Genre	**Research Report**
Target audience	**Policy/decision makers**
Series	12 reports for "Building the Future: An integrated strategy for nursing human resources in Canada" (2004–2005).
Title	Examples below are from reports [Steps] 8, 12 and 14.
Client	Nursing Sector Study Corporation (commissioned by the Government of Canada)
Overall challenge	Very complex set of data on a variety of issues related to nursing as a labour market. Difficult to contrast and compare in a way that would guide policy makers.

Value added from applying principles of Clear and Effective Communication (9. Accessible not addressed here)

Overall → ↓ **$$** (↓ word count so ↓time) ↑ **Efficiency** (easier to review, edit, translate, update) ↑ **Usability** (easier to read *and* use info)

1. Concise	✓ Pulled data from paragraphs and put in a table or bullets	**5. Complete**	✓ Ensured all data categories had parallel content.
2. Chunked	✓ Grouped like items and standardized language	**6. Relevant**	✓ Aligned content most needed for decisions by policy makers. Gave important context via map (next page). ✓ Ensured like units (%, #) were given
3. Scannable	✓ Aligned items for easier comparison	**7. Coherent**	✓ Gave comparable info across 3 groups.
4. Accurate	✓ Verified all math, etc.	**8. Inclusive**	✓ Bias-free language

Example 1: Last page for entire series

Challenge

This series of reports contained lots of data. To put them in their proper context it was important to understand the many historical, jurisdictional and geographical factors.

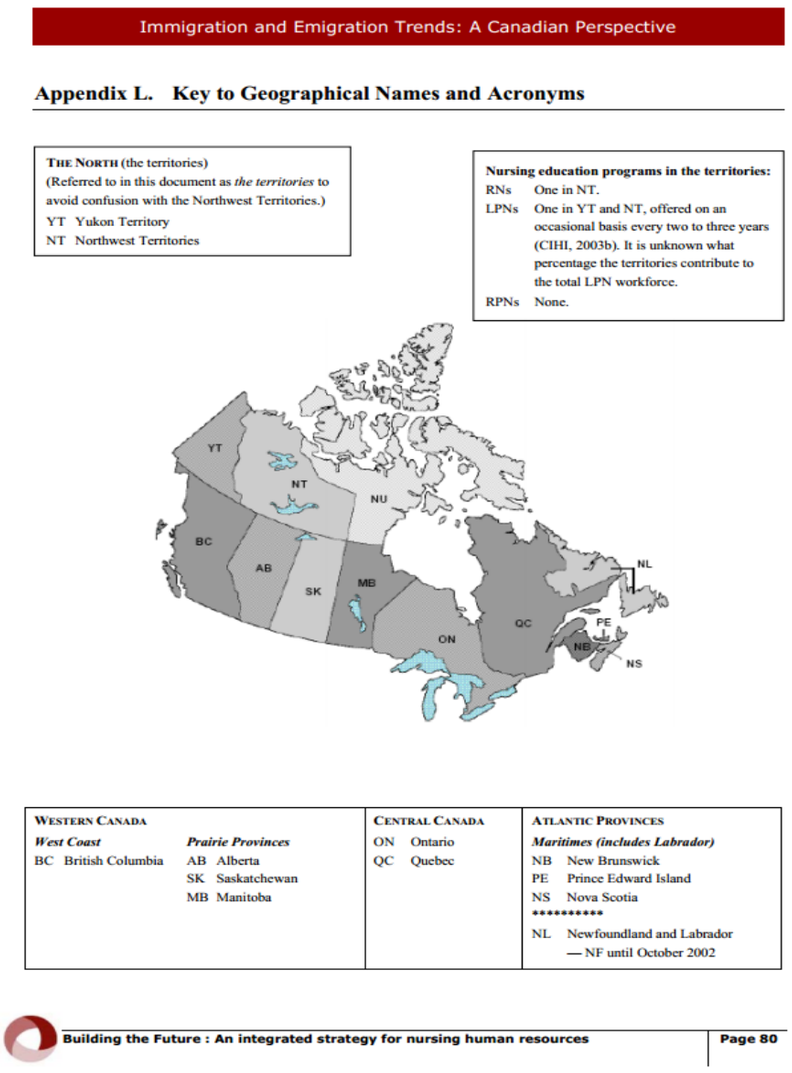
Solution

We created this annotated map to help understand the context of the data.

Caveat regarding use of codes (YT, BC, etc.):

Positive aspect. On the one hand the internationally approved alpha codes were very useful compared to using the abbreviations. They are easy to recognize and have a standard width. Both are very positive features for designing tables.

Negative aspect. Some members of the francophone community may not find this satisfactory as the linguistic base for these coded is English.



Immigration and Emigration Trends: A Canadian Perspective

Appendix L. Key to Geographical Names and Acronyms

THE NORTH (the territories)
(Referred to in this document as *the territories* to avoid confusion with the Northwest Territories.)
YT Yukon Territory
NT Northwest Territories

Nursing education programs in the territories:
RNs One in NT.
LPNs One in YT and NT, offered on an occasional basis every two to three years (CIHI, 2003b). It is unknown what percentage the territories contribute to the total LPN workforce.
RPNs None.

WESTERN CANADA		CENTRAL CANADA	ATLANTIC PROVINCES
West Coast	*Prairie Provinces*	ON Ontario	*Maritimes (includes Labrador)*
BC British Columbia	AB Alberta	QC Quebec	NB New Brunswick
	SK Saskatchewan		PE Prince Edward Island
	MB Manitoba		NS Nova Scotia
			**********
			NL Newfoundland and Labrador — NF until October 2002

Examples — paragraph to modified table, paragraph with bullets, or

Challenge	Originally the voluminous data was in paragraph format. This made it very hard to compare and contrast the data and also to see obvious trends.
Solution	I converted a lot of content to modified tables or bullets. This made it much easier see the relationship among the data across many pages.
	See examples below for Steps [reports] 8, 12 and 14

Step 8: *Nursing Education in Canada: Historical Review and Current Capacity* (133 pp.)

Before

Admissions and Admission Targets

After: see example →

Admissions, 2002, 2003

All but two schools reported their admission data for the fall of 2003. Schools were also asked to compare their 2003 admission numbers with those from 2002.

	Comparison of 2003 and 2002 Admissions
2003 Admissions (*N*=68)	68 schools admitted a total of 7,732 full-time and 219 part-time students. All schools admitted **full-time** students, ranging from 9 to 362 students per school, with a mean of 114 and a median of 89 students. Only 16 schools admitted **part-time** students, ranging from 2 to 83 students per school.
Comparison with 2002 (*N*=66)	33 schools reported an **increase** in admissions of a total of 889 students, ranging from 1 to 114 students. 14 schools reported a **decrease** in admissions of a total of 301 students, ranging from 1 to 80 students. 19 schools reported **no change**, with 3 schools not reporting. This represents an **overall increase** of 590 students admitted to first year in 2003 as compared to 2002.

Step 12: Mobility of Nurses in Canada (82 pp.)

Before

Content was in a paragraph.

After: see example →

Moved some content to a modified table.

Hiscott (1991) provided an overview of mobility patterns for RNs in Ontario using employment and non-employment variables. He identified general mobility in the RN workforce by associating it with **changes in the postal codes** of RN registrants over a one- and five-year period (Hiscott, 1991), with the following results.

- 10.4% change from 1987–1988 (1-year period)
- 19.3% change from 1984–1989 (5-year period)

Hiscott also identified RNs who **changed residence from one census metropolitan area to another** in Ontario. The incidence of mobility "appears quite substantial over the five-year time frame" (Hiscott, 1991, p. 16).

- 5.2% change from 1987–1988 (1-year period)
- 10.2% change from1984–1989 (5-year period)

Step 14. Immigration and Emigration Trends: A Canadian Perspective, p 34 (86 pp) — Example 1

Before

What Factors Influence the Migration of Canadian Nurses?

After: see example →

We changed the title to **Push Factors for Nurses Migrating from Canada**

We converted some text to a modified table.
We used an inline heading to separate **Push Factors out of BC.**

Nurse migration in the 1990s was clearly related to the unstable labour market at the time (Malugani, 2000). For example, approximately 6,000 nurses were laid off in Ontario between 1994 and 1997 ("Assess and Intervene", 2000), and many RNs found it impossible to find full-time employment and left the country ("Assess and Intervene", 2000; Malugani, 2000). A survey of RNs migrating from Ontario compared reasons for migration in two time frames, 1961–1970 and 1992–2000, and found differing motivations for migration (Registered Nurses Association of Ontario [RNAO], 2001), as follows.

1961 and 1970	1992 and 2000
• travel and weather (50%) • pay and benefits (36.71%) • job opportunities (21.42%) • family and personal (14.29%)	• downsizing/lack of employment opportunities (62.7%), including full-time stable employment • family or personal issues (28%) • pay and benefits (13.2%) • travel and weather (8.8%) • workload and work conditions (7.6%) • cost of living (3.8%) • not feeling valued (3%)

Push Factors out of BC. A survey conducted by the Registered Nurses Association of British Columbia (2002) found that reasons for RNs leaving BC were as follows.

- lack of adequate support received in the practice environments, such as mentorship and resource persons in the beginning practice of new graduates and lack of available experienced nurses as role models
- increasingly unsafe working conditions, including poor workplace communication, low morale, excessive workloads, and nursing shortages
- concerns about personal debt, especially for new graduates who reported continuing difficulty finding permanent employment

Step 14. ***Immigration and Emigration Trends: A Canadian Perspective***, p 34 (86 pp) — Example 2

Before

The Current Nursing Shortage

After

We divided the content as follows, with separate headings.

The Current Global Nursing Shortage — We separated content relevant to the global shortage in a paragraph.

Projected Losses in Canada — see example on right.

6.2.1. Projected Losses in Canada

RNs. Large deficits of RNs in Canada are projected for 2011 (78,000) and 2016 (113,000; CNA, 2002). A recent Canadian study estimated the following scenarios regarding projected loss of RNs aged 50 or older to retirement or death, based on assumed ages of usual retirement (O'Brien-Pallas, Alsknis, & Wang, 2003).

Assumed retirement age	Projected loss of RNs by *2006*
65 years of age	29,746 RNs, a number equivalent to 13% of Canada's 2001 RN workforce (O'Brien-Pallas et al., 2003)
55 years of age	64,248 RNs, a number equivalent to 28% of the 2001 RN workforce (O'Brien-Pallas et al., 2003)

Assumed retirement age	Projected loss of RNs by *2008* (Ontario)
65 years of age	15,611 RNs (O'Brien-Pallas et al., 2003), a number equivalent to 19.4% of the 2001 Ontario RN workforce of 80,428 (College of Nurses of Ontario, [CNO], 2002)
55 years of age	30,086 RNs (O'Brien-Pallas et al., 2003), a number equivalent to 37.4% of the 2001 Ontario RN workforce of 80,428 (CNO, 2002)

LPNs/RPNs. The number of LPNs in Canada has been stagnant or decreasing for the past 20 years, creating a shortage of LPNs (CNA, 2002). Estimated scenarios for LPNs and RPNS reveal the following.

Assumed retirement age	Projected loss of LPNs/RPNS by *2008* (Ontario)
65 years of age (Ontario)	5,124 LPNs (O'Brien-Pallas et al., 2003c), a number equivalent to 20.4% of the 2001 Ontario LPN workforce of 25,090 (CNO, 2002)
55 years of age (Ontario)	9,131 LPNs (O'Brien-Pallas et al., 2003c), a number equivalent to 36.4% of the 2001 Ontario LPN workforce of 25,090 (CNO, 2002)

(Step 14) Modify existing table: "Benefits of Migration to Source and Receiving"

Before

Source Country Benefits	Receiving Country Benefits
1. Stimulated economic growth through remittances and investments (Buchan et al., 2003; Lowell & Findlay, 2001; Migration News, 2002b; Samuel, 1998). For example, remittances from workers from the Philippines rose from 1 billion dollars in 1989, to 5 billion in 1995, and 8 billion in 2002, with 50% to 60% of the remittances coming from the US or Canada (Migration News, 2002b).	1. Increase in the stock of available human capital and building infrastructure (Samuel, 1998). Many industrialized countries have aging populations that contributes to and exacerbates the labour shortage (Buchan et al., 2003).
1. The opportunity for nurses to enhance their health systems and upgrade their medical knowledge and technological capacities (Adams & Kinnon, 1998; Samuel, 1998).	2. The stimulation of innovation capacity.
2. Training, education, skills, and experience of workers who return to their home countries (Buchan et al., 2003; Samuel, 1998), potentially enhancing economic development (Buchan et al., 2003).	3. Broadening the experience of international nurses can enrich the practice of the receiving country and enhance the quality of care (RCN, 2002).
3. The encouragement of modernization and cultural exchange (Samuel, 1998).	4. International dissemination of knowledge is improved (OECD, 2002; ICN, 2002a).
4. Reduced excess labour in a source country may create strong economic links between and among countries, thus promoting global economic restructuring (Samuel, 1998).	5. Saved education costs.
5. Links between migrants and their source countries create links between source and destination countries (Buchan et al., 2003).	1. Workers that may earn less might be more willing to work in hard to fill vacancies. As noted by Buchan (2001a), internationally educated nurses made up 31% of the nurses working in the inner city of London.
	2. Sustained maintenance and economic development (ICN, 2002a).
	8. Creation of jobs and fostering of social development (Samuel, 1998).
	1. Reduce wage pressures that moderate inflation and help countries in the north develop trading and investment contacts with the south (Samuel, 1998).

After

BENEFITS TO SOURCE COUNTRIES

- **Stimulated economic growth** through remittances and investments (Buchan et al., 2003; Lowell & Findlay, 2001; Migration News, 2002b; Samuel, 1998). For example, remittances from workers from the Philippines rose from 1 billion dollars in 1989, to 5 billion in 1995, and 8 billion in 2002, with 50% to 60% of the remittances coming from the US or Canada (Migration News, 2002b).
- The opportunity for **nurses returning to their home country** to **enhance the health systems and upgrade the medical knowledge** and technological capacities (Adams & Kinnon, 1998; Samuel, 1998).
- Additional training, education, skills, and experience of workers who return to their home countries (Buchan et al., 2003; Samuel, 1998), **potentially enhancing economic development** (Buchan et al., 2003).
- The encouragement of **modernization and cultural exchange** (Samuel, 1998).
- Reduced excess labour in a source country may create strong economic links between and among countries, thus promoting **global economic restructuring** (Samuel, 1998).
- Links between migrants and their source countries are established and maintained through networks (Buchan et al., 2003). The international connections created through migration can forge links between source and destination countries which facilitates **exchange of information and expertise** (Buchan et al., 2003). This can potentially have a positive impact on economic growth in the source country (Buchan et al., 2003).
- **Sustained maintenance and development of family members** in the country of origin (ICN, 2002a).

BENEFITS TO RECEIVING COUNTRIES

- Increase in the stock of **available human capital and building infrastructure** (Samuel, 1998). Many industrialized countries have aging populations, which contributes to and exacerbates the labour shortage (Buchan et al., 2003).
- The **stimulation** of **innovation capacity**.
- Broadening the experience of international nurses can enrich the practice of the receiving country and **enhance the quality of care** (RCN, 2002).
- **International dissemination of knowledge** is improved (OECD, 2002; ICN, 2002a).
- **Saved education costs**.
- Workers who earn less in their country of origin may be more **willing to work in hard-to-fill vacancies**. For example, as noted by Buchan (2000), internationally educated nurses made up 31% of the nurses working in inner London.
- **Creation of jobs and fostering of social development** (Samuel, 1998).
- Immigration helps to reduce wage pressures, thereby **moderating inflation**, and it helps countries in the **north develop trading and investment contacts with the south** (Samuel, 1998).