

# U.S. 19 CORRIDOR STUDY

JULY 2025

**DRAFT**



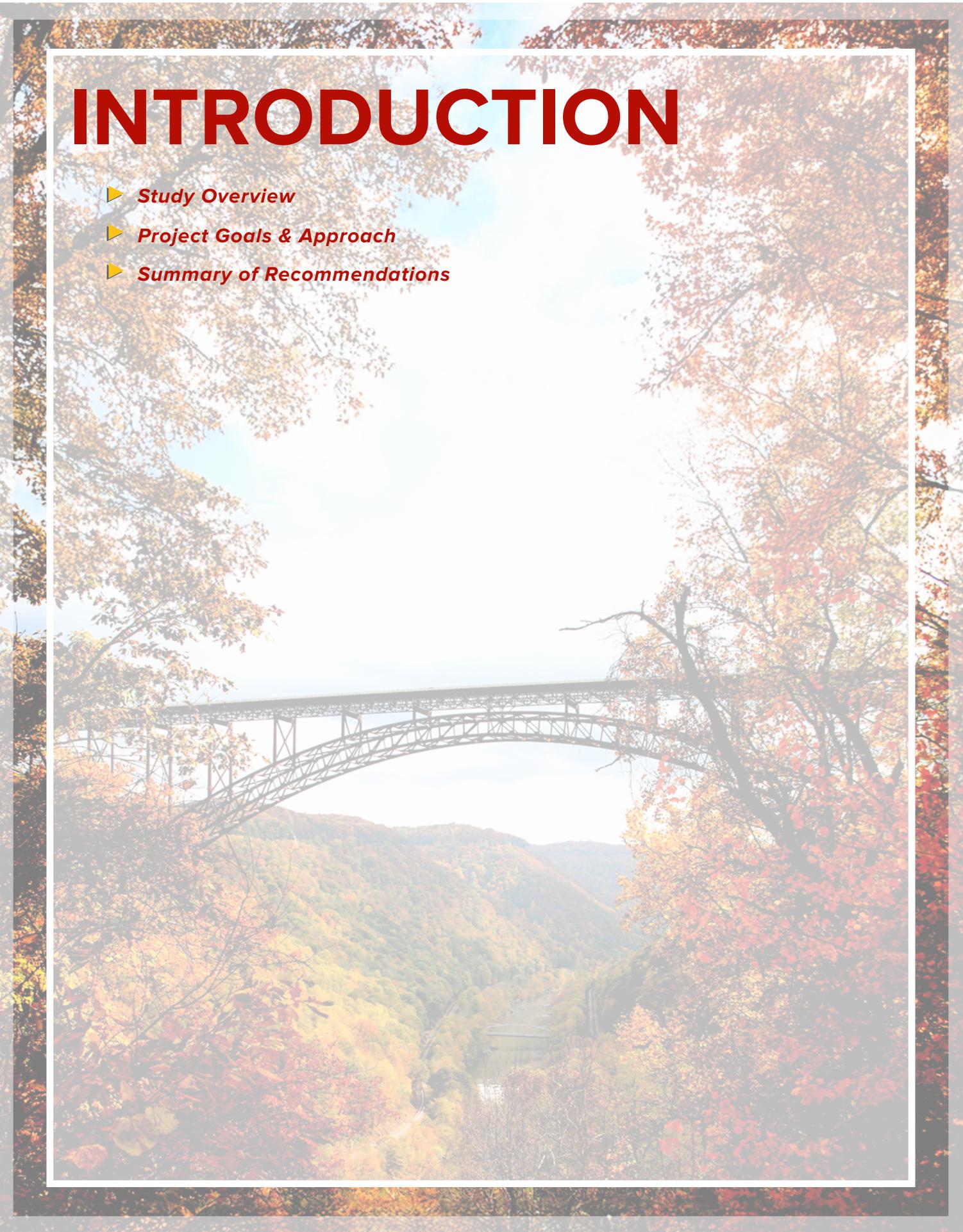
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# INTRODUCTION

- ▶ *Study Overview*
- ▶ *Project Goals & Approach*
- ▶ *Summary of Recommendations*



## Study Overview

The Fayette-Raleigh Metropolitan Planning Organization (FRMPO) is a Metropolitan Planning Organization (MPO) that oversees Fayette and Raleigh Counties (Figure 1). As an MPO, it is our responsibility to provide a coordinated, cooperative, and comprehensive approach to transportation planning. We collaborate with our communities and local agencies to identify and plan transportation projects that stimulate the local economy, enhance roadway safety and efficiency, and strengthen community connections. This study is a significant step towards all of these goals.

The U.S. 19 Corridor Study focuses on a 20 mile stretch of U.S. 19 between Ames Heights and Bradley, WV. This corridor is the primary north-south connection between our region's largest communities and is also the main access point for the New River Gorge National Park and Preserve. Within this section of U.S. 19 are 28 at-grade intersections that account for most of the road's vehicle crashes and traffic related concerns. Throughout this study, we will take a deep dive into safety and traffic issues at each of the priority intersections and present a list of recommendations to improve U.S. 19 and the communities that use it every day.

### Study Area

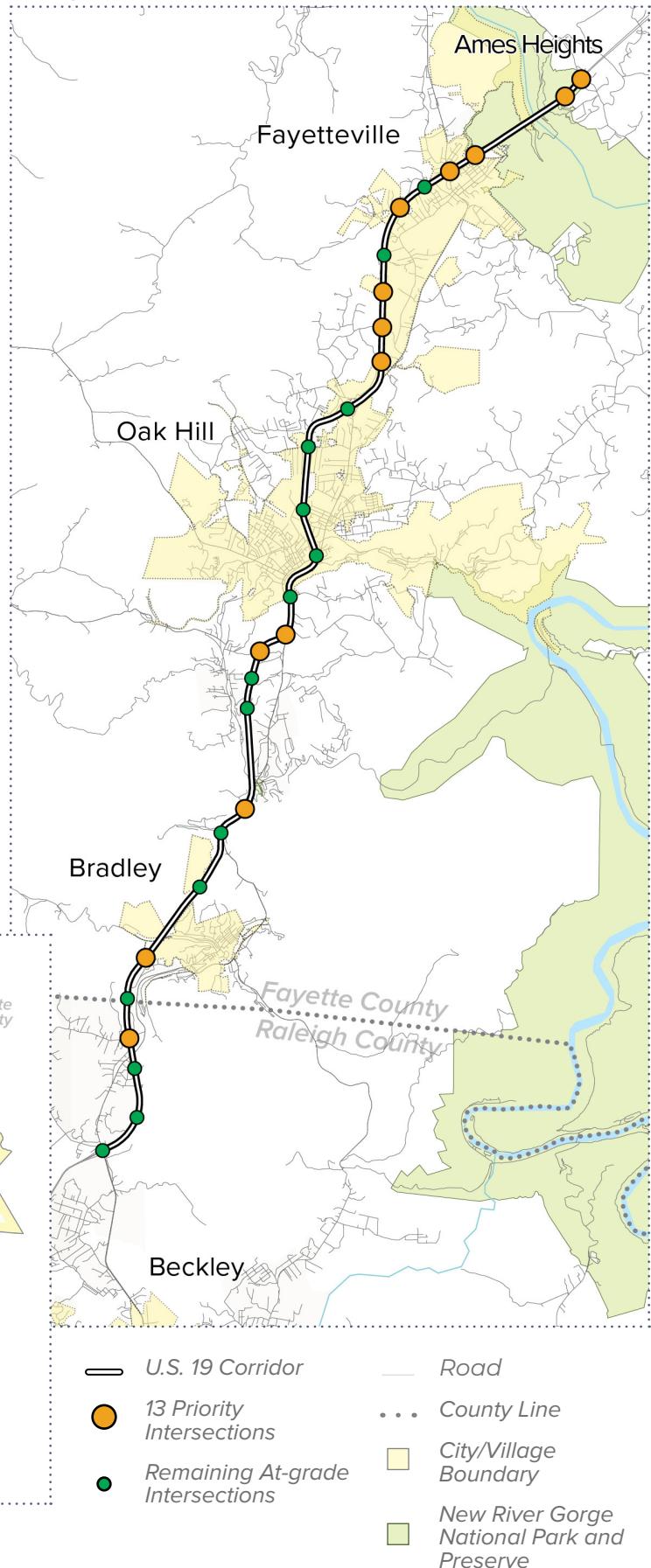


Figure 1. MPO boundary and project study area

## Project Goals & Approach

The U.S. 19 corridor is the backbone of our region. But anyone who drives it knows there is room for improvement. Recent commercial development along U.S. 19 and the recognition of New River Gorge Park & Preserve as the nation's newest National Park has led to more traffic than ever before. These changes have contributed to the stop-and-go traffic, risky turns, and abrupt stops we frequently see on U.S. 19. This study aims to improve safety and operations by identifying roadway improvements that directly address these issues.

Our approach utilized a multi-phased transportation engineering and planning process, which included traffic and safety existing conditions analysis, continual stakeholder feedback, and preliminary engineering design (Figure 3). Four core goals guided our work (Figure 2), resulting in a list of feasible projects, vetted by both engineers and local stakeholders.

Now that this study is complete, our region has a groundwork of understanding to begin making incremental progress that improves safety along U.S. 19 and pursue funding for visionary projects that require further design and outreach.

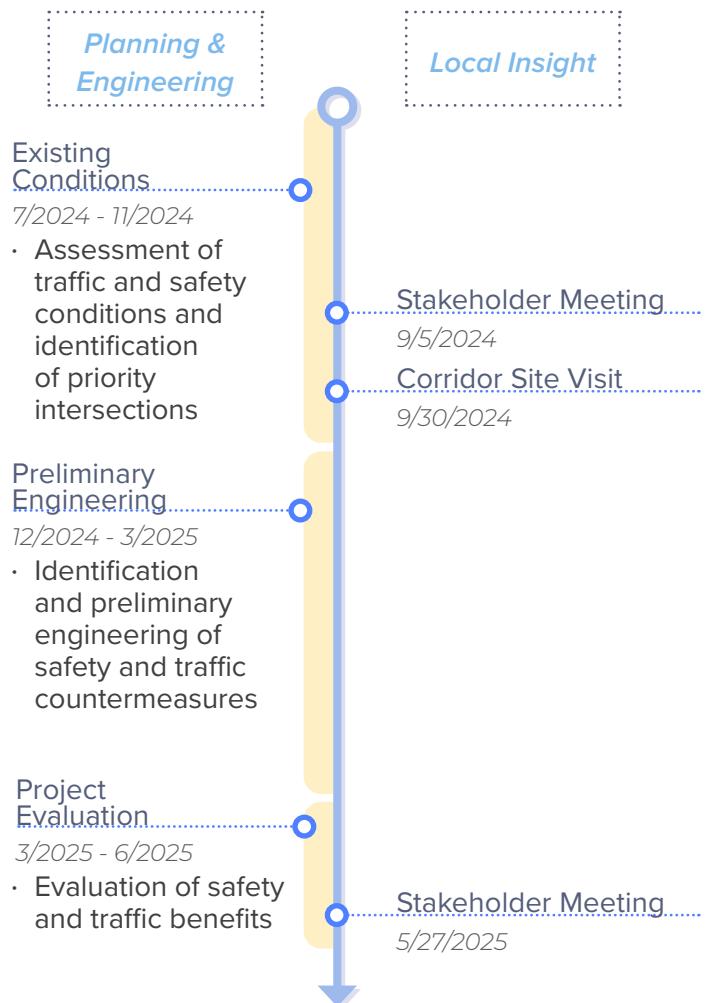


Figure 3. Project approach and timeline

## U.S. 19 Corridor Study's 4 Core Goals:



### Prioritize Safety

Identify safety countermeasures across the corridor, prioritizing intersections with a history of frequent and/or severe crashes



### Build Local Support

Engage with local leaders to discuss traffic and safety issues along U.S. 19 and leverage their insight to develop recommendations with local support



### Improve Traffic Flow

Recommend quick-win improvements and present long-term preliminary concepts that improve traffic flow by addressing network pinch-points



### Be Cost Effective

Focus on quick-win projects that can offer immediate benefit at an affordable cost for cities and villages along the U.S. 19 corridor

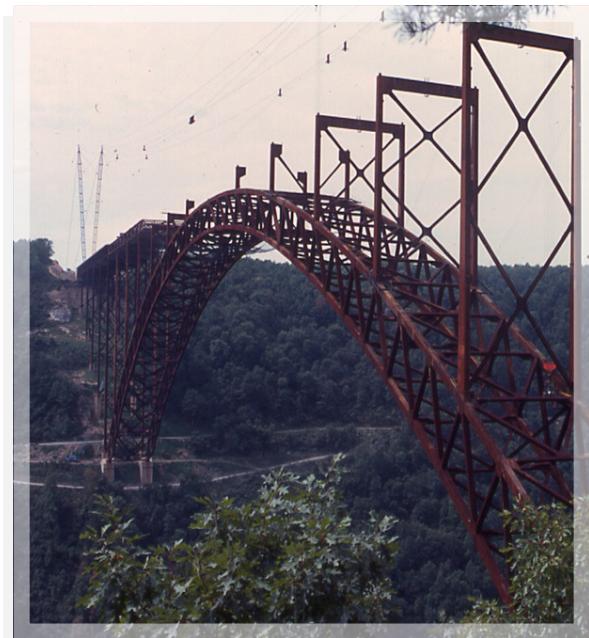
Figure 2. U.S. 19 Corridor Study core project goals

## Summary of Recommendations

This study's multi-phased approach produced a list of prioritized transportation projects to address traffic and safety concerns along U.S. 19. In total, 51 improvements were identified at thirteen priority intersections. These improvements reflect our four core goals to prioritize safety, improve local traffic flow, build local support, and be cost effective.

In total, 28 recommendations are 'quick-win' projects which can proceed as soon as time and funding allow. Communities are encouraged to coordinate early and often to find opportunities to complete multiple improvements concurrently to maximize funding, streamline implementation, and reduce the impact on traffic during construction.

The remaining recommendations are multi-year and visionary projects. These improvements require further study, engineering design, and/or environmental review prior to implementation. FRMPO must work closely with counties and local communities to secure funding and lead an open transportation planning process to deliver on these large efforts. To read more about the project's improvement options and recommendations, please read Section 3 and 4 of this report.



The construction of the New River Gorge Bridge is an example of what can be achieved in our region (Source: National Park Service)

### Section 1

Quick-win Projects: **3**

Multi-year Projects: **6**

Visionary Projects: **2**

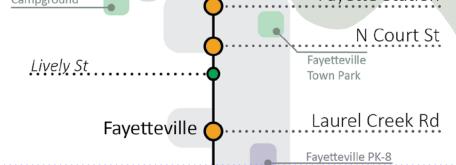


### Section 2

Quick-win Projects: **8**

Multi-year Projects: **4**

Visionary Projects: **0**

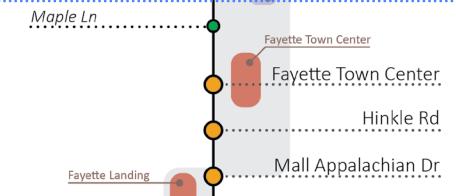


### Section 3

Quick-win Projects: **7**

Multi-year Projects: **1**

Visionary Projects: **2**

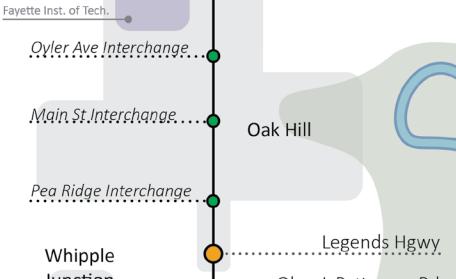


### Section 4

Quick-win Projects: **3**

Multi-year Projects: **4**

Visionary Projects: **0**

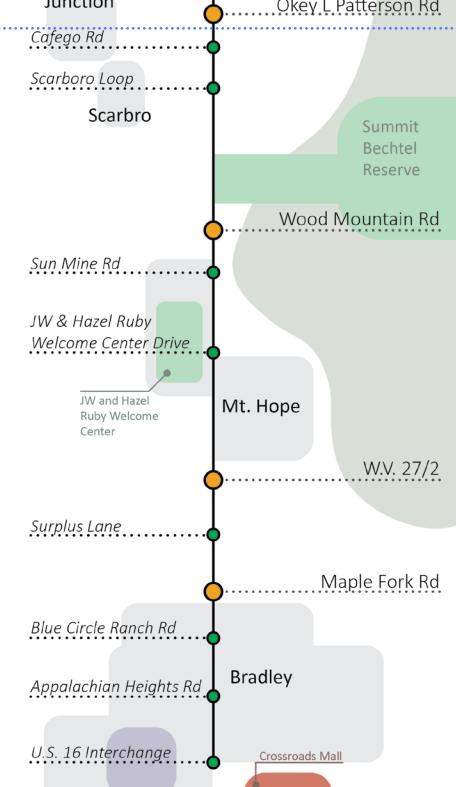


### Section 5

Quick-win Projects: **7**

Multi-year Projects: **8**

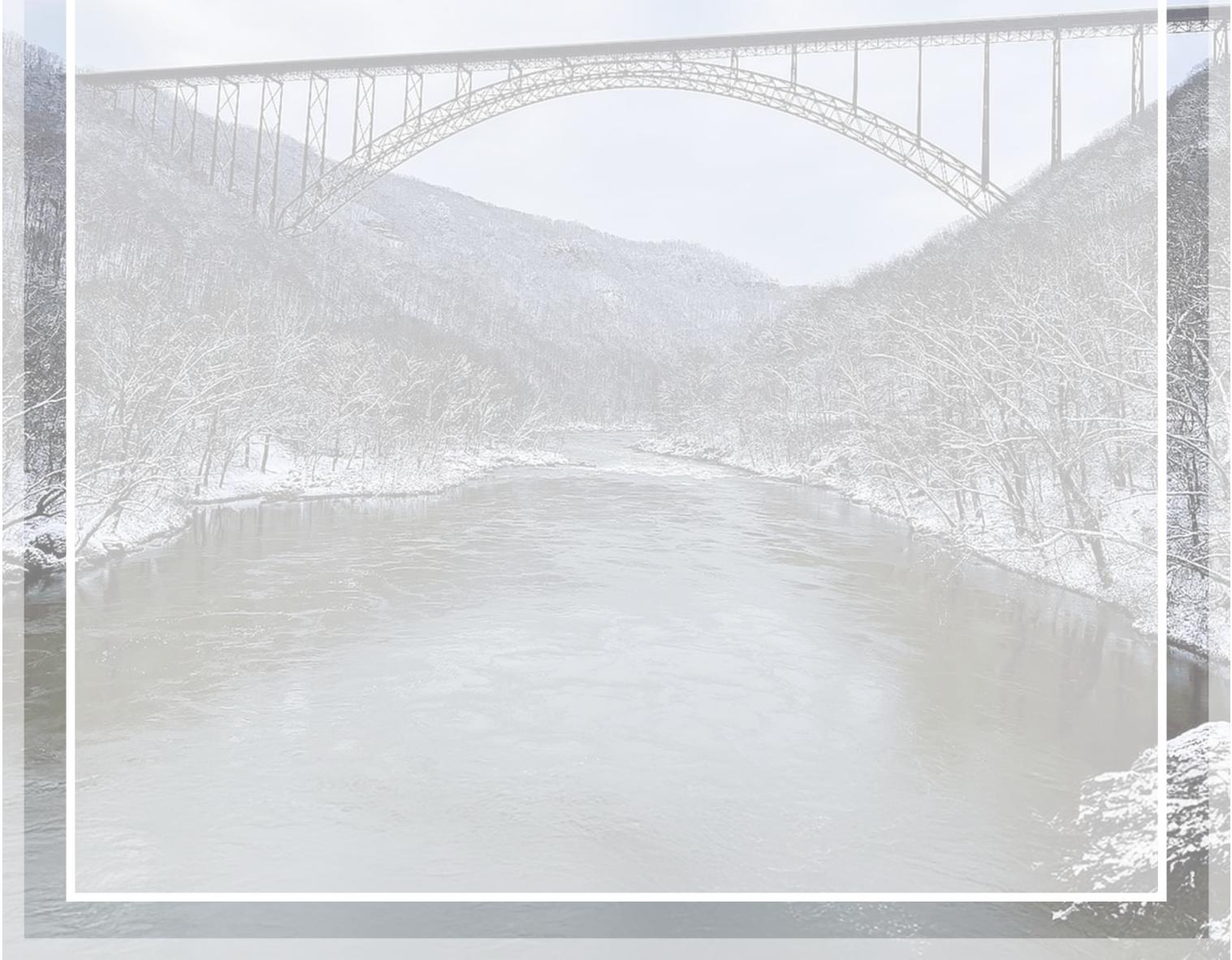
Visionary Projects: **0**



- Intersection/Interchange
- Priority Intersection
- City/Village
- Commercial District
- School/University
- Recreational Asset
- New River Gorge

# EXISTING CONDITIONS

- ▶ *Analysis Approach*
- ▶ *Corridor Safety Overview*
- ▶ *Priority Intersections*
- ▶ *Summary of Results*



## Analysis Approach

Understanding existing traffic and roadway safety conditions is critical for proposing practical and effective engineering solutions. This section summarizes the results of this assessment which were direct inputs for identifying improvement options.

The existing conditions analysis utilized local insight from community leaders, traffic performance analysis using current traffic count data, and a review of recent crash history. This multi-pronged approach provided a more complete understanding of the most pressing concerns that need to be addressed. Below is a summary of the approach to each piece of this assessment:

### Local Insight

Local insight helps confirm and explain issues revealed in the results of traffic performance and roadway safety analysis. A stakeholder group was created consisting of the members shown below in Table 1. Two stakeholder meetings were held to gather the group's experience at each priority intersection and allow them to provide feedback on early drafts of the proposed corridor concepts. In addition to these meetings, the project team conducted a field review of the U.S. 19 corridor where they observed travel behavior, intersection conditions, and collected site photos.

#### State Leadership

Brian Carr	
WVDOT	
Elwood Penn	
WVDOT	
James Moore	
WVDOT	
Kevin Sullivan	
WVDOT	
Michael Dodd	
WVDOT	
Raymond Scites	
WVDOT	
Brett McMillion	
WVDNR	
Brian Bolyard	
WVDNR	

#### Local Leadership

Ami Dangerfield	
Fayette Co. Commissioner	
Sharon Cruikshank	
Fayette Co. Planning Comm.	
Brittany Chaber	
Fayette Co. Trail Coalition	
Kevin Walker	
Fayette Co. Emergency Mgmt.	
John Vernon	
Fayetteville Fire Dept	
Cindy Wingrove	
City of Mt. Hope	
Steven Moss	
Oak Hill Planning Comm.	
Andy Austin	
New River Transit Authority	

### Traffic Performance

Intersection Level of Service (LOS) highlights locations which experience frequent traffic delays (defined below). This information is the basis for effective intersection design that reduces delays. This analysis used traffic counts collected in March 2024. This recent data gives us the clearest image of traffic conditions along the U.S. 19 corridor.



**A** : Free-flow conditions

**B** : Reasonable free-flow

**C** : Expect some stops

**D** : Expect frequent stops

**E** : At capacity, long stops

**F** : Gridlock, many delays

### Roadway Safety

Certain locations are more likely to see crashes than others due to many factors including poor site distance and visibility, high travel speeds, or stop-and-go traffic.



Historic crash reports offer insight into crash location, frequency, type, and severity. This information informs which locations are the highest safety priorities and what countermeasures are appropriate at each location. Crash analysis was the primary way that priority intersections were selected for future traffic analysis and proposed improvement concepts.

#### Recreational Services

Becky Sullivan	
New River Gorge CVB	
Eric LaPrice	
New River Gorge NP & Pres.	
Charles Sellars	
New River Gorge NP & Pres.	
Jina Belcher	
New River Gorge Dev. Auth.	
Andy David	
New River Gorge Dev. Auth.	
Geoff Heeter	
Opossum Creek Retreat	
Matthew Reineck	
Summit Bechtel Reserve	

#### Local Advocacy

Susan Given	
Disability Rights of W.V.	
Taniua Hardy	
Disability Rights of W.V.	
Trena Dacel	
United Way of Southern W.V.	
Eric Pories	
Focus Intent	
Dave Arnold	
Local Advocate	
Gene Kistler	
Local Advocate	

Table 1. List of project stakeholders

## Corridor Safety Overview

This study analyzed all crashes reported along the U.S. 19 corridor between January 1, 2017 and December 31, 2021. These crash reports log the location, frequency, type, and severity of each individual crash, providing details that offer a deeper understanding of the factors that led to each crash. This is critical for proposing engineering improvements that directly address the safety concerns we see today. Fayette County 911 emergency response data for motor vehicle incidents was collected to explore crash frequency trends between 2022 and 2024.

### Annual Crash Trends\*

Analysis of individual years shows how roadway safety is changing over time. Several corridor-wide crash trends emerged from this analysis (Figure 4):

- 794 total crashes between 2017-2021
- 5-year annual average of 159 crashes/year
- 5-year annual decline in total crashes
- 34% of crashes result in injury

\* These trends may be impacted by traffic shifts during the COVID-19 pandemic, and should be continually monitored as additional crash reports become publicly available

### Location and Crash Type

To investigate how crash types and frequency vary across the corridor, location-based software was utilized to group the crash data into two broad categories: intersections and non-intersections:

#### Roadway Segment Safety Summary

- 301 reported non-intersection crashes
- Most common crash types: animal related crashes, rear-end crashes, and sideswipe crashes
- These crashes are associated with poor sight distance, absence of night time lighting, stop-and-go traffic, and high travel speeds

#### Intersection Safety Summary\*\*

- 493 reported intersection crashes:
  - 66% of intersection related crashes occurred at traffic signals
  - 34% of intersection related crashes occurred at stop controlled intersections
- Most common crash types include: rear-end crashes, angle crashes, and sideswipe crashes
- These crash types occur more frequently in locations with stop-and-go traffic, unprotected turns, merging from a stop, poor sight distance, and high travel speeds

\*\* Intersection related crashes are defined as a crash within 250 ft of the center of an intersection

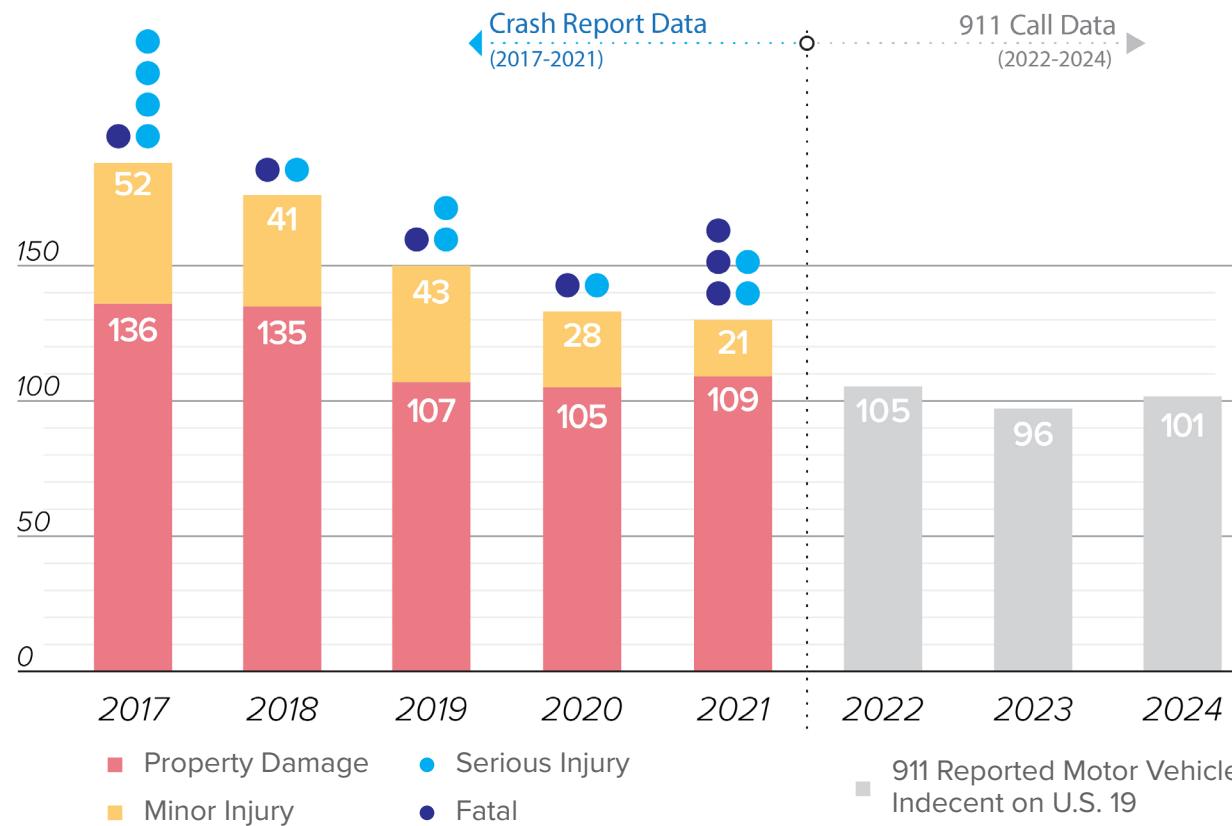


Figure 4. U.S. 19 annual crash trends and crash severity (Source: WVDOT and county, state, and local police departments)

## Priority Intersections

Improving safety is this study's top priority. Recommendations focus on reducing crashes and crash severity at U.S. 19's most dangerous locations. With that in mind, crash history is the primary factor for identifying the thirteen priority intersections to undergo more in-depth traffic performance and roadway safety analysis. Proposed engineering improvement concepts are focused at these thirteen locations. Priority intersections were grouped together into five sections for analysis and recommendations based on local land use character and roadway characteristics. The following steps were used to determine the list of priority intersections (Table 2):

1. Use location-based analysis to attribute each crash to a particular intersection or traffic roadway segment
2. Summarize each intersection's crash history by crash type and severity
3. Compare the total crashes and crash severity of each intersection within the study area
4. Select priority intersections that met one or more of the following criteria:
  - 15 or more crashes during the study period
  - A crash resulting in a fatal injury
  - Requested for inclusion by stakeholders

	Intersection	Intersection Type	Crashes
Section 1	1 Lansing-Edmond Road	Stop Controlled	19
	2 Fayette Mine Road	Stop Controlled	7
Section 2	3 Fayette Station Road	Stop Controlled	15
	4 N Court Street	Traffic Signal	62
Section 3	5 Laurel Creek Road	Traffic Signal	23
	6 Fayette Town Center	Traffic Signal with Turn Phase	100
Section 4	7 Hinkle Road	Stop Controlled	22
	8 Mall Appalachian Drive	Traffic Signal	49
Section 5	9 Legends Highway	Stop Controlled	6
	10 Okey Patterson Road	Stop Controlled	25
Section 5	11 Wood Mountain Drive	Traffic Signal with Turn Phase	42
	12 W.V. 27/2	Stop Controlled	17
	13 Maple Fork Road	Traffic Signal with Turn Phase	48

Table 2. Priority intersections for safety improvements

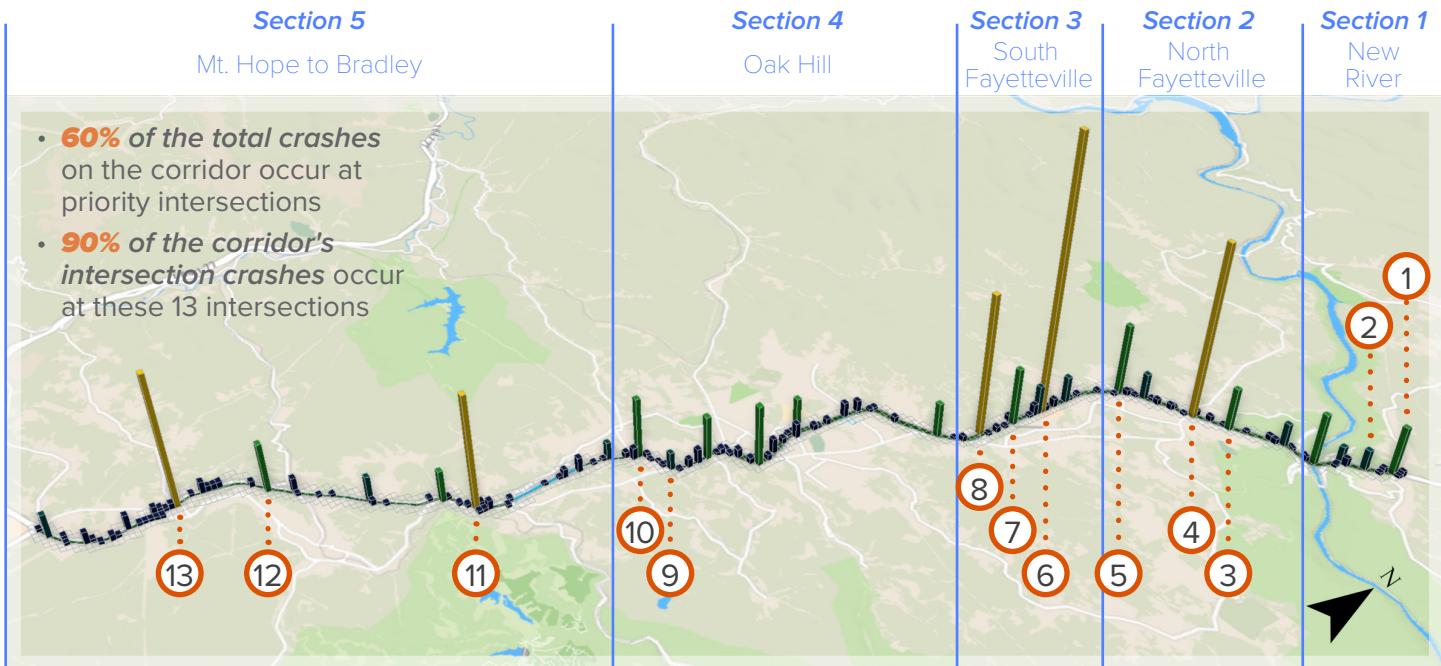


Figure 5. U.S. 19 Corridor crash location and priority intersections (2017 -2021)

## Section 1 - New River

The first section is effectively the gateway to the country's newest National Park, New River Gorge. It includes two intersections within the study area and the iconic New River Gorge Bridge, which spans over 3,000 feet and is host to recreational and community events throughout the year.

Traffic frequently crosses U.S. 19 to use park facilities (i.e. campgrounds, maintenance facilities, and trails) and visit the surrounding communities, shops, and restaurants. North of the bridge, U.S. 19 has a grass median with variable width, making this one of the widest roadway sections within the study area. Read more about the analysis for the priority intersections listed below on the following pages:

1. Lansing-Edmond Road
2. New River Gorge Entrance

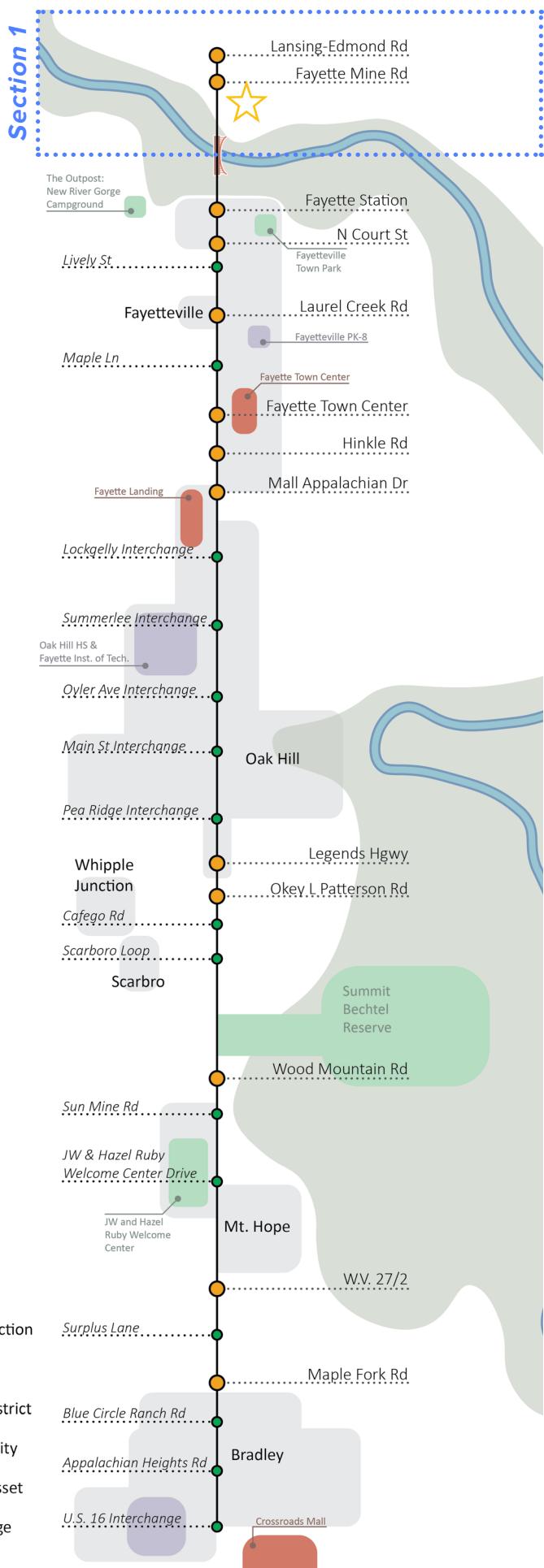
### Key Location: Canyon Rim Visitor Center

If you're visiting a National Park, the visitors center is likely your first stop. An estimated 300,000 people stop at the Canyon Rim Visitor Center while visiting New River Gorge each year. Canyon Rim sits on the north end of the study area and is primarily accessed via U.S. 19. This site provides scenic views of the New River Gorge Bridge, park information and orientation materials, and parking for visitors.



Most visitors turn off U.S. 19 to make a stop at the Canyon Rim Visitor Center  
(Source: National Park Services)

- Intersection/Interchange
- Priority Intersection
- City/Village
- Commercial District
- School/University
- Recreational Asset
- New River Gorge



## Section 1: Lansing-Edmond Road



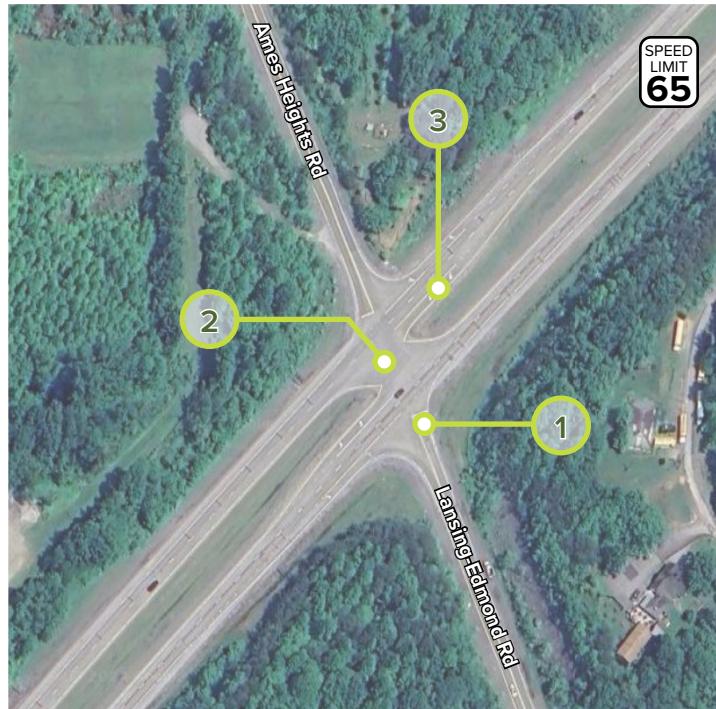
### Local Insight

Field review observations:

1. Southbound traffic is difficult to see from the intersection's east leg
2. Drivers turning left onto U.S. 19 idle and queue in the median
3. Drivers turning off U.S. 19 need additional length for deceleration

Stakeholder Feedback:

- Stakeholders ranked this intersection as the **priority #2** within Section 1
- Parallel service roads, a U.S. 19 overpass, and additional signage and striping treatments were suggested by stakeholders

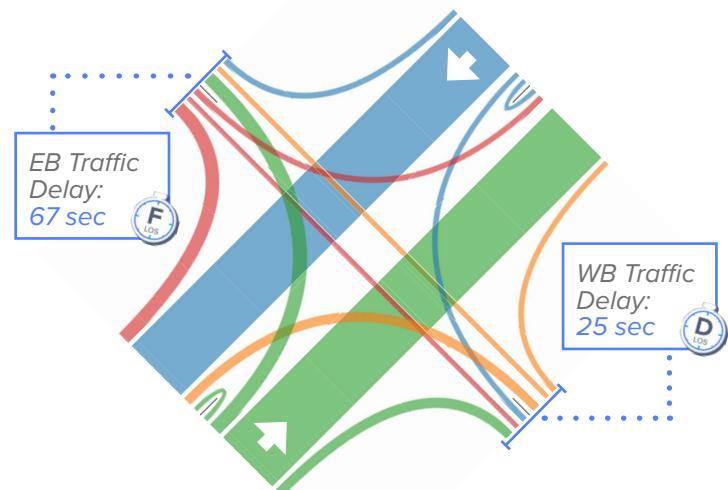


### Traffic Performance

AM Peak: 8:30 - 9:30 (1,100 veh)

PM Peak: 4:00 - 5:00 (1,600 veh)

- Currently two-way stop control on the east and west approaches
- Through and turning movements along U.S. 19 have minimal delay
- Eastbound and westbound movements experience significant delay during the PM Peak



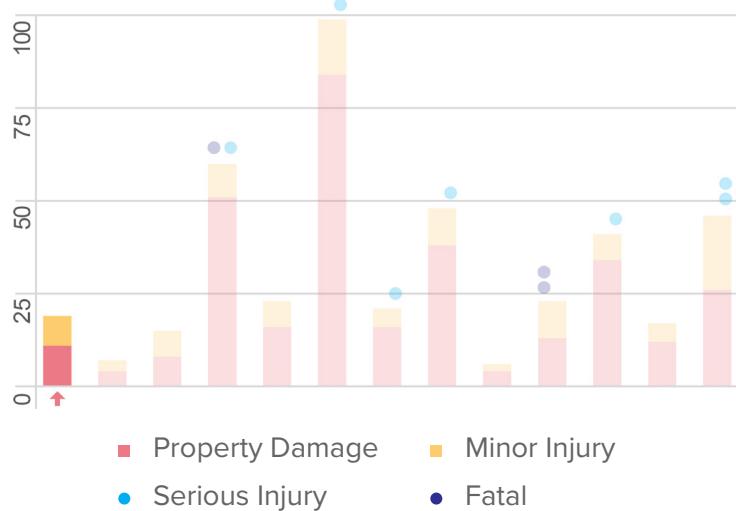
### Roadway Safety

19 total crashes:

- 8 minor injury crashes
- 11 property damage crashes

Most Common Crash Types:

- Angle (48%)
- Rear-end (21%)
- Animal (21%)



## Section 1: Fayette Mine Road (New River Gorge Entrance)



### Local Insight

Field review observations:

1. Park signage is needed to direct drivers and beautify the entrance
2. Drivers turning left onto U.S. 19 idle and queue in the median
3. Southbound left turn lane on U.S. 19 needs additional length for deceleration

Stakeholder feedback:

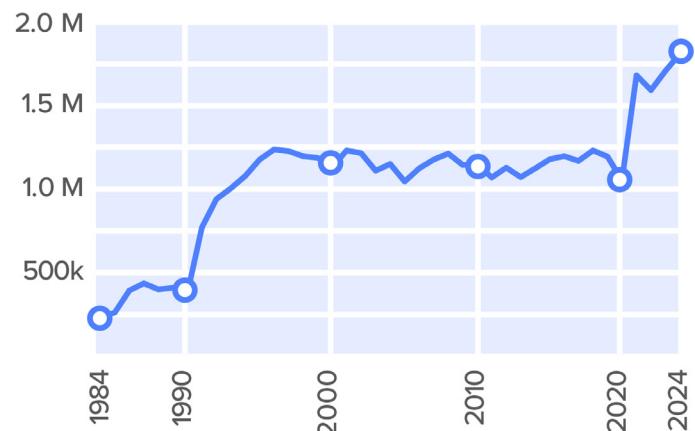
- Stakeholders ranked this intersection as the **priority #1** within Section 1
- Parallel service roads and additional signage and striping treatments were suggested by stakeholders



### Traffic Performance

- Since New River Gorge's recognition as America's newest National Park in 2020, visitation is rapidly rising
- In 2024, over 1.8 million people visited the park, a new annual visitation record which continues the upward trend we've seen since 2020
- Individual traffic counts were not collected, but local insight noted that left turns onto U.S. 19 experience similar delay this at Lansing-Edmond

### NRG Annual Park Visitation



Source: National Park Services Annual Park Recreation



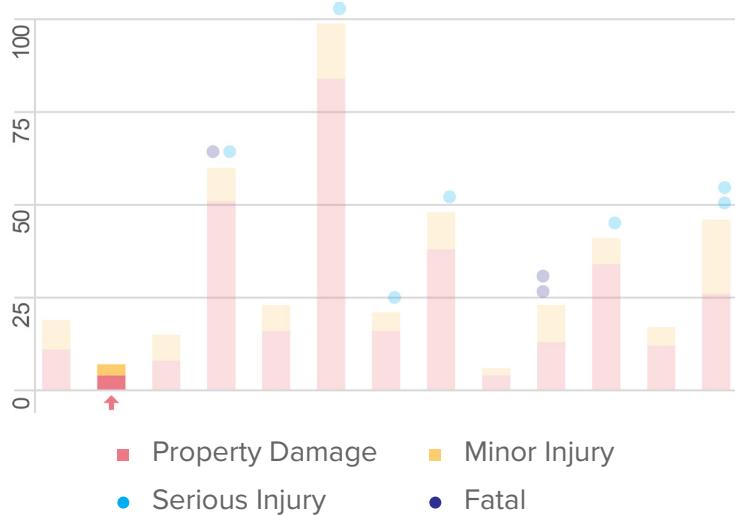
### Roadway Safety

7 total crashes:

- 3 minor injury crashes
- 4 property damage crashes

Most Common Crash Types:

- Angle (57%)
- Rear-end (43%)





## Local Insight Highlight:

### North of the Bridge Public Engagement

Since New River Gorge was acknowledged as the nation's newest National Park, there's been a strong effort to make the park entrance safer and more welcoming. Local advocates partnered with the National Park Service to engage with local communities and identify improvement options with strong public support. This effort was led in tandem with the U.S. 19 Corridor Study, with continuous communication between the groups through site visits and stakeholder meetings.

On May 13th, 2025 over 300 people attended a public open house at Midland Trail High School to provide their feedback about the improvements being considered. Participants were asked to indicate their level of support for various short and long-term projects under consideration near the park's main entrance.

Overall, there was overwhelming support for 'quick-win' projects like improved signage, lane markings, and to a lesser extent speed limit reductions. Support for long-term improvements was more mixed. Participants supported more permanent solutions like overpasses (see photo below) or interchanges, whereas less common at-grade solutions like Restricted Crossing U-Turns (RCUTs) were more divisive (see Figure 6).

## What They Learned

How much do you support the following improvements?...



Figure 6. Public open house activity results



Conceptual drawing of an overpass north of the New River gives a grand entrance to New River Gorge

## Section 2 - North Fayetteville

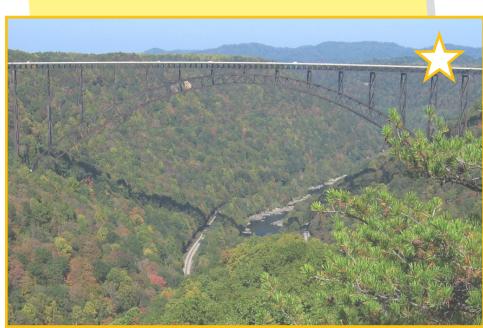
The second section covers the north side of Fayetteville. Fayetteville is the closest town to New River Gorge National Park, and home to over 2,800 people (2020 U.S. Census). North Fayetteville is characterized by a mix of parks, trailheads, campgrounds, hotels, and restaurants that attract national park visitors and locals alike.

Due to high traffic between North Fayetteville and the Gorge, many intersections are signalized to facilitate turns on and off of U.S. 19. Read more about the analysis for the priority intersections listed below on the following pages:

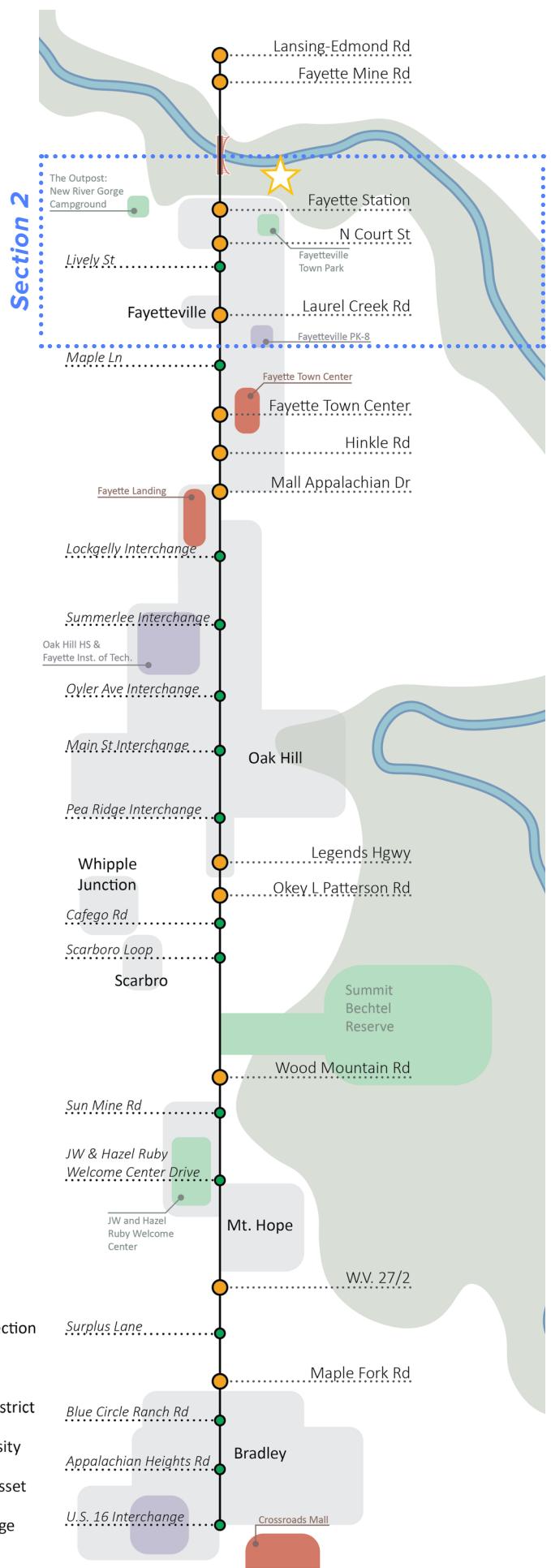
1. Fayette Station Road
2. N Court Street
3. Laurel Creek Road

### Key Location: Long Point Trail & Overlook

This is just one of many phenomenal trails that are accessible within this section. Long Point Trail is a moderate difficulty, 1.6 mile trail that is a must for all visitors. At the trail's end, an overlook offers stunning views of the New River Gorge Bridge and the valley. This trail, and many more are accessible off of U.S. 19 in this section, highlighting the strong connectivity between both sides of the river.



A photo of the New River Gorge Bridge from the Long Point Overlook  
(Source: National Park Services)



## Section 2: Fayette Station Road



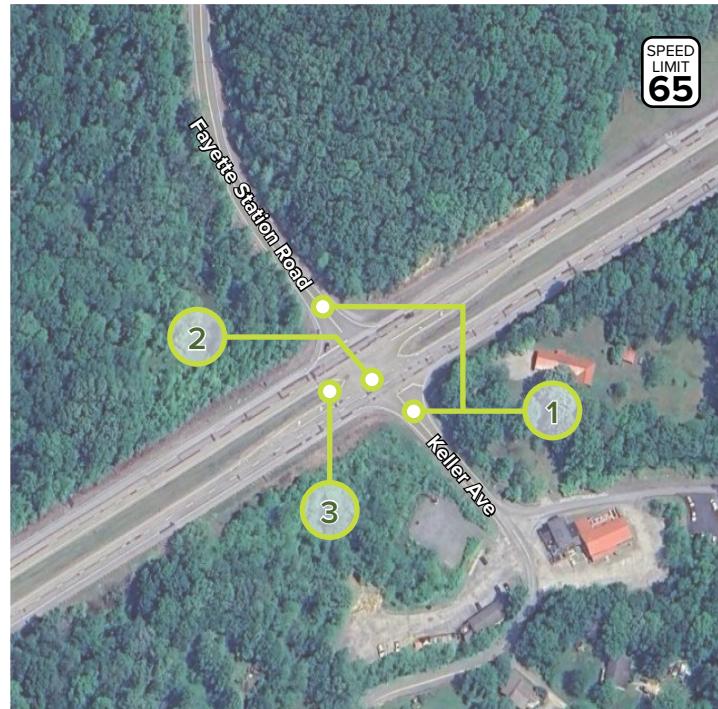
### Local Insight

Field review observations:

1. Vertical curvature makes it difficult to see cars turning onto U.S. 19
2. Drivers turning left onto U.S. 19 idle and queue in the median
3. Heavy fog makes it difficult to see the median, leading to wrong way turns

Stakeholder feedback:

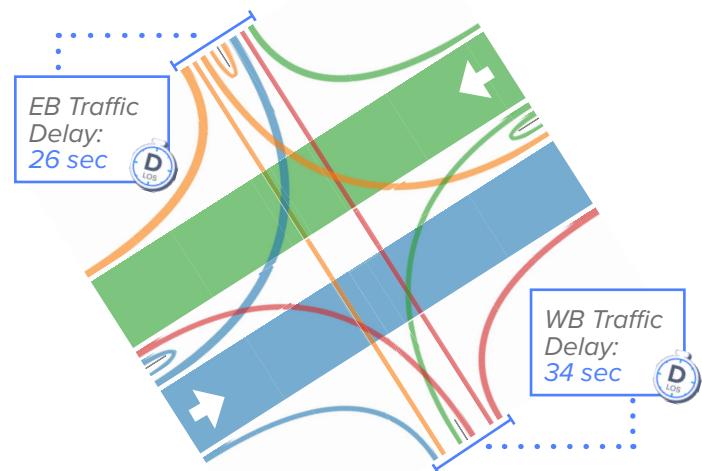
- Stakeholders ranked this intersection as **priority #2** within Section 2
- Additional signage and striping treatments and improved visibility were suggested by stakeholders



### Traffic Performance

AM Peak: 8:00 - 9:00 (1,100 veh)  
PM Peak: 4:00 - 5:00 (1,750 veh)

- Intersection operates using a two-way stop control on the east and west approaches
- Through and turning movements along U.S. 19 have minimal delay
- Eastbound and westbound movements experience moderate delay during the PM Peak



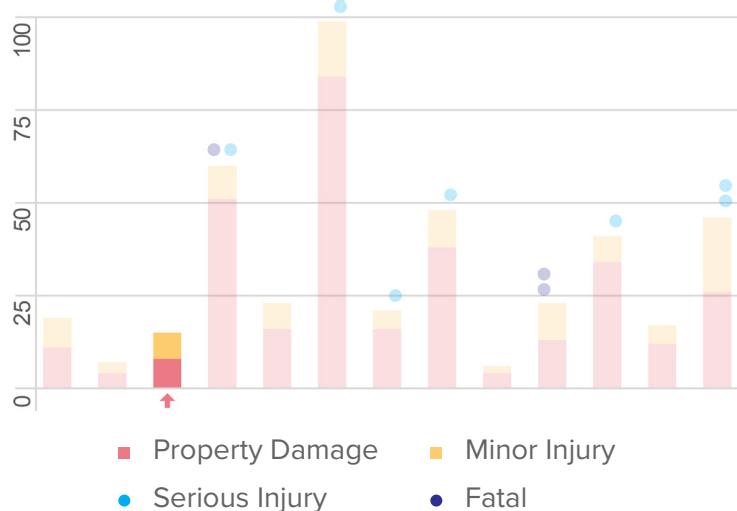
### Roadway Safety

15 total crashes:

- 7 minor injury crashes
- 8 property damage crashes

Most Common Crash Types:

- Rear-end (33%)
- Angle (33%)
- Animal (20%)



## Section 2: N Court Street



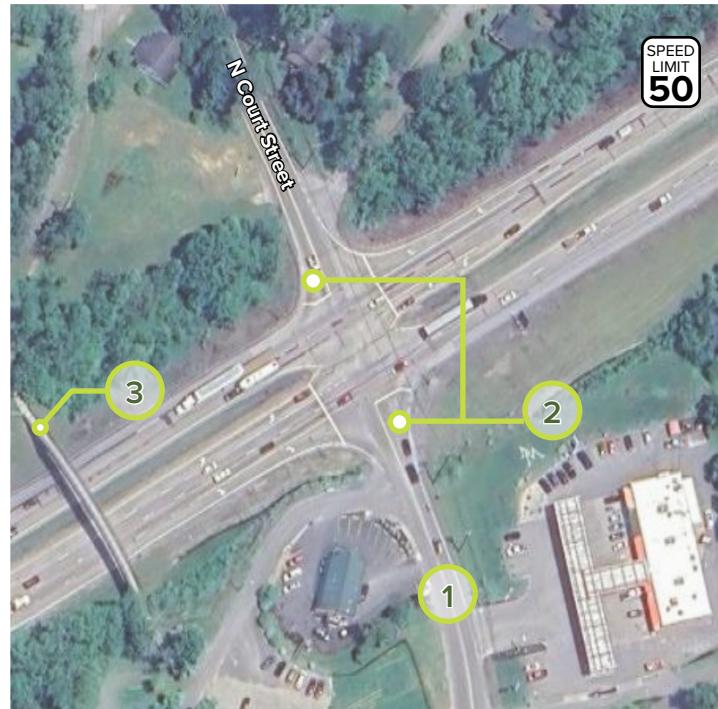
### Local Insight

Field review observations:

1. Access drives from nearby businesses impact the intersection
2. Court Street lacks right or left turn lanes and turn traffic signal phases
3. Pedestrian bridge obscures view of signal for northbound traffic

Stakeholder feedback:

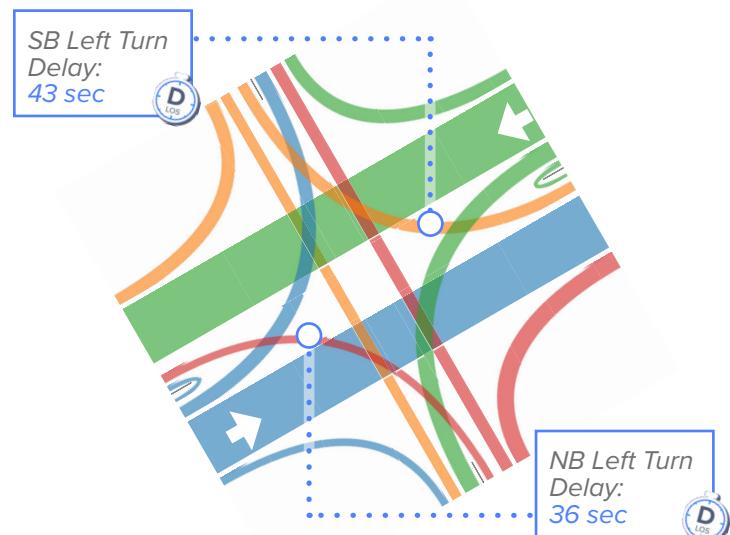
- Stakeholders ranked this intersection as **priority #1** within Section 2
- Turn signal phases on Court Street, improved access management, and advanced signal warnings were suggested by stakeholders



### Traffic Performance

AM Peak: 7:15 - 8:15 (1,550 veh)  
PM Peak: 4:00 - 5:00 (2,350 veh)

- Intersection operates using a traffic signal without a turn phase
- Turns off U.S. 19 experience moderate delay
- Southbound left turn queue backs up significantly, impacting through traffic and leading to sudden stops



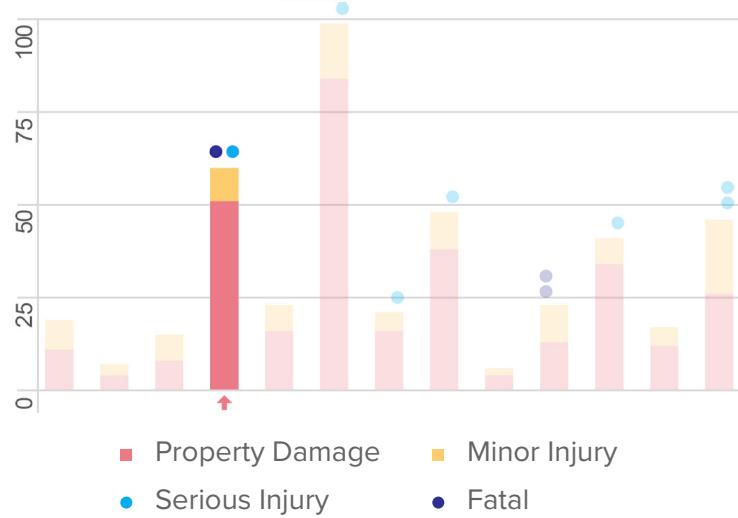
### Roadway Safety

62 total crashes:

- 1 fatal crash
- 1 serious injury crash
- 9 minor injury crashes
- 51 property damage crashes

Most Common Crash Types:

- Rear-end (66%)
- Angle (19%)
- Sideswipe (8%)



## Section 2: Laurel Creek Road



### Local Insight

Field review observations:

1. East and West legs allow right turn on red and are obscured due to vertical and horizontal curvature
2. Skewed intersection has minor impact on traffic

Stakeholder feedback:

- Stakeholders ranked this intersection as **priority #3** within Section 2
- Stakeholders felt few upgrades were needed, and supported traffic signal phasing to reduce abrupt stops along U.S. 19

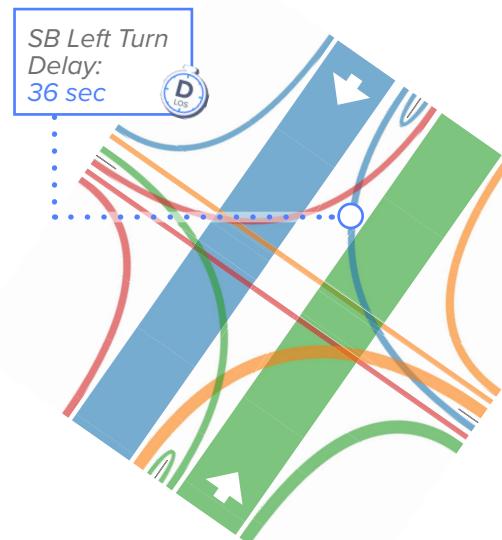


### Traffic Performance

AM Peak: 7:45 - 8:45 (1,750 veh)

PM Peak: 4:00 - 5:00 (2,100 veh)

- Intersection operates using a traffic signal without a turn phase
- Turns off U.S. 19 experience moderate delay
- Northbound left turn queue backs up and impacts through traffic



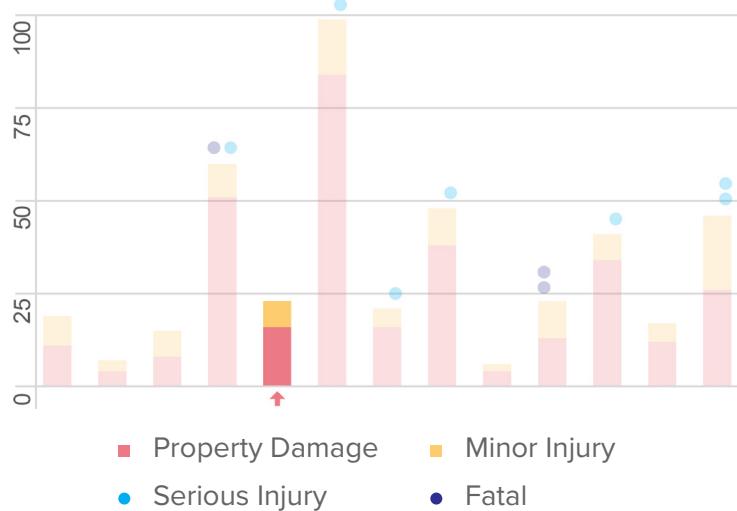
### Roadway Safety

23 total crashes:

- 7 minor injury crashes
- 16 property damage crashes

Most Common Crash Types:

- Rear-end (61%)
- Angle (18%)
- Sideswipe (9%)



## Section 3 - South Fayetteville

The third section covers the south side of Fayetteville. This section has several large commercial developments, including the study area's largest shopping destination, Fayette Town Center.

Due to the commercial development in this section, there is heavy traffic traveling across U.S. 19. To accommodate this, many of the major intersections are signalized. These intersections create additional travel delay for traffic moving along U.S. 19. Read more about the analysis for the priority intersections listed below on the following pages:

1. Fayette Town Center
2. Hinkle Road
3. Mall Road

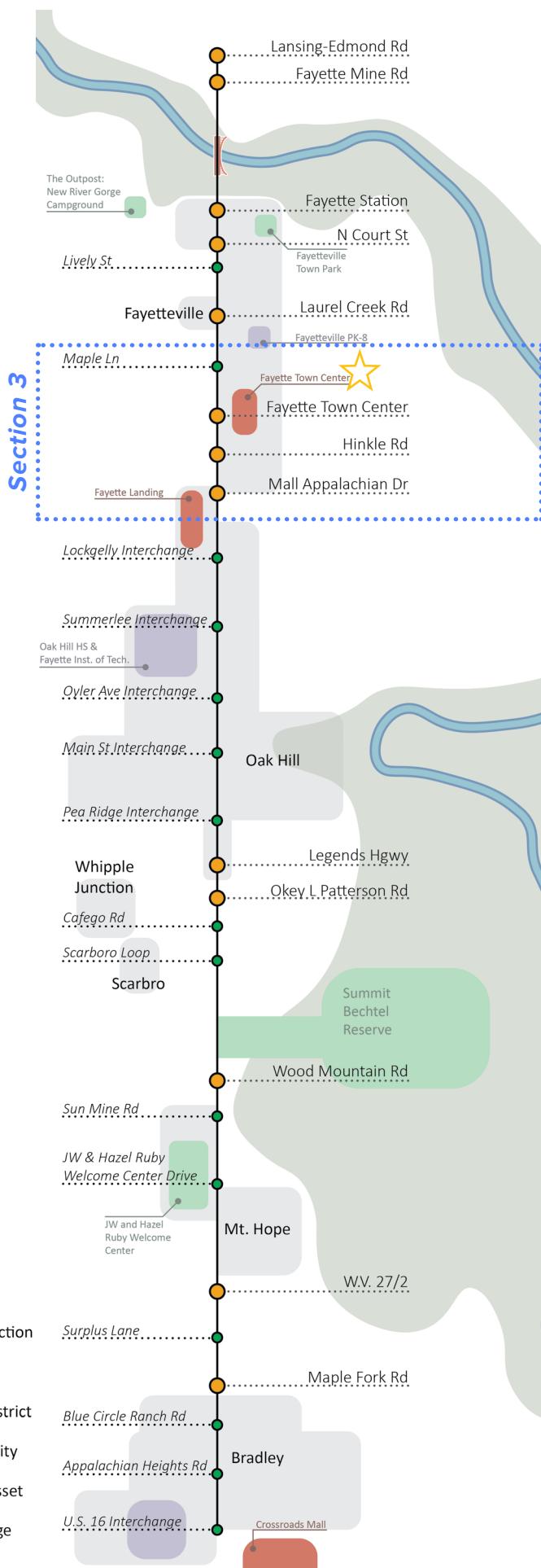
### Key Location: Fayette Town Center

This is one of the busiest shopping centers in the study area that includes two large retail centers (Walmart and Lowe's) and several other stores and restaurants.

This development has direct access to U.S. 19 using one signalized intersection. This signal includes multiple left turn and through lanes to accommodate the high traffic demand.



An aerial view of the large Fayette Town Center



## Section 3: Fayette Town Center



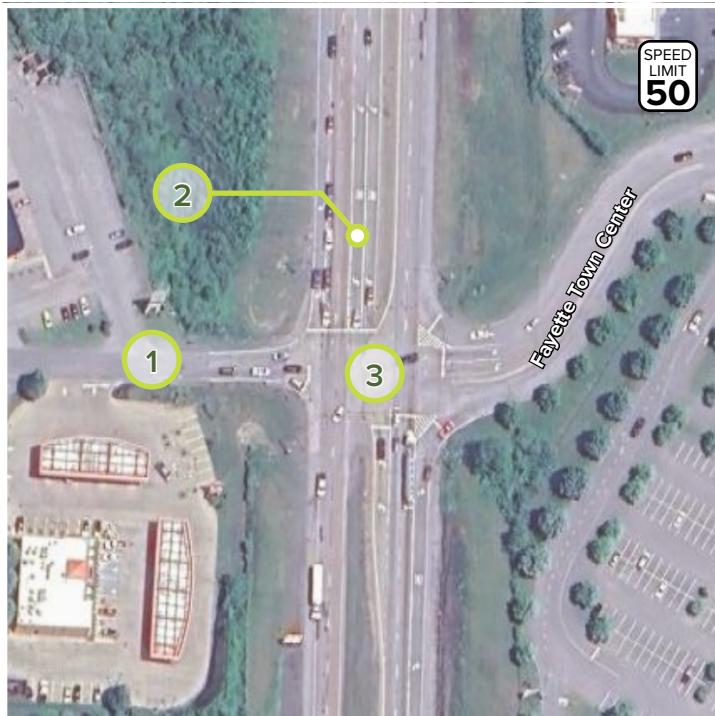
### Local Insight

Field review observations:

1. Commercial developments may benefit from increased capacity
2. Dual southbound left turn lanes experience delay due to high volumes traveling from Fayetteville
3. All legs allow right turn on red merging with high-speed traffic

Stakeholder feedback:

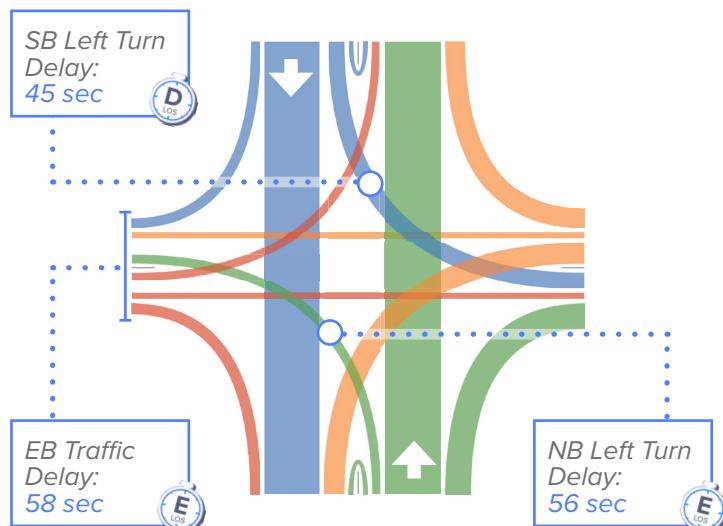
- Stakeholders ranked this intersection as **priority #1** within Section 3
- Stakeholders supported long term solutions to improve efficiency and reduce conflict points



### Traffic Performance

AM Peak: 7:30 - 8:30 (1,650 veh)  
PM Peak: 4:00 - 5:00 (2,700 veh)

- Busiest traffic signal within the study area
- Access to commercial centers leads to long queues for those turning on and off U.S. 19
- Traffic signal phasing, increased storage lane length, or an interchange should be considered



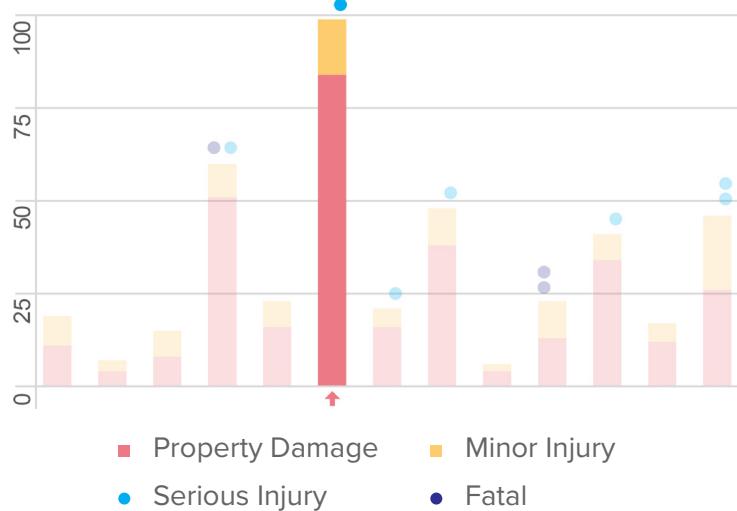
### Roadway Safety

100 total crashes:

- 1 serious injury crash
- 15 minor injury crashes
- 84 property damage crashes

Most Common Crash Types:

- Rear-end (60%)
- Angle (19%)
- Sideswipe (16%)



## Section 3: Hinkle Road



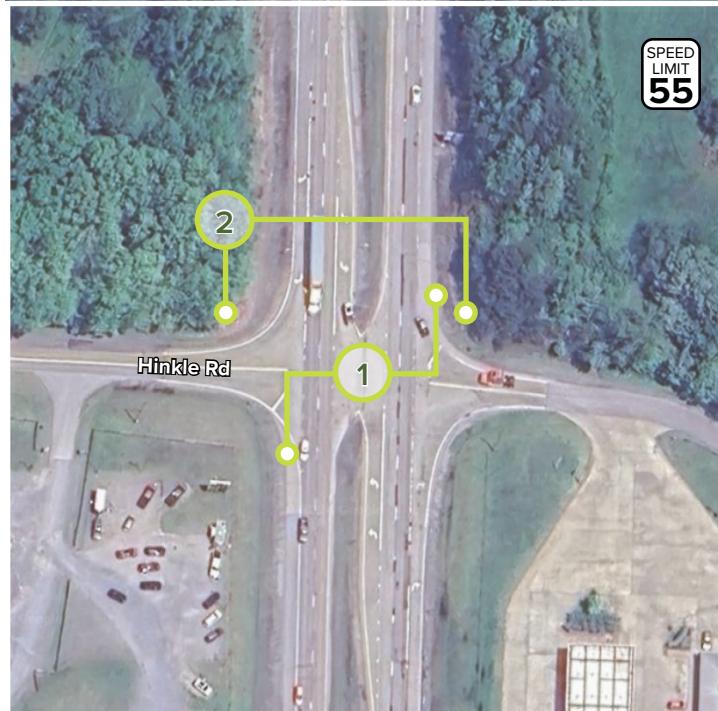
### Local Insight

Field review observations:

1. Traffic merging onto U.S. 19 needs to accelerate within through lanes
2. U.S. 19 cuts through stone hillside, impacting visibility of the intersection's East and West legs

Stakeholder feedback:

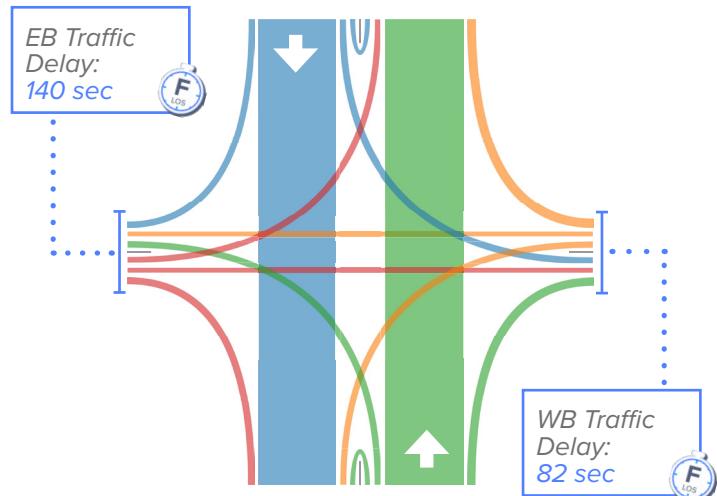
- Stakeholders ranked this intersection as **priority #3** within Section 3
- Stakeholders felt few upgrades were needed but said focus should be on improving safety of left turns onto U.S. 19



### Traffic Performance

AM Peak: 7:30 - 8:30 (1,500 veh)  
PM Peak: 4:00 - 5:00 (2,350 veh)

- Intersection operates using a two-way stop control on the east and west approaches
- Through and turning movements along U.S. 19 have minimal delay
- East and westbound movements experience significant delay during the PM Peak



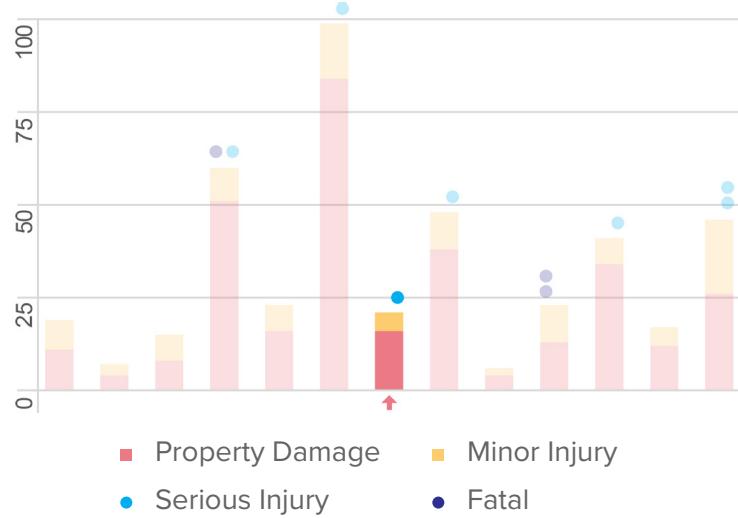
### Roadway Safety

22 total crashes:

- 1 serious injury crash
- 5 minor injury crashes
- 16 property damage crashes

Most Common Crash Types:

- Angle (64%)
- Rear-end (18%)
- Fixed object (5%)



## Section 3: Appalachian Drive/Mall Rd



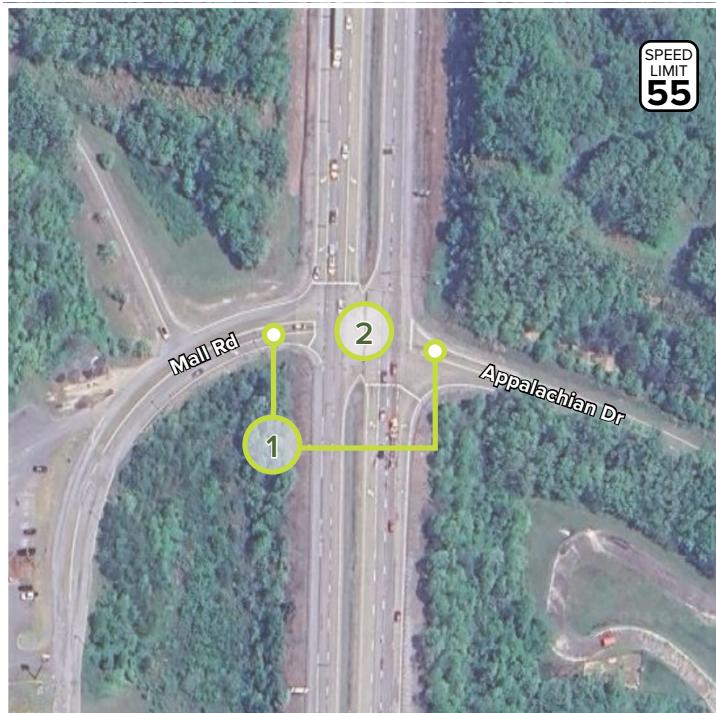
### Local Insight

Field review observations:

1. East and west legs are obscured by vertical and horizontal curvature and vegetation along U.S. 19
2. All legs allow right turn on red merging with high-speed traffic

Stakeholder feedback:

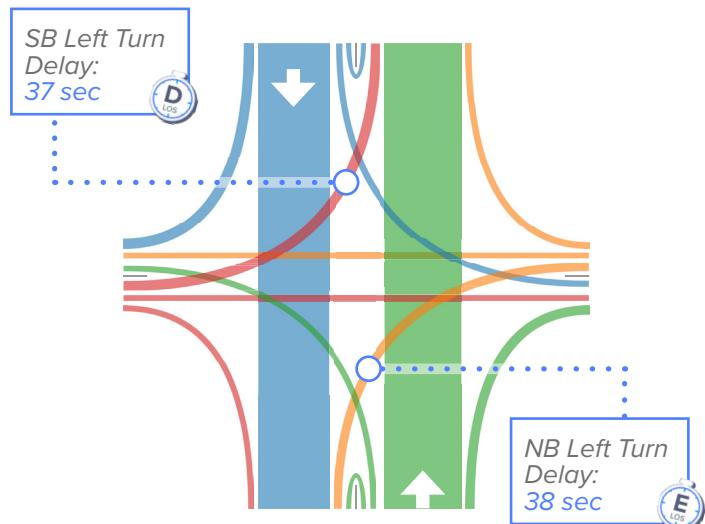
- Stakeholders ranked this intersection as **priority #2** within Section 3
- Stakeholders felt few upgrades were needed, and supported traffic signal phasing to reduce abrupt stops along U.S. 19



### Traffic Performance

AM Peak: 7:30 - 8:30 (1,500 veh)  
PM Peak: 4:00 - 5:00 (2,350 veh)

- Intersection operates using a traffic signal without a turn phase
- Through and turning movements along US 19 have minimal delay
- Left turns off U.S. 19 experience moderate delay
- East and westbound movements experience high delay during the PM Peak



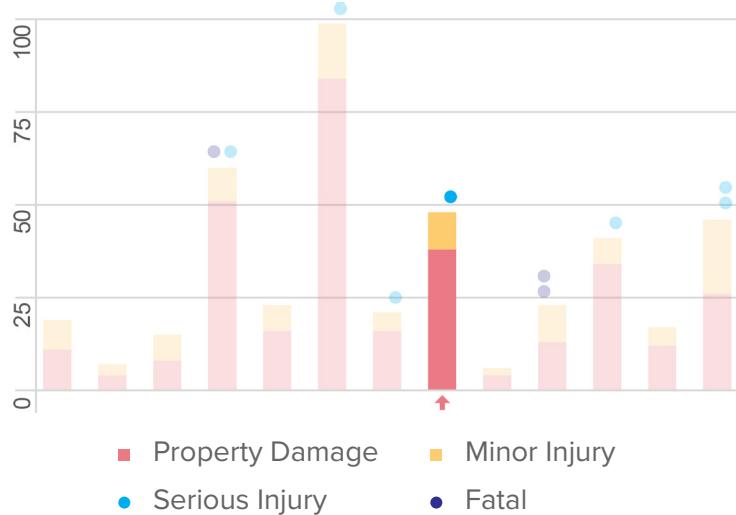
### Roadway Safety

49 total crashes:

- 1 serious injury crash
- 10 minor injury crashes
- 38 property damage crashes

Most Common Crash Types:

- Rear-end (47%)
- Angle (31%)
- Sideswipe (8%)



## Section 4 - Oak Hill

The fourth section covers the town of Oak Hill, a town of 1,400 people (2020 U.S. Census). This section is home to several prominent schools including Oak Hill High School, Oak Hill Middle School, New River Primary School, and the Fayette Institute of Technology. Each of these are accessible via the Oyler Avenue Interchange.

Few properties have direct access to U.S. 19 in Oak Hill, leading to less travel delay for north-south traffic traveling along the corridor. There are four separate interchanges that connect to U.S. 19, making this section operate much more like a freeway than an arterial. The remaining four at grade intersections are the main source of traffic delay and roadway safety concerns. Read more about the analysis for the priority intersections listed below on the following pages:

1. Legends Highway
2. Okey Patterson Road

### Key Location: Oak Hill Schools

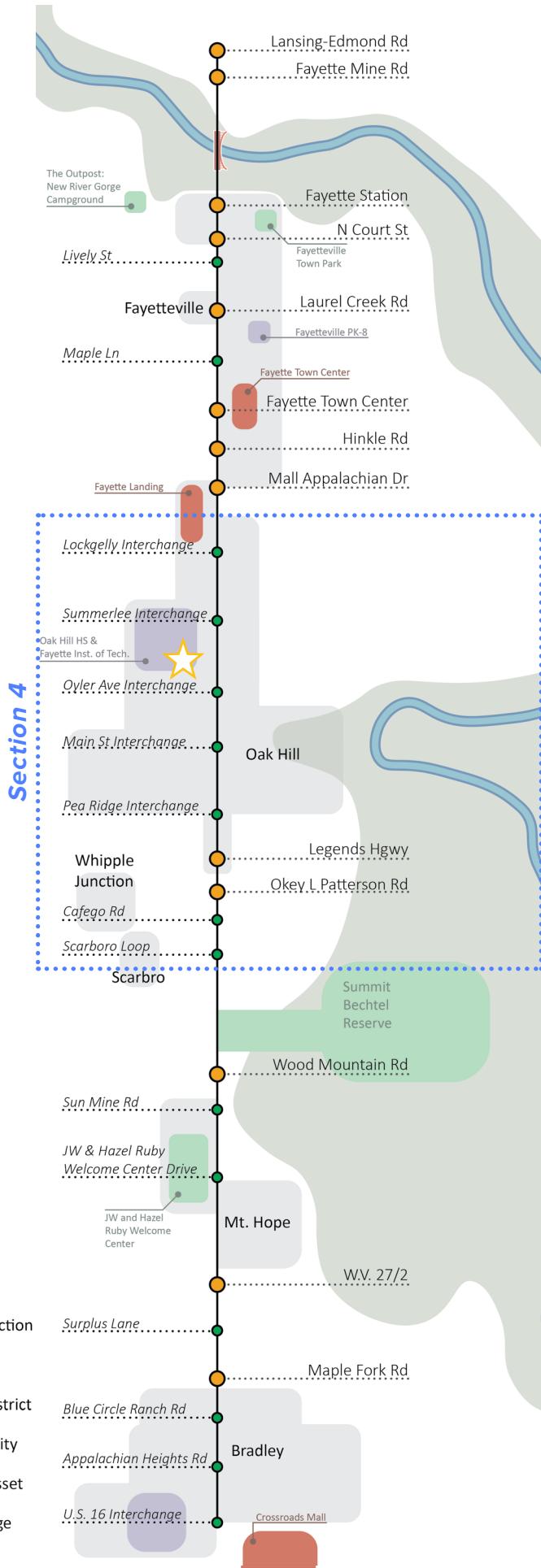
The following five schools are located just east of U.S. 19 near the Oyler Ave interchange:

1. Oak Hill High School
2. Oak Hill Middle School
3. Fayette Institute of Technology
4. New River Intermediate School
5. New River Primary School



Aerial Image of the cluster of schools near the Oyler Ave interchange

- Intersection/Interchange
- Priority Intersection
- City/Village
- Commercial District
- School/University
- Recreational Asset
- New River Gorge



## Section 4: Legends Highway



### Local Insight

Field review observations:

1. Intersection of Legends Highway and Greentown Loop impacts intersection operations
2. Traffic merging onto U.S. 19 can be impacted by cars entering/exiting the Pea Road interchange

Stakeholder feedback:

- Stakeholders ranked this intersection as **priority #2** within Section 4
- Improved striping and traffic flow on Legends Highway and Greentown Loop Rd, acceleration lanes, and left turn restrictions, were supported by stakeholders

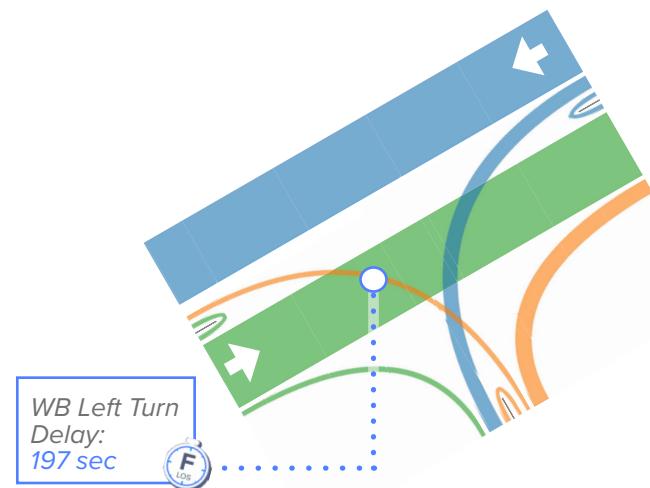


### Traffic Performance

AM Peak: 7:30 - 8:30 (1,950 veh)

PM Peak: 4:00 - 5:00 (2,750 veh)

- Intersection operates using stop control on the east approach
- Through and turning movements along U.S. 19 have minimal delay
- Traffic merging onto U.S. 19 frequently backs up, impacting Greentown Loop Rd



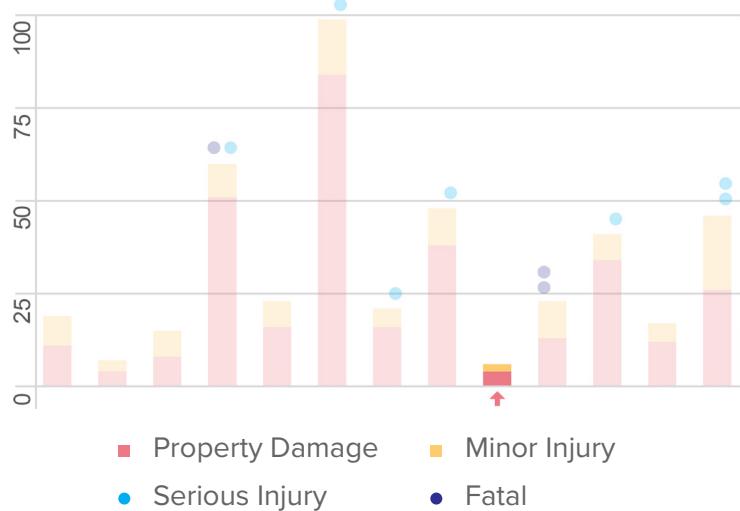
### Roadway Safety

6 total crashes:

- 2 minor injury crashes
- 4 property damage crashes

Most Common Crash Types:

- Rear-end (67%)
- Angle (17%)
- Overturn (17%)



## Section 4: Okey Patterson Rd



### Local Insight

Field review observations:

1. Steep slope on west approach can impact stopping, especially when conditions are wet and icy
2. West leg is obscured by horizontal curvature and vegetation along U.S. 19
3. Traffic has long wait due to difficult left turn and no right turn lane

Stakeholder feedback:

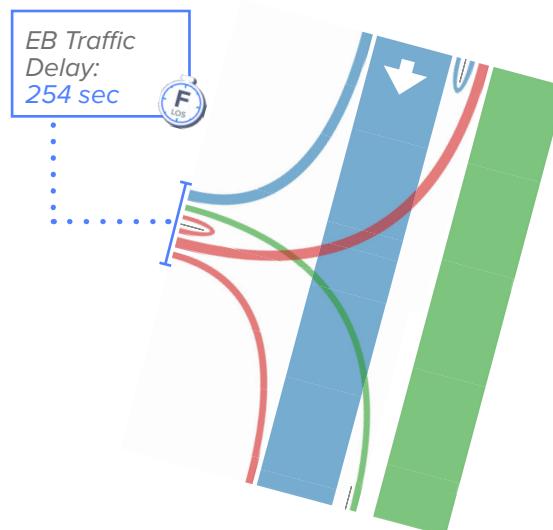
- Stakeholders ranked this intersection as **priority #1** within Section 4
- Improving safety of left turns was the top concern of stakeholders



### Traffic Performance

AM Peak: 7:30 - 8:30 (1,700 veh)  
PM Peak: 4:00 - 5:00 (2,400 veh)

- Intersection operates using stop control on the west approach
- Through and turning movements along U.S. 19 have minimal delay
- Eastbound left turns experience significant delay



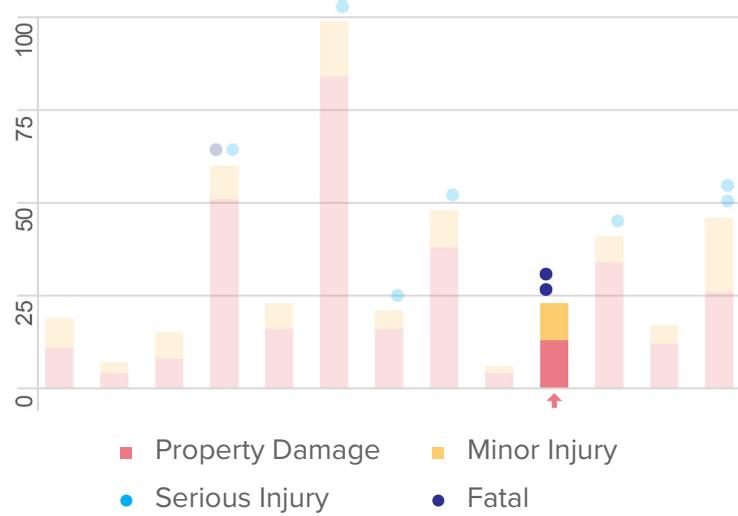
### Roadway Safety

25 total crashes:

- 2 fatal crashes
- 10 minor injury crashes
- 13 property damage crashes

Most Common Crash Types:

- Angle (56%)
- Rear-end (20%)
- Road Departure (8%)



## Section 5 - Mt. Hope to Bradley

The final section within the study area includes the towns of Scarbro, Mt. Hope, and Bradley. This is the largest section in the study area and connects to several recreational assets including the Summit Bechtel Reserve and JW & Hazel Ruby Welcome Center.

Much of the development and commercial areas of the surrounding towns are not directly connected to U.S. 19 in this section, and are concentrated on the parallel roads of SR-16 and SR-61. Because of this, there is less east-west traffic crossing the corridor compared to the north end of the study area. Several signalized intersections exist near the few gas stations and businesses that do have direct access to U.S. 19. Read more about the analysis for the priority intersections listed below on the following pages:

1. Wood Mountain Road
2. W.V. 27/2
3. Maple Fork Road

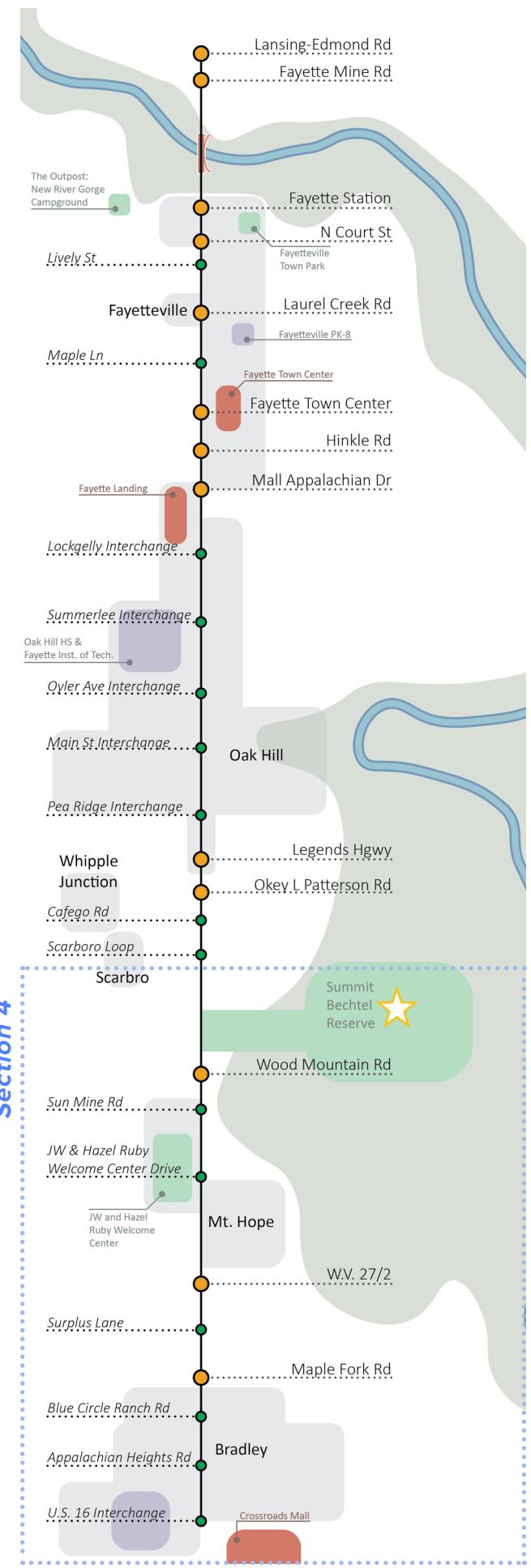
### Key Location: Summit Bechtel Reserve (SBR)

SBR is a 10,000 acre Scouting America facility. The reserve is one of Scouting America's four high-adventure facilities, and offers a wide range of outdoor experiences. This facility is the permanent home for Scouting America's National Jamboree, an event that brings scouts from across the country together every four years.



Entry signage at the Summit Bechtel National Scout Reserve

- Intersection/Interchange
- Priority Intersection
- City/Village
- Commercial District
- School/University
- Recreational Asset
- New River Gorge



## Section 5: Wood Mountain Road



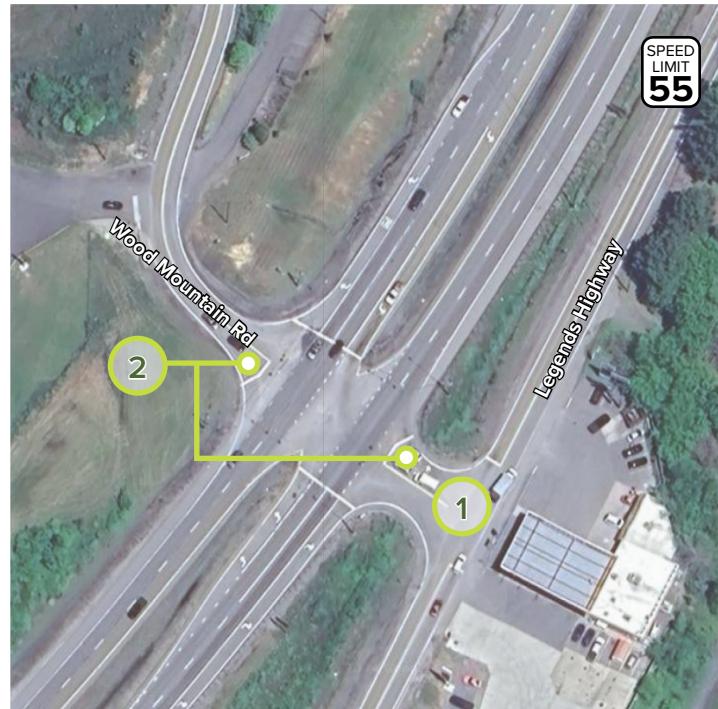
### Local Insight

Field review observations:

1. Traffic flow and traffic control are unclear, leading to indecisive driving impacting the intersection
2. Right turns on red are restricted at this intersection

Stakeholder feedback:

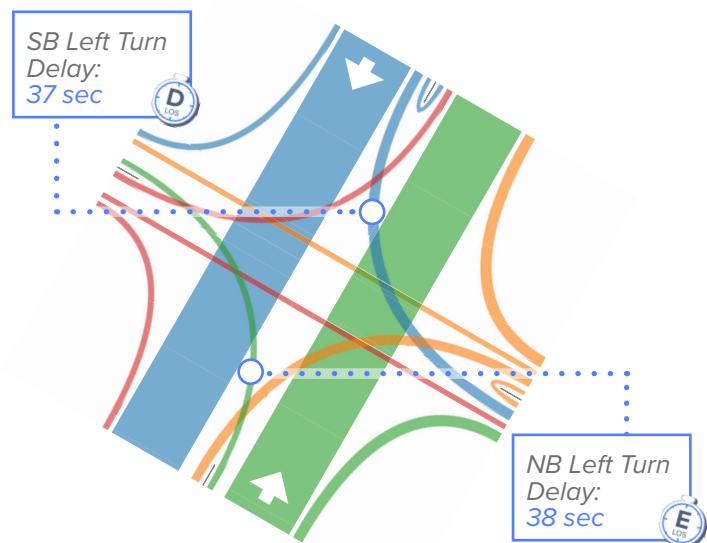
- Stakeholders ranked this intersection as **priority #1** within Section 5
- Stakeholders' largest concerns were access management, traffic control along Legends Highway, and reducing rear-end crashes



### Traffic Performance

AM Peak: 7:15 - 8:15 (1,750 veh)  
PM Peak: 4:00 - 5:00 (2,500 veh)

- Intersection operates using a traffic signal with a turn phase
- Turning movements off U.S. 19 have moderate delay
- Unique intersection due to access road and gas station east of U.S. 19
- No right turn on red restriction for east and westbound approaches



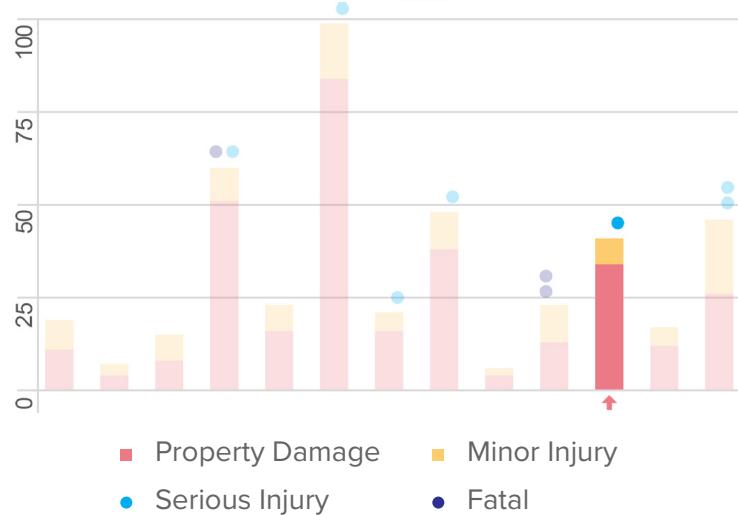
### Roadway Safety

42 total crashes:

- 1 serious injury crash
- 7 minor injury crashes
- 34 property damage crashes

Most Common Crash Types:

- Rear-end (60%)
- Angle (14%)
- Sideswipe (12%)



## Section 5: W.V. 27/2



### Local Insight

Field review observations:

1. Highest speed limit in the corridor makes merging onto U.S. 19 more difficult and dangerous
2. West leg is obscured by horizontal curvature and vegetation along U.S. 19

Stakeholder feedback:

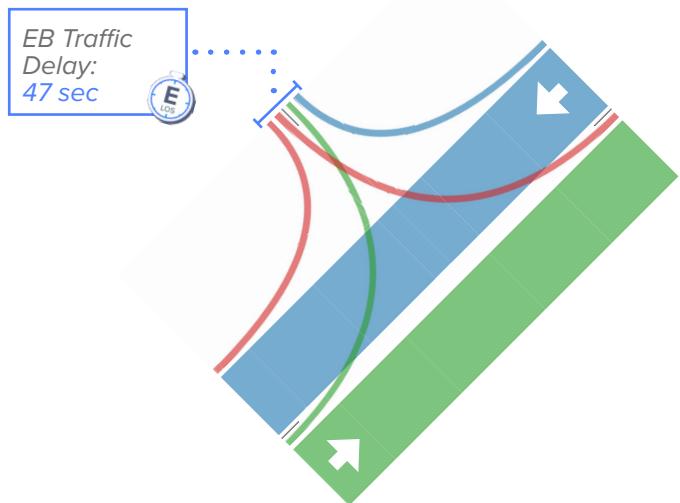
- Stakeholders ranked this intersection as **priority #3** within Section 5
- Improving safety of left turns was the top concern of stakeholders



### Traffic Performance

AM Peak: 7:15 - 8:15 (1,550 veh)  
PM Peak: 4:00 - 5:00 (2,200 veh)

- Intersection operates using a stop control on the west approach
- Through and turning movements along U.S. 19 have minimal delay
- Eastbound movements experience significant delay during the PM Peak



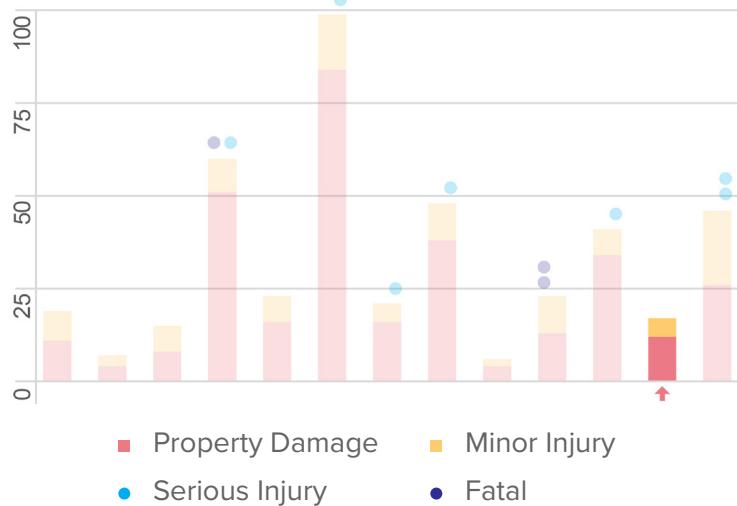
### Roadway Safety

17 total crashes:

- 5 minor injury crashes
- 12 property damage crashes

Most Common Crash Types:

- Angle (35%)
- Animal (23%)
- Rear-end (12%)



## Section 5: Maple Fork Road



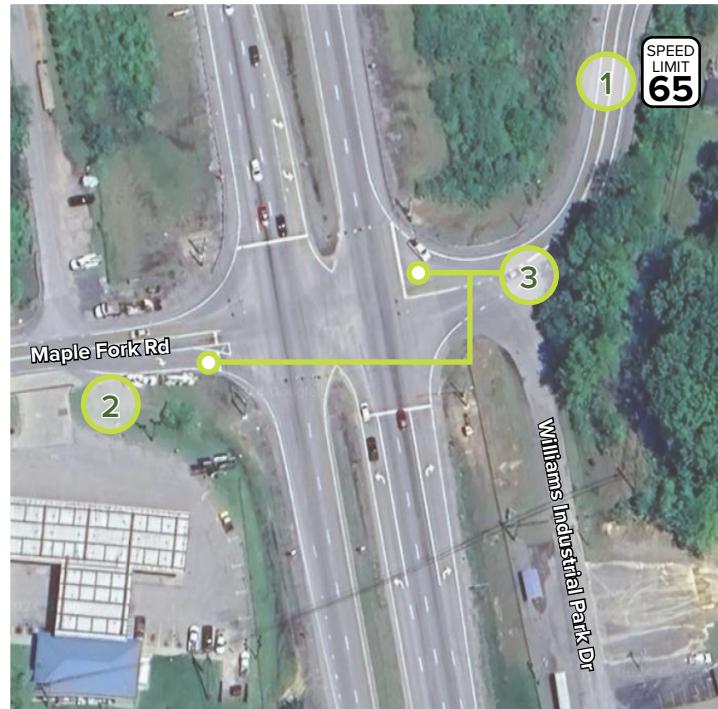
### Local Insight

Field review observations:

1. Highest speed limit in the corridor leads to abrupt stops at traffic signal
2. Access management on the west leg impacts intersection operations
3. Right turns on red are restricted at this intersection

Stakeholder feedback:

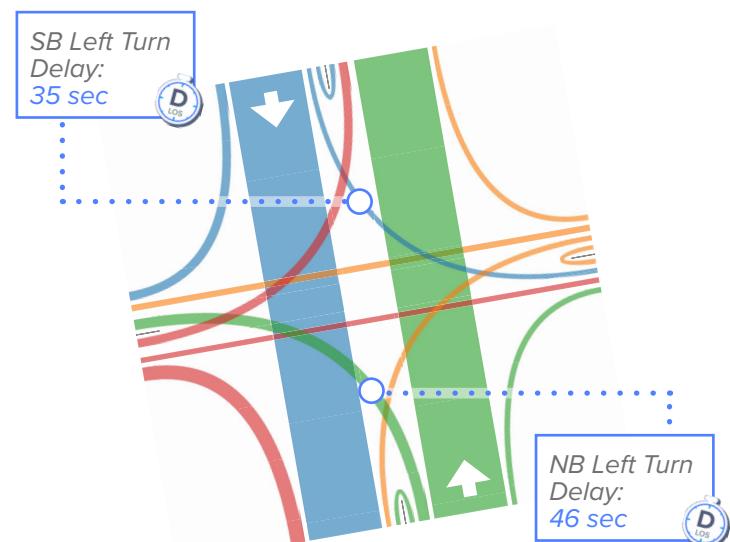
- Stakeholders ranked this intersection as **priority #2** within Section 5
- Stakeholders' largest concerns were travel speed, access management, and reducing rear-end crashes



### Traffic Performance

AM Peak: 7:15 - 8:15 (1,750 veh)  
PM Peak: 4:15 - 5:15 (2,500 veh)

- Intersection operates using a traffic signal with a turn phase
- Through and turning movements along U.S. 19 have minimal delay
- East and westbound movements experience high delay during the PM Peak



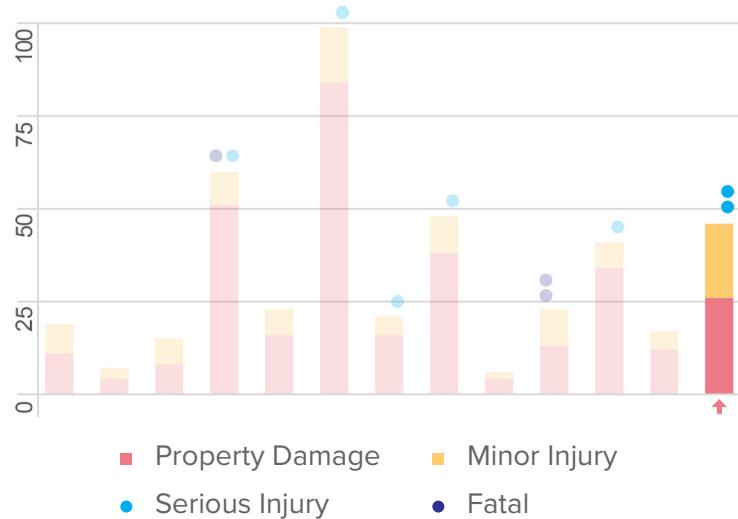
### Roadway Safety

48 total crashes:

- 2 serious injury crash
- 20 minor injury crashes
- 26 property damage crashes

Most Common Crash Types:

- Rear-end (63%)
- Fixed object (6%)
- Angle (6%)



## Summary of Results

Many of the priority intersections are victim to the same problems. Below are several takeaways from the local insight, traffic performance, and roadway safety insight provided throughout this chapter:

- Stakeholders supported short-term ‘quick wins’ at each of the priority intersections. Popular short term improvements were speed limit changes, roadway striping, turn lane additions and/or extensions, and roadside maintenance.
- Long-term improvements are likely not needed at every location, but some locations can greatly benefit from geometric design changes including R-Cuts, over or underpasses, and access roads.

- Left turns onto U.S. 19 are a major cause of severe crashes and travel delay. At locations where minor roads are stop controlled, drivers must wait for large enough gaps to cross U.S. 19 traffic and accelerate when merging. This leads to idling in the median, risky turns, and driver frustration.
- Right turns have to cross less traffic, making them faster and safer to make. But many locations do not have right turn lanes, leaving drivers stuck in queues waiting for others to turn left or travel through the intersection.

	Intersection	Intersection Type	Stakeholder Priority*	Peak Hour LOS**	Total Crashes***	Fatal & SI Crashes ***
Section 1	Lansing-Edmond Road	Two-way Stop Controlled	#2	A	19	0
	Fayette Mine Road	Two-way Stop Controlled	#1	-	7	0
Section 2	Fayette Station	Two-way Stop Controlled	#2	A	15	0
	N Court Street	Traffic Signal	#1	C	62	2
Section 3	Laurel Creek Road	Traffic Signal	#3	B	23	0
	Fayette Town Center	Traffic Signal with Turn Phase	#1	C	100	1
Section 4	Hinkle Road	Two-way Stop Controlled	#3	A	22	1
	Mall Appalachian Drive	Traffic Signal	#2	B	49	1
Section 5	Legends Highway	One-way Stop Controlled	#2	A	6	0
	Okey Patterson Road	One-way Stop Controlled	#1	B	25	2
	Wood Mountain Drive	Traffic Signal with Turn Phase	#1	B	42	1
	W.V. 27/2	One-way Stop Controlled	#3	A	17	0
	Maple Fork Road	Traffic Signal with Turn Phase	#2	B	48	2

Table 3. Summary of priority intersection local insight, traffic performance, and roadway safety analysis

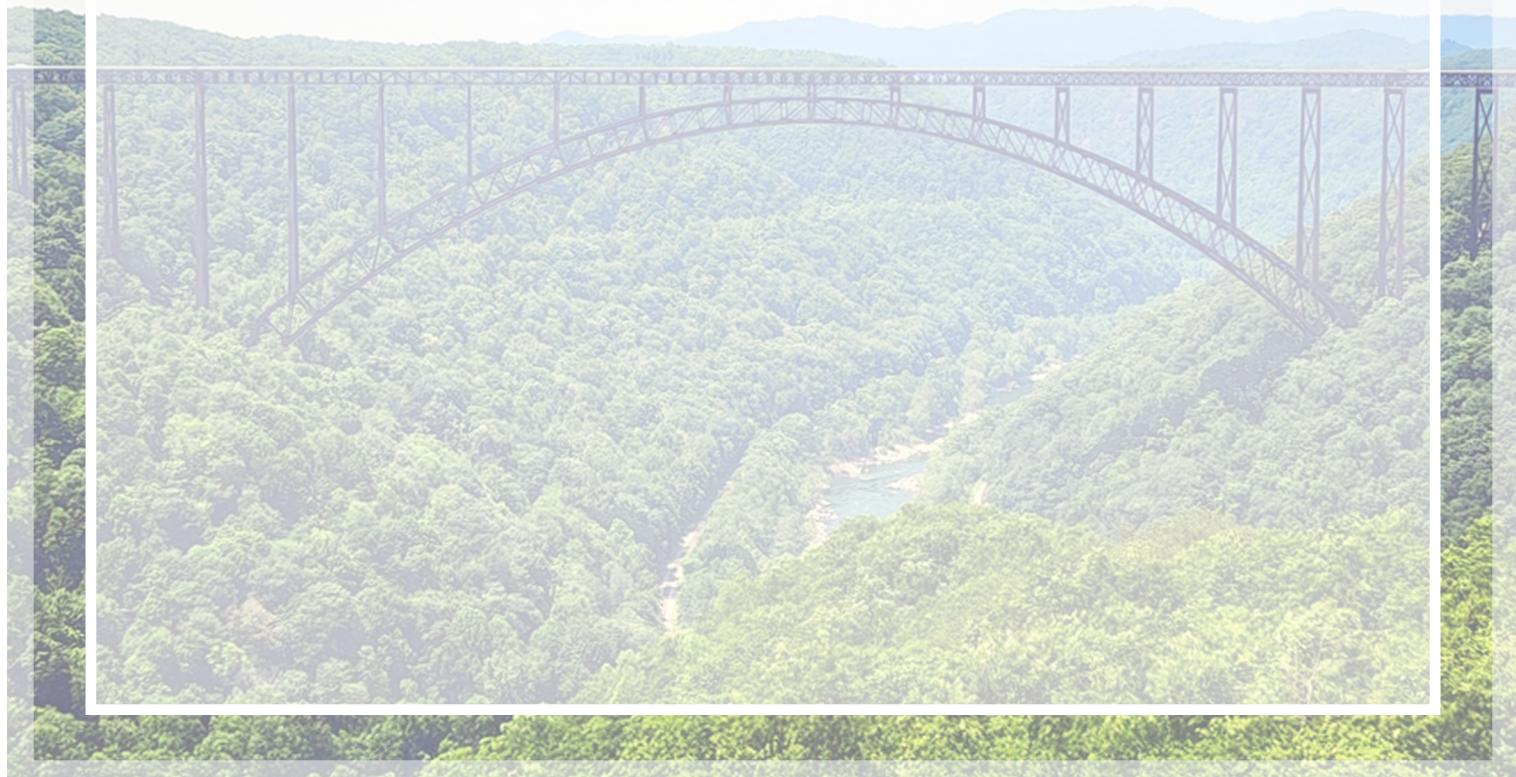
\* Intersection priority ranking within each section

\*\* Overall intersection Level of Service (LOS) during the peak hour (worst of LOS AM & PM peaks)

\*\*\* Based on WVDOT crash data 2017-2021

# IMPROVEMENT OPTIONS

- ▶ *Improvement Options*
- ▶ *Comparing Potential Improvements*
- ▶ *Quick-Win Projects*
- ▶ *Multi-Year Projects*
- ▶ *Visionary Projects*
- ▶ *Local Support*



## Overview of Improvement Options

The safety and traffic issues we see today can be improved in many different ways. Transportation engineers considered a wide range of options and identified thirteen proven safety and traffic countermeasures that are feasible to construct and appropriate for implementation along the U.S. 19 corridor. These improvement options range in project cost and implementation time, but can be grouped as follows into three broad categories:

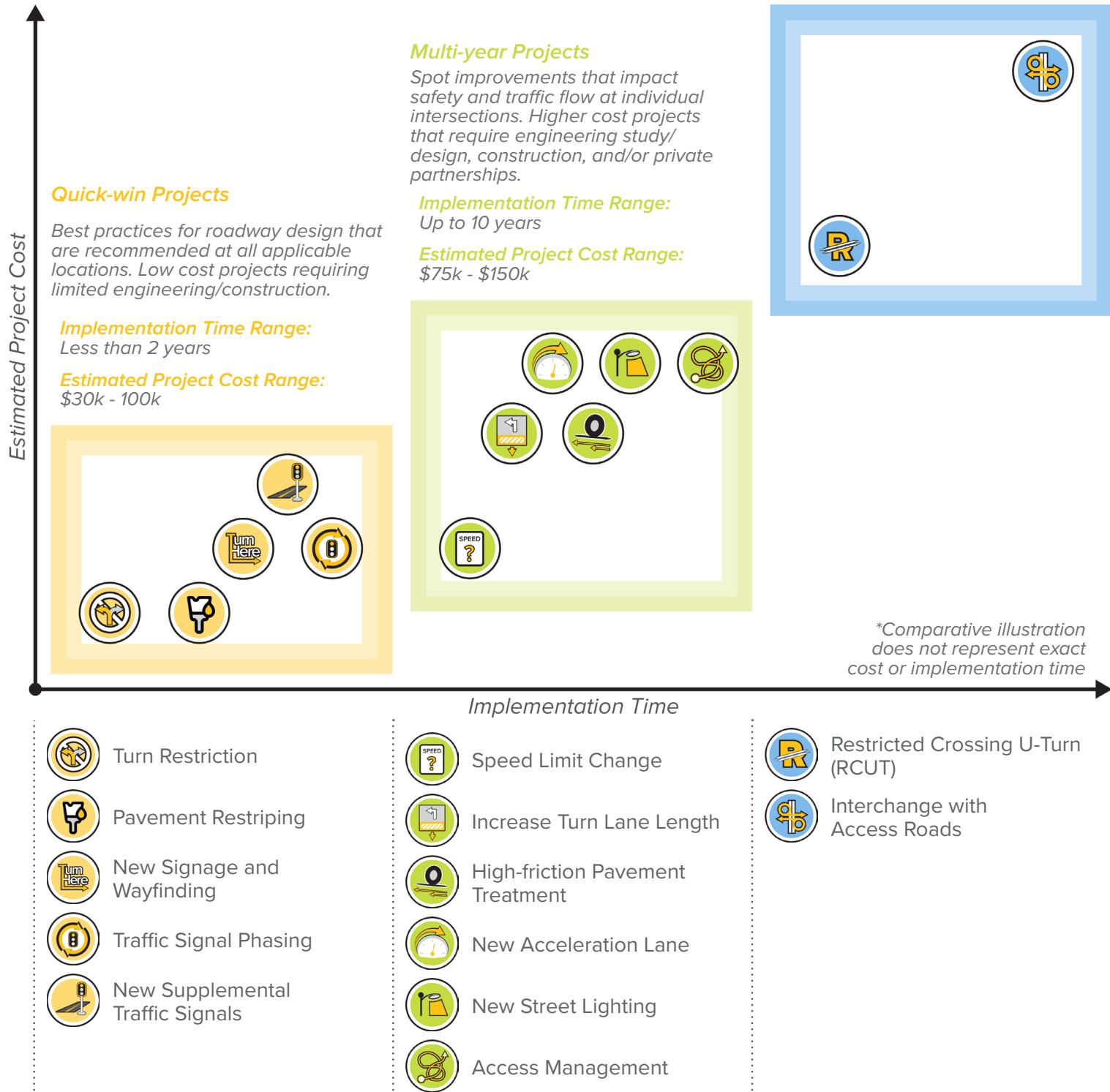


Figure 7. Cost-time spectrum of different countermeasures to improve traffic and safety on U.S. 19

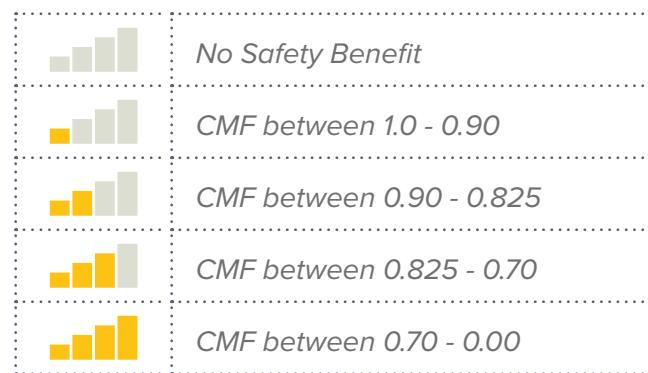
## Comparing Improvements Options

Each improvement was evaluated based on three criteria to help compare its potential impact and prioritize where communities should begin focusing their efforts. Throughout the next two chapters, each improvement option and recommendation will include a traffic benefit, safety benefit, and cost estimate score. These scores were derived by traffic and safety analyses that quantify the impact that this plan's recommendations will have on traffic flow and roadway safety along the U.S. 19 corridor. Read more about the approach that helped determine each score below:



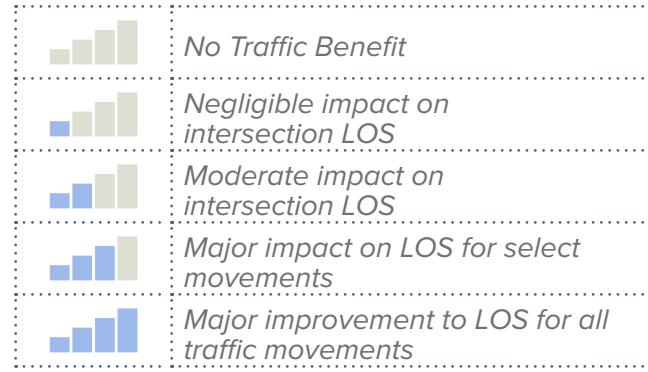
### Safety Benefit

Crash modification factors (CMFs), are estimates of the impact that a specific safety countermeasure will have on crash frequency. For example, if a countermeasure with a CMF of 0.90 is installed, it is estimated that we would see a 10% reduction in crashes if all traffic conditions remain consistent. These CMFs are developed by studying real world examples and published by nationally recognized organizations like the Federal Highway Administration (FHWA) and the American Association of State Highways Transportation Officials (AASHTO).



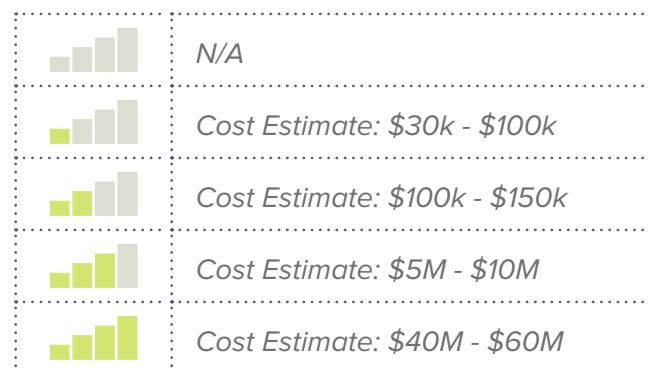
### Traffic Benefit

Each improvement option was evaluated based on the difference between current LOS and the expected LOS performance if constructed. In most cases, safety improvements have little to no traffic impact. Therefore, many of the short and multi-year projects recommended by this study will not lead to major changes in traffic flow. However, several visionary projects do have a substantial impact on traffic flow, and allow for free-flowing connections between U.S. 19 and nearby streets.



### Project Cost Estimate

High-level project cost estimates were prepared to help compare the investment needed to implement this study's recommendations. These estimates are based on the "big ticket" costs (i.e. pavement, structures) that can be easily calculated, and the cost of other similar projects. For multi-year and visionary projects, more precise estimates should be prepared as part of the detailed engineering design phase and consider items such as maintenance of traffic, earthwork, drainage, and potential right-of-way impacts.



## Quick-wins

The following projects are low-cost, quick install, projects that have serious impact on roadway safety. These projects are basic best practices for high-speed corridors like U.S. 19, and account for a majority of this study's recommendations. Learn more about quick-win improvements by reading below:

	Safety Benefit	Traffic Benefit	Project Cost
 <p><b>New turn restriction</b> </p> <p><b>Turn Restriction</b> Angled crashes can be very severe, and often happen due to poor visibility, driver impatience, or distracted driving while merging onto high speed roads. Turn restriction has many forms, but is intended to protect the driver from attempting dangerous maneuvers. This can include eliminating right turn on red onto U.S. 19 or restricting left turn movements onto U.S. 19 at locations near other safe entry points.</p>			
 <p><b>Fresh road striping</b> </p> <p><b>Pavement Restriping</b> Crisp pavement markings clearly indicate a roadway's through lanes, turn lanes, stop bars, and roadway edges. Often taken for granted, these markings have a significant safety benefit, and can reduce roadway departures, sideswipes, and wrong way accidents. Wet reflective markings and/or LED lane guidance lighting can also be included to improve visibility during the Gorge's common inclement weather events (i.e. rain and fog).</p>			
 <p><b>National Park sign</b> </p> <p><b>New Signage and Wayfinding</b> The National Park deserves a special entrance. Parks across the country have implemented unique branding, signage, and wayfinding to showcase the experience their park offers and make their facilities sites easy to find. Improved signage also has safety benefits. Signage draws the driver's attention, clearly communicating upcoming turns. This helps drivers make earlier decisions, resulting in less abrupt stops and lane changes.</p>			
 <p><b>In sync traffic lights</b> </p> <p><b>Traffic Signal Phasing</b> Traffic signals stop traffic to allow for turning movements to proceed. These signals provide easier access to surrounding businesses and allow drivers to more safely turn on and off of U.S. 19 without competing with constant through traffic. Signal coordination adjusts the timing of traffic signal cycles to allow drivers to catch multiple consecutive signals and clear turning lane queues more reliably, improving traffic flow.</p>			
 <p><b>Supplemental light</b> </p> <p><b>New Supplemental Traffic Signals</b> Supplemental traffic signals are all about visibility and driver reaction time. Supplemental traffic signals are an additional signal that mirrors the main signal above the intersection. These signals are less likely to be obscured by other large vehicles, and can be the difference between a simple stop and a screeching halt. These have the largest impact in locations with higher travel speeds and freight truck traffic, like U.S. 19.</p>			

Table 4. Description, cost, and transportation benefits of quick-win projects

## Multi-year Projects

The next set of improvements take more time, design, and funding to implement, but can have a large impact on traffic and roadway safety. Multi-year projects are higher in cost when compared to quick-wins, because they require engineering study/design, construction, and/or private partnerships. For all of these improvements, further engineering design, traffic study, and/or right-of-way acquisition may be needed for a more accurate understanding of project benefits, cost, and impacts to surrounding development.

Even though these projects may take time to move forward, that time can be worth it by providing greater impact to roadway safety and traffic flow than some of the quick-wins that were previously discussed. Learn more about multi-year improvements by reading below and on the following page:

	Safety Benefit	Traffic Benefit	Project Cost
 <p><i>Installation of a newly changed speed limit sign</i></p> <p></p>	<p><b>Reduce Speed Limit</b></p> <p>High travel speeds are directly correlated with more severe crash outcomes. The posted speed limit on U.S. 19 changes frequently through the corridor, ranging between 50-65 MPH, often changing near village boundaries. Reducing the posted speed limit to be more consistent throughout the corridor is one way to address the 'speed-up, slow-down' behavior we see today, and decrease the top end speeds that make turning onto the corridor more dangerous.</p>		
 <p><i>Dual left turn creates more space for queuing</i></p> <p></p>	<p><b>Increase Turn Lane Length</b></p> <p>Some intersections will include one or multiple turn lanes to ease the flow of through traffic. In locations with frequent lefts and few opportunities to turn, traffic can back up and overflow into adjacent through lanes. As traffic overflows into adjacent through lanes, oncoming traffic may need to weave around queued vehicles, creating safety risks. Extending left turn lanes rightsizes the queue storage length to eliminate this issue. Extra turn lane length provides more time to decelerate.</p>		
 <p><i>Installation process of high friction pavement</i></p> <p></p>	<p><b>High Friction Pavement Treatment</b></p> <p>U.S. 19 winds through the hilly landscape of central West Virginia, but remains fairly flat within the study area. That cannot be said about many of the side streets that intersect with U.S. 19. For streets that approach U.S. 19 at a steep downhill grade, it may be difficult to stop, especially during wet and snowy conditions. High Friction Pavement gives drivers more traction, which can make braking more responsive and reduce skidding.</p>		

Table 5. Description, cost, and transportation benefits of multi-year projects (continues on following page)

	Safety Benefit	Traffic Benefit	Project Cost
 <p><i>Acceleration lane makes merging easier and safer</i></p> <p><b>New Acceleration Lane</b> Traffic merging onto U.S. 19 from a stop has to quickly accelerate to the speed of oncoming through traffic. Depending on your vehicle, accelerating from 0 - 60 MPH can take over eight seconds depending on the vehicle and roadway conditions. Acceleration lanes provide a lane for cars to speed up and find a safe opportunity to merge. This reduces the risk of abrupt stops and weaving traffic that can lead to rear-end and sideswipe crashes.</p>			
 <p><i>Example of poor access management on NY-78</i></p> <p><b>Access Management</b> Some areas of the corridor have many businesses and commercial centers with direct access to U.S. 19. When driveways and intersections are close together, it creates additional conflict points that result in stopped traffic and driver indecision. Access management sets guidelines focused on consolidating driveways, increasing driveway spacing, and reducing these conflicts. Enforcing access management guidelines can help guide future development for safer road conditions.</p>			
 <p><i>Lighting increases visibility during the evening</i></p> <p><b>Highway Lighting</b> Visible range drops from several miles during the day to only 500 feet during the night, even when high-beams are engaged. Night time visibility is especially compromised for older drivers. This reduced visibility gives drivers less time to react, especially when traveling at high speeds. Highway lighting at intersections and near forested areas can improve visibility, helping to reduce rear-end, angled, and animal related crashes.</p>			

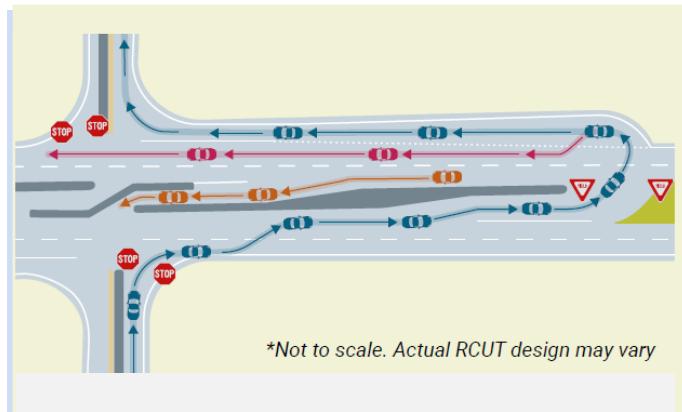
## Visionary Projects

These long-term improvements can take more than ten years to implement, but are highly effective, improving traffic flow and safety across an entire section. Each of these projects require further study, including extensive engineering design, environmental review, and complex construction.

### Restricted Crossing U-Turn (RCUT)



New RCUT Charleston, WV completed in 2021



\*Not to scale. Actual RCUT design may vary

How to Navigate an RCUT  
(Source: Nebraska Dept. of Transportation)



Left turns onto U.S. 19 can be difficult and dangerous at some locations due to high travel speeds. An RCUT restricts through and turn movements from side streets, forcing drivers to turn right and then make a U-turn at a designated median opening. This reduces the number of conflict points between vehicles, which lowers the risk of severe crashes. RCUTs are especially useful on divided highways with high traffic volumes, and can be implemented more quickly and at a lower cost compared to interchanges.



### Interchange with Access Roads



'Peanut Interchange' incorporates roundabouts  
Location: Logan, Ohio (Hocking Hills State Park)



Innovative interchange design can reduce land use impacts. Location: Hico, WV



A highway interchange is a free-flowing junction that allows traffic to transition between two roads with minimal conflict points. It typically uses grade separation in the form of ramps, overpasses, or underpasses to separate traffic movements vertically, improving safety and efficiency. Interchanges eliminate the need for stop signs or traffic signals, allowing for continuous traffic flow. These can take many forms, depending on traffic patterns, land use, or topographic constraints. They are complex to design and expensive to construct and should only be considered when other options won't adequately address safety or traffic concerns.



Table 6. Description, cost, and transportation benefits of visionary projects

## Local Support

Building local support is one of the four core goals of this study. This goal was achieved through an open and collaborative project section process between FRMPO, local stakeholders, and engineering consultants. This process helped to identify the options local communities are comfortable with and supportive of. This is especially important for quick-win improvements that can move forward incrementally as time and budget allows.

The stakeholder group had significant input on identifying the location and design of visionary projects. This support is valuable, but further, public engagement is necessary. Previously in Chapter 2, we discussed ongoing local engagement regarding improvements north of the New River Gorge Bridge. FRMPO and local communities should build on this momentum and local support to gather more feedback about these visionary options before moving forward to final design.



Construction workers make steady progress on completing New River Gorge Bridge's central arch (Source: National Park Service)



### Local Insight Highlight: Building Stakeholder Support

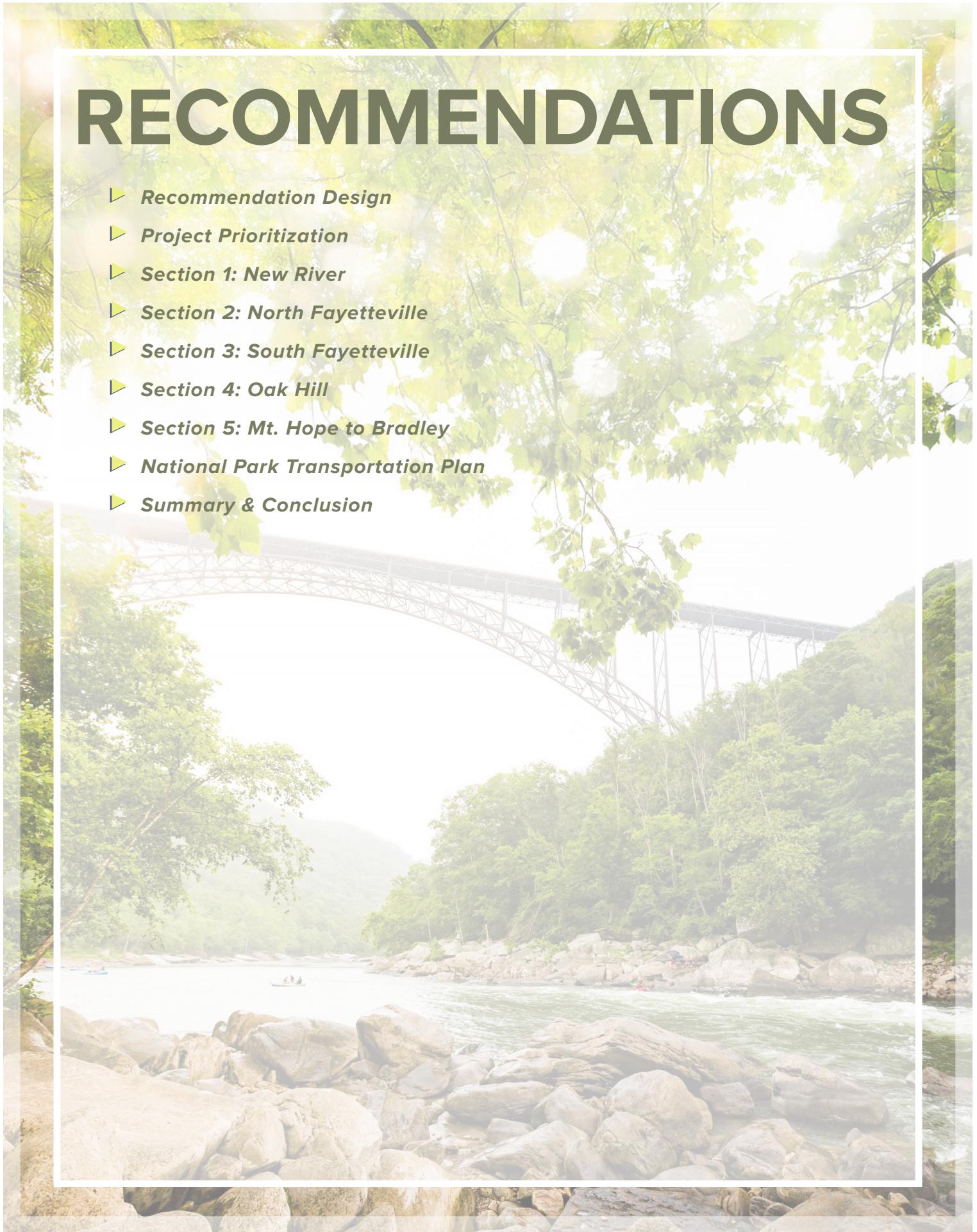
Project stakeholders were active participants in shaping the recommendations of this study. The improvement options shown in this chapter were identified with their input, providing crucial local knowledge for what improvements should be explored and where they make the most sense.

At the end of the study, stakeholders were provided a final chance to voice their support for this project's recommendations. The results of that feedback show strong support for this plan's vision.

		Against	Neutral	Support
Quick-win Projects	Turn Restriction	0.0%	33.3%	66.7%
	Pavement Restriping	0.0%	25.0%	75.0%
	New Signage and Wayfinding	0.0%	25.0%	75.0%
	Traffic Signal Phasing	2.5%	15.0%	82.5%
	New Supplemental Traffic Signals	3.1%	21.9%	75.0%
Multi-year Projects	Speed Limit Change	3.1%	21.9%	75.0%
	Increase Turn Lane Length	0.0%	12.5%	87.5%
	High-friction Pavement Treatment	0.0%	25.0%	75.0%
	New Acceleration Lane	0.0%	25.0%	75.0%
	New Street Lighting	0.0%	43.8%	56.3%
Visionary Projects	Access Management	0.0%	37.5%	62.5%
	Restricted Crossing U-Turn	25.0%	62.5%	12.5%
	Interchange with Access Roads	0.0%	50.0%	50.0%

# RECOMMENDATIONS

- *Recommendation Design*
- *Project Prioritization*
- *Section 1: New River*
- *Section 2: North Fayetteville*
- *Section 3: South Fayetteville*
- *Section 4: Oak Hill*
- *Section 5: Mt. Hope to Bradley*
- *National Park Transportation Plan*
- *Summary & Conclusion*



## Project Design

This chapter lays out a list of quick-win, multi-year, and visionary improvements that could be made at each of U.S. 19's thirteen priority intersections. These improvements were selected based on engineering judgment, potential safety and traffic benefit, and input from FRMPO, public stakeholders, and engineering consultants.

For visionary and multi-year projects, preliminary engineering was performed to determine if recommendations were feasible to construct given topography, right-of-way constraints, and roadway geometry. This preliminary engineering helps confirm that the recommendations in this plan are feasible for construction. Additional detailed engineering design is necessary for visionary and multi-year projects to consider design alternatives, mitigate any potential environmental impacts, and decide on precise roadway alignments. Preliminary engineering drawings shown in this section are not final designs, but engineering concepts that showcase how improvements may impact traffic flow and connectivity on and across the U.S. 19 corridor.

## Project Prioritization

With 51 potential projects to make progress on, communities need to know where the best place to start is. This project's number one goal is to improve traffic safety along U.S. 19, and it also how we prioritized improvements. Throughout this chapter, some recommendations are denoted by a black star (★), indicating they are expected to reduce crashes at their intersection by five or more crashes per year. This prioritization factors in both the expected benefit of the project and the safety need at the location. Several other recommendations north of the New River were also included based on expressed need by local stakeholders to support the New River Gorge National Park and Preserve by improving safe access to the park's main entrance and welcome center.

For visionary projects, multiple options are indicated as priorities for the same location. It is the responsibility of the region, alongside the West Virginia Department of Transportation (WVDOT) to further study these options to determine if these visionary projects are necessary and which design is appropriate for each location.

## Project Recommendations:

### 28 Quick-win Projects



### 23 Multi-year Projects



### 4 Visionary Project Options



Quick-win Projects	Turn Restriction	x4
	Pavement Restriping	x13
	New Signage and Wayfinding	x1
	Traffic Signal Phasing	x6
Multi-year Projects	New Supplemental Traffic Signals	x4
	Speed Limit Change	x4
	Increase Turn Lane Length	x3
	High-friction Pavement Treatment	x1
Visionary Projects	New Acceleration Lane	x2
	New Street Lighting	x10
	Access Management	x3
	Restricted Crossing U-Turn (RCUT)	1 option
	Interchange with Access Roads	3 options

Table 7. Summary on recommended improvements

## Section 1: New River

### Short-term Improvement Options

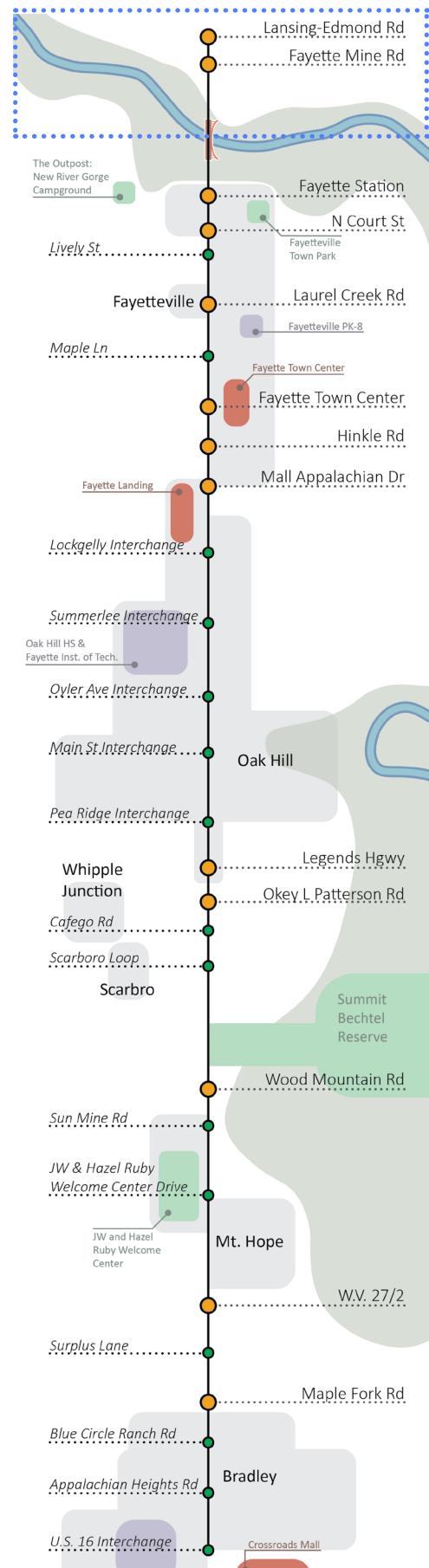
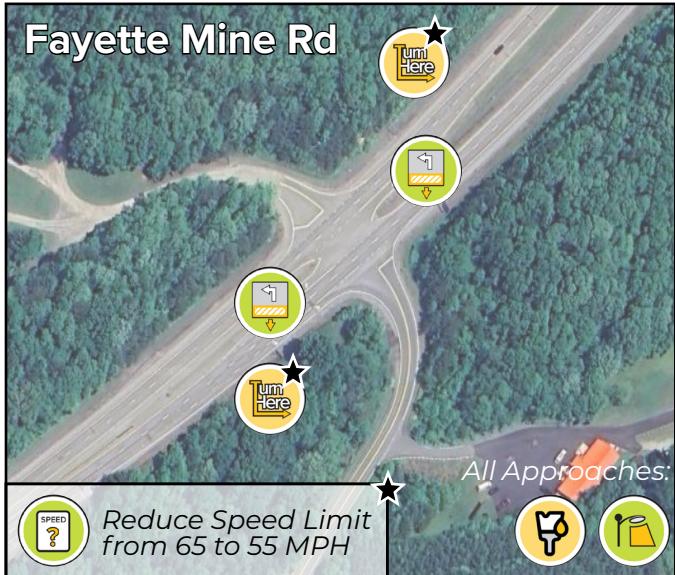
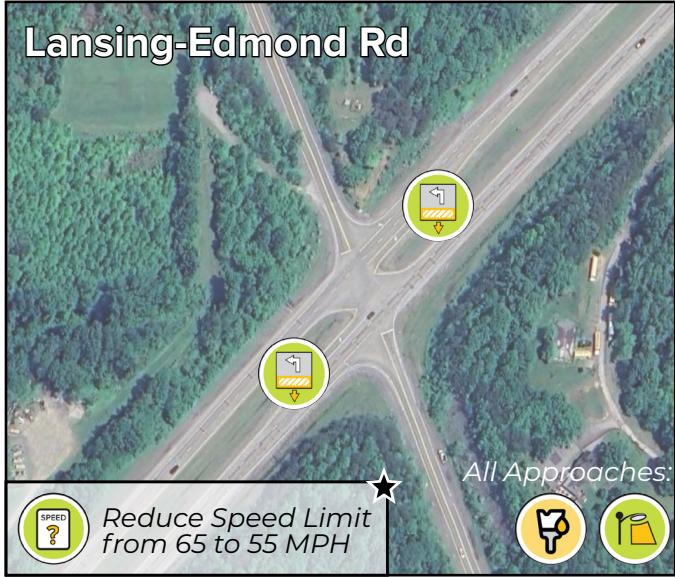
Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost
Lansing-Edmond Road	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	    	    	   
	 Speed Limit Reduction	Multi-year Projects	Speed limit reduction from 65 to 55 MPH	    	    	   
	 Extend Left Turn Lane (x2)	Multi-year Projects	Increase left lane length to allow for deceleration	    	    	   
	 Highway Lighting	Multi-year Projects	Install lighting at the intersection of U.S. 19 and Lansing-Edmond Road	    	    	   
Fayette Mine Road	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	    	    	   
	 Signage and Wayfinding (x2)	Quick Wins	High visibility signage for park entrance and advanced warning north and south of entrance	    	    	   
	 Speed Limit Reduction	Multi-year Projects	Speed limit reduction from 65 to 55 MPH	    	    	   
	 Extend Left Turn Lane (x2)	Multi-year Projects	Increase left lane length to allow for deceleration	    	    	   
Fayette Mine Road	 Highway Lighting	Multi-year Projects	Install lighting at the intersection of U.S. 19 and Fayette Mine Rd	    	    	   
	 Speed Limit Reduction	Multi-year Projects	Speed limit reduction from 65 to 55 MPH	    	    	   
	 Extend Left Turn Lane (x2)	Multi-year Projects	Increase left lane length to allow for deceleration	    	    	   
	 Highway Lighting	Multi-year Projects	Install lighting at the intersection of U.S. 19 and Fayette Mine Rd	    	    	   

Table 8. Section 1 short-term concept evaluation based on safety benefit, traffic benefit, and project cost

## Section 1: New River

### Short-term Improvement Options

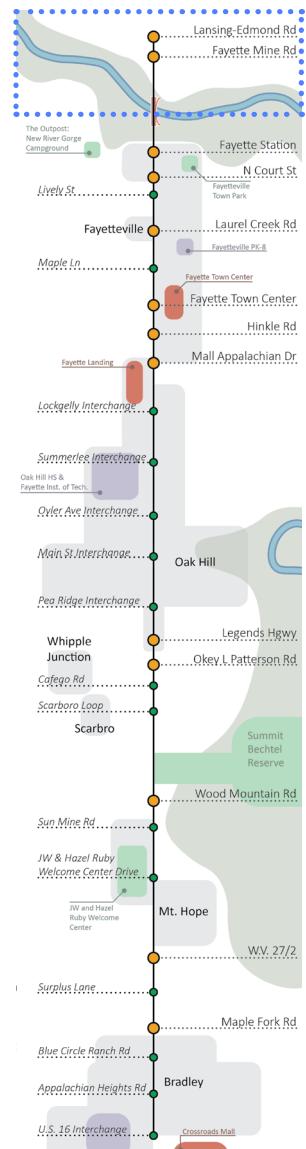
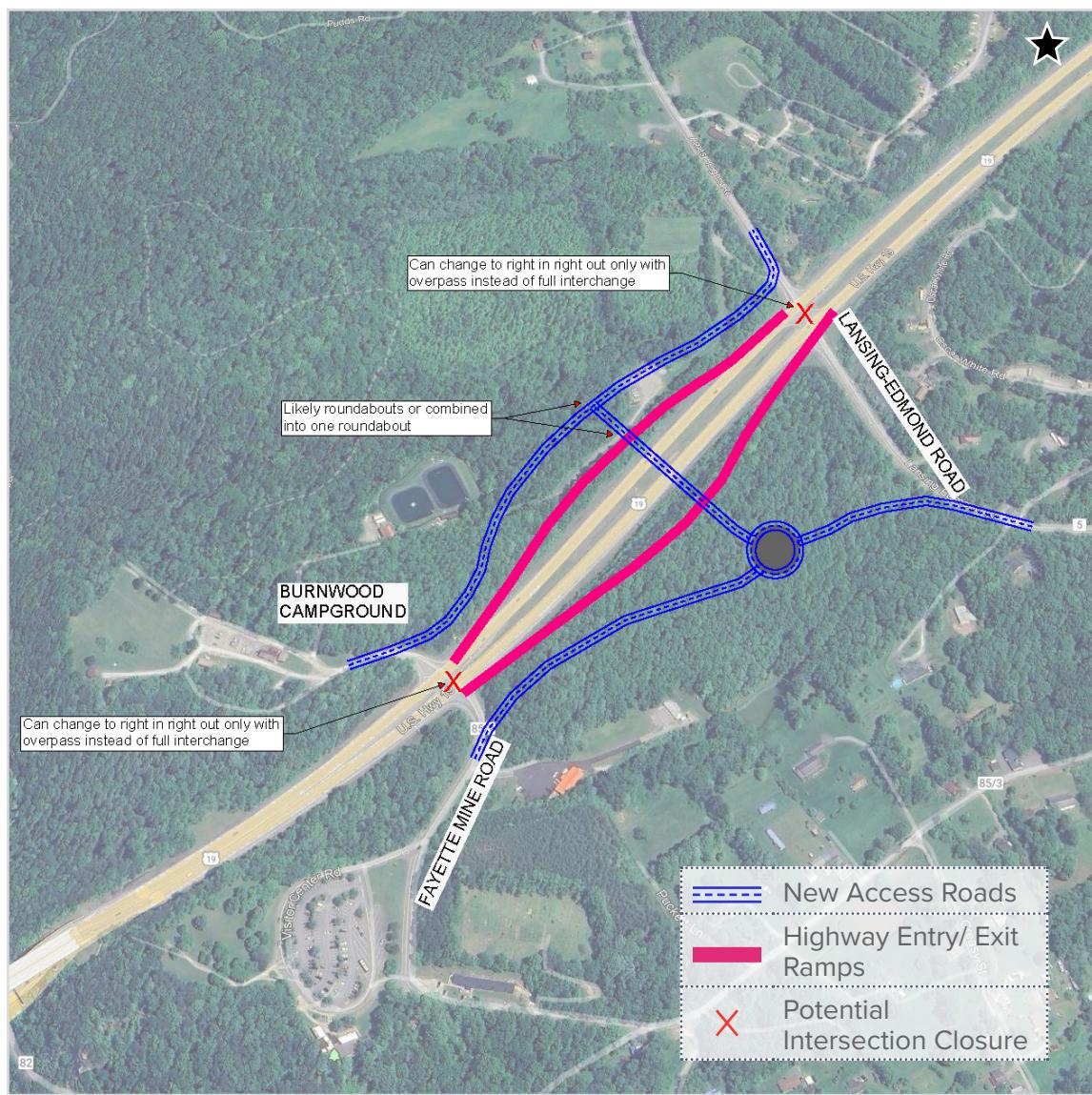


## Section 1: New River

### Long-term Improvement Options

Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost
Full Section	 Interchange with access roads	Visionary Projects	<p>Interchange between Lansing-Edmond Rd and Fayette Mine Rd. Connected with new access roads on both sides of U.S. 19.</p> <p>U.S. 19 intersections at Fayette Mine Rd and Lansing-Edmond Rd could be closed. Access maintained via new access roads.</p>			



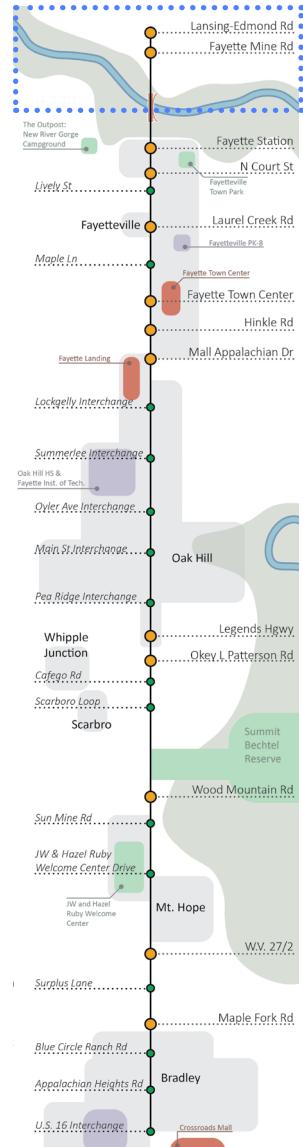
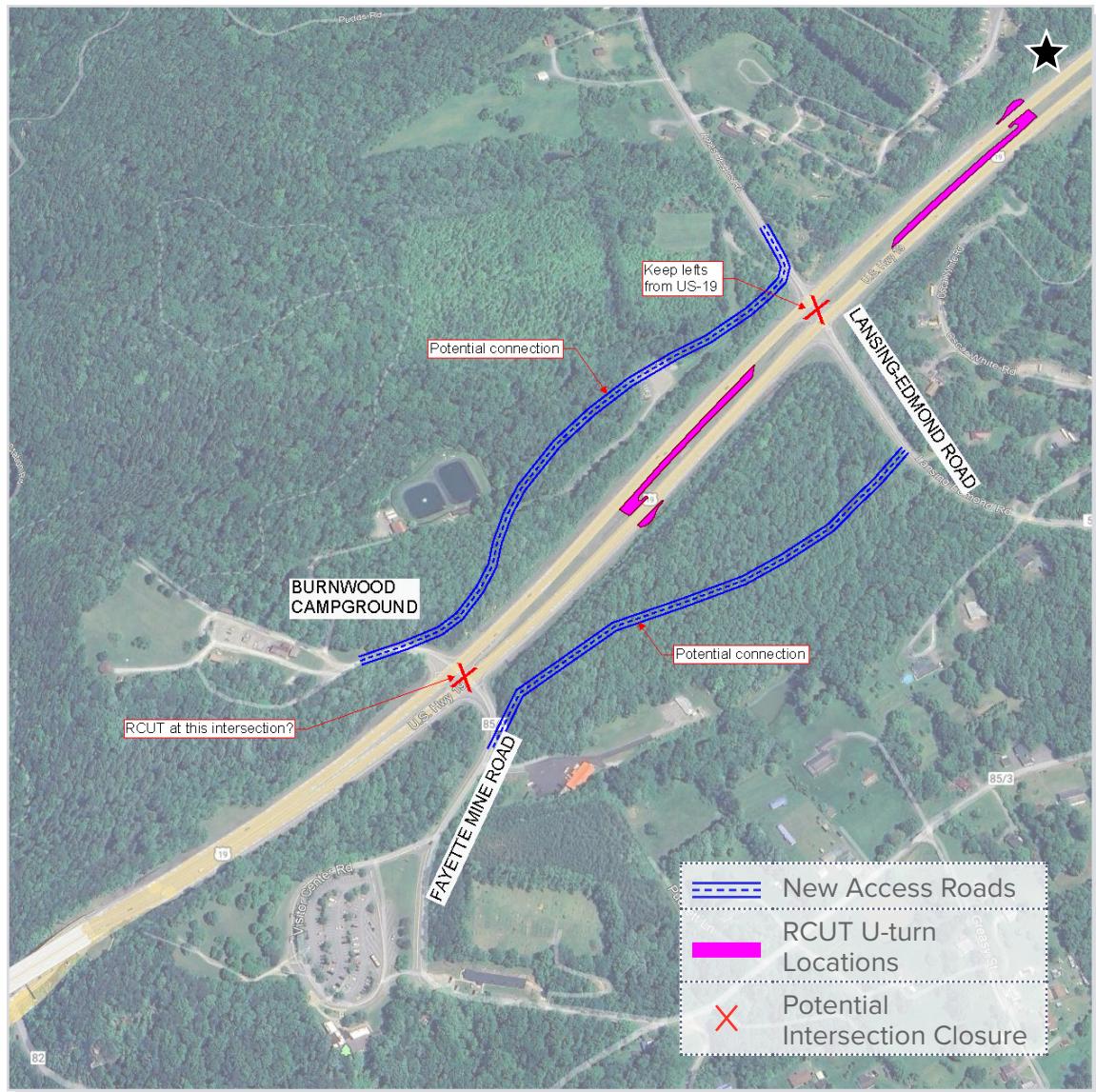
\* This report presents two possible designs. Only one visionary project should be implemented at this location.

## Section 1: New River

### Long-term Improvement Options

Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost
Full Section	RCUT	Visionary Projects	<p>RCUT between Lansing-Edmond Road and Fayette Mine Road. Connected with new access roads on both sides of U.S. 19.</p> <p>U.S. 19 intersections at Fayette Mine Rd and Lansing-Edmond Rd could be closed. Access maintained via new access roads.</p>			



\* This report presents two possible designs. Only one visionary project should be implemented at this location.

## Section 2: North Fayetteville

### Short-term Improvement Concept

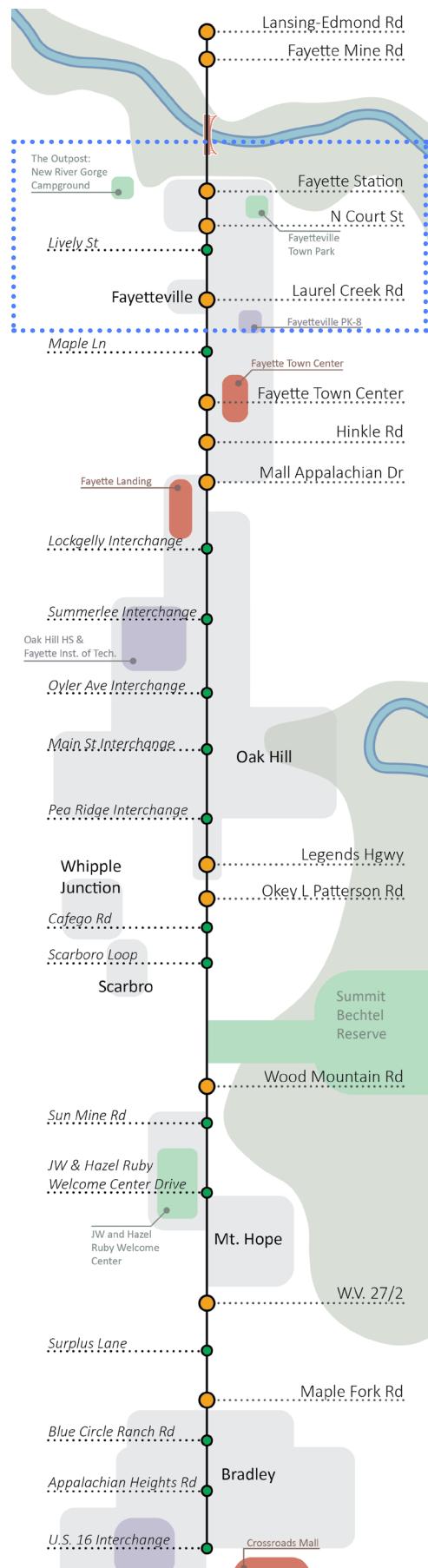
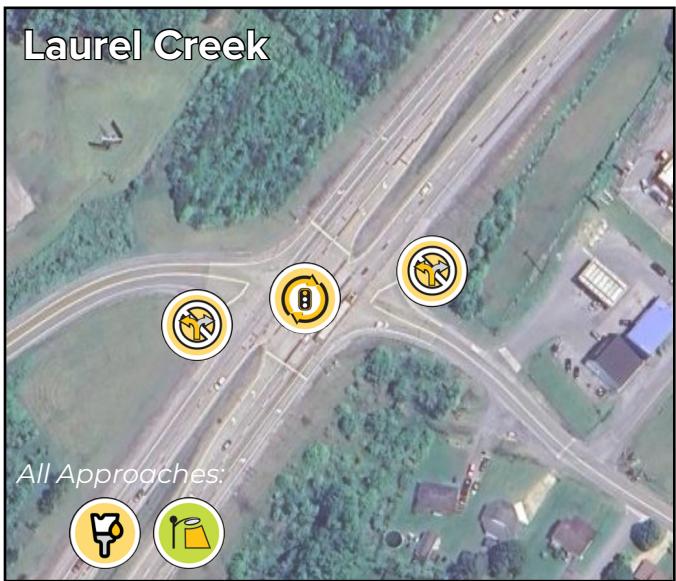
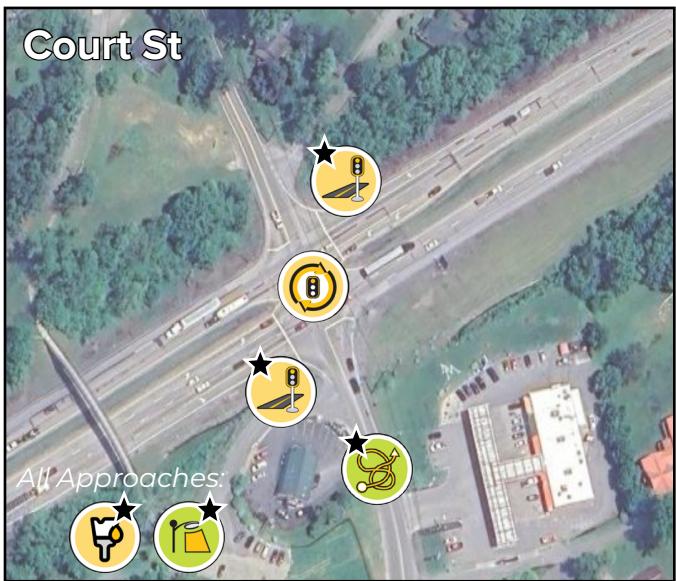
Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost
Fayette Station	 Turn Restriction	Quick Wins	Restrict left turns onto U.S. 19 from south leg	   	   	 
	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	   	   	 
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Fayette Station	   	   	 
	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	   	   	 
	 Supplemental Traffic Signal (x2)	Quick Wins	Supplemental traffic signal added to right side of both U.S. 19 approaches	    	   	 
Court St	 Signal Phasing	Quick Wins	Adjust signal phasing to clear left turn queues on Court St and U.S. 19. Increase 'all-red' intersection clearance intervals	   	   	 
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Court St	   	   	 
	 Access Management	Multi-year Projects	Driveways of nearby businesses consolidated into one drive per business and located further from Court St intersection	    	   	 
Laurel Creek	 Turn Restriction (x2)	Quick Wins	Remove right on red turns onto U.S. 19 from Laurel Creek	   	   	 
	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	   	   	 
	 Signal Phasing	Quick Wins	Increase 'all-red' intersection clearance intervals	   	   	 
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Laurel Creek	   	   	 

Table 9. Section 2 short-term concept evaluation based on safety benefit, traffic benefit, and project cost

## Section 2: North Fayetteville

### Short-term Improvement Options



## Section 3: South Fayetteville

### Short-term Improvement Concept

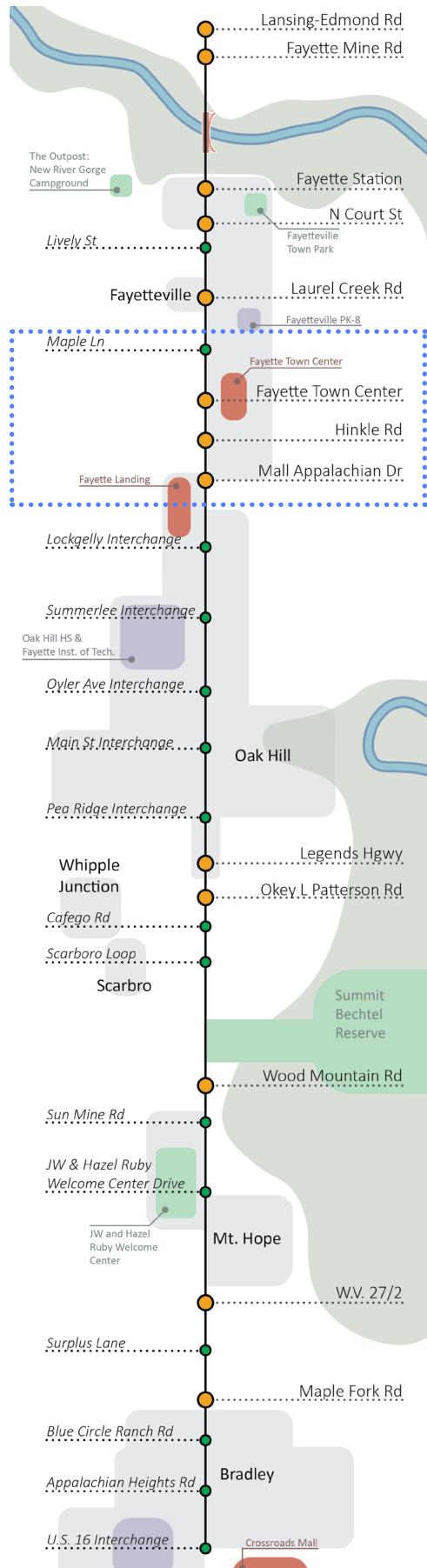
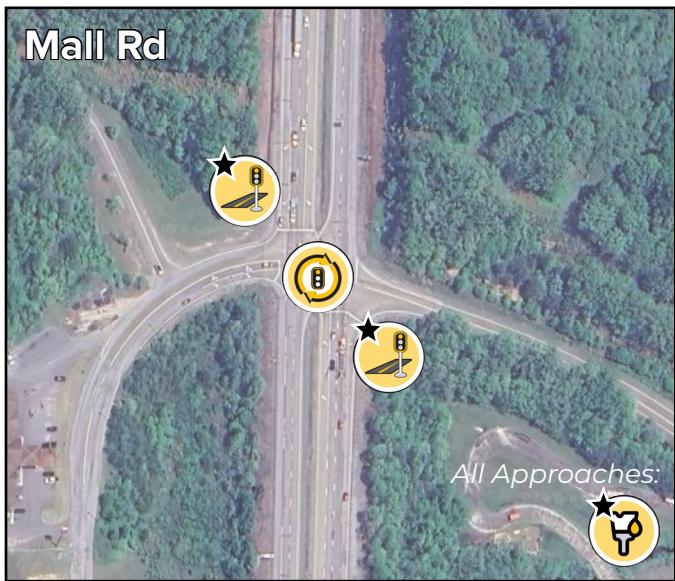
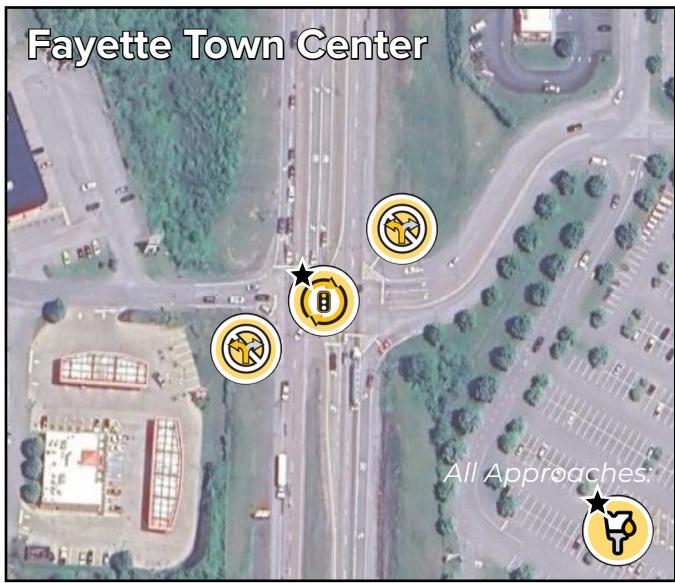
Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost	
Fayette Town Center	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	   	   	   	★
	 Turn Restriction (x2)	Quick Wins	Remove right on red turns onto U.S. 19 from Fayette Town Center	 	 	 	
	 Signal Phasing	Quick Wins	Increase 'all-red' intersection clearance intervals	  	  	  	★
Hinkle Rd	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	  	  	  	
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Hinkle Rd	  	  	  	
Mall Rd	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	  	  	  	★
	 Signal Phasing	Quick Wins	Increase 'all-red' intersection clearance intervals	  	  	  	
	 Supplemental Traffic Signal (x2)	Quick Wins	Supplemental traffic signal added to right side of both U.S. 19 approaches	   	   	   	★

Table 10. Section 3 short-term concept evaluation based on safety benefit, traffic benefit, and project cost

## Section 3: South Fayetteville

### Short-term Improvement Options

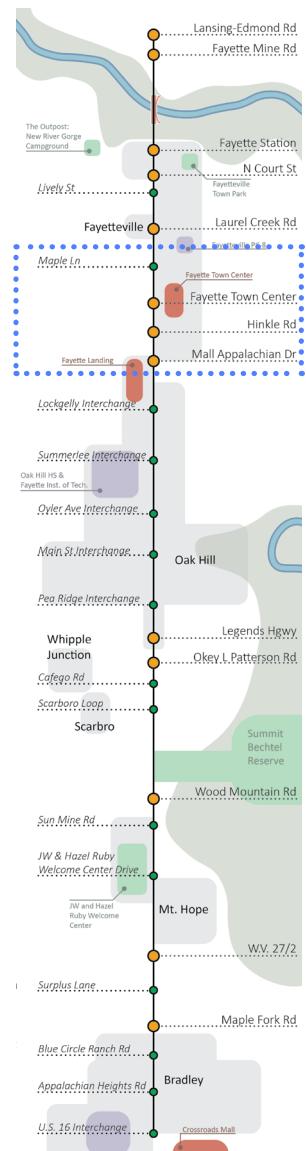
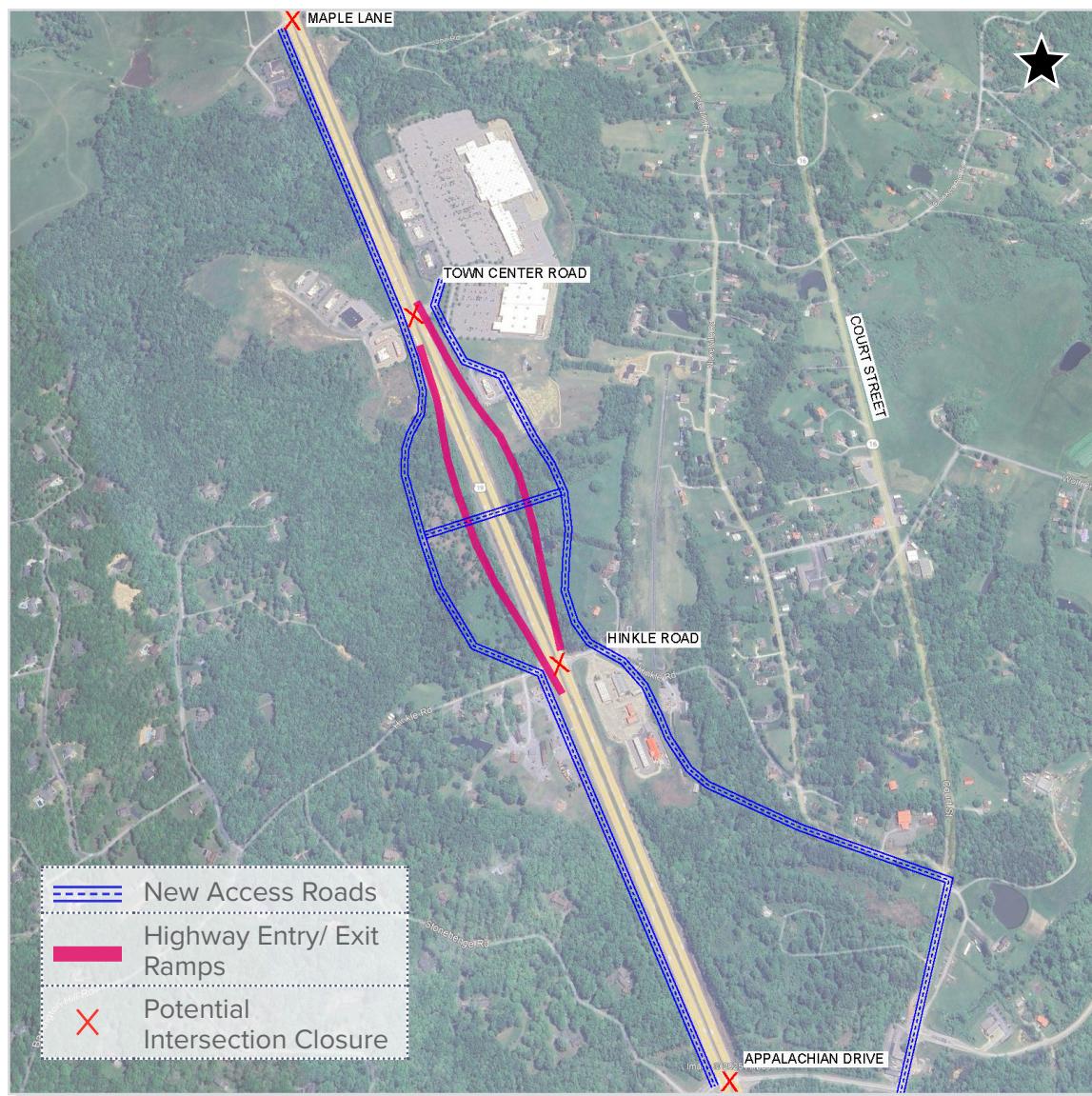


## Section 3: South Fayetteville

### Long-term Improvement Options

Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost
South of Fayette Town Center*	Interchange with access roads 	Visionary Projects	<p>Interchange between Fayette Town Center and Hinkle Rd. New access roads parallel to U.S. 19 on east and west side between Maple Ln and Mall Rd.</p> <p>U.S. 19 intersections at Maple Ln, Fayette Town Center, Hinkle Rd, and Mall Rd could be closed. Access maintained via new access roads.</p>			★



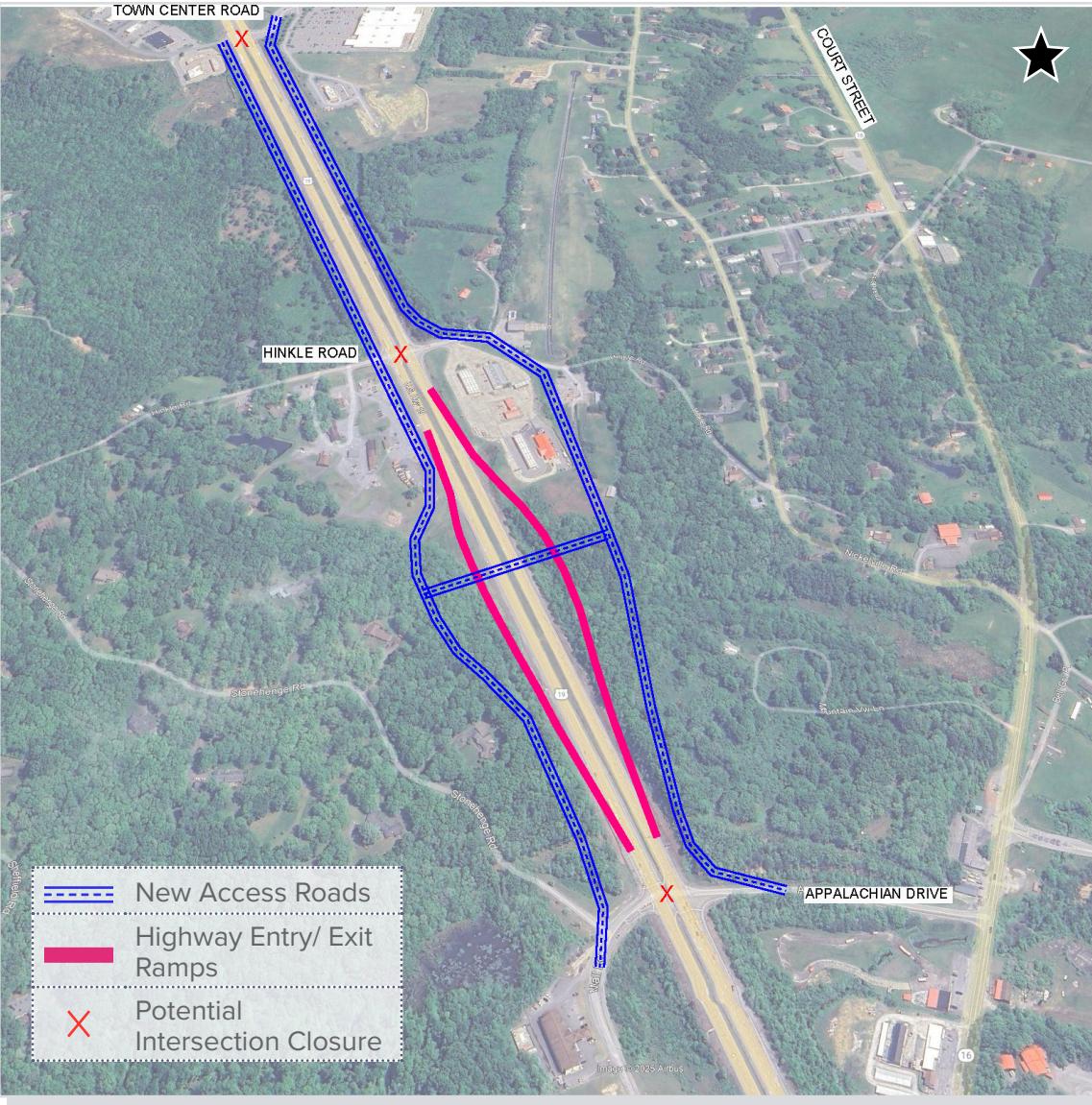
\* This report presents two possible designs. Only one visionary project should be implemented at this location.

## Section 3: South Fayetteville

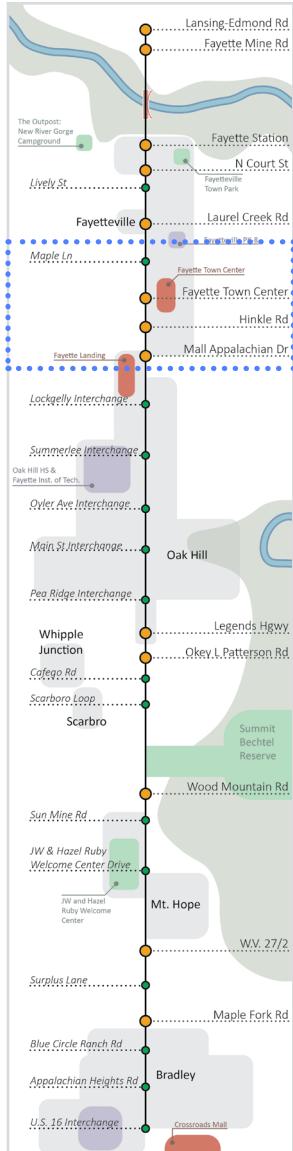
### Long-term Improvement Options

Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost
South of Hinkle Road*	 Interchange with access roads	Visionary Projects	<p>Interchange between Fayette Town Center and Mall Rd. New access roads parallel to U.S. 19 on east and sides between Fayette Town Center and Mall Rd.</p> <p>U.S. 19 intersections at Fayette Town Center, Hinkle Rd, and Mall Rd could be closed. Access maintained via new access roads.</p>			



**New Access Roads**  
Highway Entry/ Exit Ramps  
Potential Intersection Closure



\* This report presents two possible designs. Only one visionary project should be implemented at this location.

## Section 4: Oak Hill

### Short-term Improvement Concept

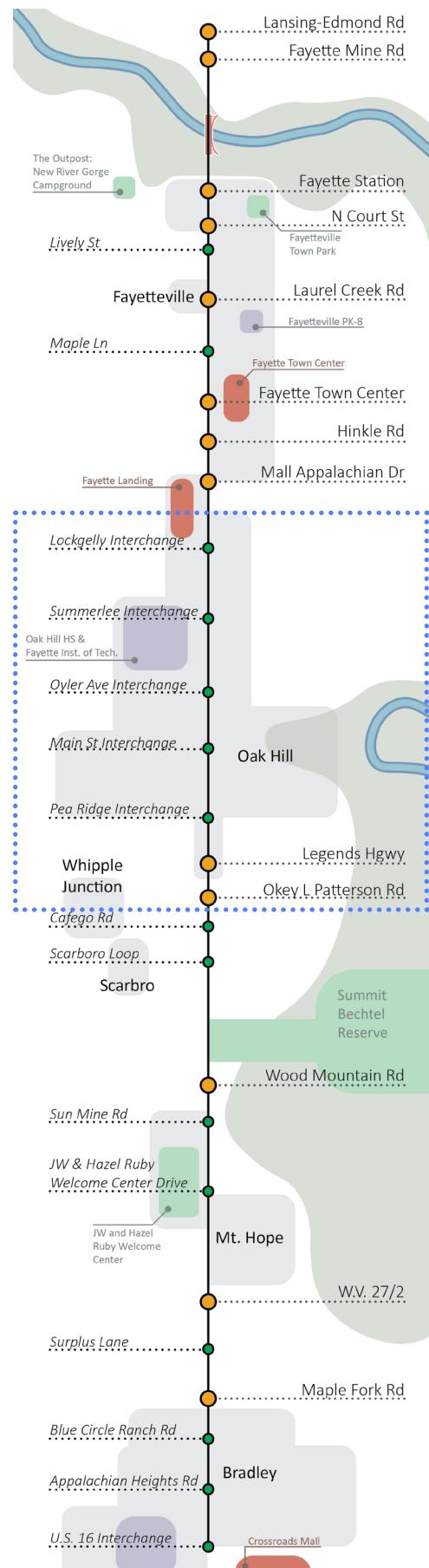
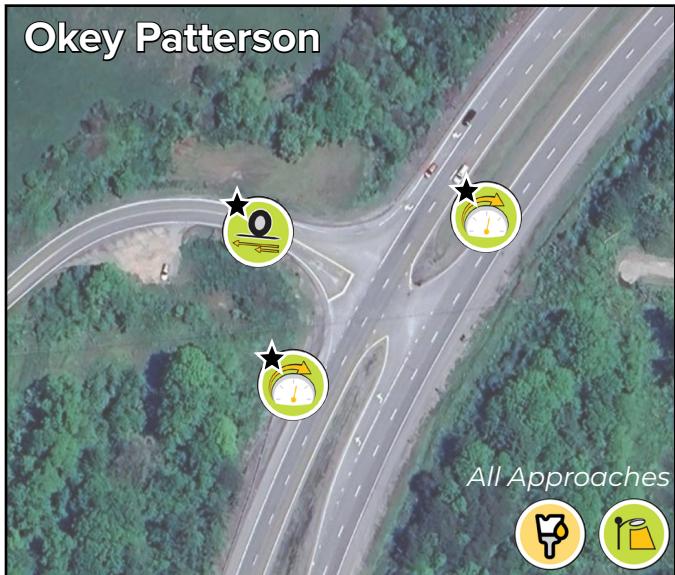
Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost
Legends Highway	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	    	    	   
	 Turn Restriction	Quick Wins	Restrict left turns onto U.S. 19 from south leg. Reroute to Pea Road Interchange	    	    	   
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Legends Highway	    	    	   
Okey Patterson	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	    	    	   
	 Acceleration Lane (x2)	Multi-year Projects	NB and SB acceleration lanes along U.S. 19 for cars merging onto U.S. 19	    	    	   
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Okey Patterson	    	    	   
	 High Friction Surface Treatments	Quick Wins	Surface treatment to reduce chance of vehicles failing to stop due to steep grade, especially in inclement weather	    	    	   

Table 11. Section 4 short-term concept evaluation based on safety benefit, traffic benefit, and project cost

## Section 4: Oak Hill

### Short-term Improvement Options



## Section 5: Mt. Hope to Bradley

### Short-term Improvement Concept

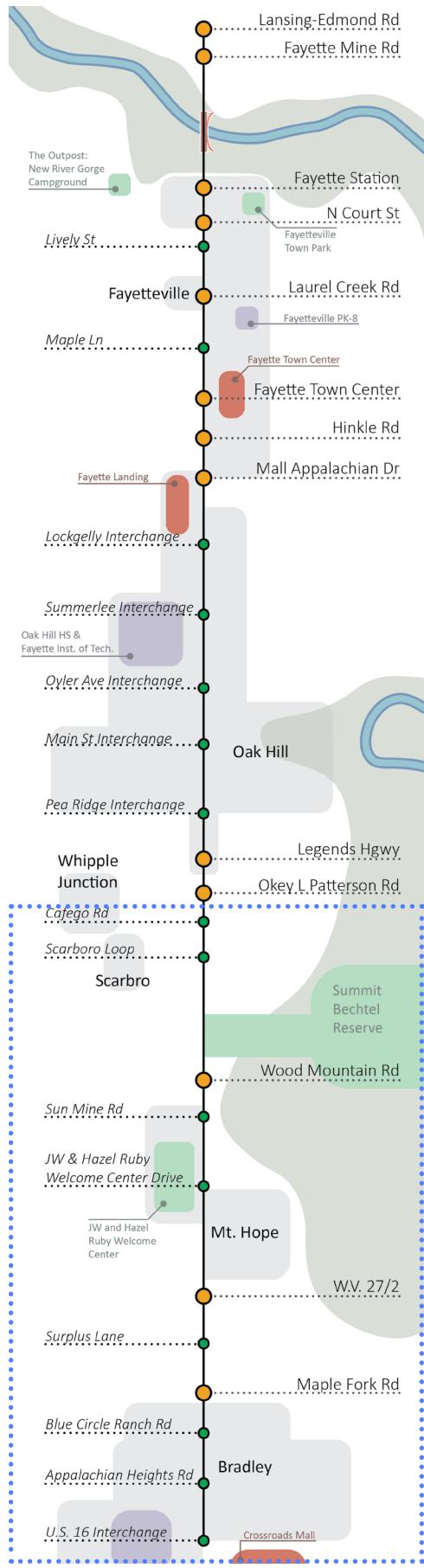
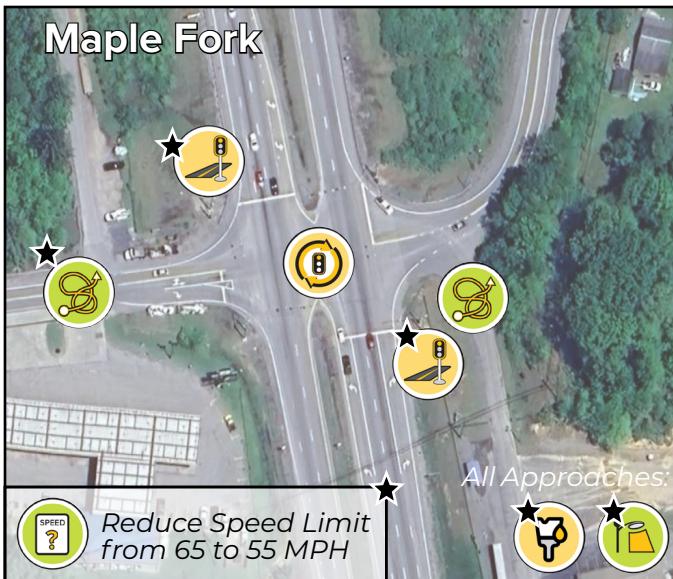
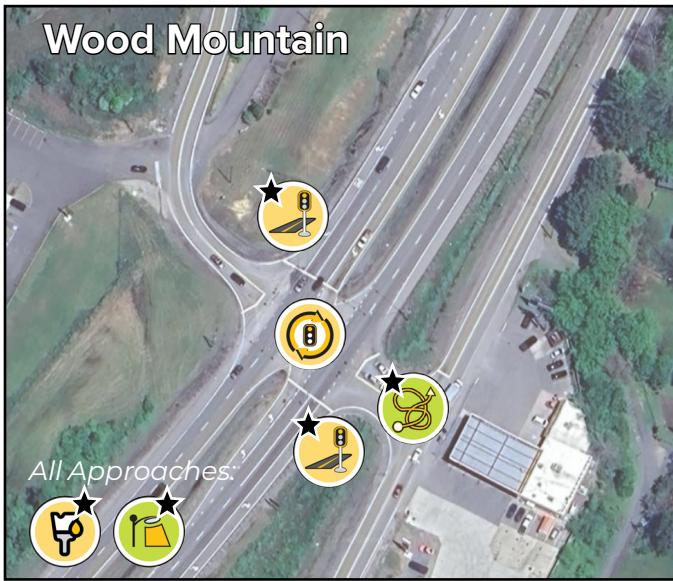
Priority Improvement = ★

Location	Improvement	Timeline	Description	Safety Benefit	Traffic Benefit	Project Cost	
Wood Mountain Road	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	   	   	   	★
	 Signal Phasing	Quick Wins	Increase 'all-red' intersection clearance intervals	   	   	   	★
	 Supplemental Traffic Signal (x2)	Quick Wins	Supplemental traffic signal added to right side of both U.S. 19 approaches	   	   	   	★
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Wood Mountain Road	   	   	   	★
	 Access Management	Multi-year Projects	Close open entry to gas station and relocate access drive south of intersection	   	   	   	★
WV 27/2	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	   	   	   	★
	 Speed Limit Reduction	Multi-year Projects	Speed limit reduction from 65 to 55 MPH	   	   	   	★
	 Acceleration Lane (x2)	Multi-year Projects	NB and SB acceleration lanes along U.S. 19 for cars merging onto U.S. 19	   	   	   	★
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and WV. 27/2	   	   	   	★
Maple Fork Road	 Pavement Restriping	Quick Wins	Restriping lanes and edge of pavement using wet reflective markings	   	   	   	★
	 Signal Phasing	Quick Wins	Increase 'all-red' intersection clearance intervals	   	   	   	★
	 Supplemental Traffic Signal (x2)	Quick Wins	Supplemental traffic signal added to right side of both U.S. 19 approaches	   	   	   	★
	 Speed Limit Reduction	Multi-year Projects	Speed limit reduction from 65 to 55 MPH	   	   	   	★
	 Highway Lighting	Multi-year Projects	Install intersection lighting at the intersection of U.S. 19 and Maple Fork	   	   	   	★
	 Access Management	Multi-year Projects	Reduce access drive width at gas station to further set back from intersection	   	   	   	★

Table 12. 1 short-term concept evaluation based on safety benefit, traffic benefit, and project cost

## Section 5: Mt. Hope to Bradley

### Short-term Improvement Options

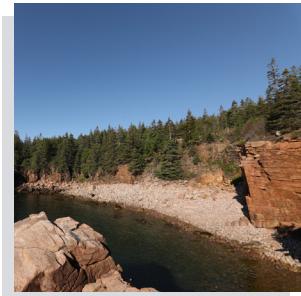


## National Park Transportation Plan

The U.S. 19 Corridor study makes recommendations to improve safe access to the New River Gorge National Park and Preserve, but it is not a substitute for a specialized National Park Transportation Plan. Many National Parks around the country have completed their own studies resulting in deeper understanding of park traffic patterns, annual visitation trends, and recommendations to improve park safety and experience. Below are examples of other National Park Transportation Plans and innovative recommendations that could be explored in a future New River Gorge Transportation Plan:

### Example of National Park Transportation Plans

#### Acadia Traffic and Parking Management Plan



*This plan focuses on addressing congestion and improving visitor experience. It identified innovative recommendations to improve transportation in the park without sacrificing immersion or natural beauty.*

### Example Plan's Recommendations

- Traffic management measures including a parking reservation system and eliminating right lane parking
- Provide real-time signage to guide visitors to less congested parking areas and alternate routes
- Expand and promote the Island Explorer bus system to reduce reliance on private vehicles
- Improve traffic safety on the park's coastal roads and high-traffic areas

#### The Great Smoky Mountain Transportation Plan



*The plan emphasizes regular updates to signage and safety information ensuring safe travel along the park's mountainous roads. Recommendations focus on road safety, traffic management, and seasonal closures.*

- Implement speed control measures and install wildlife crossing signage on key roads
- Clear signage for navigating winding mountain roads, particularly at curves and intersections
- Add merge lanes at existing bridges and intersections to alleviate congestion during peak traffic hours
- Manage traffic flow by redirecting vehicles from less-used park areas to primary entrance points

#### Shenandoah Alternative Transportation Study



*This plan addresses traffic on Skyline Drive, a major thoroughfare through the park. The plan recommendations include signage for visitor safety and safety improvements for curves and steep sections of the road.*

- Improve signage for wildlife crossings and sharp curves along Skyline Drive
- Continue managing congestion by promoting off-peak visits and educating visitors about peak traffic times
- Work on improving road signage to enhance safety and ensure clear information about trailhead access

#### Rocky Mountain Day Use Visitor Access Plan



*Rocky Mountain National Park manages visitor access while protecting resources. The Park's reservation system works to improve visitor experience by managing traffic to the park and major sites throughout the year.*

- Implement a timed-entry reservation system during peak season to distribute visitors across the day
- Implement a reservations account for visitor transportation to prevent shuttle and parking services from being overwhelmed
- Maintain a shuttle system and explore transit partnerships to improve access to the park from nearby cities

Table 13. Examples of other National Park Transportation Plans and their recommendations

## Summary & Conclusion

The recommendations in this plan build on each other to maximize traffic and safety benefit. The 26 quick-win projects are the foundational best practices that should be in place everywhere possible to ensure U.S. 19 has clear visibility and is easy to navigate. The 21 multi-year projects address specific issues and meet the traffic demand we see today. Finally, the four visionary projects can improve the functionality of the entire corridor, mitigating congestion that builds up due to issues at specific locations of high demand.

Next, FRMPO must work closely with local communities and WVDOT to implement this study's recommendations. Consistent coordination is crucial to build on this plan's momentum and find opportunities to make incremental improvements where possible. Together, these projects help us make the U.S. 19 a corridor that connects us and that we can continue to be proud of.



A 'leap of faith' from a base jumper at the 40th annual Bridge Day at New River Gorge (Source: Adventures at the Gorge)

Intersection		1	2	3	4	5	6	7	8	9	10	11	12	
		Lansing-Edmond Rd	Fayette Mine Rd	Fayette Station	Court St	Laurel Creek	Fayette Town Center	Hinkle Rd	Mall Rd	Legends Highway	Okey Patterson	Wood Mountain Rd	W.V. 27/2	Maple Fork Rd
Section 1		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Section 2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Section 3		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Section 4		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Section 5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 14. Recommended improvements at U.S. 19's thirteen priority intersections