

BELOMAR 2050 METROPOLITAN TRANSPORTATION PLAN

DRAFT
June 2026



Prepared by the Belomar Regional Council

Table of Contents

Chapter 1: Introduction	4
MTP Overview.....	5
The Belomar Regional Council.....	5
Project Purpose.....	10
Chapter 2: Engagement Summary	12
Engagement Overview.....	13
Engagement Compliance.....	13
Public Engagement.....	14
Multimodal Open-House.....	14
Public Pop-Up Meetings.....	15
MTP Public Meeting #1.....	16
Public Survey Results.....	17
Final MTP Public Meeting.....	23
Public Comment Period.....	23
Local Leadership.....	24
Focus Groups.....	24
MTP Advisory Group (AG).....	27
Engagement Summary.....	29
Chapter 3: Understanding the Region	30
Regional Profile.....	31
Regional Demographics.....	31
Economy.....	38
Transportation System Summary.....	42
Roadway Network.....	42
Regional Roadway Safety.....	46
Traffic Performance.....	49
2050 Traffic Forecast.....	54
Freight Distribution.....	56
Multimodal Transportation.....	61
System Maintenance & Resilience.....	68
Infrastructure Condition Summary.....	68
Environmental Hazards.....	71

Chapter 4: Goals, Objectives, & Performance MEasures.....74

- Performance Based Planning75
 - Why Performance Based Planning?75
 - Regional Performance Measures.....76
- MTP Goals, Objectives, & Action Items.....80
 - Goals Grounded in Local Feedback.....80
 - Statewide Transportation Goals81
- Goal 1: Foster Livable & Economically Competitive Communities.....82
- Goal 2: Improve And Maintain Roadway And Freight Facilities.....84
- Goal 3: Advance Transportation Safety And Regional Security.....86
- Goal 4: Expand Quality Mobility Options For All Users88

Chapter 5: Recommendations & Fiscal Constraint90

- Recommendations & Fiscal Constraint91
 - MTP Requirements.....91
 - Belomar 2050 MTP Fiscal Constraint.....92
 - Belomar 2050 MTP Draft Project List.....94
 - Project List Summary117
- Public Transportation Projects & Funding119
 - Public Transportation119
 - Transit Agency Funding120
 - Transit Projects.....122
- Funding Options & Implementation124
- Conclusion.....126

Appendix.....127

CHAPTER I: INTRODUCTION



MTP Overview

The Belomar 2050 Metropolitan Transportation Plan (MTP) was created through a comprehensive, cooperative, and continuing planning process. This MTP sets a new vision for expanding transportation options across our region and preparing our communities to plan, fund, and build projects their residents need most. Read more in this chapter to learn about this MTP's planning process, requirements, and regional transportation goals:

The Belomar Regional Council

The Bel-O-Mar Regional Council and Interstate Planning Commission's Transportation Study program (Belomar) was established in 1969 and serves as the Metropolitan Planning Organization (MPO) for the region. Since completion of the first long-range transportation plan in 1975, the MPO has regularly updated the MTP to comply with federal planning requirements and to reflect overall changing local conditions, transportation priorities, and community needs.

The Metropolitan Transportation Plan (MTP) 2050 provides the long-range, multimodal transportation for the Wheeling, West Virginia-Ohio Metropolitan Planning Area. The purpose of this plan is to support regional economic vitality, improve quality of life, and ensure the safe, efficient, and reliable movement of people and goods throughout the region over a 20-plus-year planning horizon.

This plan was prepared in cooperation with the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), ODOT, WVDOT, local jurisdictions, and regional stakeholders. The Belomar MTP 2050 is consistent with federal metropolitan planning requirements and emphasizes fair outcomes, ensuring that traditionally underserved populations, including low-income communities, older adults, and people with disabilities, have meaningful opportunities to participate in the planning process and benefit from transportation investments.

Belomar MPO Staff:

- Scott Hicks – Executive Dir.
- Samuel Richardson - Transportation Planning Dir.
- Ethan Combs - Transportation Planner
- James Benner - Sr. Transportation Planner & GIS Coord.

Belomar TAC & Policy Board:

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- Lisa Weishar – EORTA/OVRTA Executive Dir.
- Terry Lively – Belmont Co. Engineer
- J.P. Dutton – Belmont Co. Commissioner
- Randy Russell – Ohio County Commissioner
- Betsy Frohnappel – Marshall Co. Administrator
- John Grazinskas – Marshall Co. Commissioner
- Andrew Satak – City of Martins Ferry Service Dir.
- Rick Healy – City of Moundsville City Mgr.
- Robert Herron – City of Wheeling City Mgr.
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- Franklin Shaffer – Pultney Township Trustee
- Jeff Haught – Village of Powhatan Point Mayor
- Chris Bryan – Village of Powhatan Point Representative
- Mike Beaver – Village of Powhatan Point Councilman
- Cindy Blake – City of McMechen City Clerk
- Kara Greathouse – FHWA
- Neena Nallaballi – EPA Region 5
- Kevin Sullivan – WVDOH
- Michael Dodd – WVDOH
- Kerri Wagner – WVDOH
- Brady Vannest – WVDOH District 6
- Waseem Khalifa – ODOT
- Oliva DiGiovone – Ohio EPA
- Dan Lorenz – ODOT District 11
- Scott Warner – ODOT District 11

The Belomar Region

The metropolitan planning area for this MTP includes Belmont County, Ohio, and Ohio and Marshall Counties, West Virginia, an interconnected tri-county region with shared economic, workforce, and transportation systems. The Belomar region sits at the intersection of the Ohio River and historic U.S. 40, putting us right in the middle of other cities like Columbus, Pittsburgh, Morgantown, Steubenville, and Marietta.

The region's transportation network reflects a long history of industrial activity, river commerce, rail operations, and regional connectivity, while also facing contemporary challenges related to population change, aging infrastructure, rural access, safety and fiscal constraints.

Regional Cities & Villages

Belmont Co.

- Barnesville
- Bellaire
- Belmont
- Bethesda
- Bridgeport
- Brookside
- Flushing
- Holloway
- Martins Ferry
- Morristown
- Powhattan Point
- Saint Clairsville
- Shadyside
- Wilson

Ohio Co.

- Wheeling
- Bethlehem
- Tridelpia
- West Liberty
- Valley Grove
- Clearview

Marshall Co.

- Moundsville
- Glen Dale
- McMechen
- Benwood
- Cameron

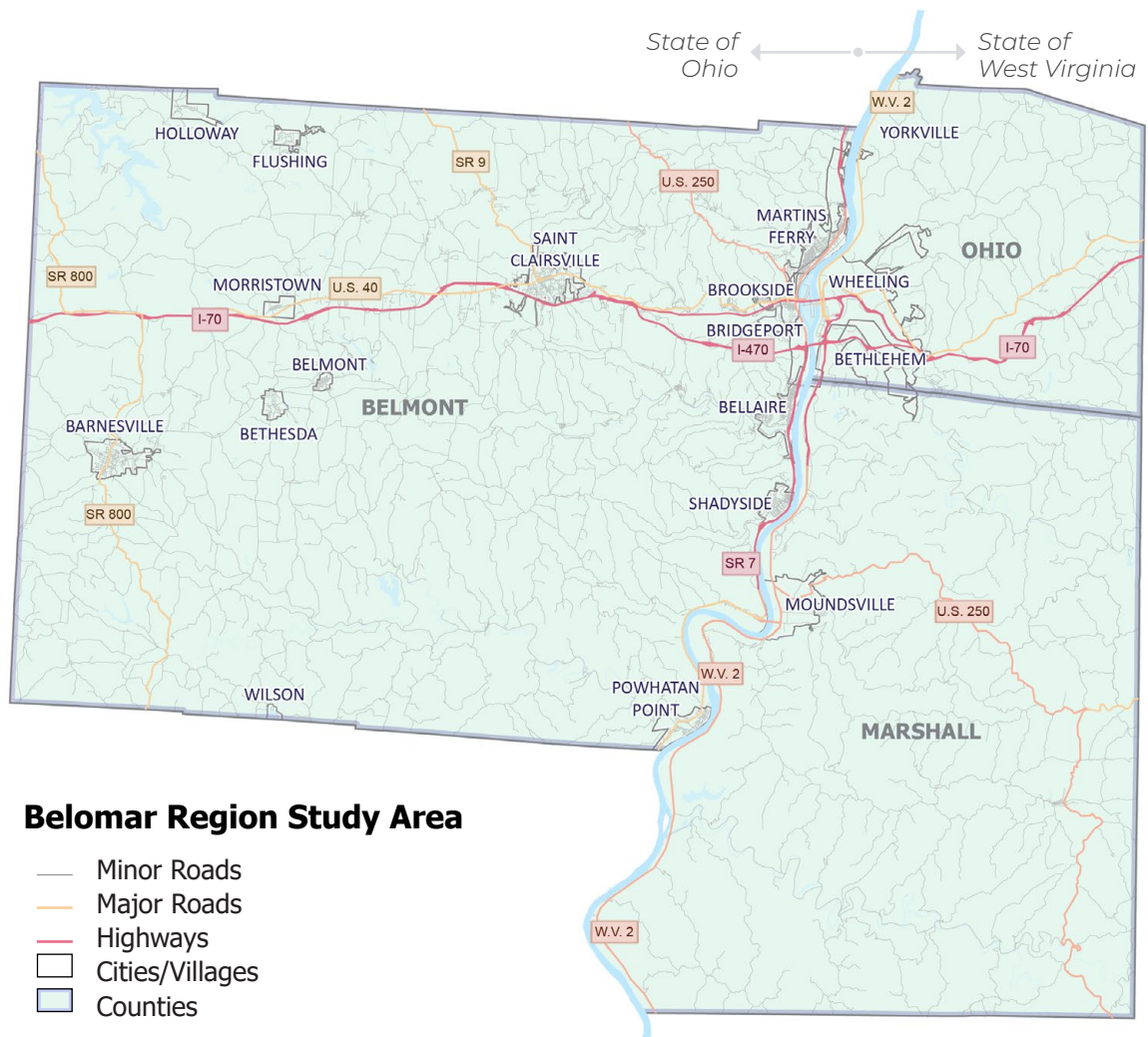


Figure 1. The Belomar Region's Major Roads, Cities/Villages, And Counties

Surrounding Metro Areas

The region sits right at the crossroads of the historic U.S. Route 40 and the Ohio River. These corridors are a historic fertile ground for industry which many small and large cities developed on over time.

The region is within just over a two hour drive of dozens of cities, making Wheeling a major crossroad in the Midwest. More locally, cities like Pittsburgh, Steubenville, and Morgantown share industry and workforce with the Belomar Region. This provides a major opportunity to play a more central role in the distribution of goods and resources to the greater Ohio River Valley Region in the future.

Surrounding Metro Areas

Within 50 miles

- Steubenville, OH
- Washington, PA
- Pittsburgh, PA
- Morgantown, WV

50-100 miles

- Canton, OH
- Akron, OH
- Youngstown, OH
- Newark, OH
- Athens, OH
- Marietta, OH
- Greensburg, PA
- Parkersburg, WV
- Clarksburg, WV
- Morgantown, WV

100-150 Miles

- Cleveland, OH
- Columbus, OH
- Chillicothe, OH
- Erie, PA
- Point Pleasant, WV
- Charleston, WV
- Fayetteville, WV
- Cumberland, VA

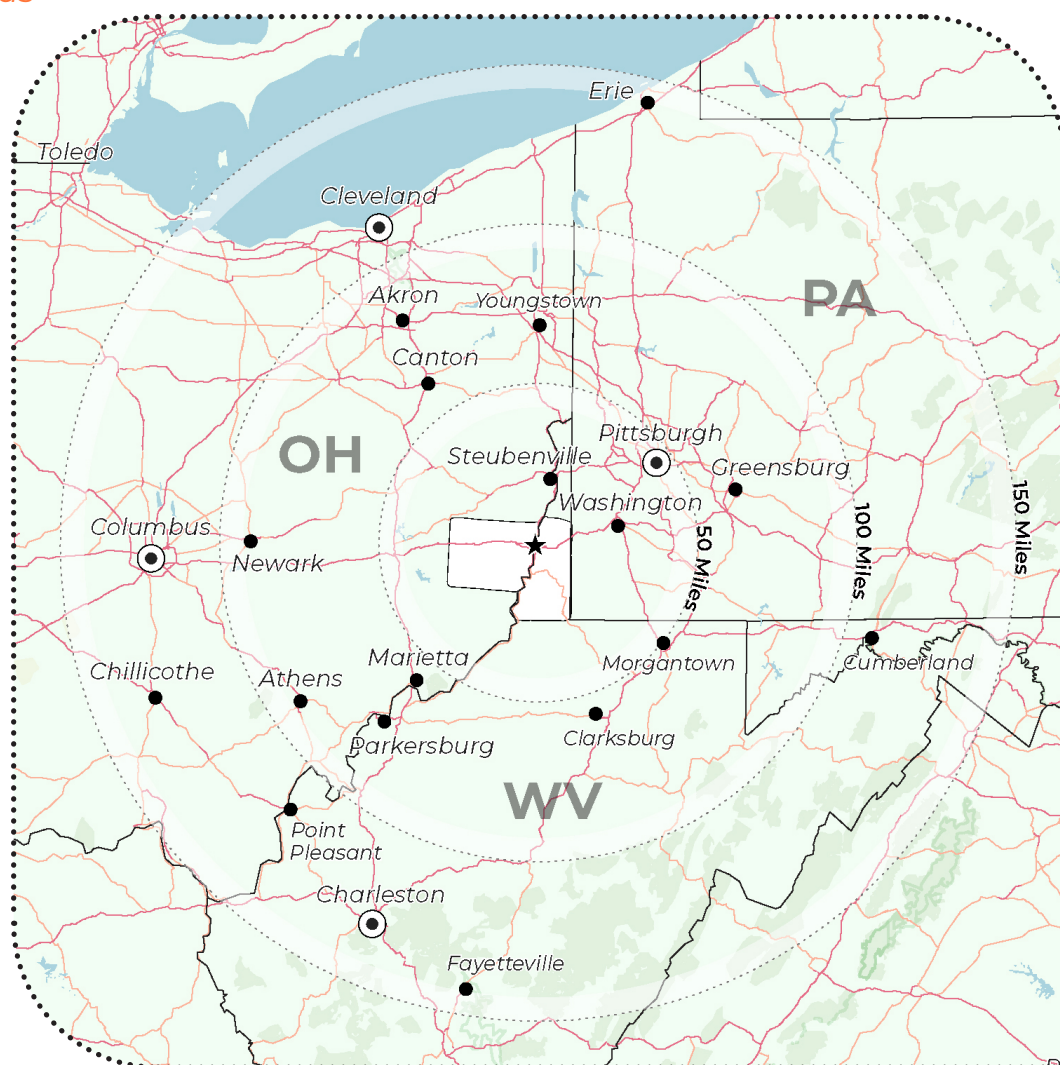


Figure 2. Cities And Metro Areas Within 150 Miles Of The Belomar Region

Regional Planning Context

Local, regional, and statewide planning and service agencies focus their efforts on improving the communities they serve. In recent years, these agencies have prepared documents through extensive planning processes to identify needs and propose practical solutions. This work serves as a foundation of public engagement, planning analysis, and best practices for Belomar to follow and build on.

The following documents were collected and reviewed to understand the long history of planning work within the Belomar Region:

Local Plans

1. *Envision Wheeling Comprehensive Plan (2014)*

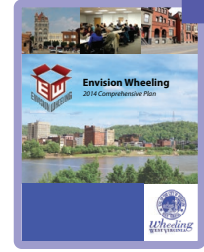
- Defines a vision for the city’s future and identifies steps, and strategies for progress.
- Identifies active transportation and public transit as key components to developing in a more sustainable and modern way.
- Calls for strong community and regional partnerships to make reaching these goals possible.

2. *Wheeling Access Plan (2019)*

- Analyzes non-motorized trip patterns and identifies locations that are currently disconnected due to topography or lack of infrastructure.
- Lists common-sense improvements that could be made to make walking, biking, and using transit safer, more efficient, and more enjoyable.

Local & Regional

2014



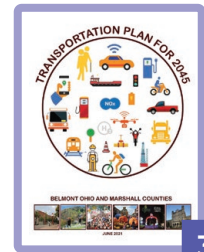
1

2019



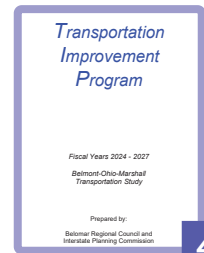
2

2021



3

2022



4

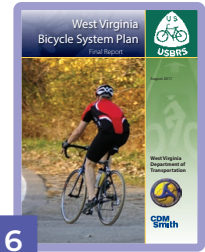
2023



5

Statewide

2017



6

2021



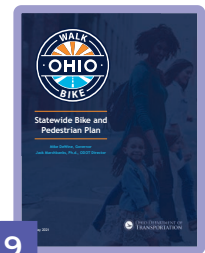
7

2021



8

2021



9

Figure 3. Regional Transportation Planning Context

Regional Plans

3. Belmont-Ohio-Marshall Counties Transportation Plan for 2045 (2021)

- This long-range transportation plan for the Wheeling-Bridgeport Metropolitan Planning area promotes economic development through the safe and efficient movement of people and freight.
- Recommendations focus on creating livable communities through streetscaping, bike/ped facilities, and improved transit.

4. BOMTS Transportation Improvement Plan 2024-2027 (2022)

- This transportation improvement plan for the Belmont-Ohio-Marshall Transportation Study (BOMTS) identifies projects to maintain and improve infrastructure through 2027.
- Transit projects included through 2027 are primarily intended to maintain existing services.

5. WVDOT Coordinated Public Transit - Human Service Plan for Region X (2023)

- Region X (Marshall, Ohio, and Wetzel Counties) worked with the West Virginia Department of Transportation to focus on access to human services, jobs, and goods for transit dependent populations.
- Agency coordination and public information/education campaigns were among many strategies outlined.
- Public information strategies included real-time bus tracking through an application and online information about existing service and service changes.
- It was recommended that existing service levels should be maintained, but extending hours of operation is critical for transit dependent users.

Statewide Plans

6. West Virginia Bicycle System Plan (2017)

- This West Virginia Dept. of Transportation (WVDOT) planning study identifies regional connections for on-street signed bike routes utilizing the state highway system.
- This plan was an effort to expand bike connections in a state where bike transportation was exceedingly difficult.
- Identifies 12 WV Cross State Bicycle Routes.

7. 2050 West Virginia Statewide Long-Range Transportation Plan (2021)

- WVDOT emphasized the need to improve transit services across the state.
- Established a statewide focus on sidewalks, pedestrian connections, bike signage, and improved bus amenities.

8. Access Ohio (2021)

- The Ohio Dept. of Transportation (ODOT) statewide plan for all modes in Ohio, including transit and active transportation.
- This plan outlines strategies for local and regional agencies to improve mobility in their communities. These strategies include inter-regional coordination, public education, and last mile services.

9. Walk.Bike.Ohio (2021)

- The Ohio Dept. of Transportation's (ODOT) bike and pedestrian plan to improve safety and mobility across the state.
- Establishes an ODOT task force for developing complete streets guidance.
- Asks locals to identify needs, develop active transportation plans, and educate people to improve mobility in their communities.

Project Purpose

The Belomar MTP 2050 is a multimodal plan that addresses the needs of all users and transportation modes. The plan considers highways and bridges, public transit, active transportation, freight movement, aviation, and emerging transportation technologies. Freight transportation remains a critical regional asset and includes truck, river, rail, air, and pipeline activity. The Ohio River continues to serve as a vital freight corridor, while interstate highways and regional connectors support industrial, commercial and workforce mobility. Rail infrastructure, though more limited than previous decades, remains important for both freight and trail-based reuse, with former rail corridors supporting a growing system of multi-use trails that contribute to recreation and tourism.

Development of the Belomar MTP 2050 considered a wide range of data and planning factors. These factors included population and demographic trends, economic conditions, land use patterns, travel behavior, system condition and performance, safety trends, freight flows, and anticipated revenues available for transportation investment. The plan emphasizes preservation of the existing system while identifying long-term needs and priorities within realistic fiscal constraints.

Public and stakeholder engagement was an integral part of the Belomar MTP 2050 development process. Opportunities for input were provided throughout the entirety of the planning process to local governments, partner agencies, transportation providers, advocacy organizations and the general public. A public survey was launched and received many responses. Other methods of engagement included public meetings, pop-ups, public comment opportunities, all of which helped shape goals, needs identification, and regional priorities.

Goal #1:



“ Foster Livable and Economically Competitive Communities ”

Goal #2:



“ Improve and Maintain Roadways and Freight Facilities ”

Goal #3:



“ Advance Regional Transportation Safety and Security ”

Goal #4:



“ Expand Quality Mobility Options for All Users ”

Regional Coordination & Regulatory Compliance

The Belomar MTP 2050 reflects coordination with state and regional plans, including the Ohio Department of Transportation's Access Ohio Long-Range Plan, and the West Virginia Department of Transportation's statewide multimodal planning efforts.

The plan was created through a comprehensive, cooperative, and continuing process meets and the following requirements of an MTP:

1. Has a horizon of at least 20 years
2. Inventories today's transportation system
3. Is fiscally-constrained, meaning it recommends projects that are feasible with the expected funding available to the agency
4. Conducts engagement about what is important to residents and stakeholders, both now and in the future
5. Evaluates all modes of transportation including driving, freight, biking, walking, and transit systems
6. Outlines a strategy to achieve the nation's overall performance measures for the transportation system

MTP Planning Process

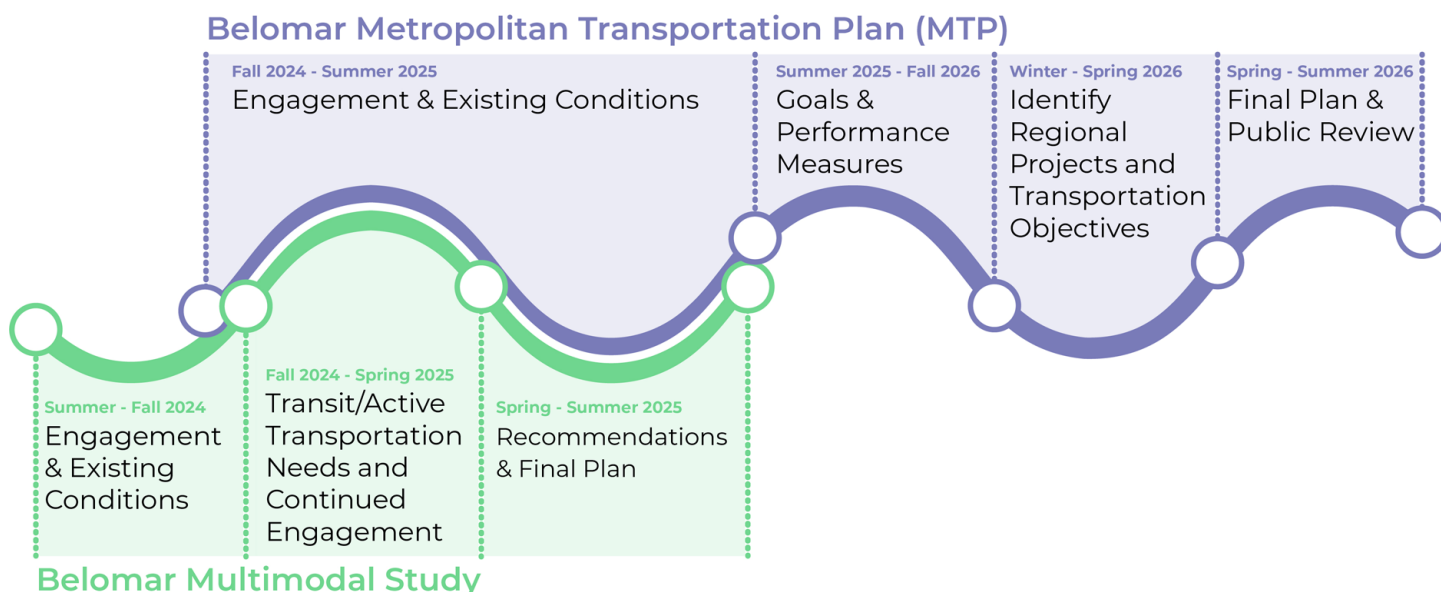


Figure 4. Belomar Multimodal Study And Metropolitan Transportation Plan Unified Project Schedule

CHAPTER 2: ENGAGEMENT SUMMARY



Engagement Overview

No one knows a region better than those who live there, which is why this engagement process looked to connect directly with the public and community leaders. This plan's goals and recommendations were forged by the conversations and relationships formed throughout this process. Read more in this chapter to learn about all of the engagement opportunities held during this plan's development:

Engagement Compliance

This engagement process was completed in compliance with Belomar's Consolidated Public Participation and Civil Rights Plan. This plan consolidates requirements from U.S. Civil Rights Laws and public participation policies to ensure a continuing, comprehensive, and cooperative approach to transportation planning. For MTP development, the public engagement process must hit the following milestones:

- One Public Open House during plan development
- One Public Open House during the draft project list phasing
- Public notice of the approaching comment deadline issued at least 15 days prior to the day of the proceeding TAC meeting before Policy Committee Adoption Consideration

Advertisement for public engagement focused on reaching underserved populations including those living in poverty, senior citizens, the disabled, and zero-vehicle households. To do this, engagement events were widely advertised using paper fliers, survey fliers, newspaper advertisements, social media, project website, and an online advertisement campaign. Fliers advertising the online public survey were displayed at public libraries, large retail stores, Oglebay Village, Wheeling Station, and places of worship around the region. The online video advertisement was posted on YouTube and Google platforms, resulting in 1,500 impressions, leading to 500 visits to the project website where people could learn more about this study and keep up to date with future Belomar engagement opportunities.

Unified Engagement Process: Belomar Multimodal Study & 2050 MTP

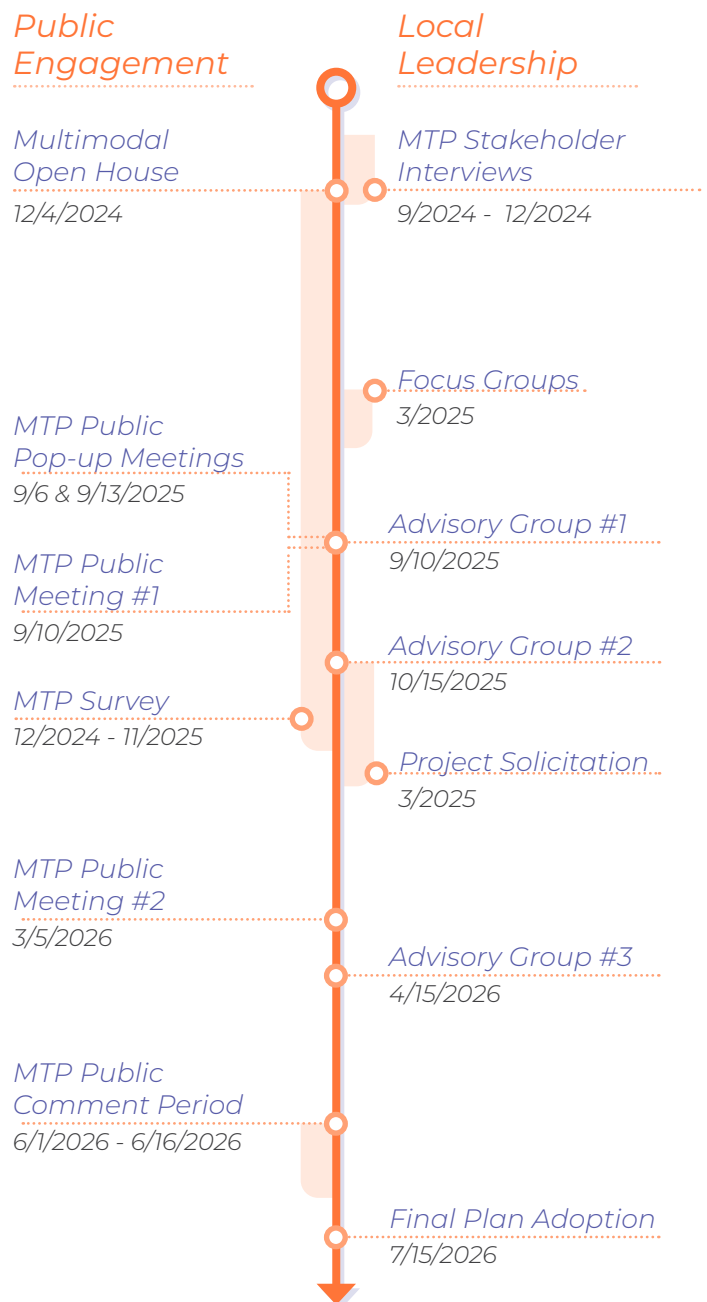


Figure 5. Belomar 2050 MTP Engagement Timeline

Public Engagement

Understanding people's transportation experience helps us identify where improvements will make the biggest impact in residents' daily lives. Public participation played a central role in determining this MTP's goals and projects. Read on to learn more about the public engagement opportunities and what we learned:

Multimodal Open-House

A public open house was hosted on December 4th, 2024 as part of the 2025 Belomar Multimodal Study's engagement process. This format encouraged one-on-one conversations with the project team about how we can make it easier and safer to bike, walk, and use transit. Participants discussed regional multimodal needs with Belomar representatives across five activity stations.



Multimodal Open House Meeting - 12/4/2024

What We Learned

New Bike/Ped Connections

- People enjoy the Wheeling Heritage Trail and see potential to connect more communities by closing the 6.4 mile gap between the trail's south terminus in South Wheeling and the Glen Dale to Moundsville Rail Trail.
- Connections across the Ohio River are limited. Opening the Wheeling Suspension Bridge to foot traffic is an improvement, but need additional connections to Martins Ferry, Bridgeport, and Bellaire.

Improving Public Transit

- Transit service schedules are limited. Participants said services either started too late or ended too early for trips they hoped to make.
- Service headways are large, causing excessive wait times and making bus service less dependable to use for appointments and commuting.
- Desire for higher frequency routes to job and commercial centers like The Highlands.

Connecting To Points Of Interest

- Several multifamily housing developments are well outside the existing transit service area. Transit service is especially critical for these residents who are often older or lack reliable access to a personal car.
- A desire was expressed for new stops outside of Wheeling; including near medical centers, higher education, and government services.

Safety, Maintenance, And Accessibility

- Sidewalks, especially in rural areas and along major roads, can be poorly maintained with cracks and overgrowth.
- Roadway crosswalks are sometimes unmarked or lack ADA curb ramps. Clear markings with ADA compliant curb ramps are especially critical near transit stops, health care centers, and commercial districts.

Multimodal Priorities

This station focused on gauging public support for improvements across different multimodal options. Participants placed stickers to indicate how high they would prioritize each mode and discussed improvement options for each. Below are the key takeaways for each mode:

Walking

- Pedestrian improvements; including more sidewalks, sidewalk maintenance, ADA compliance, and high visibility and protected street crossings were universally supported.

Biking

- In most cases, people were more likely to bike for recreation than transportation.
- Participants strongly supported expanding shared-use paths, rural bike lanes and trails, and increased bike parking in urban areas.

Public Transit

- Transit users urged for new stops and expanded hours.
- There was a general belief that transit improvements would be the most difficult to implement.

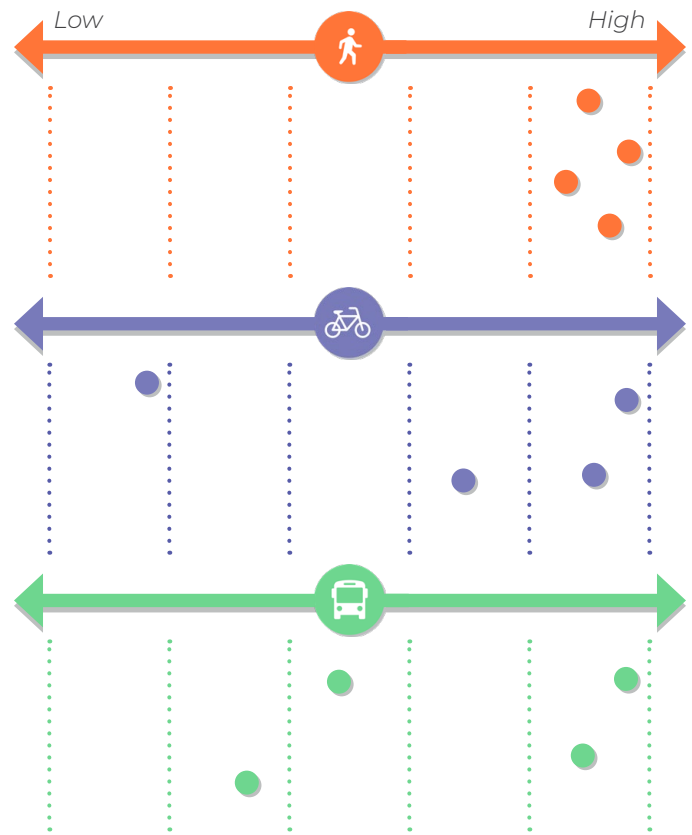
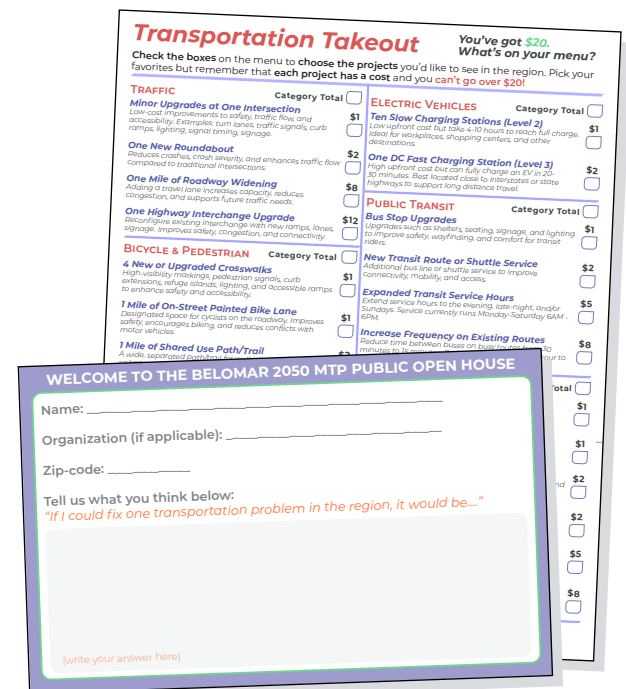


Figure 6. "What would you prioritize" activity results

Public Pop-Up Meetings

Two public pop-up meetings were held at the Wheeling Farmers Market on September 9th, 2025 and September 13th, 2025. These events were designed to bring our planning process directly to the community, collect comments, and advertise for the public survey and September public meeting.

Belomar representatives had a booth that included two meeting activities and advertisements for the public survey and project website. Overall, participants completed nine activities that identified projects they would like to see implemented in their communities. We consider this engagement strategy to be a big success, and hope to bring transportation planning to the people using this strategy in the future.



Public pop-up meeting activities to identify transportation needs and projects

MTP Public Meeting #1

The first public meeting for the Belomar 2050 MTP was held on September 10th, 2025 at the Ohio County Public Library in Wheeling, WV. The meeting included five stations designed to educate participants about what a Metropolitan Transportation Plan is, discuss major themes from existing conditions analysis, and solicit input on what goals and projects they felt were most important. Two stations in particular showed support for this MTP's goals and projects.

1. What Goals Are Important To You?

The first asked participants how high of a priority each goal of the 2045 MTP were to them. Participants greatly emphasized transportation safety and economic development. Results shown in **Table 1**.

2. Transportation "Take-Out"

Participants were given a \$20 budget and a list of projects with simplified, proportional costs to simulate a MTP's fiscal constraint. Overall, they emphasized multimodal projects and system maintenance. Results shown in **Table 2**.

What Goals Are Important To You?

Check the box to select the how much of a priority the 2045 MTP goals are to you (dots represent votes):

Previous MTP Goals	Priority		
	Low	Med	High
Promote Efficiency & Preserve System	●	○	●
Increase Safety	○	○	●●
Increase Accessibility & Mobility Options	●	●	○
Enhance Intermodal Connectivity	●	○	●
Support Economic Vitality	○	●	●
Protect and Enhance the Environment	●	○	●
Support Security	●●	○	○
Accelerate Project Delivery	●	○	●

Table 1. Transportation Priorities Activity Results

Transportation "Take-Out"

Check the boxes on the menu to choose the projects you'd like to see in the region (\$20 spending limit):

Project Options	Cost*	Votes
Minor Upgrade at an Intersection (1)	\$1	●
New Roundabout (x1)	\$2	●●
Roadway Widening (1 mi)	\$8	○
Highway Interchange Upgrade (1)	\$12	●
New or Upgraded Crosswalk (4)	\$1	●
On-Street Painted Bike Lane (1 mi)	\$1	●●
Shared Use Path/Trail (1 mi)	\$2	●●
Rails-to-Trails Conversion (5 mi)	\$5	●●
Existing Bridge for Bike/Ped	\$5	●●
New Bike/Ped River Crossing	\$10	●●
Slow Charging Stations (10)	\$1	●
DC Fast Charging Station (1)	\$2	○
Bus Stop Upgrades	\$1	●●
New Transit Route/Shuttle Service	\$2	●●
Expanded Transit Service Hours	\$5	●●
More Frequency on Fixed-Routes	\$8	●
Sidewalk Repairs (1 mi)	\$1	●●
Pothole Repairs (5 mi)	\$1	●●
Roadway Resurfacing (1 mi)	\$2	●●
Urban Streetscape Improvement	\$5	●●
Minor Bridge Repair	\$2	●
Major Bridge Repair	\$8	●●

Table 2. Desired Project Identification Activity Results

Public Survey Results

As part of our public engagement strategy, we wanted to gather input about transportation issues from a wide range of people. To do this, a single online public survey was created for the 2025 Belomar Multimodal Study and the Belomar 2050 Metropolitan Transportation Plan.

Survey questions focused on user experience, travel behavior, transportation mode preference, and desired infrastructure improvements. We asked respondents to detail why they do/don't walk, bike, or use transit on a frequent basis, and what improvements they feel could be made to make it safer and more efficient to travel.

Survey responses provide insight into public opinion, but are not always representative of the greater population. It is noteworthy the survey's respondents were on average older than the overall population and with a larger portion earning between \$25k - \$100k. See **Figure 9** for a demographic comparison between our respondents and the region.

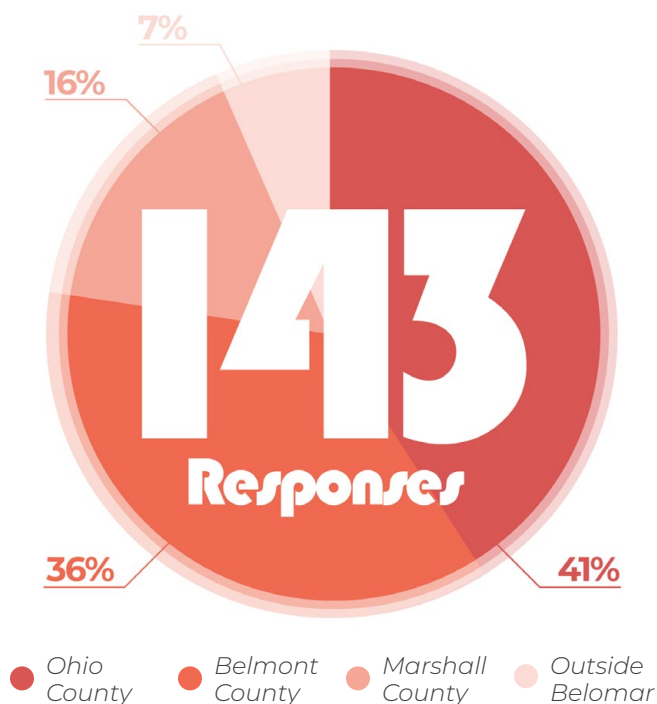


Figure 8. Survey Responses by County

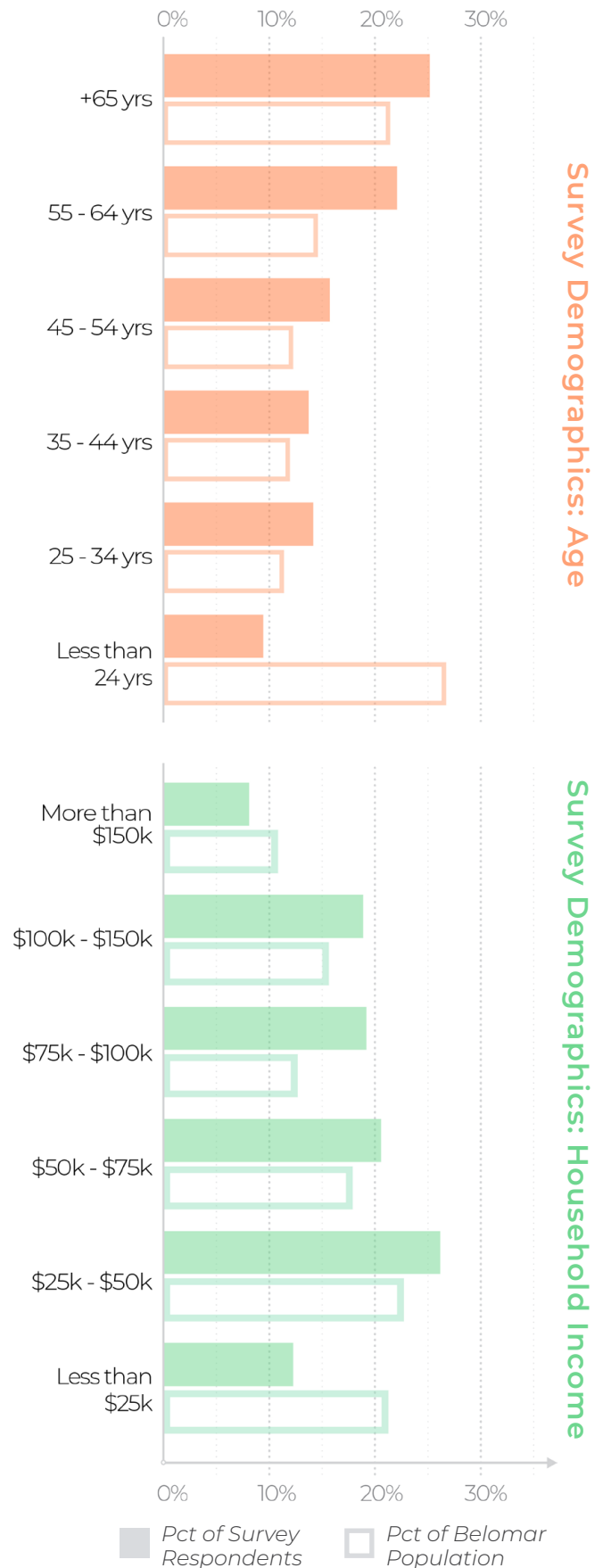


Figure 9. Survey Respondents' age and income compared to Belomar Region

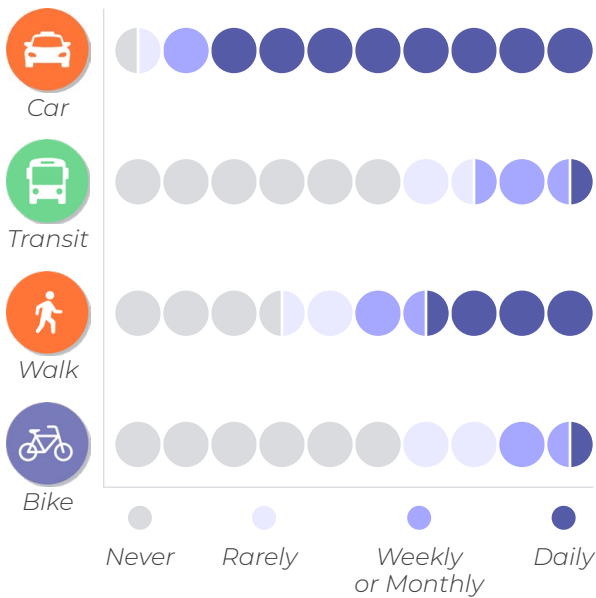
Survey Results: Regional Trip Characteristics



The public survey included several questions which captured participant's modal preferences, travel behavior, and access to goods and services. Overall, participants utilized vehicles for the vast majority of their travel, and preferred it for its convenience, speed, and perceived safety. This aligns with commuter analysis and trip characteristics revealed in the survey. Residents often need to travel outside their community, county, or state for common services or work. See results below:

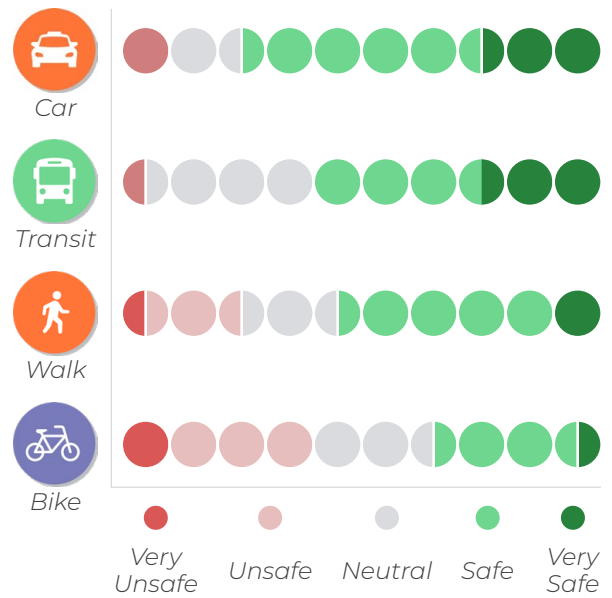
How Often Do You Use The Following?

* Each circle represents 10% of survey respondents

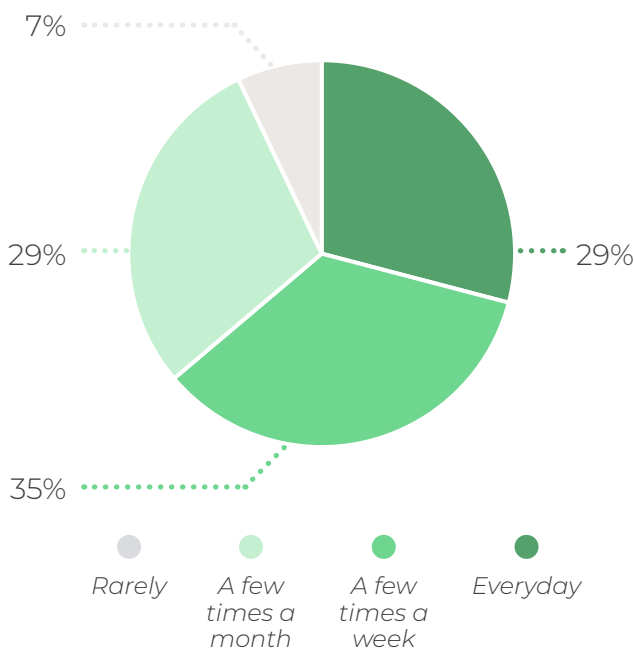


How Safe Are The Following Options?

* Each circle represents 10% of survey respondents



How Often Do You Travel Outside Of The Community You Live In?



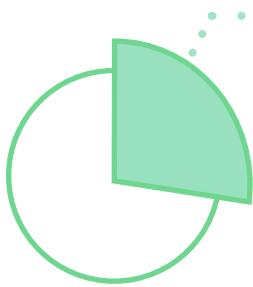
How Far Do You Travel For _____?

	10 min or less	10-20 min	20-30 min	30 min or more
My Job	33%	27%	17%	23%
Health Care or Hospital	41%	42%	13%	5%
Grocery Store	17%	43%	30%	10%
Shopping Center	39%	38%	14%	9%
School or Training Center	36%	38%	18%	8%
Recreation Activity	26%	41%	18%	15%
Leisure Activity	40%	37%	13%	10%



Survey Results: Using Transit In The Belomar Region

When And Where Do You Use Transit Today?



• • • **27%** of respondents use transit to complete trips *at least once per month*

58% never use transit

Common Trip Purposes:

1. Medical Appointments
2. Shopping
3. Commuting

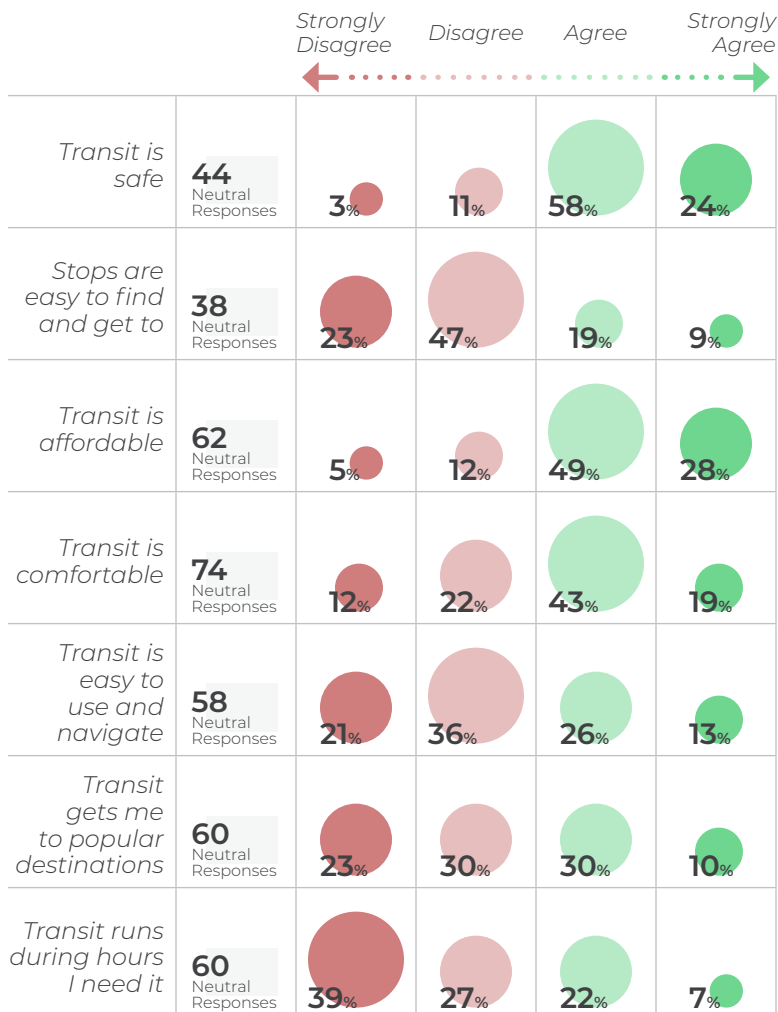
•• What Are Places You Wish You Could Go, But Can't?

Common Responses:

- Senior Housing
- Community Centers/ Libraries
- The Highlands
- Place of work
- Ohio Valley Mall

What Is Your Experience Like?

Percentages represent non-neutral responses



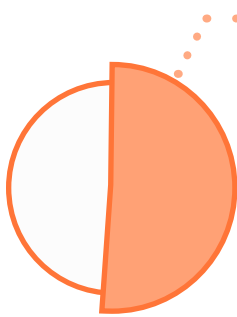
•• How Can Transit Be Improved?

- #1 Larger service area
- #2 More frequent service
- #3 Longer service hours
- #4 Transit stops closer to important destinations
- #5 Improved safety and security



Survey Results: Walking In The Belomar Region

When And Where Do You Walk Today?



••• **53%** of respondents walk to complete trips at least once per month

41% never walk for transportation

Common Trip Purposes:

1. Recreation
2. Social/Leisure
3. Commuting to work/school

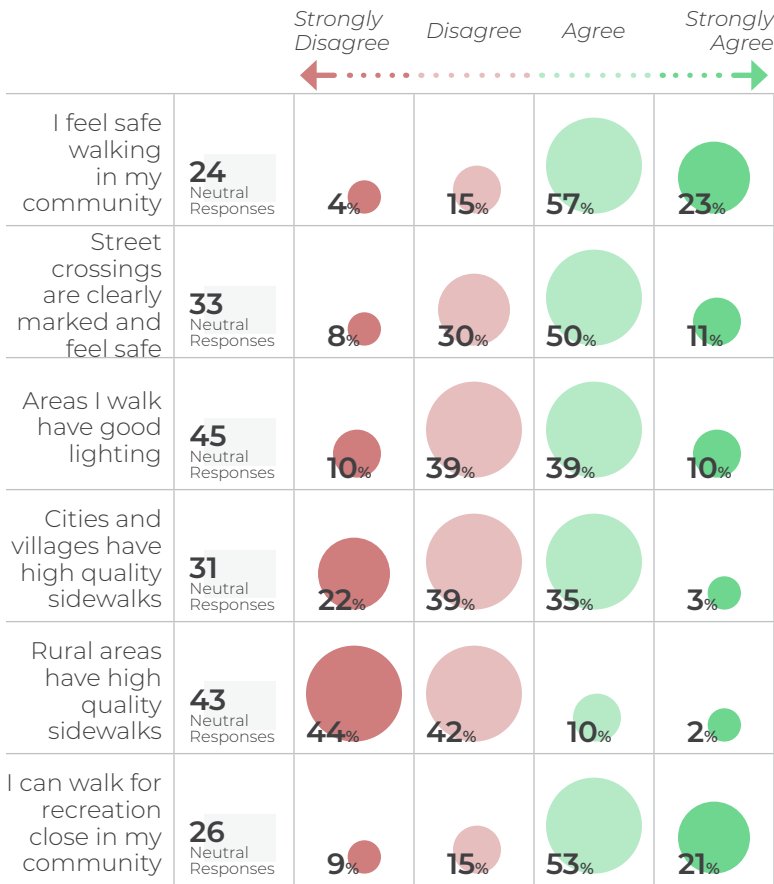
•• What Are Places You Wish You Could Go, But Can't?

Common Responses:

- Village/City downtowns
- Healthcare
- Parks and recreation

What Is Your Experience Like?

Percentages represent non-neutral responses



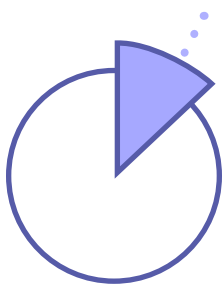
•• How Can Walking Be Improved?

- #1 Repair existing sidewalks and/or recreational trails
- #2 Build new sidewalks and/or recreational trails
- #3 Improve roadway crossings
- #4 Add more street lighting
- #5 Slow vehicle speeds on streets



Survey Results: Biking In The Belomar Region

When And Where Do You Bike Today?



••• **13%** of respondents bike to complete trips at least once per month
61% never bike for transportation

Common Trip Purposes:

1. Recreation
2. Social/Leisure
3. Commuting

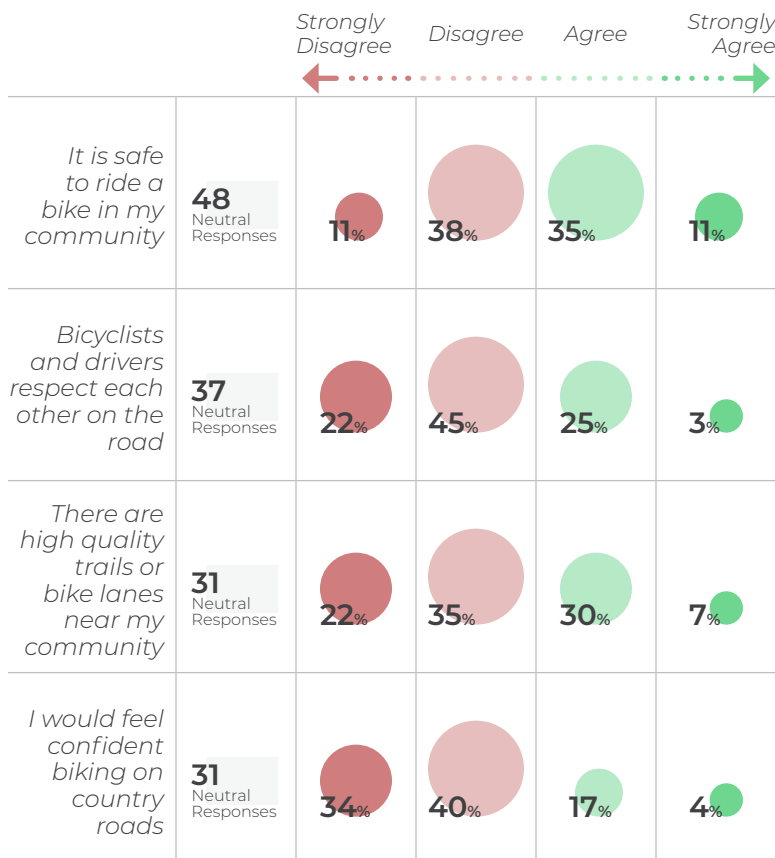
•• What Are Places You Wish You Could Go, But Can't?

Common Responses:

- Healthcare
- Parks and recreation
- Schools
- Grocery Stores

What Is Your Experience Like?

Percentages represent non-neutral responses



•• How Can Biking Be Improved?

- #1 More off-street bike paths and trails
- #2 More on-street bike lanes
- #3 Clearer signage for bike routes and shared streets
- #4 Integration with transit (bus bike racks)
- #5 More bike parking

Survey Results: Regional Multimodal Needs



Open-response questions allow respondents to offer context and suggest projects. Below is a summary of the open-response questions relating to user safety, desired destinations, and impactful improvements:

	Are there factors that make you feel unsafe?	What places would you like to go to that you can't or are difficult to get to?	What improvement would most improve your experience?
Walking 	<ul style="list-style-type: none"> • Sidewalk gaps and inadequate pedestrian crossings • Dangerous drivers • Lack of roadway lighting • Personal safety & crime 	<ul style="list-style-type: none"> • Errands, essential services, & entertainment (i.e. grocery stores, medical offices, & retail) • Local parks and trails (i.e. Oglebay Park, Heritage Trail, St. Clairsville Trail) • School or place of work 	<ul style="list-style-type: none"> • Improved sidewalks and street crossings (i.e. more coverage, maintenance, & ADA compliance) • Separation from traffic (i.e. wider sidewalks, shared-use paths, and pedestrian bridges) • Traffic calming and pedestrian visibility (i.e. street lighting, traffic signage, street design, and speed enforcement)
Biking 	<ul style="list-style-type: none"> • Lack of dedicated space for bikers (i.e. bike lanes & shared-use paths) • Rural roadway conditions (i.e. narrow shoulders & high speeds) • High level of traffic stress, especially rural roads with truck traffic 	<ul style="list-style-type: none"> • Neighborhood connectors to nearby downtowns • Local parks and trails (i.e. Oglebay Park, Heritage Trail, St. Clairsville Trail) • School or place of work 	<ul style="list-style-type: none"> • Dedicated bike lanes protected with a buffer, physical barrier, or grade separated from traffic • Bike lanes connecting neighborhoods and downtowns where traffic speeds are low • Connections between neighborhoods and existing trails (i.e. St. Clairsville Trail & Wheeling Heritage Trail)
Transit 	<ul style="list-style-type: none"> • Getting to transit stops can be dangerous due to lack of transit supportive infrastructure (limited sidewalk coverage/ maintenance & transit stop amenities) 	<ul style="list-style-type: none"> • Medical and social service appointments • Expanded stops in underserved areas and neighborhoods • Regional connections (i.e. Pittsburgh, Steubenville, and Morgantown) 	<ul style="list-style-type: none"> • Greater bus frequency and expanded service hours for commuting • Improved stops (i.e. signs, benches, shelters, schedules, & wayfinding) • Make it easier to buy a ticket (i.e. online ticket purchases, employer sponsored passes, and fixing token expiration) • Education to promote bus service

Final MTP Public Meeting

The second and final public meeting for the Belomar 2050 MTP was held on March 5th, 2026 at West Virginia Northern Community College (WVNCC) in Wheeling, WV. The meeting included maps and descriptions for all of the projects set to be included in the MTP. Participants held discussions with the project team about how they felt this list of projects impacted their communities and submitted feedback forms capturing their thoughts.

All meeting participation lists and results for both MTP Public Meetings are available in the **Appendix**.

Public Comment Period

Public comment summary pending the public review period.



Local Leadership

Public agency leaders, transportation advocates, and human service providers work every day to improve the quality of life of the region's residents. These local leaders were heavily involved throughout the process to help identify goals and capital improvement projects that will have the largest regional impact. This section summarizes the key takeaways from our conversations with local leaders:

Focus Groups

Early in the MTP process, we wanted to talk directly with local leaders and administrators to bring them into our planning process. To do this, we organized four separate focus group meetings centered around different topics with local experts. Overall, these focus group conversations brought 36 local leaders into our planning process.

These conversations established an early line of communication with our communities, and ultimately identified core transportation themes that would guide this plan's analysis, goals, and list of projects. Read more on the following pages about the major themes and takeaways from each focus group discussion.

Transit & Active Transportation

Doug Wayt
Ohio Valley Trail Partners

Jessie Schmitzer
ODOT Transit

Susan Hagan
Region X Coordinated Plan

Kierra Branch
ODOT Transit

Spencer Smith
ODOT Transit

Rick Wells
Village of Barnesville

Jake Henry
OVRTA/EORTA

Eric Gray
City of St. Clairsville

Economic Development

Natalie Hamilton
Belomar

Nancy Prager
City of Wheeling

Jennifer Brothers
Belmont Co. Port Authority

J.P. Dutton
Bemont Co. Commissioners

Amy Krasch
Wheeling Heritage

Randy Russell
Ohio Co. Commissioners

Stephanie Hockenberry
Ohio Co. Development Authority

Transportation Safety

Travis Workman
City of Wheeling

Sean Snyder
GHSP

Scott Harvey
City of St. Clairsville

Jack McNeely
GHSP

Marsha Mays
WVDOH

Nelson Croft
Ohio Co. Police Dept.

Randy Russel
Ohio Co. Commissioners

Steve Johnson
City of Wheeling

Scott Warner
ODOT District 11

Human Services & Civil Rights

Katie Hudak
NW Area Agency on Aging

Jeanne Finstein
Friends of Wheeling

Melynda Sampson
United Way

Stacie Stephen
United Way

Claudia Raymer
OCFRN

Joyce Wolen
Wheeling Housing Authority

Lisa Weishar
OVRTA/EORTA

Tania Hardy
Disability Rights of W.V.

Alaire King
Ohio Co. Community Action Commission

Kimberly Green
Marshall Co. Family Resource Network

Jeffrey Felton
Belmont Co. Jobs and Family Services

Erin Kittle
Northern Panhandle Development Board

Transit & Active Transportation Focus Group

Public Transit Needs

- **Service Frequency:** OVRTA buses are timely but infrequent. Services often end by 2 PM due to funding caps and staffing constraints. Park-and-ride options and microtransit/shuttles are desired.
- **Limited Transit Service Area:** Many residential areas, especially senior and low-income housing, are outside public transit service zones. Seniors and low-income populations struggle most with access to services due to location and mobility barriers.
- **Microtransit and Shuttle Ideas:** Proposals for shuttles to under served areas (e.g., up Two-Mile Hill or to Oglebay) received community support. Areas like The Highlands lack adequate transit service, sidewalks, and connectivity affecting job access.
- **Confusing Transit System:** Community members don't understand how to use the system. Inconsistent bus stop signage and route information makes using transit a chore. Schedules and maps are difficult to interpret, especially for new users.

Bicycle & Pedestrian Transportation

- **Safety & Security:** Dangerous conditions for cyclists were reported on WV SR-88, U.S. 40, and near Sheetz. National Road is widely used and has potential for bike lanes. Vandalism and perception of crime along the Heritage Trail discourage use. Suggestions include increased patrols and emergency call stations.
- **Sidewalk Gaps:** Several critical areas are missing or have poor sidewalks. This creates unsafe conditions for students and pedestrians. Sidewalk connection and condition is most critical around transit stops, schools, major employers, medical facilities, and commercial districts. Three locations emphasized were along WV SR-2 and near both Jefferson Avenue and Triadelphia Elementary Schools.
- **Crossings and Connections:** Physical barriers like highways (i.e. WV SR-2), topography, and the Ohio River are cited as major obstacles for pedestrians. Crossing the Ohio River is essential for resources and economic activity to be shared across communities and counties.

Transportation Safety Focus Group

Highway Safety Concerns

- **High crash areas** include I-470, WV SR-2, and I-70 merge points due to steep grades, complex interchanges, and high-speed merging.
- **Lane reductions and difficult merges** (e.g., I-470 to I-70, Washington Avenue ramp) increase collision risk.
- **Crashes on I-70 often divert trucks** onto restricted routes like U.S. 40, worsening local traffic conditions.

Pedestrian and Accessibility Concerns

- **Sidewalk gaps and closures** (e.g., Stone Church Road, Wheeling Hill) limit safe pedestrian access. Narrow sidewalks, particularly along U.S. 40, lack buffers from traffic. Increased reliance on mobility scooters highlights accessibility gaps.
- **Heavy pedestrian use** on routes like Cherry Hill Road raises safety concerns and the need for safer alternatives.

Impacts of Freight and Trucking

- **Some trucks divert to local roads** to avoid weigh stations, although traffic primarily uses I-470 westbound due to restrictions.
- **Oversized and overweight loads** are a recurring issue, with misuse of county roads causing infrastructure damage, including a bridge loss.
- **Fracking and mining traffic**, especially on narrow roads like Stone Church Road, create safety and capacity concerns.
- **Enforcement relies on mobile scales**, but limited training for new deputies remains a challenge. Truck speeds are often perceived as higher than actual due to vehicle size. This is a particular concern due to intermittent weigh station availability, especially on U.S. 40 from PA.
- **Rural roads are deteriorating** due to heavy oil and gas truck traffic. Access to wells in rural areas requires the use of local roads unfit for the weight and width of oil/gas vehicles. This causes a large maintenance responsibility on locals and the State and is a safety hazard for vehicles sharing the roads with these large vehicles.

Economic Development Focus Group

Challenges and Opportunities

- **Growth is constrained by infrastructure** and rural expansion is costly due to utility extension needs. Opening up new areas for development around The Highlands could be a prime opportunity for housing, jobs, and retail.
- **Several developments in downtown Wheeling** including the new WVU Cancer Center (2027) and a proposed hotel near convention center and downtown visitor center. Both may spur new development opportunities in downtown.

Limited Workforce Transportation Options

- **Gaps in transit service/schedule and limited ride-sharing options** make it difficult or impossible for people with unreliable transportation to access regional employers.
- **Transit shuttle service** to The Highlands recommended as part of the Multimodal Study.
- **Minimal ride-sharing** (Uber/Lyft) presence; IC Cab and Green Cab provide transportation services (primarily medical/elder service) but staffing remains a challenge.

Housing and Community Development

- **“Missing middle” housing** constrained by high rehab costs and limited supply. Demand for downsized housing, smaller homes, and rentals is increasing due to aging population and first-time homeowners.
- **Most homes are older and larger**, and some residents have more house than they may need. The affordable housing that does exist is scarce and often far from transit. Zoning restrictions in cities/villages limit infill development or make it difficult to implement
- **Higher income workers**, especially those in the Oil and Gas industries, commute into the region from PA and OH.
- **EV charging is limited** to a few locations (Oglebay Park, The Highlands) and there is a local desire for more in cities/villages.

Human Services & Civil Rights Focus Groups

Housing Challenges

- **Housing Stock:** Many homes, particularly in Marshall County, are in disrepair or outdated, requiring renovation. There’s a lack of accessible funding for home repairs or upgrades.
- **Safe, Affordable Housing Shortage:** Safe and affordable rentals are hard to find. Seniors are often stuck in homes that are too large or unsafe, lacking options for downsizing. These homes can often be difficult to manage for seniors, but may be ideal for new homeowners and growing families.
- **Funding Limitations:** Programs like the Community Housing Improvement Program (CHIP), American Rescue Plan Act (ARPA), and U.S. Department of Agriculture (USDA) loans help, but access and eligibility are inconsistent. Wheeling, for example, cannot use USDA loans.

Access to Healthcare

- **Limited Medical Facilities:** Closure of East Ohio Regional Hospital and reduced local services push patients to Morgantown. This has contributed to an over reliance on emergency rooms and ambulances for basic medical access.
- **Transportation to Medical Care:** Scheduling and distance barriers result in long travel times for what should be short trips. Medical appointments are often missed due to scheduling limitations in transit.

Access to Childcare & Family Services

- **Childcare and Services:** Transit-dependent families face logistical conflicts between work, childcare, and transportation options. Parents’ schedules rarely align with transit.
- **School Transportation:** School buses serve most districts, including after-school activity shuttles, with few exceptions. Wheeling Island’s school bus is for mobility impaired students.
- **Family Services:** Communities need better access to parenting support services (some court-ordered), crisis units, and addiction treatment.

MTP Advisory Group (AG)

Throughout the MTP update process, local community and transportation leaders were asked to join us for several meetings to help shape this plan's recommendations. This group, alongside members of the Belomar Transportation Advisory Committee (TAC) and Policy Board, provided the additional local insight needed to develop a plan that directly aligned with their goals. Three separate meetings were held throughout the process, and several members of the advisory group were included in recurring monthly meetings to guide the planning process. This plan would not be possible without their time and input.

Regional Partners

Scott Hicks	Bel-O-Mar Regional Council
Samuel Richardson	Bel-O-Mar Regional Council
James Benner	Bel-O-Mar Regional Council
Ethan Combs	Bel-O-Mar Regional Council
Ben Turin	Ohio Mid-Eastern Governments Assoc.
Lisa Weishar	OVRTA/EORTA

State and Federal Agencies

Kevin Sullivan	WVDOH
Michael Dodd	WVDOH
Kerri Wagner	WVDOH
Brady Vannest	WVDOH District 6
Dan Lorenz	ODOT District 11
Scott Warner	ODOT District Planning Engineer
Waseem Khalifa	ODOT Bridge Program Manager
Olivia DiGiovone	Ohio EPA
Kara Greathouse	FHWA
Neena Nallaballi	EPA District 5

Local Communities

Terry Lively	Belmont County Engineer
Franklin Shaffer	Pultney Township
Andrew Satak	City of Martins Ferry
Rick Healy	City of Moundsville
Tom Murphy	City of St. Clairsville
Randy Russel	Ohio County
William Lanham	Assistant City Manager - Wheeling
Robert Herron	City Manager - Wheeling
Betsy Frohnappfel	Administrator Marshall County Commission
John Gruzinskas	Marshall County Commissioner
Cindy Blake	McMechen City Clerk
Jeff Haught	Powhatan Point Mayor
Chris Bryan	Powhatan Point Representative
Mike Beaver	Powhatan Point Councilman

AG #1 - Identifying Needed Projects

The first meeting split the larger group into small discussions to identify locations in the region where transportation investment would make the biggest difference. Participants discussed safety concerns, highway bottlenecks, and economic development opportunities. These discussions identified transportation needs and projects that would be included in this plan's recommendations:

Identified Projects and Strategies

1. Improved Traffic Safety and Operations at the WVU Hospital Entrance
2. Need for a new Highlands Interchange
3. Added Traffic Capacity on 2-mile Hill
4. New Pedestrian River Crossing
5. Improved Traffic Safety and Operations at the I-70/SR-7 Interchange
6. Maintenance and Streetscaping on Central Ave in Shadyside
7. City and Village Corridor Study Program
8. City and Village Safe Routes to Schools

AG #2 - Identifying Needed Projects

The second meeting reviewed the goals of the previous MTP and discussed how communities felt they addressed their needs. This feedback solidified the goals of this plan.

Participants completed comment forms regarding how each of goals aligns with their local priorities. Overall, respondents felt each goal reflected their local needs, but emphasized the need to invest in infrastructure maintenance and regional economic development and housing.

Prioritizing Project Goals

Rank	Goal Description:
#1	Improve and maintain roadway and freight facilities
#2	Foster livable and economically competitive communities
#3	Expand quality mobility options for all users
#4	Transportation safety and regional security

AG #3 - Identifying Needed Projects

The final advisory group meeting reviewed the draft project list and provided feedback on the included projects, programming schedule, and implementation within their communities. Altogether, the adopted project list includes 16 capital improvement projects and five transportation planning studies/designs to be implemented over the next 25 years.

To read more about each of these projects in greater detail, please read **Chapter 5**.

Project List Includes



16

Capital Improvement Projects



5

Transportation Planning Studies/Designs

Engagement Summary

Public Engagement

The public engagement process for the Belomar 2050 MTP included a mix of outreach strategies designed to gather input from a broad cross-section of the community. These efforts revealed strong community support for expanded pedestrian and bike infrastructure, prioritizing system maintenance, and addressing unsafe intersections and interchanges:

- **Roadway maintenance**, especially on more rural roads impacted by heavy traffic from the oil and coal industries is a key priority. The maintenance of these roads significantly impacts roadway safety for all users.
- **Transit service limitations** makes using transit impractical for most. Respondents noted that buses often don't run early or late enough, have long wait times; and have limited coverage. Many key destinations like medical centers, higher education, and multifamily housing are outside service zones.
- **Sidewalk gaps and pedestrian safety** are top concerns as many sidewalks are missing, poorly maintained, or non-compliant with ADA standards, especially in rural areas. Safer crossings and better lighting are needed to make walking a reliable transportation option.
- **Low-stress biking infrastructure** is needed. Participants want safer, physically separated bike lanes and better connections between neighborhoods, trails, and downtowns.
- **Improving river connectivity** is necessary. Residents want new or improved connections across the Ohio River. Gaps between existing trail systems, like the Wheeling Heritage Trail and the Glen Dale–Moundsville Rail Trail, limit multimodal use.

Local Leadership

Stakeholder interviews and focus groups highlighted the interconnected challenges of housing, healthcare, transit access, childcare, and regional connectivity. Areas consistently emphasized include: gaps in service, infrastructure limitations, and addressing complex and inefficient intersections/interchanges. Below are four key takeaways from local leadership engagement:

- **Address safety and traffic flow** at major intersections and interchanges. Several interchanges and highway segments came up repeatedly throughout our conversations. Traffic flow at existing intersections with complex road connections and visibility restrictions are a high safety concern. Traffic flow, especially on I-70's 2-mile hill, has been a regional goal for decades and is high priority for both transportation and economic development reasons.
- **Expand transit services** to residents in need, by expanding service hours of select transit routes/shuttles, invest in transit supportive infrastructure, and bolster paratransit services for aging populations. Transportation planning must prioritize individuals in persistent poverty, seniors, families, and those with physical limitations.
- **Better Coordination** between state/regional agencies and local governments. Stronger inter-agency collaboration and consistent use of established communication channels could benefit the implementation of identified goals.
- **Improve quality and coverage of Bike/Ped Infrastructure.** Unsafe or missing sidewalks, particularly around schools and transit stops makes accessing transit and basic services less safe. Cities and village are in need of greater bike facility coverage, preferably with protected bike facilities.

CHAPTER 3: UNDERSTANDING THE REGION



Regional Profile

Demographic data such as population trends, commuting characteristics, job sectors, and vulnerable populations was analyzed for the purpose of identifying future transportation needs. Data was collected through the US Census Bureau's Decennial Census, American Community Survey (ACS), and Longitudinal Employer-Household Dynamics (LEHD).

Regional Demographics

According to the 2020 Decennial Census, the three-county Belomar region has a population of 139,513. The largest county by population is Belmont County followed by Ohio County and then Marshall County. The largest city in the Belomar region is Wheeling, West Virginia with a population of 25,425. The majority of the population lives in Wheeling and its surrounding communities.

Other clusters of population include the areas around Moundsville and St. Clairsville. Population density is concentrated along two major axes, the Ohio River and the I-70/US-40 Corridor. This development pattern provides unique challenges for the transportation system in this region.

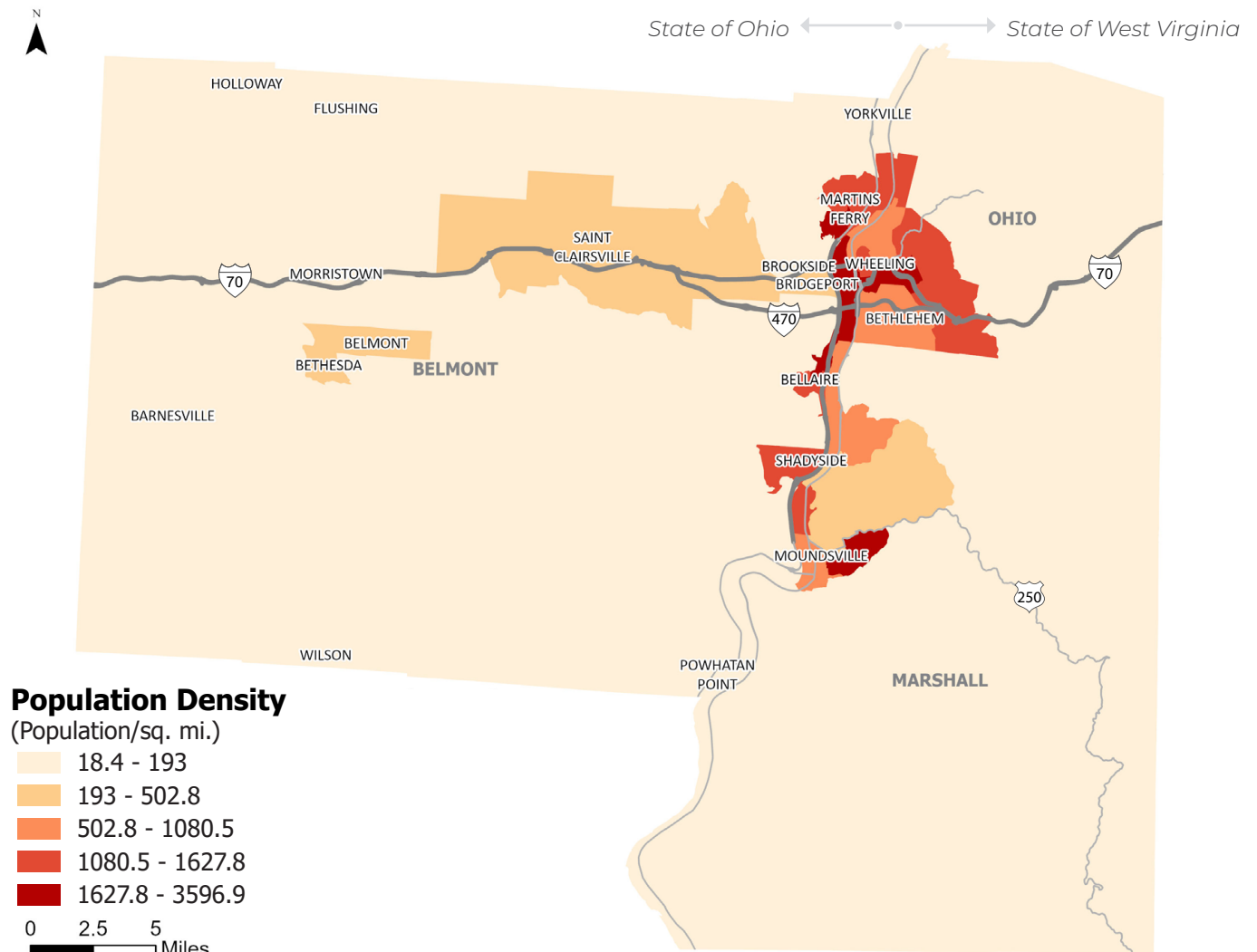


Figure 10. Regional Population Density By Census Block (2020 U.S. Census, U.S. Census Bureau)

Population Trends

The Belomar region has been declining in population since the 1980s. Ohio County has experienced the sharpest decline in population with a 31 percent decrease. This population decline has outpaced West Virginia’s eight percent population decline in the same time span. Since 1980, the State of Ohio has grown in population although Belmont County still saw a 19 percent decline in population.

A declining population can be a challenge for a region’s transportation system due to overbuilt assets and a smaller tax base. Additionally, state and federal funding opportunities are often targeted towards growing regions. However, this declining population can also be an opportunity to repurpose overbuilt infrastructure to promote safety (i.e. road diets) or multimodal transportation (i.e. rails-to-trails conversions).

Percent Pop. Change Since 1980

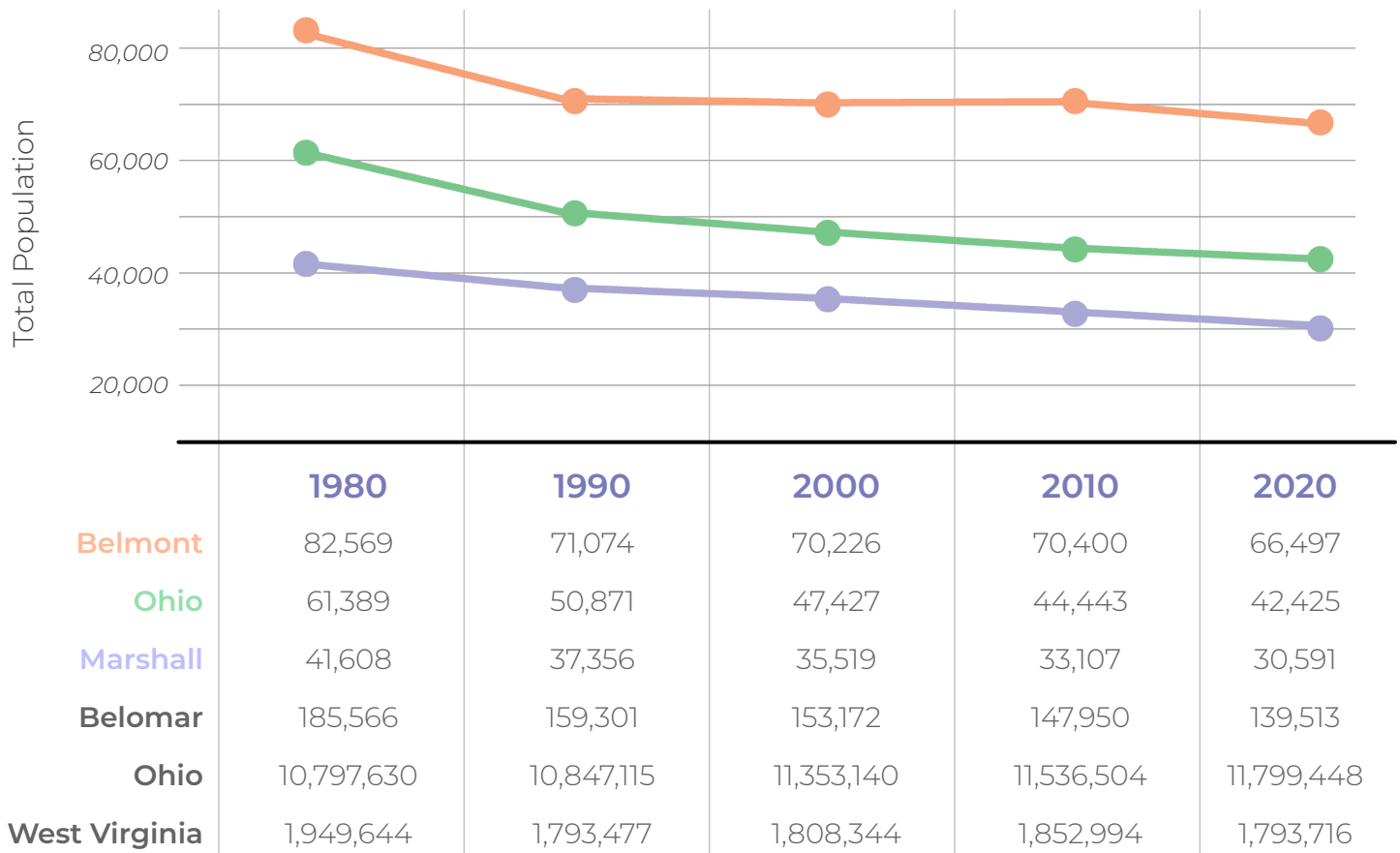
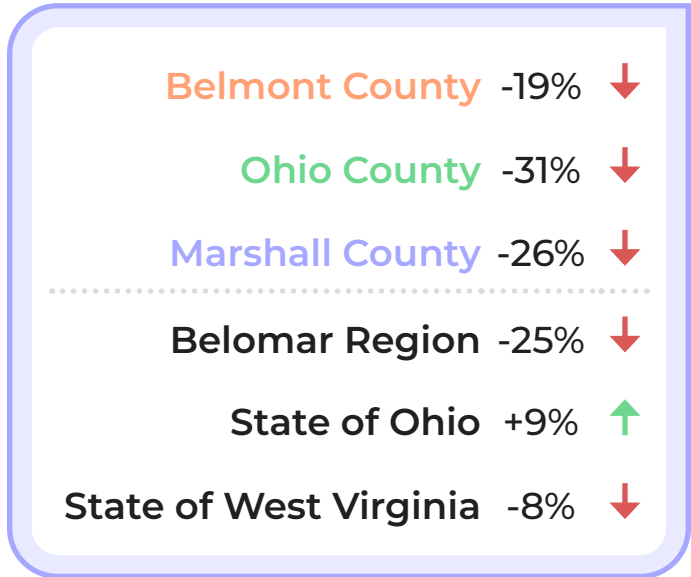


Figure 11. Historic Population Trends Of Belomar Counties Compared To Ohio And West Virginia (U.S. Census Bureau)

Housing

Bel-O-Mar recognizes that housing and transportation are fundamentally interconnected systems that must be planned in tandem to support long-term regional stability and growth. Access to safe, affordable housing is closely tied to the availability of reliable transportation options, particularly for reaching employment, healthcare, education, and essential services. As part of the 2050 Metropolitan Transportation Plan, Belomar is advancing a more integrated planning approach that considers how land use patterns, development trends, and transportation investments influence one another. This includes coordination with regional partners and ongoing planning efforts that emphasize multimodal connectivity, transit accessibility, and alignment with broader community development goals.

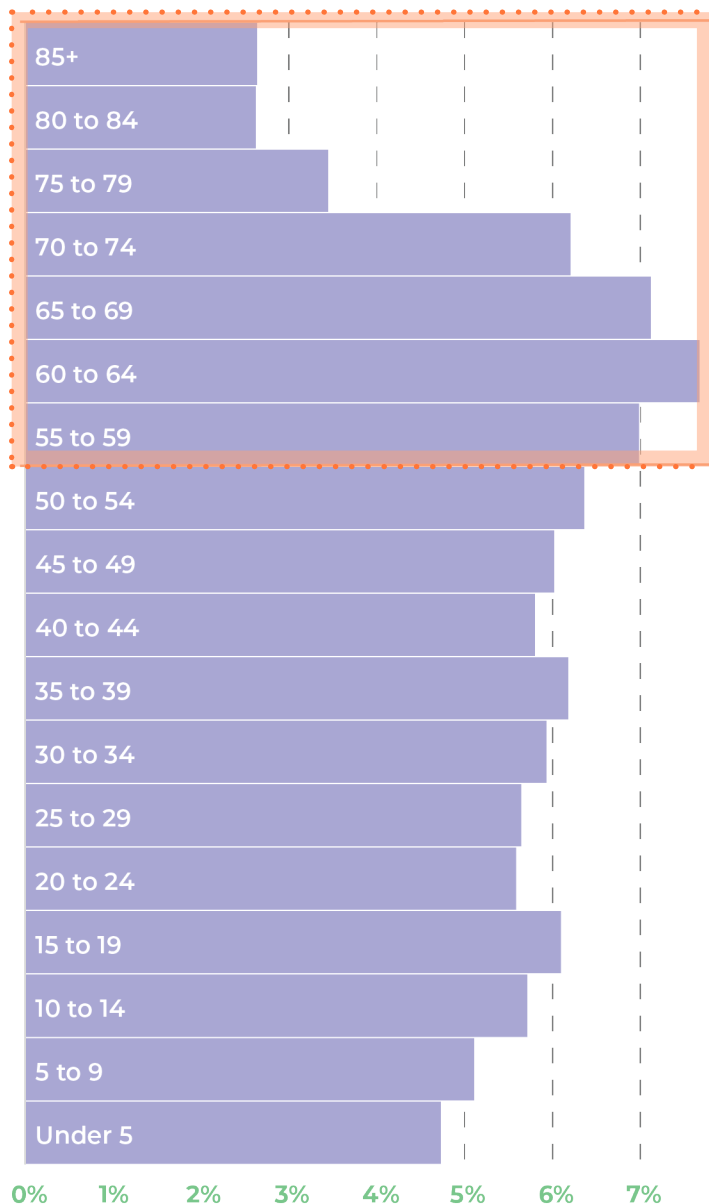
At the local level, Belomar works in partnership with Ohio County Growth and Retention to convene a housing committee that brings together key stakeholders such as the Wheeling Housing Authority, the City of Wheeling, and other public and private partners. This forum creates space for ongoing dialogue around housing needs, development opportunities, and constraints while ensuring transportation considerations remain part of those conversations. Currently, this effort is focused in Ohio County, with plans to expand the model into Belmont County and Marshall County to establish similar housing committees. In parallel, Belomar evaluates where new housing may be located in relation to existing and planned transit services, helping guide decision-making that supports accessibility, fairness, and long-term sustainability while strengthening the connection between where people live and how they move throughout the region.

To read more about some of the housing challenges discussed during the planning process, please read the Focus Group engagement summary in Chapter 2.

Aging Populations

In addition to a declining population, the region also has an aging population. This is demonstrated by median ages. For example, the median age of the Belomar region is higher than the states of West Virginia and Ohio.

Figure 12 shows age groups by percentage of the total population of Belomar. Since the chart is wider at the top than the bottom, this shows a greater proportion of the population falls into older age groups. Specifically, 37 percent of the population is 55 and up while only 21 percent is 19 and under.



An aging population significantly impacts the transportation needs of a region’s residents. As people age, they often reduce or stop driving altogether, which increases their reliance on alternative forms of transportation. Older adults are also more likely to rely on mobility devices like walkers or wheelchairs, which may require improvements to existing infrastructure to ensure ADA compliance. An older population means more need for driving alternatives, especially those tailored to seniors, such as paratransit services and non-emergency medical transportation (NEMT). These services play a critical role in helping older adults maintain their independence and access essential destinations, including healthcare facilities, grocery stores, and social services.

Median Age (2023)
Belomar: 43.4
West Virginia: 42.9
Ohio: 39.6

37% of the Belomar Population is 55 and up. Only **31% of Ohio's** population and **35% of West Virginia's** population is 55 and up.

Older residents may be more in need of transportation alternatives and ADA compliant infrastructure in their communities than younger residents.

Figure 12. Age Groups By Percentage Of Total Population (ACS 5-Year Estimates 2023)

Disabled Populations

Persons with disabilities often face unique transportation challenges and needs. Though disabilities vary by individual, people with disabilities are more likely to rely on public transit, paratransit, mobility devices, or other alternative modes of transportation. Areas with a high concentration of disabled persons have a greater need for enhanced accessibility features, such as ADA-compliant sidewalks, bus stops, curb ramps, and pedestrian crossings.

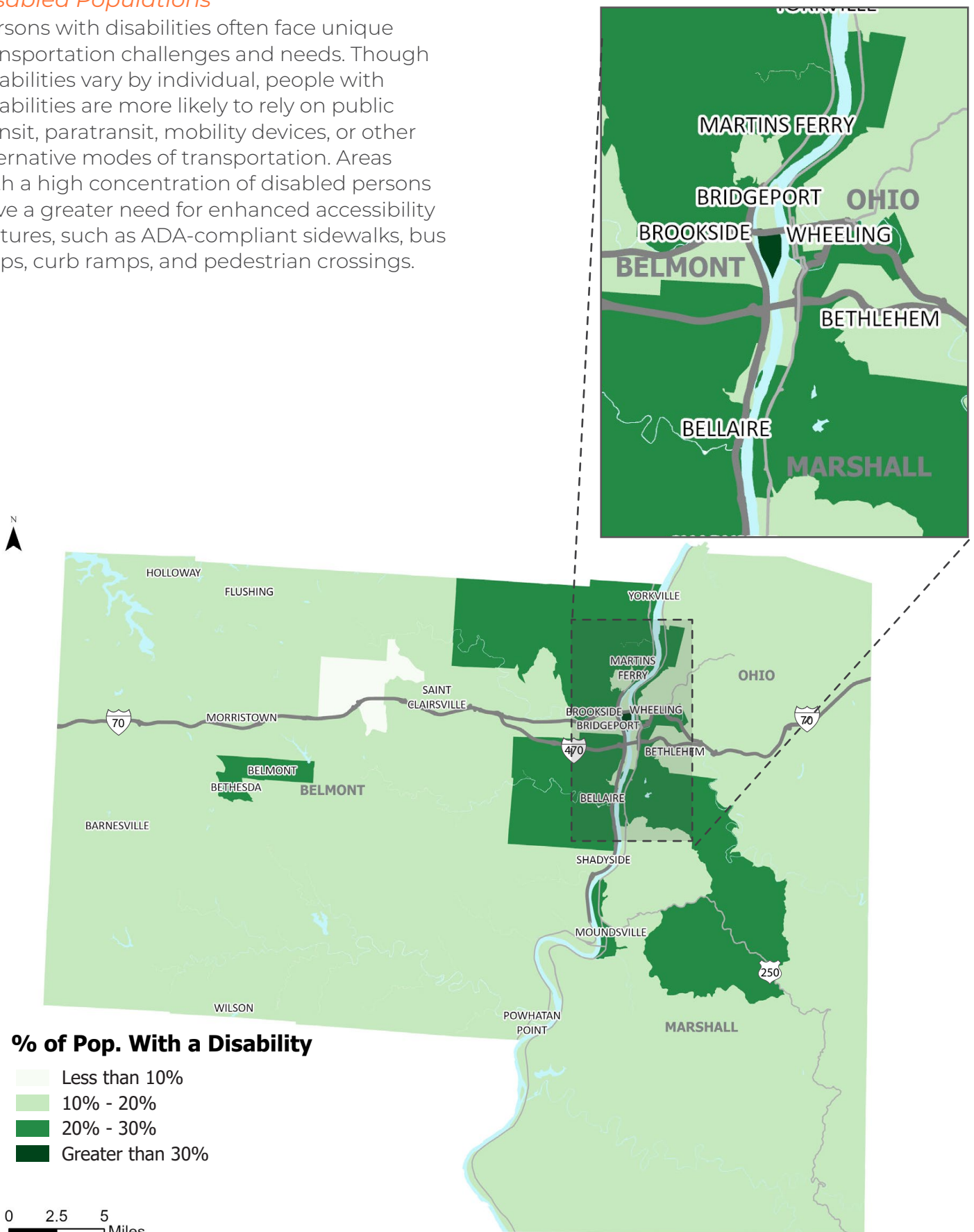


Figure 13. Disabled Population By Census Block (2022 American Community Survey, U.S. Census Bureau)

Vehicle Availability

Households without access to a car often face greater challenges reaching jobs, schools, medical facilities, and other essential services. These households are more likely to walk, bike, or use public transit than households with a vehicle. Areas with a high concentration of zero car households may need to be prioritized for bicycle, pedestrian, and public transit infrastructure.

Though this metric is valuable, it does not tell us whether those vehicles are reliable or if there are enough vehicles for the size of the household. Therefore, these are not the only areas with a greater need for alternative transportation options.

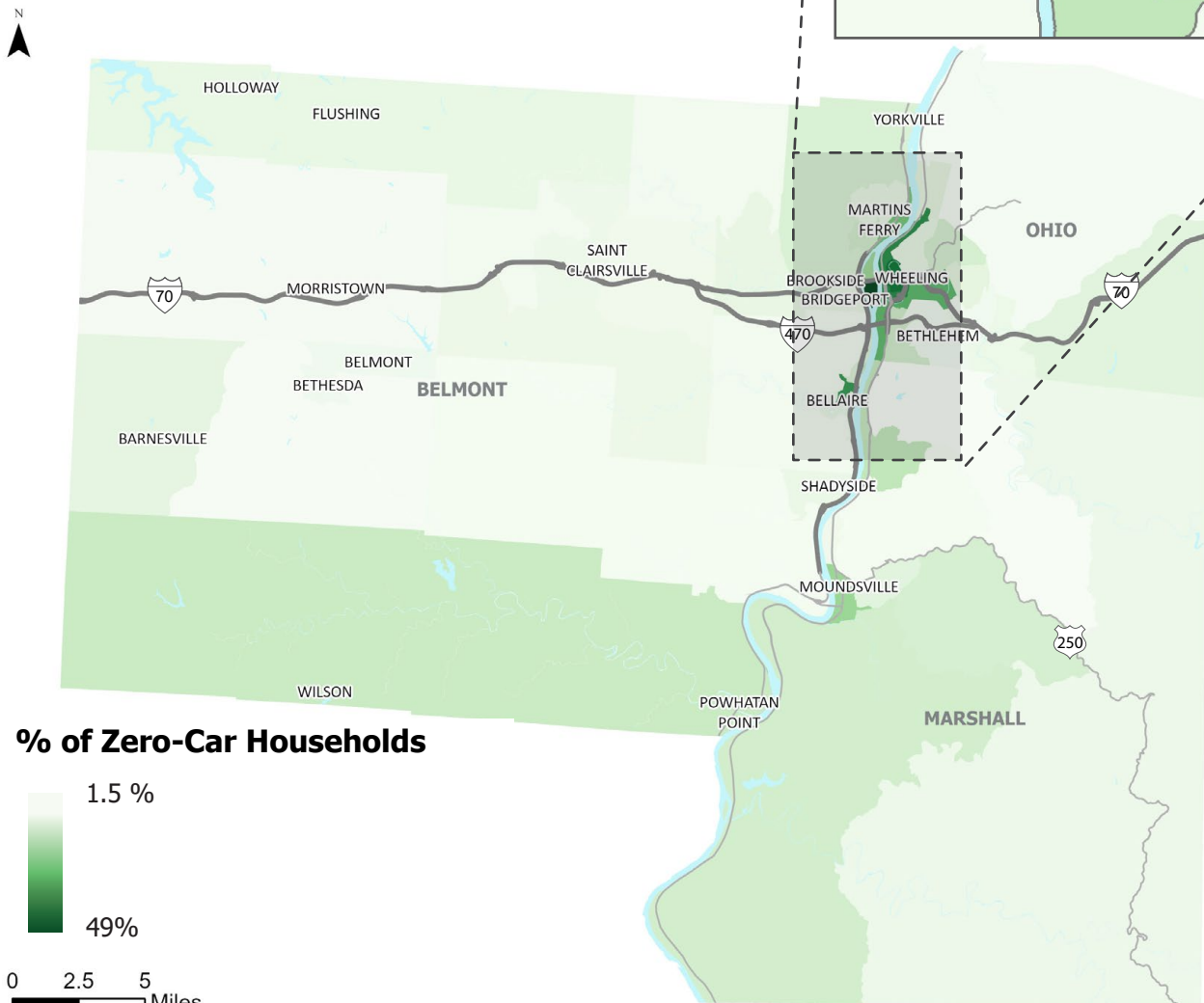
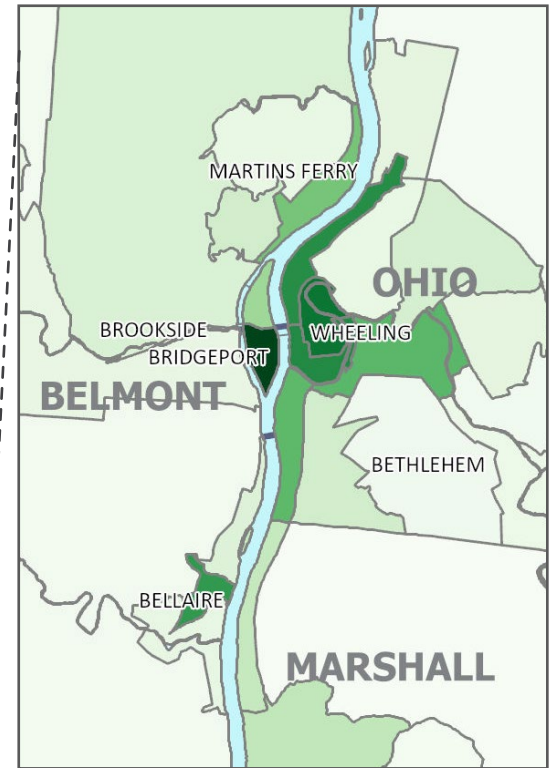


Figure 14. Zero Vehicle Households By Census Block (2022 American Community Survey, U.S. Census Bureau)

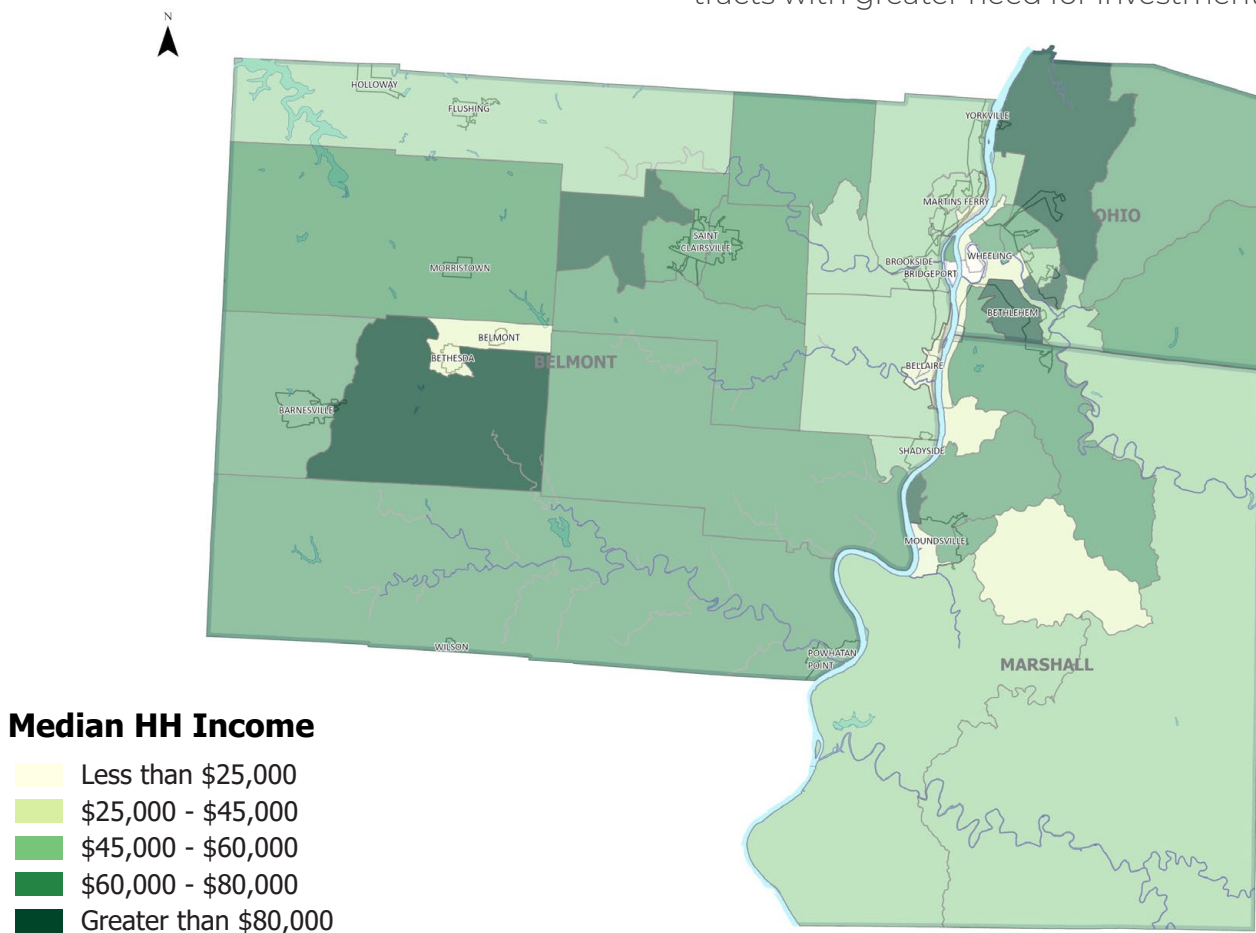
Income & Areas of Persistent Poverty

Low-income persons and families are more likely to face transportation challenges than other persons and families. The Belomar region has a higher median household income and lower poverty rate than West Virginia but a lower median household income and higher poverty rate than the State of Ohio.

However, these metrics are not evenly distributed across the region. Many of the urban areas along the Ohio River corridor, as well as many rural parts of the region, have high rates of poverty. While urban low-income residents face many transportation challenges, they may also have options such as public transit and walkable destinations that are not available to those in rural areas.

Areas of Persistent Poverty are federally designated census tracts that have had a poverty rate of at least 20 percent from 2014 to 2018 according to the American Community Survey (ACS). As part of the Better Utilizing Investments to Leverage Development (BUILD) federal grant program, projects located in these areas may qualify for increased federal funding and/or reduced local match requirements.

These areas of persistent poverty also exhibit low rates of vehicle access and high rates of disabled population, indicating greater need for investment to improve transportation access and economic opportunity. However, this designation does not mean that these are the only tracts with high rates of poverty or the only tracts with greater need for investment.



Poverty Rate: Percentage of residents living below the poverty threshold.

Belomar: 14.4% | WV: 16.7% | OH: 13.3%

Median HH Income: 50th percentile of all households for total household income of

Belomar: \$59,180 | WV: \$55,948 | OH: \$67,769

Figure 15. Median Household Income By Census Block (2022 American Community Survey, U.S. Census Bureau)

Economy

A strong transportation system must support both local and regional economic needs. The Belomar region has a unique economic profile shaped by decades of industrial development, resulting in a workforce that differs significantly from many other parts of the country. This section examines the regional economy, workforce characteristics, and commuter travel patterns to identify how the transportation system can evolve to better support future economic growth.

Employment

In the Belomar region, employment is distributed across a variety of sectors. According to 2023 American Community Survey (ACS) data, the largest share of workers is employed in the education, healthcare, and social assistance sector, making up over 25 percent of the workforce. This sector includes those working at public and private schools, hospitals, clinics, and other social service agencies. Following closely behind are the retail trade and arts, entertainment, recreation, and food services sectors. Collectively, these three categories employ approximately 50 percent of Belomar’s workforce as compared to the national average of 43 percent in the same sectors.

The predominance of these service sectors has important implications for transportation planning. Many jobs within these industries require workers to be present on-site, often outside traditional 9-5 hours. In addition, job sites are frequently dispersed across both urban and suburban areas, rather than being concentrated in a central business district. Therefore, these workers may be more reliant on personal vehicles than workers in other sectors. Late night or off-peak transit service, active transportation infrastructure, and/or on-demand microtransit may be needed to support this workforce’s transportation needs.

Industrial Sector Employment by Percentage of Workforce

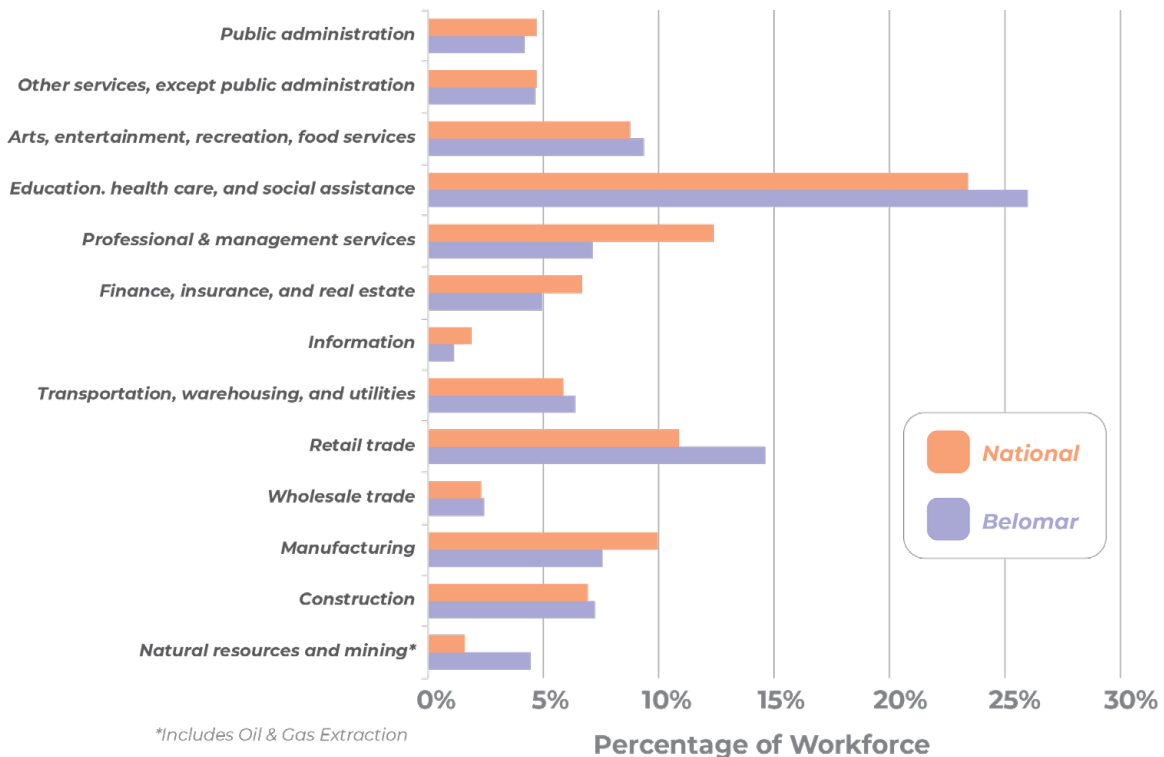


Figure 16. Belomar Regional Workforce By Employment Sector (Bureau Of Labor Statistics)

Economic Specialization

In order to understand a region's economy, it is important to look at not just where the majority of people work but also what sectors the region specializes in. These specialized sectors often make up the identity of a region's economy and have a major role in determining a region's economic future. The degree of specialization can be calculated by dividing the local concentration of a sector by the national concentration of that same sector. The resulting number is called a Location Quotient (LQ). A sector with an LQ of 1 means the region has the same concentration of that sector as the nation. A sector is considered a regional specialization if the LQ is greater than 1.2.

The Belomar region exhibits a major specialization in the natural resources and mining sector, with 2.7 times more workers than the national average. The natural resources and mining sector includes agriculture, forestry, quarrying, and oil & gas extraction. The only other industry that is considered a specialization is retail trade with a LQ of 1.3 indicating a minor specialization. This major specialization of the natural



Fracking Well Site in Wetzel County, West Virginia
Source: Ohio Valley Environmental Coalition

resources and mining sector aligns with the area's well-known history of coal mining. In recent decades, this sector has grown due to the rise in natural gas extraction via hydraulic fracturing or "fracking". This sector requires large numbers of heavy trucks on remote, rural roads. This can lead to several challenges to the transportation system such as accelerated pavement wear, traffic congestion, and crashes.

Industrial Sector Employment by Location Quotient NAICS 2023

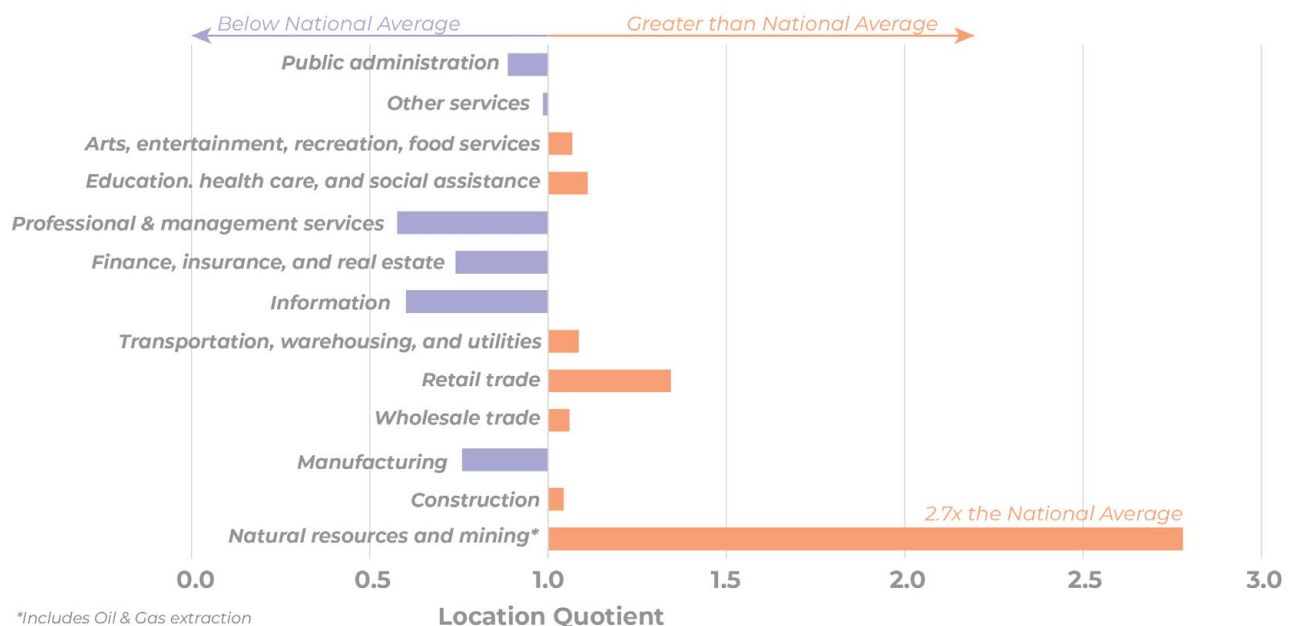
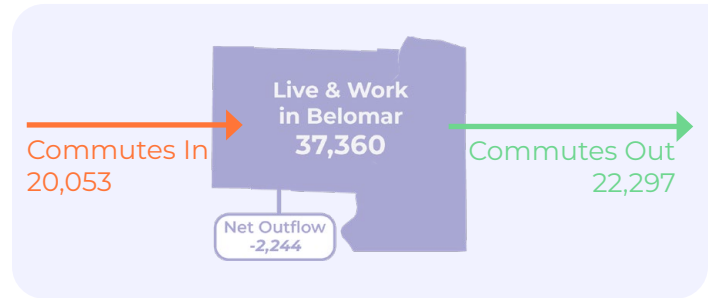


Figure 17. Belomar Regional Industrial Sector Location Quotient (Bureau Of Labor Statistics)

Commuting Patterns

Longitudinal Employer-Household Dynamics (LEHD) data is a location-based commuter resource produced by the U.S. Census. This tool allows us to explore how interconnected Belomar's local economies are, and how many residents are commuting across county lines each day.

Overall, the majority of Belomar residents live and work within the region, but counties share a significant amount of each other's workforce. Over 13,600 workers, 36 percent of the population, commute outside of their county to work somewhere else within the Belomar region. Of that, over 9,000 workers commute into Ohio County from Belmont or Marshall County, presenting an opportunity for transit to be a successful commuting option.



All Workers <i>(Commutes In + Out + Live & Work)</i>	79,710
All Workers Employed in Belomar <i>(Live & Work + Commutes In)</i>	57,413
All Workers Living in Belomar <i>(Live & Work + Commutes Out)</i>	59,657

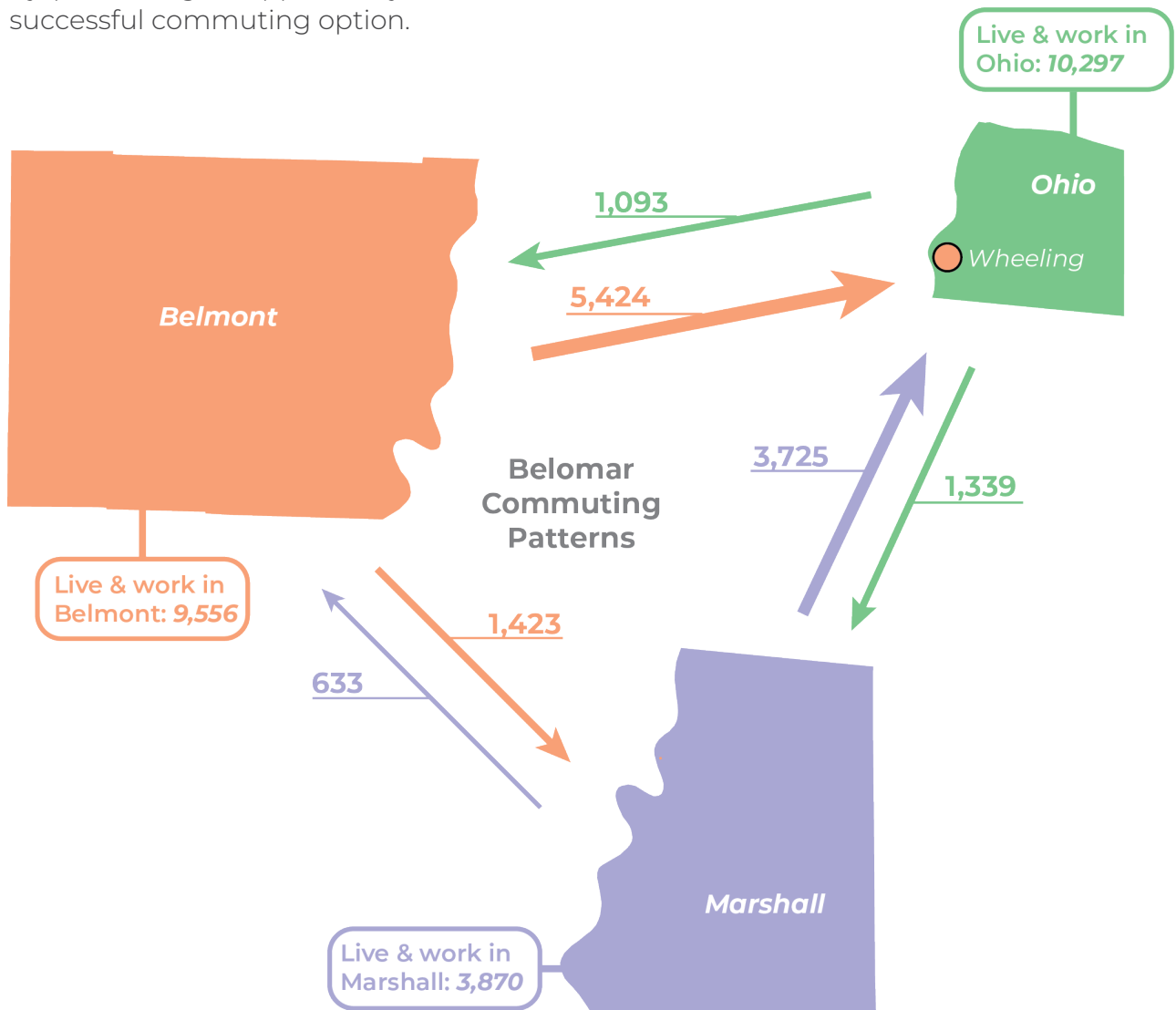


Figure 18. Intra-Regional Workforce Commute Patterns (U.S. Census LEHD Data)

Workforce Inflow-Outflow

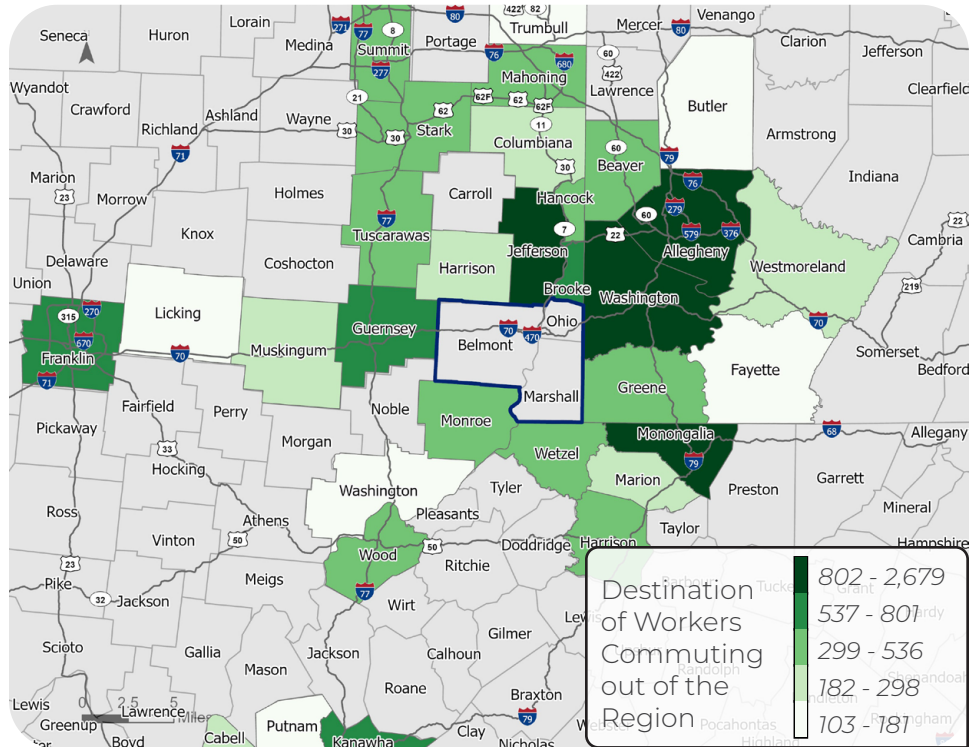
42,350 workers commute into or out of the Belomar region while only 37,360 workers live and work in Belomar. This means there are more commuters entering and exiting the region than there are commuters traveling within the region. It is essential to analyze the origins and destinations of those commuters to understand not only how many commuters there are but which routes they may be utilizing.

Commuting out of...

Allegheny County, PA, home to Pittsburgh, is the top destination for commuters leaving the Belomar region, with many likely using the I-70 corridor.

Commuting into...

More than a quarter of the 20,000 inbound commuters come from just three counties northeast of the region (Jefferson, Brooke, and Washington). These commuters likely use the I-70 corridor or State Route 7 corridor along the Ohio River to access jobs in Belomar.



Implications

While most inbound commuters originate from neighboring counties, outbound commuters have to travel to more distant counties. This pattern indicates that the Belomar region functions as an employment hub for its surrounding area, yet there may be a disconnect between the types of jobs available locally and the employment needs of residents. Outbound commuters are more likely to depend on regional highways for longer-distance travel and may face greater time, cost, and transportation burdens than those commuting into the region.

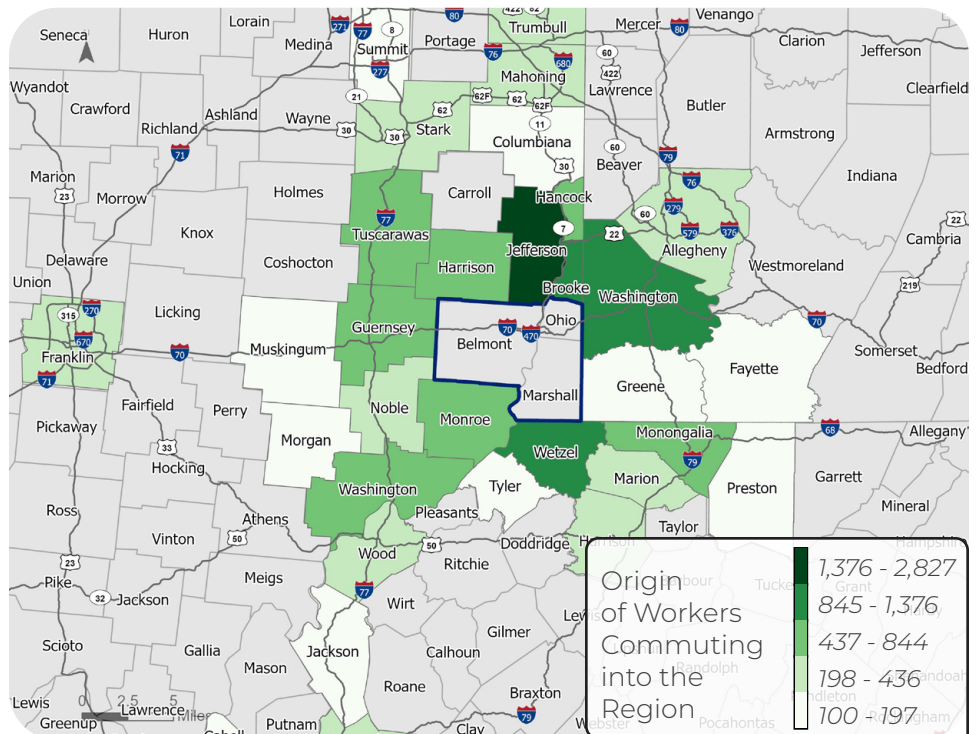


Figure 19. Commuter Origin-Destinations (U.S. Census LEHD Data)

Transportation System Summary

The recommendations of this MTP will largely focus on the critical investments to address the transportation needs throughout our region. This section will explore roadway safety, traffic, and freight distribution challenges we face, and identify locations in our region most in need of upgrades. Read more to learn about the transportation in the Belomar region and where investments will have the greatest impact:

Roadway Network

Belomar's roadway network is defined and constrained by its landscape. The Appalachian Mountains and Ohio River create a dynamic landscape that has challenged transportation engineers and construction crews throughout history. These challenges have resulted in the majority of the region's cities, villages, and highways being located along two primary corridors: the Ohio River corridor and the U.S. 40/I-70 corridor (**Figure 20**).

These two primary corridors provide connections between cities, villages, and other metropolitan areas outside of the Belomar region. This constrains the majority of regional traffic to these routes, creating major network pinch-points where they connect to municipal roads and each other. Because of this, roadway capacity and efficient interchanges are crucial for traffic movement for residents and freight traffic in the region.

Roadway Network

The Belomar region has a vast transportation network that reaches our most rural areas. This network is both a great asset and responsibility. Since our region is divided by topography and the Ohio River, most residents need a car to get around. They deserve a road network that is efficient, safe, and well maintained to access the essential goods and services they need.



Freight Distribution

Our regional economy relies on how well we can move goods and people. The efficient movement of goods via freight truck, plane, and pipeline rely on key infrastructure like our highway system, river ports, airports, and active rail lines.



Multimodal System

Transportation is more than just cars. Many residents rely on other forms of transportation to get to work, access essential services, or engage in recreation. Public transportation, walking/biking paths, and regional trails are essential transportation assets that expand the mobility options and improve the quality of life for all.



Primary Development Corridors

The majority of the developed land in the Belomar region lies along two primary branches the Ohio River corridor and the National Road corridor. The historic importance of two corridors to the region’s economy is key to understanding how the region and its transportation system have developed over the last century.

The Ohio River corridor is the historic driver of this region’s economy. River ports and railroads enabled the natural resources and manufacturing industries to thrive between the 1800s and early 1900s. Today, the Ohio River is lined by two major highways (OH SR-7 and WV SR-2/U.S. 250), which account for 20.5 percent of the average daily vehicle miles traveled in the Belomar region.

The alignment for National Road (U.S. 40) through the region was selected to minimize topographical challenges to construction while maintaining a direct east to west connection through Belmont and Ohio Counties. In the 1970s, I-70 and I-470 were built on parallel alignments to facilitate high speed freeway travel and freight truck traffic through the region. Today, these three corridors combine to move nearly 45.8 percent of the average daily vehicle miles traveled in the region.

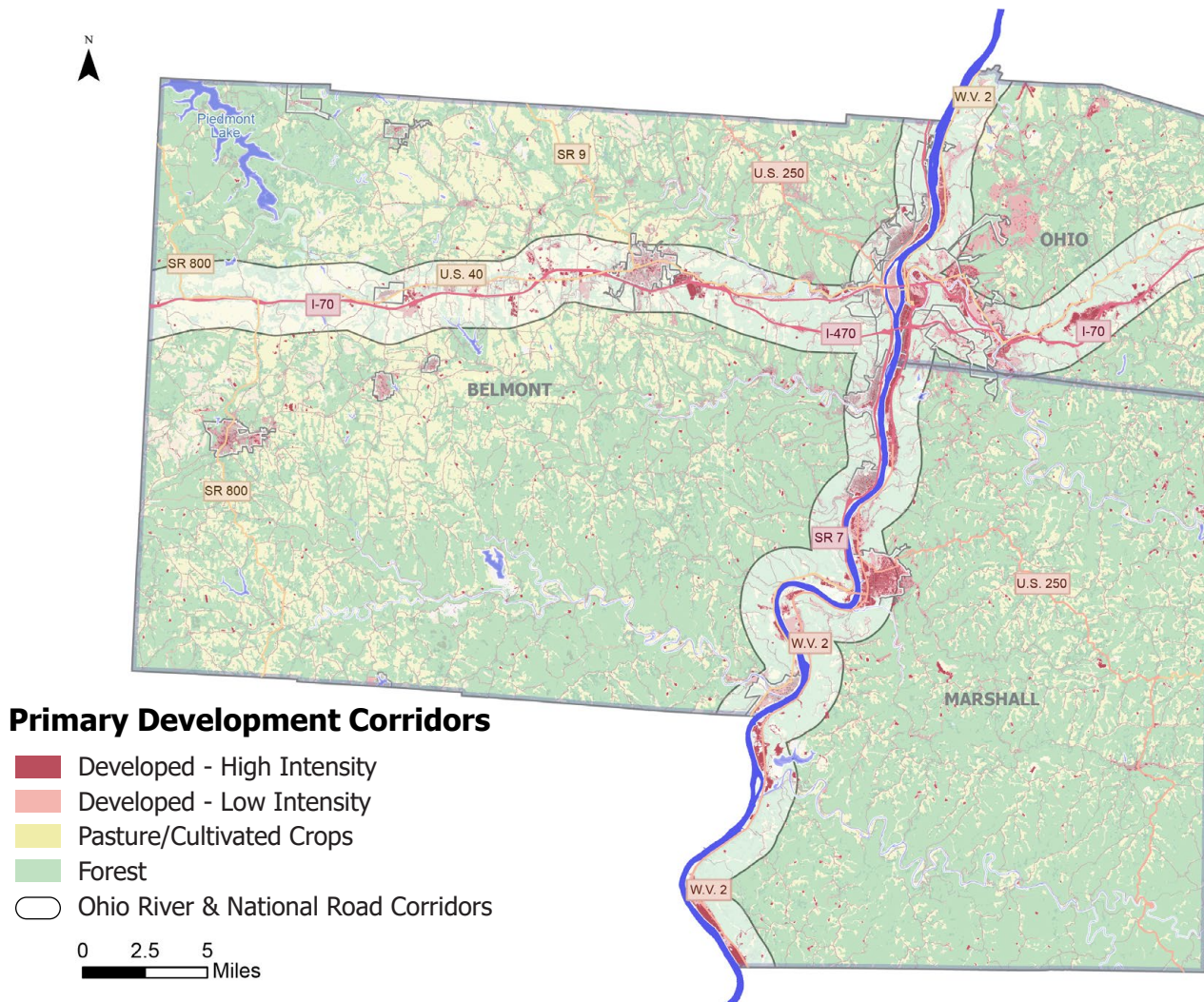


Figure 20. Development Concentrated Along The Ohio River And U.S. 40/I-70 Corridors (NLCD)

Federal Aid Routes

Federal Aid Routes are public roadways that are functionally classified and approved for eligibility under the Federal-Aid Highway Program. These routes may receive federal funding for eligible capital improvement projects, but not routine maintenance.

Within the Belomar region, there are approximately 958 centerline miles of Federal Aid Routes. Roughly one-third of these routes are classified as Non-State or Non-Federal, meaning ownership and day-to-day maintenance responsibility rests with counties, townships, and municipalities rather than the state. Since these local jurisdictions typically have limited revenue sources, these routes are more likely to rely on federal and state assistance to advance capital improvements. Roadways that are not designated as Federal Aid Routes are generally not eligible for

traditional Federal-Aid Highway Program funding, such as paving, resurfacing, roadway reconstruction, or CMAQ funded projects. This limitation can significantly constrain the ability of local governments to make improvements to their local transportation network.

However, certain federal programs allow limited eligibility on non-Federal Aid Routes, including safety projects, Transportation Alternatives projects, and off-system bridge projects, when specific federal criteria are met. Outside of these exceptions, communities seeking to improve non-Federal Aid Routes must rely on non-federal funding sources or work in coordination with the Belomar Regional Council and the State Department of Transportation to pursue functional reclassification of the roadway to Federal Aid status.

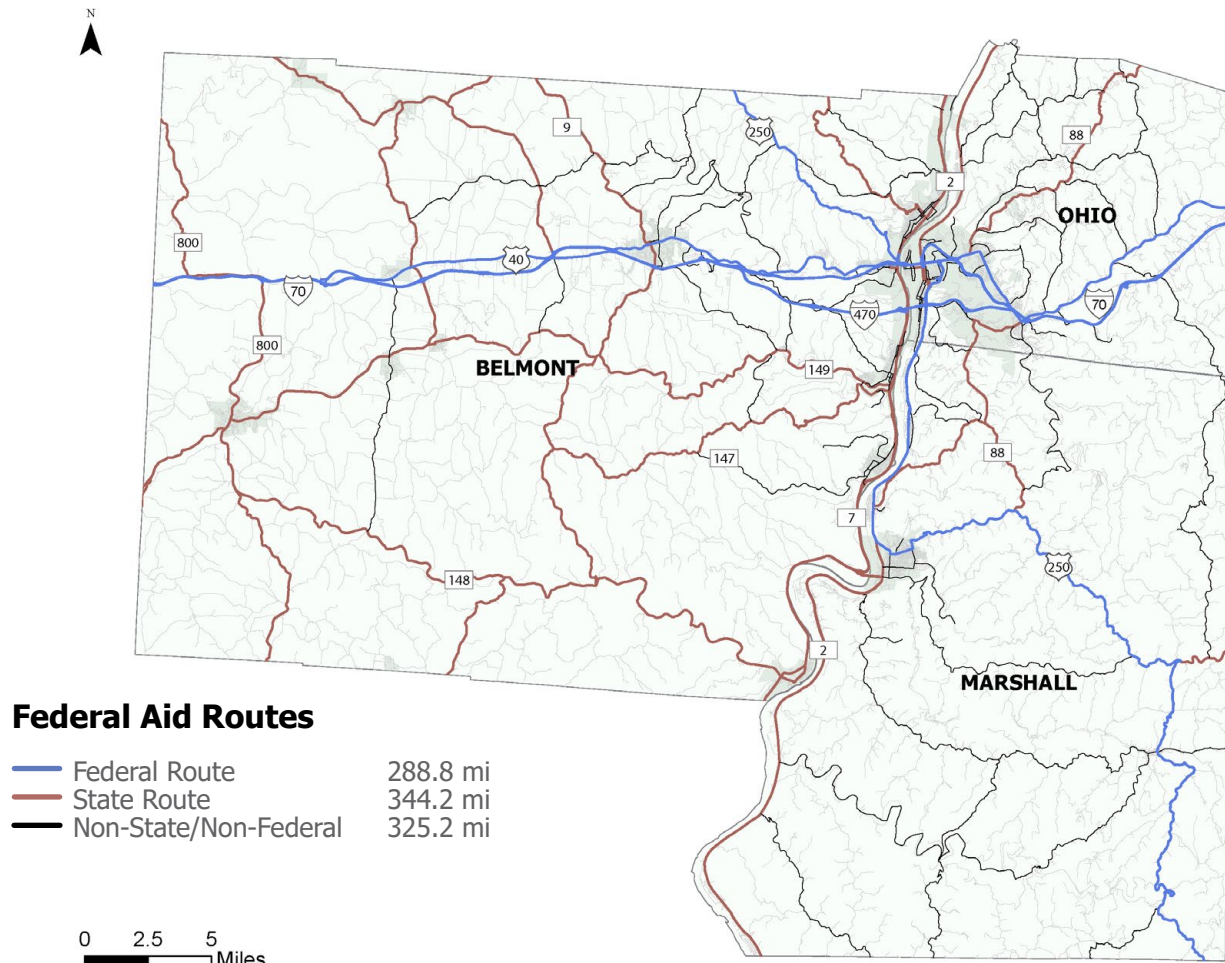


Figure 21. Belomar Federal Aid Route Network - Federal, State, and Non-State/Non-Federal Routes (ODOT, WVDOT)

Roadway Functional Classification

Functional classification denotes a roadway's role in the local and regional network and serves as the foundation for local access management/traffic impact standards and can impact project funding eligibility. This functional classification is formalized by a local or county-wide 'Thoroughfare Plan', which determines road's classifications based on existing and future transportation needs and recommends typical roadway cross sections specifically designed to meet those needs.

Figure 22 shows the existing roadway functional classification in the Belomar region. Interstate/freeways and major arterials define the region's two main development corridors: I-70/U.S. 40 and the Ohio River. Minor arterials and major collectors function to move people between community centers and these primary corridors.

Interstate/Freeway

The highest classification, these roads are designed for long-distance travel. These roads have limited access points, separated lanes, and focus on mobility, not land access.

Major Arterials

Provides high mobility, including access to cities and rural areas, with direct land access

Minor Arterials

Serve moderate-length trips, connecting to Major Arterials and Freeways. They balance mobility and land access, providing reasonable access to rural and industrial areas.

Major Collectors

Collects traffic from local roads to arterials, with longer routes, fewer driveways, and higher speeds.

Minor Collectors

Similar to Major Collectors but serve shorter routes, with lower speeds and more local land access.

Local Roads

The largest category in mileage, designed mainly for land access, not through traffic, serving short trips to higher roadway systems.

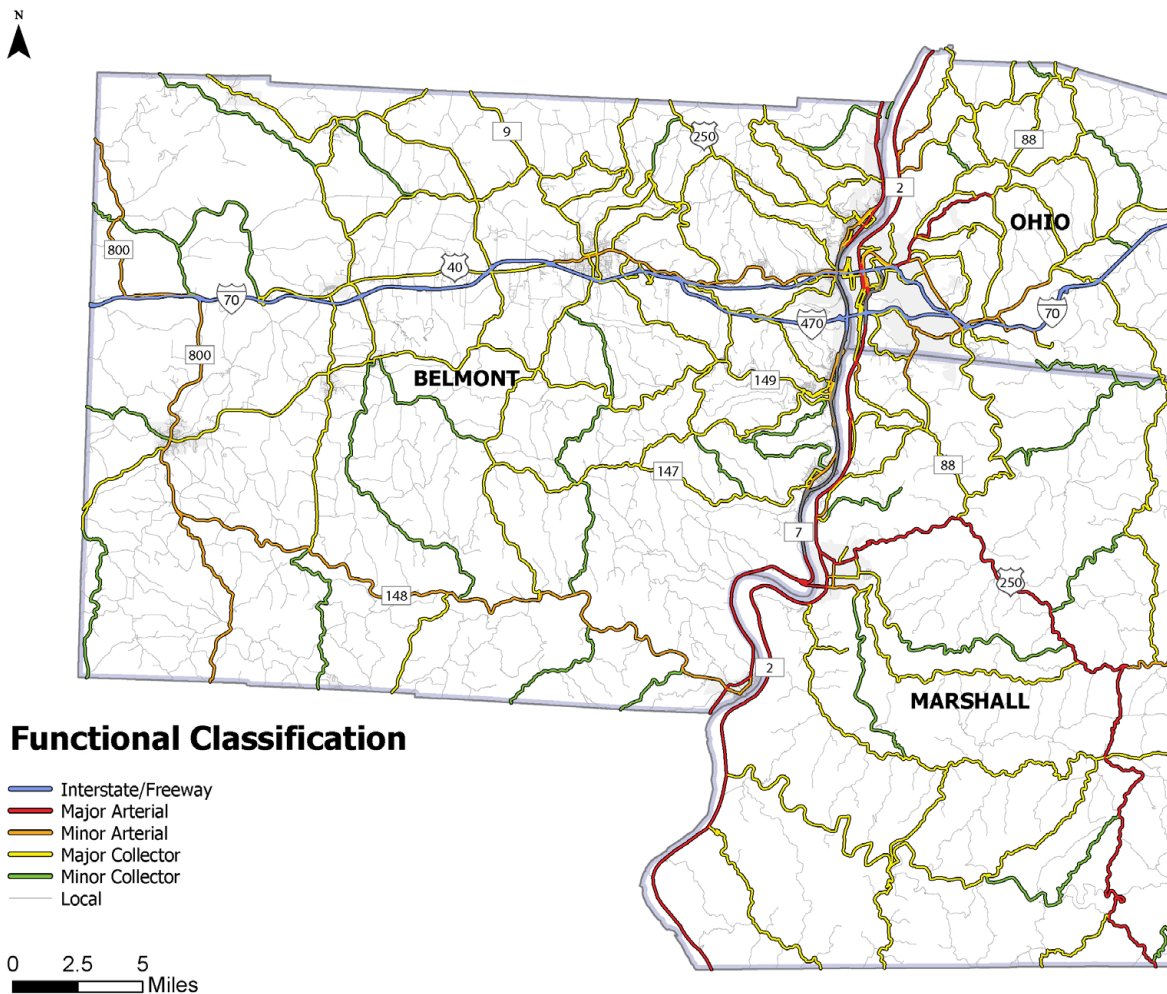


Figure 22. Belomar Regional Roadway Functional Classification Network (ODOT, WVDOT)

Regional Roadway Safety

Before setting safety goals we need to know where we stand. To do this, crash reports between 2019 and 2023 were collected from AASHTOWare, a national crash database, and analyzed to better understand the safety of our region’s roadways. During this five-year period, 12,294 crashes occurred within Belmont, Ohio, and Marshall Counties. Belmont County accounts for over half of all of Belomar’s crashes, with 6,839 total crashes during this five-year period, with I-70 being the most common crash location in the county.

Crash severity is a concerning trend. The region saw a total of 52 crashes result in a fatality, more than 10 per year on average. Additionally, 258 crashes resulted in serious injury. It is a top priority for the region to address roadway design features that were contributing factors to these tragic crashes. Figure 19 on the following page maps location trends of crashes within this five-year period to highlight locations most in need of investments to improve the safety of our transportation system.

Percentage of Total Crashes by Crash Severity (2019-2023)

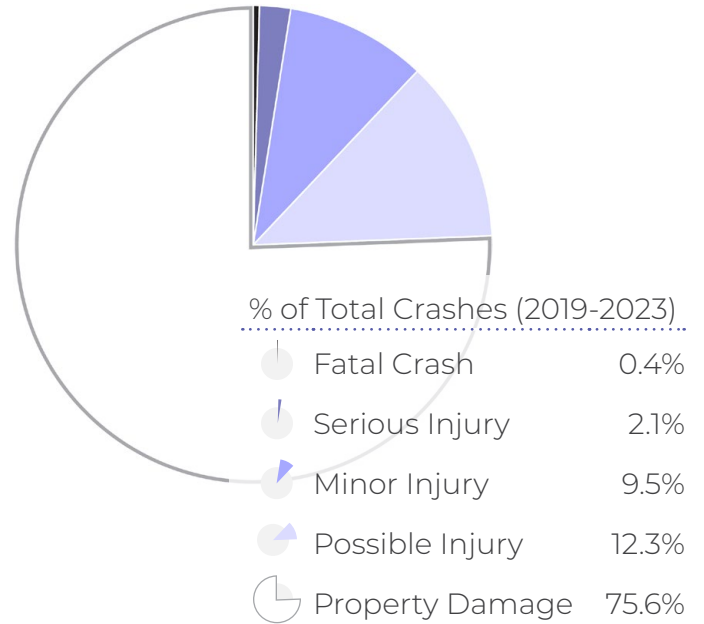


Figure 24. Percentage Of Crashes By Crash Severity (FHWA, AASHTOWare)

Yearly Crash Trends: Total Annual Crashes by County

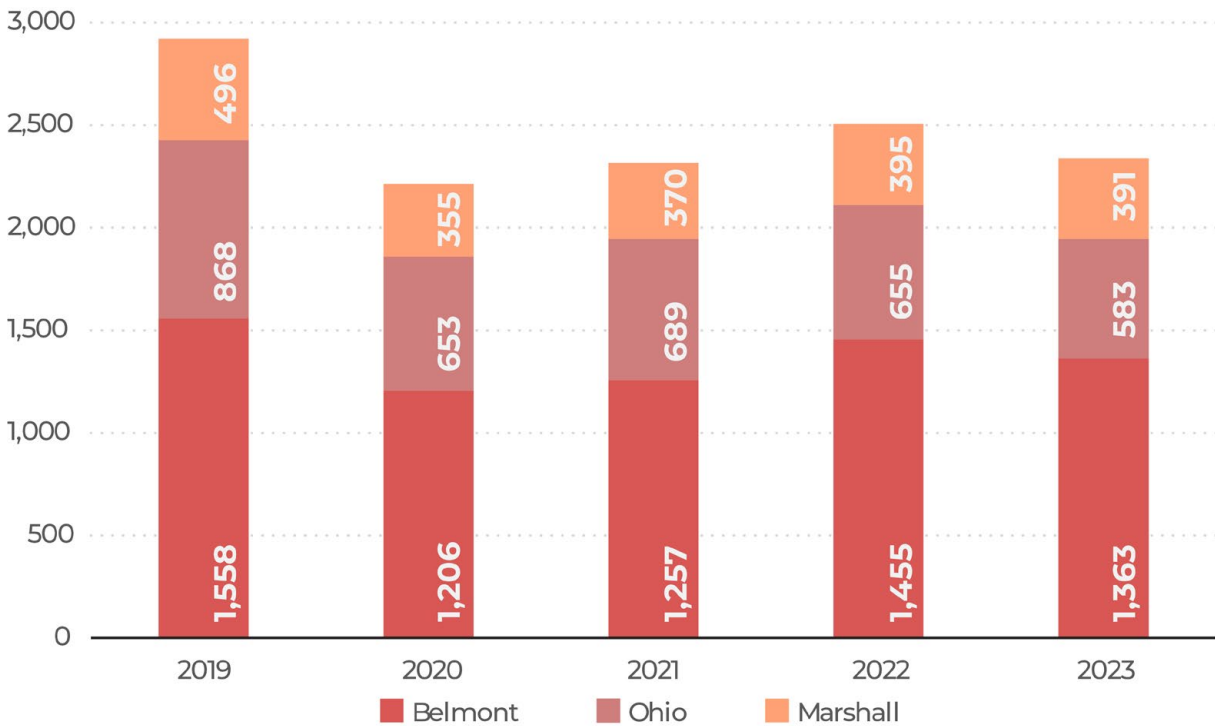


Figure 23. Total Crashes By Year And County, 2019-2023 (FHWA, AASHTOWare)

High Crash Locations

Traffic conditions, roadway design, and driver behavior all impact how likely different locations are to have crashes. As drivers, we inherently understand this, and may try to avoid certain intersections or corridors entirely because they feel stressed or unsafe to drive. Identifying these locations is critical for determining where safety countermeasures are most needed to improve the safety of our road network.

'Crash hotspots' can be identified by mapping the location of all reported crashes to highlight intersections and segments where they are most concentrated. Together, these hotspots account for over twenty-eight percent of all crashes and thirty percent of crash related fatalities between 2019-2023.

Below is the list of locations most in need of countermeasures to address the prevailing safety issues in each county (**Figure 25**):

Belmont County

- U.S. 40 In St. Clairsville
- SR-7 in Bellaire
- I-70 and I-470

Ohio County

- SR-2 in Warwood
- US 40 throughout Wheeling
- I-70 East of Wheeling (2-mile hill)

Marshall County

- SR-2/U.S. 250 in Moundsville and Glen Dale

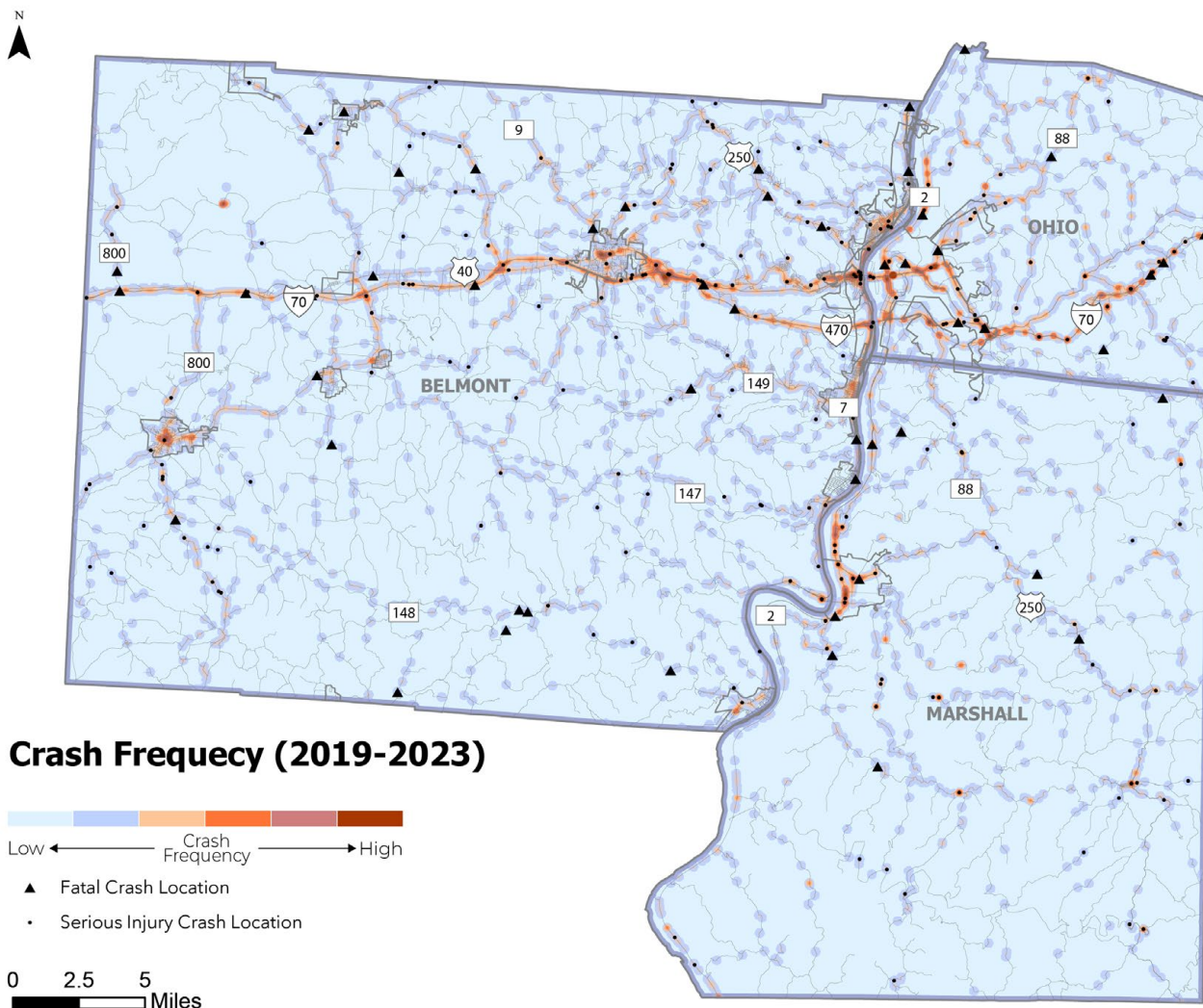


Figure 25. Regional Crash Heatmap, 2019-2023 (FHWA, AASHTOWare)

Safe System Approach

Roadway safety is one of the core driving goals of the Belomar 2050 Metropolitan Transportation Plan. Across the country, many Metropolitan Planning Organizations are leading the way toward reducing roadway injuries and fatalities, with the ultimate goal of zero annual fatalities. A true commitment to this ‘vision zero’ requires intentional and incremental improvements to our transportation system through a safe systems approach.

The Federal Highway Administration (FHWA) endorses a ‘Safe System’ approach to roadway design which identifies multiple ways to reduce crashes and improve outcomes. This approach is anchored by five core principles:

1. Safe Road Users
2. Safe Vehicles
3. Safe Speeds
4. Safe Roads
5. Post Crash Care

Addressing any one of these principles may lead to a reduction in crash severity, but when addressed together the redundancy will lead to sustainable reductions to crashes and resulting injuries/fatalities.

FHWA recommends that safety issues are prioritized using the Safe System Roadway Design Hierarchy. This tiered list begins by eliminating major roadway conflicts, reducing the hazards that lead to more severe crashes (i.e. travel speed), making operational changes to make conflicting travel movements safer, and educating the public on ways they could be safer drivers. This hierarchy presents a roadmap for how the Belomar Region can begin to address our most pressing roadway safety concerns and begin the pursuit towards zero annual fatalities.



Figure 26. Safe System Approach Core Principles (FHWA)



Figure 27. Safe Systems Roadway Design Hierarchy (FHWA)

Traffic Performance

Average annual daily traffic (AADT) is a traffic measure that shows how many vehicles travel on a specific route on an average day. This measure illustrates at a high level which routes move the most people and goods per day and how other routes feed into these primary corridors. Today, over 4,450,000 miles are traveled every day on Belomar’s road network.

Together, I-70, I-470, U.S. 40, OH SR-7, WV SR-2, and U.S. 250 account for 66 percent of the average daily vehicle miles traveled (VMT). The remaining 34 percent of VMT is dispersed across lower classification roadways connecting to the five primary corridors, including County Road 800, County Road 149, WV SR-88, and OH SR-9, and U.S. 250.

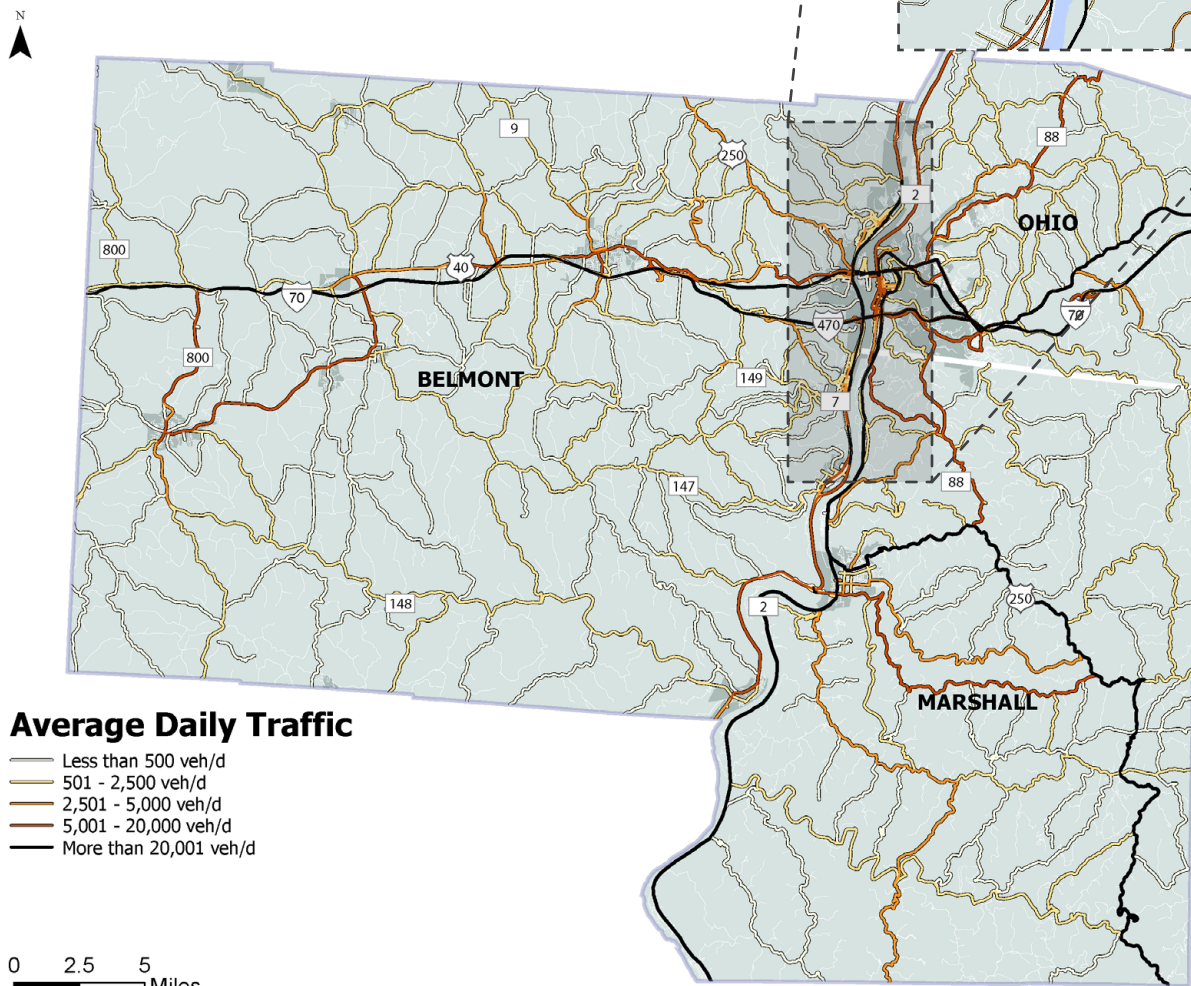


Figure 28. Regional Average Daily Traffic (ODOT, WV DOT)

Network Pinch-Points

A region-wide level of service traffic analysis was conducted to identify network segments/interchanges with poor existing level of service ratings. Level of service is a qualitative measure of traffic operations on an A to F scale based on travel speed, vehicle density, travel time, traffic volumes, and roadway capacity. Locations that receive a grade of D, E, or F are characterized by high-density traffic flows which approach or exceed roadway capacity, resulting in significant travel delay per vehicle (greater than 35 seconds).

These locations were identified to inform where capacity increasing capital improvements would be most needed. Across the region, 28 locations were identified through this analysis. Of these 28 locations, 16 are along the primary north-south or east-west corridors that the Belomar economy relies on to move goods and people in our region.

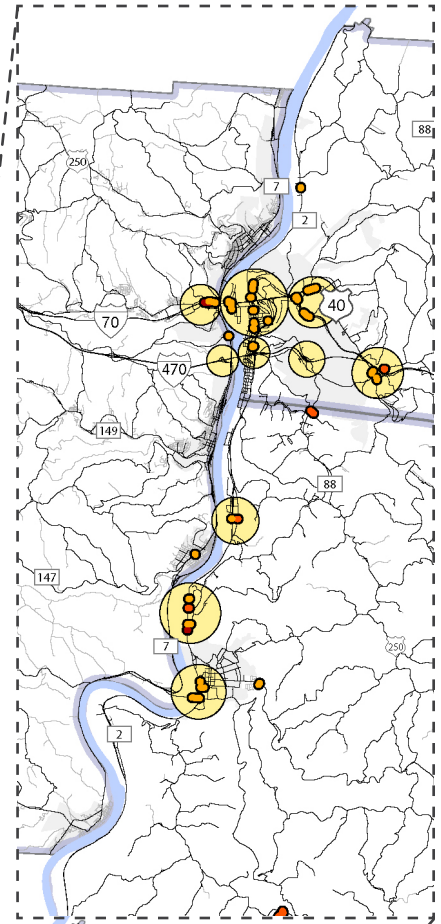
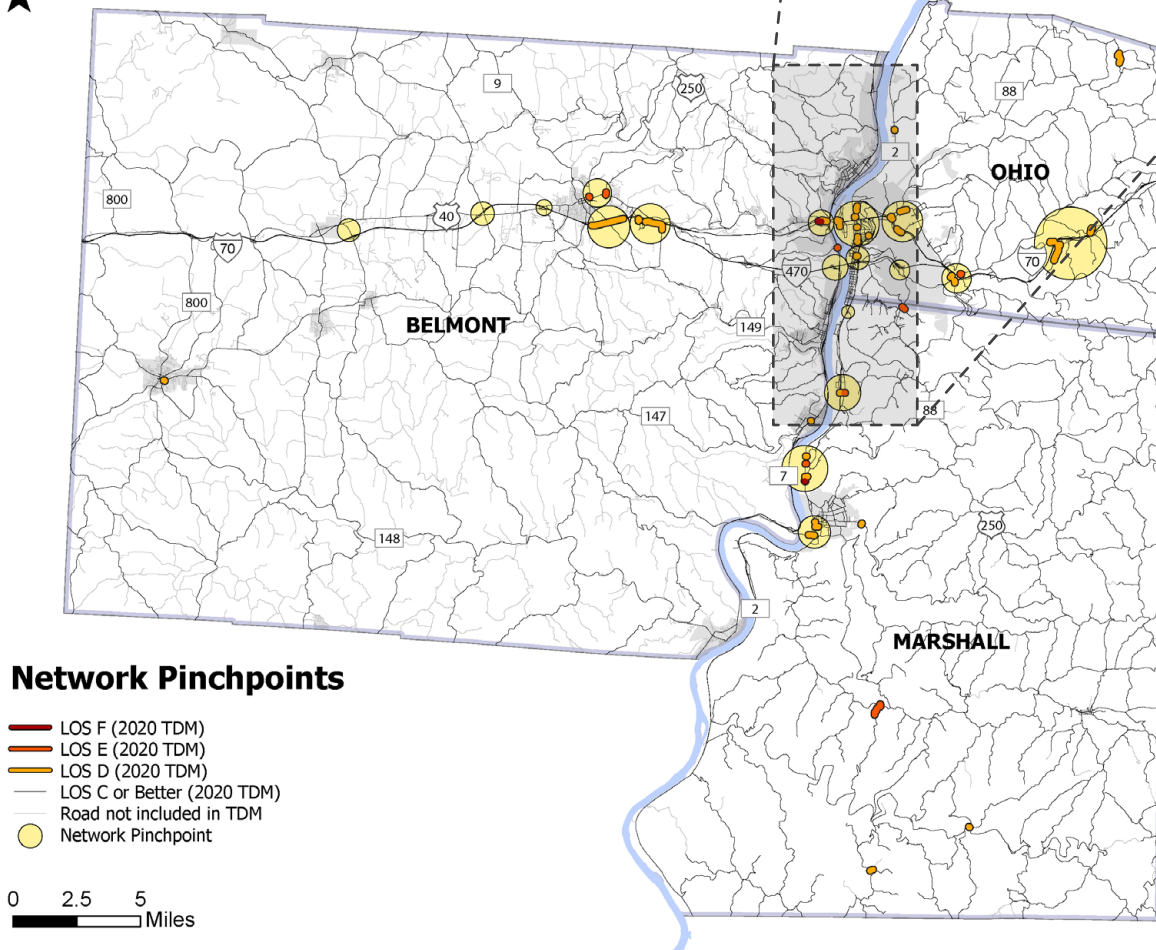


Figure 29. Belomar Existing Roadway Network Pinch-Points (ODOT TDM, 2020 Base Year)

Belmont County

Major Network Pinch-points

- | | | |
|---|---------------------------------|-------|
| A | Ohio Valley Mall Plaza and I-70 | LOS D |
| B | I-70 & SR-7 Interchange | LOS F |
| C | I-470 & SR-7 Interchange | LOS C |

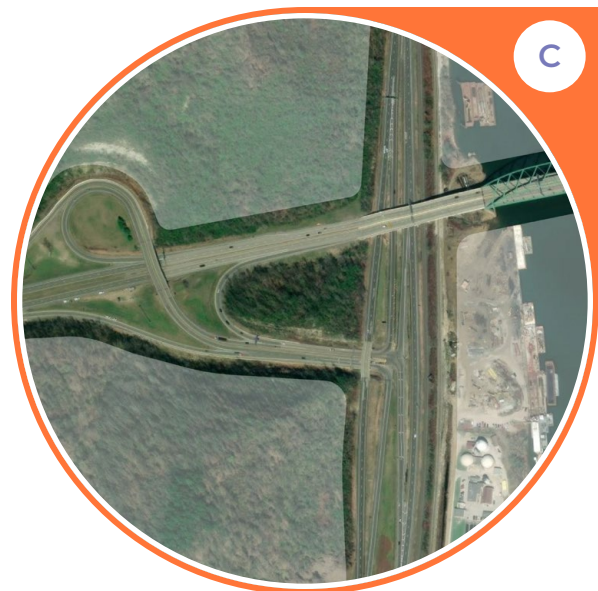
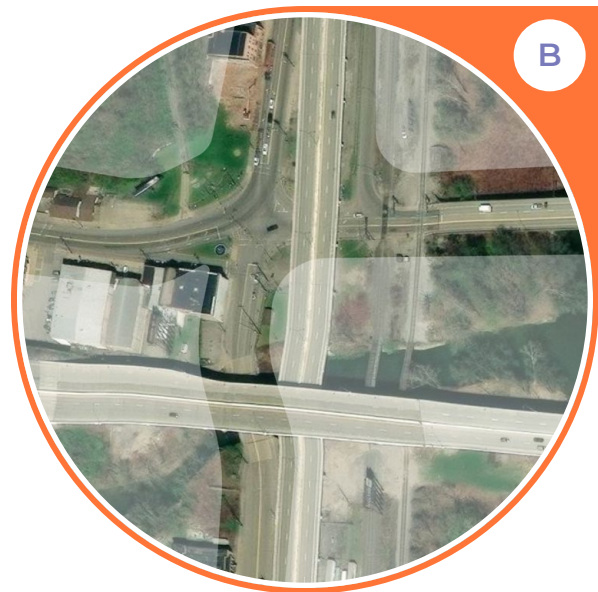
Other Network Pinch-points

- | | |
|-----------------------------------------|-------|
| SR-7 intersections in Martins Ferry. | LOS C |
| SR-7 off-ramps in Bellaire | LOS C |
| SR-7 and Dilles Bottom Rd (CR-54) | LOS C |
| Barton Rd and U.S. 40 in St Clairsville | LOS E |
| Bond Dr and SR-149 in Morristown | LOS D |
| I-70 off ramps to U.S. 40 | LOS C |

Improvement Options

The Belomar Transportation Plan for 2045 identified the following projects and studies to address roadway congestion at these pinch-points:

- Addition of third lane on I-70 from Mall Road to SR-9 interchange
- Upgrade I-470/SR-7 interchange to full free flow interchange
- Improvements in Bridgeport on Lincoln Avenue, Main Street and Cadiz Pike interchange as per local consensus
- I-70/SR-149 interchange improvement
- SR-147/SR-800 intersection improvement in Barnesville
- New signal at the intersection of Barton Road and U.S. 40
- Warrant analysis for signals at I-70 EB and WB off ramps at Marion Street



Ohio County

Major Network Pinch-points

- | | | |
|---|--------------------------------------|-------|
| A | I-70, I-470, U.S. 40 Interchange | LOS F |
| B | I-70 from Elm Grove to PA State Line | LOS D |
| C | I-470 and U.S. 250 Interchange | LOS D |

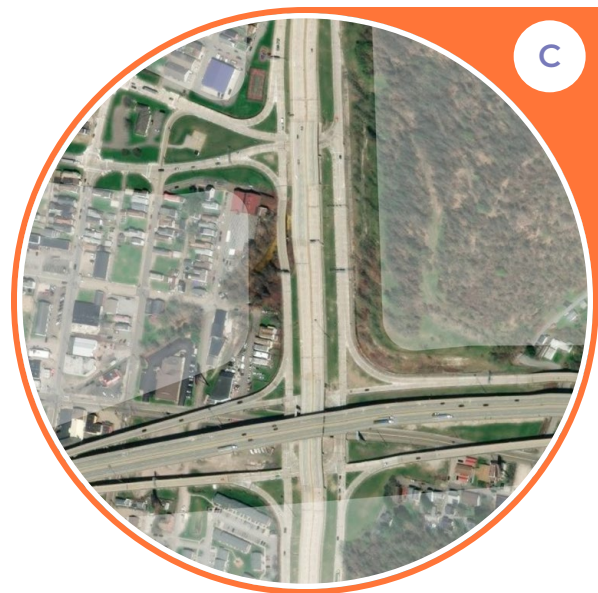
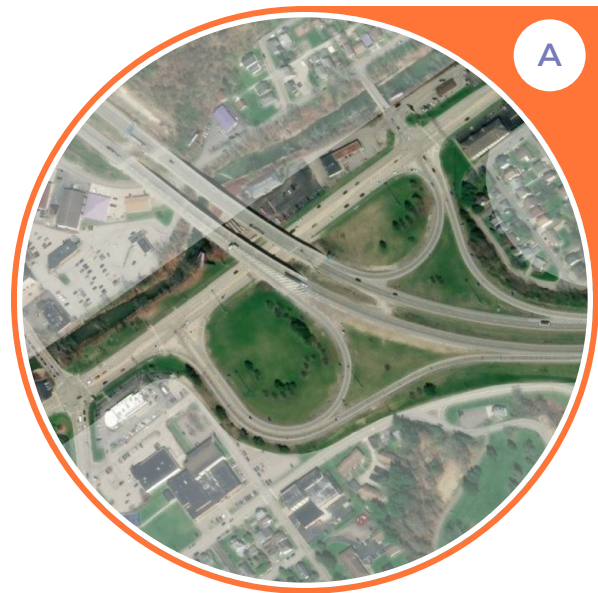
Other Network Pinch-points

- | | |
|-----------------------------------------|-------|
| I-70 at Oglebay Park Exit Ramp | LOS D |
| York St and Huron St in Wheeling Island | LOS D |
| U.S. 40 and WV SR-88 Intersection | LOS D |
| WV SR-88 and CR-6 in Bethlehem | LOS D |

Improvement Options

The Belomar Transportation Plan for 2045 identified the following projects and studies to address roadway congestion at these pinch-points:

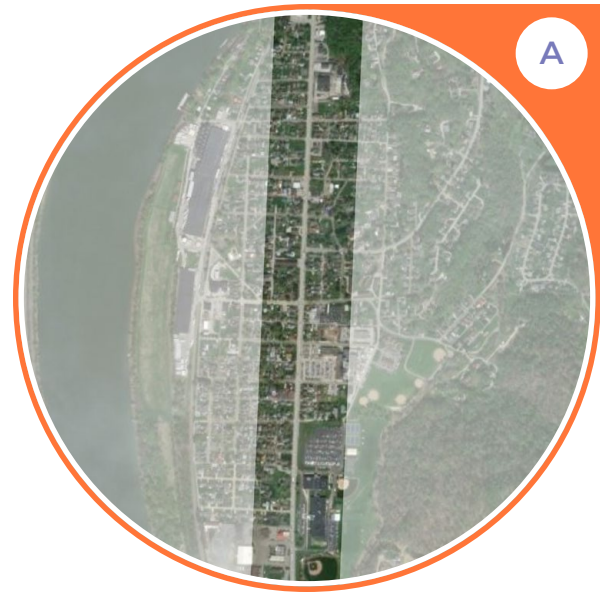
- Upgrade I-70 to six lanes from Elm Grove interchange to Cabela Drive interchange
- Add a new interchange between Cabela Drive and Elm Grove interchange
- A travel demand management study focused on mobility options to increase efficiency of travel in the National Road Corridor
- Signal warrant study for Bethany Pike and Edgewood Street intersection



Marshall County

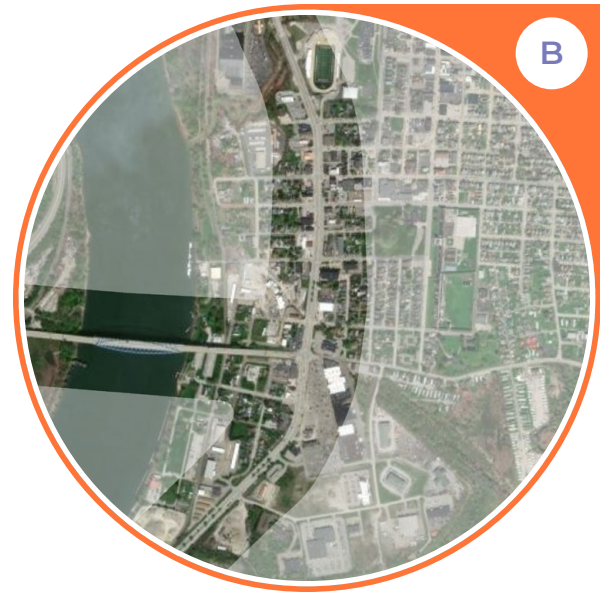
Major Network Pinch-points

- | | | |
|---|-------------------------------------------|-------|
| A | U.S. 250/WV SR-2
Corridor in Glen Dale | LOS E |
| B | WV SR-2 Corridor in
Moundsville | LOS D |



Other Network Pinch-points

- | | |
|--------------------------------------------------------------------|--------|
| Industrial Park
Road and 12th St
intersection in
McMechen | LOS: C |
| U.S. 250 and 1st
Street in Moundsville | LOS: D |



Improvement Options

The Belomar Transportation Plan for 2045 identified the following projects and studies to address roadway congestion at these pinch-points:

- Upgrade WV SR-2 to four lanes from Kent to Franklin (near WV SR-2)
- Radii improvements at the intersection of U.S. 250 and 1st Street/Jefferson Avenue in Moundsville
- A traffic study to address level of service issues in the vicinity of John Marshall High School and the need for a new signal at the intersection of U.S. 250 and WV SR-86

2050 Traffic Forecast

Belomar works closely with the Ohio Department of Transportation to evaluate the existing and future regional traffic conditions using ODOT’s Statewide Travel Demand Model (TDM). The TDM is a tool that considers changes in local/regional economic, demographic, and roadway conditions to forecast how travel patterns may change between now and 2050. All TDM’s are different depending on their inputs, network, and overall complexity, and do not reveal a certain truth about the future. But, the outputs can be extremely helpful in identifying how roadway and traffic conditions may change with relative magnitude and direction.

For the Belomar Region, population and job growth is expected to remain relatively stable. Because of this, and other factors outside of our region, traffic growth is expected to occur primary along the I-70/U.S. 40 and Ohio River corridors. This result does validate other transportation conclusions identified in this chapter. Network pinch-points along I-70, I-470, OH SR-7, and WV SR-2 may continue to exacerbate over the next 25 years. Because of this, the region needs to continue pursuing transportation and land-use development changes that improve operations at major interchanges and bring resources closer to residents so they aren’t reliant on driving along these highways for common daily needs.

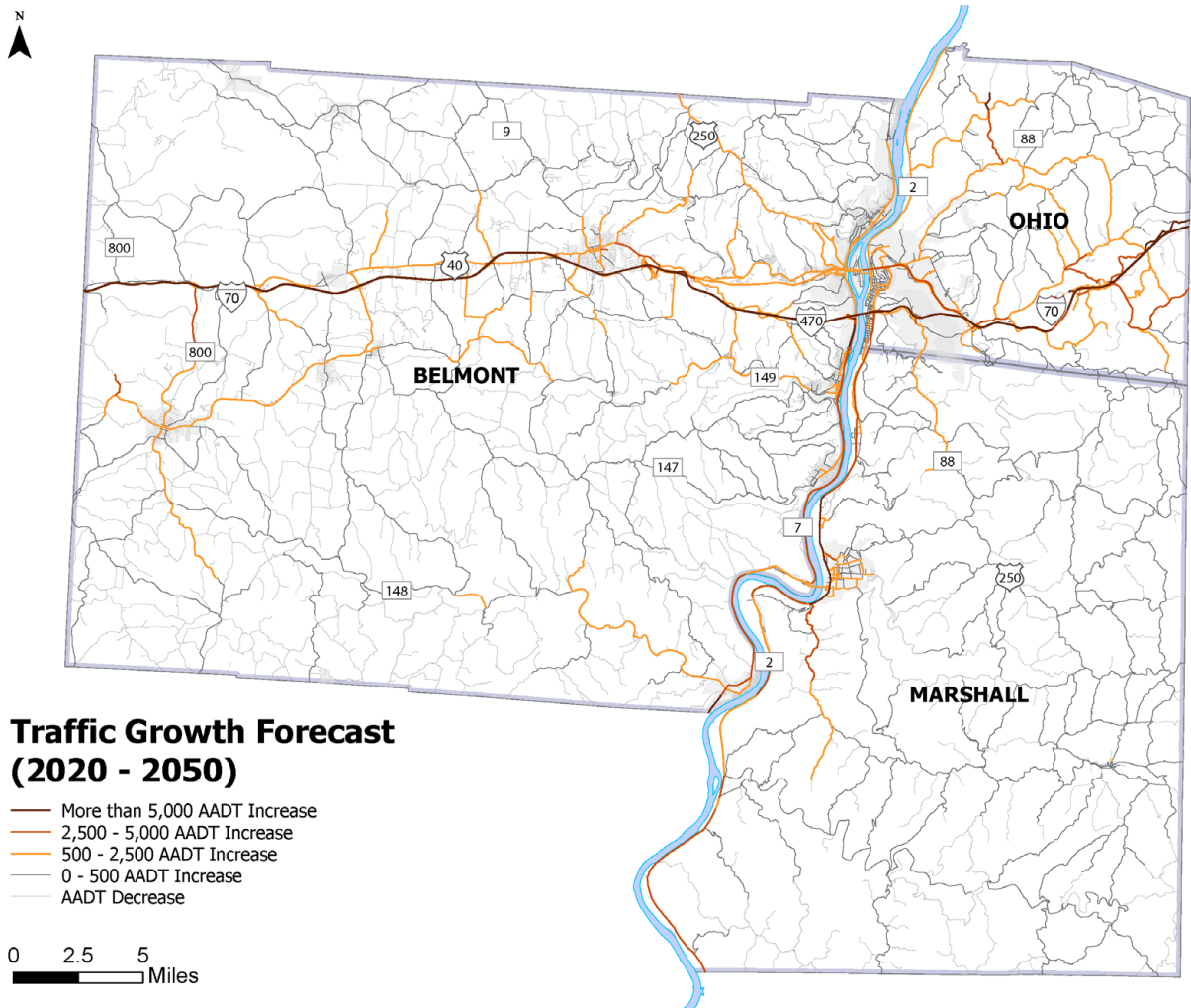


Figure 30. Average Daily Traffic Growth Between The 2020 TDM And 2050 Base TDM (ODOT)

Impacts of Traffic Forecast

Based on the Statewide TDM's traffic growth forecast, traffic conditions surrounding existing network pinch-points are expected create downstream effects. This particular model output assumes that no new projects will be completed to address these issues, and highlights the the need for continued progress to maintain an efficient and reliable transportation system.

Two major areas of concern are 2-mile Hill near The Highlands and I-70 near the Ohio Valley Mall in St. Clairsville. These two highway segments see significant increases in travel time downstream from major interchanges. This down stream delay can be interpreted as a result of inefficient interchanges/exits which can lead to cars queuing in travel lanes and slowing down travel. Future projects should aim to address capacity and interchange efficiency, especially at these locations.

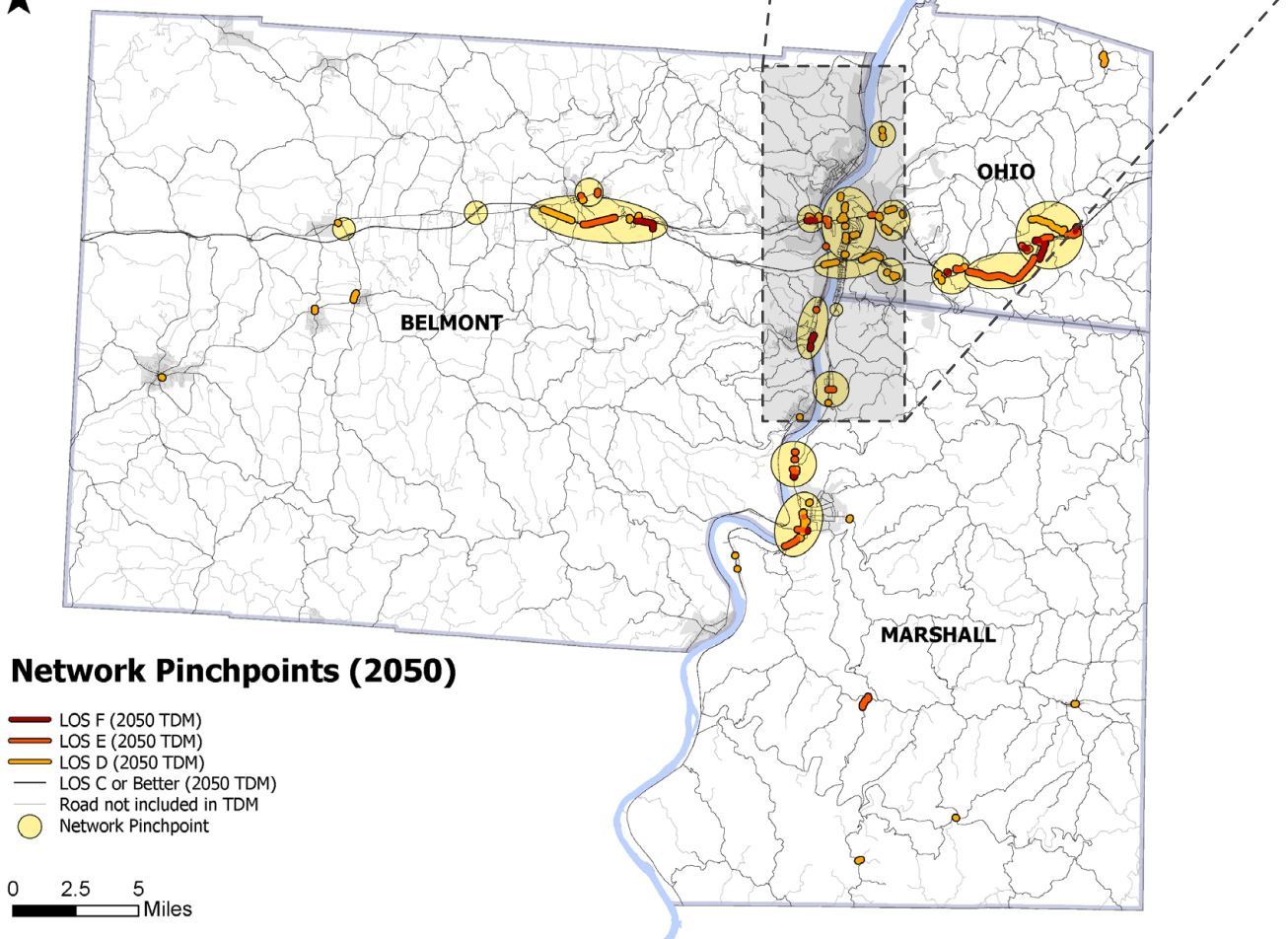


Figure 31. Belomar Future Roadway Network Pinch-Points (ODOT TDM, 2050 Base Year)

Freight Distribution

Efficient movement of goods is essential for regional economic prosperity. Wheeling's long history of industry and manufacturing has established a robust distribution network throughout the region. Even as industry in the region has declined in recent history, the region is still prepared to support new economic development opportunities due to its roadway freight, heavy rail, and river ports.

Industrial connections are centralized along the Ohio River and between Martins Ferry and Bellaire, offering direct rail and freeway connectivity to major population centers to the east and west. The majority of all goods moved into/through the region are moved by freight truck, which mainly utilize the I-70/I-470 corridors.

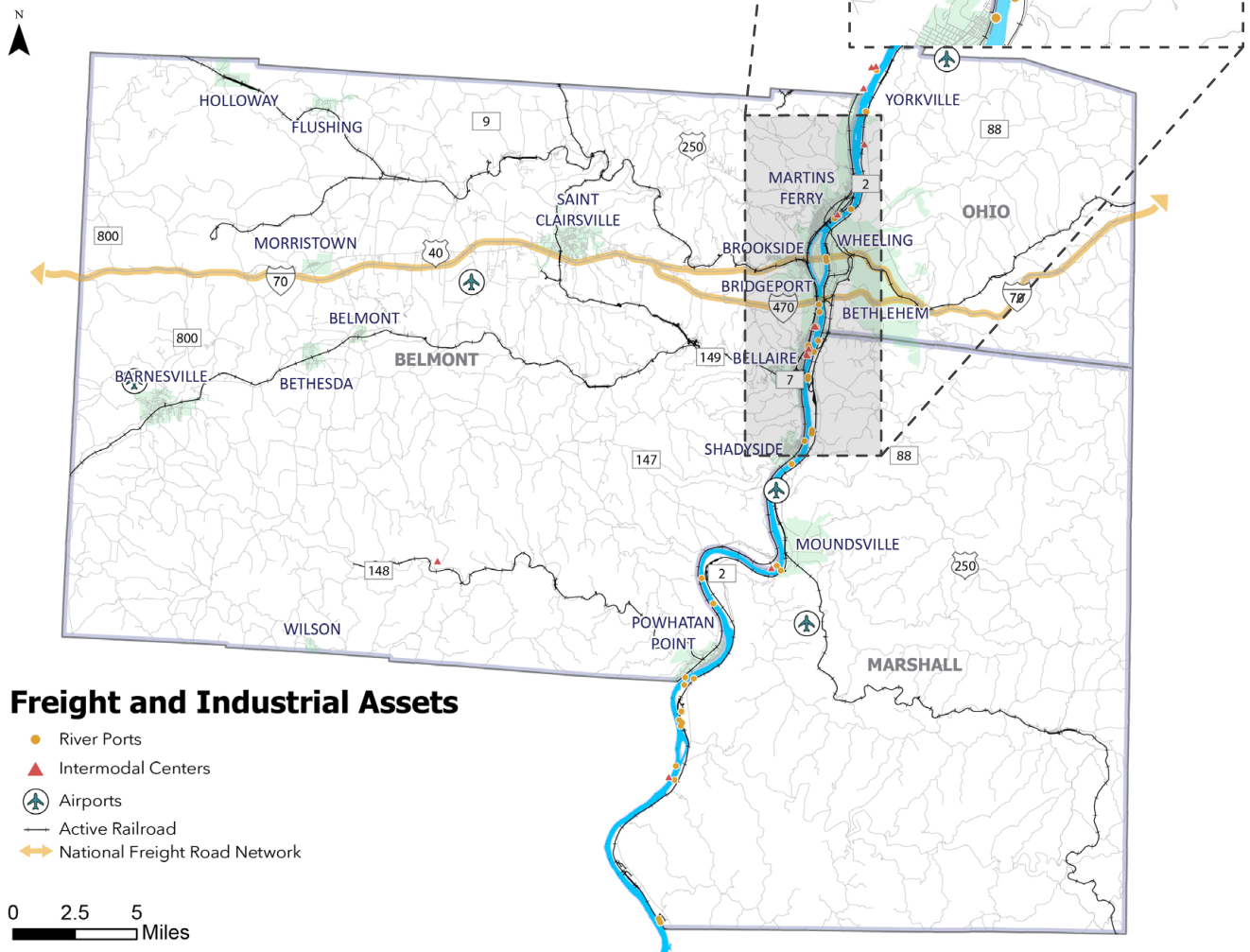


Figure 32. National Freight Network And Industrial Assets (USDOT, ODOT, and WVDOT)

Freight Truck Travel Patterns

Based on average daily truck volume, the national freight network carries the largest share of daily truck traffic. Several other segments along the region's major north-south and east-west corridors carry over 2,500 trucks per day including OH SR-7 in Martins Ferry/Bellaire and U.S. 250 in South Wheeling. Outside of these major corridors, the region's more rural cities and villages are supported by critical county roads that keep them connected to the greater region and see more than 500 trucks per day including the following; CR-800, CR-147, CR-149 & Blaine Barton Rd in Belmont County, WV SR-88 & Bethlehem Blvd in Ohio County, and WV SR-88 & U.S. 250 in Marshall County.

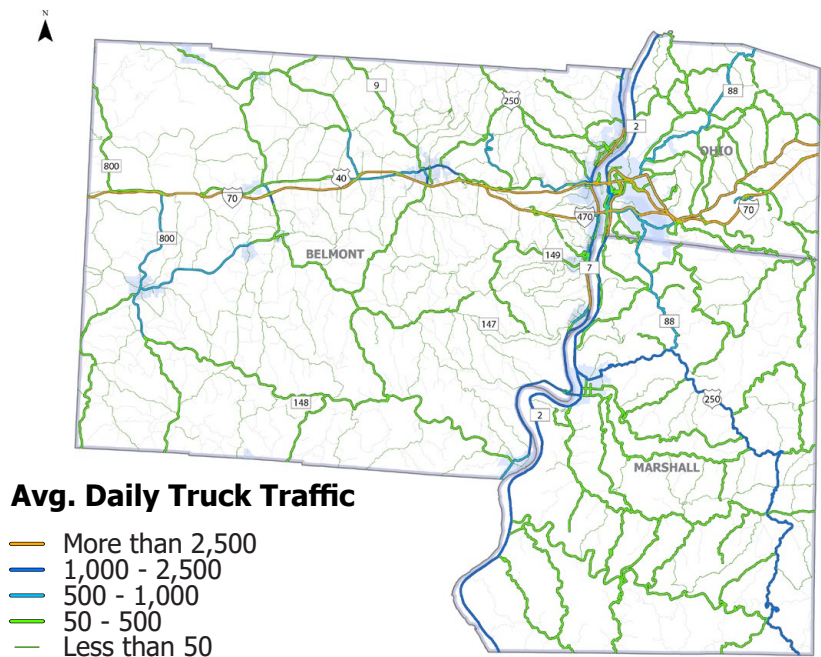


Figure 33. Average Daily Truck Traffic Volumes (ODOT, WVDOT)

Truck Traffic Percentage

Even though the majority of truck traffic occurs on our region's highways and arterials, many lower classification roads see a significant portion of their average daily traffic from trucks. In northern Ohio County and southeastern Marshall County, trucks account for more than 20% of daily traffic on many lower-classification roads. This is a maintenance and roadway safety concern. Many of these roadways are chip-seal roads that are not designed for heavy vehicles. This leads to rapid roadway deterioration that is difficult for counties to keep up with.

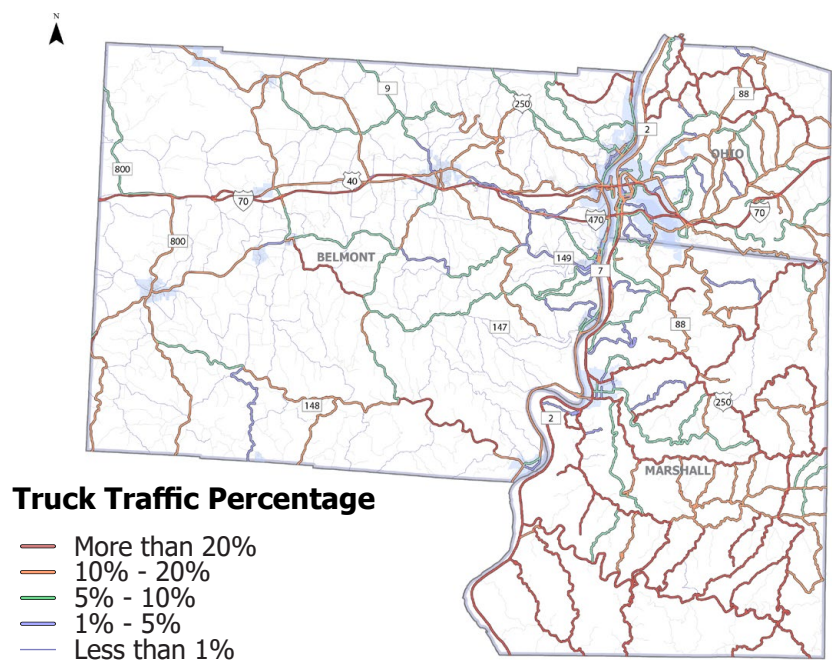


Figure 34. Percentage Of Total Traffic That Are Trucks (ODOT, WVDOT)

Impacts of Freight Traffic

One of the primary sources of freight trips within the region is associated with shale production. As shale production has ramped up in recent history, so has truck traffic which has led to an increased maintenance burden on our roadways.

Looking at the locations of active wells and mines, we notice that many of these are in our region's most rural areas, far from major highway facilities that the trucks must eventually get to for distribution. Because of this, trucks rely on lower classification roadways that are not usually designed to handle the weight and size of fracking trucks, leading to rapid deterioration, asphalt shoving, cracking, and potholes.

In Ohio, the Local Roads Oil & Shale Program provides economic support for infrastructure repairs in counties, townships, cities, and villages impacted by increased vehicular traffic from oil and gas production with zero percent required local match. This program provides essential assistance to keep up with the infrastructure impacts that come the economic growth that natural resource production can provide.

In West Virginia, the absence of county-level departments of transportation in West Virginia reduces administrative costs for counties but also limits local decision-making authority. As a result, counties have less control over project prioritization and reduced leverage in competing for West Virginia State Road Fund dollars, particularly where federal-aid eligibility constraints restrict access to supplemental funding sources.

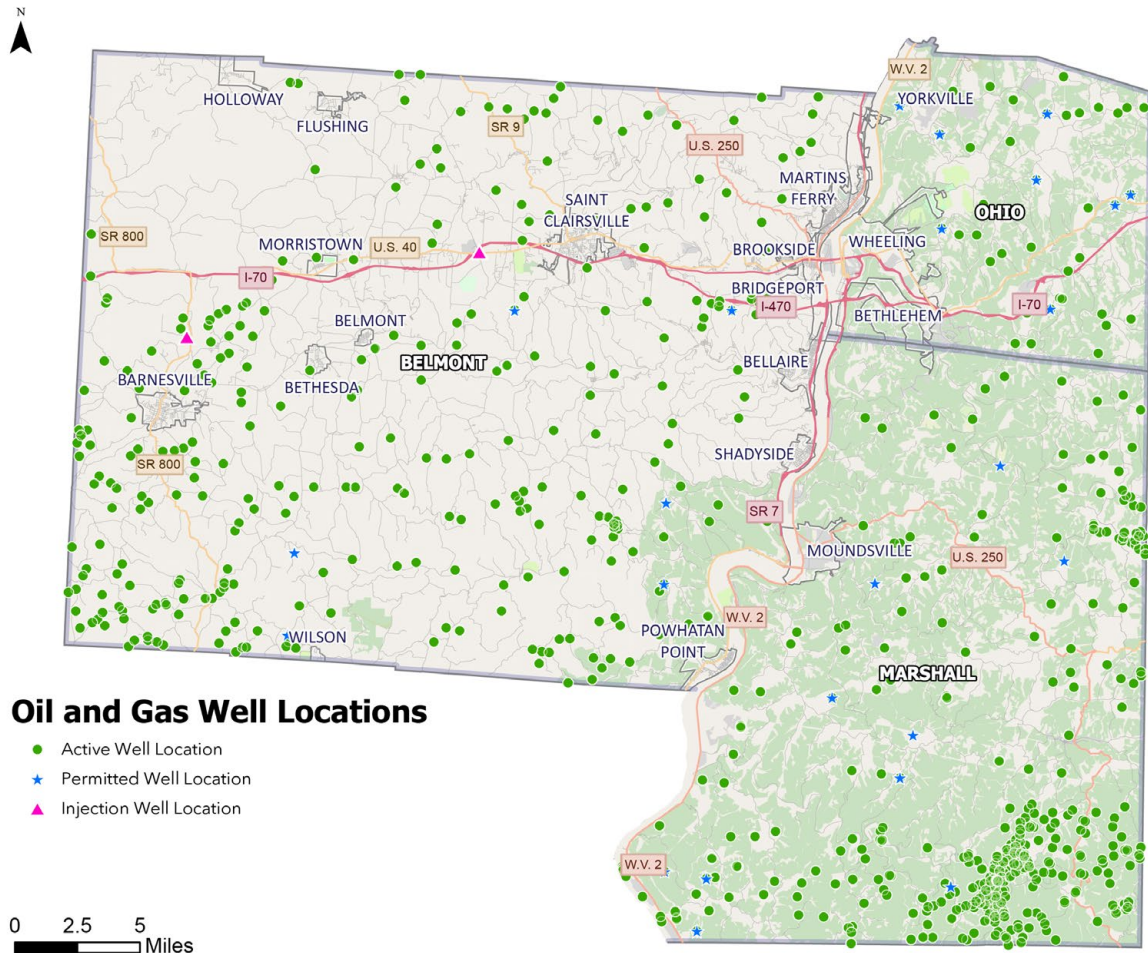


Figure 35. Regional Oil And Gas Well Locations (USGS)

Distribution of Goods

The Belomar region's unique location along the Ohio River provides many ways to distribute goods and raw materials into and out of the region. Below is a summary of the primary modes of freight distribution and top five goods by total value for the state of Ohio and West Virginia from the 2020 U.S. Census Commodities Report:

Exports

Freight truck is the predominant mode used to export goods out of both Ohio and West Virginia. It is important to note that although West Virginia exports just 12.6 percent of what Ohio exports, it moves 62 percent of the weight, increasing the maintenance burden on its roads. Below are the top five exported goods by value for both states:

	OH	WV
1	Machinery	Natural gas and fossil products
2	Motorized vehicles	Pharmaceuticals
3	Electronics	Plastics/rubber
4	Plastics/rubber	Coal
5	Base metals	Base metals

	Ohio		West Virginia	
	Weight*	Value**	Weight*	Value**
Truck	119,498	\$276,433	29,937	\$29,367
Rail	19,116	\$9,635	25,438	\$2,341
Air (include truck-air)	207	\$10,299	12	\$203
Pipeline	83,478	\$15,078	66,640	\$11,364
Water	11,169	\$2,250	32,289	\$1,844
Multiple modes & mail	17,885	\$61,034	1,673	\$2,270
	251,353	\$374,729	155,988	\$47,389

Table 3. 2020 State Imports Freight Distribution Summary (Commodity Flow Survey, Bureau Of Transportation Statistics)

* Weight measured in thousands of tons

** Value measured in millions of dollars (2017)

Imports

Both Ohio and West Virginia import the vast majority of goods by freight truck. Freight truck accounts for nearly 292 million dollars of imported goods for Ohio and 30 million dollars for West Virginia. Below are the top five imported goods by value for both states:

	OH	WV
1	Pharmaceuticals	Mixed freight
2	Motorized vehicles	Precision instruments
3	Machinery	Pharmaceuticals
4	Electronics	Machinery
5	Plastics/rubber	Plastics/rubber

	Ohio		West Virginia	
	Weight*	Value**	Weight*	Value**
Truck	121,297	\$291,975	19,431	\$30,057
Rail	27,147	\$11,441	5,570	\$1,378
Air (include truck-air)	123	\$10,345	28	\$567
Pipeline	81,927	\$17,937	13,663	\$3,994
Water	35,436	\$2,763	11,435	\$779
Multiple modes & mail	17,380	\$73,033	2,827	\$14,858
	283,311	\$407,611	52,954	\$51,633

Table 4. 2020 State Exports Freight Distribution Summary (Commodity Flow Survey, Bureau Of Transportation Statistics)

* Weight measured in thousands of tons

** Value measured in millions of dollars (2017)

Statewide Freight Goals

Our statewide planning partners at the Ohio and West Virginia Departments of Transportation regularly update statewide freight plans to assure our infrastructure is prepared to support the statewide economy. Below is an excerpt from the 2023 West Virginia State Freight Plan of specific goals and objectives to improve the movement of goods in the state:

Statewide Freight Goal	Objectives
<p>System Condition, Efficiency, and Fiscal Sustainability Maintain multimodal and intermodal freight transportation infrastructure in a state of good repair and manage life-cycle costs; efficiently deliver projects, programs and services supporting goods movement; and work to maintain existing funding mechanisms while exploring new alternative and sustainable funding mechanisms.</p>	<p>Maintain the existing freight transportation system and freight assets in a state of good repair.</p> <p>Invest in innovative technologies and program delivery strategies supporting freight movement.</p> <p>Explore new and sustainable revenue options which fund freight investments.</p>
<p>Safety and Security for All Users Reduce transportation fatalities and serious injuries involving freight vehicles, improve the safety and security of drivers, cargo, and intermodal facilities, and improve the resilience of the freight system particularly to severe weather events and other disruptions.</p>	<p>Reduce fatalities and serious injuries on the multimodal transportation system.</p> <p>Enhance the safety and security of freight operators and cargo.</p> <p>Manage a resilient and redundant freight transportation network.</p>
<p>Economic Vitality Strengthen the ability of communities and industries to access national and international trade markets, retain and grow existing West Virginia (WV) statewide and regional economic focus sectors, and support regional economic development that will diversify WV's economy.</p>	<p>Improve intermodal freight connections, and expand direct freight access to economic activity centers and emerging industries/ clusters.</p> <p>Address highway freight bottlenecks and improve first-mile/last-mile access.</p> <p>Partner with universities, community colleges, and workforce training programs to educate and train new freight operators and supporting workforces.</p>
<p>Multimodal Mobility, Reliability, and Accessibility Facilitate freight mobility and connections for on- demand and reliable goods delivery across all WV communities, including critical services such as health care and emergency management.</p>	<p>Improve freight network reliability, reduce incident clearance time and recovery, and enhance management of operational disruptions on freight corridors.</p> <p>Improve access and availability of designated and safe truck parking facilities.</p> <p>Create new opportunity for access to key destinations and jobs for underserved or disadvantaged populations.</p>
<p>Livable and Healthy Communities Create freight transportation systems that operate efficiently and cleanly, protect the natural environment and maintain access for residents and visitors to experience WV's natural and cultural destinations.</p>	<p>Reduce emissions from freight movement.</p> <p>Mitigate environmental and community impacts from freight movement.</p> <p>Coordinate freight land use and transportation decisions.</p>

Table 5. Statewide Freight Goals From The 2023 West Virginia State Freight Plan (WVDOT)

Multimodal Transportation

Walking and biking are more than recreational activities. Active streets are a sign of a vibrant local economy and connected communities. Trail connections between cities and villages can offer a new option for those who need to get to work or complete errands, but can't or choose not to drive. This section will look at the existing multimodal system of the Belomar Region.

Active Transportation

The region is home to some excellent trails and paths that are used by thousands of residents each year, despite topographic challenges. The Wheeling Heritage trail and St. Clairsville National Road Bikeway are fantastic examples of separated trails that cross and connect communities together. Despite these existing facilities, rural connections remain limited and difficult to navigate.

Bike Route 95 and the Eastern Ohio Back Road Biking Loop in Belmont County are on-street regional connections in western Belmont County. These on-street facilities provide confident cyclists with an option for transportation between villages and recreation, but less confident cyclists may prefer separated facilities because they feel safer. Expanding low-stress connections between more rural areas and villages could greatly improve the region's multimodal network.

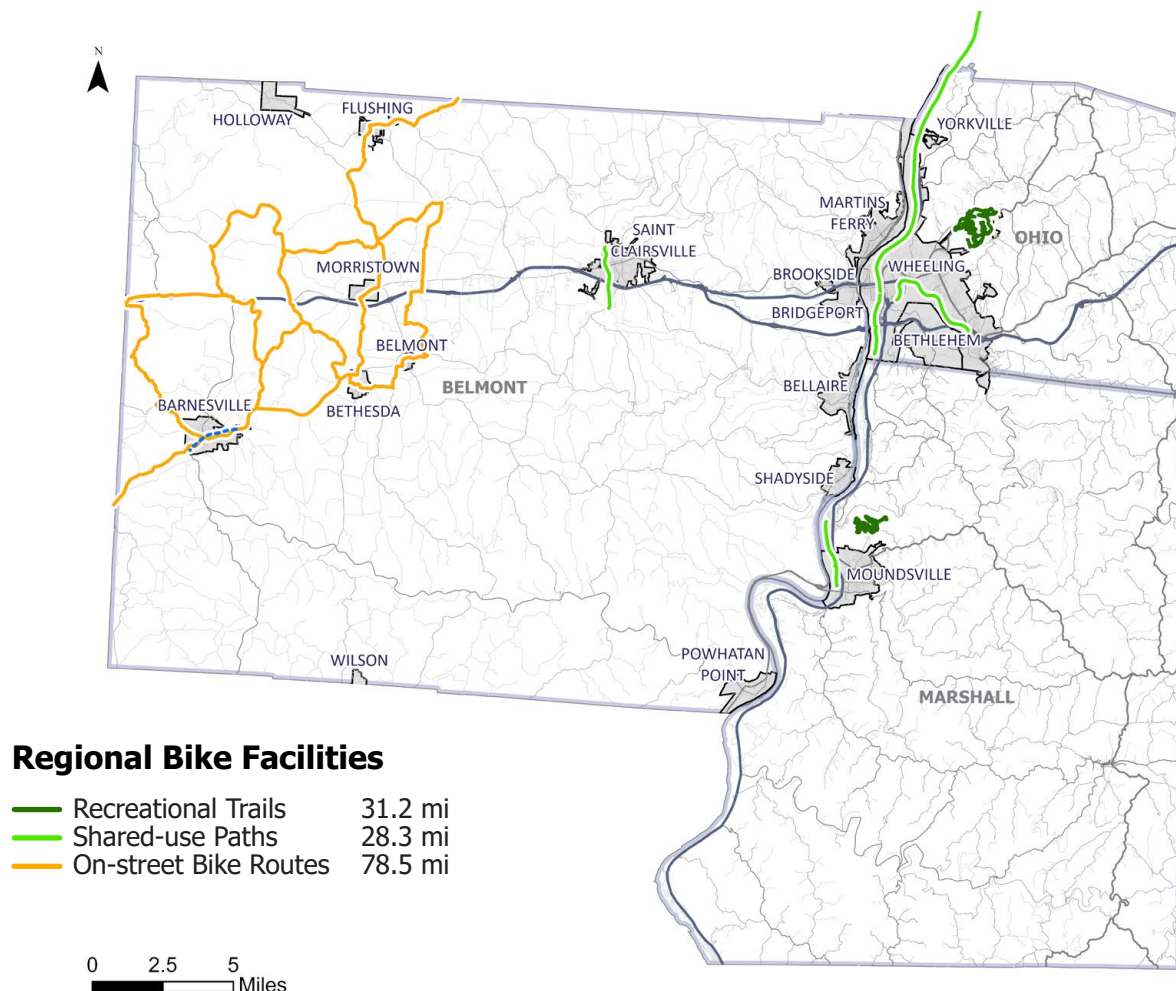


Figure 36. Belomar Regional Multimodal Network (Belomar Regional Council)

Bike Facility and Trail Accessibility

Figure 37 overlays regional population distribution with the existing bike and trail facilities. When we do this, the following patterns and gaps begin to emerge:

- Paths and trails are primarily in the cities of Wheeling, St. Clairsville, and Moundsville.
- Access to bike and trail facilities is still limited. 70 percent of the region’s population is more than a mile from the nearest trail or path.
- Connections to west Marshall County, east Ohio County, and between Morristown, St. Clairsville, and Wheeling can greatly expand regional multimodal access. This is especially critical for areas with low vehicle ownership.

	Facility Name	*Pop. within 1 mi	% Region Pop.
1	Wheeling Heritage Trail	30,700	22.4%
2	St. Clairsville National Road Bikeway	2,800	2.0%
3	Glen Dale to Moundsville Rail Trail	4,700	3.4%
4	Barnesville Trail*	1,100	0.8%
5	Bike Route 95	5,900	4.3%
6	Eastern Ohio Back Road Biking Loop	7,100	5.2%
7	Oglebay Resort Trails	3,400	2.4%
8	Grand Vue Trails	3,200	2.3%
Total		52,000	37.9%

* Population Estimated Using U.S. Census Block Data

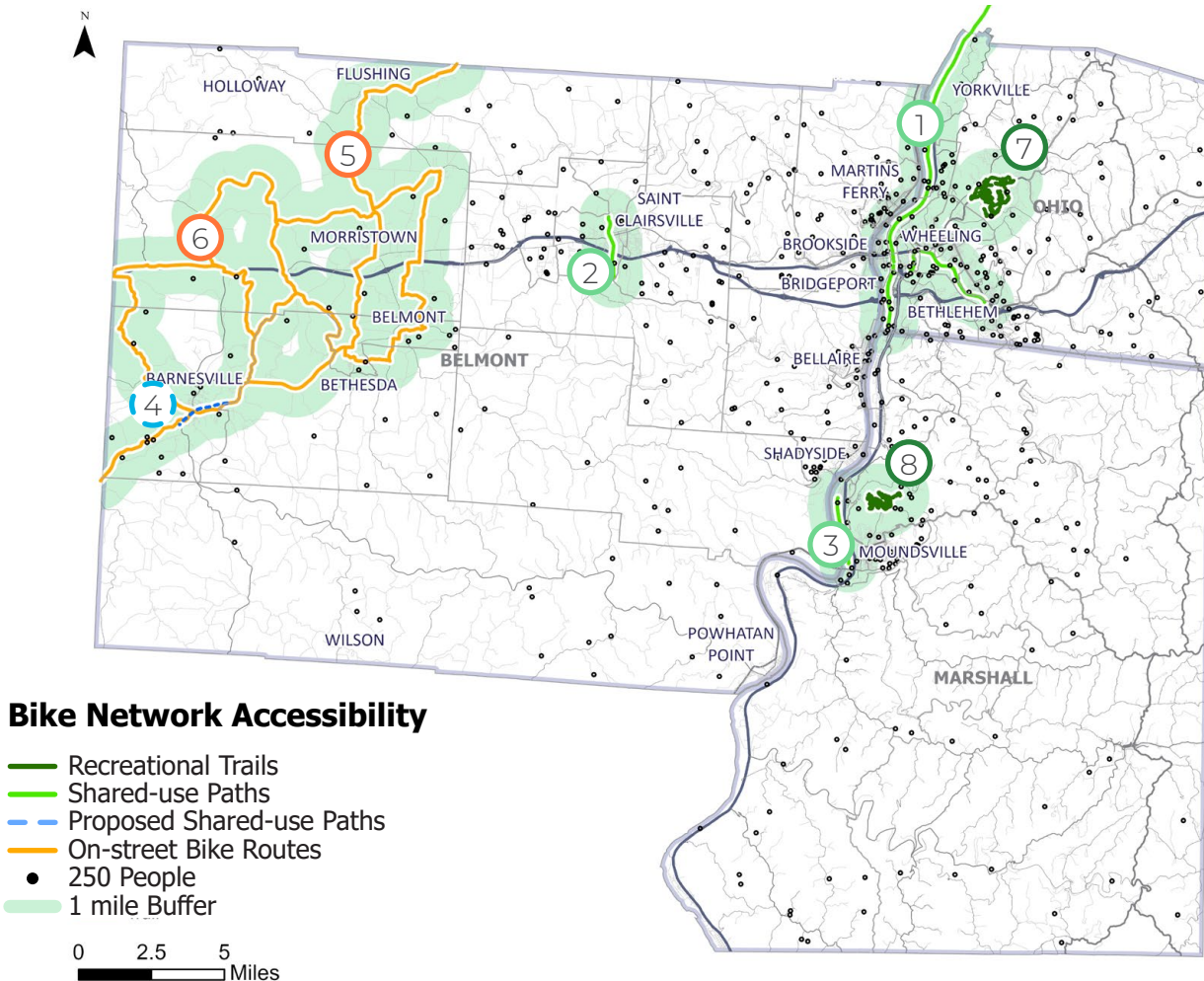


Figure 37. Population Within One Mile Of Multimodal Facility (2020 Census, U.S. Census Bureau)

Active Transportation Barriers

Today, land suitable for new development is limited in many areas, which continues to affect transportation connectivity. Steep slopes and narrow corridors made it difficult to build sidewalks, shoulders, and trails on many rural roads. Slopes over 10 percent are difficult to walk or bike, especially for new users or people using mobility devices.

Despite these constraints, the region still has strong opportunities. Large areas suitable for growth exist along the I 70 corridor, in central Belmont County, and some hilltop locations. While traditional sprawl is not feasible in many places, the same principles of compact development and connected streets still apply. In areas without trail connections, governments can acquire right of way to build shared use paths or expand existing roadways for walking and biking.

In flood prone areas, communities can improve connectivity by converting land to trails and green infrastructure while reducing long term risk through voluntary property acquisition. Valley areas outside flood zones are especially well suited for infill and denser redevelopment, though current zoning rules can slow progress by requiring variances or custom designs.

Due to the terrain cost, many near term walking and biking improvements will occur within cities and villages. However, longer term projects along the Ohio River and other key corridors are worth pursuing and can help reconnect communities and close major gaps in the regional network.

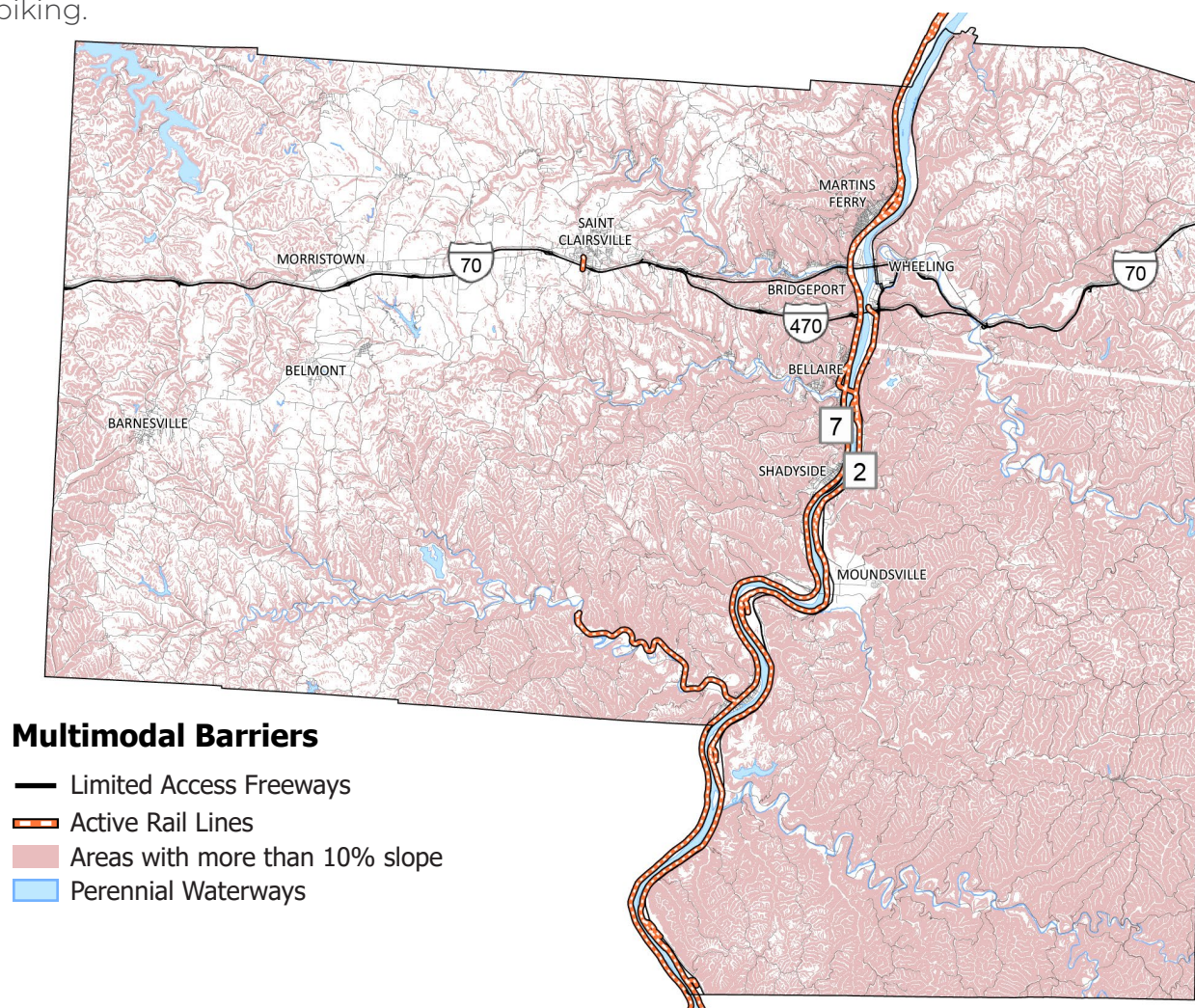


Figure 38. Barriers To Regional Multimodal Connections (Belomar Regional Multimodal Study)

Active Transportation Opportunities

Despite the challenges, the Belomar region has several promising opportunities to improve and expand active transportation options.

Figure 43 shows three opportunities to close active transportation gaps by implementing visionary regional connections.

1. Widen road shoulders and wayfinding on county roads

Improving safety on busy roads like those along the Backpacking Belmont County on-street route can be a 'quick-win' to connect rural communities.

2. Connect to Larger National Bike Routes

Work with Brooke and Hancock counties to explore potential connections to the Great Allegheny Passage.

3. Rails-to-trails Conversions

One of the most significant opportunities is the potential for more rails-to-trails conversions. Several former rail lines run through the Ohio River Valley and surrounding areas, offering relatively flat, direct alignments that are ideal for shared-use paths. This work should start by extending the National Road Bike Trail and the Wheeling Heritage Trail. Rails-to-trails conversions require long-term land acquisition negotiations, but local examples like The Glen Dale Moundsville Rail-Trail show how much benefit they provide to quality of life and the local economy.

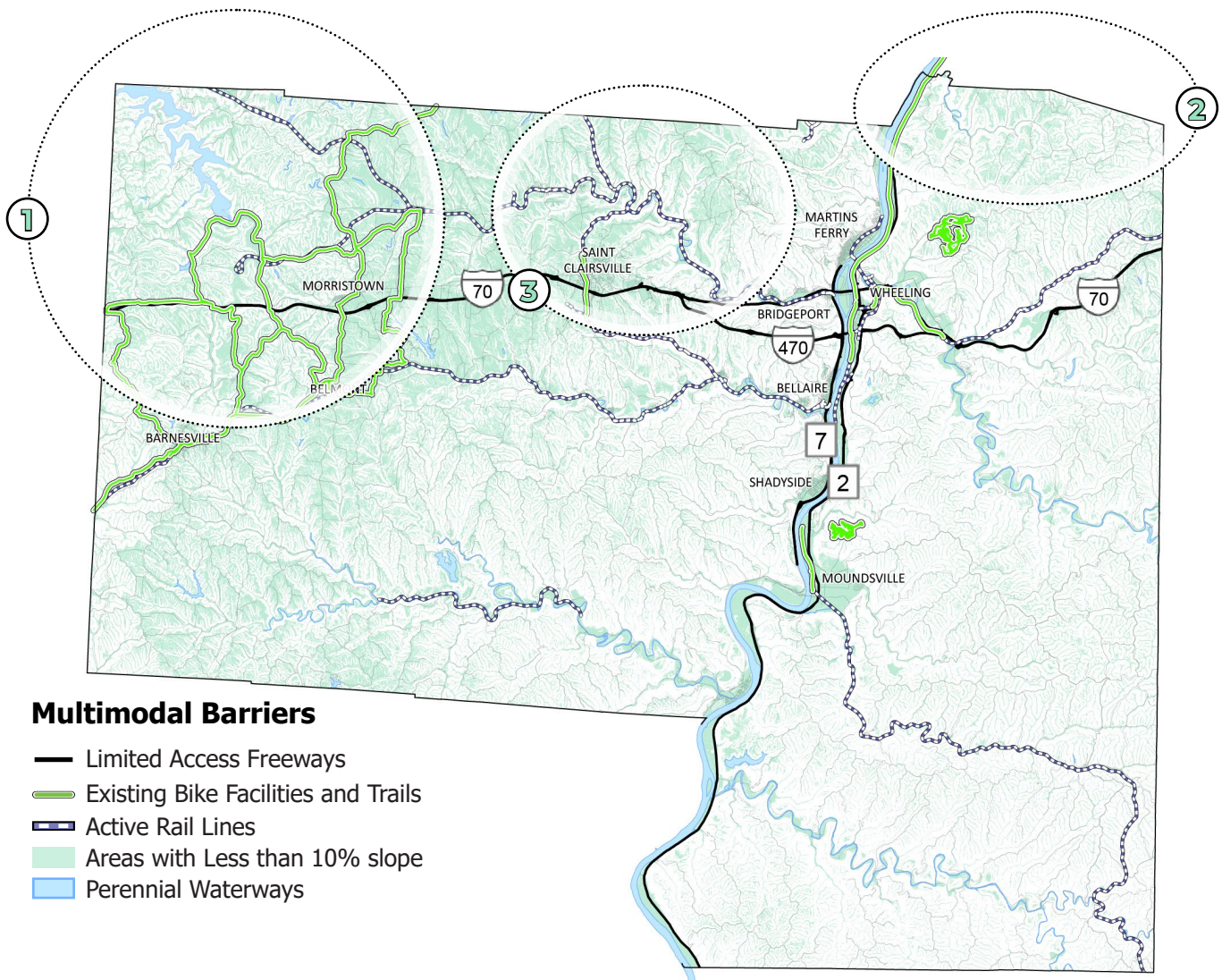
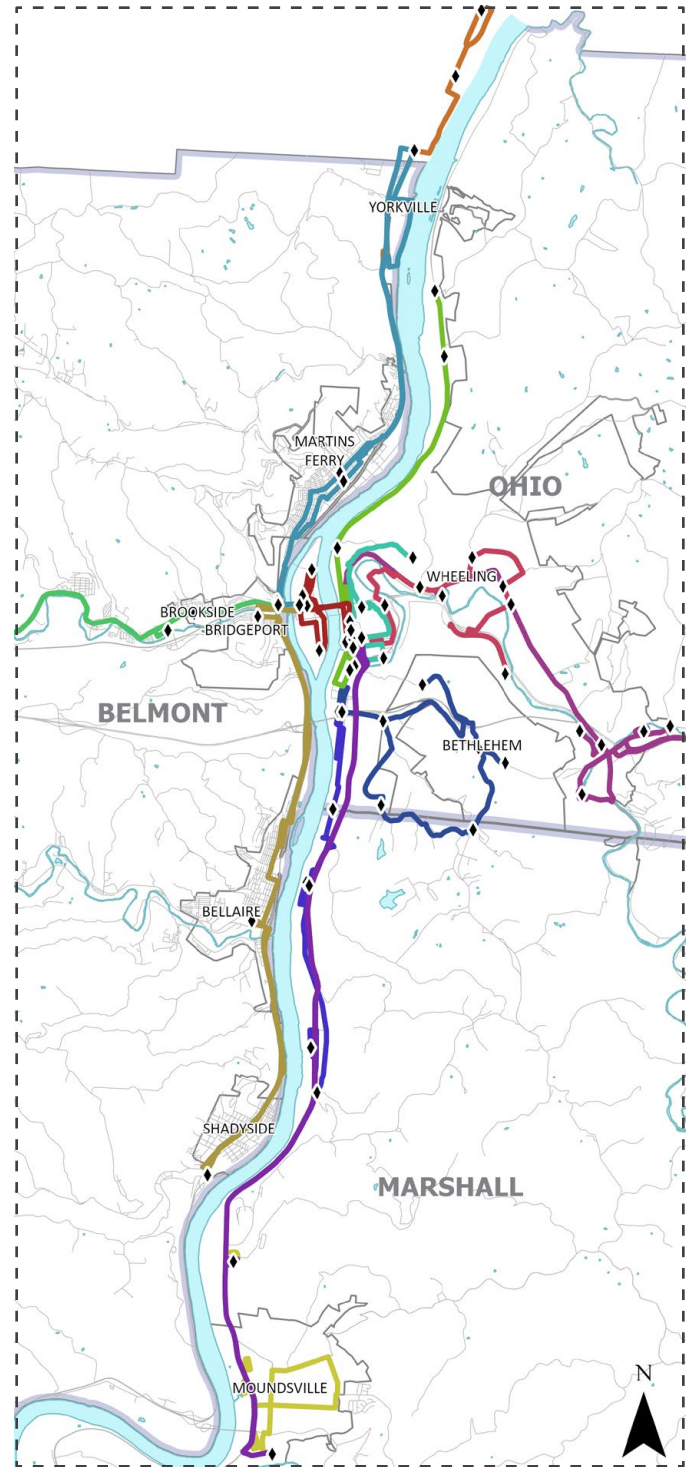
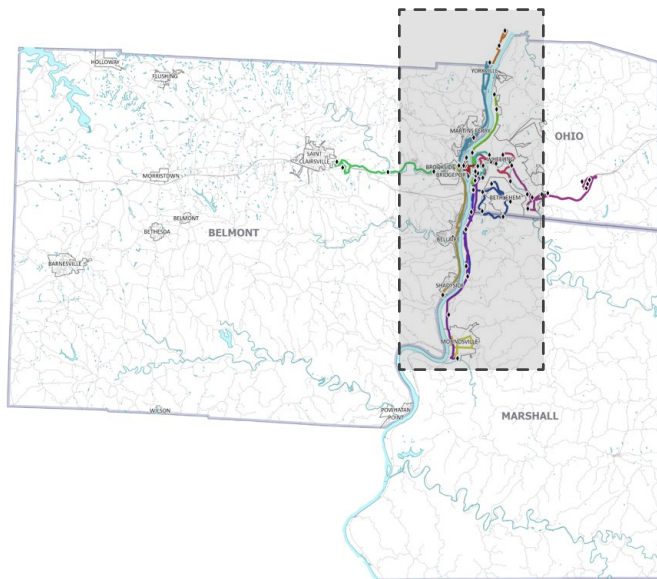


Figure 39. Opportunities For Regional Multimodal Connections (Belomar Regional Multimodal Study)

Public Transportation

Belomar has two major transit providers that offer fixed-route and paratransit services: Ohio-Valley Regional Transit Authority (OVRTA) and the Eastern Ohio Regional Transit Authority (EORTA). Between both agencies, there are 12 active transit lines, one pilot route and 65 stops throughout the region, primarily in and around the Wheeling metro area.

Outside of Wheeling, several routes connect to the surrounding cities of Clearview, Triadelphia, Bellaire, Moundsville, and Saint Clairsville. Outside of these satellite cities/villages, rural areas of the county rely on paratransit services that are scheduled in advance and pick residents up at their location.



Regional Transit Routes

- | | | | |
|---------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------|
| — Blaine Mall Route | — Reynolds DMV Route* | — Martins-Ferry Yorkville Route | — Wheeling Island Route |
| — Elm Grove-Highlands Route | — Shadyside Rotue | — Martins Ferry-Rayland Route | — Roads |
| — Moundsville Route | — Warwood Route | — Mt. de Chantal Route | ◆ Transit Stop |
| — Mozart-Bethlehem Route | — McMechen Route | — North Park-Wheeling Heights Route | |

Figure 40. Belomar Regional Fixed-Route Transit Network (OVRTA, EORTA)

* Reynolds DMV Route only available on Tuesday and Thursday

Transit Accessibility & Frequency

Transit accessibility starts with the location of transit stops and the frequency of service/hours of operation. Accessibility can be measured by the population living within a walkable distance of a transit stop. **Figure 41** shows all of the transit stops around the Wheeling metro area. Although the map may look clustered, looking closer reveals some of the following takeaways:

- Stop density is highest along the banks of the Ohio river near Wheeling and Wheeling Island. This area is the densest in the entire region in both population and development, making it the easiest part of the region to navigate by transit.
- Surrounding communities of Clearview, Triadelphia, Bellaire, Moundsville, and Saint Clairsville, are connected to Wheeling by fixed-route transit, but have limited stops. In many instances, these cities/villages have one stop, leaving many of their residents far outside of a walking distance to the nearest stop.
- The two largest shopping areas along transit routes are Highlands (near Triadelphia) and the Ohio Valley Mall (near Saint Clairsville). Frequent connection to these locations is critical for both shoppers and shift workers that may work late or early hours. OVRTA services currently run from 6:00 AM - 6:00 PM, leaving late and early shift workers without a transit option for one end of their commute.

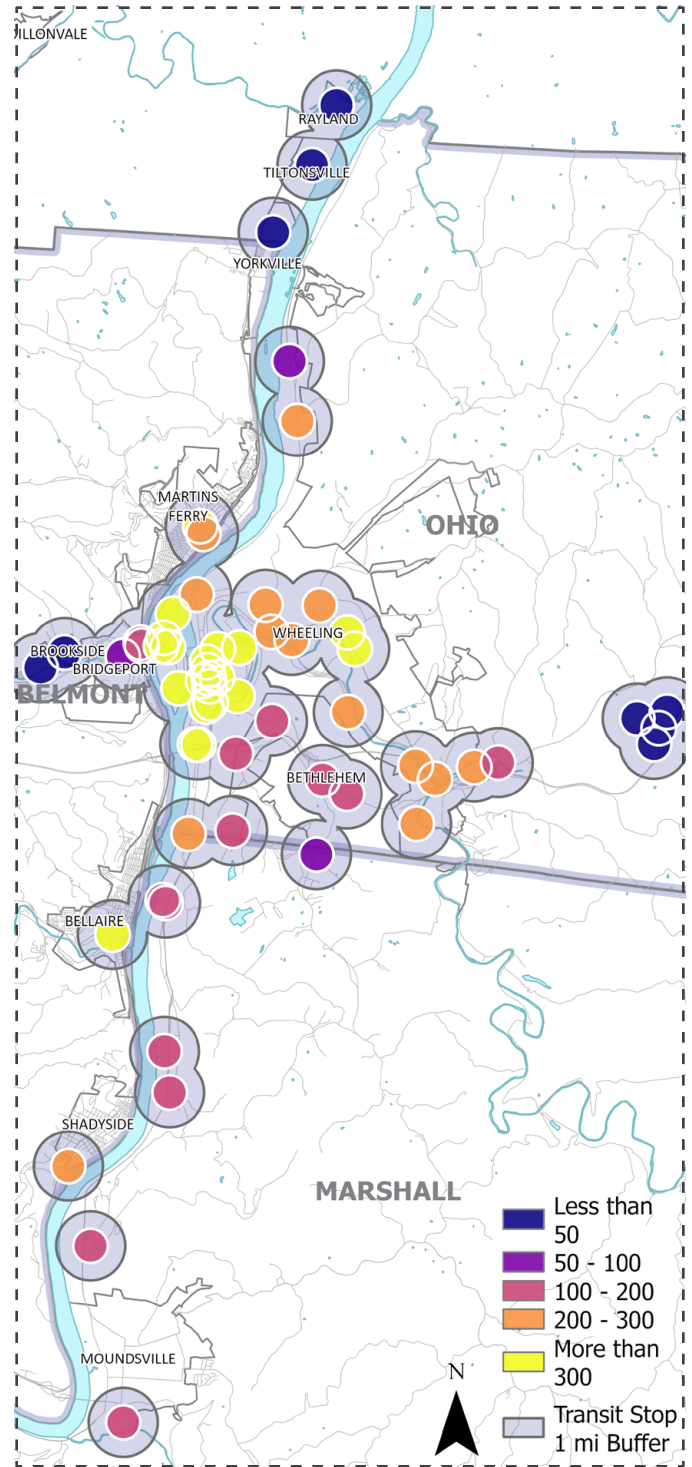


Figure 41. Population within 1/4 mile of transit stops (2020 U.S. Census, U.S. Census Bureau)

Transit Supportive Infrastructure

Each individual route crosses multiple communities, connecting riders from all over the Belomar region. But each individual community needs to play a part to lift the quality of the overall system. When we isolate the transit supportive infrastructure and trip demand results by community and county, it shows a clearer picture of how each community can play a small role in improving transit access for everyone. **Table 6** summarizes the transit supportive infrastructure and trip demand analysis by community.

Presenting the results this way shows us a place to start. Every community has quick-win opportunities for multimodal transportation. Communities, counties, and regional agencies will need to work together to address these gaps in our existing multimodal network.

- **Ohio County** has over 66 percent of the total transit stops and 45 percent of the transfer stations. Rural communities should start by focusing on low-cost projects like sidewalks and high-visibility crosswalks near transit stops. Wheeling's streetscape initiative has vastly improved TSI in the city, but transit shelters are still needed.
- **Belmont County** has over 23 percent of the total transit stops and 55 percent of the transfer stations. Communities on the north side have strategically placed their transit stations to maximize walkable area and accessibility. To the south and east, communities should consider moving stop locations and/or adding additional stops to expand transit coverage.
- **Marshall County** has the remaining 11 percent of existing transit stops and no transfer stations. Currently, crosswalks are sparse, making transit less safe to access. High-visibility crosswalks would be a major improvement, especially along SR-2 in McMechen, Glen Dale, and Moundsville.

	City/Village	Total Stops	Transfer Stations	Signed Stops	Transfers with Shelter or Seating	Marked Crosswalk	Sidewalk	Bike Facility	Walkable Area (sq mi)	Pop in Walkshed*	Trips in Walkshed (Trips/day)*
Belmont	Bellaire	1	0	0%	N/A	0%	0%	0%	0.21	250	1,800
	Blaine	1	0	0%	N/A	0%	0%	0%	0.22	250	150
	Bridgeport	3	3	33%	33%	67%	100%	0%	0.50	1,400	2,900
	Brookside	2	0	0%	N/A	0%	100%	0%	0.36	850	1,750
	Martins Ferry	2	2	100%	50%	100%	100%	0%	0.55	2,450	4,100
	Shadyside	1	0	0%	N/A	0%	0%	0%	0.25	500	650
	Unincorporated	2	0	0%	N/A	0%	0%	0%	0.48	< 50	13,450
Marshall	Benwood	2	0	0%	N/A	0%	100%	50%	0.10	300	250
	Glen Dale	1	0	0%	N/A	0%	100%	100%	0.38	1,050	2,850
	McMechen	2	0	0%	N/A	0%	50%	0%	0.47	1,350	1,150
	Moundsville	1	0	0%	N/A	0%	0%	0%	0.12	< 50	1,750
	Unincorporated	1	0	0%	N/A	0%	0%	0%	0.40	350	500
Ohio	Bethlehem	3	0	0%	N/A	0%	0%	0%	0.76	700	1,900
	Wheeling	34	5	50%	0%	35%	82%	50%	5.09	15,950	43,800
	Unincorporated	6	0	0%	N/A	0%	17%	17%	0.97	750	11,650
Jefferson	Rayland	1	0	0%	N/A	0%	100%	0%	0.19	300	-
	Tiltonsville	1	0	0%	N/A	100%	100%	0%	0.26	800	-
	Yorkville	1	1	100%	100%	100%	100%	0%	0.30	850	900
All Transit Stops		65	11	32%	27%	28%	66%	31%	11.37	27,350	87,450

Table 6. Transit Supportive Infrastructure Summary (Belomar Regional Multimodal Study)

System Maintenance & Resilience

It is a core goal of the Belomar region to be out in front of the maintenance needs of the transportation system. Falling behind on the necessary investments in our infrastructure can impact the safety and efficiency of travel for our residents and goods. Additionally, we must be prepared for threats to our communities and infrastructure. Read more to learn about the current state of maintenance and resiliency in the Belomar Region:

Infrastructure Condition Summary

Pavement conditions are measured by the Pavement Condition Rating (PCR) in Ohio and the International Roughness Index (IRI) in West Virginia. While these are different ratings, they both measure the pavement distress. The green indicates good pavement condition, while yellow indicates fair condition, and red lines indicate poor condition. Across the Region, 80.5 percent of roads are in good condition, while 1.1 percent are fair, and 18.4 percent are poor.

The rise of natural gas extraction via hydraulic fracturing or “fracking” requires large numbers of heavy trucks driving on remote, rural roads which accelerate pavement wear. The poor pavement conditions include large segments of SR-148, US-40, Mount Hope Road, Maynard Road, Fairpoint Maynard Road, and Barton Crescent Road in Ohio and CR-17, CR-5, and CR-13 in West Virginia.

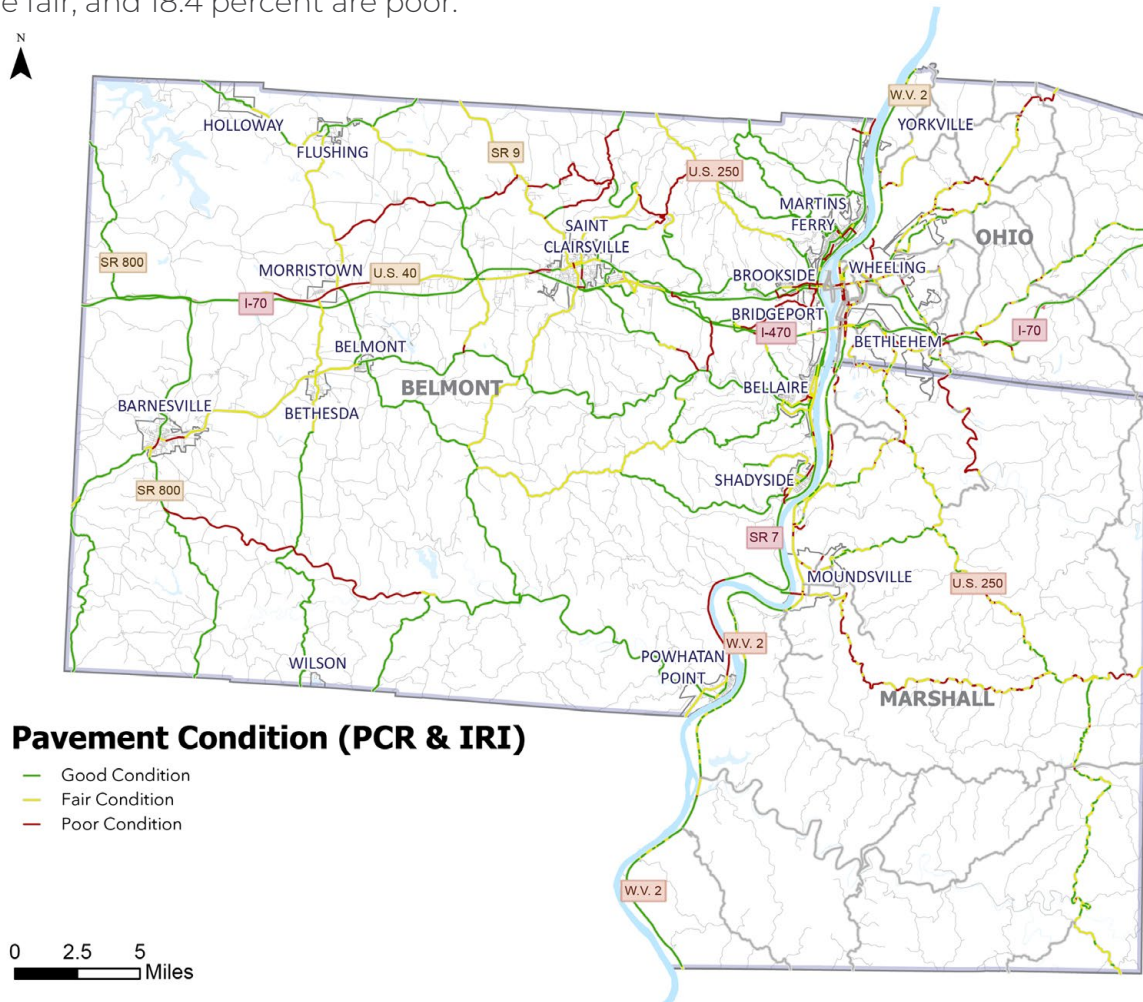


Figure 42. Pavement Condition On Major Roads (ODOT, WVDOT)

Bridge Condition

Our residents rely on bridges to make nearly every one of their trips due to the region's topography and many streams/rivers. In many instances, bridge maintenance or closure can result in long detours or even total disconnections between communities and the essential services they need. Keeping up with bridge maintenance and inspection before bridges need to be closed for safety keeps our transportation network reliable and moving. Still, it is a huge undertaking for our communities, counties, and DOT's to keep up with. When data was collected in 2025, nearly 600 bridges in our three counties, and many of them are in need of rehabilitation. 91 bridges are structurally Deficient (or "Poor"), and 108 are in fair condition and can need repairs in the near future. Poor bridges along major arterials, U.S. routes, and interstates should be priorities for repair.

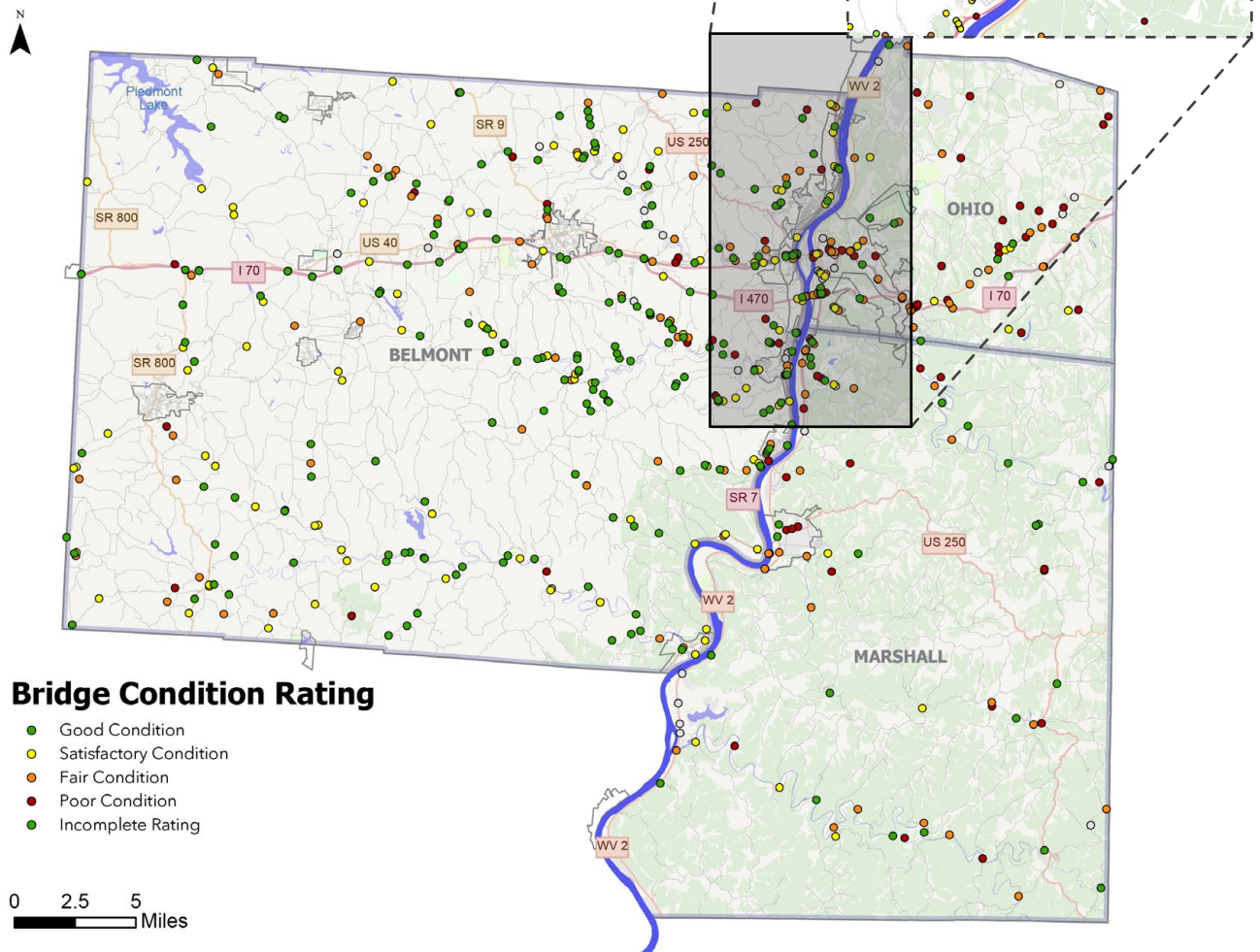


Figure 43. Bridge Condition Rating (ODOT, WVDOT 2025 Data)






Bridge Maintenance Responsibilities

The maintenance responsibility for our region’s bridges is split across four primary parties: the state departments of transportation, counties, cities and villages, and private rail companies. Using data collected from the Ohio and West Virginia Departments of Transportation, each bridge was inventoried and summarized by its county, condition, and maintaining authority.






In Belmont County, 240 out of 402 of the county’s bridges are maintained by the County. This presents a significant maintenance responsibility on the local level. Historically, Belmont County has been very proactive in this responsibility, and more than two-thirds of county maintained bridges are in good or satisfactory condition.

In Ohio and Marshall County, nearly all of the bridges are maintained by the state of West Virginia. This is due to the state owning all state and county routes. Overall, bridge condition in both counties is a serious concern. Today, 33 percent of all bridges in these counties are in poor condition and in critical need of maintenance or replacement. The vast majority of the bridges in poor condition are along highways, presenting a significant risk to safety and the movement of goods and people throughout our region.





Belmont County

Owner	Good 	Satisfactory 	Fair 	Poor 	Incomplete 	Total
ODOT	79	44	12	5	-	140
County	109	55	45	21	10	240
City or Village	4	4	3	2	-	13
Railroad	1	-	2	1	3	7
Other	3	1	-	-	-	4

Ohio County

Owner	Good 	Satisfactory 	Fair 	Poor 	Incomplete 	Total
WVDOT	13	12	36	36	8	105
County	-	-	-	-	-	0
City or Village	1	-	4	3	3	11
Railroad	-	-	-	-	1	1
Other	-	-	-	1	1	2

Marshall County

Owner	Good 	Satisfactory 	Fair 	Poor 	Incomplete 	Total
WVDOT	24	6	5	20	4	59
County	-	-	-	-	-	0
City or Village	1	-	1	2	-	4
Railroad	-	-	-	-	1	1
Other	-	-	-	-	7	7

Belomar Region






Owner	Good 	Satisfactory 	Fair 	Poor 	Incomplete 	Total
State	116	62	53	61	12	304
County	109	55	45	21	10	240
City or Village	6	4	8	7	3	28
Railroad	1	-	2	1	5	9
Other	3	1	-	1	8	13
Total	235	122	108	91	38	591

Table 7. Bridge Condition By Maintaining Authority (ODOT, WVDOT)

Environmental Hazards

The Belomar region is not immune to natural disasters, and preparation is vital. When an event does occur, our infrastructure and population must be ready to mitigate the potential damage of these events. Roadway connections, bridges, levees, and hillside stabilization are critical for creating clear evacuation routes and slowing/reducing the potential impacts of floods, earthquakes, or landslides.

In 2022, Region 10 (Marshall, Ohio, and Wetzel Counties) updated the regional hazard mitigation plan to identify and prepare for natural disasters and other hazards. The report covers the history and potential risks of a wide range of hazards including dam failure, drought, earthquake, flooding, hailstorms, hazardous materials incidents, landslides, land subsidence, oil and gas incidents, pandemic, terrorism, severe thunderstorms, wildfires, severe winds, and winter storms.

This comprehensive overview of potential threats identified flooding as the number one hazard threat to our region. Between 1995-2021, there were 141 flooding events in Region 10, resulting in \$86,541,400 in property damage. Recently, in June 2025, three inches of rainfall in just 62 minutes caused a flash flood of Wheeling Creek in Valley Grove. The damage was widespread and resulted in the loss of 9 lives and destruction of dozens of homes.

Many communities were developed in valley areas before flood risks were fully understood. Today, land use agencies must prioritize buyouts and stronger building codes to remove overnight residential uses from flood zones. Targeted buyouts can also create trails, parks, and green infrastructure that improve drainage and reduce future risk. Transportation funding should favor projects that reduce vulnerability rather than reinforce it.

Belomar and our communities must work together to invest in infrastructure that increases the storage capacity of our streams and rivers to protect these communities from these disasters. In situations where the conditions are severe, communities at the most risk need redundant evacuation routes to get to safety before it is too late.

Region 10 Hazard Mitigation Plan Goals

- Goal 1:
Reduce the negative effects of weather-related hazards.
- Goal 2:
Reduce the effects of land subsidence and landslides.
- Goal 3:
Reduce the potential effects of earthquakes.
- Goal 4:
Protect the citizens and forests from wildfires.
- Goal 5:
Protect the general public from hazardous material (hazmat) incidents and oil and gas drilling/hazardous incidents.
- Goal 6:
Protect the general public from the potential terrorist acts.
- Goal 7:
Mitigate the effects of dam failures.
- Goal 8:
Mitigate miscellaneous hazards as they emerge.
- Goal 9:
Prepare the general public, healthcare and school systems for future pandemics.

Flooding and Evacuation

Flooding in the Belomar region is so common not only due to our proximity to the Ohio River, but due to the physical geography/topography. Flash floods near streams feeding into the Ohio are particular devastating due to their incredibly short warning time (minutes - hours). Communities nearby streams in particular are at high risk for flash flooding including Wheeling, Triadelphia, Vally Grove, Woodsdale, Brookside, Bridgeport, and Bellaire.



Vehicles washed into Wheeling Creek after major flash flood in June 2025 (Photo: The Times Leader)

Wheeling Island, the most populated island on the Ohio River with over 3,000 people, is at particular risk due to evacuation constraints. The island is connected to the mainland by four bridges: I-70, Zane Street, the Wheeling Suspension, and the functionally, but not legally abandoned Aetnaville Bridge. In the event of a severe river flood, these bridges are all crucial for a safe and efficient evacuation.

Belomar needs a regional resiliency plan, particularly for the island, to ensure rapid evacuation during emergencies. Flooding on the island combined with a crash or congestion on I-70 could bring traffic to a standstill, cutting off the primary evacuation route. This risk is compounded by the congestion-prone intersection on the Ohio side of the two-lane Zane Street Bridge, creating a critical vulnerability during emergency events.

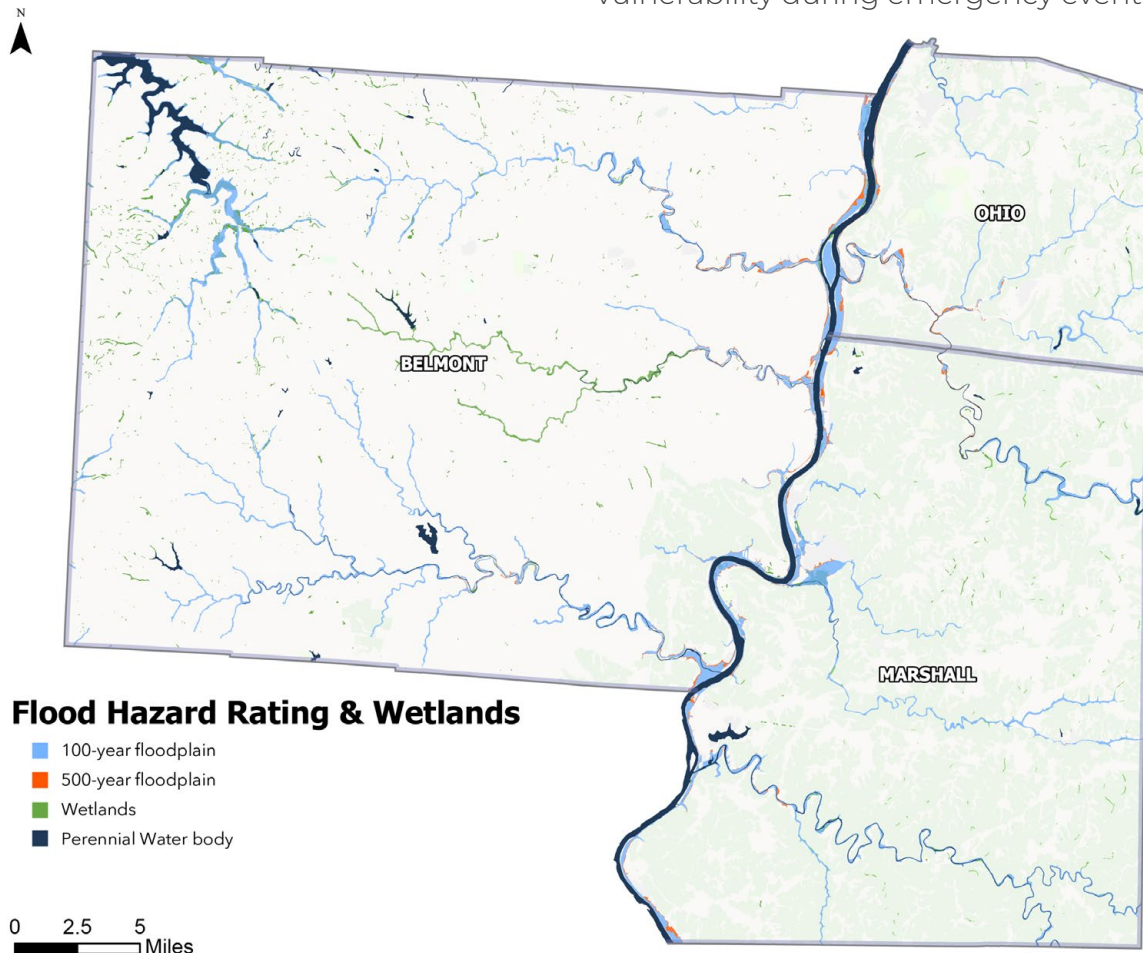


Figure 44. 100-Yr & 500-Yr Floodplains, Perennial Water Bodies, And Wetlands (FEMA National Flood Hazard Layer)

Landslides and Topography

Due to the region's topography, rainfall, and water bodies, it is particularly susceptible to landslides. The U.S. Geological Survey (USGS) collects data about landslides across the United States and collects data about soil composition to identify areas where landslides are most likely. Based on this analysis, the majority of the Belomar region has the potential to see landslides. Since 2011, fifteen landslides have occurred, primarily near the Ohio River and its tributaries. Hillside stabilization can help prevent these incidents or mitigate the impact they cause, but their random nature can be difficult to prepare for.

Notably, there is generally an inverse relationship between landslide susceptibility and flood risk across the region. Areas with steep slopes tend to face landslide risks, while flatter valley areas are more prone to flooding. Notably, central Belmont County between Morristown and St. Clairsville consists of relatively flat, resilient land with lower exposure to both hazards, making it well suited for modern, well-planned development. Moundsville, East Wheeling, and large portions of Martins Ferry, Shadyside, and Bellaire, among others, offer prime infill opportunities that can support more efficient transportation systems and reduce future infrastructure costs.

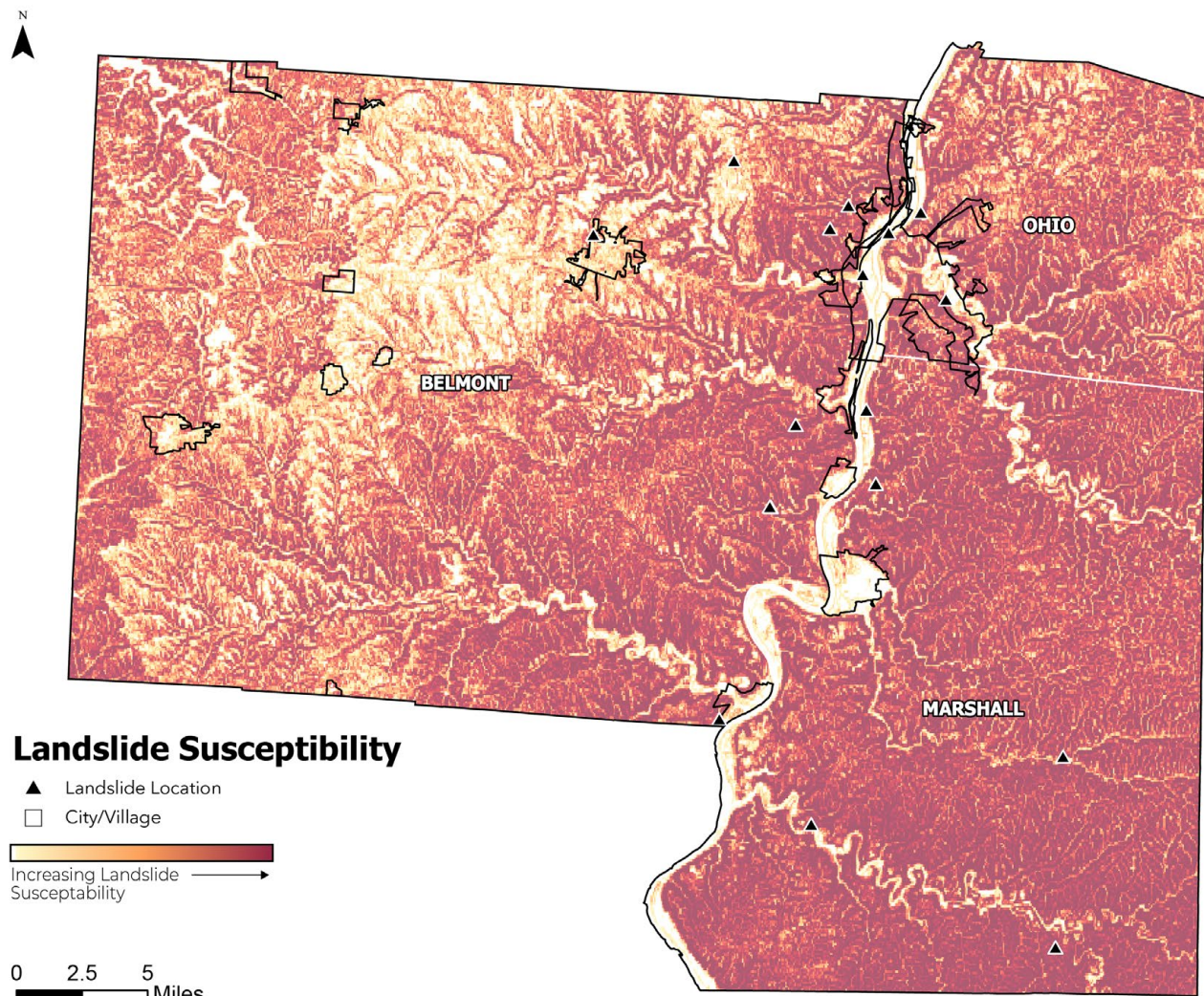


Figure 45. Regional Landslide Inventory And Susceptibility (USGS Landslide Hazard Program)

CHAPTER 4: GOALS, OBJECTIVES, & PERFORMANCE MEASURES



Performance Based Planning

This MTP utilized a continuing, comprehensive, and collaborative (3 C) planning process to determine goals and projects that address communities' most pressing needs. Belomar will continue to monitor our transportation system's performance to evaluate the impact of these projects. Read more about how we monitor our transportation system in the following section:

Why Performance Based Planning?

The latest surface transportation funding authorization legislation requires MPOs to use a performance-based planning process (PBPP) to develop MTPs. The purpose is to ensure resources are being invested in programs and projects to help planning agencies achieve national and regional transportation goals.

An important step in the PBPP is to analyze the system data and determine the objectives and strategies to achieve Belomar's goals and develop targets to evaluate progress toward those goals. Belomar established four goals, associated objectives and performance measures. These all build on the statewide long-range transportation plans for West Virginia (2050 Statewide Long-Range Transportation Plan) and Ohio (Access Ohio 2050).

Additionally, the West Virginia Strategic Highway Safety Plan, the West Virginia Asset Management Plan, the West Virginia State Freight Plan, the Ohio Strategic Highway Safety Plan, the Ohio Transportation Asset Management Plan, and the Ohio State Freight Plan were reviewed as part of this planning process. All federally required performance measures will be updated in accordance with FHWA's timelines and in coordination with WVDOH, ODOT, and the WV and OH FHWA Division Office. Progress is documented in an annual Performance Report.

Performance-Based Planning Process (PBPP) Framework

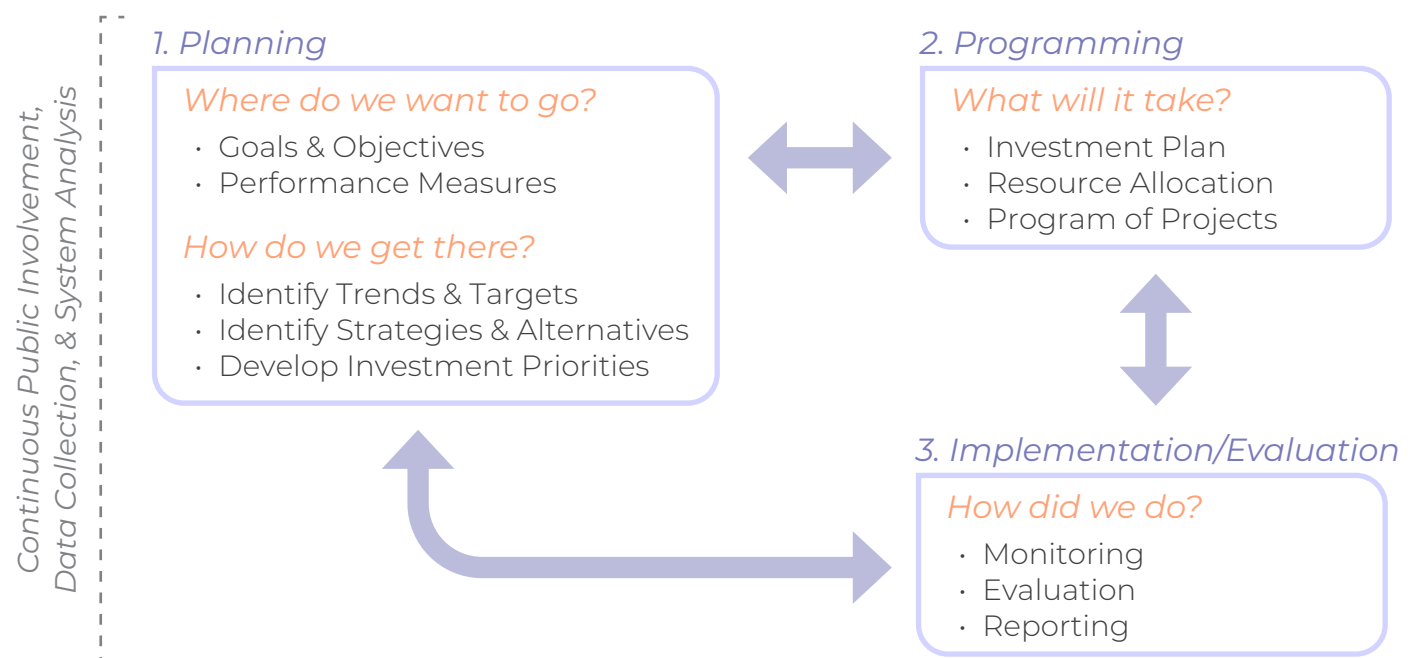


Figure 46. Transportation Performance-Based Planning Process Framework (FHWA)

Regional Performance Measures

As part of the PBPP process, FHWA requires targets to be set for specific performance measures. As Belomar is a bi-state MPO, Belomar adopted both West Virginia and Ohio's state targets.

Belomar supports both states by advancing statewide transportation goals at the regional and local level. We will continually monitor our transportation system across the following three categories to track our status reaching performance measure targets:

Transportation Performance Measures Categories		Performance Measure Guidance	West Virginia*	Ohio*
PM1	Safety	<p>Establishes five roadway safety performance measures and annual and 5-year rolling average targets.</p> <p>These measures align with Ohio and West Virginia's required safety performance measures and targets.</p>	<p>Adopted:</p> <p>Apr 16, 2026</p>	<p>Adopted:</p> <p>Oct 16, 2025</p>
PM2	Pavement and Bridges	<p>Establishes two-year and four-year targets for the maintenance conditions of bridges and roadways on the National Highway System (NHS).</p> <p>These measures align with Ohio and West Virginia performance targets.</p>	<p>Adopted:</p> <p>Apr 20, 2023</p>	<p>Adopted:</p> <p>Apr 16, 2026</p>
PM3	System Performance, Freight, and CMAQ	<p>Establishes two-year and four-year targets for travel time reliability and truck travel time reliability on the NHS.</p> <p>Establishes Congestion Mitigation and Air Quality (CMAQ) emission reduction targets in alignment with Ohio and West Virginia performance targets.</p>	<p>Adopted:</p> <p>Apr 20, 2023</p>	<p>Adopted:</p> <p>Apr 16, 2026</p>

Table 8. Performance Measure Guidance And Resolution Adoption Dates To Support State Targets



	Ohio 		West Virginia 	
PM 1 - Safety Performance Management	2026 Statewide Target		2026 Statewide Target	
Number of Fatalities	1,201		263.6	
Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)	1.09		1.674	
Number of Serious Injuries	7,283		792.4	
Rate of Serious Injuries per 100 million VMT	6.52		5.036	
Number of Non-motorized Fatalities and Non-motorized Serious Injuries	839		83.9	
PM 2 - Pavement & Bridge Performance Management	2-Year Target (2027)	4-Year Target (2029)	2-Year Target (2027)	4-Year Target (2029)
Percentage of Interstate pavements in Good condition	55.0%	55.0%	72.0%	70.0%
Percentage of Interstate pavements in Poor condition	1.0%	1.0%	4.0%	4.0%
Percentage of non-Interstate NHS pavements in Good condition	40.0%	40.0%	43.0%	42.0%
Percentage of non-Interstate NHS pavements in Poor condition	3.0%	3.0%	5.0%	5.0%
Percentage of NHS bridges in Good condition	55.0%	55.0%	11.5%	12.0%
Percentage of NHS bridges in Poor condition	3.0%	3.0%	14.0%	13.0%
PM 3 - System Performance, Freight, & CMAQ	2-Year Target (2027)	4-Year Target (2029)	2-Year Target (2027)	4-Year Target (2029)
Interstate Travel Time Reliability	85.0%	85.0%	97.0%	96.0%
Non-Interstate Travel Time Reliability	80.0%	80.0%	93.0%	92.0%
Truck Travel Time Reliability	1.50	1.50	1.35	1.40
Total Emission Reductions: PM2.5	7.435	14.870	0.090	0.090
Total Emission Reductions: NOx Precursor	68.000	136.000	1.000	1.000
Total Emission Reductions: PM10	63.000	126.000	0.100	0.100

Table 9. Belomar Transportation Performance Measures And Statewide Targets (ODOT, WVDOH)

Transit Performance Measures

MAP-21 and the FAST Act require all transit providers to establish a Transit Assets Management Plan and set performance targets for state of good repair (SGR) and transit safety.

Belomar has two transit providers: Ohio Valley Regional Transit Authority (OVRTA) and the Eastern Ohio Regional Transit Authority (EORTA). Both agencies follow their state’s Transit Asset Management Plans, and statewide performance measures. **Table 11 and Table 12** detail regional transit performance measures and targets:

Transit Asset Management Plan (TAM)

Establishes agency asset inventories and SGR standards across a transit agency’s fleet, facilities, and equipment.

- OVRTA follows the West Virginia Department of Public Transit TAM
- EORTA developed its own TAM

Public Transportation Agency Safety Plan (PTASP)

Data-driven safety plan designed to manage risks and improve safety by reaching core safety performance measure targets.

- OVRTA follows the West Virginia Department of Public Transit PTASP
- EORTA follows the ODOT Office of Transit PTASP

Statewide Transit Asset Management Plan: State of Good Repair

Category	Asset Class	Performance Measure	Dependency	Performance Target (2025)
Rolling Stock	12 Year/500K Miles	SGR %	TAM Plan	93%
	10 Year/350 Miles	SGR %	TAM Plan	93%
	7 Year/200K Miles	SGR %	TAM Plan	72%
	5 Year/150K Miles	SGR %	TAM Plan	73%
	4 Year/100K Miles	SGR %	TAM Plan	65%
AVIS				
WVDOT System Reviews				
Facility	Admin, Maintenance, & Storage	SGR %	WVDOT System Reviews	72%
			AVIS	
	Transfer Center	SGR %	WVDOT System Reviews	100%
AVIS				
Equipment	Support Vehicles	SGR %	WVDOT System Reviews	69%
			AVIS	
	Maintenance Equipment	SGR %	WVDOT System Reviews	43%
			AVIS	

Table 11. OVRTA/EORTA Transit Asset Management SGR Performance Targets

OVRTA: Safety Performance Category		<i>Fixed-Route Bus Service</i>	<i>Demand Response</i>
		Performance Target	Performance Target
Fatalities	Total number of NTD reportable fatalities	Zero fatalities per year	Zero fatalities per year
	Fatality rate per 1,000,000 vehicle revenue miles	Less than .05 fatalities per 1,000,000 vehicle revenue miles	Less than .05 fatalities per 1,000,000 vehicle revenue miles
Injuries	Total number of NTD reportable injuries per year	Less than 8 reportable injuries per year	Less than 8 reportable injuries per year
	Injury rate per 1,000,000 vehicle revenue miles	Less than 10 major/minor injuries per 1,000,000 vehicle revenue miles	Less than 10 major/minor injuries per 1,000,000 vehicle revenue miles
Safety Events	Total number of NTD reportable events per year	Less than 8 major/minor events per year	Less than 8 major/minor events per year
	Event rate per 1,000,000 vehicle revenue miles	Less than 10 major/minor events per 1,000,000 vehicle revenue miles	Less than 10 major/minor events per 1,000,000 vehicle revenue miles
System Reliability	Distance between major mechanical failures	Greater than 80,000 vehicle revenue miles	Greater than 80,000 vehicle revenue miles
	Distance between minor mechanical failures	Greater than 3,200 vehicle revenue miles	Greater than 3,200 vehicle revenue miles
EORTA: Safety Performance Category			
Fatalities	Total number of NTD reportable fatalities	Zero fatalities per year	Zero fatalities per year
	Fatality rate per 100,000 vehicle revenue miles	Zero fatalities per 100,000 vehicle revenue miles	Zero fatalities per 100,000 vehicle revenue miles
Injuries	Total number of NTD reportable injuries per year	Zero reportable injuries per year	Zero reportable injuries per year
	Injury rate per 100,000 vehicle revenue miles	Zero injuries per 100,000 vehicle revenue miles	Zero injuries per 100,000 vehicle revenue miles
Safety Events	Total number of NTD reportable events per year	Zero major/minor events	Zero major/minor events
	Event rate per 100,000 vehicle revenue miles	Zero major/minor events	Zero major/minor events
System Reliability	Distance between major mechanical failures	Greater than 5,400.51 vehicle revenue miles	Greater than 8,584.90 vehicle revenue miles

Table 12. OVRTA/EORTA Transit Safety Performance Targets

MTP Goals, Objectives, & Action Items

Belomar is adopting a series of goals, objectives, and action items to progress toward our transportation performance targets. As we continue to plan and implement transportation projects, we can ground our decisions in these principles to make incremental progress. These goals, objectives, and action items were directly informed by public engagement and help support the goals of our statewide partners.

Goals Grounded in Local Feedback

Engagement and analysis all lead to this. Below are the four goals of the Belomar 2050 MTP, and how they respond to the community feedback we've received throughout the planning process:

1. Foster Livable and Economically Competitive Communities

This goal responds to stakeholder and public input to support economic growth. This goal supports local, shovel-ready projects that improve access to jobs, businesses, education, and housing in our communities.



2. Improve and Maintain Roadways and Freight Facilities

Residents emphasized the need to maintain our existing system. This goal responds to their concern by emphasizing collaboration between local and regional partners to identify, design, and deliver maintenance and capital improvement projects.



3. Advance Regional Transportation Safety and Security

Belomar will advance transportation safety initiatives that address complex and unsafe intersections, interchanges, and road segments. Additionally, we will continue to prepare our communities to mitigate the impacts of natural disasters and domestic security threats.



4. Expand Quality Mobility Options for All Users

Public advocates and community members view the regional active transportation network as one of the region's greatest strength and opportunities. This goal builds on recent momentum to improve multimodal access to recreation, housing, and jobs across the region for users of all ages and abilities.

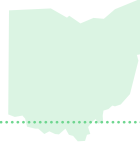


Statewide Transportation Goals

The Belomar 2050 Metropolitan Transportation Plan is committed to goals and action items that advance both local and statewide transportation initiatives. Below are the statewide transportation goals for Ohio and West Virginia. The following pages show how the Belomar 2050 MTP's goals align with Ohio and West Virginia.

Ohio Transportation Goals

Access Ohio 2045: Ohio's Transportation Improvement Plan



1. Safety

- Reduce fatalities and serious injuries
- Enhance transportation system security
- Support effective response to and recovery from natural disasters, emergencies and incidents

2. Preservation

- Maintain transportation assets in a state of good repair

3. Efficiency & Reliability

- Increase the efficiency and reliability of moving people and freight
- Improve the efficiency of connections between modes

4. Mobility & Accessibility

- Enhance public transportation and other mobility services
- Improve mobility for individuals who lack access to or are unable to use a motor vehicle

5. Economic Competitiveness

- Improve access to job clusters
- Enhance freight mobility
- Improve transportation access to attractions

6. Quality of Life

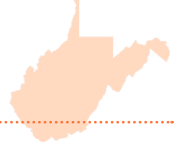
- Coordinate transportation policy and investments with community visions
- Advance transportation policy and investments that improve public health

7. Environmental Stewardship

- Reduce air quality emissions related to transportation
- Avoid, minimize or mitigate impacts of transportation on built and natural environments

W.V. Transportation Goals

Statewide Long-Range Transportation Improvement Plan



1. System Condition, Efficiency, and Fiscal Sustainability

- Maintain the existing multimodal transportation system in a state of good repair.
- Invest in innovative technologies and efficient program delivery strategies.
- Explore new and sustainable revenue options.
- Ensure that WVDOT has the necessary resources to fulfill its mandate effectively and efficiently.

2. Safety and Security for All Users

- Reduce fatalities and serious injuries on the multimodal transportation system.
- Manage a resilient and redundant transportation network.
- Decrease incident clearance time and recovery.

3. Economic Vitality and Freight Movement

- Improve intermodal freight connections.
- Expand access to economic activity centers and emerging industries/clusters.
- Address bottlenecks and first-mile/last-mile access.

4. Multimodal Mobility, Reliability, and Accessibility

- Manage recurring congestion and improve reliability on the highway system.
- Create new opportunities for access to key destinations and jobs for underserved or disadvantaged populations.
- Enhance multimodal transportation accessibility to key destinations and jobs.

5. Livable and Healthy Communities

- Reduce emissions and mitigate environmental impacts.
- Promote and improve bicycle and pedestrian infrastructure.
- Coordinate land use and transportation decisions.


Goal 1:

Foster Livable & Economically Competitive Communities

This goal responds to stakeholder and public input to support economic growth. This goal supports local, shovel-ready projects that improve access to jobs, businesses, education, and housing in our communities.



Alignment with Statewide Goals:

 Ohio

- 1
- 2
- 3
- 4
- 5
- 6
- 7

 West Virginia

- 1
- 2
- 3
- 4
- 5

Objectives, Strategies, & Action Items

To achieve this goal and achieve regional performance targets, the Belomar Regional Council will do the following to help our state and local communities advance their transportation initiatives:

Objective 1A - Accelerate Delivery of Local Transportation Improvement Projects

Strategy	Action Items	PMs
Minimize regional level traffic delays due to construction and/or maintenance.	Cooperatively work with the states to minimize construction related delays.	PM1 PM3
Promote consistency of local transportation improvements by supporting development, funding, and implementation of transportation projects.	Ensure that regional goals are consistent with the state and local goals.	PM1 PM2 PM3
	Consider local economic and comprehensive plans in the development of the long range transportation plan.	
	Select projects that are consistent with the state and local plans.	
	Coordinate in research and highlight best practice cases.	

Objective 1B - Support Economic Development & Improve Access to Local Businesses

Strategy	Action Items	PMs
Implement projects that allow existing roadways to accommodate both existing and new developments.	Coordinate implementation of two-way left turn lanes where needed.	PM3
	Coordinate the planning and development of projects designed to improve access and traffic flow to businesses, including turn lanes, rear access, and driveway consolidation.	
Identify existing and future development areas and coordinate with local agencies to assure plans account for expected trip demand.	Participate in the preparation of local Land Use Plans that identify current and proposed development.	PM3
	Support local efforts to create or update Traffic Impact Study (TIS) and Access Management Standards.	
Develop transportation projects that enhance existing developments and promote future growth.	Support planned access to committed economic development sites approved by local review.	PM1 PM3
	Support access management projects that consolidate access points at existing developments.	

Objective 1C - Air Quality & Environmental Preservation

Strategy	Action Items	PMs
Identify ways to improve air quality and reduce emissions from transportation.	Cooperatively work with the state agency to ensure that the area is meeting the National Ambient Air Quality Standards (NAAQS).	PM3
	Support statewide strategies to reduce emissions.	
	Develop and improve transit Park-and-Ride locations.	
Protect recreational and other environmentally sensitive areas.	Coordinate efforts to remediate and mitigate potential negative impacts of industrial energy production on the transportation system and communities.	PM3
	Cooperate with the state agencies in timely determination of potential negative effects of transportation projects.	


Goal 2:

Improve And Maintain Roadway And Freight Facilities

Residents emphasized the need to maintain our existing system. This goal responds to their concern by emphasizing collaboration between local and regional partners to identify, design, and deliver maintenance and capital improvement projects.



Alignment with Statewide Goals:

 Ohio

- 1
- 2
- 3
- 4
- 5
- 6
- 7

 West Virginia

- 1
- 2
- 3
- 4
- 5

Objectives, Strategies, & Action items

To achieve this goal and achieve regional performance targets, the Belomar Regional Council will do the following to maintain our infrastructure and improve regional traffic flow:

Objective 2A - Address Short & Long-Term Infrastructure Maintenance Needs

Strategy	Action Items	PMs
Facilitate maintenance strategies and schedules that are based on service life and degree of deterioration e.g. State Pavement Management Systems' based repairs.	Cooperatively work with WVDOT and ODOT to establish targets for the pavement condition and bridge condition improvements.	PM1 PM2 PM3
	Support the programming of projects that will facilitate attainment of statewide targets.	
	Identify tools and techniques that will help the local governments in developing pavement condition based maintenance programs.	
	Research and facilitate technical assistance on best practice.	
Ensure viability and maintenance of existing intermodal facilities.	Support maintenance schedules and projects for the intermodal facility.	TAM SGR

Objective 2B - Improve Traffic Flow On Major Routes & Address Network Pinch-points

Strategy	Action Items	PMs
Improve travel time to major activity centers.	Establish benchmark travel times in key corridors.	PM3
	Identify improvements needed.	
Improve traffic flow by operational improvements such as optimizing signal timing, channelization, spot improvements, and Intelligent Transportation Systems.	Establish benchmark travel times in key corridors.	PM3
	Establish travel time targets.	
Measure system's performance based on Level of Service (LOS) criteria and strive to maintain an acceptable LOS	Determine LOS of key corridors.	PM3
	Identify improvements for key locations with LOS E or worse.	
Review the functional class system.	If needed, revise functional class to address any identified access issue or freight movement issue.	PM3

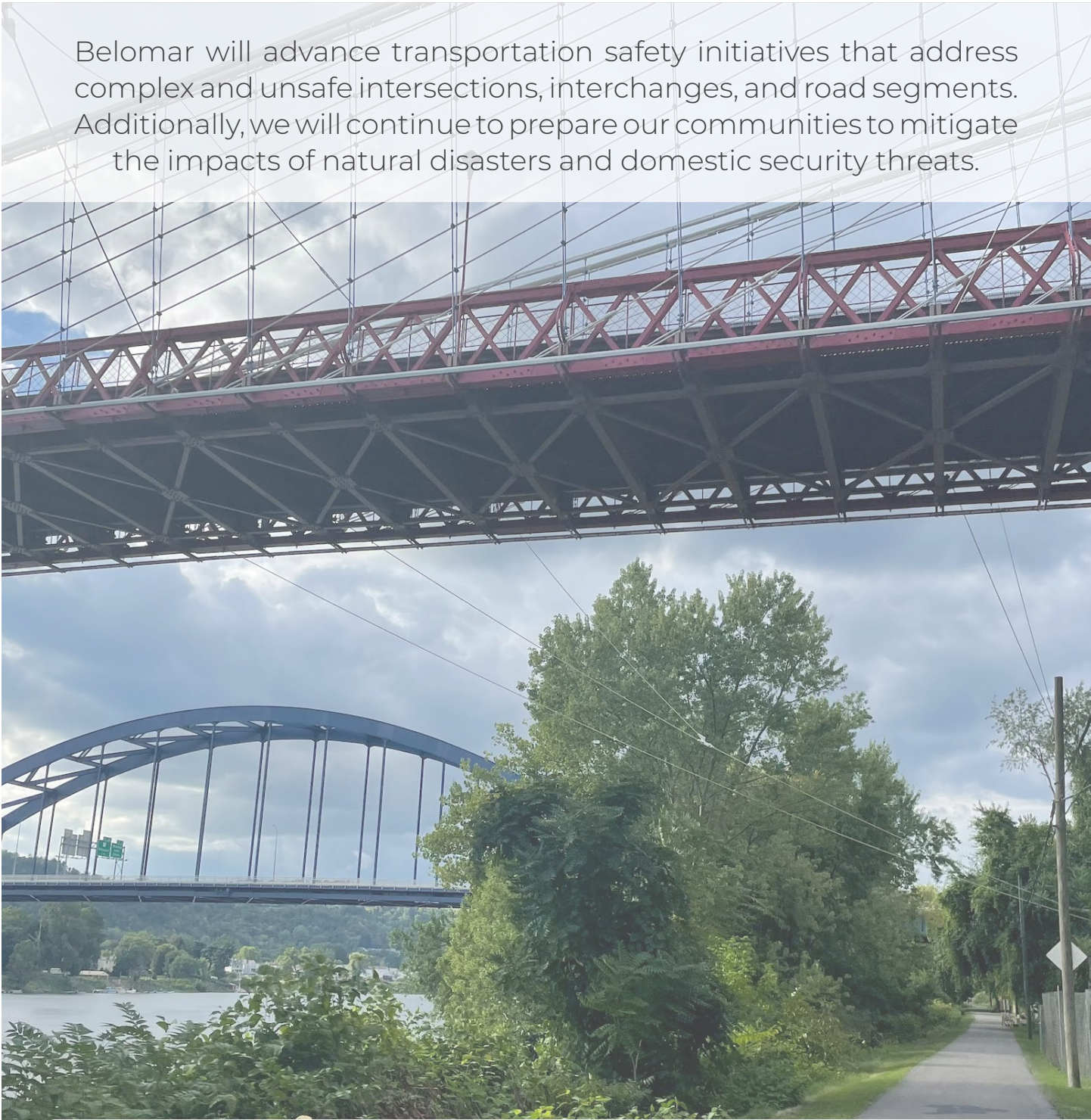
Objective 2C - Streamline Freight Movement Across The Region

Strategy	Action Items	PMs
Identify projects that facilitate efficient freight movement to, from and through the region.	Identify alternatives to address freight shippers' concern.	PM3
Study accessibility of freight terminals and major generators in the region.	Review accessibility of major generators and freight terminals.	PM3
Improve intermodal transfers where needed.	Review access to intermodal transfer locations for waterborne freight.	PM3 TAM
	Address issues regarding on-time freight delivery.	

Goal 3:

Advance Transportation Safety And Regional Security

Belomar will advance transportation safety initiatives that address complex and unsafe intersections, interchanges, and road segments. Additionally, we will continue to prepare our communities to mitigate the impacts of natural disasters and domestic security threats.



Alignment with Statewide Goals:

-  Ohio 1 2 3 4 5 6 7
-  West Virginia 1 2 3 4 5

Objectives, Strategies, & Action items

To achieve this goal and achieve regional performance targets, the Belomar Regional Council will do the following to improve roadway safety and prepare for domestic and environmental risks:

Objective 3A - Identify and address safety concerns to reduce fatal and serious crashes

Strategy	Action Items	PMs
Obtain and analyze crash data.	Cooperatively work with WVDOT and ODOT to develop targets for reducing crash frequency, serious injuries and fatalities; reducing injury crashes and fatal crashes per vehicle mile traveled.	PM1
Participate in the identification of high hazard locations.	Work cooperatively with the states in attaining safety targets.	PM1
Facilitate the development of projects that enhance the safety of people and goods movement.	Support safety projects designed to achieve targets.	PM1

Objective 3B - Ensure system security and rapid response of emergency services

Strategy	Action Items	PMs
Participate in the need assessment for system-wide security.	Support state and local efforts geared towards improving security of transportation networks and agency technologies.	PM3
Facilitate development of projects that enhance security of critical network links.	Support Emergency Management Services (EMS) and Homeland Security projects.	PM1

Objective 3C - Mitigate impacts of environmental hazards

Strategy	Action Items	PMs
Participate in the development of plans for mass evacuation during emergencies.	Support plans and projects designating evacuation routes.	N/A
	Support service plans along these routes; support signing of evacuation routes.	
Participate in the development of hazard mitigation plans for the area.	Work with the Emergency Management Services Departments of each county to assess needs and develop strategies for hazard mitigation.	N/A
Directly implement hazard mitigation land use goals into the transportation planning and project development process.	Support the implementation of hazard mitigation land use planning efforts	N/A

Goal 4: Expand Quality Mobility Options For All Users

Public advocates and community members view the regional active transportation network as one of the region's greatest strength and opportunities. This goal builds on recent momentum to improve multimodal access to recreation, housing, and jobs across the region for users of all ages and abilities.



Alignment with Statewide Goals:



Objectives, Strategies, & Action items

To achieve this goal and achieve regional performance targets, the Belomar Regional Council will do the following to expand multimodal options throughout the region:

Objective 4A - Provide Quality Mobility Options For All Users

Strategy	Action Items	PMs
Ensure transportation benefits are shared across communities and no individual communities are adversely affected by impacts.	Engage all affected communities as part of the project alternatives development and environmental review processes. Conduct project analysis to evaluate transportation benefits and project impacts across communities.	N/A
Improve the mobility of those historically underserved by existing transportation systems.	Conduct accessibility analysis for future transit and active transportation studies to evaluate existing accessibility and prioritize project that close accessibility gaps.	PM3 TAM
Preserve and enhance transit facilities and non-motorized facilities such as multi-use trails.	Work with the transit providers to establish acceptable benchmarks for the condition of assets and facilities.	SGR
	Work with the local jurisdictions to establish acceptable benchmarks for the condition of multi-use trails.	PM1 PM3

Objective 4B - Expand and improve fixed route and supplemental transit services

Strategy	Action Items	PMs
Maintain, enhance, and expand transit service.	Identify revenue shortfall, funding sources and options for transit improvement.	TAM SGR
Promote transit and facilitate a planned fleet replacement schedule.	Work with the transit provider to establish targets for the state of good repair.	SGR
Optimize service delivery by promoting coordination among providers.	Work with the fixed route and on-demand transit providers to plan for a coordinated approach to optimize service delivery.	TAM

Objective 4C - Build bicycle & pedestrian connections to recreation & city/village centers

Strategy	Action Items	PMs
Maintain, enhance and expand existing multi-use trails to work toward a regional interconnected trail network.	Build an existing asset inventory for all existing, planned, and committed active transportation facilities and access points. Inventory should include facility type, facility material, maintenance needs, and daily users.	PM1 PM3
	Assess the number of residents and jobs within walking distance of the existing, planned, and proposed active transportation network. Prioritize maintenance and enhancements on facilities that connect residents to jobs and services.	
Facilitate the development of an integrated multimodal transportation system.	Support projects that integrate multimodal transportation.	PM1 PM3
	Support an interconnected multi-use trails system by supporting local active transportation plans and closing network gaps with on-street facilities, multi-use trails, and rails-to-trails projects.	

CHAPTER 5: RECOMMENDATIONS & FISCAL CONSTRAINT



Recommendations & Fiscal Constraint

The capital improvement projects and transportation studies detailed in this chapter are chosen to address the transportation needs identified by this MTP's engagement and analysis. Over the next 25 years, Belomar will work with our local and statewide partners to deliver each project and improve the safety and efficiency of our transportation system. Please read more about each project and the funding required for implementation:

MTP Requirements

Federal transportation legislation requires MPOs to develop fiscally constrained MTPs, meaning that the funding reasonably expected to be available over the life of the plan is sufficient to implement its recommendations. Accordingly, the projects and programs in the 2050 Plan are limited to those that can be supported by anticipated future revenues. For the Belomar Region, we work with our statewide partners at the Ohio Department of Transportation (ODOT) and West Virginia Department of Highways (WVDOH) to use their guidance to determine state, federal, and local funding projections over the lifetime of this plan.

Additional unfunded needs are identified in an “illustrative” list showing investments the MPO would pursue if more funding becomes available. The Belomar 2050 MTP project list includes one illustrative capital improvement project which is shown at the end of **Table 15** in this chapter.



Wheeling, WV mural along the Wheeling Heritage Trail

Belomar 2050 MTP Fiscal Constraint

The Belomar Region has two statewide partners with separate projections for available funding. For the MTP project list, projects in Belmont County are subject to ODOT's financial forecast and projects in Ohio and Marshall County are subject to WVDOH's forecast. Below is the expected annual nominal funding (assuming a 2% annual interest rate) for both states. The state of West Virginia provides funding for all improvement projects (i.e. transportation studies and capital improvements). Ohio's funding forecast assumes 20% of all available funding will go toward improvements and the remaining 80% will go toward maintenance related projects. Project costs assume an annual 4% inflation rate to determine the estimated project cost in the program year.



Ohio*

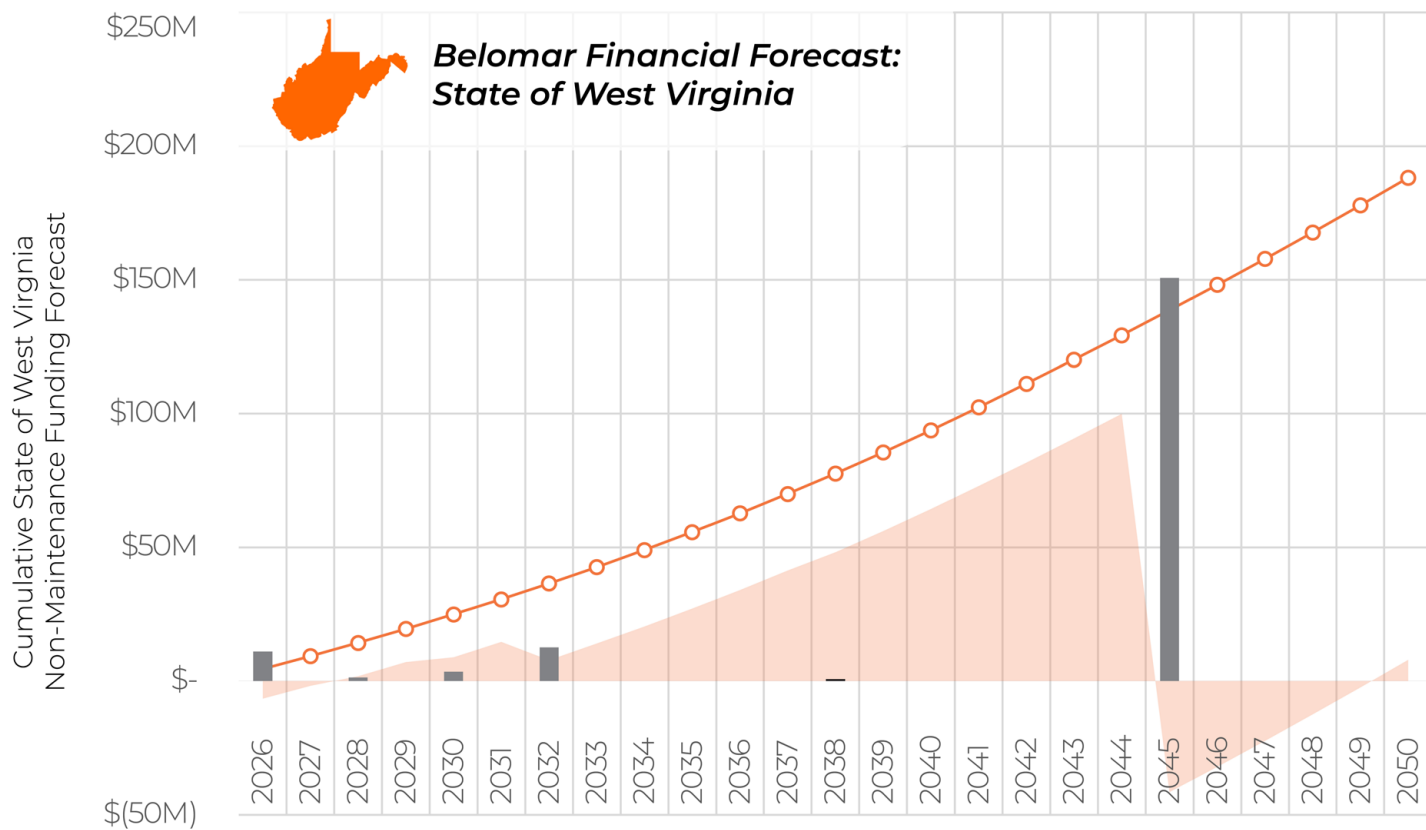
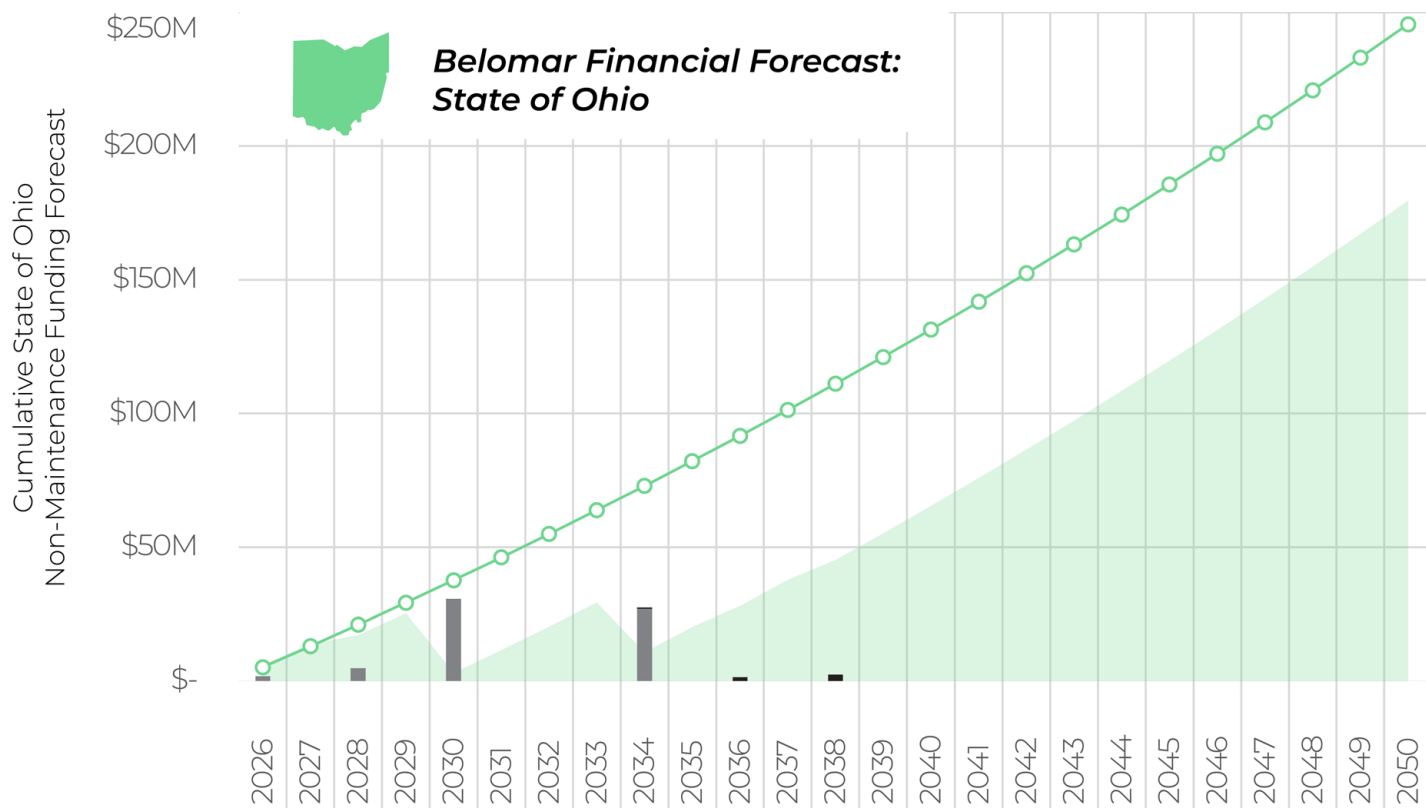


West Virginia

	Annual Nominal Finding	Cumulative Nominal Finding	Annual Nominal Finding	Cumulative Nominal Finding
2026	\$7,690,568	\$7,690,568	\$4,583,000	\$4,583,000
2027	\$7,859,602	\$15,550,170	\$4,780,000	\$9,363,000
2028	\$8,032,398	\$23,582,568	\$4,985,000	\$14,348,000
2029	\$8,209,041	\$31,791,609	\$5,199,000	\$19,547,000
2030	\$8,389,620	\$40,181,229	\$5,423,000	\$24,970,000
2031	\$8,557,412	\$48,738,641	\$5,656,000	\$30,626,000
2032	\$8,728,560	\$57,467,201	\$5,899,000	\$36,525,000
2033	\$8,903,131	\$66,370,332	\$6,153,000	\$42,678,000
2034	\$9,081,194	\$75,451,526	\$6,417,000	\$49,095,000
2035	\$9,262,818	\$84,714,344	\$6,693,000	\$55,788,000
2036	\$9,448,074	\$94,162,418	\$6,981,000	\$62,769,000
2037	\$9,637,036	\$103,799,454	\$7,281,000	\$70,050,000
2038	\$9,829,776	\$113,629,230	\$7,594,000	\$77,644,000
2039	\$10,026,372	\$123,655,602	\$7,920,000	\$85,564,000
2040	\$10,226,899	\$133,882,502	\$8,261,000	\$93,825,000
2041	\$10,431,437	\$144,313,939	\$8,616,000	\$102,441,000
2042	\$10,640,066	\$154,954,005	\$8,788,320	\$111,229,320
2043	\$10,852,867	\$165,806,873	\$8,964,086	\$120,193,406
2044	\$11,069,925	\$176,876,797	\$9,143,368	\$129,336,775
2045	\$11,291,323	\$188,168,121	\$9,326,235	\$138,663,010
2046	\$11,517,150	\$199,685,270	\$9,512,760	\$148,175,770
2047	\$11,747,493	\$211,432,763	\$9,703,015	\$157,878,786
2048	\$11,982,443	\$223,415,206	\$9,897,076	\$167,775,861
2049	\$12,222,091	\$235,637,297	\$10,095,017	\$177,870,879
2050	\$12,466,533	\$248,103,831	\$10,296,918	\$188,167,796
	\$248,103,831	-	\$188,167,796	-

Table 14. Belomar 25 Year Non-Maintenance Project Funding Forecast For Ohio And West Virginia (ODOT, WVDOH)

* Assumes 20% of available Federal, State, and Local funds will be spent on non-maintenance related projects



- Cumulative State Funding Forecast
- Transportation Study Project Costs
- ▲ Difference between Cumulative State Funding Forecast and Total Project Costs
- Capital Improvement Project Costs

Figure 47. Belomar 25 Year Non-Maintenance Project Funding Forecast For Ohio And West Virginia (ODOT, WVDOH)

Belomar 2050 MTP Draft Project List

The fiscally constrained project list delivers on this MTP's goals by prioritizing safety, access to jobs and services, and highway efficiency. Overall, the project list includes 21 projects (20 fiscally constrained projects and one illustrative project). Belomar, statewide partners, and local communities must work together to secure funding, complete environmental screenings, and construct these projects over the next 25 years. The following pages include the full list of project and details of each project's location, cost, program year, and description.

Belmont County

6 Capital Improvement Projects

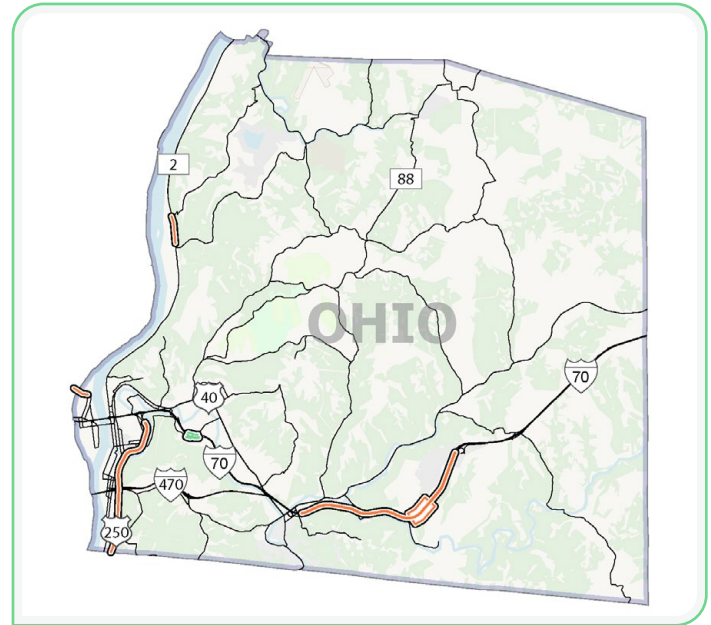
4 Transportation Studies/Designs



Ohio County

6 Capital Improvement Projects

1 Transportation Studies/Designs



Marshall County

4 Capital Improvement Projects




Capital Improvement Projects

New construction projects and upgrades to improve transportation safety and efficiency.



Transportation Studies/Designs

Analysis, studies, and engineering design to evaluate potential options for new projects and guide our infrastructure investments so they can provide as much benefit as possible.

Type	Project Name	Program Year	Belmont County	Marshall County	Ohio County
	U.S. 40/Blaine-Barton Road Intersection Improvements	2026	\$1,755,000		
	U.S. 250 Roadway Departure Signage	2026		\$351,000	
	U.S. 250 Signing Renovations - Marshall County	2026		\$5,200,000	
	U.S. 250 Signing Renovations - Ohio County	2026			\$5,200,000
	Warwood Avenue ADA Curb Ramp Improvements	2026			\$356,000
	U.S. 250/1st Street Intersection Radii Improvements	2028		\$1,385,000	
	I-70/OH SR-7/Zane Street Intersection Improvements	2028	\$2,574,000		
	Central Avenue Roadway Improvements in the Village of Shadyside	2028	\$2,164,000		
	Traffic Signal Renovation Program	2030		\$1,755,000	
	Traffic Signal Renovation Program	2030			\$1,755,000
	EV Charging Stations in the Village of Barnesville	2030	\$1,519,000		
	I-70 Capacity Improvements near the Ohio Valley Mall	2030	\$29,178,000		
	Bike and Pedestrian Bridge connecting Wheeling Island to Belmont County	2032			\$12,660,000
	I-70/OH SR-9/Thompson Drive Interchange Improvements	2034	\$26,975,000		
	Barnesville Senior Transportation Service	2034	\$479,000		
	I-470/OH SR-7 Interchange Engineering Study	2036	\$740,000		
	I-70/Marion Street/Main Street Interchange Engineering Study	2036	\$740,000		
	I-70/Washington Avenue/Mt. de Chantal Road Interchange Engineering Study	2038			\$800,000
	OH SR-7 Capacity Improvement Study between Powhatan Point and Dilles Bottom	2038	\$2,400,000		
	I-70 New Interchange near the Highlands	2045			\$150,725,000
	I-70 Capacity Improvements between Elm Grove and The Highlands*	TBD			\$98,800,000*

Funding Summary by County \$68,524,000 \$8,691,000 \$171,496,000

Table 15. Belmar 2050 MTP Fiscally Constrained List Of Capital Improvement Projects And Transportation Studies

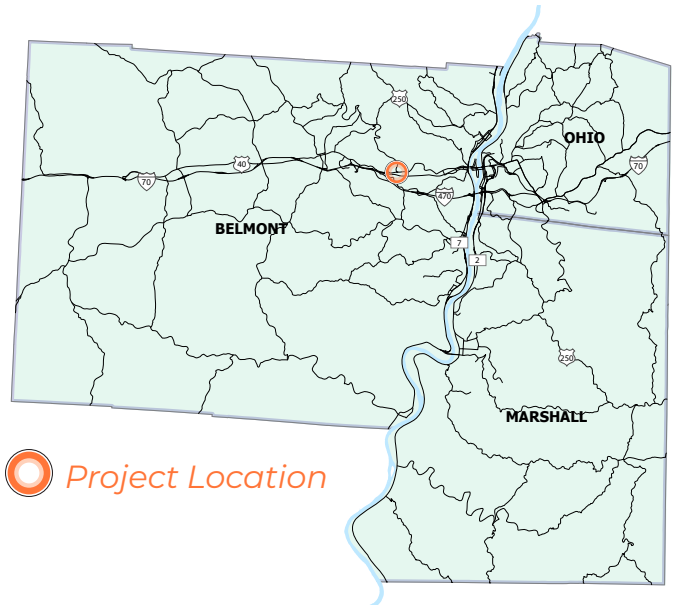
* Illustrative projects not subject to fiscal constraint and not included in countywide funding total sum. This project cost is based on recent estimates and does not account for inflation to a future program year.



U.S. 40/Blaine-Barton Road Intersection Improvements
 Capital Improvement Project: Roadway/Intersection Upgrade

County	Program Year	Project Cost
Belmont, OH	2026	\$1,755,000

Intersection improvements to address traffic and safety concerns at the intersection of Blaine-Barton Road and U.S. 40 in the Village of Blaine, Ohio.



Project Location



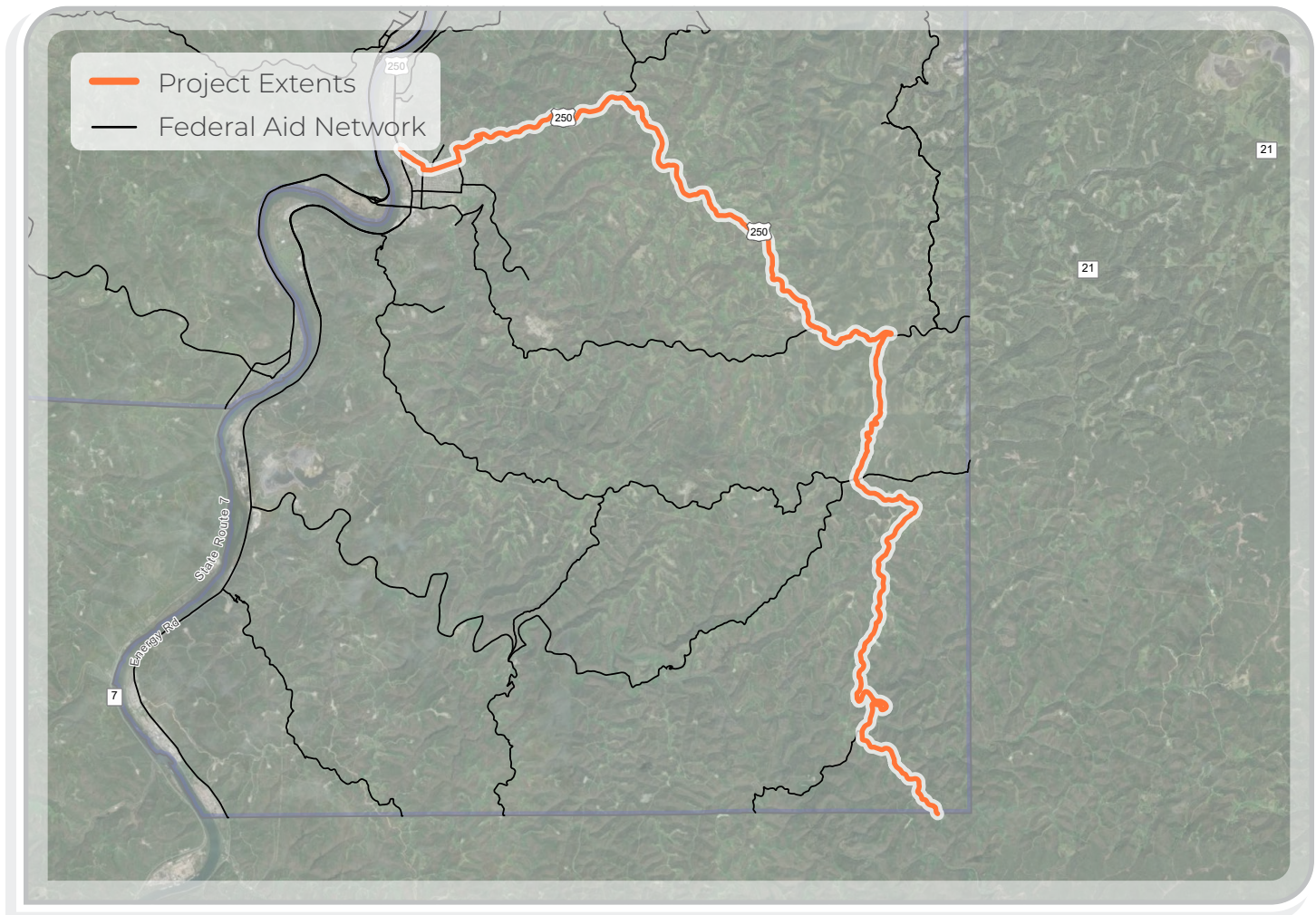
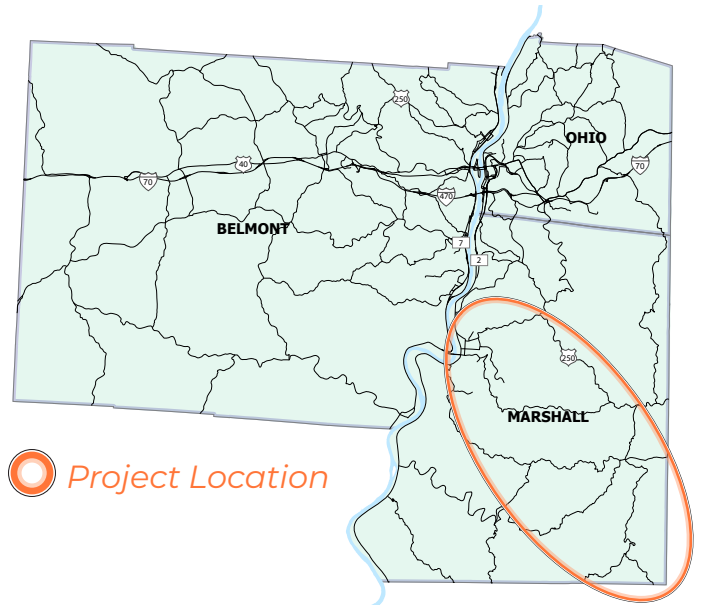


U.S. 250 Roadway Departure Signage

Capital Improvement Project: Roadway Safety Project

County	Program Year	Project Cost
Marshall, WV	2026	\$351,000

New roadway signage to warn drivers of roadway departure hazards in Marshall County along U.S. 250.

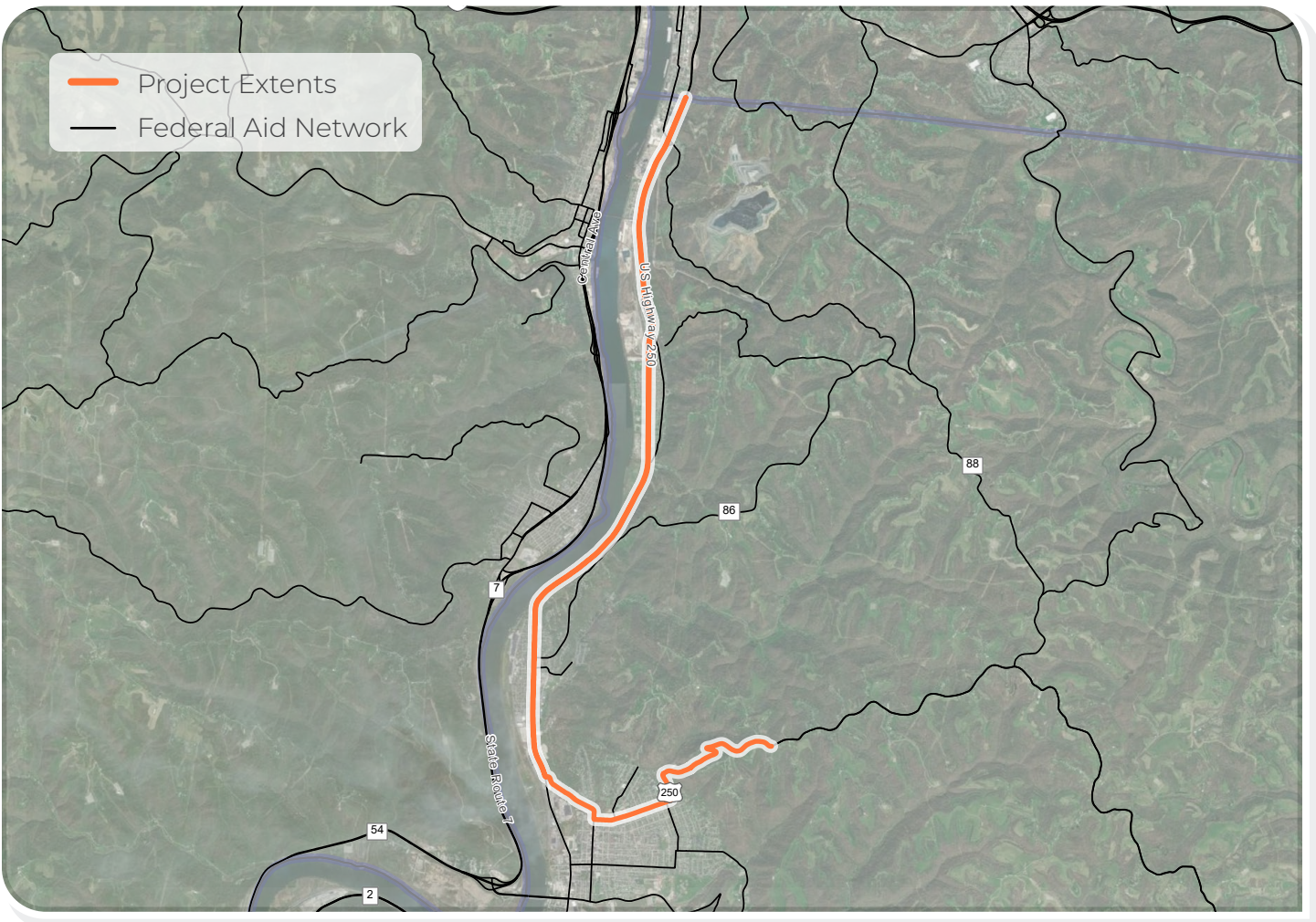
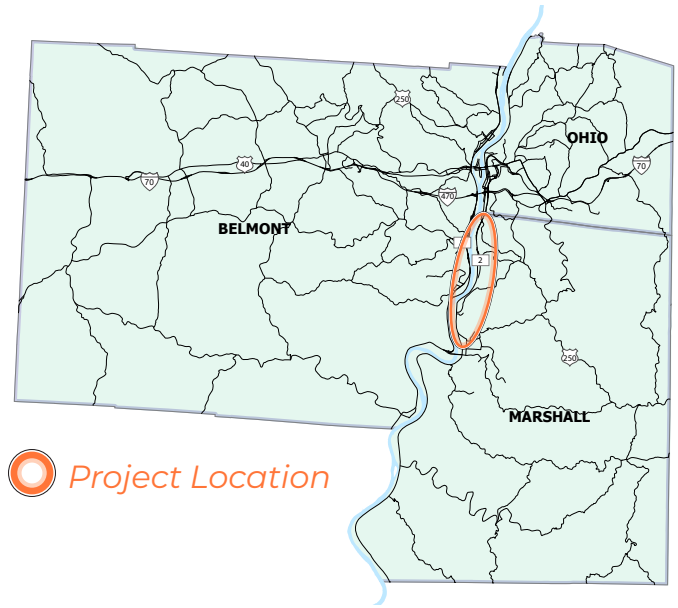




U.S. 250 Signing Renovations - Marshall County
 Capital Improvement Project: Roadway Safety Project

County	Program Year	Project Cost
Marshall, WV	2026	\$5,200,000

Replace U.S. 250 signs throughout Ohio County and Marshall County.



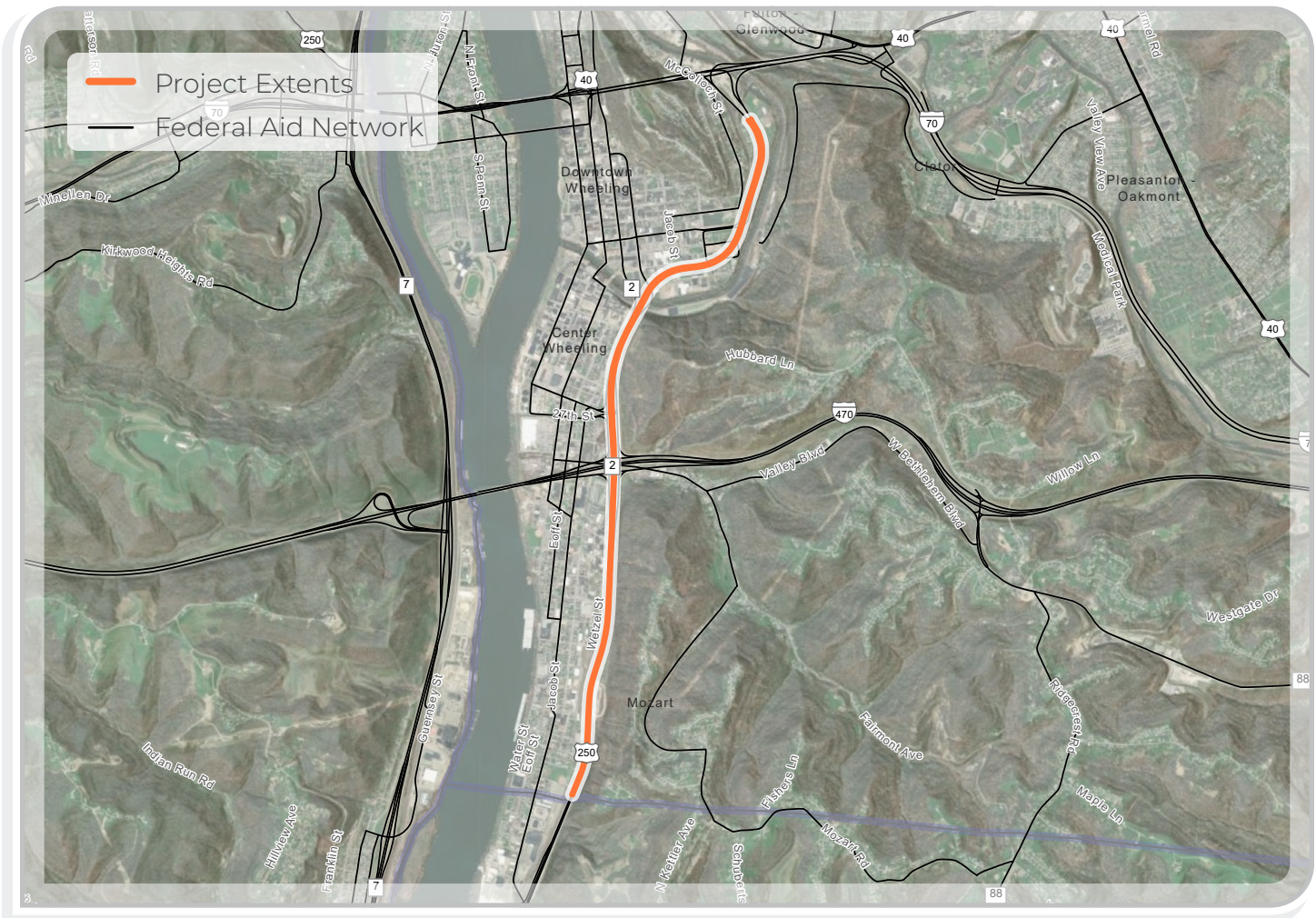
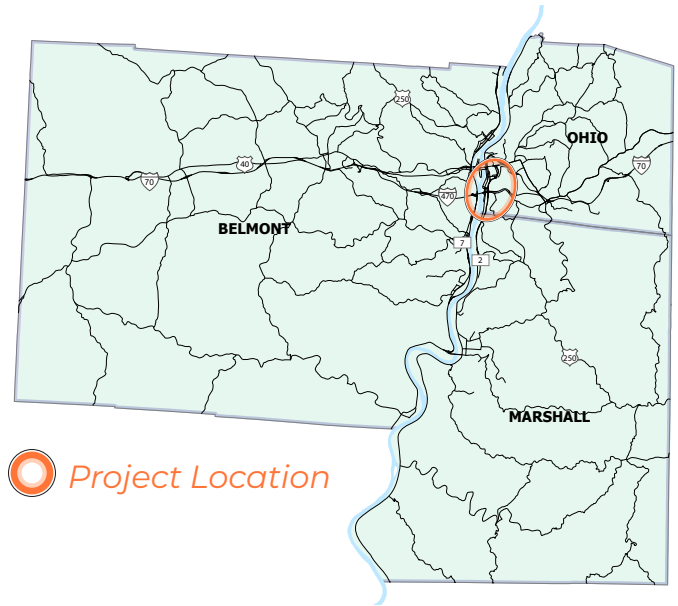


U.S. 250 Signing Renovations - Ohio County

Capital Improvement Project: Roadway Safety Project

County	Program Year	Project Cost
Ohio, WV	2026	\$5,200,000

Replace U.S. 250 signs throughout Ohio County and Marshall County.



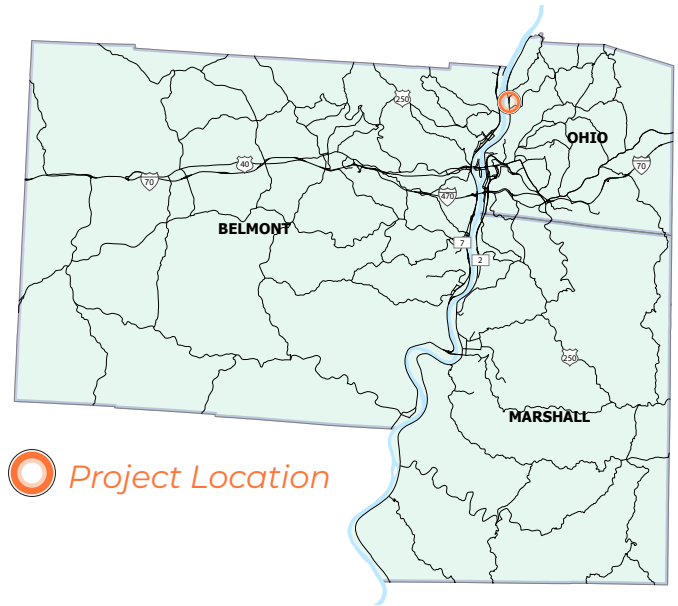


Warwood Avenue ADA Curb Ramp Improvements

Capital Improvement Project: Mobility Projects

County	Program Year	Project Cost
Ohio, WV	2026	\$356,000

Design and build ADA compliant curb ramps on Warwood Avenue.



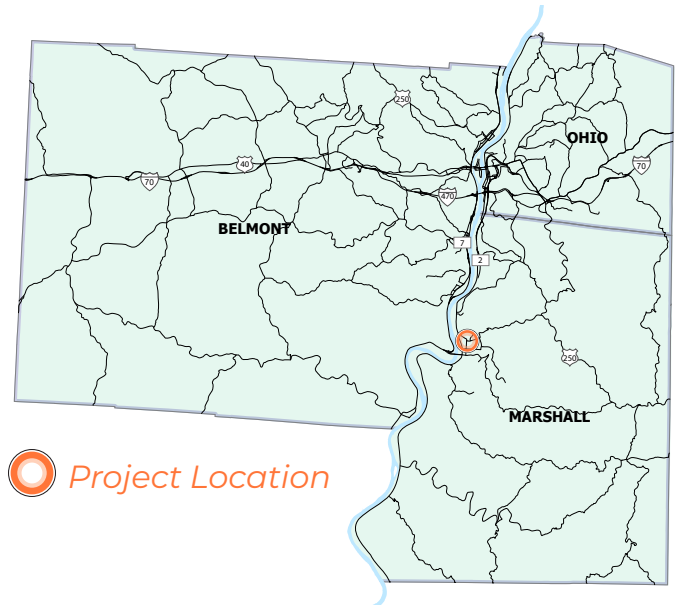


U.S. 250/1st Street Intersection Radii Improvements

Capital Improvement Project: Roadway Enhancements/Maintenance Project

County	Program Year	Project Cost
Marshall, WV	2028	\$1,385,000

Widen turning radii at the intersection of U.S. 250 and 1st Street in Moundsville to allow more sight distance and clearing distance for large vehicles turning onto U.S. 250.



Project Location



Project Extents
 Federal Aid Network

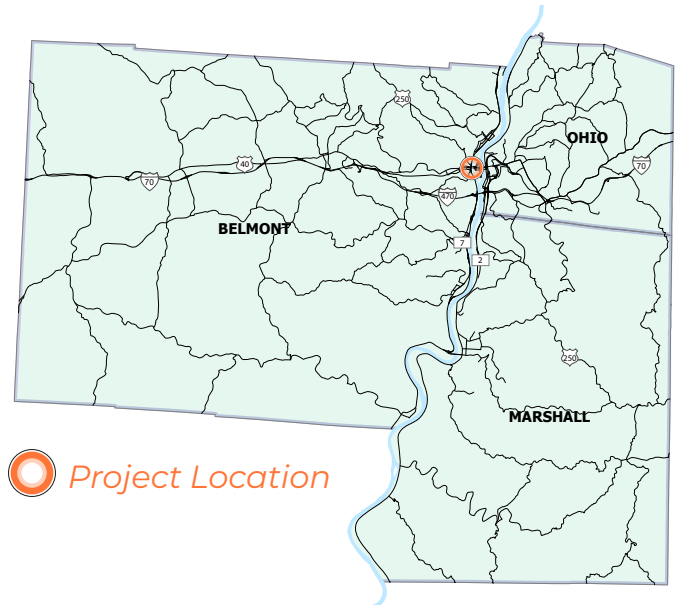


I-70/OH SR-7/Zane Street Intersection Improvements

Capital Improvement Project: Roadway Safety Projects

County	Program Year	Project Cost
Belmont, OH	2028	\$2,574,000

Implementation of the recommendations of the ongoing Traffic Safety and Operations Improvement Feasibility Study. This study focuses on the U.S. 40/U.S. 250/OH SR-7 interchange, the Zane Street corridor, and nearby elements that affect traffic and roadway safety.



Project Location



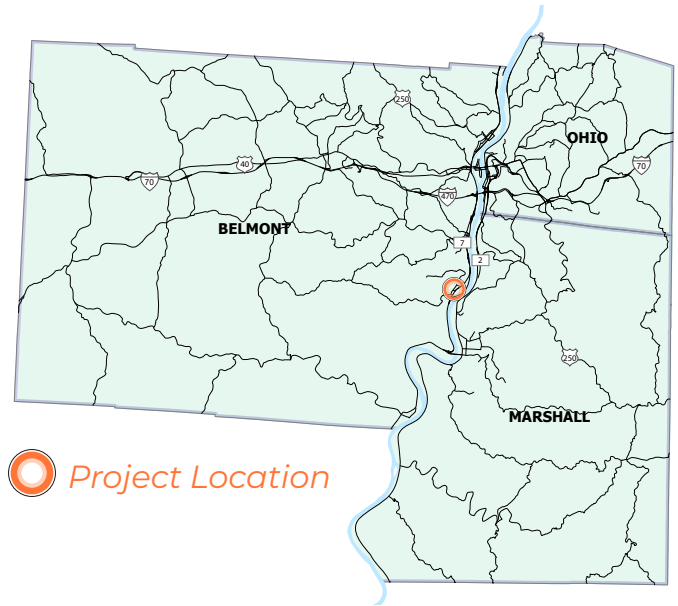


Central Avenue Roadway Improvements in the Village of Shadyside

Capital Improvement Project: Roadway Enhancements/Maintenance Project

County	Program Year	Project Cost
Belmont, OH	2028	\$2,164,000

Continuation of the Central Avenue improvements. Project includes the replacement of existing sidewalks, curbs, drainage, pavement, and striping between W 43rd Street and Wegee Road.

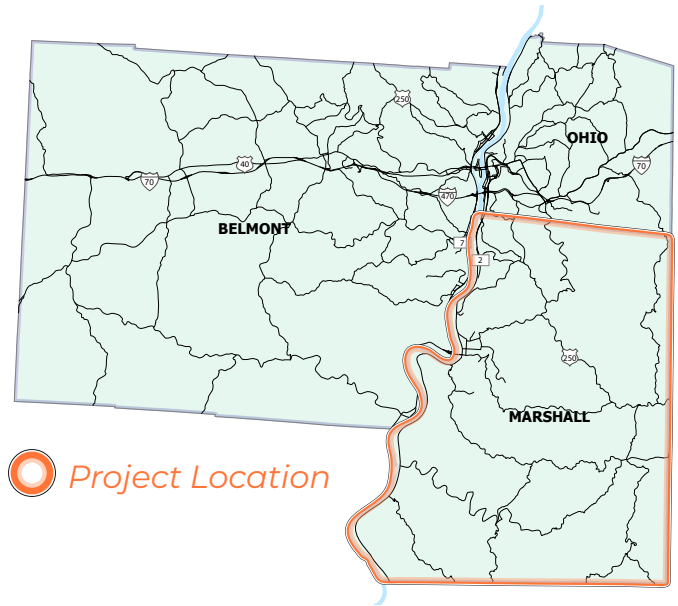




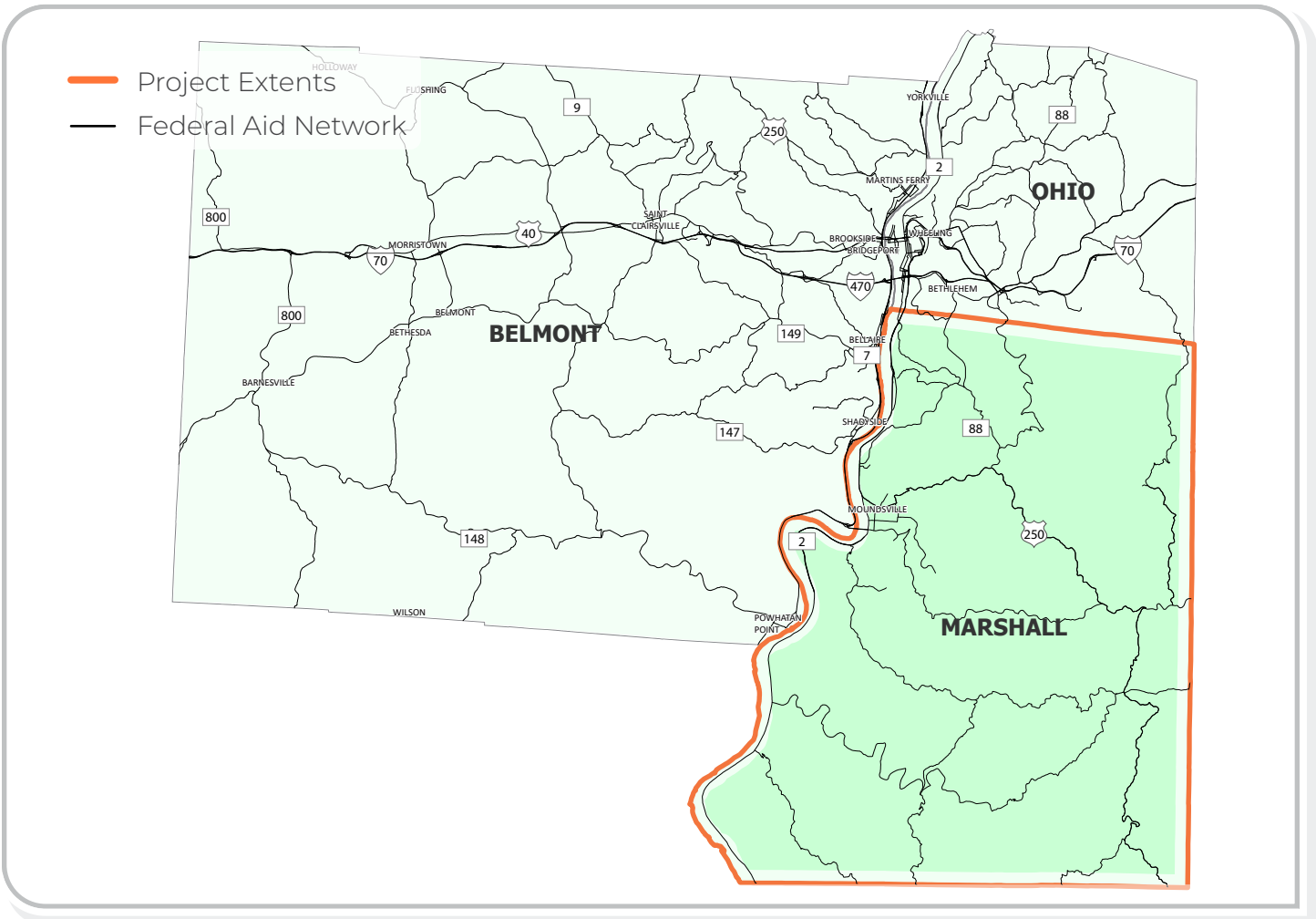
Traffic Signal Renovation Program - Marshall County
 Capital Improvement Project: Roadway Safety Projects

County	Program Year	Project Cost
Marshall, WV	2030	\$1,755,000

Traffic signal replacement program for Ohio and Marshall County signalized intersections. Replacement of signal-heads with backplates to improve visibility and function of traffic signals program to identify and replace up to 10 traffic signals.



Project Location

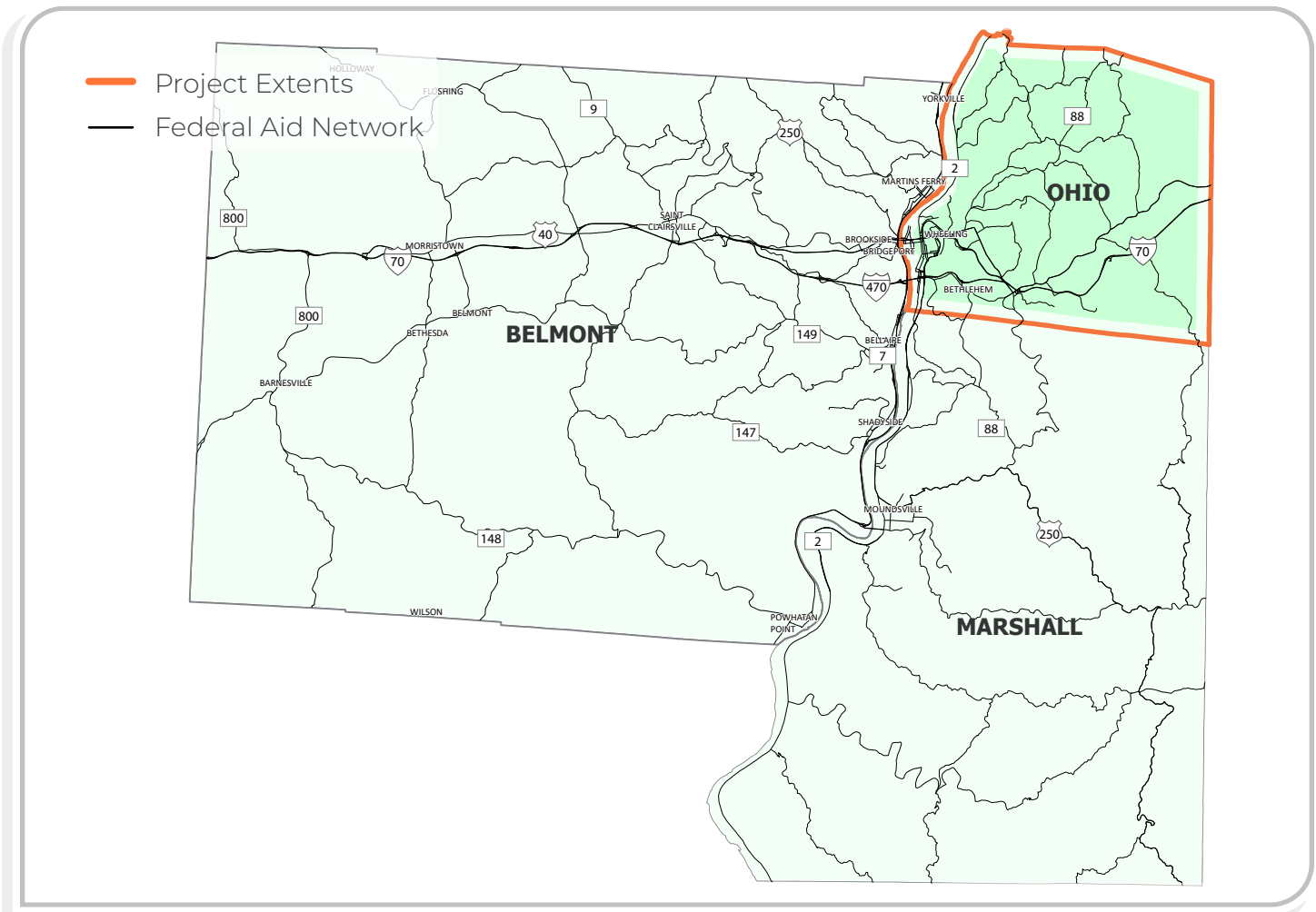
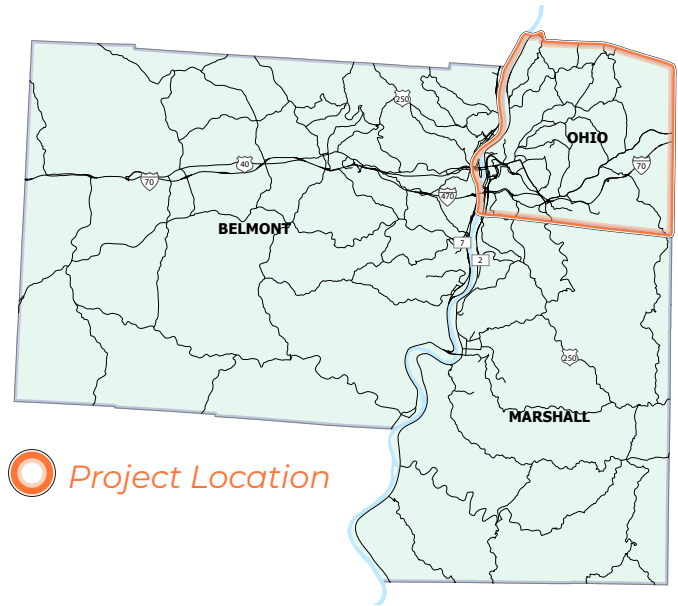




Traffic Signal Renovation Program - Ohio County
 Capital Improvement Project: Roadway Safety Projects

County	Program Year	Project Cost
Ohio, WV	2030	\$1,755,000

Traffic signal replacement program for Ohio and Marshall County signalized intersections. Replacement of signal-heads with backplates to improve visibility and function of traffic signals program to identify and replace up to 10 traffic signals.



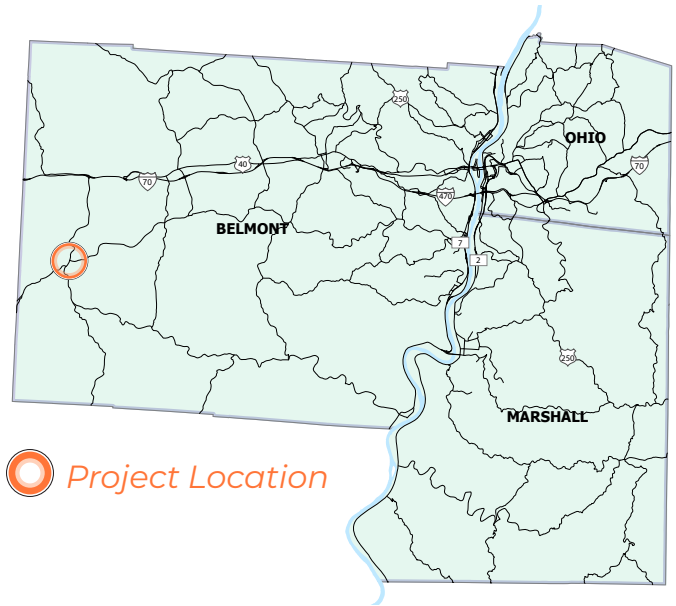


EV Charging Stations in the Village of Barnesville

Capital Improvement Project: Mobility Projects

County	Program Year	Project Cost
Belmont, OH	2030	\$1,519,000

Install electric vehicle (EV) chargers at up to three locations in the Village of Barnesville: public parking lot on East Main Street, public parking lot on W Church Street, and the Depot parking lot in Barnesville. All three locations are owned by the village and for public use.



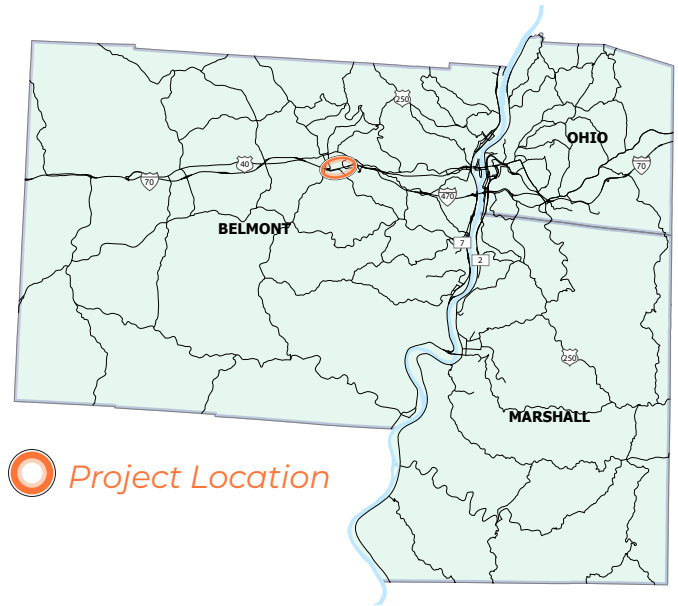


I-70 Capacity Improvements near the Ohio Valley Mall

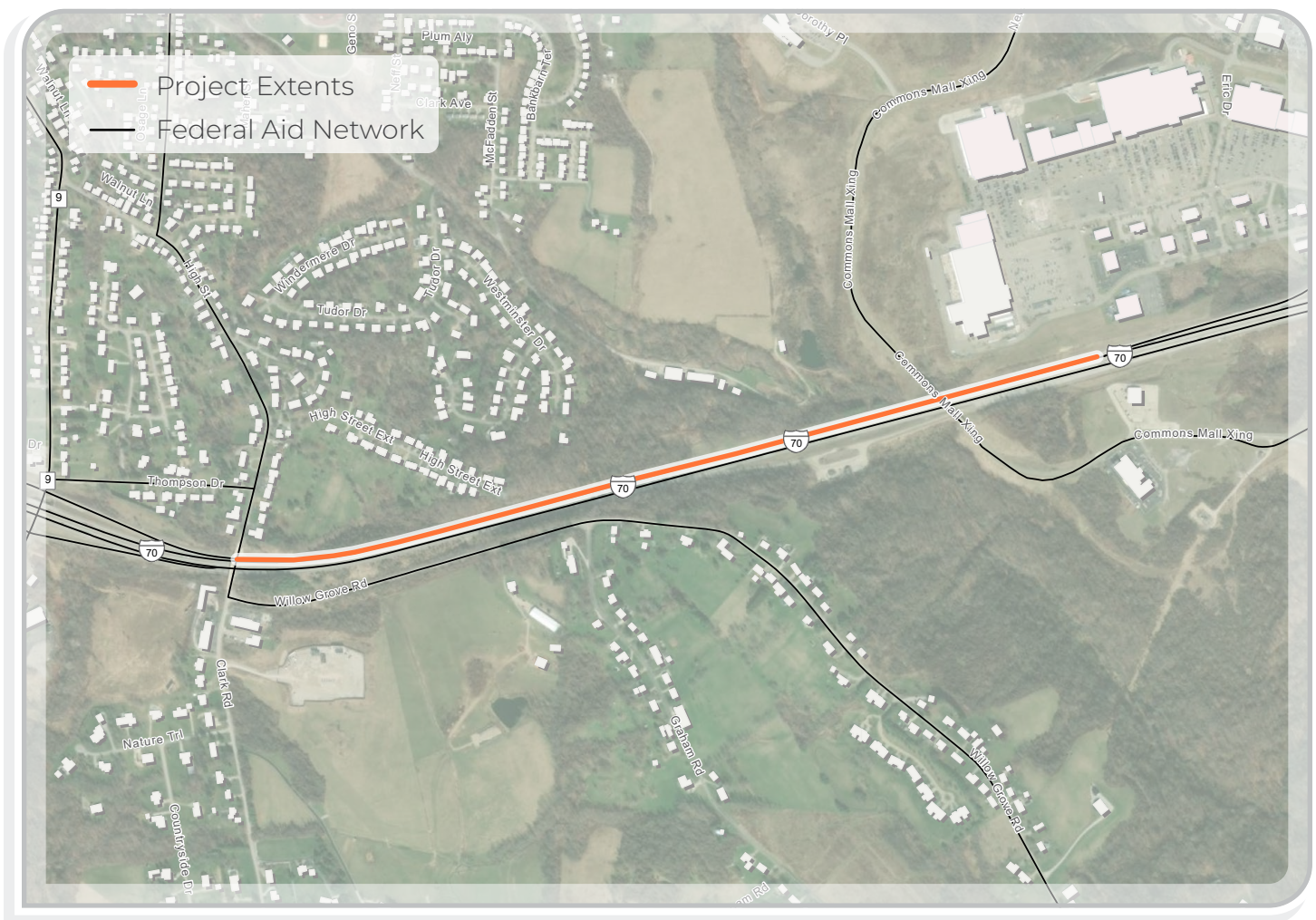
Capital Improvement Project: Highway Capacity/Interchange Project

County	Program Year	Project Cost
Belmont, OH	2030	\$29,178,000

Widen I-70 to three lanes in both directions between the Mall Rd interchange and OH SR-9 interchange south of St. Clairsville.



Project Location

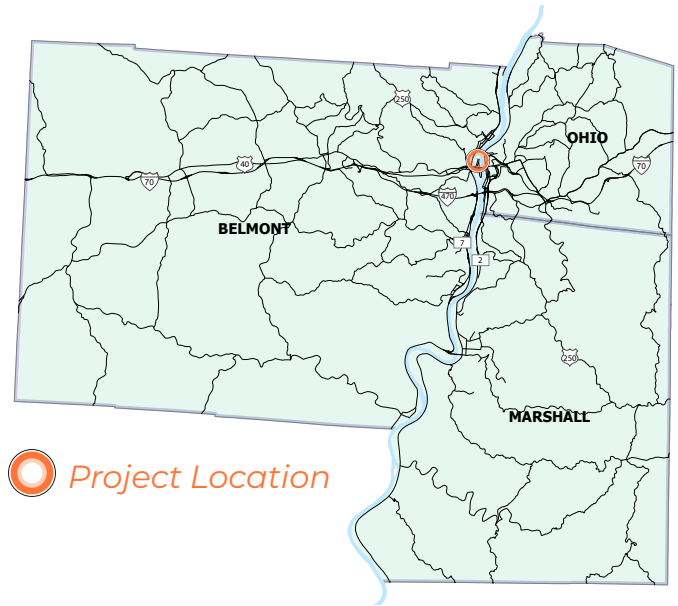




Bike and Pedestrian Bridge from Wheeling Island to Bridgeport
 Capital Improvement Project: Mobility Projects

County	Program Year	Project Cost
Ohio, WV	2032	\$12,660,000

Design and construction of a bike and pedestrian bridge to replace the Aetnaville Bridge between Wheeling Island and Bridgeport. Location will be similar to existing Aetnaville Bridge.



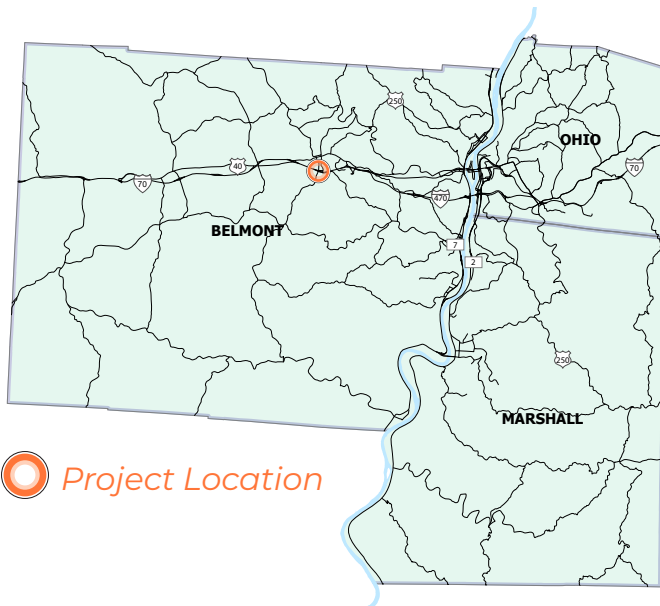


I-70/OH SR-9/Thompson Drive Interchange Improvements

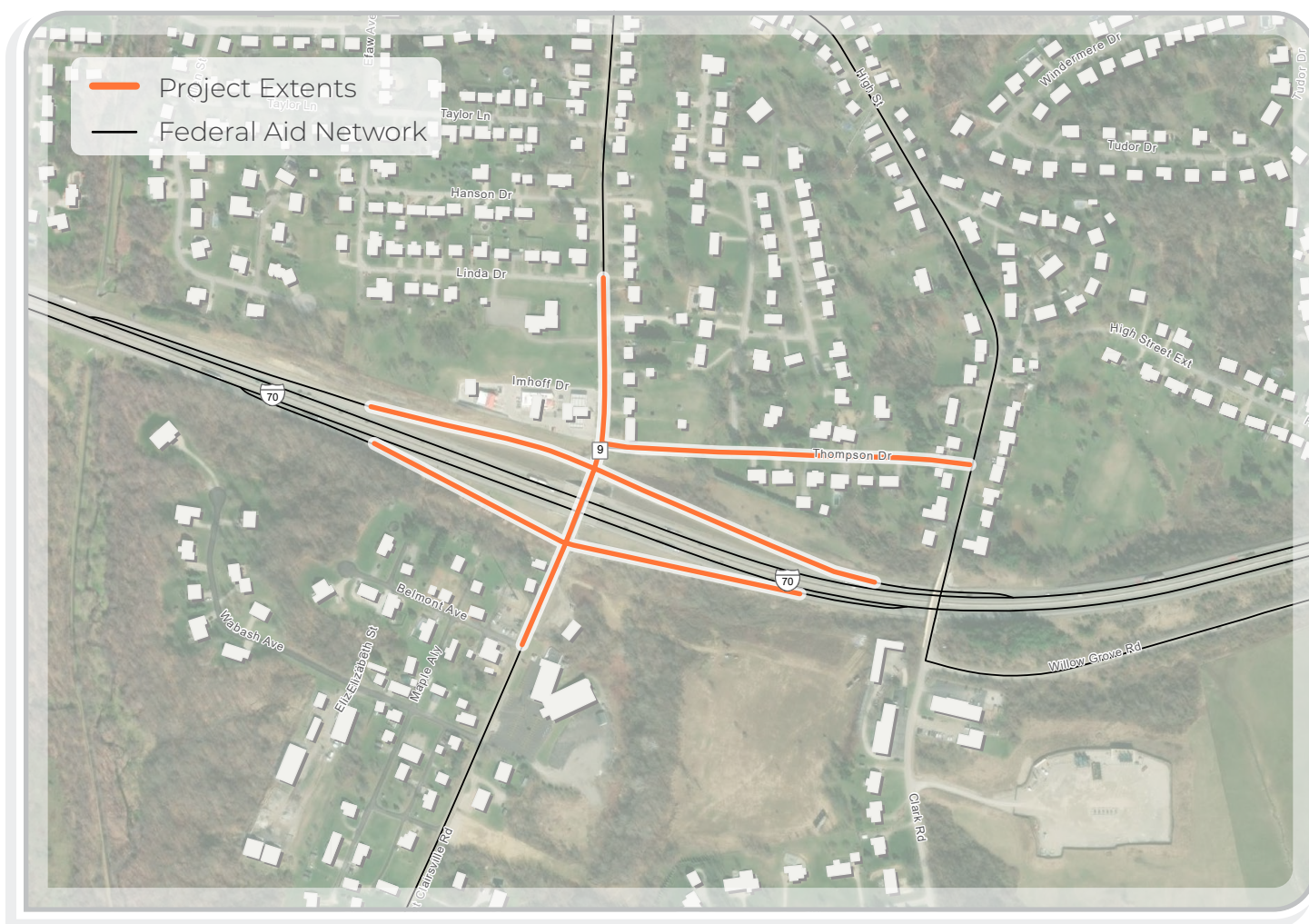
Capital Improvement Project: Roadway Safety Project

County	Program Year	Project Cost
Belmont, OH	2034	\$26,975,000

Operational improvements on OH SR-9/I-70 Ramps/Thompson Drive to address traffic flow and roadway safety concerns at the interchange ramps and nearby streets.



Project Location



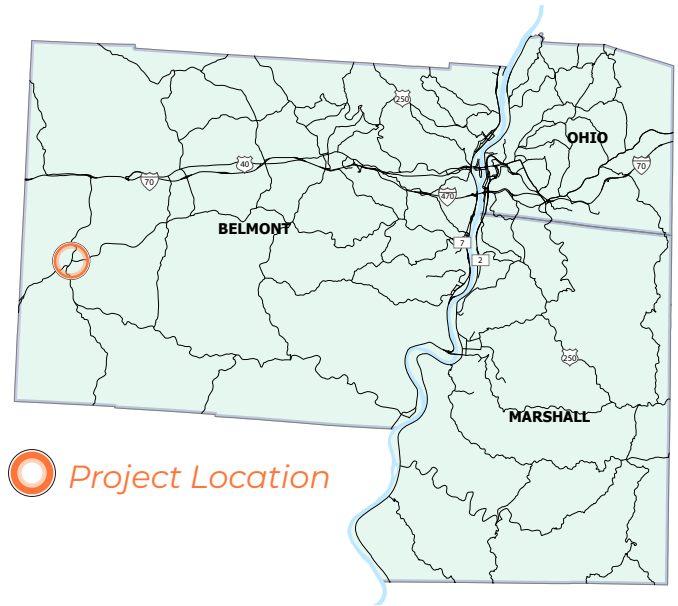


Barnesville Senior Transportation Service

Transportation Planning Study: Mobility Project

County	Program Year	Project Cost
Belmont, OH	2034	\$479,000

Transit study to explore implementing a regularly scheduled transit service between senior living homes and Barnesville’s commercial and essential services. This transit service could empower more seniors, even those without a driver’s license, to foster independent and healthy lifestyles.



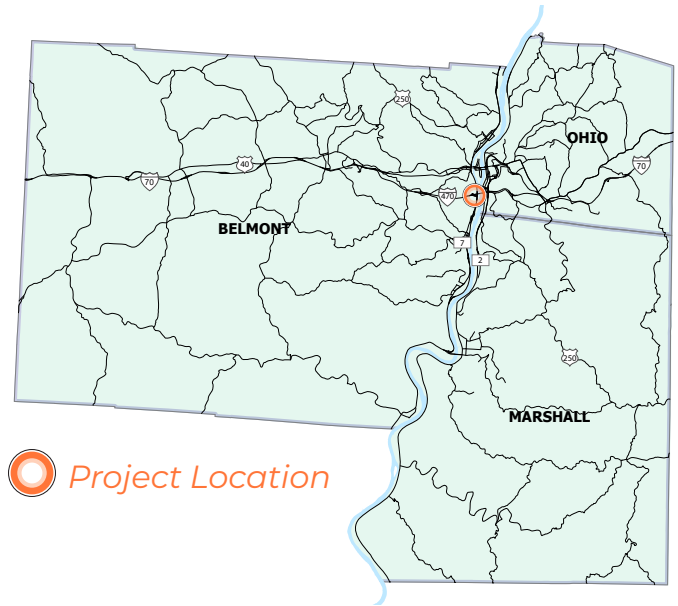


I-470/OH SR-7 Interchange Engineering Study

Transportation Planning Study: Highway Capacity/Interchange Project

County	Program Year	Project Cost
Belmont, OH	2036	\$740,000

Long-term engineering feasibility study to design and evaluate potential interchange improvements with the goal of making the I-470/OH SR-7 interchange a free-flowing interchange (no stops or signals).



Project Location



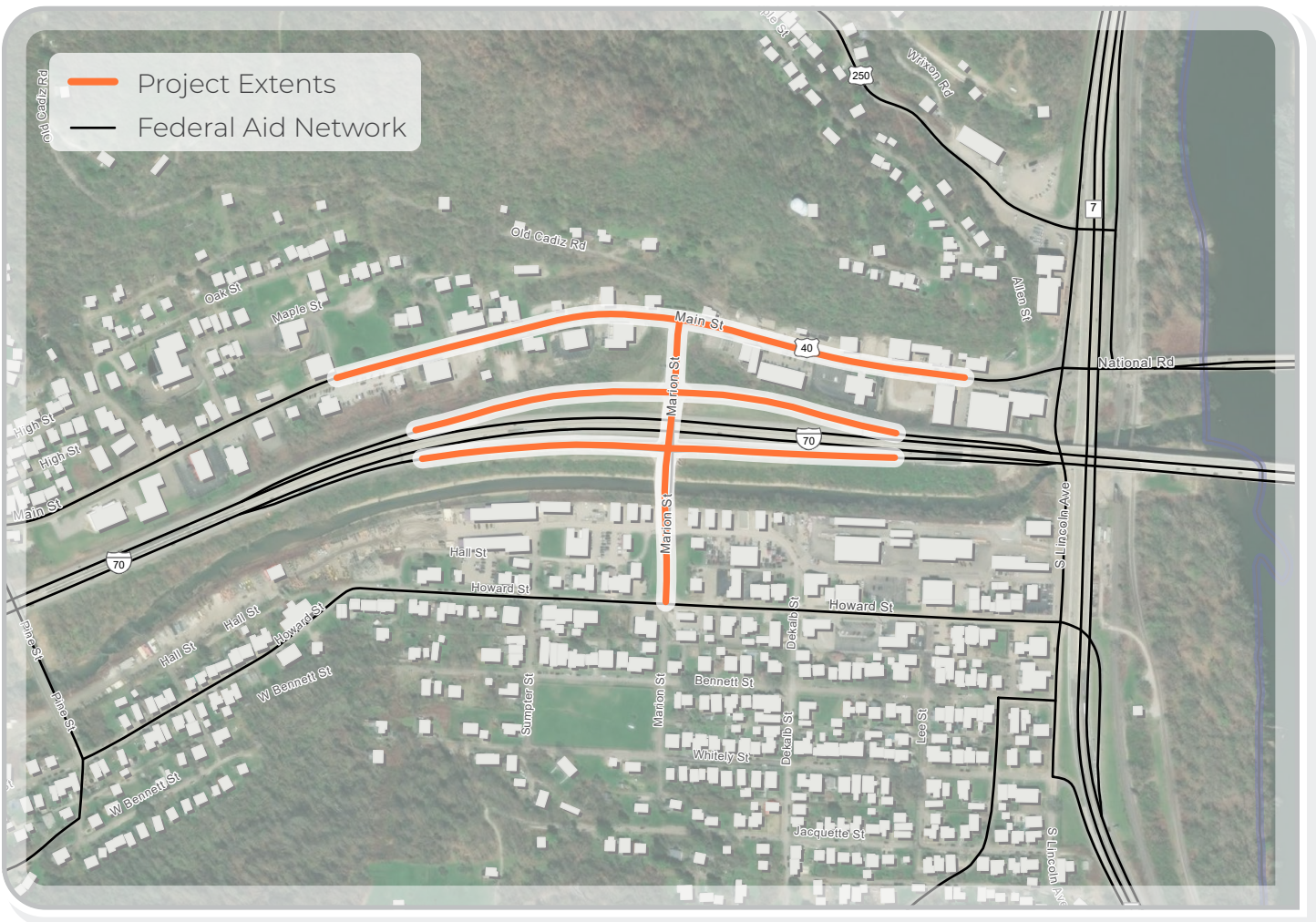
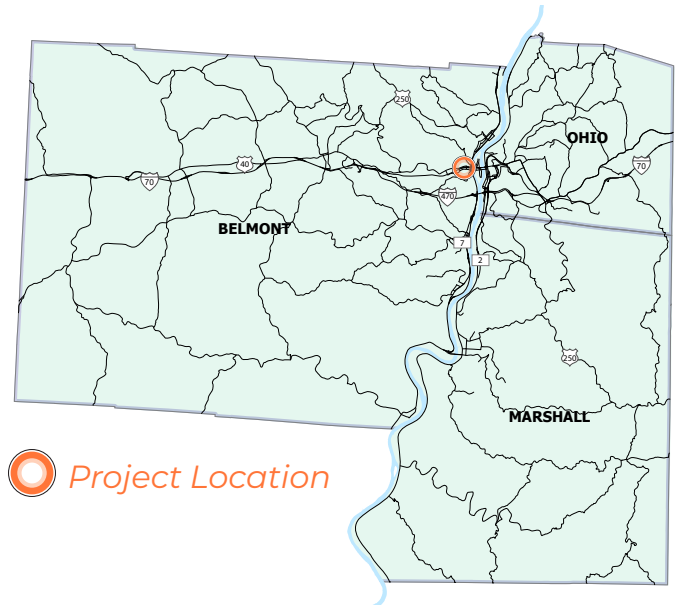


I-70/Marion Street/Main Street Interchange Engineering Study

Transportation Planning Study: Highway Capacity/Interchange Project

County	Program Year	Project Cost
Belmont, OH	2036	\$740,000

Feasibility study to determine alternatives for improving the safety and traffic flow of the I-70/Marion Street/Main Street interchange in Bridgeport.

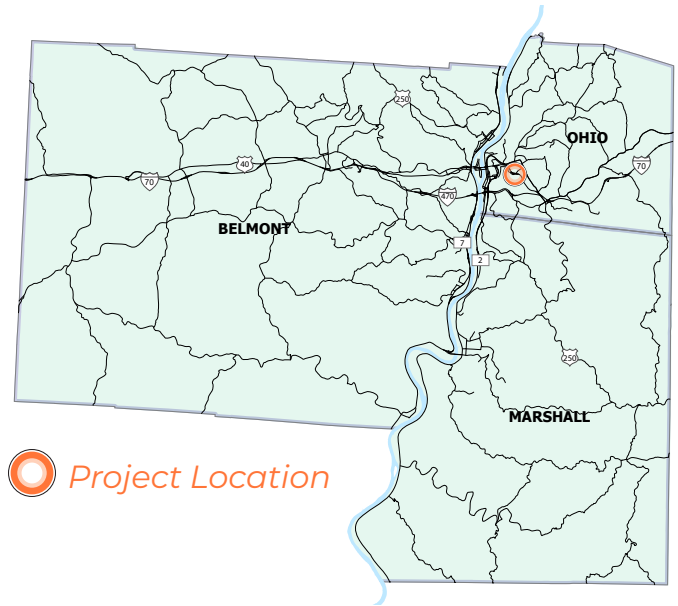




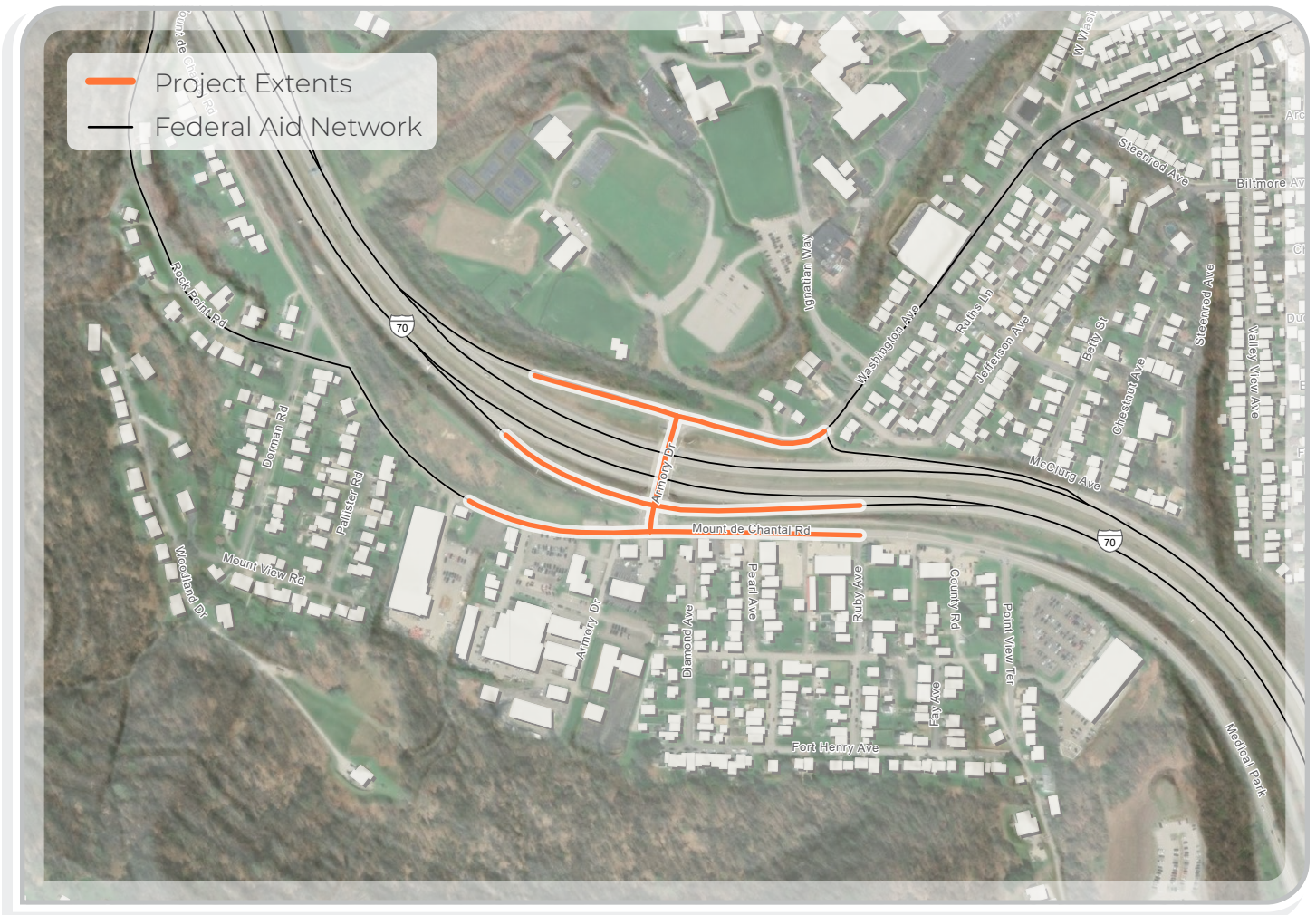
I-70/Washington Avenue/Mt. de Chantal Road Interchange Engineering Study
 Transportation Planning Study: Highway Capacity/Interchange Project

County	Program Year	Project Cost
Ohio, WV	2038	\$800,000

Transportation Engineering study to design and evaluate interchange improvement options at the I-70/Washington Ave/Mt. de Chantal interchange to address traffic flow concerns and improve access to the WVU Medicine Wheeling Hospital.



Project Location



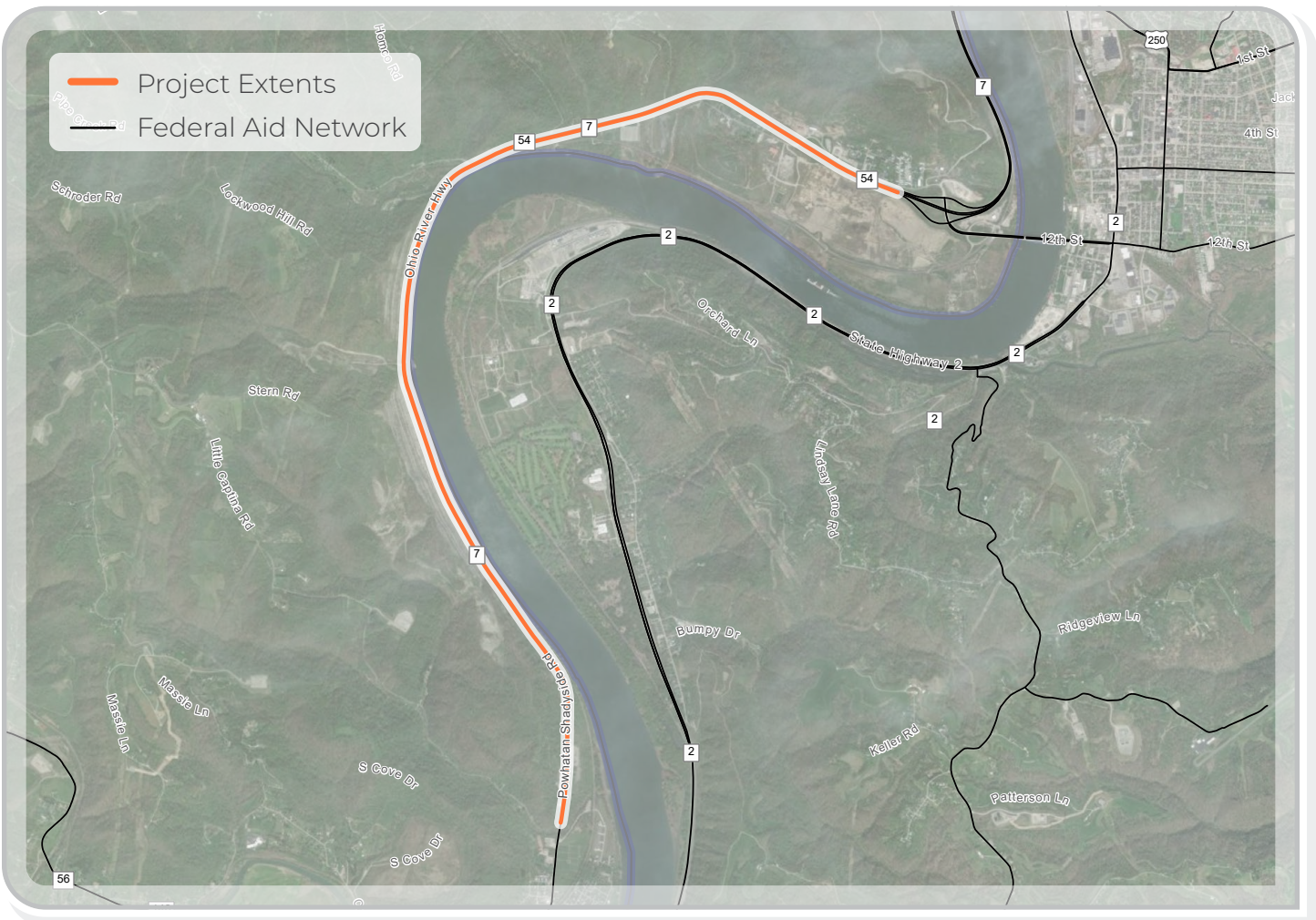
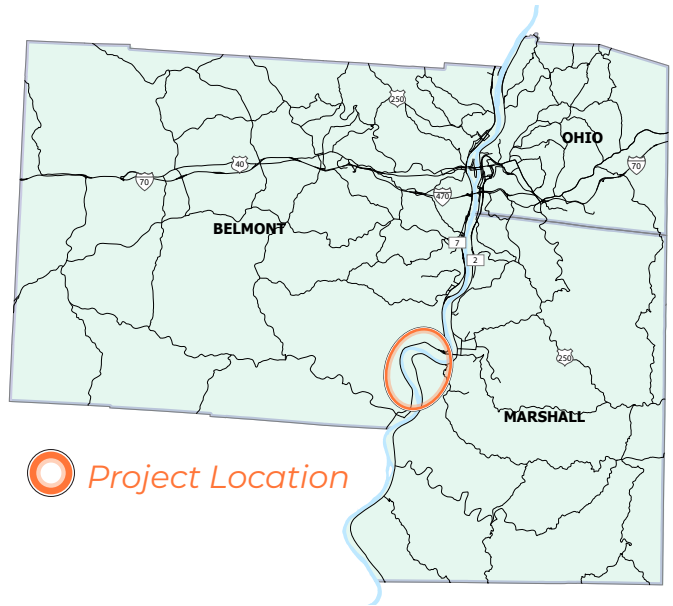


OH SR-7 Capacity Improvement Engineering Study between Powhatan Point and Dilles Bottom

Transportation Planning Study: Highway Capacity/Interchange Project

County	Program Year	Project Cost
Belmont, OH	2038	\$2,400,000

Transportation engineering study to determine the feasibility and cost of widening OH SR-7 to two lanes in both directions between Powhatan Point and Dilles Bottom.



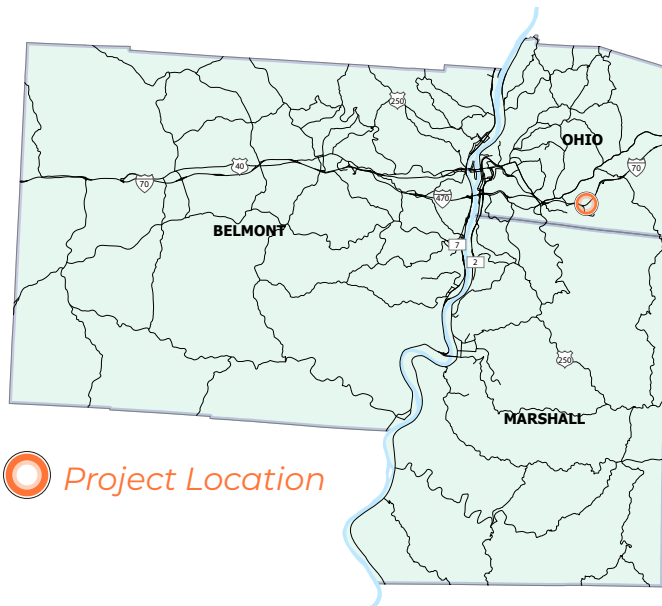


I-70 New Interchange near the Highlands

Capital Improvement Project: Highway Capacity/Interchange Project

County	Program Year	Project Cost
Ohio, WV	2045	\$150,725,000

Design and construction of a new interchange between the Cabela Drive interchange and Elm Grove interchange. Design and location of this interchange is to be determined based on future engineering feasibility study, alternatives assessment, and final design.



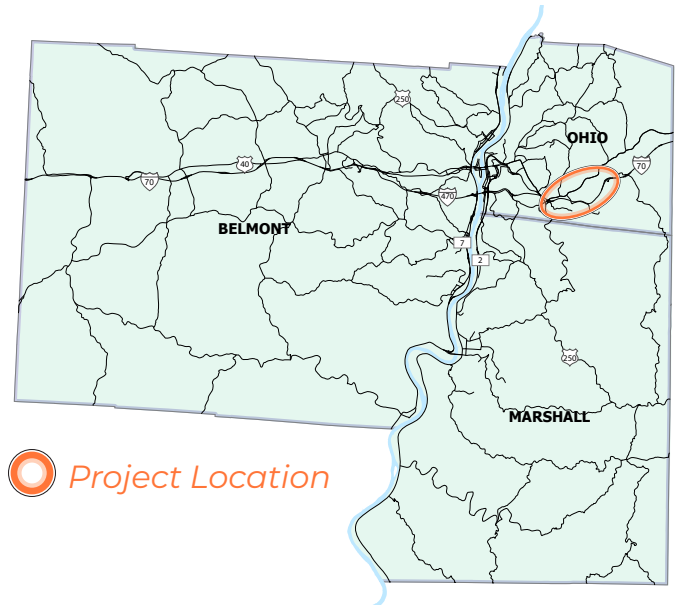


I-70 Capacity Improvements between Elm Grove and The Highlands

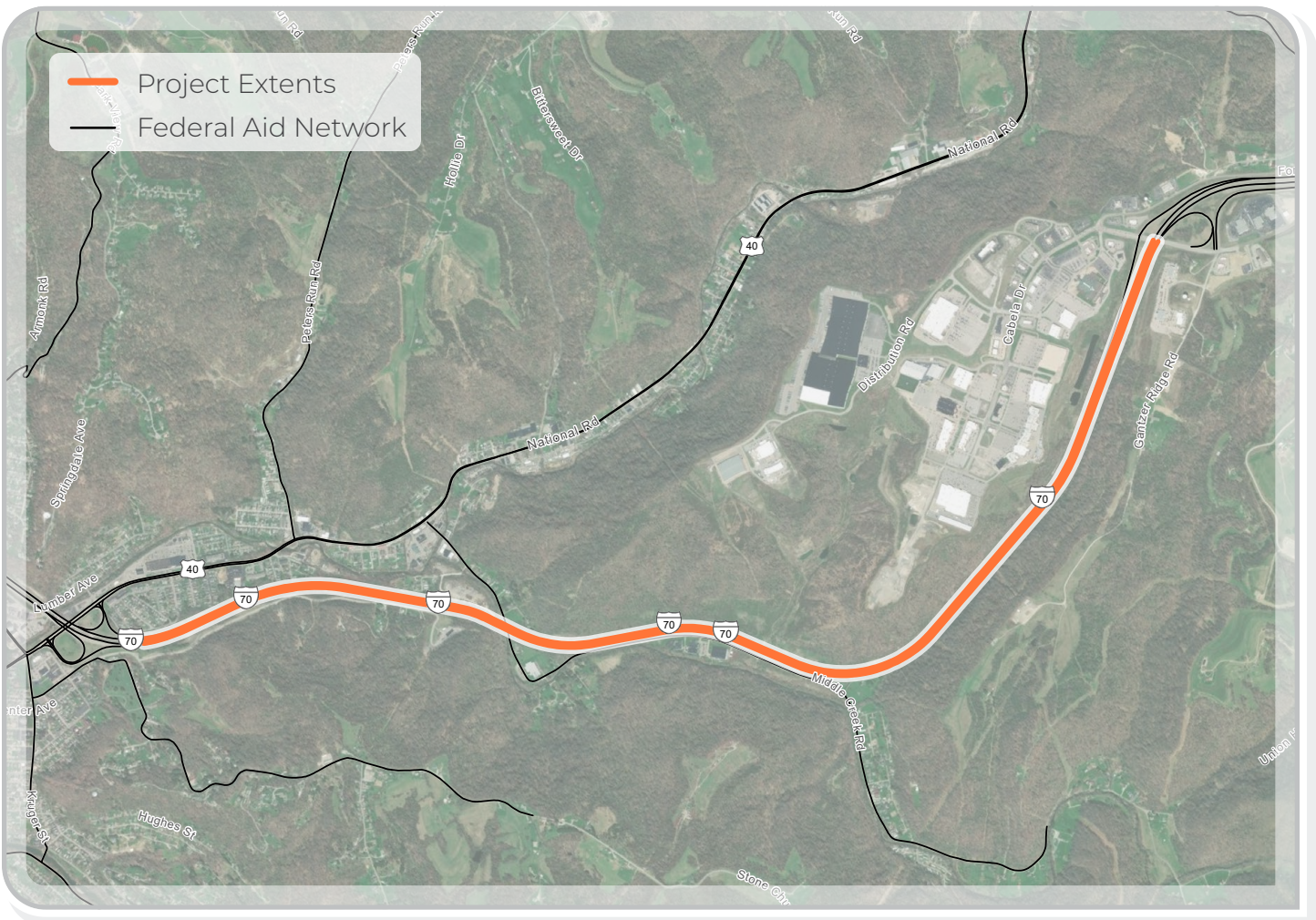
Illustrative Capital Improvement Project: Highway Capacity/Interchange Project

County	Program Year	Project Cost
Ohio, WV	Aspirational	\$98,800,000*

Widen I-70 to three lanes in WB direction between the Elm Grove interchange and Cabela Drive interchange.



* Illustrative projects not subject to fiscal constraint and not included in countywide funding total sum. This project cost is based on recent estimates and does not account for inflation to a future program year.



Project List Summary

Overall, this project list programs over 245 million dollars worth of capital improvement and transportation study projects over the next 25 years. Figure 50 details how this funding breaks down across different project types.

This MTP's goals emphasized community/economic development, roadway safety, multimodal transportation, and roadway efficiency. These projects reinforce Belomar's commitment to these goals in each of our counties and communities. This list is an excellent step forward, and is open to modification and evolution as community needs shift in the coming years and decades.

Advancing Toward MTP Goals

- Foster Livable and Economically Competitive Communities**
 Prioritize roadway projects that improve access to jobs and services.
- Improve and Maintain Roadways and Freight Facilities**
 Address our region's largest network pinch-points through interchange studies and highway capacity projects.
- Advance Regional Transportation Safety and Security**
 Address interchange conflict points and update regional roadway signage and signals.
- Expand Quality Mobility Options for All Users**
 Invest in multimodal options by enhancing transit supportive infrastructure and regionally significant bike/ped connections.

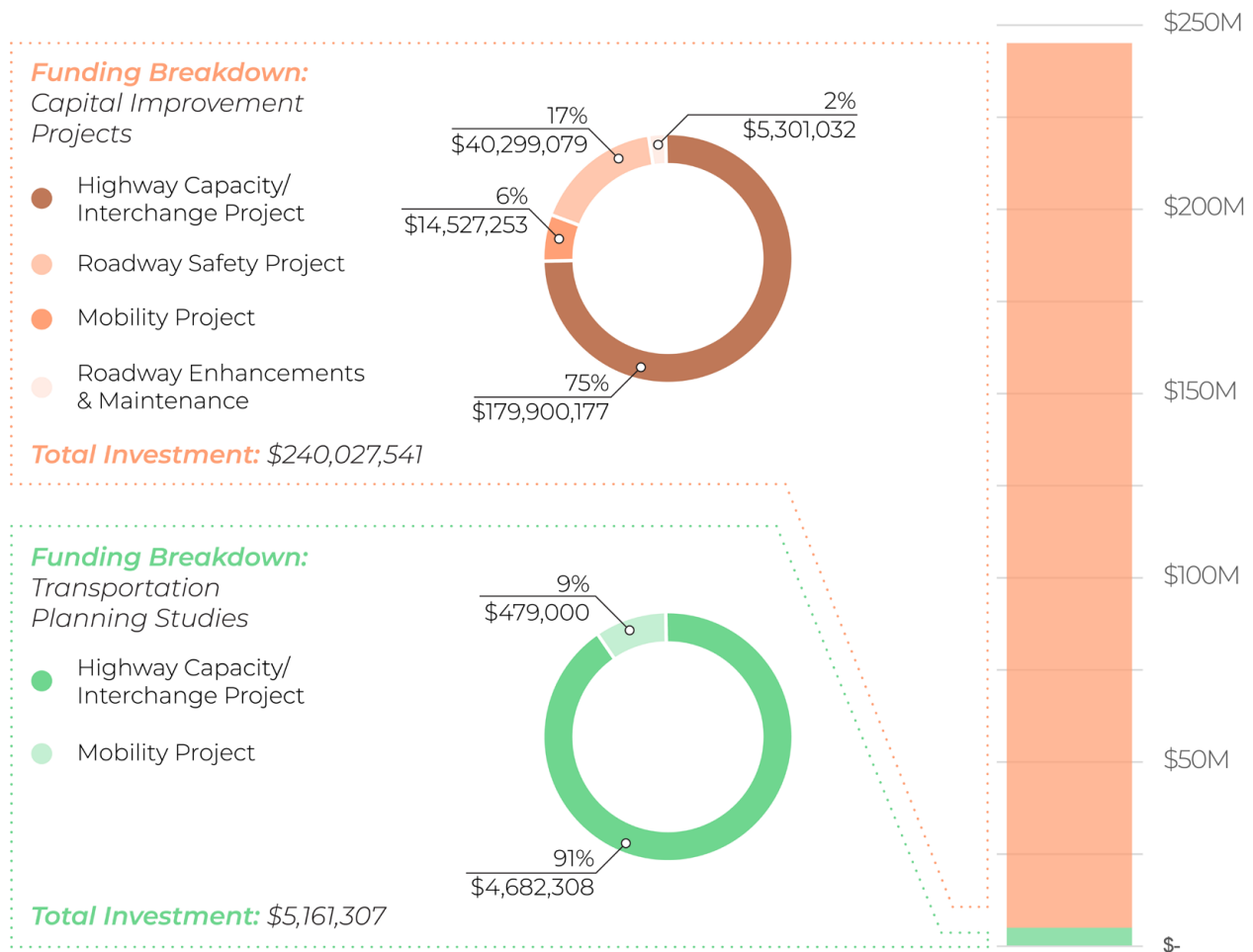


Figure 48. Project List Funding Breakdown By Project Type

Air Quality Conformity

This MTP's 21 capital improvement projects and transportation planning and design studies were identified and prioritized through public and stakeholder feedback, analysis of existing conditions, and recommendations from previous plans and studies, including the Belomar 2045 Long-Range Transportation Plan. Overall, this list places a strong emphasis on advancing the Belomar region toward achieving statewide performance targets for traffic performance, system maintenance, roadway safety, and alternative transportation options.

The project list includes three capacity-increasing projects or studies, that were included in the 2045 MTP's project list and previous analysis results concluded that they would have limited impacts on regional air quality.

Several projects and studies address roadway safety and traffic operations at major intersections and interstates. The reduction in idling vehicles and freight traffic through congestion mitigation sets the groundwork, if implemented, for the potential to outweigh any potential emissions changes due to capacity increases.

The project list also includes three mobility projects or studies designed to make communities more walkable, bikeable, and transit friendly. These projects will improve alternative transportation options for Belomar residents and install charging facilities for those using electric vehicles.

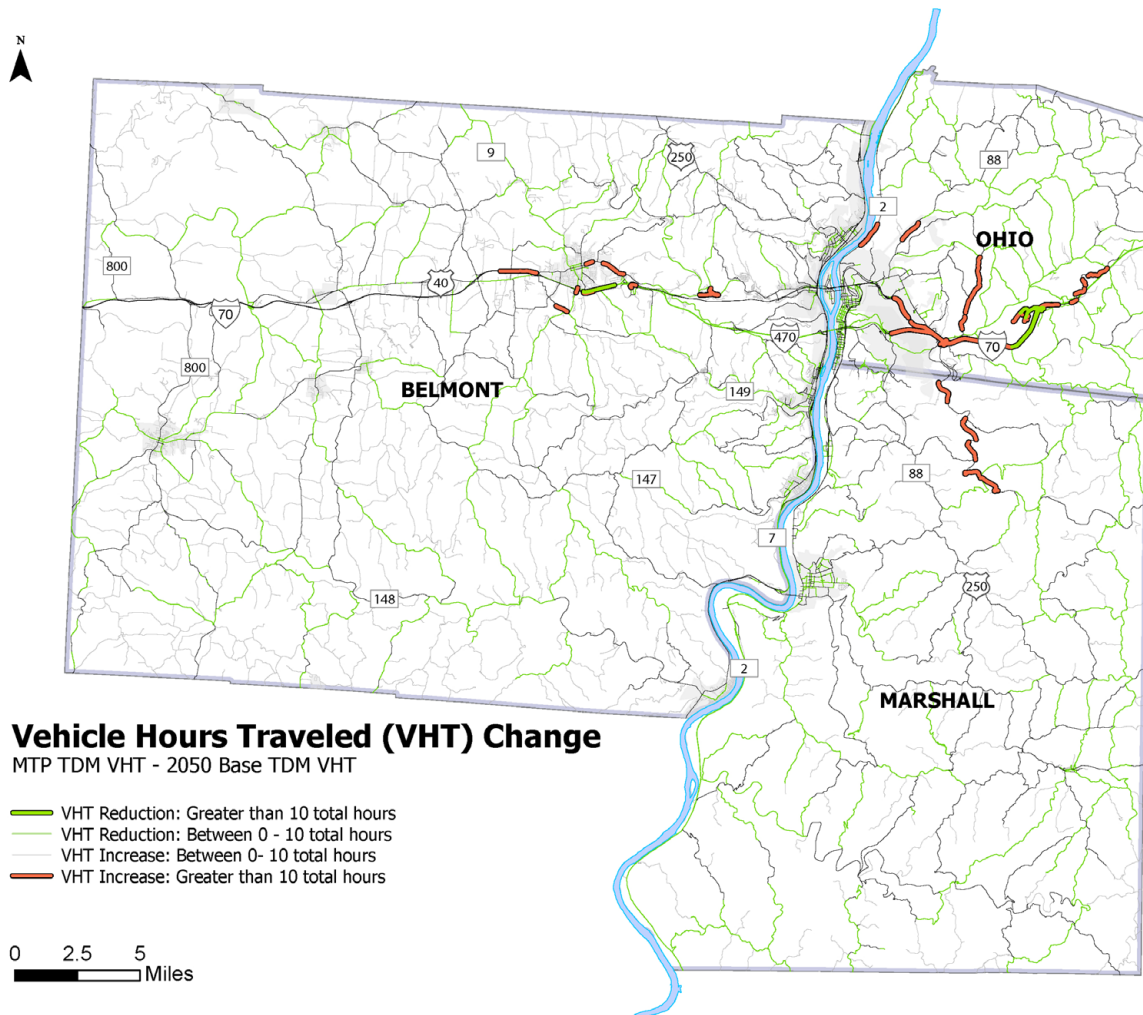


Figure 49. Change In Vehicle Hours Traveled Between 2050 Base TDM And 2050 TDM With MTP Projects (ODOT)

Public Transportation Projects & Funding

This MTP also includes the funding forecasts and programmed projects by our regional transit providers. Belomar worked closely with representatives from Eastern Ohio Regional Transit Authority (EORTA) and Ohio Valley Regional Transit Authority (OVRTA) to include each agency's financial forecast and project list in this MTP. Please read more to learn about the future projects from our transit service providers:

Public Transportation

Transit service is sustained, in part, by the federal funds provided through the Urbanized Area Formula Funding program. Section 5307 provides federal funds for transit capital and operating assistance. Other revenue sources include the fare box and local levies. EORTA also has access to a number of programs funded by the Ohio Department of Transportation. In addition, federal Section 5339 funds can be utilized for capital improvements.

The transit authorities continue to face many challenges beginning with federal funding levels that have remained relatively unchanged or had only minor increases along with operational costs that rise every year. Also, attracting more riders, expanding service, improving headways and reevaluating current routes remain a challenge.

The following assumptions were made for the transit funding forecast based on input from the transit agencies and the 2045 MTP:

Funding Source	OVRTA	EORTA
Federal Funding	Section 5307 funds will increase at an annual pace of 2.1%. The available funding share will further drop by 10% after each decennial census. The census related drops will be effective starting in the years 2034 and 2044.	Section 5307 funds will increase at an annual pace of 2.1%. The available funding share will further drop by 10% after each decennial census. The census related drops will be effective starting in the years 2034 and 2044.
State	N/A	State funding through ODOT will be held constant at \$85,000 per year.
Levies	The property tax levy revenue will increase by 3% annually. This assumption is based on the fact that the levy rate will not be bumped up during the life of this plan.	Property tax revenues generated by the EORTA vary only slightly from year to year without an increase in the levy rate. For the purpose of this plan, levy revenue has been held constant at \$685,000 per year.
Fares	The current fares collected will grow at an annual rate of 2.5%. This item includes bus fares, paratransit van fares and bus passes sold.	There have been marginal fluctuations in the fare box based revenue. However, for the purpose of this plan, the fare revenue will be held constant at \$97,500 per year.
Other	\$10,000 per year A constant dollar amount will be used for each year and this reflects revenues generated by local specials/charters.	\$2,500 per year A constant dollar amount will be used for each year and this reflects revenues generated by local specials/charters.

Table 16. Regional Transit Agency Funding Sources And Financial Forecast Assumptions (OVRTA, EORTA)

Transit Agency Funding

Based on the assumptions above, the annual operating revenue and expense projections through the year 2050 for OVRTA and EORTA are shown on **Table 18 and Table 19**. The long-term outlook shows significant deficits. However, these deficits are based on assumptions that present the most conservative view. This plan is revised every five years and the assumptions are revisited with every update cycle. Also, this plan can be amended at any time if a significant change occurs. To address short term deficits, both authorities have reasonable options.

OVRTA Funding Forecast

Year	Federal	State	Levies	Fares	Other	Total	Expenses	Difference
2026	\$749,251	-	\$2,307,085	\$10,000	\$397,842	\$3,466,204	\$3,985,366	-\$519,162
2027	\$764,985	-	\$2,376,298	\$10,000	\$407,788	\$3,561,098	\$4,144,781	-\$583,683
2028	\$781,050	-	\$2,447,587	\$10,000	\$417,983	\$3,658,648	\$4,310,572	-\$651,924
2029	\$797,452	-	\$2,521,015	\$10,000	\$428,433	\$3,758,929	\$4,482,995	-\$724,066
2030	\$814,198	-	\$2,596,645	\$10,000	\$439,144	\$3,862,017	\$4,662,315	-\$800,298
2031	\$831,296	-	\$2,674,544	\$10,000	\$450,123	\$3,967,994	\$4,848,808	-\$880,814
2032	\$848,753	-	\$2,754,780	\$10,000	\$461,376	\$4,076,941	\$5,042,760	-\$965,819
2033	\$866,577	-	\$2,837,423	\$10,000	\$472,910	\$4,188,943	\$5,244,470	-\$1,055,527
2034	\$779,919	-	\$2,922,546	\$10,000	\$484,733	\$4,199,232	\$5,454,249	-\$1,255,017
2035	\$796,297	-	\$3,010,222	\$10,000	\$496,851	\$4,315,405	\$5,672,419	-\$1,357,014
2036	\$830,092	-	\$3,100,529	\$10,000	\$509,272	\$4,451,929	\$5,899,316	-\$1,447,387
2037	\$847,524	-	\$3,193,545	\$10,000	\$522,004	\$4,575,110	\$6,135,289	-\$1,560,179
2038	\$865,322	-	\$3,289,351	\$10,000	\$535,054	\$4,701,765	\$6,380,701	-\$1,678,936
2039	\$883,494	-	\$3,388,032	\$10,000	\$548,430	\$4,831,995	\$6,635,929	-\$1,803,934
2040	\$902,047	-	\$3,489,673	\$10,000	\$562,141	\$4,965,901	\$6,901,366	-\$1,935,465
2041	\$920,990	-	\$3,594,363	\$10,000	\$576,195	\$5,103,589	\$7,177,421	-\$2,073,832
2042	\$940,331	-	\$3,702,194	\$10,000	\$590,560	\$5,245,127	\$7,464,518	-\$2,219,391
2043	\$960,078	-	\$3,813,260	\$10,000	\$605,324	\$5,390,705	\$7,763,099	-\$2,372,394
2044	\$980,240	-	\$3,927,658	\$10,000	\$620,457	\$5,540,399	\$8,073,623	-\$2,533,224
2045	\$864,070	-	\$4,045,488	\$10,000	\$635,968	\$5,653,486	\$8,396,568	-\$2,743,082
2046	\$882,216	-	\$4,166,853	\$10,000	\$651,867	\$5,710,936	\$8,732,431	-\$3,021,495
2047	\$900,742	-	\$4,291,858	\$10,000	\$668,164	\$5,870,764	\$9,081,728	-\$3,210,964
2048	\$919,658	-	\$4,420,614	\$10,000	\$684,868	\$6,035,140	\$9,444,997	-\$3,409,857
2049	\$938,971	-	\$4,553,232	\$10,000	\$701,990	\$6,204,193	\$9,822,797	-\$3,618,604
2050	\$958,689	-	\$4,689,829	\$10,000	\$719,539	\$6,378,058	\$10,215,709	-\$3,837,651

Table 17. OVRTA Funding Forecast and Annual Expenses (OVRTA)

Transit Funding Options

The reserves alone are greater than the projected deficit. The cumulative deficit through FY2030 for OVRTA is \$3,279,133 and \$3,480,948 for EORTA. Although no immediate urgency exists, other options to address the deficit include bumping up the levy rate to the maximum allowed. Neither authority has maxed out the allowable levy rate. Both agencies are also currently undergoing a Comprehensive Operations Assessment (COA) to determine how routes can be optimized to reduce operational expenses while maintaining/expanding transit accessibility across the region.

EORTA Funding Forecast

Year	Federal	State	Levies	Fares	Other	Total	Expenses	Difference
2026	\$444,829	\$85,000	\$685,000	\$2,500	\$97,000	\$1,316,355	\$1,875,466	-\$559,111
2027	\$454,170	\$85,000	\$685,000	\$2,500	\$97,000	\$1,325,697	\$1,950,485	-\$624,788
2028	\$463,708	\$85,000	\$685,000	\$2,500	\$97,000	\$1,335,236	\$2,028,504	-\$693,268
2029	\$473,446	\$85,000	\$685,000	\$2,500	\$97,000	\$1,344,975	\$2,109,644	-\$764,669
2030	\$483,388	\$85,000	\$685,000	\$2,500	\$97,000	\$1,354,918	\$2,194,030	-\$839,112
2031	\$493,539	\$85,000	\$685,000	\$2,500	\$97,000	\$1,365,070	\$2,281,791	-\$916,721
2032	\$503,903	\$85,000	\$685,000	\$2,500	\$97,000	\$1,375,435	\$2,373,061	-\$997,626
2033	\$514,485	\$85,000	\$685,000	\$2,500	\$97,000	\$1,386,018	\$2,467,983	-\$1,081,965
2034	\$463,037	\$85,000	\$685,000	\$2,500	\$97,000	\$1,334,571	\$2,566,702	-\$1,232,131
2035	\$472,761	\$85,000	\$685,000	\$2,500	\$97,000	\$1,344,296	\$2,669,370	-\$1,325,074
2036	\$482,689	\$85,000	\$685,000	\$2,500	\$97,000	\$1,354,225	\$2,776,145	-\$1,421,920
2037	\$492,825	\$85,000	\$685,000	\$2,500	\$97,000	\$1,364,362	\$2,887,191	-\$1,522,829
2038	\$503,174	\$85,000	\$685,000	\$2,500	\$97,000	\$1,374,712	\$3,002,679	-\$1,627,967
2039	\$513,741	\$85,000	\$685,000	\$2,500	\$97,000	\$1,385,280	\$3,122,786	-\$1,737,506
2040	\$524,530	\$85,000	\$685,000	\$2,500	\$97,000	\$1,396,070	\$3,247,697	-\$1,851,627
2041	\$535,545	\$85,000	\$685,000	\$2,500	\$97,000	\$1,407,086	\$3,377,605	-\$1,970,519
2042	\$546,790	\$85,000	\$685,000	\$2,500	\$97,000	\$1,418,332	\$3,512,709	-\$2,094,377
2043	\$558,273	\$85,000	\$685,000	\$2,500	\$97,000	\$1,429,816	\$3,653,217	-\$2,223,401
2044	\$502,446	\$85,000	\$685,000	\$2,500	\$97,000	\$1,441,541	\$3,799,346	-\$2,357,805
2045	\$581,967	\$85,000	\$685,000	\$2,500	\$97,000	\$1,453,512	\$3,951,320	-\$2,497,808
2046	\$594,188	\$85,000	\$685,000	\$2,500	\$97,000	\$1,463,688	\$4,109,373	-\$2,645,684
2047	\$606,666	\$85,000	\$685,000	\$2,500	\$97,000	\$1,476,166	\$4,273,748	-\$2,797,581
2048	\$619,406	\$85,000	\$685,000	\$2,500	\$97,000	\$1,488,906	\$4,444,698	-\$2,955,791
2049	\$632,414	\$85,000	\$685,000	\$2,500	\$97,000	\$1,501,914	\$4,622,486	-\$3,120,572
2050	\$645,694	\$85,000	\$685,000	\$2,500	\$97,000	\$1,515,194	\$4,807,385	-\$3,292,190

Table 18. EORTA Funding Forecast and Annual Expenses (EORTA)

Transit Projects

Assets of the transit authorities include fixed assets and the vehicle fleet. On the following page, **Table 21** shows the cost of all anticipated capital needs with the associated year of replacement. An annual inflation rate of 2% is used. The last known price of each item and the associated year is used for the cost calculation.

Transit Agency Assets

OVRTA assets consists of 12 buses, two vans, one service truck, one supervisor’s vehicle, and 16 bus shelters. All thirteen busses are medium size, medium duty. EORTA’s assets consists of six buses, two vans, one service truck, one supervisor’s vehicle, and 14 bus shelters. Only 1 bus is medium size, heavy duty.

Project Funding for Asset Replacement

OVRTA will not have sufficient funds to meet its needs using local funds alone, without an increase in levy rates. Previously, WVDPT has purchased buses and shelters using 5339 funds and also provided the 20% local match. OVRTA has been acquiring buses under an agreement, where WVDPT owns buses and OVRTA operates them as a lessee. It is reasonable to expect that OVRTA will meet capital replacement needs with the state’s assistance.

Essentially all existing major capital items for both authorities have been acquired using what was known as Section 5309 funds. These funds have been replaced by Section 5339 funds. Since funds are competitively distributed statewide, some variation in the actual year of acquisition should be expected. For example, OVRTA may not be able to acquire 5 medium size, medium duty buses in the same year (2022). As long as these funds are available, OVRTA will be able to meet the capital needs. As these funds have been available historically, for the purpose of fiscal constraint, it is reasonable to assume that federal funds will be available in the future.

Fleet Service Life Assumptions	
Medium size, heavy duty bus	7 yrs
Medium size, medium duty bus	7 yrs
Medium size, light duty bus	5 yrs
Paratransit van	10 yrs
Service Truck	15 yrs
Supervisor vehicle	12 yrs
Fixed-Asset Life Assumptions	
Bus Washer	12 yrs
Bus shelter	15 yrs

Table 19. OVRTA and EORTA Asset Life Assumptions

For EORTA, since local funds may be needed to offset operating deficits, the transit authority will likely replace these with Section 5339 funds. Historically, buses have been purchased using federal funds that have been flexed from highway funding programs and from the Ohio Transit Preservation Partnership Program (OTPPP). These funds are provided by the state based on statewide needs. A 20% local match is generally provided by EORTA. Awarded Section 5339 and OTPPP funds may also be used for the purchase of some vehicle(s), bus shelters and a bus washer.

To cover the required 20% local match, EORTA will need additional funds. The options include reducing local match to 10% by soliciting additional state funds and/or MPO suballocated funds. The assumptions used also are on the conservative side. It is likely that an assumed 10% drop in revenue after each decennial census may be less than that; more levy revenue may be generated after the next cycle of property reassessment; and there may be additional funds available in the next Surface Transportation Act. Based on the available reserves and options for additional funds, it is reasonable to assume that EORTA will meet capital replacement needs.

		Year	OVRTA Fleet Replacement	Cost
		OVRTA Project List	2027	6 medium, medium duty buses
2028	1 van		\$54,082	
2029	5 medium, medium duty buses		\$752,717	
2030	1 truck		\$45,431	
2032	2 medium, medium duty buses, 2 vans		\$436,596	
2034	6 medium, medium duty buses, 1 suv		\$1,034,321	
2036	5 medium, medium duty buses		\$864,635	
2038	1 van		\$61,144	
2039	2 medium, medium duty buses		\$367,023	
2041	6 medium, medium duty buses		\$1,145,553	
2042	5 medium, medium duty buses, 2 vans		\$1,116,440	
2045	1 truck		\$61,144	
2045	1 truck		\$61,144	
<i>Total Fleet Replacement:</i>			\$6,868,416	
Year	OVRTA Fixed-Assets Replacement		Cost	
2037	16 bus shelters		\$157,600	
<i>Total Fixed Asset Replacement:</i>			\$157,600	

		Year	EORTA Fleet Replacement	Cost
		EORTA Project List	2029	1 medium, medium duty bus
2031	2 medium, medium duty buses, 1 medium heavy duty bus		\$777,484	
2032	1 medium, medium duty bus, 1 van		\$213,708	
2034	1 van		\$59,388	
2036	1 medium, medium duty bus		\$169,537	
2038	2 medium, medium duty buses, 1 medium, heavy duty bus, 1 suv		\$933,180	
2039	1 medium, medium duty bus, 1 truck		\$234,519	
2042	1 van		\$69,583	
2043	1 medium, medium duty bus		\$194,745	
2044	1 van		\$72,393	
2045	2 medium, medium duty buses, 1 medium heavy duty bus		\$1,025,862	
<i>Total Fleet Replacement:</i>			\$3,897,991	
Year	EORTA Fixed-Assets Replacement		Cost	
2034	2 bus washer (12 year service life)		\$123,892	
2022	14 bus shelters (15 year service life)		\$102,494	
2037	15 bus shelters (15 year service life)		\$137,900	
<i>Total Fleet Replacement:</i>			\$364,286	

Table 20. OVRTA And EORTA Fleet Replacement And Fixed-Asset Projects (OVRTA, EORTA)

Funding Options & Implementation

Belomar aims to leverage a wide range of funding sources to implement this MTP's projects and support local communities in other projects that will be identified in the coming years. This section describes several state and federal transportation grant programs that are potential opportunities to secure additional funding. This list is dynamic and requirements, names, and annual available funds may change in the future, so Belomar must communicate with statewide partners to pursue grant opportunities as they arise.

State Transportation Funding Sources

The State Road Fund, used by WVDOH to cover nearly all its activities – including capital projects as well as all maintenance, project and program administration – includes the federal funding resources described above. It should be noted that not all roads are eligible for federal-aid funds; in fact, only 27% of the state's road-miles qualify, which are the roads functionally classified as rural major collectors and higher. Chapter 2 includes a discussion of roadway functional classifications.

The state revenue portion is generated from these four categories:

Motor Fuel Taxes

Produce roughly half of the total revenue generated

Registration Fees

Include vehicle registration as well as driver's license, permits and litter control fees

Privilege Taxes

Collected when a vehicle's certificate of title is issued

Miscellaneous Revenues

Includes interest on state investments, map sales, permits, etc. Recently the State Road Fund also began to receive a 'rebate' from the State General Fund for the cost of sales tax paid by WVDOH contractors when they purchase construction materials for state projects.

Federal Program	Description
National Highway Performance Program (NHPP)	Provides funding for construction, reconstruction, resurfacing, restoration, rehabilitation, preservation, or operational improvement of segments of the National Highway System (NHS). This includes Interstate highways and bridges on the NHS. It also includes all the state's Appalachian Development Highway System routes. Projects must support progress toward national goals for the condition and performance of the system.
Surface Transportation Block Grant Program (STBG)	Provides funding for roads functionally classified as rural major collector and above. Funds may be utilized on projects in Rural Areas, Urbanized Areas, Small Urban Areas, Safety and Rail-Highway Crossings. Funds may be used for bicycle/pedestrian projects or "flexed" for transit use. Funds may also be used for bridge replacement and rehabilitation on non-federal aid routes.

Federal Program	Description
Highway Safety Improvement Program (HSIP)	Provides funds to make improvements to high hazard locations on any public road, including highway-rail grade crossings, and any publicly owned bicycle/pedestrian facility. Projects are selected based on crash rate and crash frequency.
Transportation Alternatives Program (TA)	<p>Combines former funding programs for Enhancements, Safe Routes to Schools, Scenic Byways, and Recreational Trails.</p> <p>Eligible activities include bicycle and pedestrian facilities, sidewalks near elementary and middle schools, main street and boulevard projects, and environmental mitigation to address impacts of the transportation system.</p>
Congestion Mitigation/Air Quality Improvement (CMAQ)	Provides funding for transportation projects that contribute to meeting the national ambient air quality standards by reducing air pollution related to motor vehicles, locomotives, barges and ships and other forms of transportation.
Federal Lands Access Program (FLAP)	Provides funding for projects on transportation facilities that are located on or adjacent to federal lands, or that provide access to federal lands.
Federal Transit Administration (FTA) Section 5307	<p>Section 5307 is a formula grant program for urbanized areas providing capital, operating, and planning assistance for mass transportation.</p> <p>This program now includes funds previously available through the Job Access/Reverse Commute program (FTA-5316), which provides new or expanded transportation service to fill gaps that exist for welfare recipients and other low-income individuals to and from jobs and other employment-related services.</p> <p>Reverse Commute projects facilitate the provision of new or expanded public mass transportation services for the general public from urban, suburban, and rural areas to suburban work sites.</p>
FTA-5310	<p>Section 5310 is a formula grant program for the special needs of elderly individuals with disabilities. Funds (which are subject to annual appropriations) are appropriated annually based on an administrative formula that considers the number of elderly individuals with disabilities in each State.</p> <p>Funds available through the former New Freedoms program (FTA- 5317), which encourages services and facility improvements that go beyond those required by the Americans with Disabilities Act, are now combined with this program.</p>
FTA-5339	Section 5339 is a formula grant program that provides capital funding to replace, rehabilitate and purchase buses and related equipment, and to construct bus-related facilities.
FTA-5340	Section 5340 is a formula grant providing capital, operating, and planning assistance.

Table 21. Available Federal Transportation Funding Sources

Conclusion

The Belomar 2050 MTP build on the planning progress of our communities, and prepares the region to pursue opportunities to plan, design, fund, and build for the future. The analysis, engagement, and projects throughout this plan will serve as a foundation for years to come.

A special thanks to all who participated in the planning process as advocates throughout this plan's development. The relationships strengthen during the plan's development will continue to be vital as we build toward the future.



Residents enjoy an afternoon walk along the Wheeling Heritage Trail

APPENDIX

Appendices to be added after the conclusion
of the public comment period