2023 Update: Marginal Costs in Fiscal Impact Analyses

This report updates the financial cost estimates used in SPAC fiscal impact analyses. Based on reported expenditure data and Illinois budgeting practices, SPAC annually updates the costs to estimate fiscal impacts of legislation and policy change.

In Illinois, budgets are most frequently determined by past practices and minimizing disruptions in services and government spending. Currently, future services are seldom analyzed for projections and forecasts of expected needs, therefore foreseeable changes are seldom factored into budgets. This practice results in a divergence of costs from services: i.e., the number of prisoners in state prisons, or probationers supervised by county probation departments, is not predictive of those agencies’ budgets. This is most clearly demonstrated by the fact that budget changes for the Illinois Department of Corrections (IDOC) have not correlated with the prison population over the past ten years. The same holds true for county public safety budgets.1

Simply defined, marginal costs are the costs of adding additional clients compared to maintaining the status quo. The marginal costs can include: (1) **variable costs**, costs that directly relate to services (laundry, food, etc.); (2) **personnel costs** which change when staffing levels change; and (3) **fixed costs**, costs related to physical space that vary only with large service changes. The types of costs included depends on the size of the change to the incarcerated population and if the expenditures for variable, personnel, and fixed costs change in tandem.

<table>
<thead>
<tr>
<th></th>
<th>State Prison Population per inmate per year</th>
<th>County Jail Populations per inmate per year (SPAC-estimated Statewide Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Costs</td>
<td>$11,225</td>
<td>$3,817</td>
</tr>
<tr>
<td>Personnel Costs</td>
<td>$59,039</td>
<td>$40,197</td>
</tr>
<tr>
<td>Fixed Costs</td>
<td>$6,181</td>
<td>$2,204</td>
</tr>
<tr>
<td><strong>Operational Costs</strong></td>
<td><strong>$70,264</strong></td>
<td><strong>$44,015</strong></td>
</tr>
<tr>
<td>(Variable + Personnel Costs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>True Total Costs</strong></td>
<td><strong>$76,444</strong></td>
<td><strong>$46,219</strong></td>
</tr>
<tr>
<td>(Variable + Personnel + Fixed Costs)</td>
<td></td>
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</tr>
</tbody>
</table>

**Source:** SPAC analysis of IDOC FY2022 expenditures, multi-year trends in inflation adjusted IDOC variable costs, and a sample of county sheriffs’ jail expenditures in recent years.

The IDOC personnel costs for state prisons includes both personnel line items in the IDOC expenditures and an estimate for the off-budget expenditures of personnel medical insurance, workers compensation, and pension contributions.

The IDOC true total cost per inmate includes fixed costs of not only infrastructure expenditures, but also the operational costs of non-prison IDOC activities, including ATCs, the Prisoner Review Board, field services, and administrative oversight of these functions.

The statewide jail costs are from SPAC analysis of seven counties’ sheriff’s budgets for recent years. For some counties, SPAC averaged budgets for several years to account for unexpected spikes or dips in spending. Jail costs are adjusted for inflation. At the time estimation and publication of this document, cash-bail was still in operation and these costs will likely need to be updated if that were to change.

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1 See, *Quantifying County Adult Criminal Justice Costs*, available at: [https://spac.illinois.gov/publications/research-reports/quant-county-costs](https://spac.illinois.gov/publications/research-reports/quant-county-costs).
For the past several years, SPAC used a Dynamic Marginal Cost model that included “step costs” from estimated changes in staffing based on estimated changes to the prison population. However, for 2023, SPAC is using only the variable costs changes in the incarcerated population and not estimating costs for staffing changes. The prison population has decreased by nearly twenty thousand people since 2012, a historic change. This reduction has not had a parallel change in the Department of Corrections staffing or budget. Based on this recent history, we do not believe that even relatively large increases to the prison population would result in staffing changes. Likewise, we are not confident that further reductions to the prison population would necessarily reduce staffing, particularly over the three-year timeframe that SPAC uses for fiscal impacts.

The magnitude of the prison population decrease allowed IDOC to consolidate some housing units in several facilities, focused on those units that were in the worst physical condition. The fiscal impact of those consolidations has not been calculated but SPAC would expect a reduction in the fixed costs and a savings in maintenance costs. The consolidation did not result in any reduction in staff, therefore personnel cost savings were not realized.

Community Supervision Costs

For probation and parole, SPAC uses the average “per capita” costs.

The cost of one year of supervision on Mandatory Supervised Release by IDOC’s Parole Division is estimated at $4,403 per person supervised per year. This cost includes the true employee costs of pensions, workers compensation, and health benefits for parole agent staff.

The cost of one year of supervision on Probation by county probation departments is estimated at $3,325 per person supervised per year, not adjusting for contact standards due to differing client risk levels. This average cost reflects the county and state per capita spending primarily on the variable costs of probation including staffing and services provided to clients in 2021 and have been adjusted for inflation. Pretrial services provided by probation officers are not included in this estimate.

Definitions

Marginal Costs: SPAC-calculated the cost of adding or subtracting one inmate into or out of the criminal justice system. Specifically:

- All changes to the incarcerated population are estimated to involve variable costs.
- Personnel costs change if staffing changes occur.

Variable Costs: Direct relationship to the addition or subtraction of one inmate into or out of the criminal justice system. A variable cost is a cost that directly relates to agency services/output. Variable costs are incurred if the agency must process one additional inmate and would change directly as the number of inmates increase or decrease. Examples include:

- Laundry, food, and medical costs for jail inmates; and
- Staff overtime costs.
Personnel Costs: Driven primarily by increasing or decreasing full-time employment in the justice system. Personnel costs are incurred when the change in inmates is sufficient to alter staffing levels and is reflected in expenditures and actual staffing levels; for example, opening or closing a portion (wing, housing unit, etc.) of a facility and altering staffing. Examples include:

- Staff salaries, benefits, and pension costs; and
- Office supplies, vehicles, and other equipment or training for staff.

Fixed Costs: Costs that are primarily driven by factors other than inmates or employees. A fixed cost is one that does not change with an increase or decrease in the number of clients or employees. Examples include:

- Capital costs for construction;
- Overhead and constant administrative offices; and
- Interest payments on bonds.

Assumptions and Limitations

SPAC has analyzed each key component of the criminal justice system on the state and county level to develop a reliable top-down budgetary analysis of the costs. SPAC assumes that the resource needs are roughly in line with the current costs. If costs and resources used do not reflect the level of services provided, the fiscal impact analysis could misstate future costs. However, the analysis relies on the best available data and presents these fiscal impacts as reasonable estimates.

The capital construction costs, as well as bond and debt repayments, are not included unless the service change is 50% or more of the past maximum or minimum services. In addition, no continuous escalation rates are included in the estimates.

The analysis excludes consistent growth in costs caused by inflation and/or regular increases in costs. For example, if inmate medical care costs increase regularly over time, it would be wrong to assume that no change in inmates means no change in future costs. Further, because the model does not control for inflation, if medical costs per person or staff wages grow faster than overall inflation, the estimates of future costs will be low.

Jail costs are consolidated for a statewide estimate. In other words, a 6% increase in the statewide jail population is assumed to be an increase of 6% in each county’s jail population.

Questions about the calculation of the marginal costs, or for SPAC’s use of these costs, should be directed to Mark Powers at Mark.Powers@Illinois.gov.

SPAC is a statutorily created council that does not support or oppose legislation. Data analysis and research is conducted by SPAC’s research staff. The analysis presented here is not intended to reflect the opinions or judgments of SPAC’s member organizations.