Economic and Political Arguments for NORAD Modernization in an Election Year

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Introduction

In 2021, The Minister of National Defence of Canada, the Honourable Harjit Sajjan and his American counterpart Llyod James Austin III issued a joint statement on efforts to modernize the Cold War era Arctic radar sites designed to provide early warning for Soviet bombers and Intercontinental Ballistic Missiles (ICBMs) called the North Warning System (NWS)ⁱ. As seen in Fig. 1, the northernmost chain of radar which were built in the late 1980s and early 1990s and formed the backbone of the North American Aerospace Defence Command (NORAD), an agreement between the US and Canada to defend the North American continent against our adversariesⁱⁱ.



Figure 1. The DEW Line at 65: Future Unclear for North's ageing radar sites. CBC News. https://www.cbc.ca/news/canada/north/dew-line-65-years-norad-1.6446875

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As weapons technology has advanced a lot since the radar sites were constructed, the government of Canada floated the idea to modernize the NWS radars. Hence, we must ask ourselves as responsible taxpayers, is it worth the investment? I would say absolutely.

My answer is supported by two arguments, economic and political. The economic argument for modernizing the NWS radars is skilfully presented by Dr. J Craig Stone from the Canadian Forces College, Torontoⁱⁱⁱ. In simple terms, he explained that the benefits from investing into a fully capable and modernized NWS radar chain are multiple fold. He used the input-output multipliers of the proposed investment using the data from Statistics Canada. Dr Craig Stone estimated that the entire project will generate about 6.8 billion dollars in total economic output for Canada and it is projected that the majority of that 6.8 billion will stay in the northern communities which could revitalize the Canadian Arctic^{iv}.

A full modernization will have many positive impacts on Canada's economic state in general. More specifically, the economic impact can be subdivided into three categories, direct, indirect, and induced. Direct impacts include the construction of the facility itself and the local employment that the construction will generate. Indirect impacts of the modernization would be the supplier industries which would include logistics and manufacturing of components of the NWS. Finally, the induced impacts outline the positive economic boost that local businesses would receive from consumer spending by the workers working at the radar facilities. Overall, these impacts result in positive economic outcomes for Canada's territories and provinces as the direct and induced impacts benefit the Arctic communities whereas the indirect impacts have a net positive economic impact on the entire country. All three impacts were emphasized by the Canadian government's decision to contract an Inuit-owned and operated firm for 592 million dollars to manage the day-to-day maintenance and upkeep of the NORAD radar facilities.

Another aspect of the economic argument of modernizing NORAD is the direct economic benefit to Canada's northern territories. As per a report by Canada's Northern Economic Development Agency (CanNor), Canada's 2024 Our North Strong and Free initiative in addition to the NWS modernization aims to invest about 58.4 million dollars in defence related spending with various Inuit business and labour related metrics being analyzed for fair participation in the economic growth of the community. The final goal of these investments and analysis is to achieve economic reconciliation for long neglected indigenous communities in Canada's Arctic territories^{vi}.

In addition to the economic impacts of NWS modernization, multiple spillover effects come from such major investment projects. Such spillover effects often complement the economic impacts mentioned above. Modernizing the NWS radars will create a positive technological spillover in terms of sensors, energy, and environmental monitoring in and around the radar sites. The construction itself will help build and/or strengthen the communications and logistics infrastructure in the Canadian Arctic with dual-use civilian and military benefits. It is also important to note that the modernization and construction of many of the defence related sites in the Canadian would lead to the region having better infrastructure notably, construction of Forward Operating Locations (FOL) in Inuit communities such as Inuvik, etc. The presence of CAF personnel in these facilities would lead to a positive spillover effect for the Arctic communities. All in all, these spillover effects have a net positive effect on enabling the Inuit communities to assert Canadian sovereignty and territorial integrity in the Arctic and beyond.

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In terms of project timelines and development of specific components, the modernization of the ageing NWS sites and upgrading them to the Arctic Over the Horizon Radars (A-OTHR); Department of National Defence (DND) has already completed the options analysis phase and began to scout for locations to place the radar sites. The construction of the radars themselves will take place in Canada by a multitude of Canadian companies with technology partnership with Australiavii. As per the DND, A-OTHR will achieve initial operational capability by 2028 and full operational capability by 2031viii.

Politically speaking, Canadians' willingness to spend more on defence has increased especially after Russia's full-scale invasion of Ukraine in February 2022. As per a 2025 polling, 65% of Canadians agree with increasing Canada's defence^{ix}. Arctic has been at the forefront of growing geopolitical tensions with Russia as both Canada and the US are within striking distance of Russia. Souring relations trade relations and aggressive 51st state rhetoric by the US leadership along with repeated calls for Canada to spend more on defence has got Canadians worried about the defence of the continent^x. Hence, Canada's sovereignty in the Arctic has become a critical issue for Canada's political leadership^{xi}. Conversely, It has been argued that modernizing the NWS radars might not be the best way to defend the Arctic, I would argue otherwise because knowing where our adversaries are, is better than not knowing and modernizing NORAD would give us metaphorical eyes in the Arctic.

In addition to the increased appetite for defence spending, Canadians have long been cognizant of the impacts of defence production and/or activities on climate change. NORAD modernization will not be fruitful if it does not improve the standard of living and reduce the impact on already fragile northern energy grids. The Government of Canada also announced the addition of Iqaluit hydroelectric project to the Major Projects Office (MPO) as a part of nation building projects. This indigenous led project will provide energy security to the biggest city and the capital of Nunavut, Iqaluit. This project along with NORAD modernization and modernization of the Port of Churchill in Manitoba form an integral part of Canada's Arctic Economic and Security Corridor^{xii}.

Therefore, NWS modernization which will bring about economic reconciliation with Canada's indigenous peoples should be the top priority. Modernizing the NWS would improve Canada's steadfast commitment to North American security and might help to reduce tensions between Canada and the US.

Canada is incomplete without our Arctic and the Arctic region is incomplete without Canada.

Notes

¹ Government of Canada. (2021, August 14). *Joint statement on NORAD Modernization*. National Defence. https://www.canada.ca/en/department-national-defence/news/2021/08/joint-statement-on-norad-modernization.html

ii NORAD agreement. North American Aerospace Defense Command. (n.d.). https://www.norad.mil/About-NORAD/NORAD-Agreement/

iii Stone, J. C. (2024). The Economic Benefits of North Warning System Modernization. Defence and Peace Economics, 35(5), 557–576. https://doi.org/10.1080/10242694.2024.2328432 iv Ibid.

v Ibid.

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vi Government of Canada (2025, June 17). Canadian Northern Economic Development Agency's 2025-26 Departmental plan. Canada Northern Economic Development Agency.

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- viii Government of Canada. (2025, November 22). Fact Sheet: NORAD modernization project timelines. National Defence. https://www.canada.ca/en/department-national-
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- xii Blake, E. (2025, April 10). What federal parties have promised for the north. Cabin Radio. https://cabinradio.ca/229675/news/politics/what-federal-parties-have-promised-for-the-north/xii Government of Canada (2025, November 16). Iqaluit Nukkiksautiit Hydroelectric Project referred to the Major Projects Office. Crown-Indigenous Relations and Northern Affairs Canada. https://www.canada.ca/en/crown-indigenous-relations-northern-affairs/news/2025/11/iqaluit-nukkiksautiit-hydroelectric-project-referred-to-the-major-projects-office.html