Review of the offender population forecast: Models, data and requirements — with provisional forecasts for 1998 to 2007 (R-59, 1997)

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The Correctional Service of Canada (CSC) has employed several different forecasting methodologies and systems over the years. This reflects both the changing requirements of end users and improvements in the offender population forecast technology available. This report reviews the evolution and helps to better understand the current situation and the directions being taken.

Different approaches to offender population forecasting that the CSC had used ranges from fairly simple extrapolations of recent trends in inmate population level, tempered by subjective judgment about regional variation from national growth, to an extensive population simulation system encompassing different techniques, sources of information, planning applications and monitoring activities. The development of an automated and more technologically advanced offender population forecasting system was tasked to the Research branch.

Part I of R-59 report provides a historical background of CSC forecasting procedures. While new information technology has provided many improvements, it has also disrupted the legacy of our forecasting system. Given that discontinuities were introduced into the historical population data sets used for forecasting, a major effort in the Offender Population Profiling and Simulation System (OPPSIM) project will be re-building the historical time-series.

Part II provides an overview and workplan for this new OPPSIM. Features will include a model for forecasting offender profiles and federal admissions. These models will be introduced in phases, as sufficient offender profile and admission data become available.

Traditional time-series models (and data) from the offender population forecasting suite are reviewed in Part III. While OPPSIM will incorporate the main time-series models, these must first be adapted to Offender Management System (OMS) data, and re-engineered to take full advantage of more powerful forecasting technology now available.

Finally, Part IV offers provisional population forecasts for men, women, and Aboriginal offenders as well as the total community supervision populations. These provisional projections serve as a bridge until new forecasts become available. ■