



**Working to Complete a 53-County, 1,600-mile Trail Network**

**Executive Summary**

The P32+ Trail Network Connectivity Analysis opens our eyes to many things – namely continued trail possibilities and trail-related economic development/tourism success. A system of long, cross-region segments (commonly referred to as destination corridors) align nearly 1,600 miles of trails through 53 counties of Western Pennsylvania, Western New York, Western Maryland, Northern West Virginia and Eastern Ohio. These corridors, once just a dream, are now more than 50% constructed or in-place. The Network's has 860 completed miles linking urban places with undeveloped or natural landscapes and high tech research centers with historic districts.

The trail linkages fulfill real human needs - our needs to be active, relax, commute and *connect* with one another. With that, understanding trail “connectivity” is paramount as is realizing ways in which the remaining unconstructed portions of the P32+ Trail Network can be realized.

Among the three types of connectivity gaps that exist in our region, there are 50 unconstructed trail segments. Of these segments:

- 6 gaps totaling 166 miles are characterized as planning deficits – those portions of a destination corridor that do not appear to have any corridor planning proposed, underway or completed.
- 11 gaps totaling 87 miles are consistent with the experiential shift gap typology – those existing/planned corridors where there is a relatively short but significantly and commonly negative change in trail character/the user's trail experience
- 33 gaps totaling 471 miles have experienced or been challenged with on-going implementation roadblocks – those segments that have encumbered/obstructed construction (based on funding, acquisition, corridor control, engineering, etc.)

While many factors impact how trails come into existence, this Connectivity Analysis outlines the 12 key considerations influencing the scale of needed effort and the timing of future trail construction in this region. These 12 considerations, in no particular order of importance, include: 1) extent of gaps along a destination corridor, 2) status of secure right-of-way, 3) planning and engineering readiness, 4) extent of political support, 5) organizational capacity to spearhead and see through trail planning/construction/ maintenance, 6) potential economic development impacts, 7) potential tourism generation, 8) proximity to population, 9) potential to contribute to improved wellness, 10) remoteness/natural scenery, 11) proximity to historic resources and 12) proximity to surrounding public lands. Given the importance and organizational investments of each unique Corridor in the P32+ Trail Network, these considerations also aid in establishing a diagnostic look, rather than a prioritized/scored ranking system, for future trail efforts.

## P32+ Connectivity Analysis

The Connectivity Analysis includes a number of parts – definitions, criteria and background data; a Gap Map and typologies; analysis criteria; a connectivity assessment and assessment highlights. What can does the Connectivity Analysis conclude? More importantly, what is the call to action for completing the P32+ Trail Network? It illuminates:

### Background Data Key Highlights

- Approximately 3.5 million people living in 1.5 million households are located within 3 miles of a Destination Corridor. 8,000,000 people in 3.3 million households are located in the 53-County region.
- The average median income for a household within 3 miles of a Destination Corridor is approximately \$43,000. Within the 53-County region, the average median income per household is \$46,000.
- Within the 53-County region, 85% of the population is over the age of 16. 71% of the population within 3 miles of a Destination Corridor is over the age of 16.
- Within the 53-County region, 52% of the total population is employed. 43% of the total population within 3 miles of a Destination Corridor is employed.
- For those living within 1 mile of a Destination Corridor, 89.1% of those employed (16+ y.o.) commute by car, 3.1% take public transit, 4.7% walk or bike and 3.1% work at home. In the 53-county region, 89.8% of those employed commute by car, 2.9% take public transit, 4.0% walk or bike and 3.3% work at home.

### **Destination Corridor Commuter Analysis** (Commuters living within 1 mile of a destination corridor)

ID	NAME	Population Over 16	Employed	Method of Commuting					
				% of Commuters Drive Alone	% of Commuters Carpooled	% of Commuters Public Transportation	% of Commuters Walk	% of Commuters Bike/Other	% of Commuters Worked at Home
A	Cleveland to Erie	258,595	164,968	81.0%	7.8%	4.1%	2.9%	1.2%	3.0%
B	Erie to Pittsburgh	398,435	238,513	74.2%	10.5%	5.4%	5.3%	1.4%	3.1%
C	PA/WV/OH Connector	385,506	215,722	81.6%	9.8%	0.8%	3.9%	1.1%	2.9%
D	PA Wild Wild West Route	35,059	20,543	84.4%	8.8%	0.2%	2.3%	0.7%	3.6%
E	PA Wilds Connector	271,056	167,293	84.5%	7.4%	0.6%	2.8%	1.1%	3.7%
F	Pittsburgh to Ashtabula	238,253	142,806	84.6%	8.7%	0.8%	1.6%	1.1%	3.2%
G	Pittsburgh to Cleveland	623,106	387,866	80.6%	8.4%	3.7%	3.3%	1.1%	2.9%
H	Pittsburgh to DC	366,478	214,232	70.4%	9.9%	7.9%	7.0%	1.3%	3.4%
I	Pittsburgh to Harrisburg	159,776	91,168	84.3%	9.1%	0.4%	2.5%	1.0%	2.8%
<b>P32+ Network Total</b>		<b>2,491,054</b>	<b>1,496,962</b>	<b>80.0%</b>	<b>9.1%</b>	<b>3.1%</b>	<b>3.6%</b>	<b>1.1%</b>	<b>3.1%</b>
<b>P32+ Study Region</b>		<b>6,812,658</b>	<b>4,199,550</b>	<b>80.9%</b>	<b>8.8%</b>	<b>2.9%</b>	<b>2.9%</b>	<b>1.1%</b>	<b>3.3%</b>

Notes:

1. Employment and Community Statistic are based on the American Community Survey, 5 Year Average, 2012.
2. Network Total measured as commuters living within 1 mile of a Destination Corridor.

Corridor Alignments

- Planning for approximately 90% of the Network’s Destination Corridors is complete; 166 miles remains to be planned. Of the unplanned miles, 150 miles is associated with 2 planning gaps.
- Of the 50 current gaps (totaling 723 miles), 65% of the mileage is categorized as implementation roadblocks.
- Destination Corridors cross through 47 of the 53 counties. Of those 47 counties, gaps are found in *or* bordering 44 of them.
- 8 of the 50 gaps (16%) are between half (0.5) mile and one and two (2) miles in length; in other words, the *shortest* gap segments stacked end-to-end total 8.8 miles of potential trails.
- 13 of the 50 gaps (26%) are greater than 15 miles in length; in other words, the *longest* individual gap segments stacked end-to-end total 511.9 miles of potential trails.
- The remaining 29 gaps (58%) are between 2 and 15 miles. Stacked end-to-end, these segments total 203 miles; the average length of each gap segment is 7 miles.

**Destination Corridor Summary**

ID	NAME	CONNECTIVITY GAPS								Total Miles
		EXISTING		PLANNING DEFICIT		EXPERIENTIAL SHIFT		IMPLEMENTATION ROADBLOCK		
		Miles	Total	Miles	Total	Miles	Total	Miles	% of Total	
A	Cleveland to Erie	28.9	30%	51.7	54%	14.0	15%	0.7	1%	<b>95.3</b>
B	Erie to Pittsburgh	105.3	42%	1.8	1%	44.7	44%	101.1	40%	<b>253.0</b>
C	PA/WV/OH Connector	123.3	44%	98.1	35%	10.9	23%	47.3	17%	<b>279.6</b>
D	PA Wild Wild West Route	41.8	67%	0.0	0%	0.0	0%	20.2	33%	<b>62.0</b>
E	PA Wilds Connector	67.0	40%	12.6	7%	8.7	11%	81.1	48%	<b>169.4</b>
F	Pittsburgh to Ashtabula	78.4	53%	0.0	0%	0.0	0%	68.9	47%	<b>147.3</b>
G	Pittsburgh to Cleveland	144.0	61%	1.7	1%	8.5	10%	82.2	35%	<b>236.4</b>
H	Pittsburgh to DC	203.4	100%	0.0	0%	0.0	0%	0.0	0%	<b>203.4</b>
I	Pittsburgh to Harrisburg	67.9	49%	0.00	0%	0.0	0%	69.6	51%	<b>137.5</b>
<b>TOTAL</b>		<b>860.0</b>	<b>54%</b>	<b>166.0</b>	<b>10%</b>	<b>86.8</b>	<b>5%</b>	<b>471.1</b>	<b>30%</b>	<b>1,583.9</b>

Notes:

1. All mileages shown reflect what is in the P32+ Regional Study Area as of September 2014.

Assessment Highlights

- 5 of the 12 key considerations of the trail network's expansion can be directly and more immediately influenced by day-to-day policy and project decisions. These considerations include: planning/engineering readiness, status of secure right-of-way/title, extent of gaps along a destination corridor, extent of political support, and organizational capacity to spearhead and see through trail planning/construction/maintenance. The 7 other key considerations will likely be more influenced by longer-term regional-scale patterns/momentum.
- Cleveland to Erie, Erie to Pittsburgh, PA/WV/OH Connector, PA Wilds Connector, Pittsburgh to Ashtabula and Pittsburgh to Cleveland necessitate continued multi-state coordination.
- With the exception of the PA Wild Wild West Route (a single implementation gap), every Destination Corridor has a project that can be targeted for short-term action along with a project that will take more significant investments of time/coordination
- The PA Wild Wild West Route, Pittsburgh to Ashtabula and Pittsburgh to Harrisburg Corridors can be entirely characterized as challenged with implementation roadblocks.
- The Cleveland to Erie and PA/WV/OH Connector Corridors have the most significant planning gaps to be addressed.
- When examining the 12 key considerations as an aggregate, the PA Wilds Connector has the most challenges to overcome. The Erie to Pittsburgh and Pittsburgh to Cleveland Corridors appear to have the least challenges to overcome for complete development.
- With the exception of Venango County with 4 gaps present, there are typically one to two gaps per county.
- Upon completion of 4 short gaps (collectively 4.1 miles) in the vicinity of Akron and Cleveland, 120.5 miles of trails can be continuously linked together.
- With completion of a 0.6-mile gap south of Oil City on the PA Wilds Connector, 62 miles of trails can become continuously linked together.
- For planned trail segments, unsecured right-of-way is a prevalent challenge along the PA Wilds Connector, Pittsburgh to Ashtabula, and Pittsburgh to Harrisburg Corridors.
- The Pittsburgh to Erie Corridor continues to evolve with increased project coordination and support to eliminate implementation roadblocks.

Potential Launching Points for Next Steps

*Destination Corridor A: Cleveland to Erie*

Strength: low percentage gap adjacent to completed segments - A1

Challenge: planning, engineering, potential unknown construction obstacles - A3

*Destination Corridor B: Erie to Pittsburgh*

Strength: project technical plans/documents, strategy and costs exist –B4/B5/B6

Challenge: high percentage of gaps – B1/B11

*Destination Corridor C: PA/WV/OH Connector*

Strength: capacity exists and is active – C4/C6

Challenge: planning, engineering, potential unknown construction obstacles – C7

*Destination Corridor D: PA Wild Wild West Route*

Strength: More intact natural landscape – D1

Challenged: Distance to historic resources – D1

*Destination Corridor E: PA Wilds Connector*

Strength: low percentage gap adjacent to completed segments – E1/E2

Challenge: Unsecured rights-of-way – E5/E6

*Destination Corridor F: Pittsburgh to Ashtabula*

Strength: Proximity to public lands – F3

Challenge: Unsecured rights-of-way – F1

*Destination Corridor G: Pittsburgh to Cleveland*

Strength: capacity exists and is active – G10

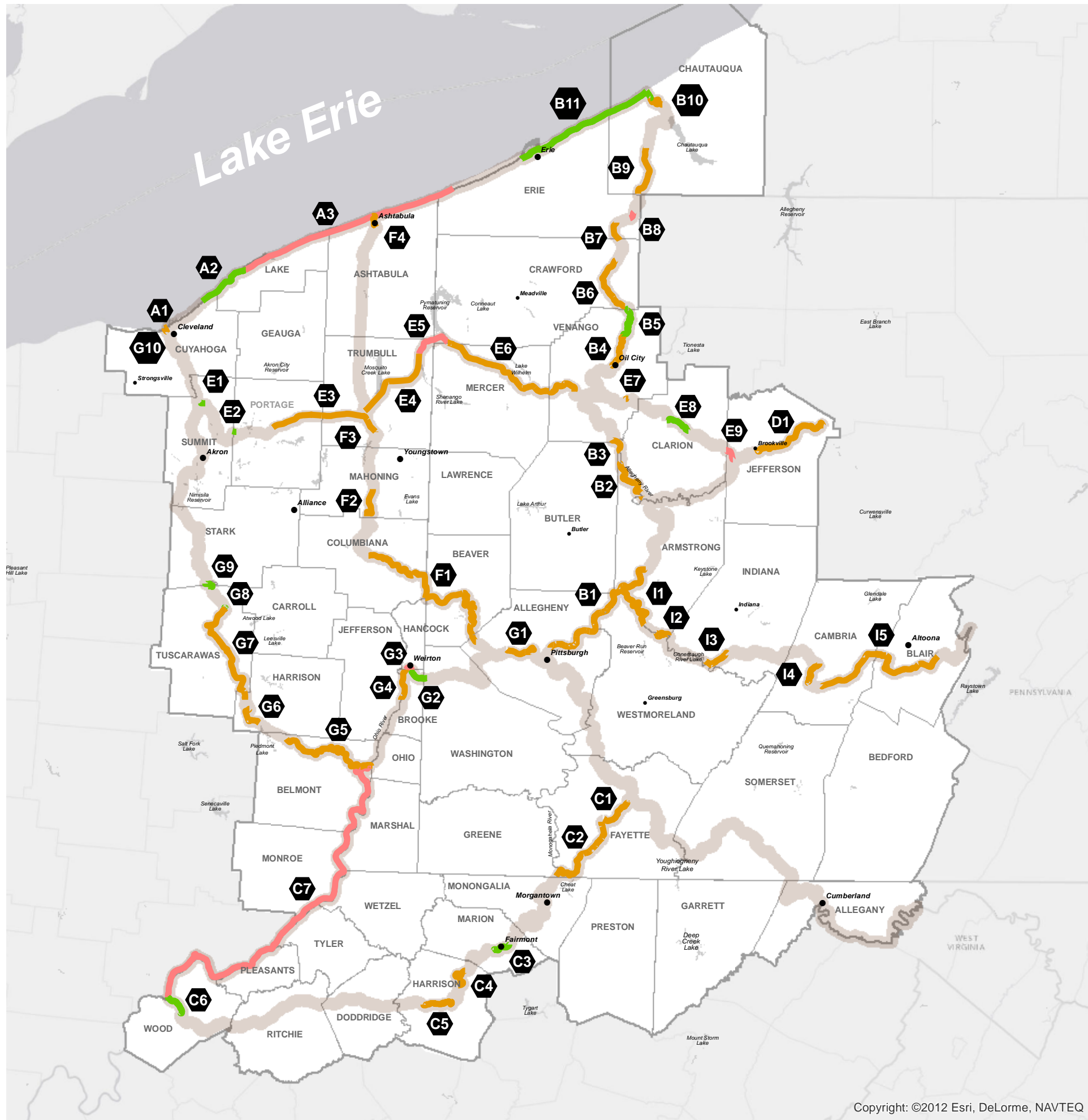
Challenge: high extent of gap adjacent to completed segments – G5/G7

*Destination Corridor H Pittsburgh to DC - Corridor Complete*

*Destination Corridor I: Pittsburgh to Harrisburg*

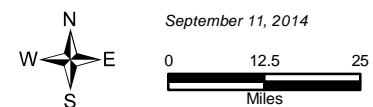
Strength: Strong political support expressed - I1/I2

Challenge: Challenged economic development impact potential – I5



# NETWORK CONNECTIVITY GAPS BY TYPE P32+ REGIONAL TRAIL SYSTEM

## 2014 CONNECTIVITY ANALYSIS



### LEGEND

- Study Area Boundary
- State Boundary
- County Boundary
- Major City

### THE NETWORK

- Network Corridor

### CONNECTIVITY GAPS

- Planning Deficit
- Experiential Shift
- Implementation Roadblock

### Destination Corridor Summary

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