



CANADIAN COUNCIL ON LEARNING CONSEIL CANADIEN SUR L'APPRENTISSAGE

Inter-provincial Mobility of the College Age Cohort

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Introduction



Theories of Migration

- **From Ravenstein's Laws of Migration (1885)**
 - Most migrants travel only a short distance.
 - Most migration occurs in steps.
 - Most migration is rural to urban.
 - Each migration flow produces a movement in the opposite direction.
 - Most migrants are adults.
 - Most international migrants are young males, while more internal migrants are female.
- **"Push and Pull Factors" or "Motivational, Informational, Financial and Structural Barriers"**




What do we know about student mobility among provinces?

- **Known Knowns:**

"Just over one in ten students leaves his or her province of origin to study; at the college level, the number is not much more than one in 50."
- Junor & Usher, 2008
- **Unknowns both Known and Unknown:**

"...the collection and reporting on mobility could be improved significantly. In Canada, this would require political will – the technology is available but better institutional cooperation at the university level would be required to ensure an accurate picture of all types of mobility"
- Junor & Usher, 2008
- **But are there also Knowns Unknown?**



Existing Research

Day, K. & Grafton, R. Q. (1999).

1. Grafton, R.Q. & Day, K.M., 1998. "Interprovincial Student Mobility in Canada." In *Canada: The State of the Federation 1998/99: How Canadians Connect*. eds. Lazar, H and MacIntosh, T. McGill and Queens University Press.

Finnie, R.


1. "Who Moves? – A Logit Model Analysis of Inter-Provincial Migration In Canada", *Applied Economics*, Vol. 36 (2004), pp. 1759-1779.
2. "Inter-Provincial Migration: A Longitudinal Analysis of Movers and Stayers and the Associated Income Dynamics", *Canadian Journal of Regional Science*, Vol. 22 (Fall 2000), No. 3., pp. 447-479.
3. "The Patterns of Inter-Provincial Migration in Canada 1982-95: Evidence from Longitudinal Tax-Based Data", *Canadian Studies in Population*, Vol. 26 (1999), No. 2, pp. 205-35.

Ram, B. & Shin, Y. E. (2007).

1. "Educational Selectivity of Out-Migration in Canada: 1976-1981 to 1996-2001," *Canadian Studies in Population*, Vol. 34 (2): 129-148.

Junor, S. & Usher, A. (2008).

1. *Student Mobility and Credit Transfer: A National and Global Survey*. Ottawa: Educational Policy Institute.



Sources of Data

- **Census Mobility and Migration Data (20% sample)**
- **Census PUMF (2.8% sample)**
- **CANSIM (CRA Administrative Files)**
- **Post-secondary Institution Data**
- **Survey Responses (CUSC, NSSE and others)**

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Defining the College-Age Cohort

- 18 – 24 (CANSIM files)
- 20 – 24 (Census Age Groups)
- 18 – 27 (Customized filters)

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What proportion of overall internal migration is inter-provincial?

16% 84% Total Population - 2006

18% 82% Ages 20-24 - 2006

Source: Census 2006, Mobility Status One Year Ago

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What Proportion of Universities' Student Bodies come from Out of Province?

| Province | Total number of students | Total number of students arriving to study | Total number of students leaving to study | Net gain (+) or loss (-) | Out-of-province students as a percentage of total enrollment |
|----------|--------------------------|--|---|--------------------------|--|
| NL | 14,446 | 1,179 | 2,342 | -1,163 | 8% |
| PE | 3,251 | 608 | 1,628 | -1,020 | 20% |
| NS | 36,237 | 10,627 | 4,397 | 6,230 | 29% |
| NB | 21,123 | 4,862 | 4,460 | 402 | 23% |
| QC | 161,775 | 12,687 | 5,988 | 6,699 | 8% |
| ON | 313,654 | 13,550 | 17,315 | -3,765 | 5% |
| MB | 27,846 | 1,183 | 1,921 | -738 | 4% |
| SK | 26,479 | 1,205 | 2,278 | -1,073 | 5% |
| AB | 65,034 | 4,985 | 5,272 | -287 | 8% |
| BC | 65,754 | 2,260 | 9,695 | -7,435 | 3% |

Source: Association of Universities and Colleges of Canada
Source: Junor & Usher, 2008

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What age groups are the most inter-provincially mobile?

Inter-provincial Out-Migration by Age 1985/86 to 2005/06

Source: CANSIM 051-0012 Accessed: June 5th, 2008

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Has inter-provincial mobility increased over time?

Inter-provincial Out-Migration by Age 1985/86 to 2005/06

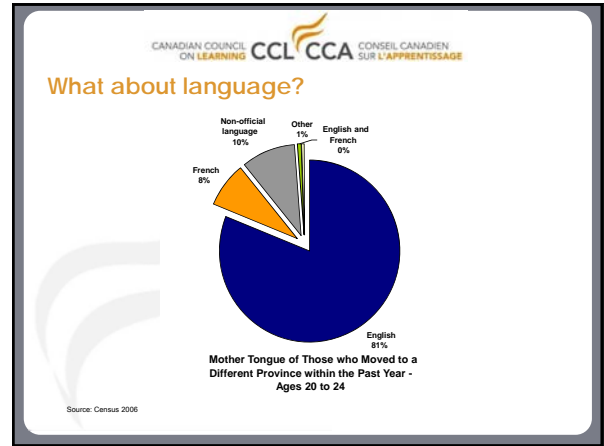
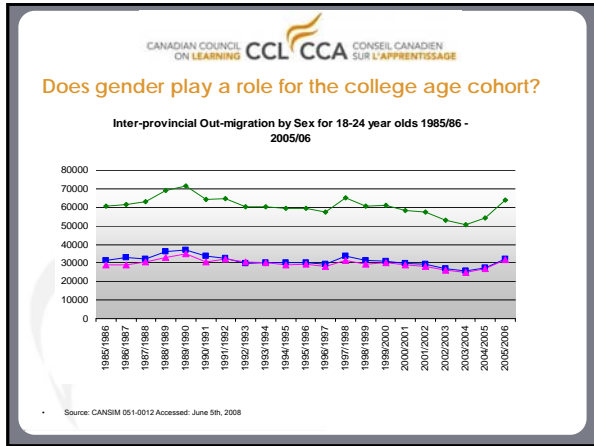
Source: CANSIM 051-0012 Accessed: June 5th, 2008

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Does gender play a role?

Inter-provincial Out-migration by Sex 1985/86 - 2005/06

Source: CANSIM 051-0012 Accessed: June 5th, 2008



Which inter-provincial pathways are most prevalent in the college age cohort?

Province of Residence One Year Before Census

| 2006 Census Ages 20-24 | CAN | NL | PEI | NS | NB | QC | ON | MB | SK | AB | BC | YK | NT | NV |
|------------------------|-------|------|-----|------|------|------|-------|------|------|------|------|-----|-----|----|
| CAN | 48210 | 2535 | 645 | 4135 | 3060 | 4050 | 11015 | 2880 | 3690 | 7955 | 7585 | 265 | 300 | 95 |
| NL | 1465 | 0 | 35 | 230 | 280 | 40 | 385 | 85 | 0 | 320 | 65 | 0 | 10 | 10 |
| PEI | 445 | 15 | 0 | 190 | 90 | 0 | 55 | 10 | 20 | 55 | 10 | 0 | 0 | 0 |
| NS | 2610 | 225 | 100 | 0 | 665 | 190 | 690 | 55 | 15 | 345 | 300 | 0 | 10 | 10 |
| NB | 1785 | 80 | 140 | 515 | 0 | 265 | 480 | 35 | 20 | 135 | 115 | 0 | 0 | 10 |
| QC | 3430 | 40 | 10 | 185 | 325 | 0 | 1835 | 70 | 65 | 420 | 450 | 0 | 0 | 15 |
| ON | 8365 | 580 | 120 | 1015 | 640 | 1915 | 0 | 630 | 290 | 1540 | 1575 | 20 | 25 | 10 |
| MB | 1925 | 20 | 10 | 95 | 35 | 115 | 600 | 0 | 280 | 445 | 260 | 25 | 10 | 20 |
| SK | 2295 | 0 | 0 | 15 | 25 | 55 | 280 | 330 | 0 | 1240 | 315 | 10 | 15 | 0 |
| AB | 16200 | 1310 | 185 | 1380 | 835 | 655 | 3715 | 1075 | 2480 | 0 | 4330 | 65 | 150 | 10 |
| BC | 9050 | 195 | 40 | 470 | 145 | 780 | 2895 | 555 | 485 | 3320 | 0 | 125 | 45 | 0 |
| YK | 175 | 0 | 0 | 0 | 0 | 10 | 25 | 0 | 10 | 45 | 65 | 0 | 15 | 0 |
| NT | 355 | 75 | 0 | 30 | 0 | 20 | 25 | 20 | 20 | 75 | 75 | 10 | 0 | 10 |
| NV | 90 | 15 | 0 | 10 | 0 | 0 | 30 | 10 | 0 | 10 | 10 | 0 | 10 | 0 |

Source: Census 2006

Which inter-provincial pathways are most prevalent in the college age cohort?

2001 Census Ages 20-24

| 2001 Census Ages 20-24 | CAN | NL | PEI | NS | NB | QC | ON | MB | SK | AB | BC | YK | NT | NV |
|------------------------|-------|------|-----|------|------|------|-------|------|------|------|------|-----|-----|----|
| Canada | 48985 | 2215 | 595 | 3505 | 2495 | 4990 | 12610 | 2630 | 4050 | 8770 | 8510 | 305 | 250 | 70 |
| NL | 1540 | 0 | 40 | 255 | 155 | 75 | 605 | 25 | 10 | 305 | 80 | 10 | 10 | 0 |
| PEI | 605 | 45 | 0 | 210 | 65 | 35 | 95 | 10 | 0 | 85 | 55 | 0 | 0 | 0 |
| NS | 2760 | 290 | 140 | 0 | 580 | 185 | 890 | 50 | 60 | 305 | 245 | 0 | 15 | 0 |
| NB | 2165 | 125 | 100 | 625 | 0 | 335 | 510 | 20 | 20 | 270 | 135 | 15 | 0 | 10 |
| QC | 4420 | 70 | 15 | 170 | 375 | 0 | 2425 | 100 | 80 | 580 | 585 | 0 | 0 | 10 |
| ON | 11025 | 795 | 140 | 1345 | 830 | 2950 | 0 | 605 | 445 | 1885 | 1960 | 45 | 25 | 10 |
| MB | 2375 | 35 | 15 | 30 | 55 | 95 | 685 | 0 | 410 | 615 | 420 | 0 | 10 | 10 |
| SK | 2585 | 15 | 10 | 35 | 20 | 45 | 225 | 340 | 0 | 1590 | 285 | 10 | 15 | 0 |
| AB | 12865 | 665 | 110 | 580 | 235 | 615 | 2220 | 1015 | 2500 | 0 | 4625 | 125 | 150 | 15 |
| BC | 7955 | 110 | 15 | 230 | 130 | 625 | 2835 | 440 | 490 | 2965 | 0 | 90 | 10 | 10 |
| YK | 220 | 15 | 0 | 0 | 0 | 15 | 55 | 10 | 45 | 80 | 0 | 0 | 0 | 0 |
| NT | 330 | 30 | 10 | 20 | 0 | 10 | 45 | 10 | 25 | 115 | 50 | 10 | 0 | 10 |
| NV | 130 | 25 | 0 | 10 | 0 | 10 | 25 | 10 | 0 | 20 | 10 | 0 | 10 | 0 |

Source: 2001 Census

Which provinces are the preferred destinations of inter-provincially mobile students?

| Attending In Study | 1 | | | 2 | | | 3 | | |
|--------------------|------------|------------|------------|------------|------------|------------|---|---|---|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| NF | ON (395) | NS (316) | NB (117) | NS (1,259) | NB (461) | ON (1,712) | | | |
| PE | NS (218) | NB (178) | ON (94) | NS (705) | NB (562) | ON (202) | | | |
| NS | ON (4,612) | NB (2,114) | NF (1,259) | NB (1,906) | ON (1,200) | QC (849) | | | |
| NB | NS (1,906) | ON (1,110) | PE (862) | NS (2,114) | ON (888) | QC (858) | | | |
| QC | ON (1,048) | BC (1,784) | NB (856) | ON (4,937) | NB (428) | NS (924) | | | |
| ON | QC (4,837) | BC (4,169) | AB (2,309) | QC (8,084) | NS (4,612) | BC (1,117) | | | |
| MB | ON (511) | SK (192) | BC (175) | ON (636) | AB (337) | SK (294) | | | |
| SK | AB (472) | BC (296) | MB (154) | AB (893) | ON (599) | MB (292) | | | |
| AB | BC (1,956) | ON (1,062) | SK (893) | ON (2,309) | QC (794) | BC (748) | | | |
| BC | ON (1,117) | AB (741) | QC (115) | ON (4,169) | AB (1,356) | QC (1,784) | | | |

Source: Association of Universities and Colleges of Canada

Source: Junor & Usher, 2008

How Many Students That Are Inter-provincially Mobile Might Be Seeking Recognition Of Transfer Credits?

18-27 Year Old Inter-provincial Migrants, by Province of Residence One Year Before Census: Census 2001

| PROVINCE OF RESIDENCE 1 YEAR AGO | NL | PEI | NS | NB | QC | ON | MB | SK | AB | BC | YK, NW, NV | Total |
|----------------------------------|----|-----|----|----|-----|-----|----|----|-----|-----|------------|-------|
| 12 Years of Education | 4% | 1% | 4% | 4% | 5% | 16% | 8% | 9% | 22% | 25% | 2% | 100% |
| 13 Years of Education | 5% | 1% | 6% | 6% | 7% | 19% | 7% | 9% | 16% | 22% | 3% | 100% |
| 14 - 17 Years of Education | 4% | 2% | 7% | 6% | 11% | 24% | 5% | 8% | 15% | 18% | 1% | 100% |

Source: Census 2001, PUMF - Individual Microdata File

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Does this stuff matter?

- **Facilitating Transfer for Students**
- **Enrolment Planning**
- **Credential Recognition and Labour Mobility**
- **Subsidies, Taxes and Tuition**
- **Attraction and Retention Programme**
- **Declining enrolments in Some Provinces**

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What can we do to learn more?

Recommendations from Junor and Usher (2008):

- *"Introduce new survey instruments to get a better understanding on the extent of demand for increased student mobility in Canada and how many students are impacted by restrictive credit transfer arrangements"*
- *"Develop a research plan"*
- *"Engage with pan-Canadian stakeholders on the value of credit transfer at Canadian colleges and universities"*

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Questions?