



ENTWISTLE FIBER

NOVEMBER 19, 2019

CONTEXT

- Original project was approved in the 2017 capital budget
- This project had a projected completion date of Q4 2018
- Due to delays from the utility distributor the project was started in spring 2019
- The project had a major scope change due to a rail crossing design that was denied and required redesign which added significant costs to the project.

Entwistle Fiber Build Cost Summary

Cost Incurred to Date	949,500
Remaining Costs Needed to Complete the Build	137,700
Total Cost of Entwistle Fiber Build	1,087,200
Project Budget	947,300
Variance	139,900

Entwistle Fiber Optic Financial Analysis

Projected Annual Operating Position				
	2020	2021	2022	2023
<u>Revenue</u>				
Fees from Service Providers ^{1,2,3}	\$31,200	\$46,800	\$62,400	\$78,000
	\$31,200	\$46,800	\$62,400	\$78,000
<u>Expenses</u>				
Salaries, wages, benefits ⁴	(\$26,200)	(\$26,700)	(\$27,200)	(\$27,700)
Contracted and General Services ⁵	(\$48,800)	(\$81,600)	(\$73,500)	(\$62,400)
Amortization ⁶	(\$108,700)	(\$108,700)	(\$108,700)	(\$108,700)
	(\$183,700)	(\$217,000)	(\$209,400)	(\$198,800)
Surplus/(Deficit)	(\$152,500)	(\$170,200)	(\$147,000)	(\$120,800)

¹Projections are based on a maximum of 130 subscribers by 2023.

²Providers to pay the County a monthly fee of \$50 per subscriber.

³Market saturation will be achieved within 4 years (2020: 40% adoption rate/52 subscribers; 2021: 60% adoption rate/78 subscribers; 2022: 80% adoption rate/104 subscribers; 2023: 100% adoption rate/130 subscribers).

⁴Based on a Connected Communities Program Manager 0.2 FTE with a 2% annual inflation factor.

⁵Includes fees associated with the Fortis joint use, backhaul local point of interconnect (Telus), Calix annual support, Calix flow analyze +, network support services, on-site technical support (truck rolls), and bandwidth required for TV delivery.

⁶Amortization reflects the capital cost of installing the fiber optic network, fiber drops to end customers, and costs of the consumers electronics required to access services annualized over an estimated useful life of 10 years.

OPERATING MODELS

	Traditional	Dark Model	Lit Model	Lit with Backhaul
Retail Services to Subscribers	Traditional Telco Model	Service Providers	Service Providers	Service Providers
Active Backhaul to Regional Point of Interconnect				Parkland County with Network Operations Partner
Active (Lit) Fibre Optic Network		Parkland County with Network Operations Partner		
Passive (Dark) Fibre Optic Network		Parkland County	Parkland County with Network Operations Partner	

KEY FINDINGS

- The County is currently responsible for all of the infrastructure costs
 - Repairs and maintenance of the main fiber
 - Replacement of infrastructure at the conclusion of its life
- The financial viability of the project is largely dependent on:
 - Royalty rate agreed upon with service providers
 - Subscriber uptake
- The County will most likely need to subsidize the cost of the fiber network
- The demographics of the hamlet Entwistle are such that it may not be attractive to larger service providers

NEXT STEPS

- Complete Smart Parkland viability process
- Open data roam for proposals for purchase
- Continue to search for an appropriate business model and/or partner is established

QUESTIONS