

IMPACT ECONOMICS

EXCERPTS FROM THE WORKING PAPER

Eyes Wide Open

Starting a Conversation on the Effects of a Diminished Resource Sector in the NWT



October 31, 2023

PO Box 774 Stn Main
Yellowknife, Northwest Territories X1A 2N6
Phone: +1.867.873.8008 Mobile: +1.867.444.6191
E-Mail: clinton@impacteconomics.ca Web: www.impacteconomics.ca

CHANGES COMING IN THE RESOURCE SECTOR

The NWT economy has included an active mining industry for over 90 years, having produced gold and silver, lead and zinc, oil and gas, diamonds, uranium, tungsten, and rare earths.

A vibrant economy has grown to support and oversee this production, including

- a larger and increasingly diverse and inclusive workforce,
- road, rail, and air infrastructure,
- power generation and transmission,
- mining services, supplies, and logistics,
- trucking and warehousing services,
- exploration,
- public administration,
- science and engineering,
- regulatory and environmental oversight, and, most recently,
- a waste management and remediation industry.

The jobs created and wages earned through mining and its wide network of indirect effects have brought growth and prosperity to a remote economy with a relatively small population that is otherwise dependent on transfers from the federal government to maintain standards of living.

Despite its long history, the future for mining in the NWT is unclear; not since the mid-1990s has the immediate outlook been quite so grim. In less than 10 years, it is conceivable that all three diamond mines will be closed (Diavik in 2026, Gahcho Kué by 2030¹, Ekati by 2028²). Meanwhile, the end of NWT's oil industry is almost upon us. The last barrel will be brought to surface in Norman Wells as early as 2026, some 35 years after peak production in 1991 and 100 years since production began.

There are a few advanced exploration projects around the territory, but none of them are certain to proceed and none represent a like-for-like replacement of the diamond mines. There are no viable prospects for a full-scale oil and gas industry in the territory at this time.

HOW DID THIS HAPPEN?

It is a valid question to ask how the territory found itself on an economic cliff, where the potential collapse of its largest private-sector employer is within sight, especially given evidence of this demise has been on clear display for more than a decade. The inquiry needn't be a witch hunt, but the territory really does need to understand how and why this has happened.

At the most basic level, there appears to be no clear, unified vision for the territory. A shortcoming that is made worse by a poor understanding of the territory's economics. The consequence is a lack of urgency

¹ De Beers is investigating the viability of underground mining that would extend the mine life of Gahcho Kué beyond 2030.

² Burgundy Diamond Mines is testing underwatering mining technology that would extend the mine life at Ekati beyond 2028. (see <https://burgundydiamonds.com/ekati-mine/>)

that might have otherwise resulted in investments over the past decade to invigorate the resource sector; or that gave way to a thorough exploration into whatever is to be the alternative.

In place of a vision and proactive approach that move the territory toward some semblance of continued prosperity, the approach has been passive with the result being a rather dire and ambiguous economic outlook for the NWT.

Life after oil and diamonds will be different than it is today. The economy will be smaller, there will be fewer jobs, and less disposable income. Government revenues will fall. There will be fewer people. If nothing is done, these changes will have cumulative effects, resulting in additional declines in the economic activity in the NWT. Consider that in Yellowknife alone, more than 1,000 residents are employed in the direct and indirect jobs created by the diamond mines, a number that does not include the critically-important induced effects flowing from consumers spending their labour income.

One cannot be dismissive of these losses or nonchalant about what happens next. The nature of the NWT economy is about to change in a profound way. Anyone who considers themselves a leader, whether an elected leader or a leader through action, needs to understand this and begin conversations on what happens next. In truth, it's a conversation that should have started the day Ekati mine produced its first diamond almost 25 years ago, but having not done so then is not reason to avoid it now.

WHAT HAPPENS WHEN IT'S GONE?

What do we stand to lose if and when the resource sector disappears from the NWT economic landscape? If the resource sector were to disappear tomorrow, gone will be

- \$2 billion in output,³
- \$406 million in direct labour income,
- 3,460 jobs (direct, indirect, and induced),
- 1,880 of the jobs being filled by NWT residents earning \$245 million,
- \$994 million in business expenditures,
- all the trickle-down spending associated with those businesses (multiplier effect in reverse),
- over \$130 million in consumer spending in the NWT economy, and
- tens of millions in GNWT tax revenues.

The territory would also suffer a loss of residents through outmigration, estimated at 1,100 residents, that would precipitate a series of negative knock-on effects of a declining population.

While a population decline of 1,100 is a reasonable prediction, one must appreciate some of the key assumptions that led to the estimate. Most influential is the assumption that a portion of resource-sector workers find other employment in the NWT economy. However, if laid off mine workers cannot transition into other jobs in the territory, the population decline will be more severe.

³ All economic figures in this report are from 2019 unless otherwise stated. 2019 was the last year in which a complete data set was available at the time the report was developed, ignoring the COVID-19 years (2020 and 2021).

The declines will be felt in Yellowknife more than any other community. It is estimated that 1,045 of the direct and indirect jobs from 2019 were filled by Yellowknife residents, while 260 of the induced jobs are located in the city. Wages and salaries from these jobs total \$173 million, which represents over 13 percent of the total personal income of all residents in the City.

Yellowknife

- 1,305 jobs
- \$173 million labour income
- 13.4% of Yellowknife's total income

Rest of NWT

- 575 jobs
- \$73 million labour income
- 7.9% of rest of NWT total income

After paying taxes, shopping online, taking vacations, and contributing to savings accounts, it was estimated that NWT residents working and earning income as a result of mining activity spent \$100 million in Yellowknife in 2019. The list below shows where some of this money went.

- \$9.8 million for groceries
- \$4.5 million for restaurant meals
- \$4.0 million for new and used cars, trucks, and SUVs,
- \$2.9 million for clothing
- \$2.5 million for alcoholic beverages,
- \$1.7 million for air transportation
- \$1.2 million for alcoholic beverage services (bars and taverns)

It is a simple fact that consumer spending will decline should mining in the NWT come to an end with nothing to replace the lost wages and salaries, and that a majority of that decline will occur in Yellowknife. It might seem rather dramatic. And it is. In truth, consumer spending isn't likely to fall to zero. Resource sector workers will receive severance packages, will qualify for employment insurance, and/or might end up on income support, but in all cases will still spend money across all of these categories, just in lower amounts. Those who live in households with other sources of income may continue spending in a similar way and only cut back on luxury goods, vacations, or savings.

But keep in mind these estimates do not include the effects of a smaller population that would be another source of lost consumer spending, and potentially a much larger one. Some unemployed resource sector workers will leave the territory, taking their families, severance pay, and all their consumer spending with them. This is a worst case but is also realistic. Some people will leave as a result of mine closures and slowing economy. The extent to which people leave will have a direct effect on consumer spending, housing markets, government revenues, and more.

What the NWT will be left with in this scenario is an economy that is almost entirely dependent on the federal government for economic activity, job creation, and income. Why that is a bad thing (or at least, a less desirable thing) requires another conversation; one that the territory ought to have given this is the direction it is heading in the absence of a change in course.

The past 25 years have been transformative for much of the territory's workforce and business community. But this transformation has stalled in recent years, and the money needed for it to continue has become scarce. The list of challenges is long. There are growing concerns regarding homelessness, housing, addictions treatment, skilled labour shortages, tailored education services, community and regional

infrastructure, to name just a few. Measurable progress in these areas requires a steady (and not insignificant) influx of cash, and is greatly aided when the territory has its own money to put toward its priorities. Without any measure of fiscal autonomy, local priorities will be addressed when they align with national interests. The kind of self-determination that NWT wants and needs will no longer be available.

GOVERNMENT REVENUES

A diminished resource sector will result in lower revenues for government. A conservative estimate based on the 2019 resource sector is \$69 million in combined tax revenues that include

- Personal income tax (\$11.5 million)
- Payroll tax (\$7.1 million)
- Non-renewable resource revenues, including royalties (\$11.9 million)
- Carbon tax (\$6.3 million)
- Fuel tax (\$8.8 million)
- Bridge tolls (\$2.3 million)
- Property tax (\$23.4 million)

The predicted out-migration also has an effect on revenues through a decrease in federal government transfers. The Territorial Formula Finance (TFF) grant can be simplified to a per capita calculation to gain some insight into this effect. The loss of 1,100 residents would lead to a \$33.6 million reduction in the TFF grant, based on a per capita decline of \$30,500.

Combined, this means government stands to lose close to \$105 million in revenues in a scenario where the resource sector disappears. Note that since 2019, the carbon tax has increased as has the per capita TFF grant. In other words, it is likely that the resource sector's contribution to government revenues is actually higher than what was estimated. These estimates also exclude the cumulative effects of the lower population and the effects on the City of Yellowknife's tax collections.

LIFE AFTER MINING

The method used to demonstrate the resource sector's economic contribution to the NWT was to study a scenario where the sector is removed and to trace the effects of that change through the economy. It is a "What If?" scenario. One must distinguish this from a forecast. No one here is predicting the complete collapse of the resource sector.

At the same time, one cannot write this scenario off as an entirely academic experiment either. The territory's diamond mines are all well past their half-lives, with Diavik set to close in early 2026—a little more than 24 months from now. Oil production in Norman Wells will also end in 2026. Ekati and Gahcho Kué mines will also close, possibly within a few years of one another between 2028 and 2030. This scenario could be altered. Ekati could continue for several more years if its underwater mining technology proves profitable. De Beers is looking at underground options at Gahcho Kué that might extend its life by a few years. But the test case where all production ends by 2030 remains an entirely plausible future, and definitely worthy of study and discussion.

ABOUT IMPACT ECONOMICS

Impact Economics is an economic research firm owned and operated by Mr. Graeme Clinton since January 2004. Mr. Clinton is a professional economist with 25 years of experience, is a recognized expert in the field, and is a regular contributor to the economic discourse in Canada's North. The company is based in Yellowknife, Northwest Territories.

Impact Economics offers economic research, advice, advocacy, and education services on a range of economic topics, including economic effects assessments, macroeconomic and quantitative research, economic modeling, and custom research in such areas as development economics, housing and homelessness, poverty, food security, and local food production (traditional economy), tourism, demographics, and labour.

Impact Economics offers its services to a diverse group of clients including industry, government, Indigenous groups, non-government and non-profit organizations.

Impact Economics' mission is to provide economic services that are based on thorough and dedicated research and sound economic principles, the results of which are provided to clients through thoughtful verbal and written presentation.

A guiding principle for Impact Economics is the belief that economics is the study of choices and the job of an economist is to quantify and qualify the outcomes of choices made and those passed over, and to explain the results in everyday language. In doing their job, an economist helps people, organisations, governments, and companies make informed decisions based on a better understanding of the economic consequences of their choices. To that end, Impact Economics is dedicated to helping clients understand the economy around them through the delivery of quality work, supporting clients with their economic questions, and sharing knowledge of economic concepts and theory and how they apply to our everyday lives.

