

The Case of the Missing Canadian Gun Owners

by

Gary A Mauser

Professor

Faculty of Business Administration and  
The Institute for Canadian Urban Research Studies

Simon Fraser University

Burnaby BC

Canada V5A 1S6

604-291-3652

Email: [mauser@sfu.ca](mailto:mauser@sfu.ca)

Web: [www.sfu.ca/~mauser](http://www.sfu.ca/~mauser)

Presented to the annual meeting of the American Society of Criminology, Atlanta,  
Georgia, November 2001

## Introduction

In 1995, the Canadian Parliament passed Bill C-68. This law mandated all gun owners had to be licensed by Jan 2001 and all firearms registered by Jan 2003.

In Jan 2001, the Canadian Firearms Centre [CFC] announced that almost 2 million gun owners had a license or had applied for one. At the same time, the CFC released a new survey saying there were 2.2 M gun owners in Canada, which meant that around 90% of all firearm owners had complied with the law.

This is somewhat surprising. In 1998, the CFC had estimated there were 3.3 M gun owners. By their figures, one-third of gun owners divested themselves of all of their firearms in just two years. That's a big drop.

As well, some critics [CILA/NFA] claim that there really are 7 M gun owners in Canada. If so, the 2 M people who comply with the law is even a smaller percentage.

The questions I will examine in this paper are:

How many gun owners are there in Canada?

How has this number changed over the past decade?

What proportion are complying with the law?

This is a work in progress. Data was not as easy to get as I'd thought when I started.

Note: this paper examines the "gray" market not the "black" market. The examination of criminals and the firearms owned by criminals' is beyond the scope of this paper. The examination here is based upon telephone surveys. Criminals are not likely to be selected in phone surveys, nor, if selected, are they likely to agree to answering questions.

You may want to take out a note pad and jot down some of the figures. It gets confusing.

## The Canadian Firearm Centre's 2001 estimate

---

Table 1 – GPC estimate of Gun owners

---

The CFC arrived at its 90% estimate by dividing the 2M gun-owners who have gotten or applied for licences as of Jan 2001, out of an estimated 2.2 M gun owners in Canada.

The CFC estimate of 2.2 M gun owners is based upon the GPC Dec 2000 survey showing 17% of households have firearms.

The CFC's earlier estimate had been based upon earlier surveys showing 24% of households or 3.3 M gun owners

How solid is the GPC survey estimate taken in Dec 2000?

First, the GPC survey is a high quality scientific survey, conducted by a professional firm. They used representative sampling and professional interviewers. The sample size is quite impressive, N = 6,145. Second, the response rate is 28%; which is respectable, if somewhat low.

However, the estimate is marred by a few weak assumptions. In the GPC survey, 3% of the entire sample claimed to hunt/target shoot but not to own a firearm; an additional 1% of the sample refused to answer the question about firearm ownership. The GPC estimate assumed that these respondents did not own a firearm.

It would be reasonable to assume that these respondents are not telling the truth. If it is assumed that these respondents actually own firearms, then the survey estimate increases from 17% to 21% of Canadian households own firearms.

---

Table 2 – survey estimates [1990s]

---

The Canadian Firearm Centre's Previous Estimates

Previous CFC estimates have varied widely: from 17% to 33, with a mean of 26%

Interestingly, the CFC estimates were higher in early 1990s [before Bill C-68, 1995 firearms act] [8 point drop; 24% drop].

---

Figure: Trend in survey estimates

---

Theoretical Weaknesses in Surveys

It is important to remember that all surveys rely upon the respondents to be able and willing to answer questions.

These two weaknesses exist in all surveys, and they occasionally result in under reporting. Occasionally, this underreporting can be substantial.

First, ignorance: the respondent may

- Not know for sure the definition of a firearm
- Not know there is a firearm in the house,
- Not know the firearm law

Existence. The family member who is interviewed may not know that another family member has a firearm in the house. Firearms are disproportionately owned and used by men [around 80%]. Wives or children may not know a firearm is still in the house. This is particularly true if the firearm may not have been used in awhile.

For example, a sizeable percentage of respondents who say there is a firearm in the house report it has not been used during the past year.

Gun owners are aging. 25% of the respondents in the GPC are over 55 years of age; no one in their household may have used a firearm in several years.

The law. The law is complex and it changes. Massive legislative changes introduced in 1977, 1991, and 1995. Regulations and interpretations have changed much more frequently. Few people – police included -- can say they fully understand the law. Thus, respondents may legitimately fear admitting they have a firearm because they are doubtful about its legality.

Second, willingness. Rs may not tell the truth. Rs may wish to conceal their own behavior or be reluctant to inform upon a fellow member of the household.

It is difficult to estimate how many Rs lie. The number of Rs who deny they have a firearm in the house seems to have increased since 1995. This may be due to increasing “demonization” of firearm ownership, and owners increased fear of the law. Or it may even to owners following the CFCs instructions not to tell people about their firearm.

---

Table 3 - Under-Reporting by women

---

Under-reporting by women

In a survey Professor Buckner and I did in 1995, we found a substantial difference in firearms reported by married men and married women. Supposedly these two groups are married to each other, so they should in fact report the same percentage of firearms in their household.

The difference could be explained by either under-reporting by women, or by over-reporting by men. Under-reporting by women is the most likely explanation; men are not likely to boast about something that attracts social disapproval and may cause legal problems. Few non-smokers would claim to be smokers.

Similar differences between married men and women have been found in several surveys. One survey found that teenaged females reported fewer firearms in their parents' homes than did teenage males.

## Correcting the CFC's estimates

---

Table 4 – Corrected estimates of number of gun owners

---

The Mauser-Buckner survey found that adding in the “refusers” and correcting for the under-reporting of married women increased the estimate from 23% of households with guns by 5.5 points to 28.5%.

These corrections do not fully account for under-reporting. Other women, beside wives, probably under-report as well, but we have no way to estimate the extent of the correction needed.

If the same corrective factor as found in the Mauser-Buckner survey is applied to the CFC estimates, the new estimates are 5 – 7 percentage points higher:

12 survey mean 33%, 3.9 M households, and 4.7 M gun owners  
pre-95 surveys, 36%, 4.3 M households, and 5.2 M gun owners  
post-95 surveys, 26%, 3 M households, and 3.8 M gun owners

These estimates are considerably higher than CFC's estimate of January 2001 (that was based upon the December GPC survey) of 2 M households with guns and 2.2 M gun owners.

Now that the survey estimates have been examined, it is time to return to the basic problem of this paper that is to understand how these estimates differ. What happened to the missing Canadian gun owners? Have they sold their firearms and dropped out of shooting? Or have they retained their firearms and are refusing to comply with the law?

## Analysis

First, I must admit that solid numbers are very difficult to get. I thought I would have been able to get more than I have by the time this paper was to be presented.

Nevertheless, here are a few hypotheses about what is happening.

First, there has been a real shrinkage since the early 1990's:

Owners have sold/surrendered all guns.

Some have died.

Others are still alive, but they have sold their last gun.



Thus, if 1.6 – 3 M gun owners divested themselves of their firearms, 3.2 M – 6 M guns were sold or surrendered to police. There are no records of this many firearms being surrendered to the police.

Gun sales. Data Mixed.

Gun ads in newspapers: declining  
Gun shops/gun shows report sales increasing.  
[Particularly since \$25 transfer fee suspended]

TANs available, but not total guns sold

All sales since 1998 are legally required to be recorded and the firearm registered. And originally subject to a \$25 transfer fee.

At the point of sale, the CFC issues a “temporary authorization number” [TAN] so new owner can take possession until the firearm is registered in his name. Which takes a month or two.

Approximately 4 M TANs issued as of September 2001, but this does not mean that 4 M firearms have been sold during this time period.

This is the best criterion, but there are a few caveats.

First, it does not include any sales before 1998.

Second. It over-counts the number of guns sold.

The CFC issues a new TAN for every transaction. The TAN doesn't stay with firearm. Thus, there is double, even triple accounting. This can be seen in the example:

A firearm is imported by a wholesaler [registered and issued a TAN]  
Then sold to retailer/another TAN  
Then it's sold to end owner/user/another TAN issued  
Therefore, there are two or three TANs for the same firearm.

4 million TANs mean a maximum of 3 M guns in total sold since 1998. Of course, not all of these sold by owners divesting themselves of their last firearm. Some bought and sold among continuing owners.

If we assume that all of these were sold by people divesting themselves of all their firearms, then this would account for only 1.5 M gun owners dropping out. We need to account for between 1.6 and 3 M gun owners to account for the estimated drop from 1995 to 2001.



Most likely, approximately 2 M people continue to own guns, but have not gotten the necessary licence to retain their firearms legally.

## Summary and Conclusion

Survey estimates of the number of gun owners in Canada have declined from 36% to 17% of households over the past decade. This means that estimates of firearm owners has dropped from about between 5.2 M and 3.8 M in the mid 1990s to 2.2 M in 2001. In other words, between 1.6 and 3 M gun owners must have divested themselves of their firearms. It is difficult to find strong evidence to support this magnitude of decline.

Some of the decline in number of gun owners is real: due to mortality, recruitment failure, people divesting themselves of their firearms. But a greater percentage appears to be gun owners deciding not to comply.

The CFCs estimate in 2001 of 2.2 M is too low, I believe, but the CILA estimate of 7 M is far too high.

My rough estimate is that there are approximately 4.5 M gun owners in Canada, and that about half of these have kept their firearms without applying for a licence. Since this decision is illegal, it follows that many owners also have also decided not to report their firearms in telephone surveys.

If this proportion of Canadian gun owners decide to violate the law, it wouldn't be that surprising. It is consistent with "grey markets" in other Commonwealth countries. Police in UK, Australia, NZ estimate that about half of guns remain unregistered and one-third of "otherwise law-abiding" owners unlicensed even after decades of firearm registration.