

Debunking ALTO

This document provides a high-level summary of key issues, largely drawing on analysis from the Citizens Research Initiative.



Cost

ALTO puts the cost of the HSR at **\$60–\$90 billion**, however:

- Imbleau has confirmed that there is **still no “credible budget”**
- **~90% of megaprojects go over budget**, with an **average overrun of ~45%** (Flyvbjerg database)
- **A few examples** include:
 - UK HS2 increased from ~£33 billion to over £100 billion before scope reductions
 - California HSR increased from ~\$25 billion USD to over \$100 billion USD
 - Eglinton Crosstown LRT increased from \$5.3 billion to over \$12.5 billion
- **\$5.2 billion** will be spent on this project (2021-2025 Federal Budgets) **before construction even begins**
- Although the HSR can travel at 300 km/h, the **average speed** will be **~195 km/h** (Toronto–Montreal 580 km / 3 h) so we are **paying for 300 km/h infrastructure** to achieve results closer to a ~200 km/h system



Economic Benefits

ALTO has said it expects to **increase Canada’s annual GDP by ~\$24.5 billion**, however:

- The C.D. Howe Institute estimates the potential impact to be much lower - only \$15-\$27 billion over 60 years (**~\$250-\$417 million/year**)
- The C.D. Howe Institute also identifies that the benefit does **not come from GDP growth**, but from time savings, and only occurs if people **use the travel time saved** to **generate economic activity**
- The HSR will likely **require an average of ~\$1.28 billion/year in subsidies for 44 years** (McGill TRAM Study)
- **Subsidies to VIA Rail** (over \$700 million/year) would **need to continue** to serve areas without HSR, although it is also possible that existing regional rail services will be deprioritized, further marginalizing rural, and small- and medium-sized communities and hurting them economically
- ALTO estimates ~50,000 construction jobs, but **all major construction projects create jobs**—so the key question is whether this is the best use of public funds
- ALTO projects ~\$1 billion/year in **tourism benefits**, but global HSR examples show benefits **go to big cities with stations**, not rural areas or provinces without HSR
- The project **ignores the negative impact the rail line will have on profitable ventures**—for example, disruption to Ontario’s agri-food sector would impact the \$52 billion/year it generates, cutting off trails and routes would hurt the \$3-\$6 billion/year snowmobiling industry in Ontario, and bisecting the Frontenac Arch biosphere would impact the \$1.8 billion/year in tourism it generates



Travel Time

ALTO says it will **reduce Toronto to Montreal travel time to ~3 hours**, however:

- Total journey time depends on station location and last-mile transportation; since many stations will likely be **outside city centres**, **overall travel time could be higher**
 - With an **alternative approach**—such as separating passenger from freight rail and running along the 401 corridor—VIA Rail’s current Venture trains could reach speeds of up to 200 km/h, for **~3.5 hours from Toronto to Montreal**, and this option would:
 - Be built at a much **lower cost**
 - Deliver **benefits as** each section is **completed** (versus from 2030 to early 2040s)
 - **Limit expropriation** of homes and farms and disruption to communities
 - **Reduce environmental impact** to sensitive ecosystems
-



Ridership

ALTO projects **24 million riders/year by 2055** and 43 million by 2084, however:

- **No detailed ridership methodology** has been publicly released by ALTO
 - Globally, HSR projects **fall short of ridership forecasts by ~65%** (Flyvbjerg database)
 - Current **travel volumes are much lower**:
 - ~3.1 million passengers/year on the Toronto–Ottawa–Montreal rail corridor
 - ~4.1 million passengers/year on Canada’s entire national rail network (all routes)
 - ~5–6 million passengers/year on flights between Toronto–Ottawa and Toronto–Montreal
 - **Station location, ticket prices, weather-based service reliability, and last-mile transportation requirements** (especially with some stations outside city centres), will **impact ridership** outcomes
-



Community Impact

ALTO emphasizes **improved connectivity** between major cities, however:

- For **rural communities** along the route, **extensive expropriation** of homes, farms, and private property would **profoundly affect individuals and families**, as well as **weakening local economies** through reduced workforce availability, a smaller customer base for businesses, and decreased municipal tax revenues
- **Communities** would be **physically divided**, with severed roads becoming a barrier to **local movement** and daily life, increasing travel time for everyday tasks, and affecting **emergency response times** due to longer and more complex routes
- **Private wells** would be at risk of both **contamination** (from chemical leaching) and **going dry** (as the water table lowers for deep excavations), and for many communities, wells are the only source of water (with no piped municipal supply to fall back on)
- **Municipal road infrastructure costs** would increase due to the **movement of construction vehicles and materials** on roads designed for farm equipment and local traffic
- Comparisons to infrastructure projects like the 401 and CPR are misleading as those projects provided affected communities with local access points, creating regional connectivity and economic benefits, while ALTO provides **no local stops** or **associated benefits**



Green Marketing

ALTO claims the HSR is a **sustainable transportation solution**, however, it would:

- Generate **~7 to 30 megatonnes of “carbon debt” during construction**—an amount unlikely to be offset, especially as electric vehicles and planes become more common
 - Consume **~50 MW of power per train** (Imbleau)—enough electricity to power ~40,000 homes/year and requiring 12+ substations and additional infrastructure along the route
 - Create a **permanent, continuous 1,000 km barrier** that **fragments habitats** and **ecosystems**, and disrupts wildlife **migration routes**
 - **Threaten** a wide range of **at-risk species**, such as the Grey Ratsnake, Eastern Wolf, Blanding’s Turtle, Eastern Loggerhead Shrike, and Tri-colored Bat
 - Threaten **rare plants**, such as the Butternut, Juniper Sedge, and Lakeside Daisy
 - Increase the **risk of invasive species** through soil disturbance, vegetation clearing, and disruption of natural drainage patterns
 - Threaten **critical watersheds**, including the Moira, Salmon, and Napanee Rivers
 - Potentially **bisect** the **UNESCO-designated Frontenac Arch Biosphere**, a globally significant ecological corridor
 - Potentially **fragment** the Napanee Limestone Plain, **one of only five alvar grassland habitats in the world** and home to many at-risk species
 - Introduce **de-icing chemicals** into ecologically sensitive areas
-



Footprint

ALTO minimizes land requirements by focusing on the rail line’s **60-metre width**, however:

- 60 metres over 1,000 km is ~6,000 hectares, or **14,826 acres**
 - **Additional land would be required for supporting infrastructure**, including traction substations, bulk transmission spurs, station buildings, maintenance depots, and stabling yards, bringing the total permanent footprint to ~17,600 acres
 - **During construction**, the active work corridor may be **80–100 metres wide** for access roads, earth-moving equipment, etc., requiring an additional ~10,000 acres, **some of which may never be fully restored to its previous land use** due to soil compaction, etc.
-



Geotechnical Issues

ALTO has said little about **geotechnical issues**, other than they will be studied, however:

- Much of the area in the Ottawa to Montreal corridor is situated over **Leda clay** (unstable clay) which has been associated with **landslides and structural damage** in the region and can liquefy when subjected to heavy loads and vibrations
- Much of the potential route through the southeastern part of Ontario is situated over **karst terrain** (unstable, soluble limestone bedrock) which is susceptible to **sinkholes and ground collapse**, conditions that may be exacerbated by ongoing vibration
- **High-speed rail requires** exceptionally **stable** and **smooth track geometry**, which can be challenging to achieve and maintain in these geological conditions
- **Construction and long-term maintenance requirements** associated with these geological conditions **remain unclear and present major engineering issues** that could substantially increase **project costs**



Food Security

ALTO markets “**culinary adventures from Toronto to Quebec City**”, however:

- **Productive farmland**—often held for generations—would be **lost or permanently altered** by the HSR with fields divided, access between parcels restricted, and movement of equipment and livestock significantly constrained
- **In Phase 1** (Montreal to Ottawa) alone, **~500 farms** will be impacted
- Only **~5%** of the **land base in Ontario** and **~2% in Quebec** is arable farmland, making any loss to this **finite and non-renewable** resource significant
- Ontario is **already losing ~319 acres of farmland every day** to urban sprawl and development
- Reducing highly productive agricultural land for ALTO HSR would **negatively impact Canada's ability to produce food locally**, contributing to higher costs for consumers
- Food security is a critical component of **national security** and it begins with protecting farmland



Trust

ALTO says it's committed to “**building strong and trustful relationships**,” however:

- A **VP of ALTO is married to the Finance Minister**, who, despite having recused himself from ALTO-related decisions and discussions, has reportedly voted on or promoted ALTO 14 times
- The project frames itself as a **nation-building** initiative, yet **taxpayers across all provinces** are expected to contribute to its funding despite limited direct benefits for Western and Atlantic provinces, raising concerns about **regional favouritism** and **undermining public trust**
- **Cadence**, the private consortium selected as ALTO's co-development partner, includes:
 - **AtkinsRéalis (formerly SNC-Lavalin)**, which became the subject of a major national controversy related to **allegations of bribery and corruption** involving activities in Libya and subsequent **political controversy** regarding the handling of criminal proceedings
 - **SYSTRA Canada**, which has been involved in several **international compliance settlements and legal disputes** regarding foreign corruption, environmental compliance, and ethical governance
- There is **no publicly available business case** for the ALTO HSR that includes detailed construction costs, schedules, ridership forecasts, revenue projections, operating costs, risk assessments, or a cost-benefit analysis showing who benefits, who bears the impacts, and **whether the project represents the best use of public funds**
- While ALTO highlights that more than 10,000 Canadians have participated in **consultations and engagement activities**:
 - **ALTO did not notify individuals that they live along the potential path of the rail line**, this had to be done by informal community networks
 - Only a **limited number of in-person consultation sessions** were held **along the potential routes**, the format of these sessions did not lend itself to detailed public discussion of complex issues, and **many concerns** were expressed regarding the consistency of the information provided
 - **Questions** to be answered in virtual sessions were **hand-picked**
 - There were many **issues with the online mapping platform** (e.g., missing landmarks, overlay that disappeared when zoomed in, periodic service interruptions, comments removed)

