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A CDI Company

West Virginia Broadband Deployment Meeting

11-17-10

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Overview

- Summary Update
- Results/Findings
- County Samples
- Considerations/Next Steps



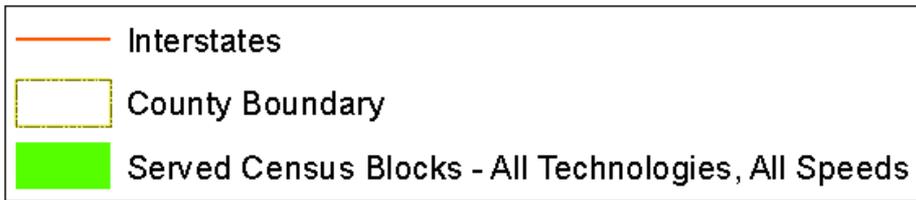
Mapping Data Facts and Assumptions

- Current assumptions within the data
 - Broadband coverage data are data submitted by providers through NTIA broadband mapping program
 - Because of NDAs and demographic data, provider customer information submitted is rolled up to census block level for any maps being created
 - A census block is considered 'served' if a provider offers service anywhere within its geographic boundaries, however, service may or may not be available throughout the entire census block.
 - This can create some areas of the map to have more coverage than actually exists

Mapping Data Facts and Assumptions

- Data verification process
 - refine information within future maps while still adhering to NDAs
 - gaps, anomalies
- Speeds are maximum advertised speeds, not typical speeds
- Maximum advertised upstream and downstream speeds provided at the metropolitan statistical area (MSA) or the rural statistical area (RSA) levels
- Speed data delivered to NTIA have pre-determined speed breaks
- Census block data are from Census 2000

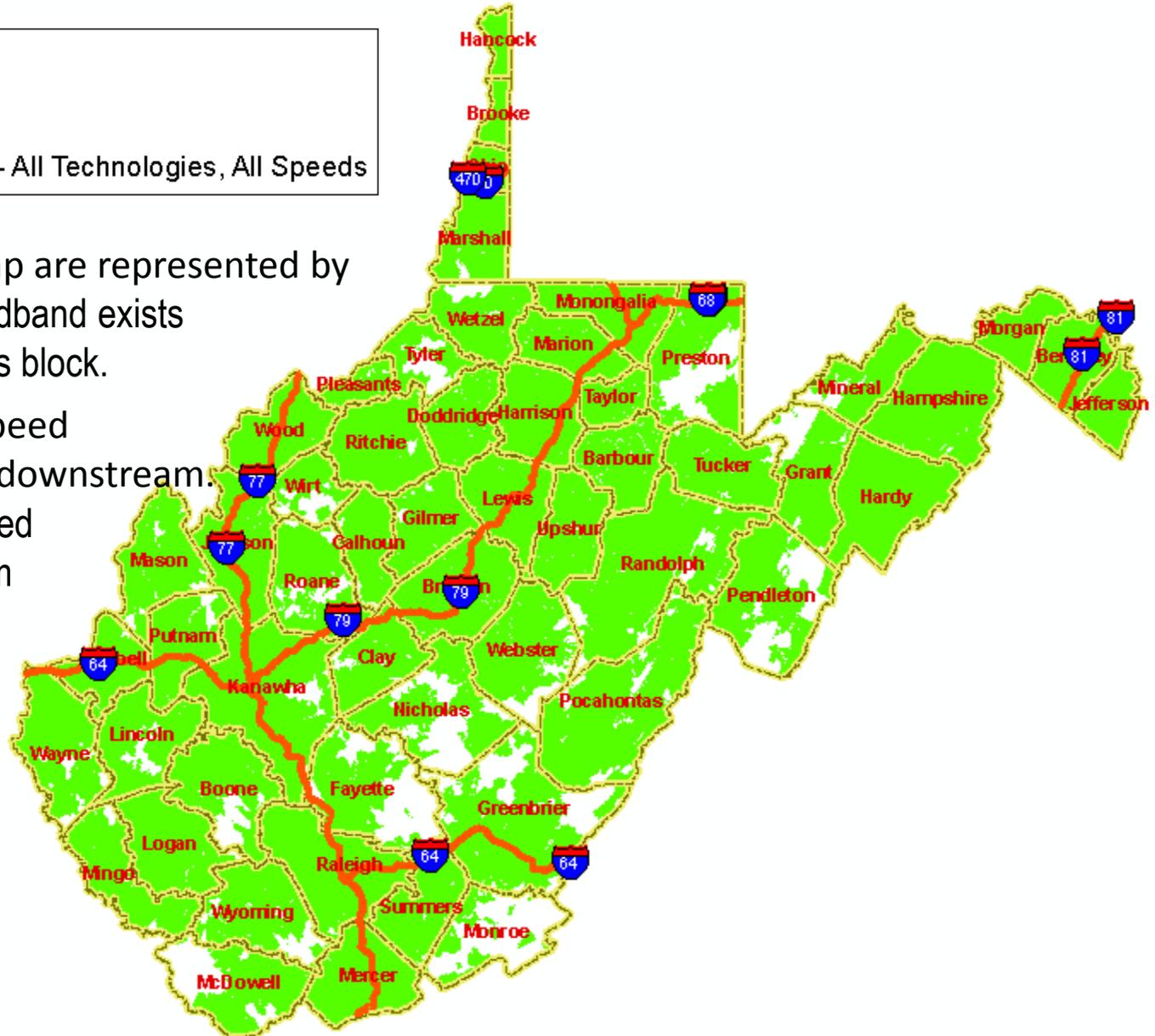
WV Broadband Map as of October 2010



Served areas on this map are represented by census blocks where broadband exists within any portion a census block.

Minimum broadband speed on this map is 768kbps downstream.

Speed information submitted by providers was maximum advertised speed.

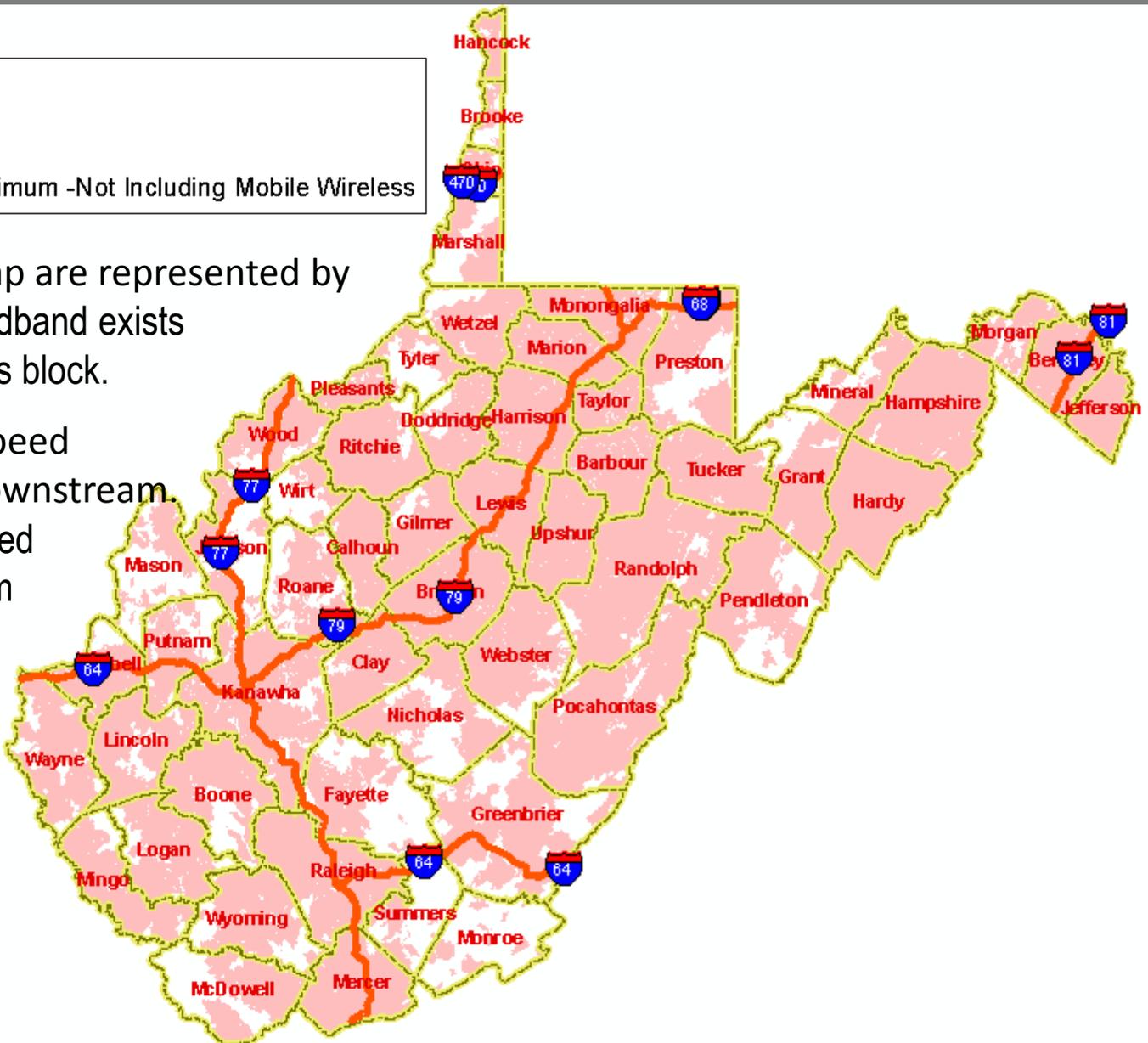


WV Broadband Map as of October 2010

— Interstates
□ County Boundary
■ Served 768kbps Down Minimum -Not Including Mobile Wireless

Served areas on this map are represented by census blocks where broadband exists within any portion a census block.

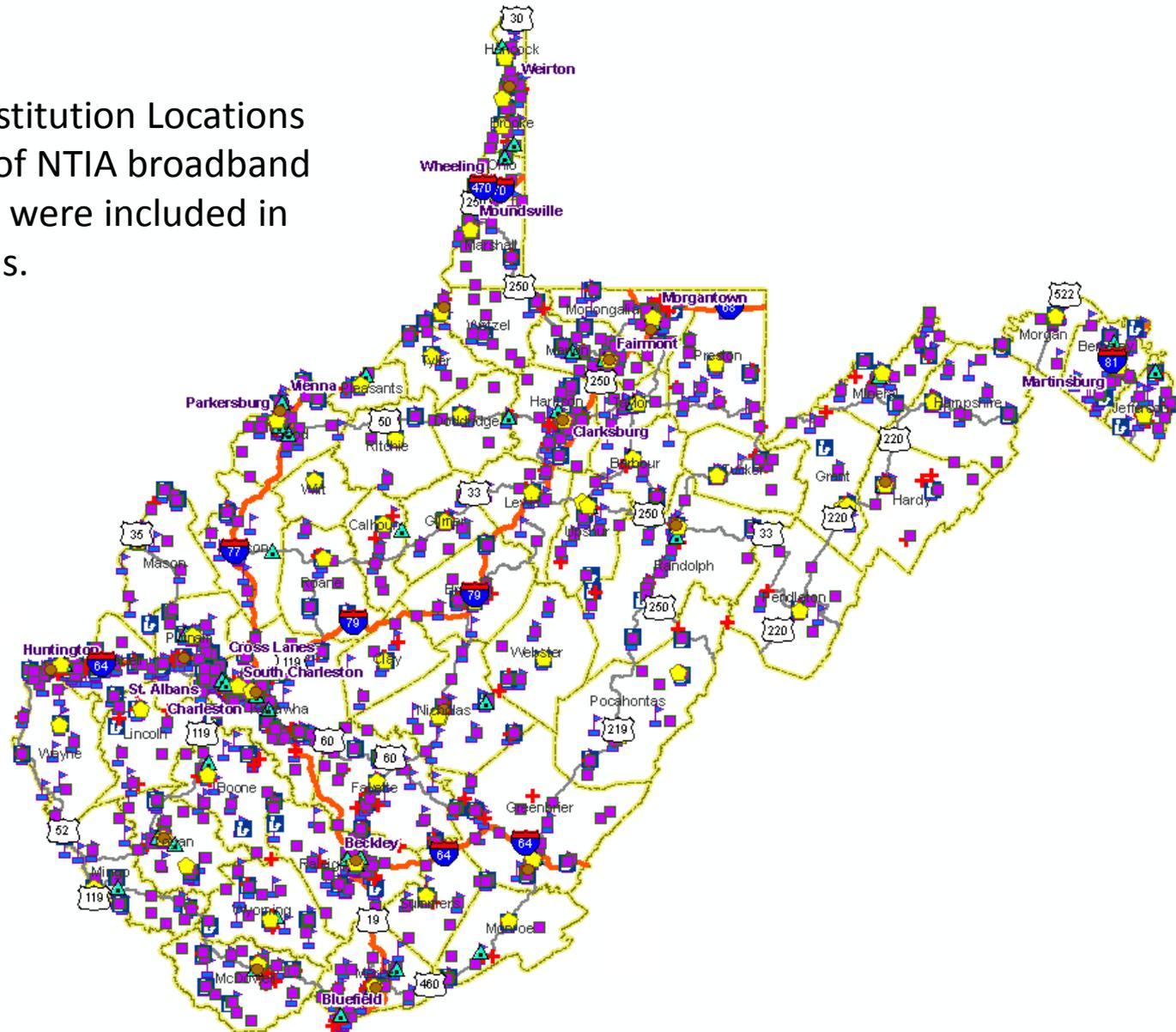
Minimum broadband speed on this map is 768kb downstream.
Speed information submitted by providers was maximum advertised speed.



Community Anchor Institutions (CAI)

Community Anchor Institution Locations are also a deliverable of NTIA broadband mapping program and were included in portions of the analysis.

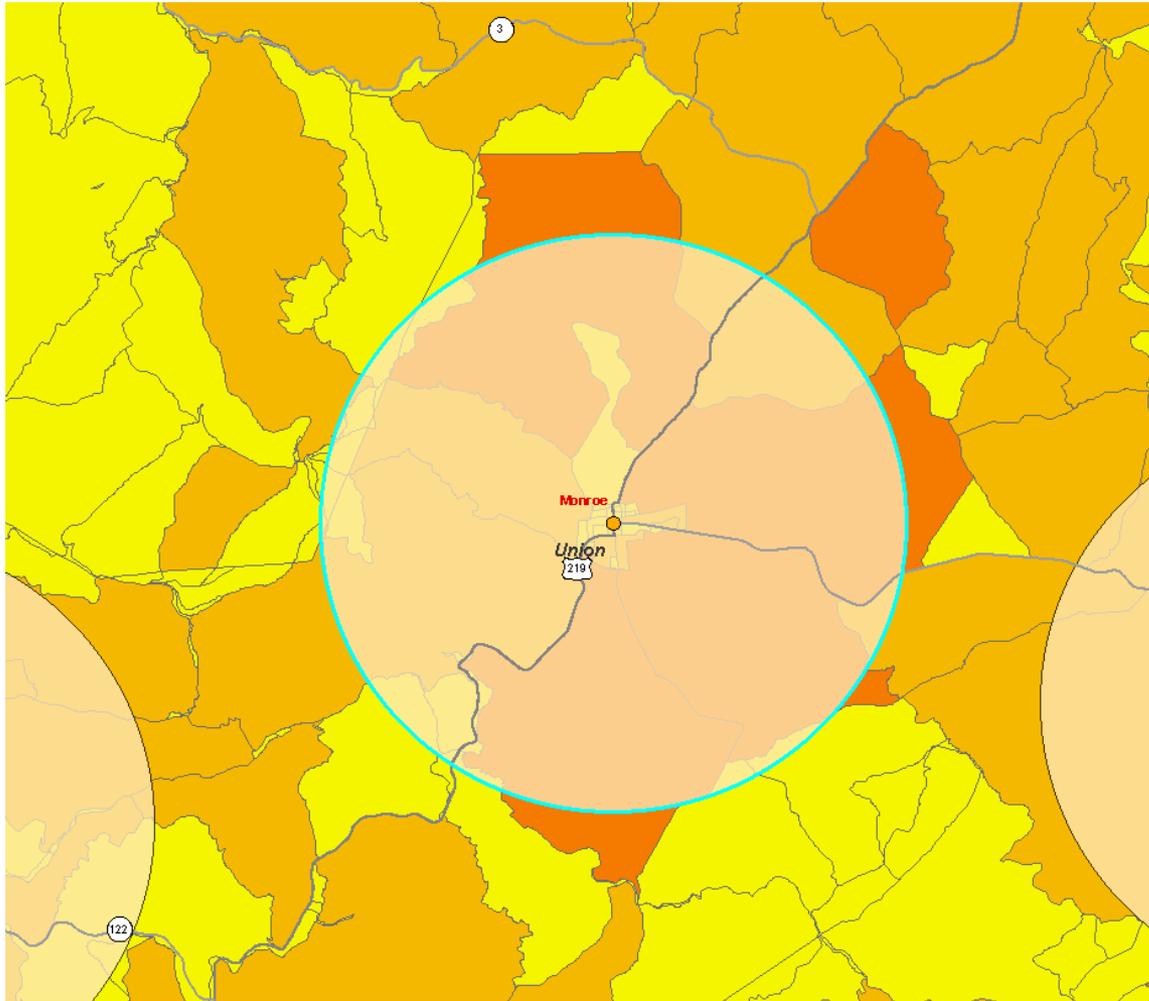
- Schools
- Healthcare
- Public Safety
- Libraries
- Community Centers
 - Government
 - Non-Government



Methodologies for Community Analysis

- As requested by Broadband Deployment Council, L.R. Kimball used broadband mapping results rolled up to small and large census block levels to determine demographic information for communities outside of areas served by broadband.
- Used Census Bureau Cities GIS Layer – 470 towns and cities
- Selected cities that were outside of served areas at the 3 speed levels (768Kbps, 3Mbps, 6Mbps)
- Created buffers of 1 mile, 3 miles and 5 miles
- Calculated census population totals, West Virginia State Addressing and Mapping Board (SAMB) addressable structures
- Compared totals across counties

Methodologies for Analysis



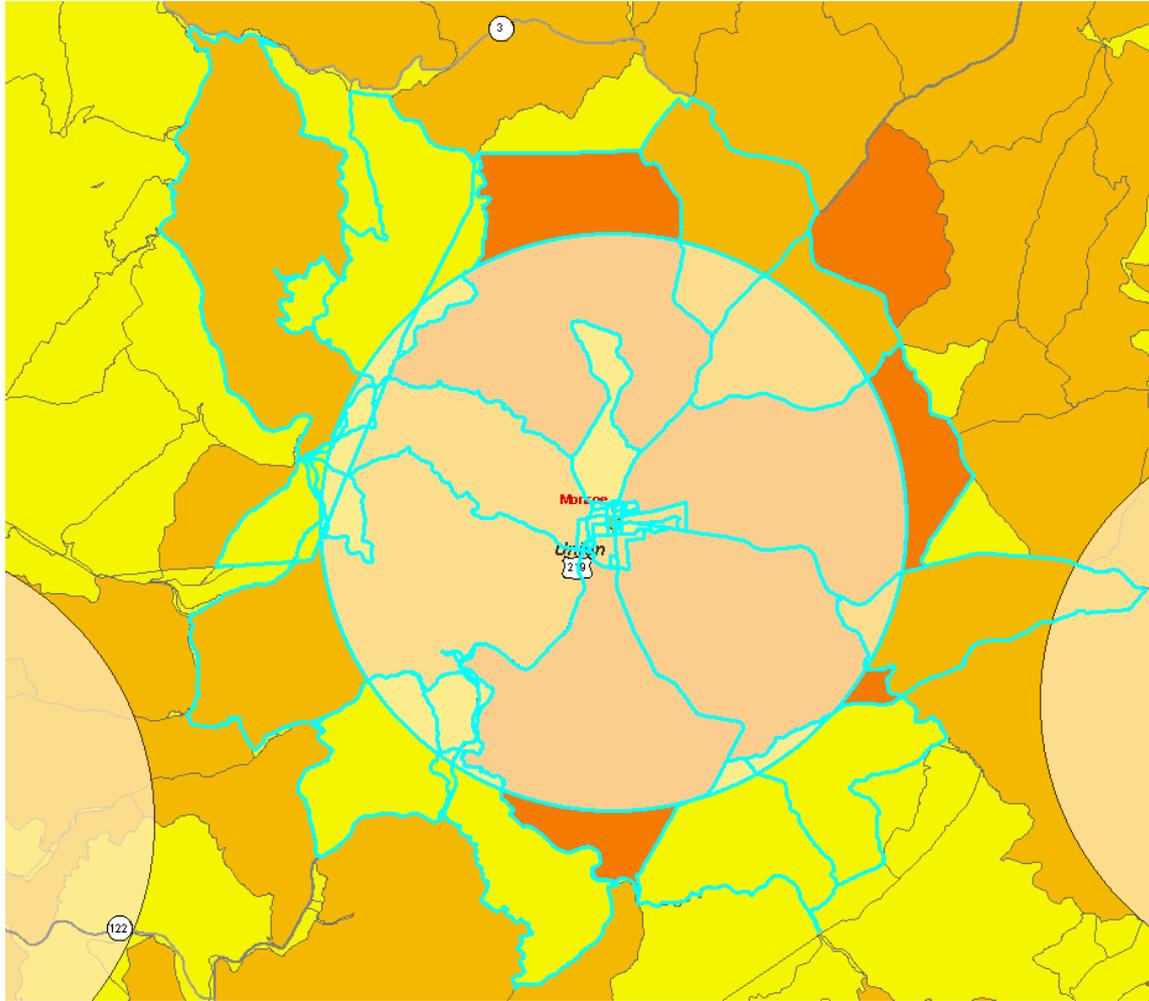
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Methodologies for Analysis



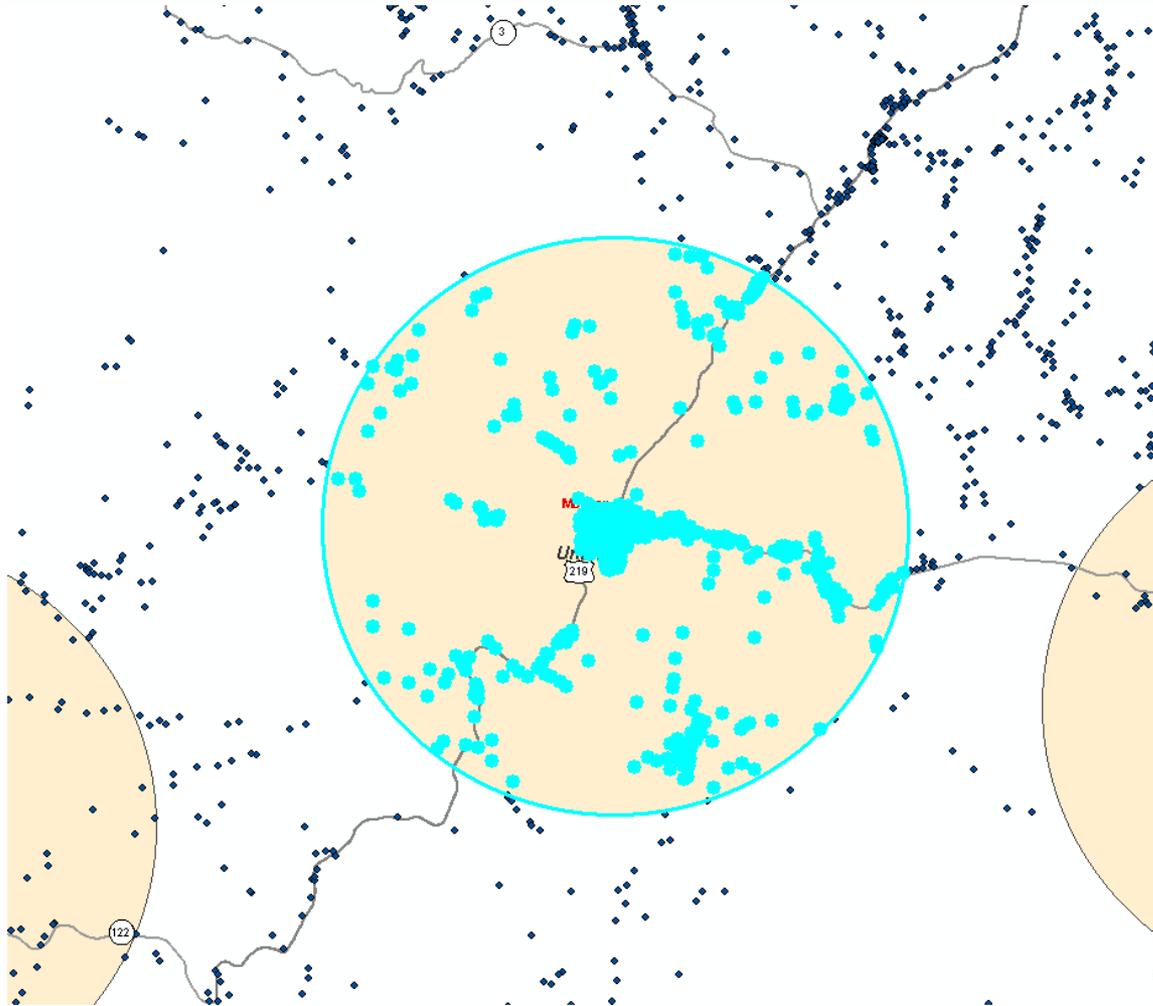
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Methodologies for Analysis



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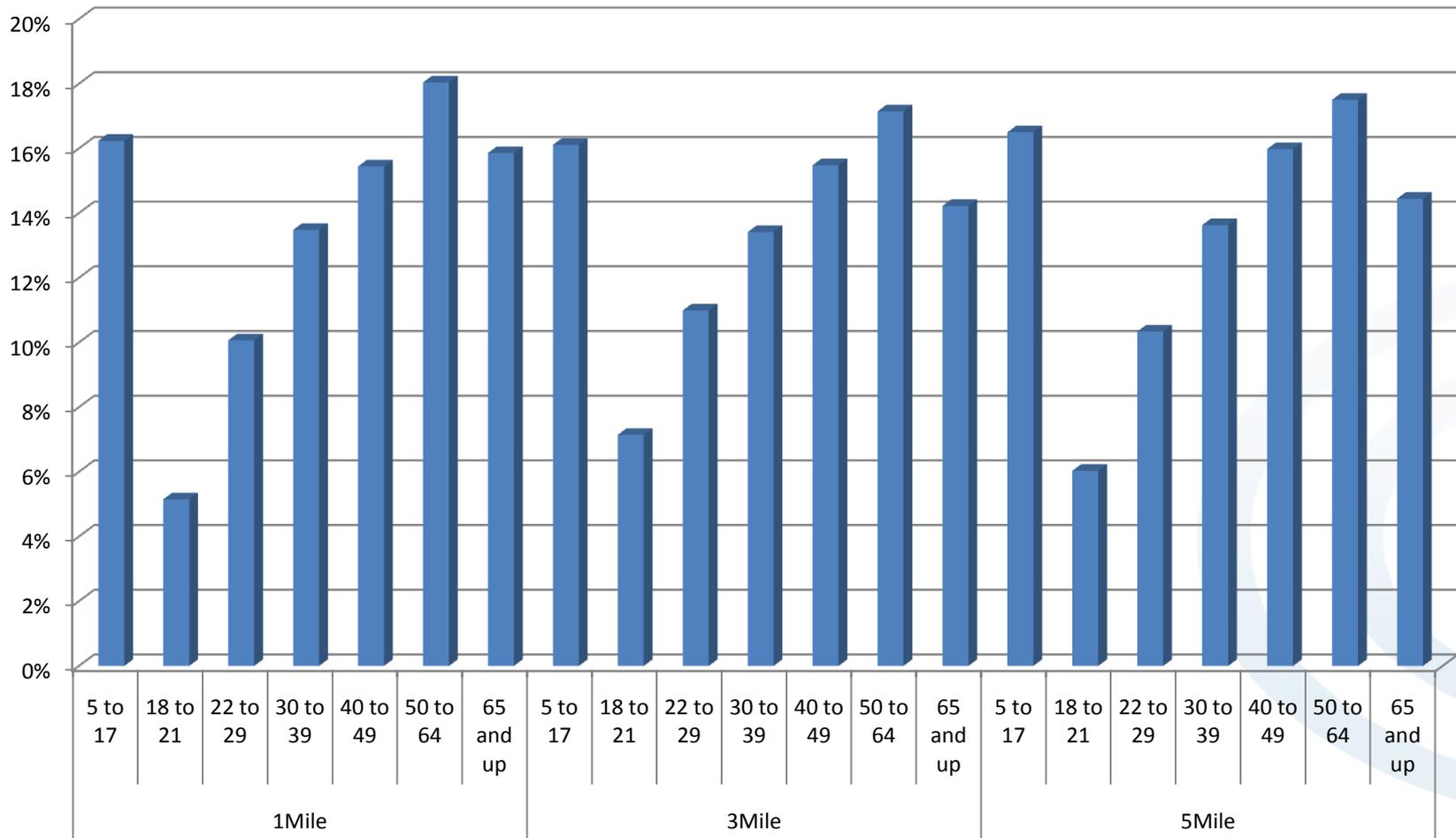
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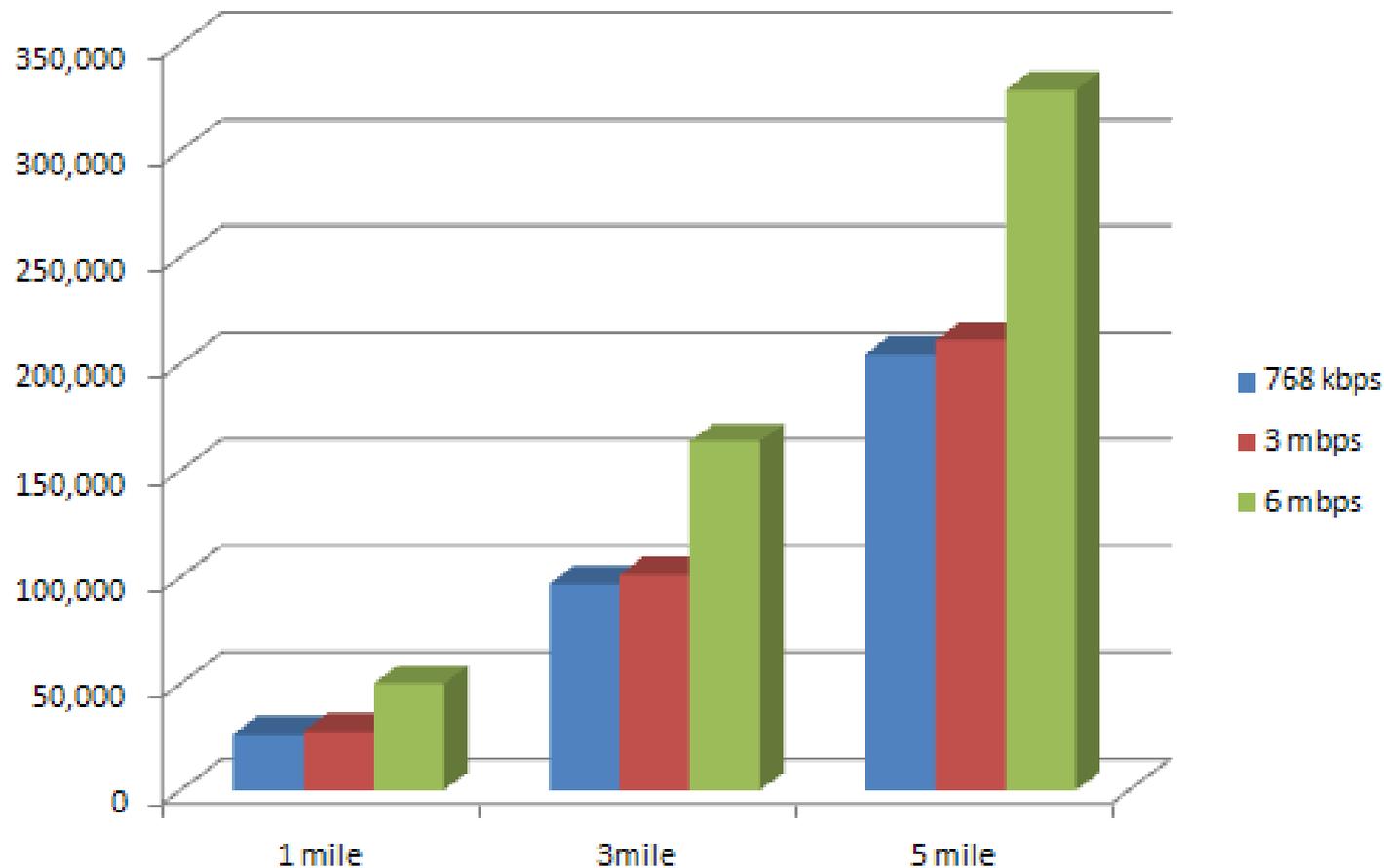
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Population Age Breakdown



Un-served SAMB address location comparison across speed tiers



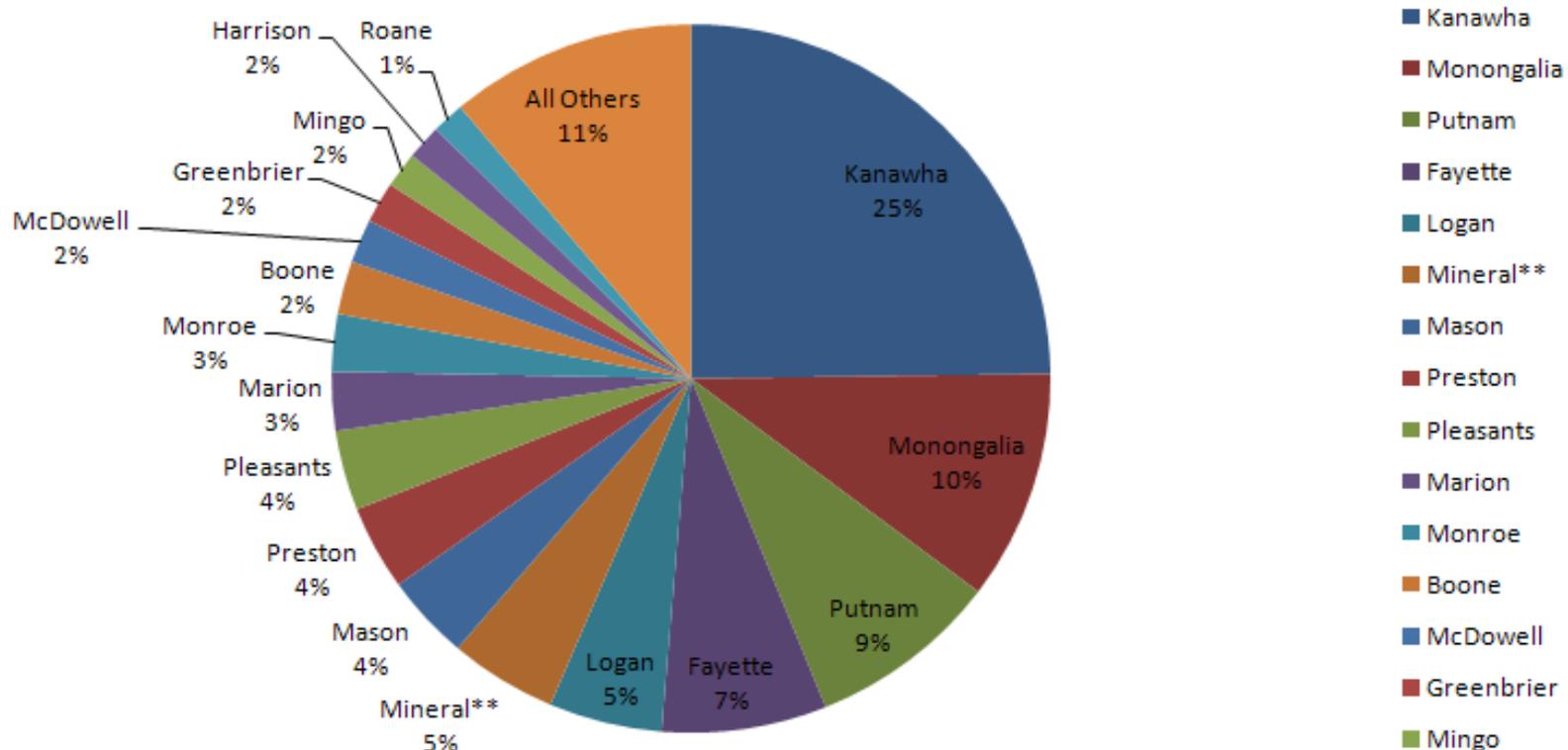
SAMB – State Addressing and Mapping Board addressable structures

Note: Totals are accumulations across each specified buffer radius and could include some overlaps in totals

Un-served Distribution by County – SAMB 1 Mile

768kbps - % of SAMB addresses within 1 mile buffer of unserved communities in each county

SAMB – State Addressing and Mapping Board addressable structures

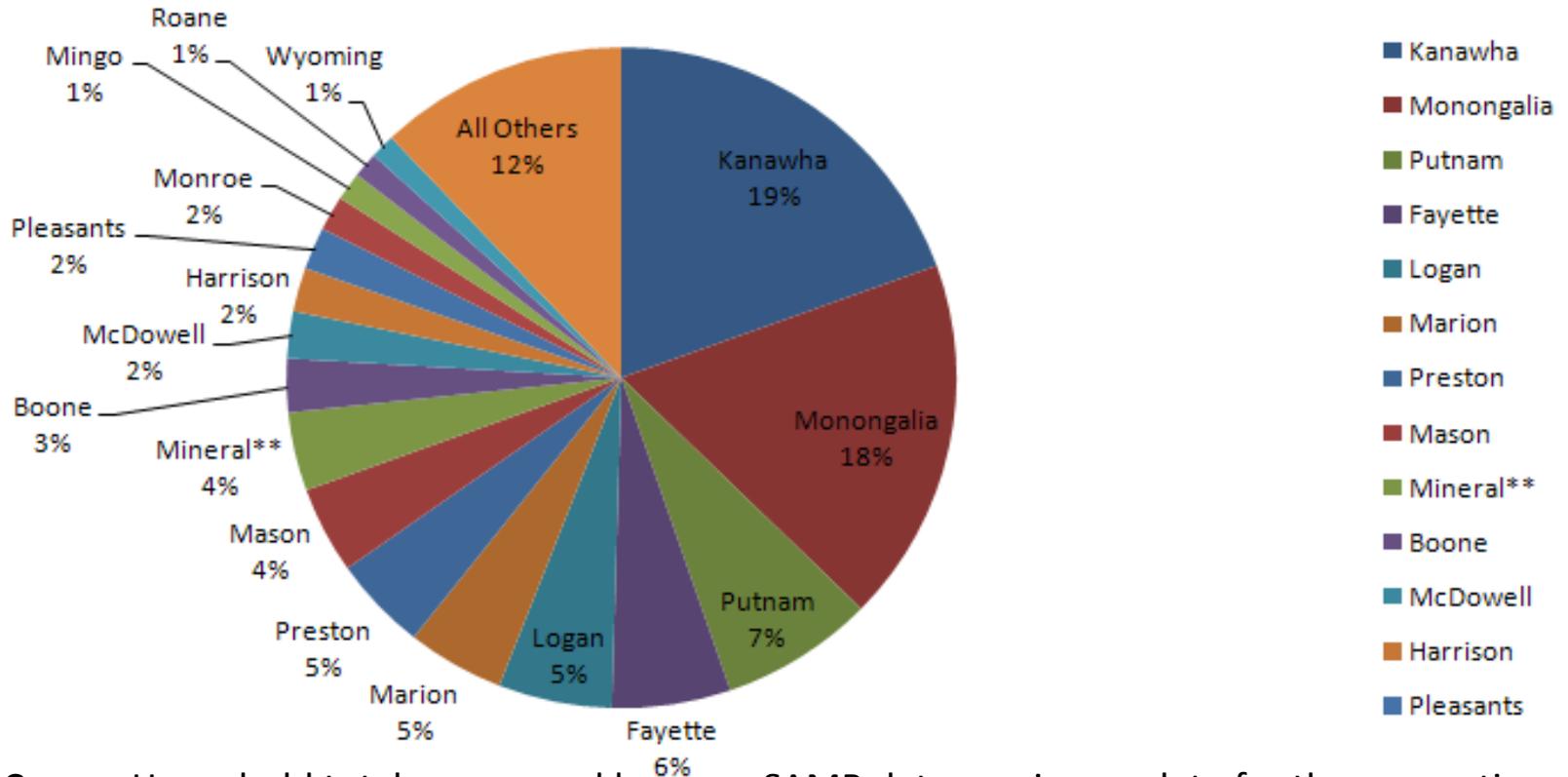


** Census Household totals were used because SAMB data was incomplete for these counties

Un-served Distribution by County – SAMB 3 Mile

768kpbs - % of SAMB addresses within 3 mile buffer of unserved communities in each county

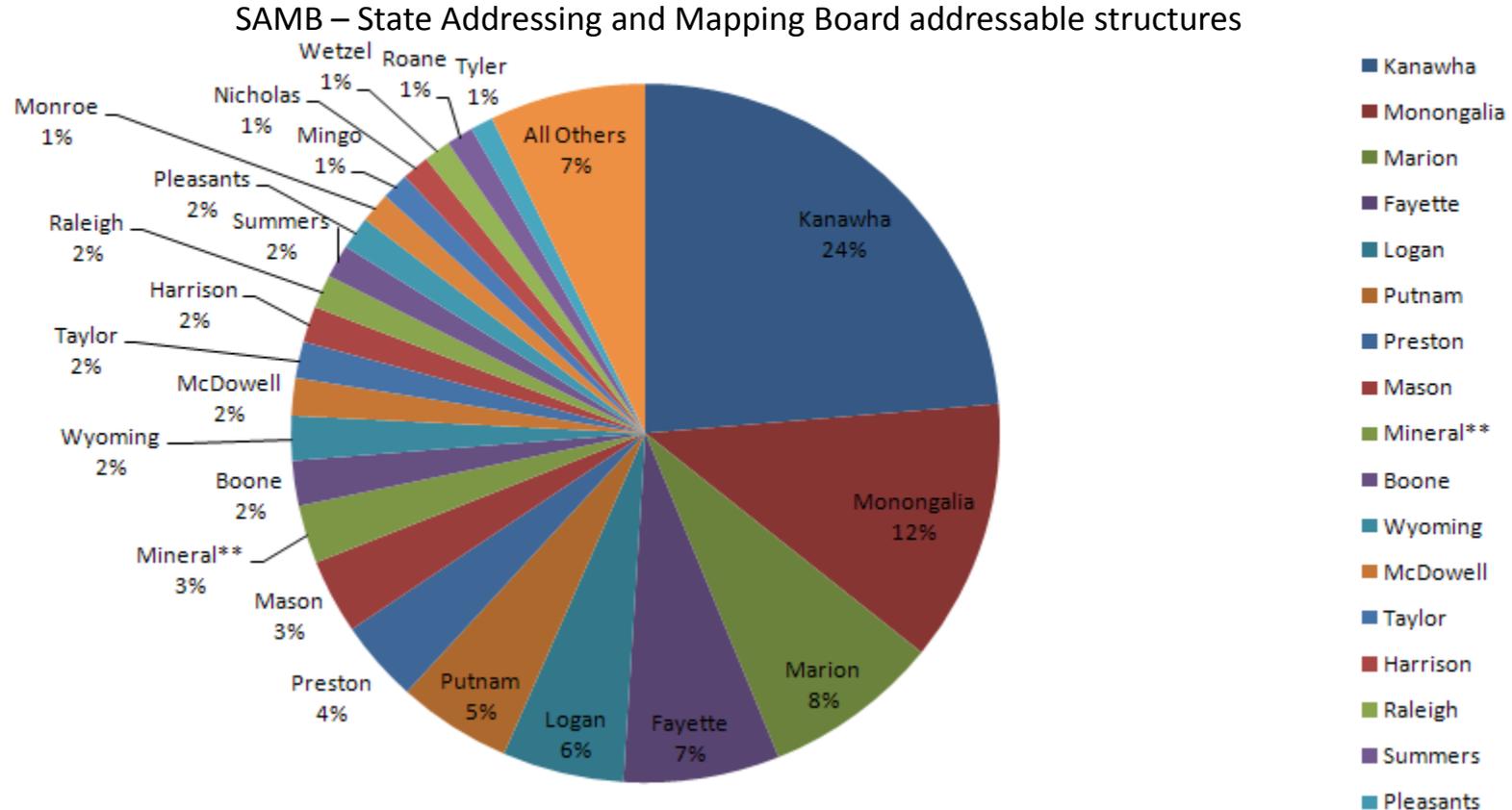
SAMB – State Addressing and Mapping Board addressable structures



** Census Household totals were used because SAMB data was incomplete for these counties

Un-served Distribution by County – SAMB 5 Mile

768kbps - % of SAMB addresses within 5 mile buffer of unserved communities in each county



^^ Census Household totals were used because SAMB data was incomplete for these counties

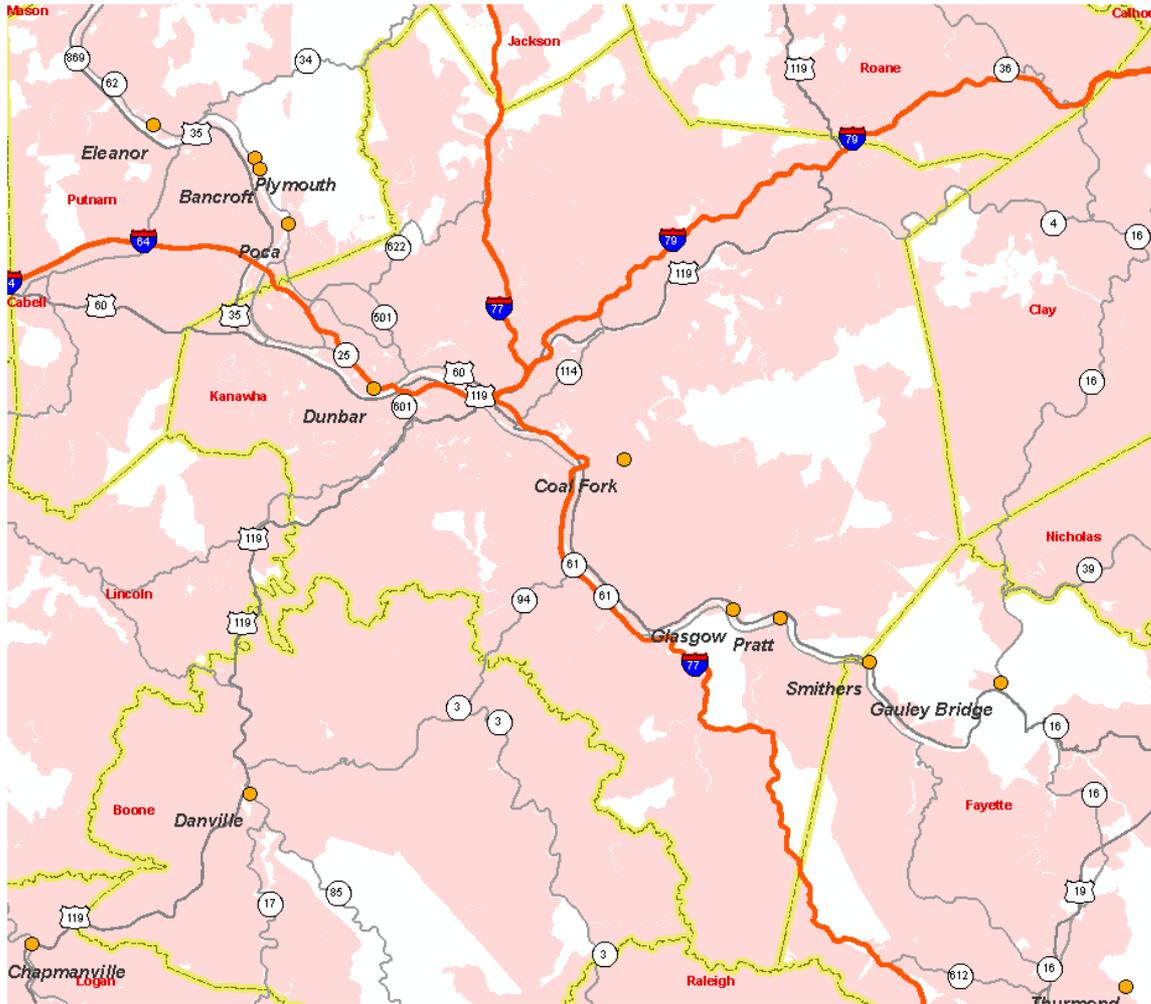
Sample Counties

County Stats							Unserved 768Kb, 3Mile Radius				
County	Communities	Pop. 2000	Pop. 2009	Net Growth*	Median Inc.	% Poverty	Communities	SAMB	Population	Anchors	Towers
Kanawha	30	200,073.00	191,663.00	-4%	\$ 41,488.00	15.8%	4	19,621	56,301	35	3
Monongalia	12	81,866.00	90,080.00	10%	\$ 41,901.00	16.3%	2	17,935	54,028	20	3
Putnam	10	51,589.00	55,673.00	8%	\$ 57,255.00	9.0%	5	7,469	49,777	9	0
Fayette	20	47,579.00	46,123.00	-3%	\$ 32,834.00	20.2%	9	5,769	23,343	7	0
Monroe	7	14,583.00	13,715.00	-6%	\$ 34,175.00	17.0%	6	1,711	6,064	10	1

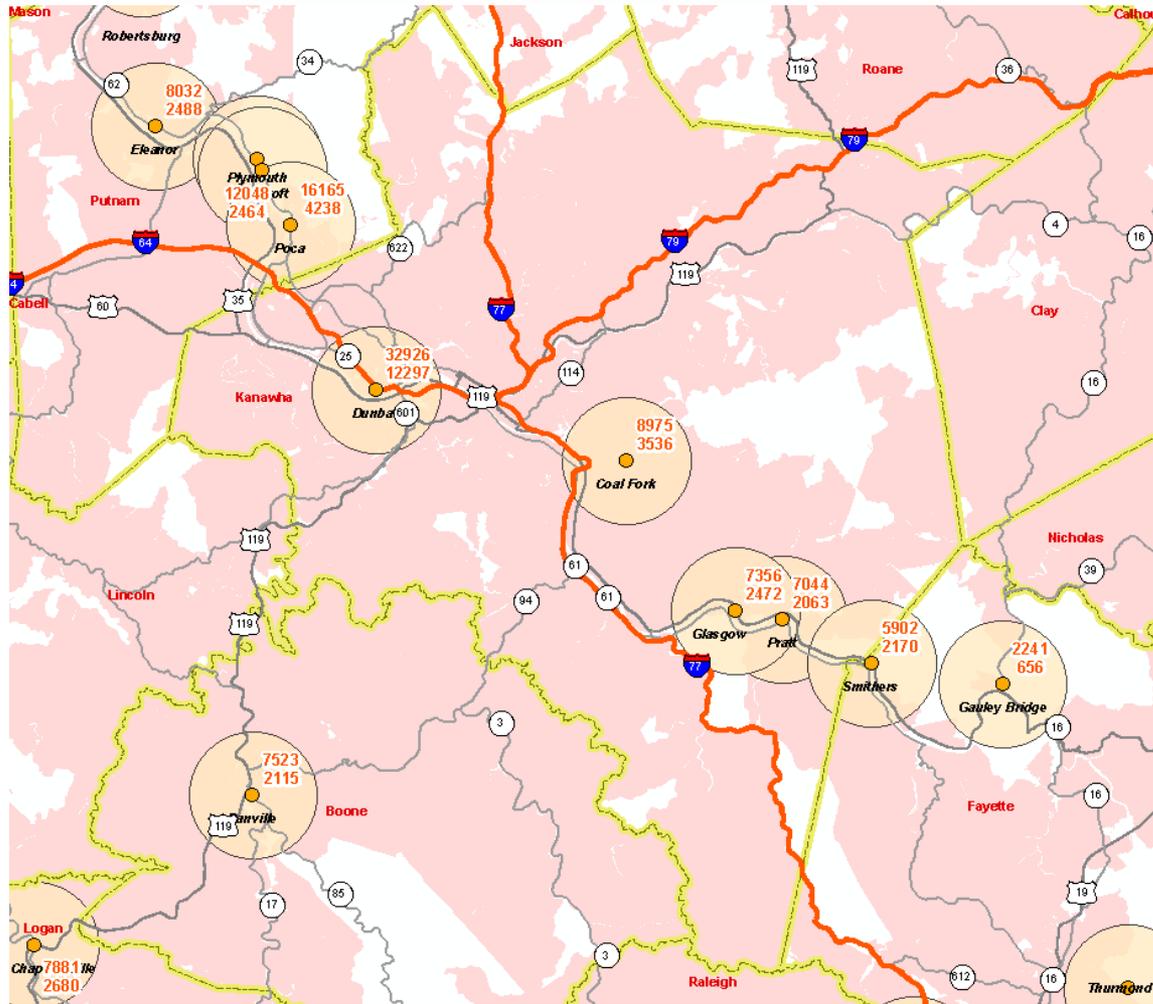
* Overall State Growth: 0.6%

Note: Totals are accumulations across each specified buffer radius and could include some overlaps in totals. Population totals are derived from census blocks and because census blocks do not follow the 3 mile radius boundary population totals can include some populations outside of the radius that are in served areas.

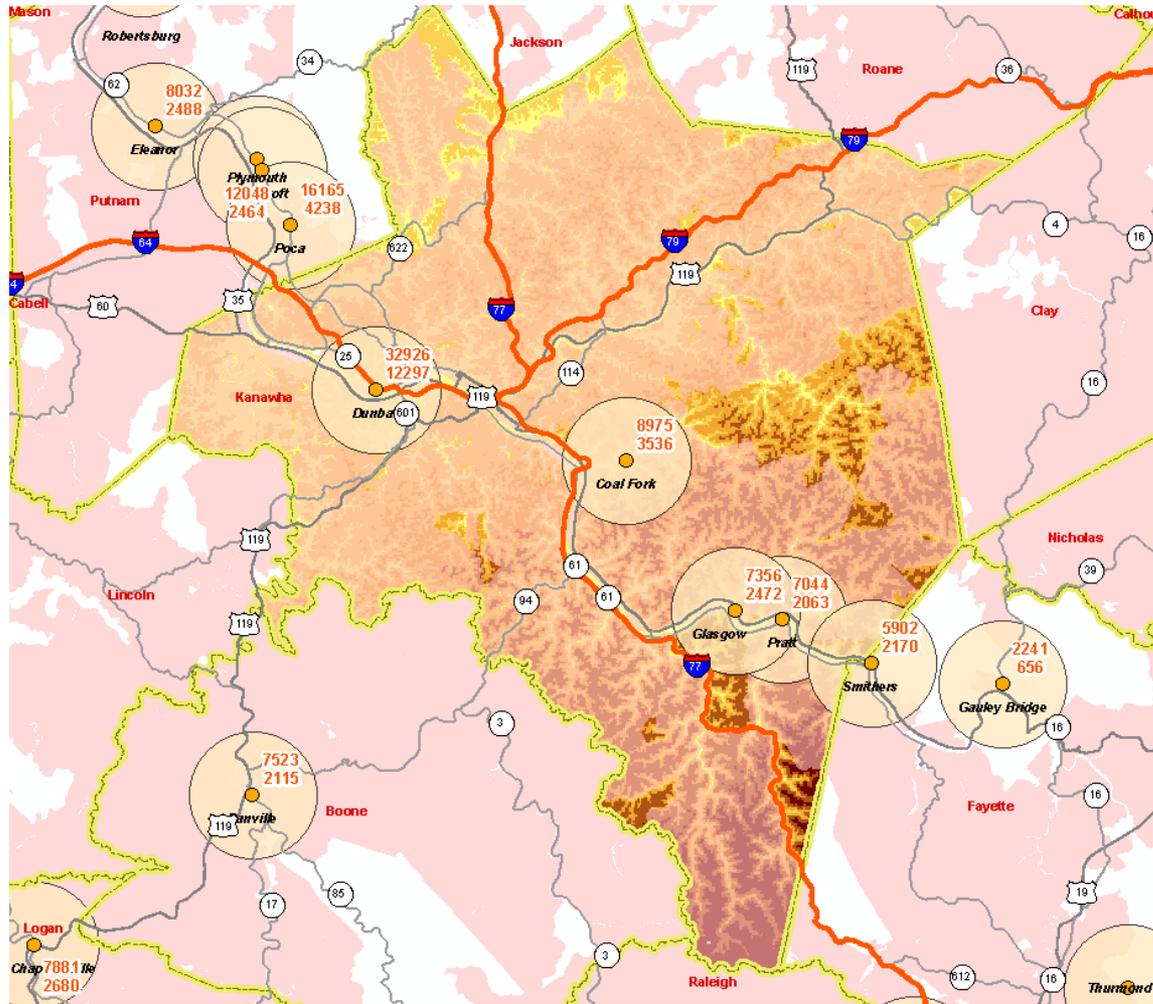
Kanawha County – 768Kbps Downstream



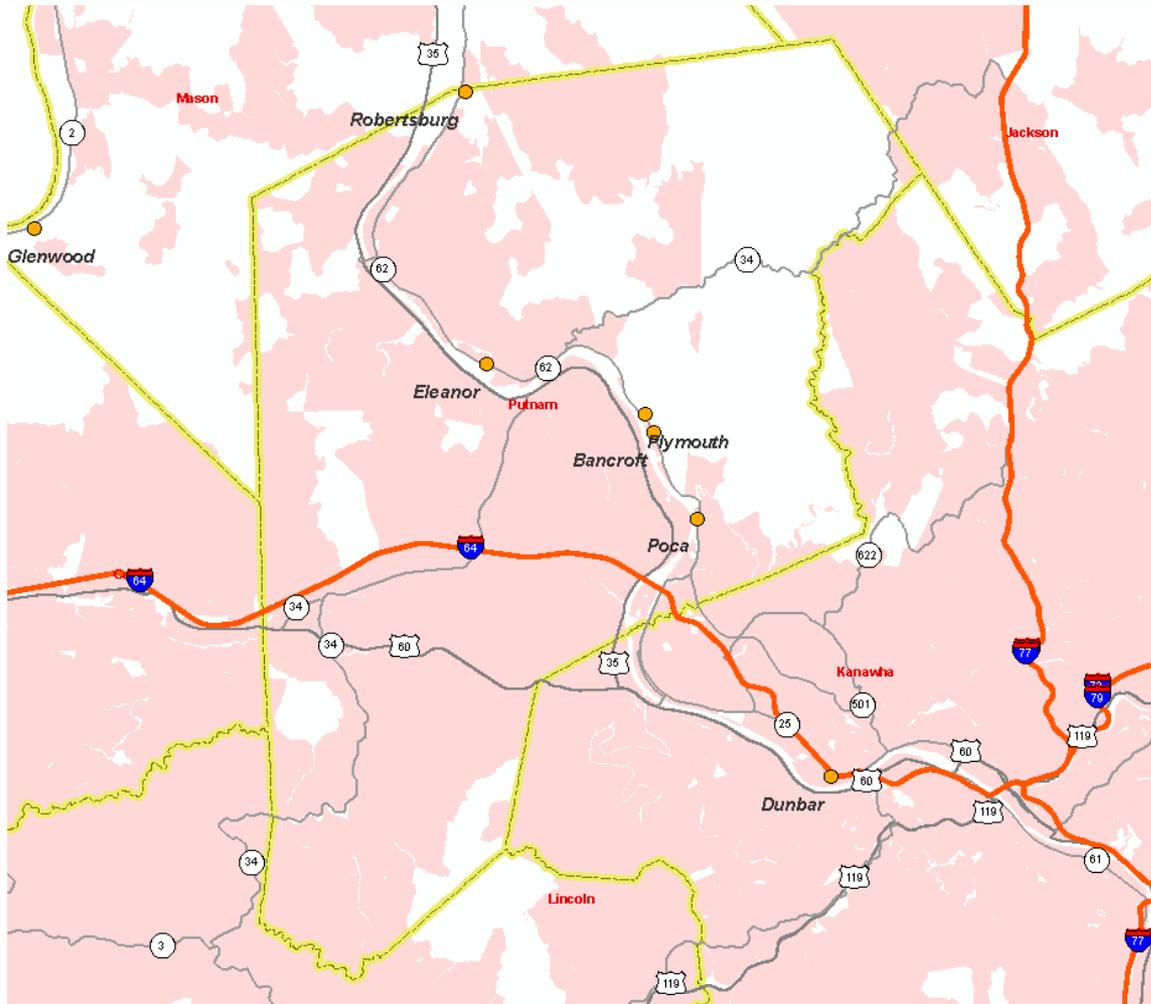
Kanawha County – 768Kbps Downstream



Kanawha County – 768Kbps Downstream



Putnam County – 768Kbps Downstream



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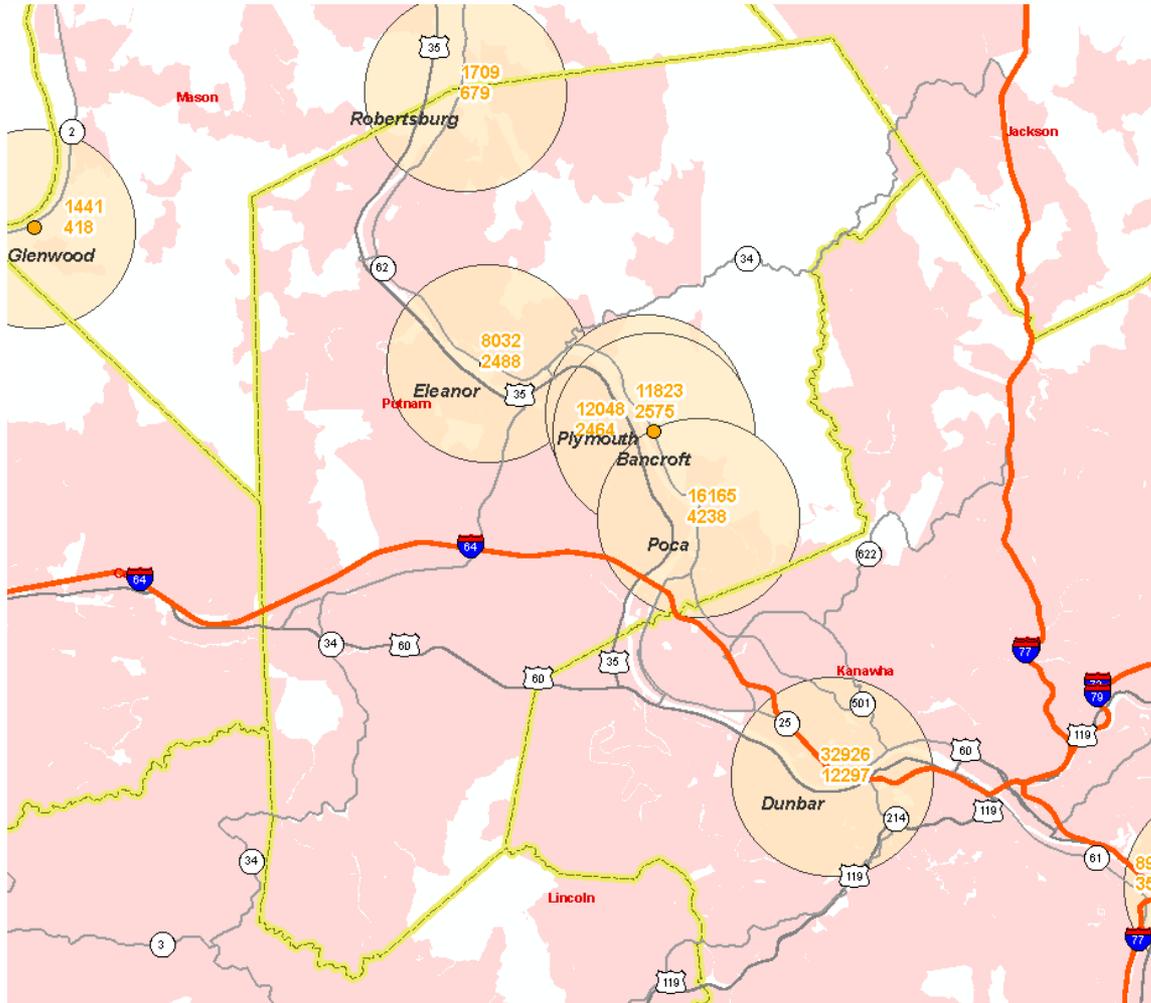
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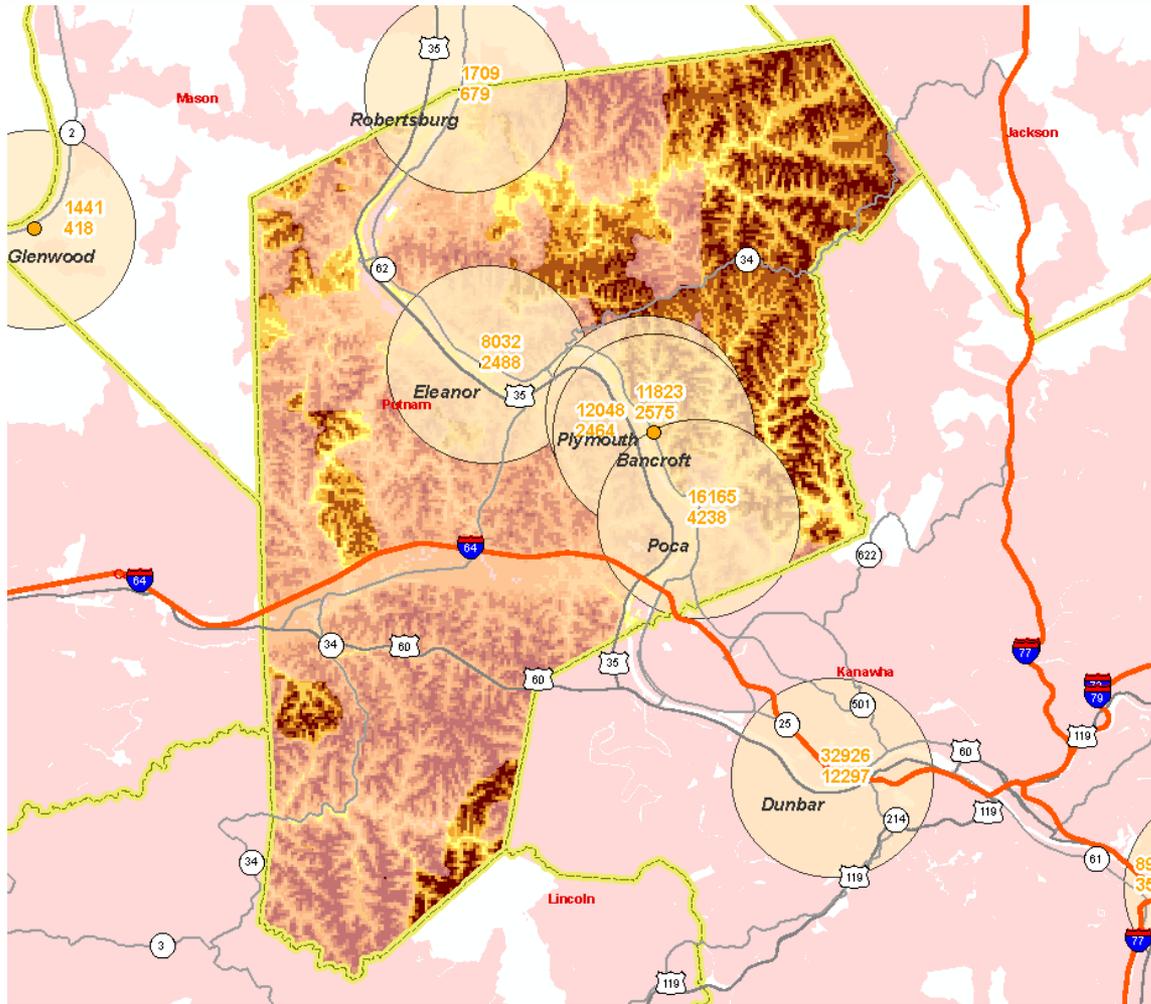
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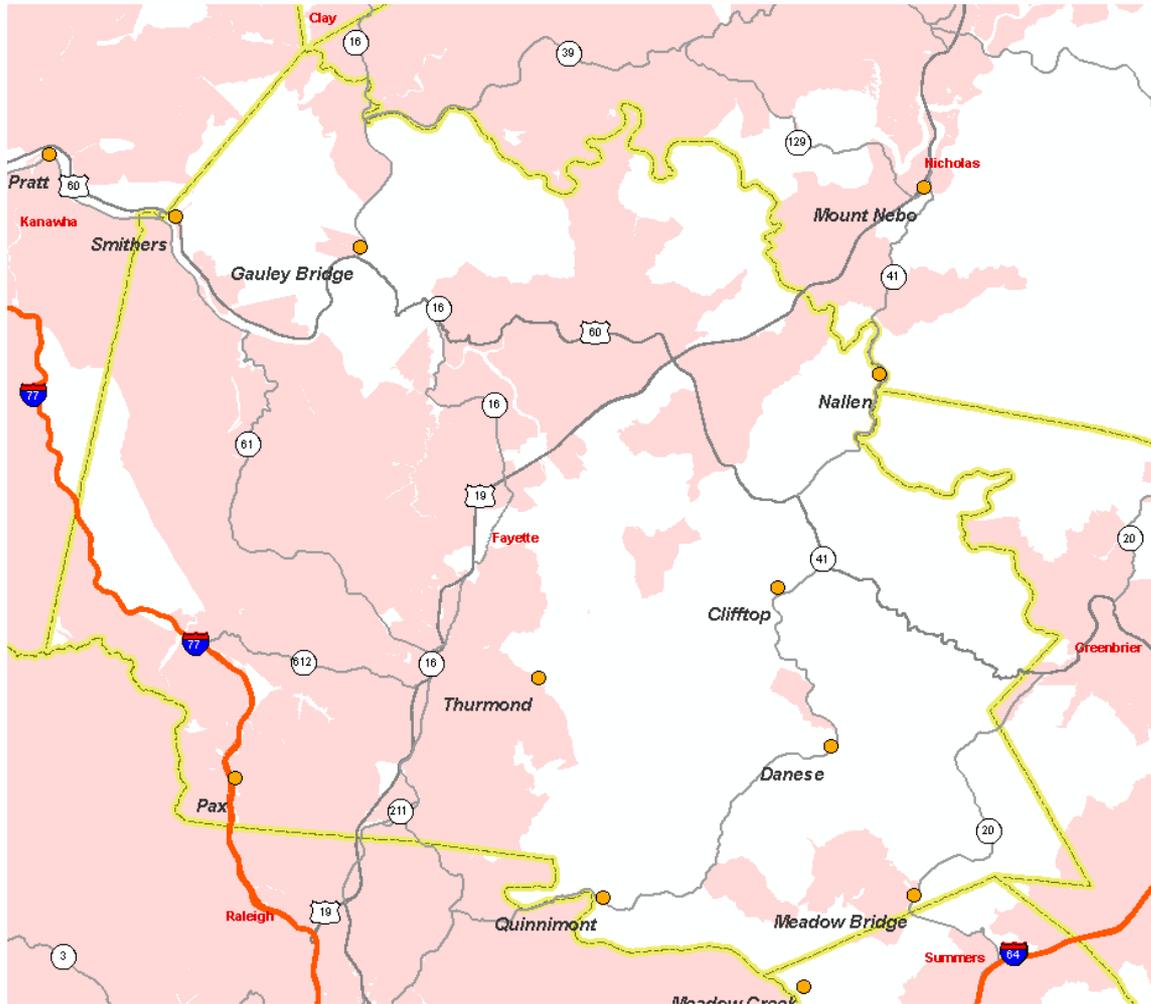
Putnam County – 768Kbps Downstream



Putnam County – 768Kbps Downstream



Fayette County – 768Kbps Downstream



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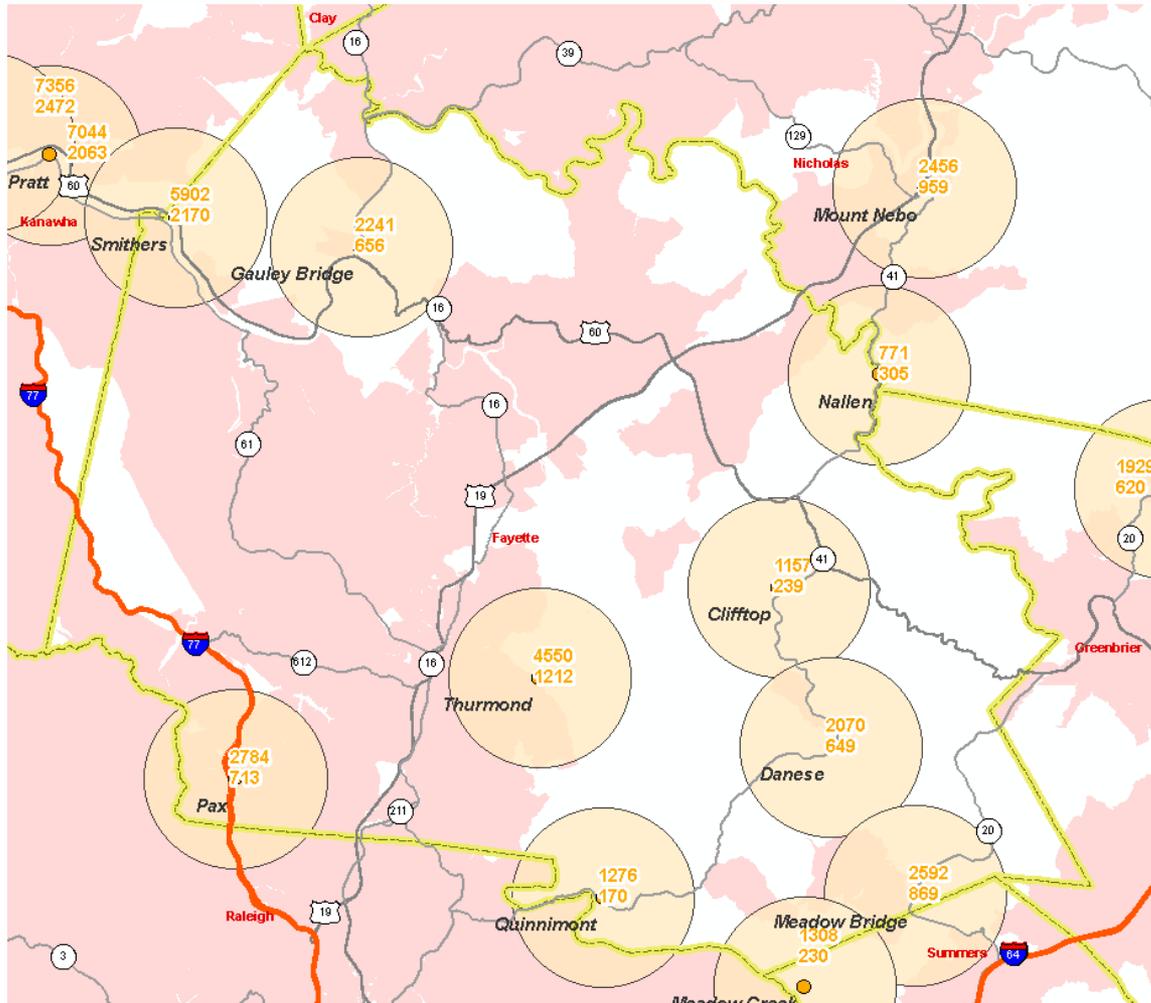
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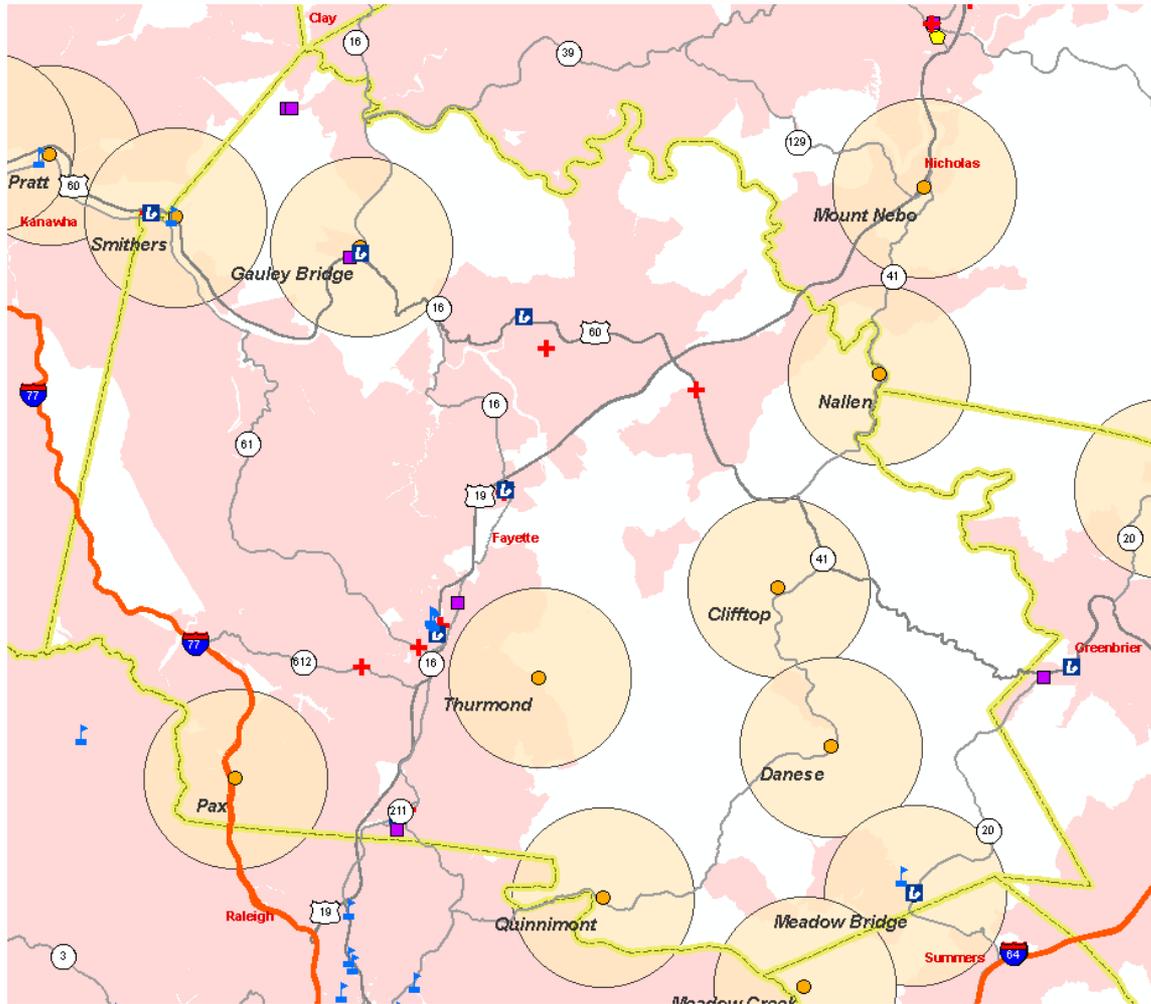
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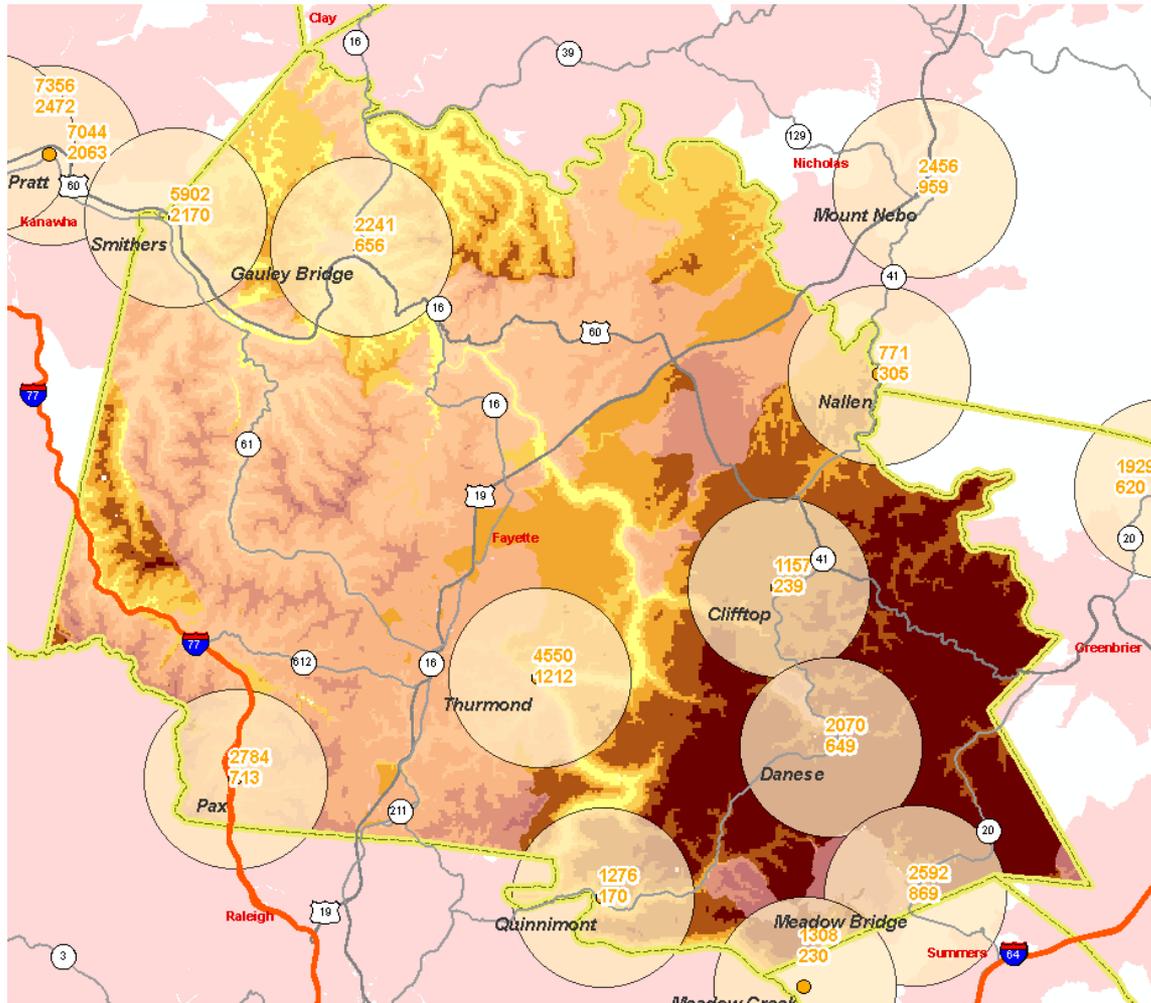
Fayette County – 768Kbps Downstream



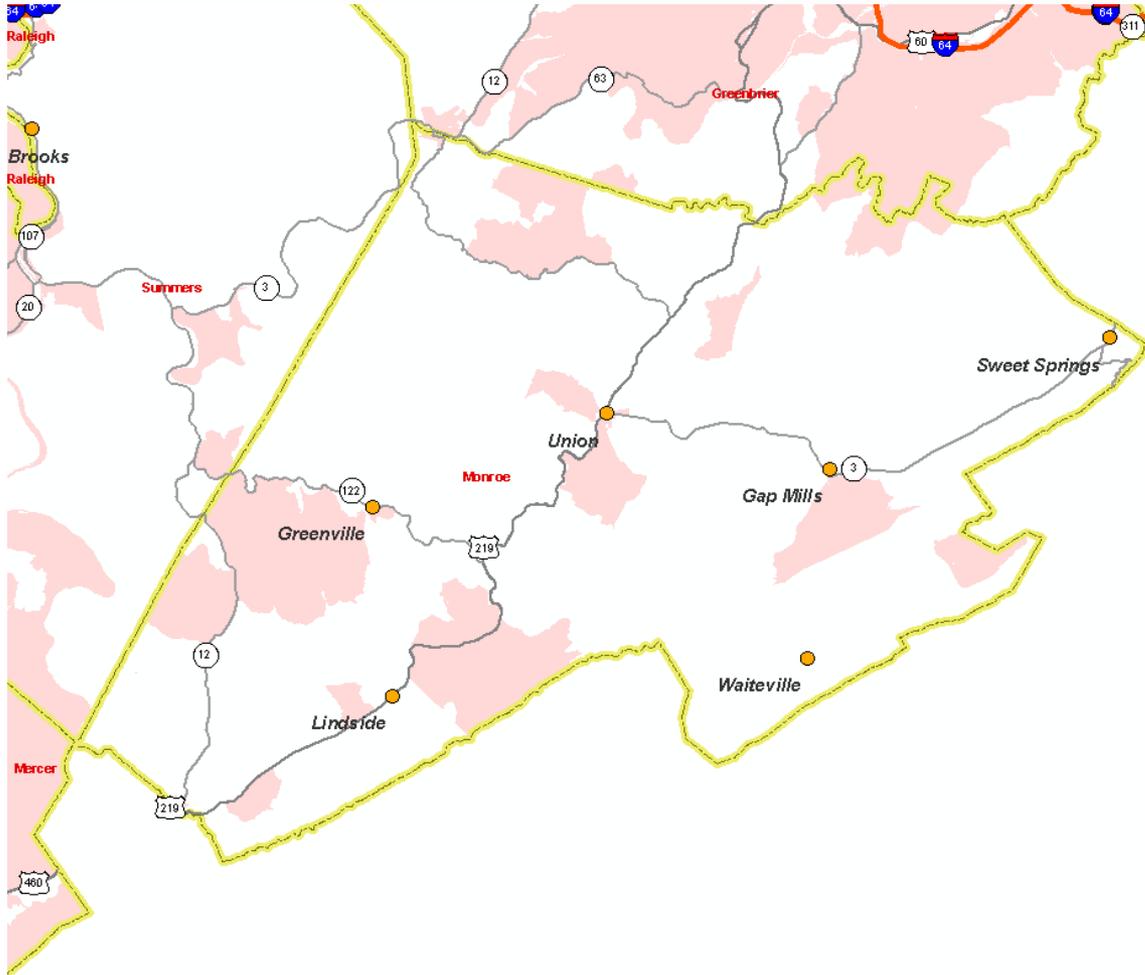
Fayette County – 768Kbps Downstream



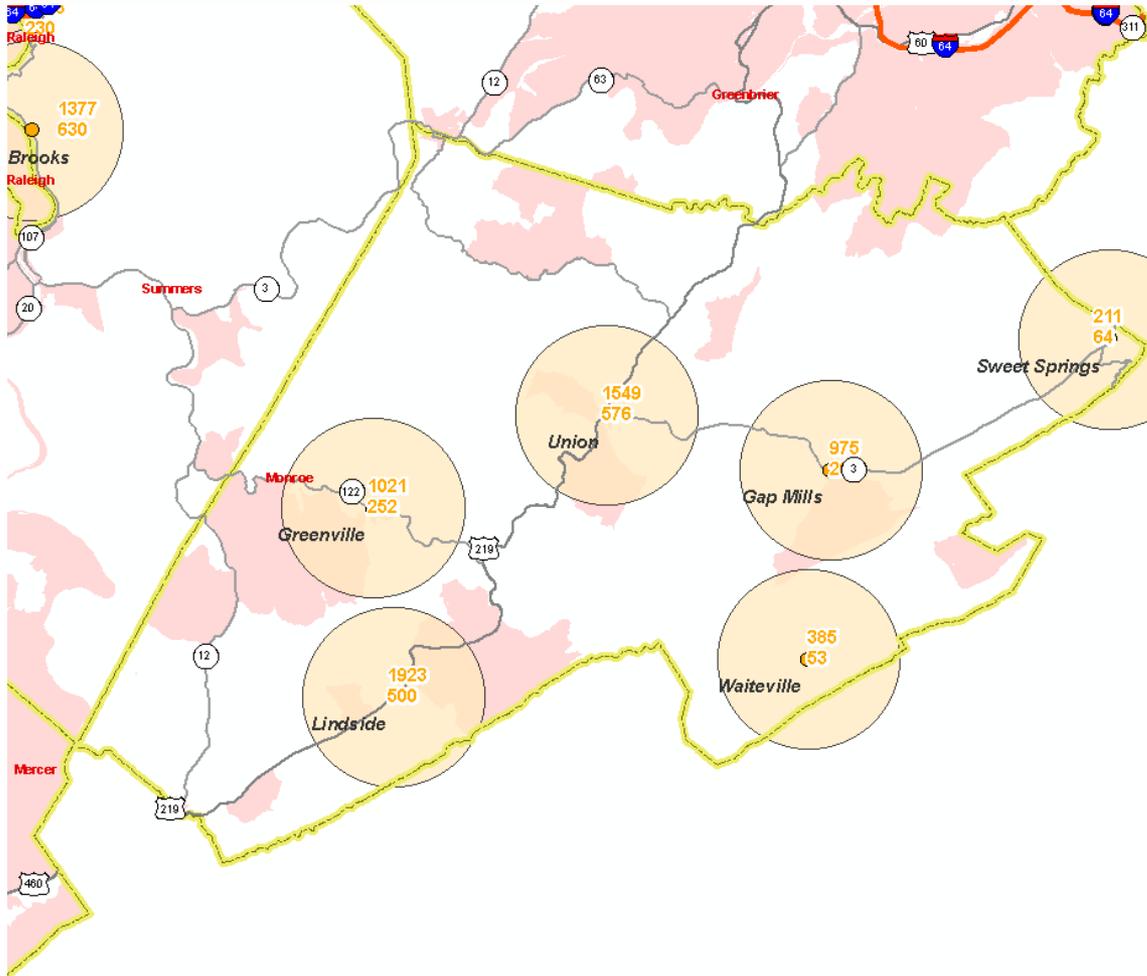
Fayette County – 768Kbps Downstream



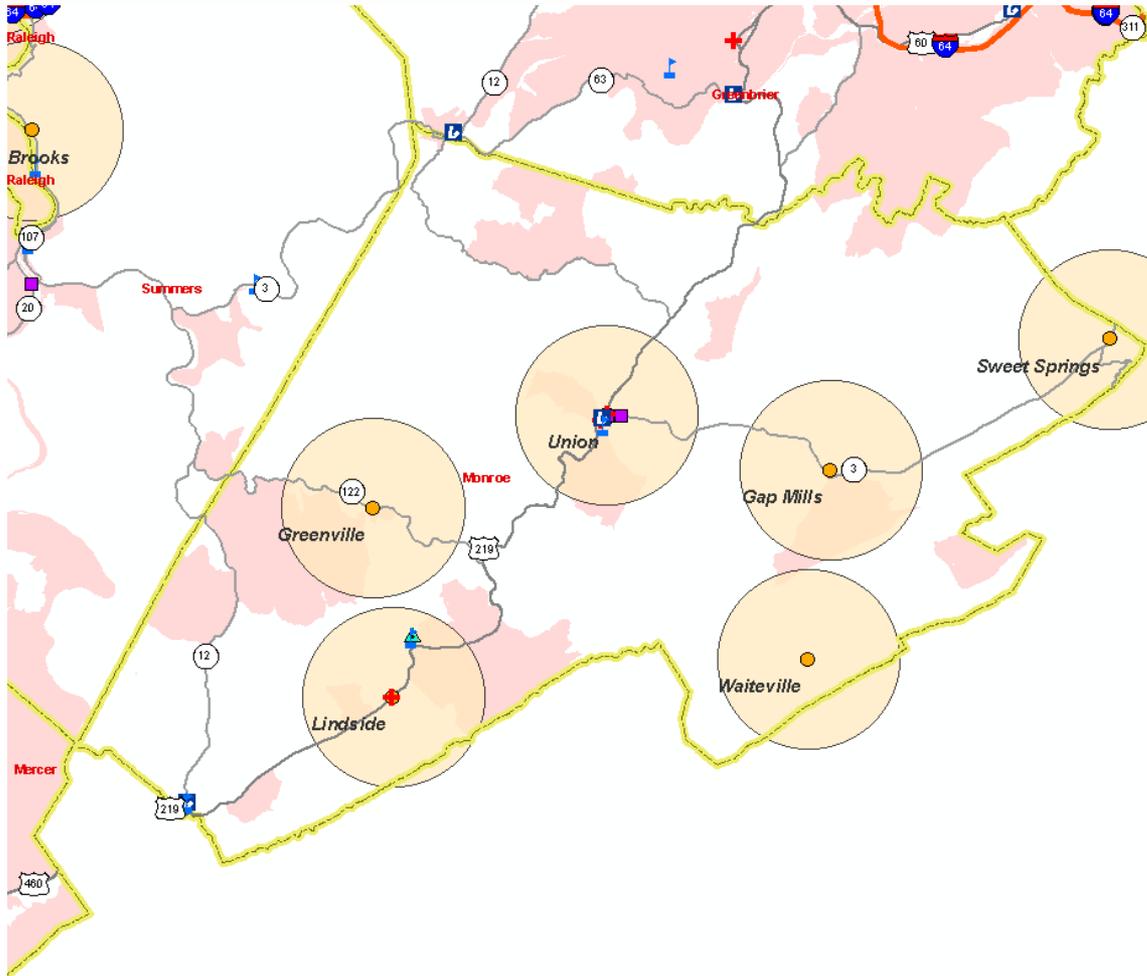
Monroe County – 768Kbps Downstream



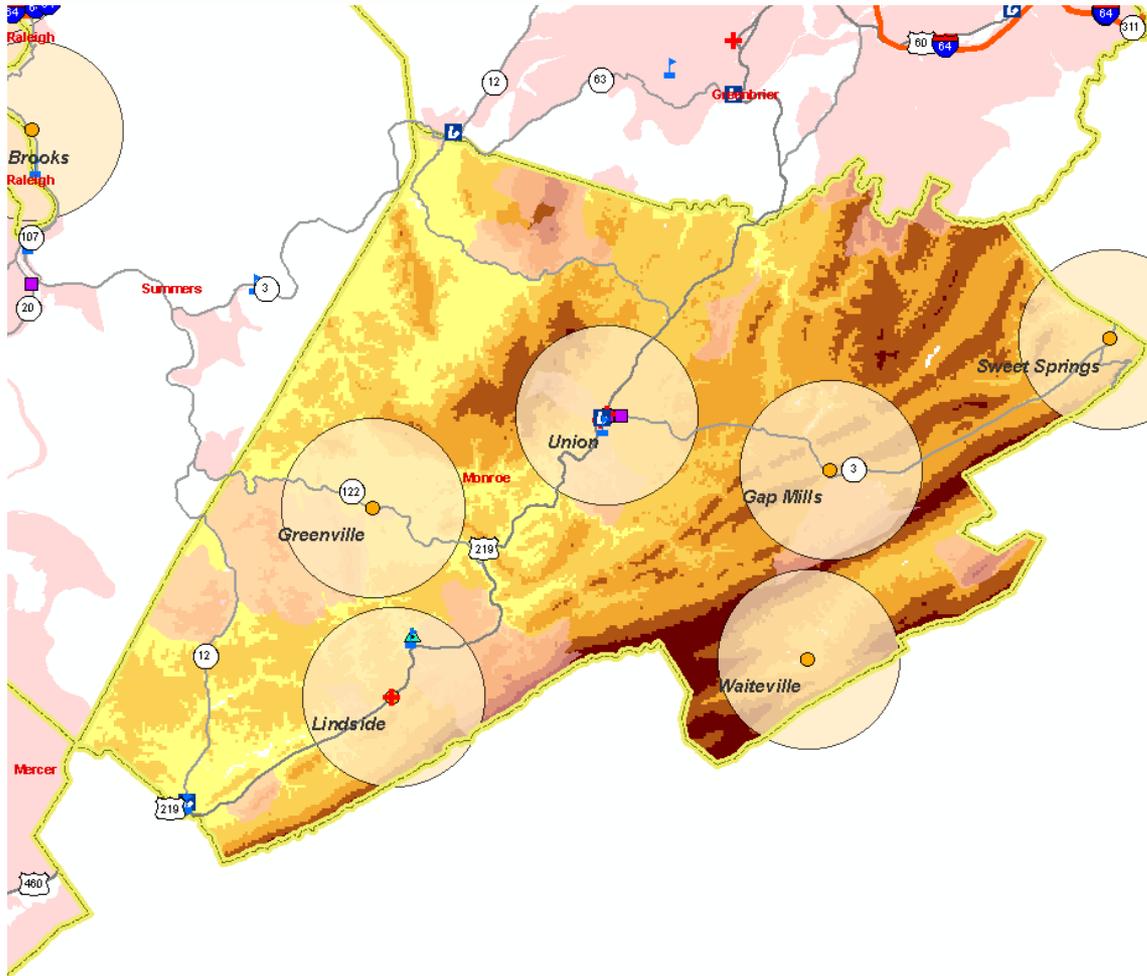
Monroe County – 768Kbps Downstream



Monroe County – 768Kbps Downstream



Monroe County – 768Kbps Downstream



Next Step Considerations

- Continue with data verification
- Case study/pilot selection
- Deployment assessment
 - Determine what is in play – leveraging assets/infrastructure (towers, land, ROW, facilities, CAI, etc.)
- Gauge vendor interest (e.g., vendor summit, RFI/RFP)
 - Solicit competitive solutions and options