

# RETURN-ON-INVESTMENT (ROI) / NEEDS ANALYSIS: City Facility Fiber Connection Capital Project

**DRAFT DOCUMENT 02/27/2020**  
 Future maintenance costs will be added to the analysis prior to final distribution.

The City contracted with Suddenlink in 2014 to construct fiber between city facilities including City Hall, Police Department, Public Works, and the Wastewater Treatment Plant. Suddenlink owns the fiber and therefore is the only internet service provider the City can use. Suddenlink internet service for City operations are priced higher than other companies would charge, and the City cannot switch providers because we do not own the fiber between our buildings.

Staff began researching ways to reduce the cost of monthly internet costs and found that many agencies including school districts, cities and county governments own their own fiber connection between facilities. Cost savings come from bidding their internet service to multiple providers, ultimately driving down their cost of monthly internet service. The project was proposed to the City Council in 2019 and approved to include the cost of design and construction in the five-year Capital Improvement Plan for 2020-2024.

The Return-on-Investment analysis is based on estimates only as true costs will be dependent upon service provider bids and vendor equipment.

CITY FACILITY LOCATION		CURRENT SERVICE WITH SUDDENLINK		ESTIMATED MONTHLY COST IF SPEEDS INCREASED TO 1GB WITH SUDDENLINK		ESTIMATED MONTHLY COST IF CITY OWNED FIBER BETWEEN FACILITIES		ESTIMATED MONTHLY SAVINGS
		Monthly Cost	Current internet speed available	Monthly cost (Estimated)	Speeds increased to 1 GB	Monthly cost (Estimated)	1GB	
City Hall	401 N. Madison St.	\$1,700.00	100Mbps over fiber	\$2,100.00	1GB over fiber	\$1,000.00	1GB over fiber	\$1,100.00
Police Department Facility	418 E. Nichols St.	\$400.00	shared bandwidth over fiber	\$725.00	shared bandwidth over fiber	\$0.00	shared bandwidth over fiber	\$725.00
Public Works Facility	502 E. Nichols St.	\$400.00	shared bandwidth over fiber	\$725.00	shared bandwidth over fiber	\$0.00	shared bandwidth over fiber	\$725.00
Wastewater Treatment Plant	22711 S Woodland Rd.	\$400.00	shared bandwidth over fiber	\$725.00	shared bandwidth over fiber	\$0.00	shared bandwidth over fiber	\$725.00
Aquatic Center	20900 Sycamore Drive	\$194.95	up to 100Mbps down / 10 Mbps up over coax	\$194.95	no service upgrade available	\$0.00	shared bandwidth over fiber	\$194.95
Parks Building	22400 Club House Drive	\$179.95	up to 100Mbps down / 10 Mbps up over coax	\$179.95	no service upgrade available	\$0.00	shared bandwidth over fiber	\$179.95
		<b>\$3,275</b>		<b>\$4,650</b>		<b>\$1,000</b>		<b>\$3,650</b>

\* Service prices do not include monthly taxes and fees

Return-on-investment calculation	
<b>Additional Equipment Costs when owning fiber :</b>	<b>\$13,000</b>
New Location - Community Center	\$2,000.00
New Location - Veteran's Park	\$2,000.00
Additional Firewall	\$9,000.00
<b>Estimated cost of construction of fiber connecting city facilities:</b>	<b>\$350,000</b>
<b>Estimated annual savings resulting from fiber construction:</b>	<b>\$43,800</b>
<i>(Monthly projected savings of \$3,650 x 12 months)</i>	
<b>Return on Investment (# of years)</b>	<b>8.3</b>
<b>Annual savings each year after construction paid off:</b>	<b>\$43,800</b>

Additional Cost Considerations
* Maintenance agreement should be considered for repair work
* Equipment upgrades required over time

Intangible Points for Consideration
* Increased security required for transfer of information between law enforcement agencies
* Efficient operations of existing software
* Option to bid internet service
* Drive down monthly cost
* Choose provider that has redundancy causing less outage times
* Increased efficiency and reliability for customer service