Calgary Green Line LRT Option Review

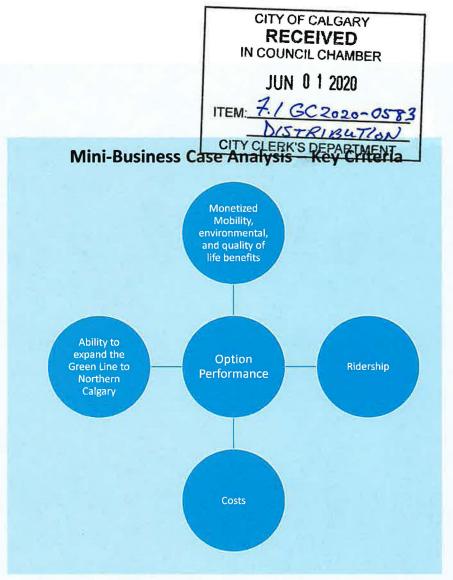
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Background

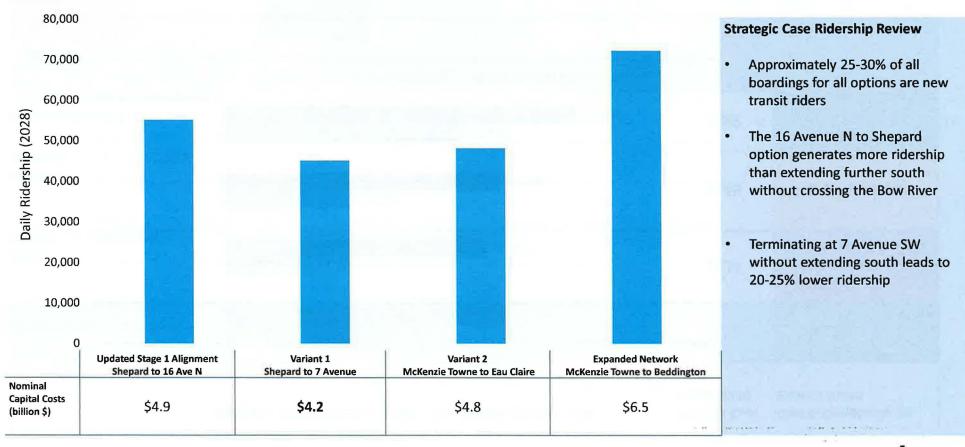
Five variants of the Green Line LRT were assessed to determine the value for money of different termini locations:

- Updated Stage 1 Alignment

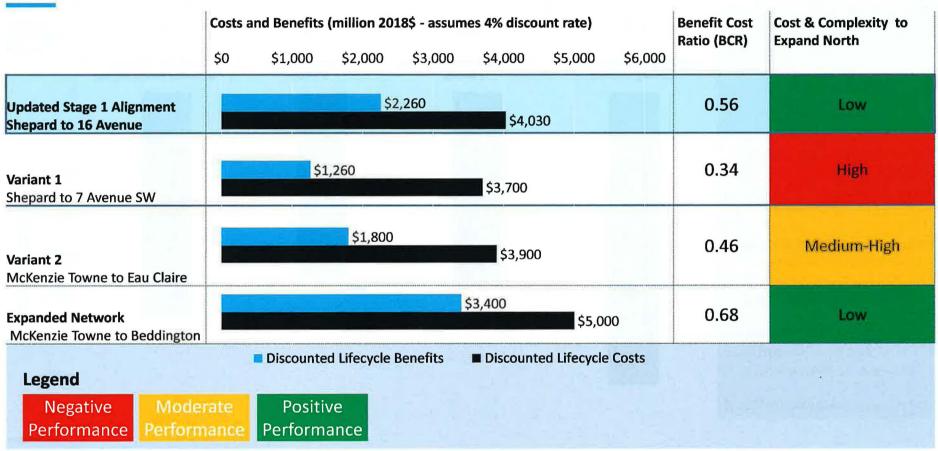
 Green Line LRT from Shepard to 16 Avenue North
- Variant Option 1 Green Line LRT from Shepard to 7
 Avenue SW
- Variant Option 2 Green Line LRT from McKenzie Towne to Eau Claire
- Comparator Extended Network Green Line LRT McKenzie Towne to Beddington



Option Comparison 1 – Ridership (Lower Bound / Conservative Forecasts for 2028)



Option Comparison 2 - DRAFT Economic Benefits and Costs (Values in Discounted Economic Terms)



Green Line Economic Case – Comparing the Options

	Costs (2018\$)	Benefits (2018\$)		
Updated Stage 1 Alignment	\$4,030	\$2,260		
	Comparison to Stage 1		Economic Impact	Conclusions
Truncate line at 7 Avenue SW (Variant 1)	-\$330M	-\$1,000M	-\$3.00 (benefit lost for every dollar saved)	Shorter versions of the Green Line lose up to \$3.50 of benefit for ever dollar saved compared to the 16 Ave to Shepard Option
Truncate line at Eau Claire, extend south to McKenzie Towne (Variant 2)	-\$130M	-\$460M	-\$3.50 (benefit lost for every dollar saved)	
Expand to Beddington and McKenzie Towne (Extended Network)	+\$970M	+\$1,140M	+\$1.18 (benefit gained for every dollar spent)	Extending south (McKenzie) and north (Beddington) leads to benefits that exceed costs
Negative Performance Positive Performance Performance			Bottom Line: An initial build to 16 Avenue N realizes significant benefits that cannot be attained by truncated north/southern extension options.	

Conclusions

The Updated Stage 1 Alignment (Shepard to 16 Avenue N) was recommended because it has the strongest strategic and economic performance of all options under consideration based on the following factors:

- A Shepard to 7th Avenue SW can save costs, but will lose 20% of ridership and lose up to \$3.00 of benefit for every \$1.00 saved
- A McKenzie Towne to Eau Claire option will lower ridership and has comparable costs (2% cheaper) but loses \$460 million in benefits
- Building to 16 Ave N allows The City to expand north in the future with reduced cost and risk these future expansions can generate up to \$1.18 of benefit for every dollar spent

Thank you

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