

Interview

Ivan Fellegi, Statistics Canada, Canada

Interviewed by: Lia Katz and Brent Willig, The George Washington University



Dr. Ivan Fellegi

Dr. Ivan Fellegi, the Chief Statistician Emeritus of Statistics Canada, spoke with us, Lia Katz and Brent Willig, in the spring of 2012 as part of a George Washington University (GWU) series on courageous moments in the lives of prominent statisticians. The intent of these interviews is to hone in on leadership examples in statistical fields and draw on these experiences to better understand the needs and opportunities in the field.

In similar spirit to the book, Profiles in Courage, this series illuminates an inflection point in each of the careers of statistical leaders. Dr. Fellegi, a renowned leader in the field, was kind enough to discuss his experiences leading Statistics Canada and transforming

the agency into “the best statistical agency in the world.”

The introduction below details the background to the challenges that Dr. Fellegi faced in his early days leading Statistics Canada. Following the introduction, Dr. Fellegi discusses his perspective on the techniques he used to reform and reinvent Statistics Canada.

Born in Hungary, Dr. Fellegi showed promise as a poet in his early years. In order to secure a place in university, however, he decided to compete for entry in a more scientific field, mathematics. His family was considered bourgeois by the Soviets and he wanted to ensure that there was no dispute about his qualifications for entry: “My teachers wanted me to enter the literature category, but I entered in the one subject the judges couldn’t dispute, mathematics.”¹

After the Soviets crushed the Hungarian revolution in 1956, he fled, arriving in Canada in 1957.² He enrolled in Carlton University, and was awarded the school’s first PhD in 1961. At the same time, he started work at Statistics Canada, (then the Dominion Bureau of Statistics) as a technical clerk. His responsibility at the agency grew, until, on September 1, 1985, he was named the Chief Statistician of Canada. He served as Chief Statistician for 22 years, until his retirement in 2008.

Statistics Canada is the central clearinghouse for all data gathering and analysis about Canadians. While the biggest project it undertakes is the national census, which is executed every five years, the agency has 350 active surveys.² to help the government, academics,

¹ “A few less surveys, a few more poems? The Ottawa Citizen, 16 February, 2008. Web. <http://www.canada.com/ottawacitizen/news/story.html?id=210f44d8-7cf2-48c2-941c-7bc9a738df99>.” ² “A few less surveys, a few more poems,” *ibid*.

² “A bout Us” Statistics Canada, 4 May 2011. <http://www.statcan.gc.ca/about-apercu/about-apropos-eng.htm>.

business, and the media better understand the implications of trends, political, economic and social,

on Canadians⁴ The agency is charged with remaining politically neutral and has the challenging task of collecting and analyzing data without bias.

Dr. Fellegi recalls the years prior to his leadership at the agency as difficult ones: “The bureau was really in a very bad way there was internal warfare. In fact we were in the media daily, in a negative cast; not for our statistics ...but for “scandals.” There were leaks about other people, people leaking information about information or gossip or presumed information about other people, which the media discussed and spun. The bureau came very close to being basically split up by the Canadian government as an organization that simply cannot be maintained as a single unit, a single entity.”

In an incident highly dramatized by the press, an executive who had been with the agency for 27 years resigned with a parting memo, excoriating the agency for being a corporate mess, with a frustrated staff with low morale, and for having lost their internationalprestige.³ Other such incidents criticized the agency for using selective statistics to mislead Canadians about petroleum issues⁴ and for losing data that had been entrusted to the agency by the British Columbia court system.⁵

⁴Some examples of Stats Canada’s work include: a comparative study on the impact of the income of fathers on the income of their sons 25 years later. Finding very little correlation, the study, proved that Canada was among the most open societies in the world. Another study, compared the impact of single parent families on children, discovered that “while more than 80 per cent of Canadian children are doing well, a disproportionate number of low income and single-parent children have problems, as measured by short attention span, behavioural problems, low grades, early smoking, etc.” (“Western helping numbers add up.” Western News. 5 January 2012. Web. http://communications.uwo.ca/western_news/stories/2012/January/western_helping_numbers_add_up-lite.html).

³ “Statistics Canada attacked in memo”. Montreal Gazette. 20 August 1975. Web. <http://news.google.com/newspapers?id=3pcuAAA AIBAJ&sjid=s6EFAAAAIIBAJ&pg=3585,1170699&dq=statisticscanada&hl=en>.

⁴ A former executive at the Bank of Canada criticized the agency publicly for using selective statistics to support the government’s program of Canadianization of the petroleum resources in Canada. “The figures yielded by the Statistics Canada survey show that only about forty percent of the industry is in fact controlled in the United States, and not 70 or 80 percent as is implied by other figures

So, while a healthy democracy benefits greatly from a politically neutral and unbiased central source of data, Statistics Canada, at the time, was suffering from a serious lack of confidence both internally and externally. As Dr. Fellegi stepped into his role, first as Deputy Chief Statistician, and, shortly after as the Chief Statistician, it was his leadership capabilities that transformed the agency.

The interview below describes, in Dr. Fellegi’s own words, some of his techniques and strategies to transform the agency into the top statistical agency in the world. This required creating a structure wherein the research and data analysis could be completed in a politically neutral and free from bias environment, even while relying on the federal government for funding of the bureau. Additionally, Dr. Fellegi instituted different means of communicating with staff, both to ensure a steady means of communication from top down, but also from bottom up. Finally, Dr. Fellegi focused on developing staff in the agency, both to increase loyalty and to decrease the infighting that had characterized the bureau for much of the 70s and early 80s.

Most importantly, Dr. Fellegi told us, was that ideas and ideals had to be actionable. Without direct action to ensure that people changed their behaviors, change would be impossible:

Whenever I said that we need to do something, I never preached about it because that is useless. Exhortation doesn’t get you anywhere ...one has to dream up techniques or tools or prods that make people behave the way you hope they would behave.

His years of leadership, strategies and techniques, paid off; during his tenure the agency became a trusted source for data and statistics on Canadians and it was named the top statistical agency in the world by the Economist magazine twice. Reflecting on the changes in the agency, Dr. Fellegi has said:

In the 1960s, the Opposition would use one set of numbers to debate something like unemployment in Parliament and the government would use another

selectively used by the authors of various government energy documents.” (Ottawa’s Statistics Misleading.” Edmonton Journal. 4 February 1981. Web. <http://news.google.com/newspapers?id=aP9k AAAAIBAJ&sjid=g4MNAAAAIIBAJ&pg=1126,1711372&dq=statistics-canada&hl=en>).

⁵ “Statistics Canada can’t find records on criminal cases.” Montreal Gazette. October 3, 1979. Web. <http://news.google.com/newspapers?id=vhQyAAAAIIBAJ&sjid=e6QFAAAAIBAJ&pg=1267,777150&dq=statistics-canada&hl=en>.

*set. We've reached the point now where we are viewed as trusted brokers and our numbers are accepted by all politicians.*⁶

Since his retirement, Dr. Fellegi serves as an advisor to the bureau, maintaining an office and working twice a week. He has remained a vocal force in Canadian statistics, advocating loudly against ending the mandatory long form census and the recent budget cuts that threaten to paralyze the agency.

The interview below tells the story of how Dr. Fellegi transformed the agency, the intentions behind each of his policy decisions and changes, and his concern for the agency's future.

Student(s): How did you take Stats Canada from being a good organization to being a world leader in statistical research?

That's a simply asked question, but there is no simple answer to that. It is really striving to improve on things that you think are capable of being improved or what should be improved, and paying attention to the fundamentals, which are methodology, confidentiality, keeping in touch with various clients [statistical offices have different client groups], creating a capacity to put in place new products as needed – which is easier said than done – and creating an internal morale where people strive and are given the opportunity to reach their personal limits.⁷

Student(s): Can you tell us a little bit more about that specifically and how in your role as the chief statistician you helped foster that environment?

Yes, really starting, in a sense, from a negative – although I might have gotten there anyway – but it started from a negative. It was in '79. I was in Washington for a year. President Carter put together a task force to make recommendations to reorganize the U.S. statistical system and I was the director or something like that of that task force. And I came back to Ottawa in '79 just a few months after a major budget cut was imposed by the government of the day, which the management – in my absence and I wasn't Chief

⁶ McMurdy, Deidre. "Aspiring poet turned statistician counts on reason over rhyme". The Hungarian Presence in Canada. Web. <http://www.hungarianpresence.ca/scitech/fellegi.cfm>.

⁷ As stated in Dr. Fellegi's analysis, these criterion are fundamental to a sound statistics and analytics agency regardless of nationality. Fellegi, I.P. and Ryten, Jacob, "The Effectiveness of a Supranational Statistical Office: Pluses, Minuses, and Challenges

Statistician at any rate – met largely by basically laying off staff. Of course [there was a] discontinuing of products as well, but laying off the staff who were associated with those particular products...And I came back at the tail end of that process where most of the staff who were to get pink slips already did get it. There were a

few whom I had to notify. That was a searing experience...I, more or less, made a vow that I would do my damndest to avoid it in the future.⁸

Now as it happens when I was appointed in '85 to be Chief Statistician, that was right on the heels of another big budget cut, a very big budget cut. And I was, sort of, bound and determined to avoid layoffs. The very first memo that I sent to staff as Chief Statistician basically proposed a social contract. Under the terms of the contract, handwritten obviously – but written on my behalf – and not signed or countersigned by every member of the staff other than myself, indicated that if you are willing to be redeployed wherever we need you, and we undertake to give you the training that might enable you to do the job that you may not have been the ideal candidate for, then we will tie ourselves into knots and if arithmetically possible to avoid the layoff, then we will do so.

In other words we will deploy everybody into a job, whether they are the right candidates for that or not, and we will provide the training and mentoring and general support. That was the beginning of making the bureau responsive. Prior to this period people basically joined Statistics Canada and they always [stayed on one track], it was a position in the organization where most people would spend their entire career. They joined and then they retired 35 years later. But, they mostly stayed in the same location, moving up a few steps perhaps in the hierarchy, but essentially not doing anything different from what they started out doing and not learning new skills, and certainly not becoming redeployable easily. That created a huge amount of rigidity in the organization. It also created all sorts of other problems.⁹

Viewed from the Outside," Journal of Official Statistics, Vol 21, No 2, 2005.

⁸ Trust and two way communication are key to facilitating a loyal and productive employee base. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

⁹ This was a functional problem within the organization that had been institutionalized for years. After breaking this rigidity, Statistics Canada now has taken measures to ensure the flexibility

[This rigidity] created factionalism, internal warfare, and certain groups being against other groups causing really very bad morale, particularly in the late 70's. I set out to overcome this and make the bureau into a much more flexible organization, which meant multiskilling most of the staff; that is the only way one can really put people to use wherever we need a new product.

And there were many particular techniques that we employed. We created an assignment problem whereby anybody who was willing to try something new could put his hand up or her hand up and any manager who needed some temporary staff, not temporary for a few weeks, but temporary for six months to a year or a year and a half, could put his or her hand up. And we just put in place a small brokering agent who brought the two together.

That started people moving around and of course it had a number of voluntary approvals before somebody was redeployed. The person obviously had to want that. His or her manager had to agree and the seeding manager had to agree. It became a brokering exercise, but since one of the conditions to entice people to move around a little in this manner, was that they could at any time, if they disliked the new place, they could reclaim their home position. That of course meant the home manager couldn't employ anybody permanently in that position, so what did the home manager do, he or she, got somebody else on assignment.

This kind of spawned an environment in which people moved around. After a year or a year and a half and then throughout my tenure, at any point in time, 10% to 12% of the staff were on assignment, mostly within Stats Canada, but a few outside [the organization]. That was the start of creating an organization in which people moved around. We gradually moved the bar up and made [the condition so that] beyond a certain rank of appointment [level in the organization], you were appointed to the rank, but not to the position. In other words [employees were not elevated to] a particular position, but to that level so we

and versatility of its employee base. Statistics Canada, "Training and Development at Statistics Canada," Statistics Canada Training Institute, March 1995.

¹⁰ Dr. Fellegi instituted a comprehensive plan to expand the skill sets of employees by encouraging them to move around the organization. Fellegi, I.P., "On Career Development at Statistics Canada," *Optimum*, The Journal of Public Sector Management, Vol. 29, No. 4 (31-37).

¹¹ Investment in employees' development was seen as essential for Statistics Canada's success; the more senior echelons of the

could [continue to] make you move around. And we did. Not arbitrarily, [we were] trying to accommodate people's developmental needs. Every year, the top four levels of the organization would assess from the point of view of their career needs and opportunities and moves were taken accordingly.¹⁰

When I say the top four levels were moved around, they were literally moved around because they had already agreed to being appointed to a level and not a position. Below that level people moved around, but more voluntarily. We brought in, for example, a system: Everybody had a mentor. Every single employee

was, at least, entitled to have a mentor. If they didn't want to have one, they didn't have one, but they were entitled. And of course in a large organization that can only be done by saying, it is not your supervisor who is your mentor because a supervisor might have a conflict of interest. The supervisor would not want to lose the best people, even for training, let alone to go to another place for development. But we appointed the supervisor's supervisor, the second level supervisor, to be the mentor of any employee who wanted a mentor.¹¹

We also established a training institute. There was no training in Statistics Canada to speak of before this time. We established a training institute which is still in place and has literally dozens of courses to offer from methodology, to economics, to sociology, to demography, to techniques of analysis, to communication, management techniques, and so on.¹²

Another plank was partially improving internal communications... you would think human beings are naturally communicative and that is true in terms of gossip, but it is not true in terms of useful communication from the perspective of an organization; it just doesn't happen. So, I put in place a whole series of actual mechanisms that triggered communication. Starting from the top, once a year I committed to have a – jokingly called – state of the union of Statistics Canada. [During the

organization were expected to lead by example. Fellegi, I.P., "On Career Development at Statistics Canada," *Optimum*, The Journal of Public Sector Management, Vol. 29, No. 4 (31-37).

¹² Continuing the theme of increasing the skill set and value of its employees, Statistics Canada established this institute to round out employees' abilities. Statistics Canada, "Training and Development at Statistics Canada," Statistics Canada Training Institute, March 1995.

speech I] reviewed the major accomplishments and why they were important and what I saw as the challenges for the next year and how we planned to meet them.¹³

This was a major discourse that usually lasted two and a half hours and everybody was invited to attend or listen; only maybe 500 could get into a room that we had available, but the remaining employees could listen online. And that was just one particular technique. Another very important technique, of communication, was that every week we had a policy committee meet-

ing. That was the executive committee, whatever you want to call it, we called it the policy committee meeting. No issue was decided between me and my immediate deputies, one on one, ever. We always discussed them in the community with all my deputies. That occurred once a week. The next day, after that meeting, every one of my deputies, I had about seven, was required to debrief himself or herself to the next two levels of his or her employees.¹⁴

If something was decided that one of the people at that level or those levels felt was wrong or could have been done differently or better, the next week we could still discuss it and change our approach. That happened, sometimes, not very often. Mostly it had a communication goal [of opening the channels of information through the hierarchy]. The top four levels by that time of the organization were informed of the same facts and also not only what we decided to do, but why we decided to do it.¹⁵

Student(s): Do you have an example of a decision that was made during one of those meetings?

Yes, I mean, how do we meet a certain sudden budget crisis. Typically that only occurred once a year. We tried to do it once a year in a major planning session but [sometimes that did not work out] and we had to revisit the issue.

Another innovation, but more in the personnel development [side]... We had competitions and then we tried to find out whether the staff considered those

competitions fair. To our shock and horror, it turned out that the staff found them very unfair. So then we decided we needed to do something about it. We put in place certain measures to address that issue. That was discussed in this policy committee and that opportunity for feedback and allowed for discussion the following week from the lower levels. That's just one example where there was actually feedback and we did change our approach.

Student(s): Did staff feel they were being evaluated by different standards?

Well, no, everybody got evaluated once a year, period. But in the public service, generally, when there is a vacancy at a particular level, it isn't just filled by the decision of the manager. It is usually put out pretty well for competition. Then there is a board put together, consisting of four or five people, and they assess the people who apply for those jobs and give the job to the best candidate. This was [the measure we took] to avoid personal favoritism. That's standard in the public service and wasn't special to Statistics Canada.

What we found in Statistics Canada, is that the manager of the vacant position, of course, was always a member of the board. And the other board members generally just complied with his or her wishes. So, in effect, the board was a charade. The manager appointed anyone whomever he or she wanted. That was unique to Statistics Canada, so we needed and wanted to address this issue.

We introduced generic competitions which meant that we didn't put up a vacant job for competition whenever it became vacant. We waited for four, five, or six "similar" positions becoming available for competition. Similar is in quotation marks because no two jobs are exactly similar, but we made them similar enough that we said we will put up a competition for these four or five positions. They were at the same level and they had certain things of similarity and we put together the board which did not consist of the local managers. And so, presumably for the fair haired boys or girls, there was no opportunity for them to win

¹³ The State of the Union Speech was used to facilitate communication and update the employee base on the goals for the upcoming year and the status of past achievements and benchmarks. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

¹⁴ The follow up to the "State of the Union" was arguably just as important as the speech itself; this allowed for employees to communicate up the hierarchy and provide crucial feedback. Fellegi,

I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

¹⁵ By establishing rule by committee, Dr. Fellegi was able to delegate to his deputies and empower them, setting them up for greater responsibility in the future. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

unfairly. If they were the best people of course they would win. We tried to make the boards more fair to get the best people to apply and not just the local people. Of course the local manager always had an interest in promoting somebody who already knew a fair bit about the job. And this tended to be someone from the same division which just perpetuated insularity which I wanted to fight. That was another technique not only to be more fair in promotions, but also to promote more diversity and move people around.

The moving around wasn't just an answer for its own sake. It resulted in really an organization that became very coherent. When visitors came to Statistics Canada from abroad – and I always met with them afterward and asked them what did they find, what did they like, and what did they dislike – almost the common theme of all visitors was they were amazed to what extent people thought similarly, because we have this coherence. It wasn't indoctrination, but it was the sharing of thoughts and arriving at conclusions really through consultation and through communication.¹⁶

Let me go back to [the theme of] communication because there were other techniques. One of the most important techniques of internal communication was that every two or three years we put up an employee opinion survey. It was anonymous so you could voice your opinion. The only identifications were your home division, your general classification, and what level in the organization were you in. We needed to make sure that anonymity wasn't comprised, so we couldn't go into too much detail. So we needed to balance it enough to make the results more useful and yet maintain confidentiality or anonymity.

The one rule that we had about those employee opinion surveys was that they were tabulated by local division; the results were tabulated and compared to the bureau average. Every manager had to stand up in front of his or her employees to discuss the results for that division: what was better, in what areas did the divisions seem to do better than the bureau on the whole, in what areas did it seem to do worse, and how can we generally improve the results for the next round of employee opinion surveys. The manager had to discuss those things and then set up a follow up process

¹⁶ Organizational coherence is absolutely necessary to a successful statistics organization. Through communication and employee engagement techniques, Dr. Fellegi was able to establish a culture of responsibility and credibility. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

division by division. That resulted in hugely useful communication because it was done with sufficient sensitivity to anonymity.¹⁷

For example, the local manager didn't actually sit on any of these follow up task forces in his or her division, but again we established a group of people who did the follow up, interviewed the employees, and asked the hard questions. We asked things [like], we seem to be doing so much worse on what employees think about our training programs or the opportunity to be trained. How come, what is wrong here, what do you think is happening elsewhere in the bureau so that their results seem to be better than ours?

[This process] led to enormously important transformations locally, but also the overall results led to trans-

formations bureau wide. For example, that's how we found out that the employees didn't think our promotion system was fair. I could go on, but this is just a taste.

Student(s): Was there another system of feedback for employees in the lower rungs to communicate up besides of the employee opinion survey?

The employee survey wasn't the only means of communicating upwards. It is the follow up to the employee opinion survey that was the most important communication.

Student(s): So those committee meetings were where things really changed, or where things started to change?

Yes, and that reminds me of another tool and entity we created. And that was for all significant internal matters, we created, a kind of, oversight committee. To give you examples, training, we set up this training institute. Somebody, of course, had to come up with the training program, not the detailed curriculum, but what are the major areas for which we need most urgently, what is the greatest priority for a training program. The program was established through a committee of my third level managers and fourth level managers.

Hiring was one of the ways we created a first class organization; we went out and hired the best and the

¹⁷ This employee survey and the resulting feedback sessions are critical for two-way communication between the top and bottom echelons of the organization. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

brightest. That was done by a committee of my fourth level managers, some third level managers, but mostly fourth level managers. It was done at the time when students were most likely to be available and they hadn't made up their mind where they were going to work. So we went out around December or January every year to universities for our recruitment campaign and we put out a lot of information about Statistics Canada. We had some seminars and invited people to come and listen to our spiel. Basically this left them with the message that this is an organization that is looking for the best and the brightest.¹⁸

Then we put a number of traveling committees together to visit the universities and do their hiring. We had a planning program, we knew how many people we wanted to work with, and could afford to hire. We

wanted to hire the best and the brightest and we did that once a year. In other words, we had a planning system which basically forecast our vacancies for the coming year. So that at the time when we could most readily hire the best and brightest, rather than the ones left over, we did our annual hiring once a year.

Student(s): You talked a lot about having a staff that was coherent where everyone was on the same page. Was there a specific incident or something that you can point to that made you realize the importance of that?

Back in the late 70's I mentioned that the bureau was really in a very bad way and that there was internal warfare.¹⁹ In fact, we were in the media daily, in a negative cast; not for our statistics, there was nothing wrong with that, but for scandals quote-unquote. There were leaks about other people, people leaking information, gossip or presumed information about other people which the media discussed and spun. The bureau came very close to being basically split up by the Canadian government as an organization that simply could not be maintained as a single unit or entity.²⁰

¹⁸ Dr. Fellegi understood that the success of the Statistics Canada depended on being able to recruit the best employees and was able to take steps in bringing new employees in after re-establishing some of the preeminence of the organization. Fellegi, I.P., "On Career Development at Statistics Canada," *Optimum, The Journal of Public Sector Management*, Vol. 29, No. 4 (31-37).

¹⁹ Please see chart at the end of this chapter illustrating the challenges at Statistics Canada during the late 70s.

²⁰ There wasn't just bad press surrounding the agency, the government was having serious qualms about keeping the agency. "Statistics Canada attacked in memo." *Montreal Gazette*. 20 August

It was my predecessor who started the process of creating this homogeneity, this fusion, sort of melding the organization to be one coherent corporate entity. But he wasn't there for very long, so I picked it up where he left off. That was a major motivator for creating an entity that thought as a corporation rather than as little princedoms at war with each other.

Student(s): How did you fill that role as the chief statistician? What did you do to drive the vision of where you wanted to lead the organization?

Two answers to that. One is of course, that a statistical agency isn't producing information for itself. It is producing information for others. One of the critical roles of the head of an official statistical office or agency is, of course, to make sure that client needs are met as much as possible. That requires a lot of effort to know just what are those client needs, and how do you become aware of them, and what do you need to do internally to be able to satisfy them. We established

a whole variety of mechanisms to become aware of client needs of different client groups.²¹

Starting with the federal government which, of course, is in many ways the most important client, not only because we are funded by the federal government, not even primarily because of that, but because the federal government's policies and programs affect most of the population. If policies and programs can be done on the basis of better information then we are serving the public good. But not only that, since any information we give to federal politicians or federal bureaucrats, since we make all of that information at the same time available to everybody else, we aren't just serving the government of the day, but the opposition, the interest groups, lobby groups, and everybody else who can argue on the basis of the same facts, and they can superimpose their ideology as far as the interpretation of the facts are concerned. So the

1975. Web. <http://news.google.com/newspapers?id=3pcuAAAIAIBAJ&sjid=s6EFAAAAIAIBAJ&pg=3585,1170699&dq=statistics-canada&hl=en>.

²¹ As a statistical agency, self-awareness of purpose is necessary to keep the organization on track. Dr. Fellegi understood that there were several constituencies, each with different needs that had to be balanced and satisfied. Fellegi, I.P. and Ryten, Jacob, "The Effectiveness of a Supranational Statistical Office: Pluses, Minuses, and Challenges Viewed from the Outside," *Journal of Official Statistics*, Vol 21, No 2, 2005.

federal government was obviously a very important focus.²²

I became very much convinced of the fact that multilateral consultations with federal clients and in fact for any client group is a marks game because the Department of Agriculture or the Department of Industry or the Department of Finance or the Department of Health or other departments can very eloquently set forth its own interests and needs and desires and everybody else is falling asleep when they are doing so because they don't share those interests as well as you do. I became convinced that what we needed to do was set up bilateral communications with each of the major federal potential client departments. And we did that. I met with the deputy minister in Canada and those that are the top officials. I was a deputy minister myself. I had the rank of a deputy minister so I could establish bilateral mechanisms with each department, whereby senior people of the right sort in each of our two organizations would be mandated to meet regularly. Regularly is the underlined word because they met whether

or not they thought there was something to discuss. And it always turned out there was something.²³

As far as Statistics Canada employees were concerned they went to these meetings preparing for them ahead of time and basically making sure that any development that they thought would be of interest to their particular department in Statistics Canada [was brought up]. Any development in Statistics Canada with its plans or programs would be put forward and comments were then sought. That particular department would prepare ahead of time and try to put forward any improvements or changes or new products that they thought they would really need and then of course it became a question of how such a product would be funded. That is another story actually.

We established a capacity to do cost recover surveys and we vastly expanded our ability to basically create the capacity, becoming so flexible that we could just put people on new programs wherever we needed them. We created the capacity for a huge increase in cost recovery program because our budget was usually limited. Client needs were always far exceeding our

²² Providing equal access is extremely important to ensuring the credibility of the organization; this includes serving all parties in the federal government equally in an unbiased and objective manner. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

ability to meet the budget, so this became a very important mechanism to better fill our client needs.

Traditional clients would more or less be the same sort of thing, except our 10 provinces in Canada. The provinces and territories are very important with Canada being a fairly decentralized federal system. In areas of major provincial jurisdiction we established a mechanism whereby basically I met with all the deputies from all the provinces about a particular topic. For example, justice statistics...justice is a shared federal and provincial responsibility. The provincial deputy ministers of justice had already arranged to meet annually, in fact twice a year, to discuss and arrange shared issues. I became a member for a couple of hours of that group and then we discussed justice related statistics, both what was available and what was needed, and how they can best be met. Very often by the provinces actually providing us more data so we could satisfy their specific needs. But sometimes it didn't come from the provinces.

A similar arrangement was made in the health department which is essentially a provincial responsibility-

ity in Canada that is not even shared; and again the same in education which is completely a provincial responsibility.

With the business community we established a core variety of mechanisms by meeting with various organs of the community. The small business community had different organizations. The chambers of commerce had different organizations. Major manufacturers had different organizations. The confidence board...So we looked for interlockers who could knowledgeably interact with us as far as the business community needs were concerned.

As far as the media was concerned, it was extremely important and we put tremendous emphasis on communications with the media. They didn't usually have needs other than that we should be available when they had questions. I made an absolute iron rule that we never avoid an interview. If somebody wanted an interview with one of our employees, that interview took place within 24 hours or at least a telephone call was returned to establish when it could take place

²³ By integrating statistical agencies with other federal departments, credibility, transparency, and two-way communication can be established and improved. Fellegi, I.P. and Ryten, Jacob, "The Effectiveness of a Supranational Statistical Office: Pluses, Minuses, and Challenges Viewed from the Outside," *Journal of Official Statistics*, Vol 21, No 2, 2005.

within 24 hours. The media's need was accommodated not only by being more available, but providing analytic information not just tables.²⁴

Again the tradition in the bureau was to provide just publications, tables upon tables, and later on the internet, but still only the tables. I felt that it was essential for a statistical agency to have a strong and vibrant program to shed light on issues on the basis of objective statistical information. Not take sides, but shed light. And that became a major tool of establishing links with the media who typically are not very good in making sense of statistical data, but are very good at picking up a good story. So we tried to tell a story. What does the data tell us? Rather than this went up and that went down which we call elevator statistics; that's not a story.

The story is that the following signs indicate improvement in the economy or poverty seems to be diminishing among the old, but increasing among the young, and what are the underlying reasons or whatever else...Again this became a very important tool of communication with the media, but also in the economic community. As soon as we established our own analytic capability and that took many years and a lot

of blood, sweat, and tears. You don't just create an analytic capacity... That is one of the most difficult things.

People communicate with like-minded people. Academics in sociology or economics or demography or whatever else can and do communicate with peers. They don't communicate with statisticians or they communicate what they think is communication. They say well I need the following or I would really like to have the following information. That is not communication because we typically don't have it and then that is the end of the discussion.

We have our own analysts internally who are peers of the appropriate academic staff and then there can be a dialogue of what is the best way or what is the most approximate way of actually meeting their needs or doing some joint analytic work which would get them the data that needed.

²⁴ By establishing a good rapport with the media, Statistics Canada was able to inform the public about the ongoings of the organization as well build credibility with them. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

²⁵ Having a wide expertise allows Statistics Canada to effectively interact in a large array of fields and agencies. Fellegi, I.P.,

So we used different communication techniques with different communities of clients. We also established in each of the major subject areas an advisory committee of top notch people in the country who knew most about those fields.²⁵

Incidentally they also became very good spokesmen; whenever there was a potential issue in the area or a new piece of information came out that the media wanted, they were able to act as not just an internal spokespersons, but some external spokespersons. They went to these advisory committee members because they became so knowledgeable about what we did. They became very positive, external spokespersons on behalf of Statistics Canada.

Student(s): Was that another strategy to try and rehabilitate the reputation of Stats Canada during the 70's?

Absolutely and it worked.

Student(s): As you start getting into things like the analytics and telling a story how do you ensure that you are maintaining that objective standpoint and really looking at the data and not using the data to drive an agenda?

It is very difficult but again with very concrete techniques. One of the common threads, in fact perhaps the common thread of what I said so far, is that whenever

I said that we need to do something, I never preached about it because that is useless. Exhortation doesn't get you anywhere. The common thread in all of these things is that one has to dream up techniques, tools, or prods that make people behave the way you hope they would behave or they should behave. Well that is communication, but it is understanding client needs whether meeting client needs and setting up the internal capacity for cost recovery. It is never exhortation. There is no point saying we need this, we should do that, how do we do it, what do I need to do? How do I make people behave differently is the common thread.²⁶

"Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

²⁶ Dr. Fellegi was an adamant supporter of the belief that leading by example is the only way to build credibility around policy and rules in an organization. Fellegi, I.P., "Characteristics of an Effective Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

So again political neutrality and objectivity is of course very important and one talks about it, but talking about it doesn't achieve it. The specific question was about the analytic program. Indeed that is a hugely important issue if you want to have an internal analytic program...How do you make sure you don't cross the magic line in the sand between shedding light and advocating? We did that by a very particular technique. Essentially we said any analytic article or [even run of the mill] article to be put out by Statistics Canada whether published in an academic journal or just in our daily information bulletin had to be subject to two kinds of review. One was of course a peer interview that was just making sure it was scientifically and analytically sound and valid.

But the second review was an internal managerial review which basically had to ask the question and answer the question: is this by any chance crossing the magic line into advocating or actually criticizing, instead of shedding light? Initially of course some of the people, some of the managers who did these reviews, senior managers, typically my deputies did these reviews. So this was more of an institutional review as opposed to a peer review. The peer review was scientific validity, the other one, the institutional review was political neutrality.²⁷

Initially some of my deputies were a little uncomfortable and they often came to ask me my opinion, but

eventually and I can't be more specific because in the end it all it boils down to a judgment. In all the years I was there as Chief Statistician we didn't have a single case where we were accused of political impropriety or crossing that magic line. I tried not to be [too] conservative. It's easy to not to cross that magic line if you are super conservative, but then you are not really telling a story most of the time. It's really about a judgment call. But not only judgment of the authors, but an institutional process that is designed to accomplish a very specific objective.

Student(s): Did you apply any other sort of techniques and a more general sense when dealing with the government?

Of course the usual techniques of [information and data] release, simultaneous access for everybody for

very sensitive data that could move the markets. We gave a little bit of advance information to those who actually really needed it just to make sure [to minimize] market turbulence. If there is a possibility of turbulence then the government must be ready to deal with it. Those are really the rare exceptions.

Other than that, everybody had basically the same access to the same information at the same time. It was generally known that I would not take any interference and I didn't. The closest I ever came in my 23 years as chief statistician to have pressure put on me was in connection with a certain analytic article, an analytic product, and I just basically rejected it.

There is only one incident in 23 years that I can think of that an attempt was even made, but that is because it was widely known that I would resign if it came to that and I would resign noisily.

Student(s): Making sure everybody would know why you were resigning?

Yes. I didn't threaten anybody but it was just by my demeanor and by my career. I was a career employee of Statistics Canada. I grew up there so to speak. I was there 51 years total. I started at age four.

Student(s): If you can say, what was the subject matter of the analytic article?

Yes, it had to do with the time when the government brought in a consumption tax and of course all of a sudden the price of everything went up. The consumer pricing jumped. Everybody knew that was going to happen. That's not very useful to say that all of a sudden when this consumption tax came, I think it was 7% initially, the prices went up 7.5% or 9% or whatever they would have gone up, in one month. Because the down the line, the question is still, ok we know that the consumption tax adds so many points to consumer price index, but what would it have been had there not been this consumption price, consumption tax introduced at that point? That really is an underlying question about inflation. That's not possible to answer rigorously because at the time when there is such a major price movement not everybody just puts the old price plus 7% out, there is competition. Businesses may just try to absorb some of it.

Other businesses may try to use the excuse of the consumption tax and really jump up prices. So there's all kinds of market reaction to this kind of major

²⁷ Peer review is essential to ensuring the validity and objectivity of releases. This assurance lends an organization to be credibly politically neutral. Fellegi, I.P., "Characteristics of an Effective

Statistical System." Morris Hansen Lecture, Washington Statistical Society, October 25, 1995.

disturbance. But, we tried to put together an analytic article as best as possible and tried to isolate how much prices would have gone up without the consumption tax, and how much of the price increase was due to the tax itself. This was much less than or somewhat less than the 7% increase because as I said quite a few businesses tried to absorb some of it.

That was the article and I don't remember what conclusions we came to but that was the one on which [someone tried to get me to break our rule]. I mean it was a very politically sensitive issue because consumption taxes are not very popular...They happen to be economically sound instead of income taxes. There was great deal of political sensitivity at the time. I think they tried to make me put off the publication of that article. I don't remember the details, but I know that was the occasion. It was many, many years ago. It really didn't become serious, like it didn't make a major mark on my memory because I just said no it is out of the question. It was an analytically very sound article and we didn't attack anybody and we didn't defend anybody. We just did the best job of shedding light on what would have been inflation in that month had there not been this price increase, this consumption tax increase.

Student(s): We noticed you were quite outspoken about your views on the long form mandatory census and the government's ending of that...How do you think that will impact the role of Stats Canada and Canadian understanding of the population in general moving forward?

Well I don't know. The data hasn't come out yet, but I am worried because the census is of course the most visible product of the organization. Not the most frequent obviously, but when it occurs it is the most widely used single product and the trouble is this voluntary long form is going to be seriously, probably seriously biased. Nobody will be able to actually know what data are good and what are biased. That is the nature of the bias, that most of the time we don't know...We know it is there or potentially there, but we don't know how big or even what direction.

There are major anomalies that will come to light and I can't believe for a second that there won't be. That can result in significant public loss of confidence in Statistics Canada which would be a huge tragedy for the country. I believe that statistics are important and I believe that confidence is fundamental to useful statistics because very few people can assess the quality of the information on their own. Therefore they either trust the provider or the data are of no use.

Student(s): That was probably why building up the reputation of Stats Canada back in the 70's was so important?

Absolutely. Absolutely, the greatest thing that happened in my tenure was when the Economist on two consecutive occasions came out and ranked Statistics Canada the best in the world among official statistical agencies.

About the interviewers



Lia Katz is a Canadian living in Washington, DC. She works at as a consultant to the nonprofit sector. She has a BA from the University of Toronto in International Relations and an MS in Nonprofit Leadership from the University of Pennsylvania.



Brent Willig s originally from Princeton, NJ and now lives in Washington, DC. He works at FTI Consulting for the Strategic Communications division, conducting public affairs and market research. He graduated from the University of Michigan with a BA in Political Science.

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Appendix A

