

USER GUIDE







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What is the Northern Economic Dependencies Dashboard (NEDD)?

The Northern Development Initiative Trust (NDIT) Northern Economic Dependencies Dashboard – (NEDD for short, found at https://edd.northerndevelopment.bc.ca/ is an economic visualization tool that launched in August 2024. It can help you understand the economy at the following levels:

- Northern and central British Columbia
- Nine regional districts
- 32 local areas

Using NEDD will enable users to gather a better understanding of the regional economy of northern and central B.C., at both the regional district and local levels. It is intended to provide all residents, including economic development practitioners and local governments, with a tool to understand the impact of economic changes and industry transitions in their communities, to help them respond and adapt.

NEDD was developed in 2024 for Northern Development Initiative Trust by Sasha Bogdanovic, founder of data visualization company, CityViz (https://cityviz.ca/), an innovative company that provides economic development data platforms. This User Guide was written by Mike Stolte, president of CIEL (https://www.theciel.com/). B.C. Stats has given NDIT non-commercial copyright rights to this data.



Seven Key Questions NEDD Can Help You Answer

Without good data, it's hard to get an understanding of your regional district or local area. We all know the old adage, "What you can't measure, you can't manage". Without this understanding, it's even harder to make good decisions. With NEDD, you can quickly grasp the current situation, and what has been happening over time to help answer important economic development questions like:

- 1. How vulnerable is my community/RD to downturns in the forest sector (and other sectors, industries)?
- 2. Who is **employing** us? How is that changing?
- 3. What are the **industries** that punch above their weight? Underperform?
- 4. How diverse is our economy?
- 5. How is our **population changing** compared with our neighbouring communities/RDs?
- 6. How can **potential investors** better understand my community/RD?
- 7. What makes us **unique economically** as a community/RD?

Seven Cool Things About NEDD

- 1. It provides a graphic story of the state of the economy.
 - At the regional district and local area levels.
- 2. It's a powerful, easy-to-use dashboard.
 - Drop down menus, printable graphics, easy comparisons.
- 3. It shows more advanced indicators than other complementary tools:
 - Community Information Tool (https://communityinformationtool.gov.bc.ca/cit-dashboard/home) (CIT – Province of B.C.)
 - State of the Basin Community Reports (https://stateofthebasin.ca/community-profiles) (Selkirk Innovates).
- 4. It provides both a **snapshot** in time AND the **change** over five years.
- 5. It is unique in **B.C.** and in **Canada**
- 6. It can be used by a **member of the general public**, **a municipal councillor** or an **economist** with key insights provided.
- 7. Raw data is **downloadable** should you wish to perform a custom analysis.



Indicators Included in NEDD (see the last page for detailed explanations)

Basic Data:

- Population, change in population
- Total jobs, jobs by industry, change in jobs

Data by industry

- Industry diversity index—How diverse is our economy? How do we compare to our neighbours and to the rest of B.C.?
- Location quotient—Do we have more of this industry than the B.C. average? A location quotient of two means we have double the jobs per capita than the B.C. average.
- Employment impact ratio—Do we rely more on this industry than the B.C. average?
- Local supply shares—Are we a net importer or an exporter?
- Income dependencies by industry-How much are we reliant on tourism, agriculture, etc.?
- Basic income share—This shows whether a regional district or local area is more productionoriented or service-oriented.
- Forest sector vulnerability index-How vulnerable is my community to a forest sector downturn?
- Forest sector income dependencies—How reliant are we on income from forest sector activities e.g. forestry, logging, value-added manufacturing, etc. relative to other RDs/ communities?

About this User Guide

This guide is provided to help you quickly get oriented and start using NEDD. Like NEDD itself, this guide is laid out visually. With the guide, you should be able to harness the power of NEDD and quickly make key insights about northern and central B.C., your regional district or local area.

The best way to learn NEDD is to jump right in and play with it. With an easy-to-use graphic interface and drop-down menus allowing for fast navigation, you can quickly drill down to find useful detailed data. A glossary of key terms is provided on the final page (and in NEDD itself!).



Appendix 1 – Getting to know NEDD!

Before You Begin - Some Important Notes

- License Agreement Copyright permission for use of this data has been purchased from B.C. Stats by NDIT and is provided by NDIT for non-commercial purposes only.
- **Boundaries** This data is provided by B.C. Stats using Census Sub-division boundaries used by Statistics Canada (see About>Local Area Boundaries for more information on boundaries)
- **Covid-19 and the 2021 Census** The model uses data from the 2016 and 2021 Censuses. Covid- 19 affected employment, income sources and other data. This should be considered when drawing inferences.
- Glossary and Key Terms A glossary of key terms is provided at the back of this User Guide.



Tip: There are several key features revealed if you hover your mouse above graphs.

Download a high-quality PNG file, zoom in or out, pan or change the scale

Expand the size of the graph



Landing Page – The Entire Region – A 30,000 Foot View



This is NEDD's landing page. It's a great place to start your exploration. It defaults to the Entire Region view, where you can quickly get an understanding of the region by comparing the nine regional districts or 32 local areas (see next section on how to use the dropdown menus at the top of the page for switching between and among many views).

1. The Navigation Bar

This allows you to quickly switch among five views:

onal ricts	Entire Region view -	Depending on the view selected in the drop-down menus at the top of the page, you can compare all nine regional districts or the 32 local areas
B Data	Regional District view -	You can view all the statistics of any of the nine regional districts
Nut	Local Area view -	You can view all the statistics of any of the 32 local areas
e 11	Raw Data view -	Displays the data in chart form. This view also allows you to download any of the data displayed into an Excel spreadsheet so that you can perform your own custom analysis
	About view –	 Explains NEDD's background, definitions and: Framework of the model Data sources Sector aggregations (e.g. which industries make up a sector?) Local area boundaries Limitations of NEDD

NEDD

Northern Economic Dependencies Dashboard

2. Map View - Current Indicator Values

This view shows the entire region broken down by nine regional districts or 32 local areas. In the case above (Basic Stats, Total Jobs, Regional Districts), a darker colour indicates more jobs while a lighter colour shows fewer.

• You can click on the map to highlight a region. You can also zoom in or out. A scale is provided on the right-hand side.

3. Polygon View – Current Indicator Values

This polygon view shows the same data from the map in a polygon form (a graph) that allows for quick comprehension. The data (in this case jobs by regional district) is shown by its relative size (e.g. a smaller polygon represents fewer jobs).

• B.C. data is shown at the bottom left of the image for reference. A high-quality image (PNG file) can be downloaded by clicking at the top right of the image on the camera icon that appears when you hover over it. The Notes (i) icon on the bottom left of the polygon displays important information (e.g. boundaries, definitions, etc.) when clicked on.

4. Change Between Census 2016 and 2021

This view shows the gain or loss in this category from 2016 and 2021, the last two available censuses.

• B.C. data is shown at the bottom left of the image for reference. A high-quality image (PNG file) can be downloaded by clicking at the top right of the image on the camera icon that appears when you hover over it.

5. Topic Description

This explains the topic of the current view

6. Key Insights

Key insights, generated by AI, provide some analysis of the data.







NEDD

Northern Economic Dependencies Dashboard

Using the Drop-Down Menus

7. Drop-Down Menus

There are three drop-down menus at the top of the page of the landing page. They allow you to look at data in many different ways:

A – Allows you to choose among:

- Basic Stats
- Income dependencies
- Jobs
- Location quotients
- Employment impacts (the impact of any industry relative to the B.C. average. A score of 1.3 would mean 30% more than the provincial average of 1.)
- Local supply shares

B – Allows you to choose among:

- Total jobs (up to 23 industries)
- Population
- Average employment income
- Basic income share
- Diversity index
- Forest sector vulnerability index

C - Allows you to choose between:

- Regional district view (all nine regional districts)
- Local area view (all 32 local areas)

NOTE: A fourth dropdown, the RAC view, denotes the geographical make-up of the four Regional Advisory Committees (RACs) which form an important part of the governance of Northern Development. See the **Governance page** of our website for more information. https://www.northerndevelopment.bc.ca/about/board-governance/











Regional District View – A Profile of Your Regional District



Navigate to the Regional District view (highlighted by the green box on the left in the illustration above) The drop-down menu at the top of the page allows you to select one of the nine different regional districts in the Northern region. In this example it's the Regional District of Bulkley-Nechako (RDBN).

1. The Regional District at a glance

This view shows data in six key economic areas (in the red rectangle), with B.C. data shown at the bottom of each heading, to provide more context:

- Population
- Total jobs
- Average employment income
- **Basic income share.** This shows whether a regional district or local area is more production-oriented (B.C.'s high is Port Alice with 96 as it largely focuses on the production of wood) or service-oriented (B.C.'s low is Richmond at 74). The B.C. average is 82.
- Industry diversity index. This shows whether the regional district is very diverse with many industries [most diverse would score 100] or very concentrated [score of 0]. The B.C. average is 69. The range for all regional districts in the province is 51 to 74.
- Forest sector vulnerability index. This shows which regional districts or local areas are most vulnerable to a forest sector downturn. The range in RDs is 0-43 in B.C. B.C.'s average is 6. A higher number indicates more vulnerability.



2. Basic Stats - Change from 2016-2021 (from last Census)

- This shows the same Basic Stats data from above (1) but in a graph format, showing the change from the last census. The B.C. average is also displayed to provide a handy reference point.
- If you click on the blue data tab (top right above graph), the data is displayed as a data chart, rather than as a graph.

3. Location quotient

- Location quotient shows how much employment specialization your regional district or local area has in different industries compared with B.C. A location quotient of 2 means that the RD/local area has double the jobs in an industry as the B.C. average (score of 1). A location quotient of 0.5 means that your RD/local area has half the jobs of the B.C. average in that industry.
- There are different views available by clicking at the top right of each graph. In this case, you can quickly switch from a bar graph view (Main Industries) to Polygon view (All) to a graph of the changes between censuses (Major changes)

4 Total Jobs by Industry

- This shows the total number of jobs in each industry.
- By clicking on the blue tabs at the top right of the graph, you can quickly see major changes and how the RD/local area compares with B.C.

5 Employment Impact Ratio

This estimates how many additional jobs are supported for each occupation in a basic industrial sector. For example, a ratio of 1.38 for forestry shows that, for 100 jobs directly in the forestry sector, 38 more are supported in non-basic industries supporting that sector such as truck transportation and wholesale trade. In addition to the direct and indirect jobs created, induced jobs are also factored in. Induced adds jobs created through household spending.

- To continue the previous example, an induced EIR of 1.75 implies that when 100 direct forestry employees and 38 indirect supporting employees spend their incomes, that spending supports 37 additional jobs in non-basic sectors such as retail and FIRE (finance, insurance and real estate).
- By clicking on the blue tabs at the top right of the graph, you can quickly see major changes and how the RD/local area compares with B.C.

6 Local Supply Shares

- Local supply shares help identify which local areas have strong, non-basic sectors that supply services to the rest of the province.
- If the share is over 1, the area could be considered a net exporter of that service with the rest of the province and if it is under 1, a net importer.
- By clicking on the blue tab at the top right of the graph, you can quickly see major changes from 2016.



7 Income dependencies

- This indicator defines the components of an area's economic base and shows how dependent it is on the different sources.
- By clicking on the blue tabs at the top right of the graph, you can quickly see major changes and how the RD/local area compares with B.C.

Local Area View – A Profile of Your Local Area



This Local Area view is the same as the Regional District view but allows you to examine any one of the 32 local areas. In the example above, the default view for each of the graphs has been changed (by clicking on the blue tabs at the top of each graph) to demonstrate the variety of views available for each of the graphs.

There are 39 municipalities and 89 First Nations in the Northern Development service area, so why are there only 32 local areas in NEDD? That's because Stats Can combines communities into Local Areas. In the About tab on the left sidebar of NEDD, if you click on 'Local Area Boundaries', you'll see where your community falls.



Conclusion

NEDD is provided to help you better understand the economy of the Northern Development region, your regional district or local area. The best way to get to know it is dive into the data for a regional district or local area you might be familiar with and play with it. Good luck!





Quick Glossary of Key Terms

Basic income share - This shows whether a regional district or local area is more production-oriented (B.C.'s high is Port Alice with 96 as it largely focuses on the production of wood and wood products) or service-oriented (B.C.'s low is Richmond at 74). The B.C. average is 82.

Diversity Index - See Industry Diversity Index

Economic diversity index - How diverse is our economy? How do we compare to our neighbours and to the rest of B.C.?

Employment impact ratio (EIR) – This estimates how many additional jobs are supported for each occupation in a basic industrial sector. For example, a ratio of 1.38 for forestry shows that, for 100 jobs directly in the forestry sector, 38 more are supported in non-basic industries supporting that sector such as truck transportation and wholesale trade. In addition to the direct and indirect jobs created, induced jobs are also factored in. Induced adds jobs created through household spending. To continue the previous example, an induced EIR of 1.75 implies that when the 100 direct forestry employees and 38 indirect supporting employees spend their incomes, that spending supports 37 additional jobs in non-basic sectors such as retail and FIRE (finance, insurance and real estate).

Employment impacts - Do we have more of this industry than the B.C. average? The impact of any industry relative to the B.C. average. A score of 1.3 would mean 30% more than the provincial average of 1.

Forest sector income dependencies - How reliant are we on income from forest sector activities - e.g. logging, value-added manufacturing, etc. - relative to other RDs/ communities? Forest sector vulnerability index – This shows which regional districts or local areas are most vulnerable to a forest sector downturn. The range in B.C. RDs is 0-43 in B.C. B.C.'s average is 6. A higher number indicates more vulnerability.

Income dependencies – How reliant are we on tourism, agriculture, etc.? Defines the components of an area's economic base and shows how dependent it is on the different sources. It is expressed as a number. 0.3 would represent 30%. 0.078 would be 7.8%.

Industry diversity index - This shows whether the regional district or local area is very diverse with many industries [most diverse would score 100] or very concentrated [score of 0]. The B.C. average is 69. The range for all regional districts in the province is 51 to 74.

Local supply shares - Are we a net importer or an exporter? Local supply shares help identify which local areas have strong non-basic sectors that supply services to the rest of the province. If the share is over 1, the area could be considered a net exporter of that good/service compared with the rest of the province. If it is under 1, a net importer.

Location quotient - Do we rely more on this industry than the B.C. average? Shows how much employment specialization your regional district or local area has in different industries compared with B.C. A location quotient of 2 means that the RD/local area has double the jobs in an industry over the B.C. average (score of 1). A location quotient of 0.5 means that your RD/local area has half the jobs of the B.C. average in that industry.

