

I-90

EXIT 46 **IMJR** Open House

Welcome



We Are Here

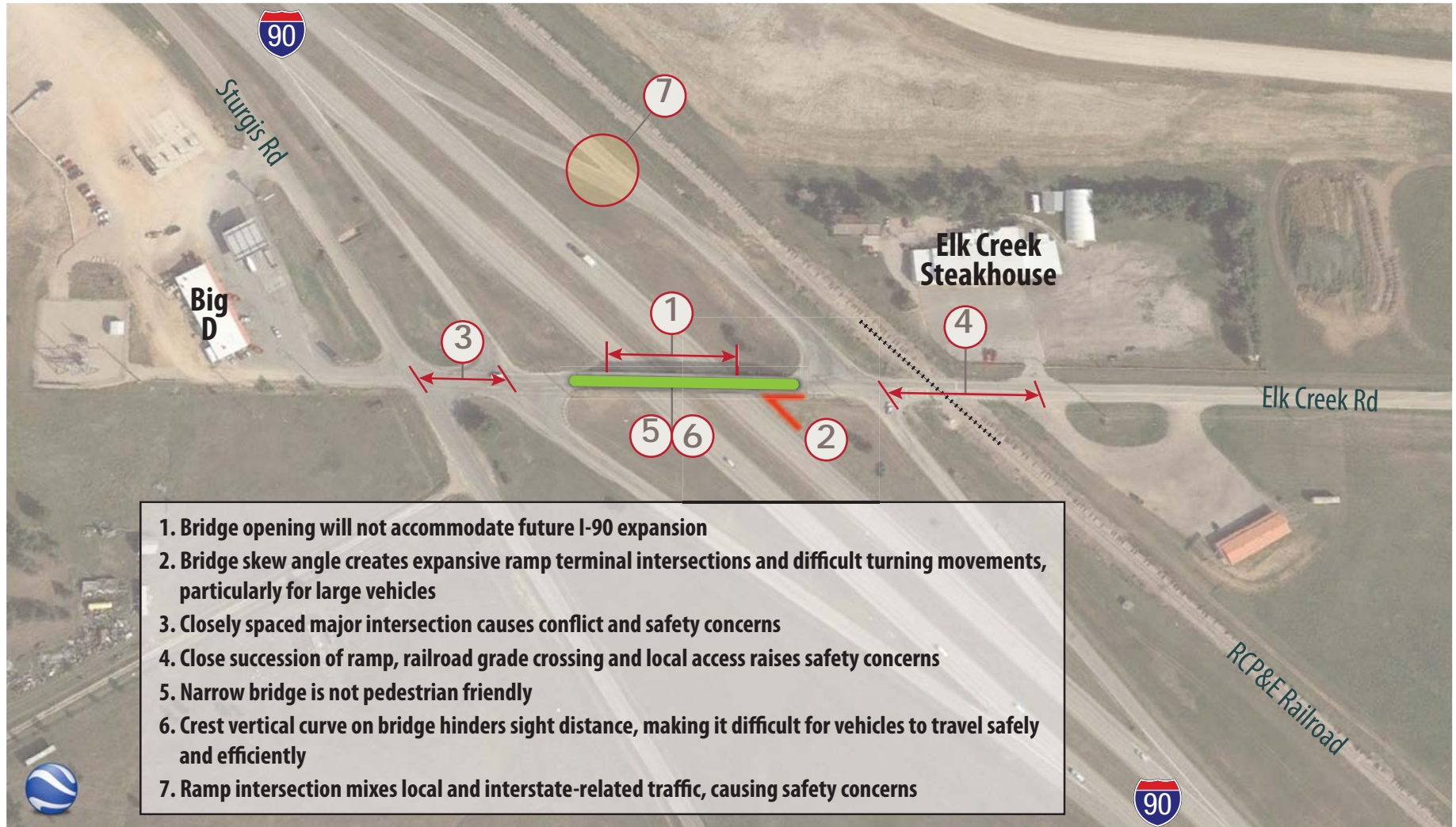
Year	2000	2004	2008	2010	2013	2014	2016	2017 - 2020	2020 - 2025
Document/ Procedural Step	<p>SDDOT Decennial Interstate Corridor Study</p>	<p>I-90 Black Hawk to Sturgis Corridor Preservation Study</p>	<p>I-90 Environmental Assessment - Exit 40 to Exit 51</p>	<p>SDDOT Decennial Interstate Corridor Study</p>	<p>Piedmont Valley Regional Shared Use Path Summary and Recommendations</p>	<p>SDDOT Statewide Transportation Planning Process</p>	<p>IMJR and Categorical Exclusion (Environmental Clearance)</p>	<p>Complete Scoping and Design</p>	<p>Construction</p>
Exit 46 Information	<p>Identified concern of close service road spacing, recommended project to realign service roads</p>	<p>Addressed potential for widening of I-90 to six lanes, evaluated Exit 46 interchange reconfiguration alternatives</p>	<p>Selected Preferred Alternative of Realigned Exit 46 Diamond Interchange</p>	<p>Reaffirmed issues of close service road spacing and substandard interchange design</p>	<p>Identified path along Elk Creek Road and crossing of I-90 at Exit 46 as high priorities</p>	<p>SDDOT included Exit 46 reconstruction in the Developmental Program of its statewide planning process</p>	<p>Will provide documentation of preferred alternative needed for Federal approval of Exit 46 project</p>	<p>SDDOT process of defining the reconstruction project and completing final design plans</p>	<p>Construction effort to be overseen by SDDOT</p>
Public Meeting(s)	<p>No meetings</p>	<p>Yes</p>	<p>Yes</p>	<p>No meetings</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>Land Owner Meeting</p>	<p>To Be Determined</p>

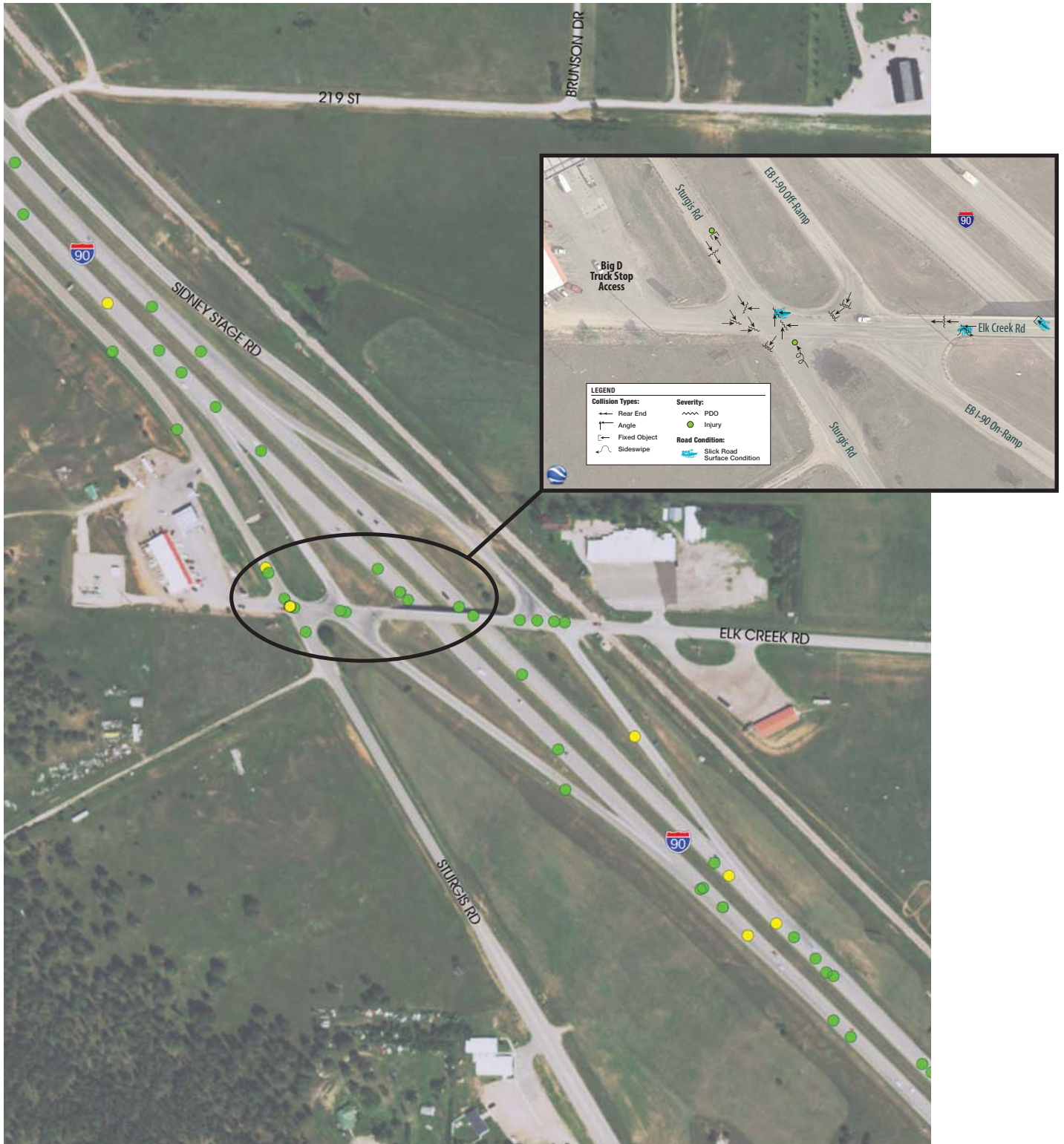
Purpose of the Exit 46 Study:

- ◆ The SDDOT has been making progress implementing the recommendations from the Interstate 90 Black Hawk - Sturgis Corridor Preservation Study. As part of that progression, the SDDOT has reached the milestone to conduct a more in-depth study of the Exit 46 interchange's traffic operations and effects to the Interstate System - in order to request permission from the Federal Highway Administration (FHWA) to make modifications to the Elk Creek Road interchange.

- ◆ An Interchange Modification Justification Report (IMJR) is a planning document prepared to gain approval from the Federal Highway Administration to make changes to an existing interstate interchange. The document addresses eight policy points to ensure that the proposed change uniquely meets the need(s), provides acceptable traffic flow and operations, fits with local and regional plans, and will be included in required environmental evaluation, review and processing.

Aerial: Fall 2015

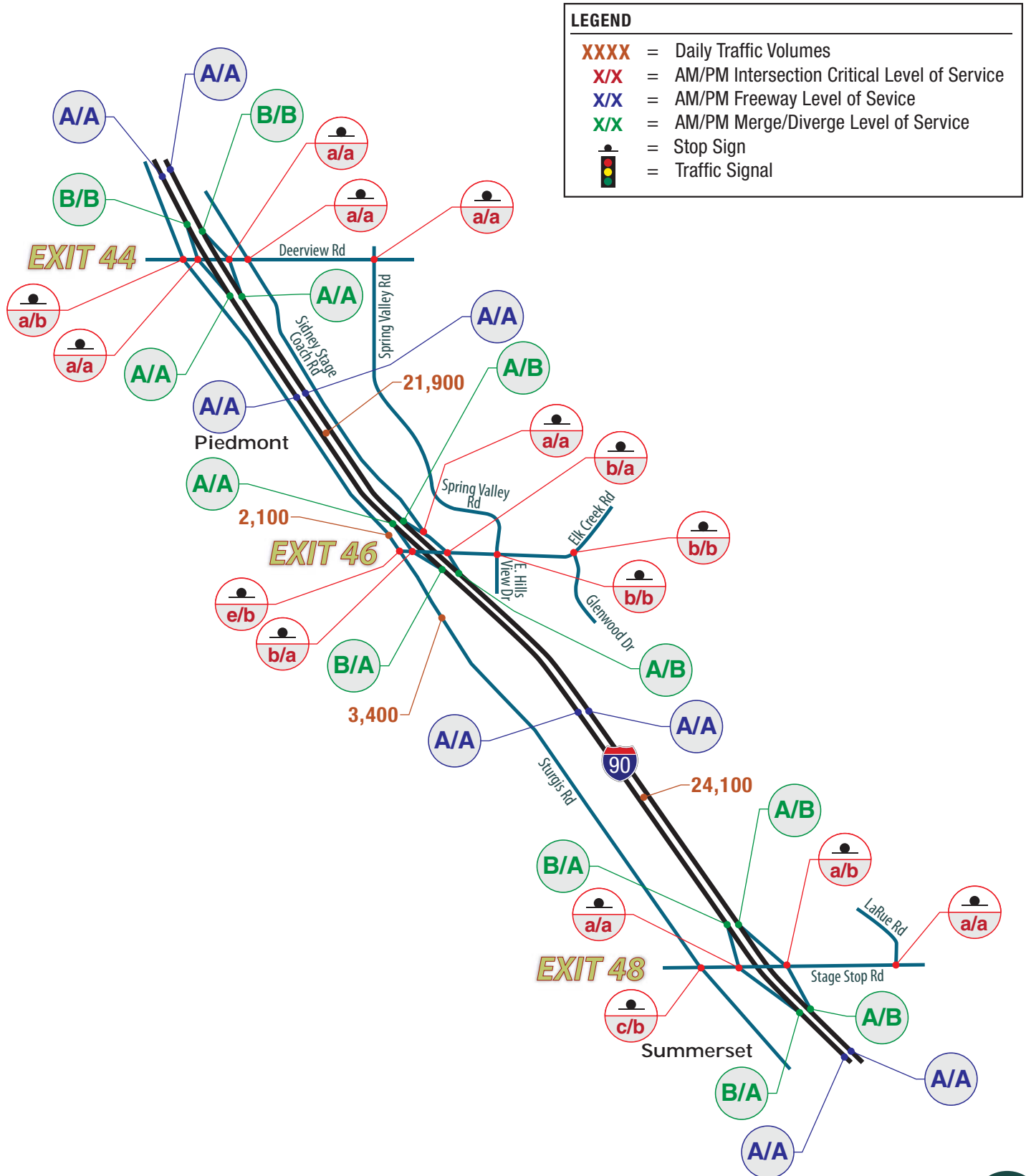




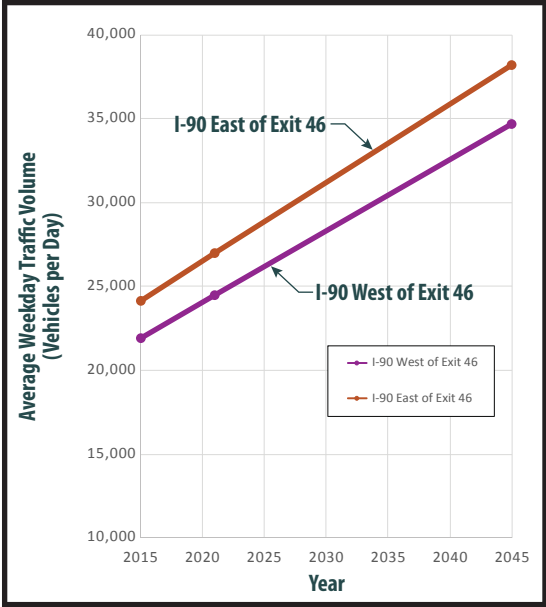
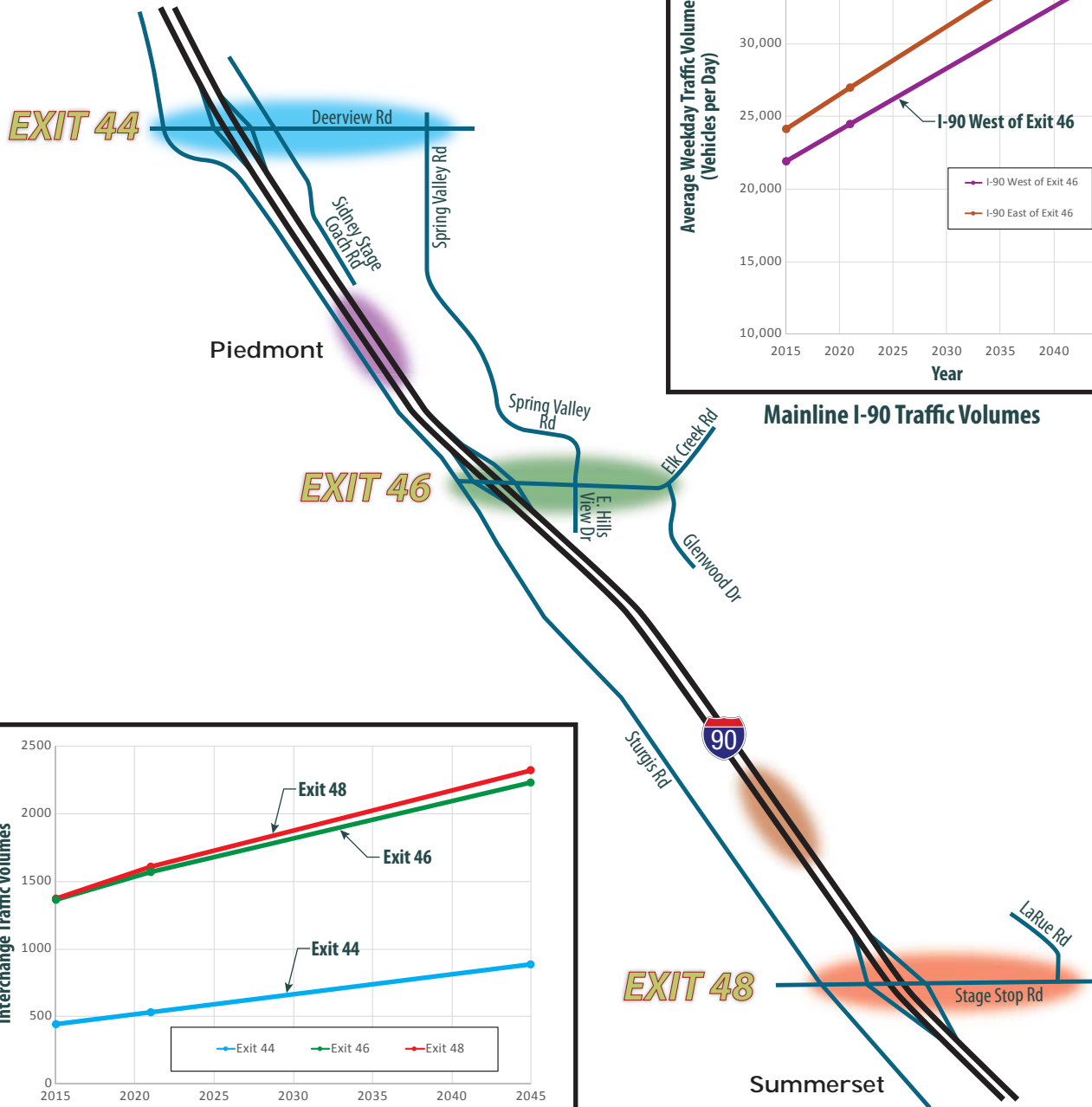
Legend

- Fatality
- Injury
- PDO

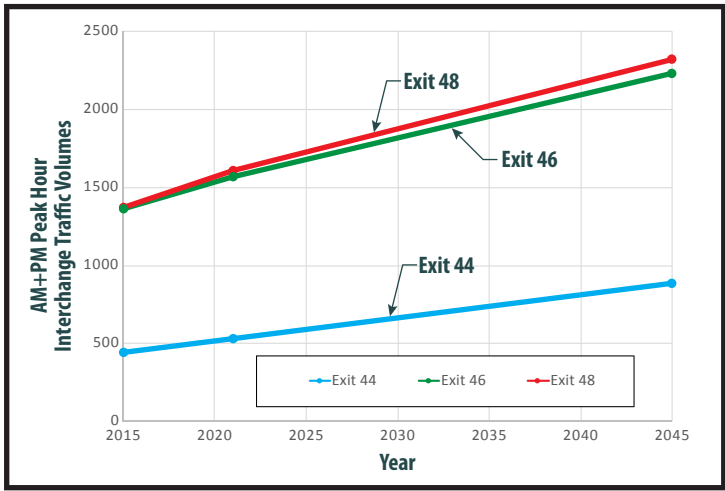




Future Growth Forecasts - Mainline I-90 and Interchanges



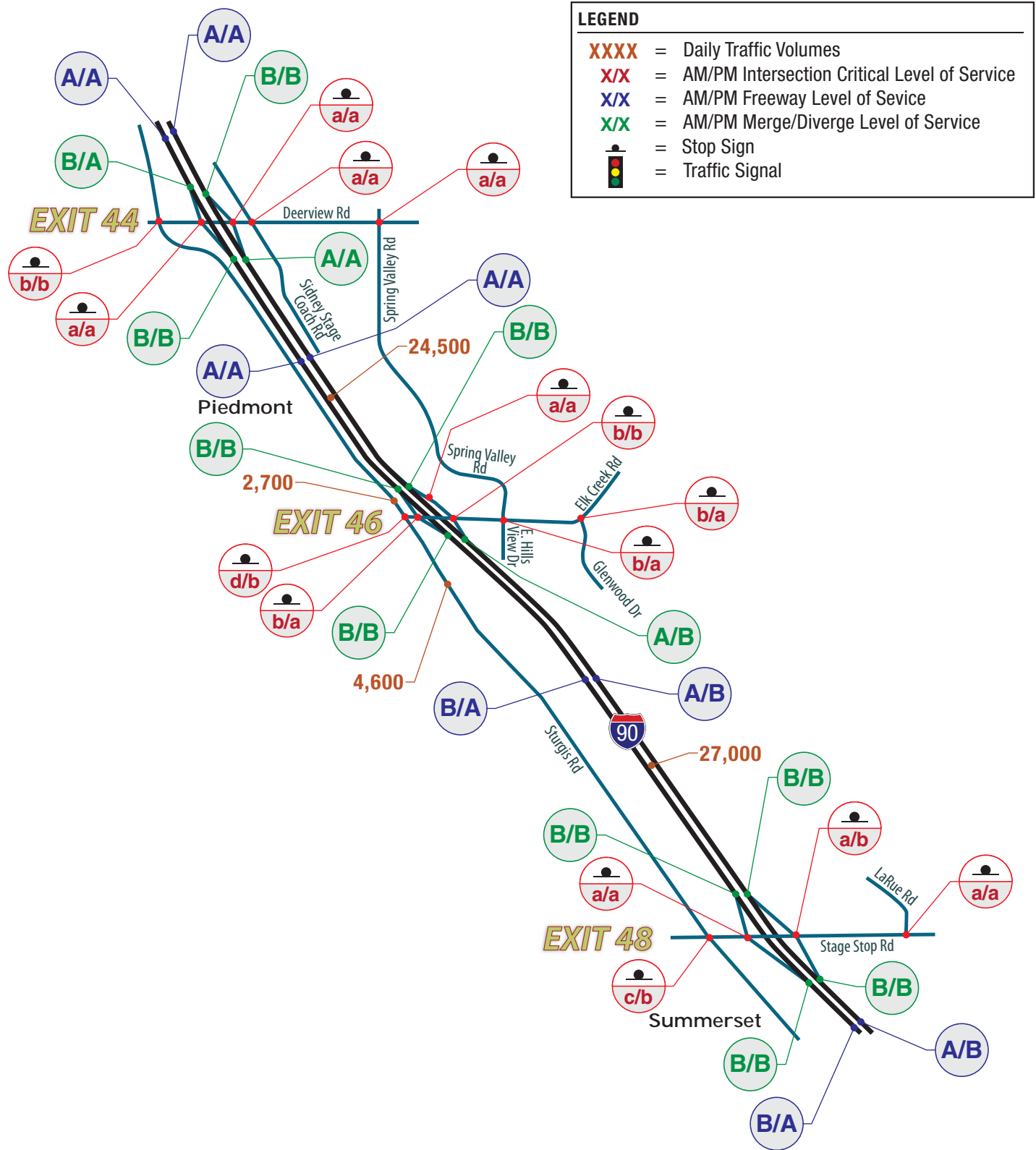
Mainline I-90 Traffic Volumes



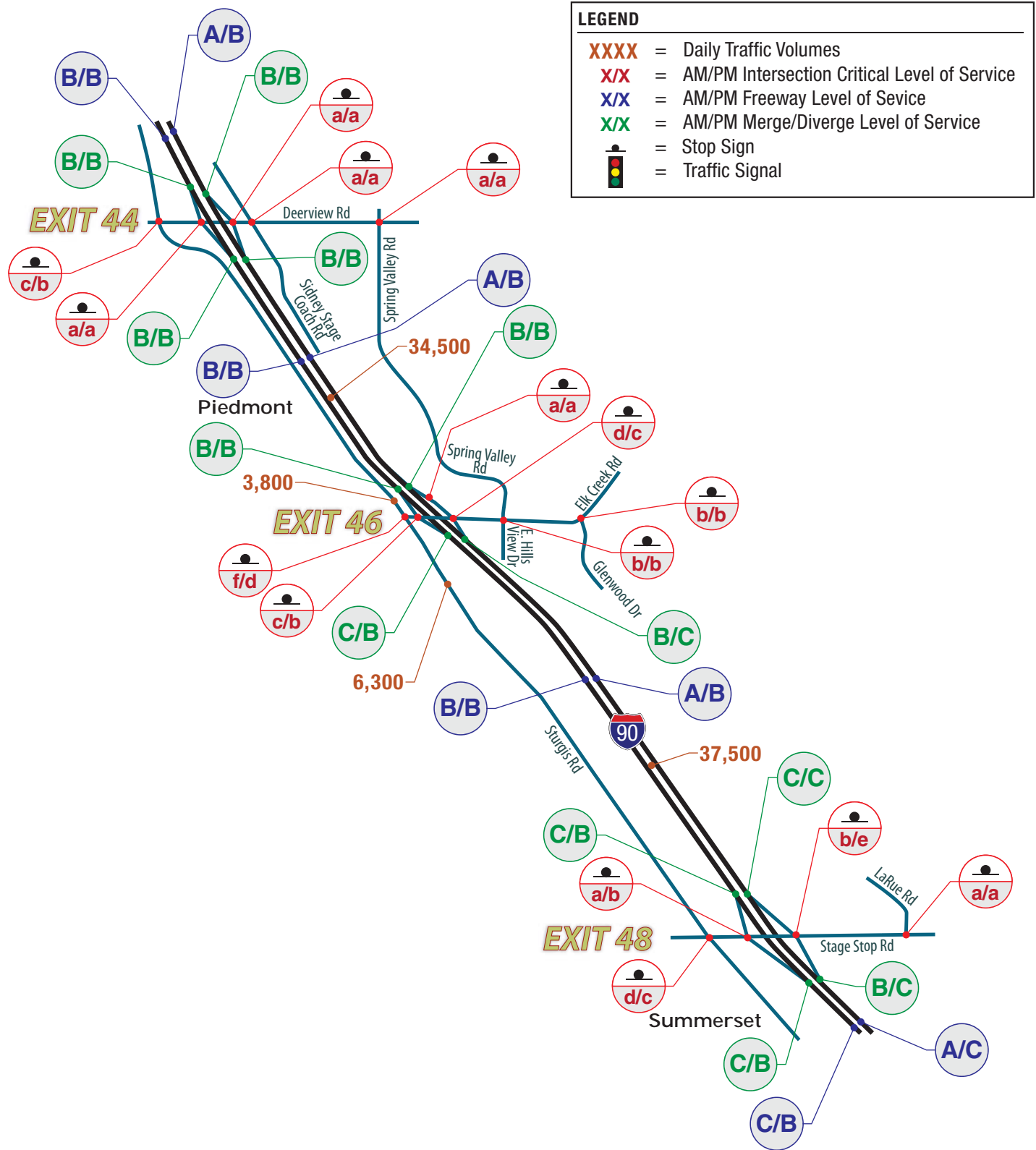
Interchange Area Traffic Volumes



2021 No Action Traffic Volumes and Operations

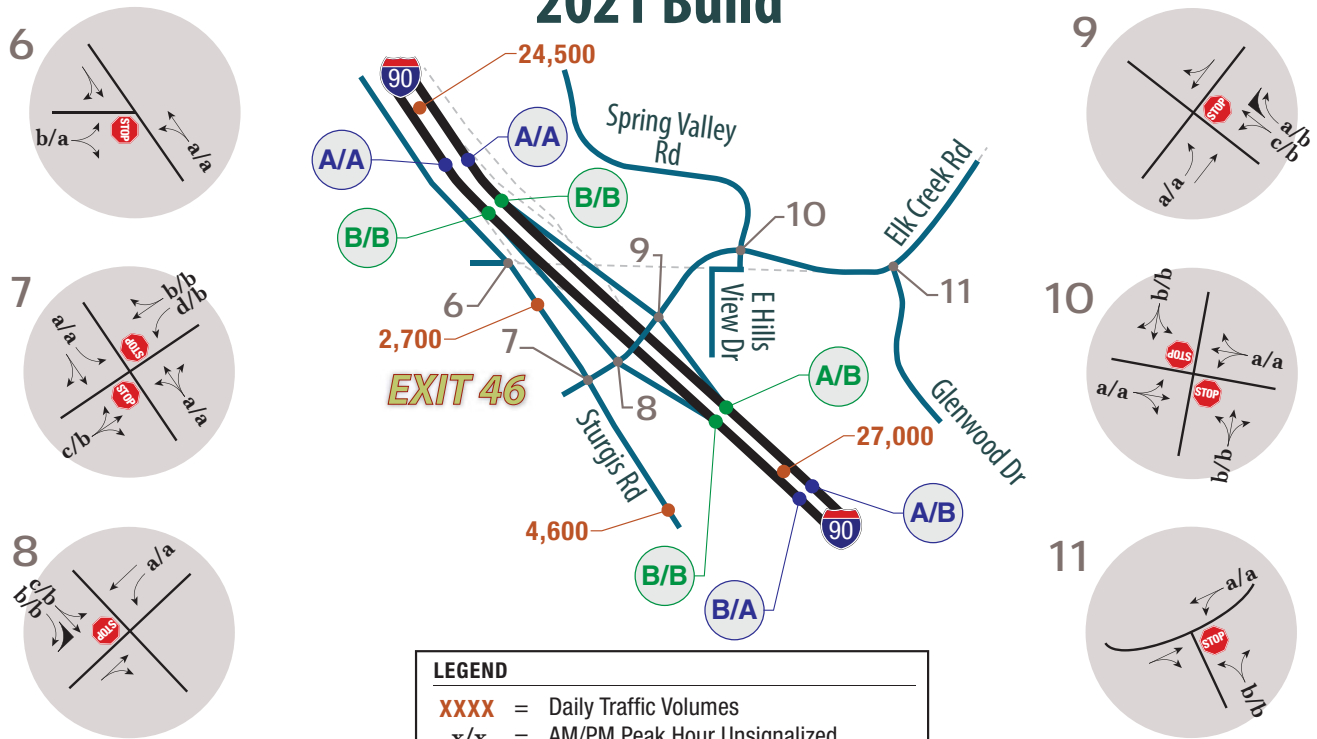


2045 No Action Traffic Volumes and Operations



Preferred Alternative 2021 and 2045 Traffic Volumes and Operations

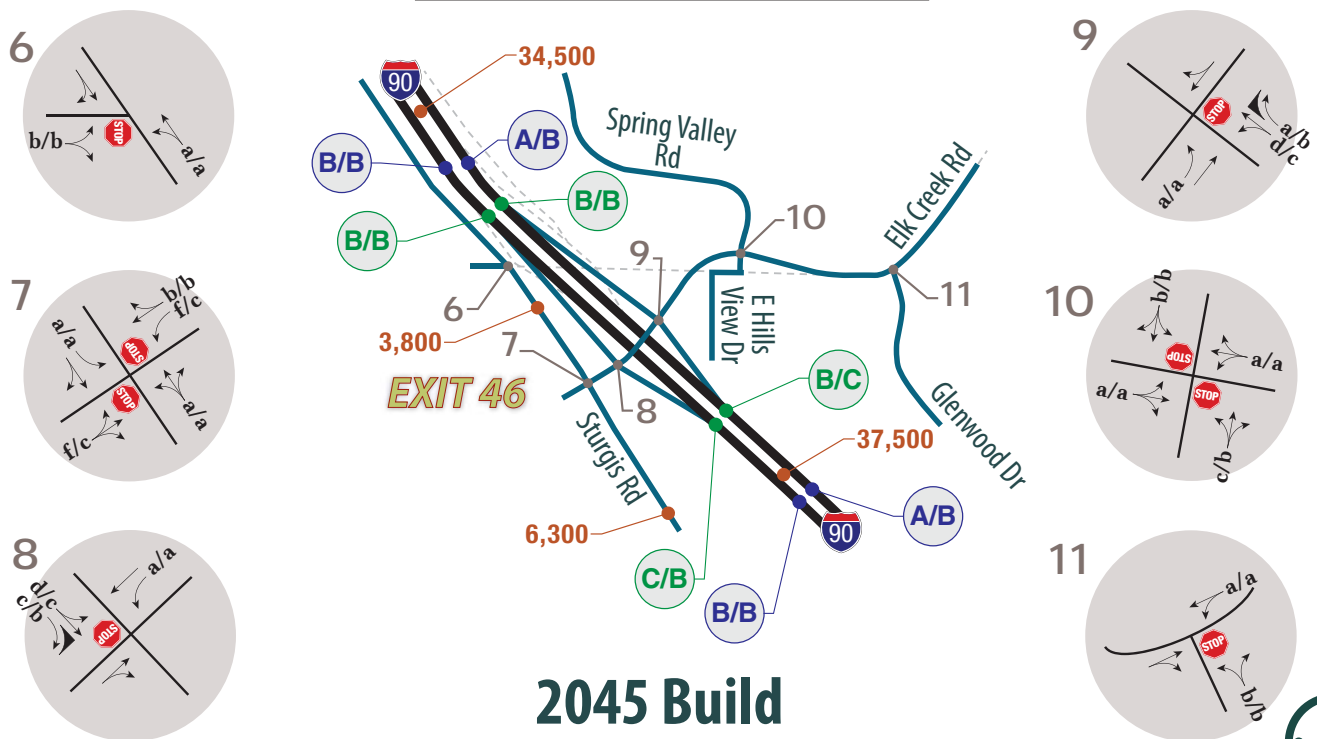
2021 Build



LEGEND

- XXXX = Daily Traffic Volumes
- x/x = AM/PM Peak Hour Unsignalized Intersection Level of Service
- X/X = AM/PM Freeway Level of Service
- X/X = AM/PM Merge/Diverge Level of Service
- STOP = Stop Sign
- = Existing Road Network

2045 Build





NOTE: Drawing Not to Scale

Piedmont Valley Shared Use Path – Elk Creek Road Segment

Completed in 2013, the Piedmont Valley Shared Use Path Summary and Recommendations Study prioritized construction of a 10-foot wide path along Elk Creek Road, crossing I-90 in the vicinity of Exit 46. Integrating this path into the reconstructed interchange can help to fulfill this priority by providing a grade separated path parallel to Elk Creek Road across both the railroad tracks and I-90. **The following two routing options are under consideration:**

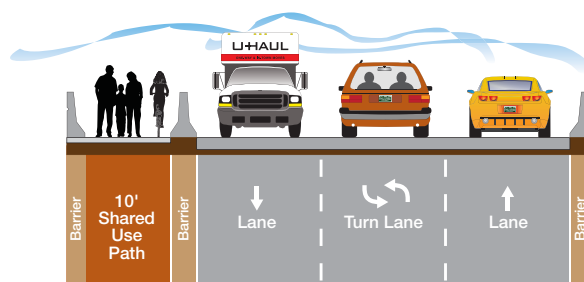
Option A: South Side of Elk Creek Road



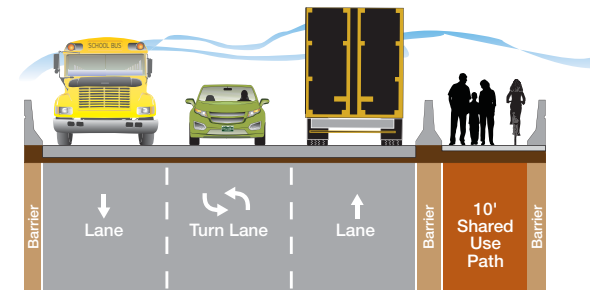
Option B: North Side of Elk Creek Road



Cross-Sectional View (looking west across Exit 46 bridge)



Cross-Sectional View (looking west across Exit 46 bridge)



Advantages –

- ◆ Fewer (3 total) major route crossings when compared to the northern multi-use path
- ◆ Does not require crossing of Elk Creek Road to access residential areas and existing sidewalk

Disadvantages –

- ◆ Location poor for snowmelt
- ◆ Increased conflict with high volume free flowing movements (northbound I-90 off ramp)
- ◆ Multiple residential street crossings on east side of I-90

Advantages –

- ◆ Fewer residential street crossings
- ◆ Reduces conflict with high volume free flowing movements (northbound I-90 off ramp)
- ◆ Location good for snowmelt

Disadvantages –

- ◆ One additional major route crossing (4 total) compared to the southern multi-use path option
- ◆ Potential conflict with higher volume free flow right turns
- ◆ Requires crossing of Elk Creek Road to access residential areas and existing sidewalk

- ◆ Compile input received from public and stakeholders
- ◆ Develop Draft and Final IMJR
- ◆ Complete Environmental Process (Categorical Exclusion)