Appendix F.

Pittman Center Jurisdiction SAP



Appendix F. Pittman Center Jurisdiction SAP

Pittman Center is a small town situated north of the Great Smoky Mountains National Park and east of Gatlinburg. Most of the roads in the Town of Pittman Center serve primarily to provide access to cabins and other residences. Two major routes intersect the town. Pittman Parkway (US 321) traverses east-to-west, along the south of the town, and carries approximately 5,000 vehicles per day. The only other functionally classified road in the town is Pittman Center Road, which intersects US 321 from the north. The alignment of the roadways creates a cut-through temptation for drivers navigating between Pittman Center Road going north-south and US 321 going east-west. Three additional roads make the east-west connection, Copeland Road, Tunis Branch Road, and Webb Creek Road. Webb Creek Road being is winding, narrow road is not suitable for carrying significant volumes of traffic. Approximately 500 vehicles per day travel through it, resulting in 5 crashes.

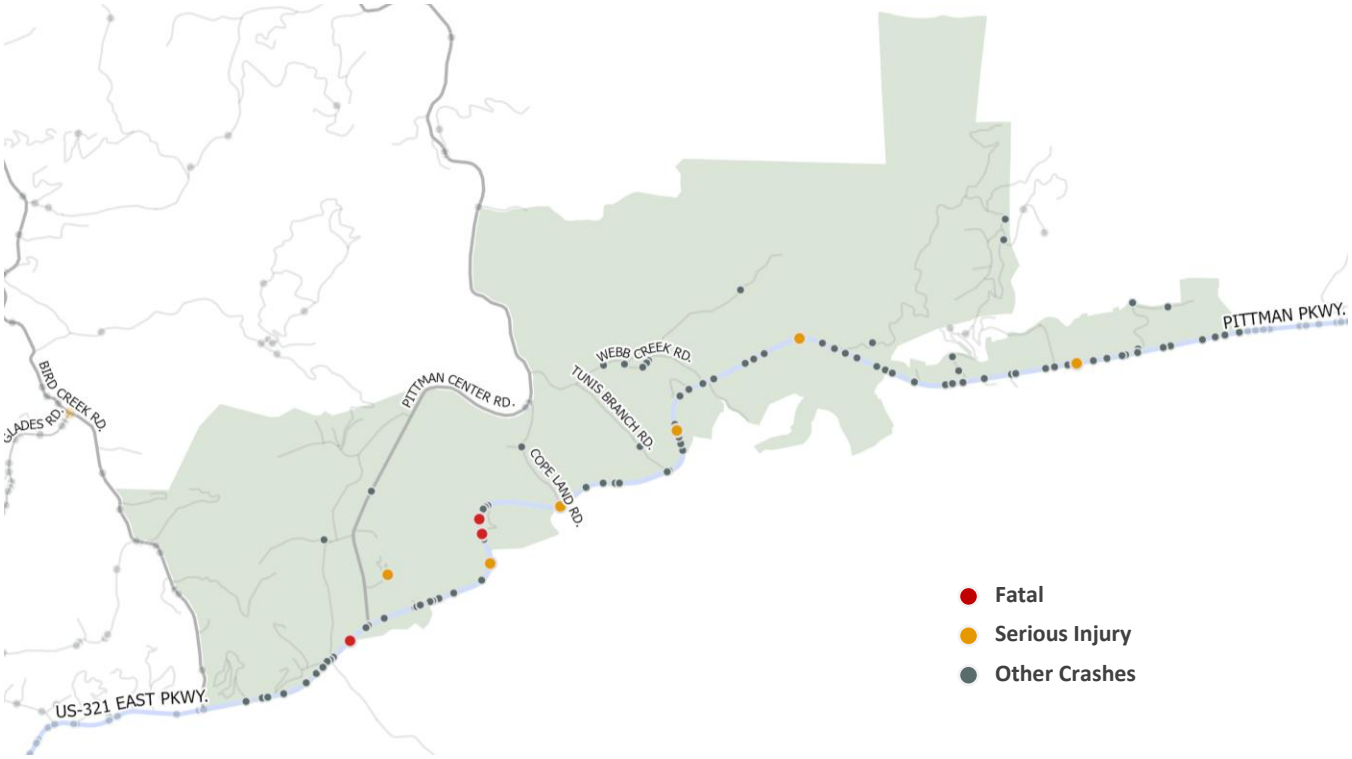


Figure 1 Pittman Center Crash Severity Location (January 2019 to April 2024)

Summary of Crashes in Pittman Center

Only 137 crashes were reported in Pittman Center during the study period. 117 (85%) of those occurred along State Route 73. There were 9 total fatal & serious injury crashes, 8 of which occurred on US 321. Head-on crashes are a particular injury concern in Pittman Center. All but one of the fatal & serious injury crashes on US 321 were caused by a lane departure, primarily vehicles crossing the centerline.

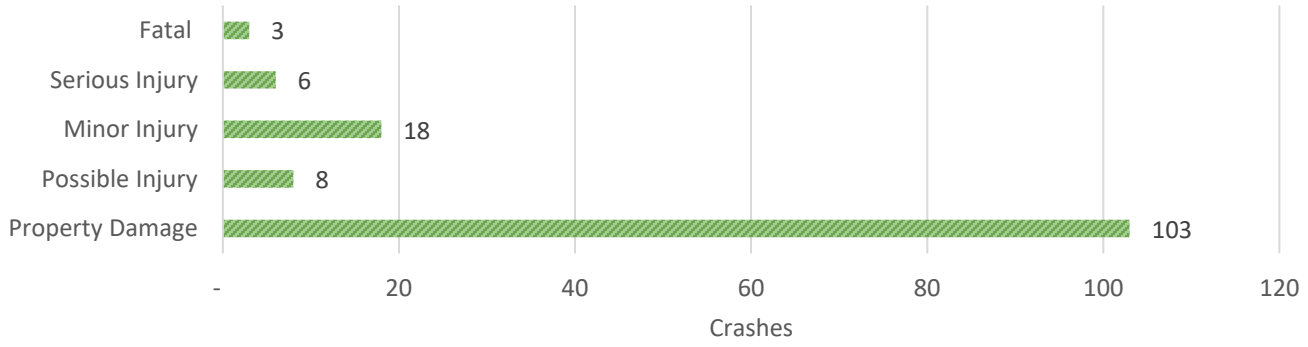


Figure 2 Pittman Center Crash Severity (January 2019 to April 2024)

Lane departure crashes, including those recorded as single-vehicle, head-on, and opposite direction sideswipes, accounted for over half of all crashes in Pittman Center. Rear-end crashes accounted for an additional 28%. The most common pre-crash actions on US 321 are slowing or stopping to make a turn or failing to maintain control within the travel lane.

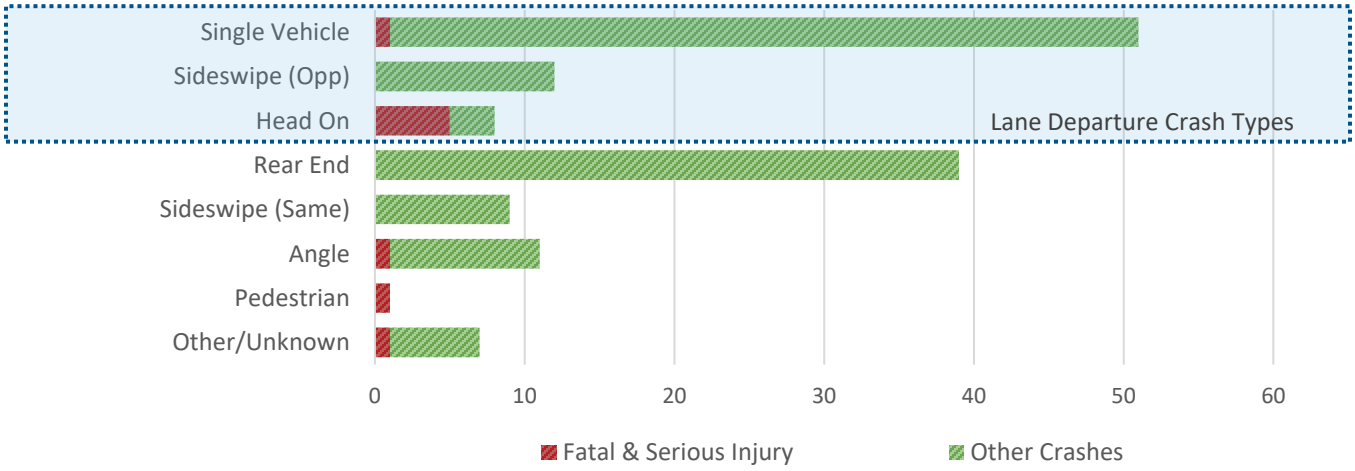


Figure 3 Pittman Center Crash Manner (January 2019 to April 2024)

All crashes on local roads, except for the one pedestrian crash, were the result of some sort of lane departure. Causes included slippery road surface and crossing the centerline or leaving the roadway in a curve. A common factor was vehicles traveling around curves with limited sight distance and having insufficient time to react to another vehicle in their lane or where the road is not wide enough to pass safely at typical driving speeds.

Public Survey Responses

Public survey responses in Pittman Center highlighted several recurring roadway safety concerns along key corridors, particularly near US-321 and rural connector routes. Residents and visitors reported near misses (3 responses) and emphasized pedestrian safety issues (4 responses) in areas where walking infrastructure is limited or nonexistent. Concerns about speeding (2 responses) were raised on winding roads where narrow lanes and sharp curves increase crash risk. Additionally, one visibility concern was identified, reflecting challenges with sight distance in mountainous terrain. Together, these comments reinforce the need for targeted improvements in Pittman Center that address speeding, pedestrian safety, and roadway visibility on rural routes heavily used by both residents and visitors accessing the Great Smoky Mountains National Park.

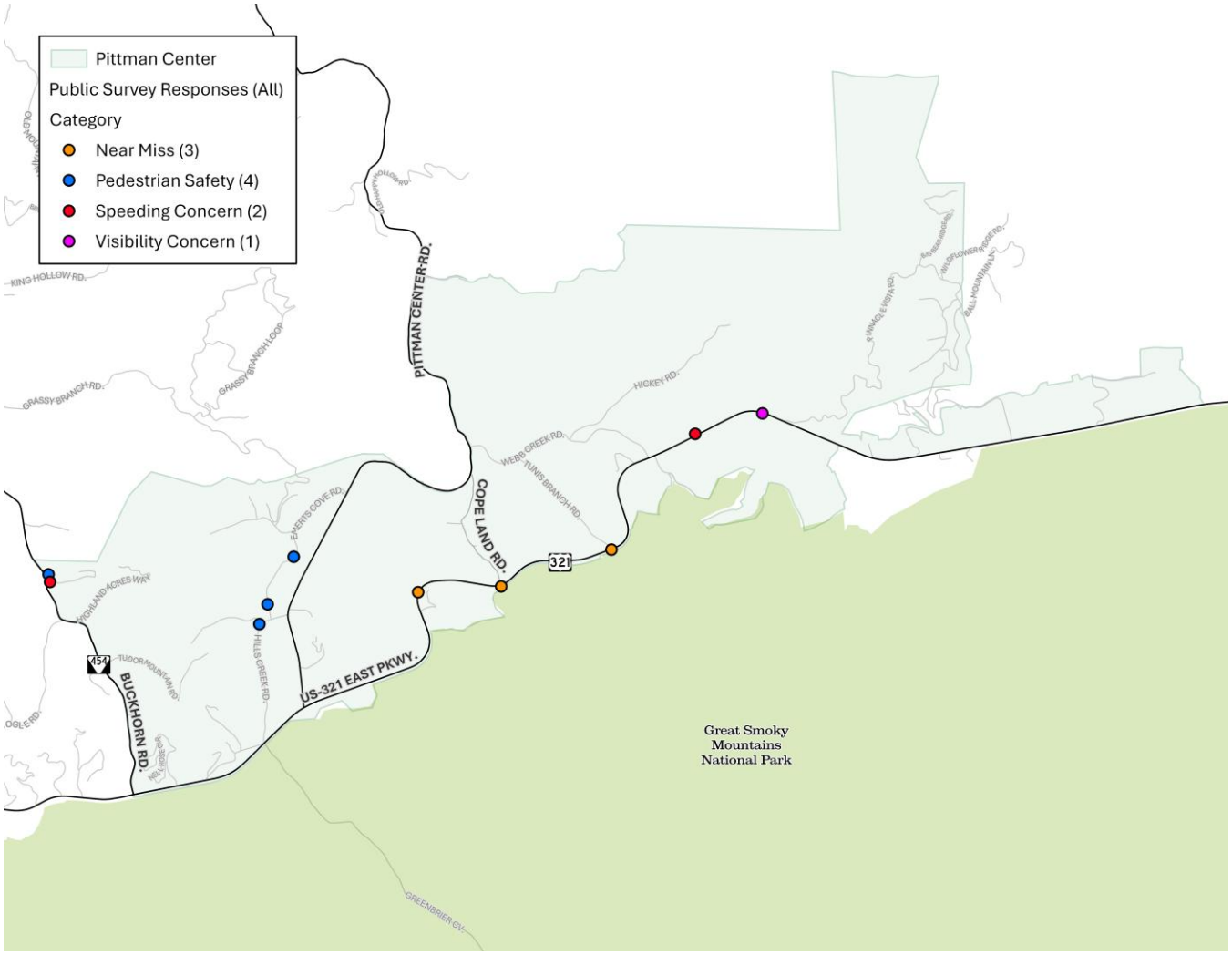


Figure 4 Pittman Center Public Survey Responses

Safety Networks

The **High Injury Network (HIN)** identifies the roadway segments in Pittman Center where the highest concentrations of **severe crashes** occur (see Figure 5). The HIN is determined by analyzing crash data to locate corridors with the greatest number of fatal and serious injury (KA) crashes relative to roadway mileage. This approach ensures that safety efforts focus on the small share of roadways where a disproportionate number of severe outcomes occur. In Pittman Center, the HIN is concentrated along State Route 32, a winding corridor travelling east-west through Pittman Center. This segment is characterized by sharp curves, limited sight distance, and heavy use by both local drivers and visitors unfamiliar with the roadway. By identifying SR 32 as part of the HIN, the Safety Action Plan directs attention and resources toward the corridor most critical to reducing severe crashes and improving overall safety in Pittman Center.

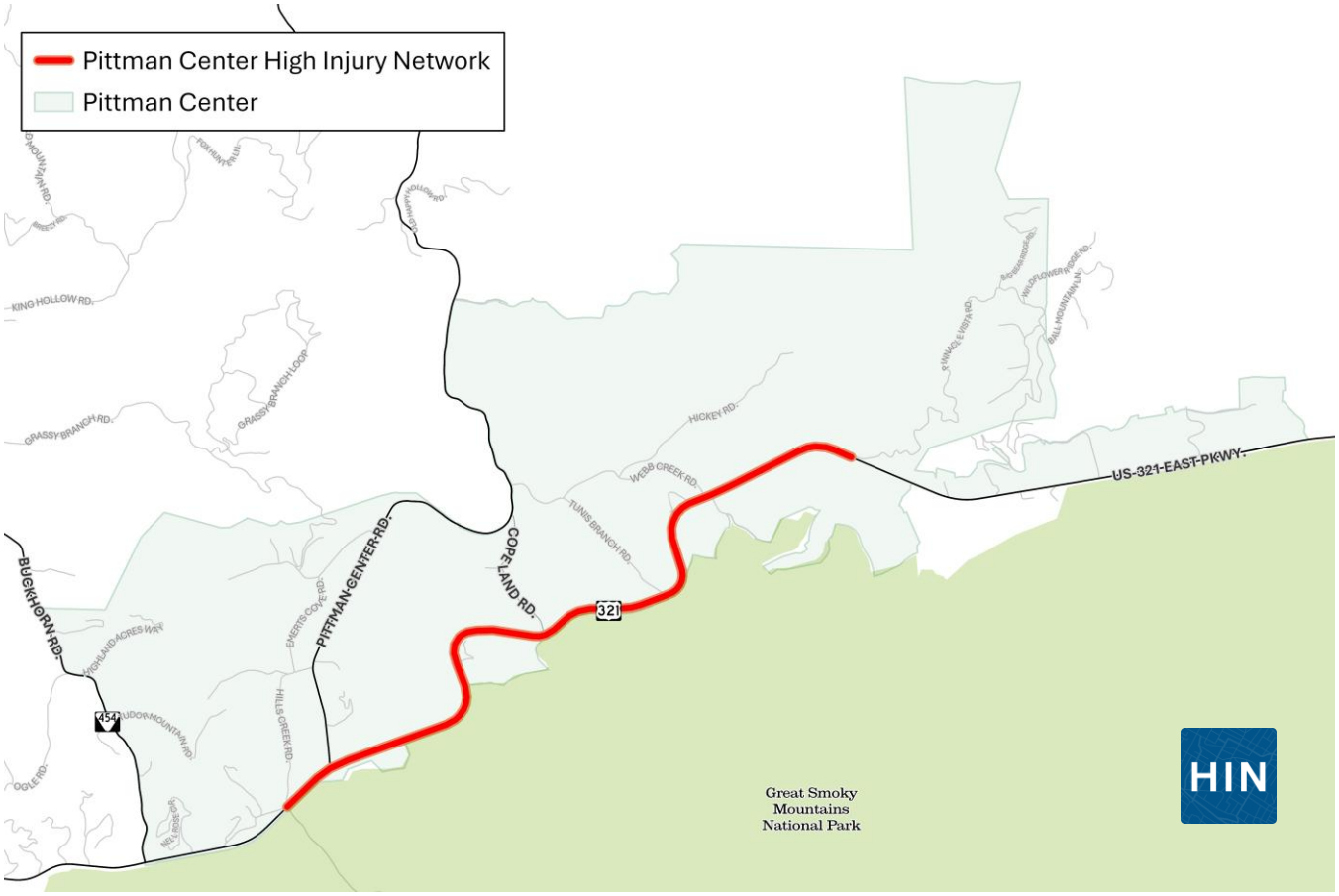


Figure 5 Pittman Center High Injury Network (HIN)

The **High-Risk Network (HRN)** identifies roadway segments with the greatest potential for future fatal and serious injury crashes (see Figure 6). Unlike the High Injury Network, which focuses only on corridors with the highest concentration of KA crashes, the HRN considers **all reported crashes** to evaluate risk. A weighted scoring system gives the greatest emphasis to fatal crashes, with progressively lower weights assigned to serious injury, minor injury, and property damage only (PDO) crashes. This approach highlights corridors with recurring crash patterns that, while not always severe today, have a higher likelihood of producing severe outcomes in the future. In Pittman Center, the HRN largely overlaps with the State Route 32 corridor, underscoring its role as a priority location for proactive safety improvements.

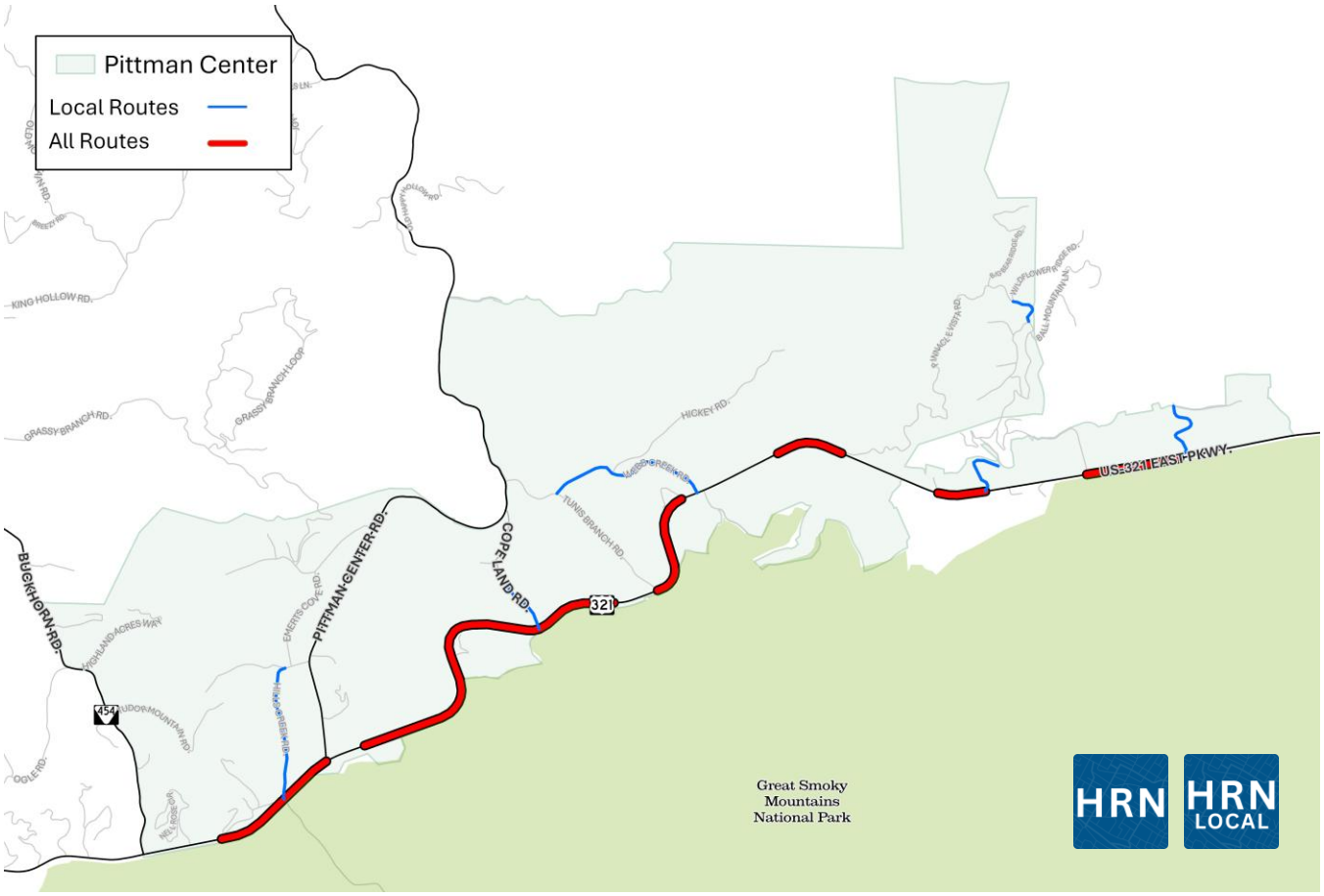


Figure 6 Pittman Center High Risk Network (HRN)

The **HRN Local** refines this analysis by removing state and federal routes and focusing exclusively on **locally maintained roads** (see Figure 6). Although these facilities carry lower traffic volumes and fewer total crashes, they often feature characteristics such as narrow lanes, sharp curves, steep grades, and limited sight distance that elevate crash risk. Identifying the HRN Local ensures that potential safety concerns on neighborhood and community roadways are not overshadowed by the larger state highway system. Addressing both the HRN and HRN Local makes the Action Plan comprehensive, targeting risks on high-volume corridors as well as the smaller roads most critical to daily life for residents.

High Priority Projects

In Pittman Center, **8 High Priority Projects** have been identified to address safety needs along key roadway segments and intersections. Of the 138 crashes that occurred in the town during the study period, **44 crashes** (31.9 percent) were captured within these project locations. While this represents a smaller percentage compared to other jurisdictions, it reflects the town's low overall crash frequency and the dispersed nature of incidents across its rural road network. The selected projects focus on known crash clusters and locations with roadway characteristics that present elevated safety risks, ensuring targeted improvements where they will have the greatest impact.

Table 1 Pittman Center High Priority Projects

ID	Location	Vehicle Crashes				VRU Crashes			
		Total	K	ABC	O	Total	K	ABC	O
PC-1	Webb Creek Rd from US 321 to Hickey Rd	7	0	1	6	0	0	0	0
PC-2	US 321 at Hills Creek Rd & Greenbrier Rd	6	0	2	4	0	0	0	0
PC-3	US 321 at Tom Ogle Rd	6	0	0	6	0	0	0	0
PC-4	US 321 at SR 416	1	0	1	0	0	0	0	0
PC-5	US 321 Curve near John Green Rd	12	**2**	2	8	0	0	0	0
PC-6	US 321 at Copeland Rd	4	0	2	2	0	0	0	0
PC-7	US 321 at Tunis Rd	3	0	0	3	0	0	0	0
PC-8	US 321 at Pittman Center Convenience Center	5	0	2	3	0	0	0	0

K = Fatal, A = Serious Injury, B = Minor Injury, C = Possible Injury, O = Property Damage Only

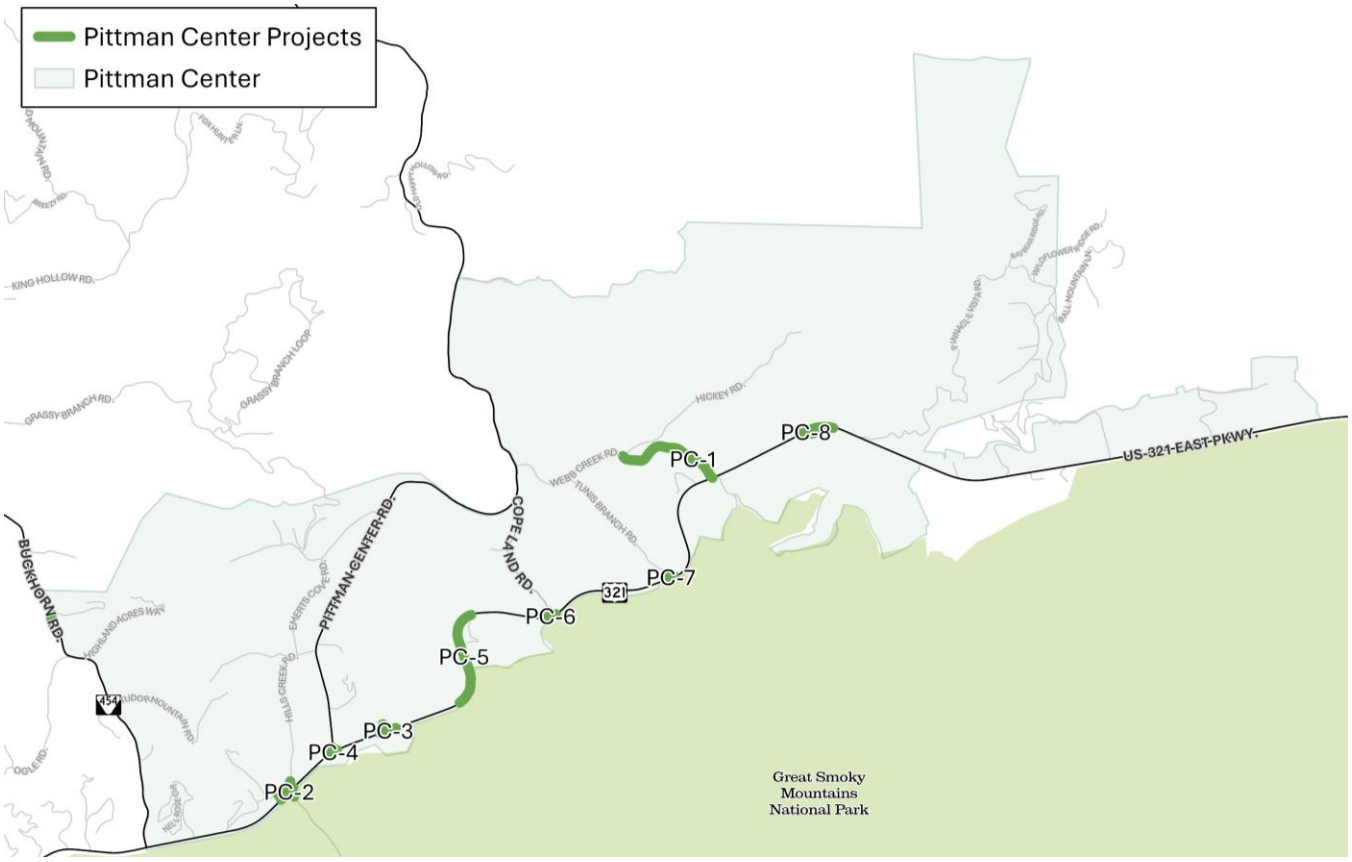


Figure 7 Pittman Center High Priority Projects

Figure 8 illustrates the layout used for the Pittman Center High Priority Project Sheets. Each sheet provides a concise summary of safety needs, existing conditions, and recommended countermeasures for specific project locations in Pittman Center. The layout presents key details in a consistent, easy-to-read format, including the project location and limits, functional classification, traffic conditions, and crash history from January 2019 to April 2024. Identification criteria indicate whether the location was part of the High Injury Network (HIN), High-Risk Network (HRN), HRN Local, Public Concern, Community Task Force or Public Safety Task Forces. Each sheet also includes an aerial map with crashes by severity and a street view image to illustrate site conditions. Recommendations summarize targeted strategies—such as signage improvements, curve warning systems, speed management measures, and geometric enhancements—intended to reduce crash frequency and severity. All High Priority Project Sheets in this section follow this same format.

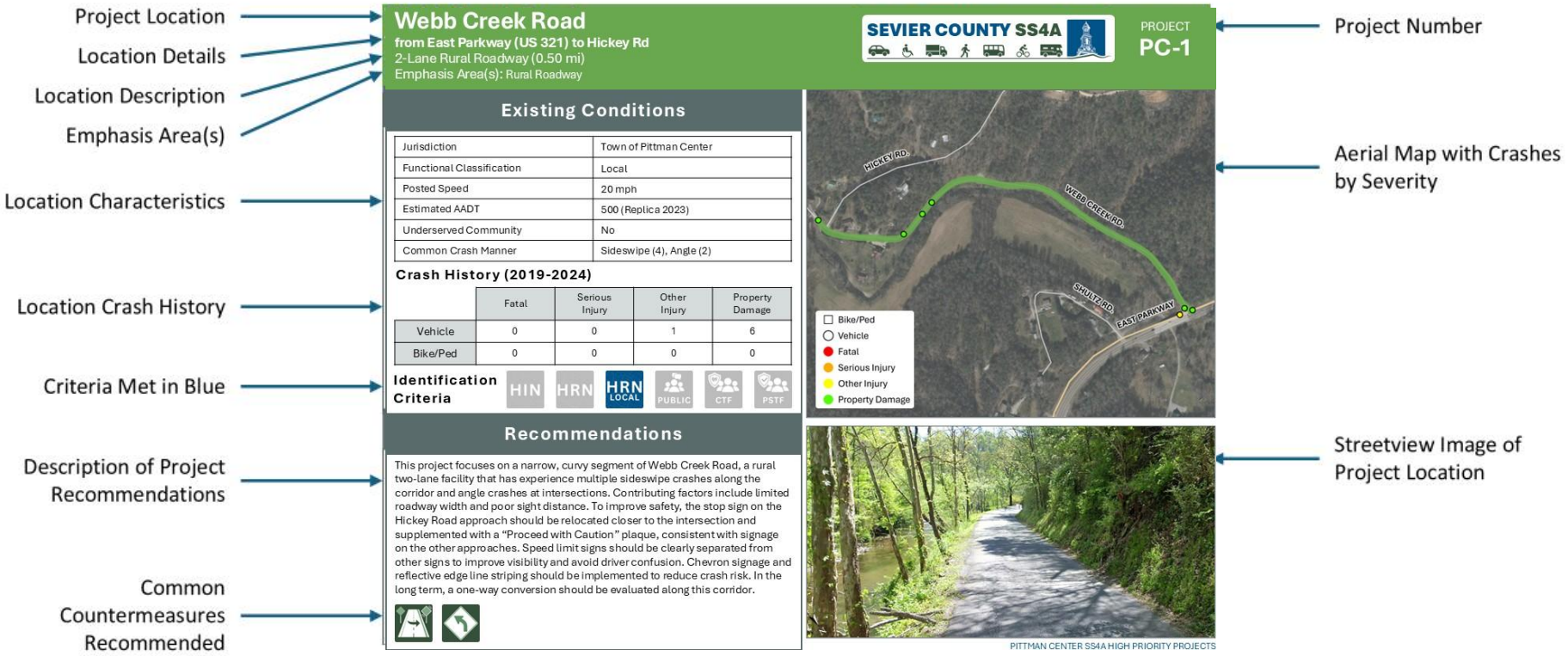


Figure 8 Example Layout of Pittman Center High Priority Project Sheet

Webb Creek Road

from East Parkway (US 321) to Hickey Rd

2-Lane Rural Roadway (0.50 mi)

Emphasis Area(s): Rural Roadway

SEVIER COUNTY SS4A

PROJECT
PC-1

Existing Conditions

Jurisdiction	Town of Pittman Center
Functional Classification	Local
Posted Speed	20 mph
Estimated AADT	500 (Replica 2023)
Underserved Community	No
Common Crash Manner	Sideswipe (4), Angle (2)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	0	0	1	6
Bike/Ped	0	0	0	0

Identification Criteria

HIN HRN HRN LOCAL PUBLIC CTF PSTF



Recommendations

This project focuses on a narrow, curvy segment of Webb Creek Road, a rural two-lane facility that has experience multiple sideswipe crashes along the corridor and angle crashes at intersections. Contributing factors include limited roadway width and poor sight distance. To improve safety, the stop sign on the Hickey Road approach should be relocated closer to the intersection and supplemented with a “Proceed with Caution” plaque, consistent with signage on the other approaches. Speed limit signs should be clearly separated from other signs to improve visibility and avoid driver confusion. Chevron signage and reflective edge line striping should be implemented to reduce crash risk. In the long term, a one-way conversion should be evaluated along this corridor.



East Parkway (US 321)

at Hills Creek Rd and Greenbrier Rd

Rural Two-Way Stop Controlled Intersection

Emphasis Area(s): Rural Roadway

SEVIER COUNTY SS4A

PROJECT
PC-2

Existing Conditions

Jurisdiction	Town of Pittman Center
Functional Classification	Minor Arterial
Posted Speed	35 mph
Estimated AADT	7,998 (TDOT 2024)
Underserved Community	No
Common Crash Manner	Rear-end (3)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	0	0	2	4
Bike/Ped	0	0	0	0

Identification Criteria

HIN HRN HRN LOCAL PUBLIC CTF PSTF



Recommendations

This project focuses on a five-legged intersection where the absence of pavement markings contributes to confusion and safety concerns. To improve guidance and reduce conflict points, it is recommended to install stop bars on all applicable approaches, dashed edge lines to clarify travel paths, and hatching between the Hills Creek Road and Old Hills Creek Road approaches to better define the intended travelway. Additionally, existing stop signs should be adjusted and reoriented to align more effectively with approaching vehicles, ensuring they are clearly visible and positioned to match driver sight lines and expectations. These improvements will enhance intersection clarity and help mitigate the risk of crashes.



East Parkway (US 321)

at Tom Ogle Rd

Rural Two-Way Stop Controlled Intersection

Emphasis Area(s): Rural Roadway, Congested Corridor

SEVIER COUNTY SS4A

PROJECT
PC-3

Existing Conditions

Jurisdiction	Town of Pittman Center
Functional Classification	Minor Arterial
Posted Speed	35 mph
Estimated AADT	7,998 (TDOT 2024)
Underserved Community	No
Common Crash Manner	Rear-end (4)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	0	0	0	6
Bike/Ped	0	0	0	0

Identification Criteria

HIN | HRN | HRN LOCAL | PUBLIC | CTF | PSTF



Recommendations

This project focuses on the T-intersection and school driveway of US 321 and Tom Ogle Drive, where rear-end crashes have been identified as the predominant crash type. It is recommended to remove the existing passing zone within the segment near the intersection to discourage high-speed maneuvers. On the Tom Ogle Drive approach, the stop sign should be relocated closer to the edge of the travelway and paired with a white stop bar for improved visibility and compliance. Additionally, a dedicated right-turn lane and left-turn lane should be installed from US 321 onto Tom Ogle Drive to separate turning traffic from through vehicles, enhancing operational efficiency and reducing the likelihood of rear-end crashes.



East Parkway (US 321)

Pittman Center Rd (SR 416)

Rural Two-Way Stop Controlled Intersection

Emphasis Area(s): Rural Roadway, Congested Corridor

SEVIER COUNTY SS4A

PROJECT
PC-4

Existing Conditions

Jurisdiction	Town of Pittman Center
Functional Classification	Minor Arterial
Posted Speed	35 mph
Estimated AADT	7,998 (TDOT 2024)
Underserved Community	No
Common Crash Manner	Rear-end (3)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	0	0	1	6
Bike/Ped	0	0	0	0

Identification Criteria

HIN HRN HRN LOCAL PUBLIC CTF PSTF



Recommendations

This project focuses on the stop-controlled intersection of US 321 and SR 416. One issue at this intersection is the offset commercial driveway located across from SR 416, which may cause driver confusion and operational issues. To address these concerns, it is recommended to convert the commercial driveway to operate with one-way circulation to help reduce conflict points and improve safety at the intersection. Other recommendations include installing a dedicated right-turn lane from US 321 onto SR 416 to improve flow and separation of movements. On the SR 416 approach, the stop sign should be repositioned closer to the edge of the travelway and supplemented with a clearly visible stop bar to improve compliance.



East Parkway (US 321)

Curve near John Green Rd

2-Lane Rural Highway (0.60 mi)

Emphasis Area(s): Rural Roadway

SEVIER COUNTY SS4A

PROJECT
PC-5

Existing Conditions

Jurisdiction	Town of Pittman Center
Functional Classification	Minor Arterial
Posted Speed	35 mph
Estimated AADT	7,998 (TDOT 2024)
Underserved Community	No
Common Crash Manner	Head-on (4), Single-Vehicle (3)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	2	1	1	8
Bike/Ped	0	0	0	0

Identification Criteria

HIN | HRN | HRN LOCAL | PUBLIC | CTF | PSTF



Recommendations

This project focuses on a rural two-lane highway segment featuring an S-curve that has experienced significant safety issues, including four head-on collisions and three roadway departure crashes – two of which were fatal. The geometry of the S-curve combined with potential speed-related issues, contributes to the elevated crash risk. To address these concerns and enhance driver awareness, it is recommended to install centerline rumble strips to discourage lane departure and reduce the likelihood of head-on crashes. Additional improvements include installing S-curve warning signs in advance of the curve and chevron signs and guardrail reflectors within the curve to provide enhanced visual guidance through the alignment.



East Parkway (US 321)

at Copeland Rd

Rural Two-Way Stop Controlled Intersection

Emphasis Area(s): Rural Roadway

SEVIER COUNTY SS4A

PROJECT
PC-6

Existing Conditions

Jurisdiction	Town of Pittman Center
Functional Classification	Minor Arterial
Posted Speed	35 mph
Estimated AADT	7,998 (TDOT 2024)
Underserved Community	No
Common Crash Manner	Single-Vehicle (2)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	0	1	1	2
Bike/Ped	0	0	0	0

Identification Criteria

HIN HRN HRN LOCAL PUBLIC CTF PSTF



Recommendations

This project focuses on the intersection of Copeland Road with US 321, located on the inside of a horizontal curve. The existing configuration results in inadequate sight distance for vehicles attempting to exit Copeland Road, increasing the risk of crashes due to limited visibility of oncoming traffic. It is recommended to install a dashed edge line along the mainline to visually guide drivers and help them maintain lane discipline through the curve. Additional improvements include curve warning signs and chevron signs to increase driver awareness of the alignment, and intersection warning signs with street name plaque to alert motorists to potential turning movements. In the long term, a one-way conversion of Copeland Road may be considered to reduce crash risk.





East Parkway (US 321)

at Tunis Rd

Rural Two-Way Stop Controlled Intersection

Emphasis Area(s): Rural Roadway

SEVIER COUNTY SS4A

PROJECT
PC-7

Existing Conditions

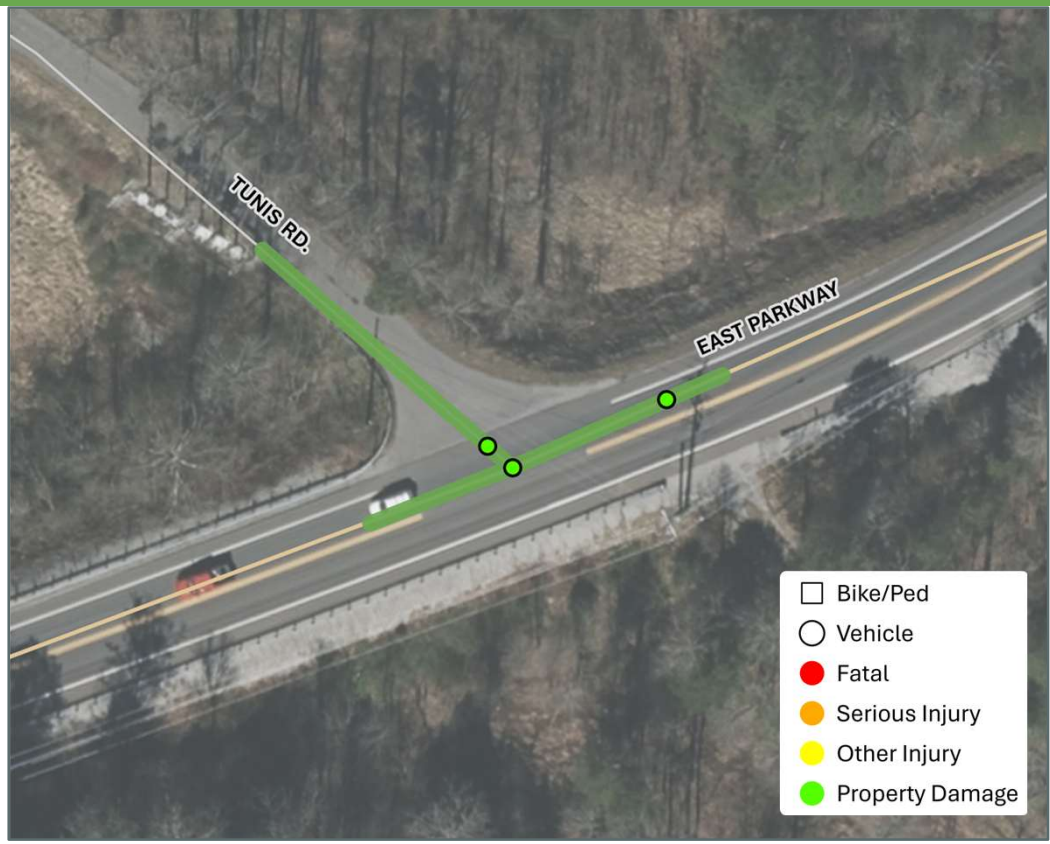
Jurisdiction	Town of Pittman Center
Functional Classification	Minor Arterial
Posted Speed	35 mph
Estimated AADT	7,998 (TDOT 2024)
Underserved Community	No
Common Crash Manner	Angle (1), Rear-end (1)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	0	0	0	3
Bike/Ped	0	0	0	0

Identification Criteria

HIN HRN HRN LOCAL PUBLIC CTF PSTF



Recommendations

This project focuses on the T-intersection of Tunis Road at US 321, which is located within a blind curve that severely limits sight distance for drivers exiting Tunis Road. A dashed edge line should be added along US 321 to visually guide drivers and help them maintain lane discipline through the curve. Additional improvements include curve warning signs and chevron signs to increase driver awareness of the alignment, and intersection warning signs with a flashing beacon to alert motorists to potential turning movements at Tunis Road. On the Tunis Road approach, a stop bar should be installed to guide drivers on how far they can safely pull forward to maximize sight distance. In the long term, a one-way conversion of Tunis Road my be considered to reduce crash risk.



East Parkway (US 321)

at Sevier County Convenience Center

Rural Two-Way Stop Controlled Intersection

Emphasis Area(s): Rural Roadway

SEVIER COUNTY SS4A

PROJECT
PC-8

Existing Conditions

Jurisdiction	Town of Pittman Center
Functional Classification	Minor Arterial
Posted Speed	35 mph
Estimated AADT	7,998 (TDOT 2024)
Underserved Community	No
Common Crash Manner	Rear-end (2), Single-Vehicle (2)

Crash History (2019-2024)

	Fatal	Serious Injury	Other Injury	Property Damage
Vehicle	0	1	1	3
Bike/Ped	0	0	0	0

Identification Criteria

HIN | HRN | HRN LOCAL | PUBLIC | CTF | PSTF



Recommendations

This project focuses on a pair of driveways forming a one-way loop access for the Convenience Center along US 321. Multiple rear-end and roadway departure crashes have been reported in this area, likely due to limited driver awareness of turning movements around the curve to the east of the site. It is recommended to relocate the existing passing zone further west of the driveways to discourage passing maneuvers in close proximity to the access points. A stop sign and stop bar should be installed on the exiting leg of the loop to clearly control outbound traffic. Additionally, intersection warning signs should be placed in advance of the driveways in both directions to alert traffic along US 321 of potential entering and exiting vehicles.

