STATE PROJECT: U219-51-7.00 02 | FEDERAL PROJECT: RHCH-0051 (052)D



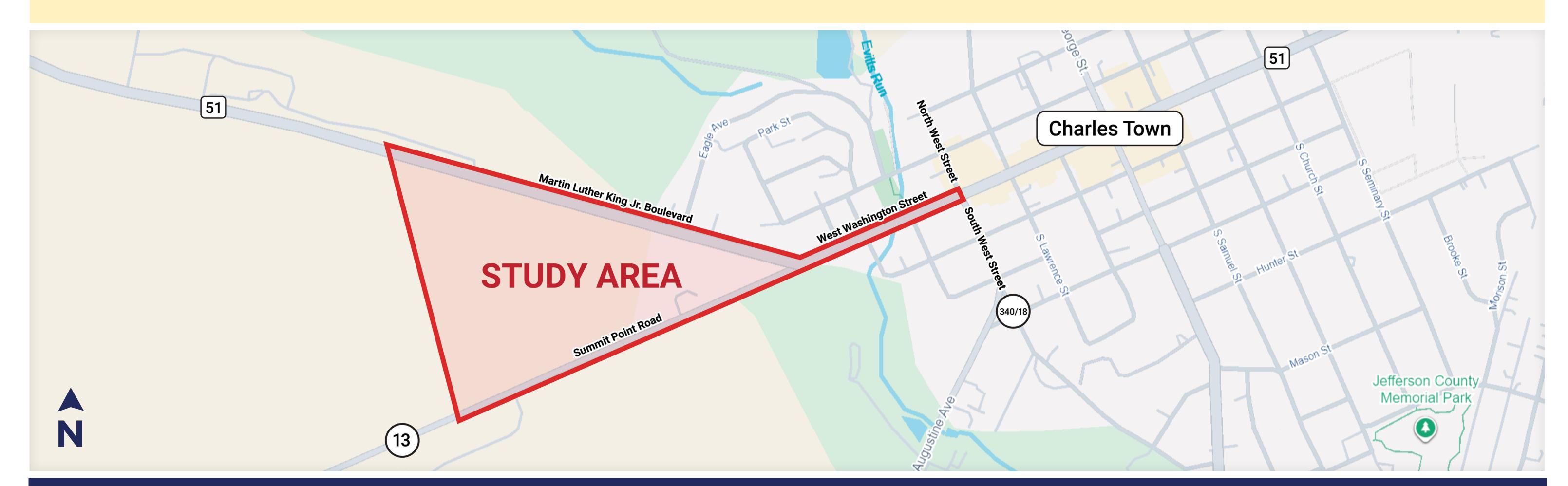
Purpose and Need

The purpose of the project is to address facility deficiencies (geometry, sight distance, and capacity), improve traffic operations to reduce congestion, and improve pedestrian mobility.

The need for the project is due to geometric deficiencies associated with area intersections including:

- The intersection of West Washington Street Summit Point Road, and Martin Luther King Jr. Boulevard is poorly configured with a highly skewed intersection and limited sight distance. This results in drivers crossing into the opposite lane when turning and drivers unable to see clearly when making turns.
- The intersection of West Washington Street and West Street lacks dedicated turn lanes on some approaches and insufficient turn lane storage length.

 This intersection also has sight distance issues.
- The West Washington Street, Summit Point Road, and Martin Luther King Jr. Boulevard intersection is experiencing congestion during afternoon peak traffic and conditions are anticipated to worsen by 2044.
- Numerous planning documents and public input received during a meeting held by the City of Charles Town on January 29, 2025, identify pedestrian mobility as a need.



A Design Study was prepared in January 2025 to identify alternatives to address the needs of the project.

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Initial Project Development

The project team has begun by conducting comprehensive studies to assess the current conditions. These studies include a review of the roadway alignment, environmental features, and traffic operations. Understanding these existing conditions helps identify the project's needs, which are detailed below.

Roadway Information

- WV 51 (West Washington Street/ Martin Luther King Jr. Boulevard) is a two-lane road with 10–11' lanes, uneven shoulder widths, and limited spots for street parking.
- CR 13 (Summit Point Road) is also two lanes, with 11' lanes and narrow shoulders.
- CR 340/18 (South West Street/North West Street) has two 11' lanes, no shoulders, and street parking on the east side.

There are two main intersections:

- WV 51 and CR 13 is a three-way intersection with a sharp angle and stop signs.
- WV 51 and West Street is a four-way intersection with traffic signals.

The speed limit on all roads is 25 mph.

Environmental Features

Environmental studies for this project include wetland and stream delineation, threatened and endangered species agency coordination, noise studies, Section 4(f) evaluation, farmlands assessment, cultural resources (archaeology and historic structures) surveys, and hazardous waste investigations. These studies will begin late summer or early fall 2025. Upon completion of these studies an environmental document will be prepared to document impacts and proposed mitigation in compliance with the National Environmental Policy Act.

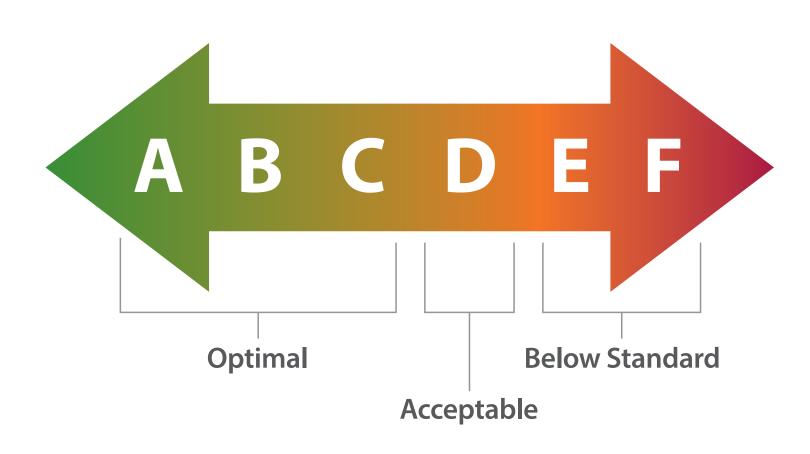
Traffic Operations

In April 2024, traffic data was collected for the project area. This information helped predict what traffic would look like in 2044 if no changes are made. Right now, the intersection of WV 51 (West Washington Street/ Martin Luther King Jr. Boulevard) and CR 13 (Summit Point Road) is already failing during the evening rush hour. By 2044, it's expected to also fail during the morning rush hour and on Saturdays if there are no changes to the current roadway configuration.

What is Level of Service (LOS)

A standard measurement, based on vehicle delay and queues, which reflects the relative ease of traffic flow on a scale of A to F.

LOS A Minor delay at an intersection, little queuing.
LOS F Highly congested traffic conditions.

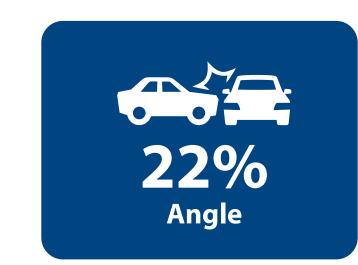


Intersection	2024 Existing LOS			2044 Future LOS		
	AM	PM	SAT Peak	AM	PM	SAT Peak
Intersection 1 – WV 51 (West Washington Street) with CR 340/18 (South West Street)/North West Street	В	С	В	С	D	С
Intersection 2 – WV 51 (West Washington Street/ Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road)	С	F	С	F	F	F

Crash Data

Crash data from 2017 to 2021 was also reviewed to understand how often crashes happened, what types they were, and if there were any patterns. Over the five-year period, there were 51 crashes in the project area. About 29% of them caused injuries. Of these 51 crashes, 23 occurred at the intersection of WV 51 and CR 340/18 and 10 occurred at the intersection of WV 51 and CR 13. When compared to similar roadways across West Virginia, this area's crash rate is nearly 2.5 times higher than the state average.



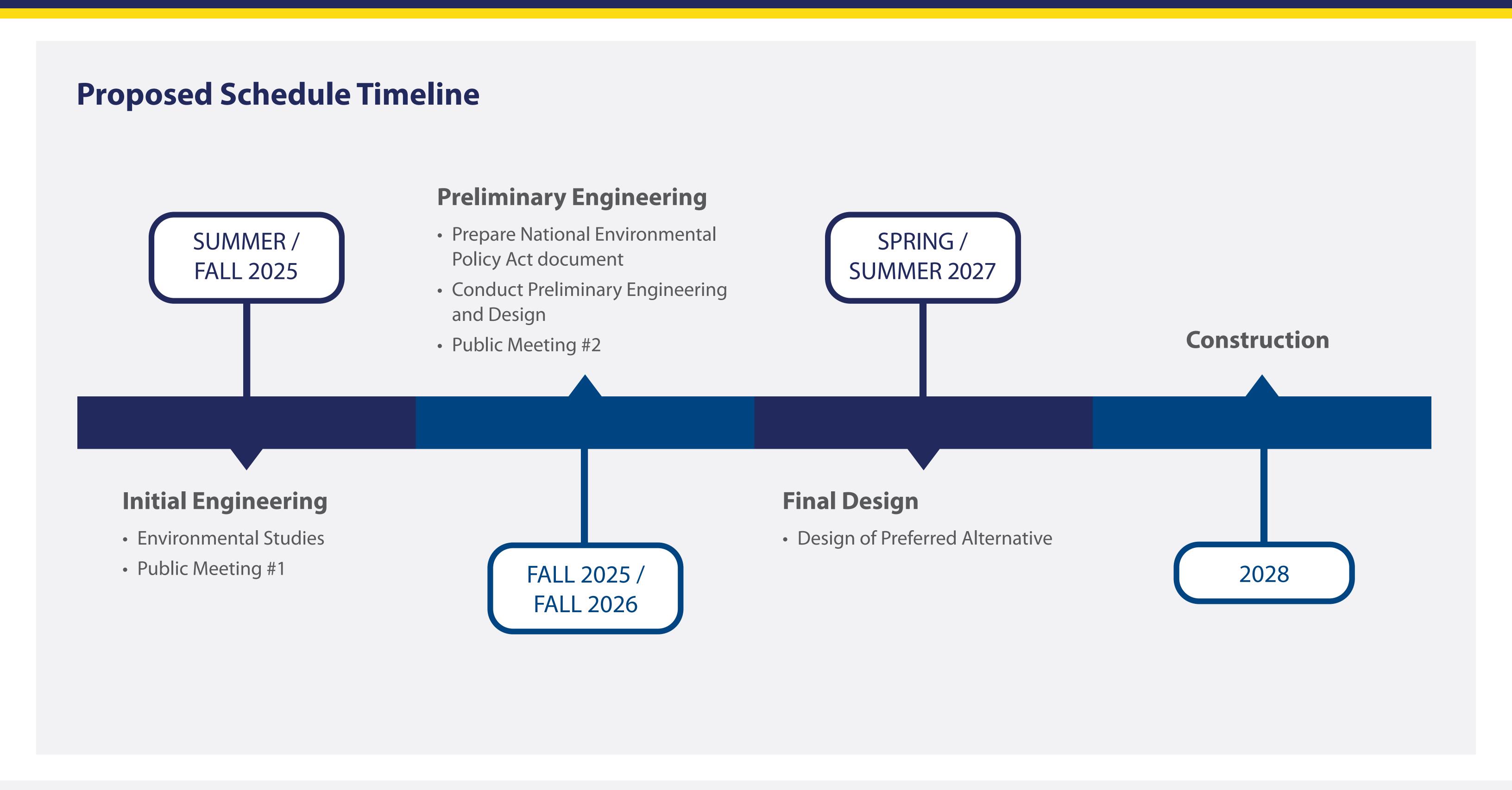


16% Single Vehicle



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WV51 (West Washington Street / Martin Luther King Jr. Boulevard) with CR13 (Summit Point Road) Intersection Alternatives

Alternative No. 1 — Single-lane Roundabout

Alternative No. 1 proposes reconfiguring the existing intersection of WV51 and CR13 from a stop-controlled intersection to a single-lane roundabout. The proposed roundabout will be centered east of the existing intersection and will include realigning the CR13 approach. Property access for the first six (6) properties on the CR13 approach will be combined into a single access point on the realigned CR13 approach.



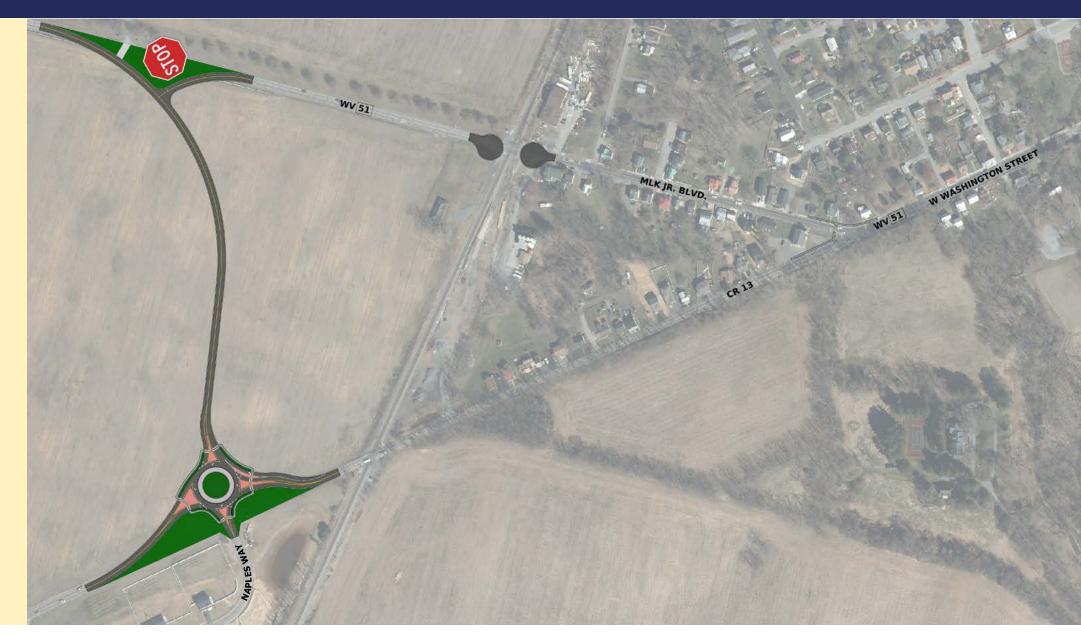
Alternative No. 3A — WV 51 and CR 13 Connector Road (One-way WV 51 WB / One-way CR 13 NB)

Alternative No. 3A proposes constructing a new connector road between WV 51 and CR 13, along with converting WV 51 to westbound-only and CR 13 to northbound-only. WV 51 and CR 13 would function as a one-way pair between the connector road and the WV 51 and CR 13 intersection. This alternative includes traffic signals at both new connector road intersections and appropriate exclusive turn lanes.



Alternative No. 4A — WV 51 Realignment to Single-lane Roundabout at CR 13

Alternative No. 4A proposes stubbing WV 51 prior to the NS railroad crossing and realigning it to intersect CR 13 opposite Naples Way at a new single roundabout. This roundabout will include a right-turn only slip lane for the westbound approach.



Alternative No. 5 — WV 51 at CR 13 Traffic Signal

Alternative No. 5 proposes
enhancing the existing
WV 51 at CR 13 intersection by
installing a new traffic signal and
providing appropriate exclusive
lanes on the approaches.



Seven alternatives were evaluated in the 2025 Design Study; the four above meet the purpose and need, are being advanced for detailed study, and retain their original names and numbering.

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Alternatives Comparisons

Alternative No. 1

Benefits: Significantly improves traffic operations at the WV 51 (West Washington Street/Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection. Significantly improves intersection safety at this intersection. Lower construction costs.

Considerations: Potential minor environmental impacts. Elevated right of way and utility impacts. Limited pedestrian mobility improvements.

Alternative No. 4A

Benefits: Moderately improves traffic operations at the WV 51 (West Washington Street/Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection. Moderately improves intersection safety at this intersection.

Considerations: Moderate right of way and utility impacts. Some minor environmental impacts. Limited pedestrian mobility improvements. Higher construction costs.

Alternative No. 3A

Benefits: Moderately improves traffic operations at the WV 51 (West Washington Street/Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection. Moderately improves intersection safety at this intersection. Moderately improves pedestrian mobility.

Considerations: Moderate right of way and utility impacts. Some minor environmental impacts.

Alternative No. 5

Benefits: Moderately improves traffic operations at the WV 51 (West Washington Street/Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection. Moderately improves intersection safety at this intersection. Minimal environmental, right of way, and utility impacts.

Considerations: Limited pedestrian mobility improvements.

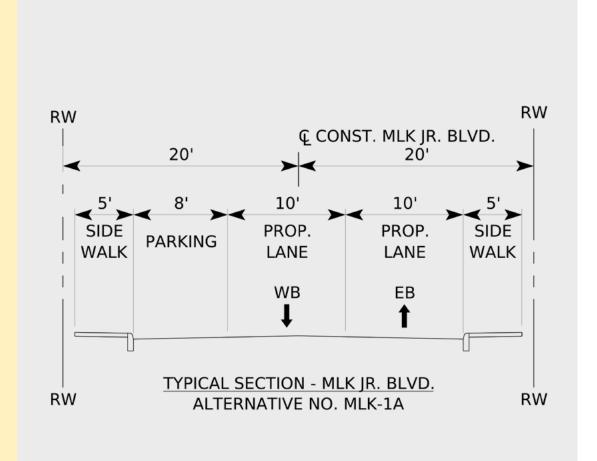
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Streetscape Concepts

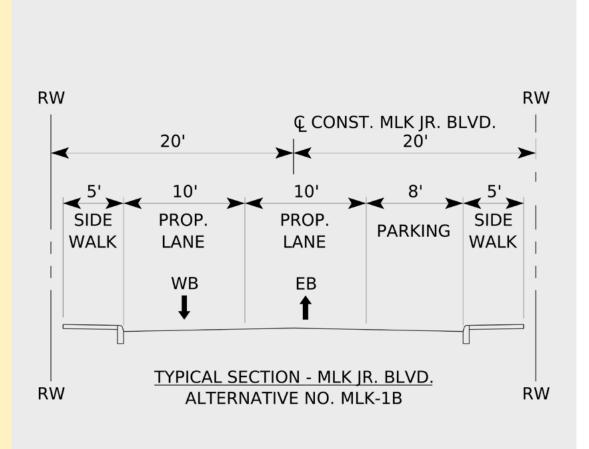
Streetscape Concept Number: Martin Luther King, Jr. Boulevard – 1a – Two-Way Traffic with Westbound Parking Lane and Sidewalks

This streetscape concept closely matches the existing condition but would better define the travel lanes, parking lane, and pedestrian facilities. A 10' wide travel lane would be used for both the eastbound (EB) and westbound (WB) WV 51 (Martin Luther King Jr. Boulevard) directions with an 8' wide parking lane for the WB side. Raised sidewalks 5' in width would be provided in both EB and WB directions. This streetscape concept would be possible in conjunction with WV 51 (West Washington Street/Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection improvements Alternative No. 1, Alternative No. 4a, and Alternative No. 5 for the WV 51 and CR 13 intersection.



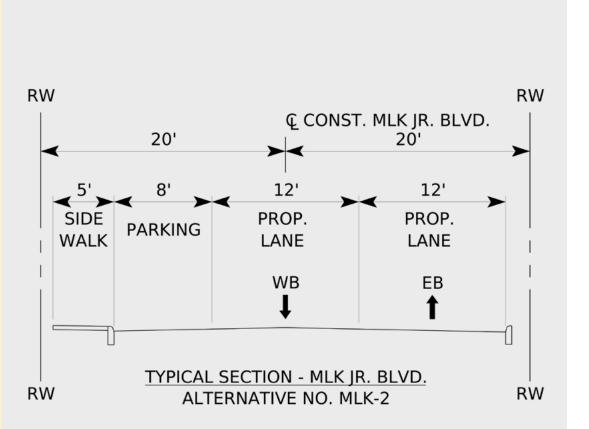
Streetscape Concept Number: Martin Luther King Jr. Boulevard – 1b – Two-Way Traffic with Eastbound Parking Lane and Sidewalks

This streetscape concept is the reverse typical section as Concept No. Martin Luther King Jr. Boulevard-1a, with the parking lane in the opposite direction. A 10' wide travel lane would be used for both the EB and WB WV 51 (Martin Luther King Jr. Boulevard) directions with an 8' wide parking lane for the EB side. Raised sidewalks 5' in width would be provided in both EB and WB directions. This streetscape concept would be possible in conjunction with WV 51 (West Washington Street / Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection improvements Alternative No. 1, Alternative No. 4a, and Alternative No. 5 for the WV 51 and CR 13 intersection.



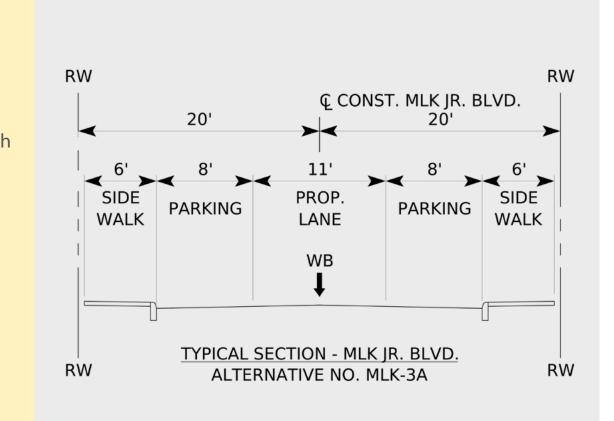
Streetscape Concept Number: Martin Luther King Jr. Boulevard – 2 – Two-Way Traffic with Sharrows, Westbound Parking Lane and Westbound Sidewalk

This streetscape concept includes pedestrian and bicyclist facilities on WV 51 (Martin Luther King Jr. Boulevard). A 12' wide shared travel lane would be used for both the EB and WB directions with an 8' wide parking lane for the WB side. A raised sidewalk 5' in width would be provided in the WB direction. This streetscape concept would be possible in conjunction with WV 51 (W Washington Street/Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection improvements Alternative No. 1, Alternative No. 4a, and Alternative No. 5 for the WV 51 and CR 13 intersection.



Streetscape Concept Number: Martin Luther King Jr. Boulevard – 3a – One-Way Traffic WB with Dual WB Parking Lane and Sidewalks

This streetscape concept would provide WV 51 (Martin Luther King Jr. Boulevard) as a one-way roadway in the WB direction. An 11' wide travel lane would be used for the WB WV 51 (Martin Luther King Jr. Boulevard) direction with an 8' wide parking lane on both sides of the travel lane. Raised sidewalks 6' in width would be provided on both sides of the roadway. This concept would be possible in conjunction with WV 51 (W Washington Street / Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection improvements Alternative No. 3a.



West Washington Street Streetscape Concept with Parking Lanes and Sidewalks

This streetscape concept would provide WV 51 (West Washington Street) with improved pedestrian facilities on WV 51 (West Washington Street). An 11' wide travel lane and an 8' wide parking lane would be used for both directions of WV 51 (West Washington Street). A raised sidewalks 5' in width with a 4' tree lawn would be provided in the both directions. This concept would be possible for use in conjunction with all WV 51 (West Washington Street / Martin Luther King Jr. Boulevard) with CR 13 (Summit Point Road) intersection improvements alternatives. Per discussions with WVDOH and Charles Town, there is a long-term pedestrian connectivity plan to connect into Evitts Run Park and cross WV 51 (West Washington Street) and traverse southward, potentially along South Water Street.

