

Addendum to the Report:

The Economic Impacts of Staffing and Operations at the Thomson Correctional Center

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It is important to note that, when we delivered on the specific requests made by the Illinois Department of Corrections and COGFA about Thompson and Pontiac Correctional Centers, slightly different questions were asked. Despite that fact, people are comparing the results of the studies. This is a problem if the basic assumptions are not considered. Keep in mind that the IMPLAN input / output model merely provides estimates and/or predictions. Hence, the results you get are dependent on the assumptions used. We were asked to use a different set of assumptions for the Thompson versus Pontiac scenarios. If these two reports are going to be compared, then we argue that there is an equally valid different set of assumptions that could be made. We re-ran the model using the second set of assumptions. The following report presents the results of the revised analysis for consideration.

1. Introduction

An earlier analysis identified economic impacts that might stem from staffing and operating the new Correctional Center in Thomson, Illinois. That study was based on two assumptions:

- As a state facility, Illinois residents would be given preference in the Department of Correction's (DoC) hiring decisions; and
- The entire 540 employee workforce would reside within a labor-shed consisting of six counties in Illinois, including Carroll, Lee, Ogle, Rock Island, Stephenson, and Whiteside Counties.

Considering these, the analysis estimated how introducing TCC employee's spendable income and the facility's intra-regional purchases of goods and services would affect the region's economy. These impacts were substantial, including:

Direct gains

Addition of TCC Employees:	540 positions
Annual Spendable Income:	\$31.8 million
Local contractual/commodity purchases	\$4.56 million

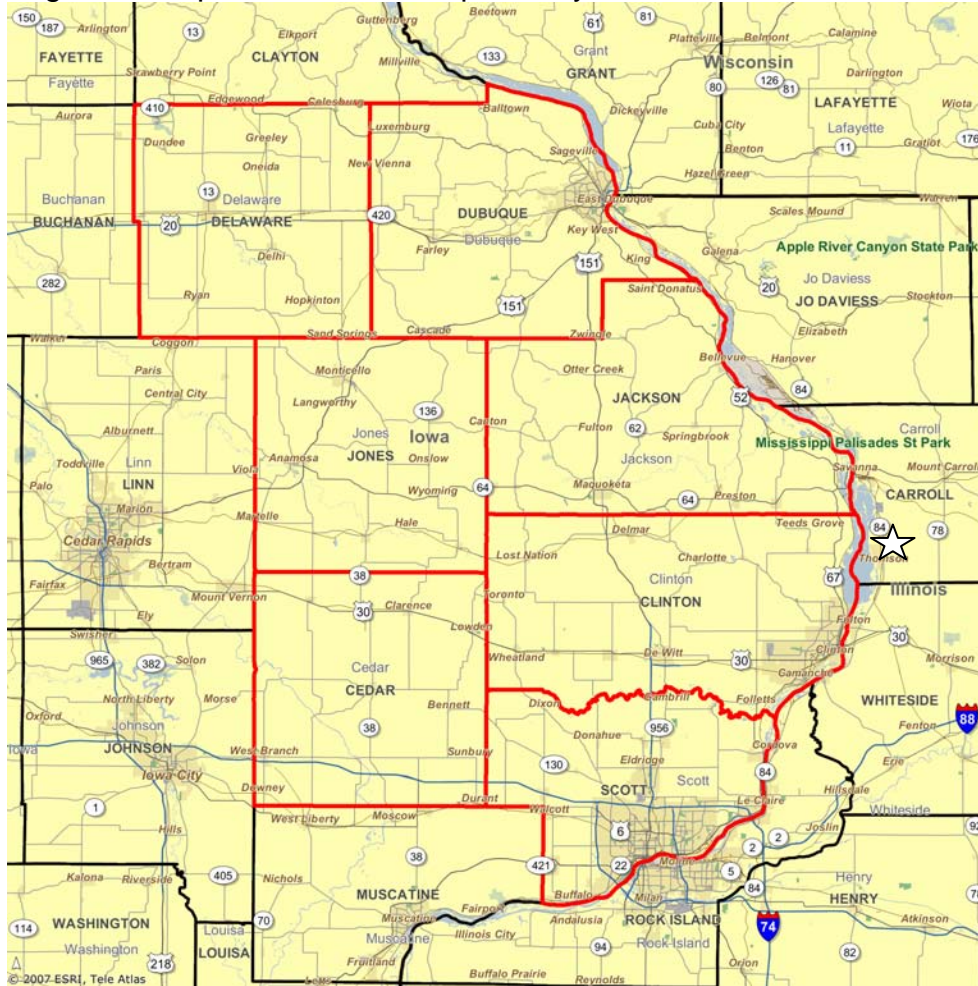
Related gains

FT/PT employment:	380 positions
Annual gain in Labor Income:	\$12.5 million
Annual gain in Output:	\$47.5 million
Annual gain in public (local/state/federal) revenues:	\$6 0 million

Following release of the report, questions regarding the assumptions were raised. The primary issue dealt with the likelihood that all TCC employees would be residents of Illinois. Although DoC policy provides hiring preferences to Illinois residents, Illinois residency is not mandatory. Several aspects of the facility's location and the nature of the area's labor force suggest that some portion of the facility's workforce might reside in Iowa, including:

- The facility's location on in proximity to the Iowa border;
- The economically porous nature of the Illinois-Iowa border. Each year, more than 17,600 Iowa residents commuting into IL for employment from the six-county area nearest the Thomson site (see Figure 1).
- At less than 10 miles distance, the population centers closest to the TCC facility are the neighboring communities of Clinton and Camanche, IA. These two cities have a combined population of almost 32,000; and
- Cross-Mississippi commuting is facilitated by a four-lane bridge on Route 30 between Clinton, IA and Fulton, IL. The bridge is 8 miles south of Thomson site. A second bridge crossing the Mississippi is located 12 miles north of the facility at Savanna, IL.

Figure 1 Map of IA counties in proximity to TCC location



☆ = Location of Thomson Correctional Center

2. Data and Methodology

As with the earlier study, the economic impacts were modeled using the IMPLAN input-output software. The model is based on an assumption that an area's businesses are connected through supply and consumption interactions. Accordingly, when a change is introduced to one industry, the others are affected to the extent that the business linkages exist. For the TCC studies, we introduced two changes to the regional economies:

- The addition of annual expenditures and spendable income of the TCC employees;
- The addition of TCC's annual commodity and contractual purchases made from vendors within the 6-County area.

The economic impacts generated in IMPLAN modeling are reported as annualized changes in a variety of categories, including

- **Output**: represents the value of production. $\text{Output} = \text{Sales} \pm \text{Inventory Change}$ (note: only local operating costs and purchases were included as TCC's Output);
- **Employment**: full-time and part-time employment;
- **Labor Income**: Employee compensation (Total payroll costs including salaries, wages, bonuses, benefits and employer-paid retirement), proprietor (self-employed) income;
- **Total Value-Added**: Include Employee Compensation, Proprietors Income, Other Property Type Income, and Indirect Business Taxes;
- **Public Revenues/Tax Impact**: Include payroll taxes, property taxes, sales taxes, and other business taxes at local/state and federal levels.

3. Study Area

The area considered in the analysis consists of Carroll County and five neighboring counties that will likely serve as the source for the majority of the Thomson facility workforce. It is expected that a large portion of TCC's employees will commute from outside the county. The five additional counties included in the study are relatively close and contain sizeable population centers including Dixon (Lee County), Oregon, Rochelle (Ogle County), Rock Island and suburbs (Rock Island County), Freeport (Stephenson County), and Morrison, Rock Falls, and Sterling (Whiteside County) Counties. The combined population for the study area is 330,374 (2000 US Census).

4. Results

The study did not change the amount or percentages of intra-regional purchases of commodity and contractual purchases by the TCC facility. The study examines how variations in the number of workers commuting from outside the study area affect the economic impacts estimated for the Thomson Correctional Center. The revised model examines the effects of the spendable income from TCC workforce residing within the study area. Accordingly, the economic impacts to be realized within the area will be proportionately reduced when fewer workers reside within the study area and more workers commute from outside. We considered several scenarios with different levels of the workforce, including 85 percent, 80 percent, and 75 percent, residing within the study area. The inputs considered in the original study, with 100 percent of the workforce originating from within the region are also included for comparison. Table 1 identifies the number of non-commuting workers and the amount of spendable income introduced each year into the regional economy for each scenario.

Table 1 Inputs relative to the percent of workers residing within study area

	100 percent	85 percent	80 percent	75 percent
Number of employees	540	459	432	405
Spendable Income	\$31.8 million	\$27.1 million	\$25.3 million	\$23.9 million
Note: This study focused on the effects associated with differing workforce commuting only. We did not assume any changes in the amount of commodities and contractual goods and services purchased from within the study area.				

Considering the interconnected nature of the regional economy, a reduction in the amount of spendable income introduced annually will result in reductions in the levels of economic interactions and the corresponding benefits to be realized within the region. A summary of potential impacts relative to different levels of commuting employees are as follows:

Economic Output:

When 100 percent of staff reside within the study area, the local operational expenditures and household expenditures of the staff will generate or support more than \$47.5 million in additional economic activity within the six county study area. However, should 15 percent of workers commute from outside the area, economic activity within the study area will decline by \$6.2 million annually. Further declines in the proportion of resident versus non-resident workforce will also reduce the amount of economic activity to be realized within the area. If 20 percent or 25 percent of workers reside outside the study area, the amount of economic activity realized within the study area will decline by \$8.4 million or \$10.2 million respectively (see Table 2).

Table 2 Changes in economic impacts relative to commuting workforce

	Percent of Workers Residing within Study Area			
	100 percent	85 percent	80 percent	75 percent
Output	\$47,504,704	\$41,359,881	\$39,105,873	\$37,263,336
Employment	380.9	308	293.7	283.2
Labor Income	\$12,482,629	\$11,134,503	\$10,639,813	\$10,235,752
Public revenues	\$6,004,814	\$5,282,765	\$5,017,861	\$4,801,401

Employment (Full and part-time positions):

There is a gain of 380.9 full and part-time jobs when all the workforce is employed from within the study area. When 15 percent of the workers commute from outside the area, this drops to 308 jobs, and down to 283 jobs when 25 percent of the workers commute into the region.

Labor Income:

Labor income is \$12.5 million when 100 percent of the workforce comes from the study area. This declines by \$1.3 million when 85 percent of the workforce is employed from within the study area. The labor income is further lowered by \$2.2 million when 25 percent of the workforce commutes.

Public Revenues:

The household income and related activities will support/create \$6 million in public revenues when 100 percent of the workforce resides in the study area. The local, state, and Federal revenue declines to \$4.8 million if 25 percent of the workforce commutes from outside of the study area.

In order to optimize positive economic impact in each of the four areas (output, employment, labor income, and public revenues), the study area must be able to provide as large of a percentage of the labor force to the facility as possible. Any loss of the workforce from the study area will only result in the project realizing fewer gains than originally projected.

Appendix

Disaggregated effects by:

- Contractual and commodity purchases within study area
- Levels of residence within study area

Table 3 Annualized impacts of additional contractual and commodity purchasing at TCC

	Direct	Indirect	Induced	Total
Output	\$4,198,566	\$547,822	\$1,792,853	\$6,539,241
Employment	69.6	5.9	18.1	93.6
Labor Income	\$2,733,844	\$220,451	\$540,827	\$3,495,122
Total Value-Added	\$3,212,834	\$321,922	\$1,071,152	\$4,605,908
Public Revenues	Local/State: \$349,626	Federal: \$841,534	\$1,191,160	

Table 4 Effects of Spendable Income for 75 percent of employees residing within study area

	Direct	Indirect	Induced	Total
Output	\$23,910,750	\$3,112,053	\$3,701,292	\$30,724,095
Employment	130.2	23.5	30.9	189.7
Labor Income	\$4,454,740	\$1,105,092	\$1,180,798	\$6,740,630
Total Value-Added	\$9,072,531	\$1,691,082	\$2,233,605	\$12,997,218
Public Revenues	Local/State: \$1,586,190	Federal: \$2,024,051	\$3,610,241	

Table 5 Effects of Spendable Income for 80 percent of employees residing within study area

	Direct	Indirect	Induced	Total
Output	\$25,344,800	\$3,298,668	\$3,923,163	\$32,566,632
Employment	138.6	25.2	33.6	200.1
Labor Income	\$4,721,764	\$1,171,347	\$1,251,580	\$7,144,691
Total Value-Added	\$9,616,251	\$1,792,472	\$2,367,497	\$13,776,221
Public Revenues	Local/State: \$1,681,329	Federal: \$2,145,372	\$3,826,701	

Table 6 Effects of Spendable Income for 85 percent of employees residing within study area

	Direct	Indirect	Induced	Total
Output	\$27,098,850	\$3,526,994	\$4,194,797	\$34,820,640
Employment	147.9	27.4	35.5	214.4
Labor Income	\$5,048,705	\$1,252,437	\$1,338,238	\$7,639,381
Total Value-Added	\$10,282,202	\$1,916,560	\$2,531,419	\$14,730,180
Public Revenues	Local/State: \$1,797,681 Federal: \$ 2,293,924			\$4,091,605

Table 7 Effects of Spendable Income for 100 percent of employees residing within study area

	Direct	Indirect	Induced	Total
Output	\$31,881,003	\$4,149,404	\$4,935,056	\$40,965,463
Employment	2001	37.6	49.6	287.3
Labor Income	\$5,939,654	\$1,473,456	\$1,574,397	\$8,987,507
Total Value-Added	\$12,096,709	\$2,254,776	\$2,978,140	\$17,329,625
Public Revenues	Local/State: \$2,114,919 Federal: \$2,698,739			\$4,813,658