



Fort Bragg Digital Infrastructure Plan 2021 – 2025

City Council Meeting
September 20, 2021





Purpose of the Study

- ◇ Explore possibility of a City-owned Broadband Utility
- ◇ Provide affordable and reliable connectivity to Fort Bragg residents and businesses
- ◇ Provide a plan to be used as Request for Proposal (RFP) for design and construction, if pursued
- ◇ Evaluate the financial cost and feasibility of a City of Fort Bragg Utility





Proposed Project

- ◇ Funding & construction of fiber-to-the-premise network
- ◇ Underground conduit & fiber installation
- ◇ Speeds up to 10Gbps
- ◇ Internet backhaul by AT&T to connect users to the world-wide web – only provider at this time
- ◇ Mendocino Community Network (MCN) serve as service provider
- ◇ City owns the infrastructure





Network Description

- ◇ Central Data Center at 416 N. Franklin Street
- ◇ 9 distribution cabinets through out City serving as aggregate fiber locations to businesses and homes
- ◇ End-user conduit and fiber drop
- ◇ 158k feet of fiber with 10% excess slack
- ◇ Service provider will extend optical network termination device at the home or business





Operating Model

- ◇ 3,100 Residential Customers/900 Businesses
- ◇ Goal 100% take rate - financial model built on 60%
- ◇ City-owned infrastructure operated and serviced by MCN
- ◇ Partnership with Mendocino Community Networks (MCN)
 - MCN is owned and operated by the Mendocino Unified School District
 - Offers internet services along Mendocino Coast, including service to Fort Bragg businesses and residents
 - Approximately 1/4 of Potential Fort Bragg Customers





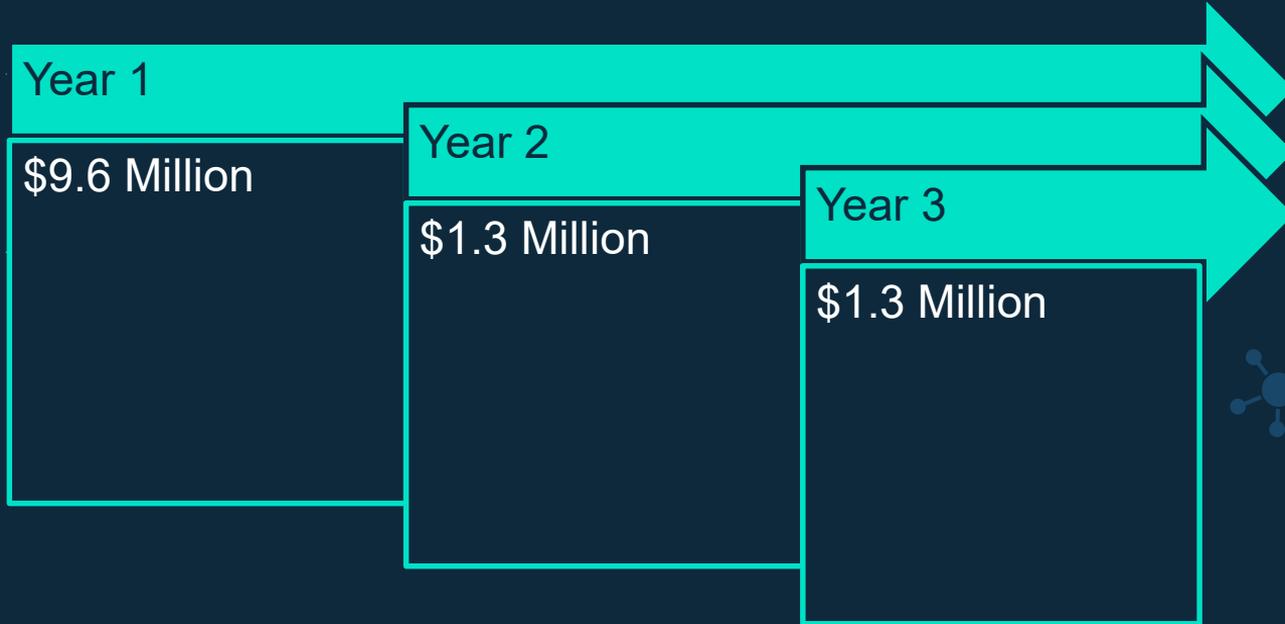
Estimated Build Cost

Last-Mile	Network Engineering & Construction	Data Center & Electronics	Subscriber Acquisition Drop & CPE	Project Manager	Total Network Cost
Total	\$7 Million	\$1 Million	\$3.8 Million	\$356k	\$12.2 Million
Avg. Cost/Foot	\$44.27	\$6.54	\$24.04	\$2.26	\$77.10
Avg. Cost/Passing	\$2,630.17	\$257.73	\$947.42	\$88.94	\$3,039.21





Cash Flow Capital Investment



Capital Funding Sources

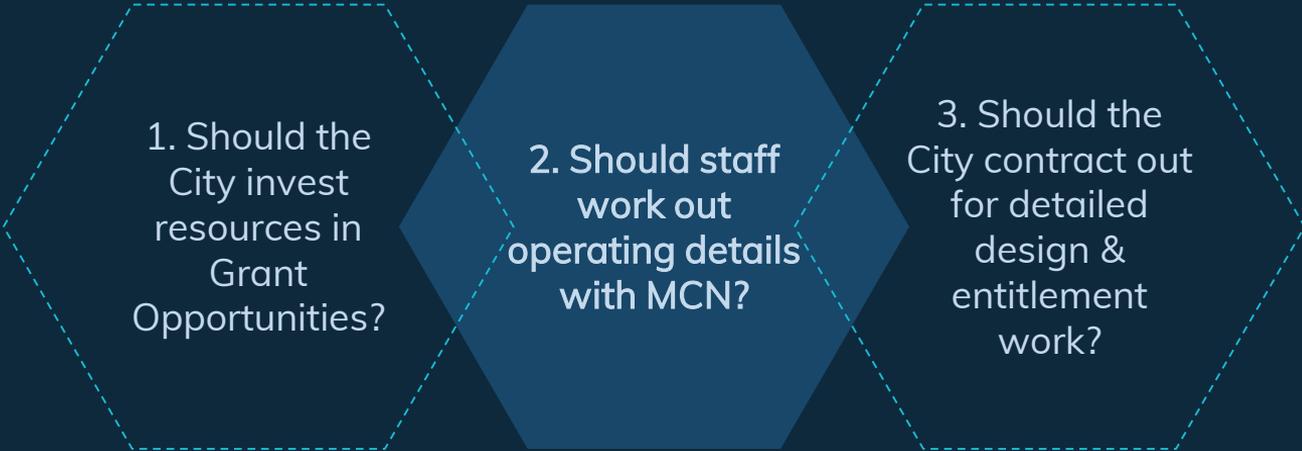
Sources	Year 1 FY 2022-23	Year 1 FY 2023-24	Year 1 FY 2024-25	Total Capital
ARP Funds	\$1,744,000	\$0	\$0	\$1,744,000
Main. & Facilities	100,000	0	0	100,000
GF Project Management	165,000	100,000	100,000	365,000
City Sources	2,009,000	100,000	100,000	2,209,000
Grants	4,000,000	0	0	4,000,000
Debt Financing	5,947,845	0	0	5,947,845
Outside Sources	9,947,845	0	0	9,947,845
Total Sources	\$11,956,845	\$100,000	\$100,000	\$12,156,845

Estimated Cash Flow

	Year 1 FY 2022-23	Year 2 FY 2023-24	Year 3 FY 2024-25	Year 4 FY 2025-26
Net Revenue to City	292,866	705,888	876,888	893,928
Less Debt Service	364,113	728,226	728,226	728,226
Net Revenue	(71,247)	(22,338)	148,662	165,702



Invest in Broadband?



1. Should the
City invest
resources in
Grant
Opportunities?

2. Should staff
work out
operating details
with MCN?

3. Should the
City contract out
for detailed
design &
entitlement
work?





Questions?