Analysis of the Absence of Regional Rail Service in Alberta

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Historical Context and Decline of Rail Services

Alberta's early settlement and economic development were closely tied to the railway system. Towns and rural communities were established along rail lines, which were vital for transporting agricultural products, particularly grain, to larger markets.

However, starting in the mid-20th century, Alberta experienced a systematic decline in rail services. This decline led to the abandonment of numerous rail lines and a shift in the transportation of goods from rail to road. For example, the **Dodsland Subdivision** was abandoned between 1977 and 1979. The abandonment of this line resulted in the closure of five grain elevators and the redistribution of approximately 24.7 thousand tonnes of grain that previously relied on rail transport.

Similarly, the **Rosemary Subdivision** was abandoned between 1975 and 1977, affecting communities like Finnegan, Dorothy, and East Coulee. The grain delivery in these areas was moderate, with the redistribution of 5.21 thousand tonnes of grain to other delivery points, significantly increasing the distance farmers had to transport their produce by truck.

Economic and Social Impact

The economic impact of rail line abandonment in Alberta was profound. In the case of the Dodsland Subdivision, the abandonment required farmers to transport their grain an average of 10 additional miles to the nearest elevator, which significantly increased their costs. For instance, in 1982, it was estimated that transporting 7,400 bushels of grain over this additional distance would cost farmers \$118,400 per year, compared to \$43,808 per year in 1974—a staggering 270% increase in just eight years.

The loss of rail services also had severe implications for local economies. Retail trade in towns affected by rail abandonment saw a marked decline as the volume of traffic decreased. In communities like Sedalia and New Brigden, the reduced customer base led to the closure of local businesses, further contributing to the economic decline.

Current State of Rail Services in Alberta

The data today clearly shows that the systematic abandonment of rail lines has led to the near-total disappearance of regional rail services in Alberta. The cumulative effect of these closures is evident in the increased transportation costs for farmers, the depopulation of rural communities, and the economic challenges faced by local businesses.

Today, the province's transportation network relies heavily on road transport, with the once-vital rail network playing a minimal role. The figures and case studies underscore the significant and lasting impact of rail abandonment on Alberta's rural communities, illustrating how the absence of regional rail service is a direct result of these historical developments.

Maloney, P. A. *Impacts of rail abandonment on rural communities: An Alberta example*. AgEcon Search. http://ageconsearch.umn.edu

To address the lack of regional rail service in Alberta and its effects on Indigenous and rural communities with little to no regular bus service, let's focus on key aspects derived from the research analysis.

Lack of Rail Service in Alberta

Alberta, particularly in its Edmonton-Calgary corridor, has historically lacked an extensive or modern rail service. The existing rail infrastructure, described in the research as having aged equipment, long travel times, and low demand, has rendered rail an ineffective mode of transport. While high-speed rail alternatives were proposed, including improvements in train frequency and speed, these options were never fully realized due to high costs and limited public demand. As a result, no viable regional rail service currently operates, leaving rural communities isolated from this mode of transport.

Impact on Indigenous and Rural Communities

The absence of rail services and infrequent bus schedules disproportionately affects rural and Indigenous communities in Alberta, many of which have limited access to transportation alternatives. Without rail or bus networks, these communities face significant challenges in accessing essential services, employment opportunities, and healthcare, which are concentrated in urban centers like Edmonton and Calgary. The lack of connectivity also exacerbates socio-economic disparities by increasing dependency on private vehicle ownership, which is not feasible for all households.

Supporting Data

From the data, it's clear that between 1964 and 1974, passenger rail traffic between Edmonton and Calgary declined from 200,000 to just 27,000 passengers annually. This steep drop in usage resulted in rail service becoming financially unsustainable, with subsidies and operating costs soaring(agecon-trf-0643). As rail became more expensive and less efficient compared to other modes, people shifted to buses and personal vehicles, which further marginalized rail as a transport option. This trend highlights why rural and Indigenous communities that do not have regular bus services have been left behind.

The lack of regional rail services, coupled with inadequate bus connectivity, severely restricts mobility for rural and Indigenous communities in Alberta. Without intervention to provide more robust public transport solutions, these communities will continue to face isolation and limited access to essential services.

Beyond the Bicentennial: The transportation challenge. (1976, October 28-30). *Sheraton-Boston Hotel, Boston, Massachusetts*.

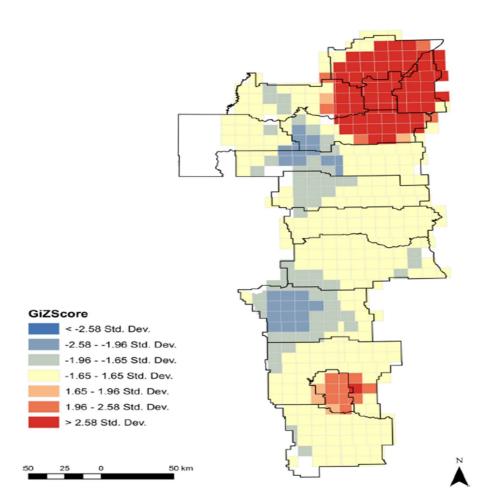


Figure 1. Hotspot analysis for conversion of agricultural to developed land in the Edmonton-Calgary Corridor: 2000–2012. This figure illustrates the spatial clustering of land conversion from agricultural to developed uses within the Edmonton-Calgary Corridor. Areas with a high z-score (greater than 1.96 standard deviations) represent significant clustering of high values, indicating regions where land conversion is more concentrated than expected. Conversely, areas with a low negative z-score (less than -1.96 standard deviations) represent significant clustering of low values, indicating regions where land conversion is less concentrated than expected.

To demonstrate the benefits of a rail connection along the CPKC Right of Way (following Highway 2A) between Calgary and Edmonton, particularly for the underserved Maskwacis and its four First Nations, we can draw on several points from both the available documents and relevant regional economic data:

1. Economic Development Potential: A rail connection would support the Maskwacis community's ability to participate in broader regional economic activities, as suggested by the pattern of economic and population growth along the Edmonton-Calgary corridor. The area is already under pressure for development, with key regions like Edmonton and Calgary experiencing rapid growth and farmland conversion (Highway connect). Connecting Maskwacis to this corridor through rail would allow the First Nations communities to benefit from the commercial and industrial development that is expanding along this highway.

- 2. Strategic Location on a High-Growth Corridor: Maskwacis is located between two major urban centres, Edmonton and Calgary, which are among the fastest-growing metropolitan areas in Canada. Between 2006 and 2011, the population of the Edmonton-Calgary Corridor (ECC) grew by 12.1%(Highway connect). As more land along the corridor is converted from agricultural to urban uses, improved connectivity through rail will allow underserved communities like Maskwacis to tap into this growth.
- 3. Transport Connectivity to Drive Economic Inclusion: Rail service would offer Maskwacis access to both employment opportunities and markets in these urban centres. Currently, the reliance on private vehicles or limited bus service isolates rural and Indigenous communities, hindering their economic participation. Providing rail infrastructure could stimulate local business, tourism, and resource development, directly benefiting the economic self-sufficiency of the First Nations.
- 4. **Supporting Agriculture and Trade**: The region around Maskwacis also contains agricultural lands, and better transport links, especially rail, could help move agricultural products to larger markets in Edmonton and Calgary. This reflects findings from the ECC study, which noted that land conversion, infrastructure improvements, and market access have a direct positive influence on economic development.
- 5. Reducing Isolation and Enhancing Social Mobility: Rail connectivity would not only benefit economic activities but also address social isolation by providing Maskwacis residents greater access to services such as healthcare, education, and training opportunities in larger urban centres. This would alleviate the existing transport barriers due to the lack of frequent and reliable public transit options.

Qiu, F., Laliberté, L., Swallow, B., & Jeffrey, S. (2015). *Impacts of fragmentation and neighbor influences on farmland conversion: A case study of the Edmonton-Calgary Corridor, Canada*. Department of Resource Economics and Environmental Sociology, University of Alberta.

Report: Potential Economic and Social Benefits of a Rail Connection Along Highway 2A for Maskwacis and the Surrounding First Nations Communities

Introduction

The Edmonton-Calgary corridor, particularly along Highway 2A, is a vital economic and transportation artery. However, the First Nations communities of Maskwacis, located along this corridor, remain underserved in terms of transportation infrastructure, which hinders their economic development. Establishing a rail connection along the CPKC Right of Way, which follows Highway 2A, could significantly enhance economic opportunities and mobility for the four First Nations of Maskwacis.

Current Transportation Challenges in Maskwacis

- Isolation and Limited Connectivity: Maskwacis is currently underserved by public transportation systems. The lack of reliable rail or bus services severely limits access to nearby economic centres such as Edmonton and Calgary. This restricts the movement of goods and people, impacting economic development, access to employment, and social mobility.
- Economic Impacts: As noted in the Intelligent Transportation System (ITS) Strategic Plan for Highway 2, the broader corridor experiences high traffic volumes, particularly in peak periods, but the rural areas along the corridor, including Maskwacis, see far fewer economic benefits due to limited infrastructure (Highway 2).

3. Economic Development Potential from a Rail Connection

A rail link for Maskwacis could directly address transportation challenges and spur economic growth. Several key benefits include:

- **Job Creation**: A rail connection would make it easier for residents to commute to job markets in Edmonton, Calgary, and Red Deer, helping reduce unemployment and underemployment in the region.
- Access to Markets: Maskwacis has considerable potential for agricultural and industrial
 development. A rail link would allow local businesses to transport goods more efficiently to
 larger markets. According to traffic and transport data from the Highway 2 Strategic Plan, the
 lack of rail increases reliance on road transport, which is both costly and inefficient for rural
 areas (Highway 2).
- Tourism and Local Business Growth: Better rail connections could increase tourism to
 Maskwacis, benefiting local businesses and enhancing cultural tourism. With access to two of
 Canada's fastest-growing metropolitan areas, the community would be well-positioned to
 attract visitors to explore Indigenous culture and history.

4. Impact on Social Mobility and Access to Services

The **2003 Alberta Transportation report** highlights the need for improved transport infrastructure to ensure the efficient movement of people and goods. The absence of regular public transport options

in Maskwacis means residents must rely on private vehicles, which many cannot afford. This results in isolation from essential services, including healthcare and education (Highway 2).

A rail connection would improve access to:

- Healthcare: Residents could travel more easily to hospitals and medical centers in nearby cities.
- **Education and Training**: Students could attend institutions in urban areas, enhancing educational outcomes for the community.

Strategic Importance Along the Calgary-Edmonton Corridor

The **ITS plan for Highway 2** identified this corridor as a key area for transportation investment, particularly given the rapid growth of population and commerce. A rail connection along the CPKC Right of Way, following Highway 2A, would complement existing transportation strategies aimed at improving traffic flow and economic integration between Calgary, Edmonton, and rural areas.

Supporting Data: Historical and Projected Transportation Demand

- Traffic Volume: The corridor between Calgary and Edmonton is one of Alberta's busiest, with daily traffic volumes ranging from 15,000 to 30,000 vehicles per day. Maskwacis, strategically located along this route, could leverage this traffic for economic benefit through improved connectivity (Highway 2).
- **Population Growth**: Between 2006 and 2011, the population of the Edmonton-Calgary corridor grew by 12.1%, a trend expected to continue. Rural areas like Maskwacis are currently missing out on this growth due to a lack of infrastructure.

A rail connection along Highway 2A via the CPKC Right of Way would significantly benefit Maskwacis and its surrounding First Nations by improving access to regional economic opportunities, essential services, and markets. The data suggests that such a project could be a transformative development for the community, helping it overcome current transportation barriers while aligning with broader provincial goals for growth and integration along the Edmonton-Calgary corridor.

Schnarr, T., & Lo, A. (2003). An intelligent transportation system plan for Highway 2 between Edmonton and Calgary. Paper presented at the Traffic Operations Research and Applications Session of the 2003 Annual Conference of the Transportation Association of Canada, St. John's, Newfoundland and Labrador, September 21–24, 2003.