

Canada's International Travel Survey: Keeping up with Demands

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1. Introduction

The International Travel Survey (ITS) is an ongoing survey conducted by Statistics Canada since the 1920s, to meet the requirements of the Canadian System of National Accounts (Balance of Payments (BOP)). Through the years, the need for more detailed characteristics of travellers for market research and industry planning was gradually incorporated in the survey. Today, the program provides a full range of statistics on the volume of international travellers and detailed characteristics of their trips such as expenditures, activities, places visited and length of stay. It covers both Canadian residents returning from trips outside Canada and international visitors to Canada.

In addition to fulfilling BOP requirements, the ITS data are also being used by the Tourism Satellite Account (TSA), Customs Canada, the Canadian Tourism Commission (CTC), provincial tourism agencies, the US Department of Commerce and a number of private sector industries. The program is also used for reporting to international organisations such as the World Tourism Organisation, the Organisation for Economic Co-operation and Development and the Pacific-Asia Tourism Association.

The program has two distinct components: Frontier (census) Counts and Questionnaire (sample) Surveys. The Frontier Counts component enumerates all persons who enter Canada via land, sea and air, while survey questionnaires are handed out to a sample of international travellers and returning Canadians in order to determine their characteristics and trip spending patterns.

Canada Customs and Revenue Agency (CCRA), under a Memorandum of Understanding in place with Statistics Canada since 1984, collects and remits frontier counts to the Bureau and distributes questionnaires to travellers. The latter are selected using a 'stint' sampling methodology. For each port of entry, a start day is selected from which a pre-specified number of questionnaires are distributed. The respondents provide information for themselves and only those for whom they feel comfortable reporting on spending and activities. In 1997, about 300,000 Canadian, 340,000 US and 320,000 overseas questionnaires were given to international overnight travellers, while about 130,000 and 170,000 questionnaires were distributed respectively to Canadian and US same-day travellers. The questionnaire response rates have deteriorated, in part apparently associated with the new, longer and redesigned questionnaire in 1989, dropping from 17% in 1986 to 5.8% in 1999.

This paper discusses briefly our efforts and experiences in recent years in searching for ways to strengthen the ITS, particularly in improving survey coverage and response rates. Data quality improvement was pursued for national and sub-national data. In addition, we also looked for ways to expand the capacity of the ITS vehicle in order to meet the increasing needs of data users. Based on the findings of our research, Statistics Canada has developed a new approach to conducting the ITS, as described in this paper. Also discussed are the planned activities over the next four years toward the implementation of this new survey approach.

2. Search for new ITS methods

Initially our research, during 1997 and 1998, focused on improving survey return rates while maintaining the basic method of questionnaire distribution at ports of entry. The method tested included, shortening the time period of questionnaire distribution (recognising the large number of tasks asked of Customs officials); employing Statistics Canada interviewers to distribute the questionnaires; interviewing travellers to collect a few key data before handing out the questionnaires; employing more respondent-friendly questionnaires of different lengths to include different modules of survey questions; and soliciting traveller participation using small gifts, e.g. trip planners, wall posters and a CD-ROM containing travel information in Canada. These studies and their results have been documented by Laflamme *et al.* Overall, the results suggested that the survey return (or response) rates for Canadian and US travellers could be raised by two or three fold to the 25% range. In comparison, the increase for overseas visitors was more modest at 15%, though the rate of increase was much higher for many tourism markets (e.g. Japan) relative to the existing ITS survey. The testing of questionnaires of different lengths also indicated that a longer questionnaire did not necessarily result in lower response rates. Travellers appeared to like to talk about their trips (e.g. place visited and activities) and their trip

experiences (e.g. ratings of tourism facilities and services). Having these 'soft lead in questions' facilitated better responses for the more difficult questions on trip spending.

As noted above, the gain in return rates by the method studied was substantive. However, it was decided that a response rate of 25% could still pose significant risks to the quality of the ITS data. We then extend our research on other data collection methods so as to achieve the level of response rates that Statistics Canada accustoms to, e.g. above 75%. This mandate resulted in the examination of methods which had been previously set aside for cost reasons. In addition, it was decided that efforts should be focused primarily on improving the quality of data on overseas visitors, the flow for which current data are the weakest while of the greatest demand.

In 1999, a test of the air-exit survey of overseas travellers was carried out at 4 major airports in Canada. This test targeted on travellers from the top four overseas tourism markets, namely the United Kingdom, France, Germany and Japan. Statistics Canada personnel interviewed the travellers in the departure lounge while they were waiting to board the sampled flights. This study examined the method of face-to-face interviews and that of having the travellers completing the questionnaire themselves. Sufficient staff were assigned so that the travellers would be interviewed in their native languages. Test results show that the two methods of data collection were very successful, achieving response rates of over 90%. The self-completion method, however, resulted in significantly more item non-response, particularly for the trip spending questions. This study also revealed certain logistical challenges pertaining to the physical and administrative arrangements at each airport, which subsequently helped improve the efficiency and effectiveness in conducting the main air-exit survey.

Cumulating the experience of the field tests in 1997-1999 and other developments in Statistics Canada and Canada Customs and Revenue Agency, the strategy for a redesign of the ITS began to take shape. This strategy is as described below.

3. A new approach to conducting the ITS

There are three elements in our new approach to conducting the ITS: taking control of data collection, increasing the use of frontier data, and increasing survey capacity to meet new data needs.

3.1 Taking control of data collection

So far, we have relied on Customs officials to distribute survey questionnaires to travellers. Many of these officials perceived that statistical tasks are preventing them from achieving the priority targets of their border operations. The test findings suggest that we would not be able to achieve our very high response rate targets by distributing questionnaires at the border even in the best conditions. The new strategy therefore is to replace the method of questionnaire distribution at the major ports with methods of interviewing travellers directly by Statistics Canada. The co-operation of Customs officials will still be needed at smaller ports which are over 200 in number across the country.

More specifically, direct interviews of travellers can be implemented in different ways, depending on the traveller flow. The air-exit survey as described above is most suitable for overseas travellers who leave Canada by direct flights to overseas destinations. These travellers often have to wait for over an hour and therefore quite happy to speak with the interviewer before they board their flights. Most of these travellers would have also entered Canada by air, and their responses can therefore be weighted up using the frontier (entry) counts. The air-exit survey can be extended to include overseas travellers who exit Canada via the US. Since the waiting time for flights to US is often short (e.g. about half an hour), the cost for surveying this traveller flow could be higher than for overseas travellers who leave on direct flights to overseas destinations.

By sampling Canadian and US air travellers from the Customs declaration cards, we can eliminate the need for distributing survey questionnaires at the arrival points. The telephone number of each sampled traveller can be traced without much difficulty based on the address information on the declaration card and publicly available electronic telephone directories. Statistics Canada interviewers will then interview the travellers using the computer assisted telephone interview (CATI) facilities. The operation of sampling and tracing will become more efficient when the data on Customs declaration cards become available by electronic imaging.

For the land ports, Canada Customs and Statistics Canada are co-operating in redesigning the computer system which records and tracks border crossing data at 32 major land ports. We envisage that the new system will select travellers while they cross the land ports so that Customs officials can collect the contact information for Statistics Canada to interview the travellers subsequently by telephone.

A special group of land travellers are those registered with the CANPASS program. By obtaining pre-authorisation, these travellers can enter through special lanes at a land port without being routinely stopped for inspection. These crossings are still recorded with the digitised licence plate data or the

swiping of smart cards. Again, the ITS will sample these crossings from the frontier data base and interviewed the travellers by telephone.

To sum up, the new approach to conducting the ITS sample survey will change the form of participation of Canada Customs significantly. The current method of questionnaire distribution will be limited to small land ports which would otherwise be very costly to survey by Statistics Canada. For the airports and major land ports, travellers will be sampled from the Customs declaration data directly while they cross the border, or from the border-crossing records for CANPASS travellers. We envisage that these changes will also reduce the workload of Customs officials significantly and help expedite travellers entering Canada.

3.2 Increasing the use of frontier data

The frontier data have been a valuable asset of the current Travel and Tourism Statistics Program. With the new approach, they will play an increasingly more importance role. The monthly publication of frontier counts will continue to be the timeliest indicator of international travel and tourism activities in Canada. As described above, more frontier data will be captured in order that Canadian and US air travellers can be sampled for telephone interviews. Indeed, highly automated procedures will have to be developed at Statistics Canada to ensure that these sampling frame data be received and processed quickly in order that the travellers can be contacted before their recall abilities are affected.

We shall continue the use of frontier counts in weighting sample data to produce valid estimates for the traveller population. In addition, we shall capture more traveller and trip characteristics which can be used to reduce the effect of uncontrollable biases in the sample survey data. The most likely source of bias would be due to survey non-response. Another inadvertent source of bias could be caused in selecting the flights for the air-exit survey and selecting the travellers available for interviews. At the moment, research work is ongoing to develop statistical methods to adjust the ITS sample data using data on trip duration and trip purpose obtainable on the Customs declaration cards for air travellers. We foresee that additional frontier data, such as age and sex of travellers, will become available for improving the quality of ITS estimates.

3.3 Increasing survey capacity to meet new data need

One of the main objectives of improving the ITS is to provide more data to meet the needs of tourism research and market analysis. Additional questions cannot be added to the current survey, as they would suppress the return rates even further. Neither could we re-use the ITS sample to conduct additional studies because the ITS does not collect addresses or other contact information of the respondents in view of the negative effect of such questions on the return rates.

The new approach to conducting the ITS offers unbounded opportunities for additional studies on travel and tourism. First, computer assisted (telephone or personal) interviews can incorporate additional survey questions quite easily compared to the use of paper questionnaires in the current ITS. The new ITS vehicle will have ample capacity to conduct supplementary or follow-up studies. Second, with the availability of the sampling frame data for air travellers and ability to sample land travellers at major ports, we shall be able to select additional samples of travellers for new studies without increasing response burden to the ITS respondents. Furthermore, the additional frame data on all air travellers, such as age, sex and country of residence (or state of residence for US visitors), etc. will be most useful in designing targeted studies on specific traveller groups.

4. Implementation plan

4.1 Traveller Characteristics

The first part of a five-year plan for improving Canada's international traveller statistics is focussed on the Overseas flow. The preferred method for this flow is personal interviews (i.e. air-exit survey) at Canada's major international airports. While the majority of the sampling strategy in year 2000 was aimed at Canada's major Overseas markets; United Kingdom, Germany, Japan and France; responses were received for over 15 markets. This new method of data collection was a phenomenal success. It achieved very high response rates across the targeted market flows with an overall annual response rate of 93%. As a result, the same collection procedures will be maintained in the year 2001. The target number of questionnaires has been increased to about 9,000. In January 2001, the response rate was 93% and the number of questionnaires collected surpassed the target by 30%.

In addition to air-exit interviews for Overseas Air Travellers, different methods will be tested for United States and Canadian Air Travellers. Three options will be tested with regards to these flows;

personal interviews (similar to Overseas travellers);

collect intercept information (name, address and telephone number) for follow-up at a later date (preferable using Computer Assisted Telephone Interviewing); and

sampling from E311 (arrival) declaration cards.

Over the next three years Statistics Canada will work with Canada Customs and Revenue Agency on a strategy for improving traveller statistics for land travellers. The strategy of collecting basic traveller data (address, telephone number) at major land ports through the Agency's current automated system will be studied further. This information will be used to either mail out questionnaires or collect required information through Computer Assisted Telephone Interviewing. Continued co-operation from CCRA in Canada's over 250 small ports to distribute questionnaires will complete the strategy for air and land flows.

Outside of Air and Land Travellers, the remaining flows represent about two percent of total international travel. Questionnaires will be distributed by CCRA officials in Vancouver and Statistics Canada personnel in Halifax for cruise travellers. In year four (4) a strategy for sampling other flows such as private plane, boat and rail on a rotational basis will be implemented. The preferred strategy for these travellers will be to have questionnaires distributed by Statistics Canada Interviewers.

4.2 Frontier Counts

The year 2001 will see closer working relationships with CCRA;

to image E311 traveller declaration cards, and

respond to administrative changes related to Expedient Passenger Release Systems (E.g. CANPASS).

A test for imaging E311 cards is scheduled for May 2001 at CCRA premises.

5. Conclusion

Tourism in Canada is seen as a growth industry, out pacing overall growth for the Canadian economy by over two fold (8% versus 3.2% in 1999). The bottom line result of economic growth from a statistical agency's perspective is greater demand for information. Statistics Canada will continue to work with its main partners, the Canadian Tourism Commission and the Provinces and Territories, to meet the ever changing needs of the tourism user community. The improvements made to date and the five-year strategy shows Statistics Canada is well on its way to improving the quality and capacity of its International Travel Statistics Program. The results of the improvements made to the Overseas flow will be available by the end of the year 2001.

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RESUME

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