

## **ACKNOWLEDGEMENTS**

The authors wish to thank Colette Cousineau for her expertise in ensuring the data in the report are accurate and reliable.

#### **EXECUTIVE SUMMARY**

This report uses standard time-series modelling techniques to develop medium-term (5 year) offender population projections for purposes of the National Capital, Accommodation, and Operational Plan (NCAOP). Projections are provided for men and women incarcerated and under community supervision, by Region, and from these are derived National offender population totals. For federally sentenced men, projections for the Aboriginal and non-Aboriginal offender populations are completed separately, then combined to derive the total projected male population.

Definitions of the federal offender populations, both incarcerated and in the community, have been modified from earlier editions of this series of reports. The new definitions align with those used by Correctional Service of Canada's (CSC's) Strategic and Operational Planning Branch. All projections are provided on a "calendar year" rather than the "fiscal year" basis traditionally used (i.e., January 1 to December 31, rather than April 1 to March 31) for purposes of the NCAOP.

The population of incarcerated men has shown a steady decline since December 1995, falling from 13,906 to 12,896 inmates by December 2002. This represents a decrease of 1,010 (or **–7.3%)** inmates. However, analyses revealed that this decrease is offset by the increase in the male Aboriginal population for the same time period. Specifically, the male Aboriginal inmate population has been *increasing* over the same time period (by 474 inmates, or 25.5 %), while the male non-Aboriginal offender population has been *decreasing* (by 1,484 inmates or 12.3%).

The population of men under community supervision peaked in 1999, and has since been on the decline. Similar to the male incarcerated population, the trend is offset by the increase in the Aboriginal offender population under community supervision. There has been a *decrease* of 925 (or -12.7%) non-Aboriginal offenders in the community since 1995, while there has been an *increase* of 207 (or 30.5%) Aboriginal offenders over the same time period.

Statistical forecasting procedures resulted in the following projections for the federally sentenced male offender population:

Overall, the population of incarcerated men is projected to increase slightly over the horizon of this forecast, rising from 12,896 inmates in December 2002 to 13,022 inmates by December 2007 (a gain of 126 inmates, or 0.2% per year). The proportion of non-Aboriginal male offenders is projected to decline at a rate of 0.8% per year while the incarcerated Aboriginal offender population is projected to increase by 4.4% per year.

 The population of men under community supervision is projected to decrease slightly, from 7,218 to 7,047 between 2002 and 2007. The number of non-Aboriginal offenders under community supervision is projected to decline by about 1% per year, while the number of Aboriginal offenders will increase on average by 2.9% per year.

The population of incarcerated women has grown rapidly over the past five years, increasing since December 1997 from 327 to 365 inmates by December 2002. This represents a gain of 11.6% (38 women inmates). Similarly, the population of women under community supervision has increased during this period, rising from 393 to 443 women offenders (an increase of 50 offenders or 12.7%). Forecasting techniques project the following for the federally sentenced women offender population:

- The population of incarcerated women is projected to increase from 381 inmates in December 2002 to <u>441</u> inmates by December 2007 (up 60 inmates or <u>15.7%</u>).
- The population of women under community supervision is projected to increase from 454 offenders in December 2002 to <u>508</u> offenders in December 2007 (up 54 offenders or <u>11.9%</u>).

## **TABLE OF CONTENTS**

ACKNOWLEDGEMENTS	III
EXECUTIVE SUMMARY	IV
TABLE OF CONTENTS	VI
I. INTRODUCTION	1
A. A Return to Favourable Social Trends	1
B. Countervailing Trends	
II. METHOD	5
A. Overview	5
1. Forecasting and population profiling tools	
2. Overview of historical data issues	
B. The Historical Inmate Series	
1. Incarcerated men	
2. Incarcerated women	
C. The Time-Series for Community Supervision	8
III. RESULTS: MEDIUM-TERM NCAOP FORECASTS	10
A. National Summary	10
1. Historical trends	
2. Projections, 2003-2007	
3. Summary results	
B. Atlantic Region	
2. Projections, 2003-2007	
3. Results	
C. Quebec Region	18
1. Historical data trends	
2. Projections, 2003-2007	
3. Results	
D. Ontario Region	
1. Historical data trends	
2. Projections, 2003-2007	
E. Prairie Region	
1. Historical data trends	
2. Projections, 2003-2007	
3. Results	
F. Pacific Region	
1. Historical data trends	
<ol> <li>Projections, 2003-2007</li> <li>Results</li> </ol>	
REFERENCES	34
APPENDIX I: PROJECTED AVERAGE GROWTH RATES	35
APPENDIX II: FORECAST CHARTS	36

#### I. INTRODUCTION

#### A. A Return to Favourable Social Trends

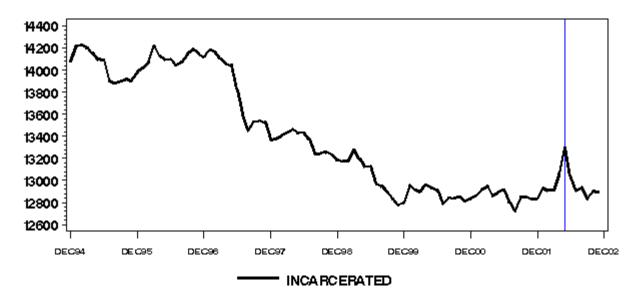
Prior to 2001, the main social and demographic indicators (e.g., crime, unemployment, etc.) were trending in favourable directions. The Correctional Service of Canada (CSC) and the Provincial/Territorial prison systems were thus facing little pressure in terms of population growth. However, in 2001, these trends diverged from a favourable direction with Canada's near-recession. The economy regained strength in 2002 and employment continues to grow in 2003, raising confidence in the return of social trends that reflect the less rapid growth in the male offender population (between 1995 and 2001).

CSC's population of incarcerated men increased significantly following the on-set of the recessions of 1982 and 1991. In 2001, the economy slowed to a lesser degree during the 'near-recession'. Thus, a slighter impact on the incarcerated male population would be expected. During the economic slow-down of 2001, unemployment rates rose and Statistics Canada reported a 1% rise in crime rates, the first increase since 1991<sup>1</sup>. Similar to previous recessions, the 2002 incarcerated federal offender population increased more than that of the previous two years, 1.1 % versus an average 0.1% (see Figure 1).

<sup>&</sup>lt;sup>1</sup> *Juristat - Crime Statistics in Canada, 2001*. The Canadian Centre for Justice Statistics, Statistics Canada. Vol. 22 No. 6.

Figure 1: The Federally Incarcerated Population

# NATIONAL SUMMARY



Since 2001, Canada has fared well in terms of growth in real Gross Domestic Product and job creation. Demographic trends point towards a continuation of population aging, along with an overall modest growth in the total population. Currently, it is too early to determine whether favourable trends will combine to exert a positive downward force on Canada's crime and incarceration rates. Forecasts generated in this report predict stability in CSC's total male offender population and increases for the women offender population.

### **B.** Countervailing Trends

This report examined trends in the male Aboriginal and non-Aboriginal offender populations. Historically, the incarcerated non-Aboriginal male offender population has been decreasing since 1995, while the community population has been relatively stable. For Aboriginal males, these populations have been gradually increasing over the same time period. Thus, between 1995 and 2002, the trend in the total male offender population has been offset by increases in the male Aboriginal offender populations.

Forecasts produced by this report reveal that the incarceration rate of male Aboriginal offenders will continue to offset trends in CSC's total male offender population. Specifically, from 2003 to 2007, the male non-Aboriginal offender population is predicted to *decrease* by an average of 69 offenders per year. In contrast, the male Aboriginal population is predicted to *grow* by an average of 140 offenders per year, thus offsetting the decrease enough to influence the direction of the trend to an average *increase* of 71 male offenders per year.

Demographic changes in the Canadian male Aboriginal population support past, current, and projected trends of the federal offender population. Aboriginal people's share of Canada's total population is on the rise (4.4% in 2001) compared to 3.8% in 1996)<sup>2</sup>. Specifically, between-census growth rates (from 1996 to 2001) were 19.8% for Aboriginal peoples compared to only 4% for Canada's total population<sup>3</sup>. Assuming that incarceration rates remain constant, a proportional increase would be expected in the Aboriginal male offender population. The Aboriginal population is also much younger than that of Canada's non-Aboriginal population (a median 24.7 years versus 37.7). The "younger" age group of the Canadian male population is considered to be at higher risk of contact with the criminal justice system, further impacting the likelihood of increases in the male Aboriginal incarceration rate. Conversely, the non-Aboriginal population of Canada is ageing, the pool of younger "higher risk" candidates is decreasing, and the population growth rate has decelerated. Thus, the federal non-Aboriginal offender population could be expected to possibly decrease over time.

Although the trend in incarceration rates for Aboriginal peoples could be expected to increase, the level of incarceration is well above that of the non-Aboriginal population. <u>Adult Aboriginal peoples represent approximately 3% of the Canadian population</u>, versus 16% of the federal offender population. This

-

<sup>&</sup>lt;sup>2</sup> 2001 Census: analysis series. Aboriginal peoples of Canada: A demographic profile. Statistics Canada, Catalogue no. 96F0030XIE2001007

<sup>&</sup>lt;sup>3</sup> 2001 Census Analysis series - A profile of the Canadian population: where we live. Statistics Canada. Catalogue No. 96F0030XIE010012001

over representation of Aboriginal people in the federal criminal justice system has been a growing concern of correctional policy makers and practitioners. One of Correctional Service of Canada's corporate objectives is to contribute to the reduction of the incarceration rate of Aboriginal offenders. Thus, efforts in this area, combined with the ageing of the Aboriginal population, will eventually negate the degree to which incarceration rates for this group impact on the total federal offender population.

#### II. METHOD

The forecasts provided in this report use standard time-series modelling techniques to develop medium-term offender population projections for purposes of the National Capital, Accommodation, and Operational Plan (NCAOP). Projections are provided by Region for Aboriginal men and non-Aboriginal men and women who are incarcerated and under community supervision. From these are derived National offender population totals.

Note that for the purposes of NCAOP, projections are provided on a "calendar year" rather than the "fiscal year" basis traditionally used (i.e., January 1st to December 31<sup>st</sup>, rather than April 1<sup>st</sup> to March 31<sup>st</sup>).

#### A. Overview

This section describes the forecasting tools and data series that have been used to develop the medium-term forecasts. "Medium-term" is used to describe a forecasting horizon of 1-5 years, whereas "long-term" describes a forecast horizon of 5-10 years.

Note: For purpose of the NCAOP, the medium-term model refers to a projection horizon of 5-years.

### 1. Forecasting and population profiling tools

The Research Branch is currently using as its main development and forecasting tool the SAS® ETS forecasting system.<sup>4</sup> This system is an advanced statistical forecasting tool that fits a variety of models to time series data. Note that the forecasts produced by this system are solely dependent on the historical data. The Research Branch also developed a series of long-term multivariate forecasting models that combine social and demographic trends to predict federal inmate populations over a 10-year horizon. Development is currently

The SAS ETS-Time Series Forecasting System can be used in a fully automatic mode, or the system's diagnostic features and time series modelling tools can be used interactively to develop forecasting models customised to best predict a specific time series. Either method greatly reduces the time required to develop and test large numbers of projection models.

underway for some of the regions, as each administrative region requires a distinct model. Finally, the Branch has developed the Climate Indicator and Profiling System (CIPS). This system profiles static and dynamic risk factors of the federal offender population over time and is currently being demonstrated for operational use.

#### 2. Overview of historical data issues

The accuracy and reliability of statistical forecasts are affected by the quality of information used to predict trends. In the past, there have been changes in data collecting methods and definitions of the offender inmate and community populations. Thus, maintaining a consistent data series to be used in forecasting has been a challenge to CSC.

The Correctional Service of Canada's (CSC's) offender information data underwent several major changes in the early 1990's. The traditional "on-register" and community supervision time-series used both for forecasting and information purposes, were affected by legislative, technological and operational changes (see Boe, 1997)<sup>5</sup>. The current Offender Management System (OMS) offender population historical data series, which extends back to 1995, has also experienced significant changes in definitions.<sup>6</sup> Alternative historical series (such as the Inmate Movement System) have an adequate time-series, but they are aggregate data and, as such, they are difficult to parse to reveal profile information.

This report deals with the above challenges by adopting a combination of approaches that reduce the impacts of changes discussed above.

Three major system shocks (previously identified in Boe, 1997) are: 1) the enactment of the CCRA in 1992; 2). the implementation of the new Offender Management System (OMS) in 1993; and 3) the opening of federal offender facilities for women in each region, beginning in 1995.

i.e., the main offender population statistics previously included the on-register and community supervision counts, which changed significantly when Day Parole became a custody release, and the on-register definition was also changed to an in-custody definition. These changes also altered the traditional definition of the monthly admissions and releases from custody.

#### **B.** The Historical Inmate Series

The following sections describe the historical series that have been developed for these forecasts.

### 1. Incarcerated men

The only adequate time-series available for forecasting the institutional population uses statistics from the Inmate Movement System (IMS). This system consists of an electronic record of institutional counts (for the institutions housing men and for Prison for Women) dating as far back as January 2, 1979. As of December 2002, there are approximately 1,253 weekly data points for every Region. The incarcerated population, for Operational Planning purposes, includes the "actual in" count as recorded in IMS, plus outside court, hospital and temporary absences, as well as those under exchange of service agreements (ESAs) with the provinces and territories.

- Not all institutions have this many data points, due to decommissioning or new construction (this especially applies to the new facilities for women that only began opening in 1995). The regional total is the sum of the totals for every institution in that region on the selected date.
- The inmate counts for all regions excludes the counts of any Community Correctional Centres (CCCs) or Community Residential Centres (CRCs) within their region, because these populations are included in the community supervision population count.
- It is not possible to identify offender characteristics in IMS. However, other data sources were used to determine the proportion of male Aboriginal offenders throughout the time series<sup>7</sup>. This proportion was applied to the IMS counts to facilitate forecasts for the Aboriginal offender population.

7

Aboriginal/non-Aboriginal proportions were obtained from the historical Offender Population Profiles System (OPPS), from the Research Branch's monthly snapshots of the federal offender population, and from Performance Management's Corporate Reporting System (CRS).

For accommodation and operational planning purposes, this data series is a good reflection of the federal population of incarcerated men.

#### 2. Incarcerated women

Previously, the IMS series was supplemented in order to produce satisfactory time-series projections for the federal population of women inmates in various regions, since the new facilities only opened beginning in 1995 (see Boe, 2002). Since then, two years (104 data points) have been added to this series, making it sufficient to use in a forecasting model.

For all regions except for the Pacific, federally sentenced women's
facilities are identified through an institutional code. Women in the Pacific
region are incarcerated in the province under an exchange of service
agreement. Data were thus obtained for that region from the provincial
equivalent of IMS at the Burnaby Correctional Centre for Women.

### C. The Time-Series for Community Supervision

Community supervision statistics were supplied by the Performance Management Sector at CSC and derived from the Offender Management System (OMS).

The community offender population, as defined for Operational Planning purposes, includes:

- federal offenders on day parole, full parole, and statutory release;
- · provincial offenders on day or full parole;
- offenders unlawfully at large for 90 days or less;
- federal offenders temporarily detained in the province or other.

This population excludes:

- temporary detainees in a federal penitentiary;
- deportees;
- federal offenders unlawfully at large for more than 90 days.

Historical statistics are not available prior to 1993. In January 1993, day paroles ceased to be counted as part of the incarcerated population and became part of the community supervision count. An "old" series covers the period from January 1980 to December 1997. However, some definitional changes were made to this series so that a new series was begun after January 1997. The new series is therefore not consistent with the earlier period.

For the purposes of the NCAOP forecasts, the community supervision counts from both the old and new series were used. To minimize differences when the two series are linked, adjustments were made. Specifically, temporary detainees in federal penitentiaries were excluded from the older series. Monthly rather than annual statistics were used to help provide the forecasts with more data. Finally, similar to techniques used for the incarcerated population, the proportion of women and male Aboriginal offenders in the community was estimated backwards, and then applied to the actual monthly counts.

#### III. RESULTS: MEDIUM-TERM NCAOP FORECASTS

### A. National Summary

#### 1. Historical trends

The historical population of incarcerated men has shown a fairly steady decrease over the past 7 years, falling from 13,906 in December 1995 to 12,896 inmates by December 2002. This represents a decline of 1,010 inmates or **–7.3%** over the 7-year period. During this period, the community supervision population peaked in 1999 (N=8,204), and has since decreased to 7,218 offenders (down 986 or 12.0%).

The ratio of the population of men in the community to male inmates has fluctuated between 1995 and 2002, peaking in 1999 at 0.64 before decreasing to 0.56 in 2002.

While the population of non-Aboriginal men has been decreasing over time, that of Aboriginal men has been increasing. Between 1995 and 2002, the proportion of incarcerated non-Aboriginal men decreased by 12.3% (N=1,484) whereas, for Aboriginal men, this proportion increased (25.5%, N=474)<sup>8</sup>. These trends are also reflected in the male community populations. The population of non-Aboriginal men in the community decreased 12.5% (N=925) and the Aboriginal population increased 30.5% (N=207).

The size of the population of incarcerated women has shown a considerable increase since December 1996, rising from 268 to 365 inmates by December 2002. This represents a gain of 97 women inmates (36.2%). The community supervision population has also increased significantly during this period, rising from 351 to 443 offenders, an increase of 92 offenders or nearly 26%.

10

Note that Aboriginal/non-Aboriginal ratios are estimated based on those reported by via the Offender Population Profile System (OPPS), monthly snapshot data provided by the Research Branch, and ratios reported by Performance Management on the Corporate Reporting System (CRS).

The ratio of the community to the custodial population for women offenders decreased during the period from 1.31 to 1.21. Historically, in comparison to men, the ratio has been significantly higher for women since 1995.

### 2. Projections, 2003-2007

The national projection for men is a sum of the projected Aboriginal and non-Aboriginal forecasts by region. For women, the national projection is simply a sum of the regional projections. Thus, for more detailed results, see the regional projections that follow in the sections below.

- The population of incarcerated men is projected to <u>increase slightly</u> over the horizon of this forecast, rising from 12,896 inmates in December 2002 to 13,022 inmates by December 2007 (126 inmates or 1.0%). While the number of non-Aboriginal men is projected to *decrease* by 3.8%, that of Aboriginal men is projected to *increase* by 22.8%.
- The population of men under community supervision is projected to decrease, falling from 7,218 offenders in December 2002 to 7,047 offenders by December 2007 (a decrease of 171 offenders or 2.4%). The number of non-Aboriginal men is projected to *decrease* by 4.9%, while Aboriginal offenders under community supervision are projected to *increase* 15.6%.
- The population of incarcerated women is projected to increase from 365 inmates in December 2002 to 441 inmates by December 2007 (up 76 inmates or 20.8%).
- The women's community supervision population is projected to increase from 443 offenders in December 2002 to 508 offenders in December 2007 (up 65 offenders or 14.7%).

## 3. Summary results

NATIONAL SUMMARY MEN

MONTH ENDING	INST COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	13,906		7,936		21,842		0.571
Dec-96	14,151		7,552		21,703		0.534
Dec-97	13,523		7,596		21,119		0.562
Dec-98	13,232		8,062		21,294		0.609
Dec-99	12,780		8,204		20,984		0.642
Dec-00	12,813		7,986		20,799		0.623
Dec-01	12,832		7,632		20,464		0.595
Dec-02	12,896		7,218		20,114		0.560
Dec-03		12,896		7,183		20,079	0.557
Dec-04		12,914		7,146		20,060	0.553
Dec-05		12,938		7,110		20,048	0.550
Dec-06		12,975		7,077		20,052	0.545
Dec-07		13,022		7,047		20,069	0.541

# NATIONAL SUMMARY NON-ABORIGINAL MEN

MONTH ENDING	INST COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	12,045		7,257		19,302		0.602
Dec-96	12,126		6,878		19,004		0.567
Dec-97	11,383		6,842		18,225		0.601
Dec-98	10,930		7,278		18,208		0.666
Dec-99	10,585		7,269		17,854		0.687
Dec-00	10,609		7,004		17,613		0.660
Dec-01	10,614		6,667		17,281		0.628
Dec-02	10,561		6,332		16,893		0.600
Dec-03		10,481		6,268		16,749	0.598
Dec-04		10,400		6,203		16,603	0.596
Dec-05		10,316		6,140		16,456	0.595
Dec-06		10,236		6,081		16,317	0.594
Dec-07		10,155		6,023		16,178	0.593

## Summary results – continued

# NATIONAL SUMMARY ABORIGINAL MEN

MONTH ENDING	LINST. COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	1,861		679		2,540		0.365
Dec-96	2,025		674		2,699		0.333
Dec-97	2,140		754		2,894		0.352
Dec-98	2,302		784		3,086		0.341
Dec-99	2,195		935		3,130		0.426
Dec-00	2,204		982		3,186		0.446
Dec-01	2,218		965		3,183		0.435
Dec-02	2,335		886		3,221		0.379
Dec-03		2,415		915		3,330	0.379
Dec-04		2,514		943		3,457	0.375
Dec-05		2,622		970		3,592	0.370
Dec-06		2,739		996		3,735	0.364
Dec-07		2,867		1,024		3,891	0.357

# NATIONAL SUMMARY WOMEN

MONTH ENDING	IINST COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-96	268		351		619		1.310
Dec-97	327		393		720		1.202
Dec-98	346		444		790		1.283
Dec-99	344		492		836		1.430
Dec-00	364		496		860		1.363
Dec-01	385		482		867		1.252
Dec-02	365		443		808		1.214
Dec-03		381		454		835	1.192
Dec-04		397		468		865	1.179
Dec-05		412		481		893	1.167
Dec-06		426		494		920	1.160
Dec-07		441		508		949	1.152

### B. Atlantic Region

#### 1. Historical data trends

The historical population of incarcerated men reveals a period of steady decrease from 1995 to 2001, followed by a relatively stable period of little change in 2001 and 2002. Overall, the population has fallen from 1,417 inmates in December 1995 to 1,215 inmates in December 2002. This represents a decline of 202 inmates or 14.3% over the 7-year period. During this period, the community supervision population increased from 694 to 772 offenders (an increase of 78 offenders or 11.2%).

The ratio of the population of men in the community to male inmates has fluctuated between 1995 and 2002, peaking in 1999 at 0.75 before decreasing to 0.64 in 2002.

While the population of non-Aboriginal men has been either steady or decreasing over time, that of Aboriginal men has been increasing. Between 1995 and 2002, the proportion of incarcerated non-Aboriginal men decreased by 16.3% (N=221) whereas, for Aboriginal men, this proportion increased (29.2%, N=19)<sup>9</sup>. Both non-Aboriginal and Aboriginal male community populations increased in this time period (9.6% and 59.1% respectively).

The size of the population of incarcerated women has shown a considerable increase since December 1996, rising from 28 to 47 inmates by December 2002. This represents a gain of 19 women inmates (67.9%). The community supervision population has also increased significantly during this period, rising from 23 to 34 offenders, an increase of 11 offenders or 47.8%.

The ratio of the community to the custodial population for women offenders decreased during the period from 0.82 to 0.72. Historically, in comparison to men, the ratio has been significantly higher for women since 1995.

14

<sup>&</sup>lt;sup>9</sup> Note that Aboriginal/non-Aboriginal ratios are estimated based on those reported by the Offender Population Profile System (OPPS), monthly snapshot data provided by the Research

### 2. Projections, 2003-2007

- The population of incarcerated men is projected to increase slightly over the horizon of this forecast, rising from 1,215 inmates in December 2002 to 1,235 inmates by December 2007 (20 inmates or 1.6%). Both non-Aboriginal and Aboriginal male populations are projected to increase, although the latter is forecasted to increase by significantly more (0.8% versus 13.0% respectively).
- The population of men under community supervision is projected to increase, rising from 772 offenders in December 2002 to 801 offenders by December 2007 (an increase of 29 offenders or 3.8%). Both non-Aboriginal and Aboriginal male populations under community supervision are projected to increase, even though the latter is forecasted to increase by significantly more (3.0% versus 20.0% respectively).
- The population of incarcerated women is projected to increase from 47 inmates in December 2002 to 66 inmates by December 2007 (up 19 inmates or 40.4%).
- The women's community supervision population is projected to increase from 34 offenders in December 2002 to 42 offenders in December 2007 (up 8 offenders or 23.5%).

## 3. Results

RESULTS - ATLANTIC REGION MEN

MONTH ENDING	LINST. COUNTI	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	1,417		694		2,111		0.490
Dec-96	1,346		629		1,975		0.467
Dec-97	1,250		814		2,064		0.651
Dec-98	1,210		698		1,908		0.577
Dec-99	1,160		871		2,031		0.751
Dec-00	1,150		825		1,975		0.717
Dec-01	1,223		771		1,994		0.630
Dec-02	1,215		772		1,987		0.635
Dec-03		1,219		779		1,998	0.639
Dec-04		1,223		785		2,008	0.642
Dec-05		1,226		790		2,016	0.644
Dec-06		1,231		796		2,027	0.647
Dec-07		1,235		801		2,036	0.649

# RESULTS - ATLANTIC REGION NON-ABORIGINAL MEN

MONTH	LINST COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL	TOTAL	RATIO		
ENDING					POP	FCST			
Dec-95	1,352	•	672		2,024		0.497		
Dec-96	1,275		611		1,886		0.479		
Dec-97	1,161		796		1,957		0.686		
Dec-98	1,125		674		1,799		0.599		
Dec-99	1,092		839		1,931		0.768		
Dec-00	1,081		784		1,865		0.725		
Dec-01	1,147		740		1,887		0.645		
Dec-02	1,131		737		1,868		0.652		
Dec-03		1,133		743		1,876	0.656		
Dec-04		1,135		747		1,882	0.658		
Dec-05		1,136		751		1,887	0.661		
Dec-06		1,138		755		1,893	0.663		
Dec-07		1,140		759		1,899	0.666		
Model:	Log Simple Exponential Smoothing Damped Trend Exponential Smoothing								
RMSE:	16.59		32.508						
R2:	0.988		0.825						

## Results - continued

# RESULTS - ATLANTIC REGION ABORIGINAL MEN

MONTH ENDING	LINST COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO	
Dec-95	65		22		87		0.338	
Dec-96	71		18		89		0.254	
Dec-97	89		18		107		0.202	
Dec-98	85		24		109		0.282	
Dec-99	68		32		100		0.471	
Dec-00	69		41		110		0.594	
Dec-01	76		31		107		0.408	
Dec-02	84		35		119		0.417	
Dec-03		86		36		122	0.419	
Dec-04		88		38		126	0.432	
Dec-05		90		39		129	0.433	
Dec-06		93		41		134	0.441	
Dec-07		95		42		137	0.442	
Model:	Linear (Holt) Ex	Linear (Holt) Exponential Smoothir Damped Trend Exponential Smoothing						
RMSE:	3.398		3.241					
R2:	0.971		0.819					

# RESULTS - ATLANTIC REGION WOMEN

MONTH ENDING	INST COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO	
Dec-96	28		23		51		0.821	
Dec-97	31		37		68		1.194	
Dec-98	26		38		64		1.462	
Dec-99	35		49		84		1.400	
Dec-00	55		41		96		0.745	
Dec-01	47		42		89		0.894	
Dec-02	47		34		81		0.723	
Dec-03		51		36		87	0.706	
Dec-04		55		37		92	0.673	
Dec-05		59		39		98	0.661	
Dec-06		62		41		103	0.661	
Dec-07		66		42		108	0.636	
Model:	Damped Trend I	ped Trend Exponential Smootl Linear (Holt) Exponential Smoothing						
RMSE:	3.241		2.862					
R2:	0.819		0.897					

### C. Quebec Region

#### 1. Historical data trends

The historical population of incarcerated men reveals a period of steady decrease from 1995 to 2001, followed by a relatively stable period of little change in 2001 and 2002. Overall, the population has fallen from 3,827 inmates in December 1995 to 3,286 inmates in December 2002. This represents a decline of 541 inmates or 14.1% over the 7-year period. During this period, the community supervision population decreased from 2,348 to 1,932 offenders (a decrease of 416 offenders or 17.7%).

The ratio of the population of men in the community to male inmates has fluctuated between 1995 and 2002, peaking in 1998 at 0.69 before decreasing to 0.59 in 2002.

While the population of non-Aboriginal men has been either steady or decreasing over time, that of Aboriginal men has been increasing. Between 1995 and 2002, the proportion of incarcerated non-Aboriginal men decreased by 18.7% (N=703) whereas, for Aboriginal men, this proportion increased (257.4%, N=162)<sup>10</sup>. These trends are also reflected in the male community populations. The population of non-Aboriginal men in the community decreased 18.7% (N=435) and the Aboriginal population increased 65.5% (N=19).

The size of the population of incarcerated women has shown a slight increase since December 1997, rising from 67 to 69 inmates by December 2002 (3.0%). In contrast, the community supervision population has decreased during this period, falling from 93 to 76 offenders, a decrease of 17 offenders or 18.3%.

The ratio of the community to the custodial population for women offenders decreased during the period from 1.4 to 1.1. Historically, in comparison to men, the ratio has been significantly higher for women since 1997.

<sup>10</sup> Note that Aboriginal/non-Aboriginal ratios are estimated based on those reported by via the Offender Population Profile System (OPPS), monthly snapshot data provided by the Research

18

### 2. Projections, 2003-2007

- The population of incarcerated men is projected to increase slightly over the horizon of this forecast, rising from 3,286 inmates in December 2002 to 3,298 inmates by December 2007 (12 inmates or 0.4%). While the number of non-Aboriginal men is projected to *decrease* by 9.0%, that of Aboriginal men is projected to *increase* by 127.6%.
- The population of men under community supervision is projected to decrease, falling from 1,932 offenders in December 2002 to 1,805 offenders by December 2007 (a decrease of 127 offenders or 6.6%). The number of non-Aboriginal men is projected to *decrease* by 7.5% (N=142), while Aboriginal offenders under community supervision are projected to *increase* 31.3% (N=15).
- The population of incarcerated women is projected to remain constant at 69 inmates from December 2002 to December 2007.
- The women's community supervision population is projected to decrease from 76 offenders in December 2002 to 73 offenders in December 2007 (down 3 offenders or 3.9%).

## 3. Results

RESULTS - QUEBEC REGION MEN

MONTH ENDING	LINST. COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	3,827	•	2,348		6,175		0.614
Dec-96	3,928		2,024		5,952		0.515
Dec-97	3,687		2,148		5,835		0.583
Dec-98	3,532		2,446		5,978		0.693
Dec-99	3,352		2,246		5,598		0.670
Dec-00	3,385		2,092		5,477		0.618
Dec-01	3,303		2,003		5,306		0.606
Dec-02	3,286		1,932		5,218		0.588
Dec-03		3,272		1,903		5,175	0.582
Dec-04		3,264		1,878		5,142	0.575
Dec-05		3,265		1,853		5,118	0.568
Dec-06		3,276		1,829		5,105	0.558
Dec-07		3,298		1,805		5,103	0.547

# RESULTS - QUEBEC REGION NON-ABORIGINAL MEN

MONTH ENDING	INGI COHNII	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	3,764		2,319		6,083		0.616
Dec-96	3,835		1,993		5,828		0.520
Dec-97	3,547		2,114		5,661		0.596
Dec-98	3,386		2,394		5,780		0.707
Dec-99	3,214		2,199		5,413		0.684
Dec-00	3,199		2,047		5,246		0.640
Dec-01	3,118		1,966		5,084		0.631
Dec-02	3,061		1,884		4,945		0.615
Dec-03		3,006		1,852		4,858	0.616
Dec-04		2,951		1,824		4,775	0.618
Dec-05		2,896		1,796		4,692	0.620
Dec-06		2,841		1,769		4,610	0.623
Dec-07		2,786		1,742		4,528	0.625
Model:	Winters Method	Additive	Log Linear (Holt)	Exponential Smo	oothing		
RMSE:	39.071		65.79				
R2:	0.986		0.786				

## Results - continued

# RESULTS - QUEBEC REGION ABORIGINAL MEN

MONTH ENDING	IINST COUNTI	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO	
Dec-95	63		29		92		0.460	
Dec-96	93		31		124		0.333	
Dec-97	140		34		174		0.243	
Dec-98	146		52		198		0.356	
Dec-99	138		47		185		0.341	
Dec-00	186		45		231		0.242	
Dec-01	185		37		222		0.200	
Dec-02	225		48		273		0.213	
Dec-03		266		51		317	0.192	
Dec-04		313		54		367	0.173	
Dec-05		369		57		426	0.154	
Dec-06		435		60		495	0.138	
Dec-07		512		63		575	0.123	
Model:	Winters Method	Additive	Log Linear (Holt) Exponential Smoothing					
RMSE:	39.071		65.79					
R2:	0.986		0.786					

# RESULTS - QUEBEC REGION WOMEN

MONTH ENDING	INST COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-97	67		93		160		1.388
Dec-98	61		94		155		1.541
Dec-99	58		100		158		1.724
Dec-00	62		84		146		1.355
Dec-01	68		80		148		1.176
Dec-02	69		76		145		1.101
Dec-03		69		75		144	1.087
Dec-04		69		75		144	1.087
Dec-05		69		74		143	1.072
Dec-06		69		74		143	1.072
Dec-07		69		73		142	1.058
Model:	Simple Exponential Smoothing		Log Linear (Holt) Exponential Smoothing				
RMSE:	3.663		3.054				
R2:	0.514		0.79				

### D. Ontario Region

#### 1. Historical data trends

The historical population of incarcerated men reveals a period of steady decrease from 1995 to 2001, followed by a relatively stable period of little change in 2001 and 2002. Overall, the population has fallen from 3,608 inmates in December 1995 to 3,407 inmates in December 2002. This represents a decline of 201 inmates or 5.6% over the 7-year period. During this period, the community supervision population decreased from 2,298 to 1,786 offenders (a decrease of 512 offenders or 22.3%).

The ratio of the population of men in the community to male inmates has fluctuated between 1995 and 2002, peaking in 1998 at 0.65 before decreasing to 0.52 in 2002.

While the population of non-Aboriginal men has been either steady or decreasing over time, that of Aboriginal men has been increasing. Between 1995 and 2002, the proportion of incarcerated non-Aboriginal men decreased by 10.5% (N=361) whereas, for Aboriginal men, this proportion increased (100.0%, N=160)<sup>11</sup>. These trends are also reflected in the male community populations. The population of non-Aboriginal men in the community decreased 23.9% (N=531) and the Aboriginal population increased 26.4% (N=19).

The size of the population of incarcerated women has shown a considerable decrease since December 1995, falling from 148 to 79 inmates by December 2002 (-46.6%). The opening of the regional women's facilities over this time period is a likely contributing factor to this trend. In contrast, the community supervision population has increased during this period, rising from 138 to 161 offenders, an increase of 23 offenders or 16.7%.

22

-

(CRS).

Note that Aboriginal/non-Aboriginal ratios are estimated based on those reported by via the Offender Population Profile System (OPPS), monthly snapshot data provided by the Research Branch, and ratios reported by Performance Management on the Corporate Reporting System

The ratio of the community to the custodial population for women offenders decreased during the period from 1.4 to 1.1. Historically, in comparison to men, the ratio has been significantly higher for women since 1997.

### 2. Projections, 2003-2007

- The population of incarcerated men is projected to increase slightly over the
  horizon of this forecast, rising from 3,407 inmates in December 2002 to 3,414
  inmates by December 2007 (7 inmates or 0.2%). While the number of nonAboriginal men is projected to *decrease* by 3.0% (N=95), that of Aboriginal
  men is projected to *increase* by 31.9 (N=102)%.
- The population of men under community supervision is projected to decrease, falling from 1,786 offenders in December 2002 to 1,618 offenders by December 2007 (a decrease of 168 offenders or 9.4%). The number of non-Aboriginal men is projected to *decrease* by 10.7% (N=181), while Aboriginal offenders under community supervision are projected to *increase* 14.3% (N=13).
- The population of incarcerated women is projected to remain constant at 79 inmates from December 2002 to December 2007.
- The women's community supervision population is projected to increase from 161 offenders in December 2002 to 181 offenders in December 2007 (up 20 offenders or 12.4%).

## 3. Results

RESULTS - ONTARIO REGION MEN

MONTH ENDING	LINST. COUNTI	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	3,608		2,298		5,906		0.637
Dec-96	3,632		2,207		5,839		0.608
Dec-97	3,462		1,881		5,343		0.543
Dec-98	3,392		2,194		5,586		0.647
Dec-99	3,330		2,059		5,389		0.618
Dec-00	3,327		2,008		5,335		0.604
Dec-01	3,423		1,866		5,289		0.545
Dec-02	3,407		1,786		5,193		0.524
Dec-03		3,407		1,752		5,159	0.514
Dec-04		3,407		1,717		5,124	0.504
Dec-05		3,408		1,683		5,091	0.494
Dec-06		3,410		1,650		5,060	0.484
Dec-07		3,414		1,618		5,032	0.474

# RESULTS - ONTARIO REGION NON-ABORIGINAL MEN

MONTH ENDING	LINST. COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	3,448		2,226		5,674		0.646
Dec-96	3,454		2,143		5,597		0.620
Dec-97	3,290		1,809		5,099		0.550
Dec-98	3,128		2,104		5,232		0.673
Dec-99	3,033		1,938		4,971		0.639
Dec-00	3,067		1,896		4,963		0.618
Dec-01	3,094		1,763		4,857		0.570
Dec-02	3,087		1,695		4,782		0.549
Dec-03		3,069		1,658		4,727	0.540
Dec-04		3,050		1,621		4,671	0.531
Dec-05		3,030		1,584		4,614	0.523
Dec-06		3,011		1,549		4,560	0.514
Dec-07		2,992		1,514		4,506	0.506
Model:	Linear (Holt) Ex	ponential Smoothir	Log Linear (Holt)	Exponential Sm	oothing		
RMSE:	29.889		43.436				
R2:	0.996		0.954				

## Results - continued

# RESULTS - ONTARIO REGION ABORIGINAL MEN

MONTH ENDING	IINST COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO	
Dec-95	160		72		232		0.450	
Dec-96	178		64		242		0.360	
Dec-97	172		72		244		0.419	
Dec-98	264		90		354		0.341	
Dec-99	297		121		418		0.407	
Dec-00	260		112		372		0.431	
Dec-01	329		103		432		0.313	
Dec-02	320		91		411		0.284	
Dec-03		338		94		432	0.278	
Dec-04		357		96		453	0.269	
Dec-05		378		99		477	0.262	
Dec-06		399		101		500	0.253	
Dec-07		422		104		526	0.246	
Model:	Linear (Holt) Exponential Smoothir Log Linear (Holt) Exponential Smoothing							
RMSE:	29.889		43.436					
R2:	0.996		0.954					

# RESULTS - ONTARIO REGION WOMEN

MONTH ENDING	LINST. COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	148		138		286		0.932
Dec-96	132		135		267		1.023
Dec-97	104		140		244		1.346
Dec-98	119		191		310		1.605
Dec-99	90		177		267		1.967
Dec-00	82		172		254		2.098
Dec-01	99		171		270		1.727
Dec-02	79		161		240		2.038
Dec-03		79		164		243	2.076
Dec-04		79		168		247	2.127
Dec-05		79		172		251	2.177
Dec-06		79		176		255	2.228
Dec-07		79		181		260	2.291
Model:	Damped Trend Exponential Smootl Damped Trend Exponential Smoothing						
RMSE:	5.108		4.43				
R2:	0.904		0.992				

### E. Prairie Region

#### 1. Historical data trends

The historical population of incarcerated men reveals a period of steady decrease from 1995 to 2001, followed by an increase that peaked in June 2002<sup>12</sup> before returning to levels more consistent with the historical trend. Overall, the population has fallen from 3,128 inmates in December 1995 to 3,073 inmates in December 2002. This represents a decline of 55 inmates or 1.8% over the 7-year period. During this period, the community supervision population increased from 1,551 to 1,802 offenders (an increase of 251 offenders or 16.2%).

The ratio of the population of men in the community to male inmates has been increasing since 1995, rising from 0.50 to 0.65 in 2000 before decreasing to 0.59 in 2002.

The inmate population of non-Aboriginal men has been either steady or decreasing over time. Similarly, the population of Aboriginal men has been decreasing until recent. Between 1995 and 2002, the proportion of incarcerated non-Aboriginal men decreased by 5.0% (N=93). For Aboriginal men, this proportion decreased up until 2001 (-3.0%, N=38)<sup>13</sup>. Yet, from 2001 to 2002, there was a 6.2% increase (N=76).

The population of non-Aboriginal men in the community increased up until the end of 1999, but has since been on the decline. Similarly, for Aboriginal men, the increase has occurred up to 2000 before decreasing.

The size of the population of incarcerated women has shown a steady increase since December 1995, rising from 34 to 127 inmates by December 2002 (273.5%). The opening of the region's women's facility over this time period is a likely contributing factor to this trend. The community supervision population has

-

<sup>&</sup>lt;sup>12</sup> The peak in 2002 may be a result of the near-recession of 2001.

Note that Aboriginal/non-Aboriginal ratios are estimated based on those reported by via the Offender Population Profile System (OPPS), monthly snapshot data provided by the Research Branch, and ratios reported by Performance Management on the Corporate Reporting System (CRS).

also increased during this period, rising from 52 to 127 offenders, an increase of 75 offenders or 144.2%.

The ratio of the community to the custodial population for women offenders decreased during the period from 1.53 to 1.06. Historically, in comparison to men, the ratio has been significantly higher for women since 1995.

### 2. Projections, 2003-2007

- The population of incarcerated men is projected to increase slightly over the horizon of this forecast, rising from 3,073 inmates in December 2002 to 3,090 inmates by December 2007 (17 inmates or 0.6%). While the number of non-Aboriginal men is projected to *decrease* by 3.0% (N=54), that of Aboriginal men is projected to *increase* by 5.5%. (N=71)
- The population of men under community supervision is projected to increase, rising from 1,802 offenders in December 2002 to 1,891 offenders by December 2007 (an increase of 89 offenders or 4.9%). The number of non-Aboriginal men is projected to *increase* by only 0.3% (N=4), while Aboriginal offenders under community supervision are projected to *increase* 15.0% (N=85).
- The population of incarcerated women is projected to increase from 127 inmates in December 2002 to 177 by December 2007 (an increase of 39.4%).
- The women's community supervision population is projected to increase from 127 offenders in December 2002 to 158 offenders in December 2007 (up 31 offenders or 24.4%).

## 3. Results

RESULTS - PRAIRIE REGION MEN

MONTH ENDING	LINST. COUNTI	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	3,128		1,551		4,679		0.496
Dec-96	3,334		1,669		5,003		0.501
Dec-97	3,182		1,839		5,021		0.578
Dec-98	3,304		1,693		4,997		0.512
Dec-99	3,147		2,011		5,158		0.639
Dec-00	3,098		2,021		5,119		0.652
Dec-01	3,018		1,969		4,987		0.652
Dec-02	3,073		1,802		4,875		0.586
Dec-03		3,069		1,824		4,893	0.594
Dec-04		3,077		1,841		4,918	0.598
Dec-05		3,082		1,858		4,940	0.603
Dec-06		3,087		1,874		4,961	0.607
Dec-07		3,090		1,891		4,981	0.612

# RESULTS - PRAIRIE REGION NON-ABORIGINAL MEN

MONTH ENDING	LINST. COUNTI	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	1,869		1,099		2,968		0.588
Dec-96	2,017		1,213		3,230		0.601
Dec-97	1,819		1,336		3,155		0.734
Dec-98	1,831		1,216		3,047		0.664
Dec-99	1,807		1,424		3,231		0.788
Dec-00	1,802		1,391		3,193		0.772
Dec-01	1,797		1,332		3,129		0.741
Dec-02	1,776		1,235		3,011		0.695
Dec-03		1,765		1,239		3,004	0.702
Dec-04		1,754		1,239		2,993	0.706
Dec-05		1,743		1,239		2,982	0.711
Dec-06		1,733		1,239		2,972	0.715
Dec-07		1,722		1,239		2,961	0.720
Model:	Log Simple Expo	onential Smoothing	Damped Trend Ex	ponential Smoo	thing		
RMSE:	18.888		22.626				
R2:	0.99		0.964				

## Results - continued

### RESULTS - PRAIRIE REGION ABORIGINAL MEN

MONTH ENDING	IINST COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	1,259		452		1,711		0.359
Dec-96	1,317		456		1,773		0.346
Dec-97	1,363		503		1,866		0.369
Dec-98	1,473		477		1,950		0.324
Dec-99	1,340		587		1,927		0.438
Dec-00	1,296		630		1,926		0.486
Dec-01	1,221		637		1,858		0.522
Dec-02	1,297		567		1,864		0.437
Dec-03		1,304		585		1,889	0.449
Dec-04		1,323		602		1,925	0.455
Dec-05		1,339		619		1,958	0.462
Dec-06		1,354		635		1,989	0.469
Dec-07		1,368		652		2,020	0.477
Model:	Log Simple Expo	nential Smoothing	Damped Trend Ex	ponential Smoo	thing		
RMSE:	18.888		22.626				
R2:	0.99		0.964				

# RESULTS - PRAIRIE REGION WOMEN

MONTH ENDING	LINST. COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO	
Dec-95	34		52		86		1.529	
Dec-96	74		75		149		1.014	
Dec-97	89		85		174		0.955	
Dec-98	103		79		182		0.767	
Dec-99	126		117		243		0.929	
Dec-00	120		147		267		1.225	
Dec-01	133		141		274		1.060	
Dec-02	127		127		254		1.000	
Dec-03		137		132		269	0.964	
Dec-04		148		139		287	0.939	
Dec-05		158		145		303	0.918	
Dec-06		167		151		318	0.904	
Dec-07		177		158		335	0.893	
Model:	Linear (Holt) Exponential Smoothir Linear (Holt) Exponential Smoothing							
RMSE:	3.095		1.347					
R2:	0.572		0.99					

### F. Pacific Region

#### 1. Historical data trends

The population of incarcerated men remained steady between 1995 and 2002, decreasing slightly overall (by 11 inmates or 0.6%). Similarly, the community supervision population remained steady during this period, fluctuating between 900 and 1,050 offenders.

The ratio of the population of men in the community to male inmates has fluctuated between 1995 and 2002, peaking in 1998 at 0.58 before decreasing to 0.48 in 2002.

While the population of non-Aboriginal men has been either steady or decreasing over time, that of Aboriginal men has been slightly increasing. Between 1995 and 2002, the proportion of incarcerated non-Aboriginal men decreased by 6.6% (N=106) whereas, for Aboriginal men, this proportion increased (30.3%, N=95)<sup>14</sup>. These trends are also reflected in the male community populations. The population of non-Aboriginal men in the community decreased 17.0% (N=160) and the Aboriginal population increased 39.4% (N=41).

The size of the population of incarcerated women has shown an increase since December 1996, rising from 34 to 43 inmates by December 2002 (26.5%). The community supervision population has also increased during this period, rising from 33 to 45 offenders, an increase of 12 offenders or 36.4%.

The ratio of the community to the custodial population for women offenders fluctuated during the period, rising from 0.97 in 1996 to 1.05 in 2002. Historically, in comparison to men, the ratio has been significantly higher for women since 1996.

(CRS).

30

Note that Aboriginal/non-Aboriginal ratios are estimated based on those reported by via the Offender Population Profile System (OPPS), monthly snapshot data provided by the Research Branch, and ratios reported by Performance Management on the Corporate Reporting System

#### 2. Projections, 2003-2007

- The population of incarcerated men is projected to increase over the horizon
  of this forecast, rising from 1,915 inmates in December 2002 to 1,985 inmates
  by December 2007 (70 inmates or 3.7%). The number of non-Aboriginal men
  is projected to *increase* by 0.6%, as is that of Aboriginal men (14.9%).
- The population of men under community supervision is projected to increase, rising from 926 offenders in December 2002 to 932 offenders by December 2007 (an increase of 6 offenders or 0.6%). The number of non-Aboriginal men is projected to *decrease* by 1.5% (N=12), while Aboriginal offenders under community supervision are projected to *increase* 12.4% (N=18).
- The population of incarcerated women is projected to increase from 43 inmates in December 2002 to 50 inmates by December 2007 (up 7 inmates or 16.3%).
- The women's community supervision population is projected to increase from 45 offenders in December 2002 to 54 offenders in December 2007 (up 9 offenders or 20.0%).

### 3. Results

RESULTS - PACIFIC REGION MEN

MONTH ENDING	LINST. COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	1,926		1,045		2,971		0.543
Dec-96	1,911		1,023		2,934		0.535
Dec-97	1,942		914		2,856		0.471
Dec-98	1,794		1,031		2,825		0.575
Dec-99	1,791		1,017		2,808		0.568
Dec-00	1,853		1,040		2,893		0.561
Dec-01	1,865		1,023		2,888		0.549
Dec-02	1,915		926		2,841		0.484
Dec-03		1,929		925		2,854	0.480
Dec-04		1,943		925		2,868	0.476
Dec-05		1,957		926		2,883	0.473
Dec-06		1,971		928		2,899	0.471
Dec-07		1,985		932		2,917	0.470

## RESULTS - PACIFIC REGION NON-ABORIGINAL MEN

MONTH ENDING	LINST COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	1,612		941		2,553		0.584
Dec-96	1,545		918		2,463		0.594
Dec-97	1,566		787		2,353		0.503
Dec-98	1,460		890		2,350		0.610
Dec-99	1,439		869		2,308		0.604
Dec-00	1,460		886		2,346		0.607
Dec-01	1,458		866		2,324		0.594
Dec-02	1,506		781		2,287		0.519
Dec-03		1,508		776		2,284	0.515
Dec-04		1,510		772		2,282	0.511
Dec-05		1,511		770		2,281	0.510
Dec-06		1,513		769		2,282	0.508
Dec-07		1,515		769		2,284	0.508
Model:	Log Linear (Holt	) Exponential Smo	Damped Trend Ex	ponential Smoo	thing		
RMSE:	32.245		36.985				
R2:	0.769		0.852				

### Results - continued

## RESULTS - PACIFIC REGION ABORIGINAL MEN

MONTH ENDING	LINST COUNTL	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-95	314		104		418		0.331
Dec-96	366		105		471		0.287
Dec-97	376		127		503		0.338
Dec-98	334		141		475		0.422
Dec-99	352		148		500		0.420
Dec-00	393		154		547		0.392
Dec-01	407		157		564		0.386
Dec-02	409		145		554		0.355
Dec-03		421		149		570	0.354
Dec-04		433		153		586	0.353
Dec-05		446		156		602	0.350
Dec-06		458		159		617	0.347
Dec-07		470		163		633	0.347
Model:	Log Linear (Holt) Exponential Smo Damped Trend Exponential Smoothing						
RMSE:	32.245		36.985				
R2:	0.769		0.852				

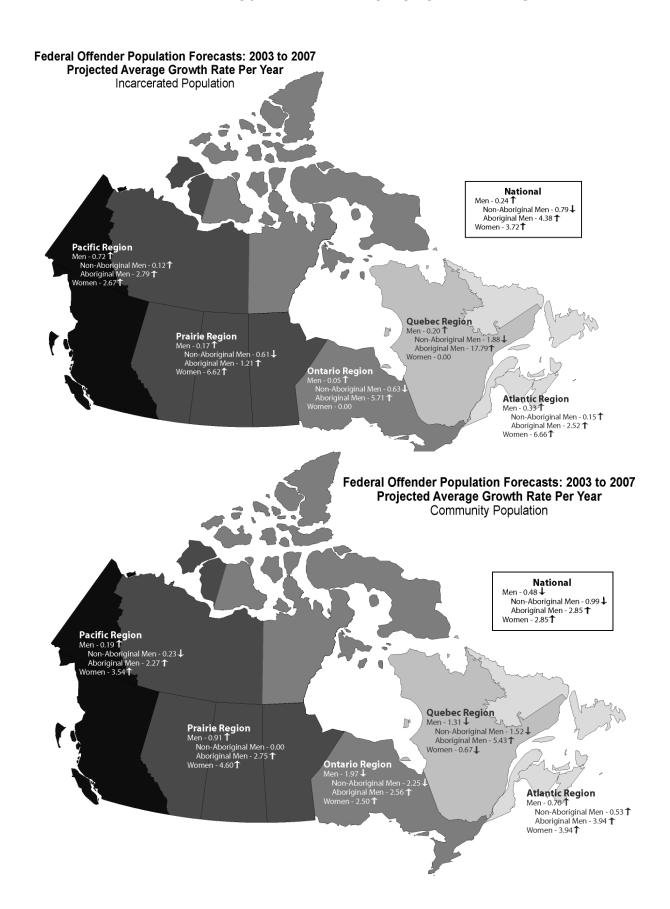
## RESULTS - PACIFIC REGION WOMEN

MONTH ENDING	INST COUNT	INST. FCST	COM. COUNT	COM. FCST	TOTAL POP	TOTAL FCST	RATIO
Dec-96	34		33		67		0.971
Dec-97	36		38		74		1.056
Dec-98	37		42		79		1.135
Dec-99	35		49		84		1.400
Dec-00	45		52		97		1.156
Dec-01	38		48		86		1.263
Dec-02	43		45		88		1.047
Dec-03		45		47		92	1.044
Dec-04		46		49		95	1.065
Dec-05		47		51		98	1.085
Dec-06		49		52		101	1.061
Dec-07		50		54		104	1.080
Model:	Damped Trend Exponential Smootl Linear (Holt) Exponential Smoothing						
RMSE:	6.26		3.71				
R2:	0.973		0.994				

#### REFERENCES

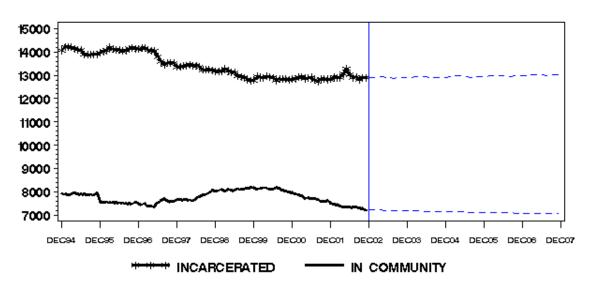
- Boe, R. (2001) A Medium-Term Federal Offender Population Forecast: 2001 to 2004. Report R-100. (Ottawa, ON: Correctional Service of Canada)
- Boe, R. (1997) Review of the Offender Population Forecast: Models, Data and Requirements with Provisional Forecasts for 1998 to 2007. Report R-59. (Ottawa, ON: Correctional Service of Canada)
- Juristat Crime Statistics in Canada, 2001. The Canadian Centre for Justice Statistics, Statistics Canada. Vol. 22 No. 6.
- 2001 Census: analysis series. Aboriginal peoples of Canada: A demographic profile. (2003) Statistics Canada. Catalogue No. 96F0030XIE20001007
- 2001 Census: analysis series. A profile of the Canadian population: where we live. (2003) Statistics Canada. Catalogue No. 96F0030XIE010012001

#### APPENDIX I: PROJECTED AVERAGE GROWTH RATES

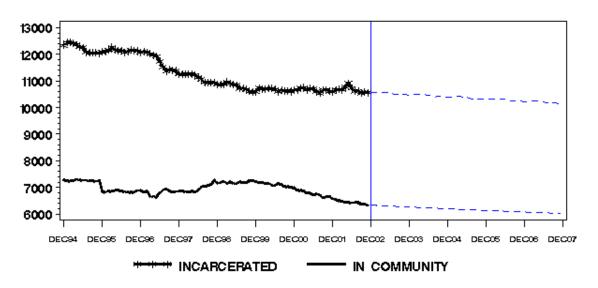


**APPENDIX II: FORECAST CHARTS** 

# NATIONAL SUMMARY MEN

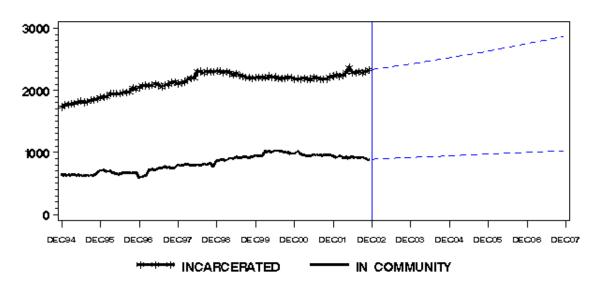


# NATIONAL SUMMARY MEN - NON-ABORIGINAL

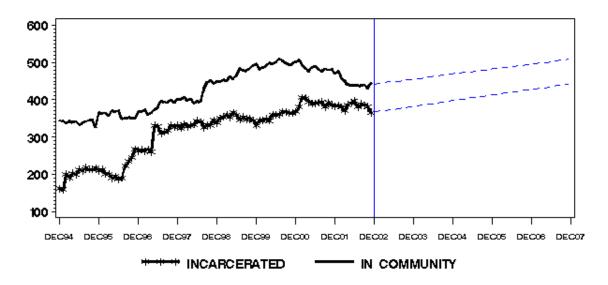


### NATIONAL SUMMARY

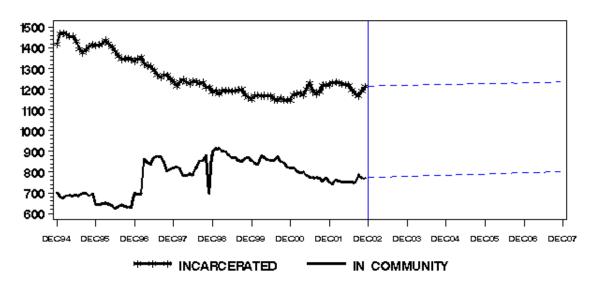
MEN - ABORIGINAL



### NATIONAL SUMMARY WOMEN

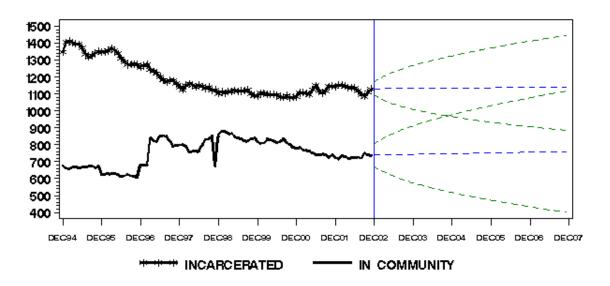


RESULTS - ATLANTIC REGION MEN

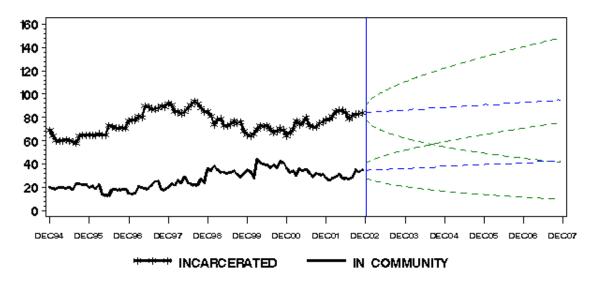


RESULTS — ATLANTIC REGION

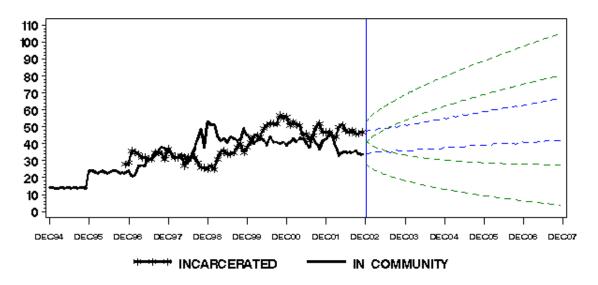
MEN — NON—ABORIGINAL



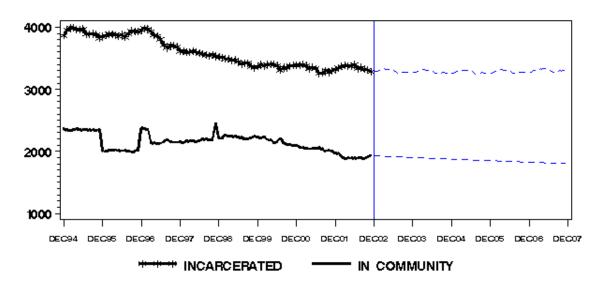
## RESULTS - ATLANTIC REGION



RESULTS — ATLANTIC REGION WOMEN

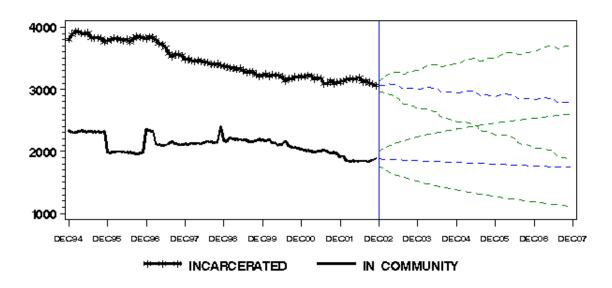


RESULTS — QUEBEC REGION MEN

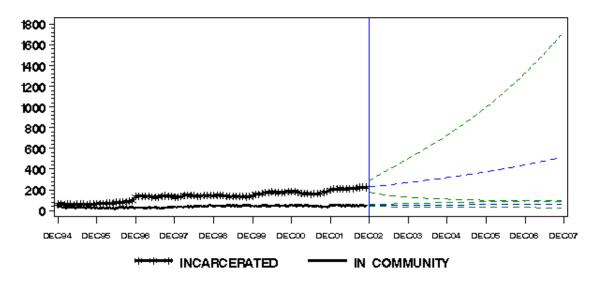


RESULTS — QUEBEC REGION

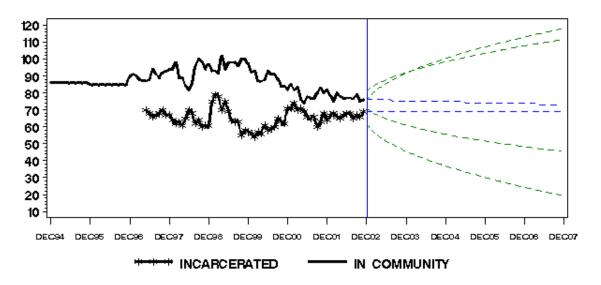
MEN — NON—ABORIGINAL



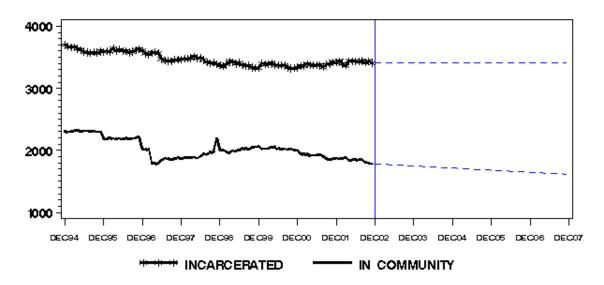
## RESULTS - QUEBEC REGION



RESULTS — QUEBEC REGION WOMEN

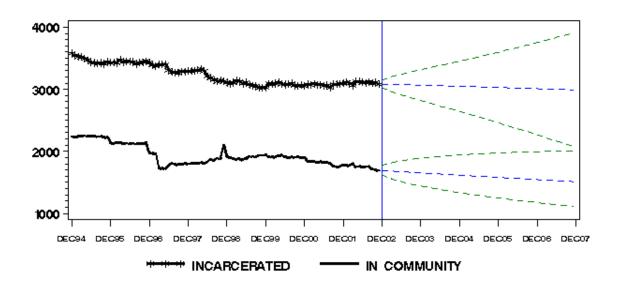


RESULTS - ONTARIO REGION MEN

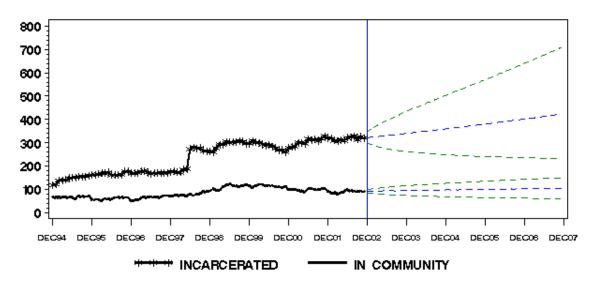


RESULTS — ONTARIO REGION

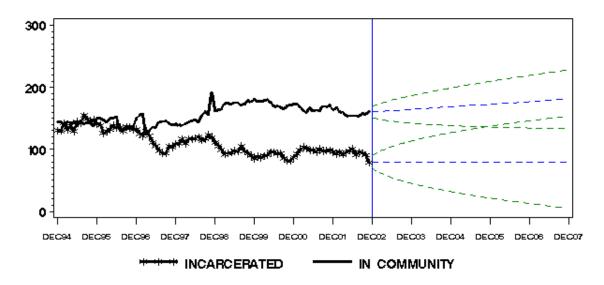
MEN — NON—ABORIGINAL



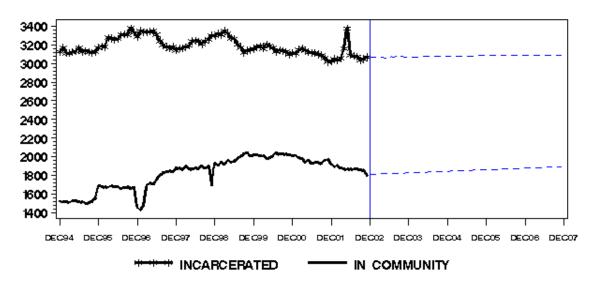
### RESULTS - ONTARIO REGION



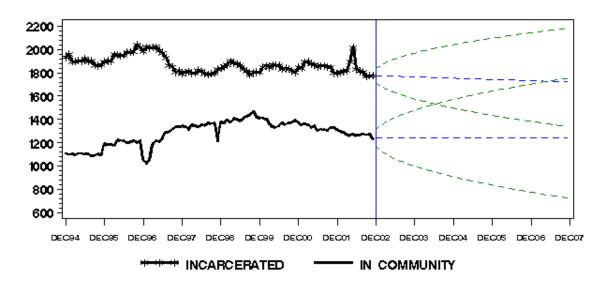
RESULTS — ONTARIO REGION WOMEN



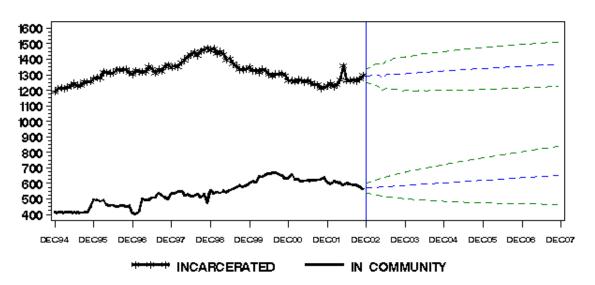
RESULTS — PRAIRIE REGION MEN



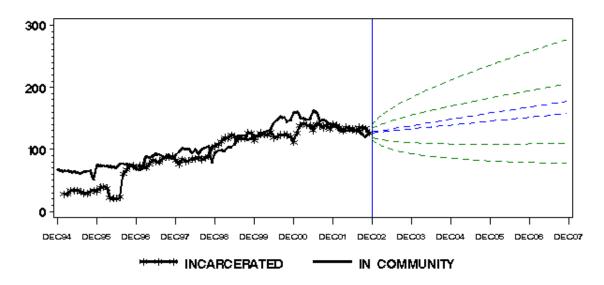
RESULTS — PRAIRIE REGION
MEN — NON—ABORIGINAL



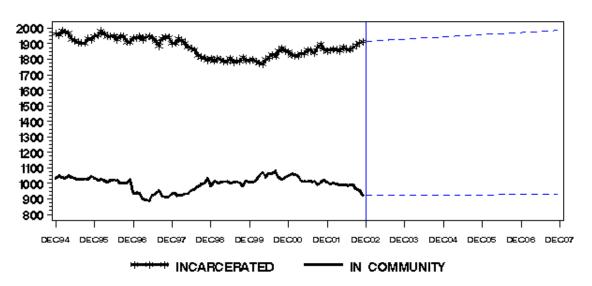
### RESULTS - PRAIRIE REGION



RESULTS — PRAIRIE REGION WOMEN

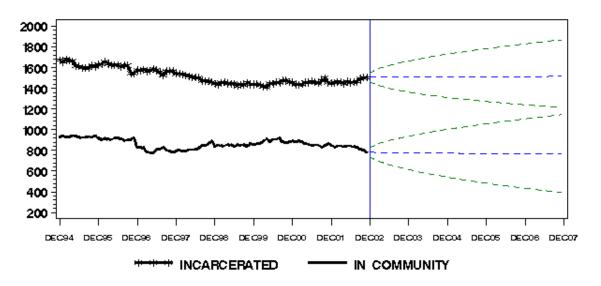


RESULTS — PACIFIC REGION MEN

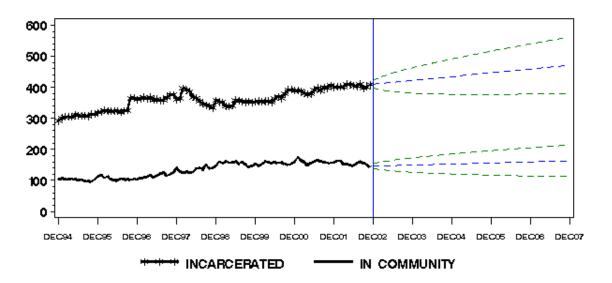


RESULTS — PACIFIC REGION

MEN — NON—ABORIGINAL



# RESULTS — PACIFIC REGION MEN — ABORIGINAL



RESULTS — PACIFIC REGION WOMEN

