
Deputy Minister Update

2023 Consulting Engineers of Alberta Transportation Connects Conference

Bryce Stewart
Deputy Minister
Transportation and Economic Corridors
February 27, 2023



Department Priorities

Department Priorities – Economic Corridors

- Minister Dreeschen has a mandate to focus on the expansion of economic corridors across the province and country, to expand employment, economic growth, and non-renewable resource revenue for Albertans.
- Economic Corridors are trade corridors that provide vital links to markets in and out of Alberta. These trade corridors may include varying types of linear infrastructure.
- Economic corridors can involve a broad range of infrastructure including transportation, energy, power, telecommunications, and other utilities.

Department Priorities – Economic Corridors

- Collaboration with other governments and stakeholders on advancing economic corridors.
 - Alberta recognizes the importance of working with the federal government and other provinces and territories on advancing nation-building projects.
 - This is a topic of conversation in Ottawa and there is tremendous engagement and interest among the prairie provinces.
- Some key corridors currently underway include the following initiatives:
 - Twinning of the Highway 3 corridor between Medicine Hat and British Columbia. Twinning of 46 kilometres from Taber to Burdett is expected to start construction in 2023.
 - Completion of the Calgary ring road (Stoney Trail).
- Highway projects that enhance economic corridors will be considered in capital planning process.

Department Priorities – Enhanced Mobility

- Part of Transportation and Economic Corridors mandate is to focus on job creation and strengthening Alberta's economy. The province is working with partners to support innovative, cost-effective transportation mobility options for Albertans.
 - In 2021-22, a total of \$114 million was spent on the Calgary LRT and \$118 million on the Edmonton LRT. This includes provincial funding as well as federal government funding as part of the Investing in Canada Infrastructure Program (ICIP) administered by Transportation and Economic Corridors. The Edmonton and Calgary LRT projects will improve accessibility and connectivity, while reducing traffic congestion and greenhouse gas emissions within the two cities and creating more than 90,000 jobs.

Department Priorities – Alternative Energy

- Transportation and Economic Corridors supports the advancement of energy efficient, low-emission transportation technologies, as well as innovative, private sector-led infrastructure projects that have the potential for job creation and economic diversification.
 - The department engages with industry through various conventions and conferences (e.g., Canadian Hydrogen Convention; Zero Emission Bus Technology, and Transit Operations Conference), and collaborative initiatives (e.g., Alberta Zero-Emissions Truck Electrification Collaboration (AZETEC) Pilot Project; Canadian Pacific Hydrogen Locomotive Pilot Project).
- Most of the investment in Electric Vehicle (EV) charging station infrastructure is undertaken by private investors and municipalities.
 - Charging station locations in the province are noted on Alberta 511 <https://511.alberta.ca/#:Alerts>
 - There are approximately 765 chargers located at 340 charging station locations across Alberta. Charging stations are generally concentrated in urban areas, such as Edmonton and Calgary.

Department Priorities – Alternative Energy

Transporting hydrogen for use as an alternative fuel:

- Transportation and Economic Corridors supports the advancement of energy efficient, low-emission transportation technologies, as well as innovative, private sector-led infrastructure projects with the potential for job creation and economic diversification.
- Premier Smith asked the Department of Energy to bring forward a Request for an Expression of Interest (EOI) on an expedited basis, in order to assess the possibility and interest of the private sector establishing hydrogen fueling stations within the province, including costs and potential government support requirements.
 - Premier’s direction indicated the fueling stations are to be industry owned and operated.
- The EOI deadline for submissions is March 10, 2023.
- Alberta’s Hydrogen Roadmap outlines the Government of Alberta’s approach to developing hydrogen use and production within Alberta.
- The roadmap is the path to building a provincial hydrogen economy and accessing global markets.

Department Priorities – Indigenous Peoples

- The province also recognizes the need to engage, and work with Indigenous peoples – First Nations, Métis, and Inuit – on enhancing economic corridors and in greenfield development.
- Transportation and Economic Corridors will work, and proactively partner, with Indigenous communities on planning economic corridors for the mutual benefit economic benefit of all.
- Examples of previous engagement:
 - First Nations Consultation during design
 - Indigenous employment during construction
 - Early work contracts for Springbank Reservoir project

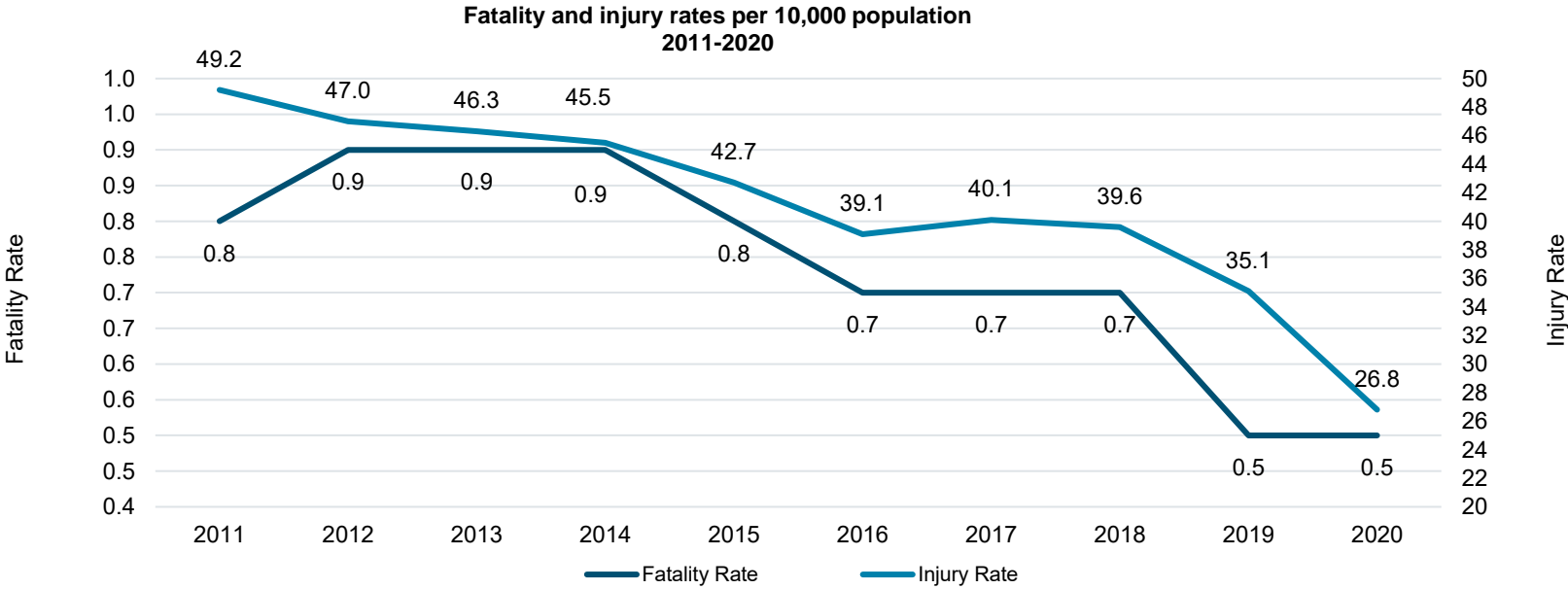
Departmental Context

Safety Statistics

Severity of Collisions	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatal Collisions	285	307	331	328	288	273	259	246	215	207
Non-Fatal Injury Collisions	13,909	13,822	14,073	14,244	13,531	12,465	13,082	12,852	11,738	9,092
Property Damage Collisions	124,985	122,466	127,234	130,168	126,886	120,386	129,126	129,498	120,119	85,702
Total Reportable Collisions	139,179	136,595	141,638	144,740	140,705	133,124	142,467	142,596	132,072	95,001

Injury Severity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number Killed	313	345	358	369	330	299	290	289	233	235
Number Injured	18,584	18,220	18,650	18,745	17,907	16,622	17,186	17,055	15,364	11,844
Total Number of Casualties	18,897	18,565	19,008	19,114	18,237	16,921	17,476	17,344	15,597	12,079

Safety Statistics



Climate Change and Resilient Infrastructure

Resilient Infrastructure

- New challenges in the face of changing climate conditions.
- The highway network is critical to the movement of people and goods and the economic prosperity of the province and country.
- Increased pressure to maintain connectivity during disaster events and restore connectivity after disaster events.
- The department is committed to ensuring our standards and practices support a resilient highway network.



Resilient Infrastructure - Bridges

- A primary concern is with more frequent floods, rather than significantly larger floods.
 - Updating the riprap inspection and maintenance programs on existing bridges.
- Secondary concerns include bridge deck drainage due to increased storms, higher wind gust loads, and more extreme temperature ranges.
 - Developing a new framework to identify high risk bridge locations.
- Continue to review bridge design standards, with increased focus on flood resiliency.

Resilient Infrastructure – Road/Pavement

- Primary concern is shorter winters (i.e., fewer months of frozen pavement)
 - Expected to shorten overall pavement life
 - Shallower frost depths/mid-winter thaws will impact winter weights and heavy haul
 - Future research to evaluate impacts and potential mitigations
- Secondary concerns are more freeze-thaw cycles, rain events, and freezing rain and the impact of these on maintenance needs
- Longer summers/warmer temperatures that may increase rutting is considered low risk
 - However, review of standards for mix type and asphalt cement grade selection is planned

Challenges

Challenges

- The CEA has a long history of working with Transportation and Economic Corridors to overcome challenges facing the industry, including:
 - Climate change impact on our infrastructure
 - Aging infrastructure assets
 - Regulatory regimes - Lengthy permitting process
 - Labour shortages
- Through the various committees and contacts the following have been brought up as areas of interest or concern:
 - Cost escalation
 - Risk apportionment on Transportation and Economic Corridor projects
 - Prompt payment

Opportunities

Opportunities

- Strengthening our transportation network and economic corridors infrastructure to address climate change.
- Shared opportunity to try new approaches.
 - Building broad-based partnerships
 - Relentlessly pushing innovation
 - Utilizing both public and private sector funding

Thank you!
