



Student Transitions Project

20-Years of STP: Review and Reflections

Presentation for BCCAT Joint Annual Meeting (JAM)
By Joanne Heslop | November 3, 2023

Agenda:



(1)
**What is the
STP?**

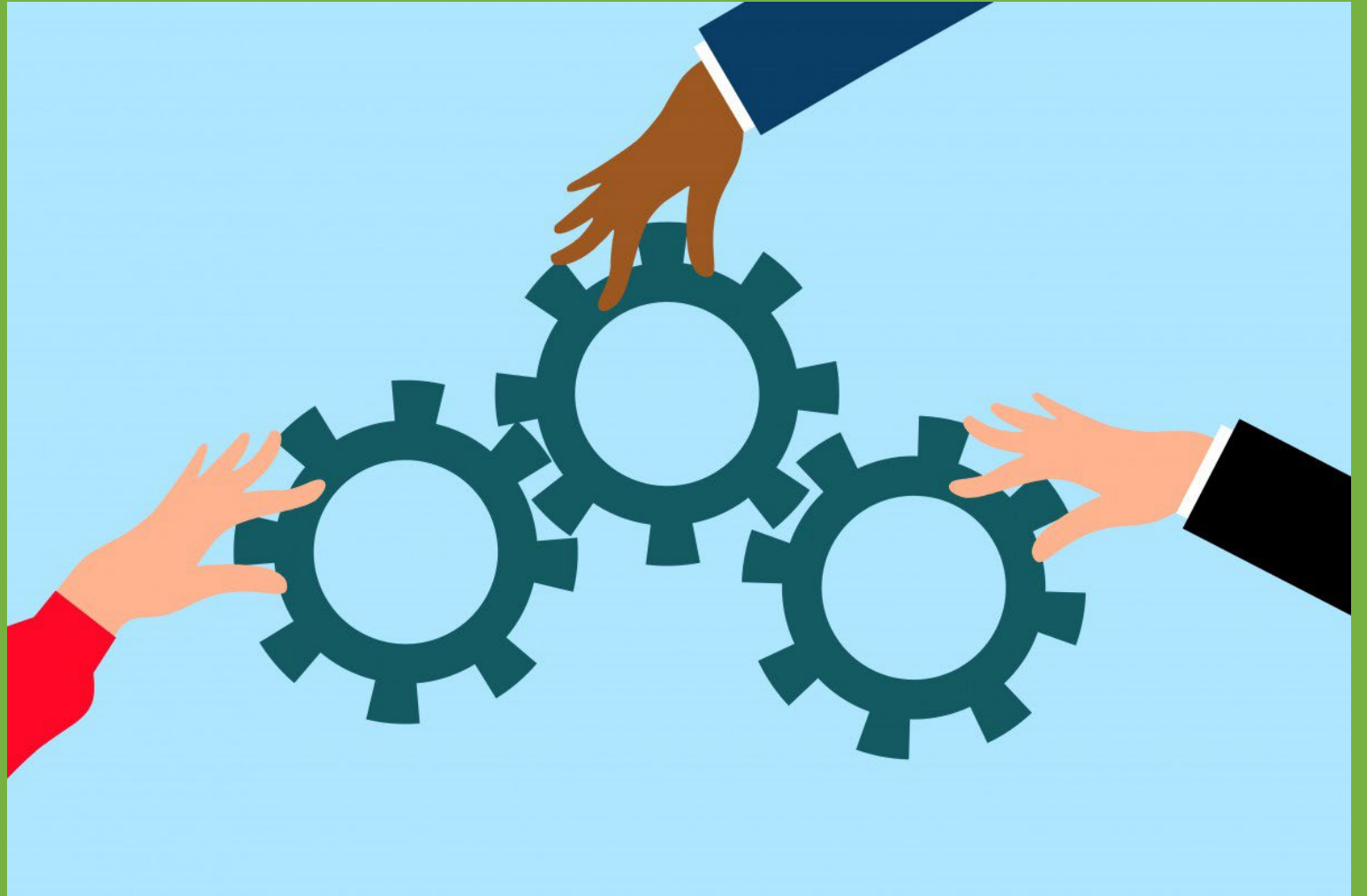


(2)
**STP Data &
Fun Facts**



(3)
**STP Insights
on Significant
Events**

What is the Student Transitions Project?

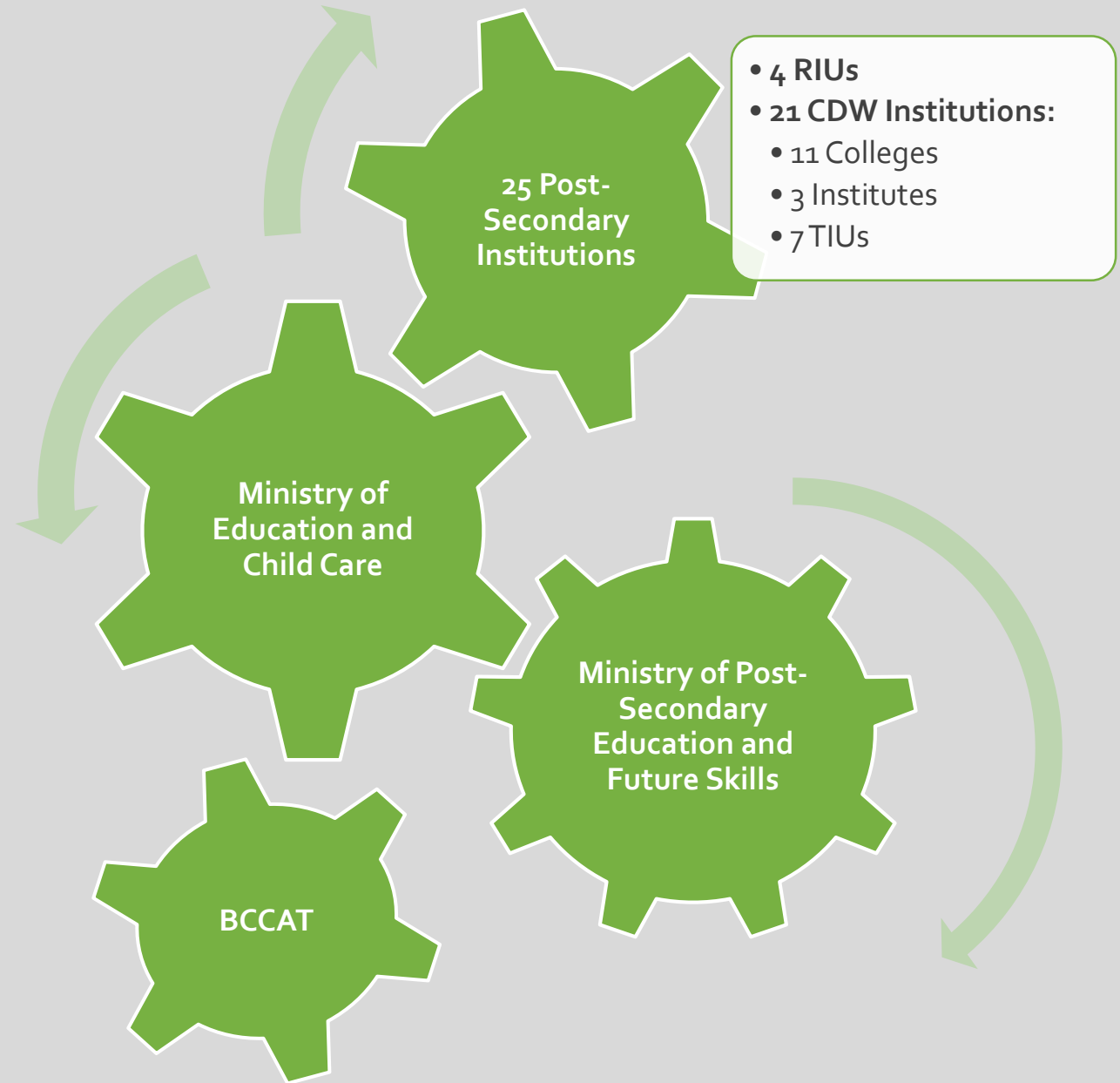


The STP is a Collaborative Effort

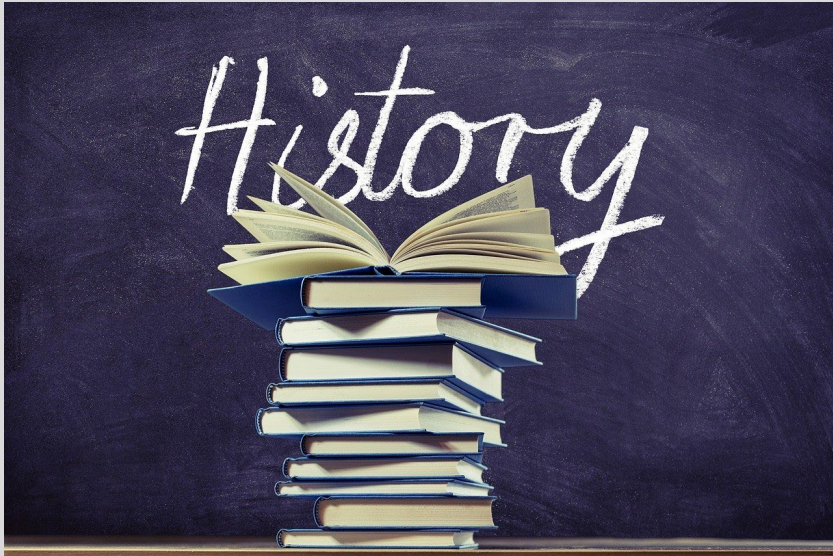
The 5-member **STP Steering Committee** consists of one member from each of the major partners.

The Ministry of Education and Child Care houses the STP data in the Education Data Warehouse and serves as **data custodian**.

Joanne Heslop is the **Manager** of the STP who co-ordinates data collection and data quality, performs data analysis, produces reports and delivers presentations.



Brief History of the STP



- **Spring 2005 – STP Launched:**

- **Agreement** signed between 2 Education Ministries, Central Data Warehouse Institutions, B.C. Universities.
- The agreement established a formal mechanism to enable the exchange of personal information while protecting individual **privacy**.
- For the **purpose** of investigating student transitions, mobility, and outcomes from K-12 to B.C.'s public post-secondary institutions.
- With a **goal** of providing reliable information at predictable times and in a timely manner to support institutions and government with planning.

- **Methodology:**

- STP links the PEN between education systems to track student transitions and student mobility. Personal privacy is protected by encrypting the PEN and removing personal information.

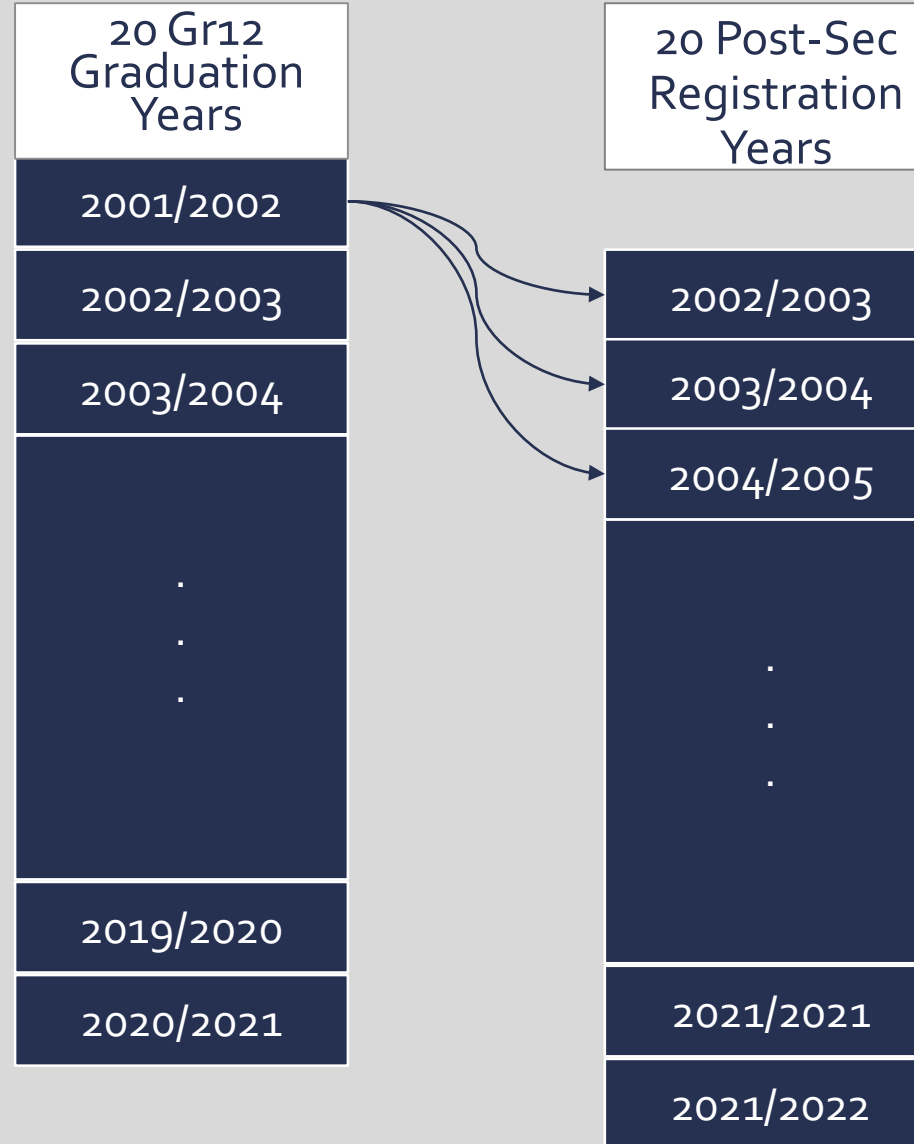
- **Research Outputs:**

- Pivot tables and dashboards provided annually to authorized users.
- Reports and publications produced annually and posted on STP website.

20 Years of STP: Data & Fun Facts

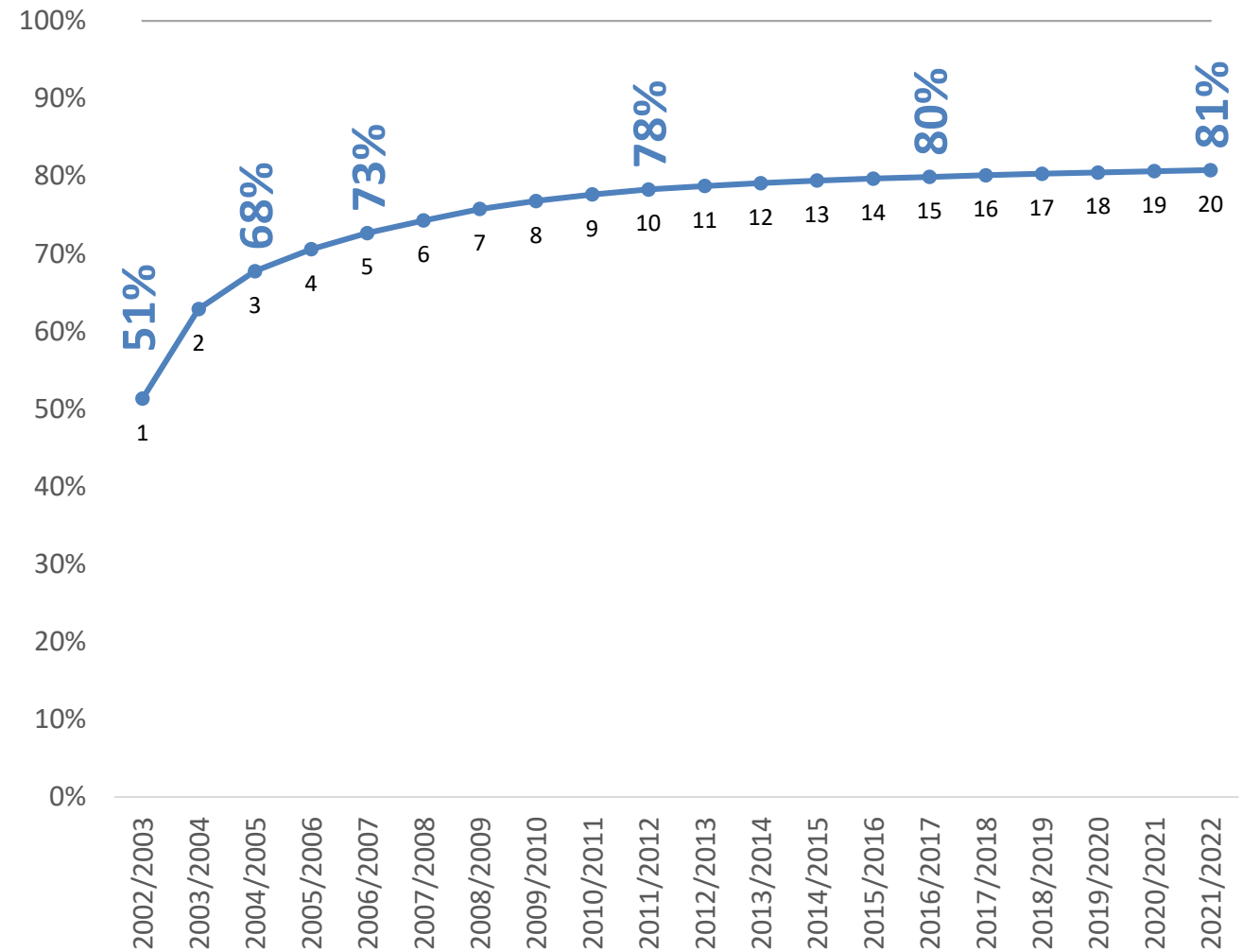


20 Years of STP Data



If we follow a cohort of grade 12 graduates for 20 years, what proportion ultimately enrolled in B.C. public post-secondary education?

81% of the 42,000 grade 12 graduates of 2002/2003 have enrolled in B.C. public post-secondary education, by 2021/2022.



20 Years of STP Data: Fun Facts



18 million
Enrolment Records



2.8 million
Unique Students



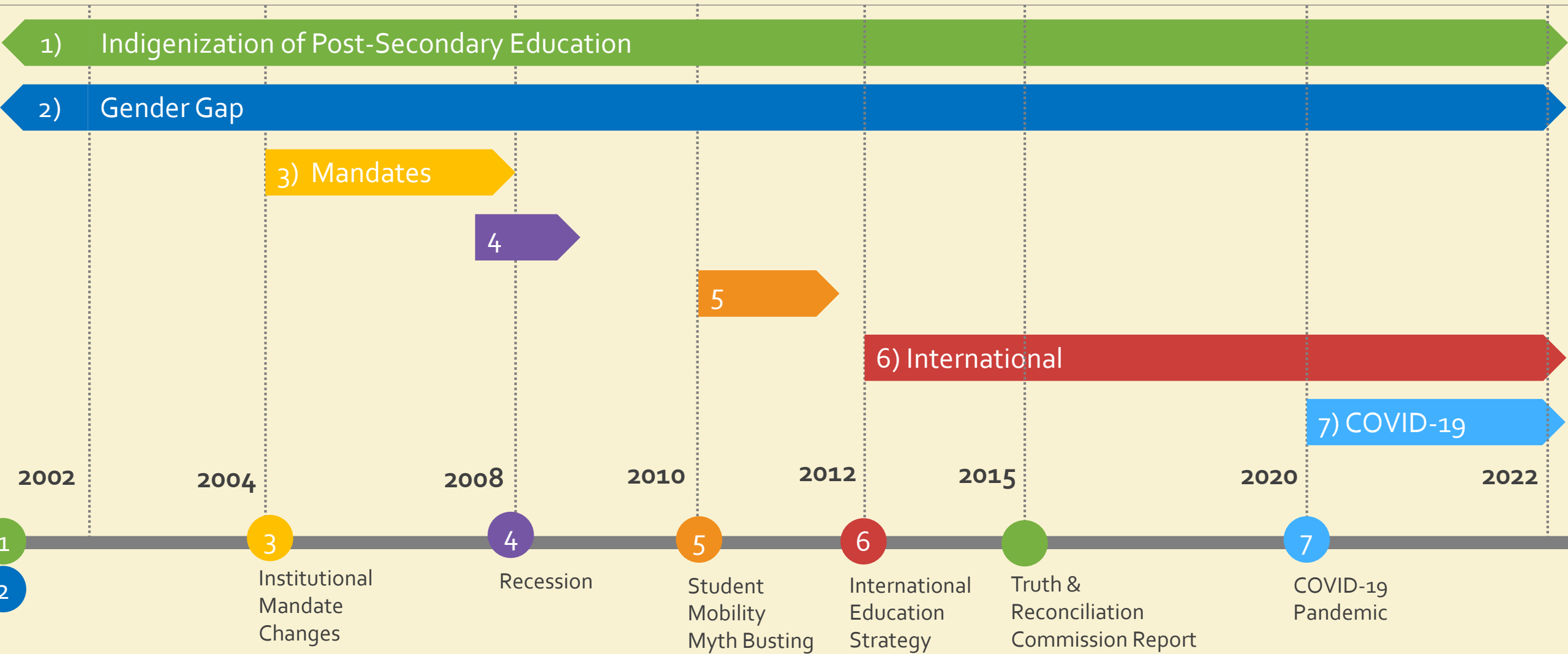
1.3 million
Credentials Awarded
(Including 445,000 Bachelors degrees)



20 Years of STP: Significant Events & STP Insights



20-Year Timeline of Selected Significant Events



1) Indigenization of Post-Secondary Education

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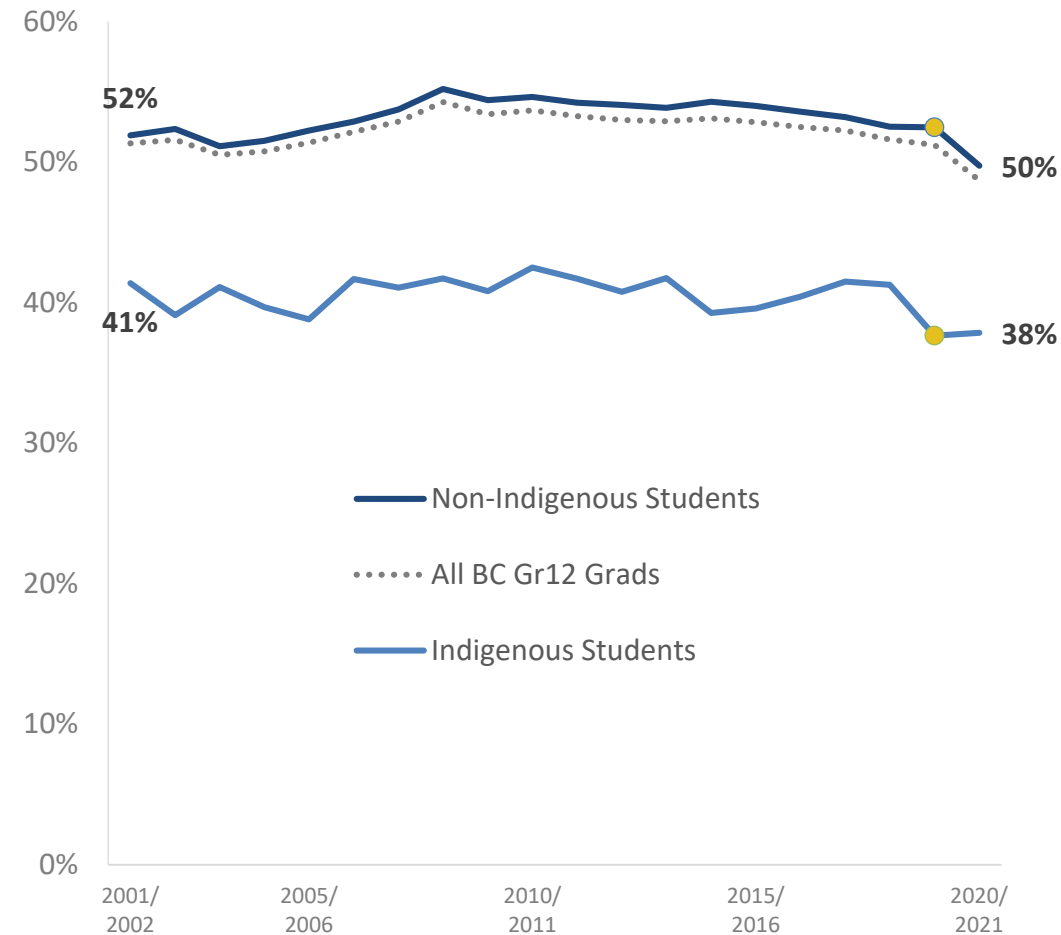


THE BENTWOOD BOX: CARVED BY COAST SALISH ARTIST LUKE MARSTON

How do Immediate-Entry Transition Rates Compare Between Non-Indigenous & Indigenous Students?

The immediate-entry transition rates of Indigenous students are lower than the rates for non-Indigenous students.

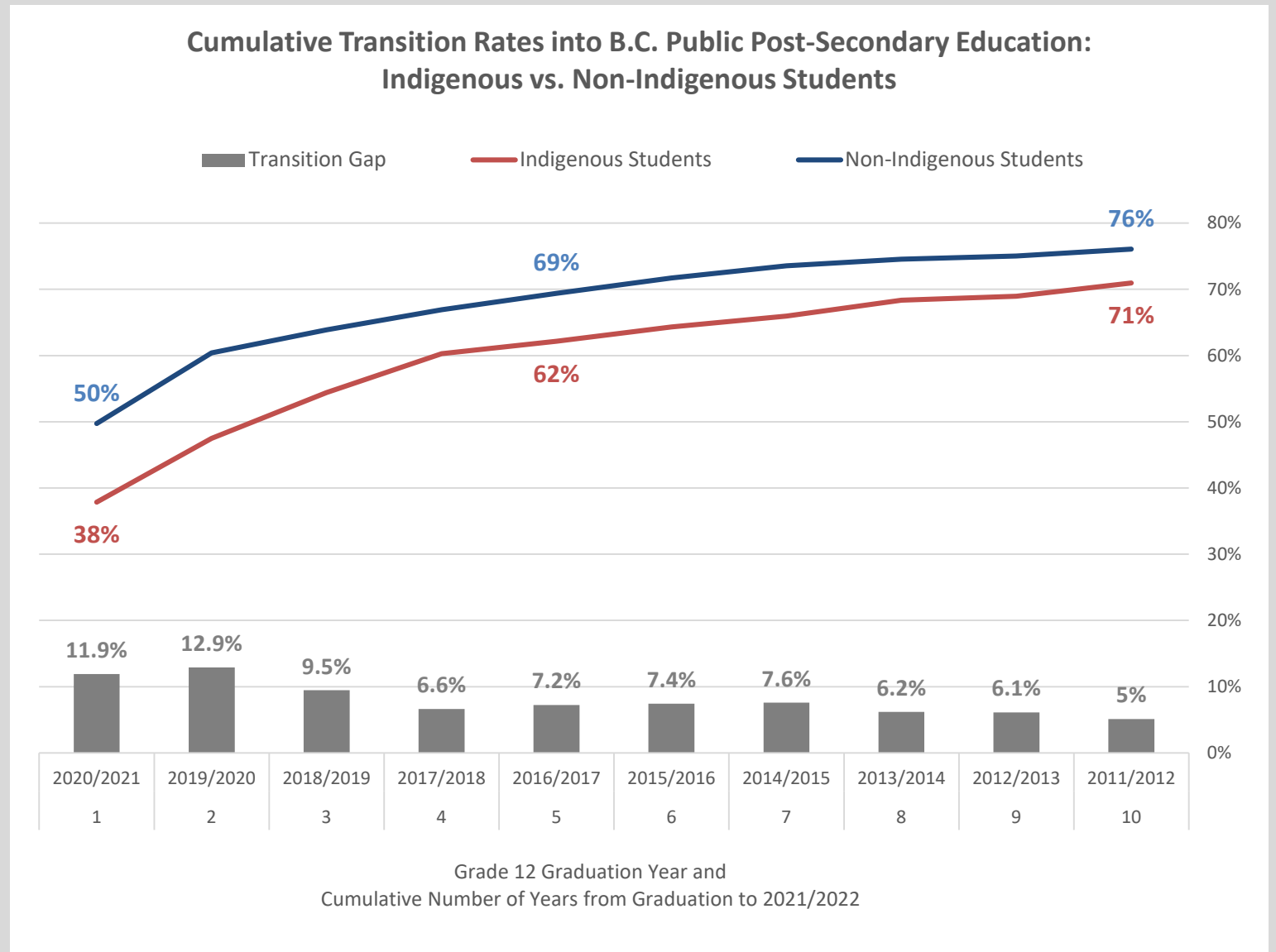
The gap is typically 11 to 13 percentage points, but widened to 15 pp for the pandemic graduates of 2019/2020.



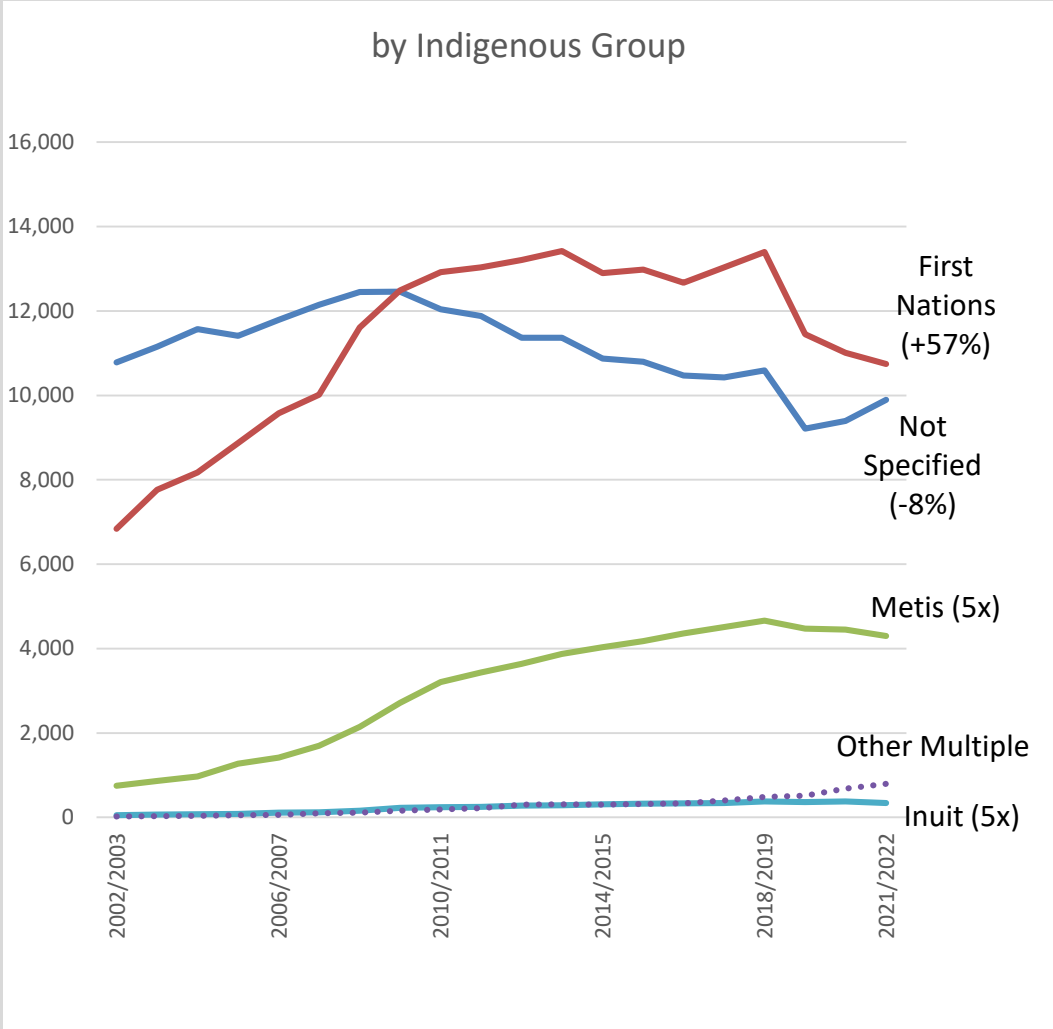
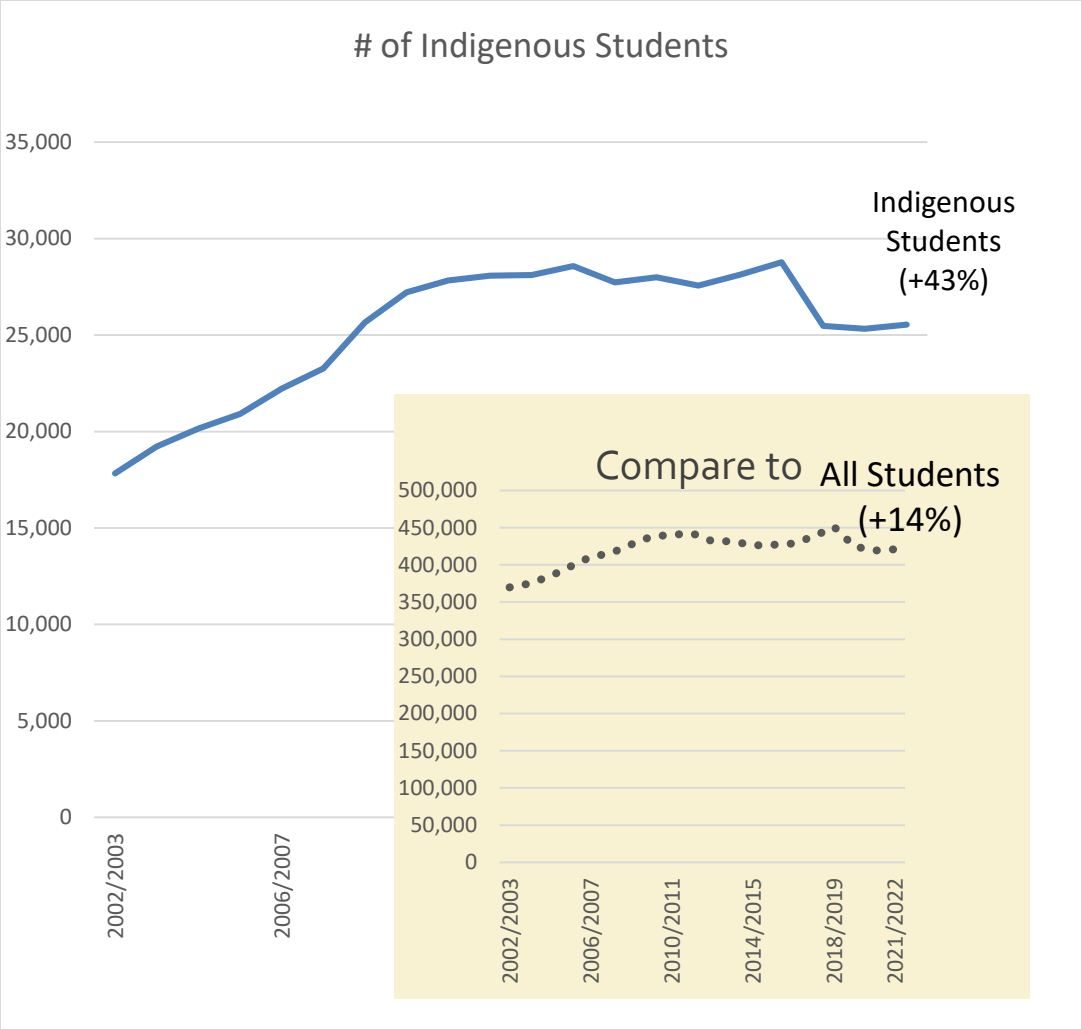
Why is it important to look beyond immediate entry transition rates?

Indigenous students tend to delay their transition to post-secondary education.

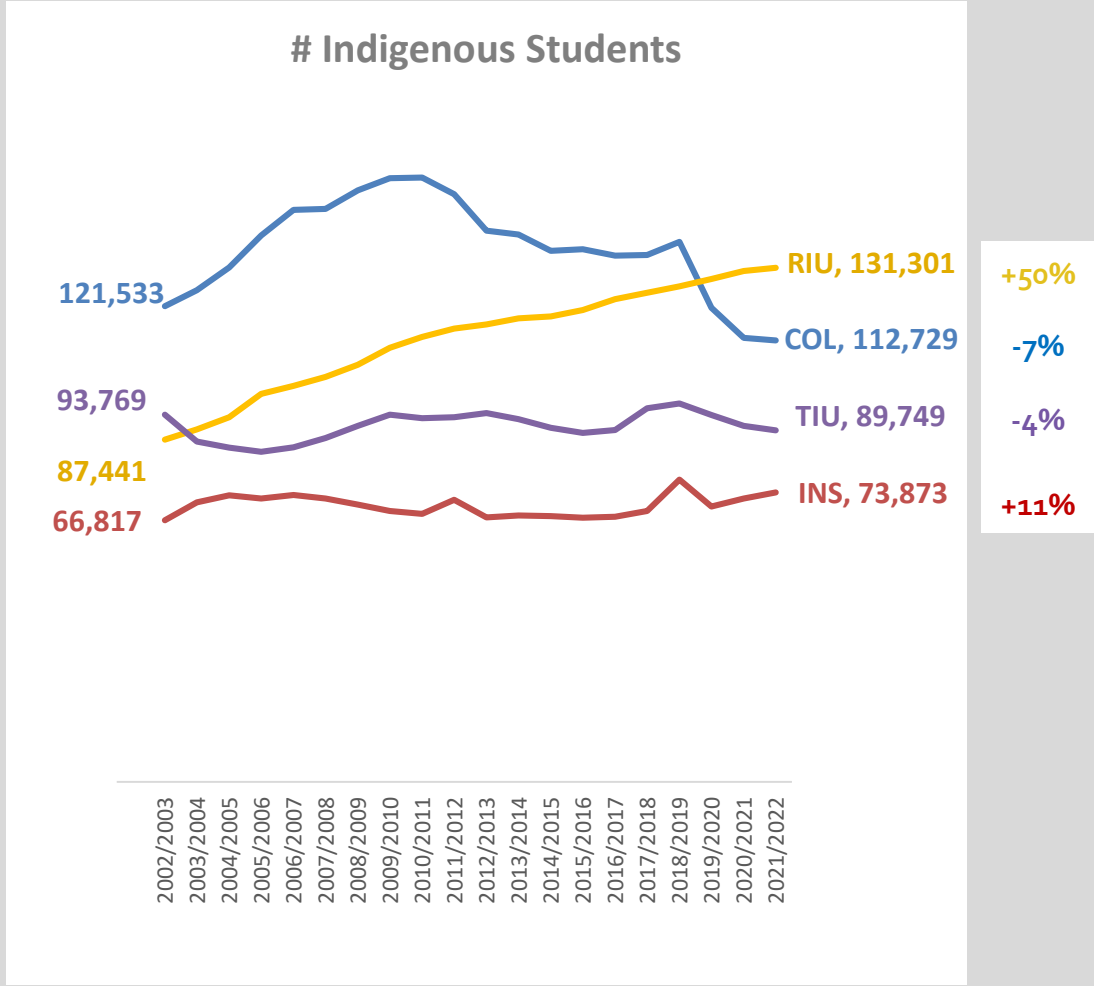
The **transition rate gap** narrows over the number of years since grade 12 graduation.



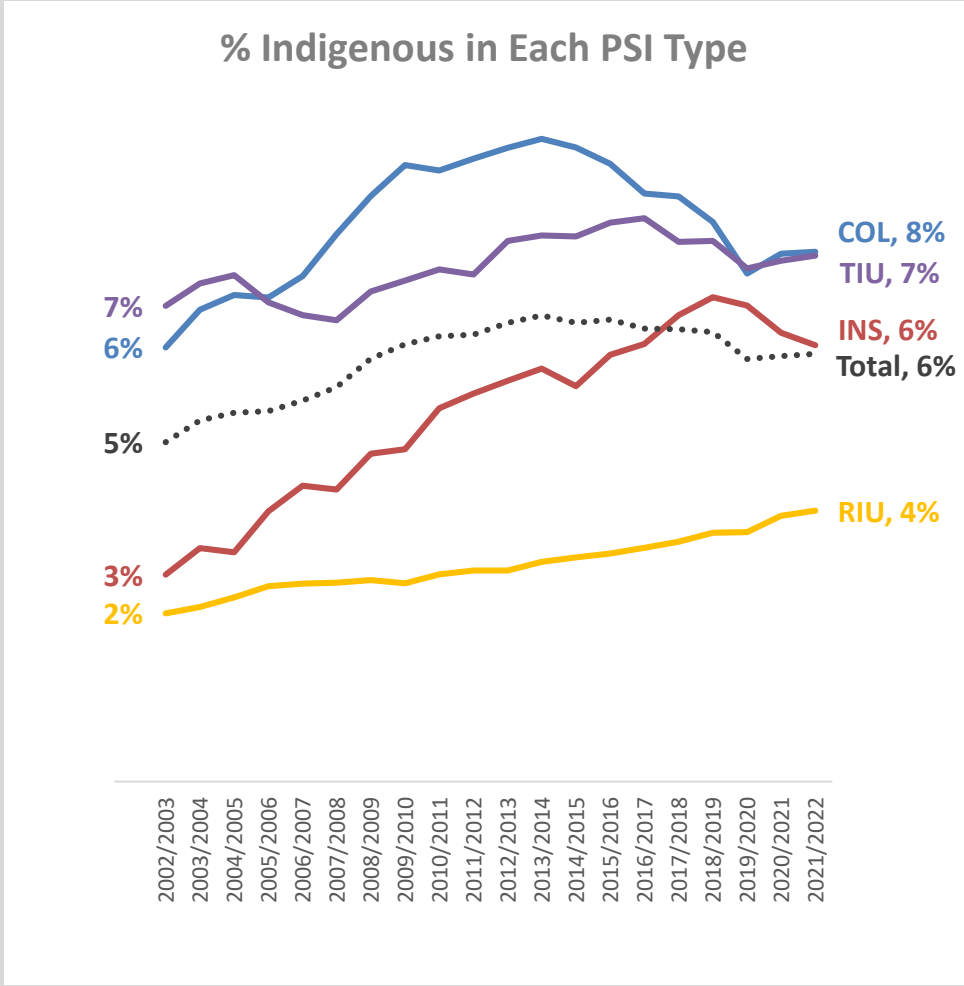
What is the Rate of Growth in Indigenous Student Enrolment in the B.C. Public Post-Secondary System?



Is the rate of growth in post-secondary Indigenous students consistent across all institution types?



Do Indigenous students represent a larger share of enrolments in each institution type, compared to 20 years ago?



2) Gender Gap

2) Gender Gap



2002

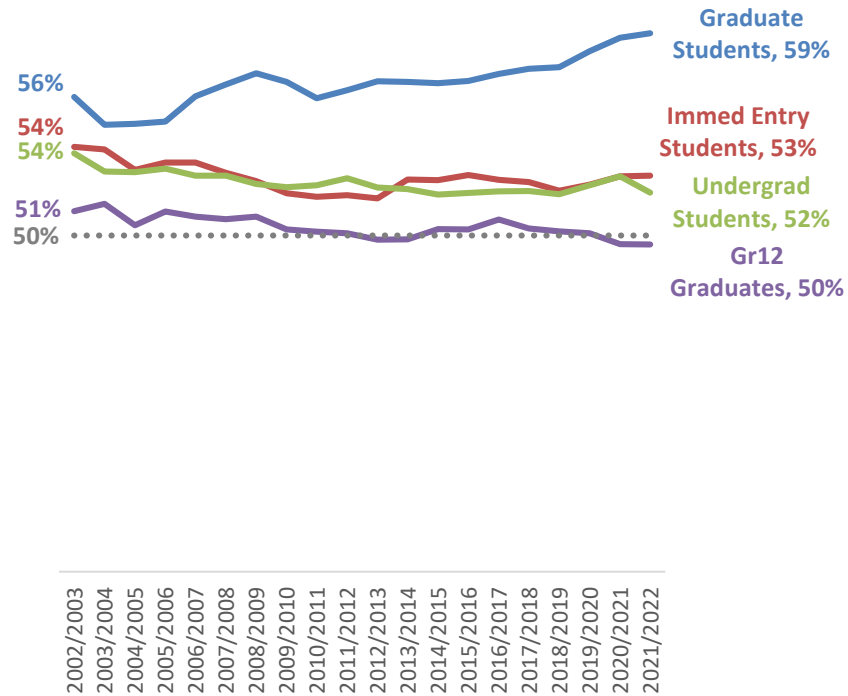
2004

2022

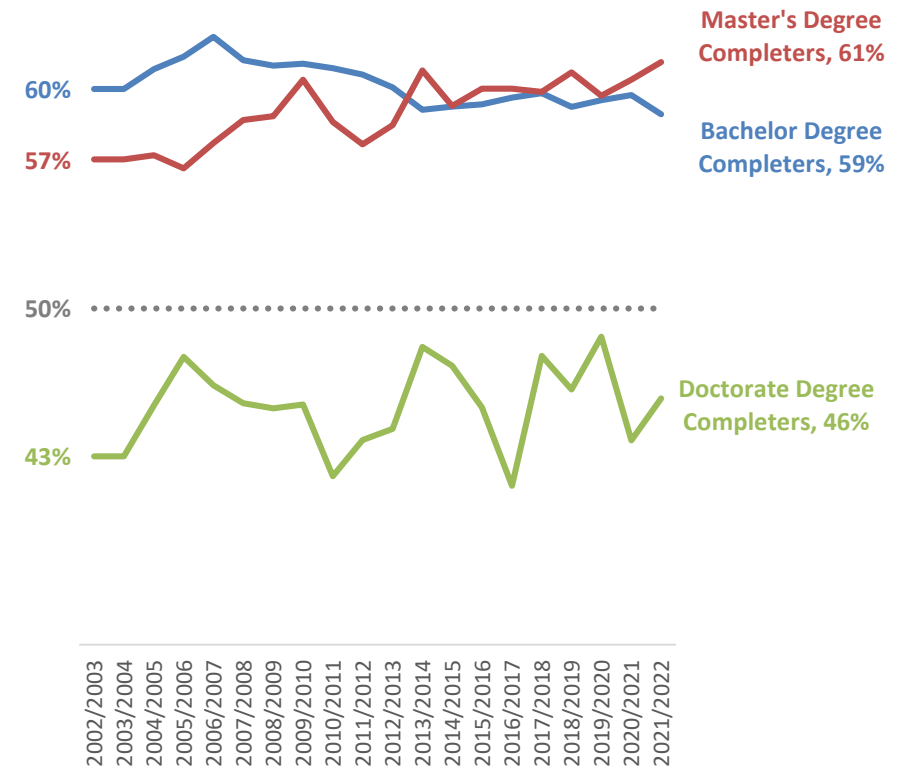
Source: Pixabay

To what extent are females over-represented in B.C.'s Education Systems?

% Female by Education Level



% Female by Degree Completed

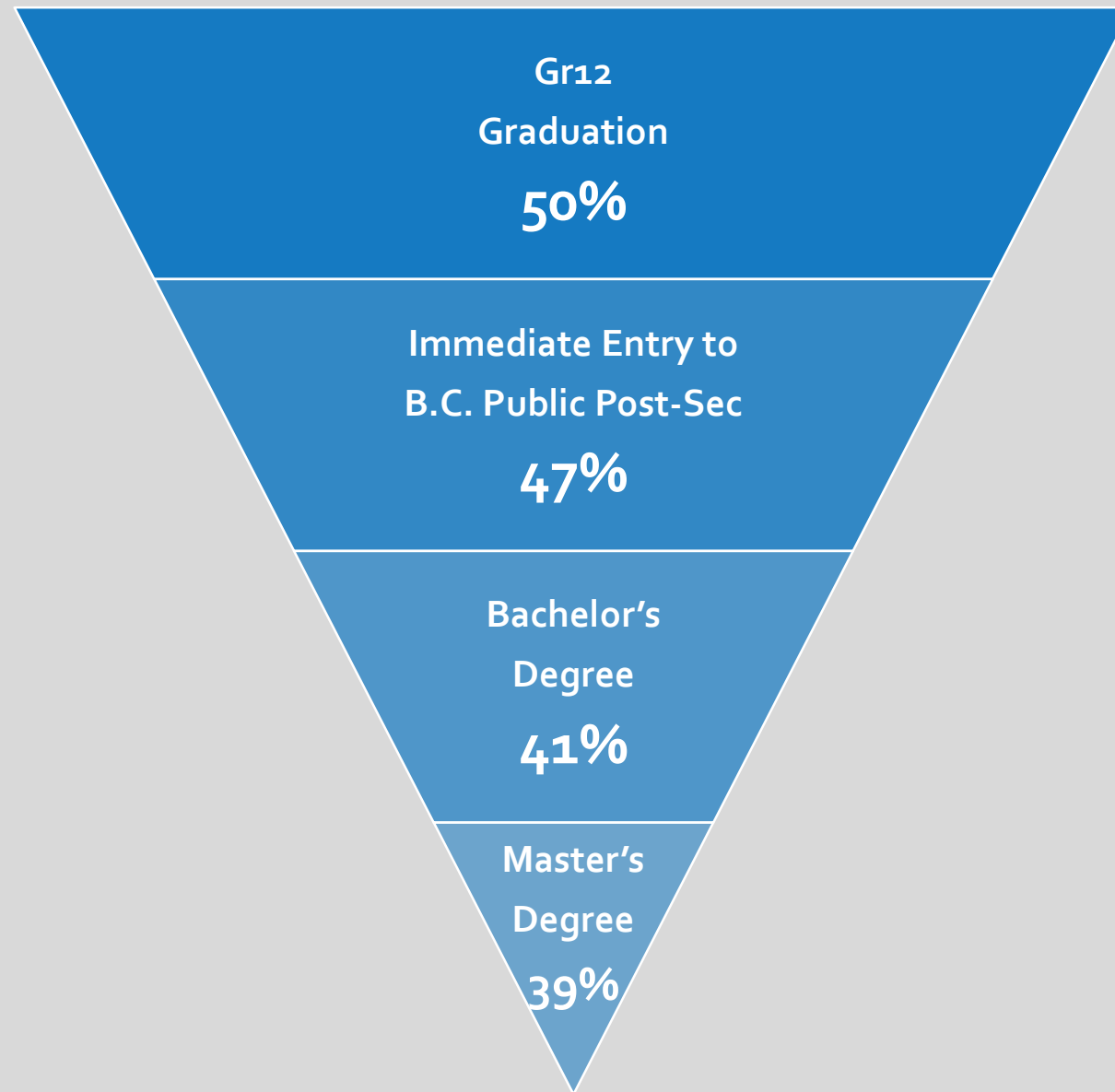


Where did the boys go?

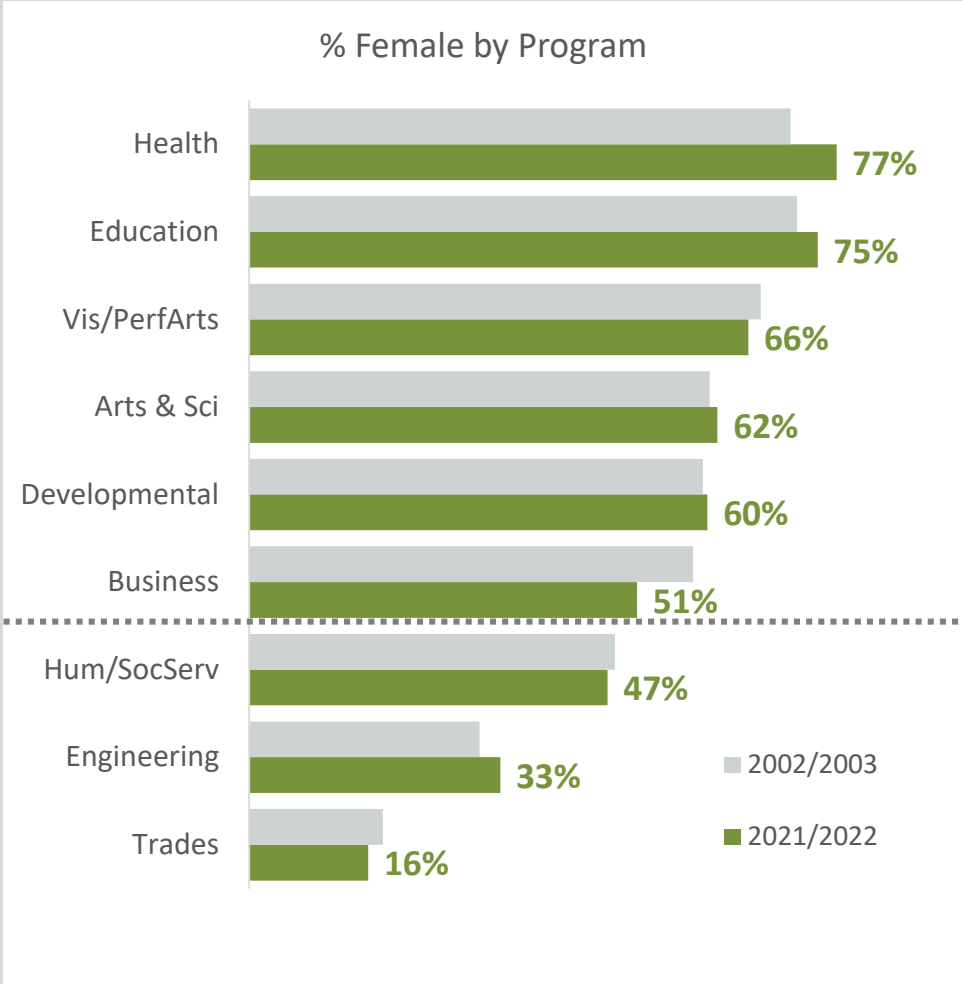
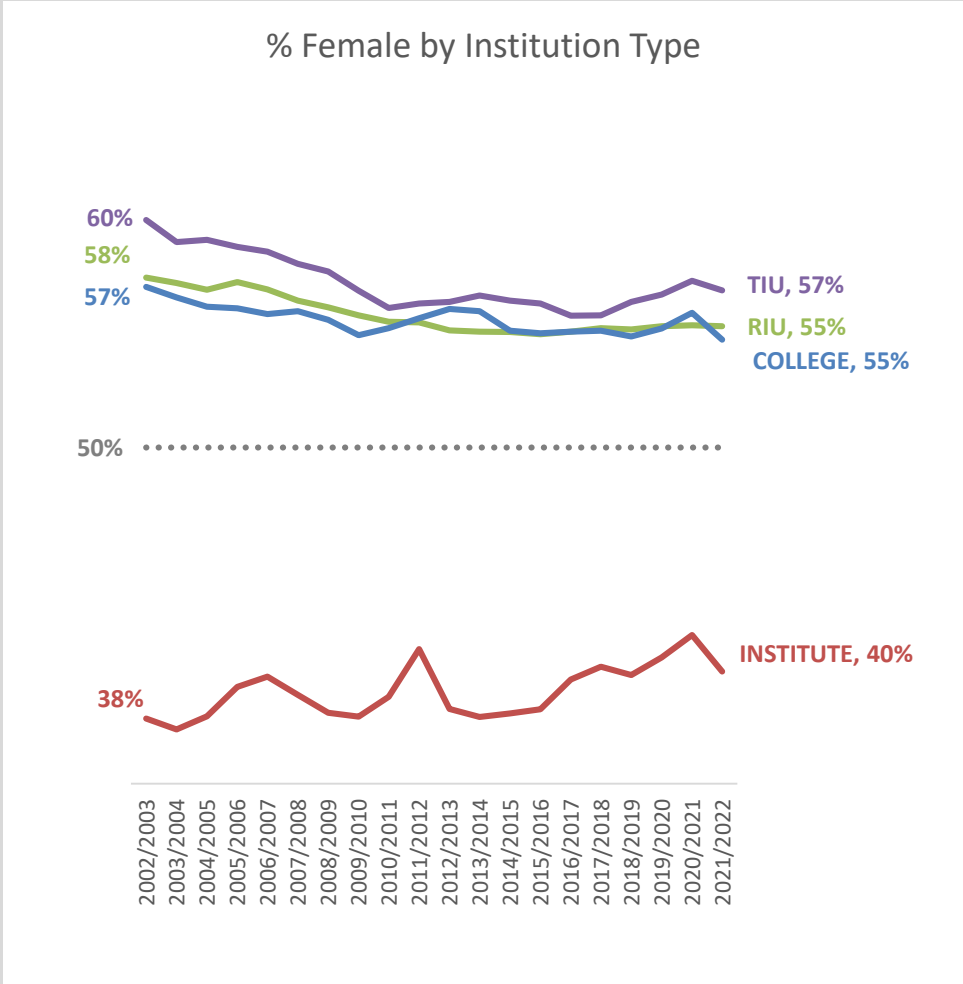
As we move through the levels of education, we see proportionately fewer males – funnel perspective.

Note that 54% of PhD graduates are male.

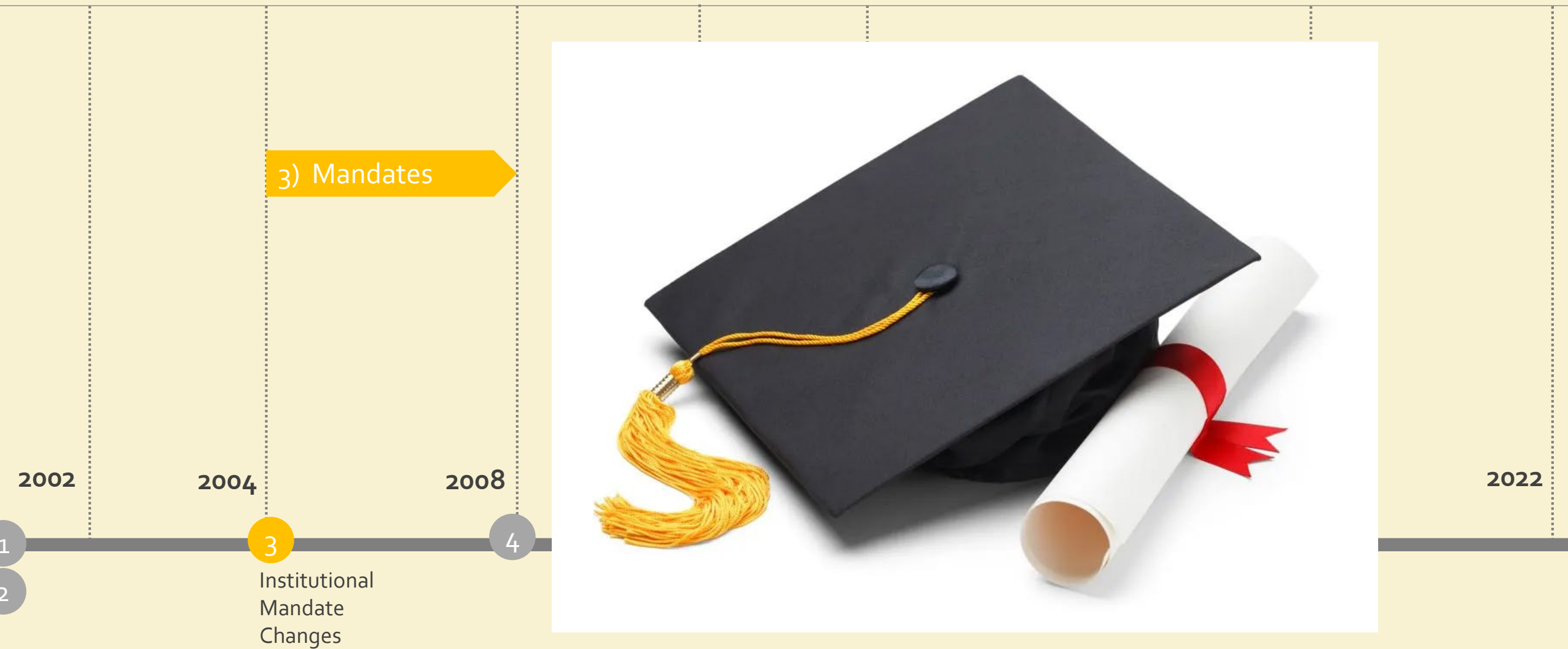
Domestic (49% male)
International (62% male)



Is the representation of females consistent across the B.C. System, by institution type and by program?

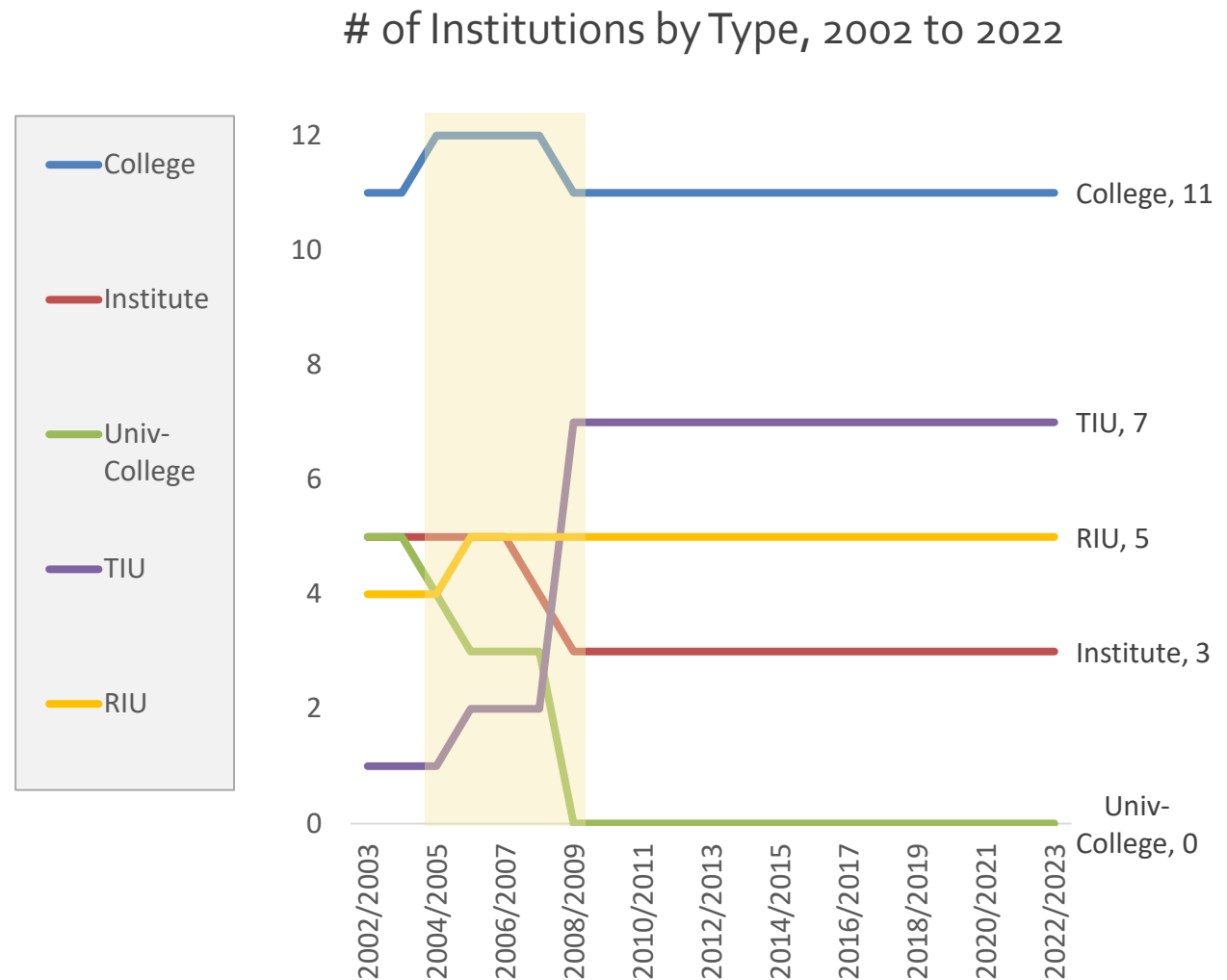


3) Institutional Mandate Changes



2004 to 2008: Changes in Institutional Mandates

- B.C. currently has 25 public post-secondary institutions.
- Institutions are categorized into institution types: Colleges, Institutes, TIUs and RIUs.
- Institutional mandates changed over time, primarily from 2004 to 2008.



When UBCO and UBCV are counted as separate campuses of a single RIU, the total count of RIUs is 4 and total PSI count is 25.

2004 to 2008: Changes in Institutional Mandates, by Institution

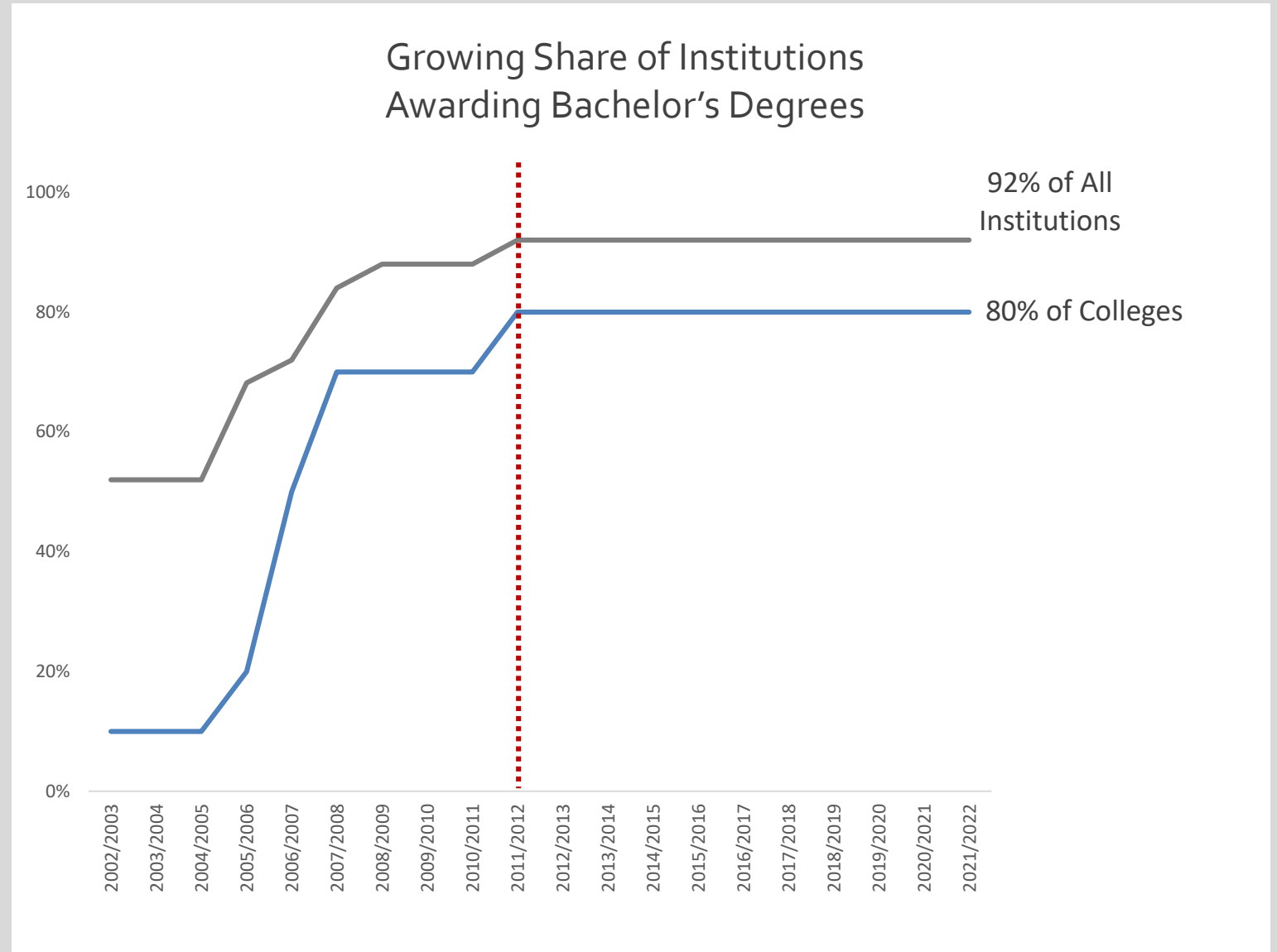
| | |
|----|--------------|
| C | College |
| I | Institute |
| R | RIU |
| T | TIU |
| UC | Univ-College |

| PSI Type | Institution | 2002/2003 | 2003/2004 | 2004/2005 | 2005/2006 | 2006/2007 | 2007/2008 | 2008/2009 | 2009/2010 | 2010/2011 | 2011/2012 | 2012/2013 | 2013/2014 | 2014/2015 | 2015/2016 | 2016/2017 | 2017/2018 | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 |
|---------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| B.C. Colleges | CAM | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | CMTN | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | CNC | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | COTR | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | DOUG | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | LANG | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | NIC | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | NLC | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | OKAN | UC | UC | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | SEL | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| | VCC | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Institutes | BCIT | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| | JIBC | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| | IIG | I | I | I | I | I | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | NVIT | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| RIUs | SFU | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| | UBCO | -- | -- | -- | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| | UBCV | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| | UNBC | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| | UVIC | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| TIUs | CAPU | C | C | C | C | C | C | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |
| | ECU | I | I | I | I | I | I | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |
| | KPU | UC | UC | UC | UC | UC | UC | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |
| | RRU | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |
| | TRU | UC | UC | UC | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |
| | UFV | UC | UC | UC | UC | UC | UC | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |
| | VIU | UC | UC | UC | UC | UC | UC | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |

B.C. currently has 25 public post-secondary institutions, when UBCO and UBCV are counted as separate campuses of one RIU. Institute of Indigenous Government (IIG) was absorbed into NVIT in 2007.

Changes in Institutional Mandates have Broadened Bachelor's Degree Completion Opportunities

- All RIUs, TIUs and Institutes award Bachelor's degrees.
- All but two colleges (CNC, CMTN) award Bachelor's degrees.
- Are RIU's awarding a smaller share of the Bachelor's degrees in B.C.?
- How has this affected student mobility in B.C.?

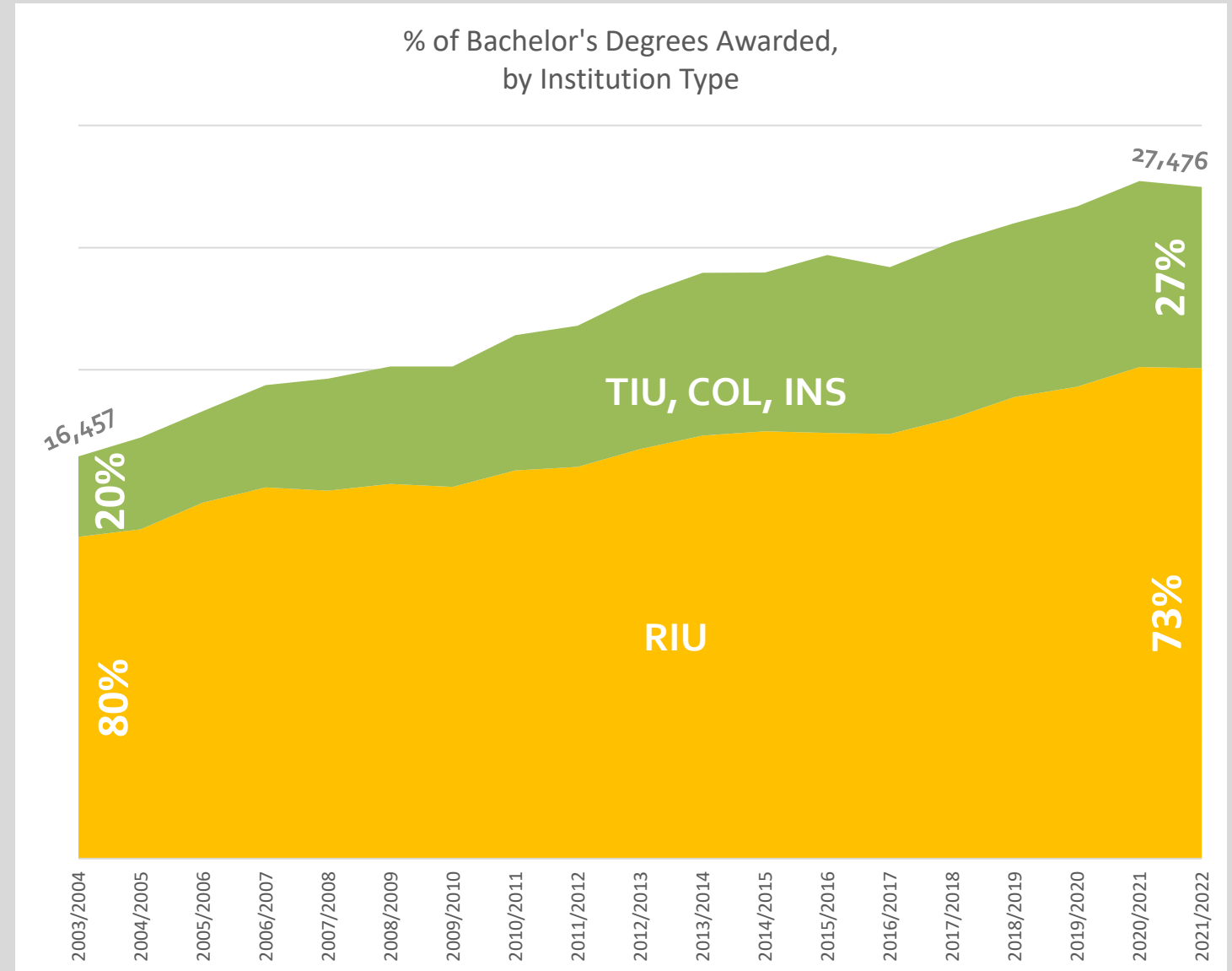


A Growing Share of Bachelor's Degrees are Awarded at Colleges, Institutes and TIUs

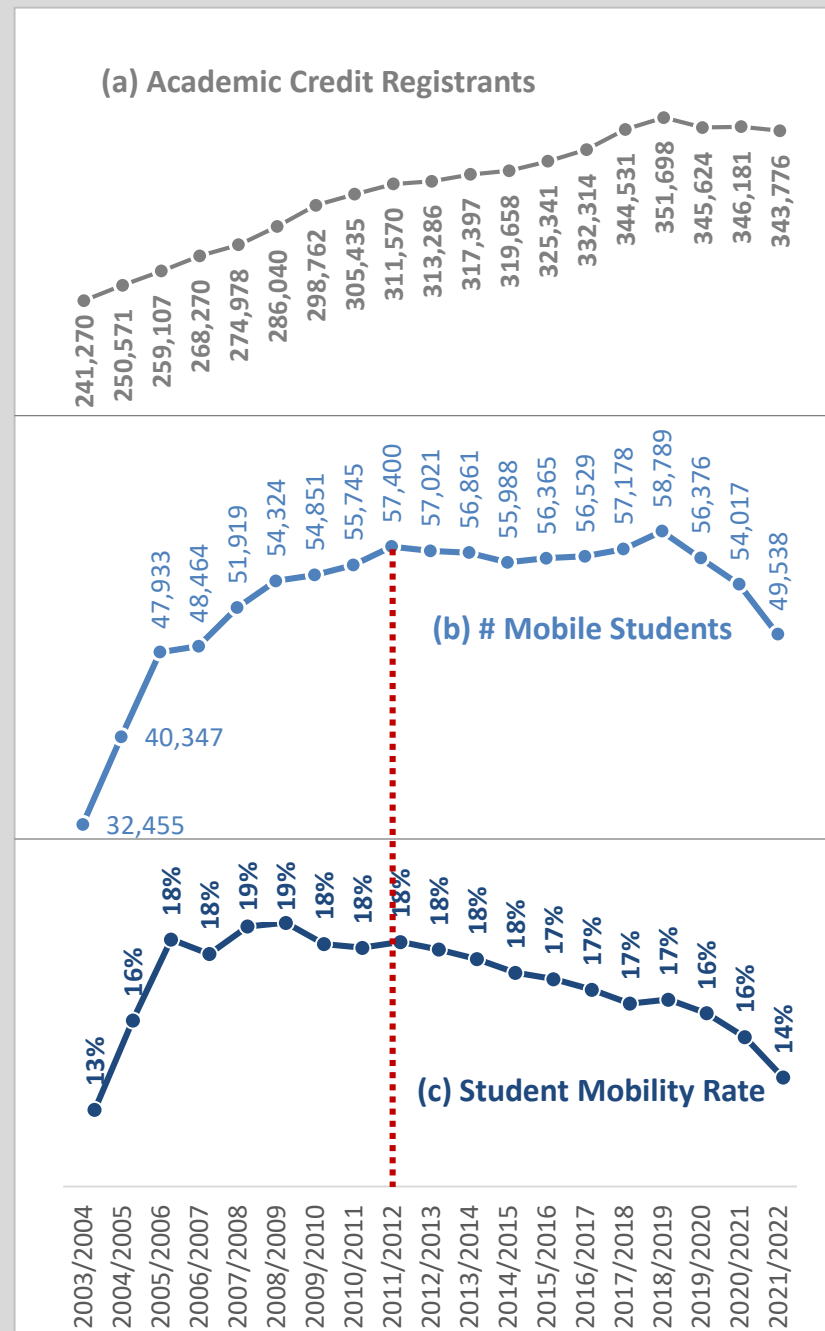
The share of total bachelor's degrees awarded by RIUs has declined from 80% of the total to 73%, as other institution types increased their share.

The total number of bachelor's degrees awarded in B.C. public post-secondary institutions grew from 16,500 to 27,500 (or $\uparrow 67\%$).

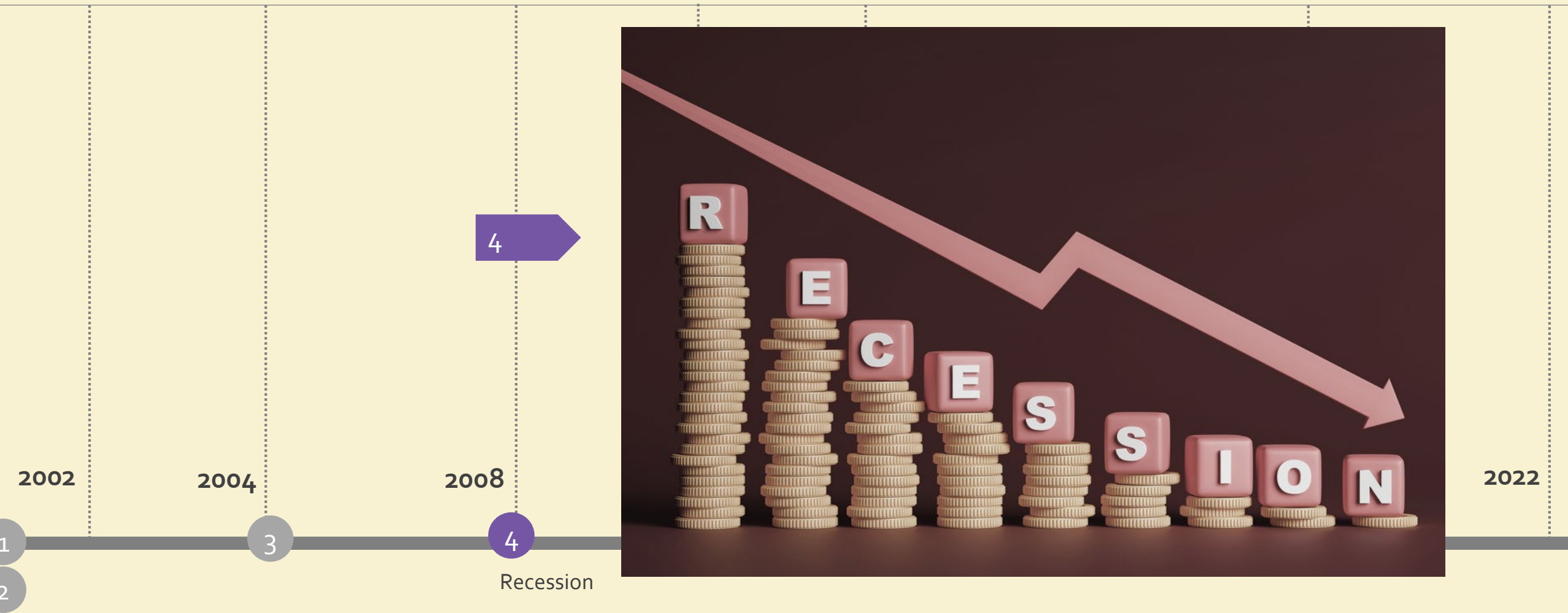
The number of bachelor's degrees awarded in TIUs, Colleges and Institutes has more than doubled (2.3x) in twenty years, compared to 1.5x in RIUs.



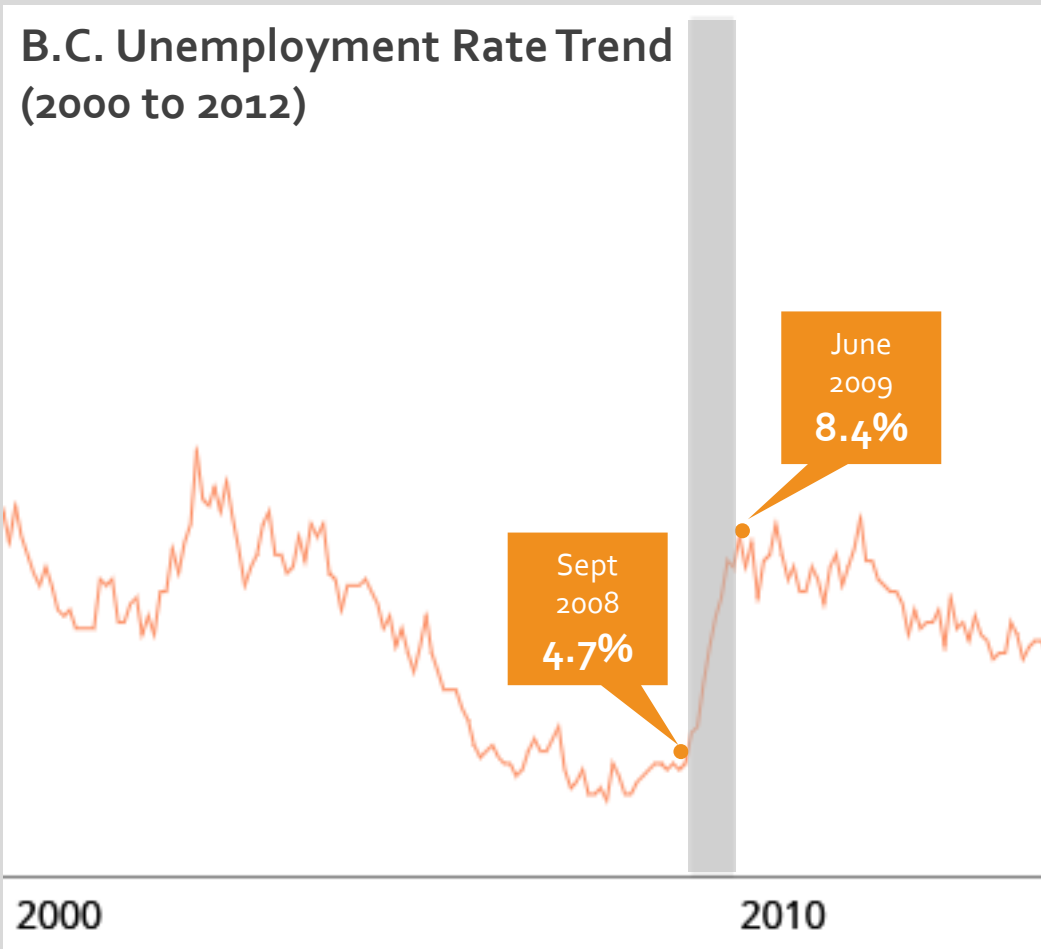
Student Mobility Rates are Declining as Bachelor Degree Completion Opportunities Widen



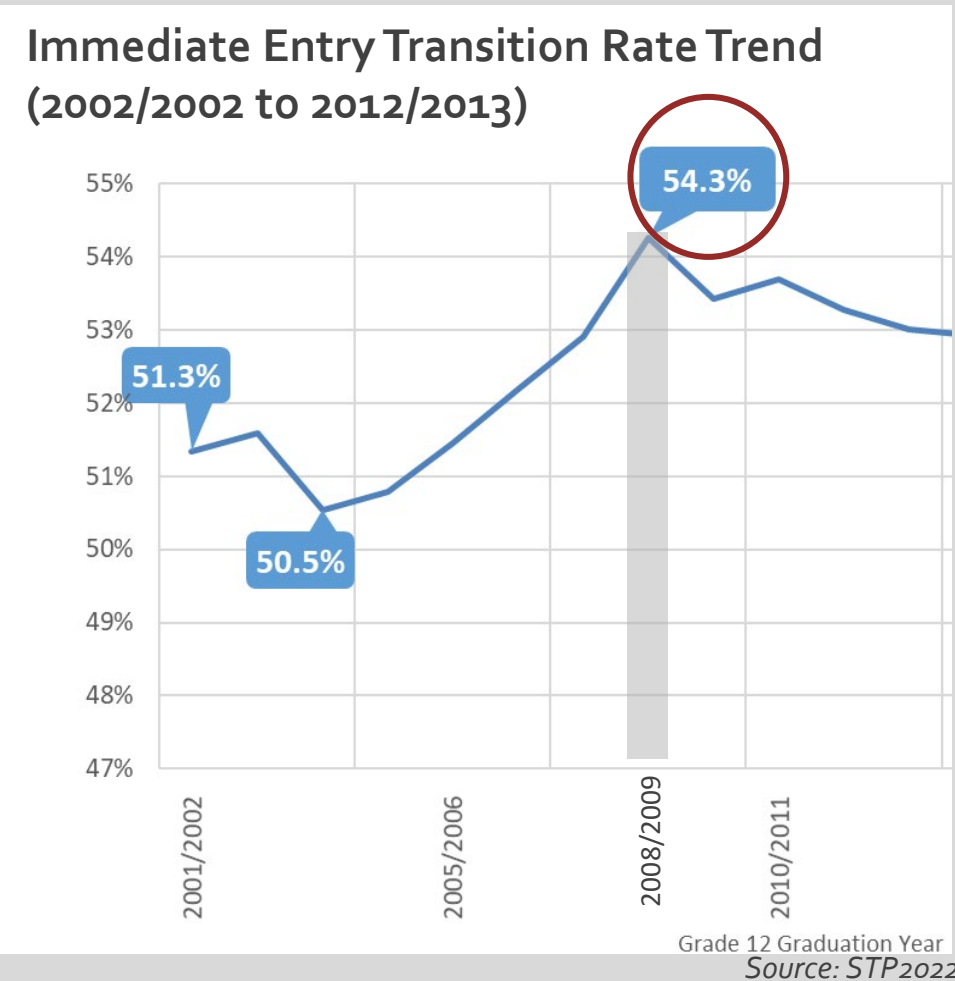
4) Recession



Did rising unemployment rates during the 2008 recession influence student transition rates?

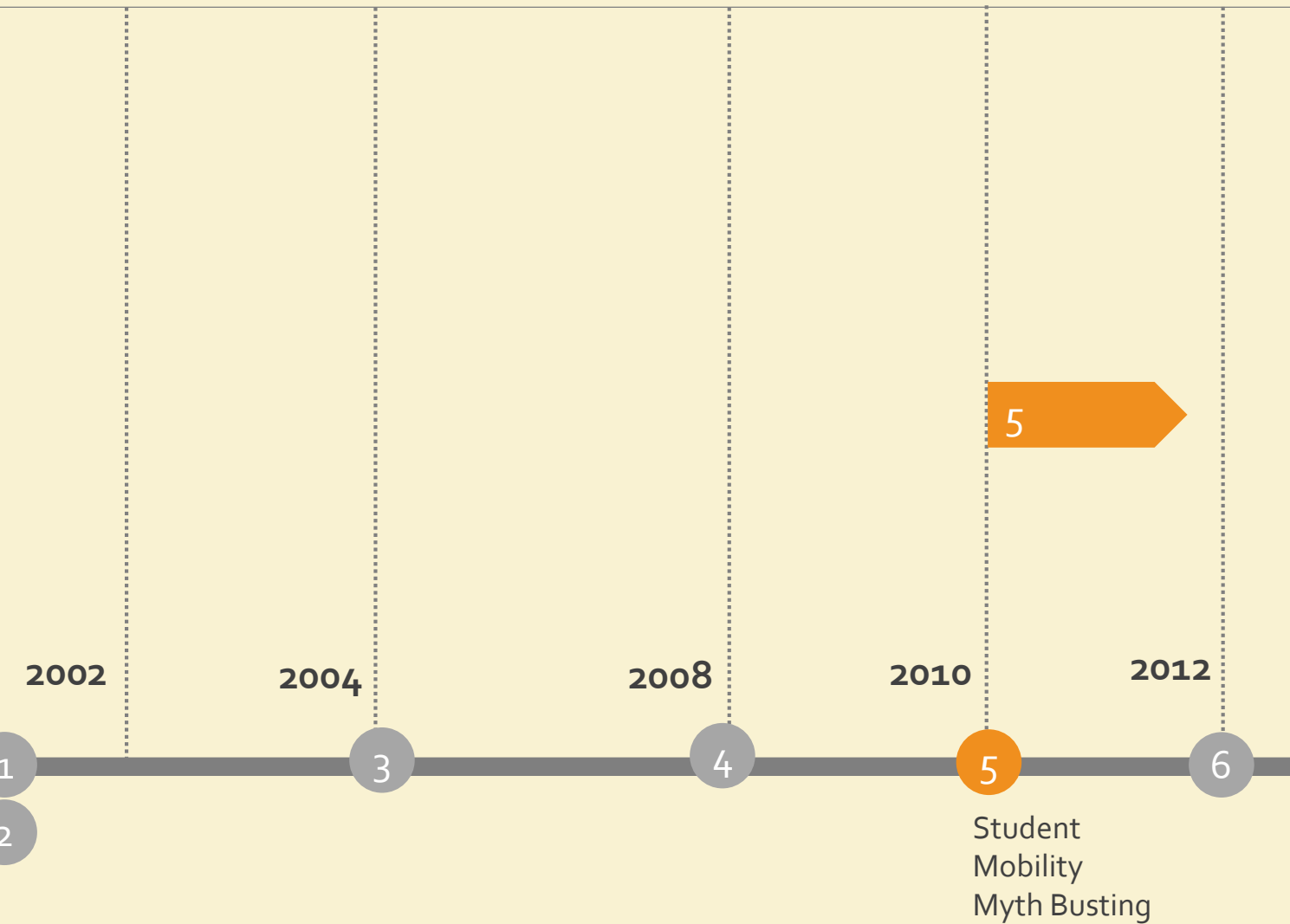


Source: BC Stats, Labour Market Statistics Dashboard
https://bcstats.shinyapps.io/LFS_app/



Total post-secondary enrolment also continued to rise during this period.

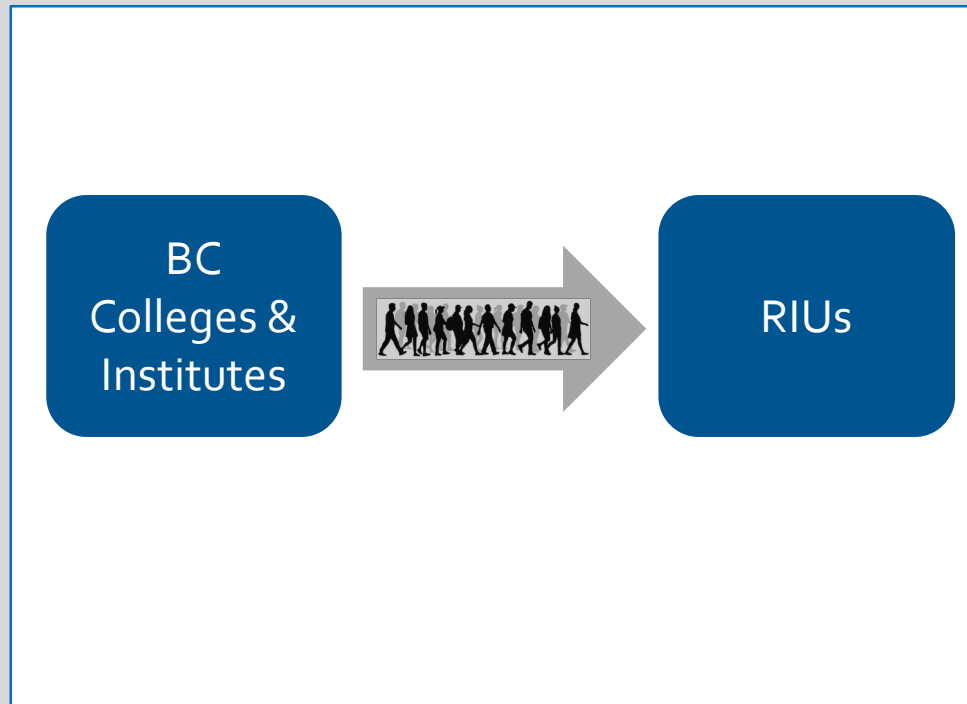
5) STP Student Mobility Myth Busting



What was the student mobility myth?

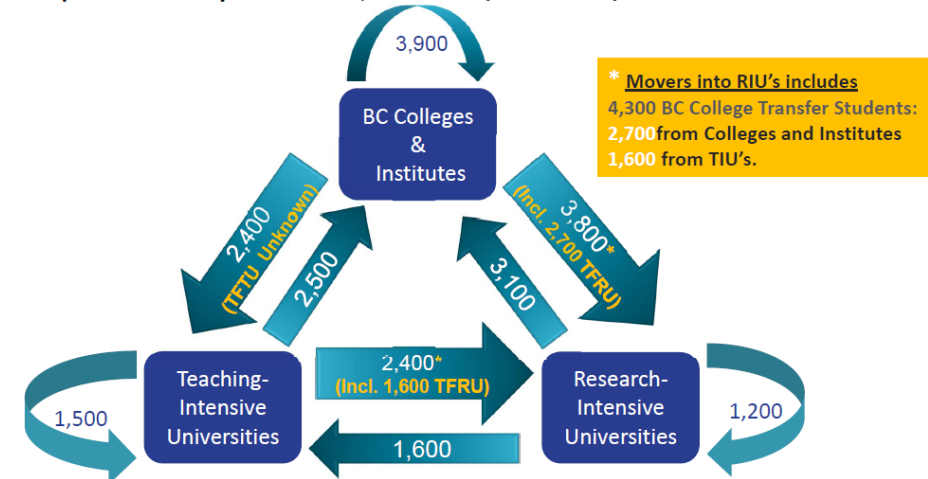
How did the STP bust that myth?

- Before the STP, many believed that student mobility in BC was primarily from Colleges/Institutes to RIUs.
- In December of 2010 STP created a student mobility diagram to reveal that students move in all directions between all institution types (not just college to university!)



New Look at Student Mobility in the BC Public Post-Secondary Education System

- 22,400** active credit course registrants (ACCR's) moved between BC public post-secondary institutions, from 2006/07 to 2007/08.



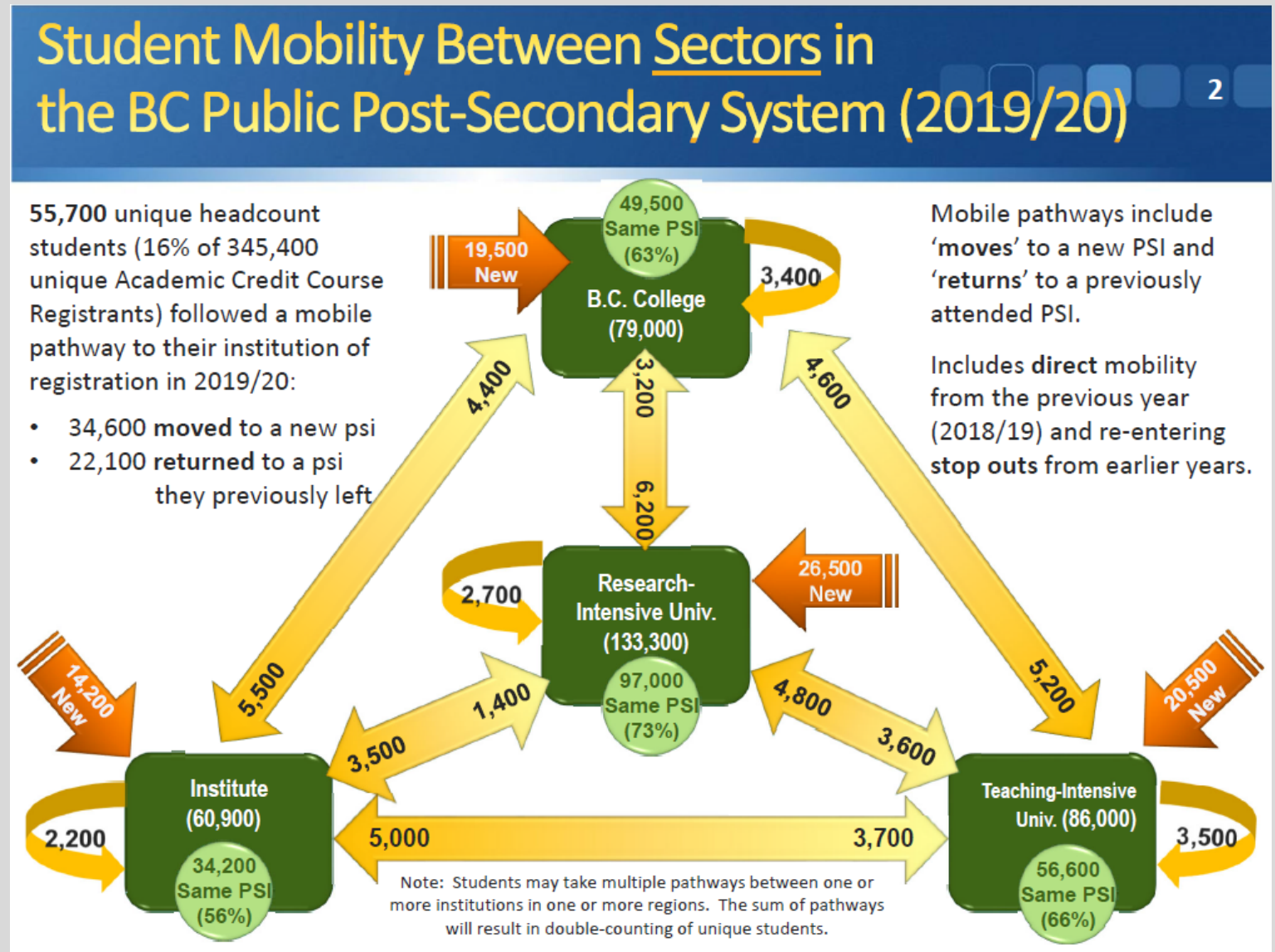
Source: STP2009

Student Mobility Diagram (STP2020)

STP's student mobility diagram is still useful and is updated every two years.

Colleges and Institutes each have their own vertex in the modern mobility diagram.

We also see fewer students moving to RIUs from other institutions.



Source: STP2022

6) International Education Strategy



6) International

2012

2015

2020

2022

6

International
Education
Strategy

7

2012: B.C. International Education Strategy



Source: Pixabay

- B.C.'s **2012 International Education Strategy** included a goal of *"increasing the number of international students choosing B.C. as their study destination by 50 percent over four years."* ^(a)
- Using a 2011/2012 baseline, the international growth needed to meet target by 2015/2016 was:
 - + 6,000 in B.C. K-12.
 - +14,000 in B.C. public post-sec
- These targets were achieved by 2015/2016:
 - ✓ + 6,100 B.C. K-12 ^(b) (including 1,000 Gr12 graduates ^(c))
 - ✓ +16,000 B.C. public post-sec ^(c)
- International enrolment continues to grow in B.C. What does that growth look like?

Data Sources:

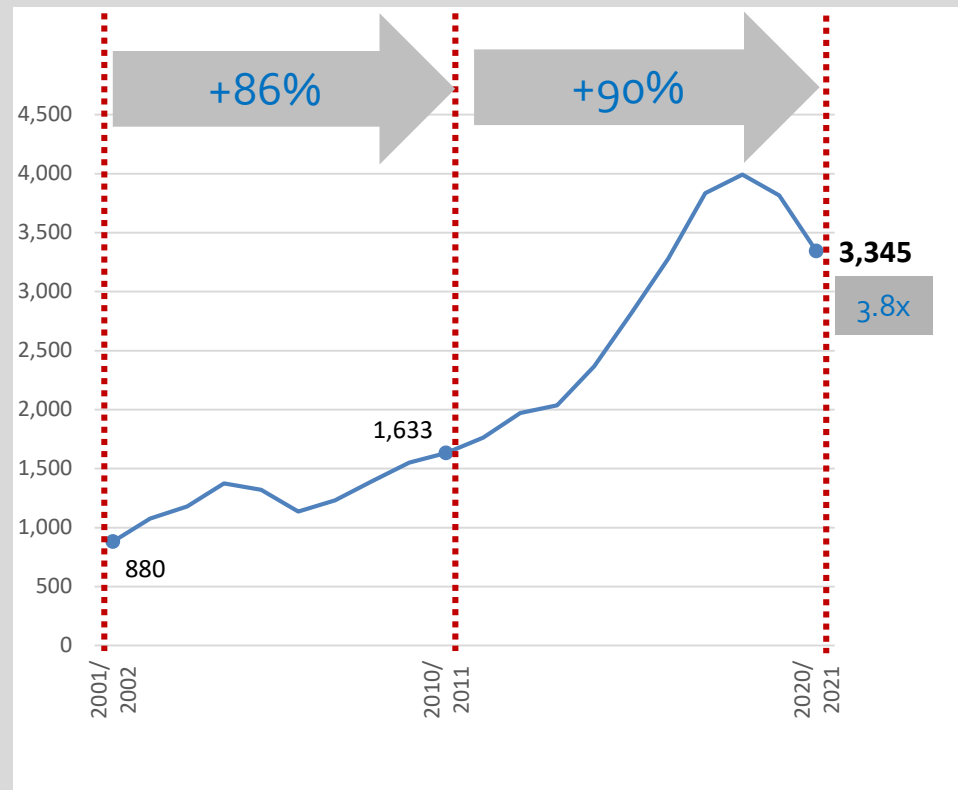
a) https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/international-education/international_education_strategy_web.pdf

b) <https://catalogue.data.gov.bc.ca/dataset/bc-schools-student-headcount-by-grade>

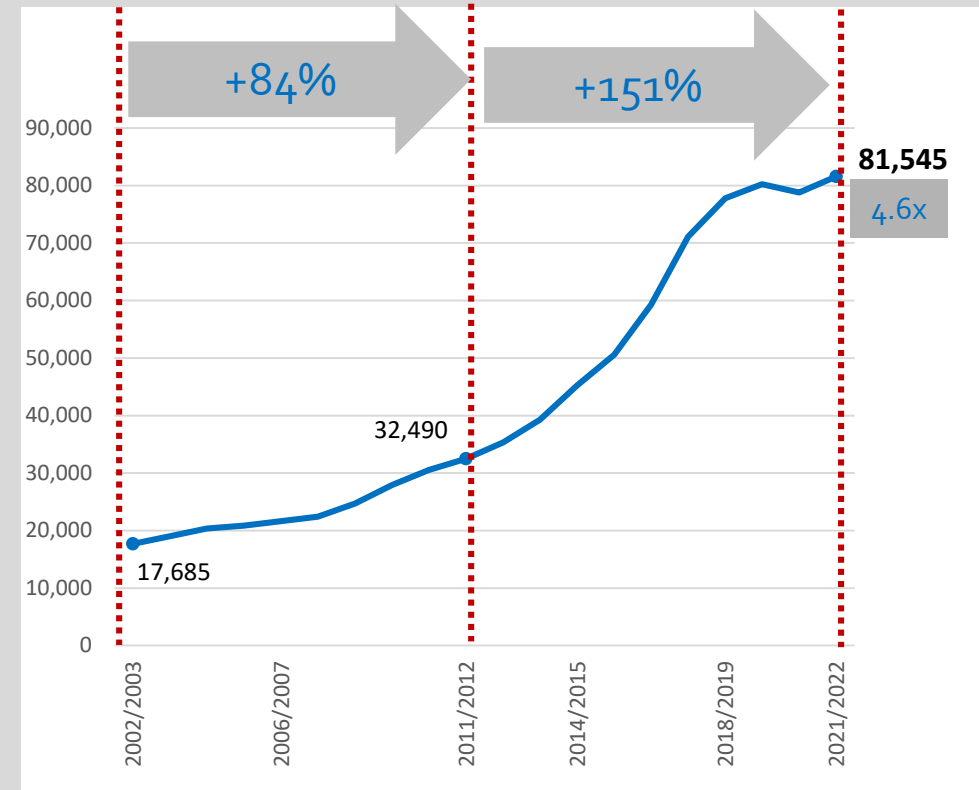
c) Student Transitions Project

International Student Growth: Gr12 Grads & Post-Sec

Non-Resident **Gr12 Graduates**
(International Student Proxy)

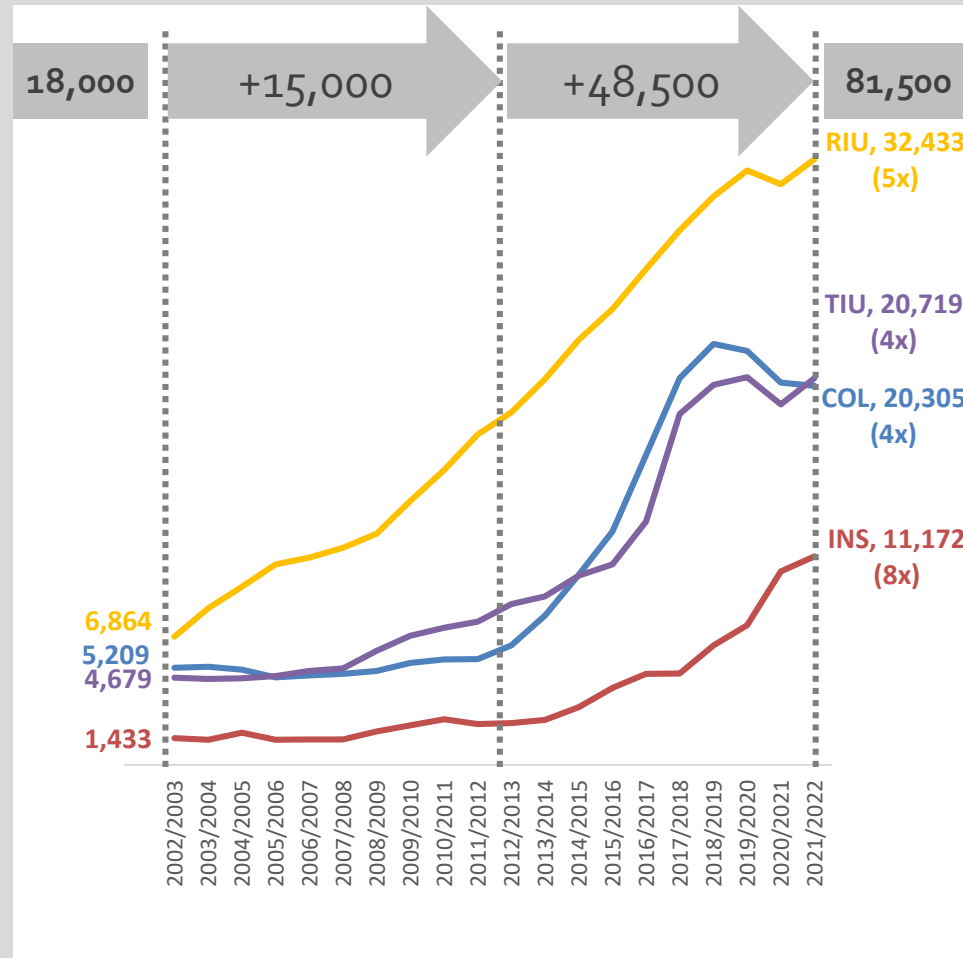


International Enrolment Growth in the
B.C. Public **Post-Secondary** System

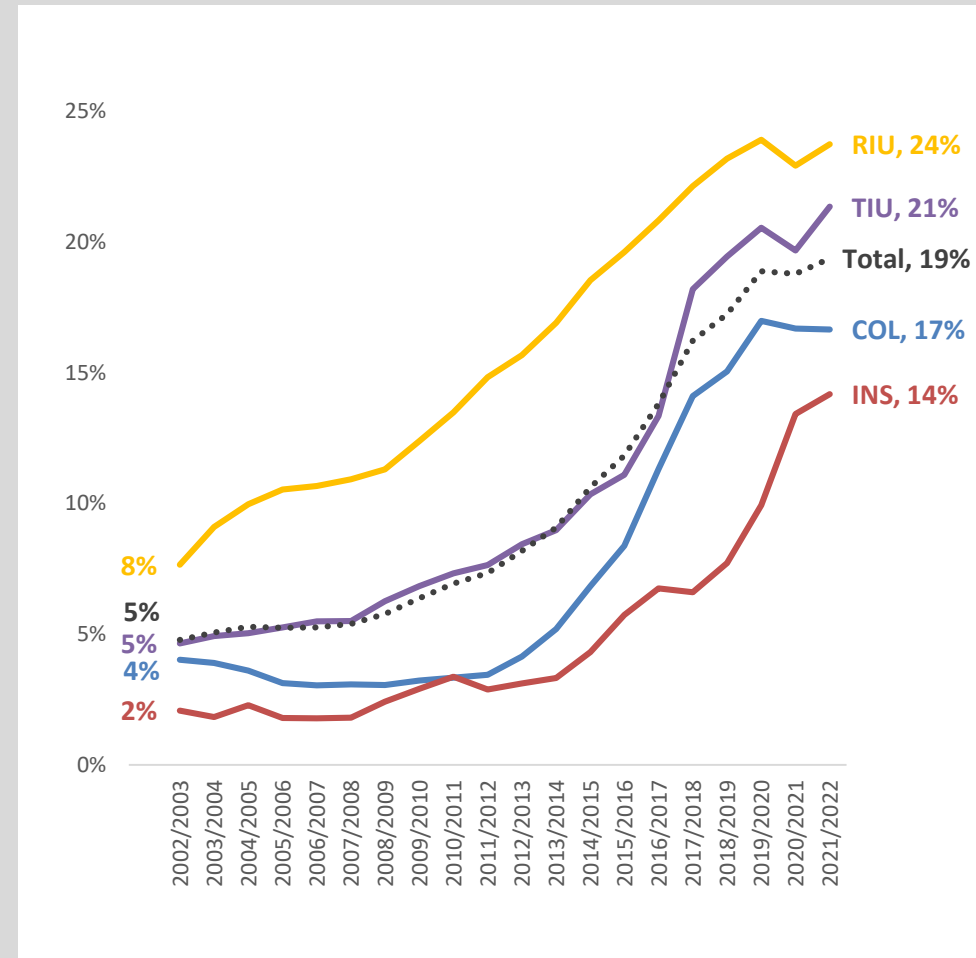


Was international enrolment growth consistent across institution types?

Headcount International



% International in Each PSI Type

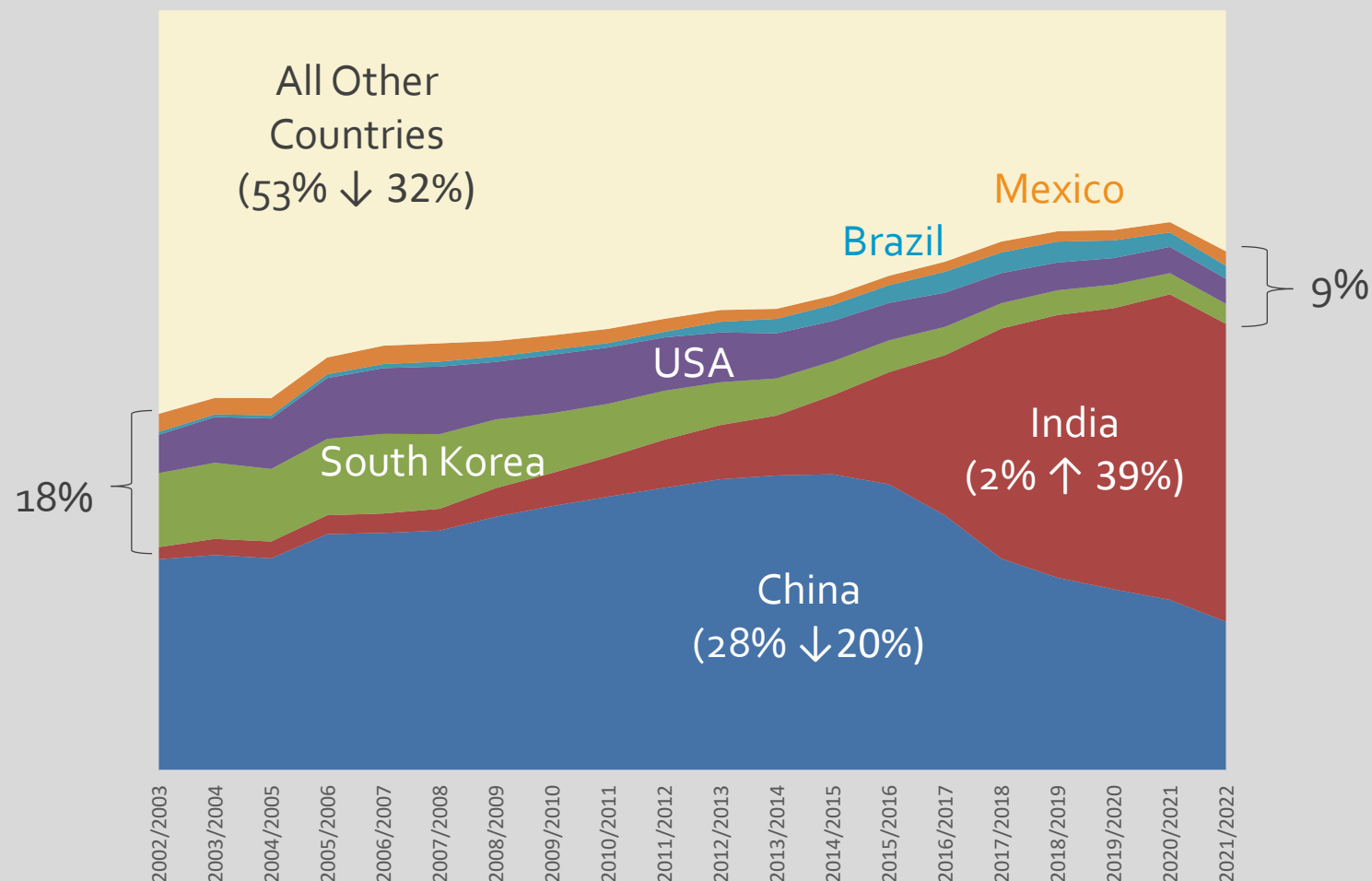


Post-Secondary Internationalization by Country

B.C.'s 2012 International Education Strategy suggested:

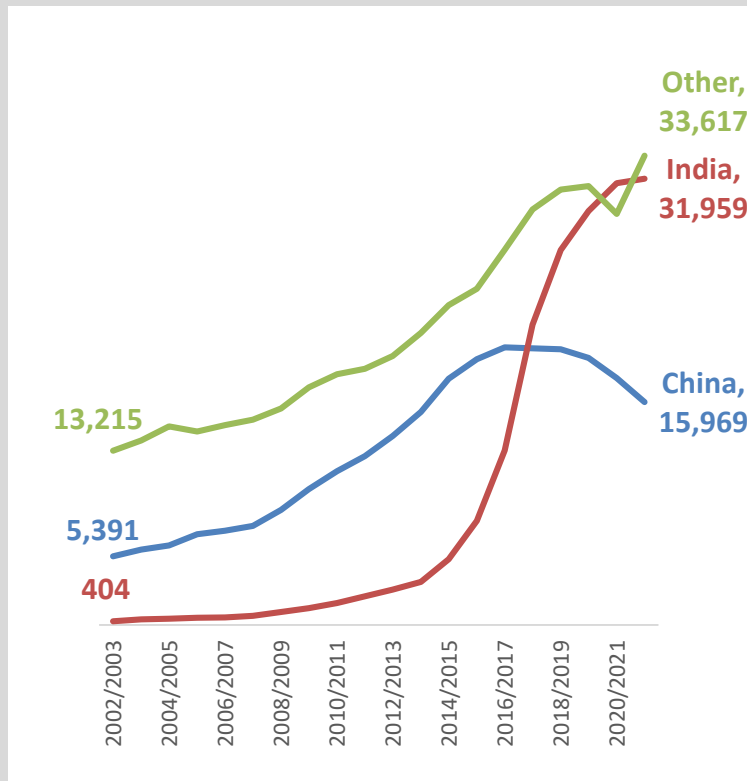
"Building on existing long-term relationships" with USA, China, South Korea.

"Also target emerging economies like India, Brazil and Mexico".

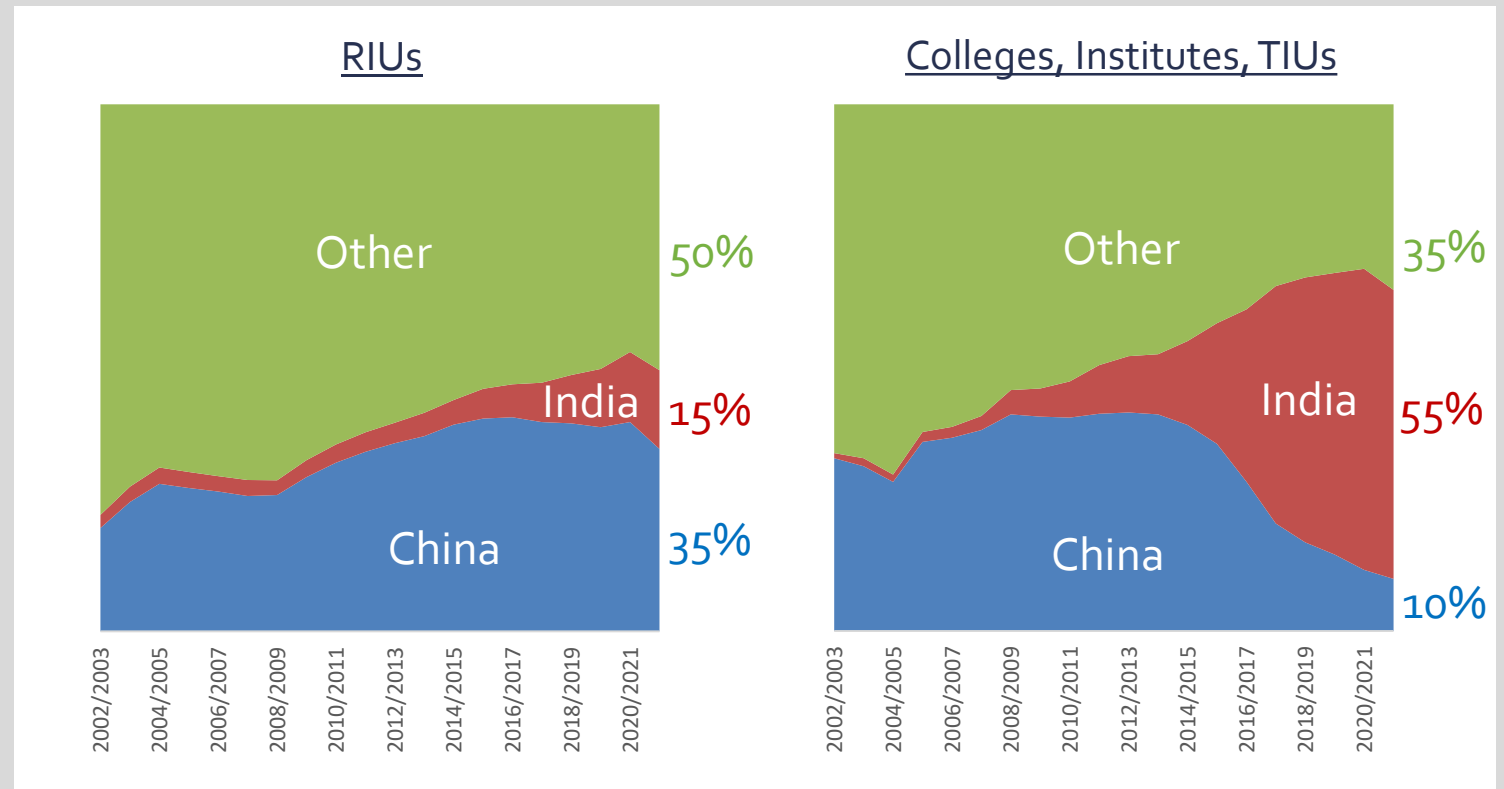


International Students from India and China: Comparing RIUs to Colleges, Institutes and TIUs

Headcount Enrolment Trend



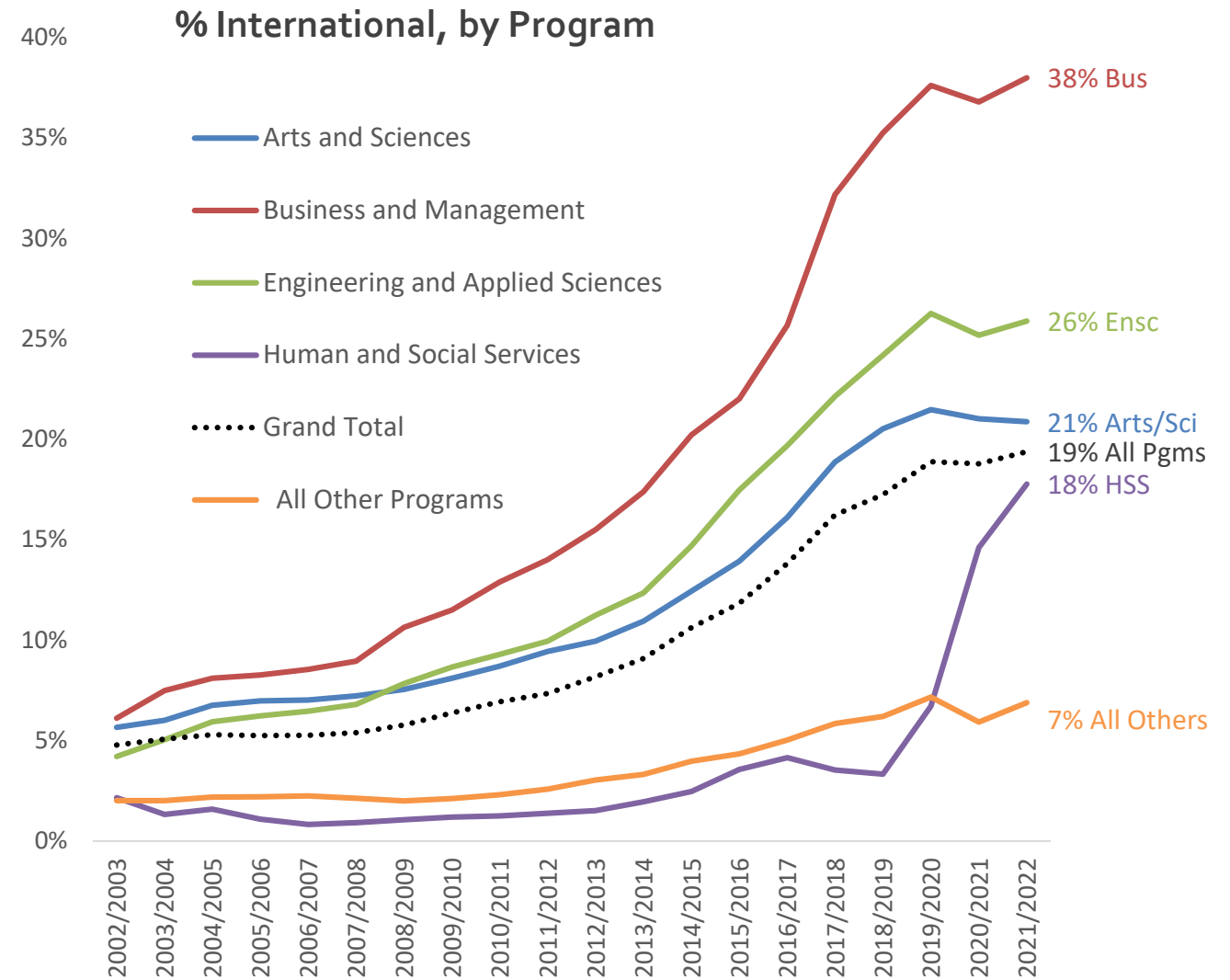
Distribution of International Students by Country



International Students are not Equally Represented in all Programs

Currently, 19% of the total 2021/2022 post-secondary enrolment is international.

Relative to all programs combined, Business programs have double the proportion of international students (38%).



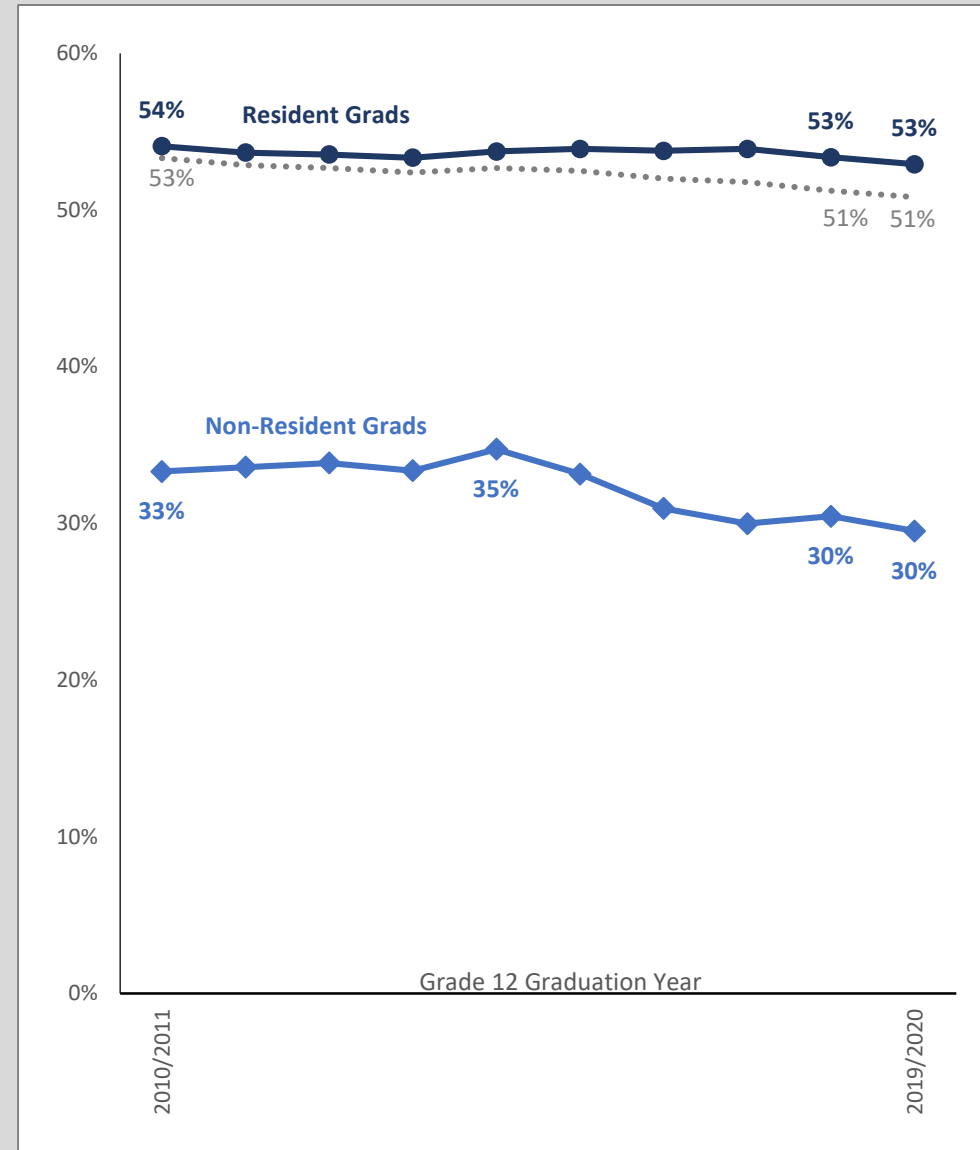
International Enrolment Growth is Impacting **Student Transition Rate Trends**

We are seeing gradually declining immediate-entry transition rates among all grade 12 graduates. Why?

Resident (domestic) students are more likely to enrol in B.C. public post-secondary education than international students.

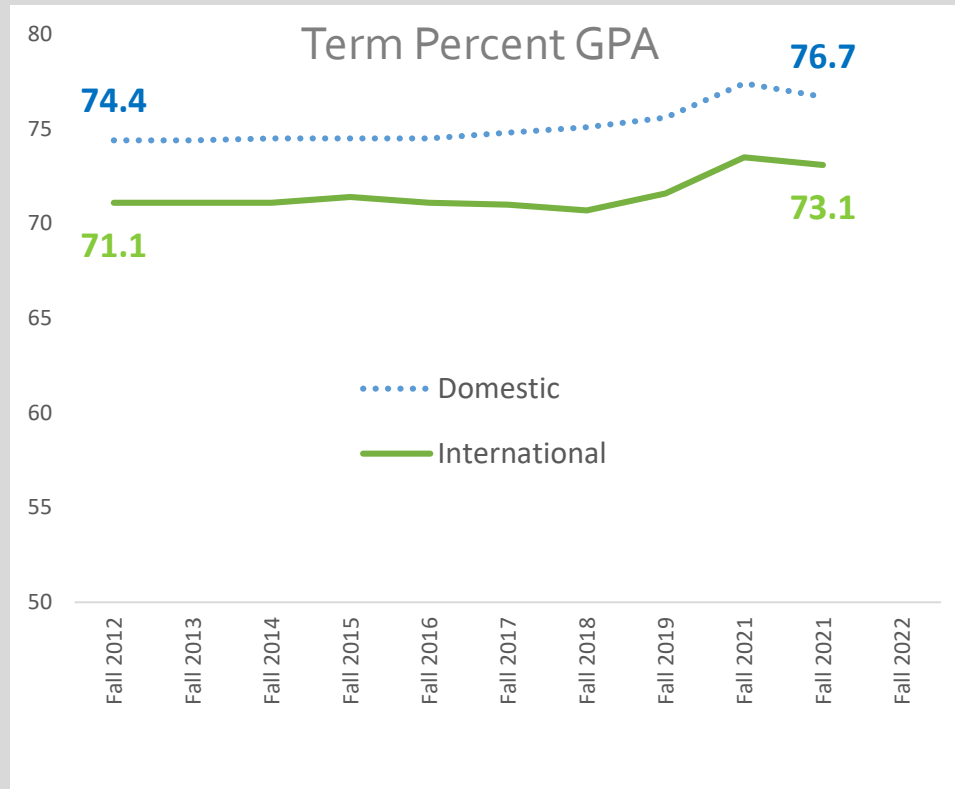
As the share of international grade 12 graduates grows, they are becoming much less inclined to enrol in B.C. public post-secondary education.

➔ Influencing downward trend in overall transition rates.

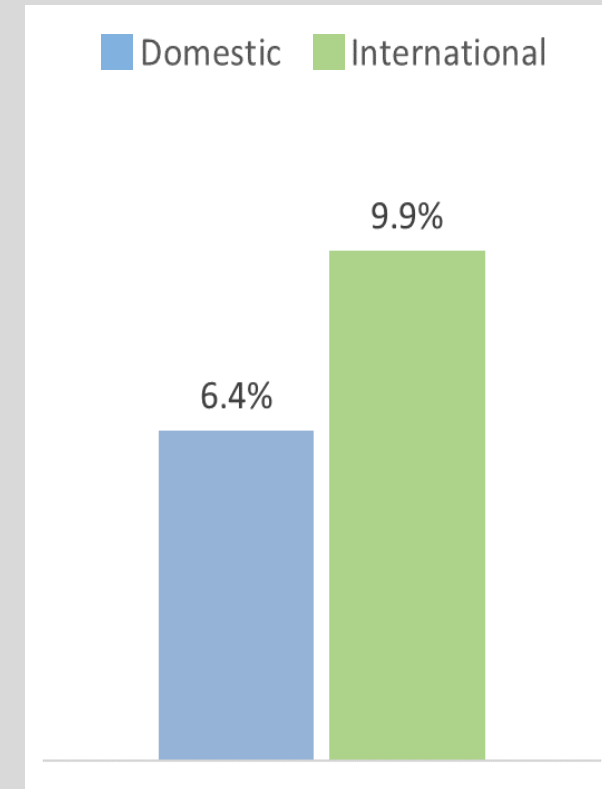


Academic Performance: International vs Domestic Students

On average, International students attain **lower GPAs** than domestic students.



On average, international students have higher **attrition rates*** than domestic students.



The first year immediate entry **attrition rate is the proportion of immediate entry students from B.C. secondary schools who "drop out" of post-secondary education in their first year and do not return to **any** BC public PSI over the next four years.*

Does this suggest that international students need additional academic support?

7) COVID-19



Source: Pexels

2002

1
2

7) COVID-19

2020

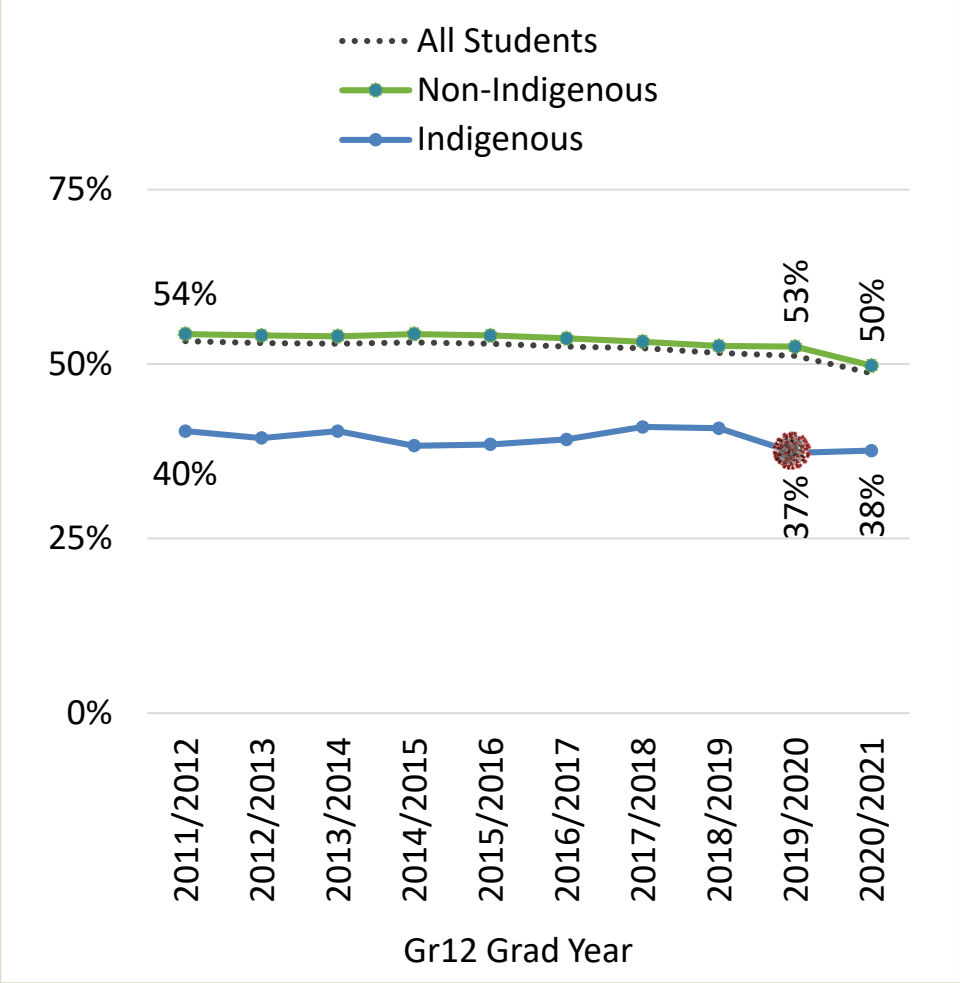
2022

7

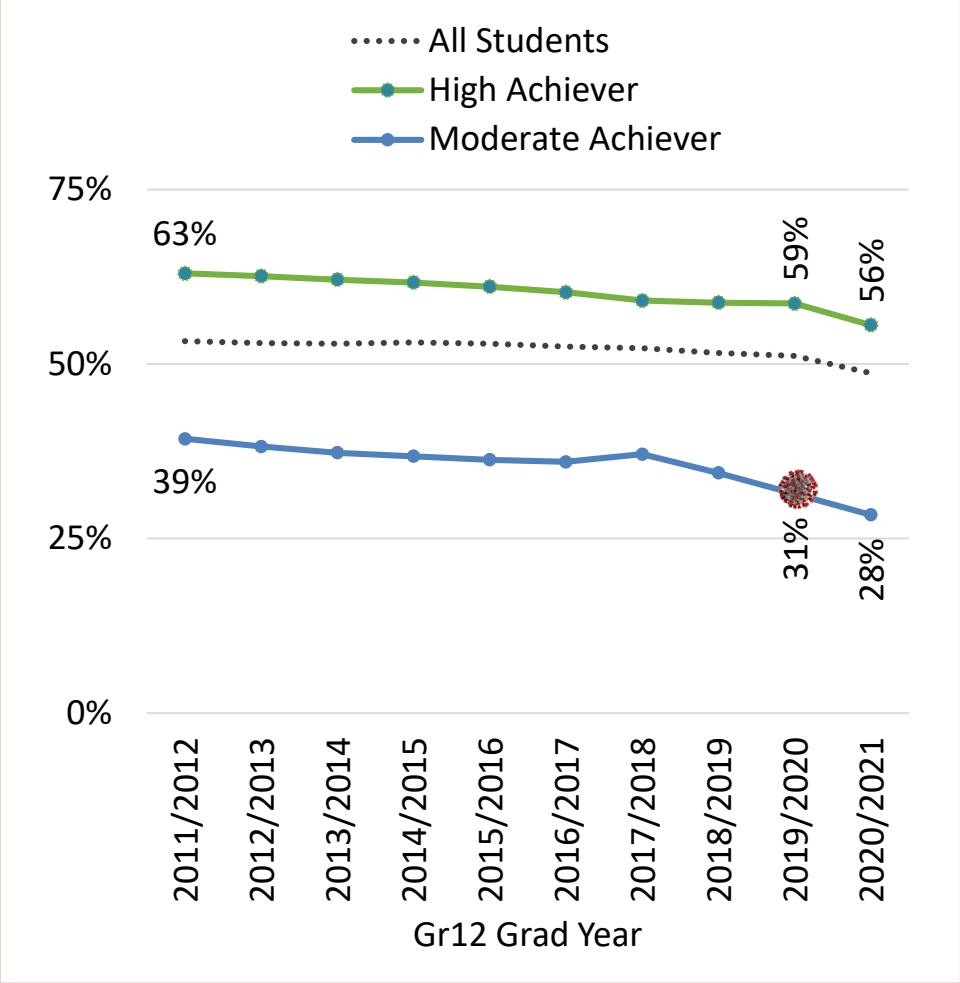
COVID-19
Pandemic

How did COVID affect transition rates of different groups?

by Indigenous Status



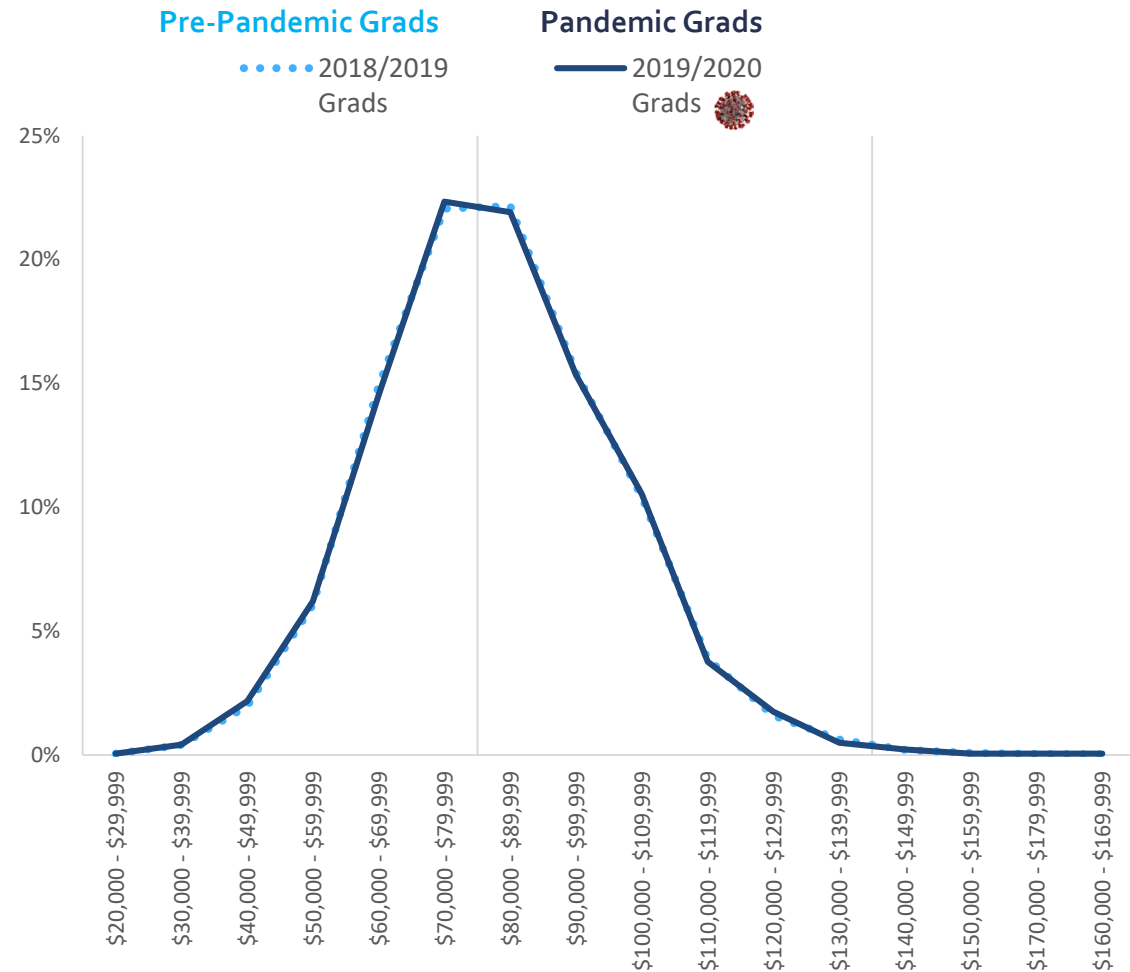
by High School iGPA: High vs Moderate Achievers



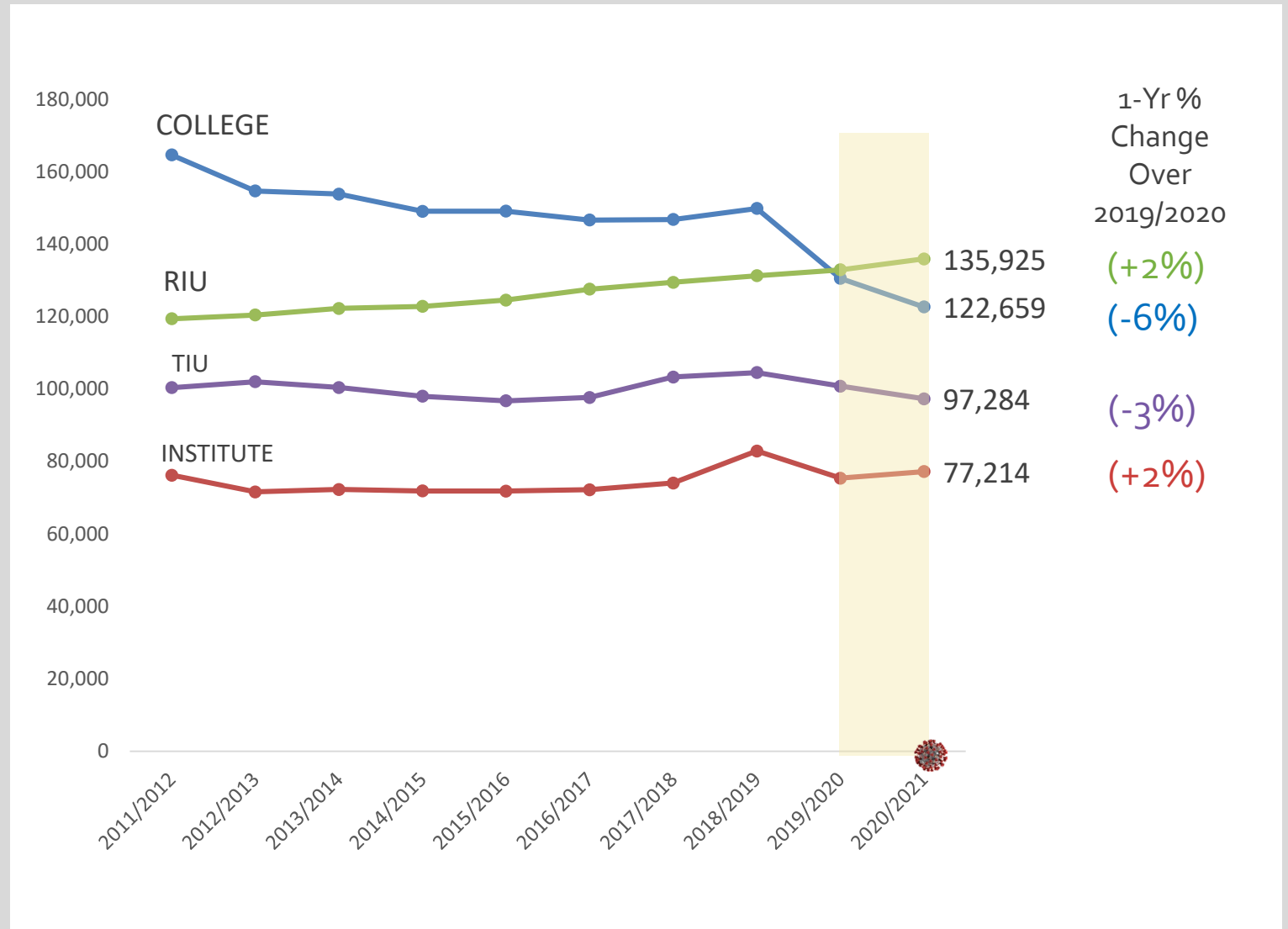
Did median family income influence transition to post-secondary education during the pandemic?

The distribution of immediate-entry students, by median family income did not differ substantially between **pre-pandemic** and **pandemic** graduates.

% Distribution of Immediate Entry Students
by Median Family Income



Did COVID-19 impact post-secondary enrolment?



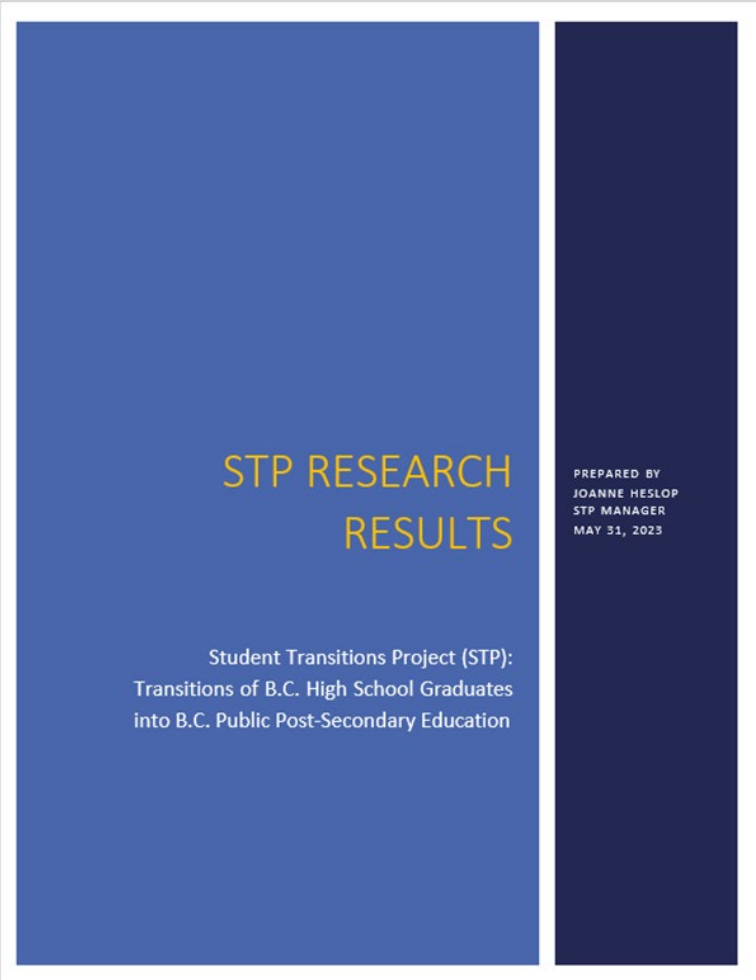
Work in Progress: 20 Years of STP Report

20 years

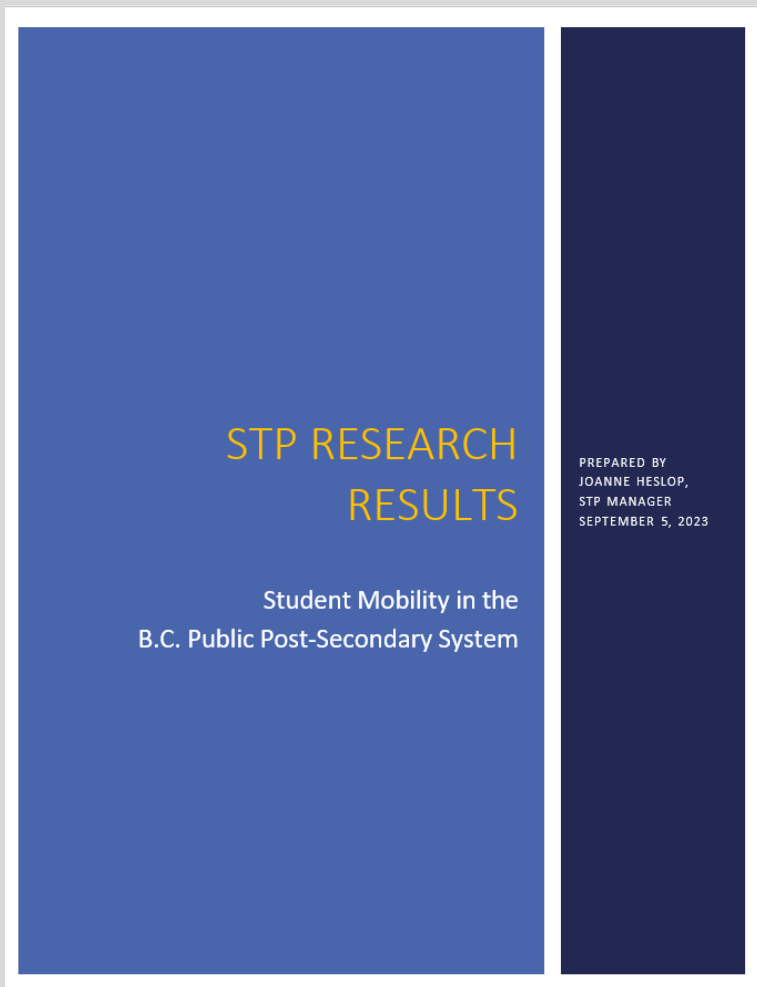
Expected release date:
Fall 2024



Released, June 2023: Gr12 Transitions & Post- Secondary Enrolment



Soon to be released: STP Student Mobility Report



Any questions, comments or suggestions?



End of Presentation

End of Presentation