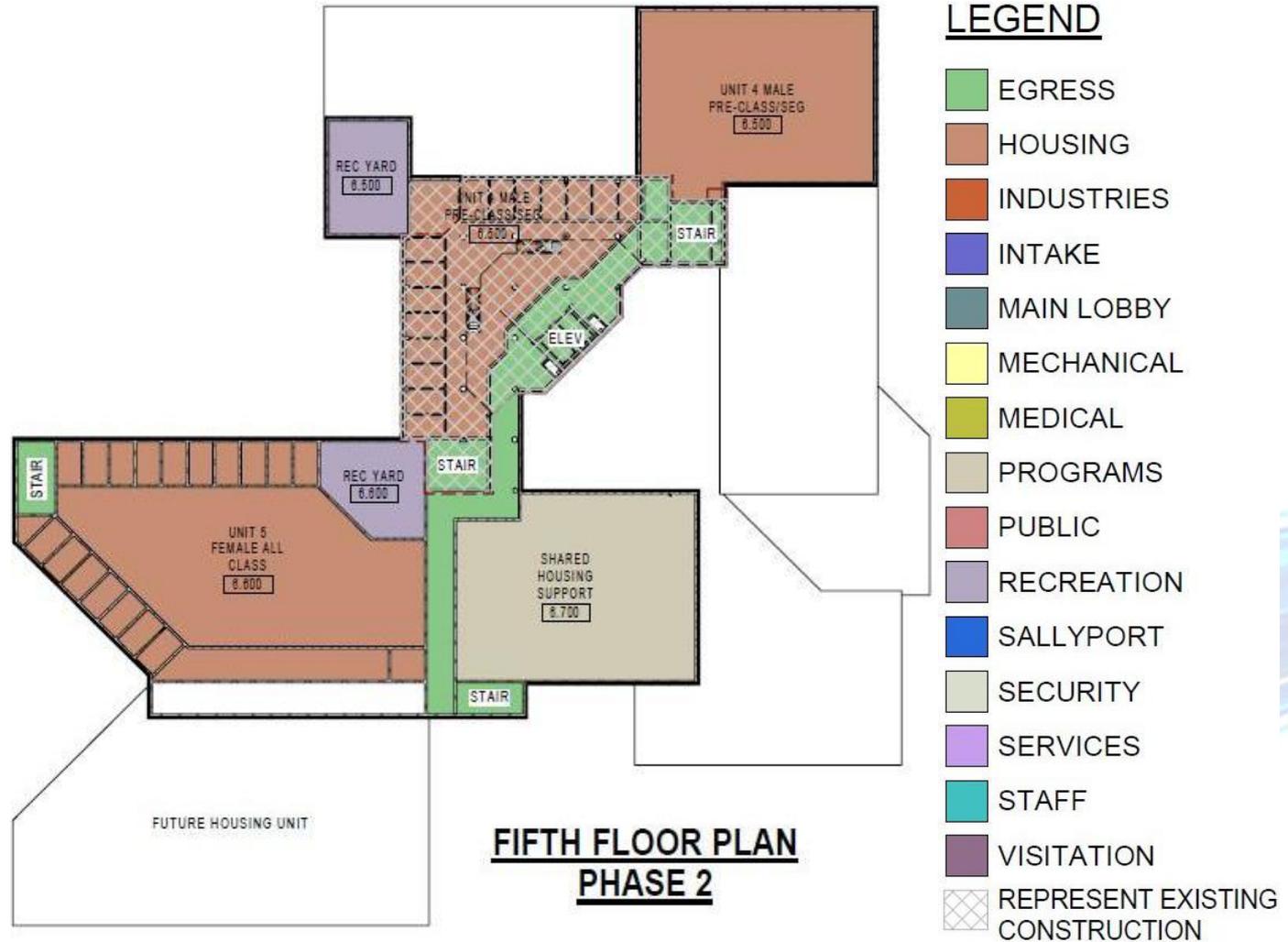
Design Concepts and Capital Costs



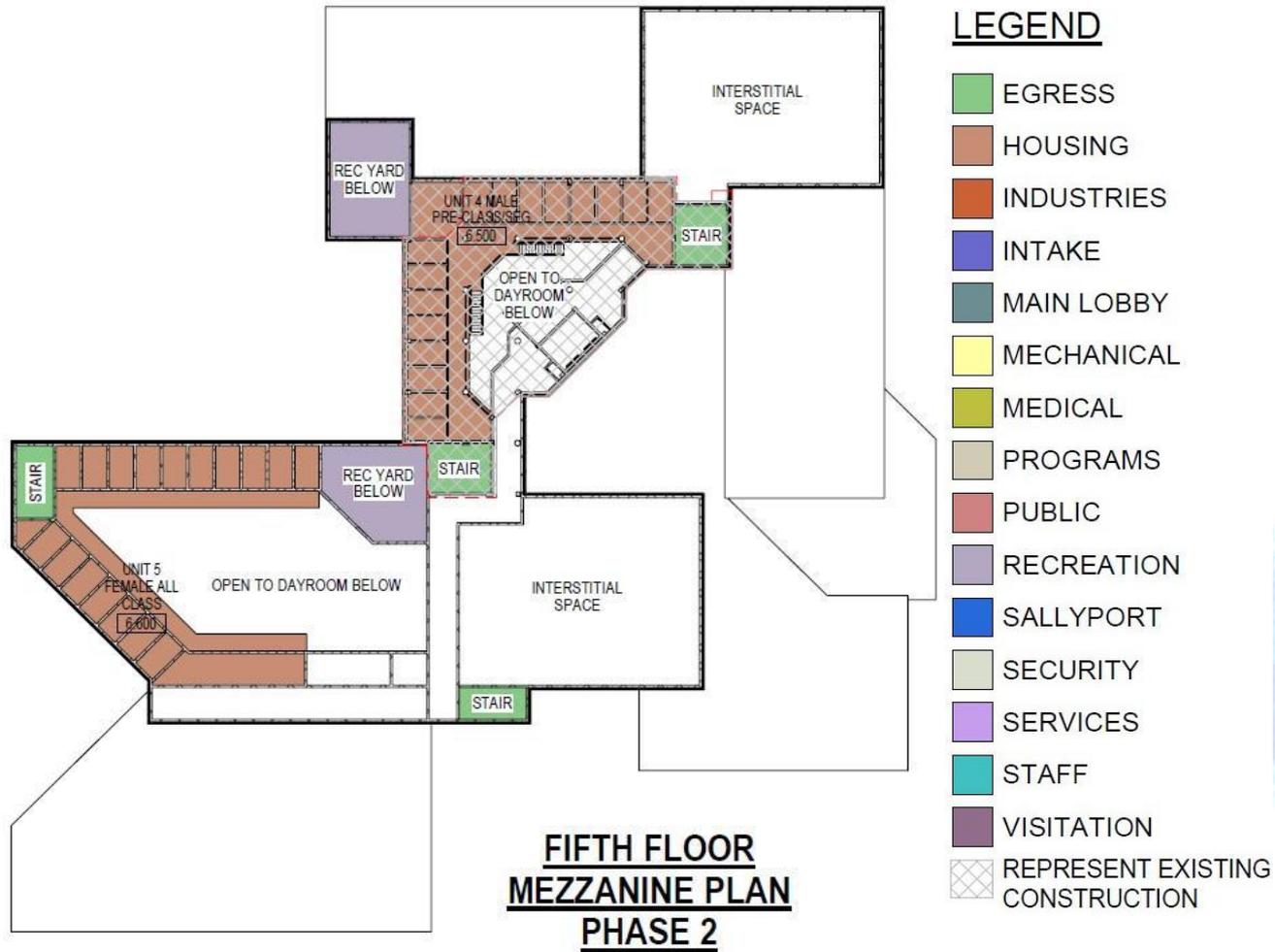
Design Concepts and Capital Costs



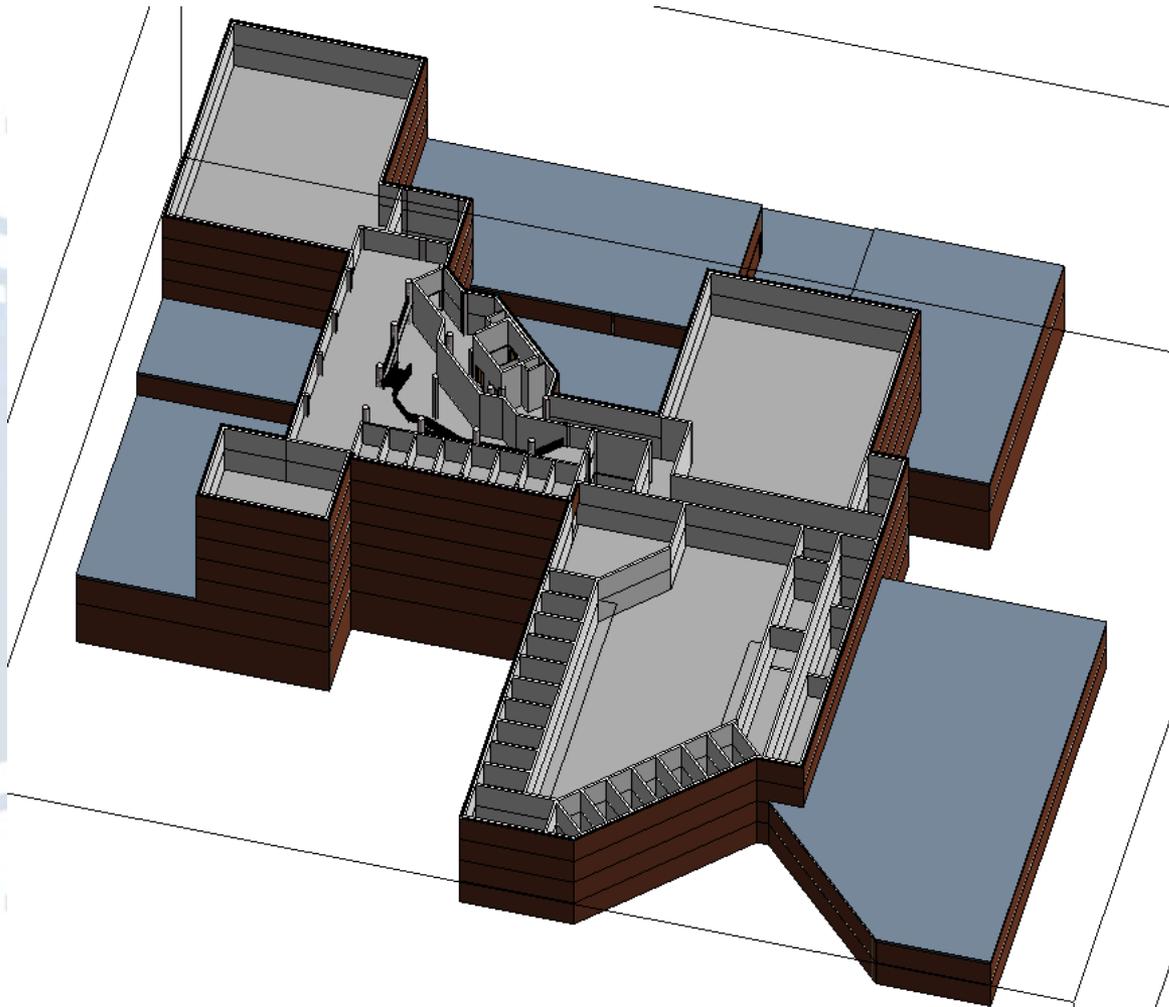
Design Concepts and Capital Costs



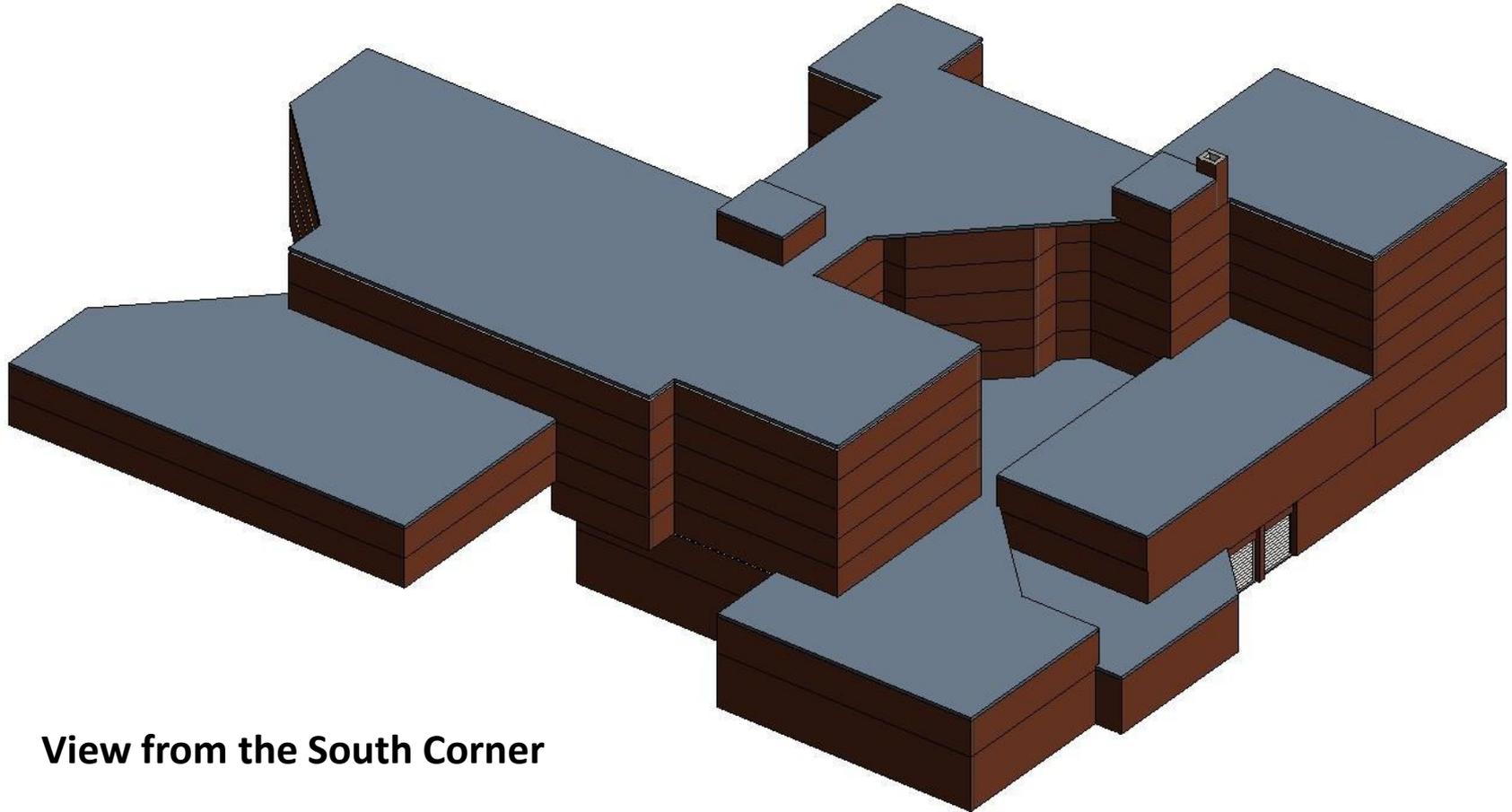
Design Concepts and Capital Costs



Design Concepts and Capital Costs



Design Concepts and Capital Costs



View from the South Corner

Design Concepts and Capital Costs

Total Program Phased		\$/PSF	Total Cost
Phase One			
Renovation	11,000	\$200	\$ 2,200,000.00
New Construction	21,050	\$365	\$ 7,683,250.00
Total Construction			\$ 9,883,250.00
Contingency	15%		\$ 1,482,487.50
Soft Costs	18%		\$ 1,778,985.00
Total P-1 Const. Costs			\$ 13,144,722.50
Total conditions report			\$ 10,819,000.00
Total Phase One			\$ 23,963,722.50
Phase Two			
Renovation	21,050	\$225	\$ 4,736,250.00
New Construction	65,810	\$415	\$ 27,311,150.00
Total Construction Cost			\$ 32,047,400.00
Contingency	15%		\$ 4,807,110.00
Soft Costs	18%		\$ 5,768,532.00
Total P-2 Project Costs			\$ 42,623,042.00

