



WEBSTER COUNTY JUSTICE CENTER PART 1 NEEDS ASSESSMENT



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planning
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management

Needs Assessment Study
for the
WEBSTER COUNTY JUSTICE CENTER
Red Cloud, Nebraska

November 1, 2017

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

This Needs Assessment Study has been undertaken to establish the needs of the Webster County Jail, Sheriff's Office and Courts (referred to as "Justice Center" in this document) now and into the future. It utilizes historical inmate population data and County records as well as interviews with local officials to project future facility needs. The overall goals of this Needs Assessment Study are:

- Define the historical County Jail population
- Evaluate the existing County Jail facility, Sheriff's Offices and the Court spaces.
- Establish a profile of typical inmates
- Forecast the number of beds required to meet future incarceration needs
- Develop a Program to identify current and future space needs
- Analyze Jail staffing needs and the impact on annual operating costs
- Develop a project budget range, based upon the recommended space Program
- With County input, arrive at an acceptable recommended number of inmate beds
- Convey to County taxpayers the liabilities and expenses incurred by continuing to operate the current facilities.

Webster County has experienced an extended decline in population over several decades, which is typical of a majority of Nebraska and Midwest counties. As of the 2010 U.S. Census, Webster County had a population of 3,812 inhabitants. The County population has been decreasing since 1910, and the rate of decrease is projected to continue over the next 30 years. By 2050, the County population is projected to be around 2,760 inhabitants, a decrease of nearly 28%. While the decreasing population will undoubtedly bring changes to the County, the County government will also be challenged to meet the needs of the remaining citizens. One of these challenges will continue to be the Jail, therefore the County should seek to increase operational efficiency and to significantly reduce operational costs as the county jail inmate population grows.

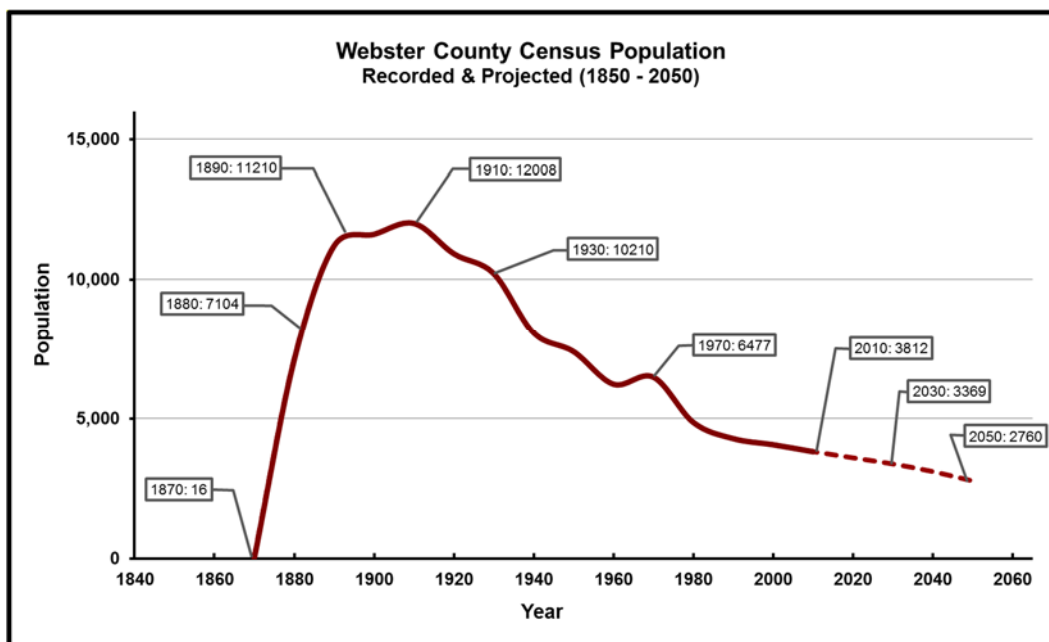


Figure 1 (Source: US Census Bureau)

Overall, Webster County appears to have a well-functioning criminal justice system. While the County maintains a relatively low rate of violent crime, the majority of arrestable offenses are alcohol or drug related (DUI's alone account for 14.7% of all arrests). The following data presents a general picture of various categories of inmates being held in the Webster County jail from 2007 to 2016:

- 34.5% of holds were 21-29 year olds, yet the 20-29 age group represents only 7.5% of the County population.
- 88.3% of holds were male, although the number of female holds has been increasing and therefore creates a classification challenge, because they need to be sight and sound separated from male prisoners.
- 69% of admissions were held 7 days or less.
- Males serve longer sentences than females, on average; 43.9% of females were held one day or less compared to 31.6% of males, while 11.9% of males were held more than 30 days compared with only 4.3% of females.
- 47.9% of admissions were charged with, or convicted of, misdemeanors or ordinance violations from 2007 to 2012.

With construction completed in 1889, the Webster County Jail is the oldest operational county jail in the State of Nebraska. It is located next to the County Courthouse on the Northeast corner of the courthouse site. The Sheriff's Office is located at the front of the facility, while the jail occupies the two levels at the back of the facility. In operation for 91 years before Nebraska Jail Standards (NJS) was established (in 1980), the existing Jail facility is non-compliant with nearly every section of chapter 15 of these Standards (which were enacted to "lessen the potential for successful litigation by inmates against local officials"). While the Sheriff's and Jail staff are highly dedicated and actively work to overcome the deteriorated and outdated Sheriff's Office and Jail facility, these very real liabilities put the Webster County Jail at risk of closure by NJS. The current Jail's antiquated design and condition create a serious risk to staff, inmates and the general public, with the potential for inmate suicide and resultant litigation a sizeable risk to the County.

In addition to risk factors, the current facility has inadequate space for operating the jail and Sheriff's Office in a safe and efficient manner. The Sheriff's Office lacks adequate space in the following areas, or is missing these spaces entirely: office, interview, booking, secured sally port, conference, K-9, kitchen, pantry, laundry, workout, training, storage, evidence storage, public lobby, restrooms, and locker rooms, with very little security or efficiency in the undersized spaces.

The Jail lacks the ability to properly classify (to separate) inmates, as required by NJS. Typical classifications include Male/Female Minimum Security, Male/Female Medium Security, Male/Female Maximum Security, Administrative Segregation and Special Needs. Lack of the ability to classify is the primary reason for transporting and boarding inmates out-of-county. As a result, the current jail poses sizeable risk to staff and inmates, due to the potential for housing dangerous inmates with minimum security types. A modern jail facility is designed to permit these classifications as well as provide efficient operation in a secure environment.

In order to forecast the number of beds Webster County will need to provide in the future, two methods of forecasting are used: the *Linear Regression* and *Incarceration Rate* methods of projection. These methods evaluate two separate sets of historical county inmate data to arrive at two independent inmate bed forecasts. While both methods forecast an increase in the number of beds necessary for

the jail to serve Webster County through 2047 (30 years), they differ slightly in degree. The Linear Regression method projects that the jail will need 10 beds to serve the County by 2047, while the Incarceration Rate method projects 12 beds will be needed. The median between these two methods forecasts that Webster County will need 11 beds in 30 years for Webster County inmates (*Figure 2*).

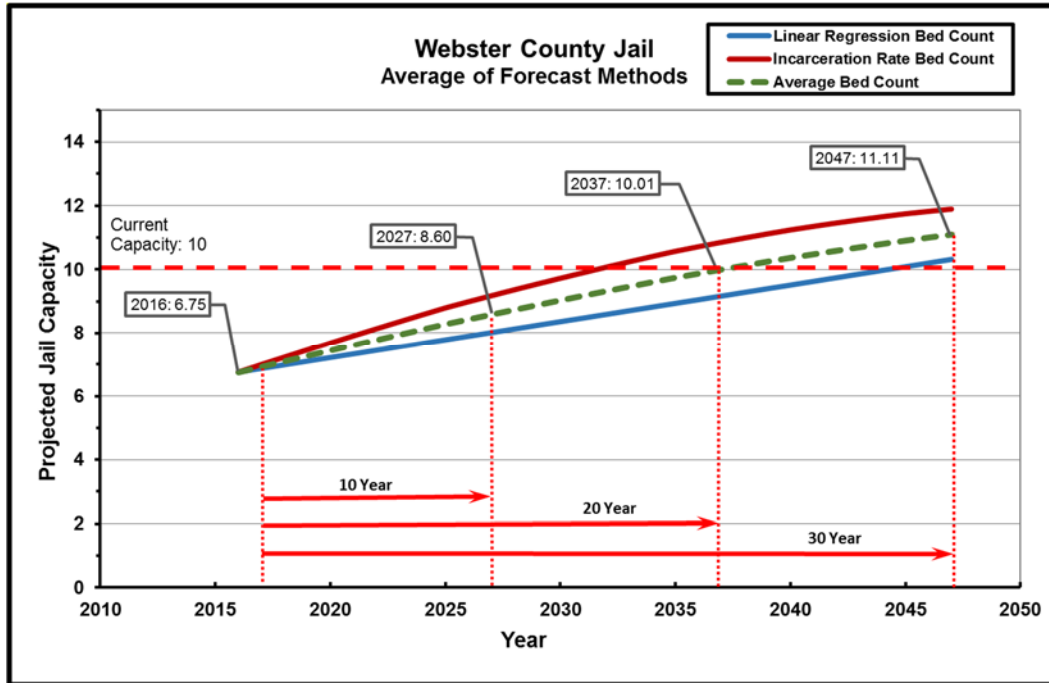


Figure 2 (Source: Webster County Sheriff's Office, Prochaska & Associates)

There has been a concern and desire voiced by State and County officials that a new Webster County Jail facility should consider a more regional approach to sizing, in order to fill a void within the region that is lacking in adequate jail beds. While the Webster County forecast above already includes a base level of inmates from Nuckolls and Franklin Counties, the goal of a Regional facility option is to explore the overflow inmate potential from Adams County Jail, which currently transports inmates to Clay and Kearney counties. These three counties would potentially become the basis for a regionally sized Webster County Jail, due to their proximity to Webster County. This potential Regional Jail forecast is highlighted in *Figure 3*.

Webster County Jail - Bed Forecast							
County vs. Regional Bed Forecast Data, Years 2017-2047							
Year	Webster County Projected ADP (Average Daily Population)	Webster County Average Bed Needs (Peak Factor of 1.73)	Webster Co. Bed Needs <small>Includes capacity for 80% 'Rule of Thumb': (Jail safety reduced & transportation resumes at 80% of maximum capacity)</small>	Potential Adams County Male Bed Forecast - 80.8% of Webster ADP 2010-2016 Average, 1.45 Peak Factor: common per jail size	Potential Adams Co. Female Bed Forecast - 46.0% of Webster ADP 2007-2016 Average, 1.45 Peak Factor: common per jail size	Regional Bed Needs <small>Webster County + Adams Co. Male + Adams Co. Female</small>	Regional Facility Max. Bed Needs <small>Includes capacity for 80% 'Rule of Thumb': (Jail safety reduced & transportation resumes at 80% of maximum capacity)</small>
2016	3.90*			4.57	2.60		
2017	4.00	6.93	8.66	4.69	2.67	14.29	17.87
2022	4.50	7.79	9.74	5.27	3.00	16.07	20.08
2027	4.97	8.60	10.75	5.82	3.31	17.73	22.17
2032	5.39	9.33	11.67	6.32	3.60	19.25	24.06
2037	5.78	10.01	12.51	6.78	3.86	20.64	25.80
2042	6.12	10.60	13.25	7.17	4.08	21.86	27.33
2047	6.42	11.11	13.88	7.52	4.28	22.90	28.63

Figure 3 (Source: Webster County Sheriff's Office, Nebraska Crime Commission Statistical Analysis Center, and Prochaska & Associates)

As of August 16th, 2017, the American Civil Liberty Union (ACLU) filed a lawsuit against the State of Nebraska for the overcrowding and deterioration of conditions at Nebraska state correctional facilities. As a result of the suit, it is anticipated that the State of Nebraska may ‘push back’ inmates into local county jails, increasing county jail inmate populations across the State of Nebraska.

In consideration of the ACLU suit and the concern for potential Regional jail beds, two facility options are presented as follows:

- For a **Regional Facility** to provide beds for inmates from Webster, Nuckolls, Franklin and Adams Counties, the forecasted target is a **20 Bed Facility**, to stay within staffing efficiency ratios.
- For a **County Facility** to provide beds for inmates currently from Webster, Nuckolls, and Franklin Counties, the forecasted target is a **16 Bed Facility**.

Both options would allow the County to grow into this space over 30 years while significantly reducing the need to transport and board inmates out-of-county. Regardless of the option selected by the County, it is recommended that the facility be designed for future expansion, should the County see the need in the future.

The size and cost of a new Justice Center serving the needs of Webster County would vary, based upon the option selected by the County.

- A **Regional Facility** would contain an estimated 22,529 square feet. A detailed Program for a 20-bed Justice Center is included later in this document. It is anticipated that a new, free-standing building, which includes the spaces designated in the Program, **would have a project budget between \$7.52 and \$8.93 million**, plus any site acquisition and utility development costs, if necessary.
- A **County Facility** would contain an estimated 22,124 square feet. A detailed program for a facility with a 16-bed Justice Center is included in Section VIII. It is anticipated that a new, free-standing building, which includes the spaces designated in the Program, **would have a project budget between \$7.35 and \$8.74 million**, plus any site acquisition and utility development costs, if necessary.

While there is an obvious difference in size and cost between a Regional and County facility, both can be operated safely and efficiently with the same number of staff. Further discussion of these two options and their associated staffing can be found later in this document.

During the *Phase 1 Needs Assessment* of the Jail and Sheriff’s Office, the Webster County Board requested that the existing 1923 Courthouse also be evaluated, with specific attention to the Courts and Court support spaces which, due to the age of the building, fail to meet the accessibility requirements of the Americans with Disabilities Act (ADA) as well as most modern building and life safety codes. Most importantly, the Court rooms fail to provide the kind of safety and security measures necessary in modern society for the public, Court judges and staff, as well as for defendants. An assessment of the Courthouse, Jail and Sheriff’s Office facilities is detailed later in this document.

This study serves to identify the *needs* of the Webster County Jail and identify an anticipated basic response. It should serve as the foundation as the County proceeds with *Phase 2 Preliminary Concept*

Planning, which generates a detailed identification and comparison of more options as part of the Nebraska Jail Standards process. *Part 2* will evaluate these Jail options, along with associated Jail support spaces, Law Enforcement Offices and the Dispatch/Communications Center. Finally, *Phase 2* will develop options for replacement of the Courts and Court support spaces.

The goal of *Phase 2 Preliminary Concept Planning* is to develop options for a new Justice Center facility that will be functional and cost effective to operate, compliant with all applicable codes and NJS, and ultimately will be supported by the taxpayers of Webster County.

INTRODUCTION

A. Background and Historical Context

The current Webster County Jail is located on the same block and adjacent to the County Courthouse building, and was constructed between 1887 and 1889. As such, it is the oldest operating County jail facility in the State of Nebraska. The two-story wood-framed building houses the Sheriff's offices and a two-room Jail wing. A single-story lean-to addition was constructed south of the Jail wing in more recent times. Because of its age, the Jail is functionally deficient and presents numerous safety concerns for both prisoners and staff. The existing Jail fails to comply with almost every section of the facility requirements of Nebraska Jail Standards (NJS) and also is non-compliant with most other modern building and life safety fire codes. Sheriff Schmitz has communicated these issues and liability concerns to the County Board of Commissioners.

In early 2017, the Board of Commissioners started the process for resolving these issues by hiring Prochaska & Associates to conduct a *Needs Assessment Study* on the facility. A *Needs Assessment Study* is one of the first steps in the Nebraska Jail Standards process, and is intended to assist a County in understanding their jail needs now and into the future. This *Phase 1 Needs Assessment Study* is followed closely by *Phase 2 Preliminary Concept Planning*, which identifies and ranks potential solutions to the established needs.

Prochaska & Associates has worked closely with Sheriff Schmitz and his staff, jail staff, and Dan Evans of the Nebraska Crime Commission/Nebraska Jail Standards (NJS), to gather the information used in the formulation of these recommendations to Webster County.

B. Study Purpose and Goals

The principle purpose for this study is the County's desire to determine jail capacity required for the incarceration of adult pre-trial and sentenced prisoners into the future. This study was brought about by several factors:

1. A growing inmate population, with the inability to classify inmates due to the antiquated jail design.
2. Liabilities incurred from the design and condition of the existing jail, ranging from non-compliance with the Americans with Disabilities Act (ADA), the NFPA Life Safety Fire Code, and the requirements of Nebraska Jail Standards (NJS).

In order to establish the needs of the Webster County Justice Center now and into the future, this Needs Assessment study utilizes historical inmate population data and County records as well as interviews with local law enforcement officials to project future facility needs. Upon analysis of this data, a program of space needs was developed to serve the County into the future, as well as a concurrent budget range if the County were to construct new Jail, Sheriff's Office and Court facilities. More specific budgets will be developed during *Phase 2 Preliminary Concept Planning* once.

At the conclusion of this study, the County will have the information necessary to make an informed decision about future detention facility needs.

The overall goals of the Needs Assessment Study are:

- Define the historical County Jail population
- Evaluate the current County Jail facility, law enforcement resources and Courtroom needs
- Establish a profile of typical inmates
- Forecast the number of beds required to meet future incarceration needs
- With County input, arrive at an acceptable recommended number of inmate beds
- Develop a Program of current and future space needs
- Estimate future staffing needs and the impact on staffing costs
- Develop a Project Budget range based upon the recommended space program

At the conclusion of the Needs Assessment Study process, the Webster County will have the information necessary to make an informed decision about future facility needs, and will be prepared to move forward with development of planning options as part of *Phase 2*.

WEBSTER COUNTY PROFILE AND POPULATION CHARACTERISTICS

A. Location

Webster County, located in south central Nebraska, has an area of 575 square miles. The County is bordered by Adams County to the north, Franklin County to the west, Nuckolls County to the east and to the south, Jewell and Smith Counties in Kansas (*Figure 4*). The county is primarily arable land with the most notable geographical feature being the Republican River, which traverses the County. The County seat is Red Cloud (population 1,020 - 2010 census). Other incorporated cities and villages include Blue Hill (936), Bladen (237), Guide Rock (225), Cowles (30), Inavale (NA).

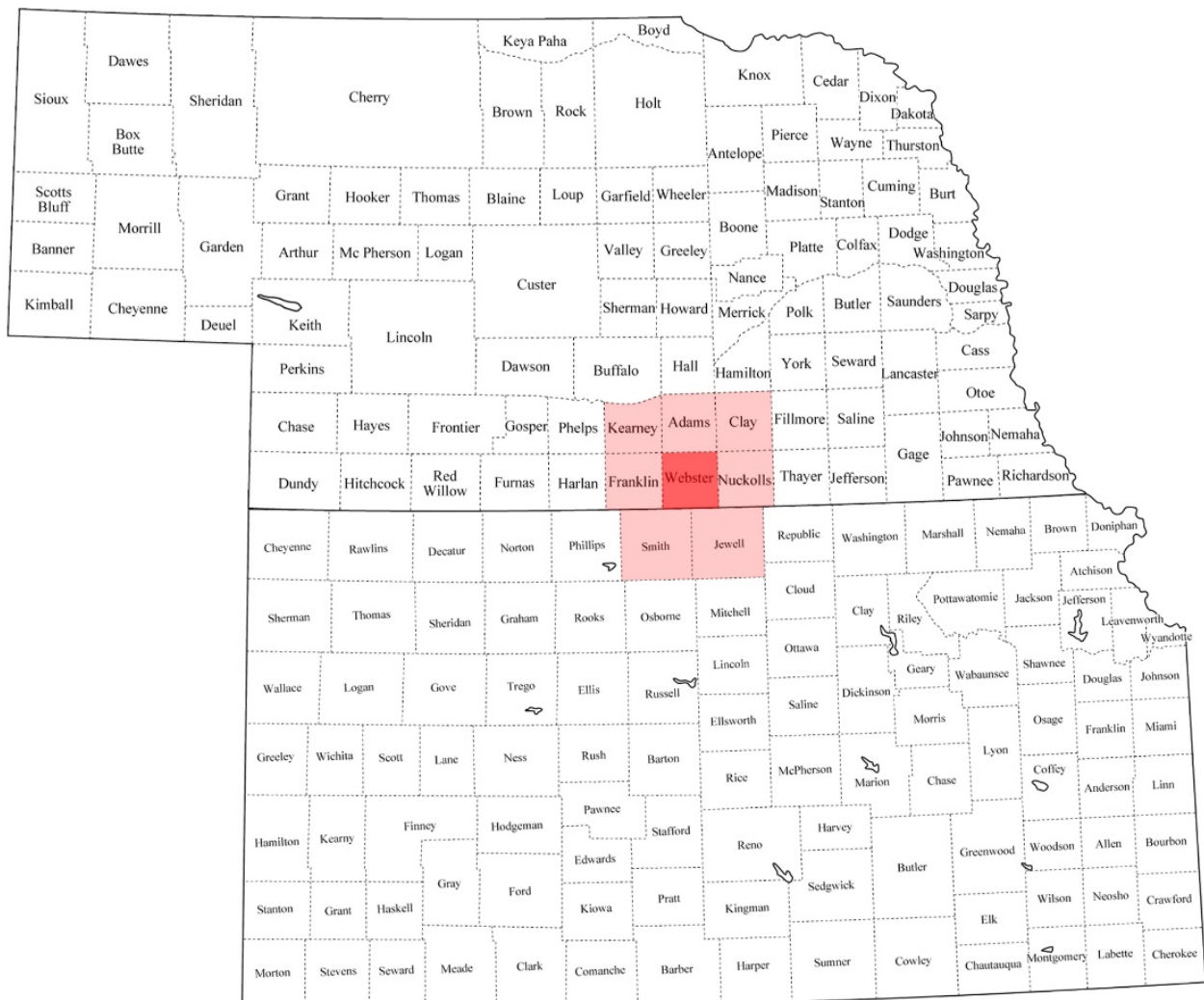


Figure 4

B. Population Profile

As of the 2010 U.S. Census, the Webster County population was 3,812 inhabitants. As with most rural Midwest counties, Webster County has experienced decreasing population counts since the 1910 Census, when it peaked at just over 12,008 residents (*Figure 5*).

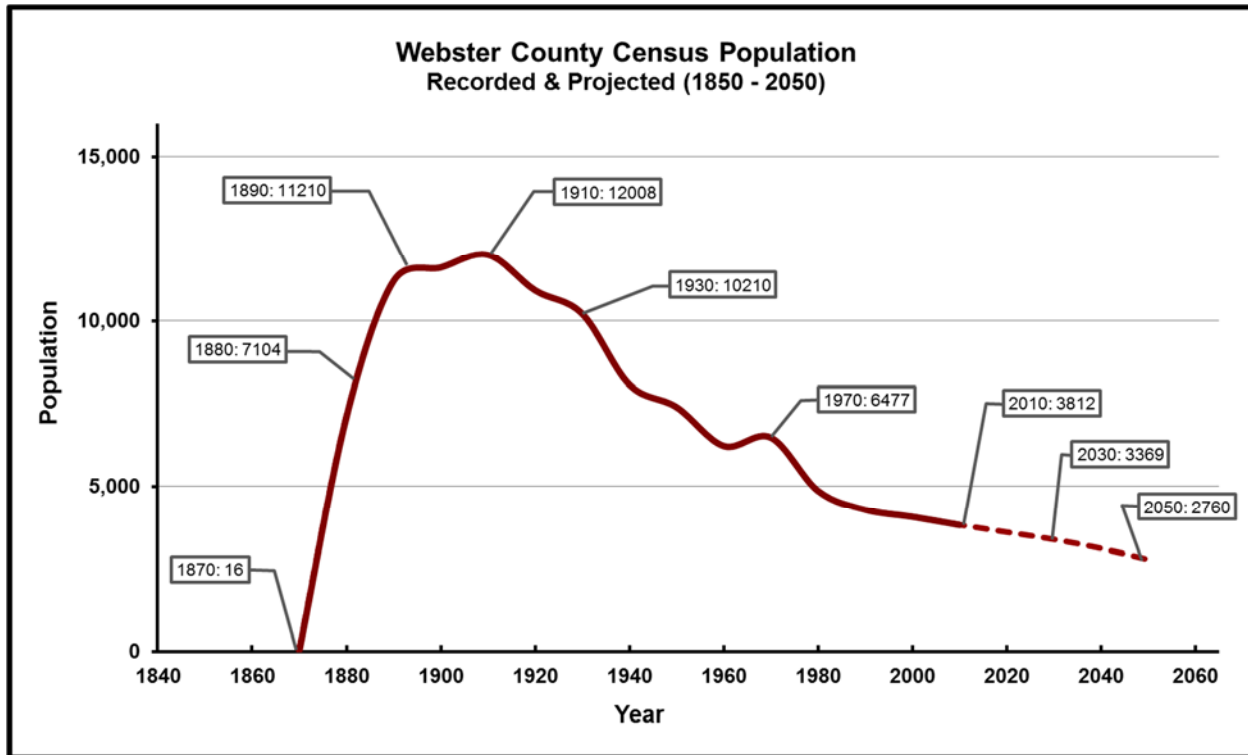


Figure 5 (Source: US Census Bureau)

The Webster County population is projected to continually decrease to 2,760 inhabitants by 2050 (Figure 6). In contrast, Nebraska's population is projected to increase during this same period with the most growth happening in and around Metropolitan, Primary and First Class Cities.

Webster Co. & Nebraska Population Projection (2010-2050)

Year	Webster Co.		Nebraska	
	Total	% Change	Total	% Change
2010	3,812	-	1,826,341	-
2015	3,700	-2.9%	1,885,189	3.2%
2020	3,588	-3.0%	1,943,452	3.1%
2025	3,479	-3.1%	1,999,466	2.9%
2030	3,369	-3.1%	2,053,788	2.7%
2035	3,233	-4.1%	2,108,903	2.7%
2040	3,096	-4.2%	2,164,420	2.6%
2045	2,928	-5.4%	2,218,089	2.5%
2050	2,760	-5.7%	2,270,977	2.4%

Figure 6 (Source: U.S. Census Bureau & University of Nebraska - Omaha)

The County is composed primarily of white individuals, although this demographic has experienced the highest decrease during the past decade (from 98.8% down to 97.5%). Over the same period, the percentage of Hispanic or Latino population has risen to 3.5% (from 0.5%) relative to the total Webster County population (Figure 7).

**Webster County Race and Ethnicity
(2000 & 2010 Census)**

	2000		2010	
	Number	Percent	Number	Percent
RACE				
White	3,984	98.1%	3,754	96.0%
Black or African American	6	0.1%	18	0.5%
American Indian and Alaska Native	11	0.1%	8	0.2%
Asian	19	0.5%	11	0.3%
Hawaiian or Other Pacific Islander	3	0.1%	10	0.3%
Other	9	0.2%	48	1.3%
Total Population	4,061	100%	3,812	100%
ETHNICITY				
Hispanic or Latino	22	0.5%	133	3.5%

Figure 7 (Source: U.S. Census Bureau)

The median age of Webster County residents is 46.2 years, which is 24% greater than the U.S. median age of 37.2 years. However, this higher median age reflects the aging of U.S. “baby boomers” (those born after World War II). This group also rises as a percentage of the total population in rural communities due to outmigration of younger generations to urban centers (Figure 8).

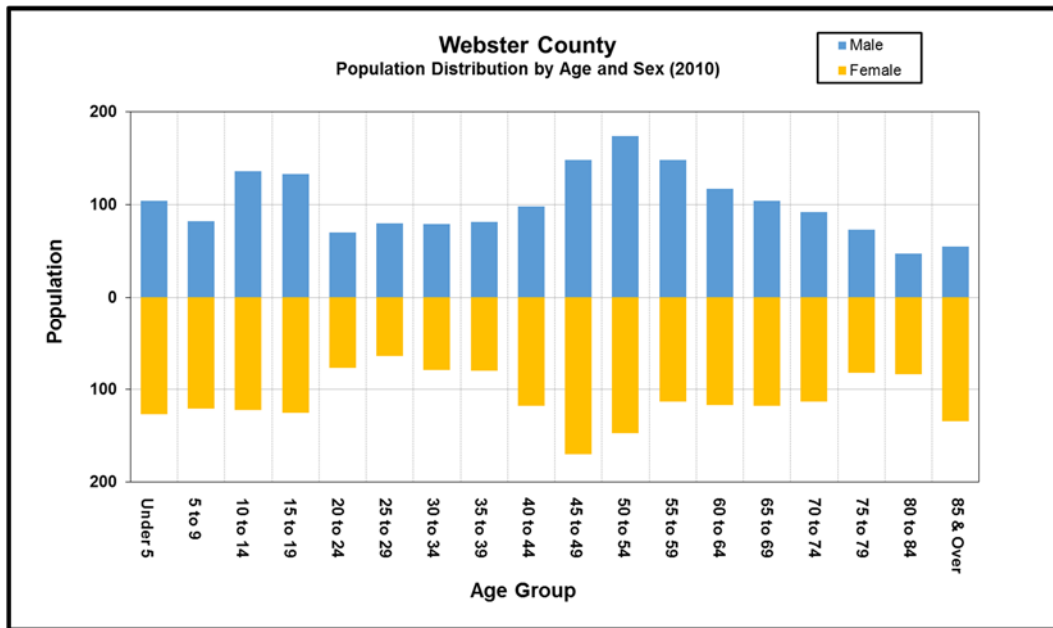


Figure 8 (Source: U.S. Census Bureau)

C. Government

Webster County is a Nebraska commissioner county (as opposed to a township county), and is thus governed by a Board of Commissioners comprised of five representatives from within the county. The five members of the Board are elected to four-year terms. The Board is the legal representative and guardian for the County and acts for and on behalf of the County. In Webster County, the Board of Commissioners meets every 1st and 3rd Tuesday of every month. In addition to the Commissioners, the voters of the County elect a Sheriff, Assessor, Attorney, Clerk, Surveyor, and Treasurer.

Webster County Municipalities

Municipality	Incorporation	Population
Red Cloud	City	1020
Blue Hill	City	936
Bladen	Village	237
Guide Rock	Village	225
Cowles	Village	30
Inavale	Census-Designated Place	N/A

Figure 9 (Source: U.S. Census Bureau, 2010 Census)

Over 60% of the county's population live within a municipality, 51.3% in Cities and 12.9% in Villages (with 35.8%, or 1,365 people, living in the surrounding rural area). Nebraska First Class and Second Class Cities generally operate with a Mayor-Council form of government, whereas villages are governed by a Board of Trustees, unless special provisions are made for alternate forms of government.

D. Economy

Economically, Webster County is one of the boundary counties along the southern border shared by Nebraska and Kansas. Webster County reported \$19,183,151 in net taxable sales for 2016, with 45.4% from Blue Hill, 44.7% from Red Cloud, 5.9% Bladen, and 4.0% Guide Rock. Highways 281 and 136 provide the main transportation link to surrounding counties, to Adams County and to Interstate 80.

Local Economy: Webster & Surrounding Counties

County	Population (2010 Census)	Collected Sales Tax (Year 2015)
Adams	31,364	\$21,272,964
Franklin	3,225	\$612,057
Nuckolls	4,500	\$2,153,945
Smith (Kansas)	3,853	\$2,262,353
Jewell (Kansas)	3,077	\$1,095,767
Webster	3,812	\$1,081,964

Figure 10 (Source: U.S. Census Bureau & Nebraska Department of Revenue)

Webster County's economy is consistent with other Nebraska counties of similar population rank. In 2010, there were 1,689 people employed within the County, 73% of who lived within the County.

Local Economy County Population Size Similar to Webster County			
County (NE)	State Rank by Population	Population (2010 Census)	Net Taxable Sales 2016
Chase	60	3,966	\$45,708,731
Kimball	61	3,821	\$23,791,686
Webster	62	3,812	\$19,183,151
Nance	63	3,735	\$17,280,867
Harlan	64	3,423	\$14,518,506

Figure 11 (Source: U.S. Census Bureau & Nebraska Department of Revenue)

The County has a median household income of \$40,256. This is \$10,741 lower than the Nebraska average of \$50,997. As of year 2016, the unemployment rate for Webster County was 3.4%, with 1,690 individuals in the employed labor force and 60 individuals who are unemployed. The Nebraska state average is 3.3%, with 988,253 individuals employed and 33,911 unemployed.

Webster County Property Tax Rates

	Average Rate (%)	Taxable Value
2016	1.3631	\$ 1,072,915,341
2015	1.3631	\$ 1,096,969,967
2014	1.5547	\$ 859,477,014
2013	1.7516	\$ 675,368,665
2012	1.8176	\$ 575,597,457
2011	1.8436	\$ 545,493,609
2010	1.8443	\$ 497,153,105

Figure 12 (Source: Nebraska Department of Economic Development)

The number of farms in Webster County has decreased from 730 in 1964 to 423 in 2012. Total cropland reached a peak of 194,601 acres in 1992 and in 2012 was at a low of 177,770 acres. Housing units have increased, with 1,632 units available in 2009, 1,817 in 2010 and 1,916 in 2011. The available housing market has leveled-off, remaining near the 2011 figure of 1,916 with 2015 having a recorded value of 1,909 units available.

Webster County
Businesses by Number of Employees (2010)

Num. of Employees	Establishments
1 to 4	47
5 to 9	20
10 to 19	14
20 to 49	6
50 to 99	1
100 to 249	0
250 to 499	0
500 to 999	0
1000 or more	0
Total Establishments: 88	

Figure 13 (Source: Nebraska Department of Economic Development)

The largest industries in the County are Retail Trade at 22 employers with 127 employees, Wholesale Trade with 11 employers and 70 employees, and Other Services with 10 employers and 409 employees. Other large industries in Webster County include Construction, Building Materials, Healthcare, and food services.

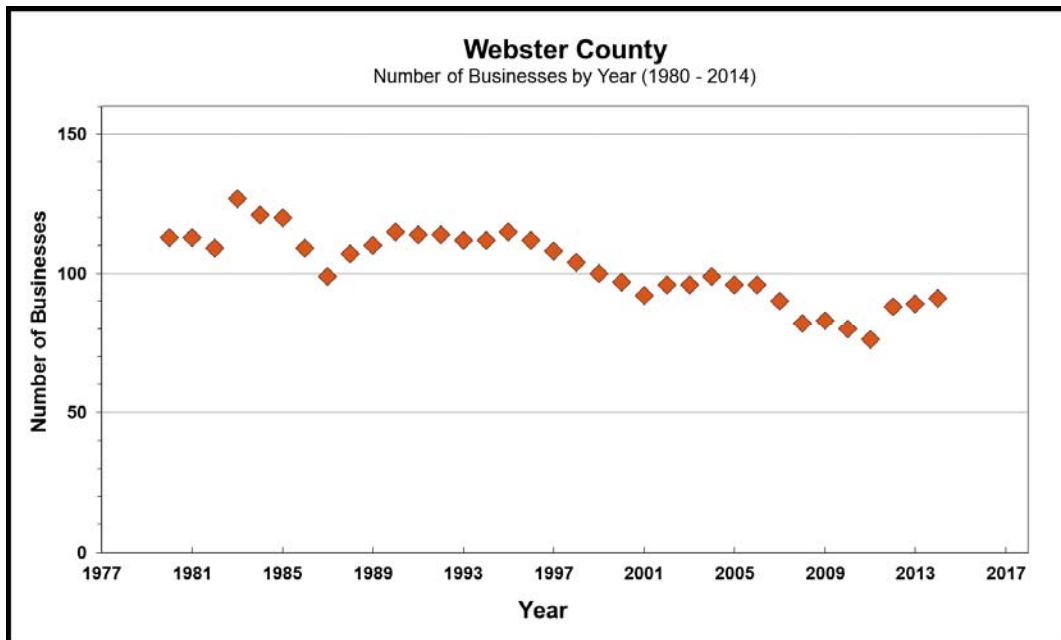


Figure 14 (Source: Nebraska Department of Economic Development)

The cost of living index in Webster County is 74.7 and 25 points less than the national average (100). This represents that the cost of goods and services within the county is typically less than elsewhere in the country.

E. Health and Human Services

Webster County is a member of the South Heartland Health District, which also includes Adams, Clay, and Nuckolls Counties. Webster County Community Hospital, a general medical and surgical hospital, is located in Red Cloud. The facility has thirteen beds and provides services such as a 24 hour emergency room, cardiac rehabilitation, patient education, and other services.

The County has 4 fire departments located in the communities of Red Cloud (city services), Blue Hill (volunteer), Bladen (volunteer.), and Guide Rock (volunteer).

Mental health and substance abuse services in Nebraska are provided through six behavioral health regions; Webster County is in Region 3, which has regional offices located in Kearney and Burwell.

F. Education

Webster County is in Nebraska Educational Service Unit Number 9. The County has two public school districts comprised of five individual school facilities. Of this list there are three schools for elementary students and two junior/senior high schools. There are options for post-high school education within an hour drive or less.

Individuals with a bachelor's degree or higher constitute approximately 19.8% of the County, which is under the state average 29.3%. High school graduates comprise 90.7% of Webster County's population, which is identical to the Nebraska percentage (90.7%). The degree of educational attainment within

the County likely relates to the number of employment opportunities available for recent college and high school graduates.

G. Summary

Webster County is in many ways a typical, rural Nebraska county, having lost a significant portion of its population over the decades. As a result of these population losses, county governments like Webster County's will be challenged to maintain current levels of service. To help meet these declining population challenges, especially with regards to the jail, the County should seek to improve operational and facility efficiencies. The status of County services, and public policy as a whole, has a complex but integral association with the demands placed upon the jail.

CRIMINAL JUSTICE SYSTEM PROFILE

A. Law Enforcement

Unlike state or Federal prisons, county jails act as the entry point for all inmates entering the criminal justice system. In Webster County, the county jail serves as a jail, sheriff's office and dispatch. The Webster County Sheriff's Office is the sole law enforcement agency dedicated to operate within the County. Though the Webster County Jail primarily houses Webster County inmates, the jail commonly houses inmates arrested by the State Patrol, Adams County, Nuckolls County and Franklin County. High risk inmates are typically transported to out-of-county jails for boarding when necessary.

Current Resources

Webster County Sheriff's Office: The Webster County Sheriff's Office is responsible for all law enforcement in the County (575 square miles) as well as for charge and custody of the jail. The current staff consists of the Sheriff, five patrol officers, and six jail staff.

Nebraska State Patrol: The headquarters for Troop C of the Nebraska State Patrol is located in Grand Island, and covers the seventeen counties of south-central Nebraska (Adams, Buffalo, Clay, Franklin, Garfield, Greeley, Hall, Hamilton, Howard, Kearney, Merrick, Nuckolls, Polk, Sherman, Valley, Webster and York). State Patrol officers are primarily focused on the reduction of traffic crashes and fatalities, but they respond to a variety of calls for service and provide assistance to local law enforcement when necessary. Criminal Investigators are called upon to investigate thefts, computer crimes, pharmaceutical diversion and suspicious deaths.

Arrest Patterns

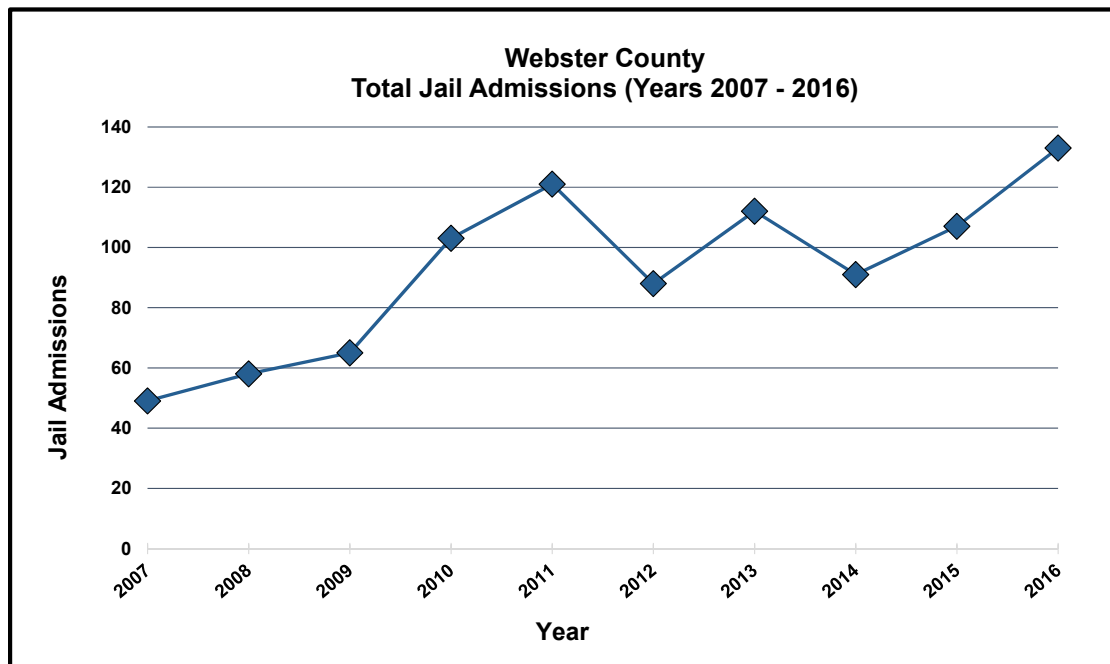


Figure 15 (Source: Nebraska Crime Commission Statistical Analysis Center)

The following arrest table indicates that arrests over the past ten years have been consistent in Webster County. Misdemeanor offenses represent a significant source of arrests, as this general offence type has remained a leading reason for arrest over the last 6 recorded years. A comparison of the arrest patterns in the County from 2007 to 2016 reveals several items of note:

- Misdemeanor offenses have remained the most occurring charge type, accounting for the highest ranking charge 6 out of 6 years between 2007 and 2012.
- Between 2007 and 2017, the total number of arrests have increased, with a sizeable ‘step-up’ between 2010 and 2011.

Webster County 2007 Charges by Frequency (Total Charges = 56)			Webster County 2012 Charges by Frequency (Total Charges = 97)		
Rank	Offense	Total	Rank	Offense	Total
1	Misdemeanor	28	1	Misdemeanor	55
2	Unclassified	15	2	Felony	22
3	Felony	9	3	Traffic/DWI	7
4	Traffic/DWI	3	4	Unclassified	6
5	Violation	1	5	Violation	5
			6	Infraction	2

Figure 16 (Source: Nebraska Crime Commission Statistical Analysis Center)

The preceding arrest records are in-line with comments gathered from Jail and Sheriff’s Office staff. Particularly, a recurring comment from Jail staff was the increasing problems associated with classifying prisoners, specifically those who are recently arrested on drugs or alcohol.

B. Court System

Prosecution and Defense Counsel

The County Attorney is elected to prosecute or defend all civil or criminal lawsuits in which the state or County is a party or interested, on behalf of the state or County. It is also the County Attorney’s responsibility to advise the County Board or County officers when requested. The Webster County Attorney is Sara J. Bockstadter. When the County Board or County officers request opinions or advice concerning duties of the offices or matters in which the state or county may have an interest, the County Attorney provides legal opinions or advice.

10th District Court of Nebraska – Webster County

The 10th District Court of Nebraska is comprised of six counties: Adams, Franklin, Harlan, Kearney, Phelps, and Webster Counties. The District Court hears all felony criminal cases, equity cases, domestic relations cases, and civil cases involving more than \$15,000. It also functions as appellate court in deciding appeals from county courts and various administrative agencies. The Clerk of the District Court, besides being the administrative officer of the court, is responsible scanning, filing, processing court documents and maintaining the court records for criminal and civil cases.

The District Court utilizes three judges which travel between County Courthouses. For 2016, the District had a need for 2.91 judges based on a total weighted caseload. Webster County is served by Judge Daniel E. Bryan Jr. who also serves Nemaha, Johnson, and Pawnee Counties. Judge Terri S. Harder serves

Kearney County while Judge Stephen R. Illingworth serves Adams, Franklin, Harlan, Kearney, Phelps and Webster Counties. Deb Klingenberg serves as the Clerk of the District Court for Webster County. The Clerk of the District Court performs the administrative duties associated with the District Court.

Webster County – 10th District Court Case Filings

Year	Misdemeanor (Traffic)	Misdemeanor (Non-Traffic)	Felony	Civil	Totals
2016	306	102	27	166	601
2015	260	96	16	176	548
2014	230	97	16	170	513
2013	343	86	19	197	645
2012	498	161	13	192	864

Figure 17 (Source: The Nebraska Supreme Court Administrative Office of Courts/Probation)

Under the current system utilized to record information, the District Court saw 601 cases filed across the region, which indicates a return to a larger number filings found between years 2012 and 2013. Just under 5% of the court filings within the district come from Webster County. Since 2012, Webster County has averaged 635 total filings per year. The number of filings per year has varied quite a bit within Webster County, with a low for the period of 230 cases in 2014 and a high of 864 cases in 2012.

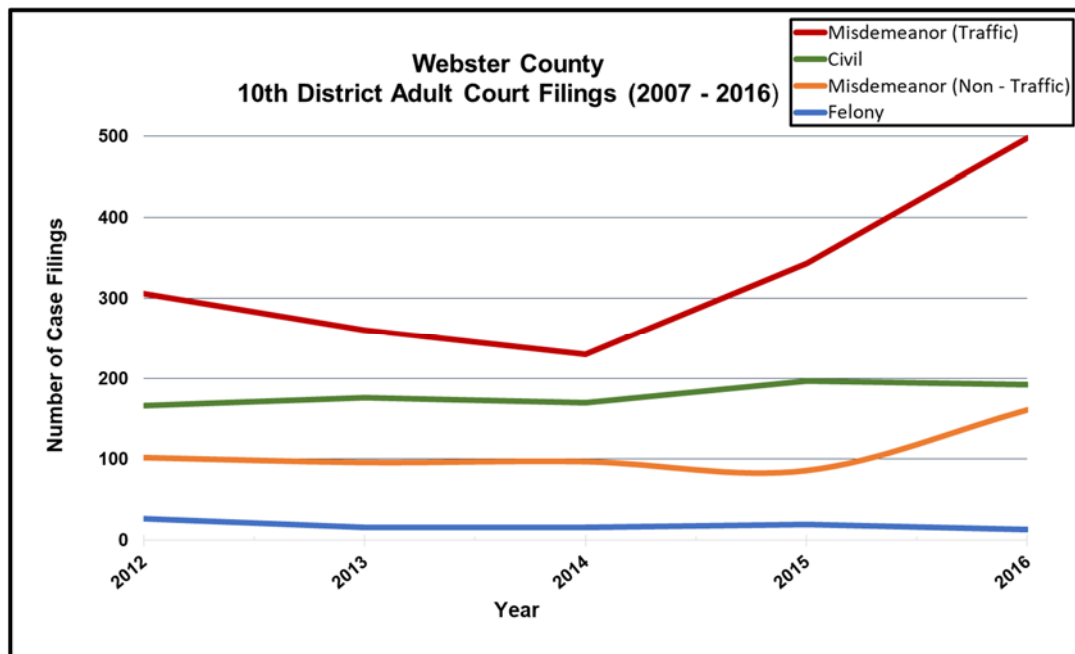


Figure 18 (Source: The Nebraska Supreme Court Administrative Office of Courts/Probation)

C. Summary

Overall, Webster County appears to have a well-functioning criminal justice system. The County maintains a relatively low rate of violent crime, and the majority of offenses are misdemeanor or drug-related crimes. It is likely that any major change in types of charges filed will be due to changes in public policy rather than a continued decline of County population.

INMATE PROFILE & ANALYSIS OF JAIL POPULATION

A. County Statistics of Detention Use

Historical Admissions Data

The Webster County Jail is the only detention facility located in the county, and is utilized by the County Sheriff’s Office and the State Patrol to house arrestees and inmates. At times, other counties or municipalities contract the jail for detention services, but this is limited due to the condition of the jail and the inability to properly classify inmates. The following data represents use of the jail by all parties, those within the County and those from other areas.

2016 Admissions by Arresting Agency

Arresting Agency	Admissions
Webster Co. S.O.	60
Nuckolls Co. S.O. (& Superior P.D.)	45
Nebraska State Patrol	12
Adams Co. S.O. (& Hastings P.D.)	8
Franklin Co S.O.	3
Total	128

Figure 19 (Source: Nebraska Crime Commission Statistical Analysis Center)

In 2012, the Webster County Sheriff’s Office was responsible for over 45.1% of all admissions to the jail, a slight decrease from 46.9% in 2007. Admissions from surrounding counties and municipalities account for the remainder of the admissions.

The following admissions data details the time of admissions, on average, between 2007 and 2016.

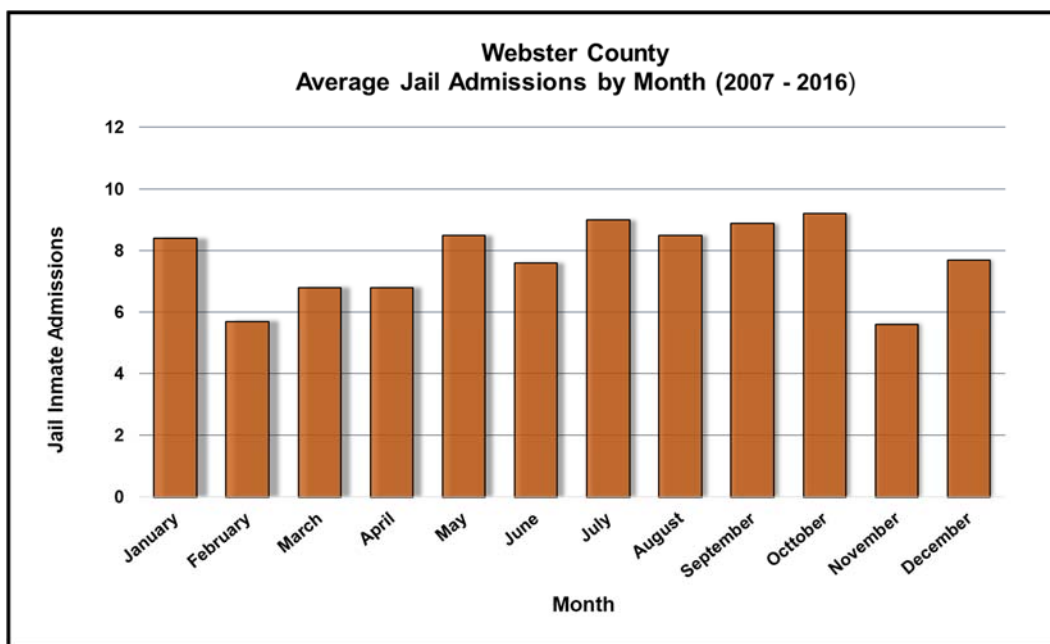


Figure 20 (Source: Nebraska Crime Commission Statistical Analysis Center)

Figure 20 shows average admissions to the Webster County Jail per month between 2007 and 2016. The County admits an average of 3.6 inmates per month, with a standard deviation of ± 8 prisoners, revealing a high degree of volatility, especially with the consistent transport of female inmates. For a 10-bed facility, this is not a particularly high number of prisoners being processed through the system considering that a majority of them will stay in jail for only a short time. Additionally, long-term prisoners are only admitted once, even though they may spend many months in jail. Overall, the jail should be prepared to handle spikes in booking activity because smaller jails generally have greater volatility in terms of numbers of inmates. It also appears that the number of arrests decrease during the months of November and February, which is not common (Figure 20). The figure below indicates that Tuesday and Friday are particularly active days for Webster County Jail admissions.

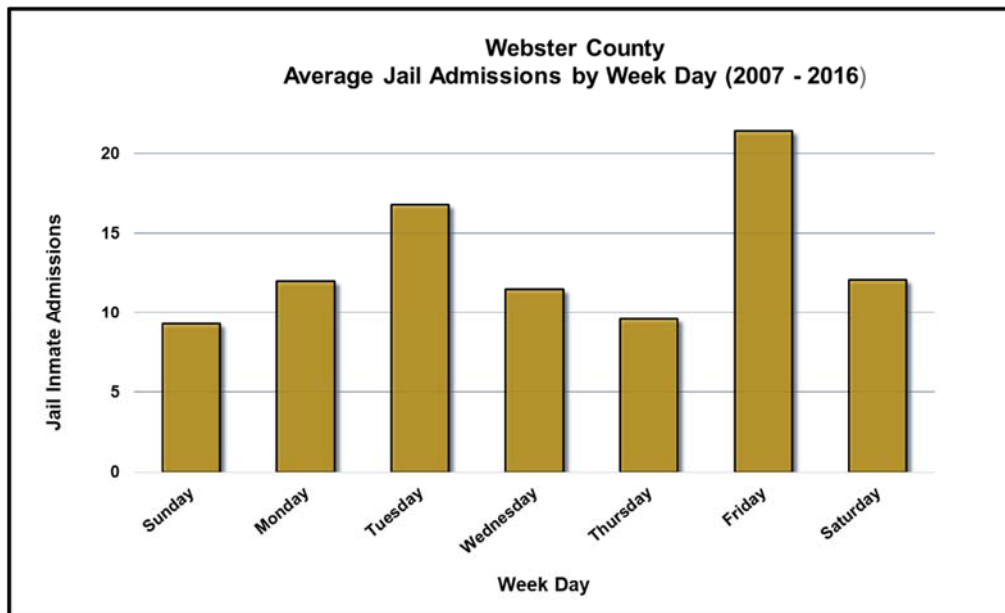


Figure 21 (Source: Nebraska Crime Commission Statistical Analysis Center)

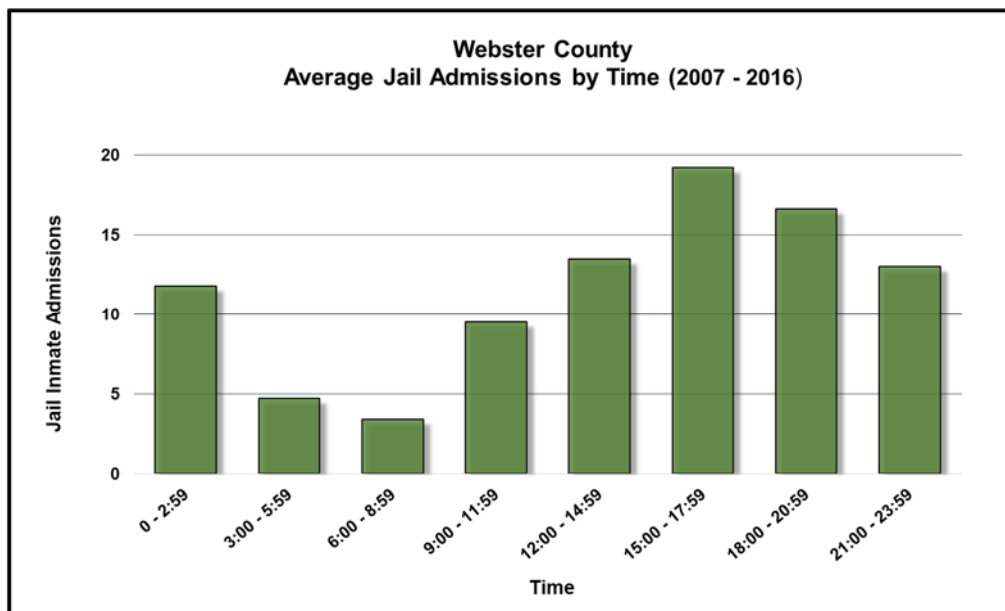


Figure 22 (Source: Nebraska Crime Commission Statistical Analysis Center)

Figure 22 depicts the average number of admissions per year sorted by time of admission. Admissions appear to be cyclical, with lows occurring between 6am to 9am and peaks between 3pm to 6pm daily.

The following admissions chart enumerates the characteristics of prisoners, on average, between 2007 and 2016. The figure below shows the number of holds by age group, as well as the average of these values (Figure 23, average in Red). It is evident that 21 to 24 year olds account for significantly more arrests than other age ranges. Nationally, this age range is considered the highest risk group for detention and makes up a significant percentage of the jail population.

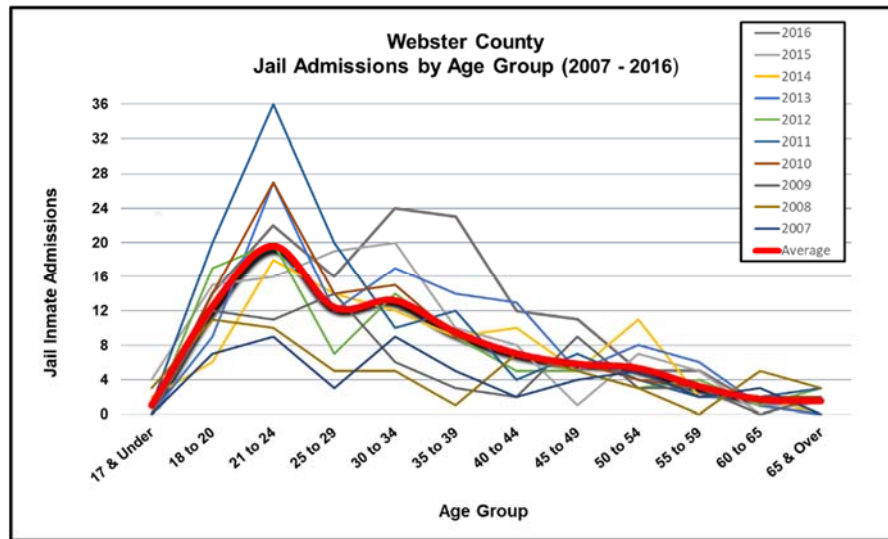


Figure 23 (Source: Nebraska Crime Commission Statistical Analysis Center)

Misdemeanor charges make up the majority of arrests, with crimes such as petty theft, public intoxication, simple assault, disorderly conduct, possession of cannabis and discharging a firearm within city limits, comprising this charge type (Figure 24). These arrests typically represent a part of the jail population that has a short average length of stay unless additional charges are present. The high rate of turnover from these holds contributes to several classification issues that a jail must be prepared for, including detoxification, interaction with long-term jail population, and emotional volatility.

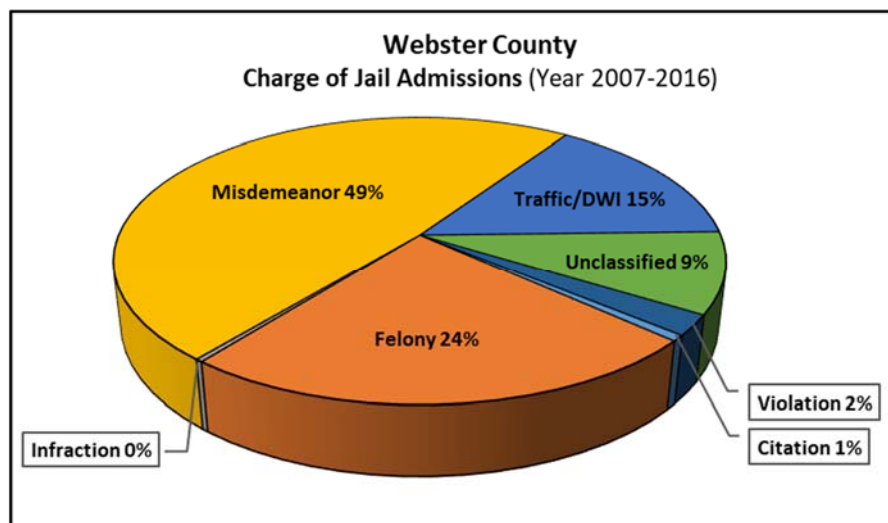


Figure 24 (Source: Nebraska Crime Commission Statistical Analysis Center)

Historical Average Daily Population

Average Daily Population (ADP) is defined as the average number of inmates in the County jail each day of the year. This value is established through records of daily population and is considered a standard method of measuring jail populations over time. As a figure, it does not tolerably depict the population variations within a day, but can be utilized to understand population trends across weeks, months and years. For example, it is evident from the following graph that the Webster County Jail has an ADP that varies quite a bit year to year.

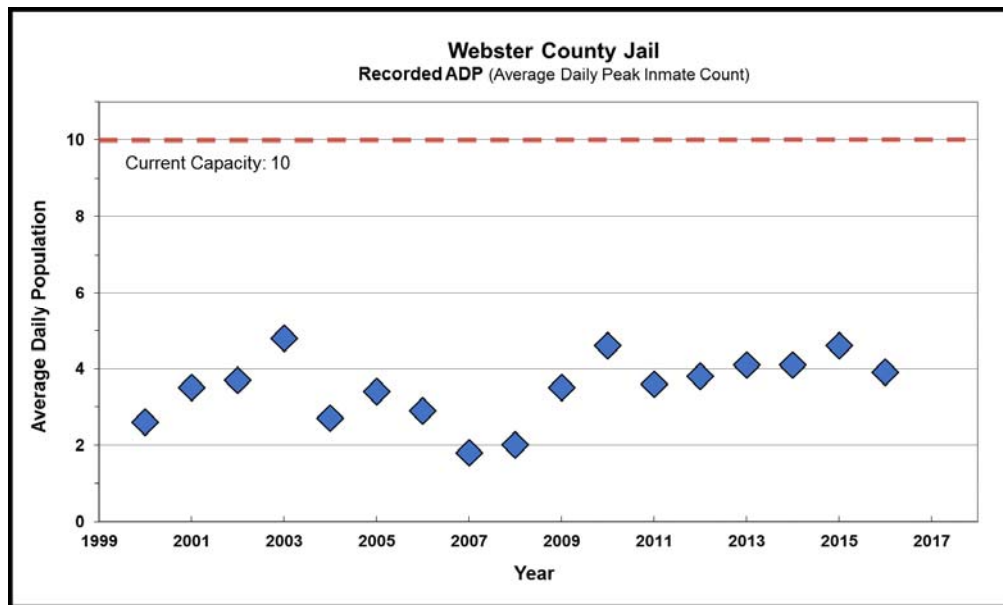


Figure 25 (Source: Webster County Sherriff's Office)

Since county jails have the ability to house inmates for other agencies, when projecting future jail needs it is important to filter the number of prisoners the county is required to hold from those that the county chooses to hold. Webster County currently houses inmates from throughout the region, but consistently houses inmates from Nuckolls and Franklin Counties. Inmates from these counties are included in the 'Webster County' inmate forecast as these counties are expected to reliably transport and board inmates with Webster County into the foreseeable future.

Historical Peak Population Counts

The following table (Figure 26) details the peak population counts for 2015 and 2016 (the previous 24 months of jail data). The highest daily population for the previous 24 months occurred in the Fall months of October 2015 and early December 2016, with single-day high counts of 8 inmates housed in the jail for both years.

This presents a significant liability to the County, since the Jail cannot function efficiently during this period and creates a safety risk to both staff and inmates. A jail is considered functionally full when the total population reaches approximately 80% of the rated capacity, because the ability to classify inmates is reduced beyond this point (80% Rule of Thumb). Peak averages are critical in forecasting bed space to guarantee adequate bed capacity when the jail experiences peak periods. When jails operate near (or over) their design capacity they are at increased risk for incidents; both staff and inmates are under increased pressures. Jails can operate in these conditions for short periods, but operating in this manner for an extended period of time increases operating risk with potential for litigation against the county.

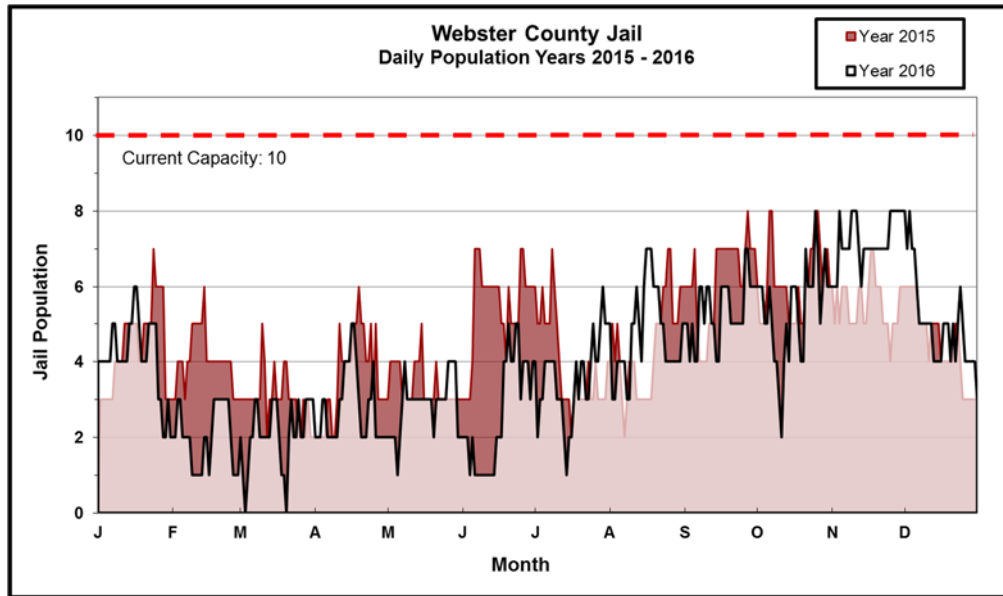


Figure 26 (Source: Webster County Jail Records, Prochaska & Associates)

In addition to the “80% Rule of Thumb” and the peak periods of time where Webster County operates with 8 inmates, there is an information gap that is generated within the Nebraska Crime Commission’s inmate recording systems. It does not account for inmates from Nuckolls and Franklin Counties that are turned-away during times of limited jail space or times of peak demand. The potential increase to ADP during these peak times is suspected to be between 1 to 2 inmates, but there is no accurate method to account for inmates that are refused by Webster County during peak inmate demand.

Length of Stay & Means of Release

The following table depicts the length of stay in total and by inmate gender.

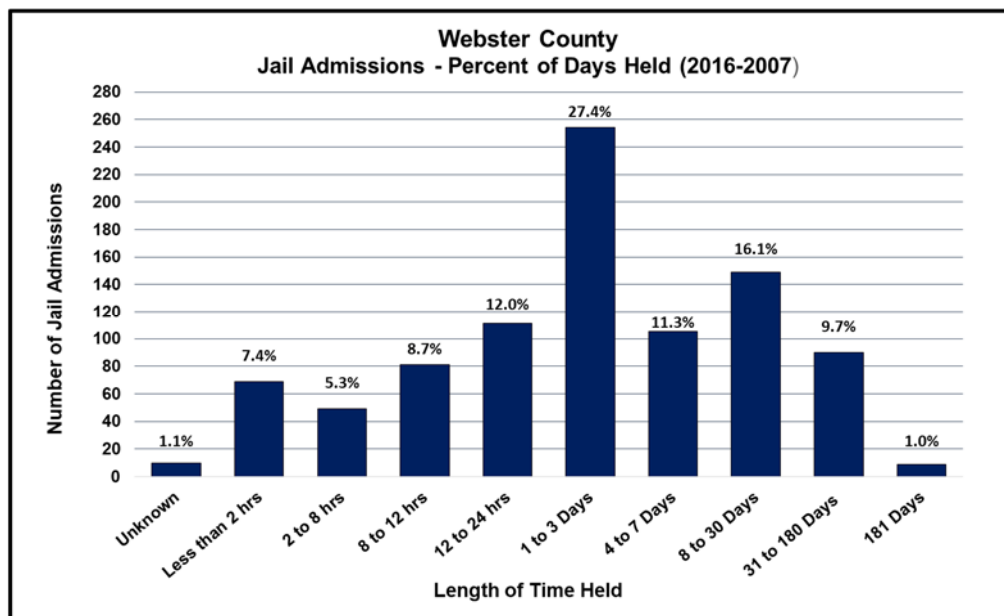


Figure 27 (Source: Nebraska Crime Commission Statistical Analysis Center, Prochaska & Associates)

The previous table (*Figure 27*) shows the average number of inmates sorted by their length of stay in the Webster County Jail between 2007 and 2016. A significant number of inmates (60.8%) are held 3 days or less, which can be explained by the typical charges previously discussed. This is generally consistent with national estimates which suggest that more than 75% of inmates are held less than 72 hours. However, it is also estimated that these inmates represent fewer than 5% of the total beds used. This is a volatile population which contributes to the variation in peak population data.

Additionally, while the data shows that a significant percentage of inmates are held less than four days, jails throughout the State of Nebraska should be concerned with the August 2017 ACLU “overcrowding” lawsuit against the State of Nebraska, which could reduce the number inmates in State custody and place the burden on county jail facilities. The result may be an increase in housing inmates in county jails due to the likely change in sentencing from 180 days to just under 1-year. This could mean higher numbers of inmates in Webster County and greater demand from nearby counties to house their overflow inmates with Webster County.

The following table (*Figure 28*) details the total number of inmate admissions between 2007 and 2016 sorted by number of hours held for males, females and unknown/not recorded.

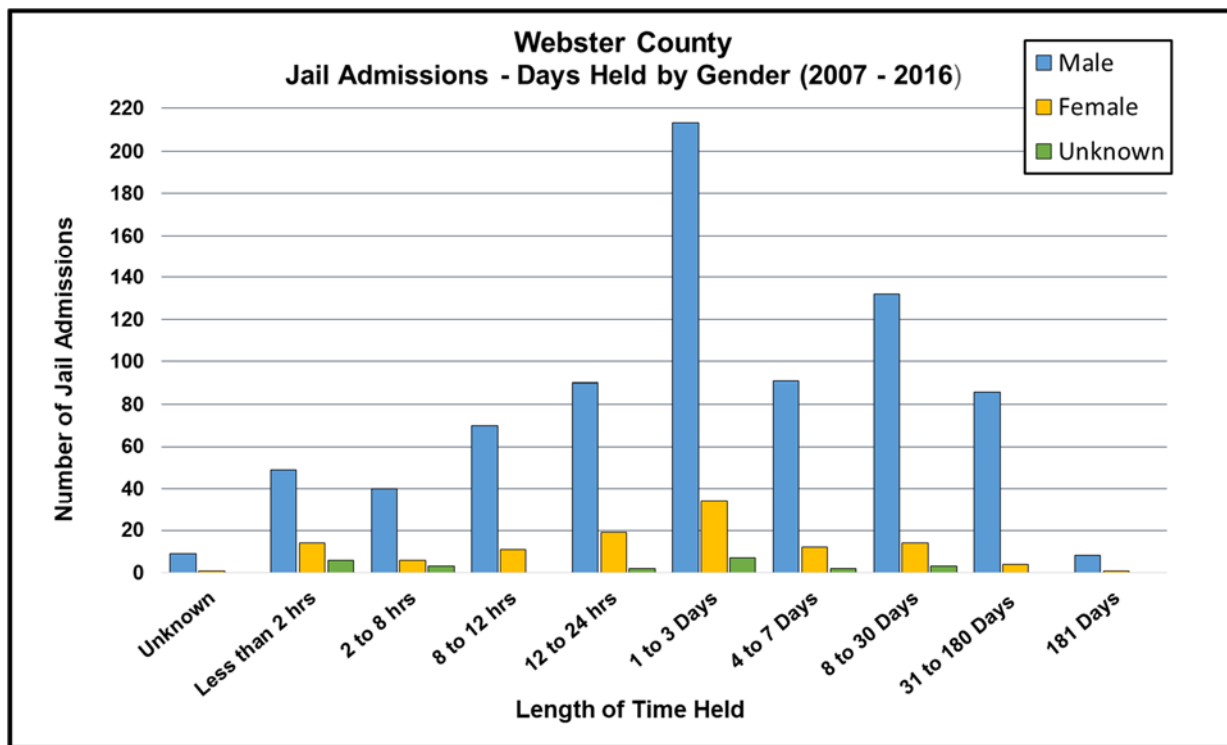


Figure 28 (Source: Nebraska Crime Commission Statistical Analysis Center)

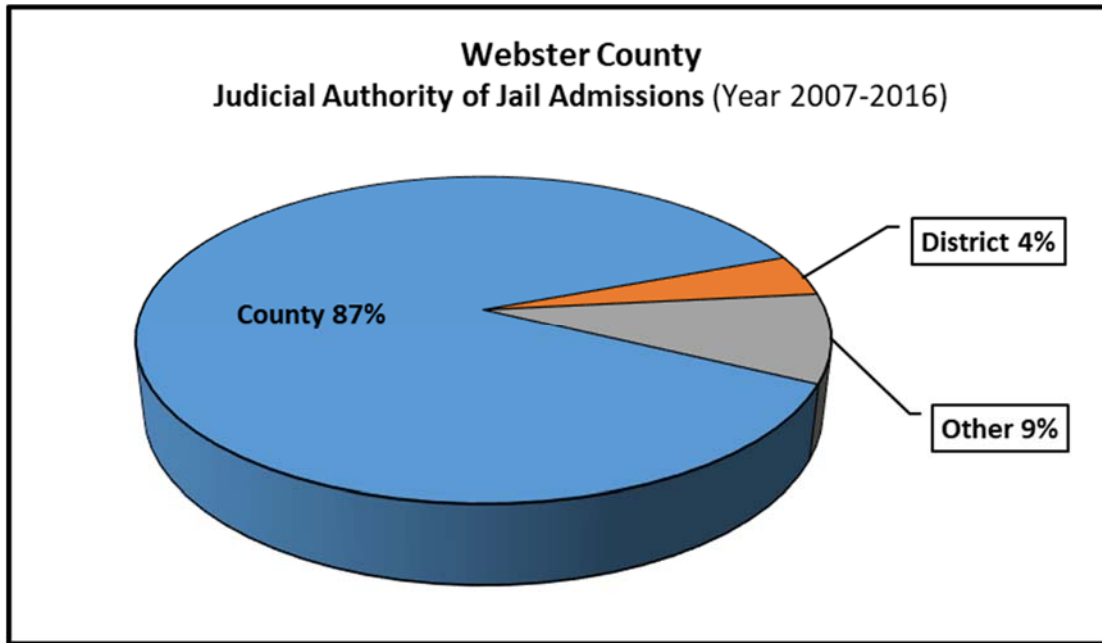


Figure 29 (Source: Nebraska Crime Commission Statistical Analysis Center)

Figure 29 above depicts the average judicial authority of holds. A majority of Webster County Jail holds are under the authority of the County Court system, due to the number of non-felony admissions.

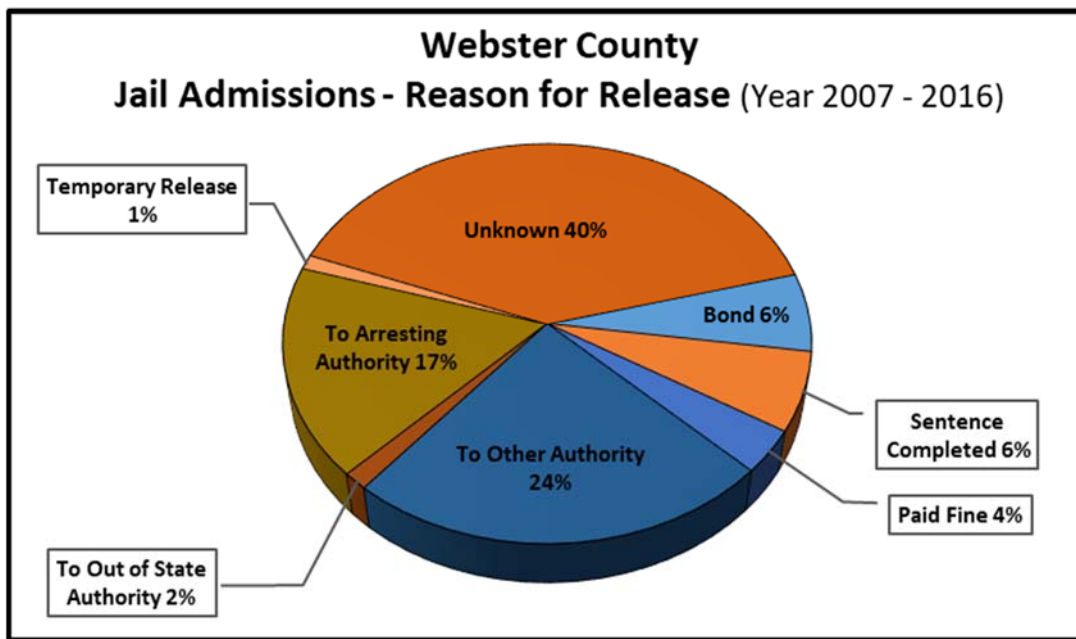


Figure 30 (Source: Nebraska Crime Commission Statistical Analysis Center)

The preceding table (Figure 30) shows that a majority of Webster County Jail holds are released to “other authorities” (at 24%). Other reasons an inmate may be released include a completed sentence, paid fine, temporary release, release to arresting authority or out of state authority, charges dropped, medical release, release to immigration, release to responsible person, and escape (no escapes from Webster County have been recorded).

B. Inmate Profile

The following table (*Figure 31*) explores the characteristics of inmates within the county jail, which is necessary when establishing inmate classification levels and separations. For example, the figure below shows that a significant majority of holds are male. However, the number of males is slightly less than the national average of 88.4%. Additionally, jail staff have indicated that the number of female holds is increasing, and will likely have to be transported due to the jails lack of classifiable capacity.

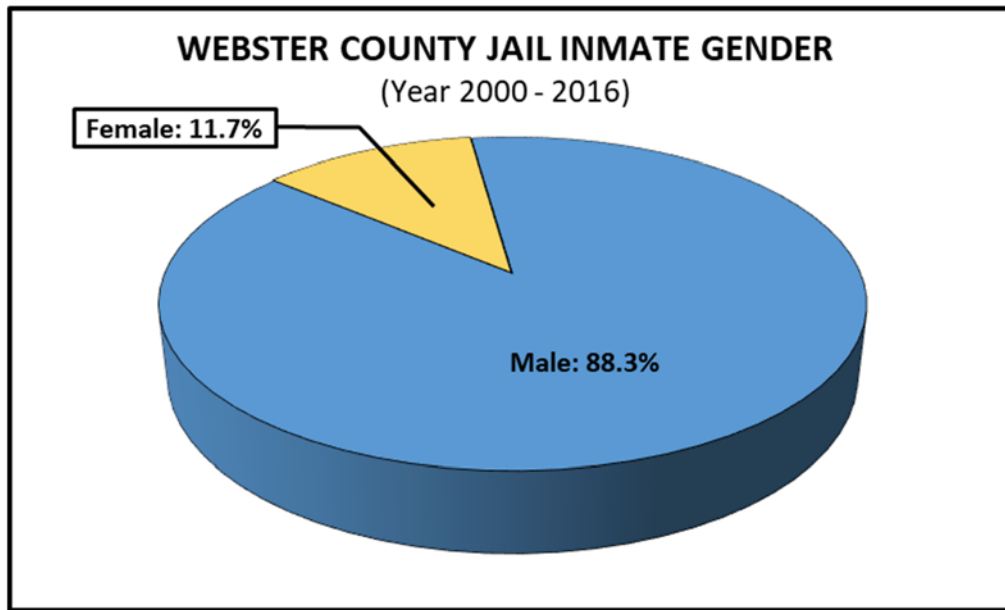


Figure 31 (Source: Nebraska Crime Commission Statistical Analysis Center)

Figure 32 below depicts the age distribution of the jail population. Nearly 35% of holds are between 18 and 24 years old, an age group which is normally considered to be high risk for detention. However, the national average for this age group is just over 13%.

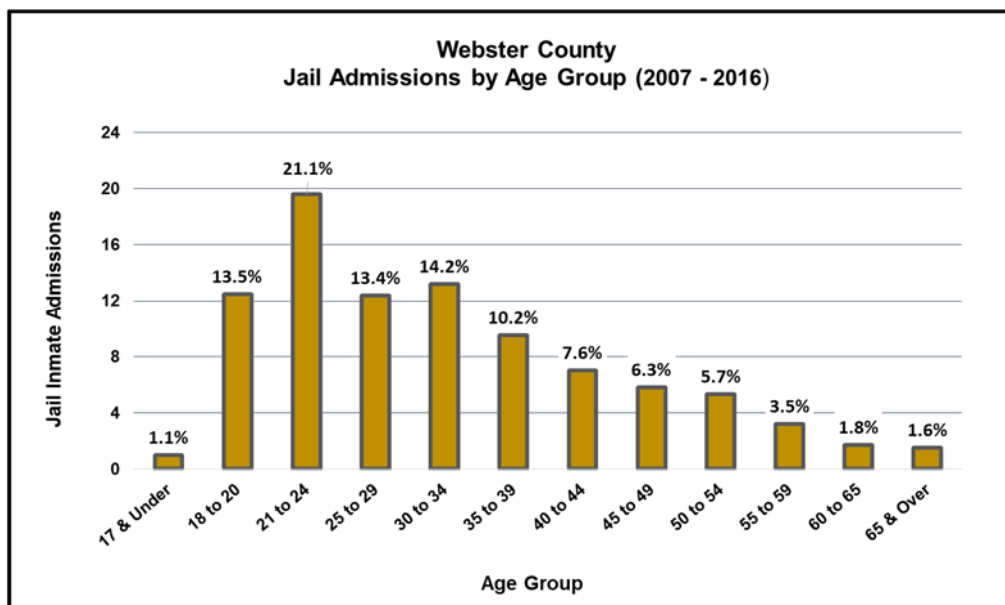


Figure 32 (Source: Nebraska Crime Commission Statistical Analysis Center)

The following table (Figure 33) show the race and ethnicity of holds between 2000 and 2016. A significant majority of holds are white and Hispanic individuals, which is inconsistent with the County racial demographic, as over 95% of Webster County’s 2010 Census population was white.

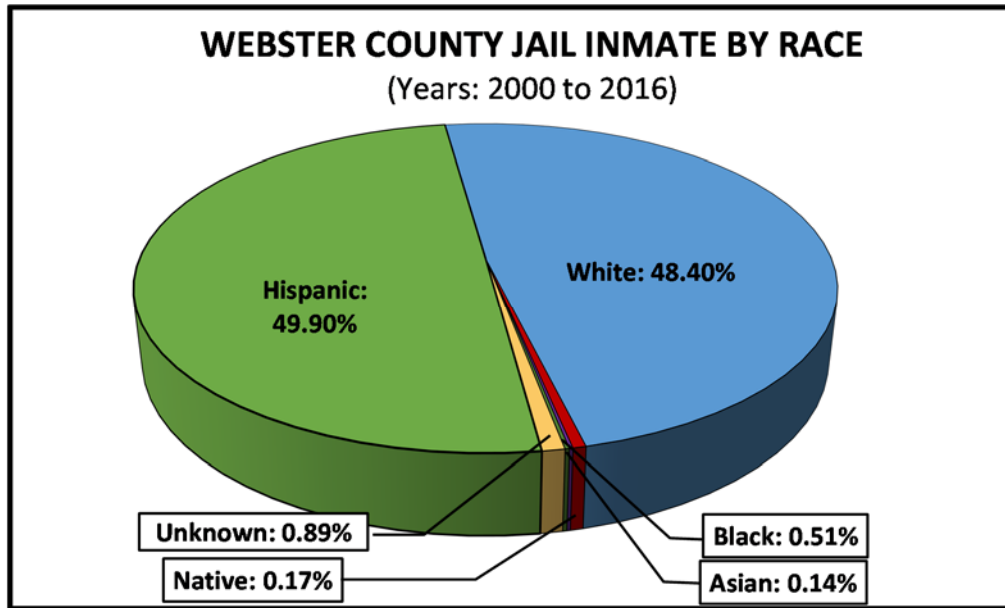


Figure 33 (Source: Nebraska Crime Commission Statistical Analysis Center, Prochaska & Associates)

Figure 34 below shows the education level of admissions in the Webster County Jail. While the Unknown population is large (86%), the level of High School Graduate and Beyond High School are more sizeable than the two groups of inmates with lesser levels of education.

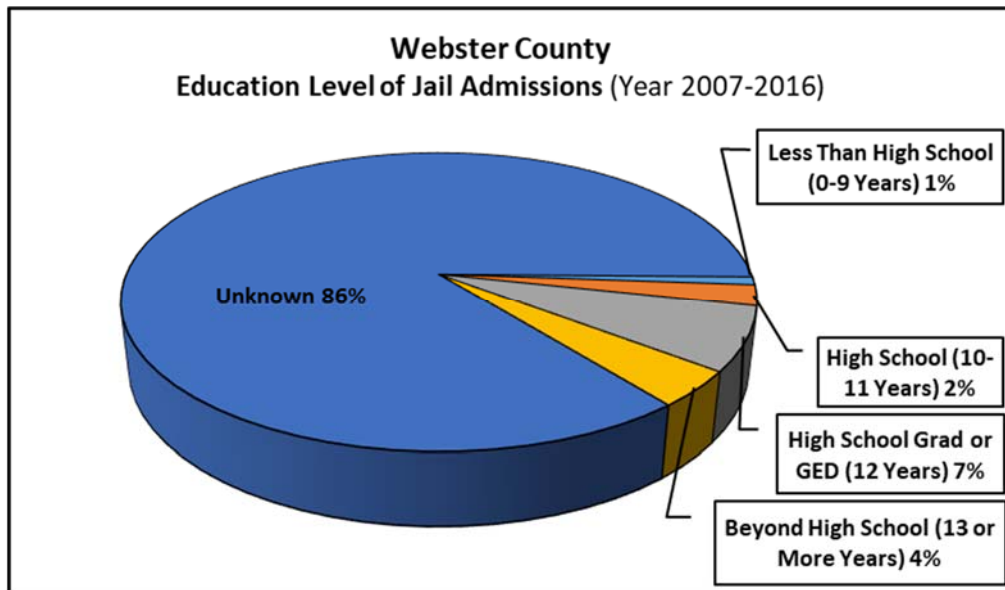


Figure 34 (Source: Nebraska Crime Commission Statistical Analysis Center, Prochaska & Associates)

The following (Figure 35) graph shows the occupation of holds in the Webster County Jail. While a wide range of occupations are represented, it is worth noting the higher percentages among the Unemployed, Unskilled, and those in Skilled Labor.

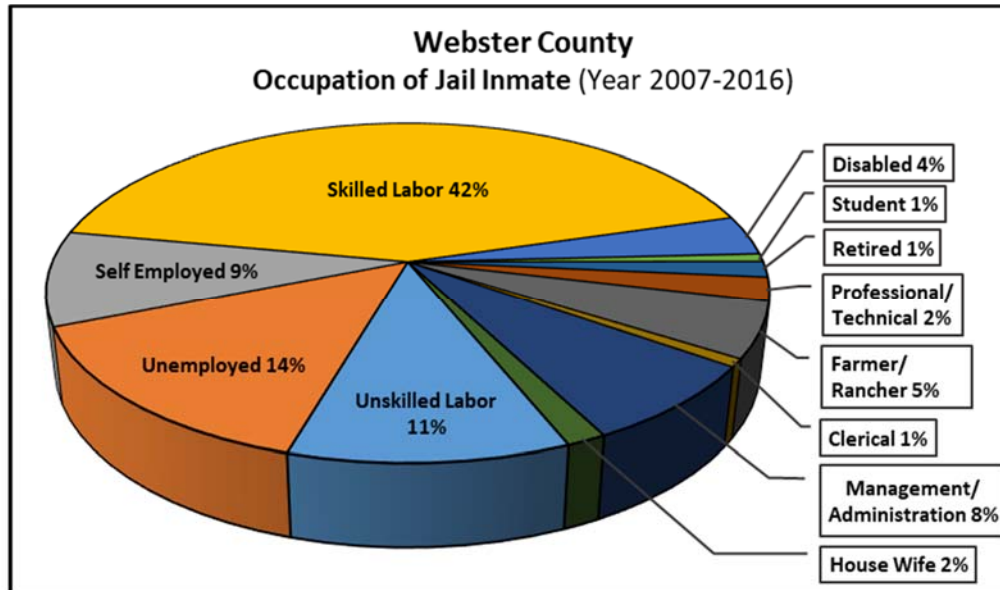


Figure 35 (Source: Nebraska Crime Commission Statistical Analysis Center)

C. Summary

The preceding *Inmate Profile* and *County Statistics of Detention Use* establish an average picture of types of inmates detained, when they are detained, and for what reasons. The data indicate the following:

- Tuesdays and Fridays are consistently the most active days for admissions; 41.2% of weekly jail admissions occur on these days.
- Admissions are cyclical throughout the day with peak admissions occurring between 3pm and 6pm, and the fewest admissions between 6am and 9am.
- 34.6% of holds are of 18 to 24 year olds, yet this age group represents only 5.2% of the County population.
- A majority of charges are misdemeanor crimes, a population that has relatively short length of stays in the jail.
- 60.6% of admissions are held less than 3 days with 72.1% being held for 7 days or less.
- 49% of admissions are charged with, or convicted of, misdemeanors crimes.
- Inmates charged and convicted of felonies are held longer on average than those charged and convicted of misdemeanors. An ACLU lawsuit in Nebraska is expected to return some of these inmates back to county jails from state facilities.
- Males serve longer sentences than females, on average. About 50.0% of females are held one day or less, compared with 31.9% of males, while 95.1% of females are held 7 days or less compared with 70.9% of males.
- Females represent 11.7% of the jail population, similar to 11.6% nationally. County officials indicate that both the frequency and length of stay of female holds have been increasing. Male and female inmates with mental health issues have also been rising nationally, as county jails are often the default location for patients when local mental health facilities across the nation are defunded.

ARCHITECTURAL ASSESSMENT OF EXISTING LAW ENFORCEMENT CENTER

A. Background & Historical Context

The current Webster County Jail is located on the same block and adjacent to the County Courthouse building, and was constructed between 1887 and 1889. As such, it is the oldest operating County jail facility in the State of Nebraska, and is something of a tourist attraction in the community of Red Cloud for this reason. It is essentially the original two-story wood-framed Sheriff's residence/offices/jail structure that was prevalent for most counties in the State at the turn of the last century, with a two-room Jail wing. A single-story lean-to addition has been constructed south of the Jail wing in more recent times. It is somewhat incredible that this structure is still in use as a jail in 2017 (*Figure 36*).



Figure 36 Entry façade, facing southeast.

B. Site Evaluation

The Jail structure itself pre-dates the Courthouse on the block by 27 years, yet it is clear that the Courthouse structure was constructed nearby in 1917 for the benefit of proximity. The building is located in Red Cloud on the corner of North Cedar Street and West 7th Avenue. The current entrance faces the southeast, and it would appear that the building was originally designed to look similar to the entry façade of any other two-story home of the period, with access on the entry side only to the street curb and sidewalk system.

Jail visitor parking is from a five-stall lot off North Cedar Street, and located off-property in the street right-of-way. Parking for Sheriff's Deputies and staff is to the rear (west of the structure) from a shared lot with the Courthouse, or from a secured four-car garage structure. The route traveled by inmates and jail staff to and from the County Courthouse is entirely outdoors. Access for the disabled to the courthouse has been aided via a ramped sidewalk.

The shared concrete parking lot for the Jail and Courthouse has approximately 15 diagonal stalls, and an additional 38 stalls largely on gravel. Additional courthouse parking could be created, if necessary, within the property boundaries.

As the Courthouse structure itself is on the National Register of Historic Places, the building typically cannot be altered significantly, so the front (south) façade and property setting for the courthouse building would usually be kept intact. Practically speaking, this would mean that the land available for Jail construction and/or public-staff parking redesign would largely be restricted on the block to the north side of the courthouse building (*Figure 37*).

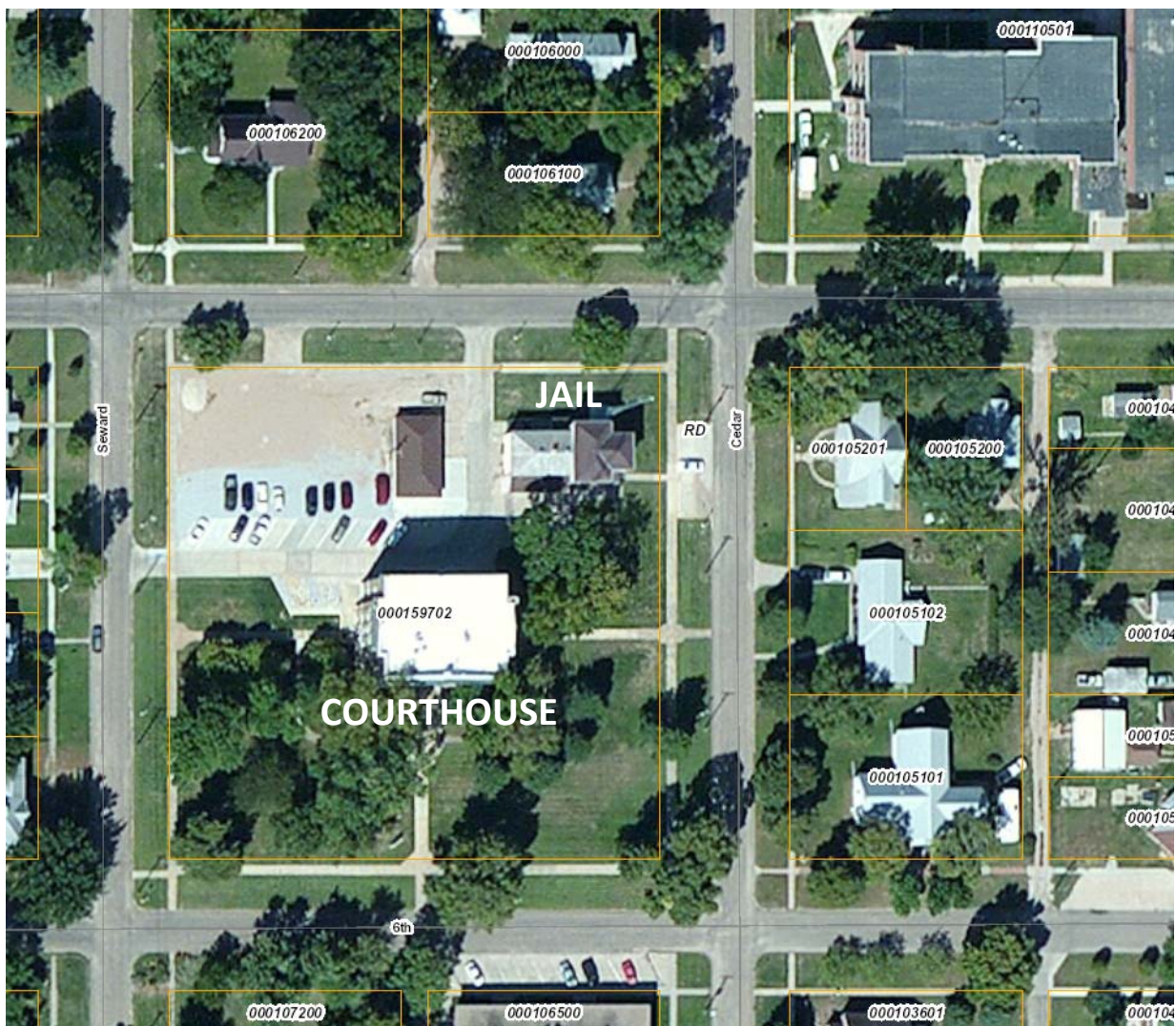


Figure 37 View of the 300 ft. square Courthouse and Jail block.

C. Building Exterior Evaluation

The original structure, though presently covered in a beige stucco material, was constructed with uninsulated multi-wythe brick. There are significant historical details evident on the exterior of the building, including arched brick window lintels, an ornate wood cornice, and dentil moldings. The windows are typically double-hung, uninsulated, divided-lite units, and are narrow and taller proportioned—typical of the period—with decorative limestone sills. It is unusual that aluminum combination storm-screens have not been fitted to these openings in the past, in response to rising energy costs. Several windows have actually been boarded up from the inside, with a small window-mounted air conditioner remaining at one of the sills (*Figures 38 and 39*).



Figure 38 Jail Wing, facing northeast, showing delivery and staff entrance through the fencing



Figure 39 Jail Wing, facing southwest, with more recent lean-to addition.

It is difficult to look too critically at an historic structure which has stood up as well as this building has after 130 years! Nevertheless, a due-diligence effort should focus on primary building shortfalls, from the standpoint of both its ability to fulfill program needs as well as its level of deterioration.

The original wall interior surfaces are plaster on lath, with some wood stud and drywall modifications over the years. The windows appear to be original divided lite double-hung units. In some instances, the interior side has been covered over with framing, and batt insulation has been inserted against the back side of the glass. Small Basement windows are typically visible through retaining limestone window wells, and have similarly not been upgraded (*Figures 40 and 41*).



*Figure 40 Typical window with interior furring
The sunburst or fan molding at the head is likely
evidence of a true brick arched lintel*



Figure 41 Typical basement window

The exterior brick surface has likely deteriorated over the life of this building, either because the brick surface spalled off or because the mortar joints needed regular pointing, so a decision was made to apply the stucco coating. The stucco is in reasonably good condition, as no cracking or other surface deterioration was observed. The limestone window sills and exposed foundation have not fared as well. *Figure 41* above reveals surface disintegration of the foundation stone, and there are more extreme examples of this elsewhere on the building perimeter.

At some point in the building's history, a small Pantry/Staff/Delivery Entrance addition was constructed on the north side, leading directly into the Kitchen area. The exterior walls of this addition are likely wood studs, and sheathed with wood lap siding, which is in need of paint. To help secure this entrance,

an 8'-0" tall chain link fence "cage" with locked gate has been added, but it would appear that some vulnerability remains, as this certainly is not a typical secured vestibule, and is the point of trash collection and food/supplies delivery for the facility. While the Jail housing area has exterior windows with security bars and interior steel grates which face the fenced enclosure, the space behind these windows is either one of the two Day Rooms, or steel cells constructed against the north wall (*Figures 42 and 43*).

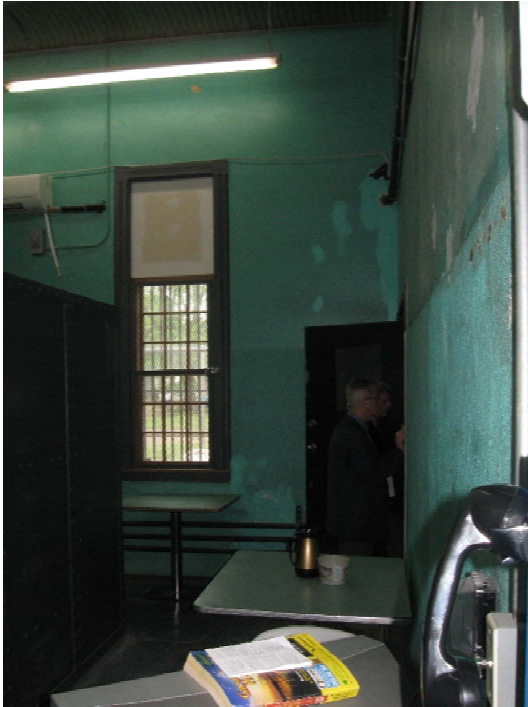


Figure 42 Interior view of the west Day Room windows.



Figure 43 Torn screen and single-pane glass into the Pantry addition. The interior Pantry area has been walled off.

Moreover, the Pantry//Staff/Delivery Entrance addition does not appear to be particularly secure itself. Windows are also single glazed, and not protected by the 8'-0" tall fencing. While the interior has been covered with furring and drywall, the original windows remain in place on the exterior (*Figure 43*).

South of the original Jail Cell wing is a more recent lean-to addition, reportedly built in 2008 to house inmate clothing and storage, a copier, work area, prisoner change-out, and inmate visitation functions. Inmates are also brought *through* this area from the inmate housing area, to a 9'-0" tall fenced outside Exercise enclosure. The exterior wall of this addition has been built and surfaced to match the stucco on the rest of the facility, but appears to be constructed with sheathed wood studs attached to a slab-on-grade floor. Exterior concrete paving is aligned with the base of the wall sheathing, and the wall construction does not appear to have sill flashing, or intact sealant, meaning that this joint is subject to water intrusion (*Figures 44 and 45*). Again, security should be of concern here, as this route through the addition and the raised Exercise enclosure would appear to be the preferred one to move inmates to and from the Courthouse.

The Jail wing roof appears to be time-worn seamed sheet metal. Some rust showed through a fairly oxidized deteriorated finish, no other visible damage was observed.

The main two-story structure and the lean-to addition roofs appear to be matching asphalt shingles. Staff reported no roof leaks. The exterior stucco material has been repainted fairly recently, and the hip roof re-shingled.



Figure 44 Un-flashed building corner



Figure 45 Southeast corner of addition and east side of Exercise area

D. Building Interior Evaluation

Original blueprints for the Jail and Sheriff's Offices do not exist. The County is well aware that the historic structure is substantially out of compliance by modern Jail Standards and Building Code requirements.

The two story portion has a small residential style raised porch, which leads into a very small secured vestibule with a reception counter separated from the Receptionist/Dispatch/Jailer by non-bullet-resistant glazing. Directly inside the inner vestibule door in one direction is a small Booking Room, and in another, an open Sheriff's Office area, sized for two desks. Equally accessible immediately inside the inner door in a third direction is the Receptionist/Dispatch/Jailer's office, through which an inmate is booked and led for clothing change-out, and thence into the cell housing area (Figure 46.)

Security at the two entrances is lacking. The front vestibule doors are too close together, and the space is too confining to allow passage while another individual is standing at the Reception window. Beyond the vestibule, a detainee is interviewed and/or booked in a small Interview room, then led past a

confining and unprotected Receptionist/Dispatch/Jailer workstation to a combined change-out and inmate visitation area. A very small Toilet is used by both detainees and staff. Visitors wishing to see an inmate must follow this route as well to sit at the single visitation window located in this space.



Figure 46 Secure Entry Vestibule Reception window, where inmates pass.

Previously mentioned was the relatively unsecured routes for inmates and Jail staff between the cell housing area and the Courthouse, and for staff/supplies through the fenced enclosure at the Pantry addition entrance (Figures 47 and 48).



Figure 47 Interior floor of Pantry with step to Kitchen



Figure 48 View from Kitchen interior into Pantry

The Jail cell housing wing is divided into two cell block areas, each approaching about fifteen feet in height. The entire wing is constructed over a concrete slab-on-grade. The largest (west) area is a single open space, in the center of which is located a Civil War-era steel assembly of two cells, each containing three beds. Outside the cells is a Day Room area (*Figures 49 and 50*).



Figure 49 Prefab steel cell in open Day Room



Figure 50 Day Room area

In an adjacent room, also inside the housing wing, is a four-cell area with Day Room. These cells are also pre-fabricated steel, but are arranged against the north outside wall, two-over-two, with a steel stair and mezzanine serving the upper two. Each of these cells has a window on the north outside wall. One of the four cells has been altered to create a large private shower, accessed from the west Day Room, but for use by the entire inmate population (*Figures 51 and 52*).



Figure 51 Prefabricated two-over-two steel cells



Figure 52 Shower converted from a cell

The remaining lower cell is currently used for storage, thus reducing the total number of cells in this room to two, both double-bunked. The original lower northeast cell window was blocked when the Pantry/Delivery/Staff Entrance addition was constructed.

The ceiling of both rooms in the wing appears to be concrete over ribbed steel decking. Access to the west cell area is through the east Day Room.

As with the rest of the building, the inmate housing area is not compliant with the Americans with Disabilities Act and, while “grandfathered”, the Jail is in no way compliant with current Nebraska Jail Standards. Because there are only two Day Rooms, inmate classification is limited to two categories. Male and female inmates require both site and sound separation, so that the presence of a female, or merely an unruly inmate, might require that inmate to be isolated in one of the two sides. Use of the single shower in that case would require shuffling inmates, with the associated security risks.

There are exposed and easily accessible utility lines serving the cells in the west cell housing area, which could be easily damaged by inmates, or potentially used for other purposes. According to the Sheriff, the steel stair serving the upper two cells in the east housing area is unsafe (*Figure 51*).

The second level of the main Jail structure once held three family bedrooms and bath for the Sheriff or Jailer’s family, but now is primarily office space for additional Officers. The stair width serving this level is typical for a residential use, but is narrow for institutional occupancies. The second level is not ADA-accessible. One former bedroom houses file cabinets and camera equipment racks. The former bathroom houses the County Dispatch radio system. There is also access from this upstairs area to an attic over the Jail housing wing (*Figures 53-55.*)

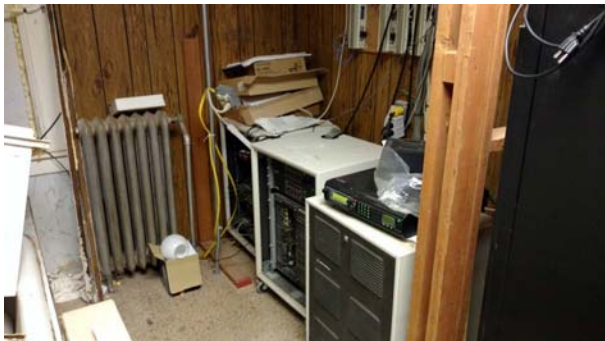


Figure 53 Dispatch Equipment



Figure 54 Evidence Storage



Figure 55 Upstairs Office

The building main floor is raised a couple feet from the exterior grade. The section of basement under the Kitchen and Reception Desk areas is full height, while the section under the Sheriff's open office is crawl space, where it is evident that the foundation is entirely composed of undressed limestone. Portions of the main floor structure (i.e., the framing over the Boiler Room) appear to be concrete over steel decking, while other areas are wood dimension lumber (*Figures 56 and 57*).



Figure 56 Basement Mechanical Room/boiler



Figure 57 Crawl Space/crumbling foundation/rotted sill

Figure 58 reveals a disintegrating floor joist sill plate, which is responsible in part for the severely sloping flooring beneath the Sheriff's Office. Elsewhere in the basement, there are examples of openings to the outside around windows, and substantial evidence of previous water intrusion.



Figure 58 Exposed limestone foundation in crawl space, and damaged floor joist sill plate

E. Summary

The useful life of most buildings is 30-40 years, at which time most building systems require significant maintenance, repair or replacement. Some systems, such as mechanical systems, reach their life-cycle end after only 20 years. In other cases, the buildings themselves become dysfunctional or non-compliant due to changes in codes and regulations, or become undersized due to growth of services. The Webster County Jail has been kept in continuous use, with significant accommodations made by its users, for 130 years. Despite the deficiencies noted in this report and by NJS during annual Jail inspections, the fact remains that significant effort was required to keep the facility in service for this long.

But while grandfathered by NJS, many of the above-described deficiencies not only create extreme inefficiencies for the staff, but are significant liability issues for the County. Lack of direct visual supervision of the inmate housing area is one of the most serious problems, along with the inmate classification issue. The lack of security at the Booking/Dispatch/Reception desk is another (there is no real Master Control), and security is a significant concern for inmate movement to and from the Courthouse, as well as for deliveries and trash collection. From a functional and code-compliance perspective, the Webster County Jail is a serious operational and liability risk.

ENGINEERING ASSESSMENT OF EXISTING LAW ENFORCEMENT CENTER

A. General

Unfortunately, because of the Jail's age no blueprints are available for the building and its additions. As such, this assessment of the mechanical, electrical and plumbing engineered systems is based solely on field observations, along with interviews with facility staff.

B. Plumbing Systems Assessment

Plumbing systems serving Webster County Sheriff's Office include sanitary sewer and vent piping, the storm sewer system, natural gas and domestic water piping, along with water heaters, plumbing fixtures and specialties, and the potential for fire protection systems. The City of Red Cloud Municipal Utility serves as the local authority for the water, along with sanitary and storm sewer systems. The Nebraska State Fire Marshal and City of Red Cloud Fire Chief have jurisdiction over fire protection systems. The State Electrical Inspector is the Authority Having Jurisdiction over electrical systems. Black Hills Energy supplies natural gas to the City of Red Cloud.

The City of Red Cloud has adopted the 2009 Uniform Plumbing Code and 2012 International Fuel Gas Code to regulate new plumbing installations. However, the City is currently reviewing the Municipal Plumbing Code and changes may be forthcoming. As regulatory requirements at the time this facility was completed were vastly different or non-existent, current plumbing systems affected by any major renovation will need to be brought up to the current code.



Figure 59: Cast Iron and PVC Piping Comprising 4" Building Drain Leaving the Basement on the North

Sanitary and Storm Sewer Systems

Webster County Sheriff's Office is served by a 4" building drain that leaves on the north and interconnects with the City's 8" sanitary sewer main running along 7th Avenue. According to the Municipal Utility's records, site sanitary sewer piping was replaced in 1967.

Plumbing fixtures and specialties within the building drain to waste lines constructed of heavy weight cast iron soil piping with bell-and-spigot type joints sealed with lead and oakum. Where repair and replacement measures have been undertaken over the years, PVC piping and fittings have largely been used.

Generally, building drain and plumbing vent systems are designed to be long lasting and typically will not need repairs. However, the original portions of the building sanitary sewer system are well over 100 years old, making it highly susceptible to corrosion and development of microbial biofilms.

Site sanitary sewer piping is subject to these same anomalies, along with pipe settlement and pipe channeling. A video camera inspection of the building drain and site sanitary sewer piping would be necessary to fully evaluate its existing condition.

Rain water is collected by gutters from roofing systems constructed either of pitched shingled or standing metal seam systems. Water is then routed through downspout leaders and discharged to daylight at various elevations to grade.

Water Service and Distribution

The Webster County Sheriff's Office is fed by a 1-inch water service line that originates from the City's 6" water main running along 7th Avenue. Water pressure in the City's main is approximately 53 psi. The water meter is located in a pit just north of the sidewalk and west of the large deciduous tree. Beyond the water meter, the building's water service line enters the basement on the north.

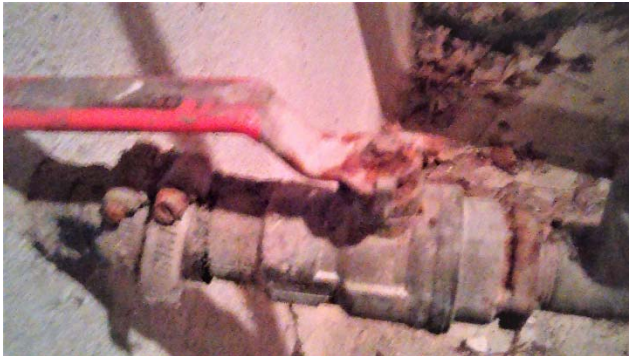


Figure 60: 1" Galvanized Steel Pipe Comprising Water Service Entering Basement on the North

The existing water service is too small for the current operation. This condition is exacerbated by the somewhat lower water pressure that exists. Code dictates the minimum size of the water supply pipe to just one security combination fixture is 1". As a result, insufficient water volume is available to operate flushometers serving security plumbing fixtures. Two well tanks, approximately 20-gallons in size, have been added to the water distribution system serving the jail to help remedy this issue.

Original portions of the domestic water piping serving the building are constructed of galvanized steel. Galvanized steel pipe is historically prone to sediment build up, which works to reduce the inside diameter of the pipe over time. Corrosion at the joints is also commonplace, often leading to water leaks. More importantly, vibration and corrosion of galvanized steel piping can allow lead to leach into the potable water supply system.

Though major inroads have been made on a legislative level to reduce lead content in plumbing piping and equipment, little can be done to mitigate the issue in older plumbing systems. Simply, galvanized steel piping, along with older plumbing fixtures, brass fittings, and other plumbing appurtenances are known sources of lead contamination.

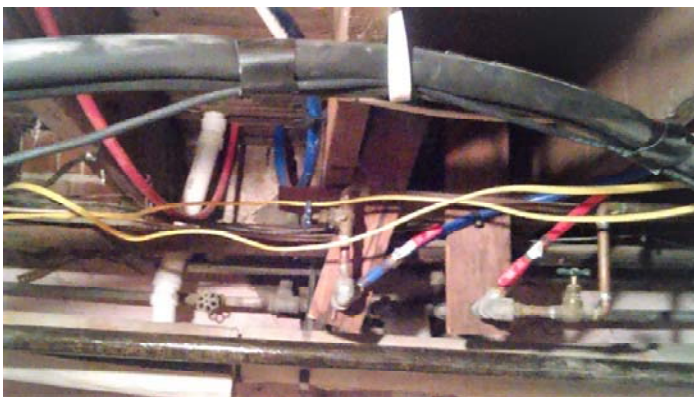


Figure 61: Water Distribution System Comprised of Bare Galvanized Steel and Copper Piping, along with PEX Tubing

Copper piping and PEX tubing have been used to make alterations to the original domestic water supply system and for repairs. Except for domestic water piping serving the shower in the Jail, no pipe insulation was found. Though domestic water piping in exposed areas is largely bare, it doesn't preclude that hidden piping segments (i.e., in walls, above ceilings, etc.) are wrapped with asbestos insulation.

Energy losses associated with bare domestic hot water piping are significant. This, in conjunction with lack of a properly designed domestic hot recirculation system, forces building occupants to wait long periods before hot water arrives at

lavatories and other fixtures. Uninsulated cold water piping increases the propensity for the lines to sweat during higher humidity periods. This can lead to staining of ceiling tiles and a water supply temperature that becomes undesirable to drink.



Figure 62: Rust and mineral deposits form on security plumbing fixture in east cell

The facility would benefit from a water softening system, as mineral deposits and rusting of plumbing fixtures indicate hardness in the local water supply. Also, use of dissimilar metals in the domestic water piping system has resulted in electrolysis where the different pipes are joined.

Lack of sufficient shutoff valves and proper piping supports are other examples of plumbing system deficiencies. Finally, no mechanical identification for plumbing piping and equipment exists, making it more difficult for contractors to fully evaluate and modify work in place.

The above described issues should be considered before deciding to reuse any portion of the existing water supply system.

A new water service is anticipated for any major renovation or expansion, especially if a wet pipe sprinkler system has to be installed. More space will be needed as the Municipal Utility normally requires that new domestic water service entrances be equipped with a backflow preventer to protect the City's water supply.

Natural Gas System

The existing natural gas meter resides outside the north wall of the building and is served by Black Hill Energy's natural gas main buried along 7th Avenue. If a marked increase in the size of the natural gas service is needed, the Utility's natural gas main should have the necessary capacity.

Natural gas service to the Webster County Sheriff's Office is sized for a gas pressure of 0.5 psig or less, and a pressure drop of 0.5" w.c. Natural gas piping installations within the building are completed with Schedule 40 black steel pipe.

The gas meter has a maximum capacity of 425 CFH and provides service to a gas-fired steam boiler and water heater in the basement, along with a gas range in the kitchen. The standby generator off the south façade also uses natural gas.

Technically, a new larger natural gas meter is needed as the building's total connected natural gas load exceeds the capacity of the existing gas meter set. Obviously, an even larger natural gas meter would be necessary if additional gas-fired appliances were installed in conjunction with a major renovation or expansion to the facility.

Domestic Hot Water Systems

Domestic hot water for the facility is supplied by a natural gas-fired, 30-gallon water heater manufactured by A.O. Smith. Though residential type, the gas water heater appears to be in relatively



Figure 63: Existing 30-gallon gas-fired water heater provides all domestic hot water supply in the building

good repair. However, the water heater recovery capability (i.e., 39 gallon/hour recovery at 100°F temperature rise) and storage capacity is less than expected for this size of facility. Though not a code requirement, it is not unusual to pursue redundancy for a water heating system serving a penal facility.

As noted previously, the existing domestic hot water system lacks the necessary piping and pump to recirculate hot water. A new domestic hot water recirculation loop would substantially reduce the amount of time that building occupants have to wait for hot water, especially after extended periods of non-use. By keeping domestic water hot piping warm, it provides a residual value of increasing the overall storage capacity of the system.

The water heater is maintained at a higher temperature for cooking and laundry. As the existing plumbing layout carries a potential for scalding, a new high-low type thermostatic mixing valve with a dedicated recirculating loop to temper the domestic hot water supply to the jail is recommended. Note that additional point-of-use thermostatic mixing valves at the lavatories would further mitigate the liability associated with scalding.

Security Plumbing Fixtures

At some point, the original security plumbing fixtures serving the Jail were replaced with stainless steel combination security fixtures. Though now somewhat dated, and subject to corrosion and scaling due to the hard water supply, the combination security plumbing fixtures continue to perform their intended functions.

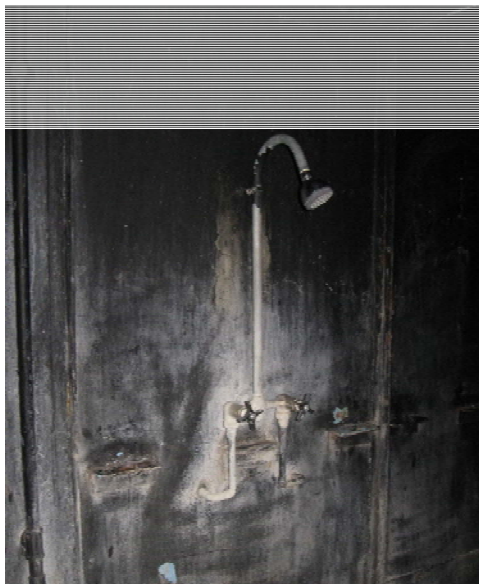


Figure 64: Steel detention cell modified to serve as a penal shower

A detention cell in the east pod on ground floor was modified to provide shower facilities for inmates and detainees. Though use of a steel cell for these purposes is innovative, it frequently requires repainting due to high moisture levels.

The showerhead, shower arm, control valves, drain, and water piping within the enclosure are not penal rated. Beyond normal safeguards for law enforcement personnel that are resident in penal rated equipment, ligature resistant products reduce liability.

The steel cell adjacent to the existing shower is used to facilitate plumbing connections to the shower, along with storage of mattresses, shop vacuum, floor buffing machine, and other supplies and equipment. The layout necessitates that stored material be moved and that service persons bring tools and potential contraband into the secured area.

In new design, the plumbing chase walkway should be provided behind the detention cells so that service can occur outside of the secured area. Installation of an electronic water control system allows

water supply to be shut off to security plumbing fixtures from a remote central location. Also, programmed limits to frequency and/or the duration of water flow can be activated. Overflow detection is recommended for the combination security plumbing fixtures. Finally, a select number of security plumbing fixtures that are ADA compliant must be provided for the needs of disabled inmates.

Plumbing Fixtures and Specialties

A major deficiency in the layout of plumbing fixtures and specialties is the lack of floor drains on the basement level. In the past, law enforcement staff have had to set up a bucket brigades where pipes have burst or leaks have occurred in older piping comprising the heating and domestic water systems.

Except for the lavatory and an abandoned bathtub on second floor, the remaining plumbing fixtures serving the facility were replaced at some point. Though the newer fixtures are in decent repair, a number of issues exist related to ADA. ADA issues related to plumbing include the type of faucets, faucet handles, and fixture mounting heights. Though not ADA compliant, the newer existing fixtures might be able to be reused in renovated restroom spaces that meet current ADA guidelines.

The bases of the existing tank type toilets are not properly caulked, creating conditions where bacteria can easily grow underneath. Beyond this, toilets in use are ill-suited for this type of facility and more prone to stoppages. In lieu of toilets, water closets have much better flushing characteristics. Provided sufficient chase space can be allocated, wall mounted water closets would make it easier to clean the restroom floors.

No refrigerated drinking fountains are available in the facility which is often required by code. A bi-level design has one drinking station to comply with the lower ADA requirement for bubbler orifice height and offers the flexibility of a second unit at standard height. Providing a bottle filler at the lower unit might be a useful feature to law enforcement staff if new water cooler equipment is pursued.

Though a yard hydrant is available on the west, the one wall hydrant on the north seems inadequate. In any case, neither hydrant offers proper protection against backflow.

No formal provisions exist on site for washing vehicles. Note that modern codes requires that oil and sand be captured from vehicle washing operations before entering the sanitary sewer systems. Allowing water runoff from vehicle washing to enter the storm sewer systems is not permitted.

Fire Protection Systems

There is no wet pipe sprinkler system to provide fire protection services within the facility. If a new sprinkler system is required in an expanded facility on this site, it would necessitate that a new fire line be brought into the building to ensure adequate flow to the fire protection system exists. Though water pressure may become a concern in a multi-level facility, the City's water main along 7th Avenue is 6" in size which is normally very suitable for this application.

In general, a new fire protection system would consist of sprinkler heads installed as needed to provide 100% sprinkler coverage of the facility. The new wet pipe sprinkler system would need to be monitored by a new fire alarm panel. In high value areas, such as Dispatch, server rooms, etc., sprinkler head activation may cause more damage than a fire itself. In these areas, consider installing a dry type fire suppression system as the first line of defense against fires.

Extreme caution must be taken in secured areas to ensure that sprinkler piping is not installed in a manner that facilitates suicides, or otherwise could be used for harmful purposes. Sprinkler heads in

secured areas should be institutional type to reduce the likelihood of vandalism. Though not a code requirement, the new fire protection system should be configured with a separate supervised valve that allows the secured area to be isolated in the event of vandalism, or accidental discharge.

Summary – Plumbing System Assessment

Though plumbing systems serving Webster County Sheriff’s Office have been generally well maintained, the building has been in operation for more than one hundred years. As such, portions of the plumbing system are significantly past the end of their expected period of useful life, with many remaining materials and equipment approaching that end.

Given its age and other factors, the existing plumbing systems are subject to a myriad of issues. These include high potential for lead contamination and scalding; water leaks that can be attributed to use of galvanized steel pipe, no drains in the basement to accommodate pipe leaks or failures; lack of a domestic hot water recirculation loop: lower operating water pressure and high water hardness; along with significant piping energy losses, electrolysis issues, and no redundancy components in place. Moreover, the water service is too small and the total connected gas load of gas-fired appliances exceeds the capacity of the existing natural gas meter.

Outside of cost considerations, little of the existing plumbing systems should be salvaged during a major renovation effort. Beyond the above described issues, the ever increasing likelihood of future failures in the existing plumbing system poses a risk of having to tear up renovated areas to make emergency plumbing system repairs.

C. Mechanical Systems Assessment

Mechanical systems serving Webster County Sheriff’s Office include the central heating plant, along with heating, ventilation and air conditioning (HVAC) systems. The City of Red Cloud has adopted the 2012 International Mechanical Code to regulate the design and installation of these types of systems.



Figure 65: Existing Low Pressure Steam Boiler Designated to Serve in Standby Capacity

Central Heating Plant

Until last year, the Webster County Sheriff’s Office was primarily heated by steam that is generated by a cast iron, sectional type boiler. Though the single pipe steam heating system now serves in standby capacity, it is doubtful that its operation would be reliable or safe after sitting dormant since the 2015-2016 heating season.

The boiler, manufactured by American Standard, was installed in 1950 and has a capacity of 250 MBH on natural gas. Beyond being in poor overall condition, energy efficiency remains low as the boiler is single-pass in design and the boiler burner incorporates atmospheric combustion.

Low pressure steam served as the heating medium and was supplied to cast iron radiators throughout the building. However, uneven heating occurred as radiators near the boiler received steam on every cycle, while radiators farther away received steam only intermittently. Single pipe steam systems were designed taking this anomaly

into account. To ensure adequate heating to the remote spaces, overheating in areas closer to the boiler is managed by opening windows.



Figure 66: One of a multitude of friable asbestos conditions

Much of the original steam distribution piping is uninsulated, resulting in even a higher propensity for overheating to occur. Unfortunately, pipe insulation that does exist contains asbestos. The pipe insulation jackets and mudded fittings are deteriorating resulting in numerous examples where asbestos was found in a friable condition. It is recommended that pipe insulation, and other building materials be tested and abated where asbestos is found. Abatement will certainly need to occur before any major construction or demolition is allowed.

Note that a secondary means of egress from the Boiler Room is often required. Also, emergency gas shutoffs should be installed adjacent to egress exits to allow gas supply to the boiler to be stopped while evacuating during an emergency. Though outside air for combustion is ducted into the boiler room, it is not in a high/low configuration as dictated by Code. No combustion air damper exists so cold outside air can migrate into the boiler room even when the boiler is off. These items, and others, will need to be addressed if replacement of the boiler occurs.

Heating, Ventilation, and Air Conditioning (HVAC) Systems

Over time, the above described primary heating system was eventually supplanted by variable refrigerant flow (VRF) systems, ductless air conditioning and heat pump systems, a package terminal air conditioner (PTAC), along with window air conditioning units and electric baseboard heat.

The VRF and ductless air conditioning systems are manufactured by Mitsubishi Electric. The ductless heat pump system was manufactured by Trane. Aside from a couple of the window air conditioners and the PTAC unit, the HVAC systems are newer and in good condition. A brief review of the various HVAC systems serving Webster County Sheriff's Office follows.

The outdoor unit serving the Mitsubishi Electric VRF system on the south is piped to a branch box that allows up to five indoor units to be interconnected. Two of the indoor units serve the Jail, while the other indoor unit is located in Dispatch. The VRF system works as a split system heat pump, providing a total heating and cooling capacity of 4 tons.

The outdoor unit serving the Mitsubishi Electric VRF system within the chain link fence area on the north is piped to a branch box that allows up to three indoor units to be installed. One indoor unit serves the Kitchen, while another indoor unit is located on second floor. This system provides 45,000 Btuh heating capacity and offers 3 tons of air conditioning.

The outdoor condensing unit on the south serving the Mitsubishi Electric ductless air conditioning system is interconnected with an indoor unit in the Communications Room on second floor. This system provides 1-ton of air conditioning. The outdoor unit serving the Trane ductless heat pump system is piped to the indoor unit in the law enforcement office on the second floor. The system provides a total heating and cooling capacity of 18,000 Btuh.

The PTAC unit provides approximately 9,000 Btuh of heating and cooling capacity to the Work Room/Jail Visitation. Window air conditioners are available in the Sherriff's Office and Booking on ground floor, and provide redundancy and additional cooling capacity to the Leased Communications Server Room on second floor. In general, the above described systems have standalone temperature controls or space temperatures are regulated by wireless hand held remote controllers.

Lastly, no dedicated ventilation air systems are in place for areas occupied by law enforcement staff and inmates. Though modern codes would normally require mechanical systems serving secured areas, the availability of operable windows may suffice for this purpose in the remaining spaces. Ventilation air systems commonly provide constant outside air for ventilation that is properly conditioned and filtered. These systems can enhance the capability to use 100% outside air for free cooling when appropriate.

Summary – Mechanical Systems Assessment

Though the variable refrigerant flow, and ductless heat pump and air conditioning systems provide needed heating and cooling capacity, the outdoor/indoor units that comprise the systems and various refrigerant lines create somewhat of a cobbled appearance. Lack of dedicated ventilation air systems serving the building is another concern. In addition to complying with current mechanical codes and meeting the changing heating/cooling load requirements of any newly renovated spaces, new mechanical equipment can often be justified from an energy cost savings basis. The existing standby steam heating system has been operated well beyond its expected useful life and is no longer considered safe or reliable.

D. Electrical Systems Assessment

Electrical systems serving the Webster County Sheriff's Office include the normal power system, along with emergency power, lighting, security, communication, and fire alarm systems. Normal power is provided by the City of Red Cloud Municipal Utility. The City of Red Cloud has adopted the 2012 National Electric Code and the current version of the NFPA Life Safety Code. The National Electric Code and NFPA 700, Emergency Systems, allows the County to require that the Sheriff's Office have reliable means for emergency and standby power.

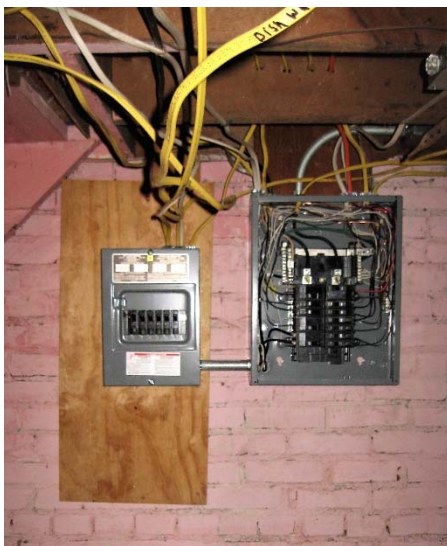


Figure 67: Appliance Panel in the Basement Lacking Panel Cover and Wired using Romex

Normal Power System

The existing electrical system is served by 240/120 volt, single phase, three wire power routed overhead from a utility pole along Cedar Street to the existing electric meter set located on the south facade. From the electric meter, power is then connected to a Cutler-Hammer 2-pole, 150A main electrical panel located in Dispatch. This panel requires a 3'-0" service clearance that is not able to be kept clear.

The main electrical panel distributes power to electric appliances, along with a newer Square D 100A appliance panel located in the basement. The panel cover working to contain sparks and needed to maintain the panel's UL listing is missing. Much of the electrical wiring to and from this panel have largely been carried out using Romex (i.e., nonmetallic cable).

Romex is generally reserved for single and multi-family dwellings and normally not allowed in commercial and public facilities. Where allowed, Romex is routed through drilled holes at least 1-1/4" from the edge of joists or wall studs, and not free hanging or stapled to the bottom of joists as was found. Romex is not allowed by Code above suspended acoustic tile ceilings, as it is in Dispatch.

Though the addition of the appliance panel has allowed additional circuits to be installed, the electrical load imposed by newer mechanical, kitchen, communications, and computer equipment continues to overtax the electrical service that is available.

Emergency Power System

Emergency power is being provided by a 15-kW natural gas-fired Siemens generator and funded by a 2010 Homeland Security grant. During power outages, the load center panel must be interconnected with the generator via a manual switch. Beyond the transfer being inconvenient, existing normal and legally required standby and emergency power circuits are combined, which is not allowed by code. Outside of alternative compliance paths, emergency loads should be rewired to a new emergency panel that is interconnected to a separate automatic transfer switch. It is reasonable to consider the remaining circuits as legally required standby loads that could then remain combined.

More importantly, the generator is too small for the ever increasing emergency electrical load in the facility. A larger generator is needed to adequately support existing electrical and electronic systems, much less than would be anticipated in an expanded facility.

Though combining the existing generator with a new generator-set to get the capacity required is possible, warranty and code issues often preclude this from occurring. However, the existing generator appears to be in good condition and has relatively few operating hours on it. Possibly, the existing generator could be utilized at another County facility.

Lighting Systems

Lighting needs in the Sheriff's Office, Dispatch, Work Room/Jail Visitation, Kitchen, Booking/Intake, and other areas are being met by recessed troffer-type fluorescent fixtures. Pendant and surface mounted strip fluorescent fixtures are used in the Jail and Food Pantry, respectively.



Figure 68: Pendant-mounted fluorescent fixtures in west cell

The unshielded pendant fixtures in the Jail could easily be broken and lead to circumstances that put law enforcement personnel in harm's way. New vandal resistant light emitting diode (LED) light fixtures are recommended in the secured area to enhance safety and reduce lighting operating costs.

Original incandescent fixtures remain in the Entry Vestibule, Server Room, Basement, and in some detention cells. As incandescent lighting is the least efficient of any technology, energy efficiency and other gains could be made by installing new LED or fluorescent fixtures. Incandescent emergency lighting units with battery backup are available in the Jail and Dispatch.

Outdoor building lighting is limited and consists of incandescent porcelain lamp-holder and incandescent flood type fixtures. The flood fixtures are controlled by photocell, while the remaining

incandescent fixtures are manually switched. Replacement of outdoor building light fixtures with LED or high intensity discharge (HID) fixtures will improve energy efficiency, lighting levels and reliability.

Security Camera System

Security cameras are strategically located in the Jail, Work Room/Jail Visitation, and Booking, along with main entrance, secured outside exercise area, and the south of the building perimeter. Common spaces and other areas in Webster County Courthouse, along with parking and main trafficking areas of the town square are also monitored in Dispatch. Due to lack of floor space, servers and other equipment supporting the camera security system are maintained in a fairly dusty storage area on second floor.



Figure 69: Pushbutton-Operated Radio Control Console in Dispatch

Communication Systems

Dispatch is equipped with an outdated multichannel radio control console, manufactured by Zetron, to carry out the dispatching tasks. The original desktop console was later expanded to allow the Sheriff's Office to monitor and dispatch to radios carried by the Sheriff, six deputies, and other pertinent personnel.

The ability to route audio signals between Dispatch and pertinent personnel resides in the control unit located in the Communications Room on second floor. Again, the room was not designed for this purpose, which compromises maintenance and ventilation. A hybrid command network designed by Interop-Solutions allows the Webster County Law Enforcement Staff to expand radio coverage to surrounding county sheriff offices and fire departments.



Figure 70: Existing Fire Control/Communicator System

Fire Alarm System

Though no wet pipe sprinkler system exists, the Webster County Sheriff's Office has a centralized fire alarm system via a fire control/communicator, manufactured by Silent Knight. The digital communicator provides the necessary components and power for supervision of up to four zones. The detection circuits accommodate the contact-type smoke detectors located throughout the facility, along with pull stations at the entrances to the Jail and Kitchen that allow manual initiation of a fire alarm.

Though the fire alarm system is in good overall condition, it has become more problematic in the last six months. The production of this particular model has been discontinued by the manufacturer, increasing the difficulty of service routines and obtaining replacement parts. The discontinuation occurred because the existing fire alarm system was certified under NFPA 71, Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service, which has since has been withdrawn. New fire alarm equipment is now certified under NFPA 72, National Fire Alarm and Signaling Code.

Summary – Electrical Systems Assessment

Even if the existing electrical service was three phase and two to three times larger, it would still lack the necessary capacity to handle new electrical loads associated with a major expansion.

Much can be said about the inroads the Sheriff's Office has made to incorporate technological advances to security, communication, and fire alarm systems. However, limited floor space within the Sheriff's Office often forces the electrical and various electronic systems to reside in areas that are not designed for this purpose. In addition to congestion, proper clearance requirements for equipment ventilation, safety, and maintenance are difficult to maintain. If a major renovation and/or expansion is pursued, the electrical and electronic systems serving the Sheriff's Office will require major upgrades and increased dedicated space.

In new design, a dedicated equipment room for servers, communications equipment, video and radio racks, uninterruptible power supply (UPS) units, etc., is provided that keeps this equipment centralized and out of harm's way. The room provides sufficient space for service and expansion, and is provided with a dedicated cooling and air filtration systems to prolong the equipment's useful life. New security, communications, and fire alarm systems will be provided as appropriate for a newly renovated or expanded facility, using existing cameras, servers, and other equipment to the extent possible.

ASSESSMENT OF EXISTING COURTHOUSE

A. Background

During the *Phase 1 Needs Assessment* of the Jail and Sheriff's Office, the Webster County Board requested that the existing 1923 Courthouse also be evaluated, with specific attention to the Courts and Court support spaces which, due to the age of the building, fail to meet the accessibility requirements of the Americans with Disabilities Act (ADA) as well as most modern building and life safety codes. Most importantly, the Court rooms fail to provide the kind of safety and security measures necessary in modern society for the public, Court judges and staff, as well as for defendants.

Phase 2 Preliminary Concept Planning will develop options for replacement of the Courts and Court support spaces along with preliminary options for the Jail and Sheriff's Office spaces.

B. Building Envelope & Building Features

The main concrete stairs leading to the primary entrance on the south were found spalled, cracked, chipped, and otherwise deteriorated. Though routine maintenance and repair have been performed, complete replacement seems inevitable. Though access to the building by handicapped individuals could occur at other building entrances, improved accessibility should be considered if exterior stair replacement is pursued.

The existing windows are aluminum frame, single pane type as a result of a replacement effort carried out in the 1970s. Uninsulated pre-finished veneer panels were used to fill in the original masonry openings. Replacement of existing windows with double pane windows with thermally broken frames would reduce energy costs and improve the aesthetics of the exterior facade.

Polyurethane foam added over the built-up roof is now crazing, blistering, and worn. Evidence of ponding exists and roof insulation is presumed water damaged, rendering it largely useless. Consider tearing off the existing built-up roof down to the deck and installing new rigid insulation covered with a single-ply membrane, such as EPDM.

The concrete roof coping has areas where freeze/thaw cycles have caused movement and cracks. A portion of the copper cornice is missing. Remaining segments are subject to cracking and the wood substrate is suspected to be rotted. Further investigate the causes of moisture infiltration and degree of deterioration and take corrective action as dictated by the findings.

Exterior brick work and mortar joints are in excellent condition given the building's age (i.e., constructed in 1923). However, some small cracks exist and one crack in the west wall allows water to seep into the occupied space.

Brick work comprising the chimney is failing, even though it was previously reconstructed. Though a new mechanical system may allow the chimney to be dismantled, complete replacement is in order if the boiler-fed heating system is maintained. Also, the brick parapet walls and cap are in poorer repair, especially where found exposed.

The floor joist sill plate in the County Assessor's Office is potentially damaged, resulting in sagging of the floor. Unfortunately, no easy means of accessing the substrate below the floor exists.

Limestone walls comprising the exterior foundation and some other structural members in the basement level show signs of erosion, spalling and pitting. The atmospheric discoloration of the limestone foundation where it protrudes above grade detracts from the building's appearance. Though further analysis is warranted, the overall structural integrity of these systems seems intact.

The construction and expansion joints serving certain areas of the perimeter of the building have opened, allowing water to drain along the exterior face of the basement walls. After the joints have been properly raked and cleaned, install compressible joint filler and appropriate sealant. Some pavement may have to be replaced to accomplish this.

Existing full glass exterior doors are aluminum frame, single pane with worn pile weatherstripping. Transom windows above the doors are single pane and one window is cracked. Replacement of the existing doors would potentially benefit energy efficiency, security, and improve the aesthetics of the exterior facade.

Birds have a tendency to roost on the east side of the building, resulting in droppings by the building entrance. Exclusion is considered the most practical and humane method of management. Various methods and materials of exclusion exist, including netting and spikes, which are the most common.

C. Primary Heating System

The existing low pressure steam heating system is served by a cast iron sectional boiler manufactured in 1982 by Peerless Heater Company. Energy efficiency is poor due to its single pass design and use of atmospheric combustion.

Provisions for combustion air to the boiler are inadequate and no emergency gas shutoffs exist at the two existing means of egress. The winding metal stairs and steep stairwell comprising the egress paths make exiting from the Boiler Room during emergencies more difficult than typically encountered.

Some lengths of steam supply piping are uninsulated, increasing energy losses and the propensity for overheating in the building. Where pipe insulation does exist, mudded joints covering fittings and other appurtenances contain asbestos.

Heating provided by the cast iron radiators is difficult to control, even where older thermostatic radiator valves are in use. The cast iron radiators use up valuable floor space, including that lost because of the high surface temperature of the radiators.

D. Heating, Ventilation & Air Conditioning (HVAC) System

Air conditioning of the Courthouse is largely accomplished via window air conditioning units. Though many of the units are newer, some do not have adequate capacity for the spaces that they serve. Remaining areas are served by older ductless air conditioning and heat pump systems. Noise and air flow is often objectionable while the above described units are operating.

The Court Room, County Attorney, Law Library, Judges Chambers, and other associated spaces on the third floor are served by three packaged air conditioning systems located in the attic space. The 5-ton condensing unit on the north is in poorer condition and a good candidate for replacement. In general, supply air diffusers used in these systems are dated, and/or residential type. Electric thermostats controlling the units do not automatically raise set point temperatures during unoccupied periods.

Little is present in terms of adequate mechanical exhaust systems for rest rooms, janitor closets, etc. Also, there are no mechanical systems in place that introduce ventilation air into the building. Though air infiltration and operable windows might suffice for County Offices, mechanical ventilation is required by modern day codes for public assembly areas like the Court Room, and occupied spaces such as the Jury and Board Rooms.

New mechanical systems could be designed to meet current heating and cooling loads and address the requirement for ventilation air. Implementation should work to mitigate noise issues, reduce energy costs, and improve comfort level for building occupants. The project should include a dedicated air conditioning system for the Elevator Equipment Room, as is typically required by the State Elevator Inspector.

E. Electrical Service

The Courthouse is served by a newer 200 amp main distribution panel, manufactured by Square D. Though in good condition, the existing service size is small, which could potentially limit options for a new mechanical system design.

F. Lighting System

Interior lighting is largely accomplished with a combination of recessed troffer, wrap around, and strip fluorescent fixtures. Incandescent light fixtures are used in the Judge's Chambers and some storage rooms. Exterior lighting attached to the building is a combination of high intensity discharge and fluorescent fixtures. Photocell or time clock control over these fixtures would help prevent operation during the daytime. Exterior lighting for the courthouse square and parking areas is limited.

Consider installing T8 fluorescent lamps and electronic ballasts in place of T12 lamps and electromagnetic ballasts in areas of the building where conversion/replacement has yet not occurred. Some of the older fixtures in rarely occupied areas may use ballasts that contain polychlorinated biphenyl (PCBs) that require proper disposal due to health and environmental concerns.

Though the majority of the remaining fluorescent light fixtures are in relatively good condition, some recessed troffer fixtures have acrylic lenses that have yellowed. If complete fixture replacement is pursued, use of new LED light fixtures could well be an economical option to reduce energy and maintenance costs.

Consider installing occupancy sensors in intermittently occupied areas such as offices, rest rooms, etc.

Consider installing natural light controllers that will turn off conventional lighting in the rest rooms and other areas when daylight is sufficient.

G. Domestic Hot Water (DHW) System

The Courthouse is served by a 40-gallon gas-fired water heater that does not have the capacity normally found in this type of facility. Domestic hot water piping is uninsulated, increasing energy losses and making it much more difficult to get hot water to lavatories and sinks. This condition is exacerbated by the lack of a domestic hot water recirculation system. It seems evident that domestic hot water is not routinely available, even if hot water is left running for some time.

H. Plumbing Systems & Plumbing Fixtures

Issues associated with lower water pressure in the community have been addressed with the addition of a booster pump that raises municipal water pressure to approximately 70 psi. Piping repairs to the domestic water system have been carried out with copper piping and PEX tubing.

Some plumbing fixtures suffer from slow drainage, which may be a function of obstructions in the waste piping. Poor venting may also be contributing to the drainage issues, as few vents through the roof exist and the size of these vents is much smaller than allowed by modern codes.

Though one drinking fountain and one lavatory looked newer, many of the fixtures are older and possibly original. Though some modifications have been made to improve accessibility, compliance with ADA guidelines is normally required if renovation to the rest rooms, or other spaces are pursued.

I. Special Systems

It may become advantageous to install a stand-by emergency generator to power critical systems in the building during power outages.

A new, larger water service main would become necessary if 100% sprinkler coverage of the Courthouse is required by the State Fire Marshal or other code officials.

FORECAST OF FUTURE FACILITY NEEDS

To forecast the number of inmate beds the Webster County Jail will need in the foreseeable future, a **Peak Capacity Factor** is applied to the two methods of projection. The forecast methods utilized are the **Linear Regression Method** and the **Incarceration Rate Method**.

A. Peak Capacity Modifier

Both the Incarceration Rate method and the Linear Regression method are used to determine *average* daily prisoner populations (ADP). This data is valid for projecting the growth of inmate populations over time, but it does not account for the actual daily peaks a jail facility experiences.

For instance, on October 24th, 2015 the Webster County jail had a daily peak of *8 total inmates* recorded, yet the average daily population for the same month was *6.10 inmates*. The peak inmate count on this day was 1.31 times greater than the ADP monthly average (*Figure 71*).

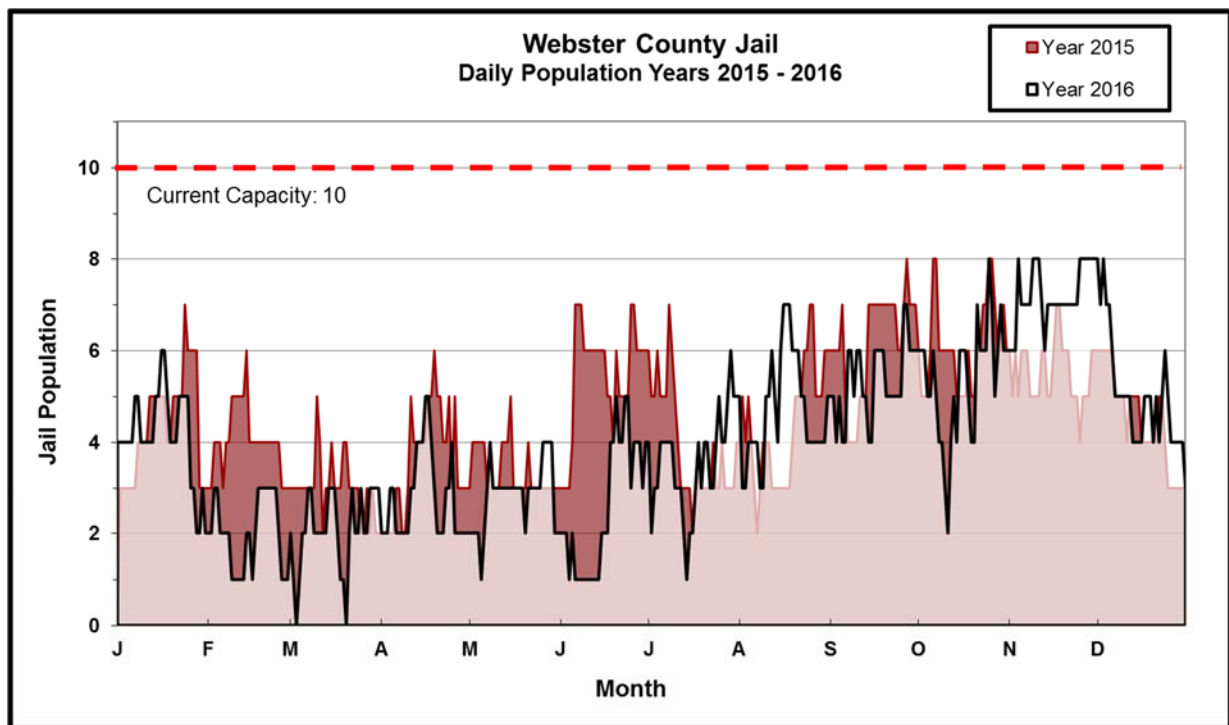


Figure 71 (Source: Webster County Sheriff's Office)

In order to account for peak booking and holding needs, special events, seasonal fluctuations, mass arrests, variations in numbers of probation/parole violators and generally recurring non-standard events, a **Peak Capacity Modifier** will be applied to the forecasted ADP.

The peak factor is calculated by determining the average peak count from the 25 highest peak days per year over the previous two-year period. The average peak count is divided by the ADP over the same period to determine the peak factor. In this case, a **peak modifier of 1.73** will be applied to the data projections (*Figure 72*).

WEBSTER COUNTY: JAIL CAPACITY PEAK FACTOR				
2-Year Average: 25 Highest ADP Days (Jan. 2014 - Dec. 2016)				
Rank	ADP Population 2015	Occurrences	ADP Population 2016	Occurrences
1	8	5	8	13
2	7	20	7	12
3				
4				
5				
6				

2015 Aver. Peak Count:	7.20	2016 Aver. Peak Count:	7.52
Year 2015 ADP:	4.53	Year 2016 ADP:	3.98
2015 Peak Factor:	1.59	2016 Peak Factor:	1.89
15-'16 Aver. Peak Count	7.36		
15-'16 Average ADP	4.25		
Forecast Peak Factor:	1.73		

Figure 72 (Source: Webster County Sheriff's Office, Prochaska & Associates)

B. Linear Regression Method

The following chart depicts the "Line of Best Fit", established through Linear Regression analysis of the County's average daily jail population (ADP) (Figure 73). The Linear Regression method of analysis is used to establish the relationship between ADP over time.

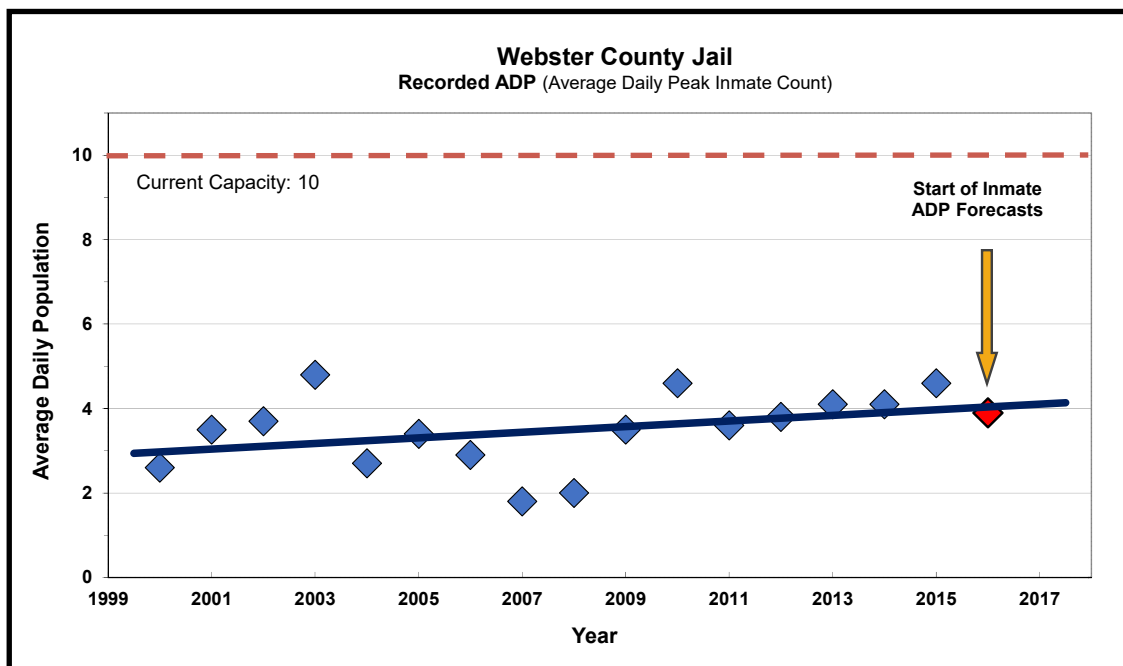


Figure 73 (Source: Webster County Sheriff's Office, Prochaska & Associates)

C. Incarceration Rate Method

The Rate of Incarceration is calculated by dividing the Jail’s ADP by the County’s general population and multiplying the result by 100,000. This establishes a rate of incarceration per 100,000 people, prorated to the number living within Webster County. (A value per 100,000 people is a de-facto national standard which allows for comparison between areas in the US, even though an area such as Webster County may not have a total population of 100,000 people). The Webster County incarceration rate is calculated as follows:

2010 Webster County Population: 3,812 people (Census 2010)
2010 Webster County Jail ADP: 4.60 inmates

$(4.60 / 3,812) \times 100,000 = 120.7$ Inmates per 100,000 people
OR approximately 1 Inmate per 829 residents

- In 2010, the incarceration rate for all local jails within the United States was 242 inmates per 100,000 residents. This value increased from 220 per 100,000 residents in 2000, an increase of 10% over 10 years. The national average incarceration rate growth increase began declining in 2008 through 2015 where it reached 230 inmates per 100,000.
- Although generally falling from 2008 to 2011, and leveling from 2012 to 2015, the trend line from 1985 to 2015 still reflects an average increase of **2.64% per year**.

This data illustrates the historical growth in the national rate of incarceration for local jails and how it projects into the future. Particularly, this data incorporates trends in local jails both large and small, including diverse prisoner populations, a blend of aged and modern jail facilities, and a mixture of judicial sentencing practices (Figure 74).

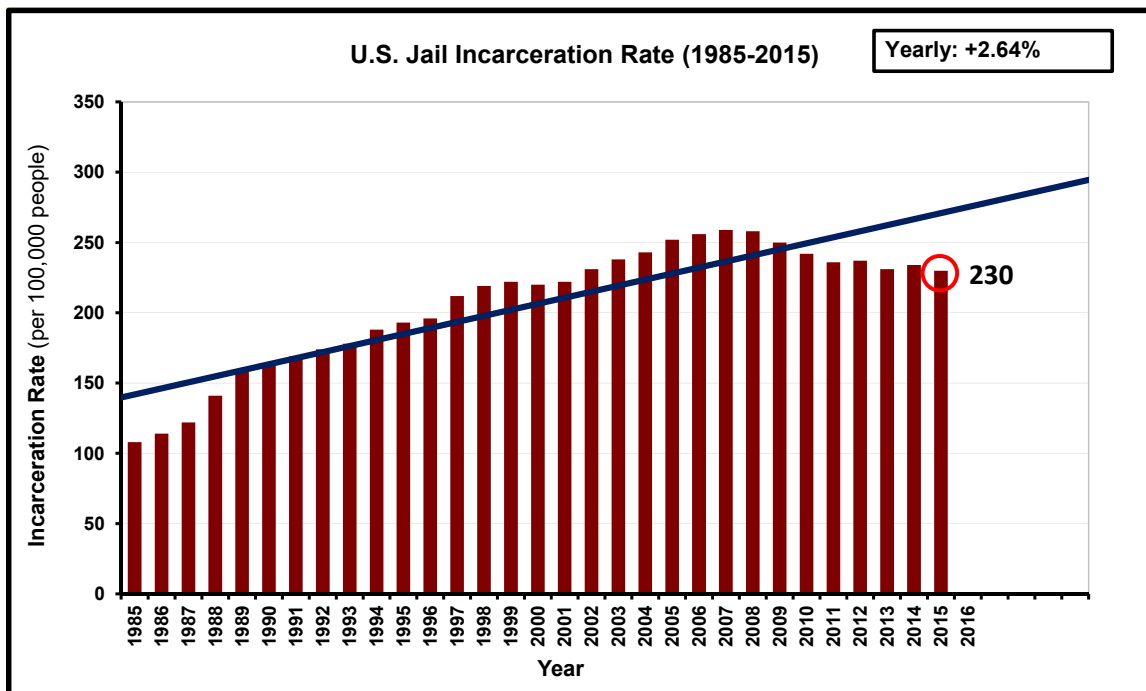


Figure 74 (Source: Bureau of Justice Statistics)

D. Forecasted Jail Bed Capacity (2017 – 2047)

The beds required for the Webster County jail to provide adequate service have been projected through 2047 using both the Linear Regression method and the Incarceration Rate method. As previously established, a peak modifier of 1.73 has been applied to the ADP projections, to arrive at a forecasted Jail Bed Capacity or Projected Bed Count.

Factors Affecting Mathematical Projections

It is important to note that the following projections rely on a series of assumptions that, if drastically divergent, could affect future recorded values. For instance, one method relies upon the projection of the rate of change in County population. However, if the County population were to change at a more drastic rate, then the projected number of beds would be affected accordingly, if all other variables held equal. Similarly, drastic alterations in public policy could have an effect on the jail population, positively or negatively. The following projections are made with a thorough understanding of current conditions and historical trends, and they represent a statistical probability. In other words, future results may indeed differ slightly from the preceding projections, but drastically divergent results are unlikely.

Linear Regression Method Forecast

The Line of Best Fit for Linear Regression is established through the recorded average daily population of Webster County Jail from 2000 to 2016 (*Figure 74*) and is then used to forecast the future ADP through 2047. This method projects an average daily population of 6 inmates by 2037 and still 6 inmates by 2047 (*Figure 76*). To forecast the number of beds, the peak factor is applied to the projected ADP, resulting in a Peak Capacity of 10 Beds by 2037 and 11 Beds by 2047 (*Figures 75 and 76*).

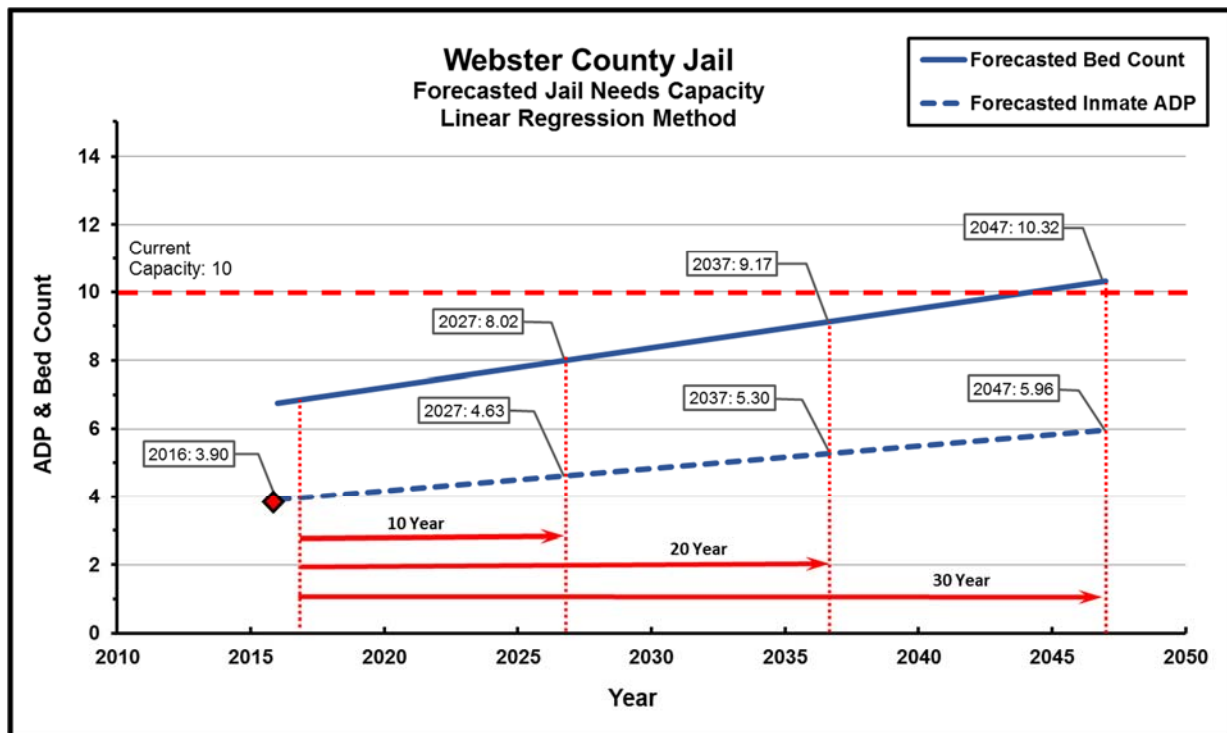


Figure 75 (Source: Webster County Sheriff's Office, Prochaska & Associates)

Webster County Jail Bed Needs Forecast Linear Regression Method				
Year	Actual ADP	Projected ADP	Peak Factor	Forecasted Number of Beds
2016	3.90*	3.90	-	-
2017	-	3.97	1.73	6.87
2022	-	4.30	1.73	7.44
2027	-	4.63	1.73	8.02
2032	-	4.96	1.73	8.59
2037	-	5.30	1.73	9.17
2042	-	5.63	1.73	9.74
2047	-	5.96	1.73	10.32

Figure 76 (*Webster County Recorded ADP)

Incarceration Rate Method Forecast

The Line of Best Fit for the Incarceration Rate forecast is established through the recorded national incarceration rate for local jails, which had an annual average growth of 2.64% from 1985 to 2015 (Figure 74). The Incarceration Rate Method applies this rate of growth to the forecasted Webster County population (Figure 5) to arrive at an inmate forecast. This forecast projects that an average of 7 inmates will be booked into the jail by 2037 and still an average of 7 inmates by 2047. With the peak factor applied to the inmate projections, the jail will require 11 beds by 2037 and 12 beds by 2047. It is worth noting that the Incarceration Rate Method is heavily based on projected county population figures and that any future alteration to the County’s growth, either positive or negative, can affect this forecast (Figures 77 and 78).

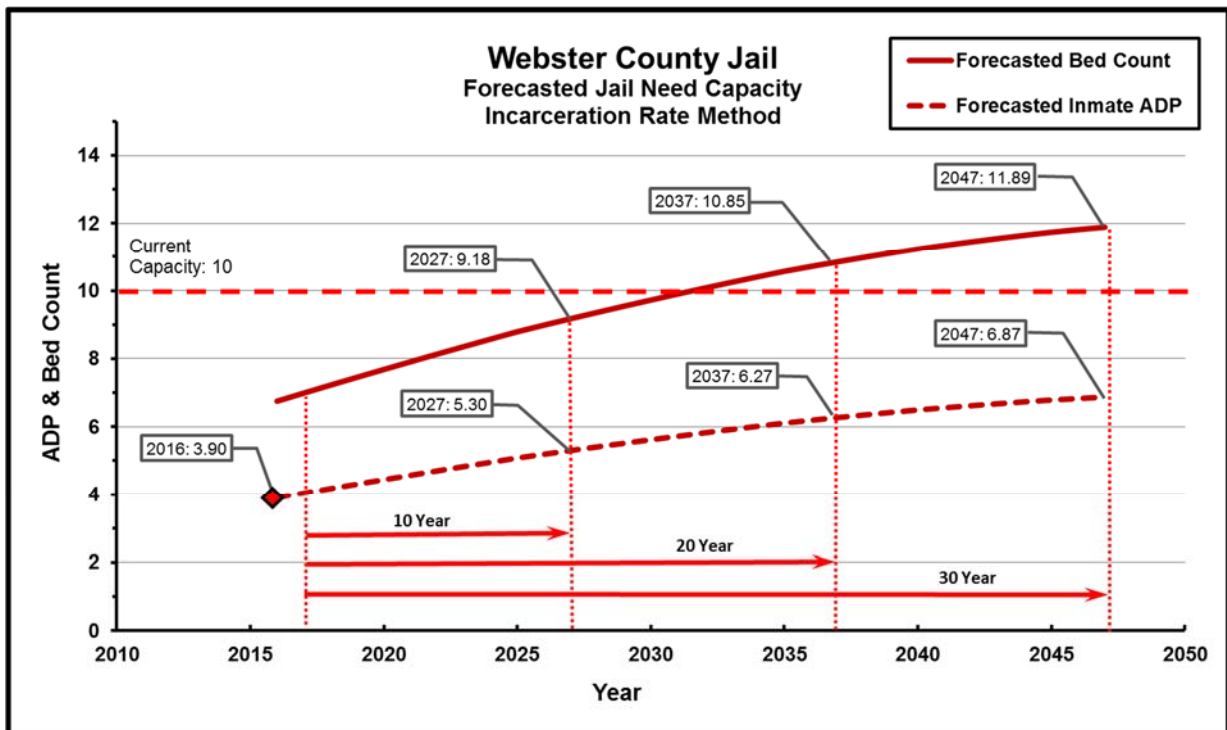


Figure 77 (Source: Prochaska & Associates, Woods & Poole Economics, and Webster County Sheriff’s Office)

Webster County Jail Bed Forecast					
Incarceration Rate Method					
Year	Population Projection	Projected Incarceration Rate (per 100,000)	Base ADP	Peak Factor	Forecasted Number of Beds
2016	-	-	3.90*	-	-
2017	3644	110.9	4.04	1.73	6.99
2022	3552	132.4	4.70	1.73	8.14
2027	3446	153.9	5.30	1.73	9.18
2032	3319	175.4	5.82	1.73	10.07
2037	3185	196.9	6.27	1.73	10.85
2042	3031	218.4	6.62	1.73	11.46
2047	2864	239.9	6.87	1.73	11.89

Figure 78 (Source: Prochaska & Associates, Woods & Poole Economics, and Webster County Sheriff's Office)

Averaging of Method Forecasts

By averaging the two separate forecast methods of projecting future jail inmate populations, a high- and low-range will develop. By averaging the high and low forecast, a more likely projection can be produced. This averaged forecast translates into a projected **Bed Requirement of 9 Beds by 2027, 11 Beds by 2037, and 12 Beds by 2047**. This forecast represents total estimated bed counts and does not account for the industry-recognized "80% Rule of Thumb": *that a jail is technically "full" at 80% of bed capacity and begins to lose the ability to properly classify and segregate inmates*. This will be discussed later in this report. The average of both forecast methods is below: (Figures 79 and 80)

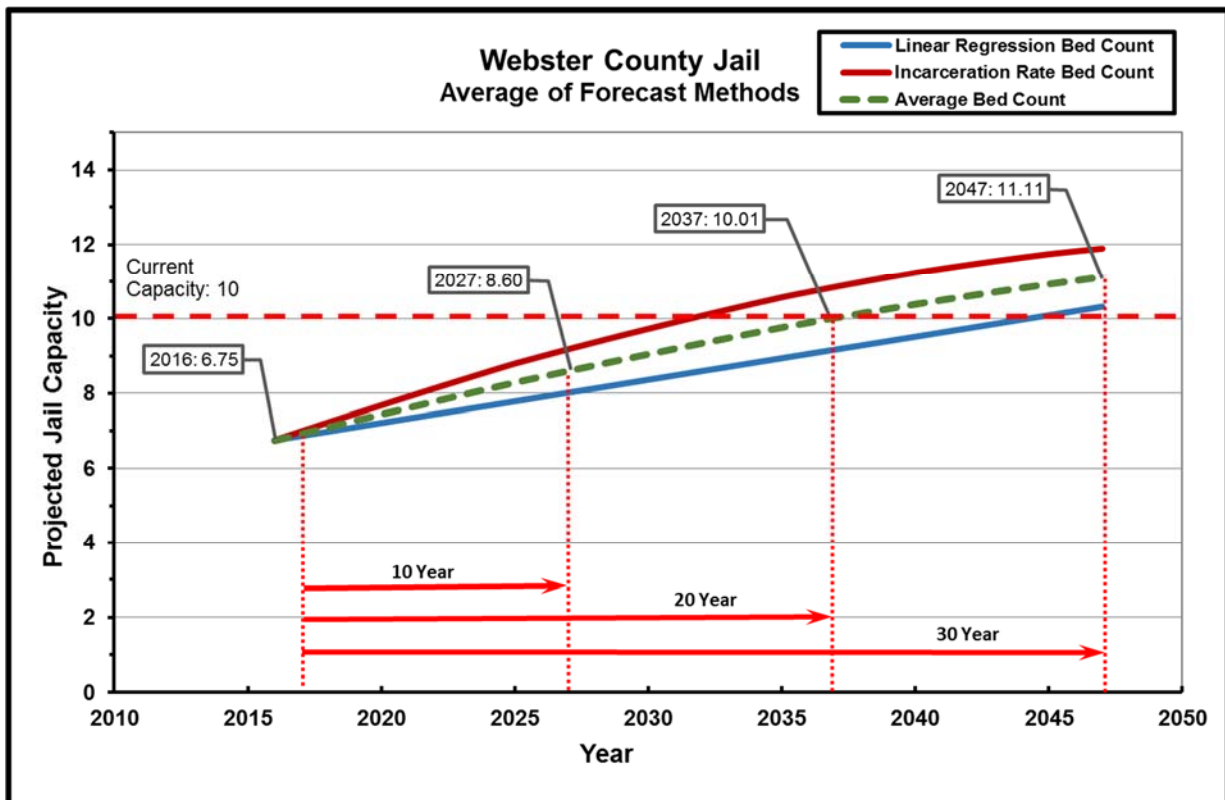


Figure 79 Includes inmate levels from Nuckolls & Franklin Counties (Source: Prochaska & Associates)

Webster County Jail Bed Needs Forecast			
Linear Regression and Incarceration Rate Methods			
Year	Linear Regression	Incarceration Rate	Average
2017	6.87	6.99	6.93
2022	7.44	8.14	7.79
2027	8.02	9.18	8.60
2032	8.59	10.07	9.33
2037	9.17	10.85	10.01
2042	9.74	11.46	10.60
2047	10.32	11.89	11.11

Figure 80 (Source: Prochaska & Associates)

E. Capacity Increase over Forecast: Regional Facility

There has been a concern and desire voiced by State and County officials that a new Webster County Jail facility should consider a more regional approach to sizing, in order to fill a void within the region that is lacking in adequate jail beds. At the same time, the County does not want to oversize the facility and not be able to afford the initial construction cost nor long-term staffing and operational costs. In response to this desire, a general list of benefits and risks associated with a larger facility follow:

Potential Benefits

- **Revenue Generation:**
The Jail currently charges \$50 per day per inmate housed from other counties and does not incur the transportation expense of these inmates. Assuming four additional beds could be filled 100% of the time, a \$200,000 increase in project cost could be recovered in under 3 years.
- **Expansion Potential:**
Jails should be sized based upon projected needs 20 to 30 years from now. Out-of-county inmates can be housed in the Webster County Jail, along with the associated income, and provide space for additional future Webster County inmates, should there be an unanticipated increase in Webster County inmates.
- **Operational Efficiencies:**
Though based on many factors, a safe staffing ratio within a modern jail facility is commonly found at 15 to 20 inmates per single correctional officer. Modern jails with 15 to 20 inmates can be staffed and operated as efficiently as a smaller facility.

Potential Risks

- **Over-staffing:**
If a jail is oversized beyond projected 20 to 30 year needs, or beyond the 15 to 20 inmate ratio noted above, the facility may require additional staffing and could incur higher operating costs, which the County may not recoup if the demand for out-of-county inmates is not realized.

While the Webster County forecast already includes a base level of inmates from Nuckolls and Franklin Counties, the goal of a Regional facility option is to explore the overflow inmate potential from Adams County Jail, which currently transports inmates to Clay and Kearney counties. These three counties would potentially become the basis for a regionally sized Webster County Jail, due to their proximity to Webster County. This potential Regional Jail forecast is highlighted in *Figure 81*.

Webster County Jail - Bed Forecast							
County vs. Regional Bed Forecast Data, Years 2017-2047							
Year	Webster County Projected ADP (Average Daily Population)	Webster County Average Bed Needs (Peak Factor of 1.73)	Webster Co. Bed Needs <small>Includes capacity for 80% 'Rule of Thumb': (Jail safety reduced & transportation resumes at 80% of maximum capacity)</small>	Potential Adams County Male Bed Forecast - 80.8% of Webster ADP 2010-2016 Average, 1.45 Peak Factor: common per jail size	Potential Adams Co. Female Bed Forecast - 46.0% of Webster ADP 2007-2016 Average, 1.45 Peak Factor: common per jail size	Regional Bed Needs Webster County + Adams Co. Male + Adams Co. Female	Regional Facility Max. Bed Needs <small>Includes capacity for 80% 'Rule of Thumb': (Jail safety reduced & transportation resumes at 80% of maximum capacity)</small>
2016	3.90*			4.57	2.60		
2017	4.00	6.93	8.66	4.69	2.67	14.29	17.87
2022	4.50	7.79	9.74	5.27	3.00	16.07	20.08
2027	4.97	8.60	10.75	5.82	3.31	17.73	22.17
2032	5.39	9.33	11.67	6.32	3.60	19.25	24.06
2037	5.78	10.01	12.51	6.78	3.86	20.64	25.80
2042	6.12	10.60	13.25	7.17	4.08	21.86	27.33
2047	6.42	11.11	13.88	7.52	4.28	22.90	28.63

Figure 81 (Source: Webster County Sheriff's Office, Nebraska Crime Commission Statistical Analysis Center, and Prochaska & Associates)

F. Capacity Recommendation

As of August 16th, 2017, the American Civil Liberty Union (ACLU) filed a lawsuit against the State of Nebraska for the overcrowding and deterioration of conditions at Nebraska state correctional facilities. The ACLU claims that inmates are suffering and dying from treatable disease, denied basic healthcare, and suffering injuries and deaths when violence erupts. Also, basic accommodations for deafness, blindness or other disabilities are not made available to inmates. As a result of the suit, it is anticipated that the State of Nebraska may 'push back' inmates into local county jails, increasing county jail inmate populations across the State of Nebraska.

In consideration of the ACLU suit and the concern for potential Regional jail beds, two facility options are presented as follows:

- For a **Regional Facility** to provide beds for inmates from Webster, Nuckolls, Franklin and Adams Counties, the forecasted target is a **20 Bed Facility**, to stay within staffing efficiency ratios.
- For a **County Facility** to provide beds for inmates currently from Webster, Nuckolls, and Franklin Counties, the forecasted target is a **16 Bed Facility**.

Both options would allow the County to grow into this space over 30 years while significantly reducing the need to transport and board inmates out-of-county. Regardless of the option selected by the County, it is recommended that the facility be designed for future expansion, in order to accommodate the additional beds forecasted by 2047 in *Figure 81*, should the County see the need in the future.

Part 2 Preliminary Concept Planning will evaluate these Jail Options, along with associated Jail support spaces, Law Enforcement Offices and the Dispatch/Communications Center.

FACILITY PROGRAM, BUDGET AND STAFFING PROJECTIONS

A. Program for a 20-Bed (Regional) Jail

The following Program defines the spaces which would be anticipated in a new 20-bed Law Enforcement Center. This program represents the initial needs of the County Sheriff's Office for a modern jail and office space. As the County progresses with the design process, focus should be placed on adjusting this program based on input from County officials, a specific site, and a corresponding facility design.

JAIL FUNCTIONS – 20-BED (REGIONAL) FACILITY	
<i>Space Description</i>	<i>Proposed SF</i>
Intake:	
Vehicular Sallyport	731 sf
Secure Vestibule/Report Writing/Restraint Chair Storage	170 sf
Booking/Booking Storage/Central Control	206 sf
Fingerprint Area and Booking Circulation	260 sf
Staff Toilet	60 sf
Holding Cells	
Multi-holding Cells (1)	105 sf
Isolation Cell (2 @ 80 sf each)	160 sf
Contact Visitation/Interview Room	100 sf
Clothing Change-out/Shower/Toilet	138 sf
Property Storage	112 sf
Laundry (including Jail Issue Storage)	230 sf
General Storage/Jail Storage	100 sf
Food Service:	
Kitchen	550 sf
Toilet	50 sf
Janitor Closet	20 sf
Janitor Closet	20 sf
Secure Vestibule	66 sf
Medical Exam/Toilet	240 sf
Program Services:	
Library/Multi-Purpose (Includes Storage Room)	240 sf
Exercise (enclosed)	600 sf
Exercise Storage	30 sf
Master Control/Dispatch/911 Communications:	
Master Control	150 sf
Master Control/911 Communications/Dispatch Equipment	150 sf
Dispatch/911 Communications	150 sf
Toilet	50 sf
Secure Vestibule	48 sf
Jail Housing Units	
Work Release	
Multi-Person Cell (Dorm) - 2 beds (80 SF min x 2)	196 sf
Minimum Security	
1 Cell – Dual Occupancy -2 beds (100 SF min x 1)	100 sf
Day Room	135 sf

Medium Security (Male)	
4 Cells – Dual Occupancy - 8 beds (100 SF min x4)	400 sf
Day Room	380 sf
Medium Security (Female)	
2 Cells – Dual Occupancy - 4 beds (100 SF min x 2)	200 sf
Day Room	190 sf
Maximum Security (M/F Swing)	
2 Cells – Single Occupancy – 2 beds (75 SF min x 2)	150 sf
Day Room	135 sf
Special Needs (M/F Swing)	
2 Cells (1 H.C.) – Single Occupancy – 2 beds (110 SF min x 2)	220 sf
Day Room	135 sf
Jail Subtotal (Net SF)	6,977 sf
Miscellaneous (Walls, Utility Chases, Circulation) @ 35%	2,442 sf
Jail Subtotal (Gross SF)	9,439 sf

The preceding portion of the program represents the space necessary for a 20-Bed jail which meets the requirements of Nebraska Jail Standards for a modern jail. The Nebraska Jail Standards are focused on improving conditions and operations in local jails to lessen the potential for successful litigation against local officials. When considered in context with the current Webster County Jail, this program underscores the inadequacies of the current facility as a modern jail and the potential liability incurred by the County.

This program includes 20 inmate beds which are gender flexible in order to accommodate fluxes in jail population. Each category of bed segregation (minimum, medium, etc.) is separated by sight and sound, meaning that the listed male beds could hold females if necessary. Additionally, the security classification labels provided do not signify exclusive uses. For example, a maximum security cell can hold a minimum security inmate if necessary, but a minimum security cell cannot hold a maximum security inmate. This arrangement allows the jailor to hold a wide variety of inmates securely, which is not possible with the current facility.

B. Program for a 16-Bed Jail

The same 20-year projection for a 16-bed option results in the alternate Space Program below. Please note that most of the spaces, other than the cell count, must remain the same as with the 20-bed option. As with the 20-bed option, during the *Phase 2* process, the focus should be placed on adjusting this program based on input from County officials, a specific site, and a corresponding facility design.

JAIL FUNCTIONS – 16-BED FACILITY	
<i>Space Description</i>	<i>Proposed SF</i>
Intake:	
Vehicular Sallyport	731 sf
Secure Vestibule/Report Writing/Restraint Chair Storage	170 sf
Booking/Booking Storage/Central Control	206 sf
Fingerprint Area and Booking Circulation	260 sf
Staff Toilet	60 sf
Holding Cells	
Multi-holding Cells (1)	105 sf

Isolation Cell (2 @ 80 sf each)	160 sf
Contact Visitation/Interview Room	100 sf
Clothing Change-out/Shower/Toilet	138 sf
Property Storage	112 sf
Laundry (including Jail Issue Storage)	230 sf
General Storage/Jail Storage	100 sf
Food Service:	
Kitchen	550 sf
Toilet	50 sf
Janitor Closet	20 sf
Janitor Closet	20 sf
Secure Vestibule	66 sf
Medical Exam/Toilet	240 sf
Program Services:	
Library/Multi-Purpose (Includes Storage Room)	240 sf
Exercise (enclosed)	600 sf
Exercise Storage	30 sf
Master Control/Dispatch:	
Master Control	150 sf
Master Control/911 Communications/Dispatch Equipment	150 sf
Dispatch/911 Communications	150 sf
Toilet	50 sf
Secure Vestibule	48 sf
Jail Housing Units	
Work Release	
Multi-Person Cell (Dorm) - 2 beds (80 SF min x 2)	196 sf
Minimum Security	
1 Cell – Dual Occupancy -2 beds (100 SF min x 1)	100 sf
Day Room	135 sf
Medium Security (Male)	
3 Cells – Dual Occupancy - 6 beds (100 SF min x3)	300 sf
Day Room	380 sf
Medium Security (Female)	
2 Cells – Dual Occupancy - 4 beds (100 SF min x 2)	200 sf
Day Room	190 sf
Maximum Security (M/F Swing)	
1 Cell – Single Occupancy – 1 bed (75 SF min x 1)	75 sf
Day Room	135 sf
Special Needs (M/F Swing)	
1 Cell (1 H.C.) – Single Occupancy – 1 bed (110 SF min x 1)	110 sf
Day Room	135 sf
Jail Subtotal (Net SF)	6,692 sf
Miscellaneous (Walls, Utility Chases, Circulation) @ 35%	2,342 sf
Jail Subtotal (Gross SF)	9,034 sf

The preceding portion of the program represents the space necessary for a 16-Bed jail which meets the requirements of Nebraska Jail Standards for a modern jail. As with the 20-bed facility, this program includes 16 prisoner beds which are gender flexible in order to accommodate fluxes in jail population.

C. Program for a Justice Center with 20-Bed or 16-Bed Jail

The following Law Enforcement Office program represents modern office space to meet the Sheriff's Office current and future needs. This program includes administrative support spaces for both the jail and the Sheriff's Department, many of which are shared spaces to maximize efficiency. This program is identical for both the 20-bed and 16 bed Jail programs.

LAW ENFORCEMENT OFFICE FUNCTIONS	
<i>Space Description</i>	<i>Proposed SF</i>
Public Spaces	
Entrance Lobby/Vestibule	240 sf
Public Toilets (2 @ 52 SF ea.)	104 sf
Video Visitation	120 sf
Administrative Spaces	
Reception/Administration/Combined File Storage	150 sf
Copy/Work Room	120 sf
Sheriff's Department Offices	
Sheriff's Office	250 sf
Chief Deputy's Office	200 sf
Jail Administrator's Office	200 sf
Canine Patrol Officer	100 sf
Squad Room (5 Desks)	250 sf
Support spaces:	
Interview Room	115 sf
Evidence Storage	500 sf
Conference/Training/EMS	480 sf
Janitor Closet	20 sf
Law Enforcement Offices Subtotal (Net SF)	2,849 sf
Miscellaneous (Walls, Circulation) @ 30%	855 sf
Law Enforcement Subtotal (Gross SF)	3,704 sf

The existing Courtroom space in the Courthouse does not meet current ADA accessibility requirements nor modern security standards for courtrooms. The following Courtroom Function program represents modern courtroom spaces to meet the needs of the District and County Judicial System. This program includes spaces for the Public, District Judge, County Judge and Court Support Staff, many of which are shared among the County and District. This program is identical for both the 20-bed and 16 bed Jail programs.

COURTROOM FUNCTION	
<i>Space Description</i>	<i>Proposed SF</i>
Public Spaces	
Entrance/Vestibule	190 sf
Public Toilets (2 @ 70 SF ea.)	140 sf
Court Spaces	
District & County Courtroom (40 Seat Gallery)	1,600 sf
Attorney/Client Meeting Room	90 sf
Attorney/Client Meeting Room	90 sf

Jury Room	450 sf
Toilets (2) @ 70 sf ea.	140 sf
County Judge's Chamber	185 sf
Toilet	50 sf
District Judge's Chamber	185 sf
Toilet	50 sf
Library	65 sf
Court Reporter's Office	150 sf
Clerk of District Court	400 sf
Vault	180 sf
Clerk of County Court	400 sf
Vault	120 sf
Breakroom	160 sf
Toilet	45 sf
Courtroom Function Subtotal (Net SF)	4,905 sf
Miscellaneous (Walls, Circulation) @ 30%	1,472 sf
Courtroom Function (Gross SF)	6,377 sf

The following County Attorney program represents modern office space to meet the current and future needs of the County Attorney. This program includes a Probation Office and associated drug-testing Toilet. This program is identical for both the 20-bed and 16 bed Jail programs.

COUNTY ATTORNEY FUNCTIONS	
<i>Space Description</i>	<i>Proposed SF</i>
County Attorney Office	230 sf
County Attorney Workspace (Open Office)	350 sf
Office	95 sf
Conference Room	180 sf
Probation Office	125 sf
Toilet (Drug Testing)	65 sf
County Attorney Function Subtotal (Net SF)	1,045 sf
Miscellaneous (Walls, Circulation) @ 30%	314 sf
County Attorney Function (Gross SF)	1,359 sf

Summary square footage for a modern Justice Center, containing Jail, Law Enforcement Offices and Court space, serving the needs of Webster County follows, with separate Program Summaries for both the **20-bed Regional Jail** facility and the **16-bed Jail** facility. Again, these Programs are intended to be used as baselines during *Phase 2 Preliminary Concept Planning* and modified to fit site conditions and as necessary as the *Phase 2* options are developed.

PROGRAM SUMMARY: JUSTICE CENTER WITH 20-BED JAIL	
<i>Space Description</i>	<i>Proposed SF</i>
JAIL FUNCTIONS	
Jail Subtotal (Net SF)	6,977 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	2,442 sf
Jail Functions Subtotal (Gross SF)	9,439 sf

LAW ENFORCEMENT OFFICE FUNCTIONS	
Law Enforcement Subtotal (Net SF)	2,849 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	855 sf
Law Enforcement Subtotal (Gross SF)	3,704 sf
COURTROOM FUNCTIONS	
Courtroom Subtotal (Net SF)	4,905 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	1,472 sf
Courtroom Subtotal (Gross SF)	6,377 sf
COUNTY ATTORNEY FUNCTIONS	
County Attorney Subtotal (Net SF)	1,045 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	314 sf
County Attorney Subtotal (Gross SF)	1,359 sf
MISCELLANEOUS	
Mechanical/Electrical Equipment	1,500 sf
Electrical Room	150 sf
Miscellaneous Subtotal (Gross SF)	1,650 sf
<hr/>	
TOTAL PROJECT (gross square footage)	22,529 sf

A modern 20-bed Justice Center serving the needs of Webster County, including 4 additional jail beds to serve the regional housing needs of nearby counties, would encompass an estimated 22,529 square feet.

PROGRAM SUMMARY: JUSTICE CENTER WITH 16-BED JAIL	
<i>Space Description</i>	<i>Proposed SF</i>
JAIL FUNCTIONS	
Jail Subtotal (Net SF)	6,692 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	2,342 sf
Jail Functions Subtotal (Gross SF)	9,034 sf
LAW ENFORCEMENT OFFICE FUNCTIONS	
Law Enforcement Subtotal (Net SF)	2,849 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	855 sf
Law Enforcement Subtotal (Gross SF)	3,704 sf
COURTROOM FUNCTIONS	
Courtroom Subtotal (Net SF)	4,905 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	1,472 sf
Courtroom Subtotal (Gross SF)	6,377 sf
COUNTY ATTORNEY FUNCTIONS	
County Attorney Subtotal (Net SF)	1,045 sf
(Miscellaneous (Walls, Utility Chases, Circulation))	314 sf
County Attorney Subtotal (Gross SF)	1,359 sf

MISCELLANEOUS	
Mechanical/Electrical Equipment	1,500 sf
Electrical Room	150 sf
Miscellaneous Subtotal (Gross SF)	1,650 sf
<hr/>	
TOTAL PROJECT (gross square footage)	22,124 sf

A modern 16-bed Justice Center serving the needs of the Webster County would encompass an estimated 22,124 square feet. Note that the total difference between the 20- and 16-bed facilities is 405 square feet.

D. Anticipated Project Budget Range

Preliminary project budget projections are summarized below. Due to the nature of a preliminary budget, costs are based on historical square foot values, plus lump sum costs and allowances for special items. Costs are budgeted for the January 2019 construction bid market. Budgets for construction beyond 2019 should be adjusted for inflation and market conditions when construction is anticipated.

The following budget projections do not account for the conditions of a specific, such as the Courthouse site, or some other location in the County. Instead, an allowance of 5% is included for general construction site work. Budgets for more specific site work will be evaluated in *Phase 2*, assuming a site is selected. The Project Overhead/Soft Costs estimate anticipates costs which are separate from the physical construction of the building that may be incurred by the County before occupancy. Added together, the construction costs (Hard Costs) and project overhead costs (Soft Costs) become the total Project Budget.

As listed in the following cost estimate, the unit costs are national averages for construction costs per square foot for specific building types. The costs used herein are from the R.S. Means *2017 Building Construction Cost Data*. The national averages were then modified according to the location of the project (construction costs for the Webster County area are approximately 90% of the national average), the size of the project in relation to the national average (to account for "economy of scale"), and to account for inflation incurred between the recorded values (January 2017) and the anticipated construction bid date (January 2019). Although Webster County can anticipate lower construction costs than the national average, the modified cost projection is increased because the proposed facility is smaller than the national average. Construction inflation has *averaged* 2.1% per year over the past ten years.

Preliminary Budget Range		Median Cost/SF	3/4 Cost/SF
WEBSTER COUNTY JUSTICE CENTER – 20-BED REGIONAL JAIL			
Anticipated Bid Date: January 2019			
Space Description (from Program Summary)	Proposed SF		
JAIL FUNCTIONS			
Jail Subtotal Area	9,439 GSF		
Square Foot Cost Range		\$290.59	\$343.99
<i>Jail Budget Range Subtotal</i>		<u>\$2,742,288</u>	<u>\$3,246,922</u>
LAW ENFORCEMENT OFFICE FUNCTIONS			
Law Enforcement Office Subtotal Area	3,704 GSF		
Square Foot Cost Range		\$180.23	\$251.91
<i>Law Enforcement Office Budget Range Subtotal</i>		<u>\$667,572</u>	<u>\$933,075</u>
COURTROOM FUNCTIONS			
Courtroom Subtotal Area	6,377 GSF		
Square Foot Cost Range		\$259.79	\$259.79
<i>Courtroom Budget Range Subtotal</i>		<u>\$1,656,681</u>	<u>\$1,656,681</u>
COUNTY ATTORNEY FUNCTIONS			
County Attorney Area	1,359 GSF		
Square Foot Cost Range		\$180.23	\$251.91
<i>County Attorney Budget Range Subtotal</i>		<u>\$244,933</u>	<u>\$342,346</u>
MECHANICAL/ELECTRICAL EQUIPMENT			
Mechanical/Electrical Equipment Subtotal Area	1,650 GSF		
Square Foot Cost Range		\$67.77	\$161.21
<i>Mech/Elec Equipment Budget Range Subtotal</i>		<u>\$111,821</u>	<u>\$265,997</u>
MISCELLANEOUS			
<i>Construction Budget Subtotal</i>		\$5,423,295	\$6,445,021
Sitework Allowance at 5% (Grading, Drives, Sidewalks, etc.)		\$271,165	\$322,251
Design Phase Contingency at 10%		\$569,446	\$676,727
TOTAL PROJECT BUDGET RANGE			
Construction Budget Total (Hard Costs)		\$6,263,906	\$7,443,999
Project Overhead Budget (Soft Costs) at 20%		\$1,252,781	\$1,488,800
PROJECT BUDGET TOTAL RANGE		<u>\$7,516,687</u>	<u>\$8,932,799</u>

Preliminary Budget Range		Median Cost/SF	3/4 Cost/SF
WEBSTER COUNTY JUSTICE CENTER – 16-BED JAIL			
Anticipated Bid Date: January 2019			
Space Description (from Program Summary)	Proposed SF		
JAIL FUNCTIONS			
Jail Subtotal Area	9,034 GSF		
Square Foot Cost Range		\$290.59	\$343.99
<i>Jail Budget Range Subtotal</i>		<i>\$2,625,190</i>	<i>\$3,107,606</i>
LAW ENFORCEMENT OFFICE FUNCTIONS			
Law Enforcement Office Subtotal Area	3,704 GSF		
Square Foot Cost Range		\$180.23	\$251.91
<i>Law Enforcement Office Budget Range Subtotal</i>		<i>\$667,572</i>	<i>\$933,075</i>
COURTROOM FUNCTIONS			
Courtroom Subtotal Area	6,377 GSF		
Square Foot Cost Range		\$259.79	\$259.79
<i>Courtroom Budget Range Subtotal</i>		<i>\$1,656,681</i>	<i>\$1,656,681</i>
COUNTY ATTORNEY FUNCTIONS			
County Attorney Area	1,359 GSF		
Square Foot Cost Range		\$180.23	\$251.91
<i>County Attorney Budget Range Subtotal</i>		<i>\$244,933</i>	<i>\$342,346</i>
MECHANICAL/ELECTRICAL EQUIPMENT			
Mechanical/Electrical Equipment Subtotal Area	1,650 GSF		
Square Foot Cost Range		\$67.77	\$161.21
<i>Mech/Elec Equipment Budget Range Subtotal</i>		<i>\$111,821</i>	<i>\$265,997</i>
MISCELLANEOUS			
<i>Construction Budget Subtotal</i>		<i>\$5,306,197</i>	<i>\$6,305,705</i>
Sitework Allowance at 5% (Grading, Drives, Sidewalks, etc.)		\$265,310	\$315,285
Design Phase Contingency at 10%		\$557,151	\$662,099
TOTAL PROJECT BUDGET RANGE			
Construction Budget Total (Hard Costs)		\$6,128,658	\$7,283,089
Project Overhead Budget (Soft Costs) at 20%		\$1,225,732	\$1,456,618
PROJECT BUDGET TOTAL RANGE		\$7,354,390	\$8,739,707

As previously stated, this budget projection is based on national construction cost averages, which have been localized to the Webster County construction market. These represent the anticipated localized median and 3/4 construction costs, meaning that a new 20-bed or 16-bed Justice Center project on a generic, "Greenfield" site in Webster County would be anticipated to fall within this range. It should be noted that this *Phase 1 Needs Assessment* budget assumes a broad range of design decisions which have not yet been finalized. As the County proceeds with *Phase 2*, more precise budgets will be established.

E. Staffing Projections

As counties explore expanding or replacing their jail facilities, staffing a larger facility is often an important concern. At the present time, the Webster County jail staff consists of 5 personnel, with 8 Sheriff's Office staff available during peak hours. These positions include: 1 Lead Jailer, 4 Full-time Jailers, 6 Deputies, 1 Chief Deputy, and 1 Sheriff. The Webster County staffing schedule varies and is based upon peak arrest time, inmate activity levels and availability of other staff. The current staffing and schedule, with the facility at its rated maximum capacity of 10 inmates, is shown in *Figure 83*:

When examining a new or expanded jail facility, it is important to recognize that over the expected 30 year life of a jail facility only about 10% of the costs will be from construction related expense; roughly 80% of the expense over the life of the facility will be salaries, utilities, maintenance, and repair costs. Reducing construction costs at the expense of long-term staff efficiency can add significant operational costs to future county budgets.

Staff efficiencies in jails are a result of the ratio of staff to inmates. The corrections industry considers a ratio of 15:1 to 20:1 an acceptable and efficient target range. This efficiency is achieved in two ways. First, transport and boarding of Webster County inmates to out-of-county jails will end, freeing deputies or other transport staff to return to law enforcement duties. Second, to maintain a safe, efficient, and minimally-staffed jail, modern jail facilities have evolved and commonly possess the following features:

- Greatly improved inmate monitoring with direct visual supervision and clear lines-of-sight.
- Archaic cell bars or steel mesh have been replaced with security glass, providing greater staff safety and better inmate supervision.
- Holding cells allow for arrestees to be confined during booking, processing and classification, freeing staff from the need to directly monitor individuals.
- Control and Master Control stations allow for greater security and overlapping staff duties.
- Electronic locks minimize the need for staff to escort inmates and allow inmates to self-escort within secure jail spaces.
- Better management of classification, which reduces inmate stress, violence and risk to staff.
- Accessibility regulations, such as the Americans with Disabilities Act, and correctional standards, such as Nebraska Jail Standards, require classification and accommodation of inmates with disabilities, or isolation/segregation of certain inmates from other inmates for their own safety.

Thus, based on efficient design of the inmate housing areas and maximizing direct supervision sight lines, supplemented with electronic security hardware and surveillance cameras, a 16-20 bed jail can be operated at efficient, secure levels with modest impact on staffing. It is anticipated that only one new jailer would need to be added, to meet NJS requirements for minimum required staffing. (*Figure 82*).

Webster County Jail Staffing					
Improved Staffing Ratio as Jail Facility Approaches 20 Beds					
('Ideal' Staffing Ratio of 15 to 20 Inmates per 1 Corrections Officer)					
Staff - Shift	Bi-Weekly Hours	Staff per Shift	Current 10 Bed Jail Staffing Ratio	"Local" 16 Bed LEC Facility Staffing Ratio	"Regional" 20 Bed LEC Facility Staffing Ratio
Lead Jailer - Day	80	1 (2)	10:1 (5:1)	16:1 (8:1)	20:1 (10:1)
Jailer - Day	168				
Jailer - Night	168	1	(5:1)	(8:1)	(10:1)
New Jailer - Night	168	1			
Sheriff's Office Staff:	Day & Night Patrol		More Day Availability	More Day Availability	More Day Availability
*New Night-Shift Jailer position desired to meet State Minimum Staffing, not due to increased facility size					

Figure 82 (Source: Prochaska & Associates, Webster County Sheriff's Office)

F. Staffing Impact on Annual Operating Expenses

It is anticipated that Webster County will add 168 hours of bi-weekly paid employment by adopting a schedule which maintains two Jailer/Dispatchers on duty at all times, to meet minimum staffing requirements of Nebraska Jail Standards. This will provide one person in Master Control/Dispatch at night, with one roaming jailer available to the rest of the jail during the same night shift.

