ATTACHMENT B ECONOMIC IMPACT STUDY

Impacts of Proposed (1) Relocation of Logan Correctional center and (2) Renovation of Stateville Correctional Center

Submitted to

Illinois Department of Corrections

Final Report

Prepared by

Geoffrey J.D. Hewings*

April 26, 2024

^{*}Hewings is a Professor Emeritus and Director Emeritus of the University of Illinois at Urbana-Champaign. The analysis, interpretation and commentary do not reflect official positions of the University of Illinois.

Table of Contents

	Page
Glossary of Terms	3
1 Introduction	5
2 Impact of Current Facilities on the Counties	6
3 Impact of Layoffs at Stateville in Will County	7
4 Impact of Re-Construction of Stateville and a Replacement for Logan on the Will Economy	
5 Summary Comments	17

Glossary of Terms

To assist the reader in the interpretation of the results, a brief introduction to impact analysis and a glossary of terms is provided in this section.

Linkages

A regional economy has several important features. First, sectors in an any economy are linked – some directly, others indirectly. For example, a sector producing automobile parts that are shipped to the final assembly line would represent a <u>direct linkage</u> between two sectors. Assume the automobile component supplier purchases some fabricated metals products from another supplier; this too represents a direct linkage. However, the fabricated metals producer has an <u>indirect linkage</u> to the automobile assembly producer. Although not directly dependent on automobile production, the fabricated metal producer is clearly indirectly dependent on the production levels of the assembler. Hence, while many sectors of the economy are linked directly, many if not more are linked indirectly. In short, no one is independent in the economic system.

Ripple or Multiplier Effects

Consider the case just reviewed; assume automobile production increases. Now, the assembler will require more components: this will generate a direct effect – and a column in the tables in this report will indicate the size and sectoral composition of these direct effects. But we know that the impacts will not stop here; the component supplier will purchase more fabricated metal products, the fabricated metal producer will buy more steel, the steel producer will buy more iron ore or scrap and so forth. What we have described here are the multiple levels of the ripple effect – a direct change in one sector leads to expansion in other sectors of the economy. These sector-to-sector effects are referred to as *indirect effects* – and these too are shown in the summary tables.

During this whole process, firms need to purchase not only components and materials from other sectors, but they also have to pay wages and salaries to their employees. These are referred to as direct income effects; tracing the impacts of the firms buying from others will also generate employment (and thus income effects) in these supplying sectors. These are referred to as *indirect income impacts*. In turn, these employees will generate their own ripple effect. For example, an assembly line worker will use the extra income earned from overtime (assumed to

occur to meet the additional demand) to take his/her family to dinner. Part of this expenditure becomes income to the waiter; he spends the money at the dry cleaners and part of that expenditure is used by the owners of the dry-cleaning business to buy lumber to renovate their house. Part of this expenditure will be used by employees in the lumber yard to enjoy an evening at the cinema – and so the process continues until the impact diminishes to zero. This part of the ripple effect is referred to as *induced income impacts*.

So we have direct effects and two types of indirect effects – one generated by industry-industry purchases and sales and one generated by expenditures by employees from wages and salaries. The summation of these impacts is revealed in the tables as **total impacts**. If the total impacts are divided by the direct impacts, we obtain the **ripple or multiplier effect**. Consider the employment multiplier of 1.5; the interpretation is as follows, for every direct job, an additional 0.5 jobs are generated through a combination of the indirect and induced impacts.

The closure of a facility in a county will generate two types of impacts – a redistribution effect (associated with the redeployment of employees to other facilities in the county) and a reduction in activity (associated with the relocation of employees outside the metropolitan region).

1. Introduction

The State of Illinois is proposing to relocate the Logan Correctional Facility (hereafter, Logan) in Logan County to a new facility to be constructed in Will County. The Stateville Correctional Facility (hereafter, Stateville), also located in Will County, will be rebuilt over a period of five years. This report provides an economic impact analysis of these two developments on the relevant counties. The data were provided by the Illinois Department of Corrections.

This Executive Summary provides assessment of (1) the current impact of the two facilities on the county economies in which they are located together with the impact of the closure of Logan on Logan County assuming no re-employment of current personnel in other state facilities in the county; (2) the impact of potential layoffs at Stateville on Will County associated with the phased rebuilding of the facility; (3) the impact of the replacement facility for Logan in Will County and (4) the impact of the re-construction of Stateville on Will County.

The analyses is conducted using input-output models constructed for 2022 using the IMPLAN software system. Earlier versions of the software were used for analysis of selected potential closures of Department of Corrections facilities in 2012. The focus is on employment impacts; as a result, there are no indirect (supply chain) effects, only direct (payments of wages and salaries to state employees and induced impacts from their spending.

¹ Regional Economics Applications Laboratory (2012) "Impact of the Closure of Selected Department of Corrections Facilities, 2011," Report to the Illinois Department of Corrections, February 2012.

2. Impacts of Current Facilities on the Counties

2.1 Impact of the Closure of Logan on Logan County

Table 1 provides a both the current impact and the potential impact of the closure of Logan on the county. The only difference would be a negative sign in front of the numbers.

The analysis assumes no re-employment of current employees at other nearby facilities and may be posited as a worst-case scenario. In reality, many employees may be able to seek other open positions at nearby facilities; others may choose to explore non-state positions while some may opt to retire.

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	451	\$47,819,000.00	\$55,669,713.16	\$55,669,713.16
2 - Indirect	0	\$0.00	\$0.00	\$0.00
3 - Induced	48	\$2,878,467.95	\$7,369,450.74	\$12,864,041.85
Total	499	\$50,697,467.95	\$63,039,163.91	\$68,533,755.01

Table 1: Current (2024) Impact of Employment in Logan on the County Economy

Table 1 provides an assessment of the impact of the 451 current full-time employees on the County economy. The row "Direct" indicates that those 451 employees receive a total salary of \$47.819m (column "Labor Income.") Through the spending of their wages and salaries (the induced effect noted on p. 4), a further 48 jobs will be created (row "Induced, column "Employment." The total employment created will be 451 (direct) + 48 (induced) yielding 499 ("Total" row, "Employment" column). If we divide the total by the direct effect, we obtain the *multiplier* or ripple effect; fin this case it is 1.11. Essentially, each position at Logan generates a further 0.112 job elsewhere in the County. These jobs (or portions of many jobs) would be in sectors such as retail, banking, utilities; together they would generate the additional 48 jobs. The Value Added and Output columns provide additional information on the impacts but these will not be discussed in this Report.

In 2022, Logan County had approximately 12,000 people employed. In the worst-case scenario, the loss of 451 direct jobs and 499 total jobs would represent just over 4% of total employment. The Department of Corrections has begun the exploration of alternative options for Logan employees and offers the following perspectives:

The Department intends to take significant measures to minimize the impact of the closure on the 451 employees at Logan. There are two correctional facilities located within 40 miles of Logan and four additional facilities within 90 miles of Logan. The Department estimates that if staffing patterns stay consistent with current trends, there will be approximately 850 positions available in other Department facilities located within a 90mile radius of Logan. These facilities include Lincoln Correctional Center (next door), Decatur Correctional Center (36 miles), Pontiac Correctional Center (77 miles), Jacksonville Correctional Center (59 miles), Illinois River Correctional Center (70 miles), and Taylorville Correctional Center (57 miles). The Department estimates there will be more than sufficient vacancies available throughout the Department to ensure all employees of Logan can remain employed within the Department. IDOC will follow the process outlined in the respective collective bargaining agreements and the Personnel Code which utilize the layoff process as the means transfer the impacted employees. to complete the layoff and transfer process. The layoff process ensures that the rights of the employees are protected during the transfer and upon arrival at their new facility. Unless an employee voluntarily chooses to be placed in a layoff status, IDOC does not expect that any employees will lose state employment as part of this process.

Clearly, the magnitude of the impact of the closure of Logan can be reduced if current employees are able to secure positions elsewhere within the system while retaining their existing residences. In this case, the disruption is likely to be short-term. However, some current employees may choose to accept alternative positions within the Department and re-locate their residences. This will transfer the geographical impact of their employment in terms of the location of the induced spending from their wages and salaries. At this time, there is not enough information to be able to make a thorough assessment of the outcomes.

2.2 Impact of Stateville on Will County

	Employment	Labor Income	Value Added	Output
Direct	946	\$89,384,010	\$102,748,722	\$102,748,722
Indirect	0	\$0	\$0	\$0
Induced	201	\$9,342,725	\$18,940,676	\$34,009,911
	1,147	\$98,726,736	\$121,689,399	\$136,758,633

Table 2: Impact of Stateville on Will County

Table 2 provides a similar summary set of information for Stateville on Will County. More detail is provided in tables 3 and 4. Table 3 shows the current impact of Stateville on the county. At present, each employee generates an impact on the county economy that creates a further 0.21 jobs and hence a multiplier of 1.21.

	Direct	Indirect	Induced	Total
Agriculture, Forestry, Fishing and Hunting	0.00	0.00	0.08	0.08
Mining, Quarrying, and Oil and Gas Extraction	0.00	0.00	0.01	0.01
Utilities	0.00	0.00	0.52	0.52
Construction	0.00	0.00	1.28	1.28
Manufacturing	0.00	0.00	0.29	0.29
Wholesale Trade	0.00	0.00	5.23	5.23
Retail Trade	0.00	0.00	35.80	35.80
Transportation and Warehousing	0.00	0.00	12.47	12.47
Information	0.00	0.00	4.67	4.67
Finance and Insurance	0.00	0.00	14.56	14.56
Real Estate and Rental and Leasing	0.00	0.00	8.71	8.71
Professional, Scientific, and Technical Services	0.00	0.00	7.62	7.62
Management of Companies and Enterprises	0.00	0.00	0.38	0.38
Administrative and Support and Waste Management and Remediation Services	0.00	0.00	9.87	9.87
Educational Services	0.00	0.00	6.21	6.21
Health Care and Social Assistance	0.00	0.00	32.37	32.37
Arts, Entertainment, and Recreation	0.00	0.00	5.44	5.44
Accommodation and Food Services	0.00	0.00	26.76	26.76
Other Services (except Public Administration)	0.00	0.00	27.81	27.81
Government Enterprises	0.00	0.00	0.58	0.58
Administrative Government	946.00	0.00	0.00	946.00
TOTAL	946.00	0.00	200.66	1,146.66
Multiplier	1.21			

Table 3: Current Employment Impact of Stateville on the Will County Economy

Table 3 takes the 1,147 total job impact and allocates the impacts across 535 sectors in the model; these sectors have then been aggregated into the more manageable 21 sectors shown in this table. The Direct Effect is concentrated in just one sector (State Government, a subset of the sector label "Administrative Government."). Looking down the column, "Induced," it is possible to see where the impacts of employee spending are concentrated; not surprisingly, they include Retail Trade, Finance and Insurance, Health Care and Social Assistance and Accommodation and Food Services. The column essentially provides information on the "spread" of the impact of employee spending on a various retail sectors in the County. The

sectors that are the major recipients of shares of consumer spending are also the ones that will be the affected in the events that any of these jobs are lost. This perspective is addressed in Section 3.

3. Impacts of Layoffs at Stateville on Will County

Table 4 shows the expected impact of the layoff of 95 employees as the first phase of the rebuilding requires relocation of current occupants to other facilities in the state. It is likely that many of these employees will be able to assume open positions at other facilities; however, in the absence of re-hiring at other facilities in the state, the loss of the 95 positions would result in the further loss of 20 jobs (the sum of the column "Induced") elsewhere in the county for a total loss of 115 jobs (the sum of the column "Total"). The model assumes that the impact of a new job and the loss of a job are identical in absolute terms, differing only by signs (positive in the first case, negative in the second case).

	Direct	Indirect	Induced	Total
Agriculture, Forestry, Fishing and Hunting	0	0	0	0
Mining, Quarrying, and Oil and Gas Extraction	0	0	0	0
Utilities	0	0	0	0
Construction	0	0	0	0
Manufacturing	0	0	0	0
Wholesale Trade	0	0	1	1
Retail Trade	0	0	4	4
Transportation and Warehousing	0	0	1	1
Information	0	0	0	0
Finance and Insurance	0	0	1	1
Real Estate and Rental and Leasing	0	0	1	1
Professional, Scientific, and Technical Services	0	0	1	1
Management of Companies and Enterprises	0	0	0	0
Administrative and Support and Waste Management and Remediation Services	0	0	1	1
Educational Services	0	0	1	1
Health Care and Social Assistance	0	0	3	3
Arts, Entertainment, and Recreation	0	0	1	1
Accommodation and Food Services	0	0	3	3
Other Services (except Public Administration)	0	0	3	3
Government Enterprises	0	0	0	0
Administrative Government	95	0	0	95
TOTAL	95	0	20	115
Multiplier	1.21			

Table 4: Employment Impact of loss of 95 positions in Stateville on the Will County Economy

4. Impact of Re-Construction of Stateville and a Replacement for Logan on the Will Economy

	Direct	Indirect	Induced	Total
Agriculture, Forestry, Fishing and Hunting	0	0	0	0
Mining, Quarrying, and Oil and Gas Extraction	0	3	0	3
Utilities	0	1	2	3
Construction	3,327	1	4	3,333
Manufacturing	0	3	1	4
Wholesale Trade	0	56	17	73
Retail Trade	0	27	120	147
Transportation and Warehousing	0	61	42	102
Information	0	6	16	22
Finance and Insurance	0	9	50	59
Real Estate and Rental and Leasing	0	30	29	59
Professional, Scientific, and Technical Services	0	41	26	67
Management of Companies and Enterprises	0	2	1	3
Admin & Support and Waste Managmt & Remediation Svs	0	47	33	80
Educational Services	0	0	22	22
Health Care and Social Assistance	0	0	109	109
Arts, Entertainment, and Recreation	0	2	18	20
Accommodation and Food Services	0	5	90	94
Other Services (except Public Administration)	0	13	94	106
Government Enterprises	0	1	2	3
Administrative Government	0	0	0	0
TOTAL	3,327	308	675	4,310
Multiplier	1.3			

Table 5: Total Five-Year Impact of the Stateville Rebuild on the Will Economy

Table 5 shows the five-year total impact of the estimated \$450 million cost for re-constructing Stateville while table 6 shows the average annual impact. The entries in table 5 can be considered job-years, since many of those employed on the construction project are likely to have continuous employment throughout the five years. The table essentially shows the "Direct" effect is concentrated in one sector, "Construction." Now there are entries in the "Indirect" and "Induced" columns. The Indirect entries identify the distribution of the supply chain effects of construction – purchases of lumber, cement, re-bar, electrical wiring. These purchases, in turn, will require further purchases – such as from transportation to move the lumber from the warehouse to the construction site. When these supply chain effects are summed, we move from a very concentrated impact in the "Direct" column to a very dispersed impact in the "Indirect"

column. The Direct and Indirect activities will give rise to payments of wages and salaries to employees working in the supply chain and these payments will be spent on a variety of goods and services – as noted in Table 3.

The final column sums all three, Direct, Indirect and Induced, to yield a total employment impact for each industrial sector. The "Total" column sum indicates that 4,310 job-years will be created; this is then shown for an "average" year's construction in Table 6.

Over 3,300 job-years would be generated directly and over 4,300 in total; each construction job would create a further 0.3 job-years in the County. The comparable annual average job creations would be 665 ("Direct") and 862 ("Total") respectively (see table 6).

	Direct	Indirect	Induced	Total
Agriculture, Forestry, Fishing and Hunting	0	0	0	0
Mining, Quarrying, and Oil and Gas Extraction	0	1	0	1
Utilities	0	0	0	1
Construction	665	0	1	667
Manufacturing	0	1	0	1
Wholesale Trade	0	11	3	15
Retail Trade	0	5	24	29
Transportation and Warehousing	0	12	8	20
Information	0	1	3	4
Finance and Insurance	0	2	10	12
Real Estate and Rental and Leasing	0	6	6	12
Professional, Scientific, and Technical Services	0	8	5	13
Management of Companies and Enterprises	0	0	0	1
Admin & Support and Waste Managmt & Remediation Svs	0	9	7	16
Educational Services	0	0	4	4
Health Care and Social Assistance	0	0	22	22
Arts, Entertainment, and Recreation	0	0	4	4
Accommodation and Food Services	0	1	18	19
Other Services (except Public Administration)	0	3	19	21
Government Enterprises	0	0	0	1
Administrative Government	0	0	0	0
TOTAL	665	62	135	862
Multiplier	1.3			

Table 6: Average Annual Impact of the Stateville Rebuild on the Will Economy

	Direct	Indirect	Induced	Total
Agriculture, Forestry, Fishing and Hunting	0	0	0	0
Mining, Quarrying, and Oil and Gas Extraction	0	2	0	2
Utilities	0	1	2	2
Construction	2,958	1	4	2,963
Manufacturing	0	3	1	4
Wholesale Trade	0	50	16	65
Retail Trade	0	24	106	131
Transportation and Warehousing	0	54	37	91
Information	0	5	14	19
Finance and Insurance	0	8	44	52
Real Estate and Rental and Leasing	0	27	26	53
Professional, Scientific, and Technical Services	0	36	23	59
Management of Companies and Enterprises	0	2	1	3
Admin & Support and Waste Managmt & Remediation Svs	0	42	29	71
Educational Services	0	0	19	19
Health Care and Social Assistance	0	0	96	96
Arts, Entertainment, and Recreation	0	2	16	18
Accommodation and Food Services	0	4	80	84
Other Services (except Public Administration)	0	11	83	95
Government Enterprises	0	1	2	3
Administrative Government	0	0	0	0
TOTAL	2,958	274	600	3,831
Multiplier	1.3			

Table 7: Total Five-Year Impact of the Replacement for Logan on the Will Economy

Table 7 and 8 provide the five-year and the average annual impact of building a replacement for Logan in Will County. In this case, the direct and total job-years would be just under 3,000 and just over 3,800 respectively. The annual averages would be 592 and 766 (table 8).

	Direct	Indirect	Induced	Total
Agriculture, Forestry, Fishing and Hunting	0	0	0	0
Mining, Quarrying, and Oil and Gas Extraction	0	0	0	0
Utilities	0	0	0	0
Construction	592	0	1	593
Manufacturing	0	1	0	1
Wholesale Trade	0	10	3	13
Retail Trade	0	5	21	26
Transportation and Warehousing	0	11	7	18
Information	0	1	3	4
Finance and Insurance	0	2	9	10
Real Estate and Rental and Leasing	0	5	5	11
Professional, Scientific, and Technical Services	0	7	5	12
Management of Companies and Enterprises	0	0	0	1
Admin & Support and Waste Managmt & Remediation Svs	0	8	6	14
Educational Services	0	0	4	4
Health Care and Social Assistance	0	0	19	19
Arts, Entertainment, and Recreation	0	0	3	4
Accommodation and Food Services	0	1	16	17
Other Services (except Public Administration)	0	2	17	19
Government Enterprises	0	0	0	1
Administrative Government	0	0	0	0
TOTAL	592	55	120	766
Multiplier	1.3			

Table 8: Average Annual Impact of the Replacement for Logan on the Will Economy

5. Summary Comments

In assessing the analysis, it is important to consider options for employees displaced by the closure of Logan and the renovation of Stateville. While Will County has 360,000 jobs to Logan's 12,000, the availability of comparable positions within modest commuting times from employees' current locations will be the major challenge. The costs of maintaining aging facilities suggests that the state has little option but to renovate and or re-locate. Both options will have costs in terms of employee positions but there appears to be some mitigating opportunities in terms of positions at other facilities within reasonable commute times.

The analysis presented in this report does not consider these alternatives and thus resents only a partial view of the outcomes. However, the compensation paid to current employees is likely to be much higher than the average in Logan County; without re-employment at other facilities, the loss to the county will be important. Will County has been growing in the last decade and offers more opportunities for alternative employment together with the prospect of a new facility offering a net gain to Corrections' generated employment in the County.