



New Bidding Process for Highway Maintenance

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Outline

- Current Statistics
- Why Change?
- What are we trying to address/fix?
- Studies
- Where are we going?
- Performance Based Specifications
 - Next Generation Highway Maintenance Contract Documentation
 - Proposal Evaluation Process
- Procurement Update
- Questions

Current Statistics

Current Statistics (1/2)

- Infrastructure Assets
 - 31,400 km of provincial highway (28,000 paved)
 - 4,500 bridges, overpasses and culverts
- Provincial Breakdown
 - 5 Regions
 - 11 Districts
 - 30 Contract Maintenance Areas (CMAs)
 - Deerfoot Trail Maintenance Area
- Partner Assets
 - 4.23 Million Albertans (as of 1 April, 2016)
 - 200 plus Municipalities
 - 10 highway maintenance contractors
 - Nearly 700 plows

Current Statistics (2/2)

- Highway Maintenance Originally outsourced in 1996
- Six years since the last highway maintenance contract was retendered
- Contracts assessed at 95/5 cost/technical
- Initial contracts were quite prescriptive and were short duration – 5 years; current contracts are 10 years or longer
- Currently we have eight conventional CMA contracts, one ring road contract, not including P3s

Why Change?

Natural Progression

- 20 years since first privatized
- Knowledge transfer from Department to Industry
 - Industry has gained 20 years of experience
- Build on all the lessons learned from previous contracts, continual improvement
- Reduce prescriptiveness in order to promote
 - Innovation
 - Flexibility of the contractor
 - Decisions made by contractor
 - Efficiencies and economies of effort

Many Questions

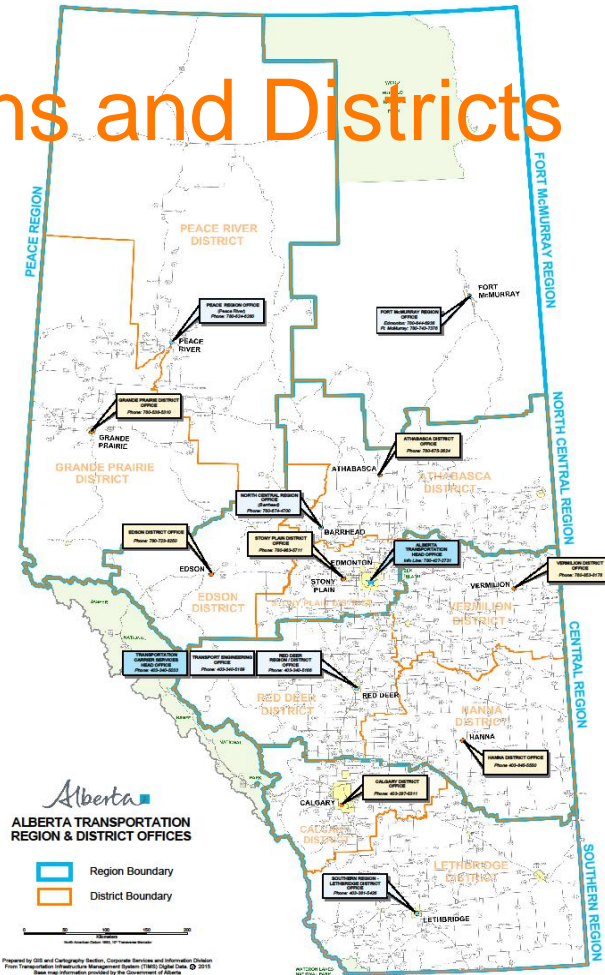
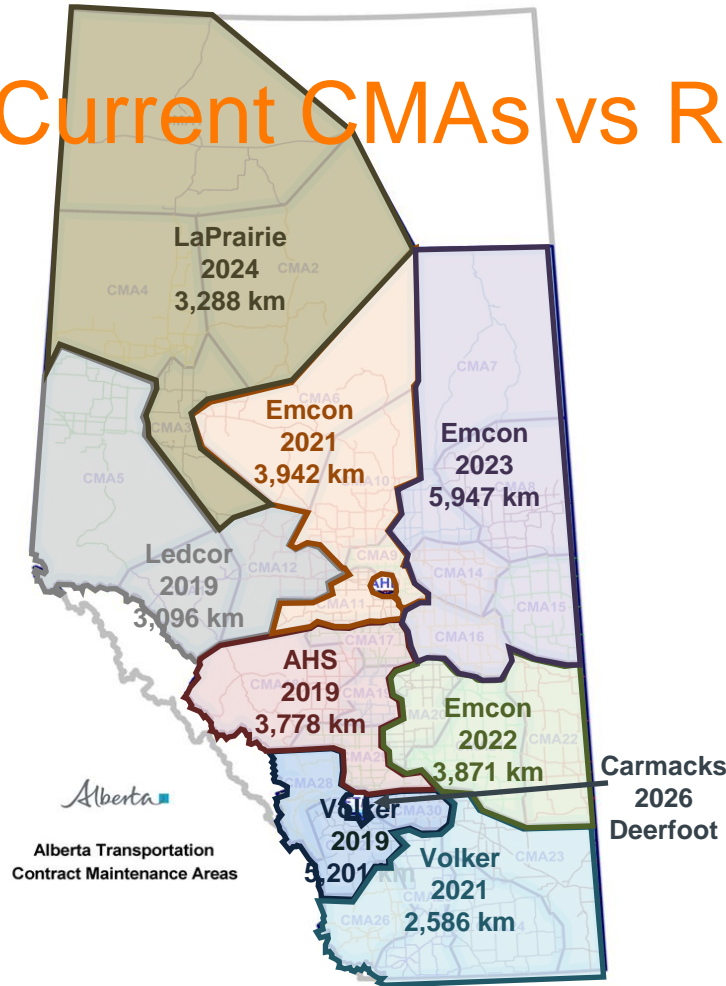
- Elected officials
 - Is level of service adequate?
 - Best value for cost?
 - Best method of delivery?
 - Can we learn from existing performance based contracts?
- Contractors
 - How can technologies be introduced?
 - Do different climates require different strategies?
- Albertans
 - Does one size fit all?
 - Do we have it right?

What are we trying to address/fix?

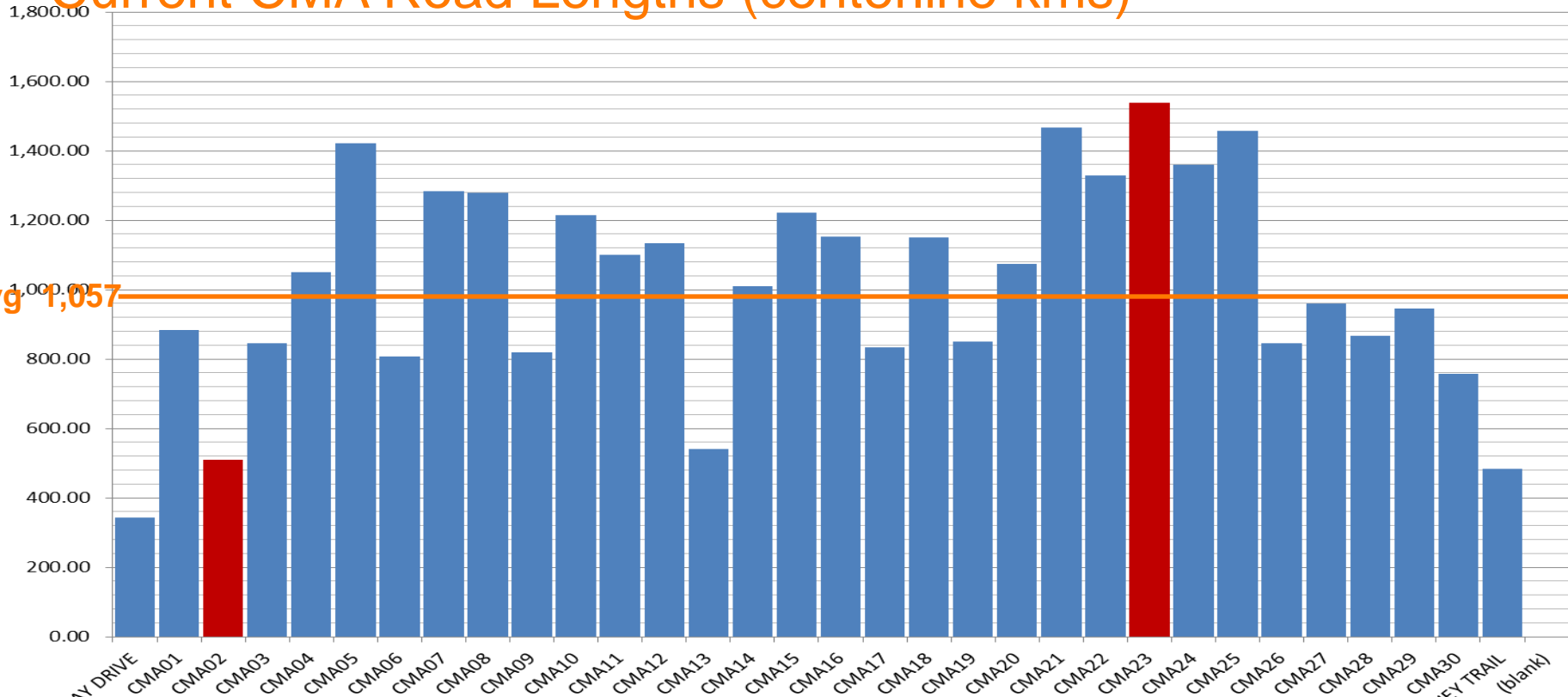
Which Delivery Model to use?

- Remain with legacy contracts?
- 100% Performance Based Contract?
- Partial Performance Based Contract?
- In-house model?

Current CMAs vs Regions and Districts



Current CMA Road Lengths (centerline kms)



Minister's Intent

- Consider converting CMA(s) (exact number to be determined) to be in-house as a mechanism to establish a benchmark for highway maintenance contractors
- Determine optimal size and construct of existing CMAs (study)
- Conduct a cost benefit analysis on multiple delivery options (study)
- Encourage and enable small contractors to bid on contracts in order to promote competitiveness (study)



Studies

Cost Benefit Analysis

Scope of Work/Objectives

- Quantify the Costs and Benefits of the Status Quo Model
- Quantify Costs and Benefits of a Performance Based Model
 - Increased performance based activities
 - Completely performance based
- Quantify the Costs and Benefits of Traditional Delivery
 - Partial insource – 1 to 5 CMAs
 - Full insource – All CMAs
- Contrast and Compare the Various Delivery Options
- Compare Cost Performance to Industry Benchmarks
- Determine Optimal Contract Lengths
- Determine Municipal interest in HMC

CMA Boundary Analysis

Scope of Work/Objectives

- CMA analysis based on
 - Regional and District boundaries
 - Optimal CMA size
 - Contract award value
 - Other feasible options
- An impact analysis from changes in current boundaries
- A review of factors influencing participation of Small and Midsized Enterprises (SMEs) in the Department's Highway Maintenance Program
- An impact analysis from a greater mix of SMEs in the delivery of highway maintenance activities

Summary and Proposed Recommendations

- Status quo is an effective delivery model
- Municipalities and SMEs are not interested in managing highway maintenance contracts.
- Consider contracts of seven year duration with one three-year extension option
- There are cost savings and reduced environmental impacts if AT owns maintenance yards
- Optimizing CMAs based on small contract value not recommended
- If going to align CMA boundaries with AT boundaries, there would be logic in optimizing road length, reducing total number of CMAs and rationalizing shops.

Where are we going?

Fall of 2017 – NextGen Contracts

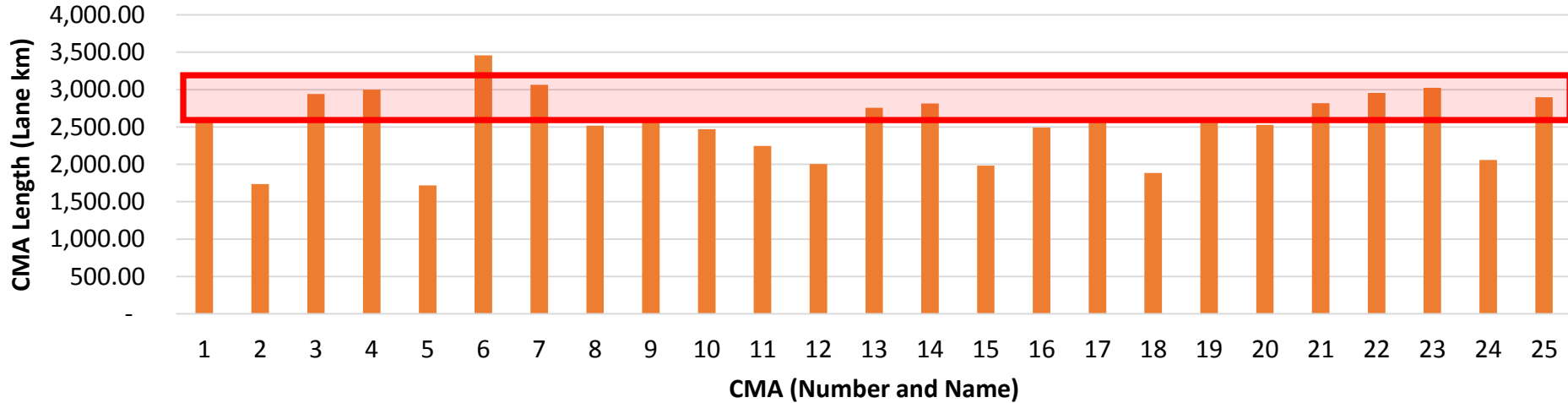
- Continue with the outsource model
- Hybrid model that is a combination of performance based and provisional activities
- Optimize Contract Lengths and Adjust administrative boundaries related to Alberta Transportation's
 - Regions
 - Districts
 - Contract Maintenance Areas (CMAs)
 - Municipal Boundaries

New Boundaries



Optimize CMA Road Lengths (lane kms)

Length of Proposed CMA's (Lane km) for 25 CMA Construct (V5)



	Centerline km	Lane km
Max	1,735	3,458
85th %ile	1,489	2,974
Average	1,269	2,551
15th %ile	1,013	1,996
Min	860	1,718
Total	31,724	63,771

Performance Based Specifications

Performance Based Specifications (1/3)

- Longer term, more sustainable, and more economical care of our highway assets
- Leverages the expertise which is now resident within industry and the private sector
- Enables higher degree of flexibility and innovation towards procedures, processes and resources
- Encourage partnerships with small/medium enterprises and municipalities
- Fosters a more extensive and deeper partnership between the Department and Industry

Performance Based Specifications (2/3)

- Benefits for Industry
- Benefits for AT
- Leverage the Experience of others
- An exciting time to be in highway maintenance

Benefits to Asset Owner	Benefits to the Contractor
Certainty in cost	Certainty of work
Certainty in outcomes	Ability to innovate
Greater ability to influence performance	Ability to configure resources to drive efficiency
Decreased involvement in day to day planning and operations	Greater control over program
Greater involvement in demonstrating value and strategic / tactical planning	More ownership of outcomes by staff

Performance Based Specifications (3/3)

- Develop Performance Based Activities:
 - Highway Patrols and Emergency Duties
 - Routine Maintenance
 - Winter Maintenance
 - Paved Highway Pothole Patching
 - Painted Highway Lines and Pavement Message Markings
 - Vegetation Control
 - Bridge Structure Cleaning
 - Grading of Gravel Surface Highways
 - Highway Lighting and Signals Maintenance
- Level of Service varies across 5 highway classes

Provisional Activities (1/2)

- Surface Maintenance
 - Excavation and backfill
 - Asphalt maintenance
- Roadside Maintenance
 - Cleaning Culverts
 - Removing and Installing Culverts
 - Curb and Gutter Repairs
 - Maintaining Highway Signs
 - Guideposts
 - Repairing, removing or installing Fence

Provisional Activities (2/2)

- Bridge Maintenance
 - Concrete Repair
 - Steel Repair
 - Timber Repair
 - Deck Repair

Next Generation Highway Maintenance Contract Documentation

RFP Preparation Activities

- Rewrite, update and edit
 - Instructions to Prospective Contractors
 - Request for Proposal Details
 - Winter Service Delivery
 - Motor Grader Service Delivery
 - Special Provisions (SP)
 - Unit Price Schedule (UPS)
 - Contract Performance Measures
 - Environmental Management Plan Guidelines
 - CMA Maps
- Creating specifications for the inclusion of maintenance for
 - Bridges
 - Highway Lighting / Traffic Signals
- Plow light colours / configuration regulation change

New Contract Documents (1/2)

- Instructions to Proponents
- RFP Requirements
- Section 1 – General Conditions
- Section 2 – Performance Based Maintenance Specification
- Section 3 – Provisional Maintenance Specification
- Section 4 – Material and Equipment Specification
- Section 5 – Environment Management Specification
- Section 6 – Quality Management Specification
- Section 7 – Traffic Accommodation Specification
- Section 8 – Common Special Provisions
- Section 9 – Schedules of Inventory
- Unit Price Schedule

New Contract Documents (2/2)

- Appendices
 - Appendix A – Performance Achievement Payments
 - Appendix B – Visual Intervention Guidelines
 - Appendix C – Performance Based Maintenance Reporting and Data Requirements
 - Appendix D – EMP Completion Checklist
 - Appendix E – EMP Annual Site Inspection Checklist
 - Appendix F – EMP Monthly Site Inspection Checklist
 - Appendix G1 – CMA Maps (separate download)
 - Appendix G2 – Provincial Map
 - Appendix H – Drawings – Snow Removal Equipment Visibility
 - Appendix I1 – Sample Performance Bond
 - Appendix I2 – Sample Labour and Material Payment Bond
 - Appendix I3 – Sample Contract Signing Form
 - Appendix J – Annual Performance Review

Managing Risk with all the Changes

- Maximum number of CMAs reduced to 7 (based on 25 CMA construct)
 - Deerfoot Maintenance Area excluded
- 10-year contract (7 + 3)
 - +3 dependent on performance in first 5 years
 - 7 years guaranteed work
 - +3 decision made at the end of year 5
- Three year penalty transition
 - 25%, 50%, 75% of payment adjustments

Proposal Evaluation Process

Proposal Evaluation Process (1/2)

- Evaluation Team
 - Five Core (3 AT and 2 Consultant)
 - One representative from each CMA
 - Evaluations Completed Individually
- Consensus Meetings
- Presentation by each proponent
- Finalize score
- Open Price

Proposal Evaluation Process (2/2)

- 60/40 Scoring Based on 1,000 Points (600 Price/400 Technical)
 - Technical Review – 278 point threshold (68%)
 - Corporate experience
 - Management team, staffing, subcontractors
 - Mobilization plan
 - Training Program
 - Operation and Maintenance plan – Winter
 - Operation and Maintenance plan – Non winter
 - Traffic accommodation Plan
 - Health and Safety Program
 - Quality Management program
 - Environment Protection Program
 - Facilities – Highway Maintenance Yards
 - Equipment and Fleet Maintenance
 - Partnering Approach
 - Innovation

Procurement Update

Procurement Update

- Deerfoot Maintenance Area
 - August 7, 2018 – Deerfoot Trail RFP issued
 - November 6, 2018 – Deerfoot Trail closes
 - December 14, 2018 - Deerfoot award posted on APC
 - August 1, 2019 – contractor operating

- CMA
 - September 28, 2018 – CMA RFP issued
 - December 21, 2018 – CMA RFP closes
 - January 7 to February 28, 2019 – Evaluations, consensus meeting, proponent presentations, price evaluation
 - End of February 2019 – expected award
 - August 1, 2019 – contractors operating

Conclusion

- 20 years since first privatized
- Knowledge transfer from Department to Industry
- Empower contractors to improve upon delivery of service – performance based delivery, outcomes focused
- Learn from other jurisdictions and our P3 Contracts
- Minimize risk; set conditions for success through partnership with industry
- Move away from 95/5 to 60/40 price/technical evaluation – demonstrate the ability to do the work and held accountable.

Questions
