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Alaska Correctional Requirements: A Forecast of Prison Population through the Year 2000 — Executive Summary

UAA School of Justice

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Summary

This Executive Summary presents major findings of the full report on the bedspace needs of the Alaska Department of Corrections as projected by the School of Justice through the year 2000. The forecast derived from this study provides evidence of the need for additional institutional capacity in Southcentral Alaska by 1990. Planning should proceed for a capacity of 1,000 beds to be available for use by 1990.

Additional information

This report is part of the Fire Island Prison Feasibility Study, a project conducted jointly by the School of Justice and School of Engineering at University of Alaska, Anchorage under contract to the Alaska Department of Corrections. The project undertook to assess the feasibility of locating a correctional facility on a 4,240 acre tract of land on Fire Island, which lies in Upper Cook Inlet about three miles off Point Campbell within the Municipality of Anchorage. The project was divided into three major phases: (1) an assessment of future bed space needs of the Alaska Department of Corrections; (2) an evaluation of the physical site and cost estimates for prison construction and operation; and (3) a public opinion survey and open discussion.

The project's three major reports include:

- *Alaska Correctional Requirements: A Forecast of Prison Population through the Year 2000* by Allan R. Barnes and Richard McCleary (1986);
- *Engineering Feasibility Study of Fire Island as a Location for a Future Correctional Facility: Final Report* edited by David C. Junge (1986);
- *Fire Island Public Opinion Survey: Summary of Findings* by Allan R. Barnes (1986).

Additional reports include:

- *Alaska Correctional Requirements: A Forecast of Prison Population through the Year 2000 — Executive Summary* by UAA School of Justice (1986);

- *Technical Memorandum: Site Assessment and Site Evaluation* by UAA School of Engineering (1986);
- *Fire Island Feasibility Study: Summary Report — Final Report* by UAA School of Justice and UAA School of Engineering (1986).

ALASKA CORRECTIONAL REQUIREMENTS:
A FORECAST OF PRISON POPULATION
THROUGH THE YEAR 2000
- EXECUTIVE SUMMARY -



JUSTICE CENTER

**University of Alaska, Anchorage
Anchorage, Alaska**

ALASKA CORRECTIONAL REQUIREMENTS:
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by

School of Justice



School of Justice
University of Alaska, Anchorage
3211 Providence Drive
Anchorage, Alaska 99508

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Purpose and Scope

The University of Alaska, Anchorage Schools of Justice and Engineering have undertaken an assessment of the feasibility of locating a state correctional facility on Fire Island in Cook Inlet near Anchorage. This Executive Summary presents the bedspace needs of the Alaska Department of Corrections (ADOC) as projected by the School of Justice through the year 2000.

Background

The number of state prisoners has quadrupled from 1970-1984 (See Fig. 1). Since 1980, Alaska inmates have almost tripled from 770 to 2073. Previous attempts by others to forecast this growth in prison population grossly underestimated the actual increases. At the present time correctional facilities are crowded and construction and renovation projects have been initiated in an effort to relieve the situation. Officials of ADOC have attempted to obtain reliable forecasts of the size and makeup of the prison population in future years as a basis for long-range programs and capital planning.

Methodology

The model used for these forecasts was designed by Richard McCleary, who has developed similar models to successfully predict prison population growth in other states. The Alaska model contains the following historical phenomena which we assume will remain constant to the year 2000:

- ° an unexplained natural growth of approximately 5% in the prison population;
- ° Alaska unemployment and armed robbery rates are associated with fluctuation in the ADOC population; and

- ° the 1980 revisions in the criminal code influence the dynamics of Alaska's prison population growth.

Results

The model was used to produce three categories of forecasts: short- and long-range status quo forecasts and forecasts based on scenarios of alternative futures.

Status Quo Forecast: Short-Range

The short-range forecasts were performed using pre-1985 data to assess the accuracy of the projection model. It appears that these short-range forecasts (see Table 1) were conservative in that they slightly underestimated the actual population. This may indicate that our long-range status quo forecasts are also conservative and slightly underestimate the total population.

Status Quo Forecasts: Long-Range

The forecast of the most probable yearly prison population of Alaska is presented in Table 2 and Figs. 1 and 2. Without changes from the status quo, Alaska's most probable long-range prison population, both sentenced and unsentenced, will total 4080 inmates in 1990 and 8914 inmates by the year 2000. The larger portion of the ADOC population, those actually sentenced to a prison term, will increase almost five-fold from 1985 levels.

Table 1

Comparison of Total Monthly Forecasts and
Total Actual ADOC Populations¹ for 1985

| Month | Forecasted | Actual ² |
|-----------|------------|---------------------|
| January | 1722.1 | 1794 |
| February | 1750.7 | 1853 |
| March | 1755.6 | 1873 |
| April | 1761.1 | 1892 |
| May | 1772.3 | 1856 |
| June | 1773.6 | 1821 |
| July | 1785.8 | 1825 |
| August | 1797.0 | 1831 |
| September | 1795.6 | 1906 |
| October | 1819.7 | 1907 |
| November | 1843.4 | 1954 |
| December | 1857.6 | 1951 |

¹Daily Average computed by dividing man days (daily population of 1 person for 1 day) by number of days in the month. Does not include prisoners in the Federal Bureau of Prisons, community correctional centers, halfway houses, etc.

²These figures were provided by the Alaska Department of Corrections Research Unit, Juneau, Alaska, in December, 1985.

Figure 1

YEARLY STATEWIDE ADOC POPULATION Actual & Forecast

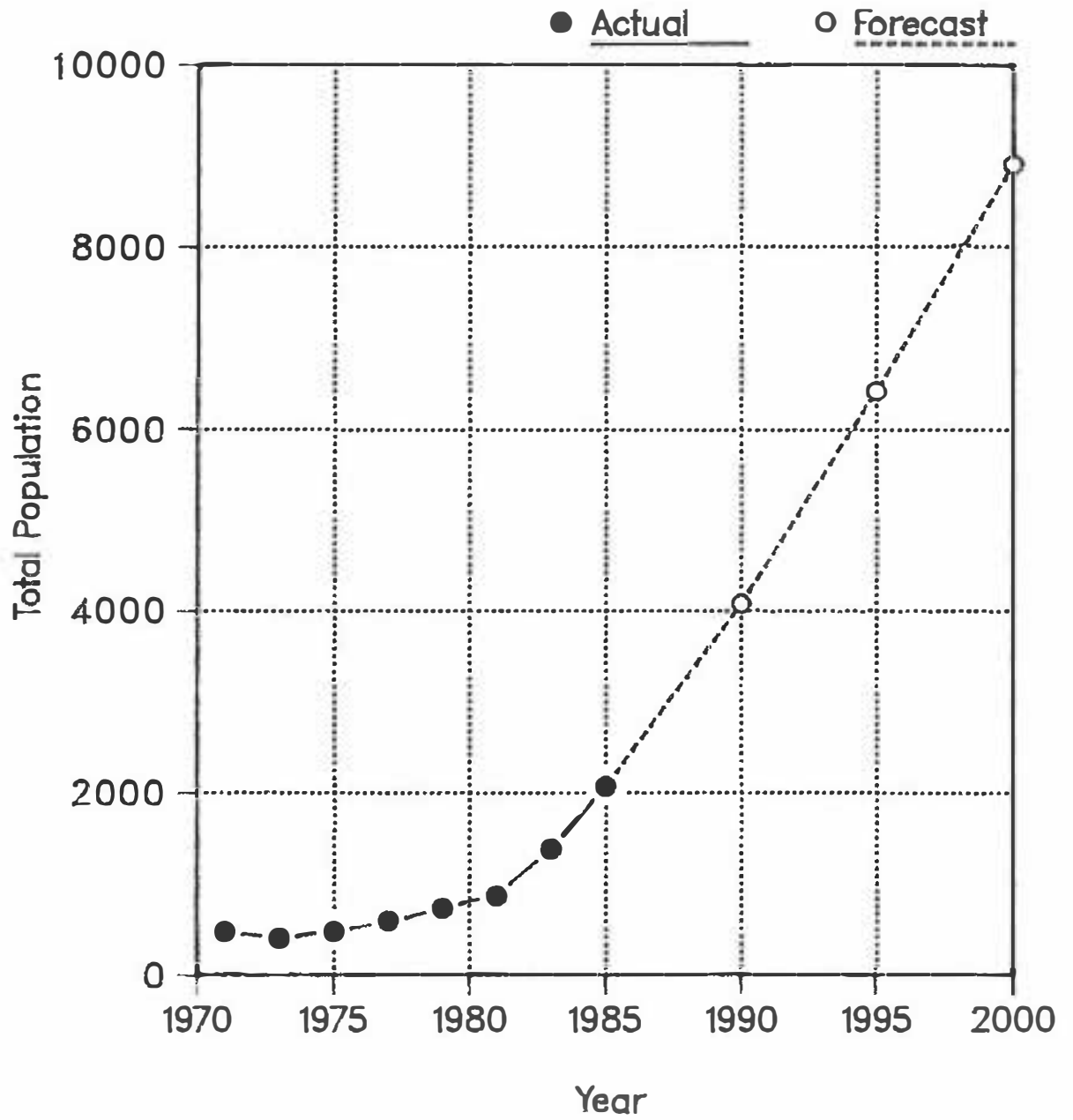


Figure 2

TOTAL POPULATION FORECASTS Status Quo

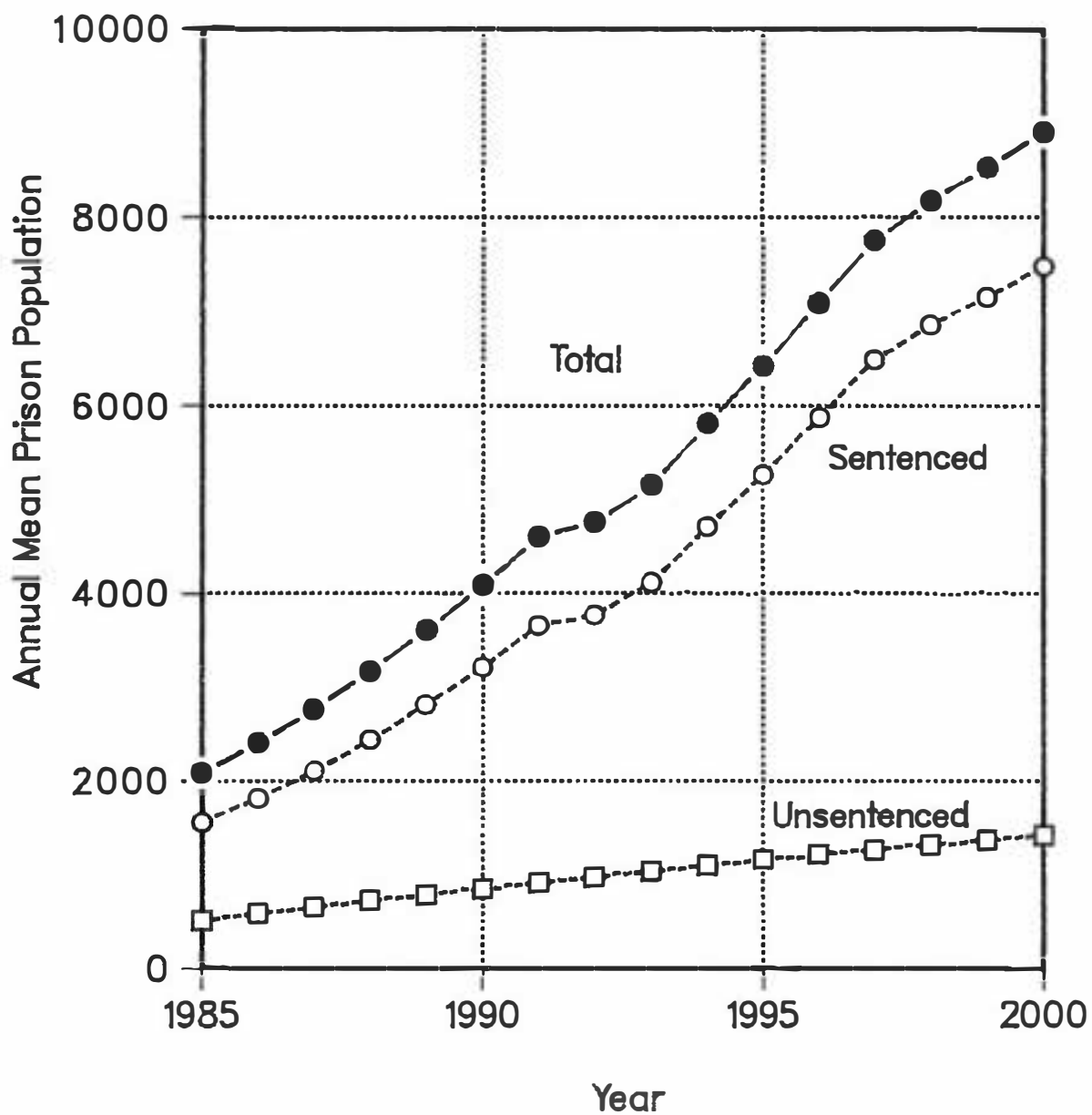


Table 2

Alaska Prison Population Forecasts: 1985 through 2000*

| Year | Total | Unsentenced | Sentenced |
|------|-------|-------------|-----------|
| 1985 | 2084 | 521 | 1563 |
| 1990 | 4080 | 863 | 3217 |
| 1995 | 6421 | 1158 | 5263 |
| 2000 | 8914 | 1429 | 7485 |

* Based on status quo assumptions. Forecasts are mean yearly population estimates. Includes FBOP population.

Alternative Scenarios

Application of two extreme alternative scenarios illustrates the range of the possible future ADOC population and specifically demonstrates the consequences of changes in the Alaska sentencing code, the unemployment rate, and the armed robbery rate. A scenario, which entails complete repeal of the criminal code revisions occurring since 1979 and substantial decreases in both the unemployment and armed robbery rates, would result in an ADOC population of 3225 sentenced inmates by the end of the century (See Table 3).

A "worst case" scenario would result (1) if the criminal code revisions since 1979 are not significantly altered or its effects on the ADOC population are not mitigated in some substantial fashion, and (2) if the unemployment and armed robbery rates increase significantly by at least 10 percent. This scenario would produce 4736 sentenced prisoners in 1990 and 24,333 sentenced prisoners by the year 2000 (See Table 3).

Table 3

Alternative Scenarios - Sentenced Only

| Year | Code Repeal & Unemployment & Armed Robbery Down | No Code Repeal & Unemployment & Armed Robbery Up |
|------|---|--|
| 1985 | 1,562 | 1,799 |
| 1990 | 2,018 | 4,736 |
| 1995 | 2,521 | 14,065 |
| 2000 | 3,225 | 24,333 |

CONCLUSIONS

The status quo forecasts, provide the most likely future prison population prediction for Alaska. It is very likely that some changes in conditions which affect the prison population will occur over the next few years. Therefore, in planning for future bedspace needs ADOC may want to consider other futures from the range of possible scenarios. The tenor towards further tightening of presumptive sentencing and increased use of incarceration which presently exist in Alaska would cause one to expect any changes affecting corrections to result in a higher rather than lower future Alaska prison population.

The forecast derived from this study provides evidence of the need for additional institutional capacity in Southcentral Alaska by 1990. Planning should proceed for a capacity of 1,000 beds to be available for use by 1990.