



## PURPOSE OF THE WORKSHOP

- **Inform local residents, community organizations and business owners that a project planning study has begun**
- **Provide an overview of the project's background, scope and purpose**
- **Review existing conditions and identify environmental constraints**
- **Present project purpose and need**
- **Present proposed concepts**
- **Obtain public comments**
- **Present project schedule and next steps**



## PROJECT BACKGROUND

- **SHA conducted a feasibility study in March 2014 to evaluate existing and future conditions at the I-70/MD 65 interchange in expectation of future development in the vicinity**
- **SHA initiated the I-70 at MD 65 Project Planning Study in 2015 to evaluate existing and future conditions at the I-70/MD 65 interchange**
- **Condition of the I-70 bridges over MD 65 (built in 1968) will be addressed by the I-70 Bridge Replacement Project (expected to move forward by the end of 2016)**
- **Currently, the eastbound bridge deck needs replacement**
- **I-70 at MD 65 interchange provides regional access within the I-70 corridor**
- **Two future developments in close proximity south of the interchange include an approved WalMart Supercenter and a proposed mixed use/retail development**



## PROJECT PURPOSE

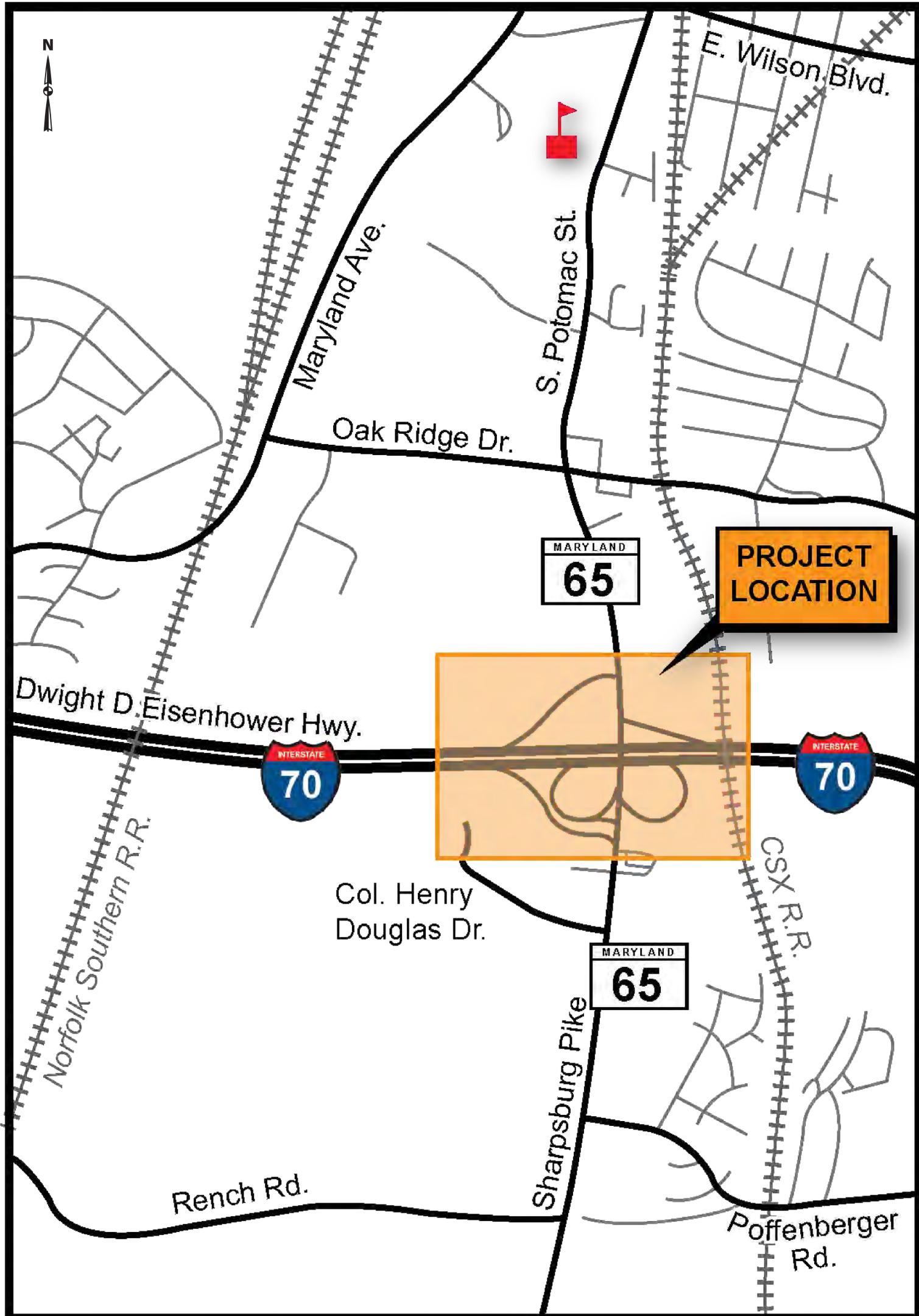
- **Improve the capacity at the I-70/MD 65 interchange and adjacent roadway approaches in anticipation of future development in the project vicinity**
- **Reduce traffic congestion and travel delays on the roadways**
- **Increase safety**
- **Improve efficiency for local/regional commerce**
- **Provide bicycle and pedestrian connectivity**
- **Address the current condition of the I-70 bridges over MD 65**

## PROJECT NEED

- **Increase roadway capacity**
- **Address vehicular, bicycle and pedestrian safety concerns**
- **Address bridge rehabilitation**
- **Support economic development through increased accessibility among economic centers**

*Note: the project is consistent with all local and regional master plans*

# PROJECT LOCATION





## EXISTING CONDITIONS - I-70

- **I-70 Project Limits:** approximately 3,000 feet east of MD 65 to approximately 6,000 feet west of MD 65
- **Speed Limit:** 65 miles per hour
- **Four-lane divided highway** with approximately 70-foot wide grass median
- **Typical Section:** two 12-foot lanes in each direction with four-foot inside shoulders and ten-foot outside shoulders

## EXISTING CONDITIONS - MD 65

- **MD 65 Project Limits:** approximately 4,000 feet south of I-70 to approximately 3,000 feet north of I-70
- **Speed Limit Range:** 35 to 40 miles per hour
- **Two-lane undivided** with alternating turn lanes south of I-70, then north of I-70 becomes four-lane divided with alternating turn lanes

## PUBLIC TRANSPORTATION

- **Washington County Premium Outlets Bus Route 552**
- **MTA Commuter Bus Route 991**
- **Two Park & Ride facilities**



## LOCAL MASTER PLAN CONSISTENCY

- **Washington County Comprehensive Plan (2002)**
- **City of Hagerstown Comprehensive Plan (2008)**
- **Hagerstown-Eastern Panhandle Metropolitan Planning Organization (HEPMPO) FY 2014–2017 Transportation Improvement Program (2014)**
- **HEPMPO Direction 2040 Long Range Transportation Plan Update (2014)**



# TRAFFIC

## Signalized Intersection Delays and Equivalent Levels of Service (LOS)

Intersection	AM PEAK HOUR						PM PEAK HOUR					
	2015 (Existing)		2020 (Interim)		2040 (Future)		2015 (Existing)		2020 (Interim)		2040 (Future)	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
MD 65 at Premium Outlets Blvd.	A	3	A	4	A	7	A	6	A	6	C	26
MD 65 at I-70 WB On-Ramp	B	14	C	28	C	27	B	14	C	26	E	68
MD 65 at I-70 WB Off-Ramp	A	8	B	13	C	29	B	12	B	17	E	73
MD 65 at I-70 EB Ramps	A	6	A	7	A	5	A	3	A	7	C	24
MD 65 at Col. Henry K. Douglas Dr.	A	5	C	24	D	46	B	13	C	34	E	66

## Diverge, Merge, and Weave Densities and Equivalent Levels of Service (LOS)

Location	AM PEAK HOUR						PM PEAK HOUR					
	2015 (Existing)		2020 (Interim)		2040 (Future)		2015 (Existing)		2020 (Interim)		2040 (Future)	
	LOS	Density (vpmpl)	LOS	Density (vpmpl)	LOS	Density (vpmpl)	LOS	Density (vpmpl)	LOS	Density (vpmpl)	LOS	Density (vpmpl)
I-70 EB Diverge to MD 65	B	12	B	14	B	16	C	19	A	10	D	28
I-70 EB Weave at MD 65	D	31	D	32	E	39	B	13	B	15	C	19
I-70 WB Diverge to MD 65	A	9	A	10	C	22	C	24	D	26	F	115
I-70 WB Merge from MD 65	A	11	B	14	D	33	A	9	F	110	F	128

Note: vpmpl = vehicles per mile per lane

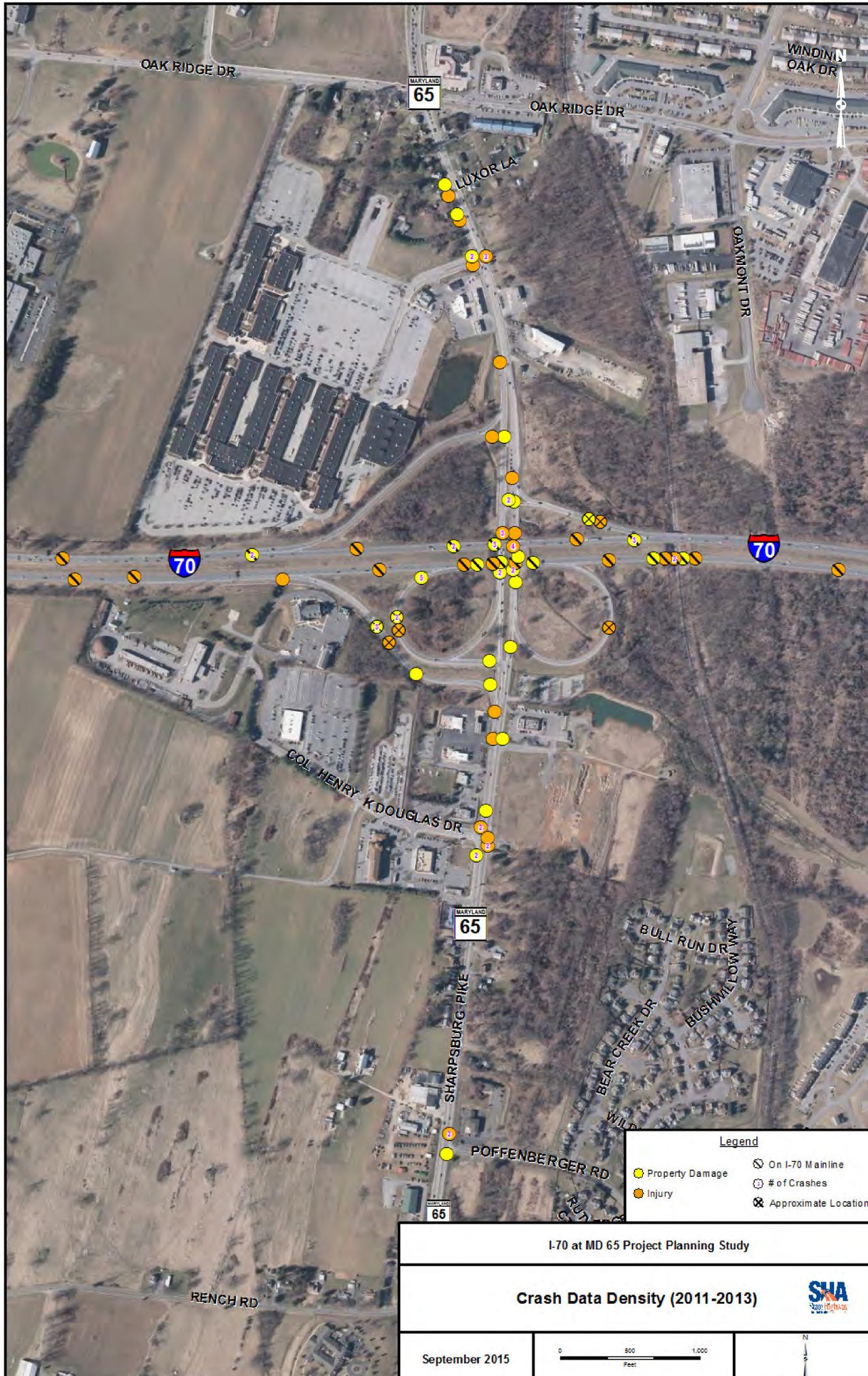


# TRAFFIC

## Travel Speeds and Equivalent Levels of Service (LOS)

Location	AM PEAK HOUR						PM PEAK HOUR					
	2015 (Existing)		2020 (Interim)		2040 (Future)		2015 (Existing)		2020 (Interim)		2040 (Future)	
	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)
<b>NORTHBOUND</b>												
MD 65: Poffenberger Rd to Colonel Henry K. Douglas Dr	A	41	C	27	F	9	B	37	C	29	F	8
MD 65: Colonel Henry K. Douglas Dr to I-70 EB Ramp	B	34	B	32	B	35	B	33	B	31	D	18
MD 65: I-70 EB Ramp to I-70 WB Ramp	B	34	B	30	C	26	C	30	C	25	F	10
MD 65: I-70 WB Ramp to Premium Outlets Blvd	B	37	B	36	B	33	B	34	B	34	B	32
<b>SOUTHBOUND</b>												
MD 65: Premium Outlets Blvd to I-70 WB Ramp	B	31	C	29	C	23	D	21	C	24	F	9
MD 65: I-70 WB Ramp to I-70 EB Ramp	B	35	D	20	F	9	A	39	D	18	F	8
MD 65: I-70 EB Ramp to Colonel Henry K. Douglas Dr	B	34	D	21	F	11	C	22	D	21	F	11

# CRASH DENSITY MAP





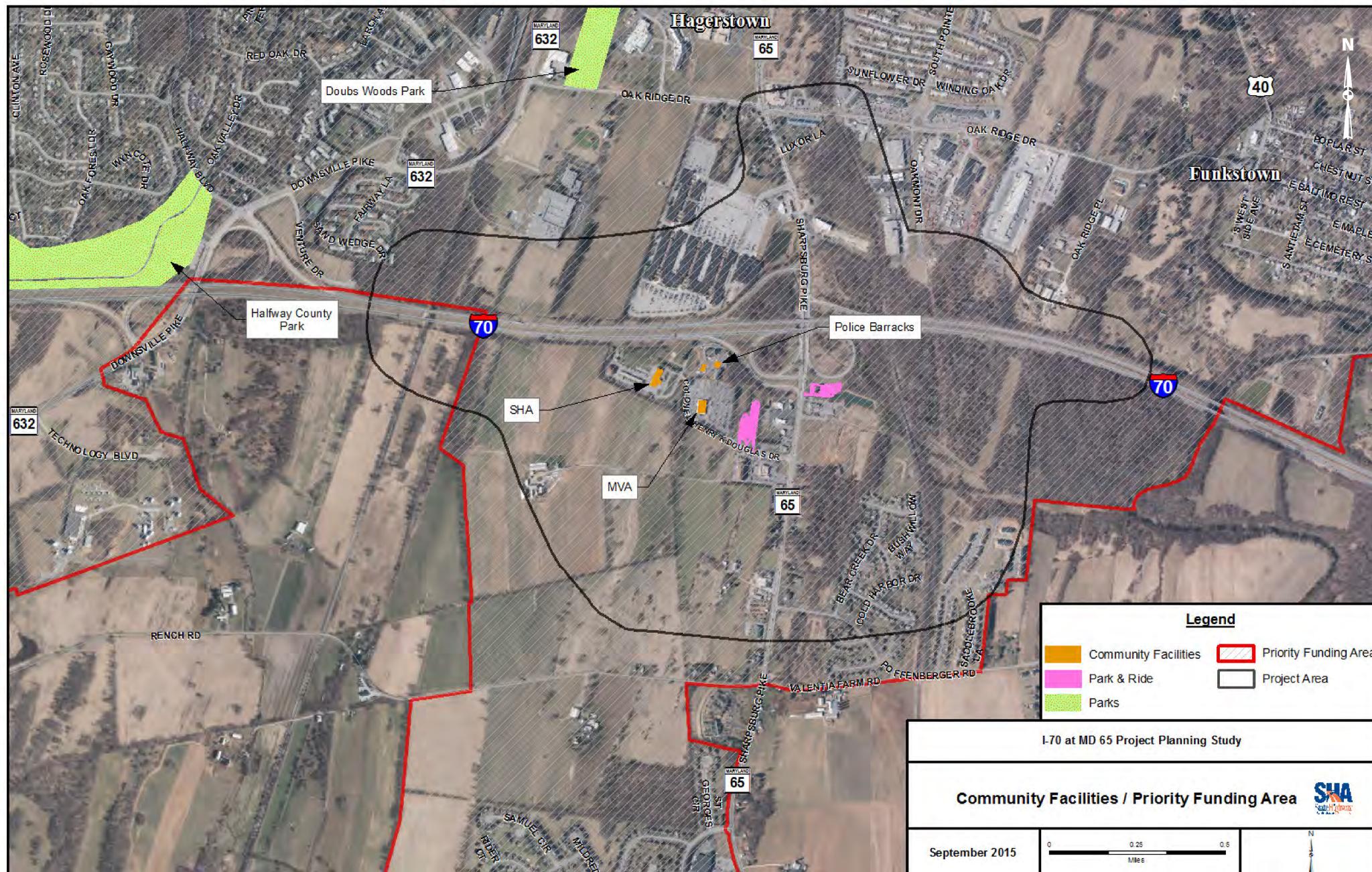
## CRASH SUMMARY – 2011 THROUGH 2013

- **I-70 mainline within 0.5 mile of the MD 65 underpass**
  - 30 crashes reported (no fatalities)
  - 15 of these crashes resulted in injuries, involving a total of 26 vehicle occupants
  - A high density of crashes occurred along I-70 eastbound at the MD 65 weave
    - The weave distance combined with high speeds and truck traffic is a safety concern
- **MD 65 from Luxor Lane to Poffenberger Road**
  - 43 crashes reported (no fatalities)
  - 24 of these crashes resulted in injuries
- **I-70/MD 65 Interchange Ramps**
  - 22 total crashes occurred on the I-70/MD 65 ramps (no fatalities)
  - MD 65 southbound to I-70 eastbound loop ramp contained the most crashes

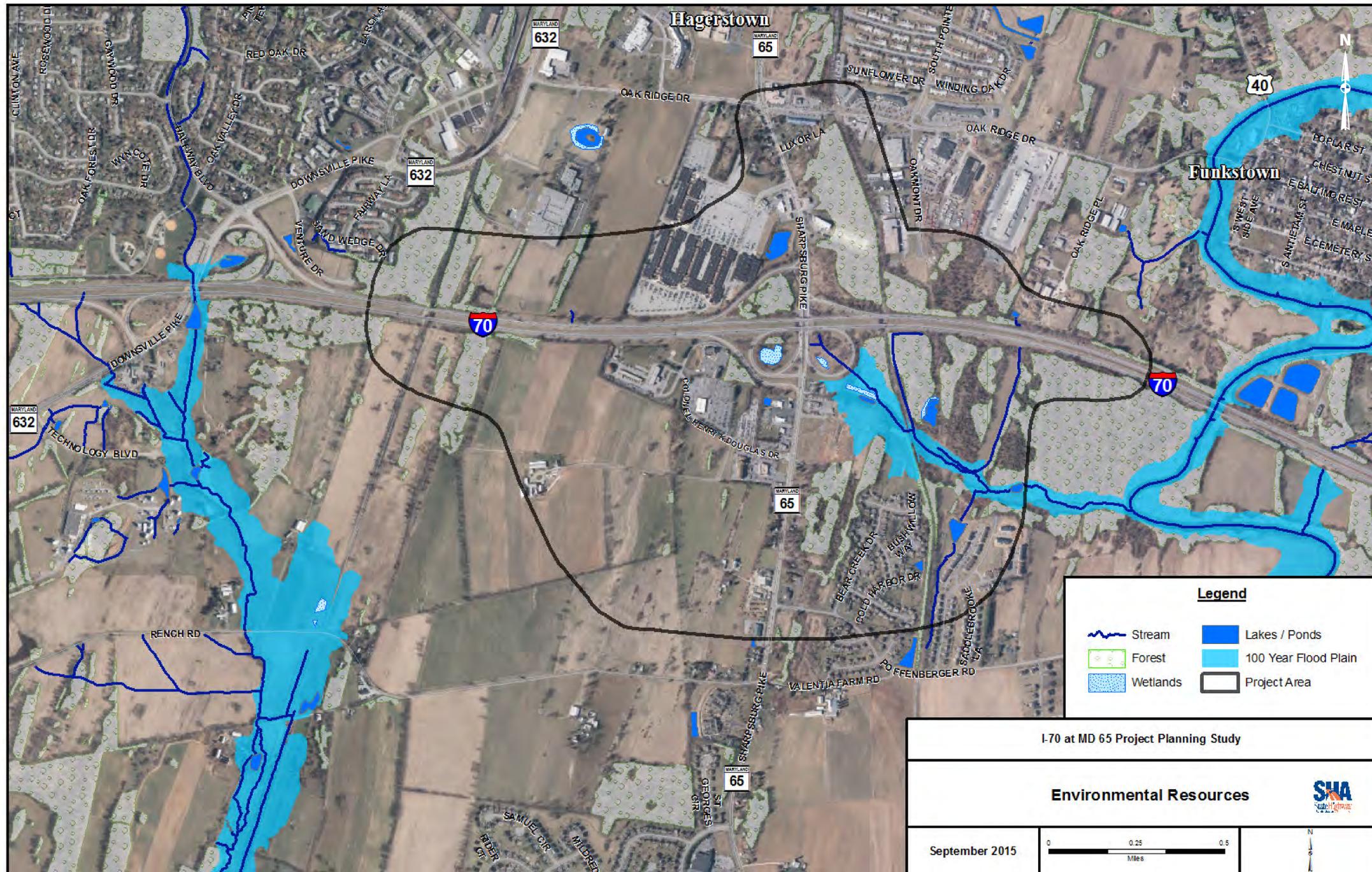
*Note: No crash rates were significantly higher than statewide average within the project area.*

*Unreported crashes were not part of this analysis.*

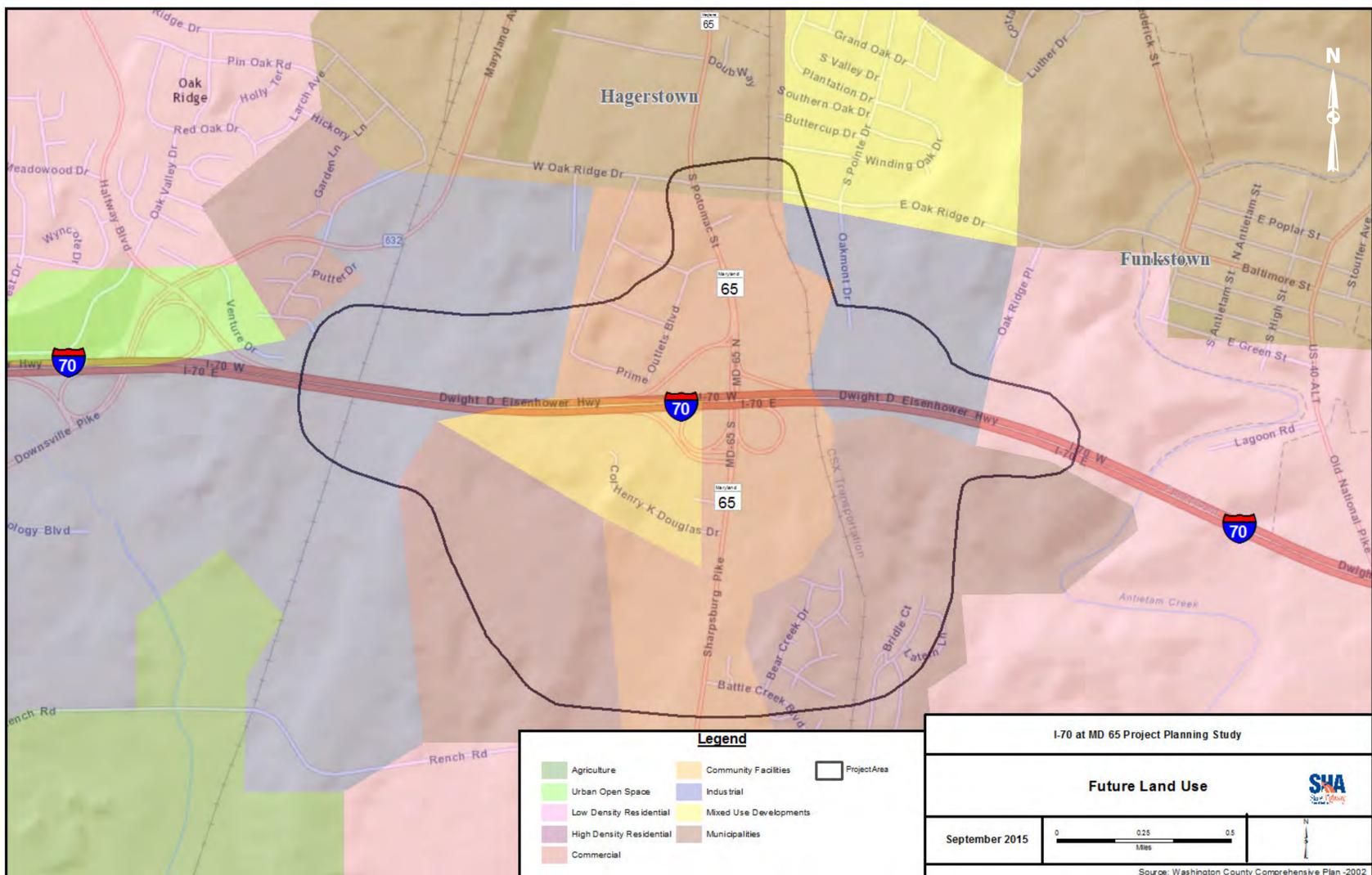
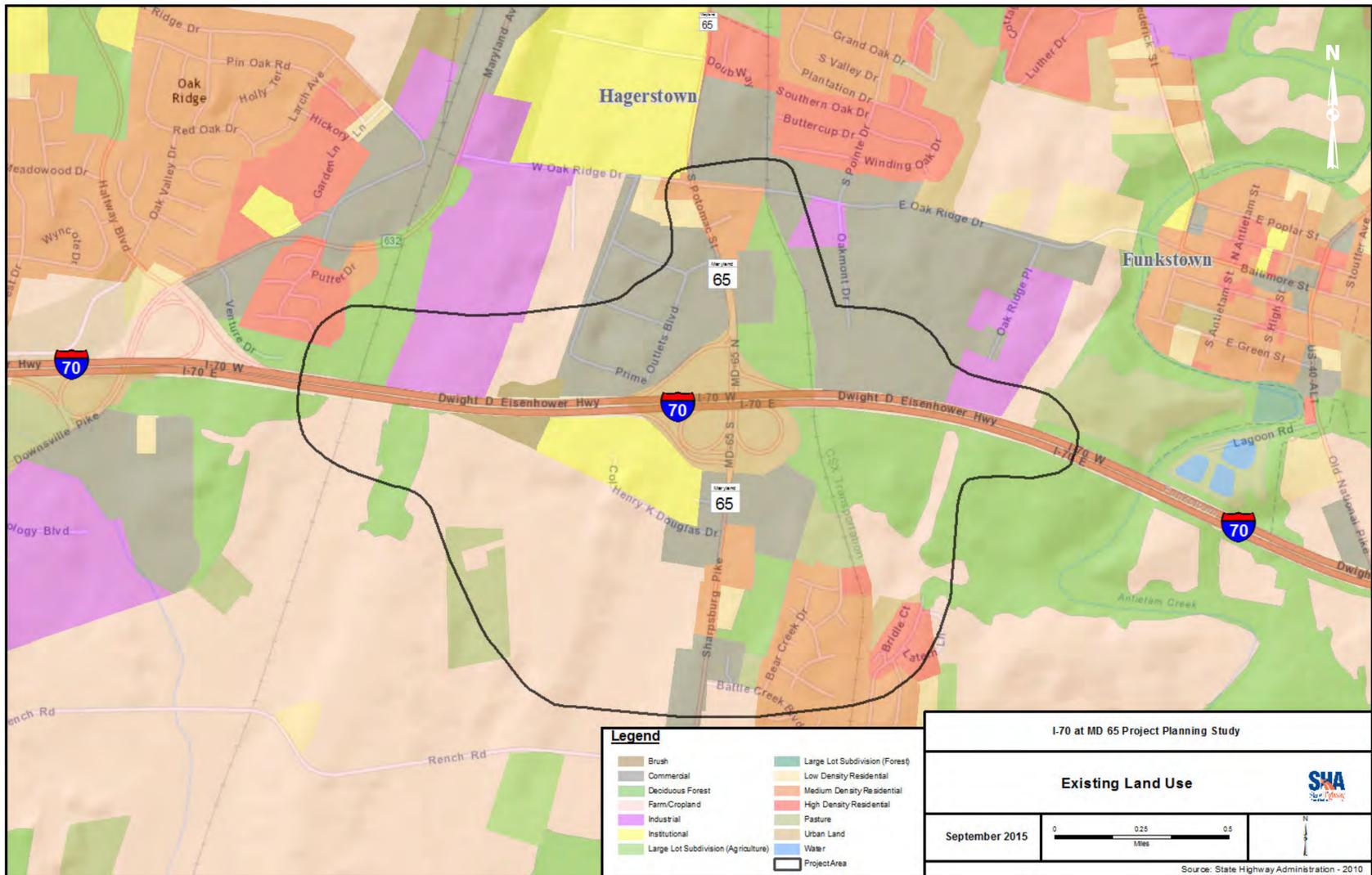
# COMMUNITY FACILITIES / PRIORITY FUNDING AREA



# ENVIRONMENTAL RESOURCES



# EXISTING AND FUTURE LAND USE





## NATURAL ENVIRONMENTAL RESOURCES

- **Floodplains – A 100-year floodplain associated with a tributary to Antietam Creek (Use IV-P) is located in the southeast quadrant of the I-70/MD 65 interchange**
- **Wetlands – Four wetlands exist in the project area (three in the southeast quadrant of the I-70/MD 65 interchange and one located in the southwest quadrant)**
- **Woodlands – Contiguous forested land is primarily concentrated several hundred yards east of MD 65**
- **Rare, Threatened, and Endangered Species**
  - **No DNR state-listed species**
  - **The study area for the project is within the range of the federally endangered Indiana Bat and the federally threatened Northern Long Eared Bat. Further investigation will be completed during the next stage of the project to determine if these species are present in the study area.**



## SOCIOECONOMIC ENVIRONMENT

- **Historic Sites:**

- No properties listed in the National Register of Historic Places (NRHP) are located within the study area. Investigations are currently underway to identify if there are properties in the study area that are eligible for listing in the NRHP.

- **Air Quality – The entire project area is located in a PM 2.5 (1997 standard) Maintenance Area**

- **Noise – Potential noise-sensitive residential areas are present along MD 65 within the project area**

- **Hazardous Materials – Sources for potential contamination include four Resource Conservation facilities and two water dischargers**

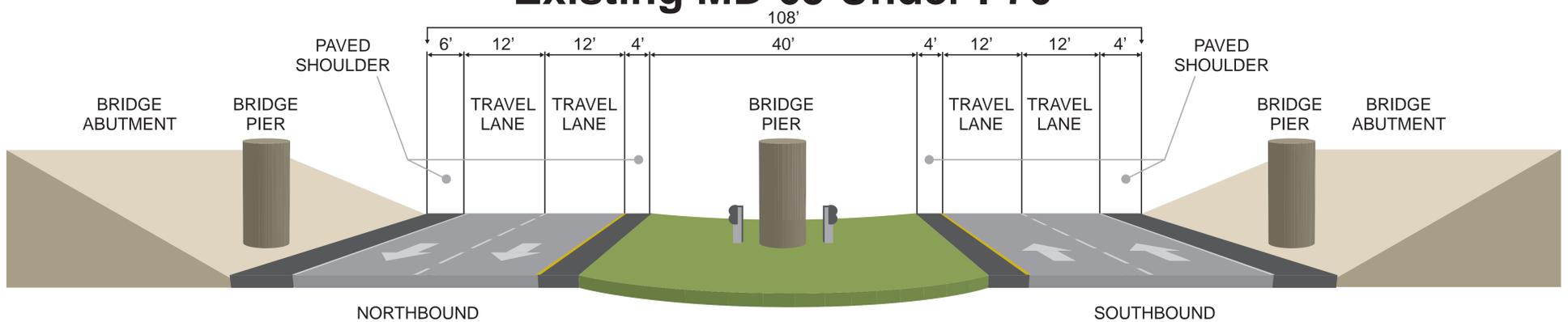
- **Environmental Justice – The potential for minority and low-income populations to be present in the project area is low; however, further outreach and demographic research will be completed as the study progresses**

# ALTERNATIVE 1 NO BUILD

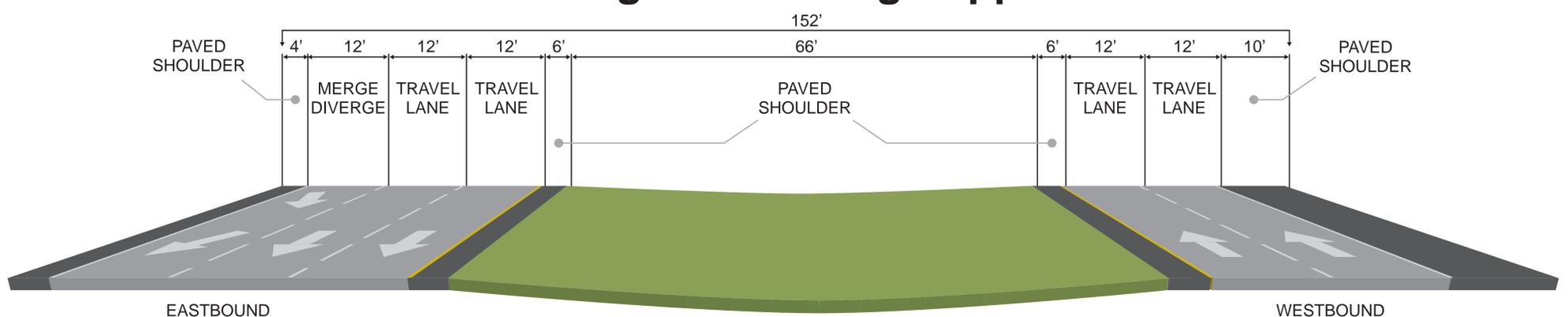
- Serves as a baseline for comparing the impacts and benefits associated with the build alternatives
- Proposes minor short-term improvements as part of routine maintenance and safety operations
- Does not address the purpose and need for the project

## TYPICAL SECTIONS

### Existing MD 65 Under I-70



### Existing I-70 at Bridge Approach





## ALTERNATIVE 2 DIAMOND INTERCHANGE – I-70 INSIDE WIDENING

- **Reconstructs most of the I-70/MD 65 interchange, reconfiguring it similar to a traditional diamond interchange**
- **A new third through-lane in each direction along I-70 will be added within the existing median**
- **Realigns the I-70 westbound off-ramp to tie-in across the existing westbound on-ramp intersection and will require a new bridge over the CSX rail line**
- **Widens the I-70 westbound on-ramp to two lanes**
- **Removes both I-70 eastbound loop ramps and realigns new slip ramps to form the diamond configuration**
- **The new I-70 eastbound on-ramp will partially impact the existing park-and-ride lot and require a new bridge over the CSX rail line**



## ALTERNATIVE 2A MODIFIED DIAMOND INTERCHANGE – I-70 INSIDE WIDENING

- **Reconstructs most of the I-70/MD 65 interchange, reconfiguring it similar to a traditional diamond interchange**
- **Proposed improvements are the same as Alternative 2, but realigns the ramps to and from I-70 eastbound approximately 120 feet further south to utilize as much of existing ramps as possible**
- **A new third through-lane in each direction along I-70 will be added within the existing median**
- **The new directional on-ramp from northbound MD 65 to eastbound I-70 will fully impact the existing park-and-ride lot causing it to be closed, and still require a new bridge over the CSX rail line**



## ALTERNATIVE 3 DIAMOND INTERCHANGE – I-70 OUTSIDE WIDENING

- **Reconstructs most of the interchange, reconfiguring it similar to a traditional diamond interchange**
- **Proposed improvements are the same as Alternative 2, except that the additional (third) through lane in each direction along I-70 will be added to the outside of the existing lanes**
- **The new I-70 eastbound on-ramp will partially impact the existing park-and-ride lot and require a new bridge over the CSX rail line**
- **Maintaining the existing median width provides the maximum green space to accommodate future drainage needs and potential erosion and sediment design facilities**

## ALTERNATIVE 4 DIAMOND INTERCHANGE PLUS REDUNDANT WESTBOUND LOOP RAMP

- **Same as Alternative 2 (also applicable to Alternatives 2A and 3) but includes an additional loop ramp from northbound MD 65 to westbound I-70**
- **The new loop ramp movement is redundant to the existing left-turn movement onto the I-70 westbound on-ramp within the northwest quadrant of the interchange, therefore providing a choice to access westbound I-70 from northbound MD 65**
- **Does not require the existing I-70 westbound on-ramp to be widened to two lanes, as done for Alternatives 2, 2A and 3.**
- **Requires barrier separation between the I-70 mainline and the on-ramp acceleration lane**

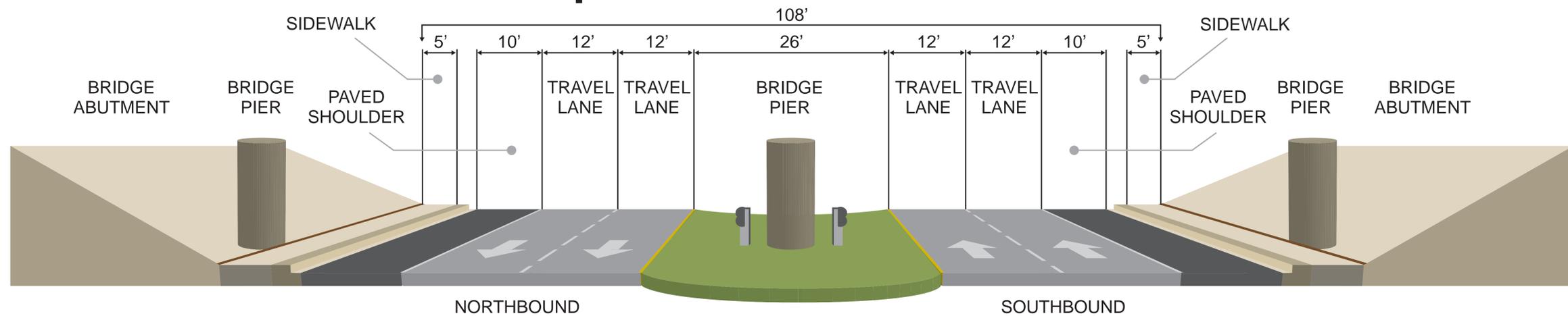


## ALTERNATIVE 5 FULL CLOVERLEAF INTERCHANGE – I-70 INSIDE WIDENING

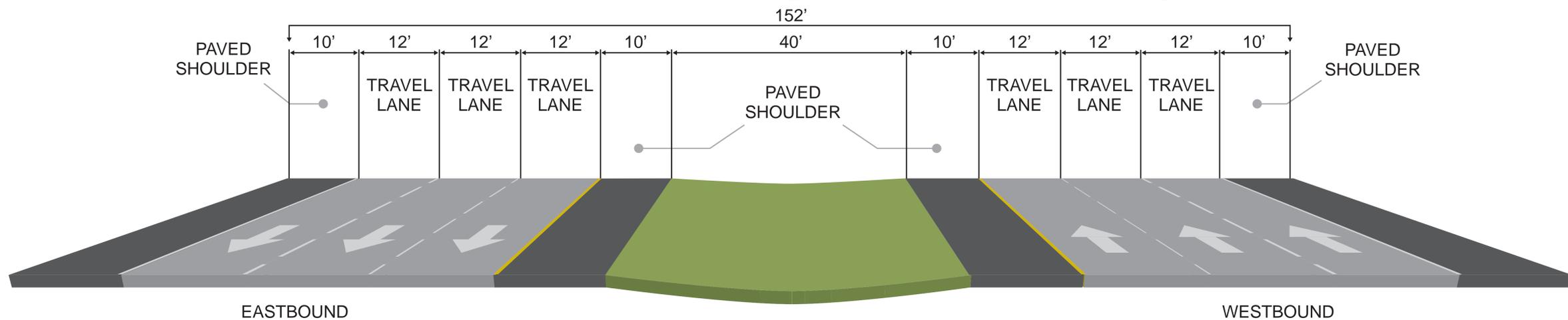
- **Modifies the existing interchange configuration to a full cloverleaf interchange**
- **Adds two new loop ramps on the north side of I-70 (to-and-from westbound I-70) and removes existing left-turn slip ramps to-and-from both northbound and southbound MD 65**
- **Adds a new directional ramp from northbound MD 65 to eastbound I-70 and a reconfigured directional ramp from westbound I-70 to northbound MD 65, in similar locations as shown in Alternatives 2 through 4**
- **Adds a new continuous outside auxiliary lane along both northbound and southbound MD 65 underneath I-70, serving as an acceleration and deceleration lane for the loop movements**
- **Shifts the existing northbound and southbound MD 65 through lanes in the existing median underneath I-70 to accommodate the new outside auxiliary lane**
- **Adds a new auxiliary lane on westbound I-70 to serve as an acceleration and deceleration lane between the two new loop ramps**
- **A new third through-lane in each direction along I-70 will be added within the existing median**

# ALTERNATIVES 2, 2A, AND 4 TYPICAL SECTIONS

## Proposed MD 65 Under I-70

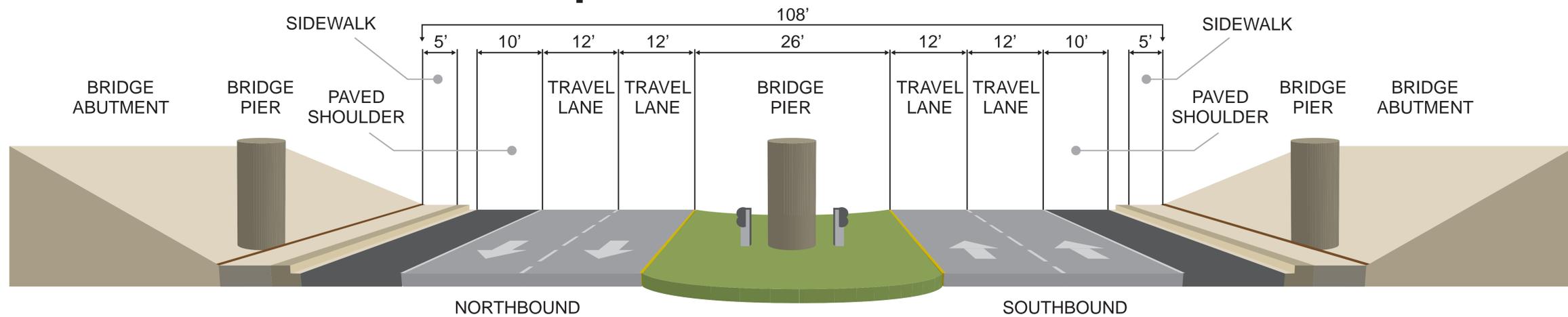


## Proposed I-70 Inside Widening Concept at Bridge Approach

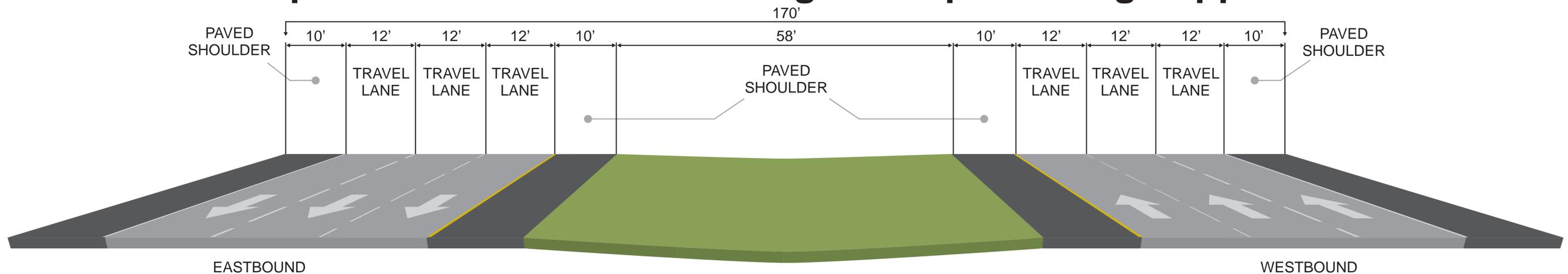


# ALTERNATIVE 3 TYPICAL SECTIONS

## Proposed MD 65 Under I-70

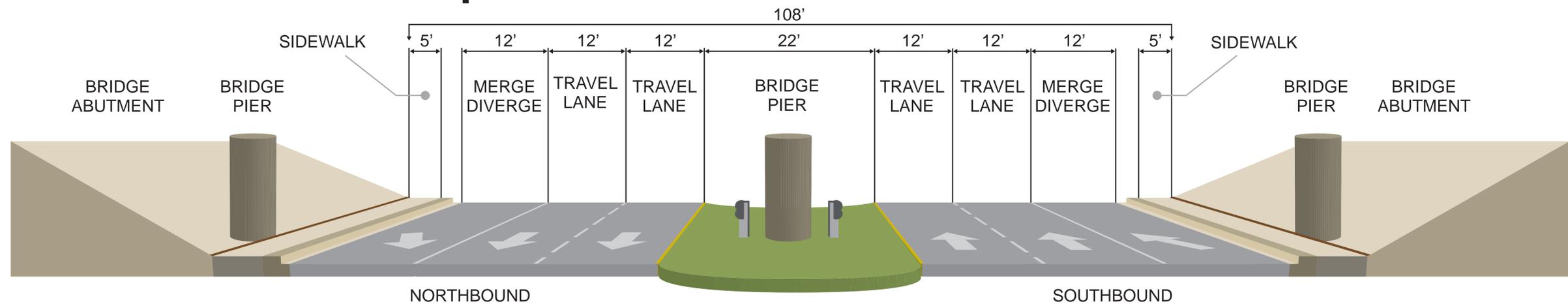


## Proposed I-70 Outside Widening Concept at Bridge Approach

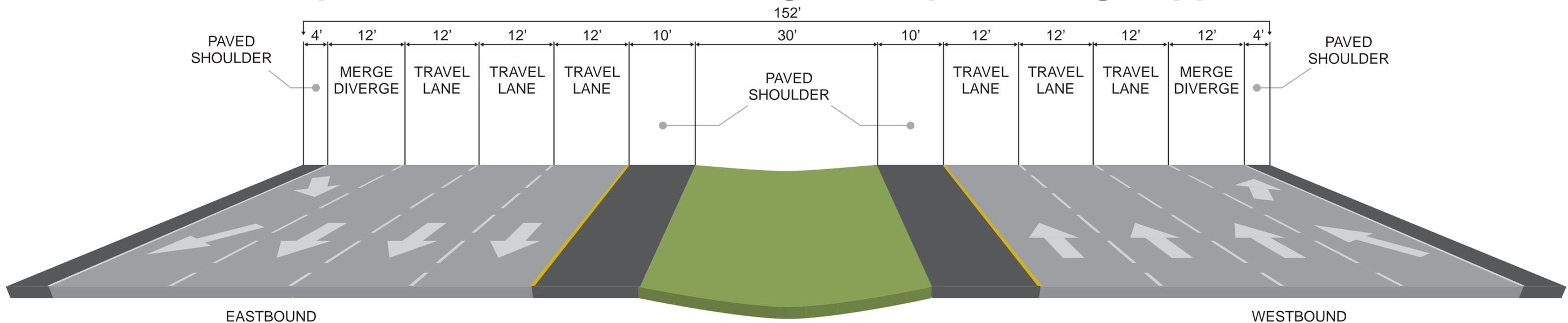


# ALTERNATIVE 5 TYPICAL SECTIONS

## Proposed MD 65 Under I-70: Cloverleaf



## Proposed I-70 Inside Widening Concept at Bridge Approach



# PROPOSED DEVELOPMENT

