MULTNOMAH COUNTY

# MULTNOMAH COUNTY CRIMINAL JUSTICE SYSTEM IMPACT MODEL: GRESHAM POLICE DEPARTMENT

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# MULTNOMAH COUNTY CRIMINAL JUSTICE SYSTEM IMPACT MODEL

The Multnomah County public safety system is made up of several agencies and from various governmental jurisdictions operating together. Like all systems, ripple effects can occur in the public safety system when changes in activities occur at various agencies. These may often have unintended consequences. For example, the State Court closures in 2004 led to unused beds in the local jails.

In February, 2005 a working group of the County's public safety departments were concerned about proposals to add a significant number of police officers at the City of Portland while simultaneously trying to determine how the County's budget would be balanced. The question was what would the results be to County agencies due to the increase in enforcement?

A simplified model was developed to simulate changes to key County controlled areas in the public safety system when enforcement agencies changed the number of sworn officers. The models were based on the unique contribution of specific enforcement agencies (e.g., Portland Police, Gresham Police, etc.). Agencies provided their own actual (not budgeted) staffing data and the workload data was captured through DSS-Justice. The model did not make assumptions about more efficient processing methods, nor was it designed to give a comprehensive system overview. The model simply illustrated what occurred and what might happen if the results were extrapolated. This report models the data based on Portland Police contributions.

CONCEPTUAL MODEL

Police officers are the starting point for nearly all of the workload generated for the public safety system. Officers typically initiate arrests which lead to bookings and jail bed use, cases received and issued for prosecution, parole and probation caseloads and subsequent treatment services. These activities are often complex in their relationships, but a simplified model is displayed in Figure 1).
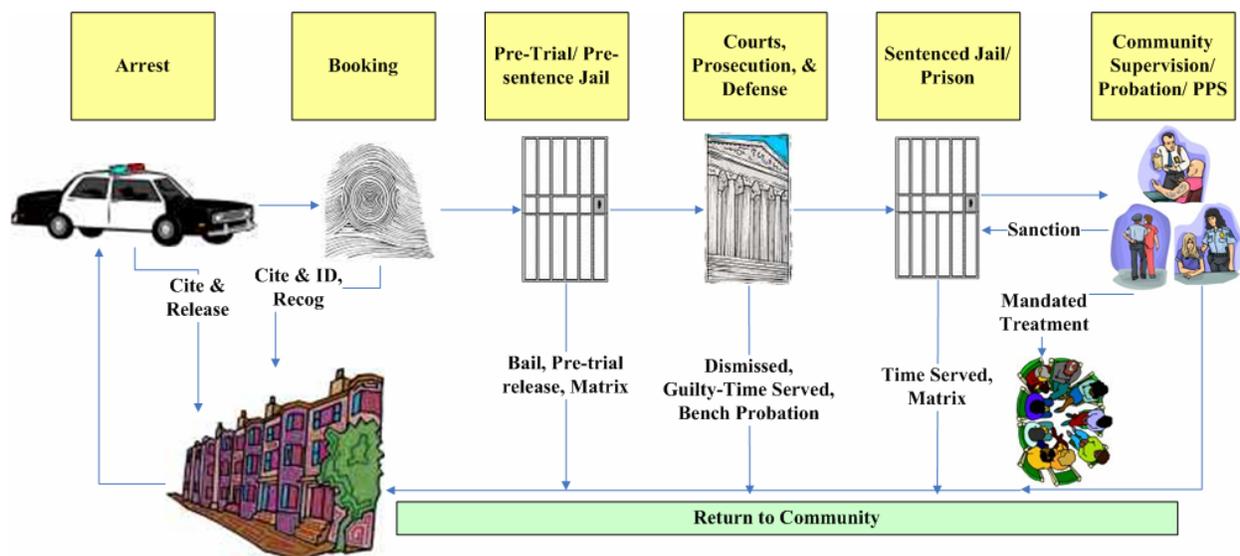


**Figure 1. Basic Local Public Safety System Model.**

MODEL SUMMARY

Two models reported herein were created based on actual CY2000 and CY2004 data. The summary page reproduces the results of these two model years in two tables. The two years were produced to give a range of results based on the funding differences in CY2000 and CY2004. These models do not account for support costs (staff support, internal services, management), increases needed in indigent defense and court services, or for non-criminal traffic enforcement.

The *model summary* is based on the model detail from CY200 and CY2004, with the addition of an average of the two years. This gives the reader a sense of the range at which the variables operated. The model summary's table entitled, ***Model Range per Individual Officer Increase***, shows various proportional resource relationships for a single officer. For example, on average adding one officer is equal to adding 0.7 precinct street officers, 1.8 more annual jail beds, 0.1 more deputy district attorneys, 0.2 more probation officers, and 7.2 more treatment slots.

The second summary page table, ***Model Results per Total Officer Increase,*** again shows the various resource relationships, but is increased for the total number of officers that are expected to change. In this particular model, the number is 50 more officers. For example, if one officer is equivalent to adding 0.7 precinct street officers, an increase of 50 officers would add 34.9 total precinct street officers. This in turn would generate volume for an additional 61.8 jail beds, additional deputy district attorneys, etc.


MODEL DETAIL

Each year's model is the same (except for supervision cases generated which were estimated for 2000); both models were built on certain assumptions (e.g., the average length of jail stay, the increase in officers) and actual data from the corresponding CY (i.e., arrests, bookings, etc).

Enforcement. The models begin with enforcement and calculate the proportion of total officers (sworn) who are actually on the street as sergeants of officers in precincts. Officers such as school resource officers, liaisons, researchers, and detectives are not counted for in this part of the model (however, their arrest activity is accounted for in the model). Total arrests for the specific modeled agency and average annual adult arrests per officer are calculated.

Jails. Understanding jails use is simply based on how many bookings occur and how long they stay. In this model jail use is calculated in two ways: direct and in-direct. Direct is the traditionally understood route, where the specific enforcement agency's officer makes an arrest and transports a person to booking and into jail. For example, of the nearly 35,000 standard bookings in 2000, Gresham Police accounted for 6% or 30 bookings per officer per year. The average length of stay for a booking in 2000 was 19.3 days. Therefore, each officer generated 575 days of jail each year, or 1.57 beds per officer per day.

Indirect accounts for the jail time due to many of the other bookings into jail (typically post-conviction) and associates it to an enforcement agency. This occurs when a probation officer or a judge orders a person to jail (e.g., sanction, remand to custody, or turn-self-in sentence—TSI). While a probation officer or judge ordered the person to spend time in jail, the case was originally generated by a police officer. Indirect is accounted for by taking a proportion of the

total number of these cases and assigning them to the modeled enforcement agency. The proportion is based on the proportion of enforcement agency's cases that the District Attorney prosecutes (see prosecution section). For example, in 2000 there were a total 5152 TSI bookings, 698 court bookings, and 1218 sanction bookings. It is estimated that Gresham Police accounted for 8% of these issued (prosecuted) cases, and therefore 8% of the indirect bookings are associated with the Gresham Police. Thus, each officer is responsible for 5 bookings with an average length of stay of 19.3 days. This totals 104 bed days annually, or 0.3 beds per day. Indirect courts accounted for a small amount as did sanctions. Together all of these other indirect subsections accounted for 0.1 additional beds per day per officer.

Prosecution. The District Attorney (prosecution) data starts with received cases, a proportion of which will never be issued for prosecution (e.g., lack of evidence, etc.). A proportion of the total cases actually issued originate from a specific arresting agency. For example, in 2000 there were nearly 34,000 cases received of which 24,000 or 71% were issued. The Gresham Police accounted for 8% of the total issued cases, or 25 cases per officer. On average each deputy district attorney prosecuted 267 cases in 2000, finding a ratio of 1 to 0.09 Gresham officers to deputy district attorneys. Thus, every additional 11 officers generate enough workload for an additional deputy district attorney.

Sentencing. The sentencing section is useful in illustrating case outcomes and needed for estimates for the 2000 probation caseloads (2004 had actuals available). Overall in 2000, 71% of the cases were found to end in guilty pleas, guilty trials, of no contest pleas—convicted. Examining the most severe sanction from the most severe convicted charge models helps determine were a defendant will go in the system. In 2000, 7% received prison sentences, 11% received local control jail sentences or other jail sentences only, 44% received some combination of jail and probation, 27% received a probation sentence only. The remaining cases received diversion or more commonly a fine/fee as the most severe sanction. Overall, 55% received some local jail time (pre- or post-trial) and 70% received some type of probation.

Supervision. The supervision section accounts for the total caseload generated by officers. The 2000 data is estimated (based on sentencing) and the 2004 is based on actuals. In 2000, it is estimated that there were 910 new probation intakes from Gresham Police officer arrests, or 12.5 new probation cases generated per officer per year. Based on best practice the Department of Community Justice attempts to maintain an overall caseload of 50:1 for it's probation officers. Thus in 2000, each Gresham Police officer generated the equivalent workload for 0.25 probation officers. In other words, this model section found that for every four officers added, enough probation workload was generated for an additional probation officer. Additionally, a proportion of offenders will leave the community an go to prison, later to return. The model notes this issue which contributes to probation and parole workload. It was beyond the scope of this model to address the returns to the community, but note the importance.

Treatment. In addition to probation officers, treatment services are also needed for those under supervision to address criminality. The treatment services numbers are based on the total probation volume generated under the supervision section. According to DCJ, slightly more than half of probationers receive some treatment services annually (e.g., drug and alcohol abuse treatment, mental health treatment, etc.). Additionally, a small proportion receive housing

services, basic literacy services, and service from the Day Reporting Center. Some may use all services, some may use non, but overall each Portland Police officer generated nearly 10.6 treatment service slots in 2000.

Others. The model recognizes that as workload increases for the County agencies, it also increases for those agencies outside the County control. Both the courts and indigent defense services will react in much the same way as the rest of the model. It was beyond the scope of this model to address the impacts to the courts and indigent defense, but notes their importance. Future models may address this area.

# County Operated Criminal Justice System Impact Model Based on Increased Gresham Police Department Enforcement: 2000 and 2004

| Variables | Model Range per Individual Officer Increase | | | Model Results per Total Officer Increase | | |
|---|---|---|---|---|---|---|
| | 2000 | 2004 | Average | 2000 | 2004 | Average |
| **Officers Added** | 1 | 1 | 1 | 50 | 50 | 50 |
| Precinct Officers | 0.68 | 0.72 | 0.7 | 33.8 | 35.9 | 34.9 |
| Beds Needed-Direct | 1.57 | 1.32 | 1.4 | 53.2 | 47.4 | 50.3 |
| Beds Needed- Indirect | 0.39 | 0.28 | 0.3 | 13.2 | 9.9 | 11.5 |
| Total Beds Needed (D&I) | 1.96 | 1.60 | 1.8 | 66.3 | 57.3 | 61.8 |
| DDA Needed | 0.09 | 0.08 | 0.1 | 3.2 | 2.9 | 3.0 |
| PO's Needed | 0.25 | 0.09 | 0.2 | 8.4 | 3.3 | 5.9 |
| Treatment Services | 10.60 | 3.88 | 7.2 | 358.1 | 139.2 | 248.7 |

**Note: This model does not account for program support (staff support, internal services, etc.) or administrative support (management) increases that may be needed as a result of increases. It also does not account for increases needed in indigent defense and court servic It does not account for changes in officer overtime. Arrests do not account for non-criminal traffic enforcement.**

# Criminal Justice System Impact Based on Increased Enforcement

**Model Assumptions**

| | |
|---|---|
| Jail ALS | 19.31 |
| Additional Officers | 50 |

### Summary Results Table: 2000

| | Per Officer | Results |
|---|---|---|
| Officers Added | 1 | 50 |
| Precinct Officers | 0.68 | 34 |
| Beds Needed-Direct | 1.57 | 53 |
| Beds Needed- Indirect | 0.39 | 13 |
| Total Beds Needed (D&I) | 1.96 | 66 |
| DDA Needed | 0.09 | 3 |
| PO's Needed | 0.25 | 8 |
| Treatment Services | 10.60 | 358 |

**Note:** This model does not account for program support (staff support, internal services, etc.) or administrative support (management) increases that may be needed as a result of increases. It does not account for changes in officer overtime. It does not account for changes in officer overtime. Arrests do not account for non-criminal traffic enforcement.

### Enforcement

| | Total Actual Officers | Actual Precinct Officers | Percent of Officers in Precinct | Total Arrests | Adult Arrests | Percent Adult Arrests | Adult Arrests/ precinct Officer |
|---|---|---|---|---|---|---|---|
| GPD CY2000 | 108 | 73 | 68% | 5,222 | 4,497 | 86% | 62 |

**Additional Precinct Officers** 33.8

### Jails- Direct

| | Total Standard Bookings | Standard Bookings by Agency | Percent Standard Bookings by Agency | Standard Bookings per precinct Officer | Average Length of Stay per booking | Total annual bed days per Officer | Average annual beds needed per Officer |
|---|---|---|---|---|---|---|---|
| GPD CY2000 | 34,984 | 2,172 | 6% | 30 | 19.3 | 575 | 1.57 |

**Results** 53.2

### Prosecution

| | Cases Received | Cases Issued | Cases Issued By DA | Total Cases Issued by Agency | Percent Issues Cases by Agency | Cases Issued per Officer | Issued Cases per DDA | DDA needed per Officer |
|---|---|---|---|---|---|---|---|---|
| | 33,968 | 24,009 | 71% | 1,824 | 8% | 25.0 | 267 | 0.09 |

**Results** 3.2

### Sentencing

| | Percent Convicted (Guilty /Plea/ No contest) | Estimated cases convicted by Agency | Percent convicted Prison | Percent convicted Jail/1145 Only | Percent convicted Jail/1145 and Probation | Percent convicted Probation Only | Estimated Cases with Jail/ 1145 sentence | Estimated Cases with Probation Sentence |
|---|---|---|---|---|---|---|---|---|
| | 71% | 1,295 | 7% | 11% | 44% | 27% | 55% | 70% |

### Other

| Place holder for Indigent Defense Attorneys | Place holder for Judges |
|---|---|

### Jail- Indirect:TSI

| | Total TSI Bookings | Estimated TSI per agency | Estimated TSI Bookings per precinct Officer | Average Length of Stay per booking | Total annual TSI bed days per Officer | Average annual TSI beds needed per Officer |
|---|---|---|---|---|---|---|
| | 5152 | 391 | 5 | 19.3 | 104 | 0.3 |

**Results** 9.6

### Jail- Indirect: Court

| | Total Court Bookings | Estimated Court Bookings per agency | Estimated Court Bookings per precinct Officer | Average Length of Stay per booking | Total annual bed days per Officer | Average annual beds needed per Officer |
|---|---|---|---|---|---|---|
| | 698 | 53 | 1 | 19.3 | 14 | 0.0 |

**Results** 1.3

### Jail- Indirect: Sanction

| | Total DCJ Bookings | Estimated DCJ Bookings per agency | Estimated DCJ Bookings per precinct Officer | Average Length of Stay per booking | Total annual bed days per Officer | Average annual beds needed per Officer |
|---|---|---|---|---|---|---|
| | 1218 | 93 | 1.3 | 19.3 | 24.5 | 0.1 |

**Results** 2.3

### Supervision

| | Estimated agency cases with new Probation | Agency Cases with Probation | Probation Cases per Officer | DCJ average cases to PO | POs needed per Officer | POs needed per Officer-- delayed PPS cases |
|---|---|---|---|---|---|---|
| | 910 | 910 | 12.5 | 50 | 0.25 | NA |

**Results** 8.4

### Treatment Services

| | DCJ Probnters in Treatment Services | Estimated Treatment Services per Officer | Average Tx cost per episode | DCJ Probnters in Housing Services | Estimated Housing Services per Officer | Average Housing cost per episode | DCJ Probnters in Londer Learning Services | Estimated Londer Learning Services per Officer | Average Learning cost per episode | DCJ Probnters in Day Reporting Center | Estimated Day Reporting Center per Officer | Average Day Reporting cost per episode | Total Additional Services per Officer | Total Cost per Officer |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 55% | 6.9 | $1,959 | 10% | 1.2 | $6,792 | 13% | 1.6 | $1,000 | 8% | 0.9 | $2,200 | 10.6 | $2,988 |

**Results** | 231.7 $ 66,207 | 42.1 $229,539 | 52.7 $ 33,796 | 31.6 $ 74,352 | 358.1 $ 403,894 |

# Criminal Justice System Impact Based on Increased Enforcement

**Model Assumptions**
Jail ALS  17.74
Additional Officers  50

### Summary Results Table : 2004

| | Per Officer | Results |
|---|---|---|
| Officers Added | 1 | 50 |
| Precinct Officers | 0.72 | 36 |
| Beds Needed-Direct | 1.32 | 47 |
| Beds Needed- Indirect | 0.28 | 10 |
| Total Beds Needed (D&I) | 1.60 | 57 |
| DDA Needed | 0.08 | 3 |
| PO's Needed | 0.09 | 3 |
| Treatment Service Slots | 3.88 | 139 |

Note: This model does not account for program support (staff support, internal services, etc.) or administrative support (management) increases that may be needed as a result of increases. It does not account for changes in officer overtime. It does not account for changes in officer overtime. Arrests do not account for non-criminal traffic enforcement.

### Enforcement

| | Total Actual Officers | Actual Precinct Officers | Percent of Officers in Precinct | Total Arrests | Adult Arrests | Percent Adult Arrests | Adult Arrests/ precinct Officer |
|---|---|---|---|---|---|---|---|
| GPD CY2004 | 110 | 79 | 72% | 5,397 | 4,539 | 84% | 57 |

Additional Precinct Officers  35.9

### Jails- Direct

| | Total Standard Bookings | Standard Bookings by Agency | Percent Standard Bookings by Agency | Standard Bookings per precinct Officer | Average Length of Stay per booking | Total annual bed days per Officer | Average annual beds needed per Officer |
|---|---|---|---|---|---|---|---|
| GPD CY2004 | 31,994 | 2,145 | 7% | 27 | 17.7 | 482 | 1.32 |

Results  47.4

### Prosecution

| | Cases Received | Cases Issued | Cases Issued By DA | Total Cases Issued by Agency | Percent Issues Cases by Agency | Cases Issued per Officer | Issued Cases per DDA | DDA needed per Officer |
|---|---|---|---|---|---|---|---|---|
| | 30,626 | 22,213 | 73% | 1,658 | 7% | 21.0 | 264 | 0.08 |

Results  2.9

### Sentencing

| | Percent Convicted (Guilty /Plea/ No contest) | Estimated cases convicted by Agency | Percent convicted Prison | Percent convicted Jail/1145 Only | Percent convicted Jail/1145 and Probation | Percent convicted Probation Only | Estimated Cases with Jail | Estimated Cases with Probation |
|---|---|---|---|---|---|---|---|---|
| | 67% | 1,111 | 6% | 18% | 19% | 18% | 36% | 37% |

### Other

| Place holder for Indigent Defense Attorneys | Place holder for Judges |
|---|---|

### Jail- Indirect:TSI

| Total TSI Bookings | Estimated TSI Per agency | Estimated TSI Bookings per Officer | Average Length of Stay per booking | Total annual TSI bed days per Officer | Average annual TSI beds needed per Officer |
|---|---|---|---|---|---|
| 3267 | 244 | 3 | 17.7 | 55 | 0.2 |

Results  5.4

### Jail- Indirect: Court

| Total Court Bookings | Estimated Court Bookings per agency | Estimated Court Bookings per Officer | Average Length of Stay per booking | Total annual bed days per Officer | Average annual beds needed per Officer |
|---|---|---|---|---|---|
| 1167 | 87 | 1 | 17.7 | 20 | 0.1 |

Results  1.9

### Jail- Indirect: Sanction

| Total DCJ Bookings | Estimated DCJ Bookings per agency | Estimated DCJ Bookings per precinct Officer | Average Length of Stay per booking | Total annual bed days per Officer | Average annual beds needed per Officer |
|---|---|---|---|---|---|
| 1578 | 118 | 1.5 | 17.7 | 26.4 | 0.1 |

Results  2.6

### Supervision

| Cases with new Probation | Agency Cases with Probation | Probation Cases per Officer | DCJ average cases to PO | POs needed per Officer | POs needed per Officer-- delayed PPS cases |
|---|---|---|---|---|---|
| 4856 | 362 | 4.6 | 50 | 0.09 | 0.05 |

Results  165 | 3.3 | 2

### Treatment Services

| | DCJ Probnters in Treatment Services | Estimated Treatment Services per Officer | Average Tx cost per episode | DCJ Probnters in Housing Services | Estimated Housing Services per Officer | Average Housing cost per episode | DCJ Probnters in Londer Learning Services | Estimated Londer Learning Services per Officer | Average Learning cost per episode | DCJ Probnters in Day Reporting Center | Estimated Day Reporting Center per Officer | Average Day Reporting cost per episode | Total Additional Services per Officer | Total Cost per Officer |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 55% | 2.5 | $2,423 | 10% | 0.5 | $ 6,792 | 13% | 0.6 | $1,000 | 8% | 0.3 | $2,200 | 3.9 | $3,104 |

Results  89.8  $ 87,008 | 16.5  $ 243,889 | 20.6  $ 35,909 | 12.4  $ 79,000 | 139.2  $ 445,806