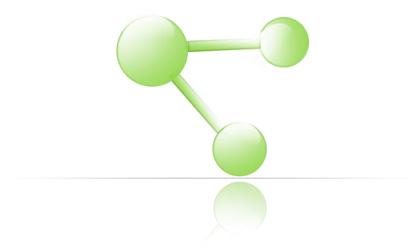


Wholesale Carrier EVPL Interconnect Guide

Updated April 2017





Introduction

The purpose of this guide is to illustrate how the each new EVPL Metro Ethernet Network (MEN) is configured. Included are updates we have implemented to consolidate their coverage where possible. The goal is to increase understanding of the MENs and provide recommended Interconnect points where a carrier may place an NNI and have the ability to service an entire MEN.

Naming Conventions

EVPL

Our ILEC-offered Ethernet Virtual Private Line service offered in legacy CenturyTel and Embarq territories. The service was formerly tariffed by the ILECs but was recently granted forbearance, giving CenturyLink additional flexibility to offer EVPL service on a more competitive basis.

EVPL Cloud

This describes how serving wire centers are grouped to form Ethernet service territories. Historically, the network was divided up into serving areas based on geographic, regulatory, or technical criteria.

EVPL MENs

Metro Ethernet Networks – Are new coverage areas made up of one or more EVPL Clouds that have been interconnected to enhance their marketability. A single aggregation point (NNI) can serve the entirety of these new areas.



About Carrier Interconnection

What is Carrier Interconnection?

Wholesale Carrier customers desire to buy Local Access from ILECs such as CenturyLink to complete their network solutions usually on their own IP networks. In order to use Local Access using switched Ethernet, customers must first purchase an "Aggregation UNI" (User Network Interface) or "NNI/ENNI" (Network-to-Network Interface / Extended Network-to-Network Interface), to be able to route their end-user "EVCs" (Ethernet Virtual Connection) to their IP gateways.

When evaluating whether and where to buy Local Access Interconnects, these carriers must develop their own business cases that demonstrate the benefits in investing in such an Aggregation UNI or NNI/ENNI. They must often consider the market(s) served, the market size, the potential business, and then compare those factors the cost of the Interconnect.

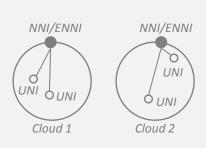
What are CenturyLink's solutions for Carrier Interconnection?

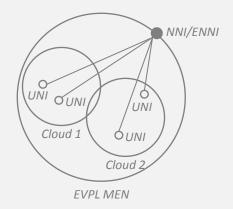
CenturyLink has had great success serving our large metropolitan areas covered under our MOE product (Metro Optical Ethernet). This product however does not cover all of our footprint. Another product, acquired from legacy companies, fills that gap in the form of EVPL (Ethernet Virtual Private Line). EVPL performs very similarly, and in some cases identical to the MOE product.

Challenges with CenturyLink's EVPL Carrier Interconnection

CenturyLink's legacy territories (Embarq and CenturyTel) are often rural in nature, and in many instances surround a metropolitan area rather than penetrate into the urban framework of the city itself.

With the creation of the EVPL MENs, CenturyLink was successful in consolidating many of the EVPL Clouds into EVPL MENs. Over time, we expect the coverage area of each MEN to be larger which, will make interconnection an easier decision for Wholesale Carriers.

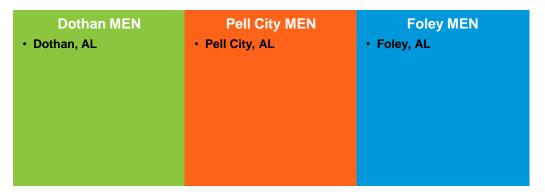


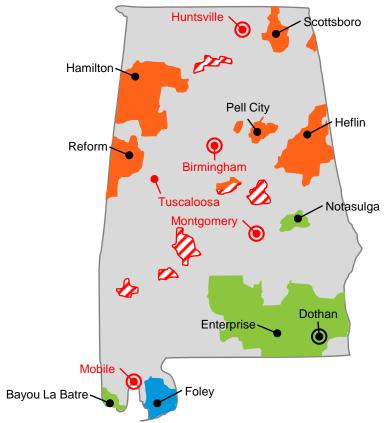






Where to Interconnect in Alabama?







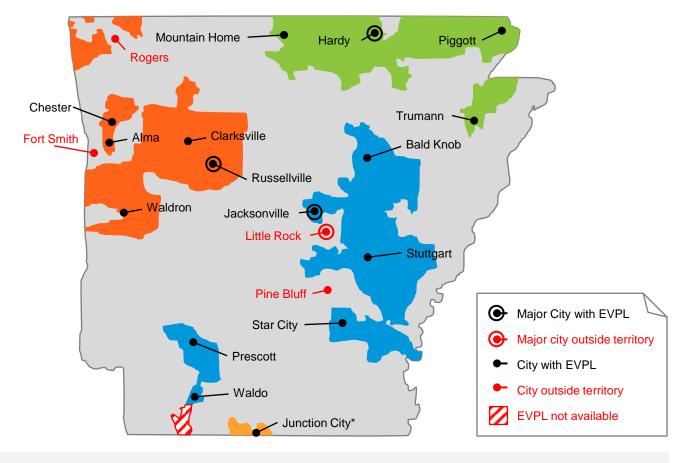
- · AL has 3 EVPL MENs spanning 4 LATAs and 93 wire-centers equipped for Ethernet
- LATAs in these MEN are 476, 477, 478 and 480





Where to Interconnect in Arkansas?

Hardy MEN • Hardy, AR	Russellville MEN • Russellville, AR	Jacksonville MEN • Jacksonville, AR	Marion MEN • Marion, LA
			(* This is a Louisiana MEN. See LA Map for more details)



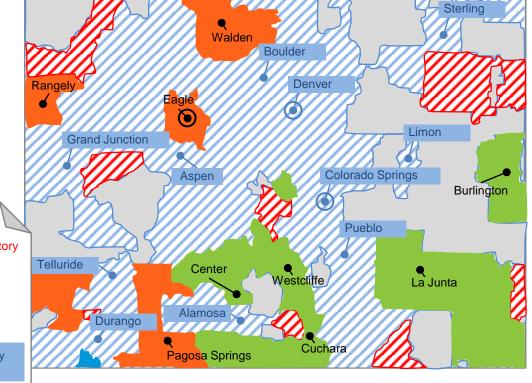
- AR has 4 EVPL MENs spanning 3 LATAs and 121 wire-centers equipped for Ethernet
- The Marion MEN is a Louisiana MEN (See LA Map)
- LATAs in these Clouds are 526, 528 and 530





Where to Interconnect in Colorado?





Major City with EVPLMajor city outside territory

- City with EVPL
- City outside territory
- EVPL not available
- Major city supported by
- MOE (Legacy Qwest)

Summary:

MOE territory

- CO has 2 EVPL MENs spanning 2 LATAs and 49 wire-centers equipped for Ethernet
- LATAs in these MENs are 656 and 658





Where to Interconnect in Florida?

North Florida MEN

• Ft. Walton, FL (LATAs 448 and 450)

• Tallahassee, FL (LATA 953)

Fort Walton Cloud
Tallahassee Cloud

Central Florida MEN

· Winter Park, FL

Ocala Cloud

Leesburg Cloud

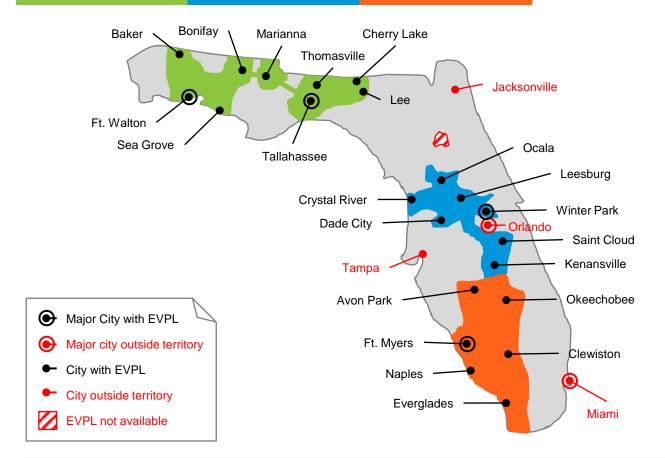
Winter Park Cloud

South Florida MEN

- Ft. Meyers (Preferred)
- Avon Park, FL
- · Naples, FL

Winter Park, FL

Avon Park Cloud Fort Myers Cloud Naples Cloud



- FL has 3 EVPL MENs spanning 6 LATAs and 142 wire-centers equipped for Ethernet
- LATAs in these MENs are 448, 450, 454, 458, 939 and 953





Where to Interconnect in Georgia?

Hinesville MEN

· Hinesville, GA





Major city outside territory

City with EVPL

City outside territory

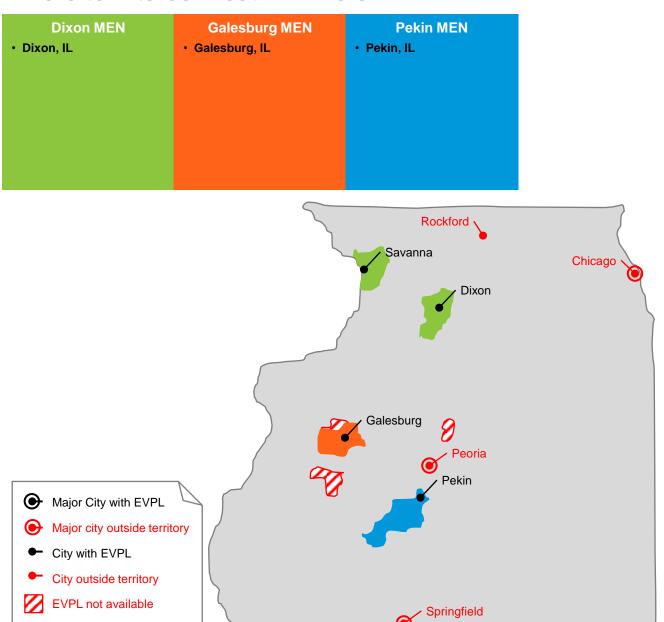
EVPL not available

- GA has 1 EVPL MEN spanning 1 LATAs and 4 wire-centers equipped for Ethernet
- LATA in this MEN is 440





Where to Interconnect in Illinois?



- IL has 3 EVPL MENs spanning 3 LATAs and 20 wire-centers equipped for Ethernet
- LATAs in these MENs are 364, 368 and 977

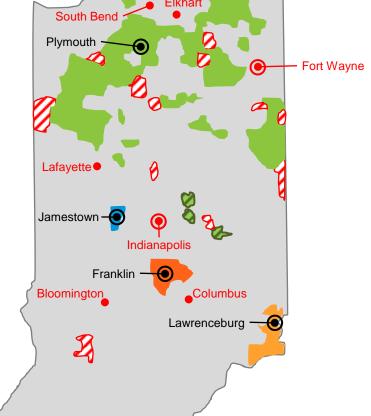




Where to Interconnect in Indiana?







- IN has 6 EVPL MENs spanning 6 LATAs and 79 wire-centers equipped for Ethernet
- LATAs in these MENs are 332, 334, 336, 338, 922 and 937





Where to Interconnect in Kansas?

Gardner MEN

· Gardner, KS

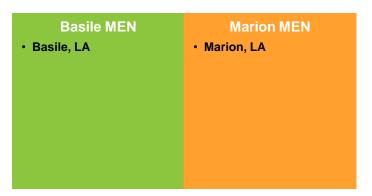


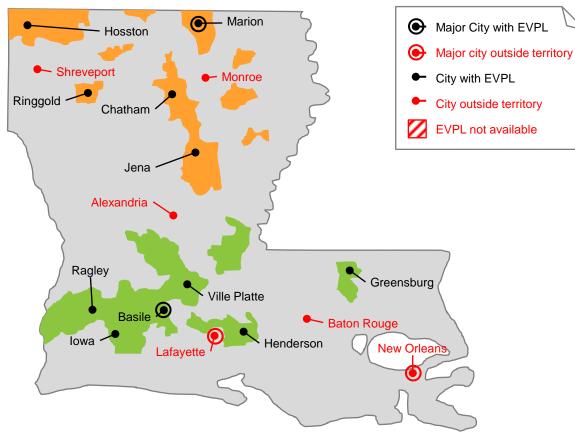
- KS has 1 EVPL MEN spanning 3 LATAs and 98 wire-centers equipped for Ethernet
- LATAs in this MEN are 532, 534 and 524





Where to Interconnect in Louisiana?





- LA has 2 EVPL MENs spanning 3 LATAs and 63 wire-centers equipped for Ethernet
- The Marion MEN extends into Arkansas (See AR Map)
- LATAs in these MENs are 486, 488 and 492



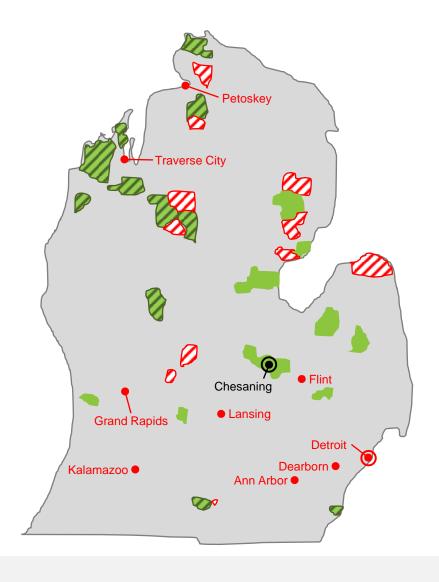


Where to Interconnect in Michigan?

Chesaning MEN

· Chesaning, MI



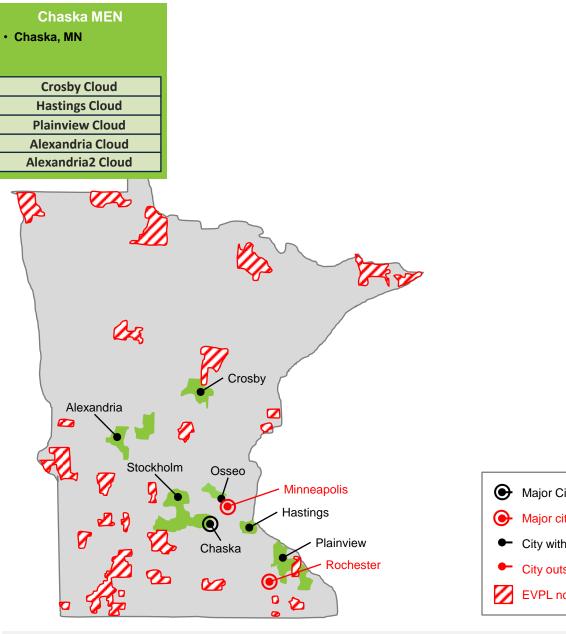


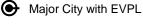
- MI has 1 EVPL MEN spanning 4 LATAs and 38 wire-centers equipped for Ethernet
- LATAs in this MEN are 344, 346, 348 and 340





Where to Interconnect in Minnesota?





- Major city outside territory
- City with EVPL
- City outside territory
- EVPL not available

- MN has 1 EVPL MEN spanning 4 LATAs and 42 wire-centers equipped for Ethernet
- LATAs in this MEN are 620, 626, 628 and 636





Where to Interconnect in Missouri?

Warrensburg MEN

• Warrensburg, MO

Wentzville, MO

Branson MEN

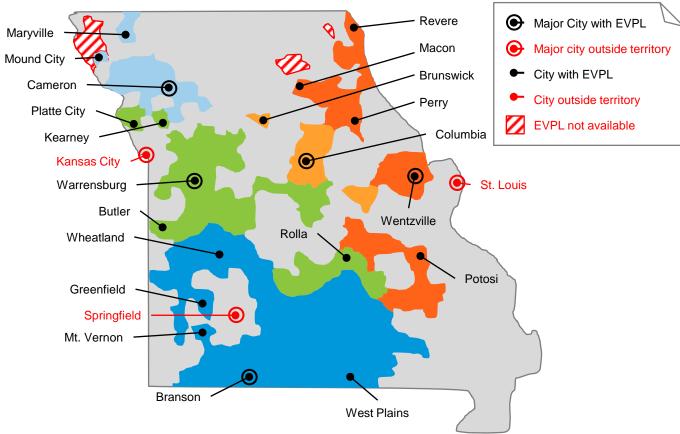
• Branson, MO

Columbia MEN

• Columbia, MO

Cameron MEN

• Cameron, MO



- MO has 5 EVPL MENs spanning 4 LATAs and 271 wire-centers equipped for Ethernet
- LATAs in these MENs are 520, 521, 522 and 524

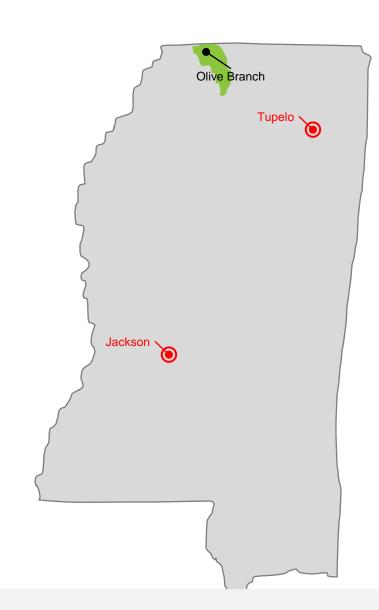




Where to Interconnect in Mississippi?

Olive Branch MEN

· Olive Branch, MS



Major City with EVPL

Major city outside territory

City with EVPL

City outside territory

EVPL not available

- MS has 1 EVPL MEN spanning 1 LATA and 3 wire-centers equipped for Ethernet
- LATA in this MEN is 468



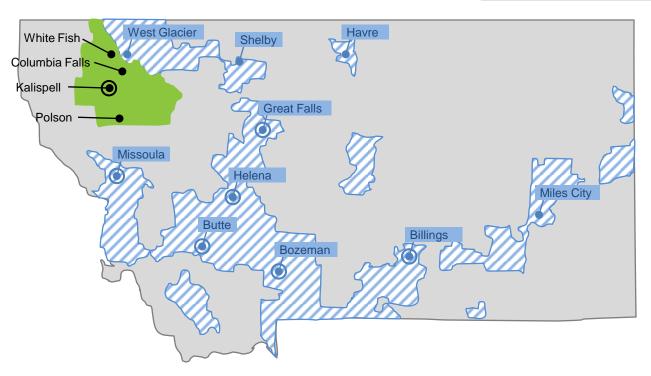


Where to Interconnect in Montana?

Kalispell MEN

· Kalispell, MT





- MT has 1 EVPL MEN spanning 1 LATA and 14 wire-centers equipped for Ethernet
- LATA in this MEN is 648





Where to Interconnect in North Carolina?

Rocky Mount MEN

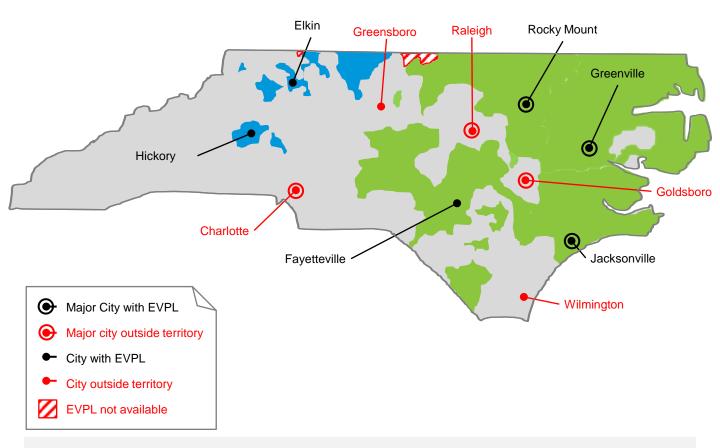
· Rocky Mount, NC

Fayetteville Cloud
Greenville Cloud

Elkin/Hickory MEN

- · Elkin, NC
- · Hickory, NC
- Rocky Mount, NC*

(* The Elkin/Hickory Cloud is Interconnected with Rocky Mount MEN BUT, due to latency concerns, it is best to connect to Elkin or Hickory directly)



- NC has 2 EVPL MEN spanning 5 LATAs and 205 wire-centers equipped for Ethernet
- The Elkin/Hickory MEN is excluded from the Rocky Mount MEN because of extreme latency concerns although they are technically interconnected.
- LATAs in these MENs are 422, 424, 426, 949 and 951

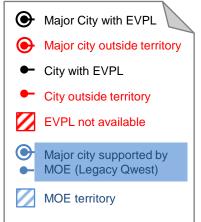


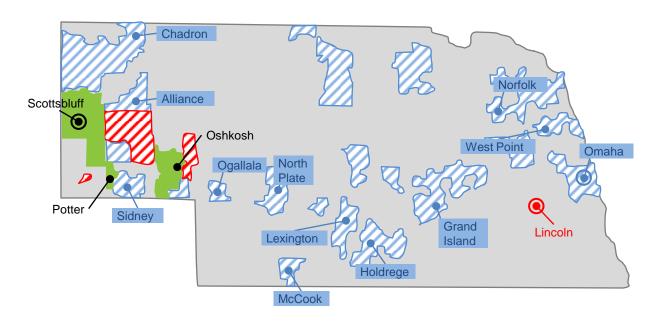


Where to Interconnect in Nebraska?

Scottsbluff MEN

· Scottsbluff, NE





- NE has 1 EVPL MEN spanning 1 LATA and 8 wire-centers equipped for Ethernet
- LATA in this MEN is 646

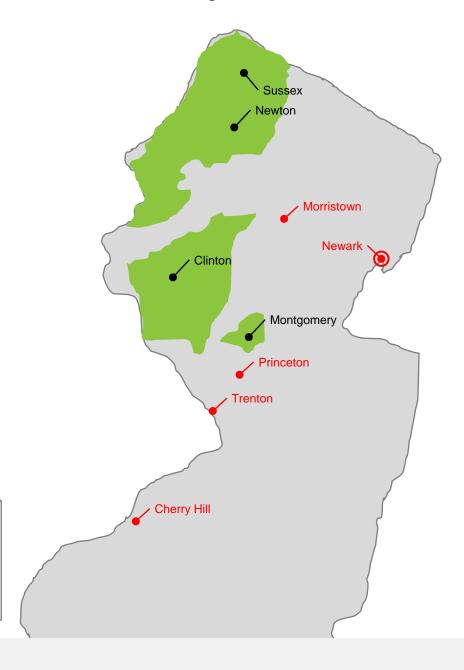




Where to Interconnect in New Jersey?

Clinton MEN

· Clinton, NJ



Major City with EVPL

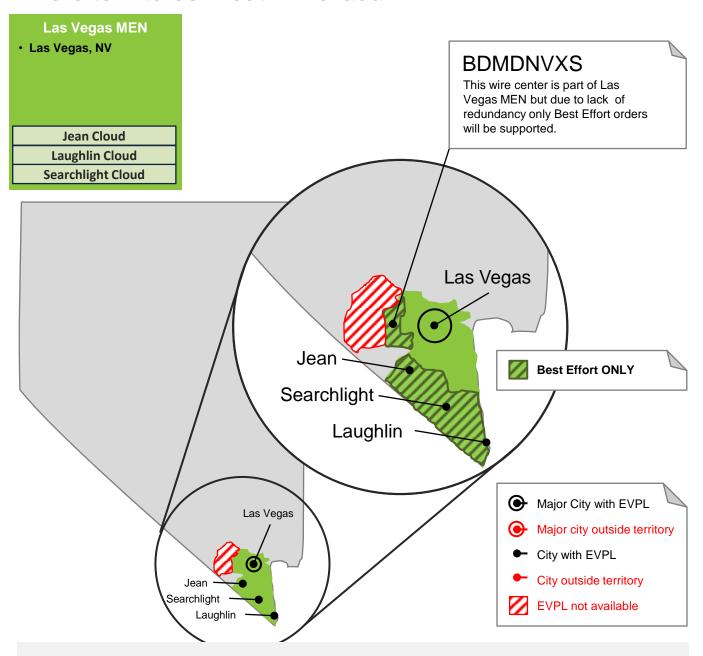
- Major city outside territory
- City with EVPL
- City outside territory
- EVPL not available

- NJ has 1 EVPL MEN spanning 1 LATA and 26 wire-centers equipped for Ethernet
- LATA in this MEN is 224





Where to Interconnect in Nevada?

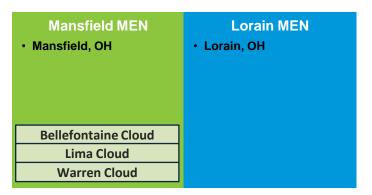


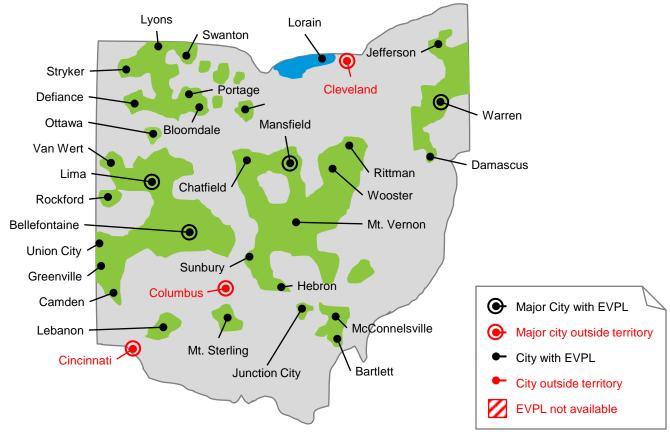
- NV has 1 EVPL MENs spanning 1 LATA and 22 wire-centers equipped for Ethernet
- LATA in this MEN is 721





Where to Interconnect in Ohio?





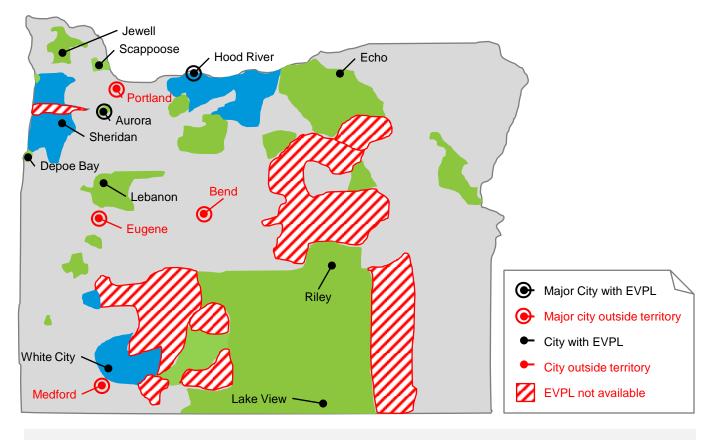
- OH has 2 EVPL MENs spanning 7 LATAs and 187 wire-centers equipped for Ethernet
- LATAs in these MENs are 320, 322, 324, 326, 328, 922 and 923





Where to Interconnect in Oregon?



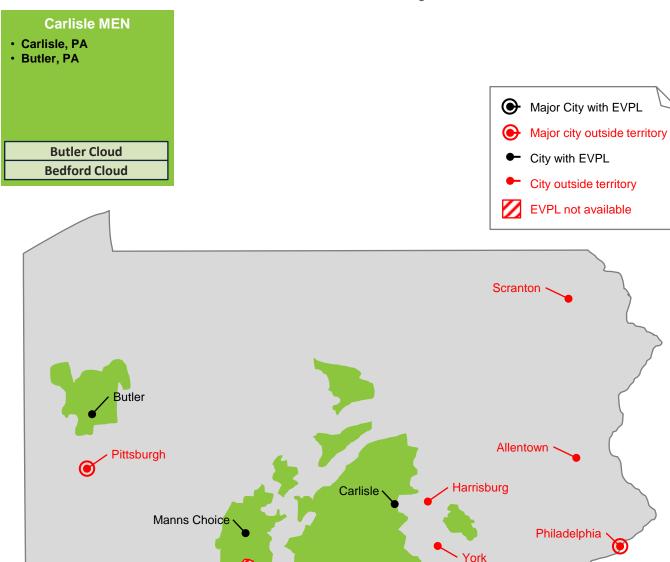


- OR has 2 EVPL MENs spanning 2 LATAs and 72 wire-centers equipped for Ethernet
- LATAs in these MENs are 670 and 672





Where to Interconnect in New Pennsylvania?



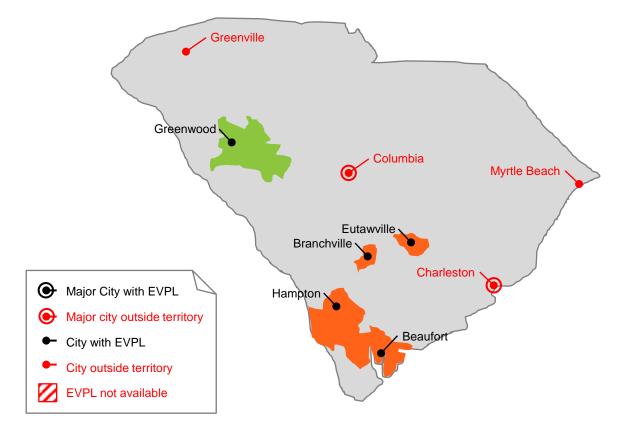
- PA has 1 EVPL MEN spanning 1 LATA and 26 wire-centers equipped for Ethernet
- LATA in this MEN is 224





Where to Interconnect in South Carolina?





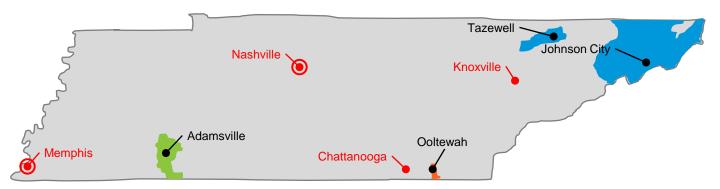
- SC has 2 EVPL MENs spanning 3 LATAs and 20 wire-centers equipped for Ethernet
- · LATAs in these MENs are 430, 434 and 436





Where to Interconnect in Tennessee?





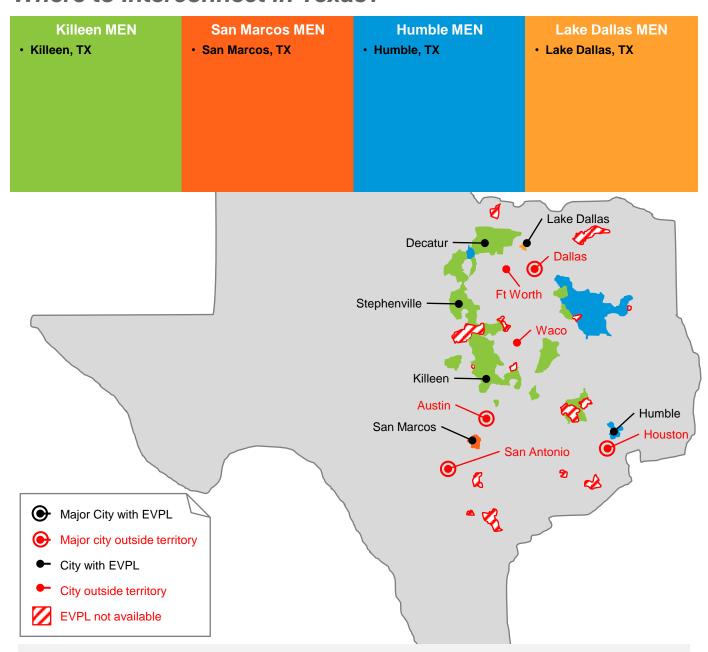


- TN has 3 EVPL MENs spanning 4 LATAs and 31 wire-centers equipped for Ethernet
- The Johnson City MEN extends into Virginia. (See VA Map)
- LATAs in these MENs are 468, 472, 474 and 956





Where to Interconnect in Texas?



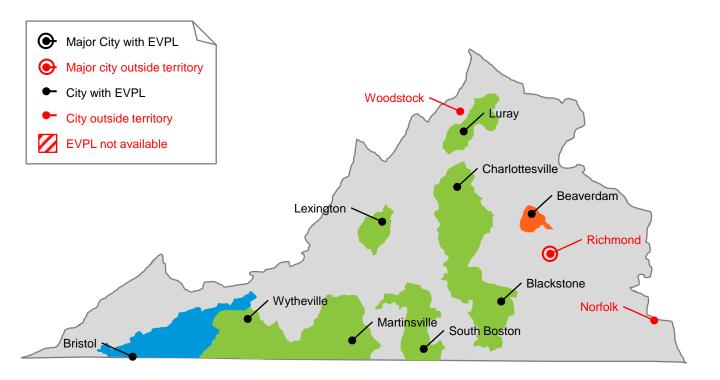
- TX has 4 EVPL MENs spanning 6 LATAs and 90 wire-centers equipped for Ethernet
- LATAs in these MENs are 552, 554, 556, 558, 560, 564





Where to Interconnect in Virginia?

Charlottesville MEN • Charlottesville, VA	Beaverdam MEN • Beaverdam, VA	Johnson City MEN • Johnson City, TN
Martinsville Cloud Wytheville Cloud		(* This is a Tennessee MEN. See TN Map for more details)



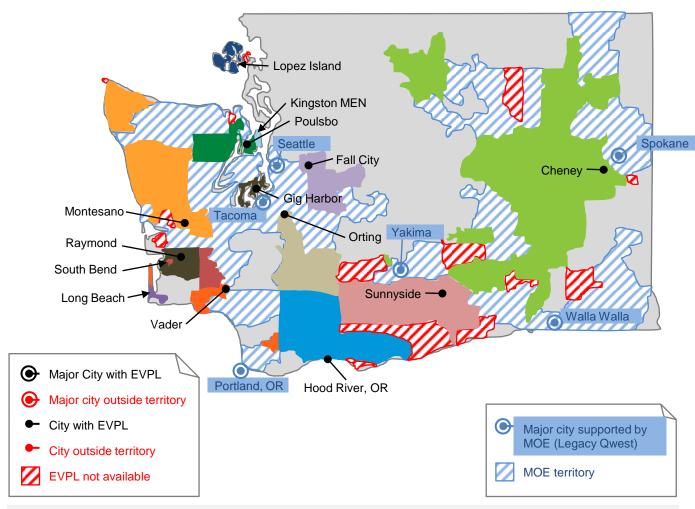
- VA has 3 EVPL MENs spanning 6 LATAs and 90 wire-centers equipped for Ethernet
- LATAs in these MENs are 250, 928, 956, 246, 244 and 248





Where to Interconnect in Washington?

Spokane-Cheney MEN • Cheney, WA	Vader MEN • Vader, WA	Vader-Sttl MEN • South Bend, WA	Gig Harbor MEN • Gig Harbor, WA
Poulsbo MEN • Poulsbo, WA	Montesano MEN • Montesano, WA	Lopez MEN • Lopez Island, WA	Fall City MEN • Fall City, WA
Spokane-Sunnyside MEN • Sunnyside, WA	Orting MEN • Orting, WA	Hood River MEN • Hood River, OR	Aurora MEN • Aurora, OR



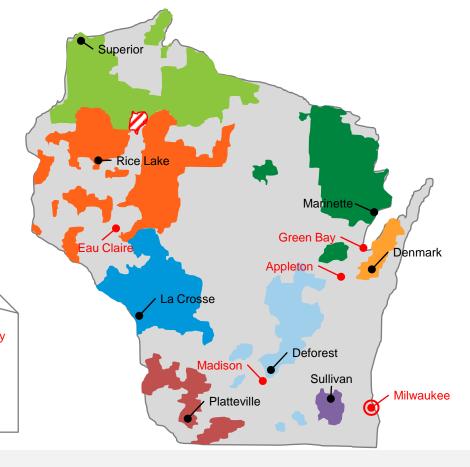
- WA has 13 EVPL MENs spanning 3 LATAs and 93 wire-centers equipped for Ethernet
- LATAs in these MENs are 672, 674 and 676





Where to Interconnect in Wisconsin?

Superior MEN	Rice Lake MEN	La Crosse MEN	Sullivan MEN
Superior, WI	Rice Lake, WI	• La Crosse, WI	Sullivan, WI
		Tomah Cloud	
Hayward Cloud		Holmen Cloud	Platteville MEN
Marinette MEN	Denmark MEN	Deforest MEN	Platteville, WI
Marinette, WI	Denmark, WI	Deforest, WI	Benton Cloud
			Boscobel Cloud
		Baraboo Cloud	PR DU CHIEN Cloud



Major city outside territoryCity with EVPLCity outside territory

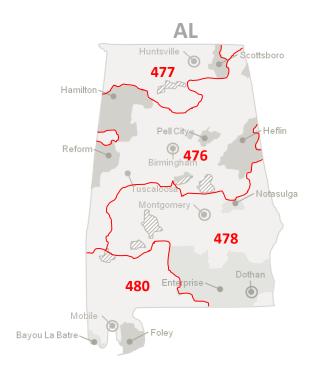
Major City with EVPL

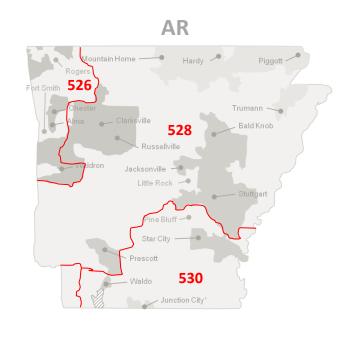
EVPL not available

- WI has 8 EVPL MENs spanning 4 LATAs and 202 wire-centers equipped for Ethernet
- LATAs in these MENs are 350, 352, 354 and 356

Appendix

LATAs (Only LATAs that cover EVPL MENs are included)





FL

