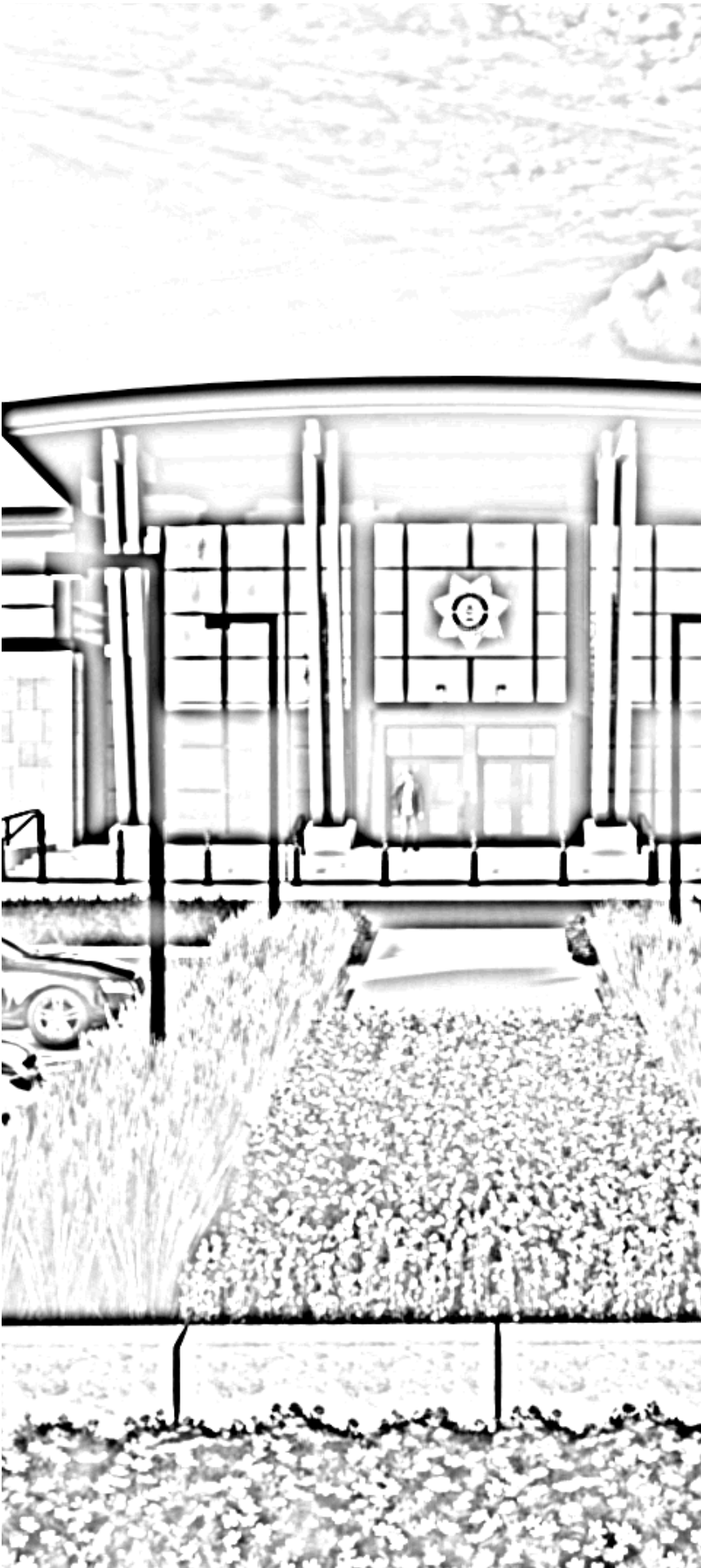

NEEDS ASSESSMENT

JOHNSON COUNTY
SHERIFF'S OFFICE
AND JAIL

VOLUME I
NARRATIVE

July 10, 2024

SHIVEHATTERY
ARCHITECTURE+ENGINEERING



PROJECT PARTICIPANTS

Michael S. Lewis and Mark Allen	Shive-Hattery, Inc.
Sheriff Brad Kunkel	Johnson County Sheriff's Office
Chief Deputy Randy Lamm	Johnson County Sheriff's Office
2nd Deputy Commander Matt Hendricks (Patrol)	Johnson County Sheriff's Office
Lieutenant Chris Wisman (Patrol)	Johnson County Sheriff's Office
Lieutenant Katrina Rudish (Investigations)	Johnson County Sheriff's Office
Lieutenant David Broll (Civil)	Johnson County Sheriff's Office
Lieutenant Demetrius Marlowe (Records)	Johnson County Sheriff's Office
Lieutenant Rebecca Moses (Jail)	Johnson County Sheriff's Office
Captain John Good (Jail)	Johnson County Sheriff's Office
Lieutenant Steve Nash (Jail)	Johnson County Sheriff's Office
Susie McAreavy (office administration)	Johnson County Sheriff's Office
Rachel Zimmermann Smith (County Attorney)	Johnson County Attorney Office
Dave Curtis (Facility Manager)	Johnson County, IA

FOR QUESTIONS, PLEASE CONTACT

Michael S. Lewis, AIA NCARB
Shive Hattery
mlewis@shive-hattery.com
515-223-8104

Mark Allen, AIA
Shive Hattery
mallen@shive-hattery.com
515-223-8104

CONTENTS

- I. NEEDS ASSESSMENT NARRATIVE..... 5**
 - A. NEEDS ASSESSMENT SCOPE OF WORK 5**
 - I. BACKGROUND JAIL STUDIES 6**
 - II. EXISTING CONDITIONS..... 8**
 - III. JAIL/HOUSING..... 8**
 - IV. PROJECT INFLUENCES/COMMUNITY CONSIDERATIONS..... 10**
- II. A NOTE ON METHODS..... 10**
 - A. SYSTEMIC APPROACH..... 10**
 - B. JAIL CAPACITY FORECAST DATA 10**
- III. JAIL POPULATION ANALYSIS/PROFILE..... 11**
 - JAIL POPULATION DEMOGRAPHIC CONSIDERATIONS**
 - A. SUMMARY OF JOHNSON COUNTY’S SHERIFF’S OFFICE FACILITIES..... 11**
 - B. HISTORIC COUNTY POPULATION 12**
 - C. JAIL POPULATION TRENDS..... 14**
 - D. JAIL CLASSIFICATION UNIT POPULATION CHARACTERISTICS..... 18**
 - I. HIGH JAIL UTILIZERS / LONG-TERM JAIL UTILIZERS.....20**
 - II. CRIME DATA STATISTICS.....20**
 - III. CRIMINAL JUSTICE STATISTICAL DATA – TRENDLINE CONSIDERATIONS.....21**
 - IV. ANALYSIS OF THE PRETRIAL POPULATION.....22**
 - V. ANALYSIS OF AGING CASES22**
 - E. RECOMMENDATIONS FOR JAIL POPULATION ANALYSIS AND MANAGEMENT22**
- IV. JCSO - JAIL OPERATIONS AND STAFFING23**
 - A. JCSO - JAIL STAFFING PROFILE23**
 - B. JCSO - PHYSICAL PLANT23**
 - C. CONSEQUENCES OF JAIL OVERCROWDING24**
 - D. JAIL STAFFING AND OPERATIONS.....24**
 - E. NEW FACILITY OPTIONS: KEY CONSIDERATIONS24**
 - HOUSING24**
 - SUPPORT SPACES25**
 - GROSS SQUARE FOOTAGE NEEDS25**
 - CONSTRUCTION COST.....25**
 - HISTORIC CONSTRUCTION COST CONSIDERATIONS.....25**
 - JAIL ONLY COST OPINIONS.....27**
 - STAFFING CONSIDERATIONS.....28**
 - LIFE CYCLE COST ANALYSIS - CONSIDERATIONS.....30**
 - OVERVIEW30**
 - OPERATIONAL STAFFING COST CONSIDERATIONS31**
 - DO NOTHING LIFE CYCLE DETERMINATIONS.....31**

F. PROGRAMMING AND OPERATIONAL DESCRIPTIONS	33
I. INTRODUCTION TO PROGRAM ELEMENTS	33
II. SECURITY DESIGN PRINCIPLES	33
A. PUBLIC RECEPTION AREAS	34
B. JAIL AND SHERIFF'S ADMINISTRATION.....	34
III. CENTRAL CONTROL.....	34
A. FACILITY INTAKE/RELEASE PROCESSING	34
IV. COURT SERVICES/JAIL SUPPORT	35
V. MEDICAL SERVICES	35
VI. HOUSING.....	35
VII. FOOD SERVICE.....	36
VIII. LAUNDRY.....	36
G. PROGRAMMING DESCRIPTIONS	36
I. FACILITY MACRO PROGRAMMING	36
H. BUILDING EXPANSION AND FLEXIBILITY	38
I. TECHNOLOGY AND SUPERVISION PRIORITIES	38
I. POLICY STANDARDS.....	38
I. INTRODUCTION.....	38
II. POLICY STANDARDS.....	38
J. DEPARTMENTAL/AREA PROGRAM SPACE LIST REQUIREMENTS	40
K. FACILITY AND SITE CONSIDERATIONS.....	52
INTRODUCTION.....	52
OVERVIEW REQUIREMENTS.....	52
SPECIFIC PROPERTY CONSIDERATIONS	52
TECHNICAL SITE DEVELOPMENT REQUIREMENTS.....	52
SITE PREPARATION	52
EARTHWORK	52
SITE UTILITIES.....	53
WATER, SEWER, AND STORM WATER SERVICE.....	53
PRIMARY ELECTRIC SERVICE.....	53
EMERGENCY SYSTEM	53
SITE IMPROVEMENTS.....	53
ENTRY ROAD, PARKING, PERIMETER SECURITY DRIVE, AND WALKWAYS	53
OTHER PARKING CONSIDERATIONS	53
STAFF SHIFT CHANGES.....	53
SECURITY.....	53

I. NEEDS ASSESSMENT NARRATIVE

In June 2023, Johnson County, IA (JC SO) issued a solicitation for a needs assessment and jail operations review that would address critical questions about its law enforcement and jail, including how current deficiencies and capacities could be remedied.

From proposals submitted in response to this solicitation in July 2024, Johnson County retained Shive-Hattery (consultant team) to conduct a high-level needs assessment review and analysis of the local criminal justice system, including (but not limited to) law enforcement operations and the jail, and produce a final report of findings and recommendations. This document constitutes that report.

A. NEEDS ASSESSMENT SCOPE OF WORK

To address the Scope of Work for this needs assessment, five areas of inquiry were identified:

1. Obtain an accurate assessment of current facilities that includes immediate, short-term and long-term facility needs.
2. Obtain a clear understanding of current and projected facility deficiencies.
3. Forecast future physical, structural and operational requirements that would meet the demands of all the Sheriff's Office needs and duties.
4. Determine potential action steps to take including:
 - a. Do nothing – proceed with facility as is.
 - b. Reconfigure and remodel current facilities.
 - c. Combination of remodeling and constructing new facilities.
 - d. Construct new facilities.
5. Prioritize facility needs and action steps.

In total, the areas of inquiry were identified to, at a minimum, support the overall mission of the Johnson County Sheriff's Office so stated: "The Sheriff is the county's principal peace officer for the unincorporated areas who is elected every four years. The mission of the Sheriff's Office is to provide citizens with the highest level of law enforcement in a fair and equitable manner. It is our hope that the members of our community will trust us to respond with respect and compassion in their time of need. It is our goal to work proactively with our citizens to keep Johnson County a safe place to live and work."

To understand how Johnson County's Sheriff's Office operationally works, it is critical to understand the components and interactions among the constituent parts. As with any organization supporting the criminal justice system, the methodology implemented in this study comprised of programmatic and operations evaluations consisting of "group of interacting, interrelated, and interdependent components that form the complex and unified whole."

The Scope of Work Johnson County identified for this assessment was:

- Review and assess the condition of the current facility, including identifying both physical and operational issues that do not meet modern standards or needs.
- Conduct interviews with relevant staff to gather information about current use of spaces and future needs, including potential growth of staff, inmate population and storage needs.
- Identify any efficient and cost-effective layout alterations that may optimize current space and staffing levels to possibly defer construction activity.
- Create a comprehensive plan for space allocation that will address immediate space needs of the Johnson County Sheriff's Office as well as needs for the next 15-25 years. The plan must lay out the most efficient, effective and functional use for needed space that includes, but is not limited to, the following:
 - o Staff workspaces.
 - o Jail facilities.
 - o Conference and meeting rooms.
 - o Functional spaces such as restrooms, mechanical spaces, vestibules, hallways and similar space allocations.
 - o Employee and public parking.
 - o Training facilities.

- Provide recommendations for current and future space requirements for records storage, evidence room storage, emergency vehicles and rescue boat storage, general storage and other storage needs discovered during the assessment. Storage areas should be secure, climate controlled and protected from fire and flood damage.
- Provide recommendation on maintaining existing facilities.
- Provide recommendations on renovating existing facilities versus building new facilities and provide timeframes for the recommendations.
- Provide high level future budget estimates for planning purposes.
- Evaluate location of current facilities.

Background Jail Studies

Beginning in 2022, the Johnson County Sheriff’s Office has conducted three previous investigations/facility and property conditions assessment studies prior to this determination to conduct this Needs Assessment Study. For reference, each of these independent assessments can be found on the Johnson County, Iowa government website (<https://www.johnsoncountyiowa.gov/sheriff/jail-stats>) under the jail studies tab, as follows:

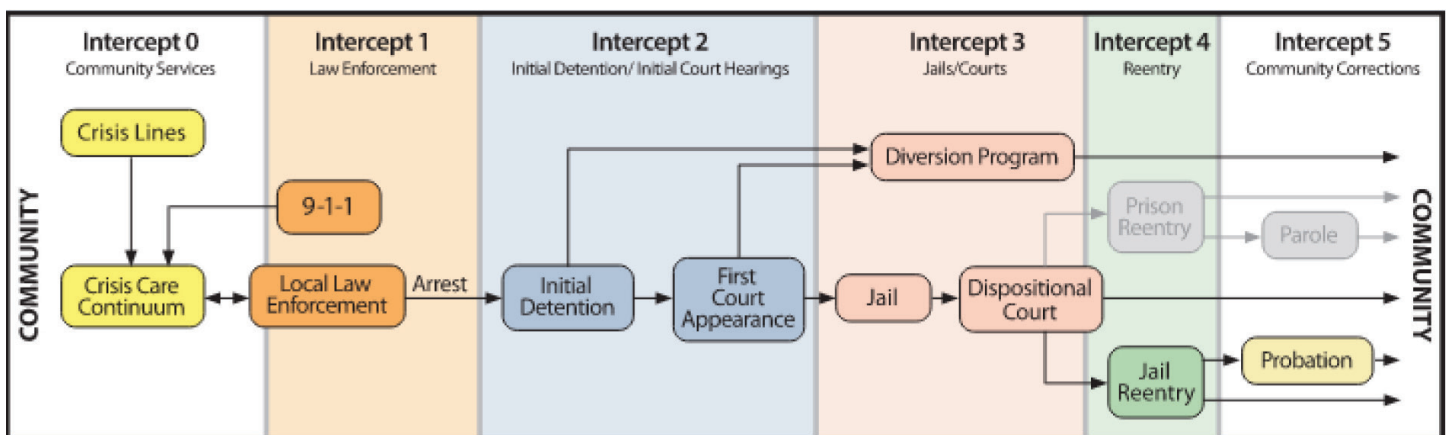
- 2022 Facility Condition Assessment
- 2023 Property Condition Assessment
- 2024 Property Condition Assessment follow-up

As identified in the scope of work for this Needs Assessment study, it is not this study’s intent to duplicate the value proposition and recommendations offered in these prior studies. An intended outcome from this evaluation is to identify and address the operational and physical limitations brought with the existing facility to achieve the long-term needs for the Johnson County Sheriff’s Office.

Within that framework, a community’s law enforcement facility (jail) is just one component of the overall criminal justice system in which the forward law enforcement facility (jail) exists. Its operations, including who enters the jail, for what purpose, and for how long, are influenced by the policies and practices of other justice system actors, including local law enforcement, prosecutors, defense attorneys and judges, as well as agencies responsible for pretrial and post-adjudication community supervision.

Thus, it is important to note and recognize that, to a large degree, a community’s jail is largely a “downstream” recipient of “upstream” decisions made by criminal justice policies and agencies beyond the control of a jail’s administration.

It is also important to note and recognize the difference between “jail” and “incarceration.” A jail is a matter of infrastructure and operations; incarceration, on the other hand, is a criminal justice methodology used by entities that hold distinct roles and decision-making authority throughout the criminal justice continuum, beginning with arrest and carrying all the way through sentencing, custody, reentry and post-release supervision. With respect to these interactions, a series of “Intercept Steps” are in play, which influence the outcomes associated with the law enforcement (jail) facility. Diagrammatically, these intercept steps are:



In the context of this study, it is especially important to recognize that the Johnson County criminal justice system is shaped and affected by a multitude of entities: by Iowa City Police Department, the Sheriff’s Office and other local law enforcement agencies from surrounding towns and cities; by the prosecutors and courts and by state Probation and Parole, among others.

Given these complex interactions, the criminal justice community influencing Johnson County has done amazingly well. Johnson County is among the State of Iowa's lowest rates of incarceration rate targets, which will be outlined later in this report. This is a result of best practice considerations, implemented in Johnson County over the years, which look at alternative program offerings. In doing so, the community is benefiting. Compared to other Iowa counties with similar conditions, a 40 percent (40%) reduction has occurred.

Even so, improvements are still possible. For this Needs Assessment Study, right-sizing Johnson County's plans for the Law Enforcement (Jail) components within the overall criminal justice framework serving your community is about creating program offerings in the newly created spaces for those confined in the facility. Further, as the intercept model indicated, these program offerings only occur for individuals who cannot be diverted otherwise and require placement in the jail.

According to the National Center for State Courts (NCSC), the rate of Serious Mental Illness (SMI) is four to six times higher in jail (14.5% of men and 31% of women) than in the general population of a community. Comparatively, substance abuse disorders, which are often co-occurring, can occur in as many as 68 percent (68%) of people in custody.

Given the significant percentage of people who are incarcerated with these concerns, it is reasonable to consider alternative diversion strategies, a move to find appropriate treatment alternatives and lessen the negative outcomes that can occur for individuals that remain in the criminal justice system.

The systemic modeling in this report, at a high level, takes into consideration the following Diversion Initiative tracks and potential outcomes:

- Drug Court – High Risk/High Need
- Treatment Diversion – Low Risk/High Need
- Intensive Supervised Diversion – Low Need/High Risk
- General Diversion – Low Need/Low Risk

It appears that the criminal justice stakeholders have overcome barriers or obstacles when compared with other Iowa Counties that are experiencing higher incarceration rates. Even with the existing facility's inability to support needed program space, by simply incorporating new program offerings with appropriately planned new spaces, Johnson County will have the ability to provide best practice program service offers to those in need by deepening collective understanding, and more consistent development toward meaningful agreements on philosophy, policies and practices with area providers.

The intention of this report is to use objective and independent analysis to deepen shared knowledge regarding law enforcement (jail) and the larger system of which it is a part. To that end, this study takes a holistic approach to evaluating the needs assessment of Johnson County's criminal justice landscape. Using this framework, in this report we identify and analyze local criminal justice practices that affect law enforcement (jail) use, provide an analysis of the incarcerated populations in Johnson County (derived from available data), review current jail staffing and projected outcomes, review current custodial and medical health care conditions, review current in-custody programming and services and propose recommendations regarding potential future jail bed capacity.

Based on our research, it is clear that Johnson County is wrestling with consequential issues of justice, safety, efficacy, cost, accountability and politics. As a consequence of a crowded and aging facility with long-term structural concerns, the existing law enforcement (jail) has been beyond its functional capacity for over a decade. The deferring maintenance considerations have overwhelmed the physical plant; most notably moisture infiltration is causing further deterioration of the exterior masonry/steel lintel conditions. We believe repairing and adding on to the existing facility is cost prohibitive compared with new construction. Simply put, the land area needed, the infrastructure improvements and cost to operate existing facility are excessive. The focus for this needs assessment quickly turned toward the long-term needs of Johnson County and the appropriate planning considerations for a forward-operating law enforcement/jail facility that is sustainable, operationally effective, and is adaptable as future needs drive additional change for the next 30 years or more.

i. Existing Conditions

Areas of Non-compliance or concern:

- Jail Standards
 - Existing Linear Design Operationally Inefficient
- Classification Needs
 - Nine (9) Existing Housing Units do not comply with Iowa Standards and are undersized
- Handicap Accessibility
- Capacity
- Structural Integrity

Specific compliance concerns with the existing facility center are the following:

ii. Jail/Housing

- To comply with Iowa Jail Standards – Housing capacity would have to be capped at 46 inmates.
 - Thus, a larger GAP would occur with current 65 Bed operational capacity.
 - Cell Size – limited unencumbered square footage conditions.
 - Plumbing Fixture (Showers) – Ratio Limitations for compliance.
 - Nine (9) Housing Units requiring intensive supervision.
 - Inmate intake and processing requires individuals to be escorted through building and up to second floor for processing.
 - Visitation and counseling occurs on second floor, requiring visitors to be escorted through building to second floor spaces.
 - One (1) small exam or treatment spaces provided.
 - Dedicated exercise space not provided (a 500 SF Exercise Area – required).
 - Undersized property storage.
- Jail does not meet ADA accessibility guidelines.
 - Toilets
 - Door swings
 - Turning radiuses
- Food service on second floor – requires all products to be circulated through the building and up to the 2nd floor for food preparations.
 - Existing kitchen at capacity to serve existing inmate population, leaving no room to accommodate future growth.
 - No delivery dock.
- No formal first appearance space provided.
- Virtually no storage on second level. Limited storage on main level.

2ND LEVEL GROSS SF
13,928 sf

FIGURE 1: 2ND LEVEL GROSS SF



1st LEVEL GROSS SF
12,752 sf

FIGURE 2: 1ST LEVEL GROSS SF



At the same time, it is also clear to us that Johnson County's stakeholders share a marked and noteworthy sense of commitment to improving what is widely perceived as a difficult and challenging situation: the condition and functional obsolescence of the existing facility. In our study, those involved in the planning repeatedly demonstrated an urgent desire to put forth a needs-based plan, which puts into motion a better system that offers the community the opportunity to deliver both safety and equality for justice.

iii. Project Influences/Community Considerations:

- Planning for growth, addressing the incarceration trends (right sizing needs).
- Supporting law enforcement and the community as a whole, addressing services tied to public safety and training outcomes.
- Addressing program services.
 - Connected opportunities with medical/mental health needs.
- Addressing classification and inmate profile considerations.
- Existing facility – end of useful life considerations.
 - 1981 facility (designed for 46 inmates and 50 staff).
 - Evidence based applications and Iowa Jail Standards Requirements.
 - Sustainability and operational effectiveness strategies.
 - Creating an environment for operational improvement (removal of existing facility constraints).

To this end, it is our hope this needs assessment report provides the critical planning information, a first step analysis and recommendations to further the planning and action in Johnson County.

II. A NOTE ON METHODS

To undertake this scope, the consultant team interviewed law enforcement and jail staff stakeholders to explore and document system-wide operations that affect the size and composition of the law enforcement/jail population, conducted multiple site visits, gathered and analyzed quantitative data and participated in meetings with the sheriff's assigned personnel. The appendix attached to this report contains records of the meetings, surveys and supporting documentation of relevant information exchanged in preparation for this report. As this Needs Assessment represents an initial step in the process, next step recommendations would include the re-engagement of the justice coordinating council and/or the formation of a Jail Task Force with public representation, including involvement by the Johnson County Board of Supervisors.

Other methodology considerations were identified using quantitative data gathered with the help of multiple departments. Shive-Hattery developed a quantitative analysis of the incarcerated population and current and historical jail usage. Shive-Hattery toured the jail facilities, considered policy and operations practices of departmental functions, analyzed jail operations and produced a jail staffing plan.

A. SYSTEMIC APPROACH

Because the jail population is constantly changing, jail planning is not a one-time process. The process of developing a Needs Assessment for the Johnson County Sheriff's Office includes evaluating efficiencies in the criminal justice system, studying the alternative (diversion) opportunities currently in place in lieu of jail placement and assessing existing and/or new jail bed use. The consultant team's approach to capacity planning involves the assessment of the operational conditions and functional conditions.

B. JAIL CAPACITY FORECAST DATA

Jail capacity forecasts are built on an analysis evaluating four data types:

- Bookings (Admissions)
- Average Length of Stay (ALOS)
- County Population Trends
- Average Daily Population (ADP) Trends

Jail capacity forecasts are compared against local and state incarceration rates to determine to what degree local practice aligns with historical and regional contexts.

Bookings (Admissions)

Jail Bookings (admissions) provide an indicator of workload; over time, they help gauge changing pressures on the jail. Factors that influence the number of admissions include the population of the jurisdiction, police resources, availability of pre-booking alternatives, pretrial failure rate and supervision failure rate.

Average Length of Stay

ALOS data can be a measure of system efficiency reflecting, for example, the time needed to move from booking to pretrial release or from booking to case disposition. ALOS can indicate the seriousness of offenses that counties prosecute or reflect changes in policy.

Average Daily Population

ADP is a general indicator of jail bed need. ADP is a direct function of admissions and length of stay and all factors and variables that contribute to admissions and length of stay.

Incarceration Rate

A jurisdiction's incarceration rate (IR) is calculated by dividing the average number of people held in a jail facility each day (the Average Daily Population, or ADP) by the jurisdiction's overall population and multiplying by 100,000 to produce a per capita ratio of 1:100,000.

III. JAIL POPULATION ANALYSIS/PROFILE

The objectives of the Jail Population Profile analysis were four-fold: 1) to answer critical questions and project the number of classification units needed to serve the long-term needs of the jail and comply with Iowa Jail Standards; 2) to identify potential factors or "drivers" of the jail population (i.e., "case considerations trends" or lengths of stay, etc.) linked to conditions; 3) to identify the segments of the in-custody population that need to remain in jail (to determine classifications scale), taking into account reductions in the jail population due to alternative program offerings that safely reduce the jail population and improve jail operations (i.e., reduce overcrowding); and 4) while many mandated sentencing laws have been reduced or relaxed contributing to an overall downward trend in jail incarceration, the jail population that remains has demonstrated increasing tendencies toward violent actions. Considering this, this segment of the jail population analysis focuses on safety considerations to identify the offender population best suited to remain in jail based on level of severity and offense.

Jail Population Demographic Considerations

Demographic profiles with Johnson County closely mirror State of Iowa data. During the course of this study we analyzed and compared both local data alongside published Bureau of Justice (BJS) statistical data, which was last updated in September 2023. The data sets evaluated are specifically focused on factors directly tied to the Johnson County Sheriff's Office's responsibility to administer the Iowa Administrative Code Chapter 50 defined requirements, as listed under the admission and classification requirements indicated later in this report.

A. SUMMARY OF JOHNSON COUNTY'S SHERIFF'S OFFICE FACILITIES

The Johnson County Sheriff's Office (JCSO), serves two functions. Of the 27,000 square feet, about 13,000 square feet on the first floor are for law enforcement and forward operations, originally designed for 50 staff and currently used by 100. Approximately 14,000 square feet are associated with the jail on the second floor. The Jail is used to hold people awaiting trial on charges, as well as people sentenced to 364 days or less in the JCSO (jail) following conviction for a criminal offense, people detained for violating court-ordered supervision and people awaiting transfer (either pre-trial or post-conviction) to another facility such as the Iowa Department of Corrections, a federal facility or another county's jail. The Jail has a functional capacity limitation of 65 people, with other inmates (when overcapacity) needing to be held and transported to other jails in the area.

B. HISTORIC COUNTY POPULATION

Johnson County is the fourth fastest growing county in the state of Iowa with a population growth increase of 12.33% over the last ten years. The statistical model used for these projections for the 20-year period has an average annual population growth rate of 1.12 per year. Thus, following the current trend, Johnson County's projected population in 2044 would be 199,695.

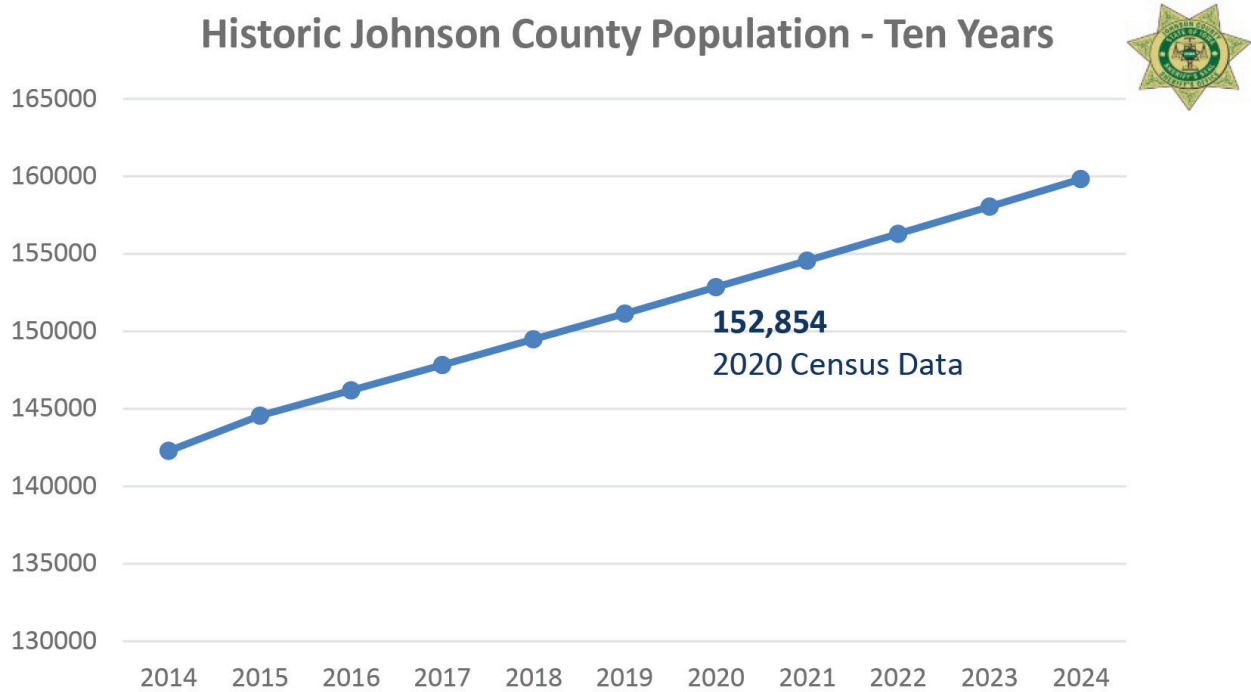


Figure 3: Historic Johnson County Population reflected over 10 years

According to updated information distributed in 2024 to 2020 United States Census Data for the 152,854 people identified in Johnson County, Iowa:

Race	Number	Percentage	Race	Number	Percentage
White/Caucasian	117,090	77%	Pacific Islander	43	<1%
Black/African American	12,847	8%	Other	4,204	3%
Asian	9,171	6%	Mixed	9,782	6.4%
Native American	332	<1%			

The following report includes demographic information tied to age and gender. This needs-based assessment is not dependent upon race, national origin or ethnicity. While demographic information might be material to a different analysis, assessing those criteria is beyond the scope of this report routed in a strict capacity determination.

Pertaining to the demographic make-up of Johnson County's Age and Sex profile:

Age Category	Total Percentage (%)	Male (M) Percentage (%)	Female (F) Percentage (%)
Under 5	4.6%	5.3%	3.9%
5 to 9	6.2%	6.9%	5.4%
10 to 14	5.2%	5.4%	5.8%
15 to 19	8.2%	8.2%	8.3%
20 to 24	15.7%	14.9%	16.6%
25 to 29	8.5%	8.7%	8.4%
30 to 34	6.6%	7.1%	6.1%
35 to 39	5.8%	5.7%	5.8%
40 to 44	5.9%	5.7%	6.1%
45 to 49	5.3%	6.0%	4.7%
50 to 54	5.0%	4.8%	5.2%
55 to 59	4.3%	4.5%	4.0%
60 to 64	5.1%	4.9%	5.4%
65 to 69	4.4%	4.3%	4.5%
70 to 74	3.5%	3.1%	3.8%
75 to 79	2.8%	2.7%	2.9%
80 to 84	1.4%	1.3%	1.6%
85 and over	1.4%	0.6%	2.2%

Median Age History (Year/Age):	
2022	31
2017	29.9
2012	29.8
2000	28.6

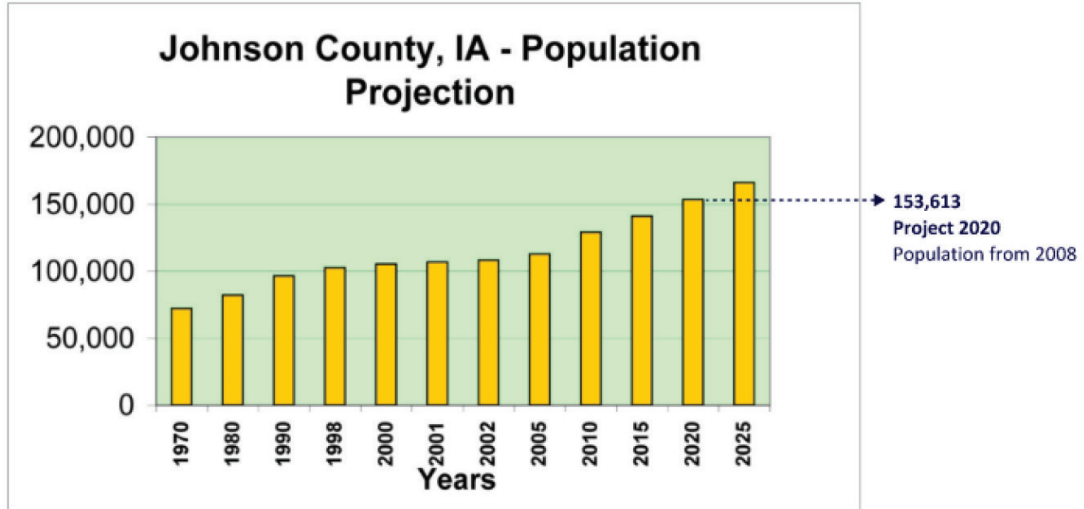
With the 2022 median age of 31 years old and minimal increase in the last five years when evaluating data back to 2000, the statistically highlighted years (bold/italic) from ages 20 to 39 became factors for consideration in the Confined Incarceration Rate Models presented in this report.

The consultant team was able to locate a September 2008 Feasibility Study. A portion of the historical population projection information from this study is reflected below. The accuracy of this historical information represents a statistical deviation of less than one-half percent (.00494) from the 2008 projection to the verified 2020 census data.

**Johnson County, IA
Population Projection
1970-2025**



	1970	1980	1990	1998	2000	2001	2002	2005	2010	2015	2020	2025
Total Pop.	72,400	82,190	96,440	102,560	105,320	106,820	108,350	112,830	129,203	141,295	153,613	166,280
Males	35,640	40,400	47,800	51,020	52,490	53,250	54,050	56,360	64,537	70,577	76,730	83,057
Females	36,760	41,790	48,630	51,540	52,830	53,570	54,300	56,470	64,666	70,718	76,883	83,223



Population by Age:

	1970	1980	1990	1998	2000	2001	2002	2005	2010	2015	2020	2025
0-19 Years	26,420	23,520	25,850	27,040	27,430	27,680	27,940	28,630	34,885	38,150	41,476	44,896
20-64 Years	40,960	52,830	63,430	67,430	69,610	70,760	71,900	75,270	80,106	87,603	95,240	103,094
65 Yrs and over	5,010	5,840	7,150	8,090	8,280	8,390	8,500	8,930	14,212	15,542	16,897	18,291

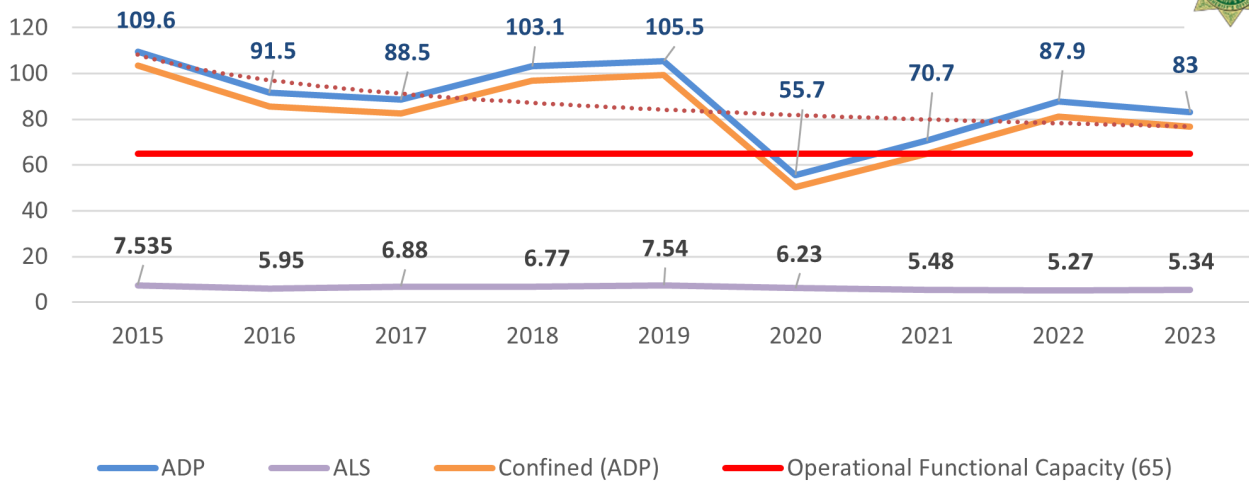
Figure 4: Johnson County, IA Population Projections 1970-2025

In the consultant team’s opinion, this significant connection also ties into the Average Daily Population downward fluctuations that have occurred. In 2008, the impact of alternative (diversion) programs was not evident. Further, in 2008 the Average Daily Population was 157 inmates with a projected jail need of 240 beds by 2030 and expansion capacity of up to 400 beds. The evidence-based data points to a significantly improved condition. Johnson County has implemented positive changes in the county’s criminal justice systems that allow for a dramatic reduction in the projected facility needs.

C. JAIL POPULATION TRENDS

Table 1 presents Average Daily Population data for the Johnson County jail system spanning from 2015 through 2023. Two key observations are apparent. First, the system’s total Average Daily Population (ADP) decreased 24 percent (24%). Over the same period of time, Johnson County’s overall population increased by 9.3 percent (9.3%). While the analysis of this trend is significant, as with other jurisdictions following the pandemic, we are seeing a gradual return to pre-pandemic levels, yet maintaining a lower rate of increase. Second, the Johnson County jail system has consistently operated above its functional capacity, going back beyond 2015. The graph’s red line denotes the facility’s functional capacity—i.e., operating at limited capacity due to functional limitations. The difference between the confined Average Daily Population compared to the actual Average Daily Population accounts for the Electronic Monitoring program, which historically diverts between five to six offenders on average each year. The average length of stay over this period declined 29 percent (29%) and is well within comparative norms. Furthermore, the average length of stay is factored into the planning decision on the number of holding cells being placed in the booking/processing component following a criminal justice trend to manage offenders’ circumstances prior to housing many of them in longer-term housing units.

Table 1 - Average Daily Population, 2015-2023



As illustrated, the Johnson County incarcerated population has declined since 2015. In 2023, Johnson County's ADP was 83 people, yielding a jail incarceration rate of approximately 53/100,000, which is lower than both Iowa's jail incarceration rate (134/100,000) and the national jail incarceration rate (182/100,000), according to the Public Policy Institute's data analytics. The jail incarceration rates relative to Johnson County, the State of Iowa, and the nation are offered as comparisons, to indicate the positive track record that is occurring in Johnson County. The comparisons are intended to point out the significant difference, or the 40 percent (40%) delta, in rate factors indicated later in the projections for this assessment.

The Confined Predictive Incarcerations Rate trend model utilized in this report takes into account the twenty-year incarceration the history from 2004 of the jail populations in Iowa. Team members involved in analyzing the model data utilized in this report previously modeled Johnson County's condition in 2008, and while the information obtained from JCSO from 2015 to 2023 in Table 1 is reflected, the statistical data utilized dates back to 2010. The annual statistical rate of change from 2010 to 2015 for Johnson County demonstrates a 2.09% average rate of increase. Based on our subject matter expert's professional experiences and given the data and factors stated in this report, the statistical rate of change factor has been reduced in the predictive model to a 1.12% average rate of change factor. Key model element adjustment factors are:

- County Population Trends, including demographic considerations represents 40-percent of modeling considerations.
- Level of Offense/Severity (Crime Trends) represents 20-percent of modeling considerations.
- Availability of Pre-Booking Alternatives/Availability of Jail Alternatives represents 25-percent of modeling considerations.
- Bookings (Admissions) represents 10-percent of modeling considerations.
- Average Length of Stay (ALOS) represent 5-percent of modeling considerations.

Table 2 shows three projected confined incarceration rate trend considerations. As illustrated, the Johnson County confined incarcerated population from 2024 to 2044 considers the continued use of alternative/diversion programs that intercept offenders from entering jail confinement. This (Low-Range) model analysis has an incarceration rate average of approximately 70/100,000, which is higher than the recent history in Johnson County (53/100,000), but significantly lower than Iowa's jail incarceration rate (134/100,000). For the modeled years the annual rate of confined incarceration is lower than in 2015, which was the highest rate of the years modeled (71/100,000). In conjunction with the inmate profile characteristics illustrated later in this report, the reduction in jail population that occurred during the pandemic years has been factored in, indicated in Table 1, from 2019 through 2021. This model recognized the demographic, legislative and restorative changes occurring in the criminal justice system in Iowa and as it relates to Johnson County. Two other models developed represent a different predictive result, which if implemented would result in a higher rate of confined incarceration. For planning purposes, the lowest predictive model (Low-Range) in the illustration below was selected for use in programming, concept and budget development.

Table 2- Confined Incarceration Rate (Trend) 2015-2044

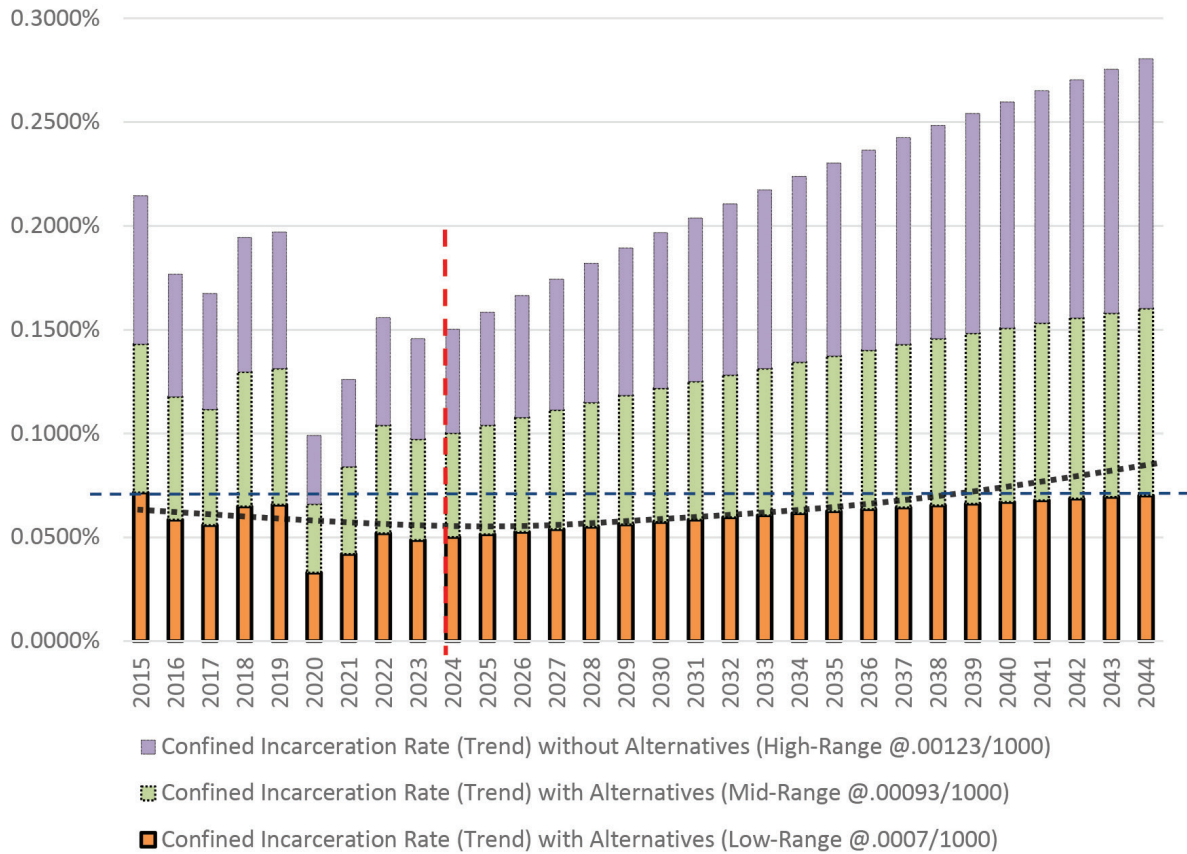


Figure 6: Confined Incarceration Rate indicating a future trend from 2015-2044

Continuing, **Table 2** shows two other models' projected confined incarceration rate trend at a higher rate. As illustrated, utilizing the same parameters developed for the low-range model, this (Mid-Range) model analysis has an incarceration rate average of approximately 93/100,000. This predictive model illustrates the potential change in confined jail incarceration if there is a return to pre-2015 criminal justice practices. The (High-Range) model in Table 2 has an incarceration rate average of approximately 123/100,000. While this model more closely aligns with Iowa's jail incarceration rate (134/100,000), additionally the availability of alternative/diversion programs has been removed, again in only the High-Range model. While the elimination of diversion programs is highly unlikely and not recommended, the high-range model was developed for comparison purposes and representing the full spectrum of options over the twenty-year period studied.

Table 3 identifies the multitude of factors that influence jail population:

Factors That Influence Jail Population	
Number of Admissions to Jail	Average Length of Stay
County population **	Level of Offense/Severity**
Number of law enforcement officers	Access to timely pretrial assessments
Booking and cite and release policies	Early appointment of counsel
Availability of pre-booking alternatives**	Pretrial release options
Access to comprehensive pretrial services	Pretrial bond review procedures
Failure to appear rate	Case processing times
Pretrial supervision, monitoring and tracking	Availability of jail alternatives**
Contracts with other agencies	Sentencing mandates
Availability of sanctioned diversion options	Stepdown options from jail to alternative facilities
Quality of systemic intervention	Sentence length
	Prevailing philosophy regarding treatment vs. punishment**
** Key predictive model considerations	

Table 4 shows the confined incarceration bed projection needs from 2024 through 2044. Utilizing the average daily predictive incarceration rate models, housing unit bed needs have been projected for each of the three predictive models. The trendline (dashed line in black) indicates the Low-Range trajectory described above. The selected Low-Range model has a three-bed rate of increased need each year for the next 20-years, with a slight variation of 8 beds needed occurring in year 2045.

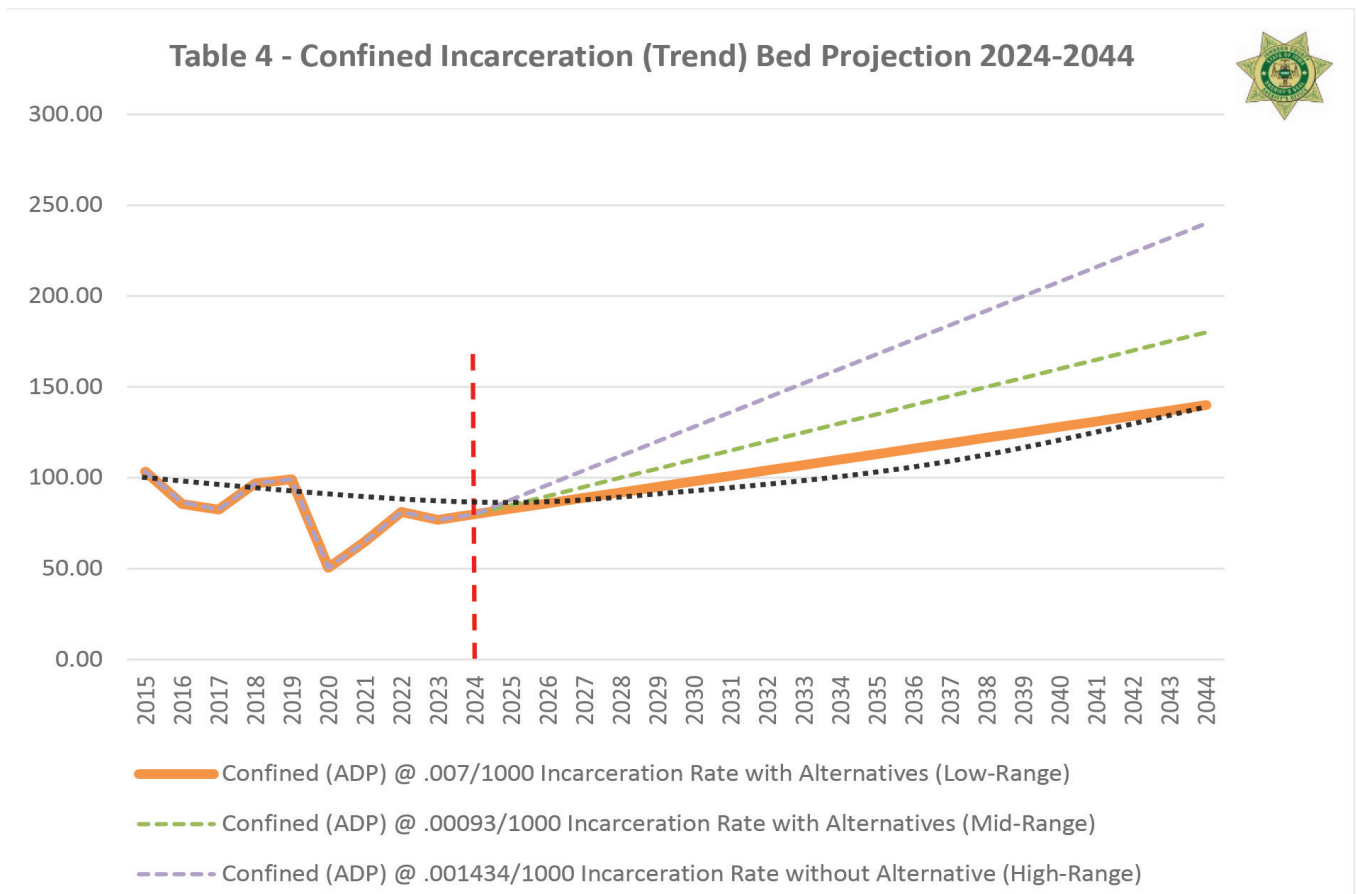


Figure 7: Confined Incarceration Rate indicating a future trend from 2024-2044

D. JAIL CLASSIFICATION UNIT POPULATION CHARACTERISTICS

The Johnson County jail classification population is predominantly male (78.58%) and female (21.42%). In recognition of changing needs within a detention facility (jail), we are increasing the percentage of administrative classification unit beds for specialty populations requiring a higher degree of separation. The increased need to have close custody configurations along with the percentage of behavioral disordered offenders requires more administrative options going forward. Approximately 11.43% of the total has been set aside to assist in dealing with offenders who do not qualify for general population, and yet the severity of concern does not justify being placed in the segregated classification units as shown in **Table 5**.

In the Iowa minimum jail standards, IAC Chapter 50 defines the title IV requirements that govern the physical plant and operational requirements for jail facilities in the state. The jail standards definition for "Classification" means a "system of obtaining pertinent information concerning prisoners with which to make a decision on assignment of appropriate housing, security level, and activities." Pertaining to the administration of classification and security per Part 50.13.1,

- a. No person shall be confined or released from confinement without appropriate process or order of court.
- b. With the exception of incidental contact under staff supervision, the following classes of prisoners shall be kept separate by architectural design barring conversational and visual contact from each other:
 - (1) Juveniles and adults (pursuant to Iowa Code section 356.3).
 - (2) Females from males (exception—alternative jail facilities) (pursuant to Iowa Code section 356.4).
- c. The following shall be kept separate whenever possible:
 - (1) Felons from misdemeanants.
 - (2) Pretrial prisoners from sentenced prisoners.
 - (3) Witnesses from prisoners charged with crimes.
- d. The following shall be kept physically separated:
 - (1) Prisoners of whom violence is reasonably anticipated.
 - (2) Prisoners who are a health risk to others.
 - (3) Prisoners of whom sexually deviant behavior is reasonably anticipated.
 - (4) Prisoners likely to be exploited or victimized by others.
- e. Detention of juveniles shall be pursuant to Iowa Code section 232.22.
- f. All staff involved in the booking process, or the supervision of prisoners shall be trained in suicide prevention. At the time of booking, an attempt shall be made (either by observation for marks or scars or direct questioning of the prisoner) to determine if the prisoner is suicidal. The following questions, or others of equal meaning, shall be incorporated into the booking process with appropriate documentation to aid in suicide prevention:
 - (1) Does the prisoner show signs of depression?
 - (2) Does the prisoner appear overly anxious, afraid, or angry?
 - (3) Does the prisoner appear unusually embarrassed or ashamed?
 - (4) Is the prisoner acting or talking in a strange manner?
 - (5) Does the prisoner appear to be under the influence of alcohol or drugs?
 - (6) Does the prisoner have any scars or marks which indicate a previous suicide attempt?

In all cases, the following questions will be asked of the prisoner:

Have you ever tried to hurt yourself?

Have you ever attempted to kill yourself?

Are you thinking about hurting yourself?

- g. Housing for prisoners with disabilities shall be designed for their use, or reasonable accommodations shall be provided for the prisoners' safety and security.

h. Jail personnel shall ask each prisoner within 24 hours of the prisoner's incarceration if the prisoner is a military veteran. If so, jail personnel shall advise the prisoner that the prisoner may be entitled to a visit from a veteran service officer to determine if veteran services are required or available and, within 72 hours, shall provide the prisoner with contact information for the county commission of veteran affairs and provide the prisoner the opportunity to contact the county commission of veteran affairs to schedule a visit from a veteran service officer.

While the Iowa Jail Standards do not require additional or further classification separations, other considerations like the PREA (Prison Rape Elimination Act) are a direct consideration for the classification projection categories. For inmates who fall outside of the Iowa Jail Standard, a portion of administrative housing units has been planned to accommodate all inmates supporting a normative humanistic environment.

Table 5 also shows the continued and growing need for classification units designed specifically to support Mental Health/ Behavioral Health and Administrative inmate profile considerations is significant. This segment of the in-custody confined population represents 22.86% of the total or has a predictive model incarceration of 22/100,000 when combined for Medical/ Mental Health consideration.

Table 5 - Classification Projection (Inmate Categories):

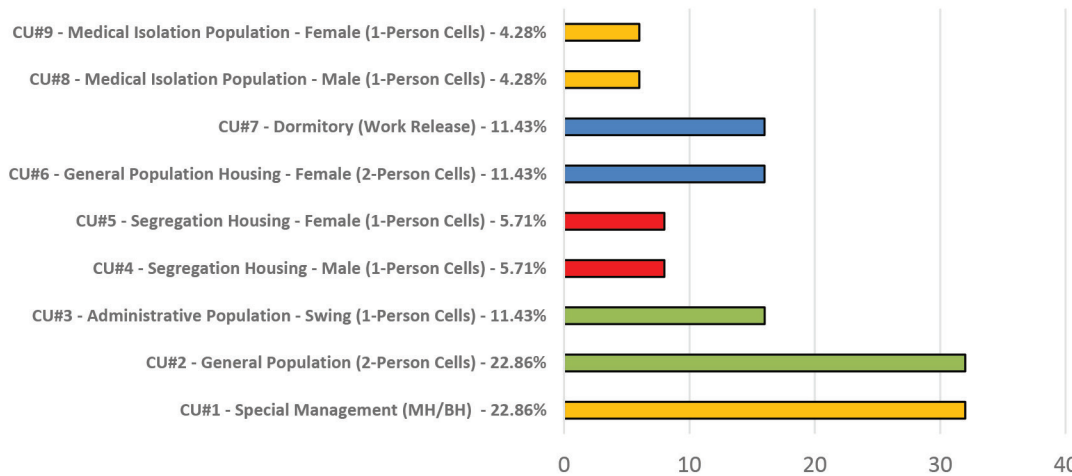
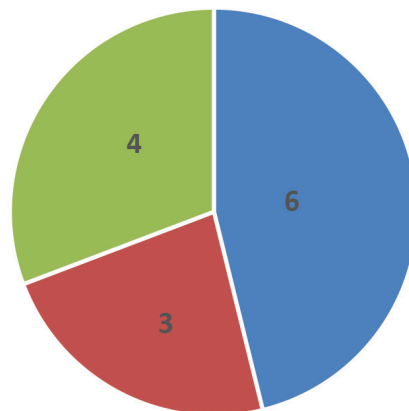


Table 6- Facility Intake / Processing (Holding Cells):



- Individual Holding Cells (max. of 4 per cell) (Occupancy 24 for M/F)
- Group Holding Cells (max. of 6 per cell) (Occupancy 36 for M/F)
- Safety Cells (Occupancy 1)

Data on the characteristics of the jail population are based on the data reviewed or, in some instances, comparison information gathered by the consultant team. Average age was not factored into the predictive model; further, we do not see the average age changing the results. Recidivism has not been calculated at this time, as this type of data analytics is more commonly evaluated from a state “correctional” level point of assessment. It is the opinion of the consult team, the recidivism would factor in when a significantly higher percentage of probation/parole violations and/or state prison transfer considerations were present in the inmate profile data studied.

i. High Jail Utilizers/Long-Term Jail Utilizers

Acknowledging the fact that there are a few extended cases occurring in the Booking Jail Roster, these cases appear to be limited to three cases from the data reviewed during this assessment. While circumstances beyond multiple charges may factor in, given the fact that the Average Length of Stay currently sits at 5.34 days, well within normal considerations, a high or long-term jail utilizer concern is not evident from the data reviewed. The number of holding cells in **Table 6** has been developed to lower the dependency on the use of long-term housing for arrestees only requiring a short-term stay.

ii. Crime Data Statistics

Johnson County’s crime statistical data from the most recent two-year period, as collected by the Iowa Department of Public Safety, was factored into the inmate classification projected profile. Our findings indicate that the existing facility cannot adequately accommodate the separation needed to properly deal with the inmates on the Johnson County Jail Roster. From our experience, the nature of charges and offenders being held in the Johnson County Jail leads us to believe the nine (9) classification categories will require eleven (11) housing units. The nature of the offense (or charges) in **Tables 7 and 8** indicate the need for a higher degree of separation with the classification groups. In large part, the Johnson County Jail and operational practices are, at this time, housing the most serious of charged cases. As recommended and described above in the Low-Range Incarceration Rate Trend predictive model, all indications point to a predictive condition where the practice of housing only the most serious offenses continue to occur.

Table 7 - Johnson Co, IA (2022) - Crime Data Statistics
(Iowa Dept. of Public Safety)

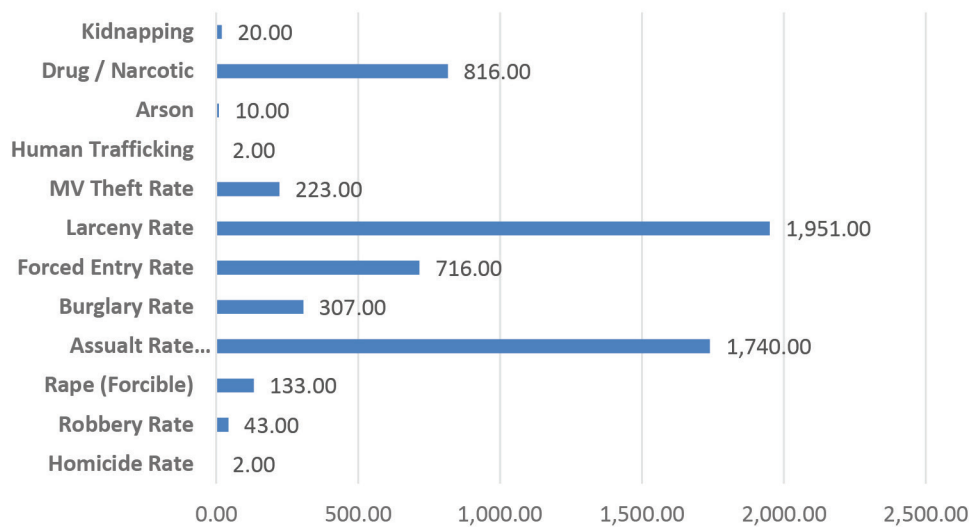
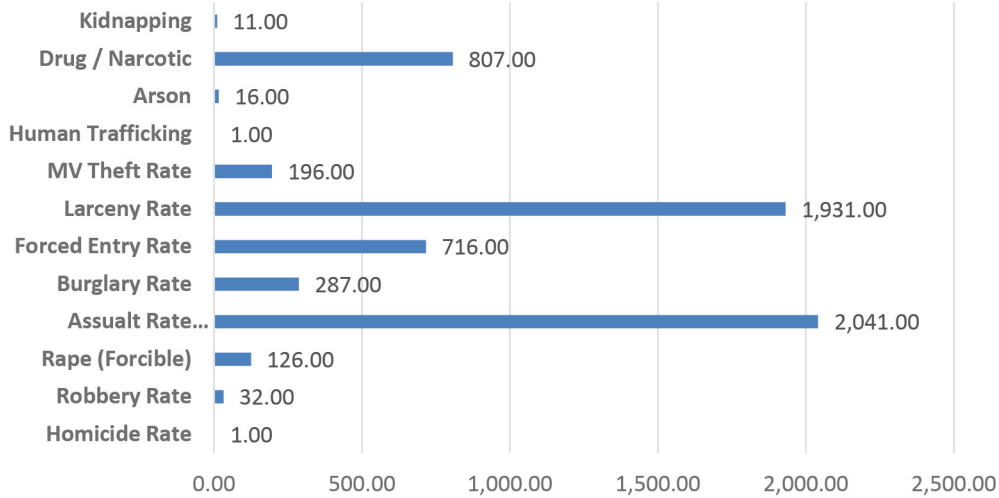


Table 8 - Johnson County, IA (2023) - Crime Data Statistics

(Iowa Dept. of Public Safety)



Statistics represent **3.73%** Increase from 2022 to 2023

Source: Iowa Department of Public Safety - Iowa Uniform Crime Reporting System (2022-2023)

iii. Criminal Justice Statistical Data – Trendline Considerations

Case type data is reported in five major case categories: Civil, Domestic Relations, Criminal, Juvenile and Traffic/Parking/Ordinance Violations. The needs assessment findings in this report are focused on the primary area of consideration: Criminal. The other four areas would have been given further consideration if the trendline and statistical data presented a reason to do so. In addition to the crime data statistics in Tables 7 and 8, data utilized in this report was analyzed from data submitted to National Center for State Courts (NCSC), criminal case filings in the state of Iowa, paralleled in Johnson County, dating back to 2012 are:

Criminal Case Filings – Year:	Annual Incoming Cases:	Year to Year Percentage (%) Change:
2012	19.5m	
2013	19.74m	+ 1%
2014	18.47m	- 6%
2015	18.15m	- 2%
2016	17.82m	- 2%
2017	17.43m	- 2%
2018	17.19m	- 1%
2019	18.32m	+ 7%
2020 (Pandemic yr. impact)	14.56m	- 21%
2021	15.36m	+ 6%
2022	15.59m	+ 1%

Consistent with the crime data statistics for Johnson County, with the exception of 2020 that shows the dramatic impact of a pandemic year, a slightly increasing condition of .44% per year average in criminal case filings has occurred. For this Incarceration Bed Projection Modeling, we have taken into account the impact of an increasing ‘criminal case and serious misdemeanor/felony charges condition’ that is occurring in Johnson County.

The criminal cases being considered are initiated by some form of a complaint. The proceedings of a felony case are usually **initiated by information or indictment**. This report analysis modeling aligns with the NCSC reporting guidelines which consider:

- Count the filing of the original charging document (complaint, information, or indictment) as the beginning of the case.
- Count the defendant and all charges involved in a single incident as a single case. If the charging document contains multiple defendants involved in a single incident, count each defendant as a single case.

- Do not count preliminary hearings as Incoming cases when they are held in the same court that will handle all subsequent proceedings in the case.
- Count a probation or parole violation that arises from a previous Felony case as a Reopened Felony case in the same Felony case type as the original case.
- Count a probation or parole violation that arises from a previous Misdemeanor case as a Reopened Misdemeanor case in the same Misdemeanor case type as the original case.
- Report the number of criminal filings and dispositions by case type, as defined in the Criminal Case Type Definitions, by the Uniform Crime Reporting (UCR and NIBRS coding) system.
- Classify cases by the most serious offense, first based on subcategory (Felony or Misdemeanor) then on case type listed in the UCR and NIBRS System Matrix in descending order of severity.

iv. Analysis of the Pretrial Population

To better understand the considerations associated with the pretrial population in the Johnson County jail, the consultant team reviewed information on the average number of bookings, comparing the inmate roster booking data with the historical overlay of the number of daily new intakes for the past three years. Of recent note, at the time of this report, the oldest case booked being held in the Johnson County Jail dates back to the beginning of August 2023, which is tied to an assault charge. Further, there are older cases listed, with offenders currently being held in out-of-county locations. A significant majority of the 76 to 83 cases currently on the Johnson County Jail roster occurred within the last three weeks.

The following disclaimer notice has been provided with the reviewed roster data:

This jail roster is not necessarily a comprehensive listing of all the inmates being held in the Johnson County Jail. The roster lists people who are currently or within the last forty-eight (48) hours were in the custody of the Johnson County Sheriff, regardless of whether they are housed at the Johnson County Jail or another facility. It includes primarily those who have not been presented to the court, those who are awaiting bail and those who are serving sentences for violations of state and local statutes. The roster does not include juveniles. The roster is automatically updated at frequent intervals each day. All non-sentenced individuals displayed on this website are innocent until proven guilty in a court of proper jurisdiction. The associated charge is for reference only and neither it nor an arrest is an indication of guilt.

Overall, the data suggests the policies and practices related to pretrial detention are a driver of jail use and are operating within normal considerations. Thus, the pre-trial population is not a significant contributor to overcrowding in the Jail. As this data analysis makes clear, people are being released on their own recognizance, bonded out and released from the Johnson County Jail in a timely manner.

v. Analysis of Aging Cases

The JCSO maintains a running list of individuals confined pretrial for an extended period of time. Referred here within as the “aging cases” caseload, these cases are reviewed on a consistent basis to aid in a timely disposition. With the Average Length of Stay currently at 5.35 days, an aging cases backlog was not a significant factor in the confined long-term Average Daily Population projection.

However, it does not appear that the overcrowding in the Johnson County jail, which has been operating above capacity for years, is due to a backlog of aging case. Offenders held within the jail while having various reasons for their placement have been placed as the intercept steps described earlier are being addressed.

E. RECOMMENDATIONS FOR JAIL POPULATION ANALYSIS AND MANAGEMENT

Recommendation # 1: Maintain and Continue to Reduce Avoidable Jail Intakes.

Johnson County and the Johnson County Sheriff’s Office has a strong history of addressing the need for alternative diversion options, thus limiting the number of inmates being held in the jail. For those arrested, booked and released within hours, continuing to explore alternative options could be increasingly beneficial. The Facility Intake configuration described on Table 6 of this assessment has been planned to allow a higher percentage of offenders who come to the jail the opportunity to never enter the long-term housing units while a determination for alternative diversion placement is being made. Increasingly, implementing a practice to screen, evaluate and place offenders and continuing to limit the housing units to only those needing to remain in jail is a best practice consideration worthy of continued exploration.

Recommendation # 2: Implement the use of the Confined Incarceration Low-Range Model.

Stakeholders across the Johnson County criminal justice system have routinely implemented strategies leading to a reduction in the number of jail beds needed. While the serious, most violent offenders will require an in-custody jail setting to comply with the Iowa Jail Standard requirements, criminal justice stakeholders in Johnson County should continue to collaboratively examine how to improve the administration, performance and best practices to reduce the number of offenders who end up at the Jail. The Low-Range model presented and recommended in this report gives strong consideration that the practices that have led to the current confinement level will continue, with improvement opportunities whenever possible. The 20-year confined incarceration projection or 140-bed capacity need is predicated on continued stakeholder involvement and participation.

Recommendation # 3: Implement policies and practices for efficient supervision of the inmate population.

Outlined further in this needs assessment is the need to change the operational philosophy associated with the Jail as a part of the sheriff's office's overall operation. The ability to cope with the linear design conditions impacting the current operation practices has been managed to the best of the sheriff's operational ability. This recommendation focuses on the need to take the next policy and procedure steps to implement the Podular-indirect supervision philosophies needed to support a new facility. The next phase in design would benefit greatly by integrating new policy considerations with the design expectations. For example, a best practice operational understanding in support of the facility's intended function depends on forward operational law enforcement and jail aspects being implemented for training components, functional circulation considerations and inmate flow and movement considerations. This approach demonstrates the principles of "form follows function" while maintaining a resilient, adaptable and flexible outcome.

IV. JCSO - JAIL OPERATIONS AND STAFFING

In this section of the report, Shive-Hattery provides an operational analysis, including a determination of staffing needs and/or staffing assignment patterns, for JCSO jail operations. Shive-Hattery assesses the adequacy of the existing staffing based on current programs, task levels, and post assignments, provide an objective review of the level of efficiency at which personnel are assigned to the various functions of the jail and provide recommendations for minimum staffing required to operate the facilities safely and efficiently.

A. JCSO – JAIL STAFFING PROFILE

The operations and staffing of the Johnson County jail are directly affected by the operational philosophy of the JCSO, the mission of the jail, the people held in the facility, the design of the physical plant, and the number and characteristics of those in custody. In addition, court decisions and state and professional standards influence operations and staffing.

B. JCSO – PHYSICAL PLANT

Jail Design: The layout and design of the existing Johnson County Jail facility presents significant staffing challenges and is extremely inefficient. In terms of operations philosophy standards, the linear design implemented in this 1981 facility was replaced by podular and direct supervision operational concepts in or about 1986 for the integration of staffing operation with jail design practices. In addition, with all primary services of the jail occurring on the second floor, limited vertical movement accessibility to support the jail increases the complexity of day-to-day operations. The physical plant intake and release area, with temporary holding cells for county detainees on the ground level, has limited capacity and does not meet the current and projected capacity needs. Staff must be available to supervise and manage behavior in all these areas and, in addition, manage internal inmate movement between the floors as well as the inflow of goods and services up to the second floor to support the housing, limited programs and medical services areas. Given first floor support facility infrastructure limitations, this too has become more staff intensive over the years with managing the overcapacity challenges.

The detention officers' ability to effectively supervise and manage the housing units is hampered by the layout and design of the housing units in the Jail. Staff observation into housing areas is primarily by cameras from the control center with officers circulating through the secure corridors and dayroom to conduct housing check-ins, but the Iowa Jail standard monitoring requirements are more staff intensive due to the existing layout and configuration conditions. Staff are required, by policy, to enter each dayroom area to conduct well-being checks, with secondary checks conducted periodically. Electronic door controls for housing units are in panels outside the units. When in use, a second officer must be available to control access into and out of the units.

Jail Capacities: A detention facility is usually defined as "overcrowded" when the incarcerated population consistently exceeds the facility's design, or rated capacity. However, symptoms of crowding may be apparent at other times as well — specifically once the

jail reaches approximately 85 percent of rated capacity. At that level, properly housing and managing the diverse jail population becomes much more difficult, compromising the jail's classification system. Given the operational capacity limitations, capped at 65 inmates, the existing jail has had functional capacity concerns dating back to the 1990s.

When a jail's classification capabilities become compromised, inconsistencies can occur in the safe separation of inmates, as well as needed separations that align with gender neutral considerations in modern jails. Not having adequate classification separations may lead to increases in violence and tension and can cross over into access to contraband concerns. Basic functions (security, programs, recreation, etc.) break down when facility resources are stretched to their limit for extended periods of time due to crowding. Maintenance and sanitation can be concerning during periods of overcrowding. Given current practices, these two areas are not concerns in the Jail, other than the water infiltration issue causing structural integrity issues which is the focus of a separate study. In addition to maintaining a safe environment, we believe these factors have contributed to capping the existing facility operational capacity at 65 inmates. If this operational cap is exceeded, these conditions can significantly increase the jail's liability exposure and jeopardize the safety and well-being of both incarcerated people and staff.

C. CONSEQUENCES OF JAIL OVERCROWDING

As noted, crowding can create significant management problems and compromise safety for inmates and staff if the jail environment becomes more volatile and if the needed classification separations are not available. The dynamics of a jail can be unpredictable, however, with adequate screening and supervision, the unpredictable can be managed. When daily fluctuations in the confined population occur, the need for additional beds is essential. Because of this, a jail is at capacity before reaching its design limits. Beds must be set aside into appropriate classification levels (a male inmate cannot be housed in a female bed, nor can a sentenced inmate be housed in a non-sentenced housing unit, treatments beds should be separated, and non-binary populations need to be managed appropriately). Enough beds need to be set aside to handle the inmate population during peak periods. For projection purposes, the consultant team has factored in a 15% classification and peaking factor into the average daily population predictive model forecasts for Johnson County.

D. JAIL STAFFING AND OPERATIONS

Staffing and operational discussion to support the programmatic needs assessment requirements associated with number of staff position, current and future, occurred throughout the meetings and work sessions to assess the needs-based space planning requirements for both Law Enforcement/Forward Operations and the Jail. The staffing considerations included detailed discussions with the sheriff's office departmental leadership to identify staffing growth projections and coverage needs for all essential custody posts and positions in the Jail. Administrative, support and program positions were included in the staffing considerations. Medical and mental health staffing needs were addressed for both the Housing Unit counseling considerations, as well as the Medical Unit associated with the Intake/Release components.

E. NEW FACILITY OPTIONS: KEY CONSIDERATIONS

A new jail facility presents opportunities that are difficult to achieve by re-using the existing jail physical plants. Such missed opportunities include enhanced staff efficiencies (lower staff to inmate ratios), the ability to better match housing with inmate profile needs and classification considerations, the ability to provide enhanced inmate mental health and behavior management opportunities (lowering occasions for violent outbreaks while increasing safety for inmates and staff) and the ability to provide better medical care in units designed to better support the jail and booking/intake process. In short, a new facility will be more operationally efficient, and will provide significantly greater opportunities to support the proper care and needs of the inmate population in Johnson County's custody.

In modern jails, inmate housing is distributed between Special Needs and Administrative housing and General Population housing to best fit the needs of today's jail population. From a gross square footage point of view, housing represents 67% of the square footage and support space such as Intake/Release, Central Control/Jail Administration, Food Service, Laundry and centralized Programming/Housing Support.

i. Housing

Special Needs and Administrative Housing is set aside for offenders in need of mental health/co-occurring behavioral health needs and transition to and from the general population units. This gradual shift in jail planning focuses on the severity and acuity levels to address a more normalized environment in restrictive housing for behavior management. Generally speaking, Special Needs and Administrative housing represents approximately 30% of a jail's overall bed capacity. From a supervision point of view, Special Needs

housing uses remote supervision (sometimes called podular-remote or indirect supervision). Within the housing unit support areas, program rooms such as multipurpose rooms and individual counseling areas have been planned to give inmates rehabilitative programming opportunities within the detention setting. In addition, access to professional and video visitation and housing unit recreation is provided as well.

General Population housing for minimum, medium, and segregation housing for maximum security classifications is a mixture of dormitory, single cell and multiple occupancy cell housing. The 22-bed unit assigned for dormitory housing is used for lower, minimum-security housing often assigned to sentenced or trustee offenders. The multiple occupancy cells (two-person) are used for medium and single cells are for both medium- and maximum-security classifications. General Population housing is typically 70% of a facility's overall bed capacity. Podular-indirect supervision has been selected as the preferred method of supervision to manage the inmates/classification profile needs of the facility going forward. The sheriff's office has selected this methodology, as it offers the best opportunity for inmate behavior management, aligned with staffing efficiencies.

ii. Support Spaces

The Intake/Release area (often called booking) is a key support space. It is like the initial screening area at a hospital. It is here that people first arrive at the jail, and they are processed, evaluated and detained until a further determination can be made. An important consideration in this planning effort has been the development and placement of a medical support unit, directly adjacent to Intake/Release. The medical unit exam and small procedures space provides the needed triage evaluation opportunity to provide immediate care and medical support. In this area there are two, 3-bed individual cell housing units. This area of the facility will have isolating negative-pressure ventilation systems, to manage infectious diseases should they occur. Further, the medical housing units provide an opportunity to reduce long-term hospital stays for inmates requiring critical care support and the hospital. The facility has been planned to have a pharmaceutical dispensing area serving the medical housing units' needs and med cart distribution to them.

iii. Gross Square Footage Needs

A jail in the range of 100 to 400 beds requires between 350 and 450 Gross Square Feet (GSF) per bed to account for all jail housing, jail support space, circulation, and mechanical/electrical space assuming the jail is one level plus a housing unit tier (mezzanine). Generally, the larger the capacity, less square feet per inmate is required. For the 140-bed configuration the programmatic Housing Unit'per inmate square footage is at an efficient 250.57 square feet with an overall Jail condition at 411 square feet per inmate. These numbers also factor in core areas of the program that need to remain flexible for future growth consideration. Example programmatic area considerations are Property Rooms in Intake and Release, with room sizes planned at 600 square feet in lieu of 400 square feet, or food service, laundry, and storage components with slightly increased program square footages to promote flexible outcomes.

iv. Construction Cost

Construction costs will vary according to the market conditions and times to start construction. A mix of single-occupancy cells and multiple-occupancy cells with a minimal number of dormitory beds is anticipated. Given the probable cost of construction materials based on industry standards and labor, localized to the Iowa City market, the cost of a new Johnson County Sheriff Office, including law enforcement and jail components for a facility with approximately 111,300 GSF, is projected at \$79,750,000 with a range in cost from \$76,250,000 to \$83,250,000 respectively, with construction inflation factored into the projection through 2025.

The construction costs for the Law Enforcement portion of the project average \$541.98 per square foot including furniture, fixtures and equipment. The Jail portion of the project averages \$752.61 per square foot with fixed detention equipment included.

Because a specific site has not been selected at this time, and only general site considerations were evaluated to establish cost comparison options, a site work allowance of six percent (6%) multiplied by the cost of the building components has been included. Further, a design and estimating contingency of ten percent (10%) has been factored in as well. Since this needs assessments and conceptual block planning pre-dates any specific design and site selection considerations, the overall cost opinion will need to be adjusted once a specific site is selected.

a. Historic Construction Cost Considerations

As a part of this needs assessment, a request was made to provide a perspective on the impact of construction inflation to demonstrate how market conditions have changed over the past ten years. When comparing historical construction cost market data specific to the Iowa City market, the consultant team adjusted the inflation factors at both five- and ten-year increments. This allowed for comparison between the current project cost of \$79,750,000 and the predictive cost opinion, both five and ten years prior.

STATEMENT OF PROBABLE COST

Johnson County Sheriff's Office, IA - Master Plan (140 Beds (Expandable)) for New Construction
 Project No: 214230378-0
 Estimator: MSL (Pre-Design Estimate)
 5/29/2024



SHIVEHATTERY
 ARCHITECTURE+ENGINEERING

Sub-Total Building Components - 140 Beds (Expandable to 240 Beds)		\$59,250,000
A	Site Work Allowance - 6%	\$3,550,000
A.1	Site Utility Extensions (water & sewer) - Est. Cost %	TBD
B	Design & Estimating Contingency - 10%	\$6,300,000
C	Furniture, Fixtures & Equipment - 4.2%	\$2,900,000
Project Construction Total (A+B+C)		GSF 111,300 \$72,000,000
Construction Cost/Square Foot (Excluding Equipment)		\$621
Project Soft Costs		
D	Land Acquisition	TBD
E	Basic Services A/E Professional Fees - 6.25%	\$4,500,000
F	Construction Contingency - 3.25%	\$2,350,000
G	Other - Administrative (Misc.)	\$900,000
H	Demolition of Existing Building(s)	TBD
Total (New) Project Costs with Mid-Year 2025 Bid		\$79,750,000
Project Cost Range Analysis (Due to Market Conditions)		
		5.00% Low Range High Range
H	Construction Cost incl. FFE Range at 5% Variance	\$68,500,000 \$75,500,000
	Cost per Gross Square Foot (Construction)	\$589.40 \$652.29
I	Soft Cost Carry-over (D+E+F+G)	\$7,750,000 \$7,750,000
Total (New) Project Budget Range (H+I)		\$76,250,000 \$83,250,000
Item G Breakout: Printing, geotechnical costs, special inspections, civil engineering, and additional site visits		

Law Enforcement @ \$541.98 per SF (for Construction)

Jail @ \$752.61 per SF

(Update 6/17/0224) Jail @ \$752.61 per SF (for Jail Construction with fixed equipment)

\$735 per SF without

Item G: Other Administrative Cost Breakdown:

	<u>Sheets</u>	<u>Sets</u>	<u>Cost / Set</u>	<u>Unit Cost</u>
1 Bid Document Printing	125	100	\$325.00	\$32,500
2 Site Survey (with \$5,000 for Phase 1 Environmental)				\$20,000
3 Geotechnical – AIA Contract Clause 4.1.2B (Site Borings & Eng. Report)				\$20,000
4 Special Inspection – per Code by Independent Agent, by Owner			0.10%	\$69,000
5 Bond Council / Financial Advisor (Owner Misc.)			0.10%	\$72,000
			<u>Proj Const. Cost</u>	<u>Fee Percent</u>
6 Civil Engineering - AIA Contract Clause 4.1.7			\$69,100,000	0.65%
7 A/E Reimbursable Expenses – AIA Contract Clause 11.8.1 (Excl. printing of bid docs (above))			0.10%	\$72,000
			<u># of Months</u>	<u>Add'l trips</u>
A/E On-Site Project Representation – AIA Contract Clause 4.1.12				<u>Fee Per Trip</u>
8 (Beyond Basic Services CA (twice a month))	24	1	\$2,000.00	\$48,000
9 Misc. (Supplemental)				\$116,500.00
Subtotal - Item G:				\$900,000

This comparative evaluation is accomplished because we have maintained a construction inflation table for Iowa dating back to 2004. From 2004 until the start of the pandemic in 2019 construction inflation in Iowa varied slightly year-by-year, with a 4% increase per year on average over this period. Starting with the pandemic years, we have seen dramatic increases in annual construction inflation reaching 8.5% per year. Construction cost indicators are projecting a leveling out for construction inflation. However, all indications to date do not predict a return to construction inflation below pre-pandemic levels, below 4% per year. At this time, the project cost model utilized for the \$79.75 million project has a 5.5% inflation factor calculated currently and going forward.

Cost Comparison – in 2020 (five years prior to the current 2025 cost projection)

In 2020, the cost of the Johnson County Sheriff's Office, including law enforcement and jail components for a facility with approximately 111,300 GSF, was projected to be \$57,125,000, or an average construction cost of \$444 per square foot when furniture, fixtures and equipment are excluded. The construction costs for the Law Enforcement portion of the project would average \$401.53 per square foot excluding furniture, fixtures and equipment. The Jail portion of the project average is \$526 per square foot. When compared to the 2025 cost opinion, over the five-year period, construction costs increased by \$177 per square foot.

Cost Comparison – in 2015 (ten years prior to the current 2025 cost projection)

In 2015, the cost of the Johnson County Sheriff's Office, including law enforcement and jail components for a facility with approximately 111,300 GSF, was projected to be \$45,450,000, or an average construction cost of \$353 per square foot when furniture, fixtures and equipment are excluded. The construction costs for the Law Enforcement portion of the project would average \$318.79 per square foot excluding furniture, fixtures and equipment. The Jail portion of the project average is \$418.77 per square foot. When compared to the 2020 cost opinion, over the five-year period construction costs increased by \$91 per square foot, or at a rate nearly half of what has recently occurred.

By providing this comparison cost information, Shive-Hattery wanted to demonstrate both how market influences have changed the cost of the work and provide some historical perspective given the fact that prior JCISO needs assessment were previously completed by others, where comparisons may have been made.

v. Jail Only Cost Opinions

As a part of this needs assessment, a request was made to provide a jail-only cost opinion compared to the full Johnson County Sheriff's Office project cost opinion of \$79.75 million. The cost of a new Jail for Johnson County, including jail support and housing components, with an appropriately sized public entrance and building mechanical/electrical support components would be 57,500 GSF. The total project cost is projected at \$48,880,000 with a range in cost from \$46,700,000 to \$51,100,000 respectively and with construction inflation factored into the projection through 2025.

The construction costs for the Jail portion of the project averages \$752.61 per square foot including fixed detention equipment within the project costs outline above. The construction costs for the Jail portion are estimated at \$43.275 million which includes a 12 percent (12%) design and estimating contingency due to the higher inflation market influences occurring in the detention and security industry.

Conversely, the associated law enforcement and storage building components represent the difference in project cost between the \$79.75 million and \$48.88 million indicated for the jail portion. The associated project cost for the law enforcement and storage building portions is \$30.87 million with a construction cost opinion of \$25.825 million.

STATEMENT OF PROBABLE COST - New Construction (Comparison)

Johnson County Sheriff's Office, IA - Master Plan (140 Beds (Jail Only) New Construction

Project No: 214230378-0

Estimator: MSL (Pre-Design Estimate)

6/17/2024



Sub-Total Building Components - 140 Beds (Expandable to 240 Beds)			\$35,624,850
A	Site Work Allowance - 6%		\$2,135,150
A.1	Site Utility Extensions (water & sewer) - Est. Cost %		TBD
B	Design & Estimating Contingency - 12%		\$4,530,000
C	Furniture, Fixtures & Equipment - 4%		\$1,690,000
Project Construction Total (A+B+C)			GSF 57,500 \$43,980,000
Construction Cost/Square Foot (Excluding Equipment)			\$735
Project Soft Costs			
D	Land Acquisition		TBD
E	Basic Services A/E Professional Fees - 6.25%		\$2,750,000
F	Construction Contingency - 3.25%		\$1,430,000
G	Other - Administrative (Misc.)		\$720,000
H	Demolition of Existing Building(s)		TBD
Total (Jail Only) Project Costs with Mid-Year 2025 Bid			\$48,880,000
Project Cost Range Analysis (Due to Market Conditions)			
		5.00% Low Range	High Range
H	Construction Cost incl. FFE Range at 5% Variance	\$41,800,000	\$46,200,001
	Cost per Gross Square Foot (Construction)	\$697.56	\$774.08
I	Soft Cost Carry-over (D+E+F+G)	\$4,900,000	\$4,900,000
Total (New) Project Budget Range (H+I)		\$46,700,000	\$51,100,000
Item G Breakout: Printing, geotechnical costs, special inspections, civil engineering, and additional site visits			

[Update 6/17/0224]
Jail @ \$735 per SF and,
\$752.61 per SF
(for Jail Construction with
fixed equipment)

Item G: Other Administrative Cost Breakdown:

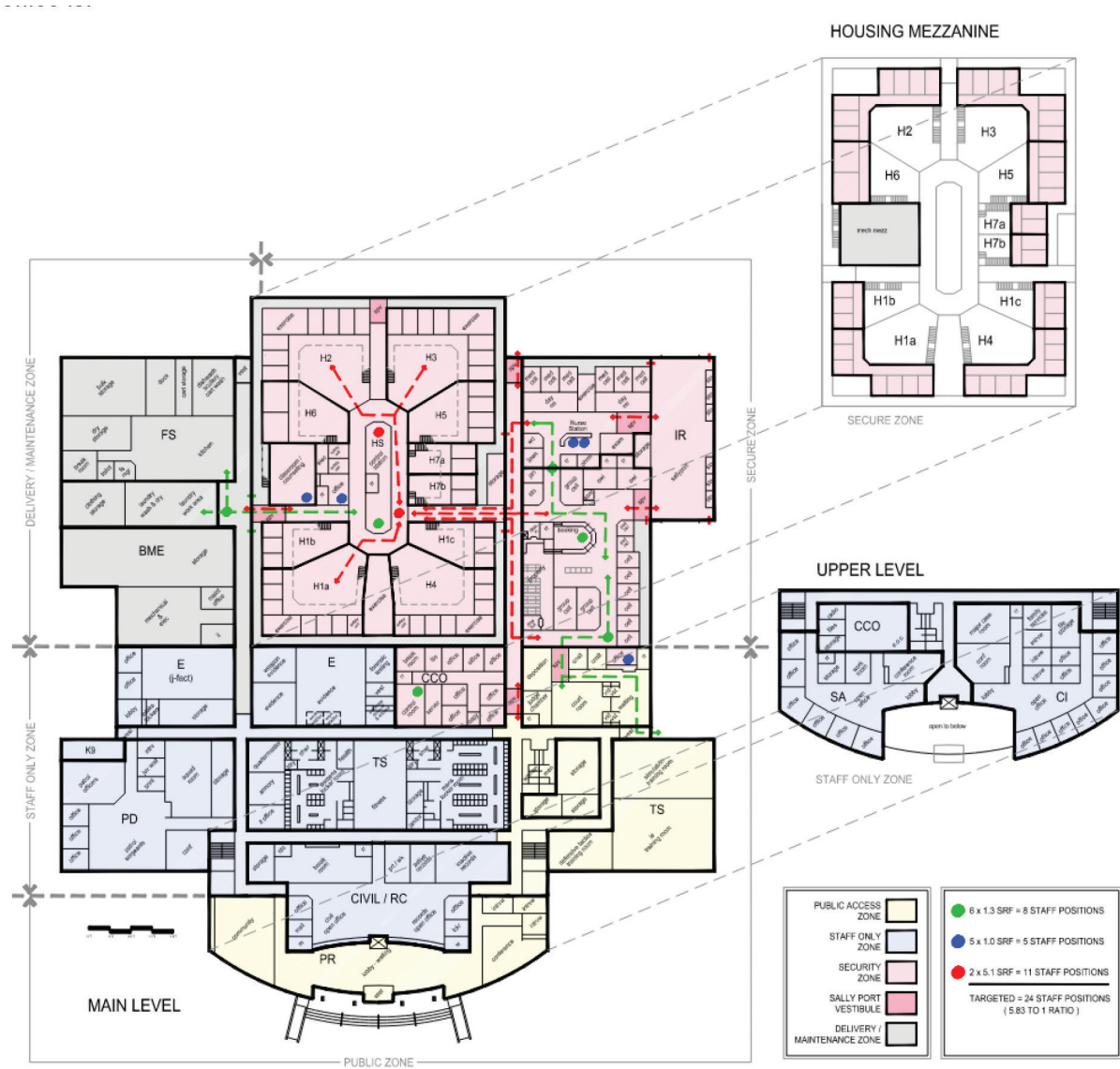
	<u>Sheets</u>	<u>Sets</u>	<u>Cost / Set</u>	<u>Unit Cost</u>
1 Bid Document Printing	125	100	\$325.00	\$32,500
2 Site Survey (with \$5,000 for Phase 1 Environmental)				\$20,000
3 Geotechnical – AIA Contract Clause 4.1.28 (Site Borings & Eng. Report)				\$20,000
4 Special Inspection – per Code by Independent Agent, by Owner			0.10%	\$42,500
5 Bond Council / Financial Advisor (Owner Misc.)			0.10%	\$44,000
			<u>Proj Const. Cost</u>	<u>Fee Percent</u>
6 Civil Engineering - AIA Contract Clause 4.1.7			\$42,290,000	0.65%
7 A/E Reimbursable Expenses – AIA Contract Clause 11.8.1 (Excl. printing of bid docs (above))			0.10%	\$44,000
			<u># of Months</u>	<u>Add'l Trips</u>
A/E On-Site Project Representation – AIA Contract Clause 4.1.12				
8 (Beyond Basic Services CA (twice a month))	24	1	\$2,000.00	\$48,000
9 Misc. (Supplemental)				\$194,000.00
Subtotal - Item G:				\$720,000

vi. Staffing Considerations

Staffing considerations for the new facility jail configuration are based on the operational expectations and positional requirements for three shift relief position groups identified. Inmate to staffing ratios will often range between 4:1 to 7:1. For the 140-bed concept design indicated, the design to ratio represented is 5.83:1. The significance of this result is no additional staff will be needed to operate the new jail. While this experience is uncommon due to increased jail capacity typically requiring an increase in jail staff, in this case, there is an adequate number of current staff to operate the jail due to the existing jail's highly inefficient configuration.

Support Services (Kitchen and Laundry) Housing and Central Control (back-up)	(3 positions x 1.3 SRF)	4 staff positions
Intake Processing (Holding) – Court Service – Intake Management	(3 positions x 1.3 SRF)	4 staff positions
Inmate Programs – MH/Medical Support - Jail Administration Support	(5 positions x 1.0 SRF)	5 staff positions
Total Baseline Positions for 140 Beds Expandable Jail		24 positions

As a baseline configuration for each site under consideration, a modification to the baseline staffing plan may be needed. The baseline diagram utilized for staffing concepts identified with the sheriff's office is:



vii. Life Cycle Cost Analysis - Considerations

Overview:

Three life cycle cost considerations have been evaluated: A Build New Life Cycle Scenario for the 140-bed jail facility, as well as two Do Nothing Life Cycle Scenarios. Each of these life cycle cost evaluations considers the following areas tied to the 20-year projections¹:

- *Capital Project Cost to construct the facility (both law enforcement and jail):*
 - o For the Build New jail scenario, \$48.88 million was applied in this evaluation with a partial initial cost incurred in FY2025-26 for principal and interest on a 20-year bond. When comparing a Build New scenario for both law enforcement and jail components, a \$79.75 million number was applied.
 - o For the jail only Do Nothing scenario, this evaluation considers the eventual closing and vacating of the existing jail². With a facility that has reached the end of its ability to meet the needs of the community, it is not a question of if, but when. For comparison purposes, we have factored in a replacement holding facility into this scenario. This facility would meet the short-term needs associated with the intake process, with the explicit purpose of processing arrestees. All long-term housing of inmates would occur out of county in other neighboring county jails. For the purposes of this evaluation, the replacement holding facility project cost projected is \$13.6 million applied with a partial initial cost incurred in FY2026-27 for principal and interest on a 20-year bond.
 - o For the Do Nothing Scenarios inclusive of both law enforcement and holding facility components, the projection includes the \$30.87 million project cost to construct the law enforcement components in addition to the Holding Facility. The total capital project cost included in the life cycle project for both is \$50 million.
- Projected Operations Cost for Staffing³
 - o For the Build New jail scenario, staffing is projected at 24 staff positions.
 - o For the jail only Do Nothing scenario, staffing would need to transition to a more robust transfer and transportation unit, requiring initial movement of the 83 in-custody average daily population inmates to other neighboring jail facilities. This evaluation is based on having 18 staff positions for the transportation unit.
 - o For the law enforcement and holding facility Do Nothing scenario, an additional 12 staffing positions would be needed to operate the holding facility, bringing the total number of staff projected to 30, including the 18 staff identified in the transportation unit.

o Note: The scenarios projected do not consider the increased liability concerns associated with transporting inmates to other facilities. Liability is a significant factor for consideration in future evaluations, both for staff and inmates.
- Projected Operations Cost for Inmate Care/Medical
- Maintenance/Custodial/Utility Costs
 - o For the Build New Johnson County Sheriff's Office (law enforcement and 140-bed jail) scenario.
 - o For the Do Nothing scenario, to support a replacement holding facility and law enforcement facility.
- Housing – Per Diem Costs
 - o Through Dec. 2023, JCSO has calculated \$15.84 million has been spent housing inmates outside of Johnson County.
 - o For the Build New 140-bed jail scenario, the need for out of county housing ends when a two-year construction period for this scenario is completed. For this evaluation, occupancy is projected to occur in 2027.
 - o For the Do Nothing scenario, Per diem cost to house inmates out of county is calculated at a starting rate of \$60 per day per inmate. An inflation factor of 2 percent (2%) per year has been factored into the calculation. For the total number of inmates managed and housed out of county over the 20-year period, there is an \$89.3 million cost impact. The transportation costs at \$7 million are in addition to the per diem cost calculated, bringing the total project cost to house inmates out-of-county at \$96.3 million dollars.
- Transportation Cost (Out of County) – 20-year cost considerations as noted above.

¹ Life Cycle Cost Analysis assumes 2% Inflation Rate/Year

² The existing facilities capacity will not meet the county needs and is functionality antiquated. Therefore, when considering the options, a new facility will be required to comply with Iowa Code requirements.

³ FTE's staff positions will increase as transportation growth occurs due to inefficiency and capacity issues of existing facilities.

- Transportation Cost (Institutional and Medical/MH) – Costs over the remaining time in either scenario to manage and transport inmates for medical care and institution exchanges with other agencies.
- Miscellaneous (Other) – Uniforms, Supplies, Training Events, Dues, etc.

Operational Staffing Cost Considerations

The single most critical issue when planning for a new or expanded justice facility is the staffing requirements and associated costs. Capital construction costs represent a small part of the total life cycle costs of a detention facility, representing only ten to eleven percent (10% to 11%) of the total costs of the facility over its useful life. The overall useful life of this type of facility is generally between 40 to 50 years. The staffing requirements and associated costs represent 63 percent to 67 percent (63% to 67%) of the total life cycle costs for a detention facility. The remaining 22 percent to 27 percent (22% to 27%) to balance is made up of utility, medical, food costs and other miscellaneous direct offender expenses. Given the significance of staffing on the life cycle costs, this element of the study focuses primarily on the staffing needed to support each concept, by locating the new justice facility on an urban or remote site. For modeling purposes, tied mainly to the length of time needed to pay down bond referendum capital financing, the life cycle cost models presented in this report are based on the projected total cost over a 20-year period.

Throughout the programming effort, we were continually evaluating the staffing impact of functional and architectural programming concepts for urban or remote sites. In each case, the major components and their functional sub-components were programmed by the underlying need to create concepts that support Johnson County’s mission: improving operations, safety, inherently promoting staff efficiency and creating an appropriate justice environment.

The staffing analysis developed for this project was analyzed through a stepped process. Shive-Hattery determined the number of employees required to safely and constitutionally supervise jail activities by including a preliminary profile of the existing jail and its operations and reviewing the ancillary functions that impact security/supervision and the need for detention officer supervision.

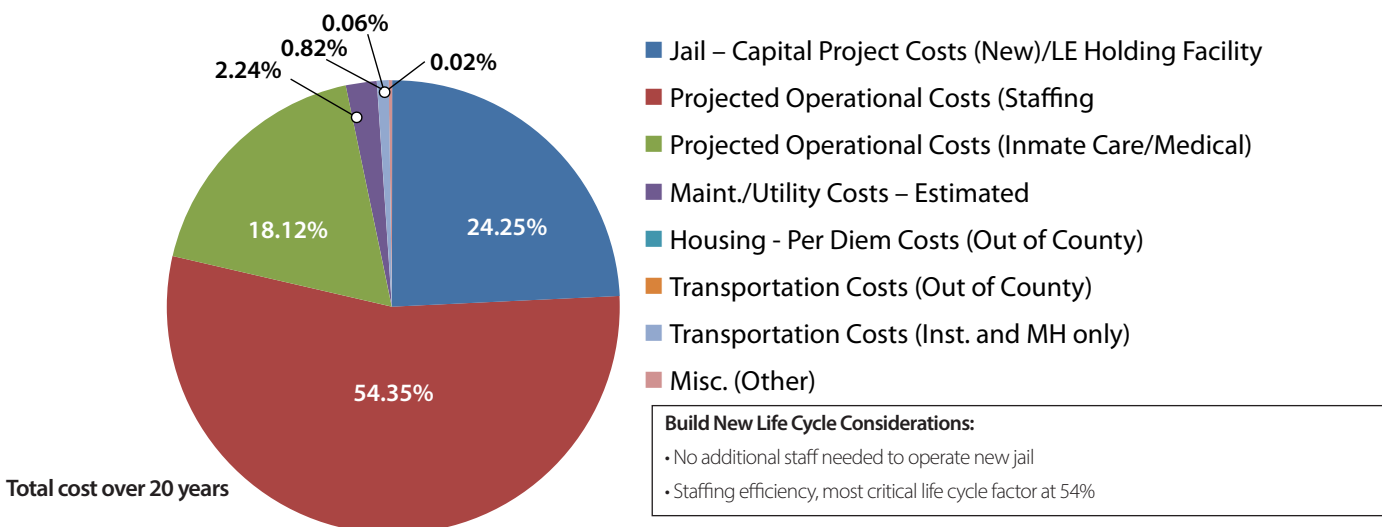
This staffing plan is designed to facilitate a 24-hours per day/7-days per week/365-days per year operation. To promote a common understanding, the staffing-shift relief factors needed to keep the facility operational have been incorporated into the first and second 12-hour watch positions. Any position that is a 24/7/365-day two-watch position has a relief factor of 5.1 built-in to the calculation. Other positions that are staffed only during the one watch period and are required to have relief are calculated at a factor of 1.3. Management positions have a shift relief factor of 1.0.

Do Nothing Life Cycle Determinations:

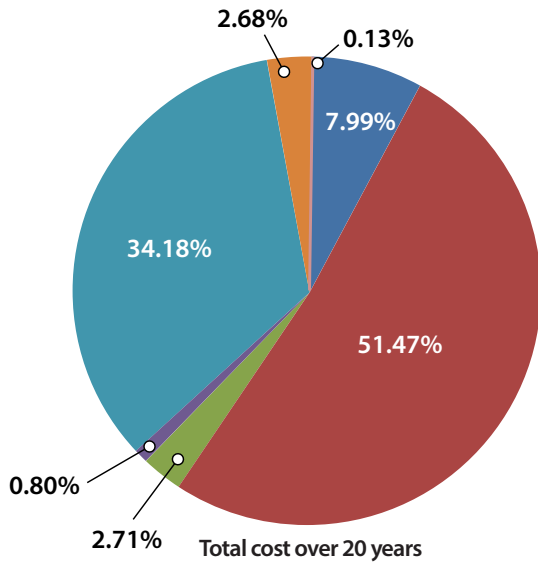
With the inclusion of the 30 staff positions noted above and the associated project costs, the cost comparison indicates:

- Through Dec. 2023, JCSO has calculated \$15.84 million has been spent housing inmates outside of Johnson County.
- If the facility were closed, the projection indicates out of county housing cost would **increase to \$96.3 million** over a 20-year period.
- Difference in Total Operating Cost compared with building New indicates an **additional \$69.395 million** would be needed over a 20-year period.

Build New Life Cycle Condition:



Life Cycle Cost Comparison (without Law Enforcement component):

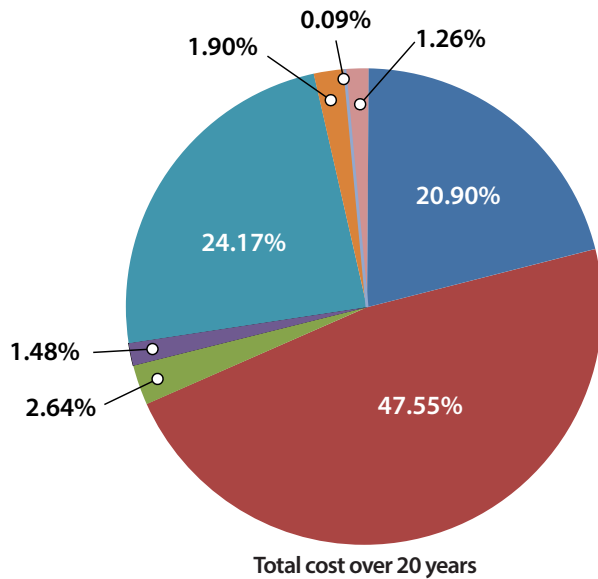


- Jail – Capital Project Costs (New)/LE Holding Facility
- Projected Operational Costs (Staffing)
- Projected Operational Costs (Inmate Care/Medical)
- Maint./Utility Costs – Estimated
- Housing – Per Diem Costs (Out of County)
- Transportation Costs (Out of County)
- Transportation Costs (Inst. and MH only)
- Misc. (Other)

Do Nothing Life Cycle Considerations:

- Through December 2023, JCSO has calculated \$15.84 million has been spent housing inmates outside of Johnson County.
- If the facility were closed, projects indicate out of county housing cost would increase to \$96.3 million over a 20-year period.

Life Cycle Cost Comparison (with Law Enforcement component):



- Jail – Capital Project Costs (New)/LE Holding Facility
- Projected Operational Costs (Staffing)
- Projected Operational Costs (Inmate Care/Medical)
- Maint./Utility Costs – Estimated
- Housing – Per Diem Costs (Out of County)
- Transportation Costs (Out of County)
- Transportation Costs (Inst. and MH only)
- Misc. (Other)

Do Nothing Life Cycle Considerations:

- Through December 2023, JCSO has calculated \$15.84 million has been spent housing inmates outside of Johnson County.
- If the facility were closed, projects indicate out of county housing cost would increase to \$96.3 million over a 20-year period.
- Difference in total operating costs compared with building new is an additional \$69.395 million over a 20-year period.

F. PROGRAMMING AND OPERATIONAL DESCRIPTIONS

i. Introduction to Program Elements

Programmatically, the Johnson County Sheriff's Office facility needs assessment has been developed to address the 20-year need projection for both Law Enforcement/Forward Operations as well as Jail/Detention space needs. Program considerations for each represent:

- Law Enforcement/Forward Operations – is 48% of the total program space (53,800 SF).
 - o Best Practice Average Comparison 500 SF/Employee.
 - o JCSO Program is planned for 489 SF/Employee.
- Jail/Detention Space – is 52% of the total program space (57,500 SF).
 - o Best Practice Average Comparison 400 SF to 450 SF/Inmate.
 - o JCSO Program is planned for 411 SF/Inmate.
 - o JCSO Housing Unit is planned for 257 SF/Inmate.

The following is a description of functions that are found for both programmatic components:

ii. Security Design Principles

For the justice facility program, several security principles have been identified.

1. A Central Control/EOC Support Area will exist within the new facility, which shall control all perimeter security and movement between building components. The Control Center will be as penetration-resistant and self-contained as possible to ensure continuous facility security and control of offender activities. Overall, Central Control will manage all perimeter accesses and monitoring systems and control or monitor all internal movement within the facility.

The Central Control Station will monitor and control all major building alarms, and response systems will maintain constant communications with all staff working at posts throughout the facility. In the event of an emergency, Central Control will also have a backup/override capability over all local housing and housing control positions and will maintain a link to all records and data systems relevant to the processing and management of movement throughout the building.

2. Two interlocking doors will provide all access into the security perimeter. All interlocking systems will have an electric override function that can be activated by staff in emergency situations. Most of the court components will occur on the public side of the facility. Offender Holding Areas will be separated from public spaces, and movement to and from Intake and Booking will occur through secure circulation.
3. Entrance into the jail security perimeter by officials outside service individuals (doctors, counselors, educators, lawyers, etc.) will be as direct and efficient as possible. Security will be provided to the spaces these individuals need access to, with monitoring systems at a nearby staff post and CCTV and/or audio monitoring respective to the meeting's privacy needs.
4. Persons visiting inmates will not normally penetrate jail security. A video visitation system has been designed for the facility to limit inmate/visitor movement. Visitation will be conducted through electronic communication from the visitor lobby spaces to each dayroom.
5. When visitors and service providers need to enter the security perimeter, they will pass through metal detection and should be subject to search.
6. Surveillance by direct staff view from the Podular Housing Unit control room or contact shall be implemented over reliance on electronic surveillance equipment.
7. There will be control positions constantly staffed to support the housing units. These positions would have control over all doors and security systems within their respective areas. These control positions can be overridden or shut down by Central Control.
8. Access to public lobbies will be open during normal visiting and business hours.

a. Public Reception Areas

Public and official visitor reception is intended to serve the new facility's needs. Staff will enter the facility through a separate staff entrance.

Public reception will be off the main entry vestibule. It is important for this area to confine public movement to as limited an area as possible while also making public access convenient and easily identifiable without undue assistance from staff. After checking in at the reception desk, visitors will be directed to administration or the areas that service visitor and community needs.

It is important that the public reception area conveys a proper image and appearance, responds to department reception and security policies and is adequately sized to serve the facility. This area of the facility is the most influential on public opinion, along with the exterior appearance associated with law enforcement/forward operations.

When a professional visitor interacts with an arrestee in the Facility Intake/Release Area, consult rooms are located immediately off the visitor jail lobby, adjacent to the booking and processing area. Arrestees who are involved in the processing-holding sequence can speak with attorneys, bonding agents and family/visitors on subjects primarily related to attaining release.

b. Jail and Sheriff's Administration

The administration components programmed in this study focus on two types of Administration. First, support administration space for the new jail facility; Second, the sheriff's administration and forward operations departments.

Administration space provided for the facility staff has been configured to support the long-term training and operational needs that foster support law enforcement's community support and engagement. The sheriff's training components will consist of classrooms, and simulation and defensive tactical training support spaces. These spaces will support Johnson County's needs and the surrounding community.

iii. Central Control

Central Control includes activities and functions pertaining only to the new facility. The primary objective of this component is to monitor control of electronic security and life safety systems associated with the facility's perimeter security.

The space around this component establishes a security zone since Central Control functions as the nerve center of the building. Activities also include selective monitoring of visitors, staff, and inmates in and out of the facility.

The Central Control Room is located on the interior, as shown in the blocking diagrams, and is located strategically in the facility for maximum efficiency in and out of the housing units.

a. Facility Intake/Release Processing

The Intake/Release component of the new jail serves as a processing center for the new building. The primary point remains at the main jail for the Sheriff's Office and other local law enforcement agencies to bring their arrestees. Intake/Release includes the following sub-components:

- Facility Intake/Vehicular Sally Port.
- Booking-Identification.
- Operating While Intoxicated (OWI) support functions.
- Medical.
- Jail Court support.
- Admissions-Property-Release.

The Facility Intake/Vehicular Sally Port addresses the need for secure vehicle and arrestee reception and initial security processing, as well as the needs of arresting officers who will interface with the OWI screening, intake processing, and other staff in the area.

A new, secure, vehicular sally port serves as the point of entry to the intake center. Arresting or transporting officers will drive into the sally port, which is controlled from an Intake-Release control room and staffed 24 hours a day. Routine entry involves moving arrestees from the parked vehicle into the reception area, which functions as an initial processing area before arrestees are permitted access to the Booking-Identification lobby. Processes are completed in the reception area before entry.

Booking-Identification includes initial property removal and inventory, search procedures and metal scanning. This process ensures that arrestees are “clean” in terms of possession of weapons and/or dangerous contraband.

Persons released from intake processing or any one of the several jail housing unit components will be routed through the release processing area for property return and then be routed through the jail lobby.

In the Booking Lobby/Reception counter area, arrestees are engaged in the following activities and processes:

- Property exchange and inmate uniform issuance in dress-in areas, processing assignments and jail identification.
- Medical screening.
- Holding in secure holding cells or waiting/staging in a normalized open waiting area.
- Fingerprinting for full set of finger and palm prints.
- Video imaging.
- Classification identification for processing into the facility.

iv. Court Services/Jail Support

Video advisory hearings will be conducted via an internal CCTV link between the new facility and the Court components. The program assumes that judges, officers of the court and defense counsel will appear to conduct proceedings while in-custody defendants will be located simultaneously in advisory court or deposition areas in the new jail.

v. Medical Services

The medical services component is designed to minimize the need to transport inmates to a hospital facility. The medical treatment concepts programmed into this project are also designed to limit the internal movement of offenders in need of medical or mental health attention.

Starting at the housing unit, a medical screening and triage will evaluate an inmate’s condition. If after this initial evaluation further treatment is needed, the medical services component is designed to accommodate the following:

- Portable X-ray
- Examination Room
- Minor Procedure Medical Treatment

Four medical isolation cells and two infirmary units for three people each will accommodate the need of offenders requiring additional separation from the general population. The medical cells in this area will be designed for isolation with negative pressure mechanical system considerations.

The nurse’s station is shared with a detention officer.

vi. Housing

The new expansion project involves a variety of housing configurations for general, segregation and administrative inmates for adult populations. The facility will primarily operate by means of podular indirect supervision. Cell configurations are designed for single- or two-person occupancy. Dormitory housing will be in direct line-of-sight with the floor control position and will be designed to accommodate direct lines of sight into the housing units.

Housing support areas are planned to accommodate professional visitations, hearings/group meetings, classroom activities, medical screening and proper supervision.

Indirect supervision involves the observation, control and management of offenders within the housing units by a deputy located at a control station directly outside the housing units. Barriers, which separate deputies and offenders such as those formed by podular-remote glazed control rooms, are featured in the indirect supervision concepts in this study.

Standards: All program components will comply with the Iowa Jail Standards and will consider the ACA standards where applicable.

Natural Light: Each cell will have a window to the exterior to directly provide natural light through a service chase behind the modular cells. Since offenders spend a substantial amount of their time in the dayrooms, providing quality lighting to this area is a priority. In addition, direct sunlight to support a normative environment in the housing dayrooms and housing unit staff support areas will be accommodated through the use of clerestory windows or light monitors.

Dayrooms: All housing units will have their own dayrooms, which will be sufficiently sized to facilitate activities such as dining and offer casual seating for reading and television viewing. Pre-trayed meals will be assembled on a rolling cart, which will be rolled into each dayroom at the proper times.

Pod Access and Control Concepts: Consistent with security and control concepts required in a podular indirect supervision setting, each Pod has entry from the corridor. The housing unit deputy will monitor the interior door to the units, with backup monitoring from Central Control. This is important concerning entries, during which it is critical that the housing unit officer determines that the occupants are under control and that the unit is ready to accept additional occupants or returning inmates. The corridor will have access control from a security vestibule with interlocked doors.

vii. Food Service

All offenders will be served at their housing units in a uniform, compartmented tray system. Staff meals may be served separately in staff break areas in the facility.

Food products are received in bulk and case lots from vendor trucks at a secured loading dock. Deliveries are brought into a secure receiving reception area for checking and staging. A receiving office is provided with direct access and a view to the staging area.

After deliveries are checked, they are to be transported to the appropriate storage area for stocking.

Dry food storage space is to be adequately sized to accommodate up to a 30-day supply.

Refrigerated storage is typically sized for deliveries two times per week. At least one week of frozen food products will be accommodated in the storage area. Additional freezer space may be provided outside the building.

viii. Laundry

Laundry services will provide inmates with clean and sanitized linens and uniforms regularly. The laundry will also be capable of processing inmate personal items. Laundry responsibilities will also include supplies for holding and property dress-out. The laundry processing functions include load sorting, washing, drying, and folding of clothing and linen. This area shall be open and in full view of visual supervision.

G. PROGRAMMING DESCRIPTIONS

i. Facility Macro Programming

Macro space planning has been developed with future growth in mind for both the law enforcement facility as well as the core jail elements to address the long-term capacity needs. The jail construction would accommodate 140 beds with core support service areas such as medical, food service, laundry, and processing space sized for the full capacity. Said differently, the core elements of the building have subtle adjustments allowing for flexibility as needs change at a time when the facility reaches capacity.

The baseline space planning considerations listed below account for proper separation of the building components through secure circulation elements for offender movement in the jail and to law enforcement components. Public circulation is limited to essential components and visitation elements. Controlled circulation occurs in areas essential for initial appearance proceedings and professional visitation.

Space configurations and proposed square footage for each of the building components are broken down into the following major categories:

Public Reception – Ancillary	6,500 SF
Law Enforcement Components: (46,300 NSF)	
Sheriff's Administration	3,500 SF
Civil Division	2,700 SF
Records Division	2,800 SF
Watch Command and Patrol Division	5,000 SF
Criminal Investigation Division	5,000 SF
K9 Unit	300 SF
Training and Support	10,000 SF
Evidence/ forensic Testing	5,000 SF
Vehicle Maintenance and Storage	12,000 SF
Jail Components: (52,200 NSF)	
Housing – 140 Beds	
Housing Support and Jail Administration	5,600 SF
Special Management Housing (25 Beds)	7,500 SF
General Population Housing (28 Beds)	4,200 SF
Administrative Transitional Housing (28 Beds)	4,200 SF
Segregation Housing – Male/Female (15 Beds)	3,900 SF
General Population Female Housing (16 Beds)	2,100 SF
Dormitory Housing (22 Beds)	1,900 SF
Intake/Release/Medical/Court (6 Beds)	13,500 SF
Food Service/Laundry/Storage	6,500 SF
Central Control/EOC Support	2,800 SF
Building Support – Mechanical/Electrical	5,400 SF
<i>Subtotal – Marco Program (NSF)</i>	<i>110,400 NSF</i>
<i>Projected Macro Program – Gross Square Feet (max) for 140 Beds = (building envelope, common circ, stairs, elev.)</i>	<i>122,000 GSF</i>
Overall Jail Square Footage per Inmate @ 140 Beds	411 SF
Housing Unit Square Footage	36,000 SF
Housing Square Footage per Inmate	257.15 SF

H. BUILDING EXPANSION AND FLEXIBILITY

Flexibility is certainly a priority for this project. As with all modern buildings, changes occur over time and floor plans will require modification. Using compartmentalization in the macro-program, the building components are designed to look at future internal growth needs. Office components include space for future employees and amenities. Storage elements look at long- and short-term strategies to accommodate evidence, information and records management. Inmate areas are designed to bring essential services to the offenders housing unit to reduce movement expense. Thus, while the planning team has been as accurate and insightful as possible, building systems and floor plan shapes should be as flexible as possible.

In this baseline planning scenario, all core elements have been programmed to accommodate expansion beyond the initial construction. For remote sites, expansion would be horizontal, expanding the building in two directions with growth for law enforcement and inmate housing occurring at the perimeter of the building. Administration and miscellaneous functions, inmate processing functions, and support functions have been programmed to accommodate expansion of this facility to 240 beds. It must be noted that the need for a 240-bed facility is beyond 30 years (2054). Thus, additional housing and the incorporation of minor internal changes would only become necessary beyond this predictive model, implemented a couple of years in advance of the time expansion if needed.

i. Technology and Supervision Priorities

Technology integration with supervision and management of inmates is a priority to create an efficient facility. Consequently, if choices are made relative to costs, the county should spend more to attain clearer views and with more direct movement rather than spend excessive money on sophisticated security technologies.

The facility design should anticipate future technologies and build flexibility into the facility to accommodate and integrate new technologies. Providing space for CAT6 cabling and/or fiber lines for technologies that can be installed in the future is important. Further the use of wireless technologies has significantly improved, but with the secure nature of detention construction, current technologies remain dependent on cabling solutions. The facility design will be prepared for the implementation of video technologies. Some areas that utilized video connectivity are attorney-client interviews, pretrial release interviews, medical, counseling and religious broadcasts. Preparing multi-purpose activity space, which the existing facility cannot currently support, is a relevant consideration for improving offender services in the facility.

I. POLICY STANDARDS

i. Introduction

A key foundation for determining future needs is the development of a series of policy standards to guide short- and long-range planning decisions. These decisions, made during the next stage of the planning process, will influence the way Johnson County operates and constructs its future facilities. This is important because at some point the existing facility has influenced the policies adopted by Johnson County. A new facility will provide an opportunity to revisit the operational practices, putting in place best practice considerations going forward. While it may be difficult to qualify the impact the existing facility has had, operational influences and inefficiencies have occurred.

These policy standards recommendations can be derived from Iowa Jail Standards, PREA considerations, DOJ considerations for adult local detention, and the American Correctional Association (ACA) standards. The policy standards are a series of physical, operational, staffing and treatment criteria that describe how offenders should be housed and managed based on their classification, custody level and special needs.

ii. Policy Standards

The policy standards represent vision statements of what the JCSO aspires to be in the coming years, not necessarily what it is today. They are intended to represent best practices within the fields of adult detention. The policy standards incorporate all applicable national and local standards and the planning consultant's experience. In particular, the core standards represent critical configurations for facilities and have been adopted in accordance with the initial planning concepts outlined in this needs assessment.

It is recommended that the policy standards be used by Johnson County to develop a detailed response and solution during full architectural design. The basis for future policy standards should be organized and divided into primary categories as follows:

- General Population considerations.
- Special Needs/Management considerations.
- Security and Circulation considerations.
- Staffing and Operational considerations.

Within each subcategory, a series of standards can be applied to further define the physical plant requirements for housing and other facility components, housing operations, offender movement, programs and services and refined staffing requirements for the in-custody populations being served.

J. DEPARTMENTAL/AREA PROGRAM SPACE LIST REQUIREMENTS

The 20-year projections implemented in the program planning process for this needs assessment include the Johnson County Sheriff's Office needs for forward operation law enforcement services, the inclusion of JFACT into the facility, the inclusion of long-term storage facility needs and the square footage projections for a 140-bed jail. To achieve compliance with the Iowa Administrative Code requirements, in accordance with operation expectations, 444 program spaces have been identified. The individual room space list components as summarized above are:

Program Space List - Johnson County, IA						PUBLIC RECEPTION / ANCILLARY	PA
Johnson County Sheriff's Office / BH Therapeutic							
Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks	
PA Public Reception - Ancillary							
PR.101		Entry Vestibule	1	150	150		
PR.102		Public Lobby	1	750	750	Vestibule, Lobby, Front Desk Access, Kiosks for Weapons permits / information;	
PR.103		Locker Area	1	40	40	Historical Display Elements, Access to Interview Rooms, Access to Training Room;	
PR.104		Metal Detector	1	60	60	12 lockers (small compartments)	
PR.105		Video Visitation Booths	4	25	100	4 stations (two chairs at each on public side)	
PR.106		Non-Contact Visiting Booths	2	80	160		
PR.107		SRO / Private Consult Room	1	100	100		
PR.108		Prof. Interview / Conference Room	2	150	300		
PR.109		Lobby Fingerprint Area	1	50	50		
PR.110		Sallyport Vestibule	1	80	80		
AN.111		Public Toilets	2	200	400		
AN.112		Mother's Room / Privacy Room	1	100	100	Sink, Small Fridge, Chair and Table	
AN.113		Break Room and Kitchen	1	800	800	2 fridges, 2 microwaves, 1 dishwasher; Seating for 16 (ice machine)	
AN.114		Short-Term Sleeping Room(s)	2	80	160		
AN.115		Staff Toilets	2	65	130		
AN.116		Storage - Misc. Supplies	1	300	300		
AN.117		Conference - Meeting Rooms	2	500	1,000	Two Rooms (25 people each)	
AN.118		Community Room	1	500	500		
AN.119		Kitchenette	1	50	50	Located near Community / Conf. Rooms	
Sub-Totals: PA			28	187	5,230		
			Spaces	Avg. NSF per Space	Total N.S.F.		
			X Building Gross factor of: 1.25 =			6,500	
						Total G.S.F.	
						4/16/2024	

Program Space List - Johnson County, IA						SHERIFF'S ADMINISTRATION	SA
Johnson County Sheriff's Office / BH Therapeutic							
Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks	
SA Sheriff's Administration							
SA.101		Sheriff's Office	1	250	250	Private Office	
SA.102		Chief Deputy	1	200	200	Private Office	
SA.103		2nd Deputy - Patrol Command	1	200	200	Private Office	
SA.104		Civil Lieutenant	1	150	150	Private Office	
SA.105		Investigations Lieutenant	1	150	150	Private Office	
SA.106		Records Lieutenant	1	150	150	Private Office	
SA.107		Jail Captain	1	150	150	Private Office	
SA.108		Admin Assistant	2	75	150	Open Office	
SA.109		Future Admin Deputy Office	2	100	200	Private Office	
SA.110		Storage Room - Crime Prevention Materials	1	150	150		
SA.111		Conference Room	1	500	500		
SA.112		Work Areas - Printers / Copiers	1	200	200	Copiers / Office Supplies	
SA.113		Mail	1	50	50	Part of Workroom	
SA.114		Storage - General	1	300	300		
SA.115		Admin Toilets	2	65	130		
Sub-Totals: SA			11	266	2,930		
			Spaces	Avg. NSF per Space	Total N.S.F.		
			X Building Gross factor of: 1.20 =			3,500	
						Total G.S.F.	
						4/16/2024	

Program Space List - Johnson County, IA

CIVIL DIVISION - ANCILLARY CA

Johnson County Sheriff's Office / BH Therapeutic

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
	CA	Civil Division				
	CA.101	Civil Deputy	6	100	600	Open Office (Workstations) -
	CA.102	Secretary - Public Facing Staff	2	100	200	View to Front Reception Counter (Total of eight workstations with RC.101)
	CA.103	Clerk - Assistant / Support	2	80	160	
	CA.104	Work Areas - Printers / Copiers	1	200	200	
	CA.105	Case Files - Records	1	1,000	1,000	
	CA.106	Break Room	1	100	100	Shared with Records
	CA.107	Restrooms	2	100	200	Shared with Records

Sub-Totals: CA	15	164	2,460
	Spaces	Avg. NSF per Space	Total N.S.F.
		$1.10 =$	2,700
			Total G.S.F.

4/16/2024

Program Space List - Johnson County, IA

RECORDS - ANCILLARY RA

Johnson County Sheriff's Office / BH Therapeutic

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
	RA	Records Division				
	RA.101	Record Clerk	5	100	500	Open Office (Workstations) - Currently 5 employees + 3 add'l civilian staff (future)
	RA.102	Reception - Public Facing Staff	1	100	100	View to Front Reception Counter (Total of eight workstations with RA.101)
	RA.103	Records - Coordinator Office	1	100	100	
	RA.103	Records - Admin Sect	1	80	80	
	RA.104	Work Areas - Printers / Copiers	1	200	200	
	RA.105	Record Storage- Active	1	200	200	
	RA.106	Files - Records	1	700	700	Storage for 9 years worth of records (for compliance with IAC)
	RA.107	Storage	1	400	400	
	RA.108	Break Room	1	100	100	Shared with Civil
	RA.109	Restrooms	2	100	200	Shared with Civil

Sub-Totals: RA	15	172	2,580
	Spaces	Avg. NSF per Space	Total N.S.F.
		$1.10 =$	2,800
			Total G.S.F.

4/16/2024

The staffing plan diagram is broken down into the following focused position groups. A shift relief factor (SRF) has been applied. The baseline groups-positions-needs are:

Program Space List - Johnson County, IA						Watch Command & Patrol Division	PD
Johnson County Sheriff's Office / BH Therapeutic							
Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks	
PD Watch Command & Patrol Division							
PD.101		Lieutenant - Patrol Operations	3	100	300	Private Office (Watch Commanders: 3 shifts @ 1 per shift)	
PD.102		Patrol Sergeants	6	100	600	Open Office Workstations or Indv. (Watch Commanders: 3 shifts @ 2 per shift) (4	
PD.103		Admin Assistant - Patrol Division	1	75	75	Open Office Workstations	
PD.104		Patrol Officers	1	720	720	Projected & Shared: 36 Patrol Officers; 8 to 12 Shared 6'x30" benching workstations;	
PD.105		Patrol Form Storage / Printer	1	220	220	Space for officers' files, collateral assignments, work equipment / office materials	
PD.106		Juvenile Waiting	1	120	120		
PD.107		Interview Room	1	100	100		
PD.108		Roll Call (Squad) Room	1	1000	1,000	Sized for 40; Movable tables and chairs	
PD.109		Small Equipment Storage / Patrol Issue / Misc. Patrol Operations storage	1	400	400	Adjacent to Roll Call; civil disturbance gear, weapon lockers, shared field related equipment, etc;	
PD.110		Go Bag Storage / Patrol Operations Storage	1	200	200	Lockers adjacent to patrol deputy vehicle parking exit & Patrol; Includes 36 (approx. 2'x4') lockers in an alcove	
PD.111		Storage Room	1	200	200		
Sub-Totals: PD			18	219	3,935		
			Spaces	Avg. NSF per Space	Total N.S.F.		
X Building Gross factor of:			1.25	=	5,000		
						Total G.S.F.	
4/16/2024							

Program Space List - Johnson County, IA						CRIMINAL INVESTIGATION	CI
Johnson County Sheriff's Office / BH Therapeutic							
Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks	
CI Criminal Investigation							
CI.101		Det/Receipt/Admin	1	150	150		
CI.101a		Receipt/Admin (Closet)	1	50	50		
CI.102		Legal Secretary / Admin Assist	1	120	120		
CI.103		Lieutenant - Investigations	1	150	150	Private Office	
CI.104		Criminal Investigation (Detectives)	9	100	900	Private Office (Currently six, plus three future)	
CI.105		Meeting Space - open	1	200	200		
CI.106		Interview Room	3	100	300	Sight and sound separated.	
CI.107		Interview VIP Viewing Room	1	100	100		
CI.107a		Interview Room - Toilet	1	60	60		
CI.108		Soft Interview Room	2	80	160	Sight and sound separated	
CI.109		Family Services Room	1	150	150	Semi-secure	
CI.110		Conference room	1	360	360	Seating for 12 people; sight and sound separated	
CI.111		Polygraph Room	1	100	100	Sound proof	
CI.112		Major Case Room - Multi Agency	1	800	800	Seating for 16-20 people. Secure location, limited access	
CI.113		Storage Room	1	150	150		
CI.114		Task Force	6	75	450	Work Stations	
Sub-Totals: CI			32	131	4,200		
			Spaces	Avg. NSF per Space	Total N.S.F.		
X Building Gross factor of:			1.20	=	5,000		
						Total G.S.F.	
4/16/2024							

Program Space List - Johnson County, IA

K9 Unit

K9

Johnson County Sheriff's Office / BH Therapeutic

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
K9 K9 Unit						
	K.101	Kennel / wash down area	1	80	80	
	K.102	Work Area - Support	1	100	100	
	K.103	Storage Room	1	100	100	

Sub-Totals: K9

3 **93** **280**
 Spaces Avg. NSF per Space Total N.S.F.

X Building Gross factor of: 1.10 = **300**
 Total G.S.F.

4/16/2024

Program Space List - Johnson County, IA

Training & Support

TS

Johnson County Sheriff's Office / BH Therapeutic

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
TS Training & Support						
	TS.101	Locker Room Toilets & Showers	9	100	900	Indv. Separate rooms
	TS.102	Locker Room Amenities - Gen. Circ.	1	500	500	Vest Drying, Circ.
	TS.102a	Women's Locker Room	1	600	600	30% of 94 Locker plus 6 future (2'w x 2'8"d + 3'-6" circ (each))
	TS.102b	Men's Locker Room	1	1400	1,400	70% of 94 Locker plus 6 future (2'w x 2'8"d + 3'-6" circ (each))
	TS.103	Laundry & Storage - Staff	1	200	200	
	TS.104	Combined Fitness & Exercise Room	1	1000	1,000	Weight & Cardio Machines (Open Fitness Configuration)
	TS.104a	Equipment Storage	1	150	150	Tactical Dummies, Mat Storage etc
	TS.105	Defensive Tactics Training Room	1	800	800	
	TS.105a	Tactical Team Equipment Storage (SERT)	1	200	200	Cubby-Style Lockers; Qty: 8
	TS.106	Training Coordinator - Future	1	100	100	
	TS.107	LE Training Room	1	800	800	Seats 40 (combined); A/V considerations; Demountable Partition with Simulation Training
	TS.107a	Simulation Training Room (FATS)	1	800	800	Adjacent to Training Classrooms
	TS.107b	Drone and Sim. Equip. Storage	1	200	200	50 SF for Drone Storage & 150 SF for Sim. Equipment Storage
	TS.108	Kitchenette	1	50	50	One located near Training Room, Another near Lobby / Office Area
	TS.109	Quartermaster - Issue and Storage	1	500	500	Uniform / Belt Storage
	TS.110	Armory- Weapon / Ammo Storage	1	500	500	Secure Room

Sub-Totals: TS

24 **363** **8,700**
 Spaces Avg. NSF per Space Total N.S.F.

X Building Gross factor of: 1.15 = **10,000**
 Total G.S.F.

4/16/2024

Program Space List - Johnson County, IA

HOUSING SUPPORT & JAIL ADMIN

HS

Johnson County Sheriff's Office / BH Therapeutic

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
H		HOUSING				
HS		Housing Support & Jail Admin.				
1	HS.101	Professional Visitation	2	50	100	
	HS.102	Vocational _ Medical Screening	1	200	200	Exam - Evaluation Room
	HS.103	Pod / Floor Control Circulation	1	800	800	
	HS.104	General Storage / Janitor Closet	1	380	380	
	HS.105	Housing Unit Laundry	1	150	150	
	HS.106	Personal Hygiene / Support	1	150	150	
	HS.107	Multi-Purpose Classroom	1	600	600	Small Group - Meeting 8-10 offenders
	HS.108	Exercise Yard _ General Pop	1	500	500	
	HS.109	Exercise Yard - Special Mgmt Population	1	200	200	Where possible, located with 'Housing Units,' see Program Sheets
	HS.110	Therapeutic (Counseling) / Volunteer Offices	1	120	120	
	HS.111	Pod / Floor Control Officer Work Station	1	400	400	Elevated Pod Control - from first level.
	HS.112	Staff Toilet	1	60	60	
	HS.113	Safety Cell	2	70	140	Padded
		Per every 150-Beds	15		3,800	
	HS.113	Jail - Lieutenant	2	150	300	Locate with 'CO' Central Control, see Program Sheet
	HS.114	Jail - Sergeant	1	200	200	Support Office / Admin Space - located within Jail Housing components
	HS.115	Jail - Deputies Office	2	120	240	Locate with 'CO' Central Control, see Program Sheet
	HS.116	Jail - Deputy Report Writing	1	400	400	Locate with 'CO' Central Control, see Program Sheet
	HS.117	Staff Toilet	1	40	40	Locate with 'CO' Central Control, see Program Sheet
	HS.118	Electrical / Security Closet	1	80	80	Locate with 'CO' Central Control, see Program Sheet
		Jail Admin - Subtotal	8		1,260	

Sub-Totals: HS

23	220	5,060
Spaces	Avg. NSF per Space	Total N.S.F.

X Building Gross factor of: 1.10 = **5,600**
Total G.S.F.

4/16/2024

Program Space List - Johnson County, IA

Special Management HOUSING POD

H1

Johnson County Sheriff's Office / BH Therapeutic

Designed for Male or Female Occupancy

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
H1		HOUSING				
HM-A		Special Mgmt - 'MH/BH' Therapeutic Housing				
	H.101	1-person Cells	16	70	1,120	1 bed cell with SS toilet/sink; cell chase oriented to dayroom. Showers are centralized. Natural light required. Glazing in the cell door. Expandable through the
	H.102	1-person Padded Cell	0	70	0	
	H.103	HVAC - Plumbing Cell Chase	8	40	320	Rear Chase Access Design (increase from 15 SF per chase)
	H.104	Dayroom (35 sqft / inmate minimum)	1	720	720	Natural Light through windows required; Provide seating and tables for 64. Provide 2 phones wall mounted (1 ADA compliant) Provide handheld charging station for 12 devices GFIC outlet, sink w/ gooseneck; adjacent water drinking fountain. Separate defined areas with acoustic control, broadcast network for programs.
		Telephone Area				
		Video Visitation				
		Food Service / Beverage Counter				
		TV watching area				
	H.104	Dayroom Cell Tier Walkway	1	560	560	Minimum 4'-6" wide, minimum guardrail height of 48 inches (open grate config)
	H.105	Dayroom Shower /Toilet Area	2	45	90	(2) 1 stall areas, one ADA compliant stall and one shower.
	H.106	Exercise Yard	0	250	0	Shared see Housing Support for SF
		See Housing Support for Prof. Visitation, Education and Program spaces				
1		16-Bed Pod Total:	28		2,810	
1		Additional 16-bed Pods:	28		2,810	

Sub-Totals: H1 - 32 Beds

56	100	5,620
Spaces	Avg. NSF per Space	Total N.S.F.

X Building Gross factor of: 1.35 = **7,500**
Total G.S.F.

Programmed for 32 Beds (25 Beds shown in Concept Design)

4/16/2024

Program Space List - Johnson County, IA

Johnson County Sheriff's Office / BH Therapeutic

GEN POP HOUSING POD

H2

Designed for Male or Female Occupancy

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
H2	HM-A	HOUSING Gen Pop. Housing				
H.201		2-person Cells - Double Bunk	8	92	736	2 bed cell with SS toilet/sink; cell chase oriented to dayroom. Showers are centralized. Natural light required. Glazing in the cell door.
H.202		HVAC - Plumbing Cell Chase	4	40	160	Rear Chase Access Design (increase from 15 SF per chase)
H.203		Dayroom (35 sqft / inmate minimum)	1	560	560	Natural Light through windows required; Provide seating and tables for 20% increase in occupants.
		Telephone Area Video Visitation Food Service / Beverage Counter TV watching area (1)				Provide handheld charging station for 12 devices GFIC outlet, sink w/ gooseneck; adjacent water drinking fountain. Separate defined areas with acoustic control, broadcast network for programs.
H.204		Dayroom Cell Tier Walkway	1	280	280	Minimum 4'-6" wide, minimum guardrail height of 48 inches (open grate config)
H.205		Dayroom Shower Area	2	45	90	(1) 2 stall areas each, one ADA compliant stall in one area.
H.206		Exercise Yard	0	250	0	Shared see Housing Support for SF
		See Housing Support for Prof. Visitation, Education and Program spaces				
		16-Bed Pod Total:	16		1,826	
		Additional 16-bed Pods:	16		1,826	

Sub-Totals: H2 - 32 Beds **32** **114** **3,652**

Spaces Avg. NSF per Space Total N.S.F.

X Building Gross factor of: 1.15 = **4,200**

Total G.S.F.

Programmed for 32 Beds
(28 Beds shown in Concept Design) **4/16/2024**

Program Space List - Johnson County, IA

Johnson County Sheriff's Office / BH Therapeutic

ADMIN. TRANSITIONAL HOUSING POD

H3

Designed for Male or Female Occupancy

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
H3	HA-A	HOUSING Admin. Transitional Housing				
H.301		1-person Cells - expandable	8	92	736	1 bed cell with SS toilet/sink; cell chase oriented to dayroom. Showers are centralized. Natural light required. Glazing in the cell door. Expandable through the
H.302		HVAC - Plumbing Cell Chase	4	40	160	Rear Chase Access Design (increase from 15 SF per chase)
H.303		Dayroom (35 sqft / inmate minimum)	1	560	560	Natural Light through windows required; Provide seating and tables for 20% increase in occupants.
		Telephone Area Video Visitation Food Service / Beverage Counter TV watching area (1)				Provide handheld charging station for 12 devices GFIC outlet, sink w/ gooseneck; adjacent water drinking fountain. Separate defined areas with acoustic control, broadcast network for programs.
H.304		Dayroom Cell Tier Walkway	1	280	280	Minimum 4'-6" wide, minimum guardrail height of 48 inches (open grate config)
H.305		Dayroom Shower Area	2	45	90	(1) 2 stall areas each, one ADA compliant stall in one area.
H.306		Exercise Yard	0	250	0	Shared see Housing Support for SF
		See Housing Support for Prof. Visitation, Education and Program spaces				
1		8 (16) -Bed Pod Total:	16		1,826	
1		8 (16) -Bed Pod Total:	16		1,826	

Sub-Totals: H3 - 16(32) Beds **32** **114** **3,652**

Spaces Avg. NSF per Space Total N.S.F.

X Building Gross factor of: 1.15 = **4,200**

Total G.S.F.

Programmed for 32 Beds
(28 Beds shown in Concept Design) **4/16/2024**

Program Space List - Johnson County, IA

Johnson County Sheriff's Office / BH Therapeutic

SEGREGATION HOUSING POD

H4

Designed for Male or Female Occupancy

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
	H4 / H7 HS-A	HOUSING Segregation Housing - Male or Female				
H.401		1-person Cells	8	70	560	1 bed cell with SS toilet/sink; cell chase oriented to dayroom. Showers are centralized. Natural light required. Glazing and Food-pass in the cell door. Rear Chase Access Design (increase from 15 SF per chase) Natural Light through windows required; Provide seating and tables for 64. Provide 2 phones wall mounted (1 ADA compliant) Provide handheld charging station for 12 devices GFIC outlet, sink w/ gooseneck; adjacent water drinking fountain. Separate defined areas with acoustic control, broadcast network for programs. Minimum 4'-6" wide, minimum guardrail height of 48 inches (open grate config) (1) 1 stall areas, one ADA compliant stall and one shower. Shared see Housing Support for SF
H.402		HVAC - Plumbing Cell Chase	4	40	160	
H.403		Dayroom (35 sqft / inmate minimum)	1	360	360	
		Telephone Area				
		Video Visitation				
		Food Service / Beverage Counter				
		TV watching area				
H.404		Dayroom Cell Tier Walkway	1	280	280	
H.405		Dayroom Shower /Toilet Area	1	45	45	
H.406		Exercise Yard	0	250	0	
		See Housing Support for Prof. Visitation, Education and Program spaces				
		8-Bed Pod Total:	15		1,405	
		1 Additional 8-bed Pods: H4-B	15		1,405	

Sub-Totals: H4 - 16 Beds **30** **94** **2,810**

Spaces Avg. NSF per Space Total N.S.F.

X Building Gross factor of: 1.40 = **3,900**
Total G.S.F.

Programmed for 16 Beds
(15 Beds shown in Concept Design) 4/16/2024

Program Space List - Johnson County, IA

Johnson County Sheriff's Office / BH Therapeutic

GEN POP 'FEMALE' HOUSING POD

H5

Designed for Female Occupancy

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
	H5 HM-A	HOUSING Gen Pop. 'Female' Housing				
H.501		2-person Cells - Double Bunk	8	92	736	2 bed cell with SS toilet/sink; cell chase oriented to dayroom. Showers are centralized. Natural light required. Glazing in the cell door. Rear Chase Access Design (increase from 15 SF per chase) Natural Light through windows required; Provide seating and tables for 20% increase in occupants. Provide handheld charging station for 12 devices GFIC outlet, sink w/ gooseneck; adjacent water drinking fountain. Separate defined areas with acoustic control, broadcast network for programs. Minimum 4'-6" wide, minimum guardrail height of 48 inches (open grate config) (1) 2 stall areas each, one ADA compliant stall in one area. Shared see Housing Support for SF
H.502		HVAC - Plumbing Cell Chase	4	40	160	
H.503		Dayroom (35 sqft / inmate minimum)	1	560	560	
		Telephone Area				
		Video Visitation				
		Food Service / Beverage Counter				
		TV watching area (1)				
H.504		Dayroom Cell Tier Walkway	1	280	280	
H.505		Dayroom Shower Area	2	45	90	
H.506		Exercise Yard	0	250	0	
		See Housing Support for Prof. Visitation, Education and Program spaces				
1		16-Bed Pod Total:	16		1,826	

Sub-Totals: H5 - 16 Beds **16** **114** **1,826**

Spaces Avg. NSF per Space Total N.S.F.

X Building Gross factor of: 1.15 = **2,100**
Total G.S.F.

Programmed for 16 Beds
(16 Beds shown in Concept Design) 4/16/2024

Program Space List - Johnson County, IA

Johnson County Sheriff's Office / BH Therapeutic

GENERAL HOUSING (Dormitory) POD

Designed for Male or Female Occupancy

H6

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
H6		HOUSING				
H6-A		General Housing (Dormitory)				
H.601		4-person Sleeping Areas - Double Bunk	4	180	720	4 bed 'wet' sleeping areas (3/4 Glass Front with Glass Door) . Showers and toilets are centralized. Natural light required. Padded Cell (management cells) Natural Light through windows required; Provide seating and tables for 20% increase in occupants. Provide handheld charging station for 12 devices GFIC outlet, sink w/ gooseneck; adjacent water drinking fountain. Separate defined areas with acoustic control, broadcast network for programs. Minimum 4'-6" wide, minimum guardrail height of 48 inches (open grate config) (2) 1 stall areas each (SHR/TLT.), one ADA compliant stall in one area. Janitor mop sink supply shelf w/ hooks.
H.602		1-person Single Cell	0	70	0	
H.503		Dayroom (35 sqft / inmate minimum)	1	600	600	
		Telephone Area				
		Video Visitation				
		Food Service / Beverage Counter				
		TV watching area (1)				
H.504		Dayroom Cell Tier Walkway	0	280	0	
H.505		Dayroom Shower Area	2	45	90	
H.506		Housing Unit Janitor's Closet	0	40	0	
		See Housing Support for Prof. Visitation, Education and Program spaces				
		20-Bed Pod Total:	7		1,410	
		Additional 20-bed Pods:	0		0	

Sub-Totals: H5 - 20 Beds

7 **201** **1,410**
Spaces **Avg. NSF per Space** **Total N.S.F.**

X Building Gross factor of: 1.35 = **1,900**
Total G.S.F.

Programmed for 20 Beds
 (22 Beds shown in Concept Design) **4/16/2024**

Program Space List - Johnson County, IA

FACILITY INTAKE / RELEASE

IR

Johnson County Sheriff's Office / BH Therapeutic

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
IRCM Intake / Release / Court / Medical						
IR-A Intake / Release						
IR-A Intake / Release						
IR.101		Vehicle Sallyport	1	1,350	1,350	Sized to be able to have 2 bays each being 2 cars deep 30' x' 45'
IR.102		Vehicle Sallyport Storage	1	200	200	
IR.103		S.P.V.	1	120	120	
IR.104		Open Booking	1	500	500	
IR.105		Booking Counter	1	200	200	
IR.106		Dress In / Dress Out	1	120	120	Adjacent to Property Room
IR.107		Property Room	1	600	600	
IR.108		Finger Print / Photo ID	1	50	50	
IR.109		Staff Toilets	1	60	60	
IR.110		Individual Holding Cells	6	80	480	
IR.111		Individual Holding Cell - Padded	2	80	160	
IR.112		Group Holding Cells	3	240	720	
IR.113		Janitor's Closet	1	20	20	
IR.114		OWI Screening - Support	1	100	100	Including Data master (adjacent to VSP with Arresting Officer Work area)
IR.115		OWI Processing	1	240	240	
IR.116		Interview / Deposition	1	100	100	
IR.117		Electronic Monitoring / Storage	1	200	200	Processing (In/Out) & 50SF dedicated storage
JC Jail Court Support						
JC.101		General Courtroom / Video Court	1	900	900	
JC.102		SoundLock / Security Vestibule	1	80	80	
JC.103		Visiting Judge's Chamber	1	250	250	
JC.104		Chamber Toilet	1	50	50	
JC.105		Attorney Conference / Work area	2	200	400	
JC.106		Reception / Waiting Area	1	200	200	
JC.107		Legal / Conference	2	120	240	
M Medical Services						
M.101		Medical Exam / Small Procedures	1	300	300	Office and exam in 1 room, medical records can be co-located in room
M.102		Pharmacy / Dispensing Area	1	80	80	Separate room off exam room
M.103		Storage	1	300	300	
M.104		Soiled Linen	1	100	100	
M.105		Medical Dayroom #1	1	200	200	
M.106		Isolation / Medical Cells (Unit 1 (M or F))	3	120	360	
M.107		Medical Dayroom #2	1	200	200	
M.108		Isolation / Medical Cells (Unit 2 (M or F))	3	120	360	
M.109		Waste Disposal	1	60	60	

Sub-Totals: IRM **47** **198** **9,300**

Spaces Avg. NSF per Space Total N.S.F.

X Building Gross factor of: 1.45 = 13,500

Total G.S.F. Programmed for 6 Medical Beds
(6 Medical Beds shown in Concept Design) **4/16/2024**

Program Space List - Johnson County, IA

Building Support - Mech. / Elect.

BS

Johnson County Sheriff's Office / BH Therapeutic

Staff Post	Program No.	Space Description	Number of Spaces	Areas of Each (NSF)	Total (NSF)	Remarks
BME Building Support - Mechanical Electrical						
	BME.101	Mechanical Room _LEC	1	700	700	
	BME.102	Mechanical Room _ Jail	1	900	900	
	BME.103	Mechanical Mezzanine _ Jail	1	1000	1,000	
	BME.104	Electrical Room	1	500	500	
	BME.105	IT / Security Equip Room	1	300	300	
	BME.106	Custodial Closet	4	50	200	
	BME.107	General Building Storage	1	1400	1,400	
	BME.108	Facility Maintenance Office	1	200	200	

Sub-Totals: BME	11	473	5,200
	Spaces	Avg. NSF per Space	Total N.S.F.
X Building Gross factor of:	1.05	=	5,400
			Total G.S.F.

4/16/2024

K. FACILITY AND SITE CONSIDERATIONS

i. Introduction

This justice facility's overall mission is to provide an appropriate judicial environment and to ensure the safety of the community, staff and offenders. This section of the study has been developed to define the site requirements necessary to build a justice facility. The technical requirements identified in this section will need to be reviewed and adjusted once a specific site is chosen. This information has been developed as a guideline.

There are multiple access and/or egress points into a justice site facility plan, including administration/visitation/lobby and a vehicular sally port for intake/booking, transport of offenders, food services, laundry and supply delivery trucks.

ii. Overview Requirements

The size of the site will influence design. Site needs are a function of the size of the ground-level area of the building, including law enforcement and storage building functions and other areas needed for expansion, parking for both public and secure staff areas, building access and roads, outdoor staging activities, landscaping buffers and support elements. In remote or non-urban sites when site selection is under consideration, non-building elements may comprise 75 percent (75%) of the site area required.

Parking requirements are an important planning element. The Johnson County Sheriff's Office has considered the number of facility staff, professional visitors for inmates and other public visitor needs when determining the amount of space allocated for parking. In a remote site configuration, secured staff parking for patrol and personal staff vehicles should support the total staff at the facility to transition through shift changes. Including a percentage of flex parking stalls, the secured employee parking area should accommodate between 100 to 144 parking stalls. Public parking areas should be designed to accommodate professional visitors and visitors participating in training events.

The public parking area should be designed to accommodate between 50 to 70 stalls. A small, controlled area outside of the secondary jail entrance for professional visitors (visiting judges, attorneys, outside agency law enforcement, counselors, etc.) has been planned for 10 to 12 stalls.

Given the potential size of a new jail and allowing space for potential future expansion, a site between 15 and 20 acres would accommodate flexibility when addressing the long-term growth and having an efficient facility.

iii. Specific Property Considerations

To accommodate for future expansion of the concept, a 15 to 20 acre rectangular site should be selected whenever possible. The site must be accessible to law enforcement agencies and the public 365-days a year/24-hours a day/7-days a week. Therefore, we recommend locating a property adjacent to the county highway, or city-maintained street. Since public accessibility is required, locating the facility near public transportation is critical. The property should not be immediately adjacent to or in a flood plain.

iv. Technical Site Development Requirements

a. Site Preparation

Site preparation work shall consist of clearing and grubbing, topsoil stripping and stockpiling and tree removal.

b. Earthwork

Earthwork will include excavation for building structure, foundations and utilities; backfilling; grade sub-soil and reform to rough grades, contours and level required and rough grading for roads, walks, parking areas, landscaped areas, etc. There should be 6-inch topsoil cover in all unpaved areas within the compound.

v. Site Utilities

a. Water, Sewer and Storm Water Service

Water will be supplied from the city/county distribution system. A 6-inch water main shall serve the facility for domestic cold water and fire suppression requirements. After the primary entry, a 4-inch waterline should loop the facility to provide adequate distribution and maintain pressure. Domestic hot water will be generated and stored by gas-fired hot water heaters.

Sanitary waste should be discharged into a city sanitary sewer system. A minimum 6-inch sewer line should extend to the building's perimeter to collect all areas. Provision should be made for future expansion, including capped end connection to serve all future expansion areas. Before entering the city sanitary system, all sewage must be processed through a sewage grinder.

Storm water surface runoff will be discharged into the county storm sewer system.

The entire facility will be protected with a fire extinguishing system. This will include sprinklers, standpipes and/or other active systems. A fire pump may be required to supply the sprinkler and standpipe systems.

b. Primary Electric Service

The local utility company should serve the site. The electric utility will provide, install and maintain the primary overhead or underground duct bank from utility distribution system to the site. A single point electric meter shall be utilized for the entire system.

All electric utility system grounding will be installed in accordance with the local utility company and local codes and ordinances.

c. Emergency System

Parallel emergency standby generators shall be provided as the supplementary power system for all emergency lights, fire fixtures and designated equipment for emergency use. The generators shall be able to be run in parallel operation. The emergency transfer scheme shall be done through transfer switching operation. Consideration should be given to utility peak load curtailment and/or cogeneration.

vi. Site Improvements

a. Entry Road, Parking, Perimeter Security Drive and Walkways

Road, parking and walkways will need the following:

- final preparation of sub-grade.
- concrete walks shall typically be 4,000 psi concrete, 6 inches thick with medium broom finish.
- concrete paving at service drive: 4,000 psi, 6 inches thick with over 8 inches compacted granular fill.
- asphaltic general-purpose paving shall typically be 1-1/2 inches thick asphalt over an asphaltic base.

Construction shall be in accordance with the State of Iowa Standard Specifications for Highway Construction.

b. Other Parking Considerations

In developing parking estimates for this facility, there are two additional important considerations:

i. Staff Shift Changes

Since facilities operate 24 hours a day, seven days a week, the total staff is never at the facility at the same time. However, there tend to be brief periods when parking needs are more than normal periods. At shift change, for example, the jail staff on duty are parked at the facility when their replacements arrive and need to park. As a result, at least two cars must be accommodated for the single staff position at shift change. Once shift change ends (45-60 minutes), many spaces again become available.

ii. Security

Lighting of all lots should be provided, and the possibility of CCTV monitoring of staff parking lots should be considered.