

2016 Local Road Reconstruction Strategy Review

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Main Goal

Examine 2 methods of operation based upon costs:

1. Internal Construction Forces
2. External Tendering Only

Understand the specific challenges related to each option.

Main Drivers of the Review

- 1) Can the Transportation group undertake more local road construction?
- 2) Is it economically feasible for the County to provide local road construction services?
- 3) Is the method of contract conveyance purely a financially decision?
- 4) Is the investment in internal forces a core function of the Transportation group?
- 5) Can employees be secured and retained for road construction?
- 6) Does capital expenditures in equipment and staff provide the best value?
- 7) Is there engineering capacity to actively support the construction group?

Primary Information

Information was gathered through the following sources:

- Cross-divisional Project Team
- Steering Committee
- Review of 2012 DCL Siemens Study
- Peer Municipal Interviews
- Industry Technical Expert Interviews
- Internal Financial Costs

Current Economic Conditions

- Over capacity in construction industry,
- Competitive bidding creating downward pressure on unit costs,
- Short-term economic predictions flat,
- Higher unemployment rate in AB ~ 8.6% from ~6.1%(July 2015),
- Price of oil during 2016 (~ \$18.00 – \$36.00)

(<http://finance.alberta.ca/aboutalberta/osi/aos/data/Heavy-Crude-Oil-Reference-Prices.pdf>)

New & Unanticipated Factors

- Technical leadership of construction group,
- Construction staff retention,
- Attraction of skilled equipment operators,
- Difficulty in acquiring economically feasible earth borrow sources,
- Culture of municipal employer,
- Current economic conditions.

Peer Municipal Interviews

Barrhead, Bonnyville, Lacombe, & Leduc

- Road design criteria consistent since 2012
- Barrhead, Bonnyville & Lacombe – internal forces
- Leduc – external tendering only
- Staff retention highly impacts program
- Similar equipment compliment
- Stable 'core' group of staff imperative

Financial Data

| Cost Comparison Between County and Contracted Forces | | | | | |
|--|-------------|----------------|-----------------------|-----------|-------------|
| | | Length (km) | Subgrade Width (m) | \$/km | % Change |
| County Forces | 2012 Report | 7.2 | 8.0 | \$296,956 | |
| | 2016 Report | 8.0 | 8.0 | \$331,209 | 12% |
| Contracted Forces | 2016 Report | 6.4 | 8.0 | \$409,538 | |

Cost Difference Between County Forces & Contracted Forces = \$ 78,329 / km
 % Cost Difference Between County Forces & Contracted Forces = 21%

(Note: financial information was derived from 4 subsets of financial data)

Cost Evaluation of Options

Option 1A

- 12.8 km/yr
- Annual Constr.
Cost = \$4.24M
- Additional Costs
= \$0.68M
- Total Yearly Cost
= **\$4.92M**

Option 1B

- 12.8km/yr
- Annual Constr.
Cost = \$4.66M
- Additional Costs
= \$0.83M
- Total Yearly Cost
= **\$5.49M**

Option 2

- 12.8km/yr
- Annual Constr.
Cost = \$5.24M
- Additional Costs
= \$0.34M
- Total Yearly Cost
= **\$5.49M**
(+\$2.93M in equipment
sales)

Conclusion

Local Road Re-construction Program decisions will have to be made based upon the following 3 criteria:

Financial Costs,

Staff recruitment and retention, and

Strategic direction of the Transportation group.