

DRAFT

Connecting Albertans with Each Other and the World:

A Long-Term Transportation Strategy for Alberta

Our Vision:

An integrated, cost-efficient, multi-modal transportation system that is safe, affordable, and accessible to all Albertans.



Introduction

Imagine a transportation system that includes driverless vehicles powered by alternative fuels with advanced onboard vehicle technologies. Imagine a seamless transportation system with zero traffic fatalities, injuries and collisions. Imagine that Albertans can fly direct to other global centres, without having to first connect through another city.

Fifty years from now, Alberta's transportation system could include any or all of these elements, and much more. Turning what we imagine into reality will require thoughtful planning and investment. Part of that planning process is determining what Albertans and industry stakeholders envision for our transportation system.



What we have heard so far

Alberta Transportation began consulting Albertans through public consultations in late January and February of this year, with sessions in 18 communities across the province. The working sessions focused on the big-picture vision for Alberta's future transportation system that will enhance the quality of life for all Albertans and secure our place nationally and internationally.

Over 900 people attended the public consultations. Approximately 50 percent of those attending were representatives from municipal governments. Business representatives made up another 20 percent and the remainder of participants were from transportation services, non-profit organizations, First Nations and/or Metis governments or organizations, and private citizens. There were also more than 100 submissions received by email, phone and feedback forms.

Input from the public consultations and feedback forms have been used to form the foundation of the draft Transportation Strategy.

What's next?

The next phase of public consultation is taking place throughout April and May. All Albertans are encouraged to read the draft Transportation Strategy and complete an online survey or a more in-depth online workbook.

This is your opportunity to influence the future of Alberta's transportation network. What do you think our transportation system needs to look like 50 years from now if we are to achieve our proposed vision of "an integrated, cost-efficient, multi-modal transportation system that is safe, affordable and accessible"?

Your input is needed in the development of a long-term, multi-modal transportation strategy. We need to ensure we are headed in the right direction and have the support that will be needed from government, industry and all Albertans to implement our vision.

To provide your input on the draft Strategy, please visit www.transportation.alberta.ca

Connecting Albertans with Each Other and the World: A Long-term Transportation Strategy for Alberta will envision how our transportation system will meet our needs in 2065. It will identify the trends, challenges and opportunities ahead. It will examine many competing needs that will drive the transportation system in the future, and how we will achieve the proposed vision for Alberta's transportation system in the next 50 years.

Through the public consultations, seven goals were recommended for Alberta's future transportation system. **We need your thoughts on these recommended goals and the actions that will turn these goals into reality.** The Transportation Strategy will also identify potential financing and funding mechanisms to build and maintain the infrastructure that will be needed in order to realize a safe, affordable and accessible multi-modal transportation system.

Defining Multi-modal

Multi-modal means all transportation modes. The Transportation Strategy will be based on an integrated, multi-modal system that considers how all modes interact with one another.

The modes being considered in the development of the Transportation Strategy are road, rail, air, marine, pipelines, active (self-propelled) and public transportation. Albertans and Alberta businesses rely on all of these modes to travel and transport products within the province, within Canada and to the rest of the world.

Modes of Transportation

Road – the transportation of people and goods on provincial highways and bridges, as well as other roads that are under the jurisdiction of municipalities, the federal government and the private sector. Considerations include the roadway infrastructure, passenger vehicles, commercial vehicles and users of the road network.

Rail – the transportation of people and goods by railways, including passenger rail systems. Considerations include rail infrastructure (track) and vehicles (locomotives, hopper cars and passenger train sets). Both federally-regulated and provincially-regulated railways operate in Alberta.

Air – the transportation of people and goods via aircraft, including fixed and rotary airplanes, and airships (for transporting heavy equipment). The air mode includes the aerospace sector.

Marine – the transportation of people and goods via watercraft, including ferries (within Alberta) and commercial vessels (overseas). Considerations include canals and waterways within Alberta, as well as port operations and the marine terminals in British Columbia and other jurisdictions that facilitate the transfer of containers, break-bulk (e.g. forest products, machinery) and bulk goods (e.g. coal, grain) between vessels and other modes.

Pipeline – the transportation of goods like oil and gas via underground infrastructure.

Active – the transportation that is self-propelled or human-powered, including walking and cycling.

Public – the transportation that includes passenger services available for use by the general public such as transit services, inter-city busing, accessible transportation and taxis. Public transportation is operated by municipalities and the private sector.

Our Transportation Story

Where have we been?

Before further examining the future of Alberta's transportation system, it is important that we understand and explore the system's development and current state. Alberta's transportation system today is a product of the prudent development of a network of arteries and modes to help move people and goods.

Key milestones in Alberta's transportation history help us understand how we got to where we are today. Some of those milestones include:

- The establishment of the Canadian Pacific Railway mainline in southern Alberta in 1883.
- The completion of the first pipeline from Bow Island to Lethbridge and Calgary in 1912.
- The first passengers on Calgary's public transit system in 1931.
- The building of the Trans Canada Highway in the 1950s.
- The opening of the Edmonton and Calgary International Airports in 1960 and 1977 respectively.
- The opening of the Prince Rupert Grain Terminal in 1985.
- The start of the first portion of the Trans Canada Trail in Alberta in 1989.
- The launching of the Asia-Pacific Gateway and Corridor Initiative by the federal government in 2006.
- The signing of important trade agreements, like the New West Partnership Trade Agreement in 2010.

All of these milestones and many more, have played an integral part in Alberta's development as a key player in the global economy, and as an attractive place to live and do business.

Where are we now?

Today we have ring roads in Edmonton and Calgary to address urban transportation issues and move people and products quickly around Alberta's largest cities. We have also expanded transportation developments in rapidly growing and remote, resource-rich areas like northeast Alberta.

Planning for the future

The planning done over 40 years ago for the ring roads in Edmonton and Calgary is a great example of how transportation needs must be anticipated and strategically thought through. Projects such as the ring roads are complex and require large amounts of land, significant expenditures that must be spread out over large periods of time, collaboration among many stakeholders and multiple stages of public consultation. Thanks to the work done in the 1970s, two ring roads that have a tremendous impact on the movement of people and goods in Alberta's two largest cities are almost complete.

Our well-maintained rail and highway systems offer Albertans and businesses better access to new markets in eastern Canada, the United States and to Asia and other markets through major sea ports such as Port Metro Vancouver, the Port of Prince Rupert, the Port of Thunder Bay and the Port of Churchill.

Public transportation (bus and light rail transit) is developing at a rapid pace, as are active transportation systems (walking and biking).

Today's transportation network extends to commercial trucking, railways and ship yards that operate at full capacity 24 hours a day, 365 days a year to move Alberta's imports and exports across provincial and international borders throughout North America and the global marketplace.

Pipelines and corridors for multi-use purposes carry petroleum products to fuel vehicles and natural gas to heat homes and businesses. Today's multi-modal transportation network is strategically planned to get the greatest return on investment with minimal impact on the environment.

Building tomorrow's transportation system will be a natural extension of where we are today. However, to do so we must understand the current and future trends that will impact the system's development, along with the challenges and opportunities those trends will present.

Trends, Challenges and Opportunities

Where are we going?

Trends

There are a number future trends to consider that could affect Alberta's competitiveness, market access, economic growth and attractiveness as a place to live and do business, just a few of which are listed below.

- Rapidly growing Asian markets require our exports to continue their growth while the United States remains Alberta's largest trading partner by a significant margin.
- Limited pipeline capacity from Alberta to other jurisdictions means large energy suppliers are looking to alternate modes of transportation, such as rail.
- Transportation energy consumption in Canada is expected to continue to grow, while technological improvements will continue to reduce fuel consumption, increase efficiency and decrease emissions.
- In 2013 alone, the province welcomed over 135,000 new Albertans, which is equivalent to adding a city the size of Red Deer in just a single year.
- Albertans are using transit in greater numbers and active transportation (walking and cycling) is growing in popularity.
- Growth in commuter and high-speed rail networks is occurring worldwide.
- There has been a trend towards a zero-fatality strategy for road safety that addresses drivers, infrastructure and vehicles together.
- Advancements are being made in the research and testing of vehicles with greater autonomous, or self-driving, capabilities.
- Private-public partnerships (P3s) will continue to grow to help advance priority transportation projects.



Challenges

In order to successfully implement a long-term transportation strategy, it is important to also examine some of the key challenges facing the system such as:

- Maintaining affordable and reliable transportation services in all areas of Alberta.
- Ensuring Alberta remains competitive by having the ability to move people and products to other markets in an efficient and cost-effective manner.
- Addressing supply-chain capacity and constraint issues.
- Ensuring the needs of an aging population are met.
- Paying for new technologies.
- Securing significant public and private investment in environmental sustainability.
- Establishing long-term, sustainable and stable revenue sources and funding.
- Maintaining a labour supply for transportation-related activities.
- Acquiring the “social license”, or support of Albertans and neighbouring provinces, for future corridors and infrastructure.

While by no means an exhaustive list, the trends and challenges help us understand what is ahead.

Opportunities

A number of exciting opportunities will be available to Albertans and Alberta businesses in the next 50 years. Through our transportation system, we can realize and capitalize on these opportunities, improving Alberta’s economic, social, environmental and fiscal well-being. Some of these future opportunities include:

- Supplying Alberta goods and services to new markets.
- Aligning with the plans of all levels of government as well as private sector operators.
- Enhancing rail service throughout the province.
- Increasing the efficiency of moving goods with better integration of all transportation modes.
- Identifying and acquiring corridors for multi-use purposes.
- Working with municipalities to ensure travel choice is available to residents and visitors.
- Supporting active living initiatives.
- Collaborating to influence and advocate for implementation of key safety and security measures through driver education, improved infrastructure designs and better enforcement.
- Investing in transportation-related research and development.
- Increasing research capacity in priority areas of technological advancement.
- Addressing any regulatory issues or other barriers to adopting new technologies.
- Developing more efficient and ‘green’ multi-modal transportation supply chains and networks.
- Using ‘green’ design, vehicle technology and materials.
- Evaluating revenue-generating tools such as tolls and other user-pay mechanisms.

Planning for the future

The Peter Lougheed Bridge on Highway 63 north of Fort McMurray, which opened in 1979, is another example of how long-term planning is important to meeting future needs. The bridge was built to access promising oil sands properties in the Albian Sands/Bitumount/Fort Hills Area. Although thought to be a poor plan due to the economic downturn at the time, the Peter Lougheed Bridge has proven to be a wise investment, enabling the rapid development of oil sands properties when the price of oil recovered. Without the bridge, ground access for resource exploration and development would have been much slower to develop. Today, there are a number of major oil sands developments north of the Peter Lougheed Bridge and an average of more than 6,000 vehicles travel over it daily.



Meeting the Vision

An integrated, cost-efficient, multi-modal transportation system that is safe, affordable and accessible to all Albertans.

Principles

The Government of Alberta can play many roles in the development and implementation of a long-term vision for transportation – we can advocate with the air, marine and rail industries and we can influence, regulate, manage and deliver many different parts of the transportation system. We do this, and will continue to do this, in close collaboration with our government and industry partners.

Planning and implementing a multi-modal transportation strategy is not the responsibility of the provincial government alone. Other levels of government and the private sector also play an important part in ensuring Alberta has an effective, multi-modal transportation system. Implementation of the strategy will require municipal governments, the federal government, the air, port and rail industries, and other transportation service providers such as busing and logistics companies to work with the Government of Alberta and build on their own priorities and initiatives. As users of the transportation system, Albertans have a responsibility as well to use the system in the safest and most efficient ways possible.

As we work toward realizing our vision and throughout implementation of the goals and actions that will get us there, we will be guided by a number of principles:

- Partnership and collaboration are central to the success of any strategy.
- Existing roles and responsibilities will be respected, including existing transportation plans, land use planning processes and agreements, municipal authority for public transportation, ownership of private sector services, and the federal government's role in regulating national infrastructure.
- Innovation and technology are a means to an end.
- Investments must be made where they are needed most, while ensuring that we can maintain today's infrastructure.
- It is important to ensure access to transportation services for all Albertans.
- The quality of life of Albertans is an important consideration when transportation decisions are made.
- The private sector and users will need to play an increasingly important role in funding and financing transportation infrastructure.

Innovative Funding and Financing

*The maintenance of Alberta's existing transportation infrastructure and priority areas of new investment for an increasingly high-tech system will require funding beyond what is affordable for all three levels of government, given the pressure of constrained public finances in the foreseeable future. A combination of innovative financing and funding options will be needed and it is important to distinguish between the two. **Financing** involves raising the capital necessary to build infrastructure and can be obtained through methods such as public-private partnerships (P3s), borrowing from capital markets and cost-sharing agreements. **Funding** refers to making payments on capital raised through means such as user charges like tolls or fuel taxes that generate additional revenue and can be used to support operations and maintenance.*

Recommended Goals and Suggested Actions

After examining the trends, challenges and opportunities within the transportation system, it is clear that Alberta has a significant opportunity to use transportation as a powerful platform to help achieve Albertan's vision of reaching its full potential.

A lot of work has already been completed as Alberta develops a multi-modal transportation system that incorporates bold directions for sustainable development of its transportation infrastructure. Now it's time to look to the future and determine how best to get there.

Based on the input obtained from public consultations held on the Transportation Strategy, as well as input received directly from Albertans and industry through feedback forms and written submissions, seven recommended goals and a number of specific actions are being suggested.

Recommended Goal 1: Competitiveness, Market Access and Economic Growth

All Albertans and Alberta businesses will have equal access to a transportation system with a variety of modes to transport people and goods within the province, across Canada and internationally.

Suggested Actions:

- Increase the use of rail to move goods and services and promote expansion of the rail network along corridors where services have been abandoned.
- Invest in highway improvements.
- Expand the use of airports in communities.
- Increase the use of pipelines for the movement of goods within and outside of Alberta.
- Seek Open Skies agreements to improve direct air access to international markets.
- Explore high-speed rail in Alberta.
- Conduct a transportation needs assessment for rural and urban communities.
- Strengthen intergovernmental agreements that enhance transportation corridors and promote harmonized regulations within Alberta, and between Alberta and other provinces and states (e.g. New West Partnership Trade Agreement, Agreement on Internal Trade).
- Work with all transportation partners to identify and acquire corridors for multi-use purposes to ensure better infrastructure coordination and long-range economic opportunities.
- Create more routes around communities instead of through them.
- Develop more designated routes for dangerous goods and routes that accommodate oversize and overweight loads.
- Ensure all of Alberta's transportation policies align with the policies of other Canadian jurisdictions.
- Collaborate on, and implement, a Pan Canadian transportation strategy that maximizes the benefits of integrating all modes and minimizes supply-chain inefficiencies.
- Ensure municipalities work with each other to address local transportation and land-use issues through mechanisms such as regional governance models.
- Develop better connections among the different ways of travelling or transporting goods.
- Increase the number of Canada/United States border crossings.

Recommended Goal 2: Active Communities

Alberta's transportation system will support a high quality of life by incorporating active transportation options such as walking and biking in both rural and urban areas.

Suggested Actions:

- Collaborate with partners on a needs assessment for, and promotion of, active transportation (such as walking and biking) within and between all Alberta communities.
- Implement international best practices for integrating active transportation options with public transit, roads, and into highway rights-of-way (e.g. bike trails).
- Develop multi-use trails for commuting, as well as recreation.
- Secure a consistent and predictable source of funding for active transportation needs.
- Encourage municipalities to implement processes and build infrastructure that makes their community accessible to all.

Recommended Goal 3: Connected Communities

Alberta's transportation system will include easily accessible public transportation options in and between communities.

Suggested Actions:

- Develop an effective and efficient provincial highway network that connects to local road networks in rural, remote and Aboriginal communities.
- Remove barriers to small business entrepreneurs providing privately operated transportation services in rural, remote and Aboriginal communities such as charter buses.
- Implement a barrier-free access policy and legislation to ensure all Albertans can physically access transportation services.
- Make more modes of transportation available in rural areas.
- Advocate for a national transit strategy.
- Work with municipalities to promote and/or improve public transit.
- Develop a provincial transit strategy (that includes urban and rural communities).
- Implement best practices in providing reliable, accessible, affordable and age-friendly public transit.

Recommended Goal 4: Safety and Security

The safety and security of people and goods traveling throughout, and into and out of, Alberta will be enhanced with educational, regulatory, technological and infrastructure improvements.

Suggested Actions:

- Increase funding for and use of enforcement on Alberta's highways, including implementation of photo radar.
- Increase fines and penalties for traffic violations.

- Improve driver education programs and licensing requirements in Alberta.
- Increase awareness of safe driving initiatives, such as distracted driving and seatbelt laws.
- Explore and implement best practices in safe road design.
- Improve winter maintenance on roads.
- Update existing road design standards and ensure all infrastructure meets the same standards.
- Improve signage to help Albertans travel safely.
- Enhance provincial railway safety regulations to minimize incidents.
- Improve safety on existing routes that accommodate oversized and overweight loads.
- Collaborate with the federal government to implement enhanced transportation safety standards that ensure optimal infrastructure performance.
- Use new technologies, to make roads, vehicles and drivers safer.
- Work with transportation partners to implement initiatives that will ensure safe and efficient screening of people and goods.
- Work with transportation partners to ensure sensitive information about goods and people movement is not vulnerable to security threats.
- Work with other jurisdictions to ensure international borders are secure without compromising the efficient flow of people and goods.
- Enhance emergency response plans for major transportation incidents/disruptions as transportation modes and networks evolve.

Recommended Goal 5: Innovation and Technology

Innovative technology and systems will be used to improve transportation safety, sustain the lifetime of transportation infrastructure and provide timely information to Albertans about the transportation network.

Suggested Actions:

- Incorporate new technologies and innovations into the regulatory framework proactively (e.g. autonomous vehicles, electric vehicles, etc.).
- Work with other governments, industry and post-secondary institutions to increase research capacity in priority areas of technological advancement.
- Develop a strategy that supports traffic safety goals and to improve the performance of the transportation system.
- Collaborate with post-secondary institutions to ensure Alberta has a sufficient supply of skilled transportation professionals and that they understand how all modes interact as a system.
- Create a Centre of Excellence to research and promote best practices in transportation.
- Collaborate with manufacturers to improve vehicle safety design.
- Conduct a needs assessment to determine transportation technology requirements.
- Explore technologies that are designed for Alberta's climate.
- Build infrastructure that is compatible with new technologies, such as fibre-optic cables in highway rights-of-way.
- Continue with implementation of the 511 Alberta traveler information service and expand upon real-time information provided.
- Use electronic signage to manage congestion.

Recommended Goal 6: Environmental Stewardship

Alberta's transportation system will incorporate sustainable land-use practices and manage air, water, and wildlife in an environmentally responsible manner.

Suggested Actions:

- Work with partners to balance environmental considerations with social and economic impacts of transportation projects.
- Use existing rights-of-way for infrastructure to reduce impacts on land.
- Improve wildlife corridors and crossings.
- Support research related to new types of vehicle fuels such as natural gas and biofuels.
- Explore environmentally friendly materials and products for construction, maintenance and other transportation services.
- Implement infrastructure to support the use of alternative fuels.
- Implement and promote the use of environmentally friendly transportation demand management tools, such as carpooling, telecommuting and public transit.
- With partners, develop benchmarks, targets and sustainability performance measures that track environmental progress in the transportation industry.
- Work with partners to ensure all environmental rules and regulations are implemented, monitored and enforced.

Recommended Goal 7: Long-Term Sustainability

Alberta's transportation system will be financially sustainable and Alberta will maintain its transportation assets while supporting the development of new infrastructure.

Suggested Actions:

- Evaluate and implement user-pay mechanisms (e.g. tolls, fuel taxes).
- Pursue funding partnerships with private sector/industry and the federal government.
- Borrow funds to pay for transportation projects.
- Explore additional mechanisms that could be used by municipalities to fund and finance transportation in Alberta's communities.
- Work with industry to develop processes/guidelines for determining financial support from industry for transportation infrastructure projects (e.g. use of royalties).
- Work with partners to ensure transportation spending is based on cost-benefit analysis that considers capital costs, maintenance costs and replacement costs, as well as good governance.
- Implement a stable funding structure for all transportation projects that includes both construction and maintenance.
- Make more use of existing infrastructure to reduce the amount of new infrastructure that is needed.
- Work with partners to integrate land-use and transportation plans.

How to Provide Input

Alberta is a place – and people – on the move. We are looking at the future of transportation in this province and we need to start planning for the future now. The input of key partners and **all** Albertans is crucial to the success of the 50-year, multi-modal Transportation Strategy.

We want to hear from you! We ask that your ideas be bold, innovative and outline your vision for Alberta's transportation system in 2065. Tell us how **you** think our province can best ensure a reputation 50 years from now as a leading-edge, progressive province that is connected nationally and internationally through a transportation system that is second to none.

To share your thoughts with us, please visit www.transportation.alberta.ca and complete the survey and/or the workbook. We look forward to receiving your input.