

# **I-90 Exit 32 to 40**

## **Corridor Study + Design**

Public Meeting #1  
December 20, 2017  
Brown High School



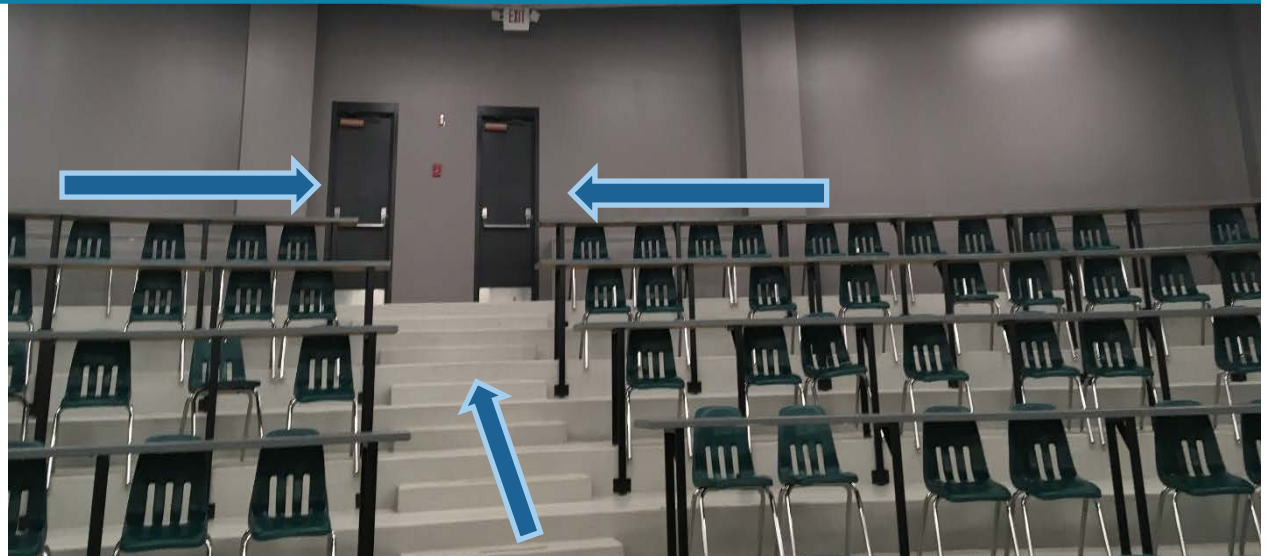
# Agenda



- 1 Introductions & Housekeeping
- 2 History & Background
- 3 Project Need & Goals
- 4 Project Stakeholders
- 5 Project Data
- 6 Next Steps & How to Get Involved



# Housekeeping exit locations



# History & Background

This section of I-90:

- Previously designated as US 14 and SD 79
- Became part of the US Interstate system in 1958 (longest route in US)

Construction History		
	Eastbound	Westbound
1958	Sturgis to Tilford Port of Entry (Reinforced Concrete)	
1962	Tilford Port of Entry to Tilford (Concrete)	
1981	Sturgis to Tilford Port of Entry (PCCP)	Exit 37 to Tilford Port of Entry (PCCP)
1982	Tilford Port of Entry	
1986	Tilford Port of Entry Modifications	
2004	Exit 32 Interchange Reconstruction	
2007	Tilford Port of Entry to Tilford (PCCP)	Exit 32 to Tilford (PCCP)
2011	WIM	

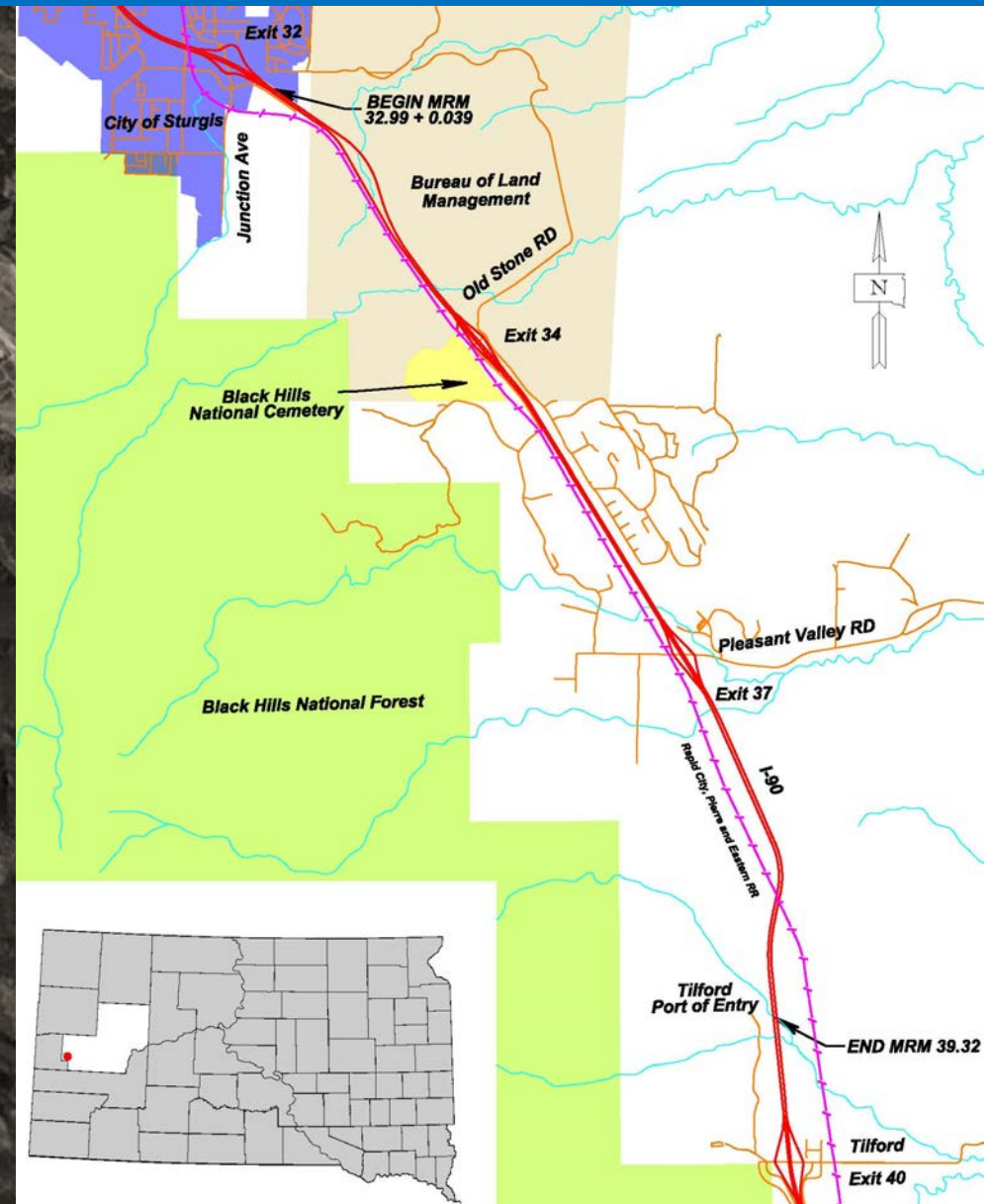
# History & Background

## Previous Completed Studies

- Interstate Corridor Study (2000)
- I-90 Black Hawk to Sturgis Corridor Preservation Study (2004)
- Decennial Interstate Corridor Study (2010)
- Meade County Master Transportation Plan (2016)

# Project Need & Goals

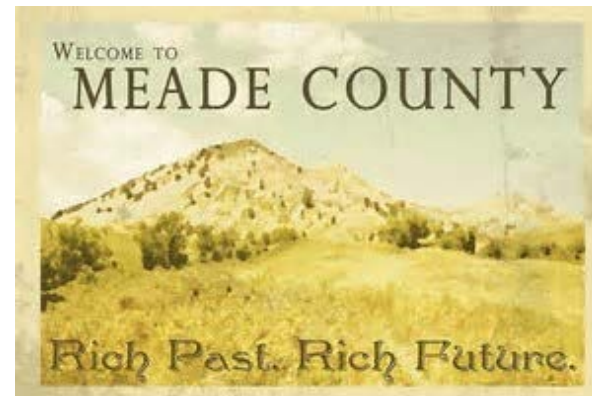
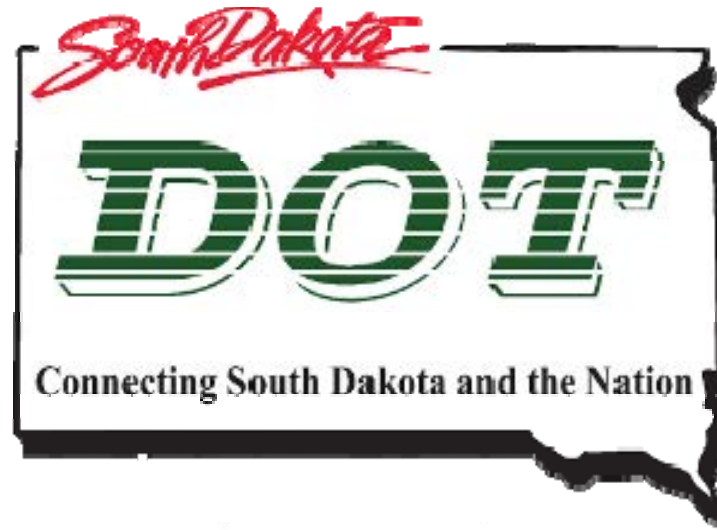
- Replace eastbound lanes
- Drainage structures nearing end of useful life
- Interchanges do not meet current standards
- Address queuing issues at Tilford



# Project Need & Goals

- Determine traffic demand, structure needs, and geometric deficiencies of the I-90 corridor
- Identify and analyze conceptual improvements (corridor and interchanges)
- Develop feasible construction projects within the corridor
- Design and implement improvements

# Project Stakeholders



# Project Stakeholders

1. US Army Corps of Engineers (USACE)
2. Bureau of Land Management (BLM)
3. Black Hills National Cemetery
4. Sturgis Chamber of Commerce
5. Sturgis Economic Development Corporation
6. Meade School District
7. Prairie Hills Transit
8. South Dakota Highway Patrol – Motor Carrier
9. Sturgis Emergency Services
10. Landowners and business owners
11. Rapid City, Pierre, Eastern Railroad (RCPE)
12. Lower Brule Sioux Tribe
13. Sisseton - Wahpeton Oyate
14. Standing Rock Sioux Tribe
15. Yankton Sioux Tribe
16. Cheyenne River Sioux Tribe
17. Oglala Sioux Tribe
18. Three Affiliated Tribes of ND
19. Northern Arapaho Tribe of WY
20. South Dakota GFP

# Project Data

## Crash Analysis

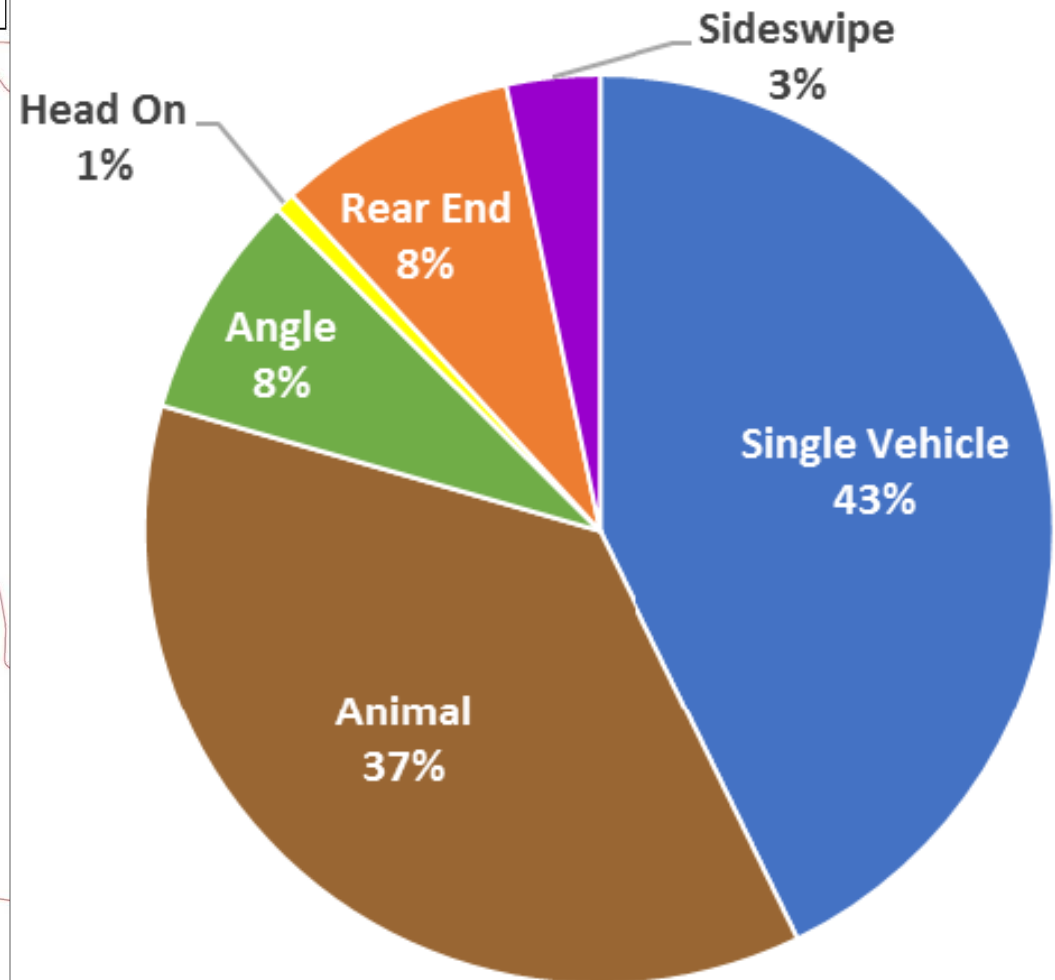
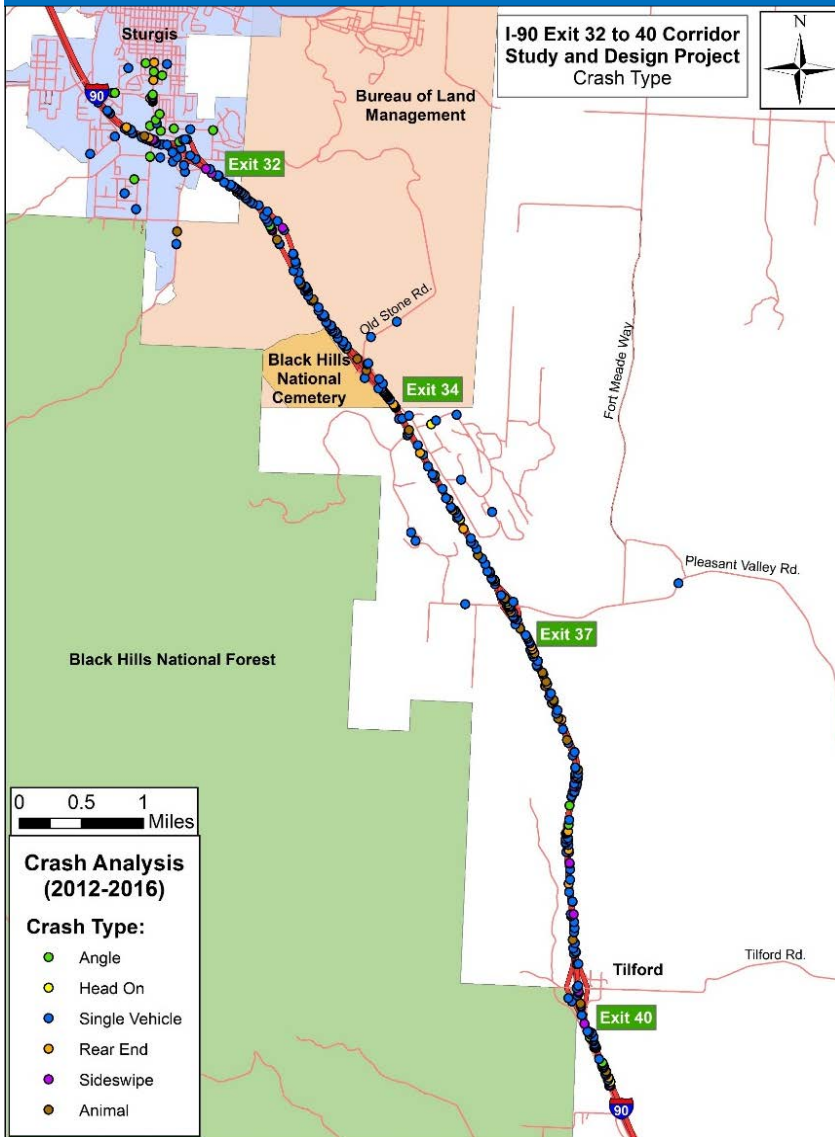
### *Total Crashes*

Year	Number of Crashes
2012	87
2013	91
2014	87
2015	81
2016	77



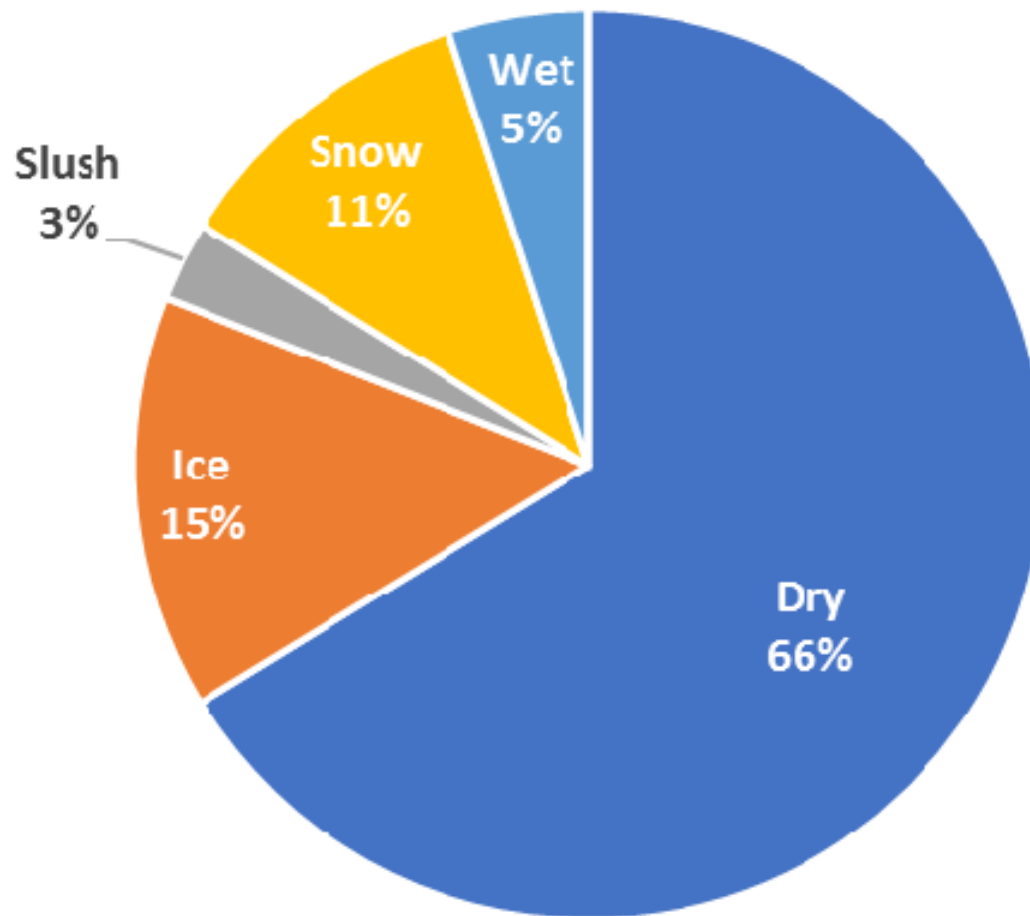
# Project Data

## Crash Analysis - *Crash Type*



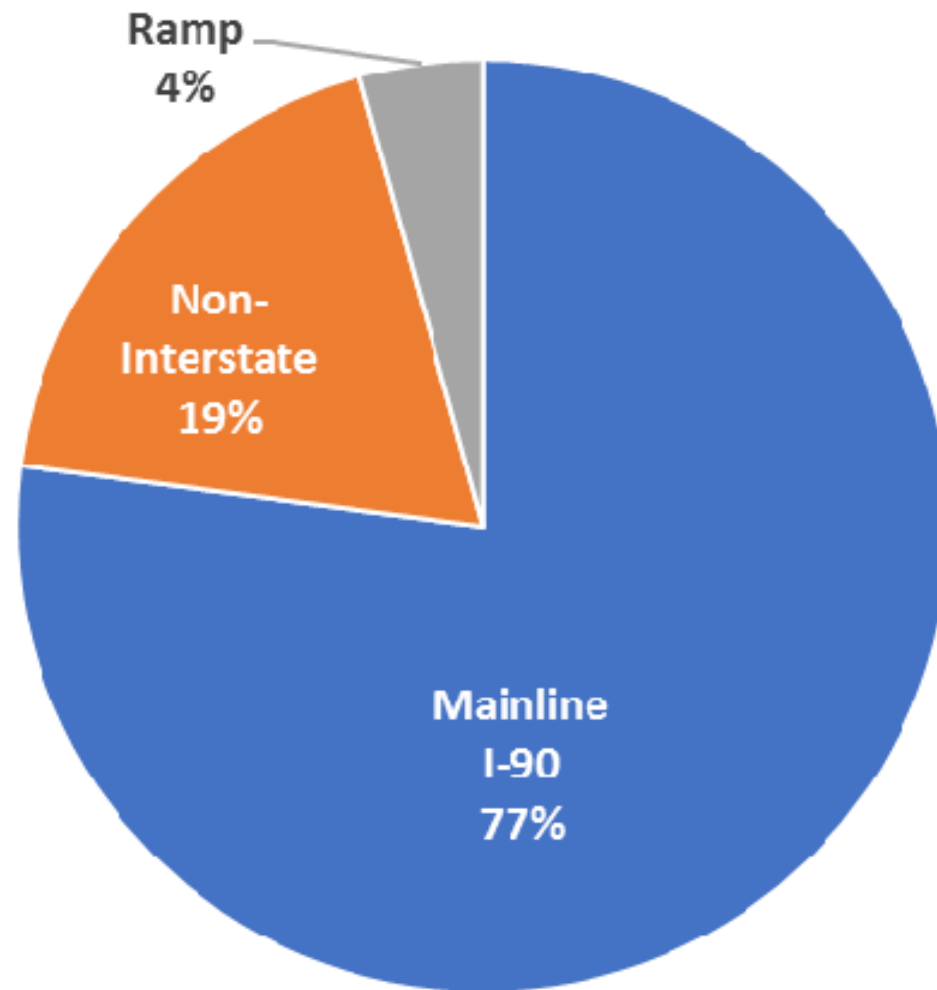
# Project Data

## Crash Analysis - *Road Condition*



# Project Data

## Crash Analysis - *Location*



# Project Data

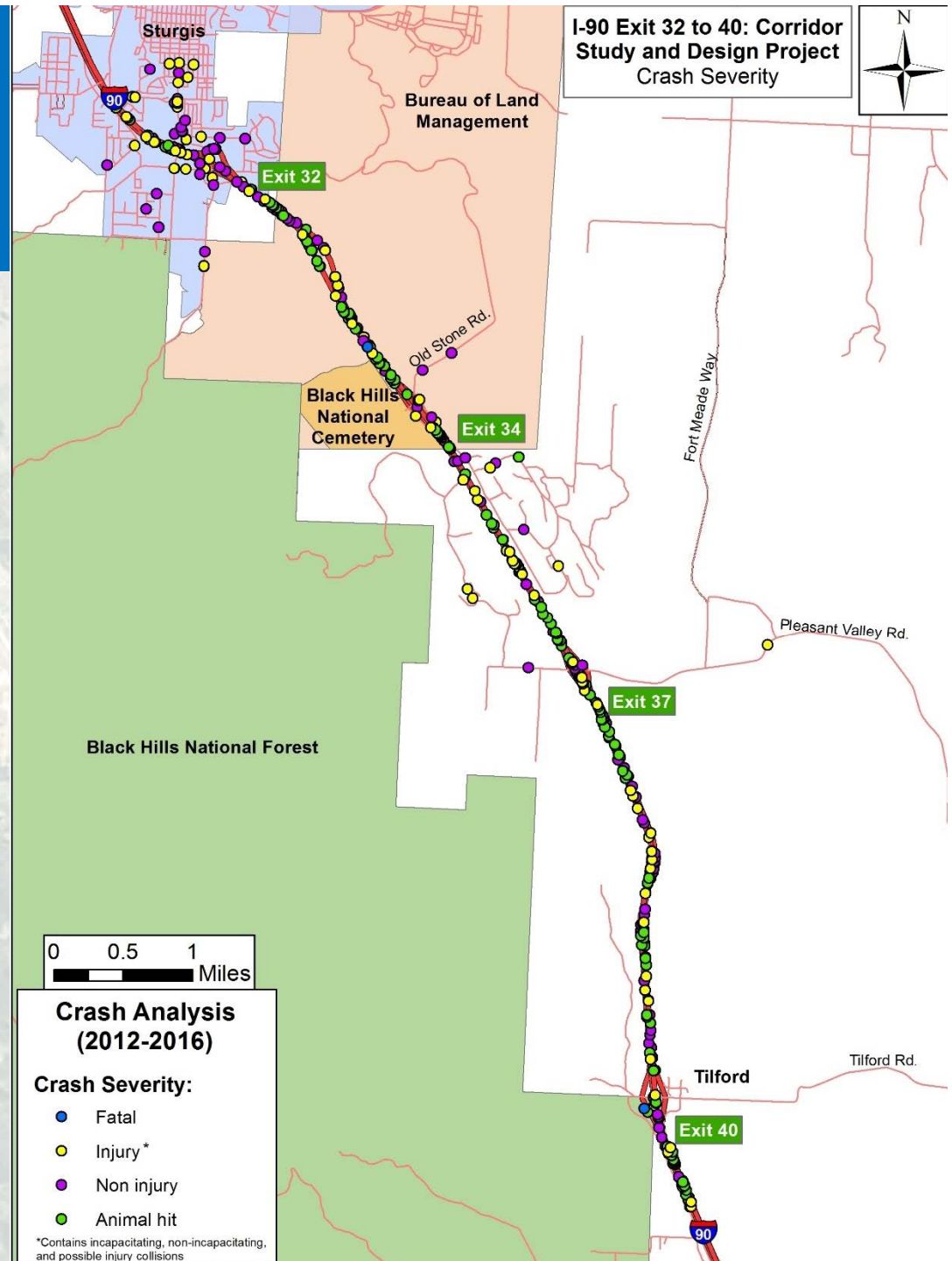
## Crash Analysis - **Severity**

2 - Fatal

100 – Injury

190 – Non-Injury

131- Animal Hit



# Project Data

## Bridge Review

Structure Inventory  
and Appraisal  
Reports (SIA)

National Bridge  
Inventory (NBI)

Maintenance History

Inspection Reports



# Project Data

## Bridge Review - *Age and Sufficiency*

Bridge No.	Mileage Reference Marker	Feature Crossed	Type	Age	Sufficiency Rating
Mainline Structure over Local Roads					
47-048-462	34.81	I-90 EB over National Cemetery Rd	Conc. Slab Bridge	54	82.0
47-048-461	34.81	I-90 WB over National Cemetery Rd	Conc. Slab Bridge	54	82.0
Local Road Structures over Mainline					
47-061-480	37.01	Pleasant Valley Rd over I-90	Steel Beam Bridge	54	96.7
47-069-510	40.20	Tilford Road over I-90	Steel Beam Bridge	53	86.0
Culverts					
47-045-458	34.32	I-90 over Alkali Creek	Conc. Box Culvert	70	81.9
47-064-484	37.40	I-90 over Pleasant Valley Creek	Conc. Box Culvert	61	82.0
47-068-501	39.32	I-90 over Creek	Conc. Box Culvert	61	82.0
47-068-503	39.45	I-90 over North Br Morris Creek	Conc. Box Culvert	61	82.0
Railroad Tunnel					
47-068-495	38.67	I-90 over CP/DM&E RR	Train Tunnel	36	82.0

# Project Data

## Bridge Review

Less than Desirable  
Clearance Over  
Local Roads

Substandard Lateral  
Clearance

Nonstandard Bridge  
Barriers



# Project Data

## Existing Corridor Issues

- Stopping Distance
- Intersection Proximity to Interchange
- Curve Sharpness
- Snow Drifting Critical Areas
- Capacity at Tilford Port of Entry
- Slope Standards
- Adjacent Land Use
  - National Cemetery
  - Bureau of Land Management



# Project Data

# Schedule

1. Corridor Study
2. Determination of Construction Project(s)
3. Interchange Modification Justification Report(s) (IMJR)
4. Environmental Studies
5. Construction Plans

## Upcoming Meetings

[illegible]

# Next Steps

## **Corridor Study:**

June 2017 - February 2018  
stakeholder meetings in January

## **Environmental Studies:**

January 2018 - September 2019

## **Construction Plan Development:**

January 2018 - September 2021

# How to Get Involved

## **Leave a Comment Related to this Meeting:**

### **Tonight**

- Written (place in comment box) or Oral

### **After Tonight** (Comments accepted until January 5, 2018)

- Written (Take a comment card with you)
- Website ([www.i90exit32to40.com](http://www.i90exit32to40.com))
- Contact Me (phone, email, letter)

**Enter the Photo Contest – Opens in January!**

**Attend an Upcoming Public Meeting**

***Project Staff are available to answer questions***

# How to Get Involved

It's the end of the presentation but the night isn't over.

Review the Existing Issues Map.

Do you have an issue that should be included?

Let us know.

sign up for the State's listserve to receive email updates:

***<https://listserv.sd.gov/scripts/wa.exe?A0=I90EXIT34TO37>***

Visit us on our webpage: [www.i90exit32to40.com](http://www.i90exit32to40.com)