

CEA Transportation Conference

Capital Planning, Grants and Engineering Services Division Update

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February 27, 2023

Transportation and Economic Corridors



Alberta

Agenda

- Budget 2022 – Recap
- Procurement Updates
- Cost Escalation
- TSB Updates and Innovations
- Grants Update

Budget 2022 - Recap

2022-23 Consulting Work

- Contracts executed* = 81
- Total Contract value = \$79 million

- Ranking Lists Issued:
 - Included 41 project bundles

*Anticipated contracts to end of fiscal year

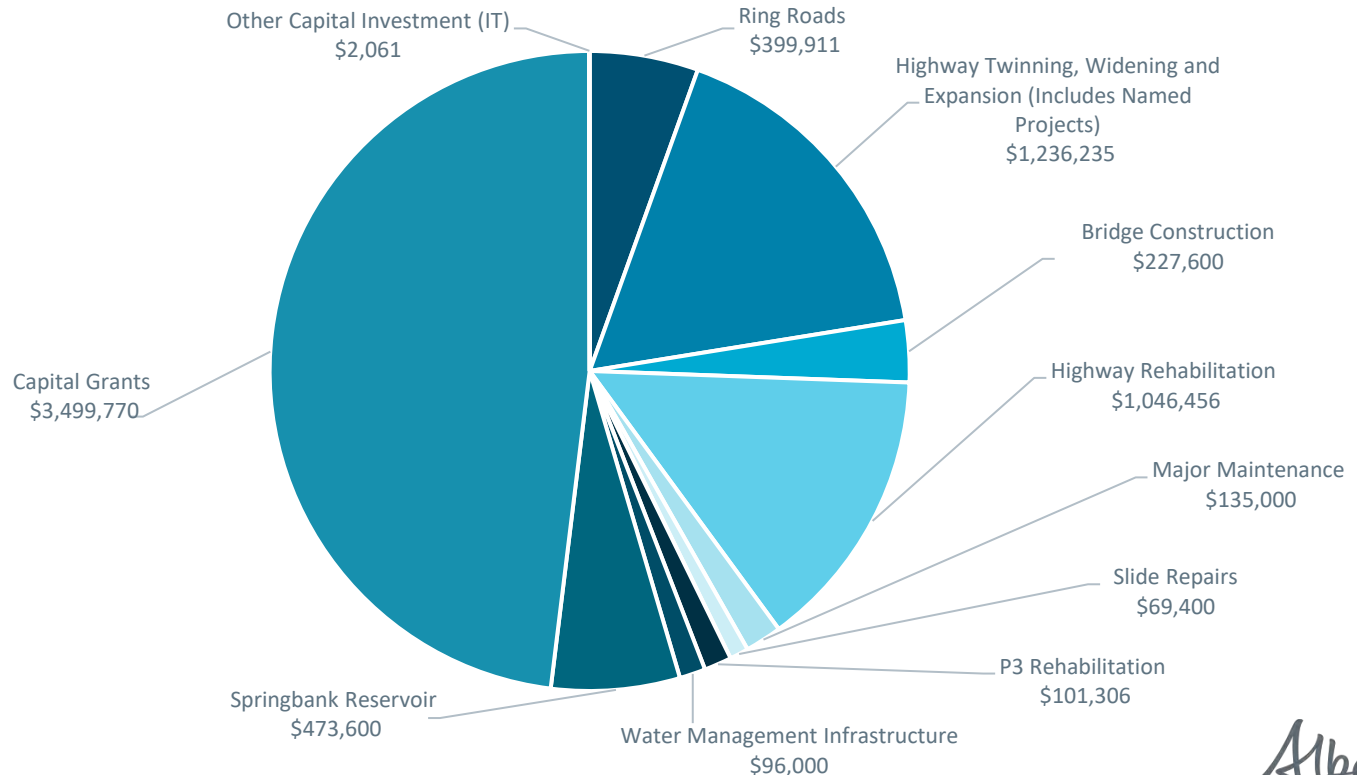
Historical Consulting Award Amounts (>\$75,000)

Fiscal Year	Number of Contracts	Total Awarded
2022-23	81	\$79,000,000
2021-22	75	\$83,000,000
2020-21	86	\$72,500,000
2019-20	13	\$6,000,000
2018-19	107	\$81,500,000

Management of Construction Program

- **Goal:**
 - To deliver the department's Capital Construction Program within budget targets.
- **Achieving the Goal:**
 - Achieved through early engagement of engineering consultants to ensure timely delivery of construction tenders, with utility issues, land acquisition, environmental permits, etc. in place as well as construction tender scheduling and monitoring.
 - Various factors (such as tender award price, emergencies, and environmental compensations) may affect overall spending and remaining tendering.

Transportation and Economic Corridor 3-Year Capital Plan Allocation (\$000s)



Capital Plan Break-Down

- Budget 2022 invests \$7.3 billion over three years in Transportation's Capital Plan to support strong transportation infrastructure.
 - \$1.6 billion for planning, design and construction of roads and bridges;
 - \$1.6 billion in Capital Maintenance and Renewal for smaller bridge construction projects and major highway and bridge rehabilitation projects;
 - \$570.0 million for Water Management and Flood Recovery; and
 - \$3.5 billion for Capital Grants to support Municipal Infrastructure.

Economic Corridors

- We see key economic corridors as critical parts of bringing goods to market and supporting economic growth by providing safe and efficient highway connections.
- In 2022/23 Transportation and Economic Corridors made significant capital investments in Economic Corridors.
 - Over \$615 million is invested on Roads and Bridges projects to grow economic corridors.
 - Over \$380 million is invested on Capital Maintenance and Renewal projects to enhance existing economic corridors

3-Year Construction Program (2022/23-2024/25) Engineering Services Projects Not Yet Procured

Project Type	Total
Bridge Construction	28
Highway Rehabilitation	27
Slide Repair	4
Planning Studies	3
Total	62*

*Note that multiple projects may be bundled in a single RFP.

Procurement Updates

2022 in Review – Major Procurements

- The Highway 3 Twinning from Taber to Burdett – Design Build was advertised and is in Stage 2 of the procurement.
 - This is the first of eight sections. The remaining seven sections are at various stages of project readiness, with detailed engineering work anticipated to begin on some segments in spring 2023.
- The Highway Maintenance Contracts in Southern Alberta for CMA 522-525 were advertised and have recently concluded the evaluation process. The next bundle of Highway Maintenance Contracts are expected to be advertised shortly.
- The Commercial Safety Rest Area (CSRA) procurement was advertised and will close on February 28, 2023.

2022 in Review - Continued

- The second phase of the Highway 40 twinning project was tendered and awarded. The contract value for this project is ~\$100M
- The Cochrane Interchange (Highway 1A & 22) project closed in February.
- Concluded procurement of electrical retail services in conjunction with Alberta Infrastructure.

2022 in Review - Continued

- Design, build and commission services for 25 new traffic cameras and 6 dynamic message signs to be completed in 2023
- Consultant performance evaluations
 - Currently evaluations are done once a year per contract
 - On average we receive about 120+ evaluations per year
 - We are finalizing the 2022 evaluations, which are due in March
 - Project consultants please make sure your 2022 evaluations are submitted on time
 - The Provincial averages will be updated on May 9th

Looking Ahead

- Procurement Planning:
 - Continue looking ahead to ensure engineering services are engaged with enough time to ensure on time project delivery
 - Anticipate ranking lists will be issued in the coming months in the categories of ACP, Culverts and Standard Bridges, and Major Bridges.
- QBS:
 - Another project utilizing the QBS model is expected to be advertised in the next couple of months.

Looking Ahead - Continued

- Alternative procurement models:
 - A Construction Consultant General Contractor (CCGC) template is currently being developed for use on an upcoming project in the Peace Region.
- Contractor Performance Management Program (CPM)
 - The Department has been busy completing contractor evaluations.
 - Feedback from the “soft launch” will be sought from industry.
 - Following feedback, the department will determine next steps.

Industry Partnerships

- The Department consistently meets with industry and discusses topics of interest and relevance, with the intention of working together to find mutually agreeable solutions.
- The following meetings were held in 2022:
 - Strategic Priorities Group (SPG) – 2 meetings
 - Operations Committee (OPS) – 4 meeting
 - Consultant Procurement Steering Committee – 3 meetings
 - Numerous Monthly Calls between the Deputy Minister, CEA, and ARCH.

Cost Escalation

Costs Volatility

- Department is aware of cost volatility, and the potential impacts to steel and asphalt pricing.
- We are in the process of working with industry to finalize our enhanced sharing mechanism for diesel fuel costs on projects.
- We continue to gather information from other jurisdictions situation and approaches, while we assess the issue with industry and impacts to the construction program.
- Updated average unit pricing are posted on our website to more accurately reflect and keep informed of current pricing trends.
- We continue to work with contractors on possible design exceptions, if supply of materials becomes an issue.

Technical Standards - Updates and Innovations

TSB - Innovations and Updates

- Engineering Consultant Guidelines
 - New draft sections were developed, and many sections updated.
 - Reviews include both department internal process groups (BPMC and CPMC) and CEA through Operations Committee and Bridge Operations Subcommittee.
 - CEA input was very valuable and responses to CEA input were provided two weeks ago.
 - Document publishing to the web is set for March.

TSB - Innovations and Updates

- Engineering Consultant Guidelines Changes
 - The complete revamping of:
 - Section 2: Planning
 - Section 7: Utilities is new details and dedicated chapter
 - Section 8: Geotechnical Investigation and Design added details for investigation/design
 - Section 10: Bridge Planning, Design and Inspection (now Section 11: Bridges)
 - Wherever possible, embedding content from the Design Bulletins into the guidelines and archiving the DBs
 - Bringing processes, definitions, templates and forms up to date with current practices

TSB - Innovations and Updates

Innovation and Process	Description
Bridge Construction & Fabrication Training Course	Course offered for March 20 to 24, 2023
BIM Inspector Training – Class A	Course planned for May/June 2023
Portland Limestone Concrete Pilot on Bridges and Update on Flatwork	Lower emission concrete – bridge project pilot using Portland Limestone Cement Constructed in 2022. Analysis of test results and 2023 inspections in the works. Spec amendment permitting PLC on highways construction flatwork is planned for 2023.
Bridge Construction Change Process	Reviewing the outcomes from the 2022/2023 trial projects
Standard Bridge Spec Amendment	General overhaul for bridge components and overhead sign structure in the works and planned for release in mid 2023
Bridge Load Evaluation Manual	Update planned to be released in mid 2023

TSB - Innovations and Updates

Innovation and Process	Description
Environmental Management System Manual Update	Updates to the manual summarizes various changes to legislation
Artificial Intelligence Enhancement of the Alberta Wildlife Watch	Ongoing consideration in 2023 of the feasibility of AI to predict animal-vehicle collision locations on the provincial network.
Geometric Design Guide Updates	Chapter G – updates throughout the 3R/4R chapter
Asphalt Mixes	Two trial projects of 40% Recycled Asphalt Pavement were completed last year. Results are promising and will continue to be evaluated in 2023.
Line Paint Durability	New specification for data loggers on paint trucks is being rolled out. Summer 2023 there will be ongoing review of retro-reflectivity and specification review.

Grants

Grants

- Budget 2022 allocates \$268.7 million over 3 years to Alberta's Municipal Infrastructure Grants Programs which include the Alberta Municipal Water/Wastewater Partnership, Water for Life and First Nations Water Tie-In.
 - It also includes a commitment for \$7.5 million for the Sundre Wastewater Treatment Plant as a pilot project.
- \$85 million is also allocated 3 years under the Strategic Transportation Infrastructure Program (STIP). This includes new funding of \$25 million in 2024-25.
- \$206.7 million is also allocated to the City of Edmonton's Yellowhead Trail, 50th Street and Terwillegar Drive road projects.
- \$1.1 billion will also flow to Calgary and Edmonton's LRT expansion projects.

Questions or Comments?

