

CALGARY AIRPORT – BANFF RAIL (CABR)

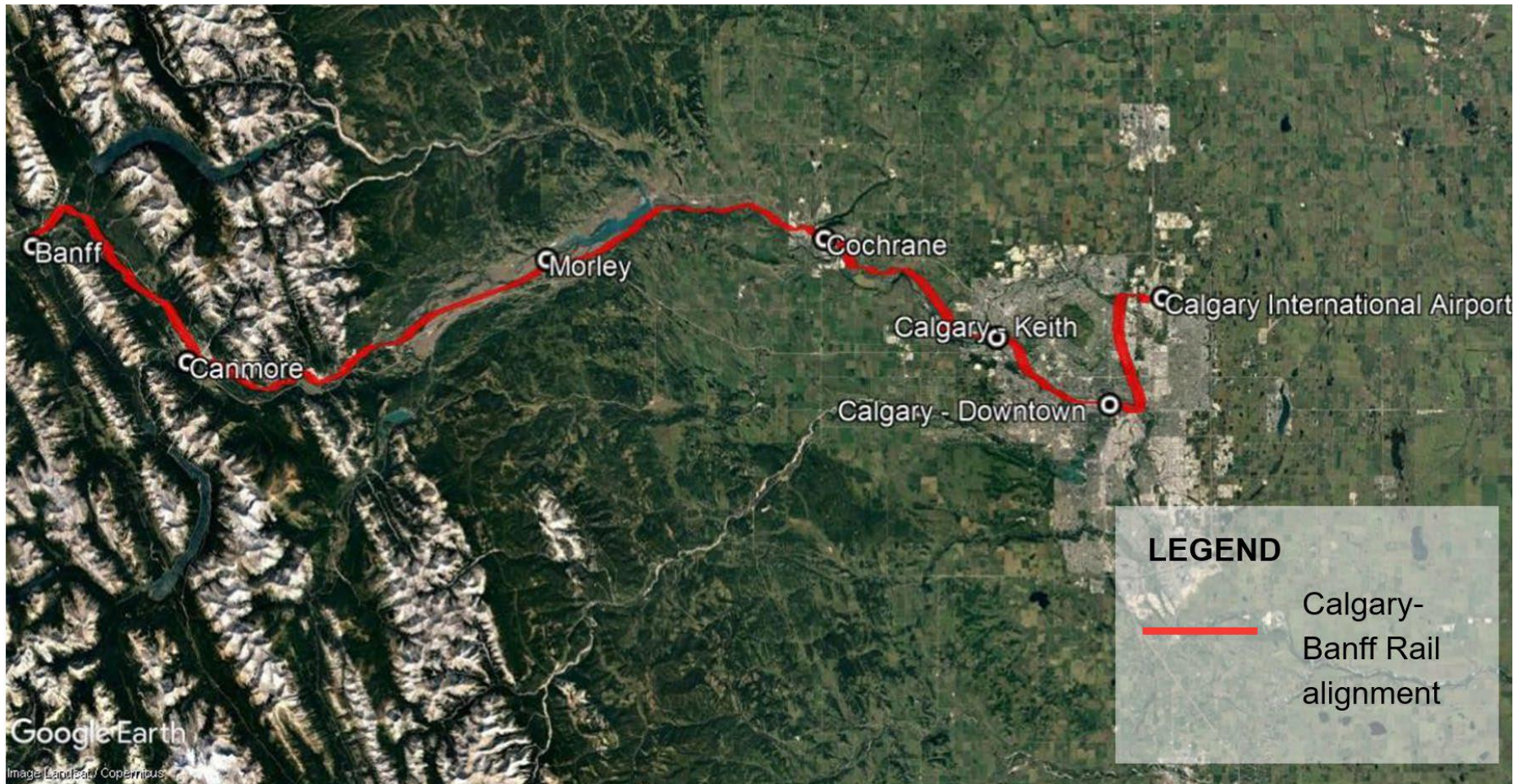
Mass Transit Public Infrastructure for Calgary with Connection to Mountains: Phase 4 (Design)
Parks Canada Encouraging Mass Transit Could Eliminate Need for Provincial Financial Support



August 2022

CALGARY AIRPORT – BANFF RAIL: KEY ELEMENTS

- 150 Km commuter & tourist system on new, dedicated line ensuring on-time performance
- Built entirely within CP Rail corridor and Airport Authority Lands; 7 Destinations
- Airport – Downtown Calgary every 10 minutes, to Banff every 1 - 2 hours

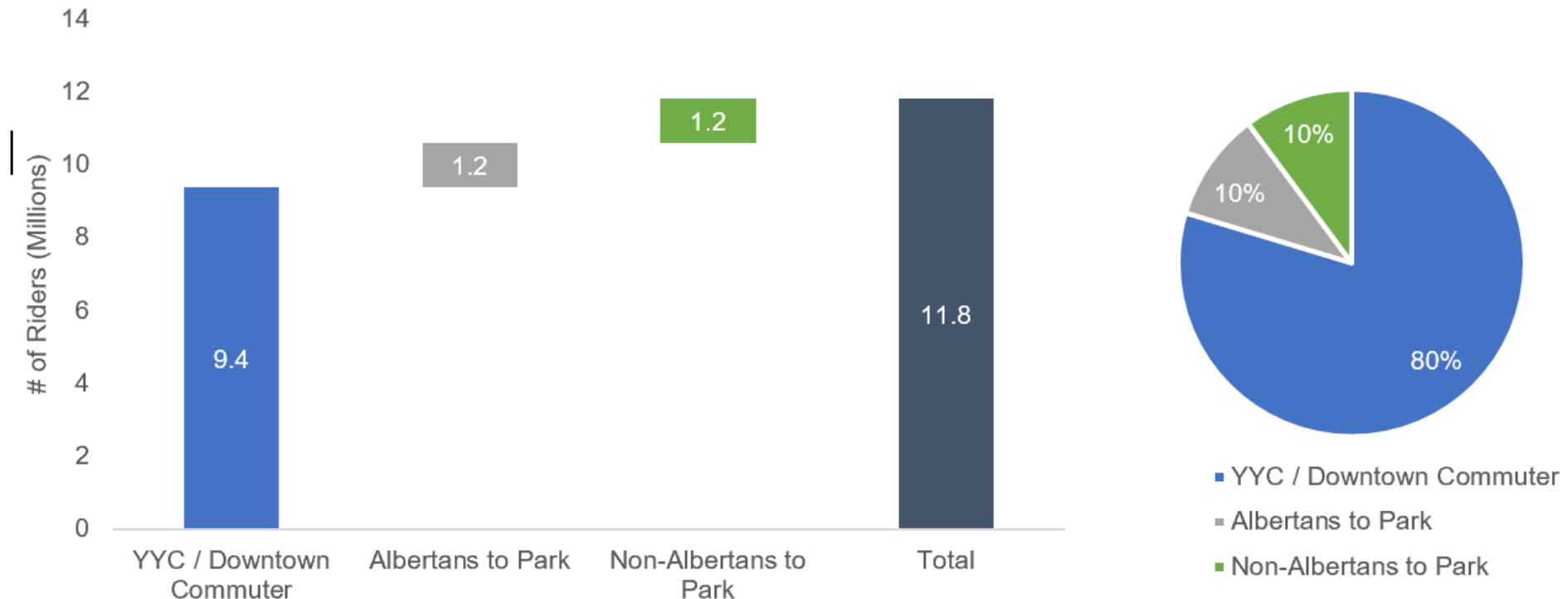


CABR: Ridership Forecast – Calgary Mass Transit 80% of Volume

Liricon/Plenary Ridership Forecast 11.8 million/year 80% YYC/Downtown/Commuters, 20% Park Visitors

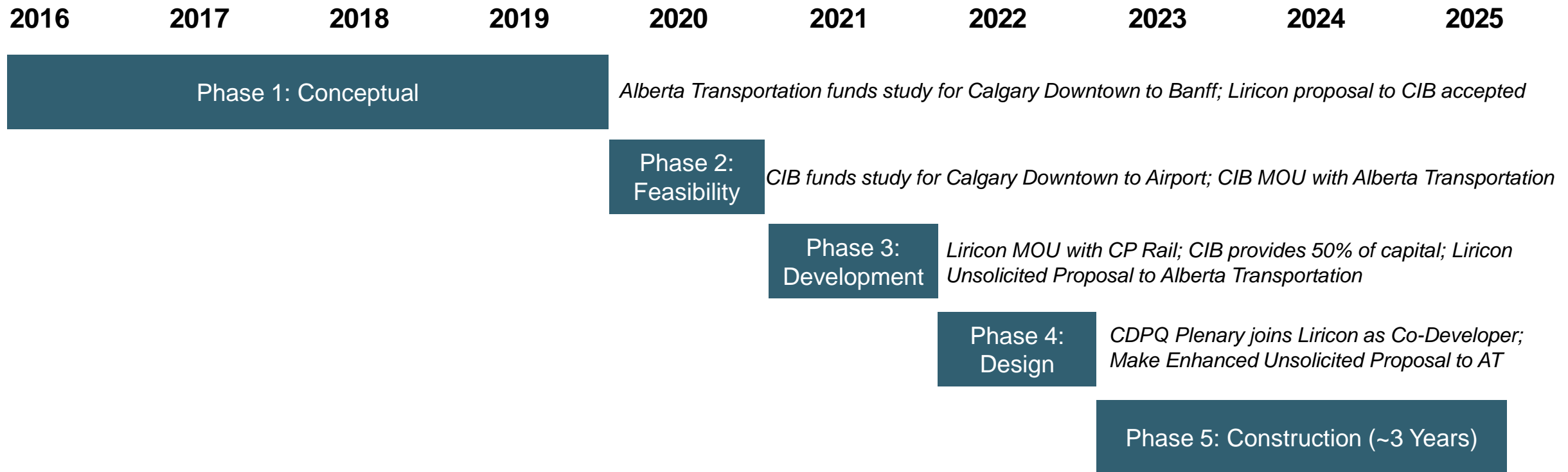
- CABR captures 20% of Park visitors split half Albertans, half non-Albertans. Non-Albertans charged premium to Albertans in all 3 classes of service: economy, premium economy and first class.

Liricon / Plenary Annual Ridership Forecasts



PROJECT PHASES

Formal initiative started in March 2016 with Calgary, Cochrane, Canmore, Banff seeking provincial funding for conceptual study



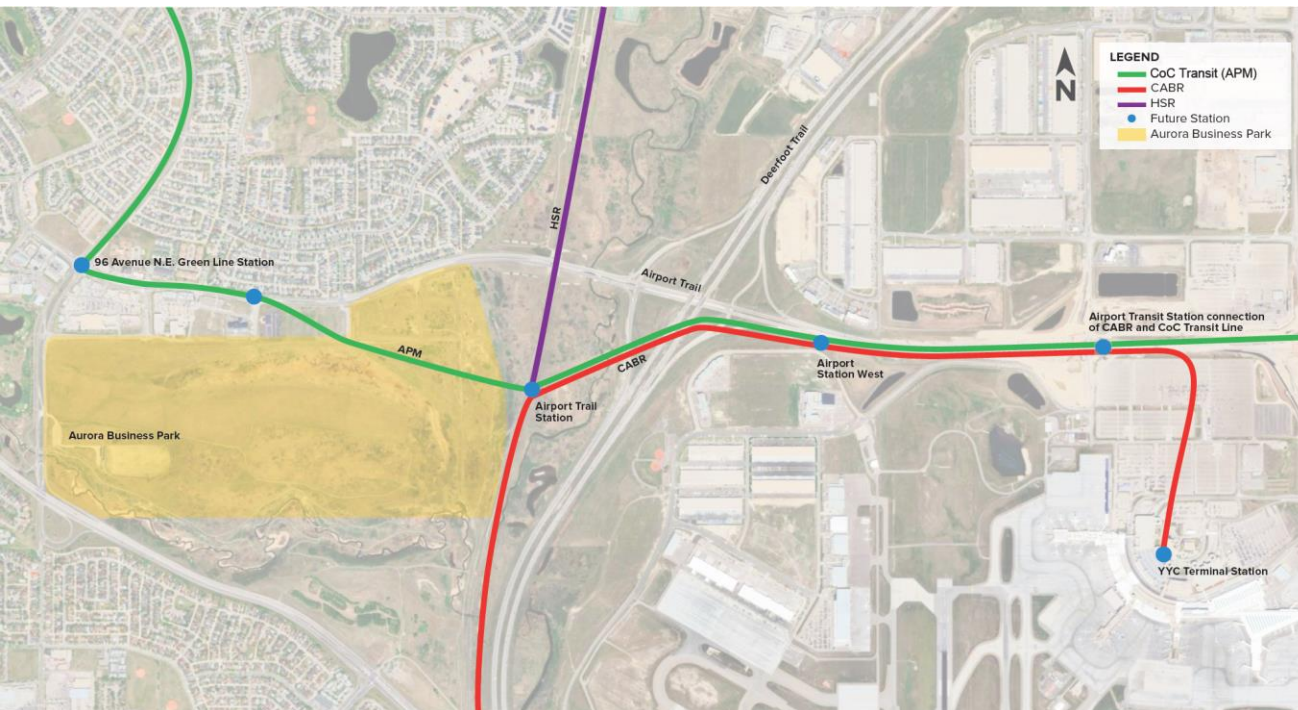
CABR: Unique in North America Benefits

- **Fastest Direct Airport to Downtown Rail Connection**
 - Express rail connection between YYC and Downtown Calgary every 10 minutes ,15-minute travel time
 - Revitalize Calgary's downtown core, magnet for top talent around the world
- **Only Urban to World-Class Recreation Rail Connection**
 - Direct rail connection every 1 – 2 hours between Calgary and Bow Valley communities
 - Includes stops at Stoney Nakoda Nation and commuting
- **Only Multi-Class, High Frequency Rail Service**
 - Economy class provides commuter's affordable transit
 - Premium economy , first class provides unique travel experience for International travelers
- **First Hydrogen Powered Passenger Rail Service**
 - Zero-emissions system will help to accelerate Alberta's developing hydrogen economy
- **CABR is Foundation Upon Which to Build Edmonton – Calgary High Speed Rail**
 - CABR will build and share with Prairie Link HSR Calgary Airport – Downtown Calgary segment

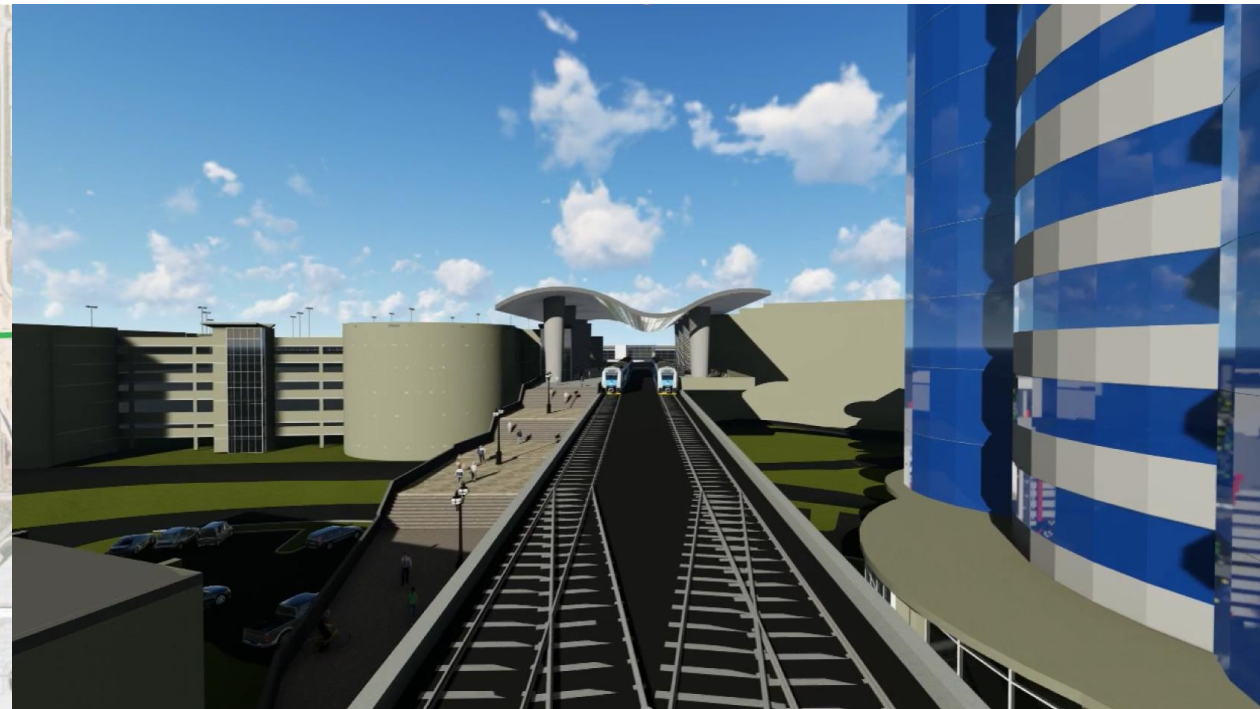
CALGARY INTERNATIONAL AIRPORT (YYC) Multi-Modal Hub

CABR potential to support YYC Airport with Multi-Modal Transit Hub, Multi-Use “Airport City”:

- CABR proposing to serve as free YYC “people mover” connecting 4 Stations on Airport Lands:
 - Terminal: direct connection from travelers to downtown and mountains
 - Airport Transit Station: potential Calgary Transit LRT connecting future Blueline & Greenline expansions
 - Airport West Station: connect developing commercial node including hotels, office, industrial
 - Airport Trail Station: Edmonton – Calgary High Speed Rail provided shared access to downtown



Illustrative CABR Airport Lands Routing



Terminal Station Courtesy of Calgary Airport Authority

CABR: HYDROGEN POTENTIAL COMPATIBLE WITH CP RAIL

CABR potential to be first hydrogen powered passenger train in North America

- Not enough space for electrified trains adjacent to CP Rail mainline in downtown Calgary
- Using diesel electric powered system, material reductions in greenhouse gas emissions: 429,956 tonnes of CO₂
- Hydrogen compelling zero-emission alternative
- Operate on conventional heavy rail system
- Catalyst for Alberta's hydrogen strategy



Alstom Coradia i-int HMU



Stadler Flirt H2 HMU

CP Rail and Alberta are Leading the Way

- CP Rail on November 1, 2021 received a \$15 million matching grant from Emissions Reduction Alberta to design and build North America's first line-haul hydrogen-powered locomotive.
- The \$30 million investment is refining process of converting diesel-electric powertrains to hydrogen-electric power trains over a series of three categories of locomotives.

"Alberta is investing to lead the transition to affordable, reliable and clean energy. CP's initiative represents a highly compelling opportunity to catalyze the hydrogen economy in Alberta and around the world."

Steve MacDonald, CEO of Emissions Reduction Alberta



INNOVATIVE P3 STRUCTURE

LIRICON/PLENARY ENHANCED UNSOLICITED PROPOSAL TO ALBERTA

Uniquely Affordable Rail Project in North America – Showcase Model for Successful P3

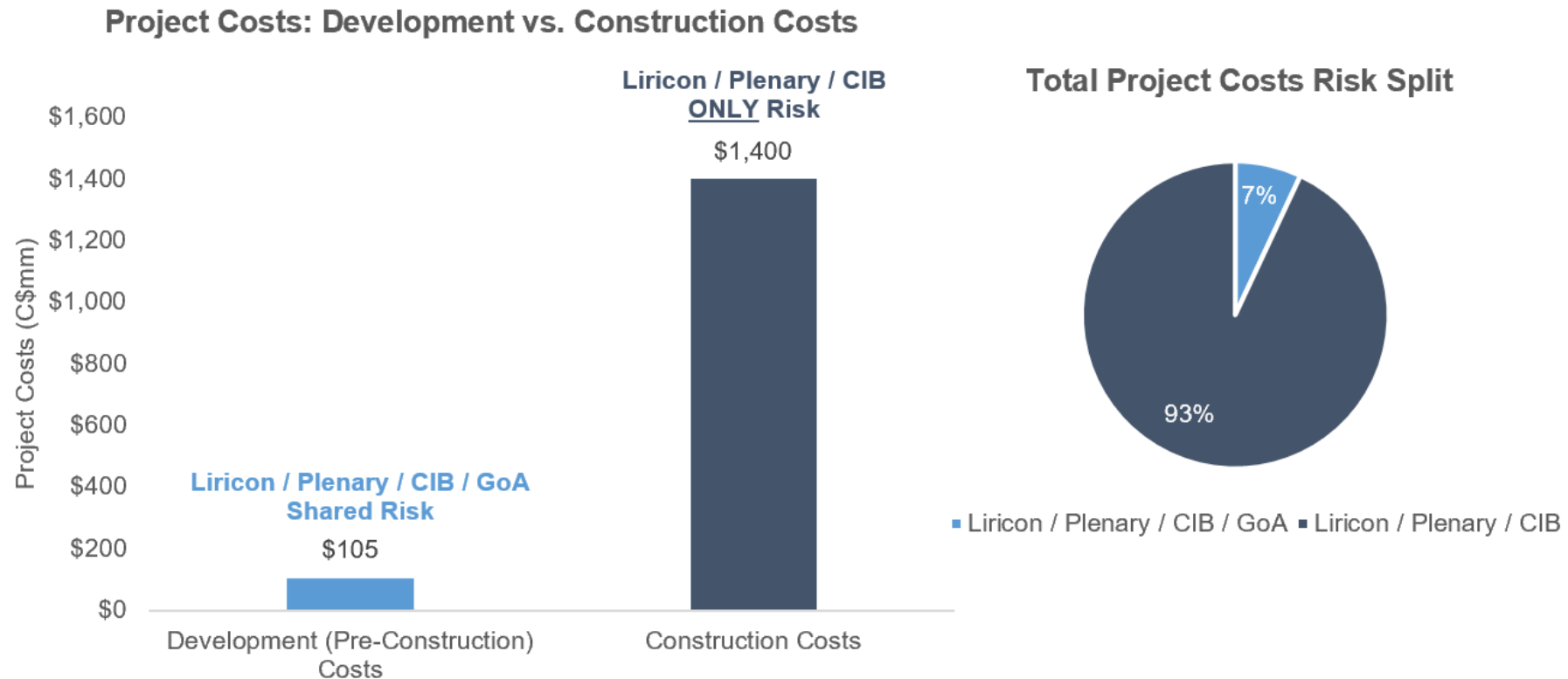
1. **Build within CP Rail Corridor:** Government Studies Peg Cost \$1.5 Billion for 150 km (\$10 million/km)
 - Cost per km is 5% of light urban rail's \$200 million/km– Development 3.5 years rather than 10 years
2. **CIB Provide 50% of Capital Costs:** Cost 1% for 50 years (lower cost than Alberta can borrow)
 - P3 comprised of private and federal capital covers of upfront capital costs in exchange for low-cost mortgage
 - Instead of Province paying \$1.5 billion upfront, P3 provides mortgage of \$60 million/year for 50 years
3. **Out-of-Region Visitors Charged Premium to Alberta Residents:** Common in International Tourism Transit
 - Swiss rail model of multiple classes of service - economy, premium economy, first class
 - Alberta residents' economy ticket: YYC – Downtown \$10, Downtown – Banff \$20
 - Ticket revenue generates about \$30 million/year surplus above operating costs and maintenance
4. **P3 Model Risk Transfer from Province to Private Sector:** P3 Taking Capital Cost and Revenue Risk
 - Net cost to Province capped at \$30 million/year (\$60 million/year mortgage - \$30 million/year surplus)
 - Unique P3: Financing secured only against P3 assets, “walls-off” risk to protect Province

CABR: Ultra Low Risk and Cost to Province – 2022 Update

Province Only Shares in Development (Pre-Construction) Costs

- Province funds only \$10 Pre-Construction Costs, CIB and Liricon/Plenary at risk for \$95 million if can't deliver project for \$30 million annual performance payment
- CIB and Liricon/Plenary assume 100% of construction, ridership and revenue risk

Project Costs Risk Sharing

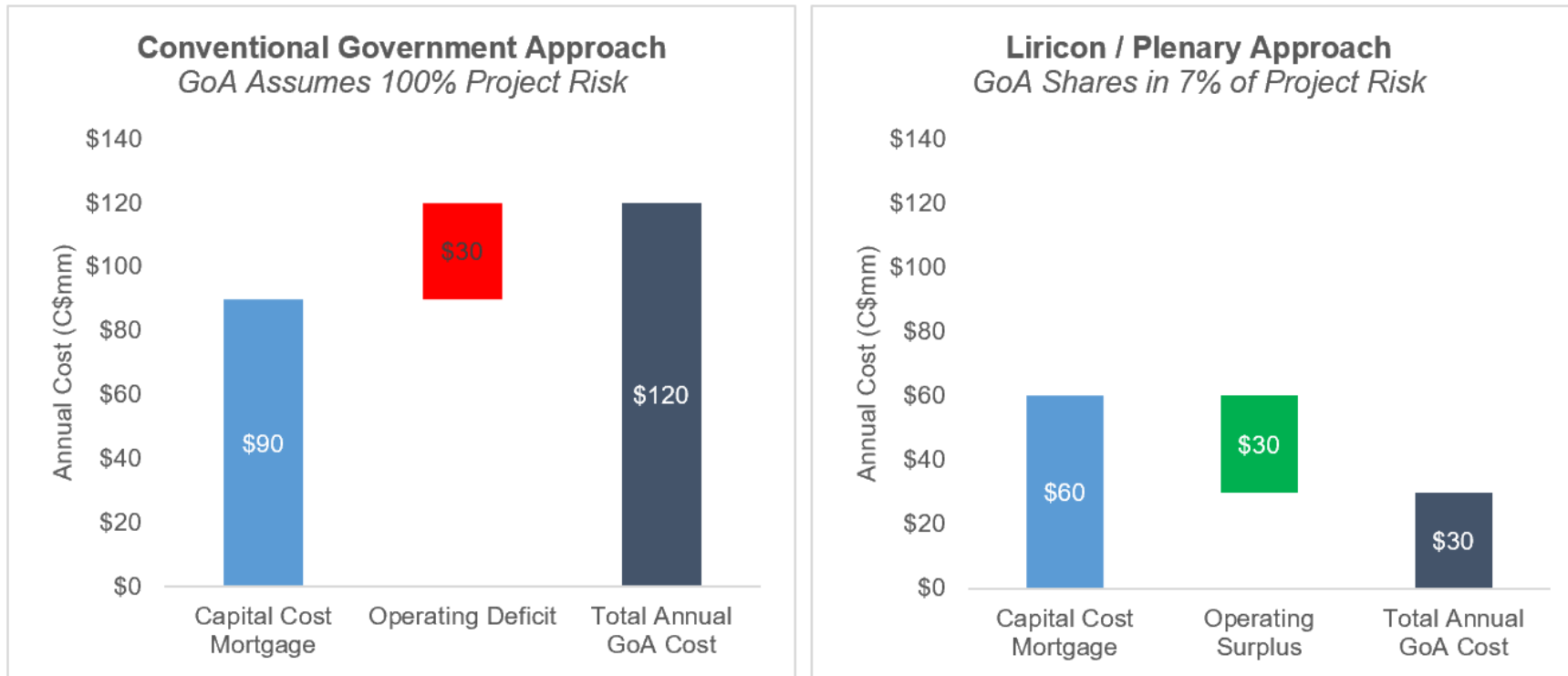


CABR: Ultra Low Risk and Cost to Province – 2022 Update

Province Developing Using Conventional Government Approach 4X the Cost, 100% of the Risk

- Province building & operating CABR using conventional government approach (financing on Alberta cost of funds, typical regulatory process, single class fare) cost \$120 million/year, assumes 100% risk
- Liricon/Plenary USP assumes 93%+ of construction, ridership, revenue risk for capped \$30 million/year

Project Annual GoA Financial Cost



CABR: 2 Dozen+ Stakeholders Support Ensures Success – 2022 Update

Community Support – Local Transit Integration

- Calgary, Cochrane, Canmore, Banff all advancing opportunity to integrate with local transit systems

Calgary Airport Support – Complimentary Rail Hub

- Designing rail hub to integrate complimentary Airport Transit Line, Edmonton – Calgary High Speed Rail

Major Airline Support – Seamless Passenger Connections

- Air Canada, WestJet opportunity to integrate schedules, provide seamless passenger transfer to Banff

Calgary Tourism Support – Provide Banff Stop-Over Packages

- Calgary Hotel Association, Calgary Stampede, BMO Convention Centre (CMLC), Tourism Calgary

Banff Tourism Support – Provide Packaged Tours

- 6 Banff hospitality businesses representing 70% of the hotel rooms, F&B locations in Banff National Park

Hydrogen Economy Support – North American Flagship Project

- Rollingstock: Alstom, Siemens, Sumitomo Supply: Suncor Energy, TC Energy

Business Community Support – P3 Model, Workforce Quality of Life, Environmental Leadership

- Business Council of Alberta, BMO, CIBC, RBC, Scotia, TD for P3 Model, Downtown Calgary Revitalization

Parks Canada Supports Encouraging Green Mass Transit to Banff

Parks Canada Encouraging Mass Transit Through Gate Fee Could Reduce and Potentially Eliminate Provincial Financial Support

- Liricon/Plenary proposal shares ridership upside with Province, potential to decrease capped performance payment
- CABR construction strategy within Banff National Park is to move personnel and material within CP Rail corridor, eliminating need to construct new access roads on Parks Canada land
- Banff Management Plan 2022 – Key Strategy 8: Moving People Sustainably
 - “incentives for high occupancy or zero emission modes of transport and disincentives for use of private gasoline/diesel powered vehicles”
 - *“Travel to and within the park will be enhanced, sustainable and integrated into the visitor experience.”*
 - *By 2024, a comprehensive people-movement plan for the park is developed that sets ten-year goals, objectives and measurable targets, and considers local, regional, municipal and private transportation*
- Parks Canada announced November 2020 Expert Panel on Sustainable Transportation in Bow Valley
- CABR’s capped Alberta annual performance payment based on capturing 20% of Park visitors
- Should Parks Canada increase Park person vehicle entrance fee so that CABR captures 40% of Park visitors, then the Province annual performance payment of \$30 million could be eliminated.
- Zion National Park charges US\$35/vehicle (C\$45/vehicle) with no mass transit alternative
 - On average Banff has 2.2 people/vehicle so Parks Canada charging half US rate