

DATA CHALLENGE

***TELL A STORY
WITH DATA!***

Connect with leaders in academia,
government and industry while
exploring the world of data!

Kickoff Orientation Session!
(What you need to know to compete successfully!)



International Business &
Entrepreneurship Centre

Agenda

1. What is the Data Challenge/
2. Why Participate?
3. Who Participates?
4. Teams
5. What Does Your Team Need to Do?
6. How Does it Work?
7. Judging
8. Prizes
9. Key Dates
10. Next Steps

Overview

- The 8th annual UNB Data Challenge brings together teams of students from across Canada to demonstrate the power of open data
- Competitors create an **Infographic Poster** and **Presentation** to tell a data story through data visualizations featuring open data from governments, non-profits, and NGOs
- \$4,500 in prize money!
- Virtual event (Zoom)
- 9am-4pm*



Why Participate?

- Our judges are work in government, business and academia with expertise in business analytics and data visualization
- Many represent employers looking to fill positions and are looking to connect with and identify high-potential students
- \$4,500 in cash prizes!

Who Participates?

- In 2023, over 100 students participated in 40 teams
- Open to all students enrolled in a post-secondary institution in any discipline



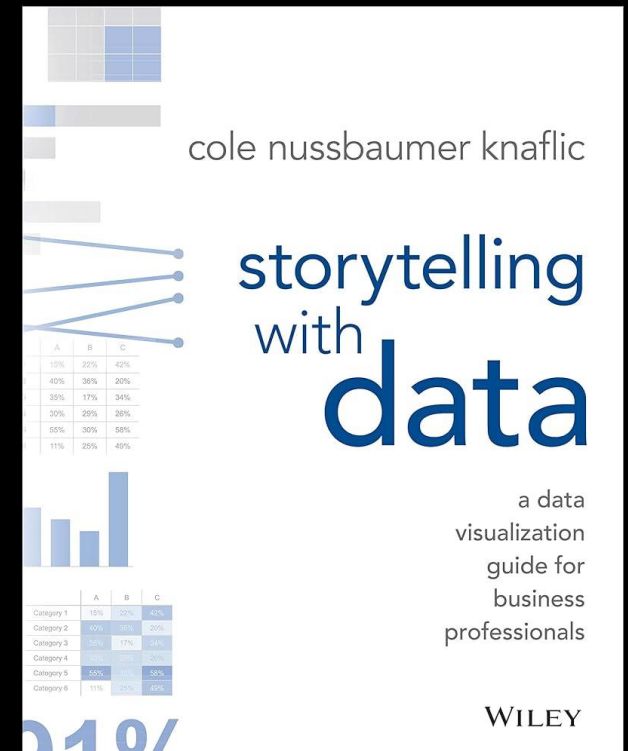
Team Eligibility

- University students:
 - Any year
 - Any discipline
 - Undergrad or graduate
 - Any school
 - Must be Canadian university
- 1 to 4 members
- At least 1 member must participate on Nov. 29 (all may participate on Nov. 29)

What Do You Need to Do?

- Your team will find and analyze an open data set and prepare:
 1. An **Infographic Poster**
 2. A 7-minute **Data Story Presentation** delivered to the judging panel (using Zoom), highlighting key findings in the data and offering potential solutions

Bring your data to life with charts and graphs! Tell a story!



Step 1: Select an Open Data Set

- Teams select one of the **Themes** to examine using a publicly available open data set.
- Teams may use the open data sets provided, or any publicly available open data set.
- Your analysis should focus on your city, province, region (or Canada as a whole where appropriate).
- The judges will be looking for how you interpret and read the data in a different and unique way.
- Your goal is to communicate an insight, story, recommendation, or new idea using the data set that can help decision makers better understand an issue and develop solutions that work.

Themes & Data Sets

Theme: Economic

- Housing availability and affordability in your city/province
- Post Covid-19 population growth in your city/province
- Office space utilization post-Covid (e.g. using Google Places data) in your city/province
- The impact of inflation in your city/province
- Population growth and immigration in your city/province
- Changes in employment (quiet quitting, remote work, retirements, labour shortages) in your city/province
- Effect of construction on business activity in in your city/province (e.g. using Google Places data)

Theme: Environment

- Frequency and impacts of extreme weather events (e.g. forest fires, floods, hurricanes) in your region
- Climate change impacts on humans, plants and wildlife in your city/province

Themes & Data Sets, con't

Theme: Social Issues

- Poverty levels in your city/province
- Homeless and unhoused population characteristics in your city/province
- The impact of Airbnb rentals on housing in your city/province
- Mass transit coverage in your city/province

Theme: Health Care

- Access to healthcare in your city/province
- Availability of professionals (physicians, nurses, support staff) and future trends in your city/province

Your Own Theme:

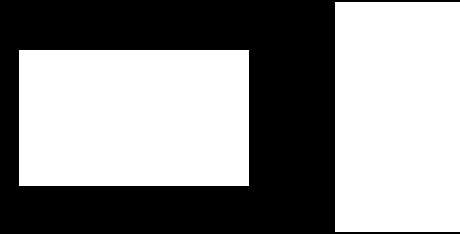
- Choose your own theme, as long as your data set is publicly available, relevant, timely and is focused on social, economic health issues. We recommend you use the United Nations' 17 [Sustainable Development Goals](#) as a guide.

Some Open Data Sets

- www.kaggle.com
- www.open.canada.ca
- <https://data-fredericton.opendata.arcgis.com>
- <https://www.statcan.gc.ca/en/microdata/dli/data/all>
- <https://gnb.socrata.com/>
- <https://nb.211.ca/search/>
- <https://www.communityprosperityhub.com/>

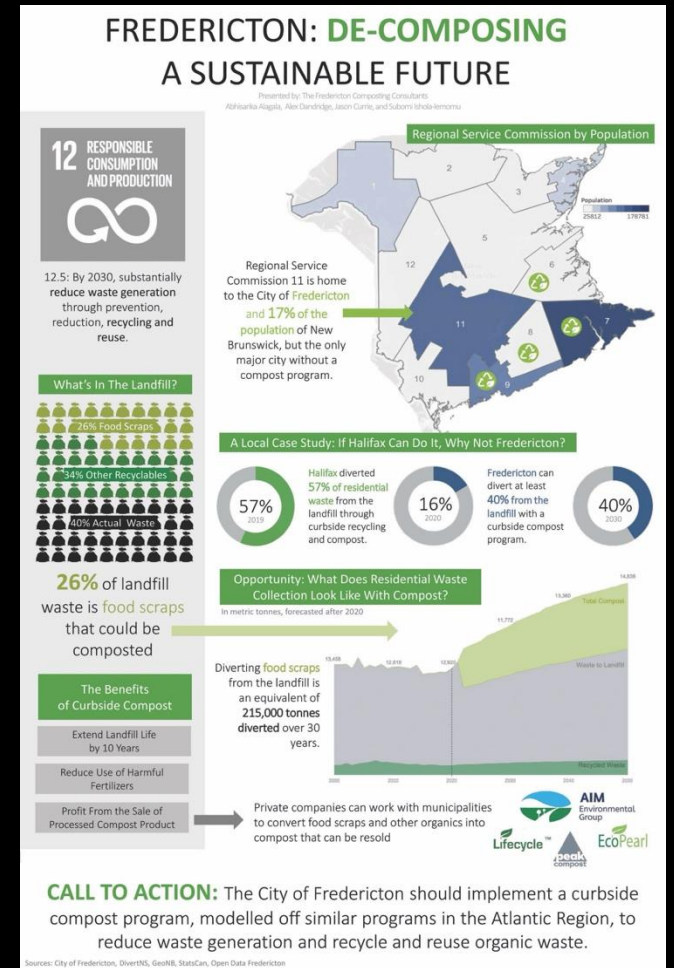
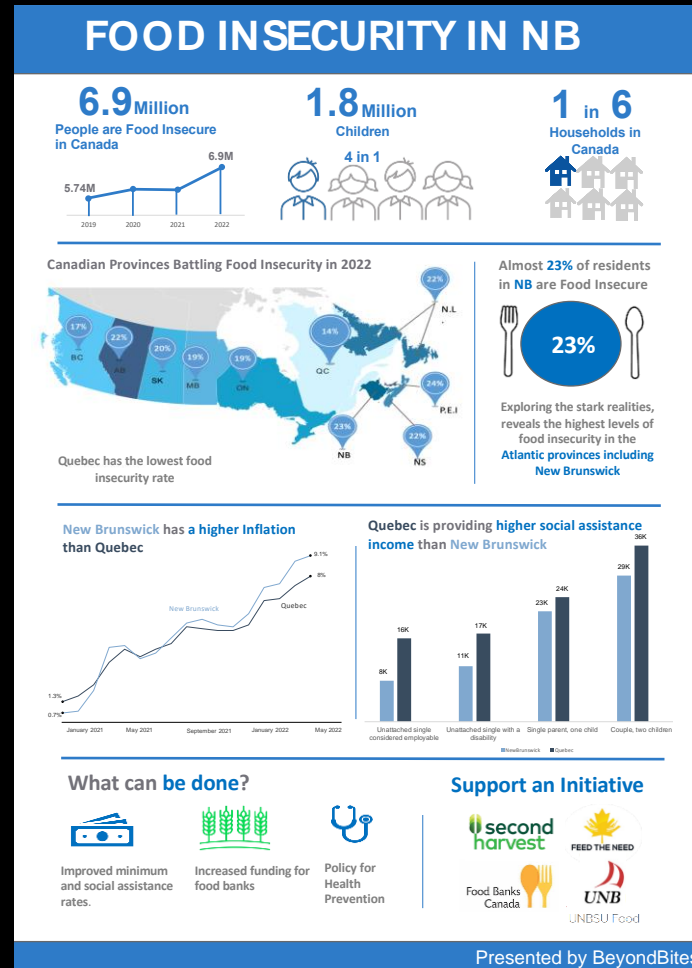
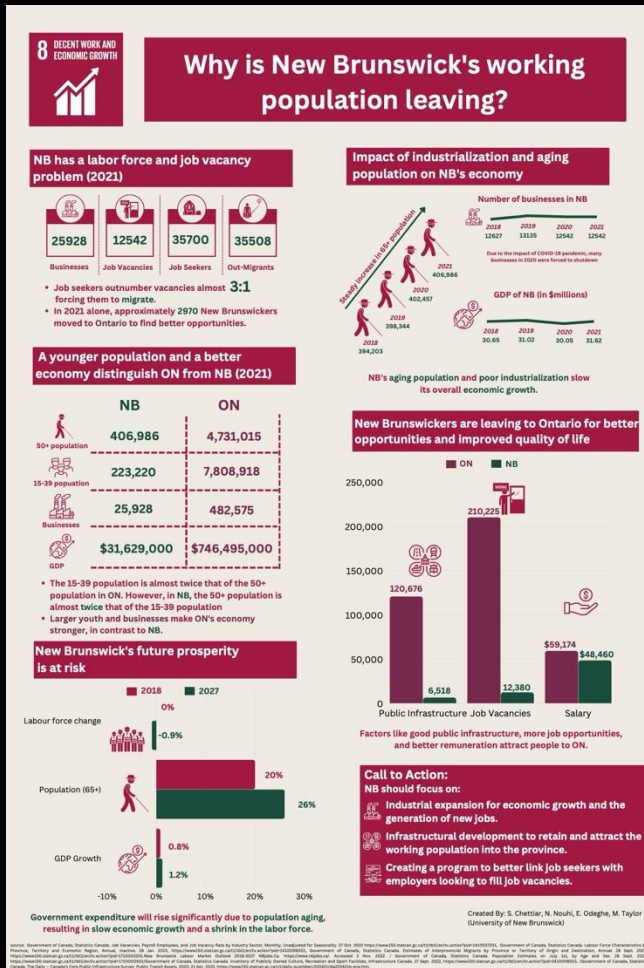
Step 2: Create an Infographic

- Tell a story
- Infographic Submission Format:
 - Letter format (8.5"x11"), landscape or portrait
 - Max 10 MB
 - File type: PNG/JPG (NO PDFs!)



Infographic Examples

More samples [here!](#)



Step 3: Submit Infographic by Nov. 20

- <https://www.surveymonkey.com/r/DataC2024>
- Due by 11:59pm AT
- The top 18 teams will be selected from all entries – top 18 teams will be emailed on Nov. 22
- The top 18 teams will present on Nov. 29 to the judges
- The remaining teams will have their Infographics judged – still eligible to win prizes in Infographic Category!

Step 4: Turn Infographic Into Presentation: Top 18 Teams

- On Nov. 29, if selected, your team will present your findings to the panel of judges
- Infographic format is hard to present either in person or on Zoom!
- So: take you infographic and turn it into a slide deck that allows you to explain your Infographic and findings
- Any format useable by Zoom (PowerPoint, PDF, Google Slides, Keynote, etc.)
- 1 or more team members may present
- Timing:
 - Team Presentation: 7 minutes
 - Judges Q&A: 8 minutes
- Number of Slides:
 - 10-12 slides

FREDERICTON: DE-COMPOSING A SUSTAINABLE FUTURE

Presented by: The Environment Consulting Consultants
 Afsharika Akpoh, Alex Dandridge, Jason Currie, and Subomi Shodeletemo

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

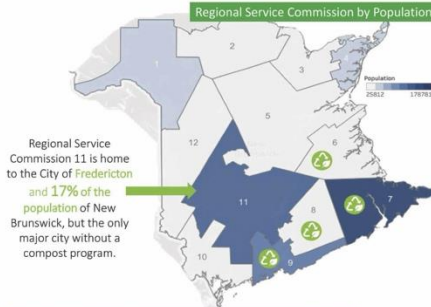
What's In The Landfill?



26% of landfill waste is food scraps that could be composted

The Benefits of Curbside Compost

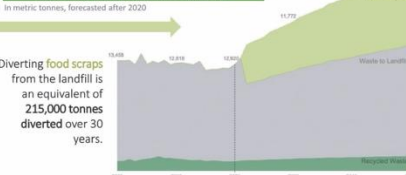
- Extend Landfill Life by 10 Years
- Reduce Use of Harmful Fertilizers
- Profit From the Sale of Processed Compost Product



A Local Case Study: If Halifax Can Do It, Why Not Fredericton?



Opportunity: What Does Residential Waste Collection Look Like With Compost?

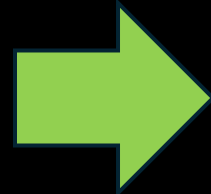


Private companies can work with municipalities to convert food scraps and other organics into compost that can be resold

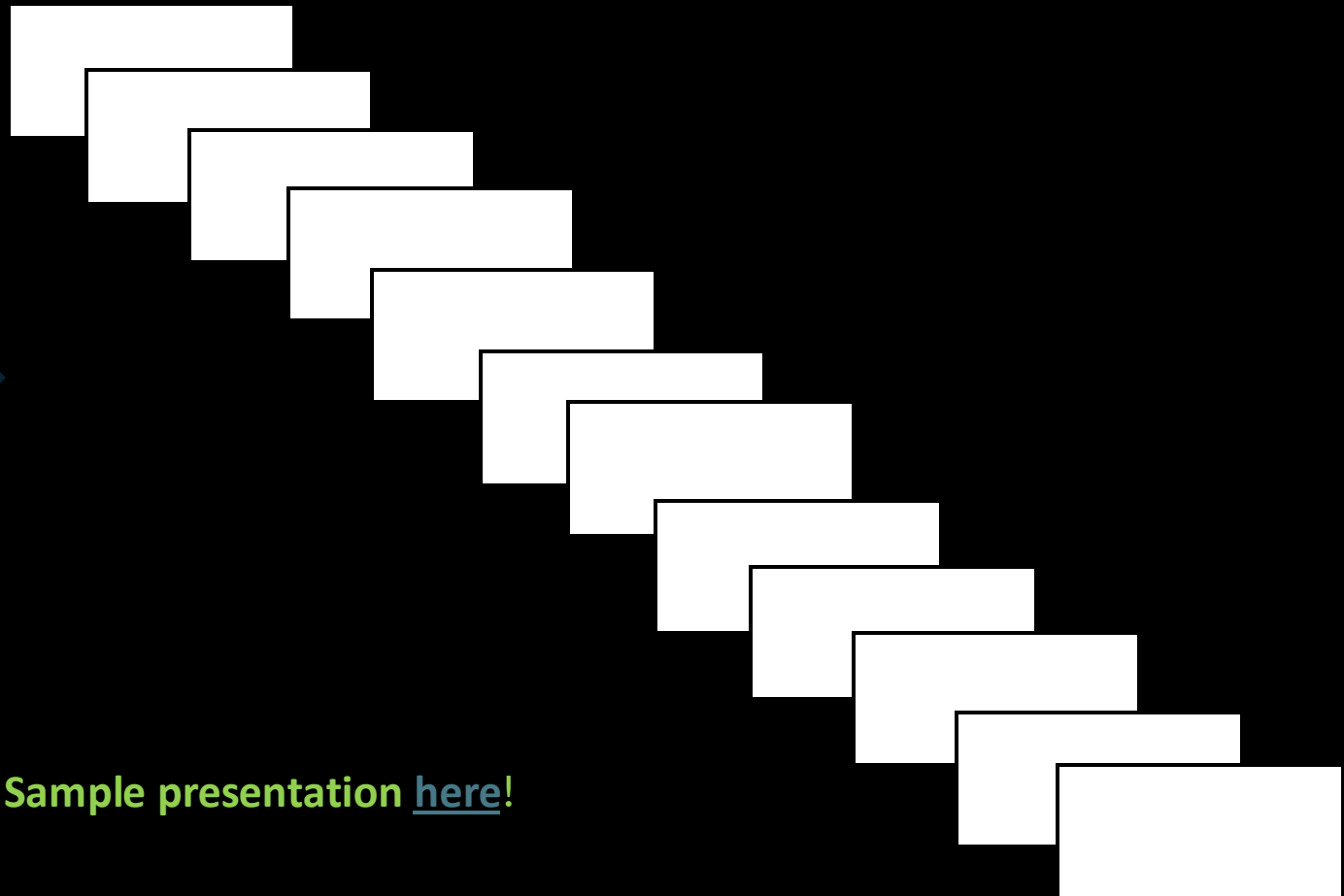


CALL TO ACTION: The City of Fredericton should implement a curbside compost program, modelled off similar programs in the Atlantic Region, to reduce waste generation and recycle and reuse organic waste.

Sources: City of Fredericton, DiversNS, GeoRIA, Statistics Canada, Open Data Fredericton



Sample presentation [here!](#)



Step 5: Present to Judges on Nov. 29

- Judges are industry and faculty members with expertise in data visualization and analytics
- Present to 2-4 judges
- Qualifiers: Top 18 teams present in morning
- Finals: Top 6 teams present in afternoon
- Finals are open session **GOVMAKER**
- Top 3 in presenters and Top 3 infographics announced end of day!

Nov. 29 Schedule (all times Atlantic – 1 hour ahead of Toronto!)

9:00 to 9:30am	Opening Remarks
9:30 to 11:40am	Qualifier Round*
11:40 to 12:00pm	Judges' Deliberations
12:00 pm	Announcement of Finalists!
12:00pm to 1:00pm	Panel: Employment Opportunities in Data
1:00 to 3:00pm	Finals*
3:00 to 3:00pm	Judges' Deliberations
3:30 to 4:00pm	Announcement of Winners!

*Teams only required to attend for their 20-minute presentation slot. You will receive this time in advance for the morning session. At noon on Nov. 29 if you are in finals.

Judging Rubric: Infographics

Infographic Poster Judging Criteria

Judges will review ALL infographic submissions and score based on these general criteria:

1. Analysis: The depth of the data analysis and insights.

- What questions were asked, and how appropriate are chart types, aggregations, and analyses in providing insight?
- Have trends, patterns, or outliers been identified in the data?
- Have meaningful conclusions been drawn?

2. Storytelling: The clarity and effectiveness of the narrative in conveying key findings.

- Is the context and topic of the visualization clear?
- Is there a logical flow?
- Is the reader inspired to take action?

3. Design: The visual appeal, creativity, and usability of the data visualization.

- Has the team demonstrated design principles in the layout, use of color, and formatting?

Prizes

Infographic Poster:

- 1st Place: \$750
- 2nd Place: \$500
- 3rd Place: \$250

Data Story Presentation:

- 1st Place: \$1,250
- 2nd Place: \$1,000
- 3rd Place: \$750



Summary of Process





Acing Data Viz

Powered by



NOV. 8 at 12 PM

Zoom Meeting

RAY HARRIS

Head of Data Strategy & Owner

Important Dates

Nov. 8 "Acing Data Viz with Ray Harris", Zoom, 12pm-1pm AT

Nov. 20 INFOGRAPHICS DUE 11:59pm AT

Nov. 22 Top 18 teams announced to compete on Nov. 29

Nov. 29 Finalists present at Data Challenge, Zoom, 9am-4pm

Next Steps

- **Contact:**
 - Ryan Reid
 - Manager, IBEC
 - ibec@unb.ca
- **Attend:**
 - Acing Data Viz, Nov. 8
- **Apply (Nov. 20):**
 - unb.ca/datachallenge

