

**Downtown Correctional Center and Satellite Jail Discussion  
Attachments to Accompany Committee of the Whole Agenda  
June 14, 2011**

1. National Institute of Corrections Report on Downtown Correctional Center  
Agenda Item Facilities X.D.1  
Pages 1-26
2. Facilities Director – White Paper on Downtown Correctional Center  
Agenda Item Facilities X.D.2  
Pages 27-30



**U.S. Department of Justice**  
**National Institute of Corrections**

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*Washington, DC 20534*

**DISCLAIMER**

RE: NIC Technical Assistance No. 11J1054

This technical assistance activity was funded by the Jails Division of the National Institute of Corrections. The Institute is a Federal agency established to provide assistance to strengthen state and local correctional agencies by creating more effective, humane, safe and just correctional services.

The resource person who provided the on-site technical assistance did so through a cooperative agreement, at the request of the Champaign County Sheriff's Office, and through the coordination of the National Institute of Corrections. The direct onsite assistance and the subsequent report are intended to assist the agency in addressing issues outlined in the original request and in efforts to enhance the effectiveness of the agency.

The contents of this document reflect the views of Mr. Warren Cook and Mr. Mark Martin. The contents do not necessarily reflect the official views or policies of the National Institute of Corrections.

## **OVERVIEW**

Based upon a request from Sheriff Dan Walsh, on behalf of the Champaign County Sheriff's Office, the National Institute of Corrections contracted with technical resource providers Warren F. Cook and Mark Martin, to provide short-term technical assistance services for their agency in conjunction with the review of the utilization of their jail in supporting the criminal justice system within Champaign County; and, the preparation for the replacement of their downtown jail facility. The specific request for this technical assistance project asked that the resource team work with staff to:

1. Identify the statistical history; along with the policies and trends that are currently affecting their criminal justice system workloads and impacting their jail population.
2. Identify a menu of alternatives to incarceration available for pretrial persons and sentenced offenders, for consideration, to reduce their jail population.
3. Assist the agency with a review of the use of their jails and related issues.
4. Assess various elements of their current jail's physical plant and operations.
5. Review their criminal justice system with an emphasis on the components that could assist with reintegrating offenders back into the community.
6. Interview various stakeholders to identify current operational aspects of their criminal justice system and identify items to impact future system efficiencies.
7. Identify associated master plan elements for their satellite jail complex.
8. Discuss the benefits of the development of a Champaign County Criminal Justice Coordinating Council.

The technical resource team, after preliminary discussions and independent preparation, including the review of data provided, traveled to Urbana, Illinois arriving on Sunday – May 1, 2011.

On Monday – May 2, 2011, the resource team met with Sheriff Walsh and his command staff, to review the status of their current jail and discuss various scenarios that would assist them in dealing with their jail crowding. In addition, they toured both the downtown jail and the satellite jail, while making associated recommendations for dealing with their non-compliance with professional standards.

During the remainder of Monday and all day on Tuesday – May 3<sup>rd</sup>, the resource team met with Champaign County Officials and other stake holders, to describe the scope and goals of the technical assistance project, and to receive their input. The following is a list of those interviewed:

Sheriff Dan Walsh	Chief Deputy Kris Bolt
Jail Supt. Michael Moore	Lt. Robert Craven
Jay Schubert (AA)	Ray George (ARAMark)
Michael Gerges (Mental Health)	Sheila Swain (Medical Services)
Barbara Kesser (Library Coord)	Dave Nisbet (Chaplain)
Nancy Griffin (Program Coord)	Joe Gordon (Court Service Director)
Roger Holland (Court Admin)	Randy Rosenbaum (Public Defender)
Alan Reinhart (Maintenance)	Jacqueline Archey (GED)

Chief Finney (Champaign PD)	Dep Chief Christensen (U of Ill PD)
Chief Connolly (Urbana PD)	Thomas Beltz (County Board)
Deb Busey (County Administrator)	C. Pius Weibel (County Board Chair)
Dean Nudo (County Board)	Julia Rietz (State's Attorney)

The purpose of these meetings was to gain information and associated insight regarding the various components of their criminal justice system, pretrial and sentencing practices, the operation of their current jails, their information and data system, and their plans for the future development of new facilities. In addition, there was an emphasis during these sessions to identify the symptoms and possible solutions to the negative dynamics of their current jail operations and jail population.

The providers were encouraged that the stakeholders had a positive outlook on the actions that the Champaign County Criminal Justice System could take to correct inappropriate behavior by offenders within their community. The following are some of the items discussed during these meetings:

1. The continuation of their successful Electronic Home Detention program.
2. The need to develop a workable 'Alternatives to Incarceration Program' to help reduce the jail population.
3. The need to study the feasibility, costs, and benefits of a Champaign County Restitution and Work Release Center.
4. The current and future use of the Electronic Home Detention Program.

5. The need to develop additional educational, alcohol, drug, and group counseling programs for offenders, including anger management and domestic violence, both within the jail and for those offenders who do not require custody.
6. The gathering of social service and religious providers within Champaign County to become working stakeholders, to assist pretrial persons and offenders with programs that will assist with their betterment.
7. Becoming proactive in supporting programs that are provided to help offenders become 'law abiding, tax paying productive citizens' within their community.

*Typically 90% of the offenders that go through the courts and county jail return to the community. If they participate in programs for their betterment while responding to sentencing orders, they will be prepared to live non-criminal lives, succeed, and not return to jail.*

8. Developing a plan for an expanded Champaign County Jail Complex, on the site of the satellite jail, to potentially include:
  - a. A Day Reporting Center and Community Corrections facilities.
  - b. An expanded jail, to allow the county to close the downtown jail.
  - c. A law enforcement complex for Sheriff's operations.
  - d. The possibility of a work release facility for both males and females, as part of the new jail facilities.

During the morning of Wednesday – May 4th, the providers held a Stakeholders *Meeting*

to:

1. Debrief those in attendance regarding the provider's observations;
2. Describe the providers' recommendations for consideration;
3. Educate those in attendance regarding the role of alternatives to incarceration and the associated benefits for Champaign County;
4. Receive additional input from those in attendance.
5. View the NIC Video "Beyond The Myth - The Jail In Your Community"
6. Discuss ways to deal with the increased requirements for jail time for specific traffic offenders placed by the Illinois Legislature.
7. Discuss various suggestions for the betterment of the Champaign County Criminal Justice System.

The following stakeholders attended the meeting:

Joe Gordon    Allen Reinhart    Dan Walsh    Kris Bolt    Stacy Sherrick  
Michael Moore    Darren Cooper    Roger Holland    Julia Rietz    Jacqueline Archey  
C Pius Weibel

## OBSERVATIONS AND RECOMMENDATIONS

1. The providers were equally concerned regarding the negative conditions within the downtown jail, including:
  - a. The deplorable conditions within the facility.
  - b. The disparate gender treatment; i.e. primary use of the downtown to hold females and special need inmates (without any programs), while male inmates are held in the newer satellite jail (with programs and better conditions of confinement),
  - c. The lack of any programs for females within the downtown jail, knowing that a number of small group programs could be held within the jail's Dayroom spaces.
  - d. The limited artificial and natural light and dingy colors found within the jail, making the ambience depressing for staff and inmates alike.
  - e. The amount of problems with debilitated plumbing, electrical, HVAC, and security systems.

The providers note that inmates who are kept in these conditions regress mentally and after fashion assume a state of physical and mental malady that have significant negative impact on their lives for years to come.

**While the female inmates and those with special needs should be moved to the satellite jail (as soon as possible) the providers (at minimum) recommend that the Sheriff take steps to bring programs (GED, AA, NA, and Counseling Discussion Programs) within the downtown jail utilizing community resources.**

2. The providers were concerned that the County provides only emergency maintenance to address the needs of the downtown jail facility; resulting in its continual degradation.

**The providers recommend that the County Board join the Sheriff in making a decision to close the downtown jail (as soon as possible) and move the females and others to the satellite jail.**

**This can be done this year, through the use of minimum or medium jail beds, through the use of dormitory-style housing units for traffic and minor offenders. This will result in freeing up more jail beds for females and special needs inmates, currently held within the downtown jail.**

3. **IF THE DOWNTOWN JAIL IS NOT CLOSED, the Board needs to spend a significant amount of funds to remodel the jail and upgrade all the supportive systems.**

4. **The providers recommend that the Champaign County Stakeholders fully embrace the philosophy of reentry and reintegration - making the offender whole, while addressing the requirements of the court and getting the offenders back into the community as productive citizens.**

5. **Planning For The Future: The providers recommend that the Champaign County Board establish a Champaign County Jail Planning Committee to actively work on the development of a needs assessment and master plan for the expansion of their Champaign County Criminal Justice Complex, at the site of the satellite jail. As part of this recommendation, the providers suggest that the County contract with a criminal justice planner (not a bidding architect) to provide assessment and planning expertise.**

The providers are encouraged by Sheriff Walsh's and the Jail Administrator's upcoming participation with others in the "Planning (for) Opening a New Institution" (P.O.N.I.) Program with the National Institute of Corrections during August 2011, where they will be accompanied by a County Commissioner and a member of the Jail Planning Committee. Sparked by the Sheriff's leadership and desire to operate a very good jail that meets standards and is safe and secure, their participation --- in jail planning education programs is visionary and will result in immediate and long-term

improvements in jail operations and it will positively impact the jail planning and design process.

6. **As part of the County's master plan for expansion, a new or greatly expanded and renovated Champaign County Jail should be one of the first portions of their new complex to be completed. In addition to actively working to comply with the American Correction Association Standards for Local Detention Facilities (ALDF), the standards of the National Commission on Correctional Health Care (NCCHC), the jail planning should also provide appropriate spaces for active recreation and programs for jail inmates; while providing space for growth over the next 20 to 30 years.**

It is felt that only the following categories of pre-trial persons and offenders should remain in jail (noting that 90% of those that are booked into the jail will return to the community):

- a. The person who will continue to be a predator upon the community;
- b. The person that is a 'flight risk', and unlikely to appear at court time;
- c. The person that a Judge requires to remain in jail until trial;
- d. The person that is being held on a warrant from another jurisdiction;
- e. The convicted person that requires a jail sentence; [or]
- f. The person that is being held for contempt of court or non-compliance by a judge.

All others should be considered as candidates for release from jail (being released on Own Recognizance Release [often referred to as "OR"] or

assigned to alternatives, such as a Day Reporting Center) where they can be monitored. This way alleged and convicted offenders are less likely to lose their jobs and their families' income; frequently resulting in their families being thrown onto the County's welfare system to further drain county resources.

**Offenders assigned to alternatives programs and associated sanctions:**

1. Are still controlled, supervised, and managed by the criminal justice system (as exhibited by the county's current Electronic Home Detention Program);
2. May be assigned or sentenced to report to the Day Reporting Center, each and every day, to check in per court orders, participate in programs for their betterment, and provide restitution as they participate in community service;
3. Are appropriately punished for their convicted criminal behavior;
4. Spend renewed time with their families within their own homes;
5. Have a high probability of becoming a tax-paying/law abiding citizen;
6. Pay a portion of the cost of their monitoring and programs.

**The following are typical statements made by offenders assigned to alternatives to incarceration, house arrest, and electronic monitoring programs:**

"...well anyone that is on the monitoring program is stupid if they try to escape, because they are the one that is going to suffer the consequences..."

"...I'm just glad I'm able to work. My job is far more important. If I lost my job it would hurt me and my family. I can't comprehend why you would

want to violate your release conditions. It is not reasonable...”

“ It made me realize about life and freedom. I can’t go anywhere...I am a very active person, and this is almost like being in jail. It takes time to go downtown and get checked...I can’t take my granddaughter anywhere, like the park or to a friends with other children. I can’t go to the grocery store.”

“...It controls but punishes too. You pay for it. It’s punishment. I work and go home. That’s it. I am still confined. I can’t go out. It is a form of control. No question. No doubt...”

“...Freedom is something you don’t miss until you don’t have it. I feel fortunate to be back with my family. It gives me the opportunity to be with my family each and every day. Mom is happy I am home. I am able to help my mother tremendously with household duties and yard work. My relationship with my family has improved...”

**Actions The Short Term. To deal with the current problems within their criminal justice system and the crowding within their jail, the providers hereby recommend:**

- 1. That the County and the Sheriff explore acquiring one or more small manufactured buildings (possibly utilizing donated construction**

**trailers that are not being utilized due to reductions in construction activities within the County), to provide flexibility for:**

- a. Programs space directly adjacent to the current jail,**
- b. Dormitory space:**

- (1) If a review of the jail population reveals that there are persons who do not qualify for electronic monitoring, but are such that can reside in a low security dorm;**
- (2) This dormitory housing would be ideal for those persons who have to remain in jail for traffic charges.**
- (3) Used for detention during construction / renovation.**

**Utilizing this scenario, the County Board could issue a letter of donation, allowing the donating company to take appropriate tax credits for their donation. These structures could be truncated to the satellite jail through recreation yard [utilizing the existing outer door], allowing easy supervision *utilizing existing staff* making frequent security and welfare checks. In addition, the closing of the downtown jail would provide staff to provide 'direct supervision' (24-7) for the dorms.**

**To ensure that there is appropriate security for these units, a security fencing system should be installed to create a secure perimeter around the modular units.**

**2. That the Jail Superintendent, with the full support of the Sheriff, seek out community program volunteers (AA, NA, GED, Anger Management, Domestic Violence, Thinking Errors, Job Search, etc.) working with inmates while they are in jail and supporting a seamless continuation of these programs within the Champaign County Community, so that the inmate can continue to work on the programs and their betterment upon release from jail. In addition, the Sheriff should work with his staff to develop and implement an inmate re-entry program. Along with these, a work release program will reinforce the elements of reentry.**

**3. That the Jail Commander continue to work on updating the basic requirements for the operation of the jail;**

- a. Mission Statement describing their operational philosophy;**
- b. Policies, Procedures, Post Orders, and an Inmate Manual;**
- c. Training for jail staff.**

**In addition, it is further recommended that ALL STAFF participate in 40 hours of In-Service Training each year.**

**4. That the Jail Administrator subscribe to corrections professional periodicals (“American Jails” and “Corrections Today”), along with receiving the ACA “ALDF”, “ACRS” Standards, the “NCCHC” ; to ensure that the Champaign County Jail is not only in compliance with all these standards, but also on the cutting edge for the operation of a**

**local county jail and associated alternatives to incarceration programs.**

- 5. That the County should install reflective material on all windows (upper and lower) facing the housing officer's station, to keep the inmates from watching where the officer is located and where the officer is looking while visually supervising the housing units. This can be accomplished economically by utilizing inexpensive auto glass materials applied to the officer's side of the windows.**
  
- 6. That the superintendent remove all adjustment wands for window shades, as these can be removed and sharpened by the inmates.**
  
- 7. That the superintendent make provisions for the use of the area in the housing pod area, shown on the plan as "Multi-Purpose" as program space for inmates. This will facilitate more programs and relieve the busy schedule in the classroom.**

## **Summary**

The providers would like to thank Sheriff Walsh and his staff for their professional courtesy and hospitality during the scope of this project. In addition, the vision shown by the Champaign County stakeholders is encouraging, as they move forward to change conditions within their jails and the operating philosophy of their criminal justice system.

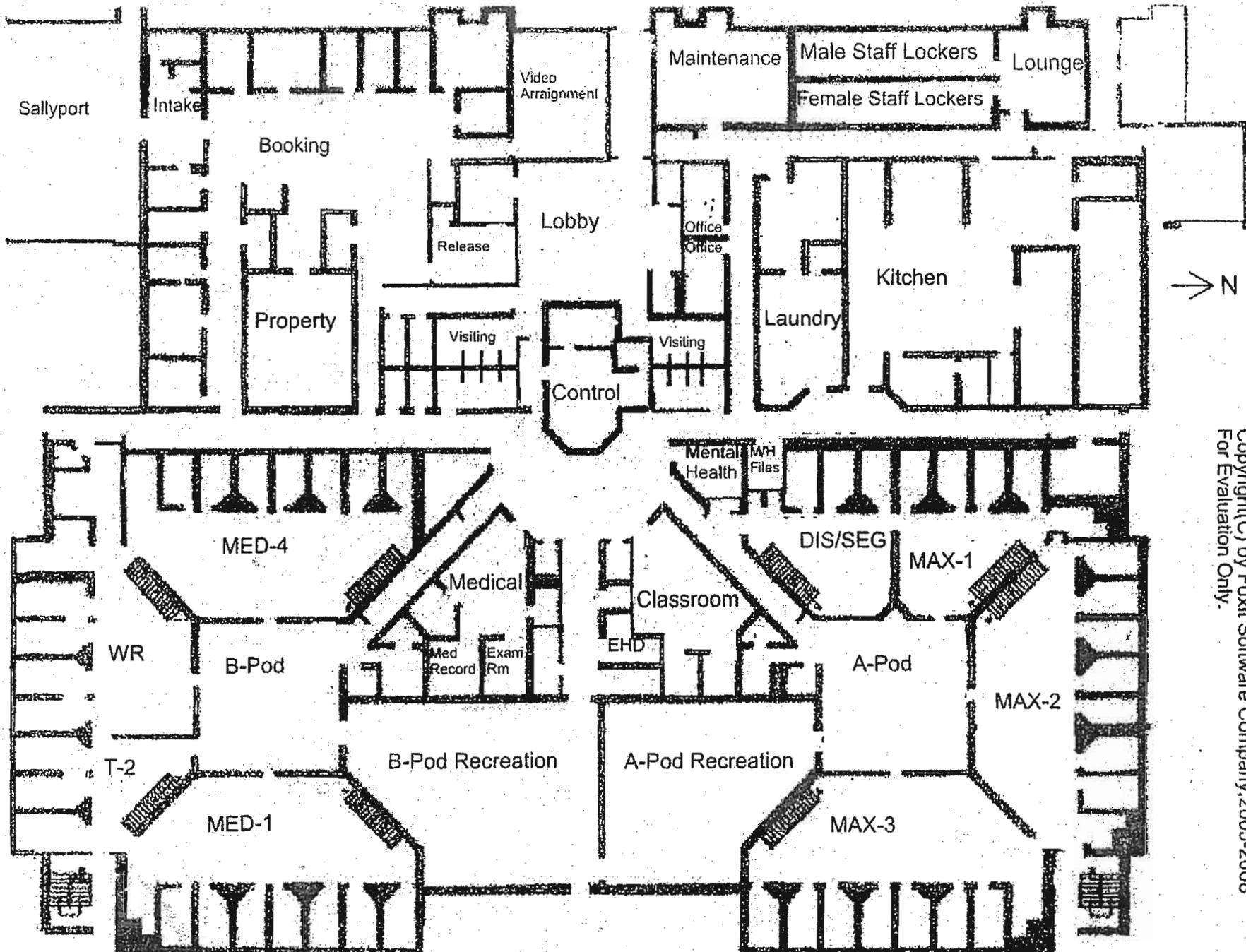
Through this approach, they will ensure that their resources are properly utilized and that offenders, while being held accountable for their criminal behavior, are given opportunities to improve – becoming law abiding/tax paying citizens; without just wasting time and the County's valuable resources, while sitting in highly expensive jail cells.

**The providers recommend that Sheriff Walsh distribute this report to all of the stakeholders, for their review, consideration, and associated work to implement the components that will significantly improve their jail and criminal justice system.**

**Note:**

Utilizing data supplied by the agency, the attached analyses of data (*see Appendix*) were developed by Mark Martin to reflect various elements that affect the operations of the Champaign County Jail, as well as an expanded and remodeled jail. Please note that the data that was analyzed was limited and that a more comprehensive needs assessment study should precede and serve as a basis for the development of a jail master plan.

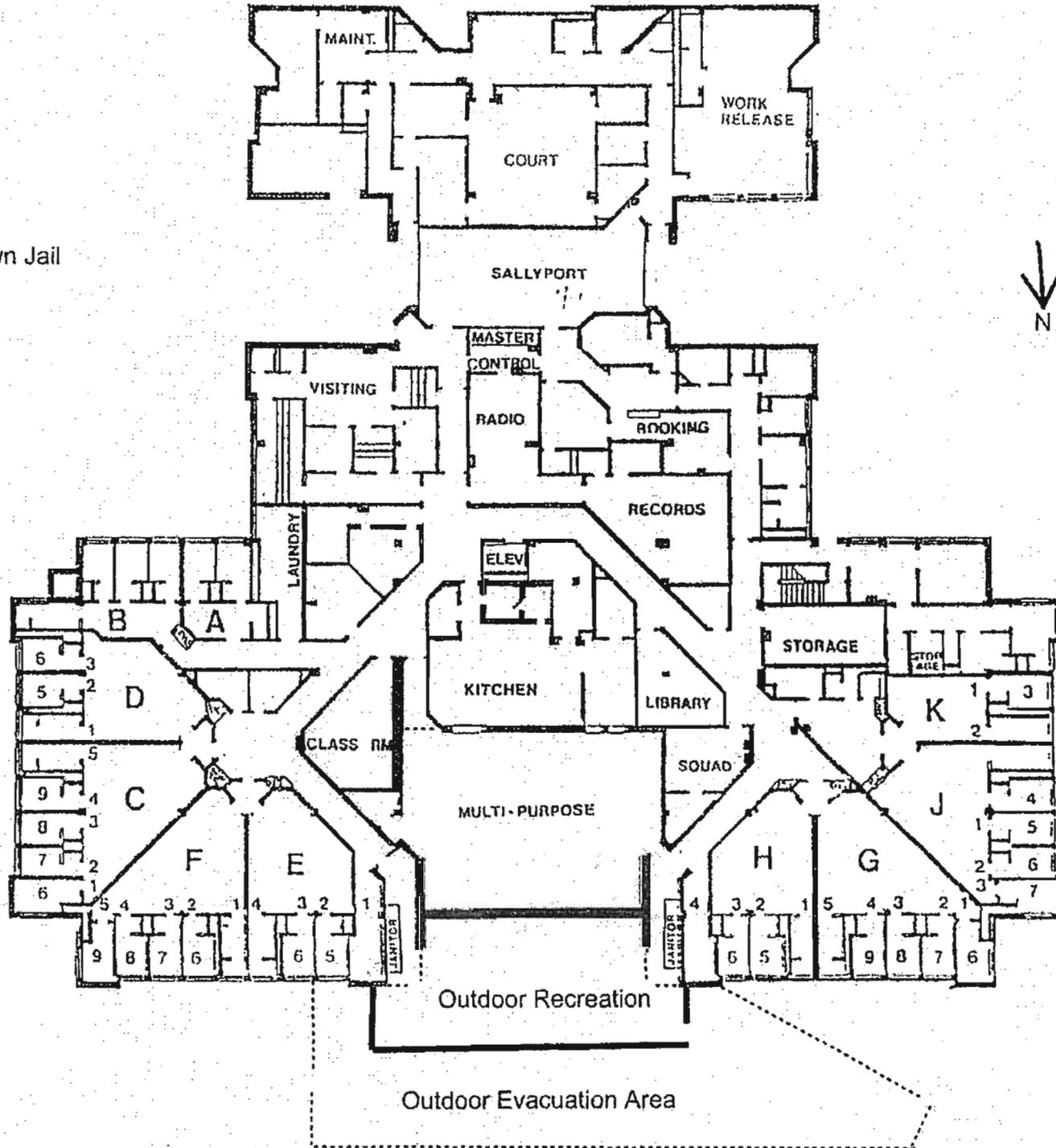
# SATELLITE JAIL



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### Downtown Jail



## **Appendix – Jail Population Data**

## Jail Population Data

The consultants requested selected jail data prior to the onsite visit. The jail provided a one-day snapshot of the jail population and trend data for 2005 through 2010. This section of the report provides a summary of the consultants' preliminary analysis of the snapshot and trend data. The snapshot data included the following data elements:

- Age
- Gender
- Residency
- Charge
- Detention status (pre-trial, sentenced, hold)
- Charge Level (misdemeanor, felony)
- Violent Crime (yes or no)
- Alcohol or Drug related (yes or no)
- Days held

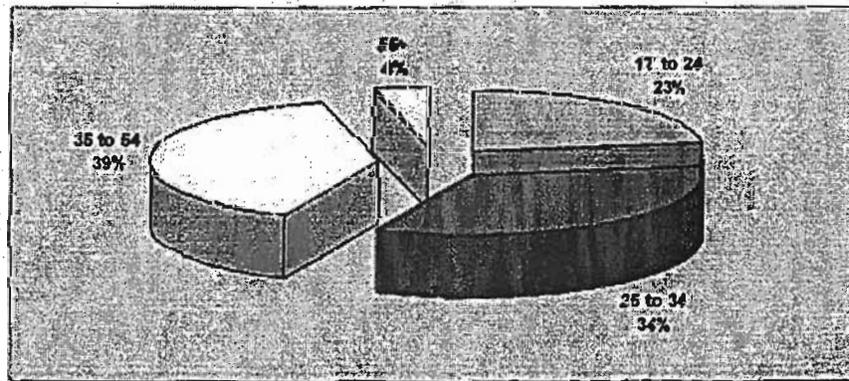
The snapshot included data for 250 inmates in custody on April 25, 2011.

Basic characteristics of the Champaign County jail population based on the snapshot profile:

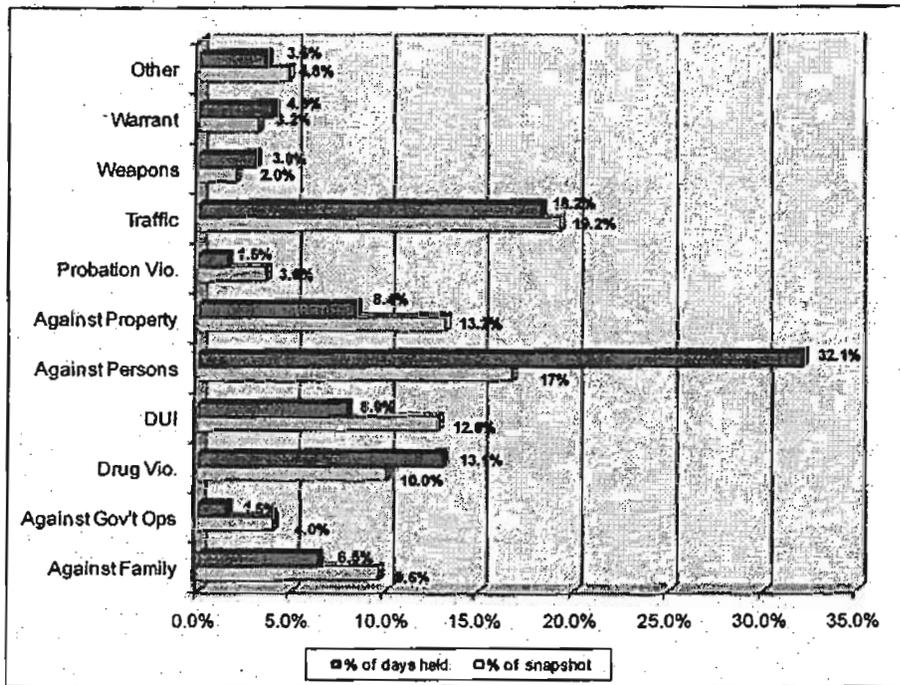
Gender	85% male
Average Age	34.1 years
Charge	22.4% drug or alcohol offenses
Residency	84.4% Champaign Co. residents
Longest Stay	550 days male; 167 days female
Average Stay	24.3 days in 2010

The average number of days held of those in custody on April 25th was 54 days. Male inmates had been in jail for an average of 57 days compared to 36.4 days for female inmates.

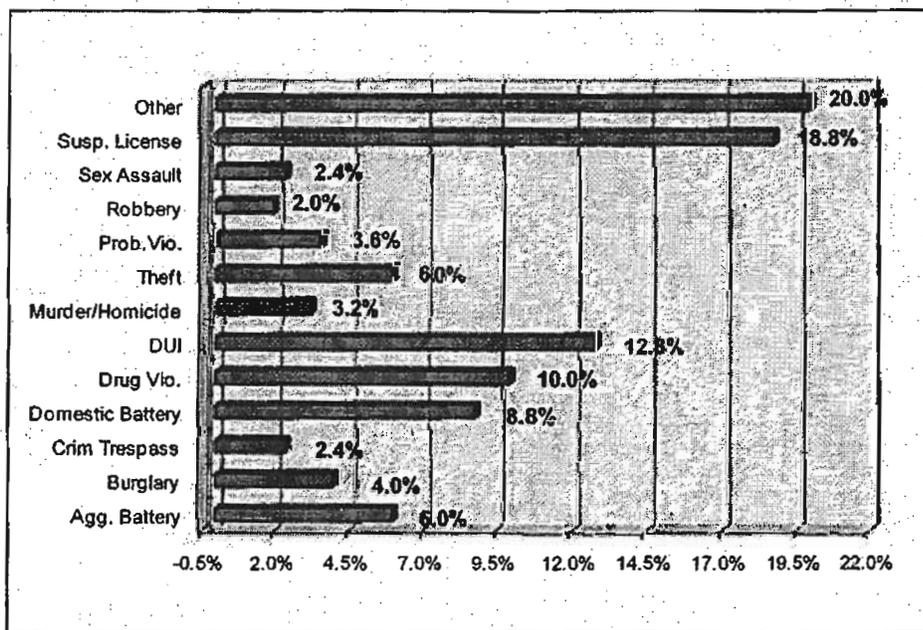
Over 39% of the inmates in custody on May 7th were between the ages of 25 to 44. Only 4% were 55 years or older.



About 17% of the inmates in the snapshot profile were in custody for offenses against persons, however they accounted for 32.1% of the days held by the group. Inmates charged with traffic offenses accounted for 19.2% of the total count and about 18.2% of the total jail days. Inmates held for offenses against property accounted for 13.2% of the count, but only 8.4% of the total jail days. The majority of the traffic offenses were for driving under suspension.



The chart below provides a breakdown of the most serious charge for inmates held in custody at the time of the snapshot.



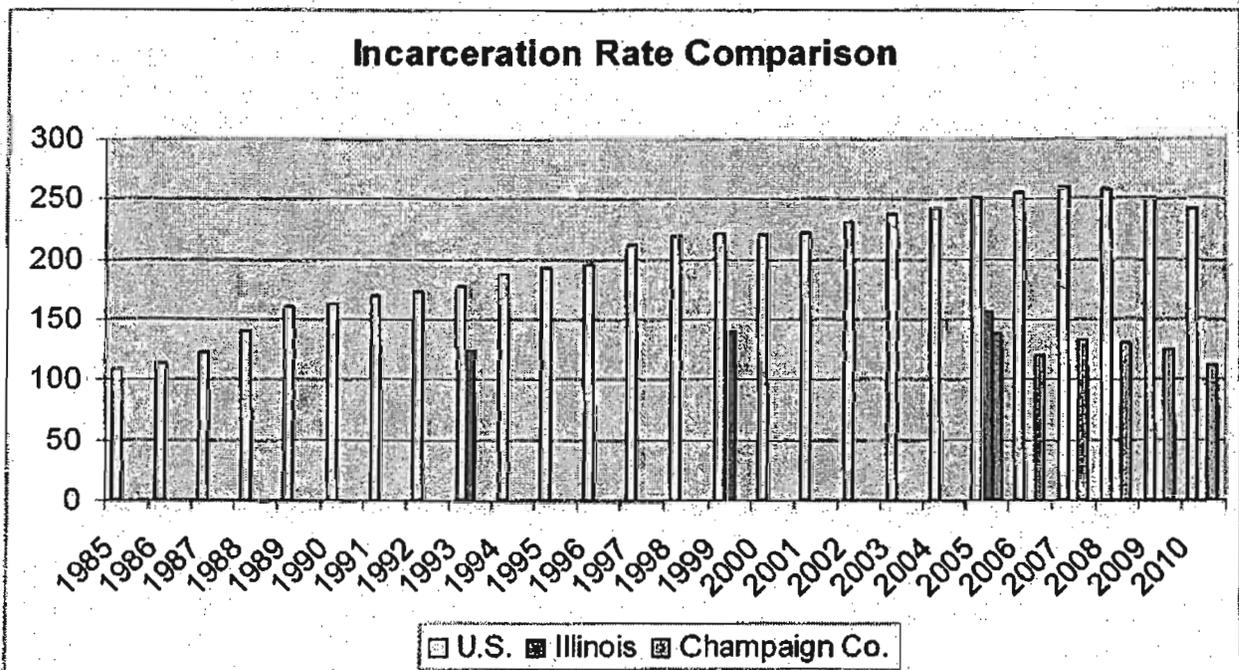
Driving Under Suspension was the most frequent listed offenses at 18.8%, followed by DUI at 12.8%, Drug Violations at 10%, and Domestic Batter at 8.8%

The chart below shows the historical trends and annual rates of change on a number of factors that are typically used to project future jail bed space needs. The overall county population has grown while the total arrests, jail admissions, and average daily population has declined. The average daily population in this chart reflects only those actually detained. Not included are a number of individuals in custody that were placed on electronic monitoring.

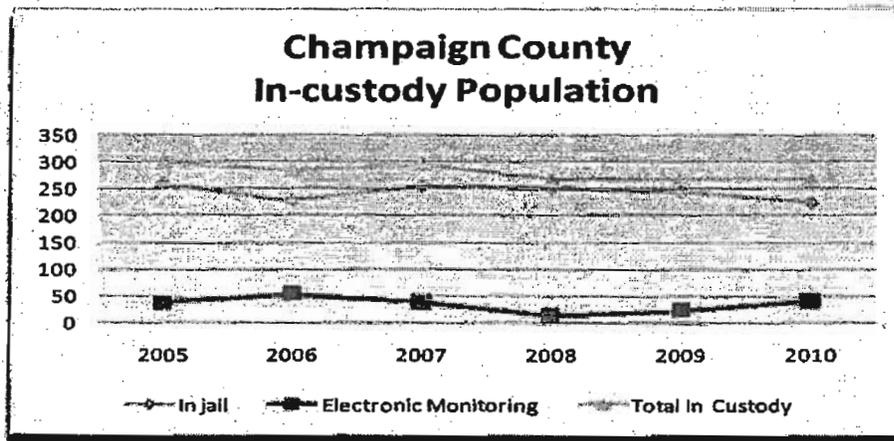
Historical Trends and Annual Rate of Change 2005 - 2010							
Year	County Population*	Adult Arrests	Jail Admissions	Total Jail Days	Average Daily Jail Population	Average Length of Stay	Incarc. Rate per 100,000
2005	187,870	8448	8969	125815	259	14.0	138
2006	190,599	7066	9013	111298	229	12.3	120
2007	192,975	7505	9397	115804	256	12.3	133
2008	193,562	7109	9282	105433	252	11.4	130
2009	195,671	6904	8754	107004	244	12.2	125
2010	201,081	6076	7792	105319	225	13.5	112
Ave. Annual % of Change	1.02%	-4.58%	-0.54%	-3.74%	-1.13%	-3.10%	-2.13%

\*2005 - 2009 are est. based on 2000 census. May be low given 2010 census number.

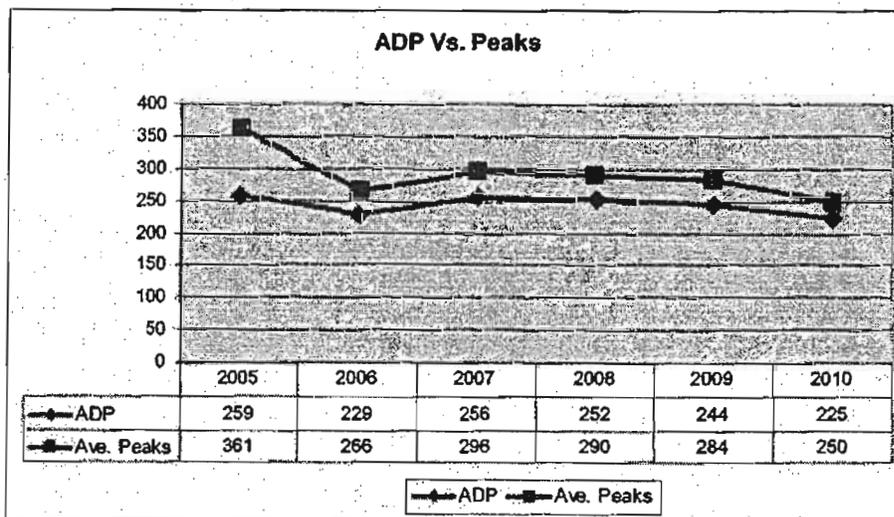
The incarceration rate for Champaign County is somewhat lower than for the state of Illinois and substantially lower than the rate of incarceration in the U.S. The chart below shows the rate trends nationally over the past 25 years, along with the rates for the State and County as they were available.



The chart below shows the overall average number of inmates in the Sheriff's custody over the six year period, broken down by those in jail and those placed on electronic monitoring. Over the past couple of years, the in-jail population has declined while the EM population has had a corresponding increase.



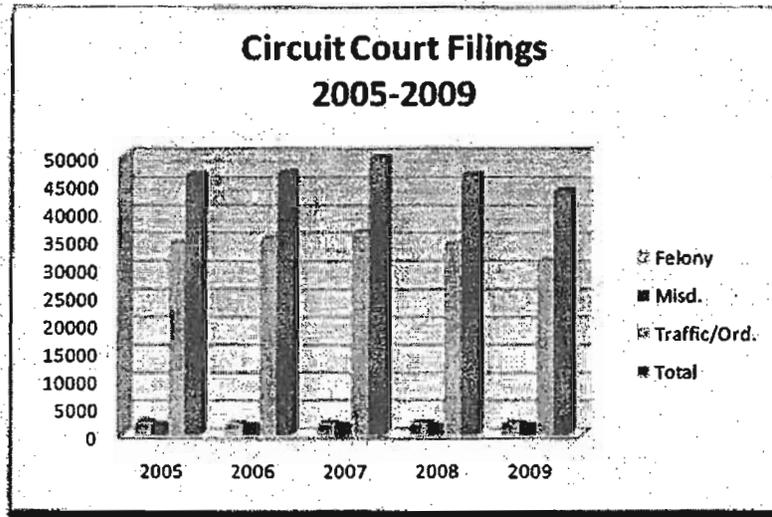
In looking at jail capacity, it is important to understand that more beds are required than are indicated in the average to account for classification separation requirements and periods when the population is above the average. The chart below provides a comparison of the average daily population over the past six years with the average of the peaks (average of the 12 highest counts each year) for those years. Except for 2005, the average peak population ranged about 10-15% higher than the average.



### Court Data

The charts below show the trends in Circuit Court filings from 2005 through 2009. The overall number of filings has declined from a high of 49,736 in 2007. The traffic and ordinance cases, which dominate the numbers, follow the same pattern.

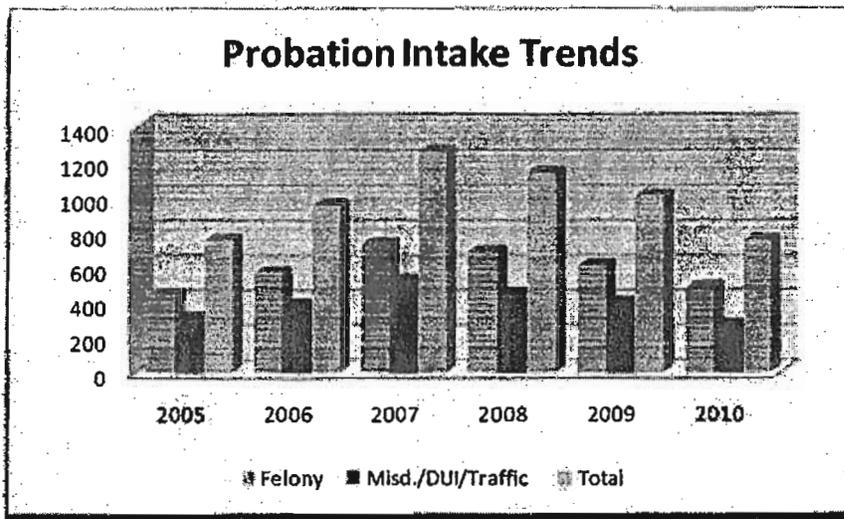
<b>Champaign County Circuit Court Criminal, Traffic, Conservation &amp; Ordinance Filings</b>				
	<i>Felony</i>	<i>Misd.</i>	<i>Traffic/Ord.</i>	<i>Total</i>
2005	2415	1834	34,430	46,757
2006	2135	1603	35,260	47,061
2007	2270	1610	36,432	49,736
2008	2329	1714	34,239	46,640
2009	2183	1737	31,343	43,841



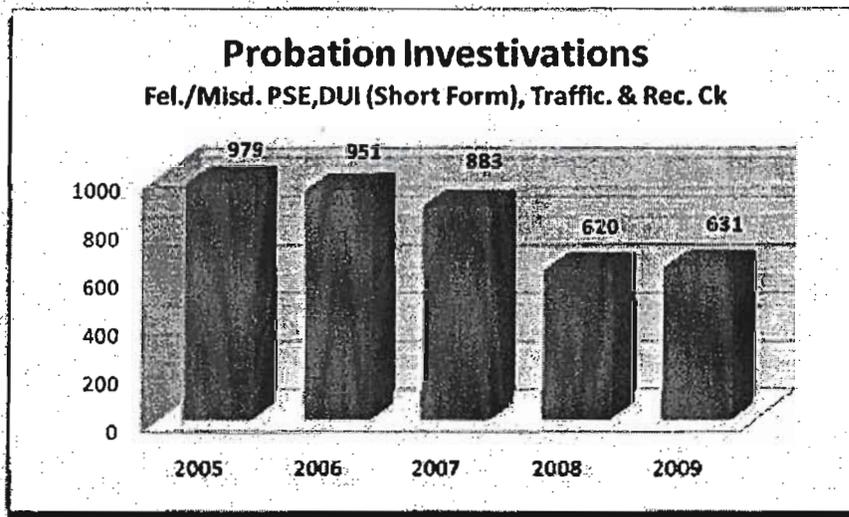
### Probation Data

The charts below show the number of probation intakes by category over the past six years. As might be expected, the probation intakes follow a pattern similar to the court data with a peak in 2007 followed by a decline in numbers.

<b>Champaign County Probation Intakes 2005-2010</b>			
	<i>Felony</i>	<i>Misd./DUI/Traff</i>	<i>Total</i>
2005	448	313	761
2006	570	385	955
2007	736	526	1262
2008	692	454	1146
2009	614	398	1012
2010	489	272	756

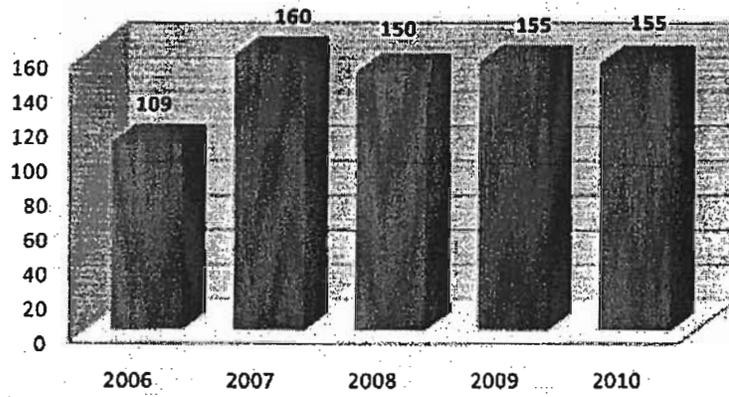


Pre-sentence and other types of investigations make a up a substantial portion of the workload for the Probation Office. the following chart shows the total number of investigations by year. After slight declines in 2005-2007, the numbers dropped considerably in 2008-2009 from the previous years.



The average caseloads for probation officers, as shown in the chart below, have maintained in the 150-160 range over the past four years.

### Average Adult Probation Caseloads



Sheriff's Office  
204 E. Main Street  
Urbana, Illinois

## Building and Mechanical Information

### HISTORY

The Sheriff's Office and downtown Correctional Facility was built during the late 1970's with Substantial Completion in June of 1980. The total building square footage is 55,000.

The upper level was designed with 14 individual offices, conference room, evidence storage area, an open office area for Civil Records, a dispatch room, records storage and a squad room totaling approximately 12,000 square feet.

The Lower Level was designed with a Court Room for Arraignments with supporting office space, a dormitory for Work Release program, a drive through sally port, a Booking area with a holding tank and 3 isolation cells, a small infirmary area, a library, a kitchen, a visitation area, a laundry room, an indoor and outdoor recreation room and a class room. The Jail was designed for a capacity of 72 cells, with security levels ranging from isolation cells, segregation cells, minimum, medium and maximum areas. This area totals approximately 30,000 square feet.

The remaining 13,000 square feet is used for mechanical rooms, boiler rooms, storage areas and telecommunication closets.

In the early 1980's, shortly after the Jail was opened, steel plating was welded to all exterior window in the secure areas, following an escape from the new facility. Later holes were drilled in them to achieve minimal natural lighting. Within the next year all ventilation supply air and return air diffusers were covered with a very close cell perforated steel plate welded in place in the cell areas to minimize anchor points. These two items greatly reduce the natural light and restricted the air flow in the cell areas.

In June of 1985 the installation of Back-up Air Conditioner was completed. This back-up system was designed to retro-fit to the existing water cooled system in the building, utilizing the existing cooling tower and chilled water building loop. It was sized to only handle a partial cooling load.

As the need for more cells increased through the late 1980's and early 1990's additional cells were provided by completely gutting the individual rooms in the dormitory and adding steel bunk beds. Additional beds were also added to some of the individual cells in the minimum and medium security levels.

After the Adult Detention Facility located on Lierman Avenue was opened in 1996, the kitchen equipment was removed. Useable pieces of the equipment were installed in the Adult Detention Facility; the remaining equipment was disposed of. This area in the downtown facility was never remolded or properly converted to useable space.

In 1996 the original Master Control operating systems was failing on a regular basis. The Master Control room was remodeled and the operating system was retro-fitted with a new control system to match the technology used at the Adult Detention Facility.

The original water heater and hot water storage tank were removed in October of 2003 and replaced with higher efficiency boiler style heaters and new storage tanks.

In the fall of 2009 the original water cooled Chiller (air conditioning unit) failed. During the spring of 2010 a new Air Cooled Helical Rotary Chiller was installed and connected to the buildings chilled water loop. Should a temporary malfunction occur with this new Chiller, the 1985 Back-up Air Conditioner will be used to maintain partial cooling.

## EXTERIOR

### Roof

In 1994/1995 a new EPDM Ballasted roof manufactured by Carlisle Syn Tec Systems was installed on the building. The manufacture warranty to repair any leak in the Carlisle Sure-Seal Membrane System was for a period of 10 years. In addition, a Twenty Year Membrane Material Warranty was supplied at the time of installation. Within the next five years a new roofing system should be installed as the existing roofing material will continue to degrade over time. The estimated cost to replace the roofing system is \$180,000 to \$200,000, at current market pricing.

### Brick & Mortar

The majority of the brick and stone exterior of the building has never been cleaned, tuck pointed or water proofed since it was constructed. Although, several times over the last 20 years, the white efflorescent now showing again on the free standing brick walls and parapets above the roof line, have been cleaned and water proofed. The efflorescent is caused by moisture entering into the walls and is now starting to show on the building structure. The entire exterior of the building, as well as the stone coping and caps are now in need of cleaning, tucking pointing, caulking and water proofing. The estimated cost for the exterior restoration is \$120,000 to \$140,000.

## INTERIOR

### Emergency systems

The Emergency Generator was sized for minimal building support at 75 KW. This stand alone generator has a maximum run time of approximately 9 -12 hours total. An extended power outage forces refueling within an 8 hour time period. The generator supplies power to limited system to only maintain the security in the Jail. Minimal lighting through the office spaces and cell block areas are provided, as well as power to the Master Control Panels, Detention Locks and Sally port doors. All building heating, cooling and ventilation systems are not on emergency power. The Sheriff's Office support staff and Deputies are not able to function during an outing in this building. An emergency generation system to support this building during an extended outage is estimated at \$400,000 to \$700,000, depending on design and building equipment upgrades. (GHR 2009 & 2011 ILEAS Generator Study)

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### **Detention Locks**

All detention locks in the lower level jail were manufacture pre-1980. Most parts are no longer available for the mid level or medium security style of locks, Folgers Adams 126 series and 122 series detention locks. The remaining minimum and maximum security level locks replacement parts are becoming rare and are increasing in price annually. To purchase all of the mid level security locks at one time, to receive the best possible pricing, an estimated cost of over \$30,000 (Sentry Security Fasteners Inc, 5-17-11).

### **AHU's**

The upper and lower level office spaces are control by the two original air handling systems with supply and return fans which are of a variable inlet vane design. The large motors run at a constant speed and the pneumatic system is required to modulate the inlet vane dampers to modulate air flow by the demand on the system. The recommendation is to remove the variable inlet vanes and add variable frequency drives to the air handling systems to allow them to be slowed down at less than peak loads. Estimated project cost of \$115,000 (GHR energy survey, 2009)

### **Climate Control**

The existing climate control system is a pneumatic based type system installed in 1979. The recommendation is to remove the obsolete pneumatic temperature control system and replace with digital control system featuring hot and cold deck temperature reset, enthalpy-controlled free cooling cycle and demand -controlled ventilation. Estimated project cost of \$223,000 (GHR energy survey, 2009)

### **Boilers**

The existing boilers were installed in 1979; they have exceeded their life expectancy of 30 years. The recommended process is to remove obsolete fire-tube hot water boilers having low efficiency and replace with modular condensing type boilers having the highest efficiency available. Estimated project cost of \$422,000 (GHR energy survey, 2009)

A summary overview of these expenses and estimated dates for replacement follows:

	2012		2013		2014		2015	
	Min	Max	Min	Max	Min	Max	Min	Max
Roofing System							\$180,000	\$200,000
Brick & Mortar					\$120,000	\$140,000		
Detention Locks	\$30,000	\$30,000						
Emergency Systems			\$400,000	\$700,000				
AHU's			\$115,000	\$115,000				
Climate control			\$223,000	\$223,000				
Boilers	\$422,000	\$422,000						
<b>Outstanding Liability/Year</b>	<b>\$452,000</b>	<b>\$452,000</b>	<b>\$738,000</b>	<b>\$1,038,000</b>	<b>\$120,000</b>	<b>\$140,000</b>	<b>\$180,000</b>	<b>\$200,000</b>
<b>TOTAL MINIMUM LIABILITY</b>	<b>\$1,490,000</b>							
<b>TOTAL MAXIMUM LIABILITY</b>	<b>\$1,830,000</b>							