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# 2013 Synthesis of Life After Service Studies

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## Foreword

**Lieutenant-General Walter Semianiw, Assistant Deputy Minister,  
Policy, Communications and Commemoration, Veterans Affairs Canada**

*"When first introduced in 2010, the Life After Service Studies (LASS) program of research opened the door to a new focus of study – one that provided much-needed information about the physical, mental, and social well-being of Veterans of the Canadian Armed Forces. The results of LASS 2010, though already informing programs and policies, were just the beginning of this dedicated area of study. Veterans Affairs Canada is pleased to continue this important work with the Department of National Defence and Statistics Canada with LASS 2013. This latest study also included Reserve Force Veterans, providing new information about this group that represents approximately half of Canadians with military service. With each study we are learning more about the Canadian transition experience and working to provide more responsive support to the men and women who serve this nation."*

Signed:

A handwritten signature of LGen Walter Semianiw, enclosed within a large, roughly circular, hand-drawn outline.

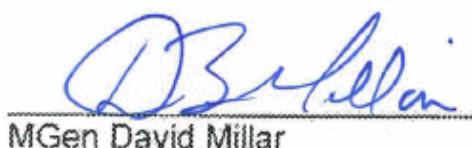
LGen Walter Semianiw

17 June, 2014  
Date

**Major-General David Millar, Chief Military Personnel,  
Department of National Defence**

*"The transition from military to civilian life is an important time for Canadian Armed Forces (CAF) members. The Life After Service Studies (LASS) program of research, initiated as part of a partnership with Veterans Affairs Canada (VAC) and Statistics Canada in 2010, has provided useful information about the health and well-being of our Veterans, and of the factors that might aid successful adjustment to civilian life. The 2013 LASS was the first study to include Veterans of the Primary Reserves. With the recent deployment to Afghanistan and other commitments, the CAF has been using more Reservists to fill multiple roles both in Canada and on deployments, and this study provides new and important information about the well-being of this population in addition to Veterans of the Regular Force. It is important that the policies, practices and programs of both DND and VAC are developed in a complementary fashion, with the common goal of assisting in the transition of these soldiers, sailors, airmen and airwomen to civilian life. This collaborative research will ensure better-informed, better-synchronized policy across both Departments, to the benefit of the men and women who have served our country."*

Signed:

A handwritten signature of MGen David Millar, enclosed within a horizontal line.

MGen David Millar

17 June 2014  
Date



# **2013 Synthesis of Life After Service Studies**

## **Executive Summary**

The Life After Service Studies (LASS) program of research is designed to further understand the transition from military to civilian life and ultimately improve the health of Veterans in Canada. LASS partners are Veterans Affairs Canada (VAC), the Department of National Defence/Canadian Armed Forces, and Statistics Canada. LASS 2013 builds on the earlier studies from 2010 by including Veterans of the Primary Reserves in two major studies: the survey of health and well-being, and the record linkage for pre- and post-release income trends. This report synthesizes findings from these studies.

### **LASS 2010 Findings**

Regular Force Veterans released from 1998 to 2007 had higher prevalences of chronic musculoskeletal disorders, obesity, anxiety disorders, and activity limitation compared to Canadians. Difficult adjustment to civilian life was experienced by 25% of Veterans.

The 2010 income data showed an average 10% decline in income over the first three years post-release. Post-release income exceeded pre-release income over time. The rate of low income was less than that of Canadians. Over the post-release period (up to 9 years), 15% of Regular Force Veterans experienced low income at some point, with higher rates among younger Veterans, those who involuntarily released, or released at lower ranks.

Veterans of the Reserve Force were not included in LASS 2010, since release data was not available electronically. Reserve support to operations such as Afghanistan underscored the importance of including these Veterans. Subsequent effort by the Department of National Defence provided data to allow for the significant addition of Reserves to LASS 2013.

### **LASS 2013 Veteran population groups**

The LASS 2013 survey and income study included three groups of Veterans:

- Regular Force released from 1998 to 2012<sup>1</sup>;
- Primary Reserve Class C released from 2003 to 2012<sup>1</sup>;
- Primary Reserve Class A/B released from 2003 to 2012<sup>1</sup>.

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<sup>1</sup> End year was 2011 for income study; see Appendix C for definitions of population groups.

These three groups had very different characteristics. Regular Force Veterans were the oldest group, and Reserve Class A/B Veterans were the youngest group.

### **LASS 2013 Survey of Health and Well-being**

Most adjusted well to civilian life; however, 27% of Regular Force Veterans, 24% of Reserve Class C Veterans, and 11% of Reserve Class A/B had difficulty. Regular Force Veterans were less likely to have a sense of community belonging than Canadians; Reserve Class A/B and Class C Veterans were similar to Canadians.

Regular Force Veterans had higher prevalences of chronic physical health conditions (including arthritis, hearing problems, obesity, pain) and activity limitations than Canadians; Reserve Class A/B Veterans were similar to Canadians. Prevalences of chronic physical health conditions for Reserve Class C Veterans were between these groups and were higher than Canadians.

Methodology in mental health measures changed from the 2010 to 2013 LASS surveys to improve Canadian comparisons. In 2013, Regular Force Veterans had higher prevalences of mental health conditions (including depression, anxiety) than Canadians; Reserve Class A/B Veterans were similar to Canadians. Prevalences of mental health conditions for Reserve Class C Veterans were between these groups and were higher than Canadians.

### **LASS 2013 Income Study**

The rates of low income for all three groups of Veterans were less than that of Canadians. Over the post-release period (up to 13 years), 16% of Regular Force Veterans, 13% of Reserve Class C, and 25% of Reserve Class A/B experienced low income at some point. The highest rates of low income were among younger Veterans, those who involuntarily released, or those who released at lower ranks.

Methodology in income change measurement improved from the 2010 to 2013 LASS income studies to follow a cohort comparing income in the pre-release year with all the first three years post-release, thus providing a more accurate reflection of income changes during transition. Income trends of these cohorts were very different between the Veteran groups. Income declined post-release for Regular Force (-2%) and increased for both Reserve Class C (14%) and Reserve Class A/B (43%).

## **VAC Reach**

Just over a third of Regular Force Veterans (35%), a smaller proportion of Reserve Class C Veterans (17%), and very few Reserve Class A/B Veterans (3%) were receiving benefits from VAC. Less than 10% of non-recipients had comorbid physical and mental health conditions, demonstrating that Veterans of all three groups with more complex health conditions are largely reached by VAC programs.

VAC programs are reaching some segments of the cohort with the largest declines in income post-release.

## **Conclusion**

Most Veterans adjust well to civilian life with Reserve Class A/B Veterans having the least difficulty. Consistent with 2010 findings, prevalences of chronic conditions (both physical and mental) and activity limitations were higher for Regular Force than for Canadians. Prevalences were also higher for Reserve Class C Veterans. For Reserve Class A/B Veterans, the prevalences of chronic conditions were similar to Canadians.

Income in the pre-release year compared with income for all of the first three years post-release showed a decrease for Regular Force Veterans and an increase for both Reserve Class A/B and Reserve Class C Veterans. Low income rates for all three groups were lower than Canadians. In both the 2010 and 2013 income studies, rates of low income were higher among younger Veterans.

There were more health and well-being issues among Veterans receiving benefits from VAC than non-recipients. VAC programs are reaching Veterans with the most complex health conditions and those with the largest declines in income.

LASS 2013 findings provide evidence for improvements to programs, benefits, communications and outreach, ultimately improving the health and well-being of Veterans in Canada.



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## 1. Introduction

The Life After Service Studies (LASS) program of research is designed to enhance understanding of the transition from military to civilian life and ultimately improve the health of Veterans in Canada (VanTil 2011). LASS partners are Veterans Affairs Canada, the Department of National Defence/Canadian Armed Forces, and Statistics Canada.

LASS 2010 studied the health and well-being of former Regular Force personnel who released from service during 1998-2007. This research included two major studies: a health survey and income study. Findings from LASS 2010 are described in more than 20 publications (see *Appendix B*).

Veterans of the Reserve Force were not included in LASS 2010, since release data was not available electronically. Reserve support to operations such as Afghanistan underscored the importance of including these Veterans. Subsequent effort by the Department of National Defence provided data to allow for the significant addition of Reserves to LASS 2013.

LASS 2013 builds on this earlier work with two similar studies: 1) survey data collected during March 2013; and 2) income study using data linkage to Statistics Canada's annual income file. LASS 2013 expands the populations studied to former Regular Force personnel who released from service during 1998-2012, and former Primary Reserve personnel who released from service during 2003-2012.

This report synthesizes the key findings from LASS 2013 studies (see *Appendix A*) and compares these findings with those from LASS 2010.

## 2. Veteran Population in Canada

Veterans in Canada are former officers or non-commissioned members of the Canadian Armed Forces (Regular or Reserve)<sup>2</sup>. As of March 2013, there were about 700,000 Veterans living among the general population in Canada, including those with service in World War II, the Korean War, and those who served since 1953. In this report, Veterans who served after 1953 are referred to as Canadian Armed Forces (CAF) Veterans and number almost 600,000.

Regular Force Veterans had full-time service. The 68,000-member Regular Force has three service environments: Navy, Army, and Air Force. The 27,000-member Primary Reserve Force augments the Regular Force with six elements: the Army, Naval and Air Reserves, the Canadian Special Operations Forces Command Reserve, the Health Services Reserve and the Judge Advocate General Reserve. The largest proportion of Veterans of the Primary Reserve Force had part-time service in Class A, with multiple movements to full-time Class B service. Smaller numbers had full-time Class C service while on domestic or international deployments (see *Appendix C* for definitions of Classes of Primary Reserves).

Veterans in Canada may apply to Veterans Affairs Canada (VAC) for benefits, with eligibility governed by 16 Acts and their regulations<sup>3</sup>. Eligibility generally requires the presence of a health condition related to service. As of March 2013, about 66,500<sup>4</sup> (11%) of CAF Veterans were in receipt of VAC benefits. Almost all of those were in receipt of a disability benefit.

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<sup>2</sup> Canadian Forces Members and Veterans Re-establishment and Compensation Act, SC 2005, c21, s2(1).

<sup>3</sup> [www.veterans.gc.ca/eng/department/Legislation/actsVAC](http://www.veterans.gc.ca/eng/department/Legislation/actsVAC)

<sup>4</sup> VAC Statistics Directorate, March 2013; excludes still-serving.

### **3. Methodology**

LASS 2013 studied three groups of Veterans:

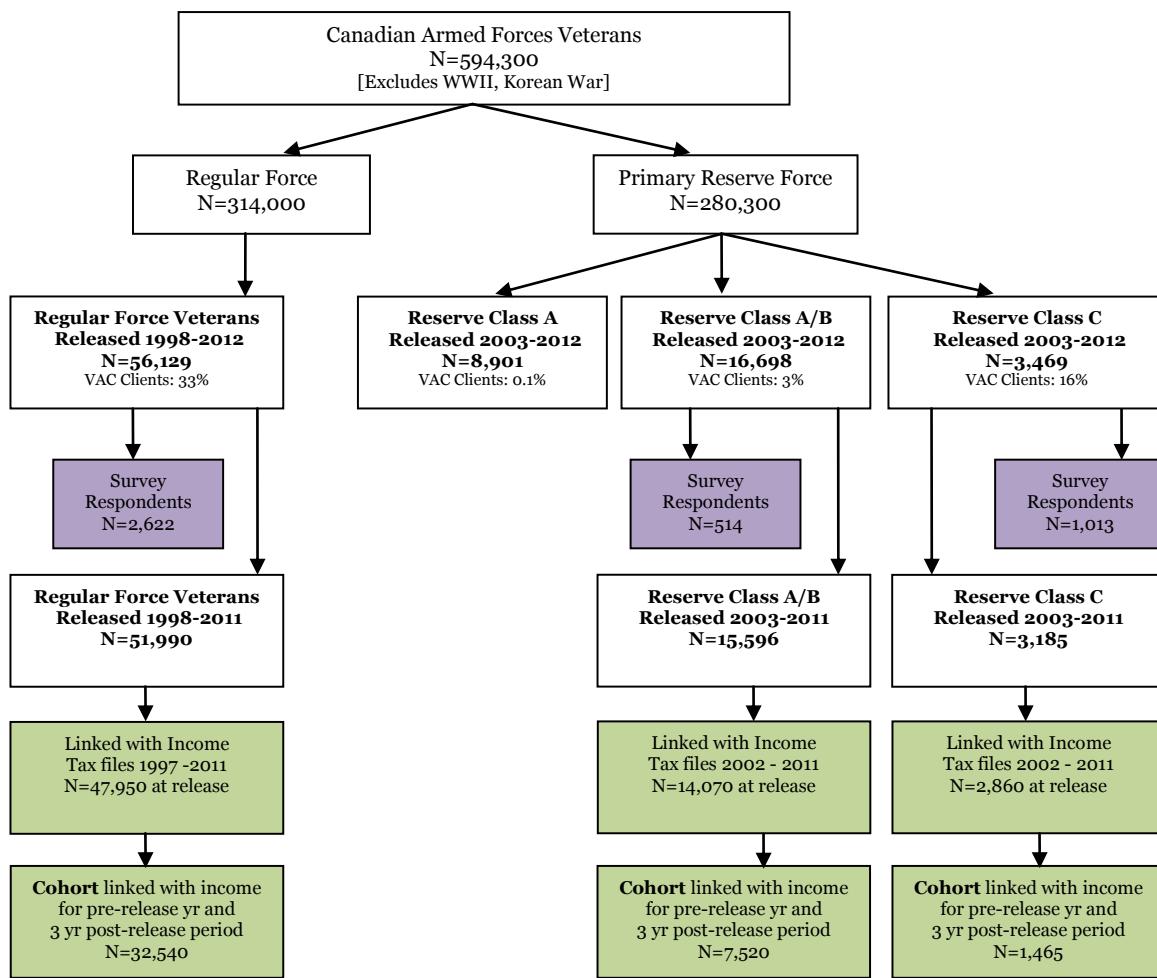
- Those who released from the Regular Force between 1998 and 2012;<sup>5</sup>
- Those who released from the Primary Reserve Force Class C between 2003 and 2012;<sup>5</sup>
- Those who released from the Primary Reserve Force Class A/B between 2003 and 2012.<sup>5</sup>

During service, persons move between the Regular and Primary Reserve Forces, and between Class A, B, and C within the Primary Reserve. For this study, each Veteran was assigned to one of the mutually exclusive groups, as defined in *Appendix C*. The start dates were determined by initiation of the electronic human resource database at the Department of National Defence; initiation was earlier for the Regular Force than the Reserve Force. Figure 1 depicts the selection of Veterans for both LASS 2013 survey and income studies.

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<sup>5</sup> End year was 2011 for income study; see Appendix C for definitions of population groups.

**Figure 1. Life After Service Study Population, March 2013**



### **3.1 Survey of Health and Well-Being**

The LASS 2013 survey of health and well-being was a computer-assisted telephone interview survey conducted by Statistics Canada in March 2013 with a representative sample of Veterans from the Regular and Reserve Forces, as described above. The survey achieved a 70% response rate, and 90% agreed to share their data with VAC and DND.

The survey results reflect three groups of Veterans, as defined in *Appendix C*. The numbers of survey respondents for these groups are shown in the purple shaded boxes in Figure 1.

Weighted population estimates, used for prevalences and proportions, were calculated using individual respondent sampling weights provided by Statistics Canada that accounted for the stratified sample design, and for differences between respondents and non-respondents. Comparisons to the Canadian general population were calculated by age-sex adjusting the Canadian comparator data to the three groups of Veterans and calculation of 95% confidence intervals to assess statistical significance. Canadian comparators were from Statistics Canada surveys, primarily the 2011-12 Canadian Community Health Survey.

### **3.2 Pre- and Post-Release Income**

The LASS 2013 income study examined pre- and post-release income using data linkage. Data on releases were extracted from DND Human Resources Management System to create the study population. DND implemented a national system in 1998 for the Regular Force and by 2003 the system was consistently capturing data on Primary Reserve personnel. DND's release data was linked by Statistics Canada with income data from tax files available up to 2011 with a 92% overall linkage rate. Statistics Canada derived aggregate tables from this data.

The income study results reflect means for three groups of Veterans, as described in *Appendix C*. The numbers of linked records for these groups are shown in green shaded boxes in Figure 1.

Income reflects sources reported in T1FF file, and does not include VAC's Disability Pension or Disability Award.

## **4. Survey of Health and Well-Being**

- In general, the LASS 2013 survey of health and well-being found:
- Regular Force Veterans had higher rates of chronic health conditions and activity limitations than other Canadians; this finding is similar to what was found in 2010. They were less likely to report low income than other Canadians, or to have a sense of community belonging.
- Reserve Class C Veterans looked more similar to Regular Force Veterans than Class A/B Veterans. Most were doing well at adjusting to civilian life, but many were experiencing chronic health conditions and activity limitations.
- Reserve Class A/B Veterans reported the most positive health and well-being indicators. They looked similar to other Canadians.

### **4.1 Prevalence of health indicators**

The three Veteran groups had very different characteristics. Regular Force Veterans were the oldest group, and had the most males. Reserve Class A/B Veterans were the youngest group. Reserve Class C Veterans had an average age between these groups, and had the most females. These differences in age and sex are important to consider in understanding the reason for different prevalences observed in the three groups.

With respect to adjustment to civilian life, 56% of Regular Force Veterans reported easy adjustment and 27% reported difficult adjustment, consistent with LASS 2010 findings. An easy adjustment to civilian life was reported by 61% of Reserve Class C Veterans and 74% of Reserve Class A/B Veterans.

More Veterans were married (or common-law) than Canadians. Post-secondary education rate of Regular Force Veterans was lower than that of Canadians, consistent with LASS 2010 findings. Post-secondary education rates were similar to Canadians for Reserve Class C Veterans, and higher than Canadians for Reserve Class A/B Veterans. Unemployment rates for all three groups were similar to Canadians. For Regular Force Veterans, this finding was consistent with LASS 2010. Low income rates for all three groups were lower than Canadians.

Chronic health conditions were more prevalent for Regular Force Veterans than for Canadians, consistent with LASS 2010. Changes in survey questions in 2012 allowed for better comparison with Canadians for measures of hearing problems, chronic pain, and mental health conditions. Together, the health indicators show more chronic problems for Veterans of the Regular Force and Reserve Class C than for Canadians; Reserve Class A/B were similar to Canadians.

Activity limitations were more prevalent for Regular Force Veterans than for Canadians, consistent with LASS 2010. These limitations were also higher for Reserve Class C Veterans than Canadians. Suicide ideation in the past 12 months was 7% for Regular Force Veterans and 5% for Reserve Class C (there were too few Class A/B responses to produce a reliable population estimate). These results are comparable to the LASS 2010 results for Regular Force. Further analysis will promote a better understanding of these results. Smoking and drinking rates for the three groups of Veterans were similar to Canadians.

A sense of community belonging was reported by about 60% of Veterans. For Regular Force Veterans, this rate was consistent with LASS 2010. When compared to Canadians of similar age-sex structure, community belonging was lower for Regular Force Veterans, and similar for Reserve Force Veterans (both groups). Satisfaction with life was lower for Regular Force Veterans than Canadians, consistent with LASS 2010. Reserve Class C Veterans had lower rates of satisfaction than Canadians, and Reserve Class A/B were similar to Canadians.

The prevalences of selected indicators are described in Table 1.

**Table 1. Observed Prevalence of Health Indicators, by Veteran groups**

<b>Indicator</b>	<b>Regular Force</b> released 1998-2012	<b>Reserve Class C</b> released 2003-2012	<b>Reserve Class A/B</b> released 2003-2012
<b>Mean age</b>	44 ↓	40 ↓	31 ↓
<b>Women</b>	13% ↓	23% ↓	19% ↓
<b>Married</b>	74% ↑	72% ↑	56% ↑
<b>Education</b> post-secondary	52% ↓	71% ⇔	73% ↑
<b>Unemployment</b>	7% ⇔	5% ⇔	6% ⇔
<b>Labour force</b> employed in 2013	72%	80%	84%
<b>Low income</b> <sup>6</sup>	8% ↓	8% ↓	12% ↓
<b>Adjustment to civilian life</b>	56% easy 27% difficult	61% easy 24% difficult	74% easy 11% difficult
<b>Self-rated health</b> very good/excellent	53% ↓	61% ⇔	69% ⇔
<b>Self-rated mental health</b> very good/excellent	62% ↓	67% ↓	74% ⇔
<b>Arthritis</b>	22% ↑	16% ↑	6% ⇔
<b>Back problems</b>	35% ↑	32% ↑	17% ↑
<b>Hearing problem</b>	9% ↑	5% ↑	<5% ⇔
<b>Obesity</b>	26% ↑	24% ↑	18% ⇔
<b>Chronic pain</b>	34% ↑	28% ↑	13% ⇔
<b>Activity limitation</b> <sup>7</sup>	50% ↑	40% ↑	23% ⇔
<b>Mental health condition</b> <sup>8</sup>	24% ↑	17% ↑	9% ⇔
<b>Past year suicide ideation</b>	7% ↓	5% ↓	<5% ⇔
<b>Community belonging</b> strong	58% ↓	60% ⇔	57% ⇔
<b>Satisfaction with life</b> satisfied/very satisfied	86% ↓	89% ↓	94% ⇔
<b>Daily smoking</b>	17% ↓	13% ↓	10% ↓
<b>Heavy drinking</b>	25% ⇔	28% ⇔	32% ⇔

↔ equal to Canadians ↑ higher than Canadians ↓ lower than Canadians

<sup>6</sup> Low Income Measure (LIM) relative to family size, threshold calculated annually by Statistics Canada;  
eg. 2011 LIM for family of 2 adults and 2 children is \$36,000

<sup>7</sup> Restriction of activity in major life domains often or sometimes

<sup>8</sup> Mood disorder (including depression), anxiety disorder, posttraumatic stress disorder (PTSD)

## 4.2 VAC Reach

About 23% of CAF Veterans released from 1998 to 2012 were VAC clients. Just over a third of Regular Force Veterans (35%) were receiving services from VAC while a smaller proportion of Reserve Class C Veterans (17%) were VAC clients. Very few Reserve Class A/B Veterans (3%) were VAC clients, consistent with their younger average age and lower prevalence rates of chronic health conditions.

Almost all VAC clients had chronic physical conditions, consistent with eligibility for VAC programs that generally require the presence of a health condition related to service. Both Regular Force and Reserve Class C Veterans who were VAC clients had high prevalences of chronic conditions, as described in Table 2. Half of VAC clients had a mental health disorder, usually complicated by a comorbid chronic physical condition. Less than 10% of non-clients had comorbidity, demonstrating that Veterans with more complex health conditions are largely reached by VAC programs.

**Table 2. Observed Prevalence of Chronic Conditions, by VAC client status**

<b>Veteran Group</b>	<b>VAC Client</b>	<b>Non-Client</b>
<b>Chronic Physical Condition<sup>9</sup></b>		
Regular Force	92%	63%
Reserve Class C	95%	63%
Reserve Class A/B	F	54%
<b>Mental Health Condition<sup>10</sup></b>		
Regular Force	47%	11%
Reserve Class C	50%	10%
Reserve Class A/B	F	9%
<b>Comorbid Mental &amp; Physical Conditions<sup>11</sup></b>		
Regular Force	44%	9%
Reserve Class C	49%	9%
Reserve Class A/B	F	F

F – numbers too small for a reliable estimate

<sup>9</sup> Any of: arthritis, back problem, heart disease, effects of stroke, high blood pressure, ulcer, bowel disorder, asthma, COPD, migraine, dementia, effects of traumatic brain injury, urinary incontinence, diabetes, cancer, obesity, hearing problem, chronic pain.

<sup>10</sup> Any of: mood disorder (including depression), anxiety disorder, posttraumatic stress disorder (PTSD).

<sup>11</sup> At least one mental health condition AND at least one chronic physical health condition.

## 5. Pre- and Post-Release Income

LASS 2013 examined income trends pre- and post-release for three groups of Veterans, as described in *Appendix C*.

### 5.1 Income trends

Regular Force Veterans were followed from the pre-release year up to 13 years post-release. Average income in the year prior to release was \$70,900 (all income in 2011 constant dollars), increasing in the release year then declining the next year to \$65,000.<sup>12</sup> Post-release income then steadily increased, reaching pre-release levels by eight years after release. These trends were similar to those seen in the LASS 2010 income study.

Average income did not decline post-release for Reserve Force Veterans, who were followed for up to eight years after release. For Reserve Class C Veterans, average income increased from \$66,300 pre-release to \$71,700 by eight years post-release; for Reserve Class A/B Veterans, the increase was from \$35,300 to \$60,300.<sup>12</sup>

The largest source of income in each year was earnings, followed by government transfers including pensions. Government transfers increase post-release, but receipt of employment insurance (EI) and social assistance or the guaranteed income supplement was temporary, with few receiving these benefits every year post-release. This was consistent with LASS 2010.

Low income was experienced by 16% of Regular Force Veterans at least one year post-release. Thirteen percent (13%) of Reserve Class C Veterans had low income, quite similar to the Regular Force when the shorter post-release period is taken into consideration. A higher rate of low income (25%) was experienced by Reserve Class A/B, which is likely attributable in large part to their younger age.

Income decline in any of the three years post-release for Regular Force Veterans was 9%, similar to the 10% in LASS 2010. LASS 2013 also used improved methods to provide a more accurate picture of change in income by following a longitudinal cohort over time with record linkage in the pre-release year and all of the first three years post-release.

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<sup>12</sup> average of full study population, not longitudinal cohort, see Figure 1.

Using the new method to follow income trends shows a similar pattern of decline for Regular Force Veterans; income declined by 2%. The different results using the old and new method is likely due to exclusion of an anomalous bump in income from severance payments. For the Reserve Force cohort, income increased: 14% for Reserve Class C, and 43% for Reserve Class A/B Veterans. Other LASS 2013 results for all three Veteran groups are described in Table 3.

**Table 3. Observed Income Trends, by Veteran groups**

	<b>Regular Force</b> released 1998-2011	<b>Reserve Class C</b> released 2003-2011	<b>Reserve Class A/B</b> released 2003-2011
<b>&lt;30 years of age</b>	27%	43%	79%
<b>Cohort average income pre-release</b>	\$ 69,300	\$ 60,500	\$ 32,700
<b>Cohort average income for 3 yrs post-release</b>	\$ 67,900	\$ 69,100	\$ 46,600
<b>Cohort change in income</b>	- 2%	+ 14%	+ 43%
<b>Low income<sup>13</sup> at least one year post-release</b>	16%	13%	25%

It is important to note that income trends observed in the Veteran groups differ partially due to their age distributions. Younger Veterans of both the Regular and Reserve Forces experienced increases in income post-release and had higher rates of low income.

## 5.2 VAC Reach

Similar to the 2013 Life After Service Survey, 35% of the Regular Force cohort were clients while 65% were non-clients. The vast majority (95%) of the Reserve Force cohort were not clients of VAC.

Declines in income can impact the transition experience for Veterans. Higher post-release declines were experienced by VAC clients compared to non-clients. For Regular Force Veterans, there was an 11% decline for clients vs. a 4% increase for non-clients; for Reserve Force Veterans, there was a 9% decline for clients vs. a 39% increase for non-clients. Within these groups, there were sub-populations with large declines in income, including medical releases from the Regular Force and older releases from the Reserve Force. Many in these sub-populations were VAC clients, indicating that the Department is reaching many who are potentially in need of VAC programs based on declines in income. Those reached are mostly Veterans of the Regular Force, and unlikely to be Veterans of the Reserve Force.

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<sup>13</sup> Low Income Measure (LIM) relative to family size, threshold calculated annually by Statistics Canada

Low income also impacts the transition experience. Low income was experienced by fewer VAC clients than non-clients. For Regular Force Veterans, low income rates were 11% for clients and 19% for non-clients. For Reserve Force Veterans, low income rates were 18% for clients, 24% for non-clients. The highest rates of low income were experienced by certain sub-populations, including: involuntary releases, release at lower ranks (private for Regular Force, recruit for Reserve Force), and younger Veterans. While few in these sub-populations were VAC clients, more analysis is required to determine if the primary factor for low income was age-based or due to other factors.

## 6. Discussion

The 2013 Life After Service Studies extended the 2010 research by including both Primary Reserve Force personnel who released in 2003-2012 and Regular Force personnel who released in 1998-2012. Together these studies have provided a comprehensive picture of the well-being of CAF Veterans.

In general, results from LASS 2010 and 2013 are similar for Veterans of the Regular Force. Most Veterans adjust well to civilian life while Reserve Class A/B Veterans had the least difficulty.

In 2013, chronic health conditions were more prevalent for Veterans of the Regular Force than for Canadians, consistent with LASS 2010. Together, the health indicators confirm more prevalent chronic physical health conditions for Veterans of the Regular Force and Reserve Class C than for Canadians; Reserve Class A/B findings were similar to those of Canadians.

Improvements in the 2013 survey methodology allowed for better comparisons to Canadians, with results showing that mental health conditions were also more prevalent for Veterans of the Regular Force and Reserve Class C than for Canadians; Reserve Class A/B findings were similar to those of Canadians.

Improvements in the 2013 income study methodology allowed for more accurate measurement of changes in income post-release, with results showing that income declined slightly for the Regular Force Veterans, and increased for Reserve Class A/B and C Veterans. Low income rates were similar for Veterans of the Regular Force and Reserve Class C, and higher for Reserve Class A/B Veterans. Low income was confirmed in LASS 2013 and 2010 to be higher among younger Veterans, those who involuntarily released, or released at lower ranks.

There were more health and well-being issues among clients than non-clients. VAC programs are reaching Veterans of all three groups with more complex health conditions as well as those with the largest declines in income post-release. While income levels were generally good news, there was a small number of Veterans experiencing low income and they were unlikely to be clients of VAC. This finding is consistent with results from LASS 2010.

The findings of the first reports provide evidence to support programming to meet the needs of CAF Reserve and Regular Force personnel in transition to civilian life. The findings will assist DND and VAC in mitigating problems related to this transition and addressing issues later in the Veteran life course. LASS 2013 findings will be a resource for examination of programs and benefits to ultimately improve the health and well-being of Veterans in Canada.

## **7. Conclusion**

Most Veterans adjust well to civilian life with Reserve Class A/B Veterans having the least difficulty. Consistent with 2010 findings, prevalences of chronic conditions (both physical and mental) and activity limitations were higher for Regular Force than for Canadians. Prevalences were also higher for Reserve Class C Veterans. For Reserve Class A/B Veterans, the prevalences of chronic conditions were similar to Canadians.

When comparing pre-release year to all of the first three years post-release, income decreased for Regular Force Veterans and increased for both Reserve Class A/B and Reserve Class C Veterans. Low income rates for all three groups were lower than Canadians. In both the 2010 and 2013 income studies, rates of low income were higher among younger Veterans.

There were more health and well-being issues among Veterans receiving benefits from VAC than non-recipients. VAC programs are reaching Veterans with the most complex health conditions and those with the largest declines in income.

LASS 2013 findings provide evidence for improvements to programs, benefits, communications and outreach, ultimately improving the health and well-being of Veterans in Canada.

## **Appendix A: Additional LASS 2013 reports**

Thompson JM, Poirier A, Sweet J, McKinnon K, VanTil L, Sudom K, Dursun S, Pedlar D. *Health and Well-being of Canadian Armed Forces Veterans: Findings from the 2013 Life After Service Survey*. Charlottetown (PE): Veterans Affairs Canada, Research Directorate Technical Report; 3 July 2014.

MacLean MB, Campbell L, VanTil L, Poirier P, Sweet J, McKinnon K, Sudom K, Dursun S, Herron M, Pedlar D. *Pre- and Post-Release Income: Life After Service Studies*. Charlottetown (PE): Veterans Affairs Canada, Research Directorate Technical Report; 3 July 2014.

VanTil L, Perrie S, Poirier P, Sweet J, McKinnon K, MacLean MB, Sudom K, Olson E, Yuen J, Pedlar D. *Methodology: Life After Service Studies 2013*. Charlottetown (PE): Veterans Affairs Canada, Research Directorate Technical Report; 3 July 2014.

## **Appendix B: Life After Service Studies 2010 Reports**

### **First Reports:**

VanTil L, MacLean MB, Thompson J, Pedlar D.

*Life After Service Studies: A Program of Population Health Research at Veterans Affairs Canada.* In Aiken AB, Bélanger SAH, eds. *Shaping the Future: Military and Veteran Health Research.* Kingston: Canadian Defence Academy Press; 2011, pp317-322.

MacLean MB, Van Til L, Thompson JM, Pedlar D, Poirier A, Adams J, Hartigan S, Sudom K.

*Life After Service Study: Data Collection Methodology for The Income Study and The Transition to Civilian Life Survey.* Veterans Affairs Canada Research Directorate Technical Report, April 29, 2010.

Thompson JM, MacLean MB, Van Til L, Sudom K, Sweet J, Poirier A, Adams J, Horton V, Campbell C, Pedlar D.

*Survey on Transition to Civilian Life: Report on Regular Force Veterans.* Research Directorate, Veterans Affairs Canada, Charlottetown, and Director General Military Personnel Research and Analysis, Department of National Defence, Ottawa. 04 January 2011.

MacLean MB, Van Til L, Thompson JM, Poirier A, Sweet J, Adams J, Sudom K, Campbell C, Murphy B, Dionne C & Pedlar D.

*Income Study: Regular Force Veteran Report.* Veterans Affairs Canada, Research Directorate and Department of National Defence, Director General Military Personnel Research and Analysis. January 4, 2011.

### **Series of Subsequent Technical Reports:**

MB MacLean, A Poirier & J Sweet.

Release 1: *Veterans Independence Program Need - Indicators from the Survey on Transition to Civilian Life.* Veterans Affairs Canada Research Directorate Technical Report, February 14, 2011.

MB MacLean, A Poirier, T O'Connor.

Release 2: *Province of Residence at Release and Post-Release – Data from the Income Study.* Veterans Affairs Canada Research Directorate Technical Report, March 2, 2011.

MB MacLean, A Poirier, J Thompson.

Release 3: *Contact with Veterans Not in Receipt of VAC Benefits – Data from the Survey on Transition to Civilian Life.* Veterans Affairs Canada Research Directorate Technical Report, March 11, 2011.

MB MacLean, J Sweet & A Poirier.

Release 4: *Effectiveness of Transition Screening - Evidence from the Survey on Transition to Civilian Life*. Veterans Affairs Canada Research Directorate Technical Report, April 26, 2011.

MB MacLean, J Sweet & A Poirier.

Release 5: *Income Adequacy: Comparing Pre- and Post- Military Incomes of Medical and Non-Medical Releases*. Veterans Affairs Canada Research Directorate Technical Report, June 24, 2011.

MB MacLean, J Sweet & A Poirier.

Release 6: *Effectiveness of Career Transition Services*. Veterans Affairs Canada Research Directorate Technical Report, July 27, 2011.

J Thompson, A Poirier.

Release 7: *Survey on Transition to Civilian Life: Veterans not Receiving Benefits from VAC*. Veterans Affairs Canada Research Directorate Data Report, 15 August 2011.

Thompson JM, Sweet J, Poirier A, VanTil L.

Release 8: *Suicide ideation and attempt findings in the Survey on Transition to Civilian Life: Descriptive Analysis*. Veterans Affairs Canada Technical Report. 30 November 2011;39 p.

Thompson JM, Pranger T, Poirier A, Sweet J, Iucci S, Ross D.

Release 9: *Mental health findings in the 2010 Survey on Transition to Civilian Life*. Veterans Affairs Canada. Research Directorate Technical Report. Charlottetown. 01 August 2012;42 p.

Thompson JM, Poirier A.

Release 10: *Descriptive Cross Tables from the Survey on Transition to Civilian Life*. Veterans Affairs Canada Technical Report. 12 January 2012;8 p.

MB MacLean, J Sweet & A Poirier.

Release 11: *Predictors of Persistent Low Income*. Veterans Affairs Canada Research Directorate Technical Report, April 3, 2012.

MacLean MB, Van Til L, Thompson JM, Sweet J, Poirier A, Sudom K, Pedlar DJ.

Release 12: *Adjustment to Civilian Life*. Veterans Affairs Canada Technical Report. 24 January 2013.

MB MacLean, A Poirier.

Release 13: *Identifying Afghanistan Service*. Veterans Affairs Canada Research Directorate Data Report, May 10, 2013

Thompson JM, Pranger T, Sweet J, Poirier A, McColl MA, MacLean MB, Besemann M, Shubaly C, Moher D, Pedlar D.

Release 14: *Disability findings from the 2010 Survey on Transition to Civilian Life*. Veterans Affairs Canada Research Directorate Technical Report. 28 October 2013.

Hachey, KK, Sudom KA.

*Canadian Forces personnel adjusting to civilian life: Resources promoting successful adjustment.* Ottawa, ON: Department of National Defence. DGMPRA Technical Memorandum 2013-008. 2013.

## **Peer-Reviewed Publications:**

Thompson JM, Hopman W, Sweet J, Van Til L, MacLean MB, VanDenKerkhof E, Sudom K, Poirier A, Pedlar D.

*Health-related Quality of Life of Canadian Forces Veterans After Transition to Civilian Life.* Can J Public Health 2013;104(1):e15-e21. Avail:

<http://journal.cpha.ca/index.php/cjph/article/view/3403>

MacLean MB, Van Til L, Thompson JM, Sweet J, Poirier A, Sudom K, Pedlar DJ. *Post-Military Adjustment to Civilian Life: Potential Risk and Protective Factors.* Physical Therapy J 2014; 94(8): 10p. Published online June 13, 2013.

Thompson JM, Zamorski M, Sweet J, VanTil L, Sareen J, Pietrzak RH, Hopman W, MacLean MB, Pedlar D.

*Roles of physical and mental health in suicidal ideation in Canadian Armed Forces Regular Force veterans.* Can J Public Health 2014;105(2):e109-e115.

## Appendix C: Definitions

### Classes of Primary Reserves<sup>14</sup>:

- Class “A” Reserve Service is when the member is performing part-time training or duty in circumstances other than Class B or Class C Reserve Service.
- Class “B” Reserve Service is when the member is on full-time service and is serving on a training course, or as a temporary instructor conducting training, or on other approved duties of a temporary nature.
- Class “C” Reserve Service is when the member is on full-time service and is serving in a Regular Force established or supernumerary position, or is deployed on an operation, domestically or internationally.

### Groups used in survey data analysis:

Individuals move between the Regular Force and Primary Reserve; and within the Primary Reserve there is frequent movement between Class A, B, and C. This movement was addressed in the study by assigning each Veteran to one of the following mutually exclusive categories:

- **Regular Force Veterans** had full-time service in the Canadian Armed Forces. They may also have served in the Primary Reserve Force. They released between 1998 and 2012. <sup>15</sup>
- **Primary Reserve Class C Veterans** had full-time service in support of deployed operations, domestically or internationally. They also served in Class A and B, but they had no Regular Force service during the study period. They released between 2003 and 2012. <sup>15</sup>
- **Primary Reserve Class A/B Veterans** had Class A part-time and Class B temporary full-time service. They had no Regular Force or Class C service during the study period. They released between 2003 and 2012. <sup>15</sup>

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<sup>14</sup> Queen's Regulations & Orders, Chapter 9; excludes other types of Reserves: Supplemental, COATS, Rangers.

<sup>15</sup> End year was 2011 for income study