

**Arkansas Rural Connect
Projects Proposed
Round 2c**

Arkansas Department of Commerce Broadband Office

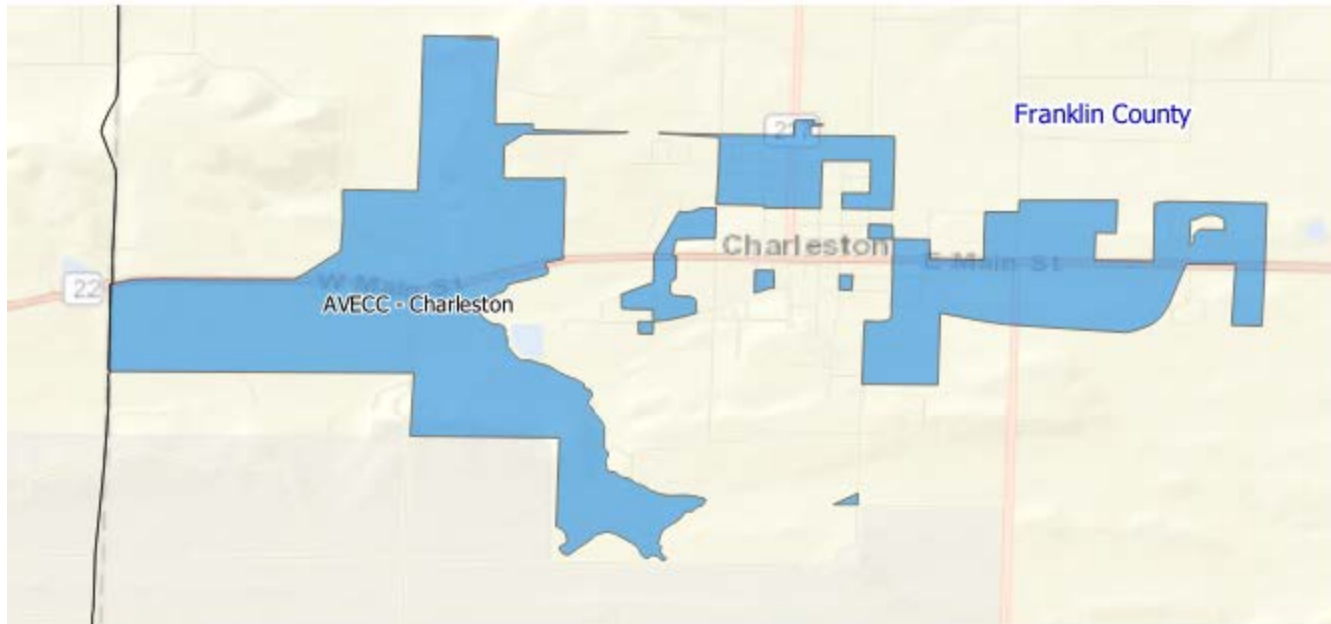
November 10th, 2021

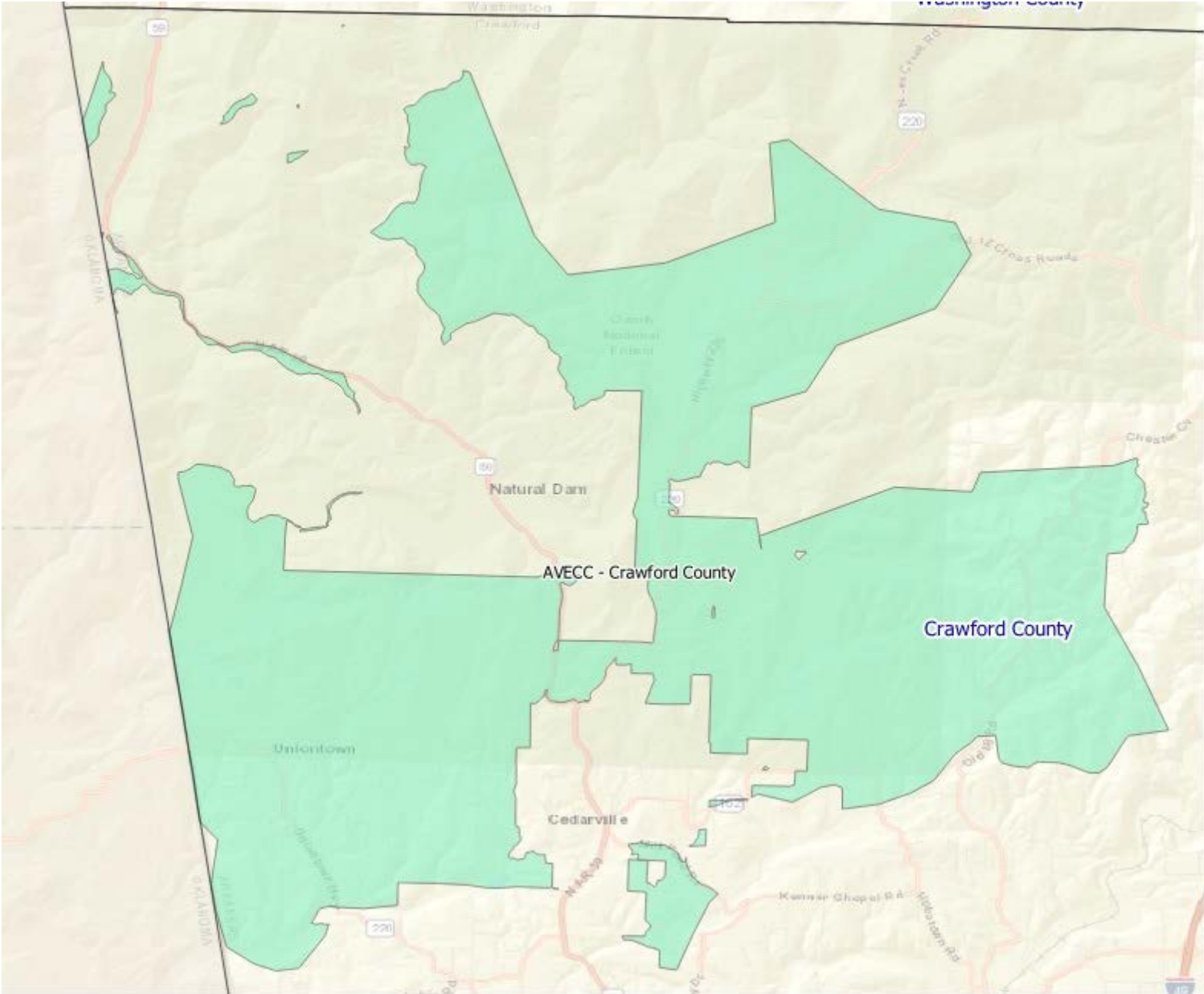
List of Projects

- AVECC-Wave Rural Connect - Charleston
- AVECC-Wave Rural Connect - Rural Crawford County
- CableSouth Media 3 - Lincoln County
- HillBilly - S. Sharp County
- Ind.Co. Cable TV - Newark
- Mountain View Telco - Stone Co-Mingues Turner/Hwy 87/Pleasant Grove
- Premier - Mineral Springs
- Premier - Stamps
- Ritter - Craighead County - Central
- Ritter - Craighead County - East
- Ritter - Cross County Crowleys Ridge
- Ritter - Cross County West
- Ritter - Jefferson County NE
- Ritter - Jefferson County NW
- Ritter - Poinsett County NorthCentral
- Ritter - Poinsett County SouthCentral
- Ritter - Pope County Appleton-Hector-Scottsville
- Ritter - Pope County SouthWest
- Ritter - St. Francis County - NorthCentral
- Ritter - St. Francis County - NorthWest
- SATCO - Bradley County
- SATCO - South Warren
- SWAT - Blevins & McCaskill
- SWAT - Columbia County
- Walnut Hill Telephone - Ebenezer
- Walnut Hill Telephone - Falcon
- Walnut Hill Telephone - Medlock
- Walnut Hill Telephone - Oak Grove Rd
- Walnut Hill Telephone - Shiloh
- Walnut Hill Telephone - South Lake Columbia
- Windstream - Cleburne
- Windstream - Dallas County 2

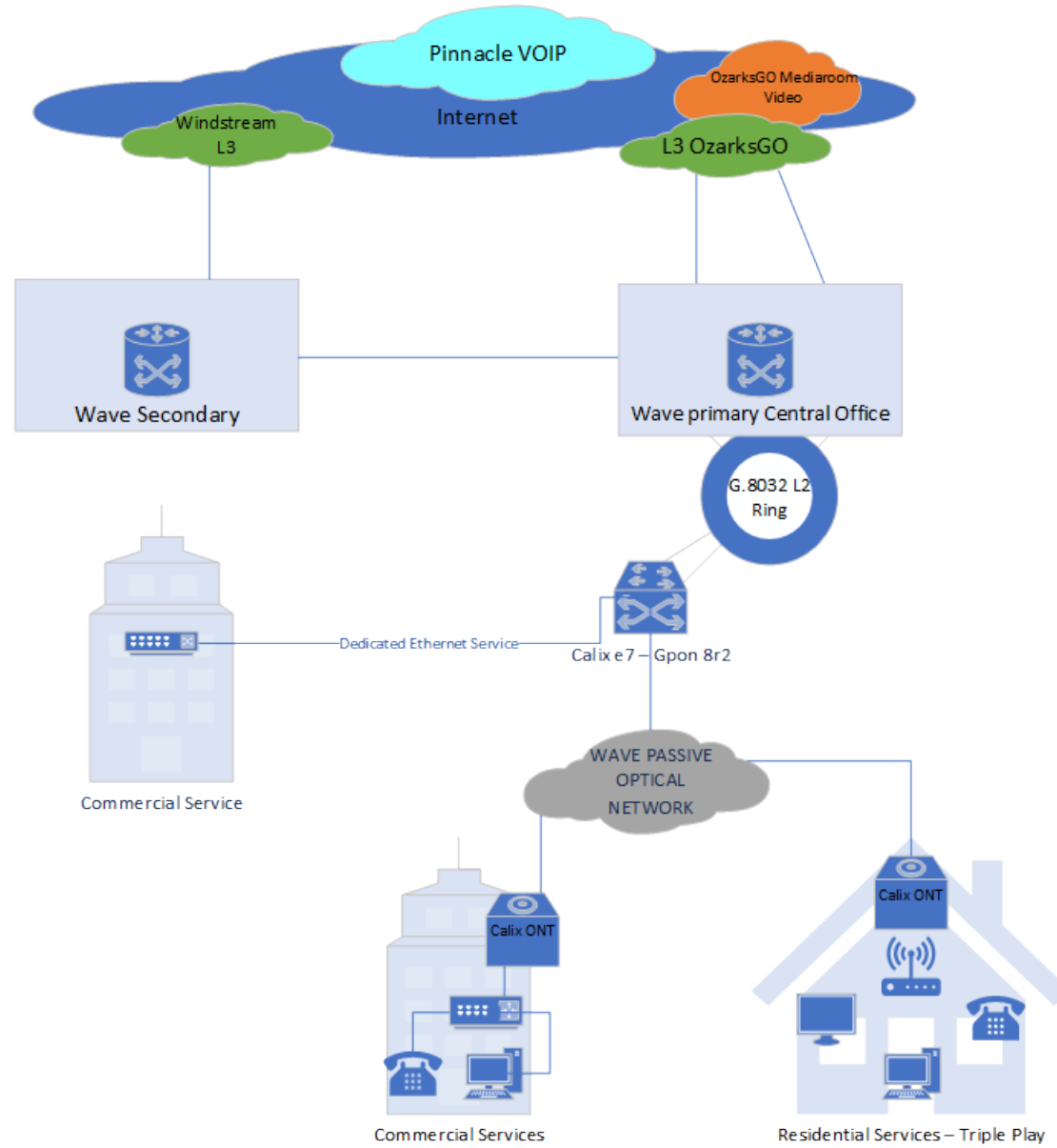
Total Amount requested: \$124,766,141.48

Application	Households	Award request	Technology
AVECC-Wave Rural Connect - Charleston	472	\$1,200,000.00	Fiber
AVECC-Wave Rural Connect - Rural Crawford County	1,012	\$3,316,500.00	Fiber
	Total	\$4,516,500.00	

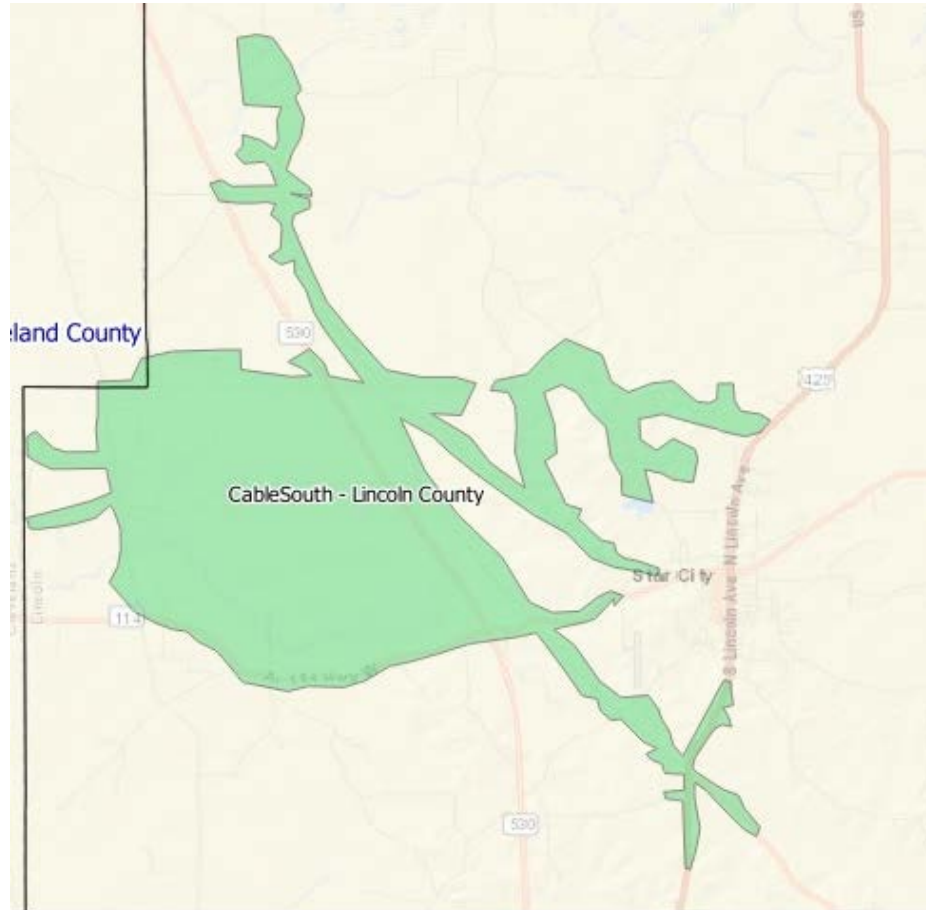




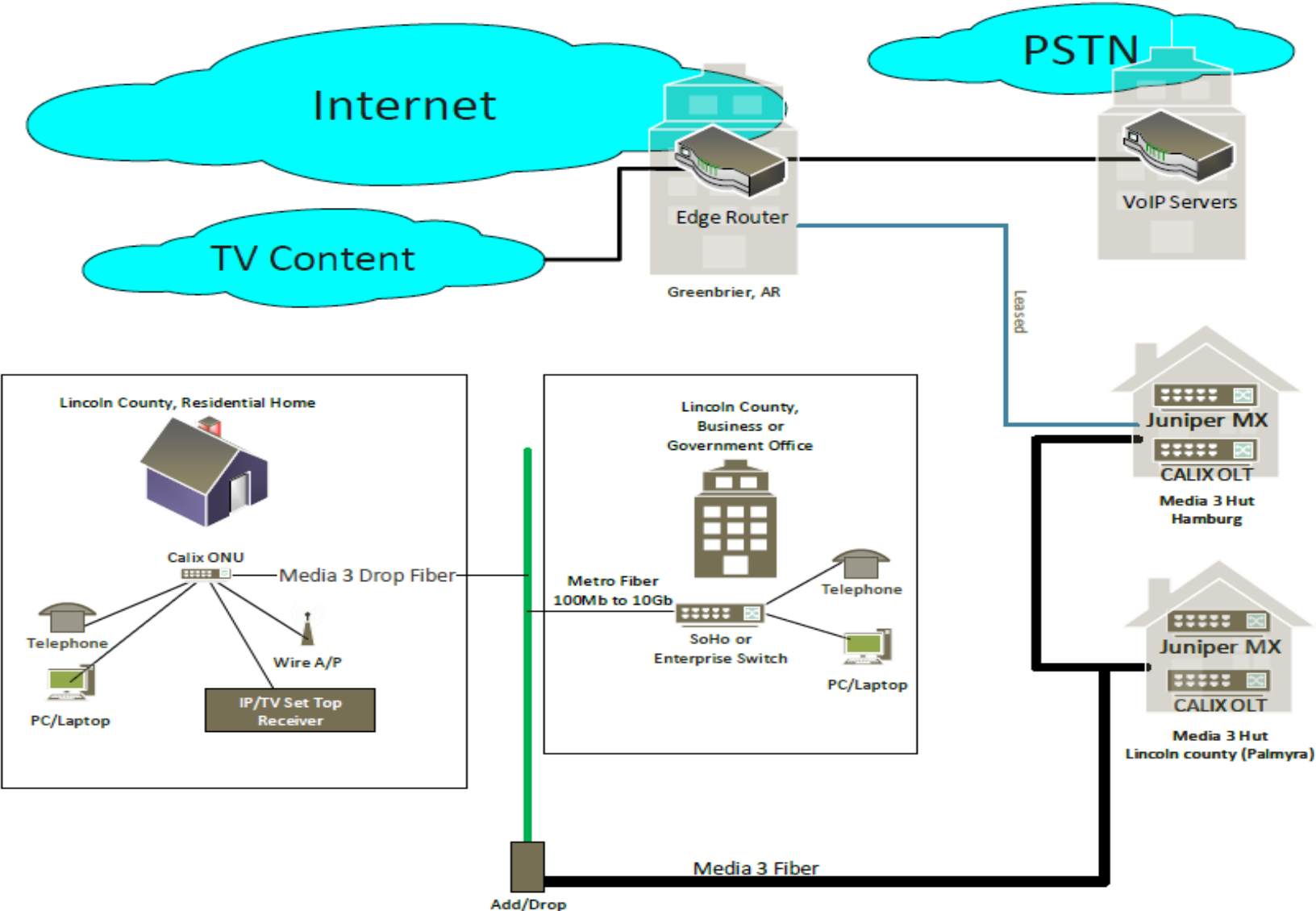
AVECC All projects



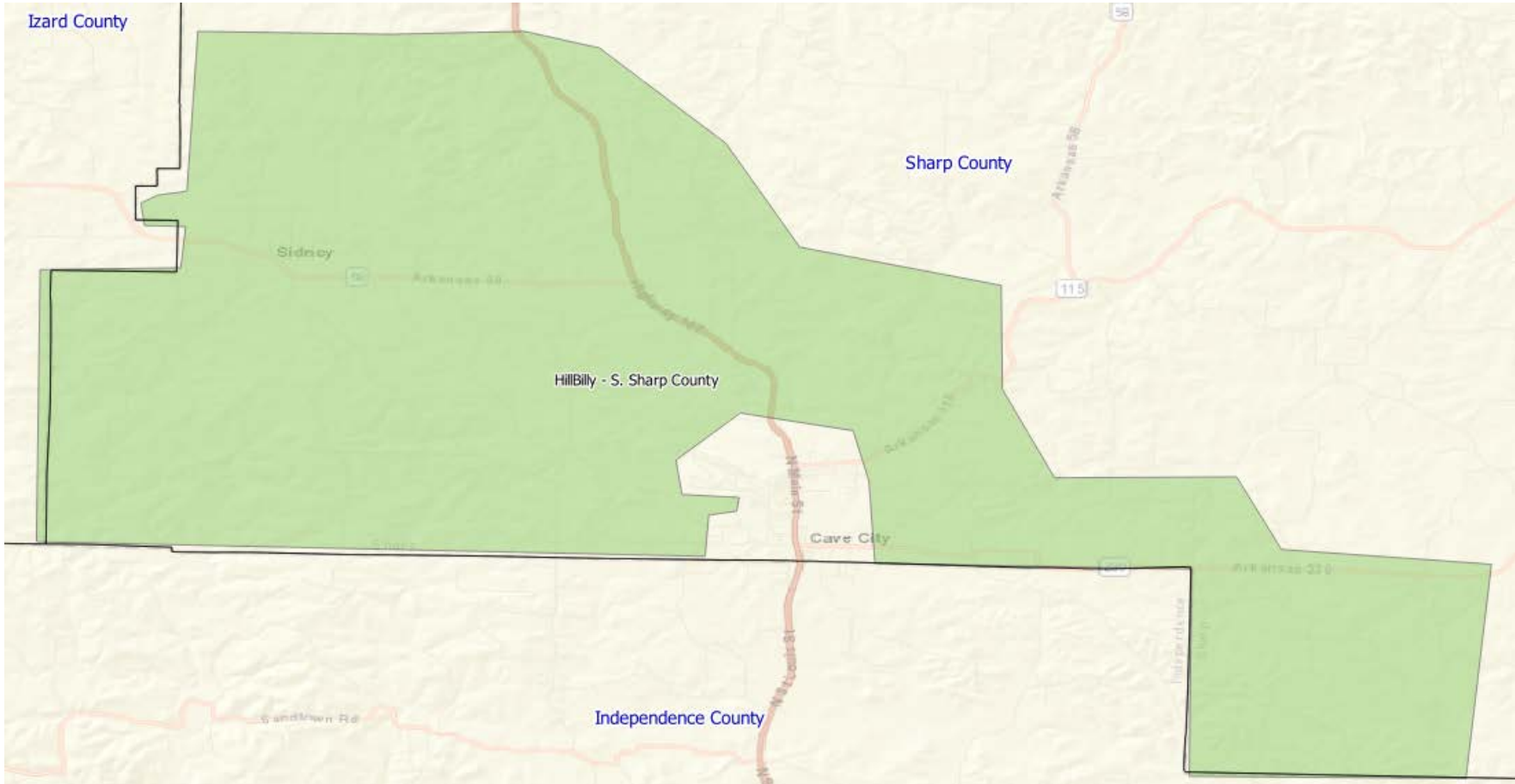
Application	Households	Award request	Technology
CableSouth Media 3 - Lincoln County	769	\$4,119,296.08	Fiber
Total		\$4,119,296.08	



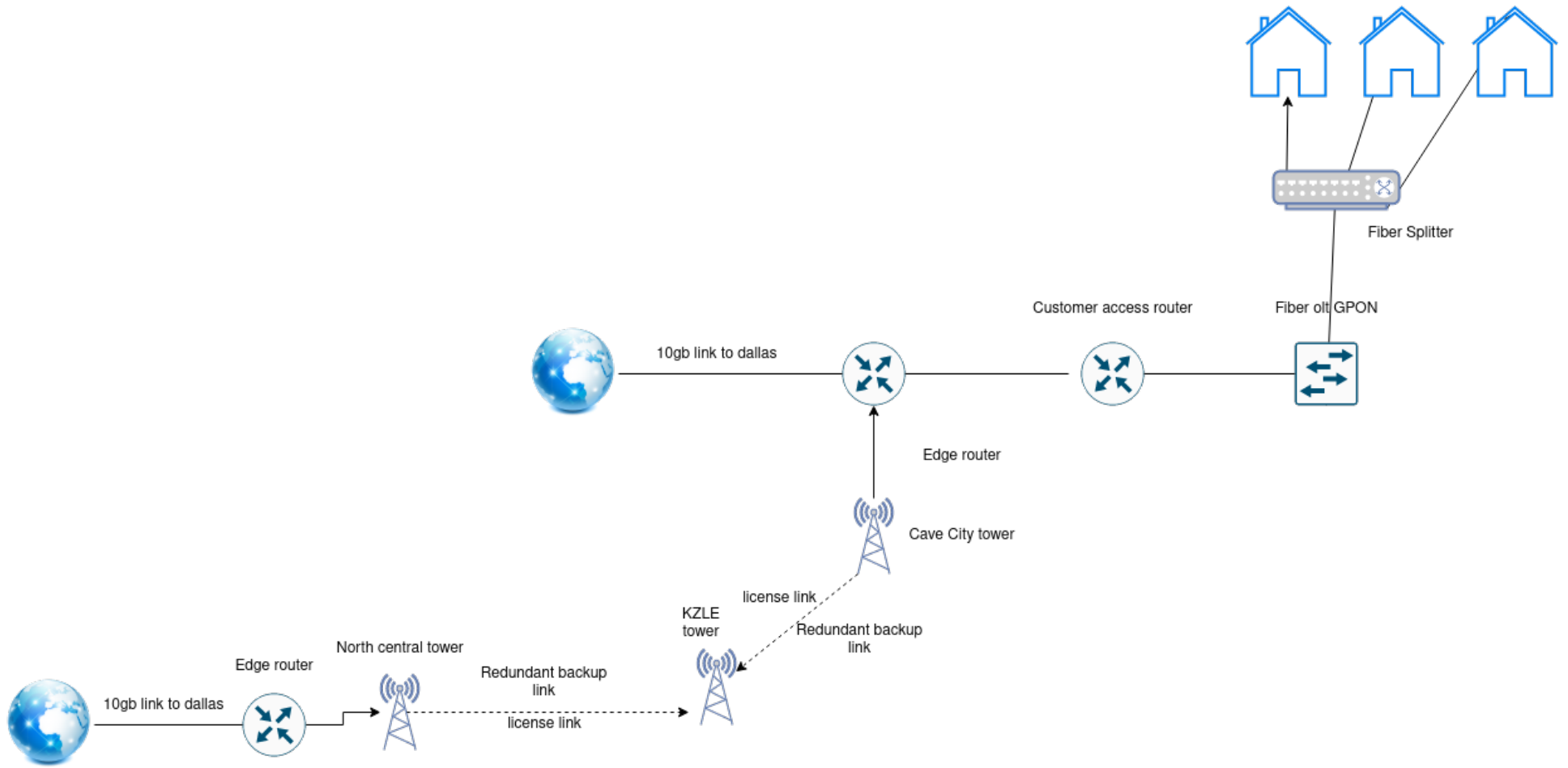
Cablesouth – Lincoln



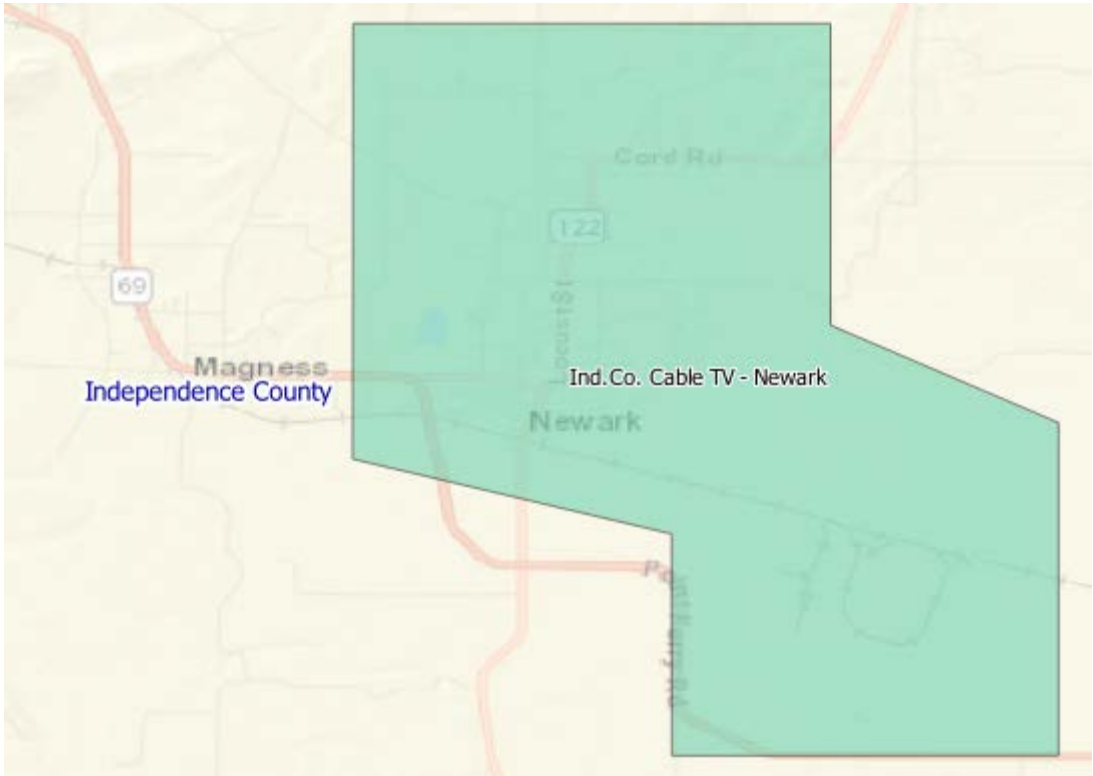
Application	Households	Award request	Technology
Hillbilly Wireless - Sharpe County South	697	\$8,958,197.00	Fiber
Total		\$8,958,197.00	



HillBilly - S. Sharpe



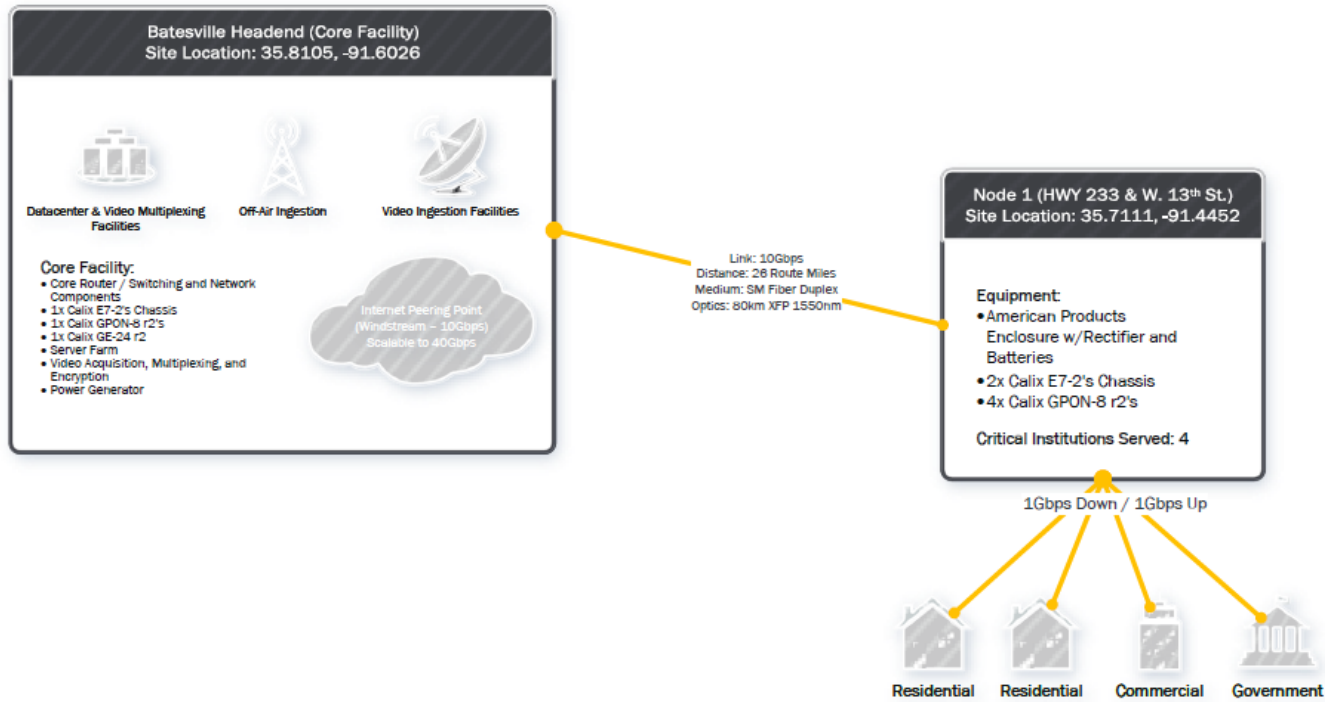
Application	Households	Award request	Technology
IndCo Cable TV - Newark	659	\$6,803,125.00	Fiber
Total		\$6,803,125.00	



Indco Cable – Newark

Exhibit B: ARC Round 2 PFSA (Newark, AR)– Proposed Network Design / PFSA 1

September 22, 2021



Service Area Details:

- Area Covered: 29.19 sq mi
- Fiber (Feeder) Route Miles: 61
- Fiber (Trunk) Route Miles: 44
- PFSA Materials Total: \$2,113,276
- PFSA Construction Total: \$4,276,645
- PFSA Other / Misc. Total: \$305,000
- PFSA Total: \$6,694,920
- Application: 100% Buried Plant
- Soil Type: 80% Rock & 20% Dirt/Clay

Premise Details:

- Residential: 780
- Commercial: 16
- Agricultural: 4
- Industrial: 6
- Other: 9
- Total: 815

Services Provided:

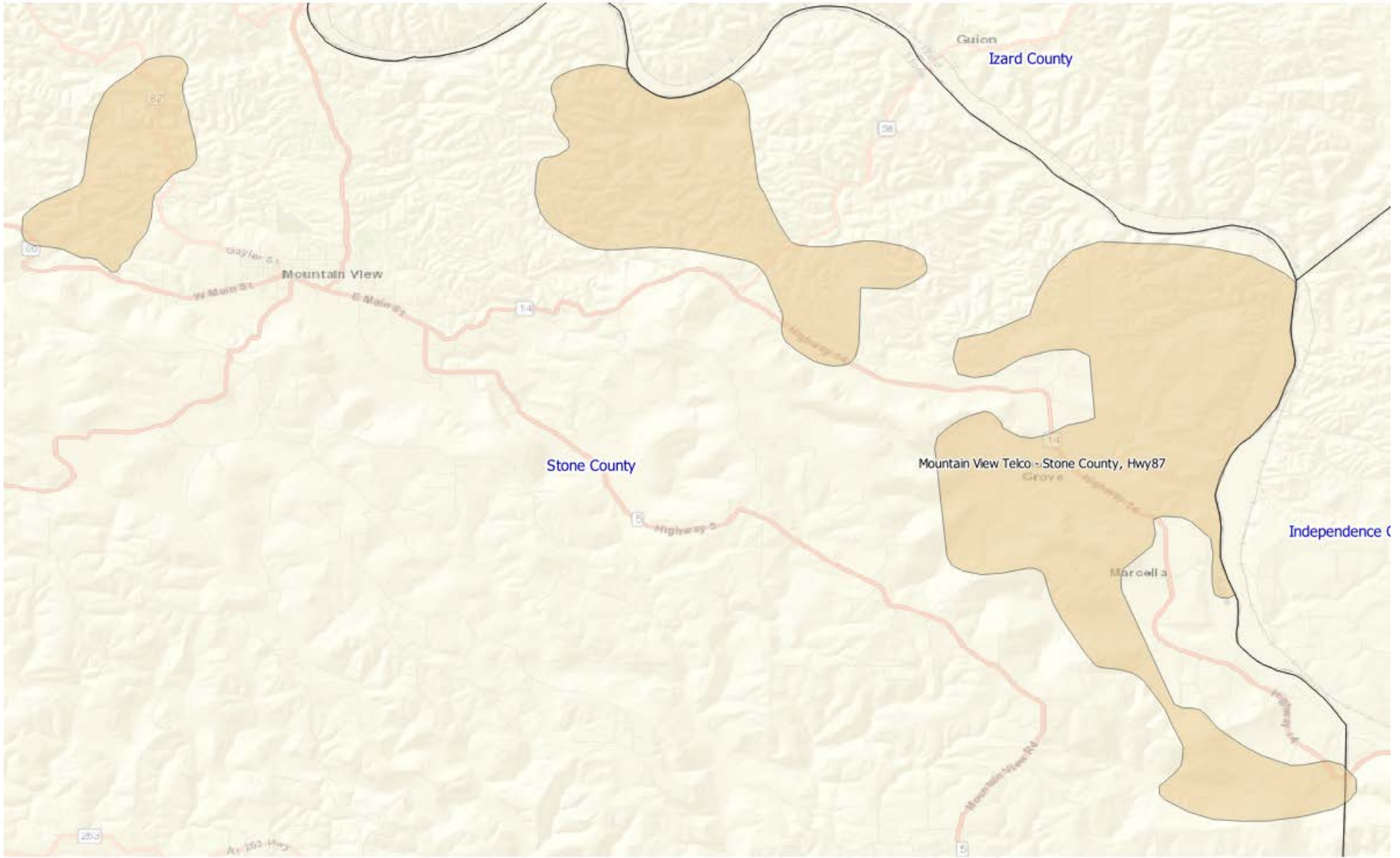
- All sites will deploy services via GPON for Residential and Standard Business Customers (Can provide 2.5Gbps Down and 1.25Gbps Up) **Will Scale to 10GPON**
- Active Ethernet for Dedicated Commercial, Industrial, and Critical Institutions (Can provide up to 10Gbps Down and 10Gbps Up)

Architecture:

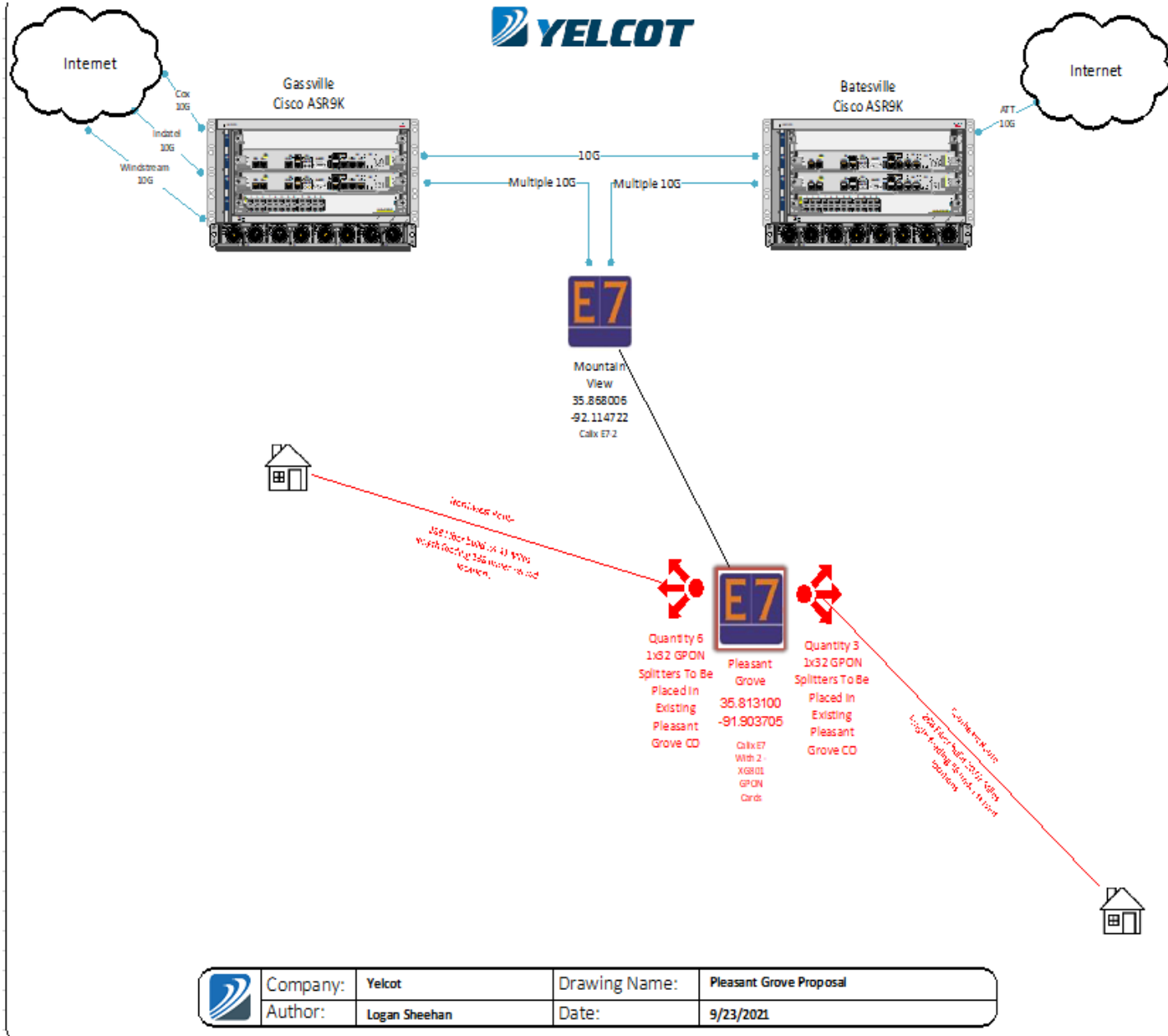
- Calix AXOS Modular Platform GPON, 10GPON & Active Ethernet
- Distributed Split Passive Optical Network (PON)
- Can comfortably provide services to premises within 20 route miles from site
- Multiple fiber paths for redundancy and fail-over
- Standby Power w/Battery Backup



Application	Households	Award request	Technology
Mountain View Telco - Stone Co-Mingues Turner/Hwy 87/Pleasant Grove	497	\$6,066,845.00	Fiber
	Total	\$6,066,845.00	

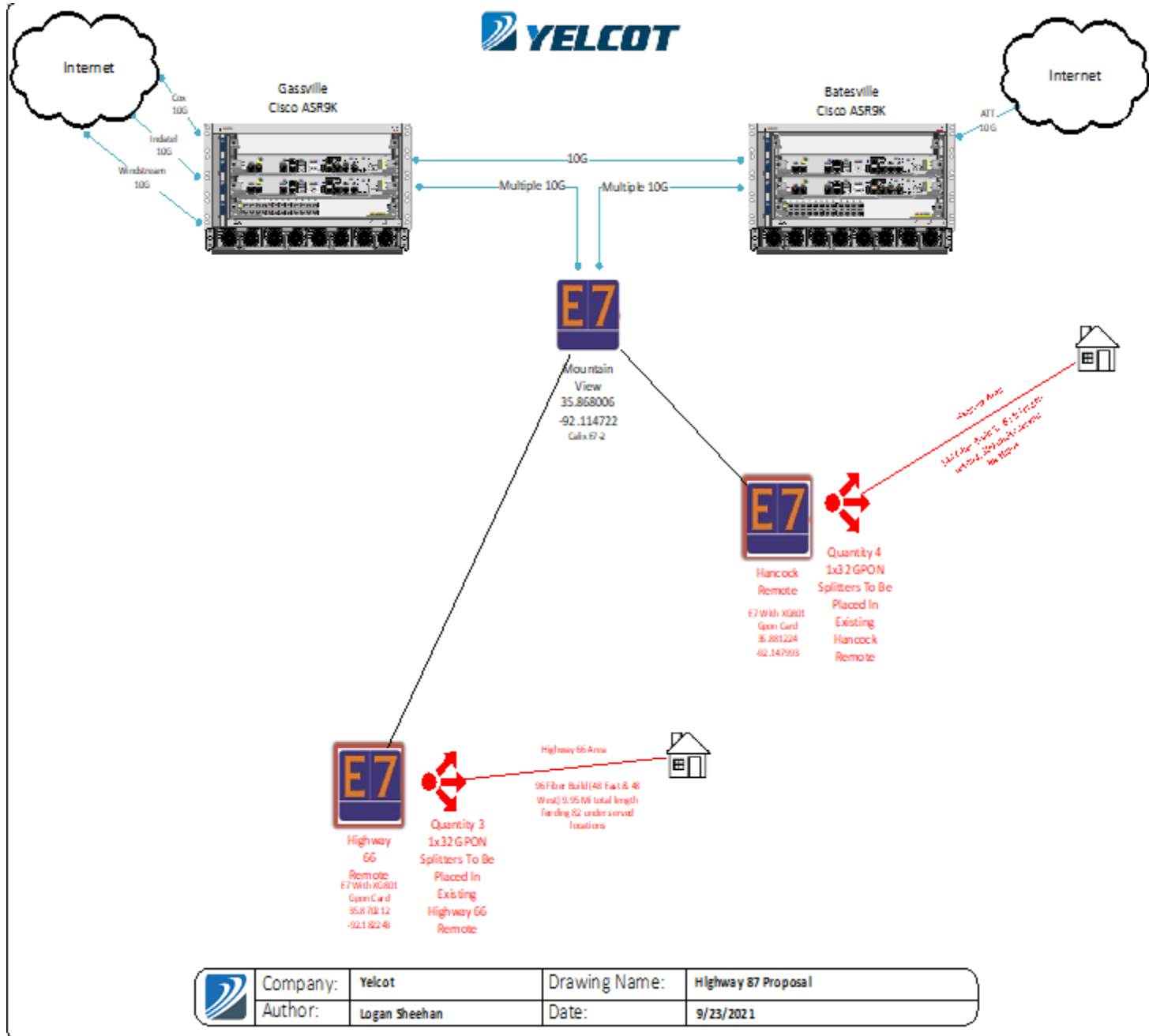


Mountain View Telco - Stone County, Pleasant Grove

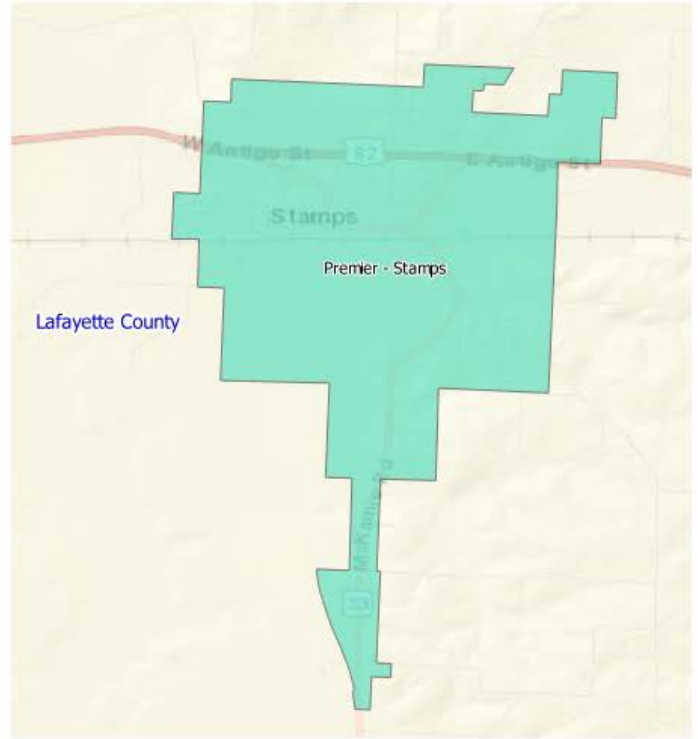
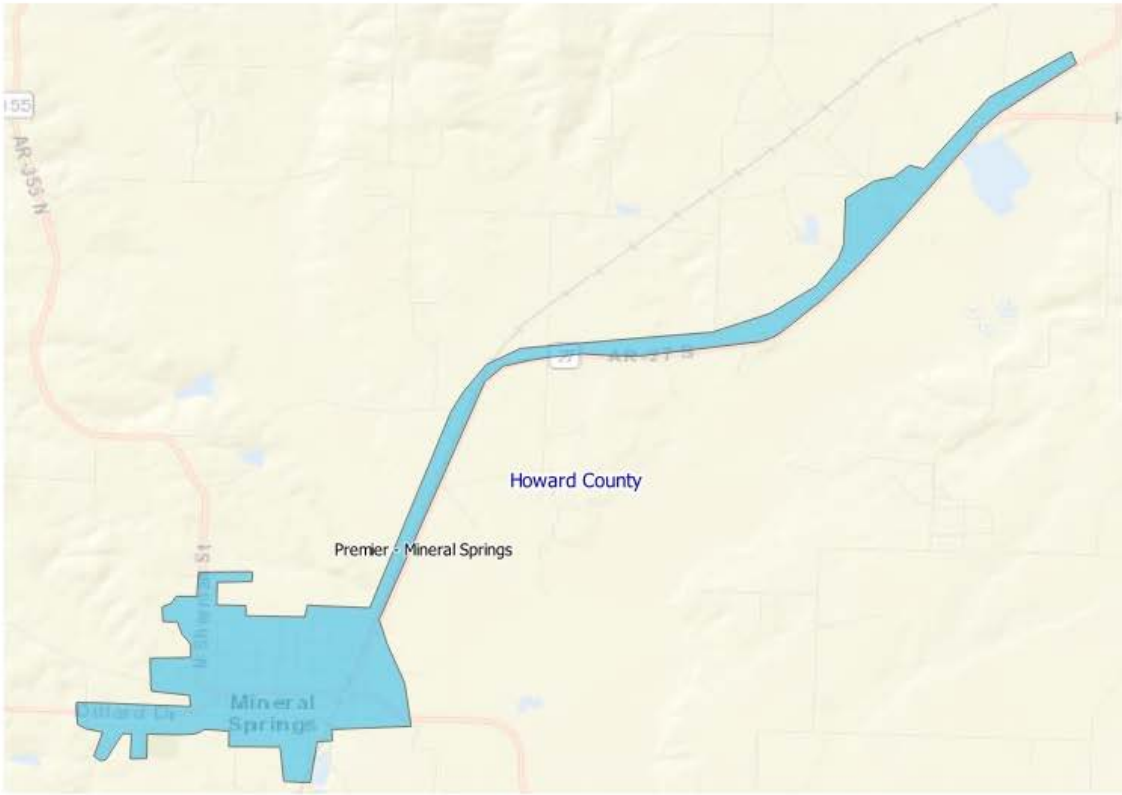


	Company:	Yelcot	Drawing Name:	Pleasant Grove Proposal
	Author:	Logan Sheehan	Date:	9/23/2021

Mountain View Telco - Stone County, Hwy 87

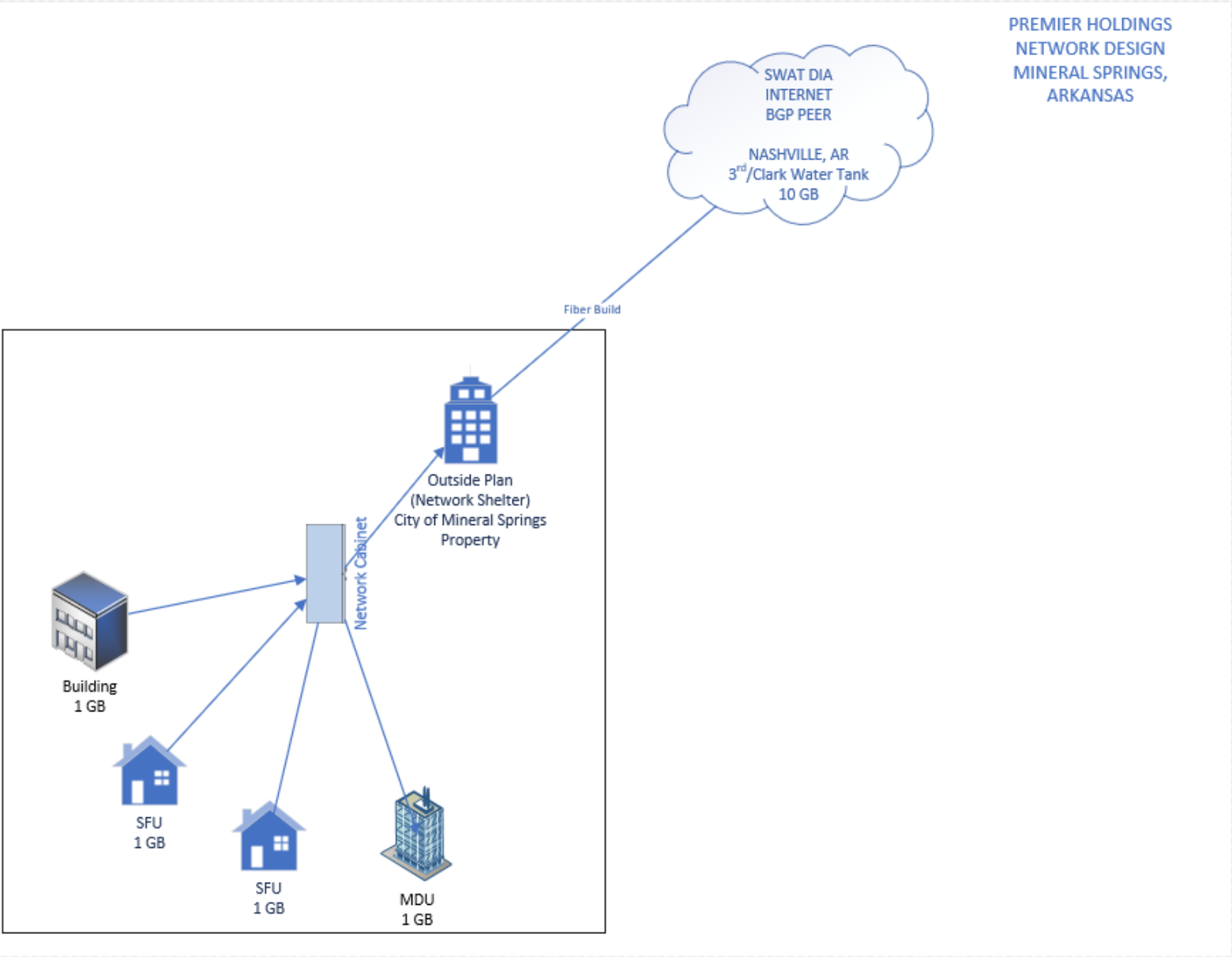


Application	Households	Award request	Technology
Premier Holdings LLC - Mineral Springs	539	\$4,477,692.52	Fiber
Premier Holdings LLC - Stamps	700	\$3,985,912.88	Fiber
Total		\$8,463,605.40	



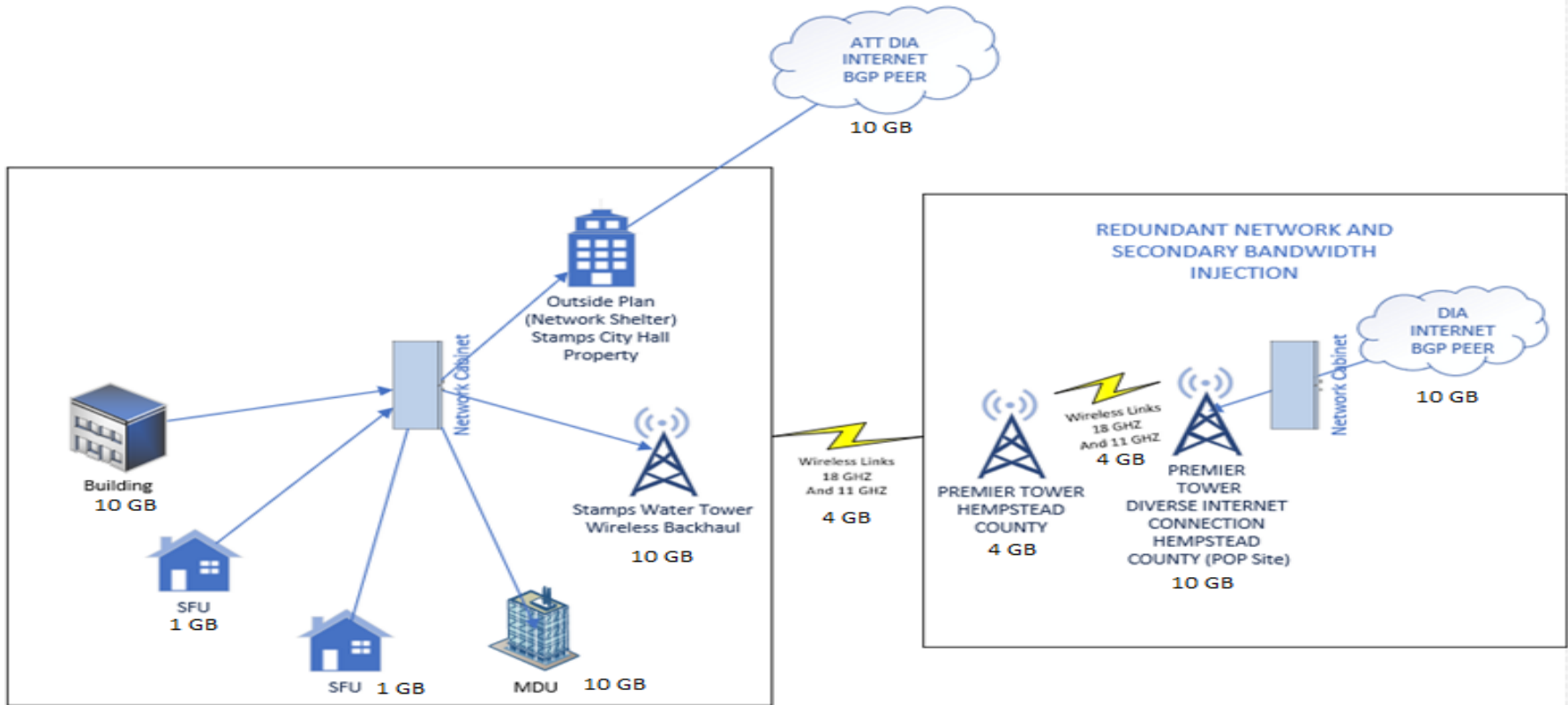
Premier – Mineral Springs

PREMIER HOLDINGS
NETWORK DESIGN
MINERAL SPRINGS,
ARKANSAS

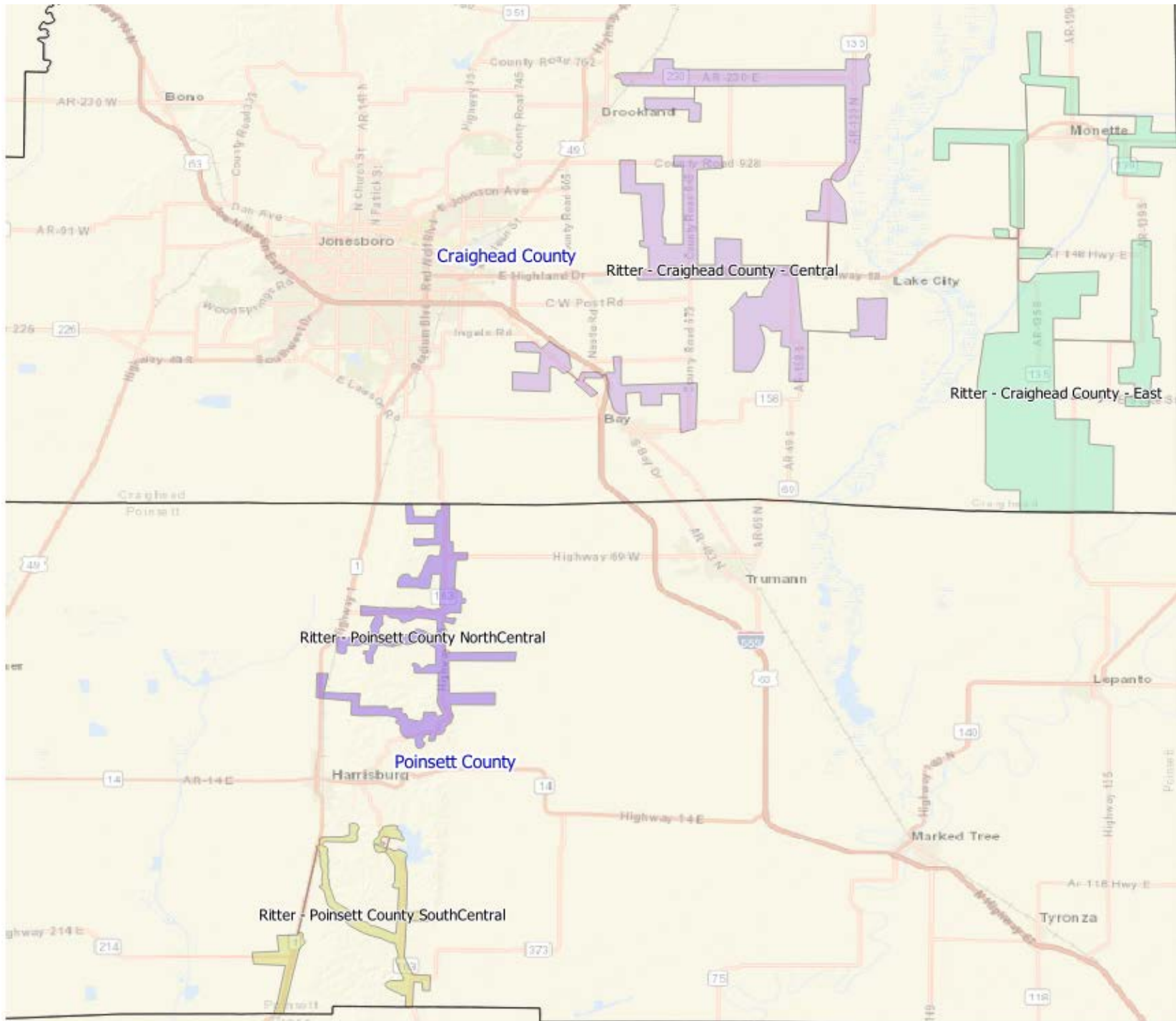


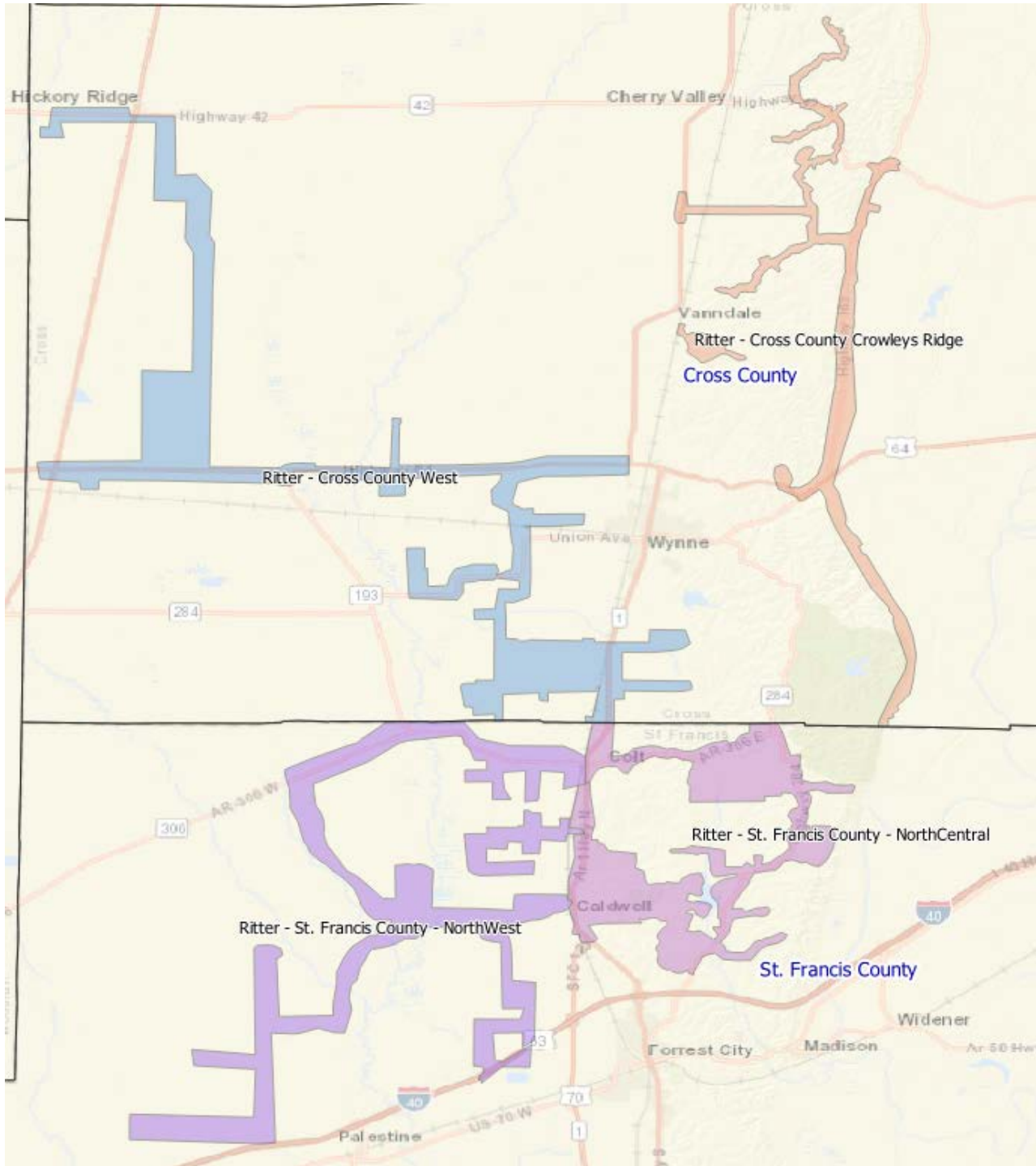
Premier - Stamps

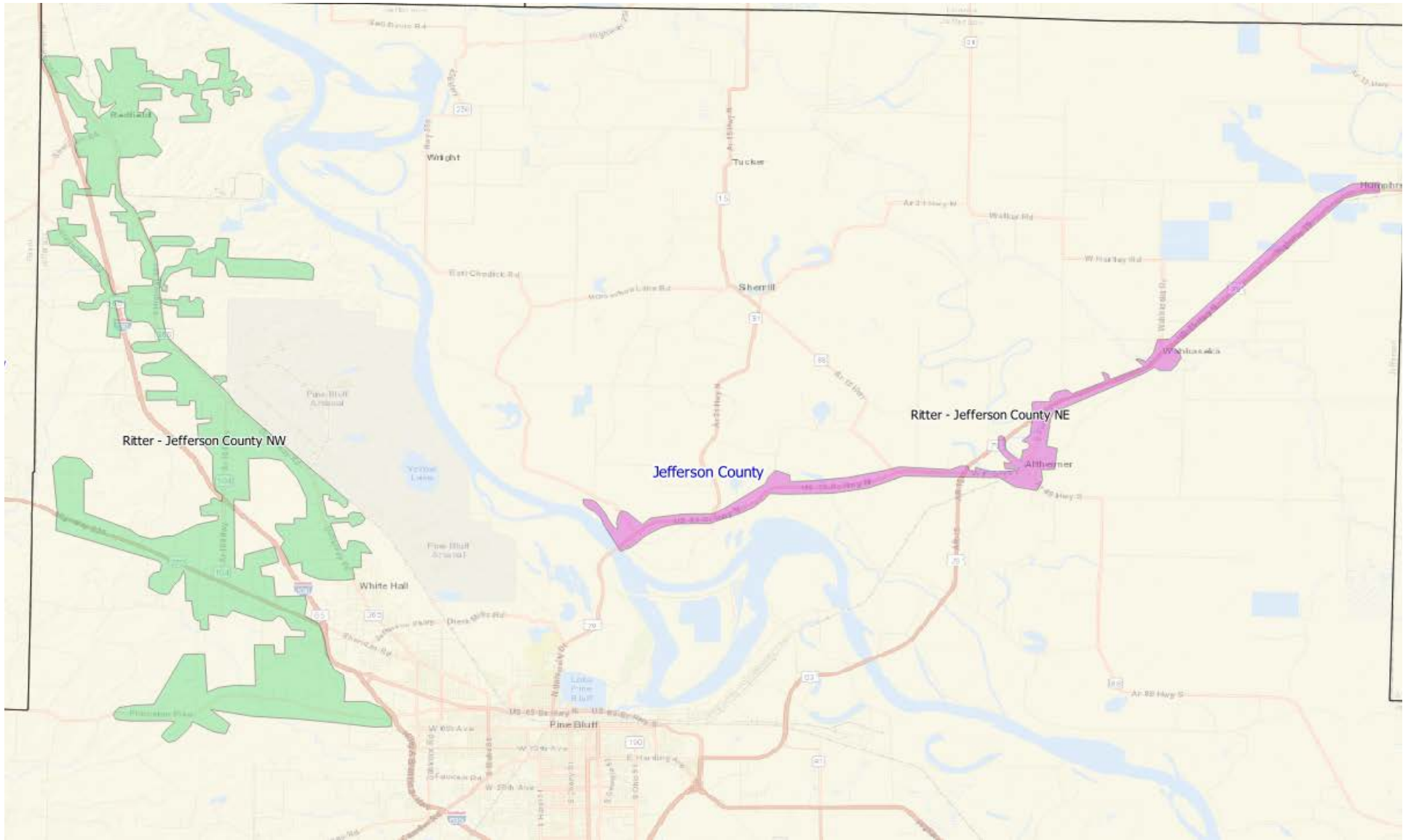
PREMIER HOLDINGS
NETWORK DESIGN
STAMPS, ARKANSAS

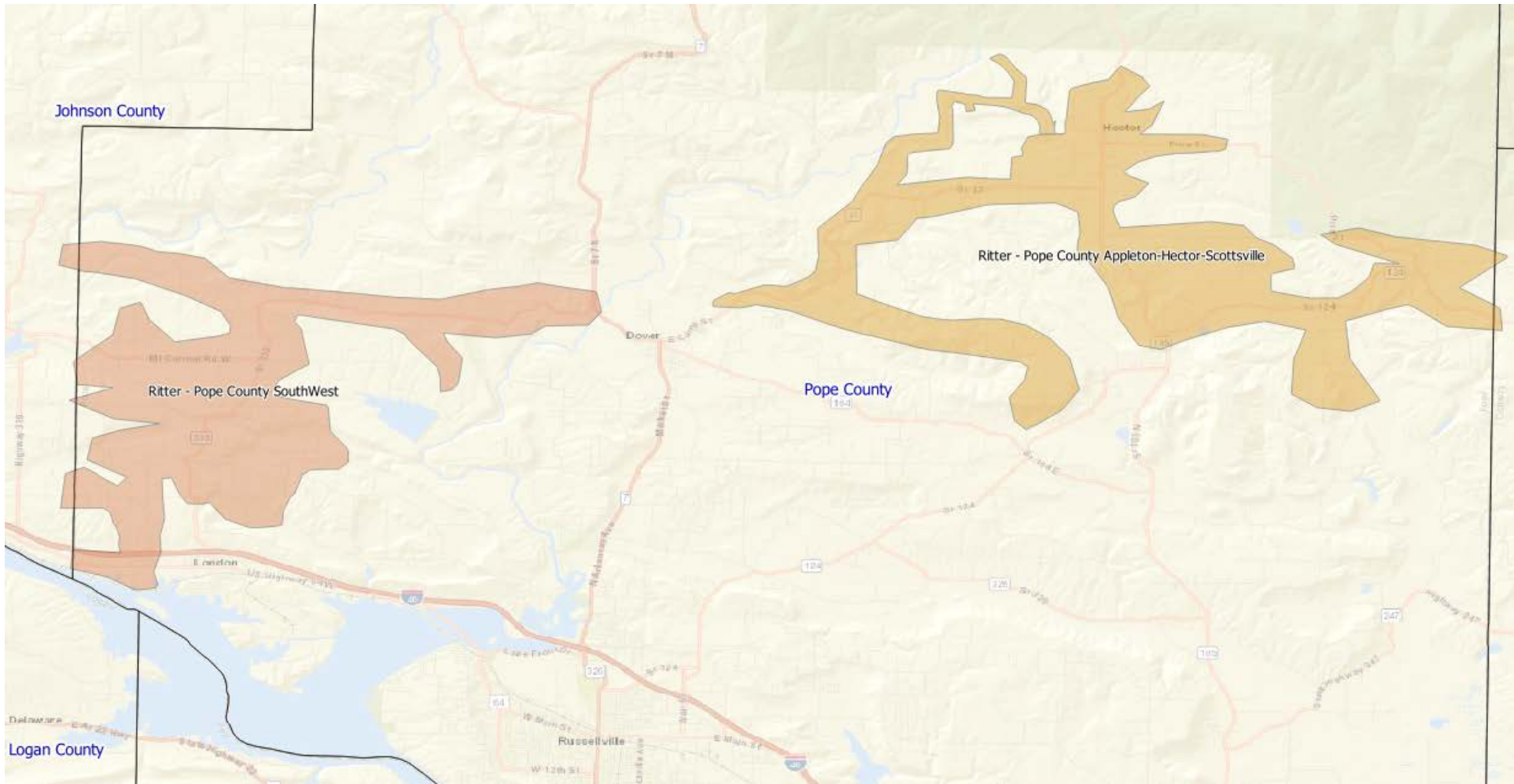


Application	Households	Award request	Technology
Ritter - Craighead County - Central	698	\$3,787,289.00	Fiber
Ritter - Craighead County - East	526	\$3,251,190.00	Fiber
Ritter - Cross County Crowleys Ridge	441	\$3,180,100.00	Fiber
Ritter - Cross County West	588	\$4,257,650.00	Fiber
Ritter - Jefferson County NE	529	\$4,636,917.00	Fiber
Ritter - Jefferson County NW	4,140	\$11,305,061.00	Fiber
Ritter - Poinsett County NorthCentral	504	\$2,893,700.00	Fiber
Ritter - Poinsett County SouthCentral	246	\$1,631,845.00	Fiber
Ritter - Pope County Appleton-Hector-Scottsville	977	\$5,665,012.00	Fiber
Ritter - Pope County SouthWest	772	\$7,053,243.00	Fiber
Ritter - St. Francis County - NorthCentral	1,305	\$4,311,450.00	Fiber
Ritter - St. Francis County - NorthWest	694	\$3,296,875.00	Fiber
	Total	\$55,270,332.00	



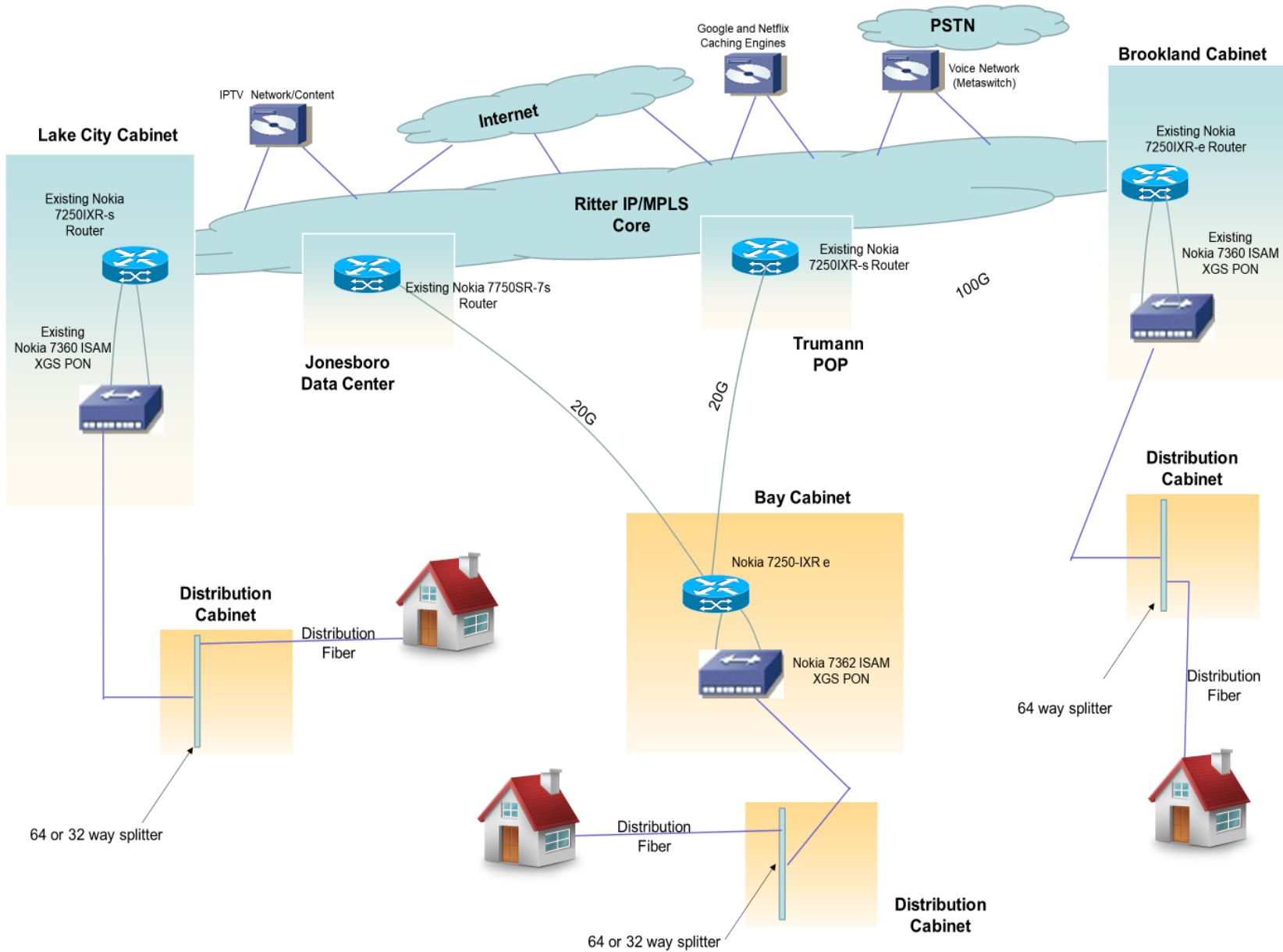






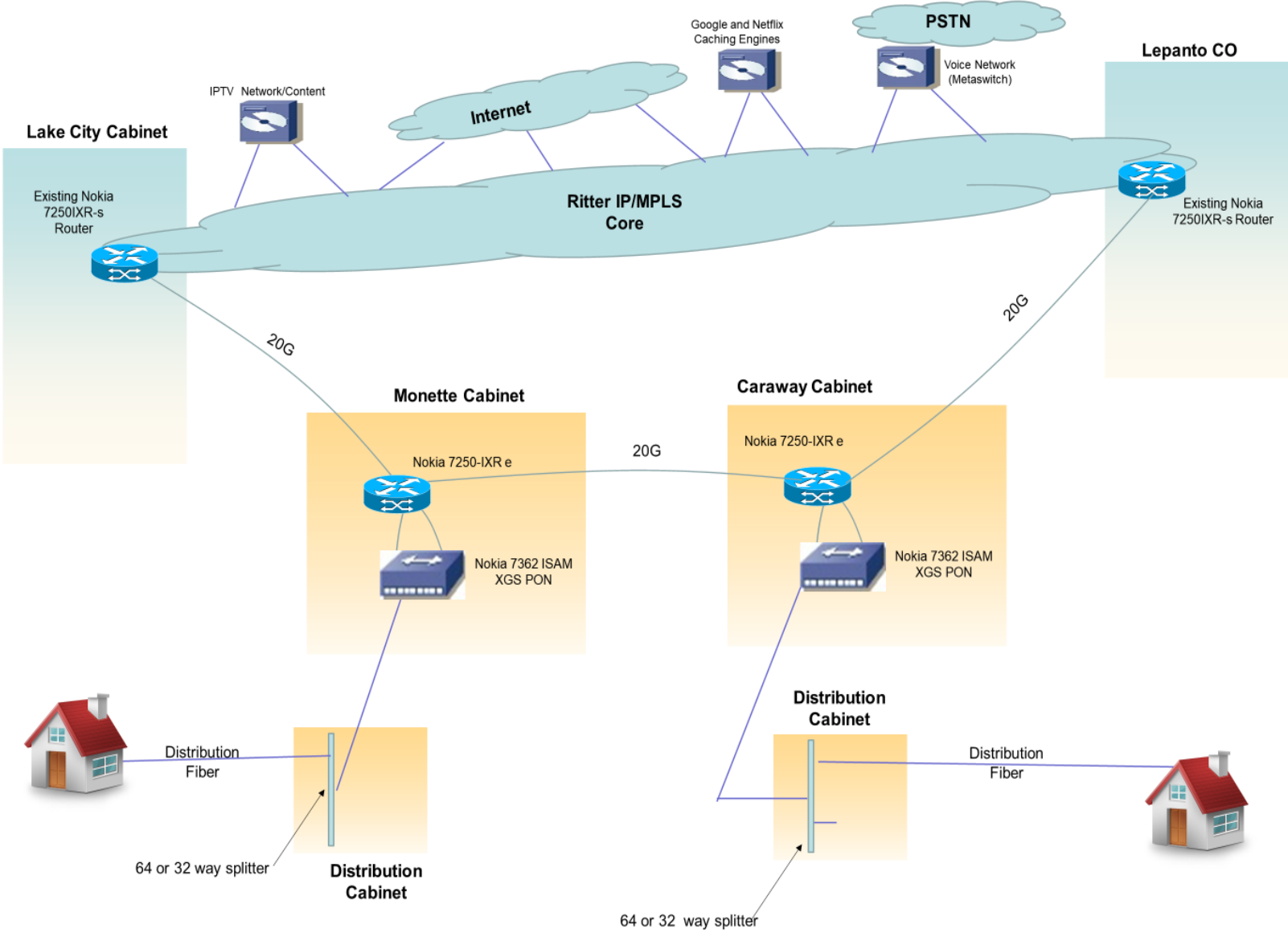
Ritter – Craighead County - Central

Craighead County – Central Network Diagram



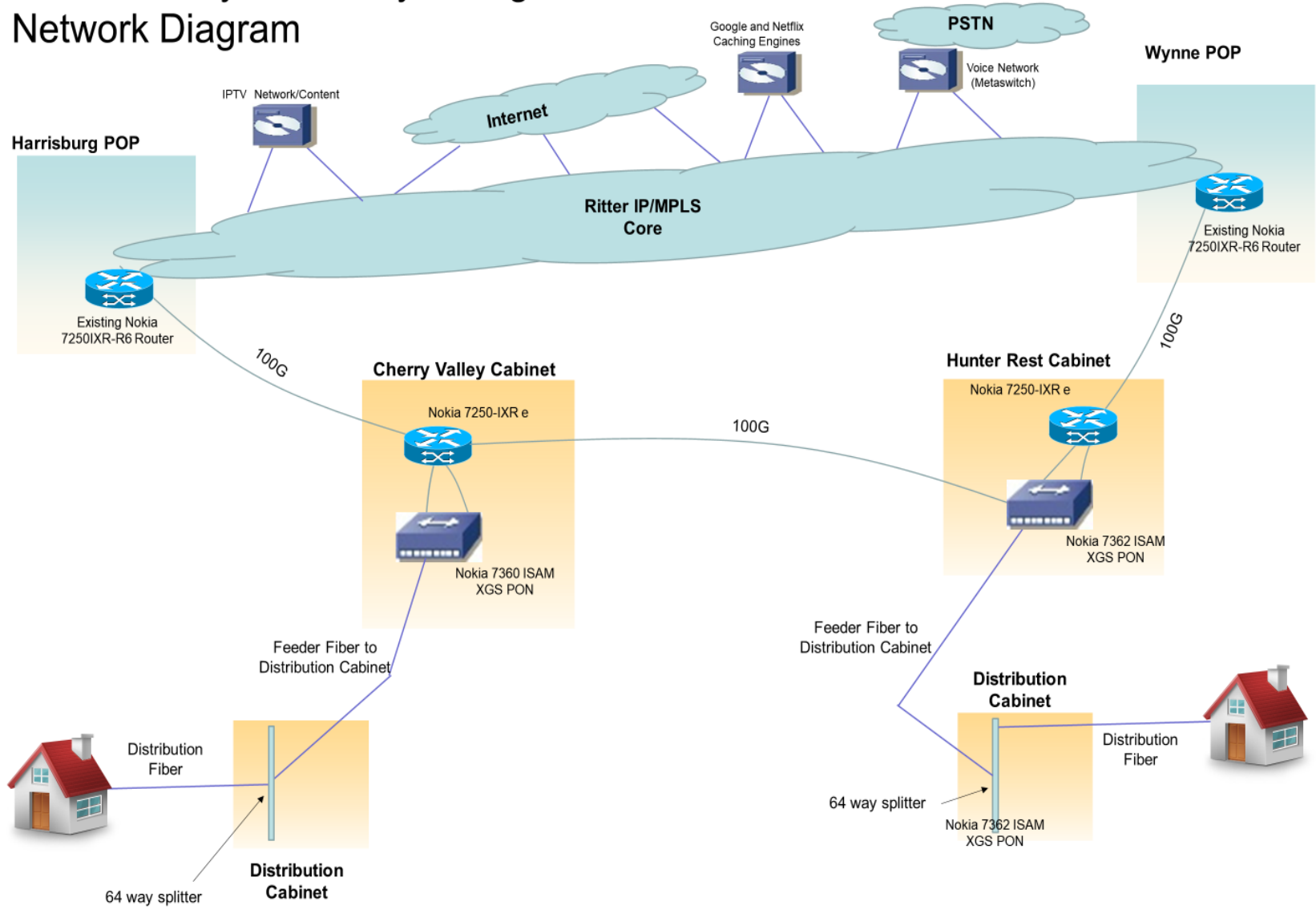
Ritter – Craighead County - East

Craighead County – East Network Diagram



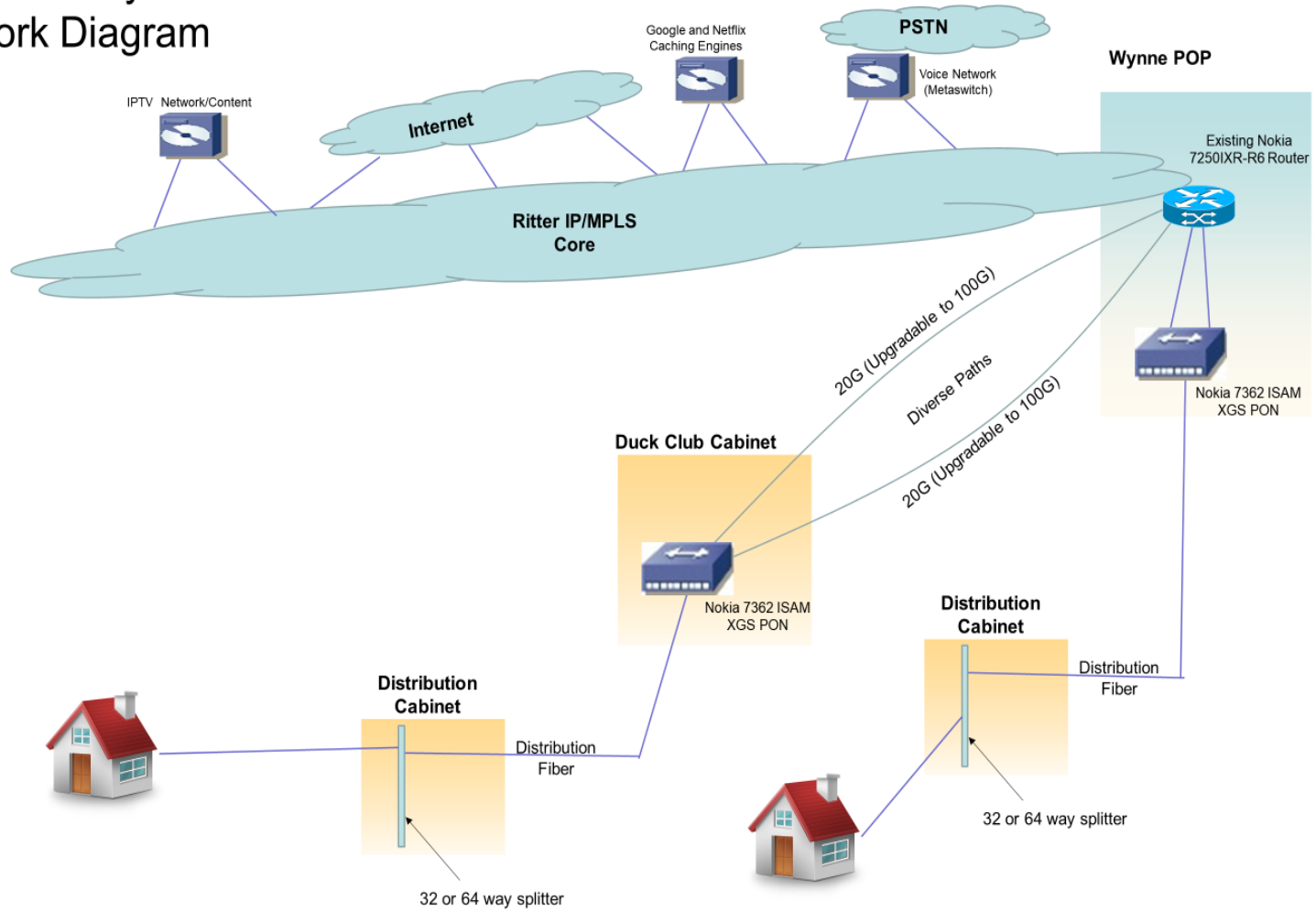
Ritter – Cross County – Crowley's Ridge

Cross County – Crowley's Ridge Network Diagram



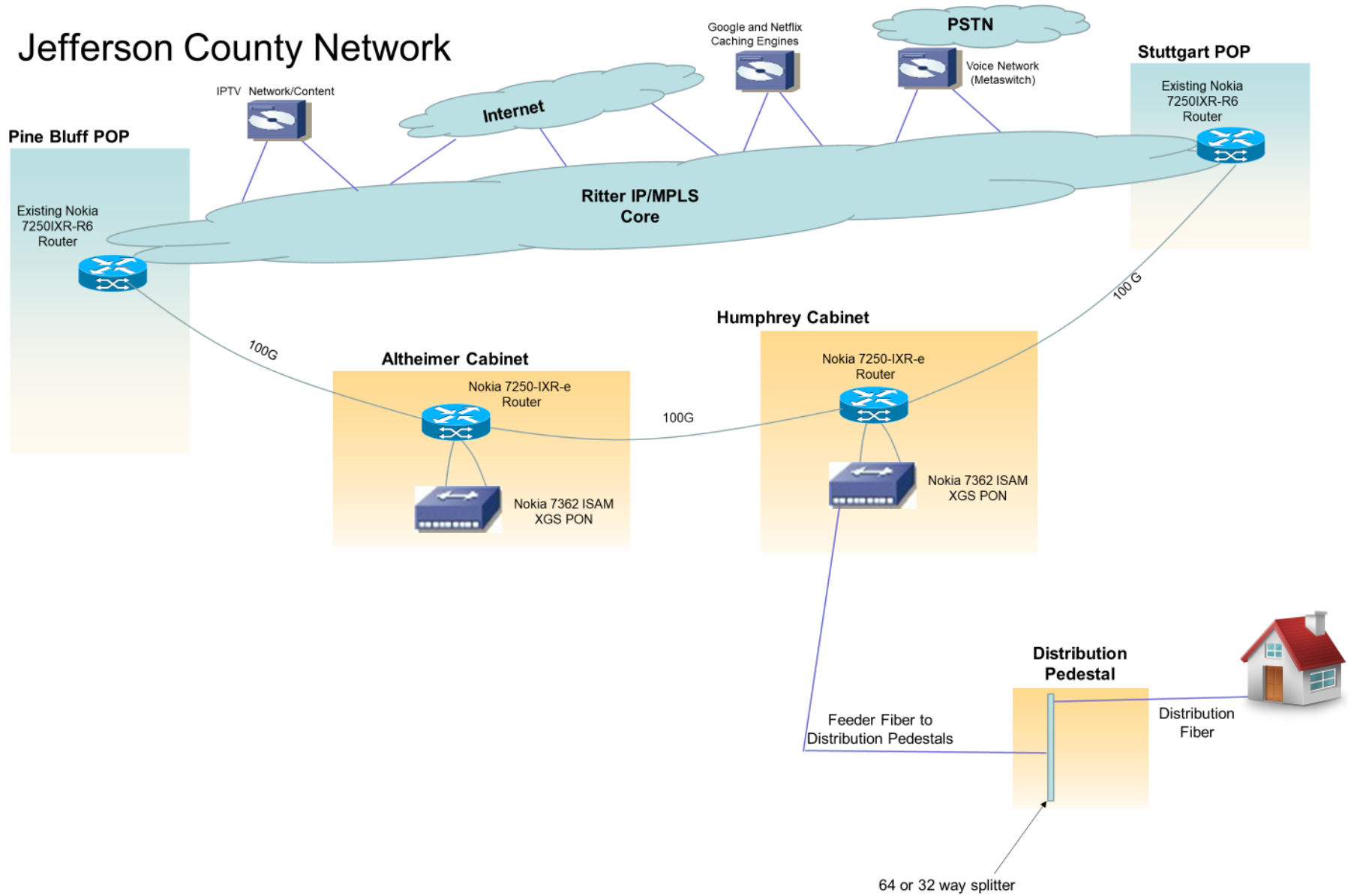
Ritter – Cross County – West

Cross County – West Network Diagram



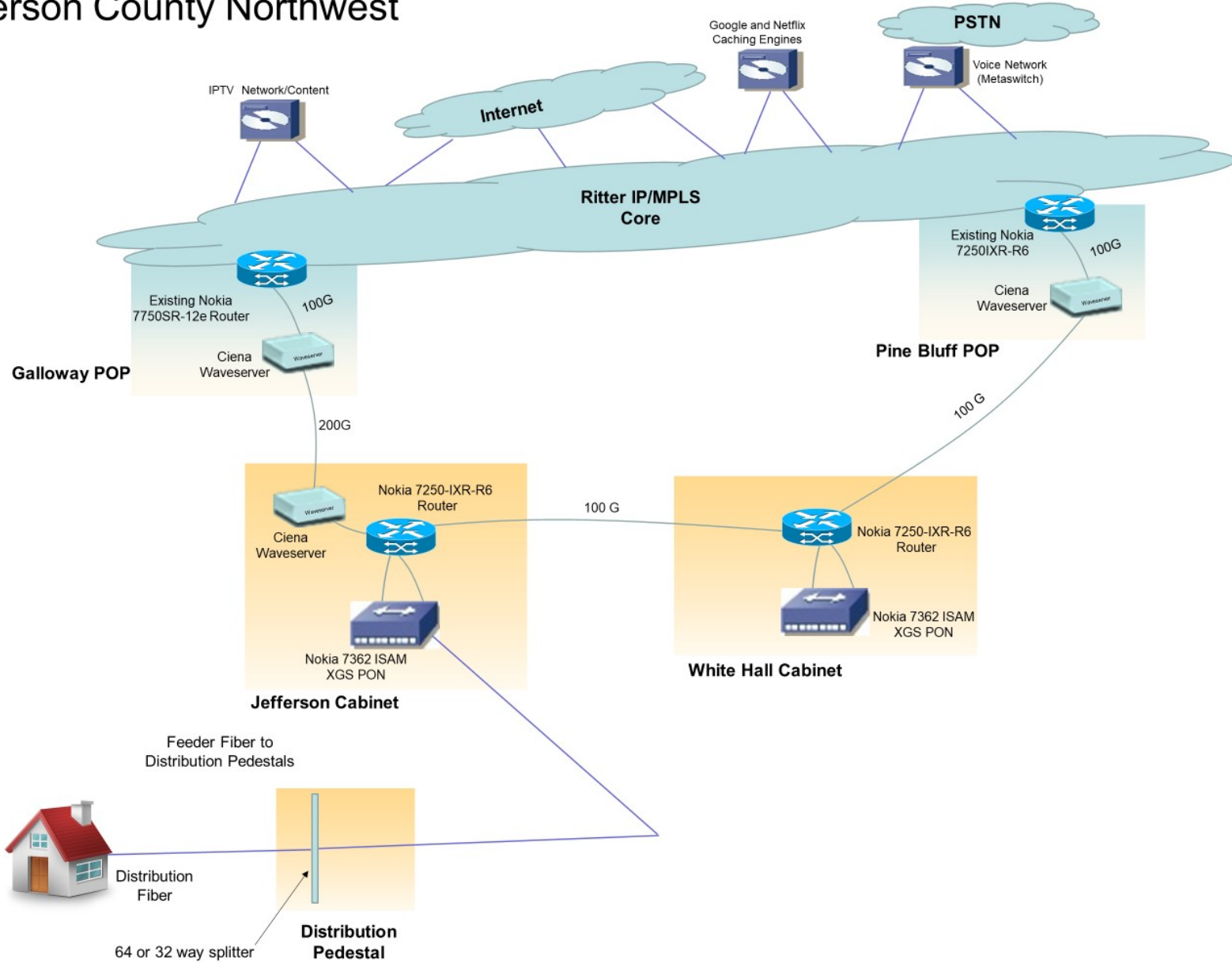
Ritter – Jefferson County – NE

Jefferson County Network



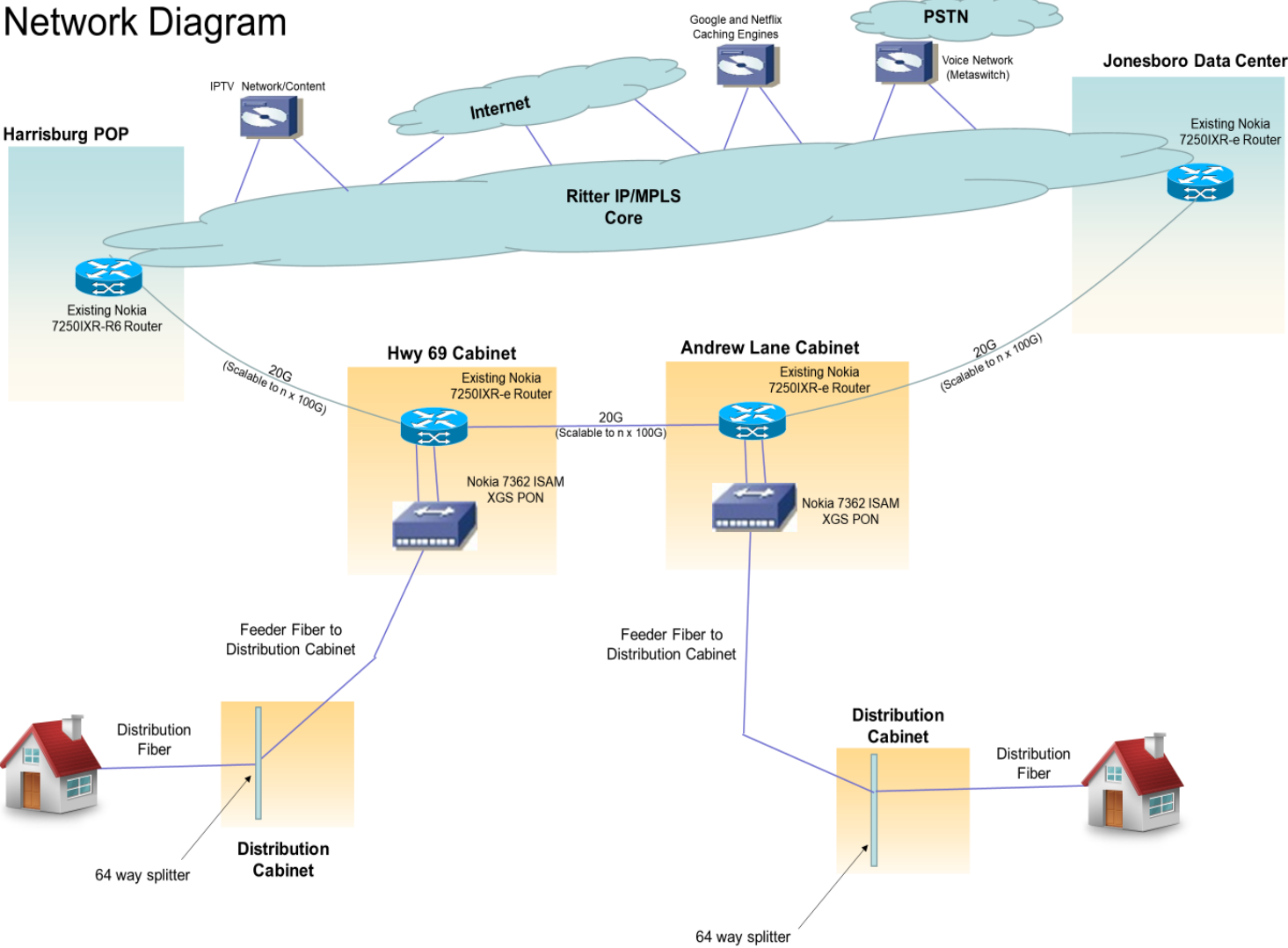
Ritter – Jefferson County – NW

Jefferson County Northwest



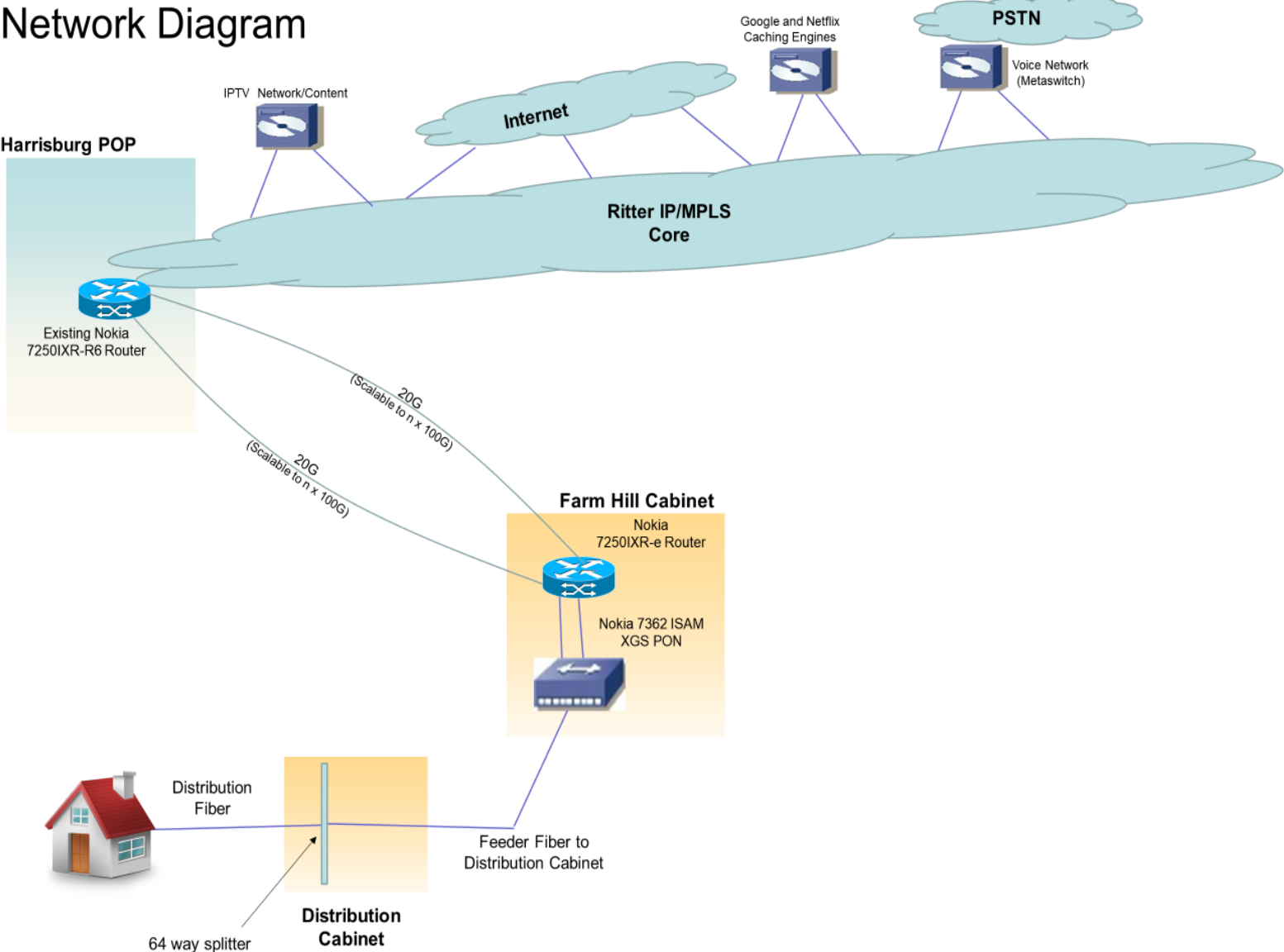
Ritter – Poinsett County – North Central

Poinsett County North Central Network Diagram



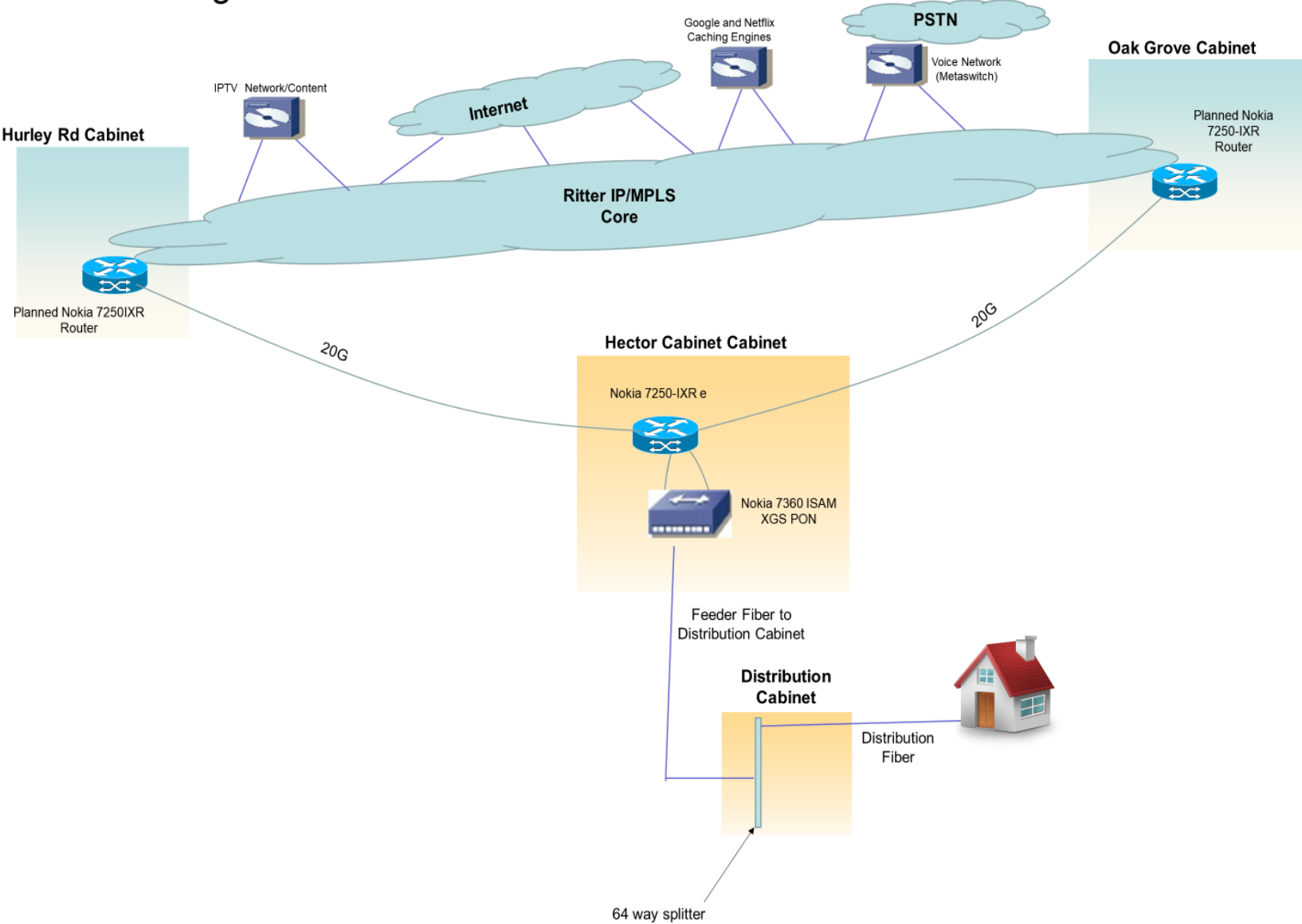
Ritter – Poinsett County – South Central

Poinsett County South Central Network Diagram



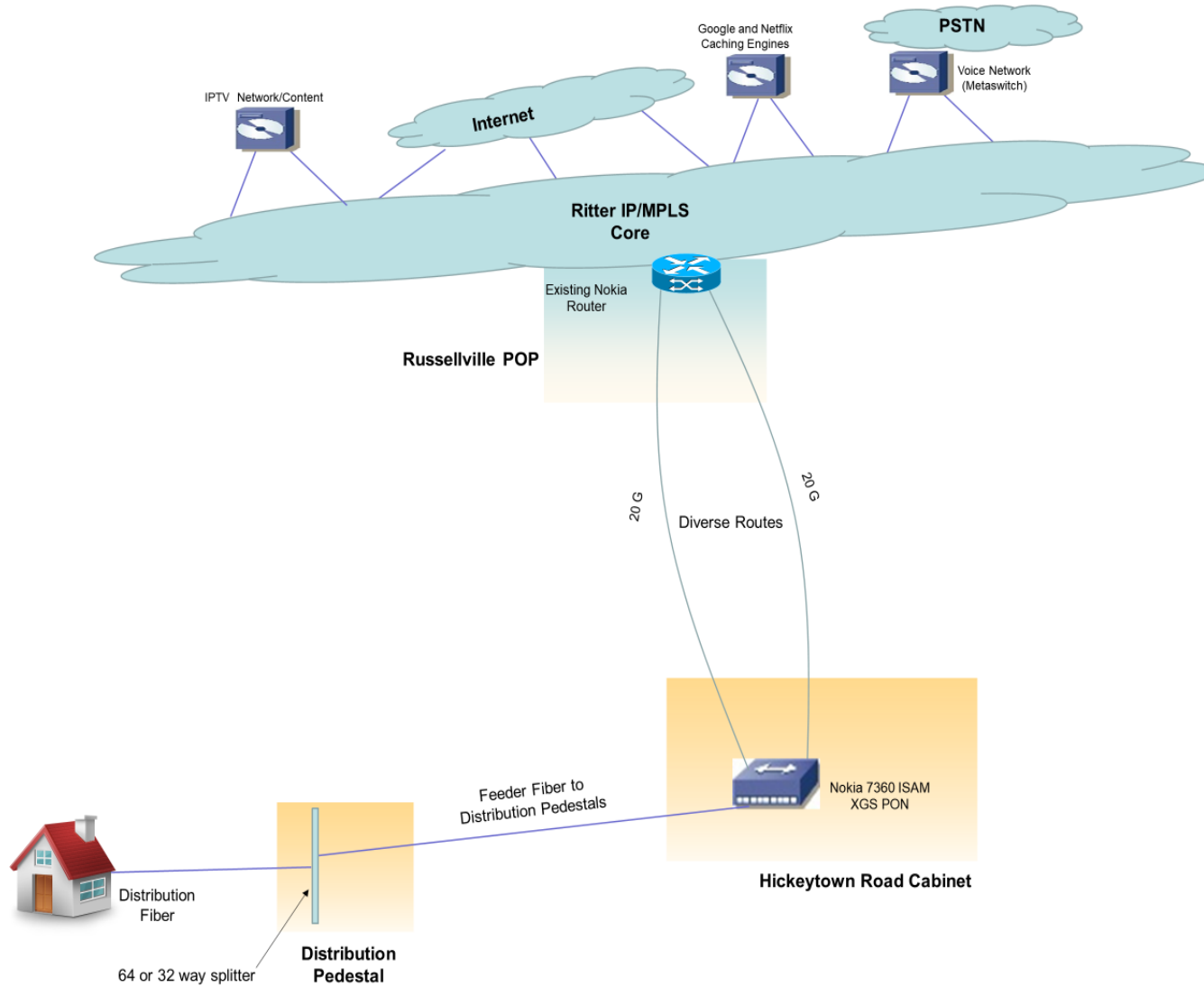
Ritter – Pope County – Appleton-Hector-Scottsville

Pope County – Appleton-Hector-Scottsville Network Diagram



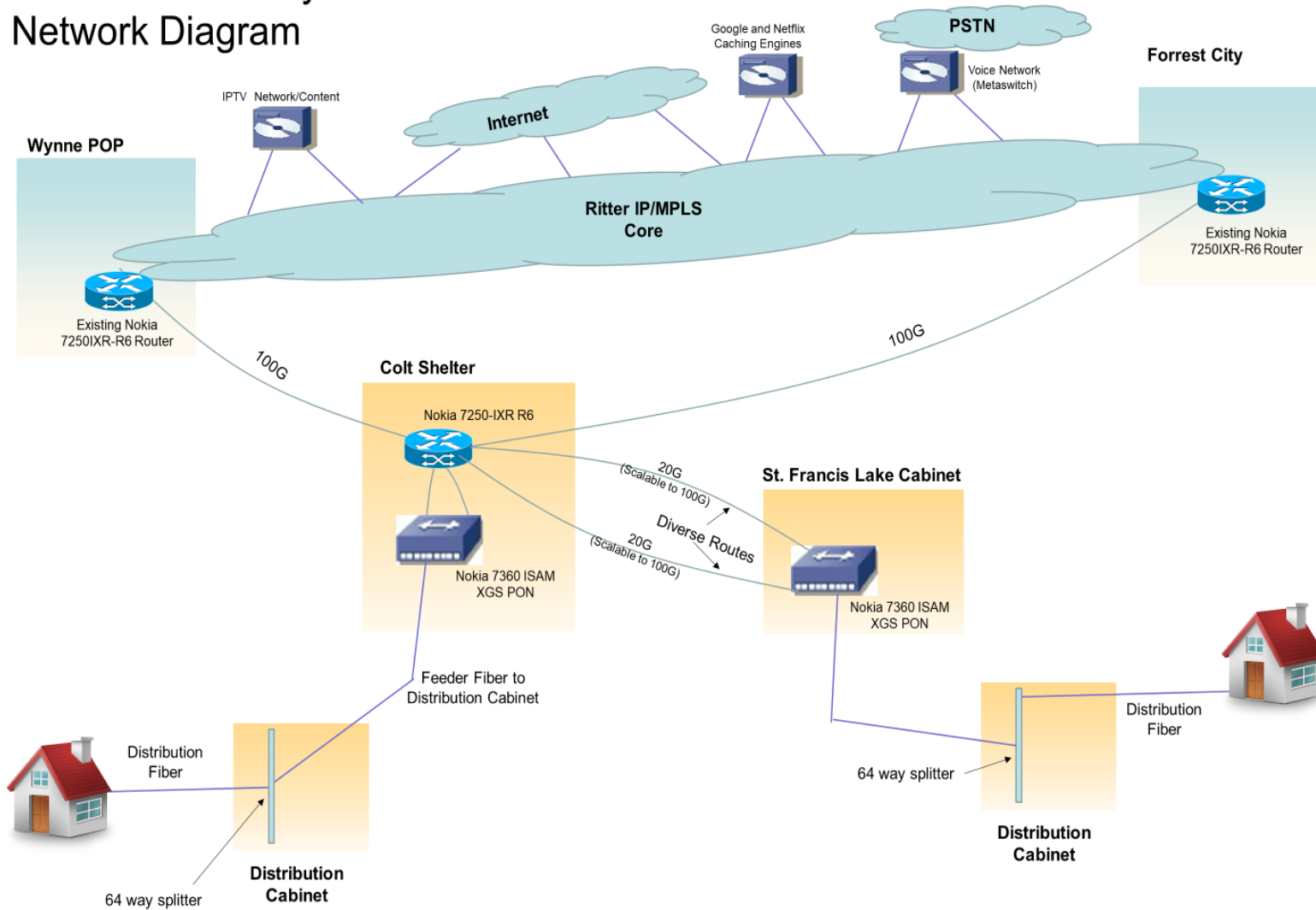
Ritter – Pope County – Southwest

Pope County – SouthWest Network Diagram



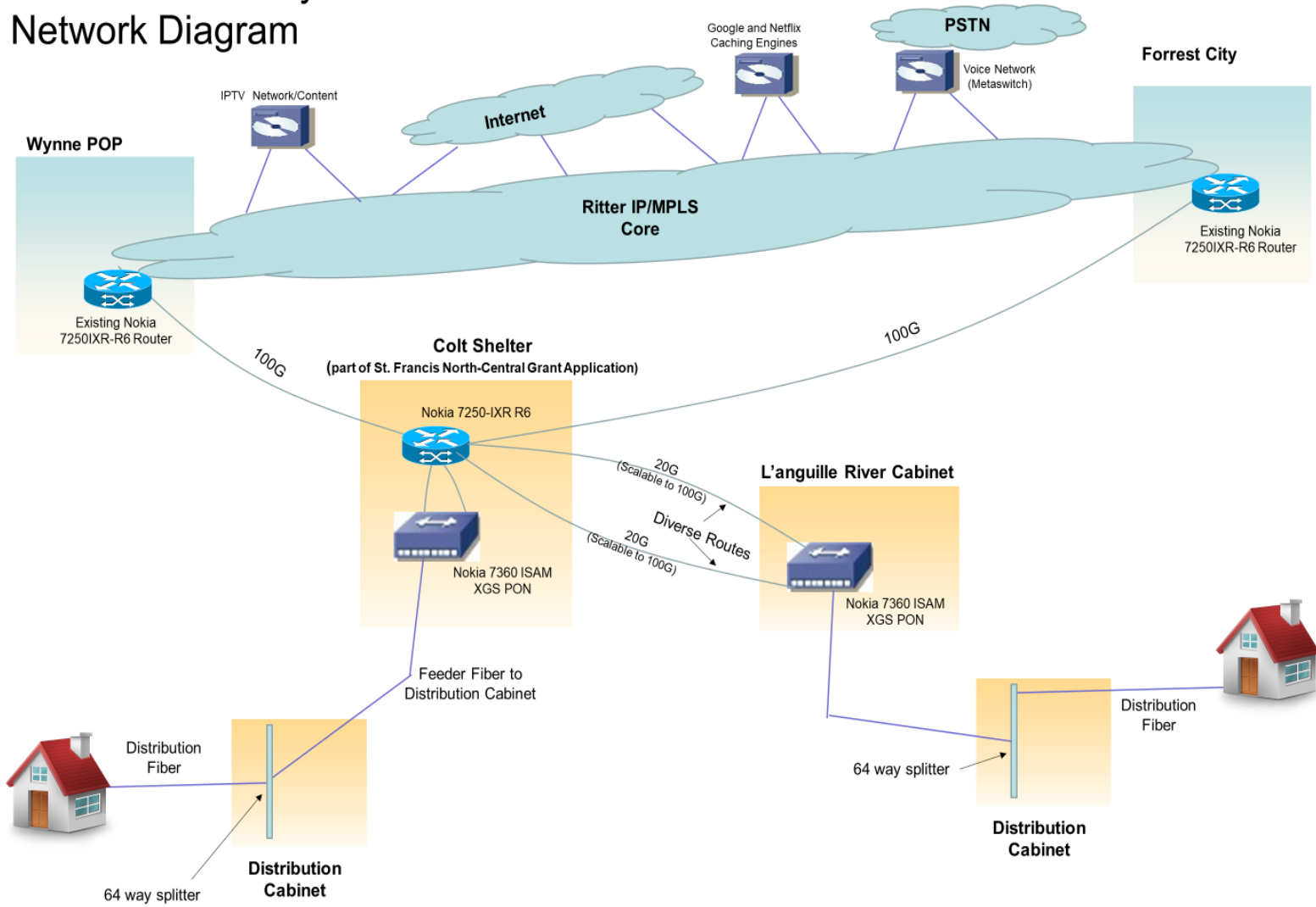
Ritter – St. Francis County – North Central

St. Francis County North-Central Network Diagram

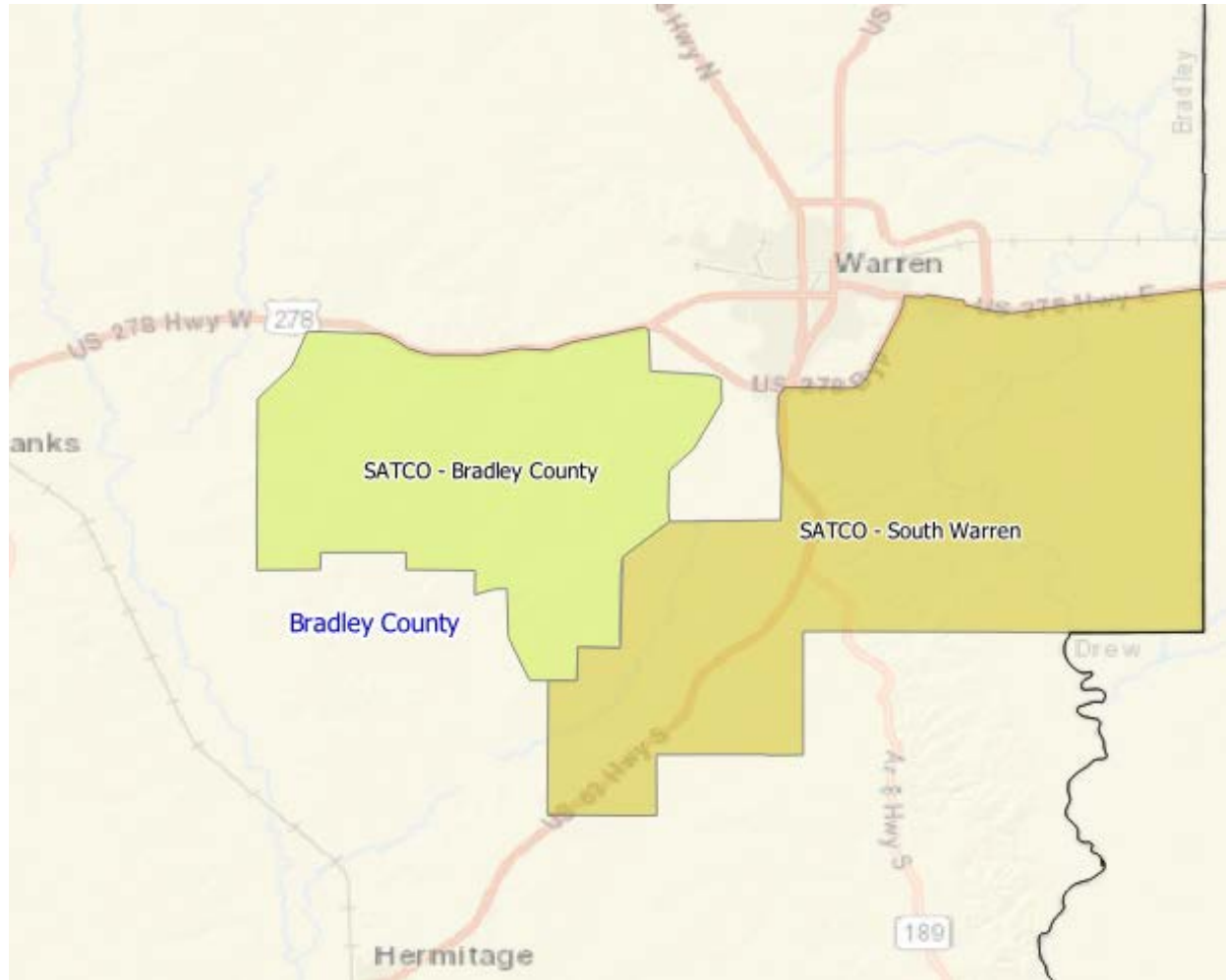


Ritter – St. Francis County – Northwest

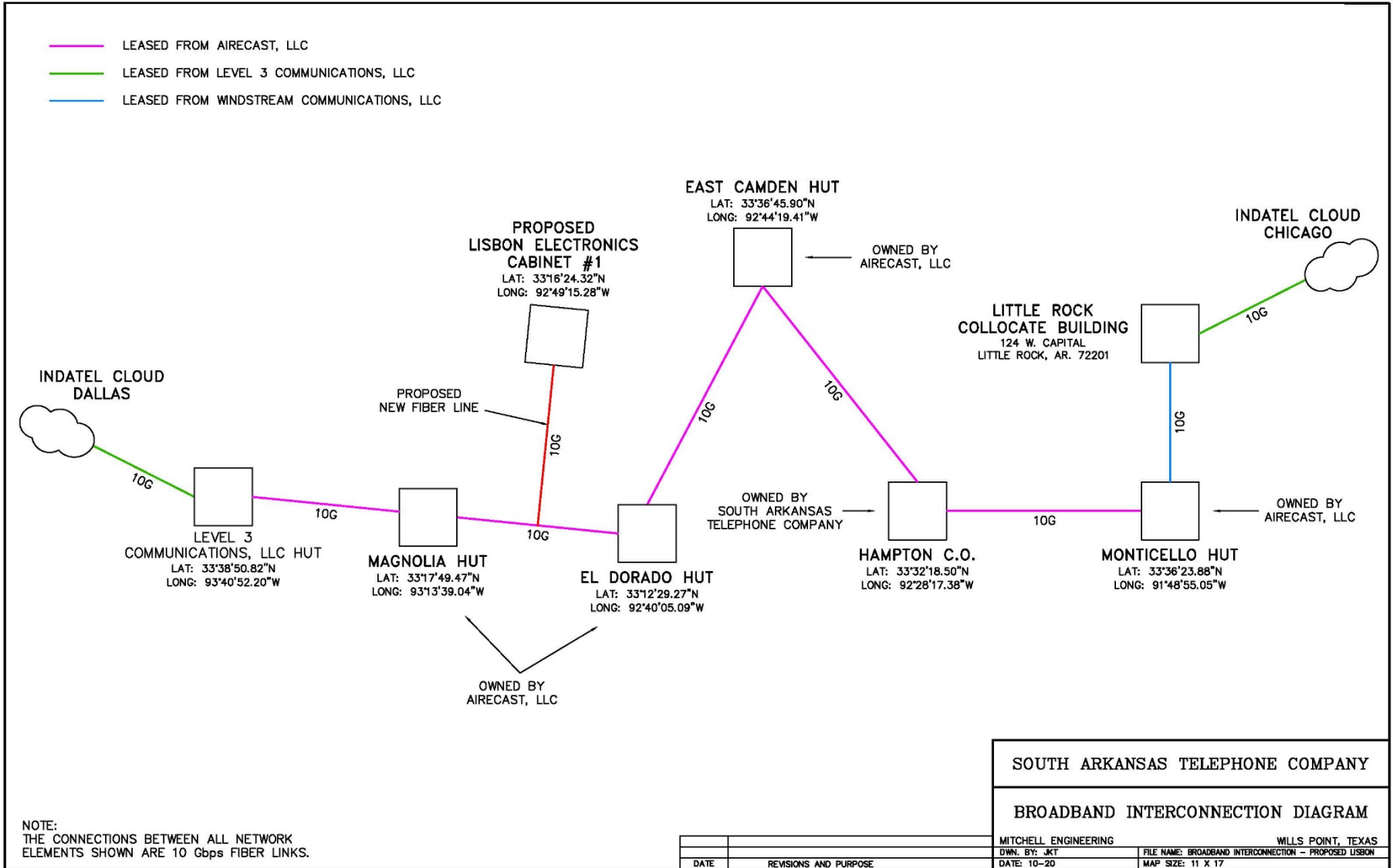
St. Francis County NorthWest Network Diagram



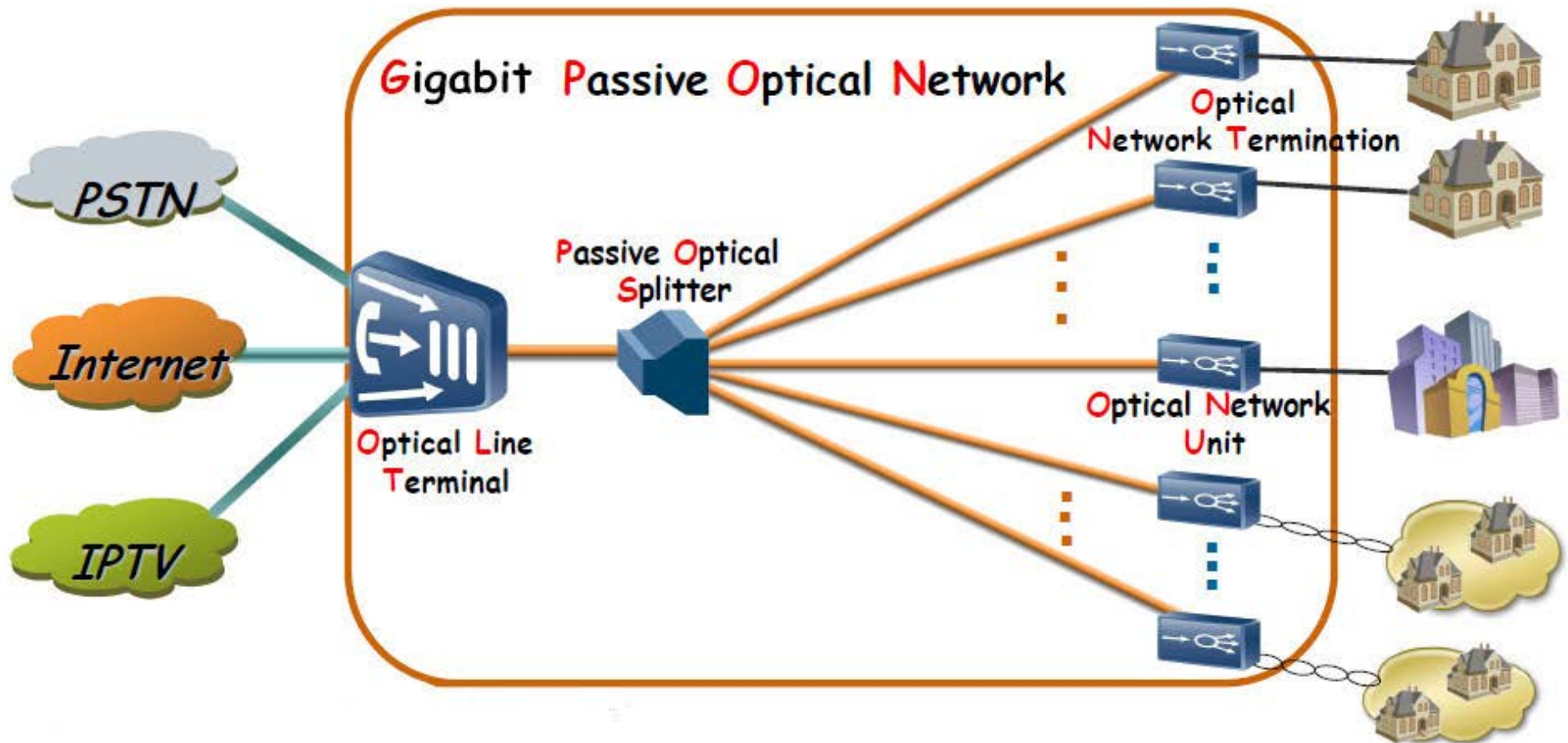
Application	Households	% Served by +25:3 mbps (Form 477 wireline)	Award request	Technology
SATCO - Bradley County	208	35%	\$2,991,357.00	Fiber
SATCO - South Warren	236	73%	\$3,377,110.00	Fiber
Total			\$6,368,467.00	



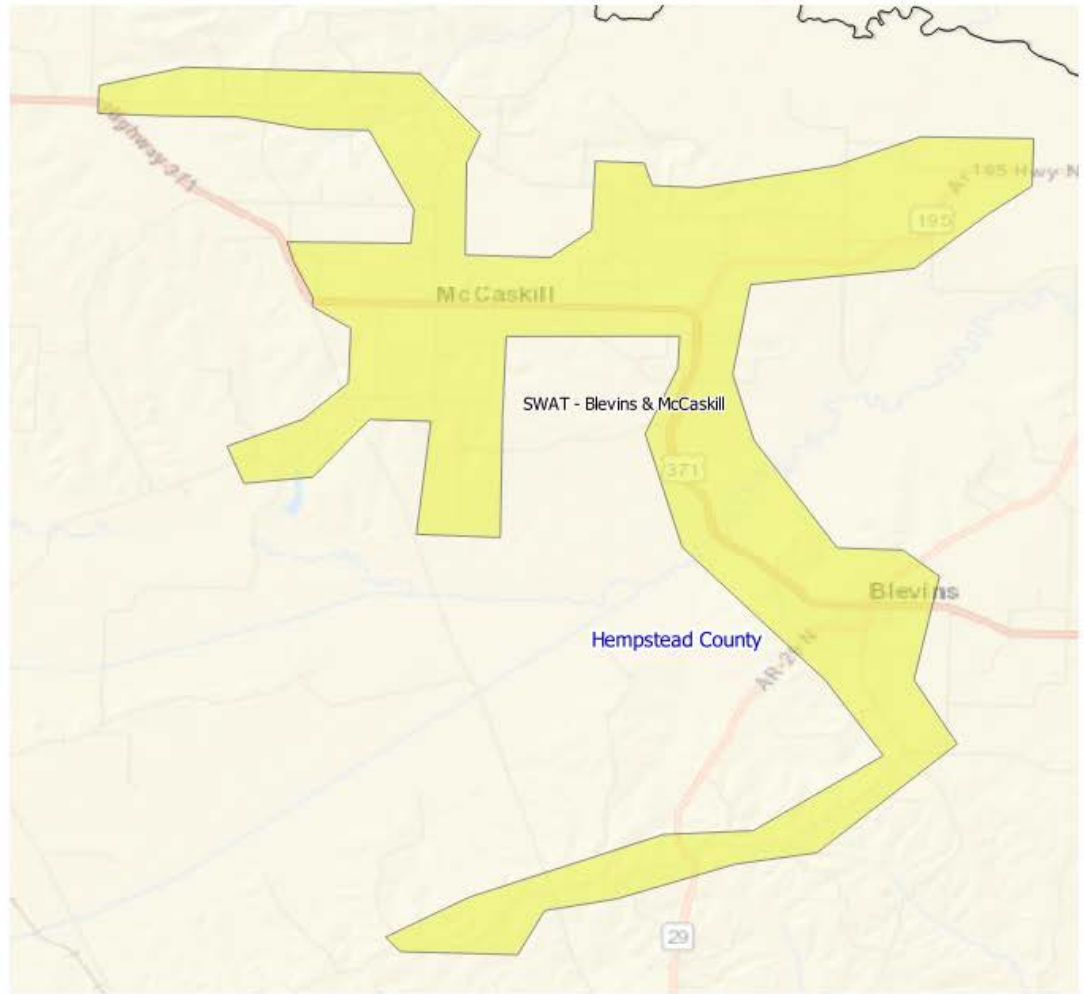
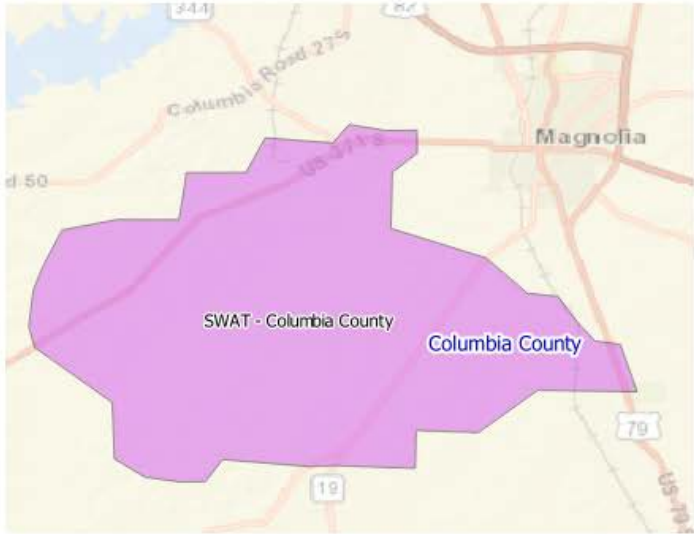
SATCO All Projects



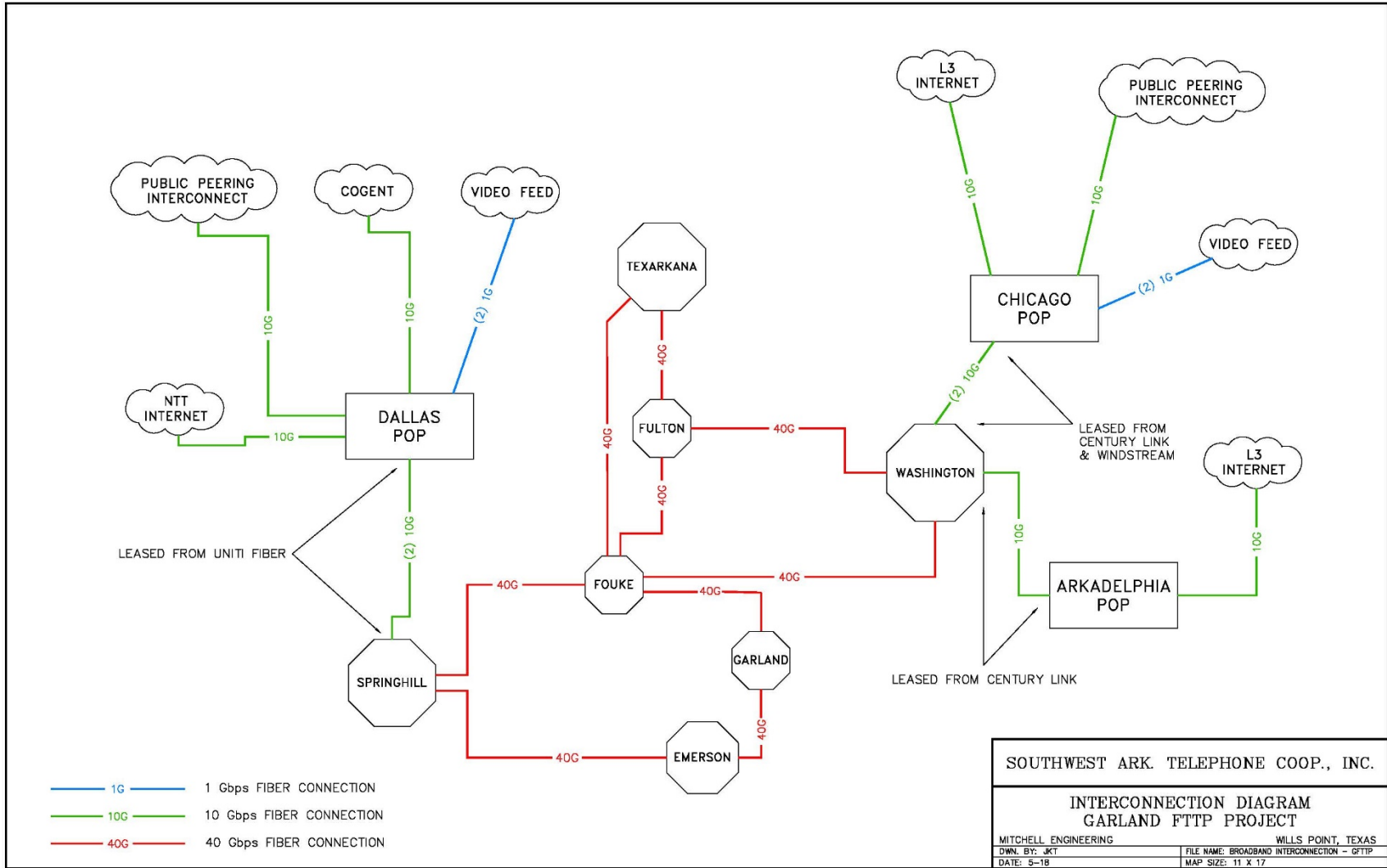
SATCO All Projects



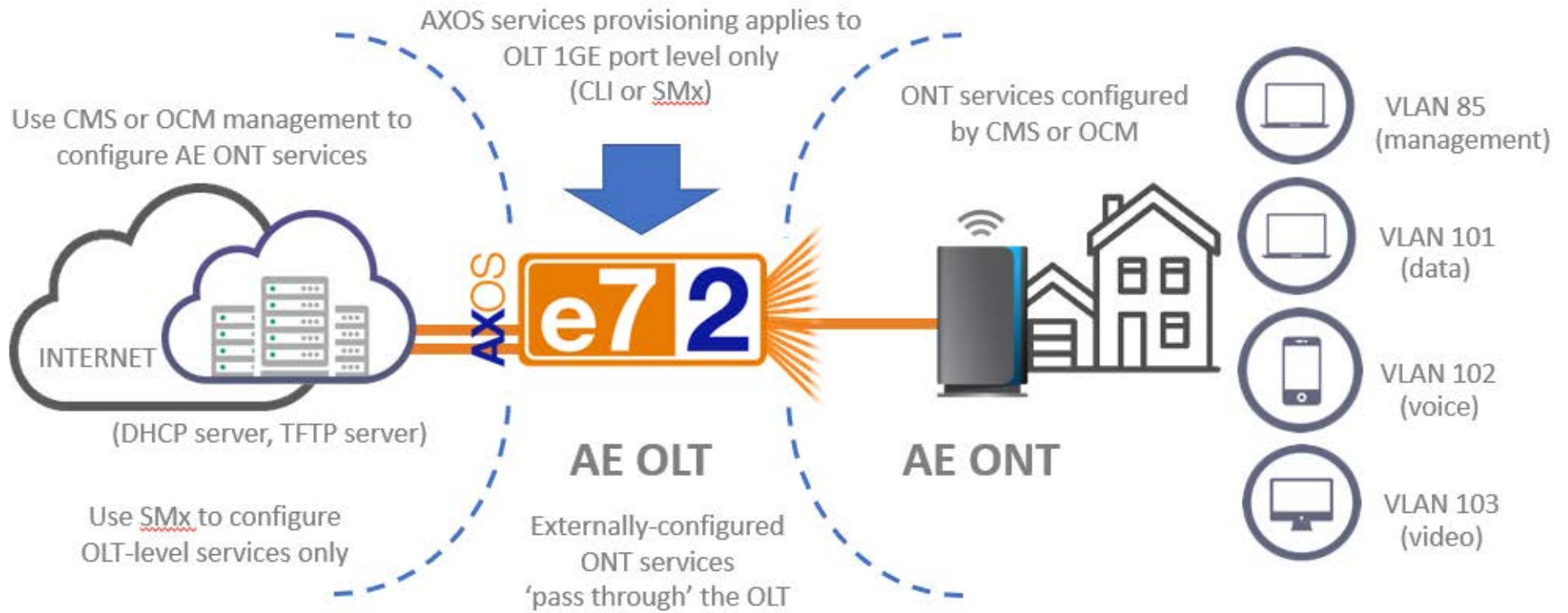
Application	Households	Award request	Technology
SWAT - Blevins & McCaskill	352	\$3,696,764	Fiber
SWAT - Columbia County	633	\$5,494,263	Fiber
Total		\$9,191,027	



SWAT – All Projects

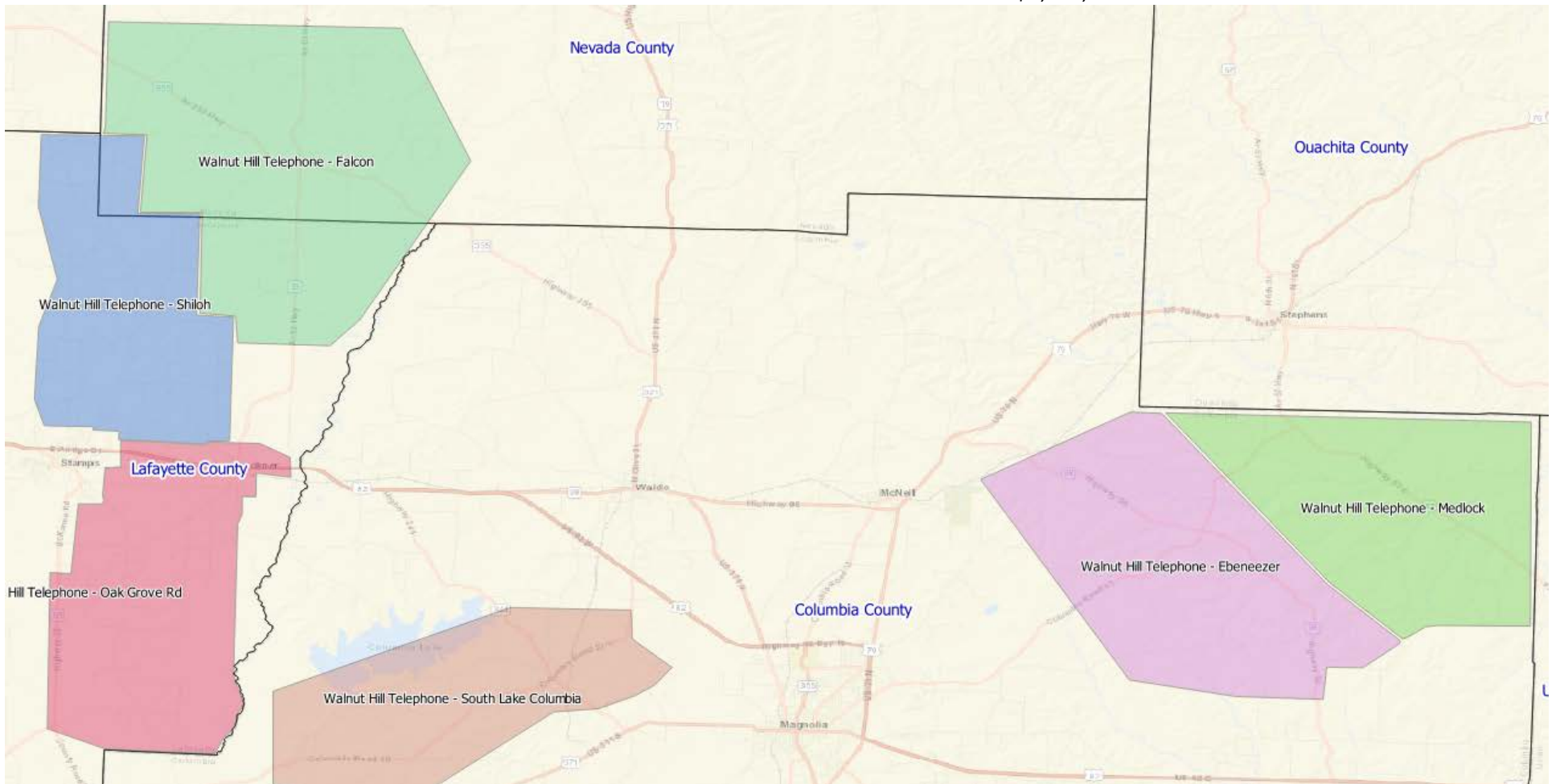


SWAT – All Projects

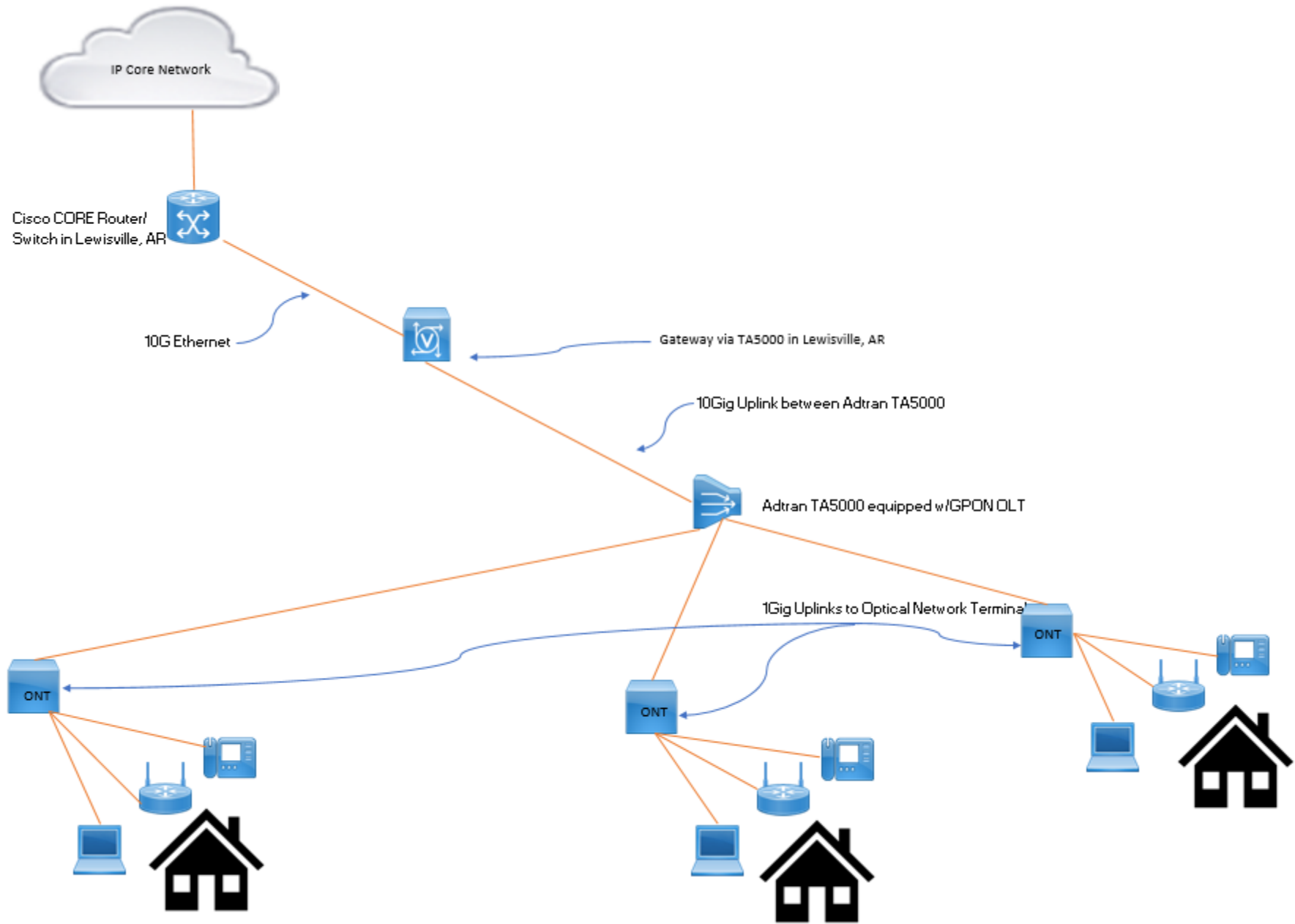


External ONT management model

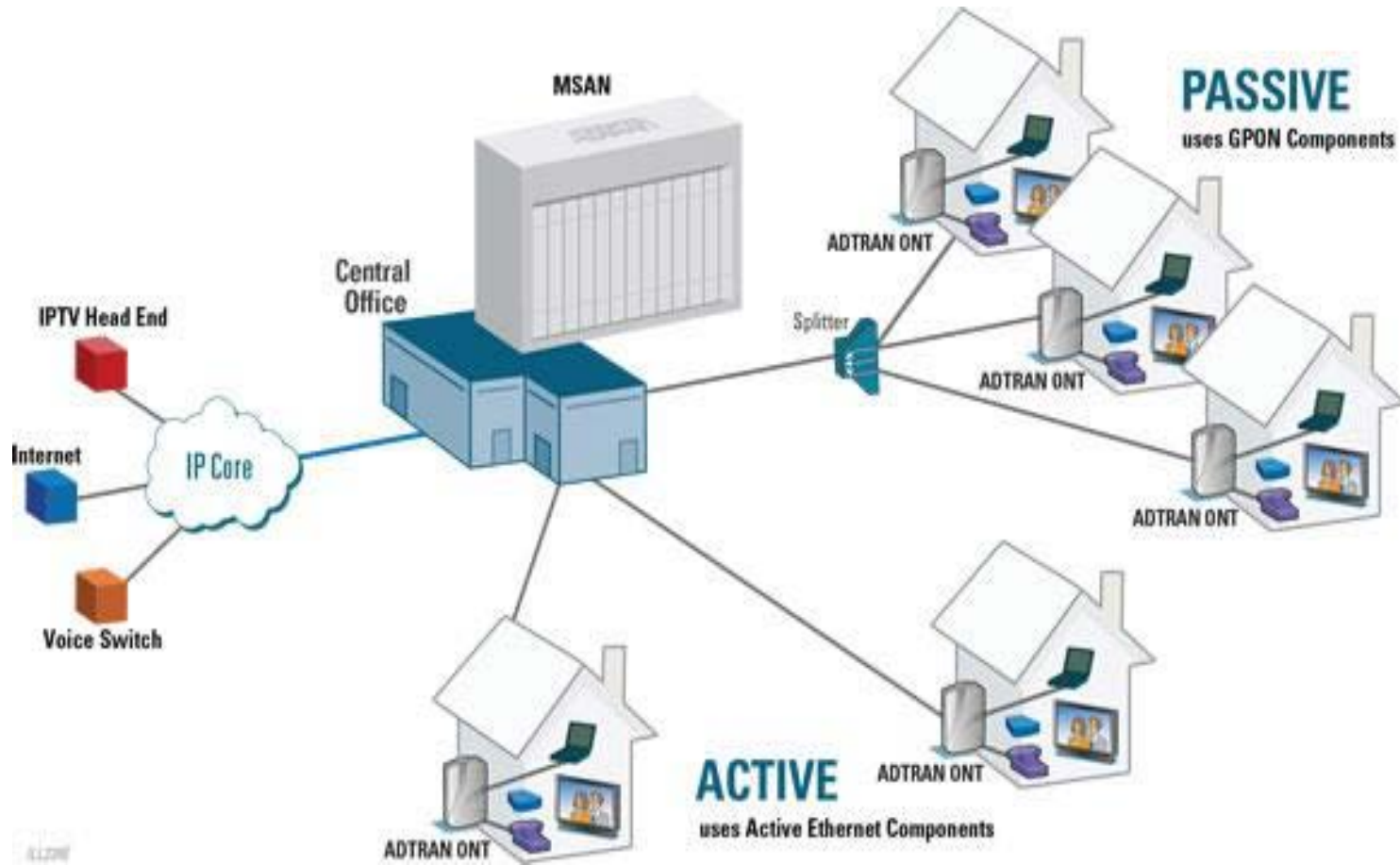
Application	Households	Award request	Technology
Walnut Hill Telephone - Ebenezer	155	\$1,953,060.00	Fiber
Walnut Hill Telephone - Falcon	131	\$1,419,735.00	Fiber
Walnut Hill Telephone - Medlock	55	\$793,461.00	Fiber
Walnut Hill Telephone - Oak Grove Rd	270	\$1,810,694.00	Fiber
Walnut Hill Telephone - Shiloh	206	\$1,845,485.00	Fiber
Walnut Hill Telephone - South Lake Columbia	271	\$1,943,357.00	Fiber
Total		\$9,765,792.00	



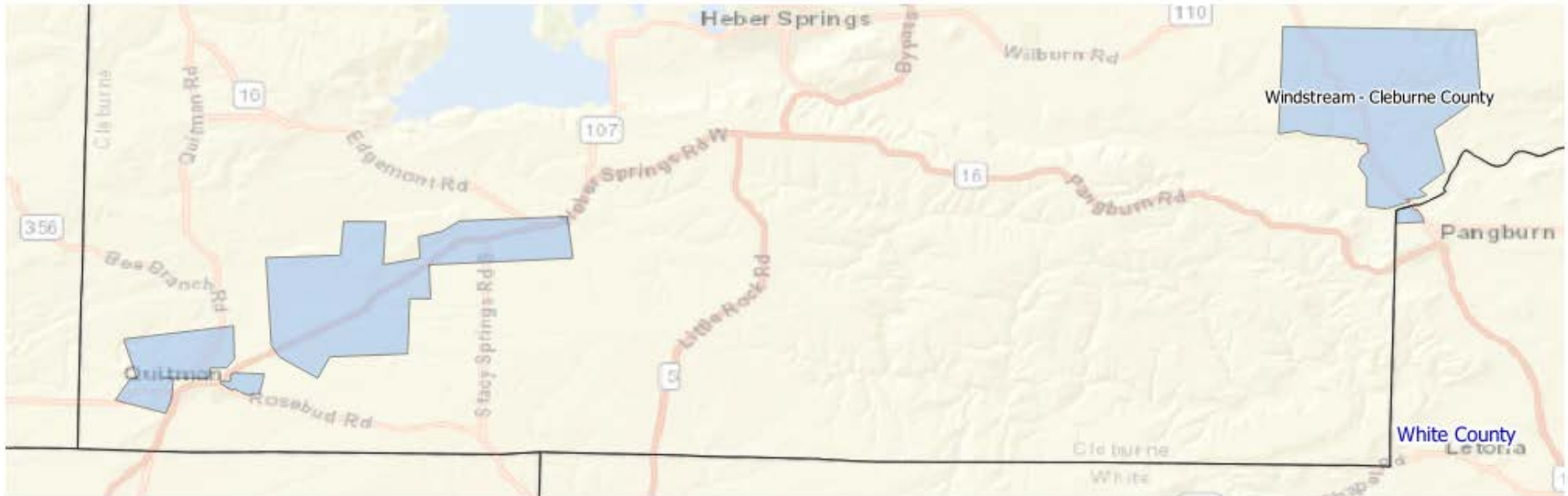
Walnut Hill – All Projects



Walnut Hill – All Projects

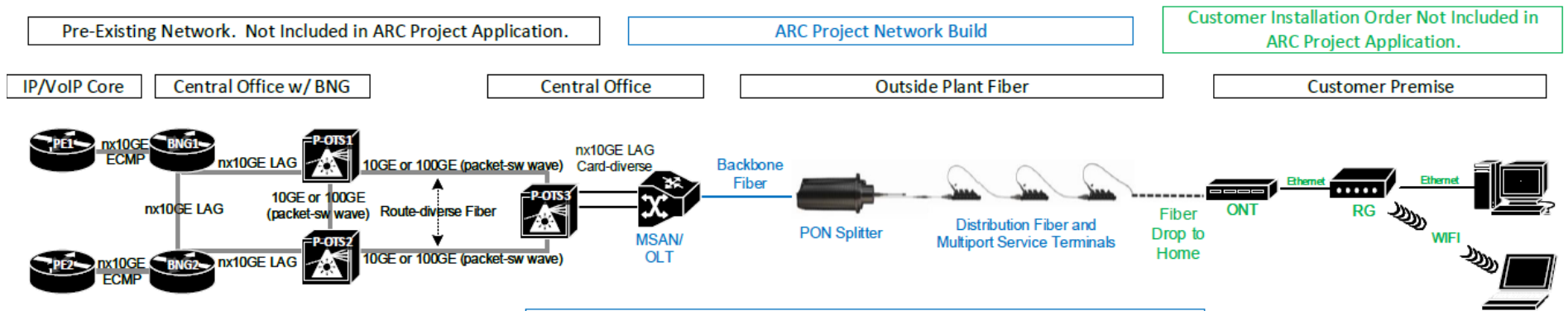


Application	Households	Award request	Technology
Windstream - Cleburne County	424	\$2,802,321.00	Fiber
Windstream - Dallas County 2	366	\$2,440,634.00	Fiber
Total		\$5,242,955.00	



Windstream – All Projects

Windstream General Fiber-To-The-Home Network Architecture



- Multiservice Access Node (MSAN) is a shelf that houses Optical Line Terminal (OLT) equipment in support of PON fiber networks. Windstream deploys both Adtran and Calix MSAN/OLT equipment and considers them equal.
- Adtran MSAN = TA5000 or TA5004
- Calix MSAN = E7 or E3-2
- Fiber, PON splitters and terminals are sourced from multiple suppliers including Commscope and Clearfield. These items are included in the material price per foot.
- Specific quantities and cost information included in application spreadsheet.

- Voice (VoIP) Network = Metaswitch
- IP Core = Juniper MX, Nokia 7750 SR-7S
- IP Provider Edge (PE) = Juniper MX and Cisco ASR9K
- IP Broadband Network Gateway (BNG) = Nokia 7750 SR-7/SR-12
- Transport Packet Optical Network (POTS) = Ciena Z-Series, Z77/Z33/Z22

- Residential Gateway (RG) = Actiontec T3260
- Optical Network Terminal (ONT) depends on MSAN/OLT vendor and individual customer requirements.
- Adtran Most Common ONTs = TA352, TA411, TA372
- Calix Most Common ONTs = 760GX, 803Gv1, 711GE