

Feasibility Study for Passenger Rail Service in Calgary- Lethbridge-Medicine Hat Corridor

	Syed Muhammad Yasir Shah.	(21885	49)	
	Natalia Gabriela Kowalska. (28052		•	
	Nurel Yakubova. (221		84)	
Student Number (s):	Mohamed Obaeid. (225348		B 1)	
	Saed Rashid Qadeer. (241469		96)	
	Ridhi Singla. (2371562)		52)	
	Oiisha Abdazimova (2236143)			
Programme	Business Management			
	Mental Wealth 3: Global Ente	rprise	Seminar	
Module Title:	and Consultancy Practice		Group	
	HR6026		Word	2015
Module Code:			Count	

In submitting this assessment, I confirm that no part of this assignment, except where quoted and referenced, has been copied from material belonging to any other person e.g. from a book. Handout, another student. I am aware that it is a breach of UEL regulations to copy the work of another without clear acknowledgement and that attempting to do so renders me liable to disciplinary proceedings.

Table of Contents

	1
FEASIBILITY STUDY FOR PASSENGER RAIL SERVICE IN CALGARY- LETHBRIDGE-MEDICINE HAT CORRIDOR	≀1
EXECUTIVE SUMMARY	2
COMPANY BACKGROUND	3
OUR ORGANISATION OPERATES THROUGH:	3
GRAVITY MODEL ANALYSIS	5
CLIENT'S NEEDS AND OBJECTIVES	7
ECONOMIC IMPACT	8
SOCIAL IMPACT	9
BALANCED ASSESSMENT REQUIRES ADDRESSING KEY CHALLENGES:	10
SWOT AND PESTEL ANALYSIS	10
INFRASTRUCTURE EVALUATION AND COST ESTIMATES FOR CANADIAN PACIFIC KANSAS CITY (CPKC)	11
ENVIRONMENTAL CONSIDERATIONS AND MITIGATION STRATEGIES	12
COST ESTIMATION	12
TICKETS AND SCHEDULES	13
SAFETY MEASURES	14
HEALTH ANALYSIS	15
HEALTHCARE ACCESS	15
ENVIRONMENTAL IMPACT ASSESSMENT	15
CONCLUSION	16
DEFEDENCES.	10

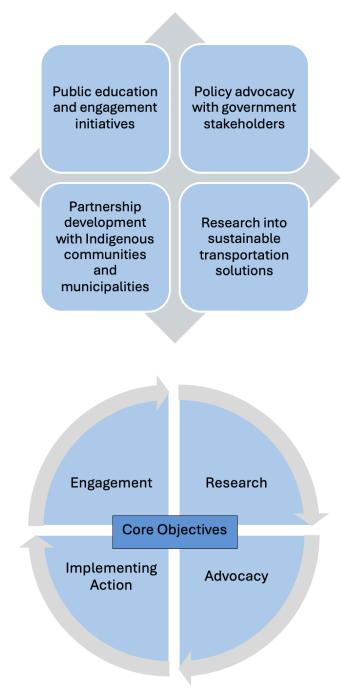
Executive Summary

This document presents a comprehensive assessment of Integrated Travel's capacity to drive this vision forward. It examines our organizational strengths, including deep technical expertise and a robust stakeholder network, alongside key challenges such as funding Constraints and public awareness gaps. The analysis also highlights strategic opportunities, from policy alignment to emerging clean rail technologies, while addressing external threats, including political shifts and industry resistance.

Company Background

Integrated Travel is a not-for-profit advocacy organization dedicated to restoring sustainable passenger rail service across Alberta. Founded in 2019, we focus on developing regional transportation solutions that prioritize accessibility, environmental responsibility, and economic benefits for all Albertans. (Integrated travel, 2024)

Our Organisation operates through:



Strengths

Advocacy Expertise

Technical Knowledge

Stakeholder Network

Non-Profit Status

Challenges

Funding Model

Resource Constraints

Implementation Authority

Public Awareness

Analysis of Organization

External Threats

Funding Competition

Political Priorities

Industry Resistance

Public Perception

Strategic Opportunities

Policy Alignment

Technological Advancements

Partnership Potential

Public Sentiment

PROJECT STEP-BY-STEP AND METHODOLOGY

PROJECT STEP BY STEP AND METHODOLOGY

<u>Step 1: The</u> project will be to make a railway between Lethbridge-Calgary-Medicine Hut. One the first week we have started to research about the location and the area in which we understand if this project is manageable.

Step 2: In the next few weeks, we have used the gravity model to show us the figures of how many people come to these locations which tells us that there will be many uses for he railway. We then researched the reason why people will use the railway such as for tourism or medical use to get to hospitals etc.

<u>Step 3:</u> What we then did is that we looked at the economics such as how much the tickets are going to cost and how much it will cost to create this project. Also the environmental benefits as to why the project can help.

<u>Step 4:</u>The next week we discussed the poster in which we discussed what should be added to then show the client what we have done.

<u>Step 5:</u> We have been given feedback and have been working on improvement just as the client has asked. We would then make sure that the report is tidy and have all of our information added.

<u>Step 6:</u> We have made some improvements and have finalised the project which shows the full picture of the project.

<u>Step 7:</u> as the work has been completed we have noticed how the project can be useful for the people that lives in or near the area.

<u>Summary:</u> These steps have made us realise that this project to create this railway will have many positive impacts and it will be successful and beneficial to the area

Gravity Model Analysis

The Journey from Lethbridge to Calgary is approximately 215 km. (Rome2Rio, no date) People would travel to the areas because there are good places to visit and to make a good trip. It is exceptionally good for travellers to visit attractions such as Little Bow Provincial Park, which is known as an enjoyable day for families to enjoy and relax.

Another attraction would be the Bomber Command Museum of Canada, which is known to be a must-visit for people who are interested in history.

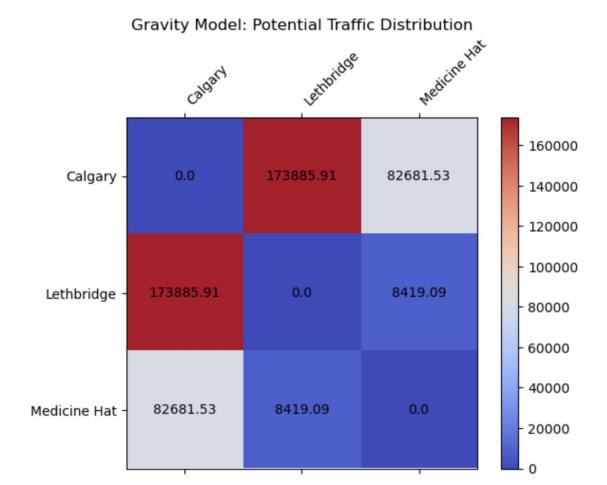
This museum shows WWII bombers and training aircraft, as well as aviation art and informative videos, which visitors can enjoy. These are only a few places that are mentioned, there are many more reasons such as these attractions why people will travel. Tourism is not the only reason people would want to travel.

other reasons can be for people to travel to places, such as travelling to school. Another reason can be because people are becoming more eco-friendly and having a railway service would be better for the environment than driving.

When comparing cars and aeroplanes, trains emit between 66 and 75 per cent less carbon. Having a railway service is much more sustainable. (Rail bookers, no date) There are a lot of opportunities and potential reasons for people to travel if there was a railway service between Calgary, Lethbridge, and Medicine Hat.

Potential Attraction Between Cities

	Calgary	Lethbridge	Medicine Hat	
Calgary	0	173885.9062	82681.53046	
Lethbridge	173885.9062	0	8419.092344	
Medicine Hat	82681.53046	8419.092344	0	



(Wander log, April 2023).

Aim potential development of passenger rail services between Calgary and Medicine Hat

The project aims to develop passenger rail services between Calgary and Medicine Hat, highlighting numerous economic and sustainability benefits. Rail transportation is cost-effective, reduces pollution and GHG emissions, and enhances accessibility for lower-income groups. It improves transportation fairness, safety, and congestion for locals, businesses, and visitors. Additionally, rail transit attracts tourists, and boosts healthcare access, community resilience, and business productivity.

Client's Needs and Objectives

Aims and Objectives of the Project.

The primary aim of the project is to conduct a feasibility study for establishing a passenger rail service in the Calgary-Lethbridge-Medicine Hat corridor. The objectives include:

Assessing Demand.

Evaluating the potential traffic and distribution of travellers between the cities using the Gravity Model.

Environmental Impact.

Analysing the benefits of reduced carbon emissions compared to other modes of transportation.

Economic Benefits.

Identifying opportunities for boosting local tourism and economic growth.

Infrastructure Requirements.

Determining the necessary infrastructure and investment for the railway service.

Problem Being Addressed

Transportation Efficiency:

The need for a reliable and efficient mode of transportation between Calgary, Lethbridge, and Medicine Hat.

Environmental Sustainability: Reducing carbon emissions and promoting ecofriendly travel options.

Tourism Accessibility: Improving access to key attractions and enhancing the tourism experience.

Commuter Convenience: Providing a convenient travel option for daily commuters, students, and travellers.

Proposed Solution or Approach to Solving the Problem

The proposed solution involves conducting a comprehensive feasibility study to evaluate the viability of the passenger rail service. The approach includes:

Traffic Analysis. Using the Gravity Model to predict and optimize traffic distribution between the cities.

Environmental Assessment.

Comparing the carbon emissions of trains with cars and aeroplanes to highlight the environmental benefits.

Economic Evaluation.

Assessing the potential economic impact on local tourism and businesses.

Infrastructure Planning.

Identifying the necessary infrastructure, including stations, tracks, and facilities, and estimating the investment required.

Stakeholder Engagement.

Collaborating with local communities, government agencies, and businesses to ensure the project meets their needs and expectations.

Economic Impact

Medicine Hat, with easy access to major roads, railways, a regional airport, and the United States border, is a perfect location for both business and leisure. Medicine Hat Regional Airport (YXH) is the region's major airport, with daily flights to Calgary.

25% of the local labour force works in agriculture, construction, and manufacturing. The Average wage of \$17.96 in the local agriculture workforce. Within a 100-km radius, Medicine Hat has a total draw pool of 9,447,907 tons of potential bio-feedstock available. The Medicine Hat region produces several pulses, including dry field peas, chickpeas, lentils, dry white beans, and others.

Protein Industries Canada (PIC) received over \$150 million in 2018. Medicine Hat has highly qualified talent to serve multiple industries. The community has a strong farming and livestock tradition, with 4% of the labour force and 10% in construction. Medicine Hat is also home to one of Canada's largest petrochemical sectors, allowing prospective bio-industrial companies access to a specialized workforce.

The foundation for the creation of new mobility options will increase collaboration between the commercial sector, non-governmental organisations, and domestic and international research and development facilities. Places to visit, like Red Rock Coulee, Bow Island Centennial Park, and Lethbridge Corn Maze, are accessible only through HW 2 from Calgary in Ontario, Canada. The winter months data showed a negative relationship with demand, whereas summertime ridership rose. Chilly weather and poor station infrastructure may drive riders to use private vehicles, lowering winter ridership. These effects could be

further mitigated by alterations to station infrastructure, such as the number of heated shelters and inside seating.

Health tourism is the practice of drawing visitors to the destination's distinctive attractions along with medical facilities. Due to its cost, convenience, and dependability, rail transit is preferred by many tourists, as shown in other popular tourist destinations. According to Travel Alberta, the region's economic impact is expected to reach \$1.3 billion between 2022 and 2035. Equity refers to the rights and abilities of all socio-economic demographics in a community to safe, affordable, and convenient mobility, especially when unable to drive themselves, including:

Social Impact

The Government of Alberta's Transportation and Economic Corridors Business Plan 2024—27 underscores the need for equitable transportation solutions to connect communities and support economic growth. A regional passenger rail service in the Calgary—Lethbridge—Medicine Hat corridor would provide a reliable alternative to car-dependent travel, addressing mobility gaps for vulnerable populations such as seniors, students, and low-income households. By linking urban centres like Calgary with mid-sized cities (Lethbridge, Medicine Hat) and smaller towns, rail services would enable access to jobs, healthcare, and education. For example, students commuting between Lethbridge College/University of Lethbridge and Calgary's post-secondary institutions would benefit significantly.

Strategic investments in rail infrastructure align with Alberta's goal of developing economic corridors (Transportation and Economic Corridors Business Plan 2024–27). Rail hubs in Lethbridge and Medicine Hat could spur business growth near stations, such as retail, hospitality, and mixed-use developments. Tourism would also benefit: Calgary's cultural attractions (e.g., Stampede), Lethbridge's heritage sites (e.g., Fort Whoop-Up), and Medicine Hat's art scene could become more accessible to regional visitors. A 2022 Alberta Central Zone Economic Overview highlights tourism as a key growth sector for these cities, which rail connectivity could amplify.

Transitioning to rail reduces greenhouse gas emissions, supporting Alberta's Climate Leadership Plan. Trains emit up to 75% less CO₂ per passenger-kilometre than private vehicles (Alberta Transportation, 2023). Reduced highway traffic on key routes like Highway (the primary corridor connecting these cities) would improve air quality, lowering respiratory health risks. Rail also decreases fossil fuel dependency, aligning with provincial emissions targets.

Rail travel has a lower accident rate than road transportation, as noted in the Transportation Safety Board of Canada's 2022 Annual Report. The highway, which currently serves as the main artery for the corridor, experiences high collision rates due to congestion and weather-related risks. Shifting passengers to rail could reduce traffic volumes and accidents. Modern rail safety measures, such as automated signalling systems, further mitigate risks.

Rail services would strengthen regional ties by enabling affordable travel for family visits, cultural events (Lethbridge's Whoop-Up Days), and medical appointments. Rural residents in towns like Claresholm and Brooks, who currently rely on limited bus services, would gain mobility. This fosters a shared regional identity and reduces isolation.

Balanced assessment requires addressing key challenges:

Funding: High upfront costs for tracks, stations, and trains. Solutions include federal-provincial partnerships and phased implementation.

Land Use: Coordination with municipalities to minimize displacement during station construction.

Ridership: Competitive pricing, seamless integration with local transit (Calgary Transit, Lethbridge Transit), and frequent scheduling is critical for viability.

SWOT and PESTEL Analysis

Strengths

Established expertise in Alberta's industrial corridors; strategic partnerships with energy/agriculture sectors; provincial government backing for infrastructure.

Weaknesses

Over-dependence on cyclical oil/gas freight; limited geographic scope beyond Alberta; aging rail lines increasing maintenance costs.



Threats

Oil price volatility and pipeline expansions reducing rail demand; competition from road transport; climate disruptions (e.g., wildfires damaging tracks).

Opportunities

Diversify into intermodal/e-commerce logistics; adopt hydrogen/electric locomotives to meet sustainability goals; tap into federal green infrastructure funding.



Infrastructure Evaluation and Cost Estimates for Canadian Pacific Kansas City (CPKC)

CPKC's 32,186 km rail network spans Canada, the U.S., and Mexico, serving as a key freight corridor that boosts cross-border trade and supply chain efficiency. Yet, various challenges demand vital infrastructure upgrades, including Increasing freight volumes have led to congestion in high-traffic corridors, limiting efficiency.

Ageing Infrastructure: Some sections of the network require modernization to meet evolving freight demands.

Cross-Border Logistics: The Patrick J. Ottens Meyer International Railway Bridge has boosted U.S.-Mexico freight movement, though further upgrades at key junctions are needed (Laredo Morning Times, 2024). These improvements are crucial for enhancing CPKC's efficiency and sustainability.

Potential Enhancements

1 Enhancing Train Speeds

Improving train speeds can reduce transit times and increase efficiency. This requires:

- Track Upgrades: Strengthening rail infrastructure to support higher-speed operations.
- Modernized Signalling Systems: Implementing advanced train control technologies to optimize scheduling.
- **Route Realignment**: Adjusting certain track sections to improve curvature and minimize speed restrictions.

2 Increasing Rail Capacity

To accommodate rising freight demand, CPKC can implement:

3 Strengthening Infrastructure Resilience

Climate-related disruptions, such as floods and wildfires, necessitate infrastructure fortification:

- Weather-Resistant Materials: Use durable rail components to withstand extreme temperatures.
- Improved Drainage Systems: Reducing the risk of track washouts during heavy rainfall.
- Fire Prevention Measures: Expanding the use of fire-resistant materials and monitoring equipment (CPKC, 2023).

Environmental Considerations and Mitigation Strategies

Rail expansion can impact ecosystems and emissions. To mitigate these effects, CPKC should:

- Use Sustainable Materials: prioritise and eco-friendly resources.
- Upgrade Locomotives: Shift to hybrid and low-emission engines.
- Implement Green Solutions: Add vegetation barriers and wildlife corridors.
- Expand Electrification: Reduce diesel use with more electric routes.

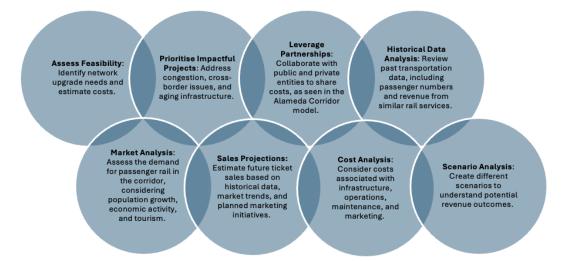
Cost Estimation

Infrastructure costs depend on terrain, material requirements, and project complexity. A breakdown of estimated costs for key enhancements includes:

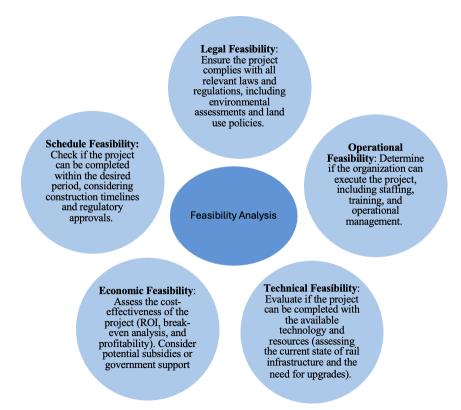
Upgrade Type	Estimated Cost per kilometre (CAD)	Total Estimated Cost
Track Upgrades	\$2-5 million	Varies by section
Double-Tracking	\$3-7 million	High-traffic corridors
Yard Modernization	\$50-150 million	Per facility
Electrification	\$3-5 million	Per Km
Bridge Enhancements	\$50-100 million	Per structure

For reference, the Patrick J. Ottens Meyer International Railway Bridge required an investment of approximately \$100 million (Laredo Morning Times, 2024). A comprehensive feasibility study is needed to refine cost projections for targeted upgrades.

Recommendations



Feasibility Analysis



Tickets and schedules

The expected ticket prices for the passenger rail service in the Calgary-Lethbridge-Medicine Hat corridor are estimated to range from 34.79\$ to 45.40\$. These prices are based on current ticket costs but may vary depending on the service and booking type.

The service schedules for the passenger rail service in the Calgary-Lethbridge-Medicine Hat corridor are still being finalized as part of Alberta's broader Passenger Rail Master Plan. However, the plan envisions frequent and reliable services that connect these key cities with other regional centres.

Multiple daily departures to accommodate both commuters and leisure travellers.

Peak and off-peak services to meet varying demand throughout the day.

Weekend and holiday services to cater to tourists and occasional travellers.

The exact timings and frequency will be determined based on further market analysis and public consultations.

The introduction of the passenger rail service in the Calgary-Lethbridge-Medicine Hat corridor is expected to significantly reduce travel times between these cities. Here are some estimated travel times based on the proposed rail service:

Calgary to Lethbridge	1.5 to 2 hours
Lethbridge to Medicine Hat	1 to 1.5 hours
Calgary to Medicine Hat	2.5 to 3 hours

Safety Measures

There are several safety measures planned for the passenger rail service in the Calgary-Lethbridge-Medicine Hat corridor to ensure the well-being of passengers. These measures include:

Advanced Signalling Systems	Implementation of modern signalling systems to prevent collisions and ensure safe train operations.
Regular Maintenance	Routine inspections and maintenance of tracks, trains, and infrastructure to prevent accidents and ensure reliability.
Emergency Response Plans	Comprehensive emergency response plans, including coordination with local emergency services and regular drills.
Passenger Safety Features	Installation of safety features such as CCTV cameras, emergency communication systems, and secure boarding areas.
Staff Training	Extensive training for staff on safety protocols, emergency procedures, and customer service to handle any situation effectively.
Health & Hygiene Measures	Enhanced cleaning protocols and health measures, especially considering recent global health concerns

Health Analysis

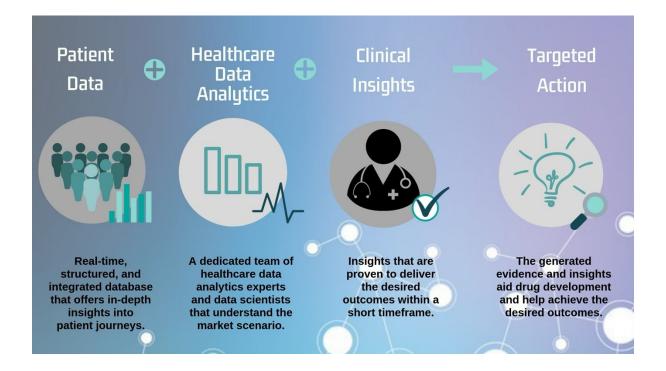
Health systems across Calgary, Lethbridge, and Medicine Hat address varying regional needs. Calgary, as a large urban centre, offers advanced medical care, research facilities, and specialized services. Lethbridge, a key regional hub, provides a range of primary and secondary healthcare services, catering to diverse population needs. Medicine Hat supports rural areas with localized care facilities.

Improved transport links, such as the proposed train service, could enhance access to healthcare, allowing quicker travel for specialized treatments. However, the environmental health impacts of such projects, including emissions and noise, must be considered. Strengthening integrated healthcare across these cities ensures better public health outcomes.

Healthcare Access

Calgary boasts advanced healthcare with high accessibility and specialised services. Lethbridge serves as a regional hub, addressing mental health and chronic conditions, with a focus on rural health. Medicine Hat focuses on localised care for rural areas. Improved transport links could enhance access across these cities, bridging gaps in specialised treatments and ensuring equitable healthcare delivery.

Medicine Hat emphasises integrated healthcare, offering mobile services for home-based treatments. All three cities prioritise healthcare access, but Calgary stands out for its advanced infrastructure and a broader range of services.



Environmental Impact Assessment

The Calgary-Lethbridge-Medicine Hat rail corridor has both advantages and disadvantages from an environmental viewpoint, and they need to be managed equally. Habitat

fragmentation will be affected by construction, and therefore Alberta's wetlands and forests will need wildlife corridors and reforestation. Noise mitigation through barriers and quiet zones will be used to address community concerns, particularly around Calgary. Diesel is bad for air quality but moving to electric or hydrogen power could cut CO₂ emissions by 50%. On a tonne-km basis, rail transport emits 70% fewer greenhouse gases than road transport, which is consistent with Alberta's carbon reduction targets. Water protection needs drainage systems and monitoring of them, particularly near the Bow River. The project will meet the requirements of the Alberta Environment regulations and the Fisheries Act and will involve Indigenous peoples such as the Métis Nation of Alberta and the local First Nations to include traditional ecological knowledge. This approach guarantees that the development is environmentally friendly and, at the same time, contributes to the growth of the economy of Alberta.

Conclusion

The Calgary-Lethbridge-Medicine Hat rail corridor is a transformative opportunity for Alberta's transportation network. This project is a balanced approach between economic development and environmental stewardship through strategic investment. However, problems like funding present challenges that need further work. But the long-term benefits are worth it: improved accessibility, economic stimulation, reduced emissions, enhanced safety, and increased social cohesion between communities. The comprehensive analysis is positive for revenue forecasts, technical feasibility, strong ROI, and operational viability. Practising sustainable practices and engaging stakeholders, including Indigenous communities, in the execution of this rail service, will have positive impacts for many years to come on both the environment and the province of Alberta.

References:

* Alberta Transportation (2023) Climate Leadership Plan and Emissions Reductions.

Available at: https://www.transportation.alberta.ca [Accessed 18 March 2025]. * CPKC (2023) Rail Network Modernization and Environmental Resilience. Available at:

https://www.cpkcr.com [Accessed 18 March 2025] * Rail Bookers (no date) Sustainable Travel. Available at: https://www.railbookers.co.uk/where-to-start/sustainability [Accessed 18 February 2025].

* Wanderlog (2023) 30 best stops between Lethbridge and Calgary. Available at: https://wanderlog.com/drive/between/58106/58048/lethbridge-to-calgary-drive [Accessed 10 February 2025].

Akhavan, P., Azizi, N., Akhtari, S., Haass, O., Jan, T. and Sajeev, S., 2023. Understanding critical success factors for implementing medical tourism in a multi-case analysis. Knowledge Management & E-Learning, 15(1), p.43.

Buray, T., Hegazi, M., Busche, H. and Lovegrove, G., 2024. The economic feasibility of (re-)introducing tram-trains in Canada: Okanagan Valley electric regional passenger rail. Sustainability, 16(10), p.4081.

Medicine Hat, 2023. Annual Report 2023. Available at:

https://www.medicinehat.ca/en/government-and-city-hall/resources/Documents/Plans-Reports-and-Studies/Annual-Report-2023.pdf [Accessed 18 February 2025].

Boray, T., Hegazi, M., Busche, H. and Lovegrove, G., 2024. The Economic Feasibility of (Re-) Introducing Tram-Trains in Canada: Okanagan Valley Electric Regional Passenger Rail. *Sustainability*, *16*(10), p.4081.

Ding, D. and Wu, X.Y., 2024. Hydrogen fuel cell electric trains: Technologies, current status, and future. *Applications in Energy and Combustion Science*, *17*, p.100255

Pollock, S., Devasurendra, K.W., Weiss, A., de Barros, A., Wirasinghe, S.C. and Kattan, L., 2024. Evaluating transit mode choice in the context of the COVID-19 pandemic–A stated preference approach. *Travel behaviour and society*, *34*, p.100678.

Medicine Hat, no date. Agriculture & Food Brochure. Available at: https://www.medicinehat.ca/en/Microsite_MH-Ec-Dev/Documents/Agriculture-Food-PDF-Brochure.pdf [Accessed 18 February 2025].

Medicine Hat, no date. Community profile. Available at: https://www.medicinehat.ca/en/mhed-community-profile.aspx [Accessed 18 February 2025].

Rail bookers, no date. Sustainable Travel. Available at: https://www.railbookers.co.uk/where-to-start/sustainability [Accessed 18 February 2025].

Rome2Rio, no date. How to get from Lethbridge to Calgary by plane, bus, or car. Available at: https://www.rome2rio.com [Accessed 10 February 2025]

Alberta Health Services, 2025. Homepage. Available at: http://albertahealthservices.ca [Accessed 18 March 2025].

Integrated Travel (2024) Enhancing Transportation Equity in Indigenous Communities. Available at: https://integrated.travel/Enhancing-Transportation-Equity-in-Indigenous-Communities/ [Accessed 24 March 2025]

Integrated Travel (2024) Homepage. Available at: https://integrated.travel/ [Accessed 24 march 2025]

Integrated Travel (2024) Petition for Reinstatement of Passenger Rail in Alberta. Available at: https://integrated.travel/Change-org-Petition-for-Reinstatement-of-Passenger-Rail-in-Alberta/ [Accessed 24 march 2025]

Integrated Travel (2024) Responsible Rail. Available at: https://integrated.travel/Responsible-Rail/ [Accessed 24 March 2025]

Lokuge, N. and Anders, S., 2022. Carbon-credit systems in agriculture: a review of literature. The School of Public Policy Publications, 15.

Statistics Canada, 2025. Homepage. Available at: http://statcan.gc.ca [Accessed 18 March 2025].

Wander log, 2023. 30 best stops between Lethbridge and Calgary. Available at: https://wanderlog.com/drive/between/58106/58048/lethbridge-to-calgary-drive [Accessed 10 February 2025].

Appendix:

Breakdown of work:

Number	Name	ID	Email	Responsibility
01	Mohamed Obaeid	2253481	u2253481@uel.ac.uk	1. Gravity Model Analysis (Ridership Estimation)
				Assigned to:
				- Analyse the gravity model (Excelbased) to estimate ridership.
				- Focus on understanding travel patterns (e.g., Lethbridge to Calgary vs. local travel within communities).
				- Identify key destinations and reasons for travel.
				- Prepare a summary of findings for the report. including methods/tools, key deliverables, and steps to achieve the objectives.
02	Nurel	2211384	u2211384@uel.ac.uk	2. Economic Benefits Research
	Yakubova	oova		Assigned to:
				- Research the economic impact of the rail service on the region.
				- Focus on benefits for the agricultural and industrial sectors (e.g., greenhouse farming, food processing).

				- Include potential job creation and economic growth.
				- Summarize findings with supporting data
03	Ridhi Singla	2371562	u2371562@uel.ac.uk	3. Social Benefits Research
				Assigned to: [Student 3]
				- Research the social benefits of the rail service.
				- Focus on improved connectivity for communities, low-income travellers, and seniors.
				- Explore potential subsidies and their impact on ridership.
				- Summarize findings with supporting data.
				executive summary, covering the company's background, opportunities/issues, and scope/objectives. and internal strengths/weaknesses, external challenges/opportunities).
04	Syed	2188549	u2188549@uel.ac.uk	4. Infrastructure Assessment
	Muhammad Yasir Shah			Assigned to: [Student 4]
	rusii siiuii			- Evaluate the current rail infrastructure (operated by CPKC).
				- Identify necessary upgrades (e.g., line speed improvements, capacity expansion).
				- Estimate costs for enhancements (use the baseline of \$0.70 per kilometre
				- Summarize findings with recommendations for infrastructure improvements. Define the client's needs, aims/objectives, and the
				problem being addressed, as well as outline the proposed solution.
05	Natalia Gabriela Kowalska	2805222	U2805222@uel.ac.uk	5. Revenue Forecasting and
	Nuwaiska			Feasibility
				Assigned to: [Student 5]
				- Assess potential revenue streams for the rail service.
				- Analyse the feasibility of the project based on ridership estimates and costs.

				 Consider subsidies for low-income travellers and their impact on revenue. Summarize findings with a feasibility conclusion SWOT analysis PESTLE AND project's goals
06	Oiisha Abdazimova	2236143	u2236143@uel.ac.uk	6. Environmental Impact Assessment • Assigned to: [Student 6] • Research the environmental impact of the rail service. • Focus on potential reductions in greenhouse gas emissions and other environmental benefits. • Include considerations for sustainable practices in rail operations. • Summarize findings with supporting data. identify potential challenges/risks and develop mitigation strategies for issues
07 Group leader)	Saed Rashid Qadeer	2414696.	U2414696@uel.ac.uk	7. Report Compilation and Final Review Assigned to: [Student 7] - Compile all sections (ridership, economic benefits, social benefits, infrastructure, revenue forecasting) into a detailed feasibility report Summarize the contributions and findings from all other sections, including company background, opportunities/issues, challenges, SWOT analysis, and proposed strategies. -Ensure coherence: Review all sections to ensure logical flow and consistency throughout the project. -Identify missing points: Check for gaps, such as overlooked challenges, objectives, or strategies, and address them effectively. Problem-solving: Suggest actionable solutions for any unresolved issues identified in the report. Final polish: Collaborate with team members to refine language, structure, and presentation for a professional-quality outcome. Report integration Combine insights from SWOT and PESTLE analyses to

		present a holistic perspective of the
		internal and external environment.