



City of Box Elder
FHWA
Rapid City Area MPO



I-90 Corridor Exit 61 to Exit 67 Corridor Study

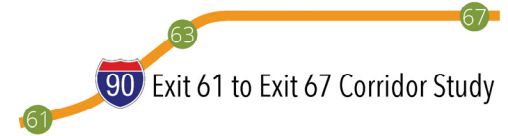
Public Meeting #1

July 26, 2016

BHSU Rapid City Center



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Introduction

- Welcome
- Housekeeping Items
- Methods of Commenting
 - Comment Card tonight
 - Comment Card later
 - Conversation with project representatives
 - Correspondence after the meeting
- Comments due by August 10



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Project Contacts

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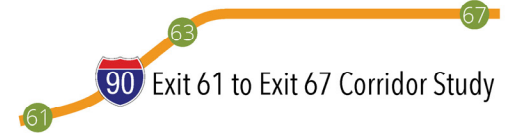
lyle.devries@fhueng.com

Study Advisory Team Entities:

- Federal Highway Administration (FHWA)
- City of Box Elder
- Rapid City Area MPO
- Ellsworth AFB
- Ellsworth Development Authority
- SDDOT Departmental/Local Staff



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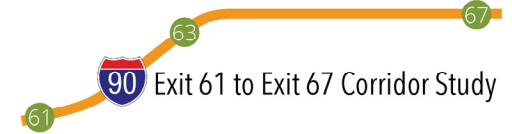


Project Background

- Recommended in BESTPlan as a more focused study of important corridor
- Positioned to:
 - Answer key questions in advance of I-90 rehab/reconstruction (8 yrs. out)
 - Address future of Exit 63
- Collaborative effort among several entities



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Study Goals:

Complete a list of transportation issues and needs facing the I-90 corridor within the study area

Develop feasible solutions to address those issues and needs that meet current design standards and/or traffic level of service expectations under both the current and predicted future traffic conditions while promoting a livable community that will enhance the economic and social well-being of all users of the corridor.

Two primary areas of need will be investigated in this study.

1. I-90 Corridor Capacity

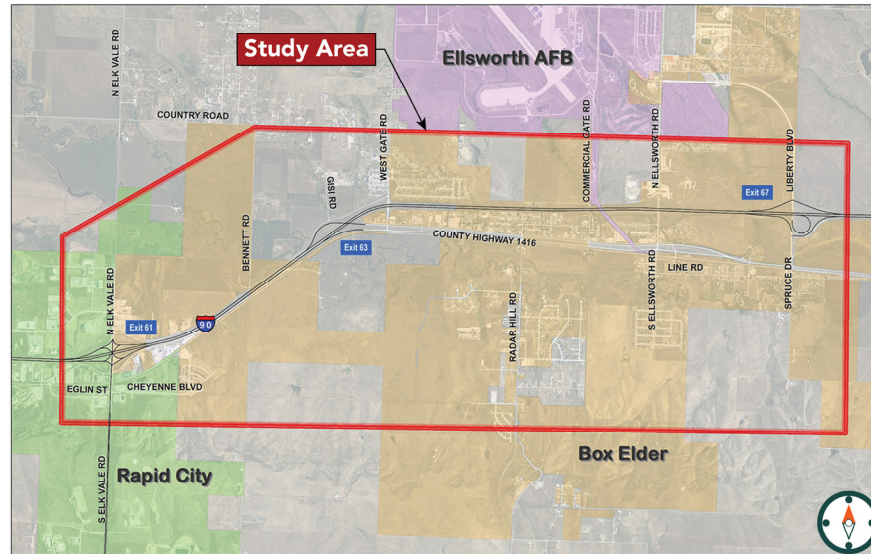
The need for I-90 and the surrounding roadway network to provide acceptable traffic operations and safety now and into the long range future.

Traffic counts, forecasts and analyses may support:

- The need for an additional travel lane along I-90 for all or part of the study corridor
- The need for particular regional roadway network improvements to accommodate vehicle-trips and support I-90
- The need for other multimodal mobility enhancements

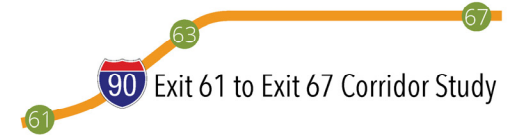
2. Interchange Access

The current half movement interchange provides only for movements to and from the west, not in compliance with current Federal Highway Administration (FHWA) policy requiring that service interchanges provide for all movements. The study will investigate options to bring Exit 63 into compliance with FHWA policy.

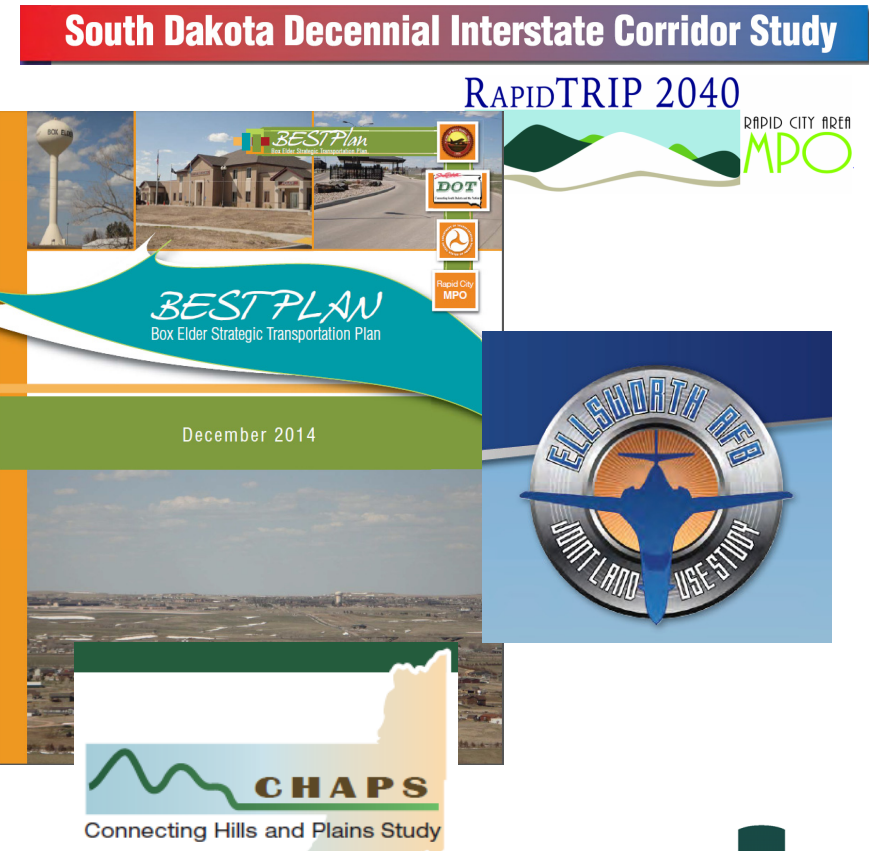




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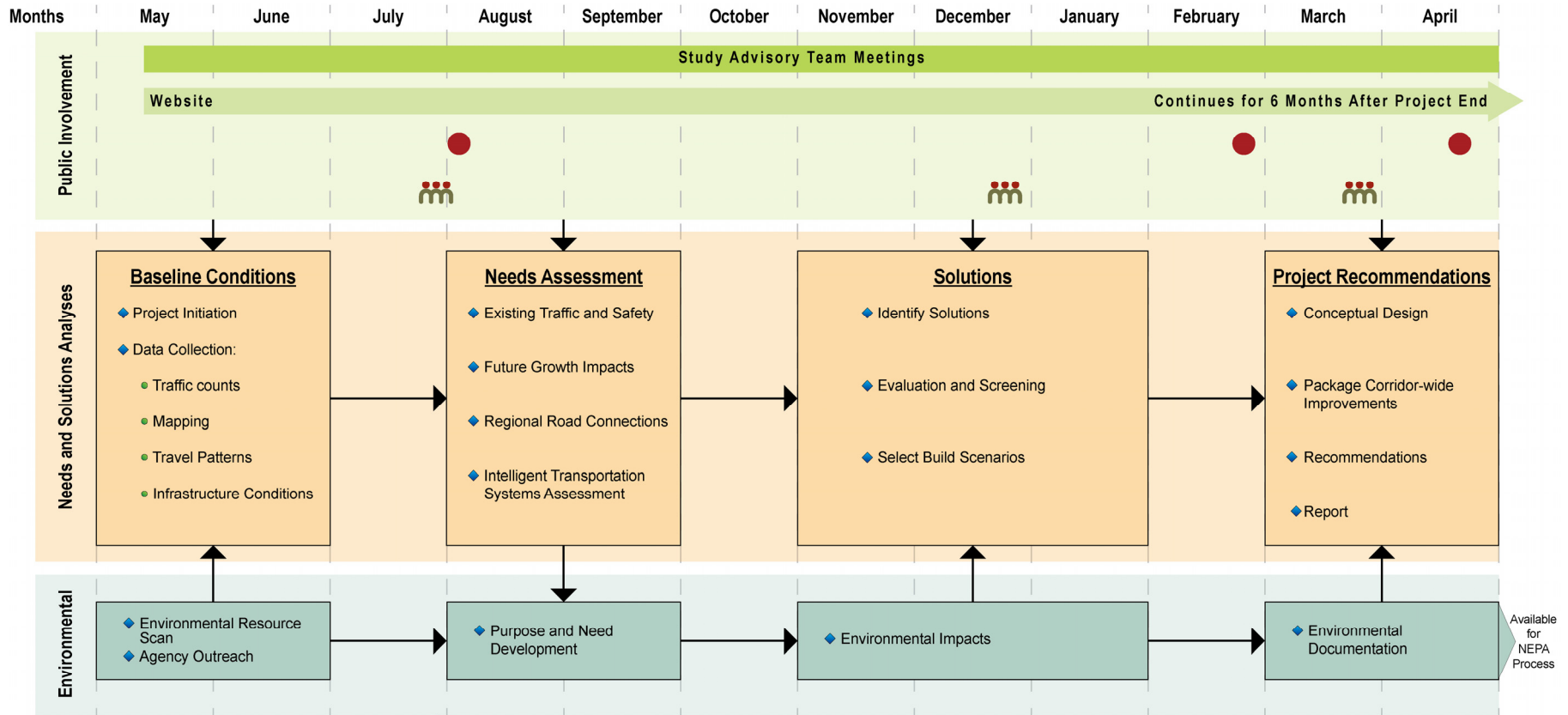
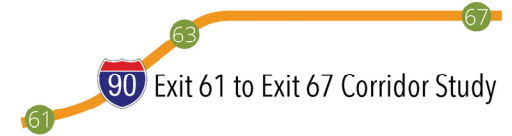


Entity	Goals	Documents	I-90 Input
SDDOT	Safe and effective transportation system	<ul style="list-style-type: none"> 2000/2010 Decennial Interstate Corridor Study Involvement in Meade County, Pennington County and BESTPlan Transportation Plans 	<ul style="list-style-type: none"> Need for reconstruction/rehabilitation of pavement by 2023 Preserve opportunity for future widening Alternatives developed for Exit 63 interchange
Ellsworth Development Authority	Maintain the operational mission of EAFB while accommodating surrounding growth and economic development and protecting public health and safety	<ul style="list-style-type: none"> 2009 Moving Forward with Ellsworth Transportation Work Plan 2016 Ellsworth AFB Joint Land Use Study (JLUS) 	<ul style="list-style-type: none"> Prior documents support full interchange at West Gate Road as replacement for Exit 63 Interchanges should be located outside of protected zones
Ellsworth Air Force Base	Continuing success of operational mission		
City of Box Elder	Community vitality, sustainability, and financial health	<ul style="list-style-type: none"> 2014 BESTPlan Zoning regulations 	<ul style="list-style-type: none"> I-90 access instrumental to commercial viability, seek compatibility with local development
FHWA	Improve mobility through national leadership, innovation and program delivery	<ul style="list-style-type: none"> Design and planning standards for Interstate facilities, procedural documents 	<ul style="list-style-type: none"> I-90 planning process should follow regulatory guidance, set stage for needed approvals and environmental document(s) Current Exit 63 not compliant with policy of all movements
Rapid City Area MPO	Focus on effective regional transportation planning/federal funding coordination	<ul style="list-style-type: none"> 2015 RapidTrip 2040, Regional Long Range Transportation Plan 	<ul style="list-style-type: none"> I-90 Growth forecasts in regional model Planning oversight/approvals
Pennington County	Repair, maintain and reconstruct county roads	<ul style="list-style-type: none"> Pennington County Master Transportation Plan (CHAPS) 	<ul style="list-style-type: none"> I-90 bisects county and connects to county roads, including County Highway 1416





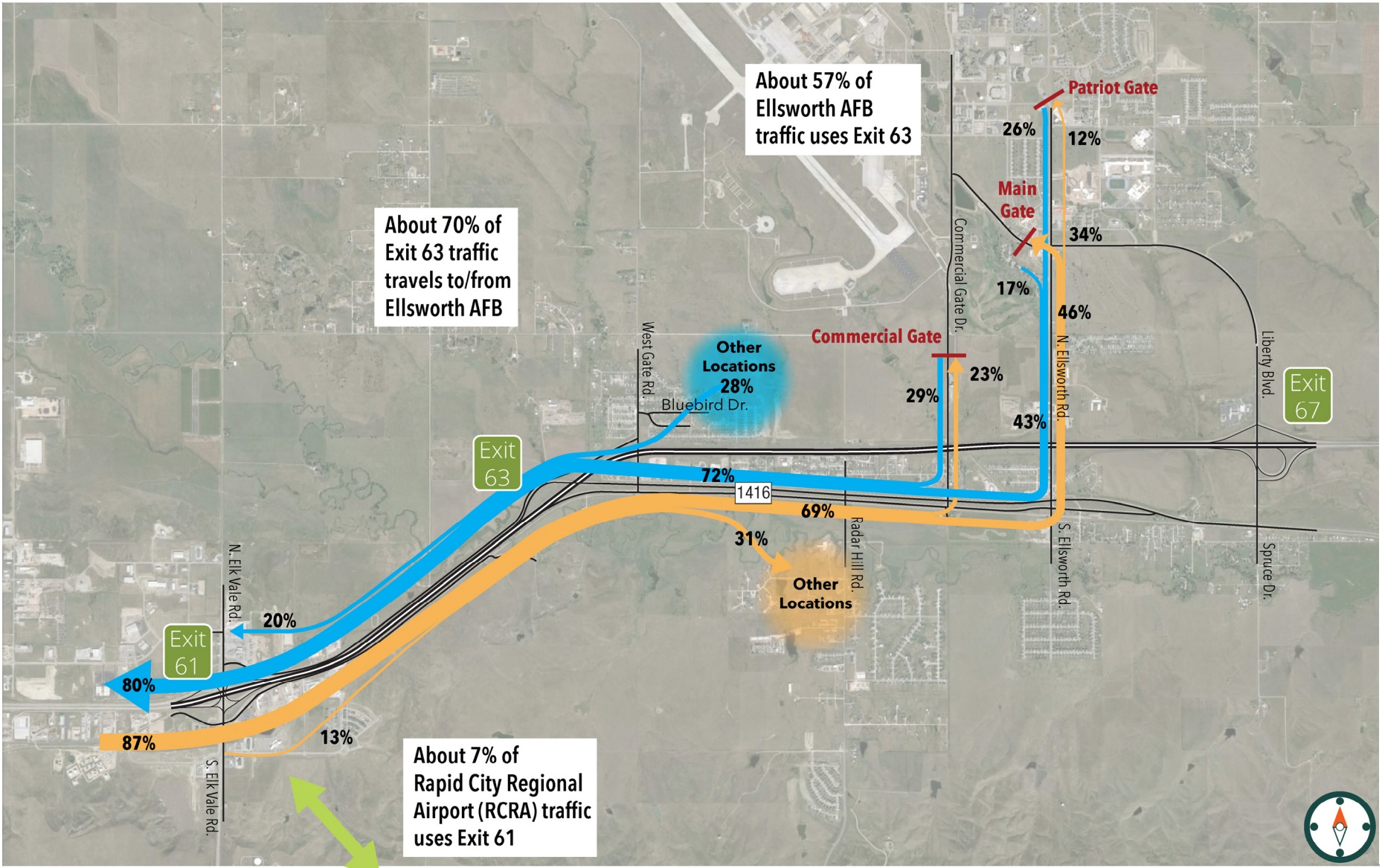
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 **We Are Here**

LEGEND  Public Meeting  Rapid City Area MPO Meeting (open to the public)

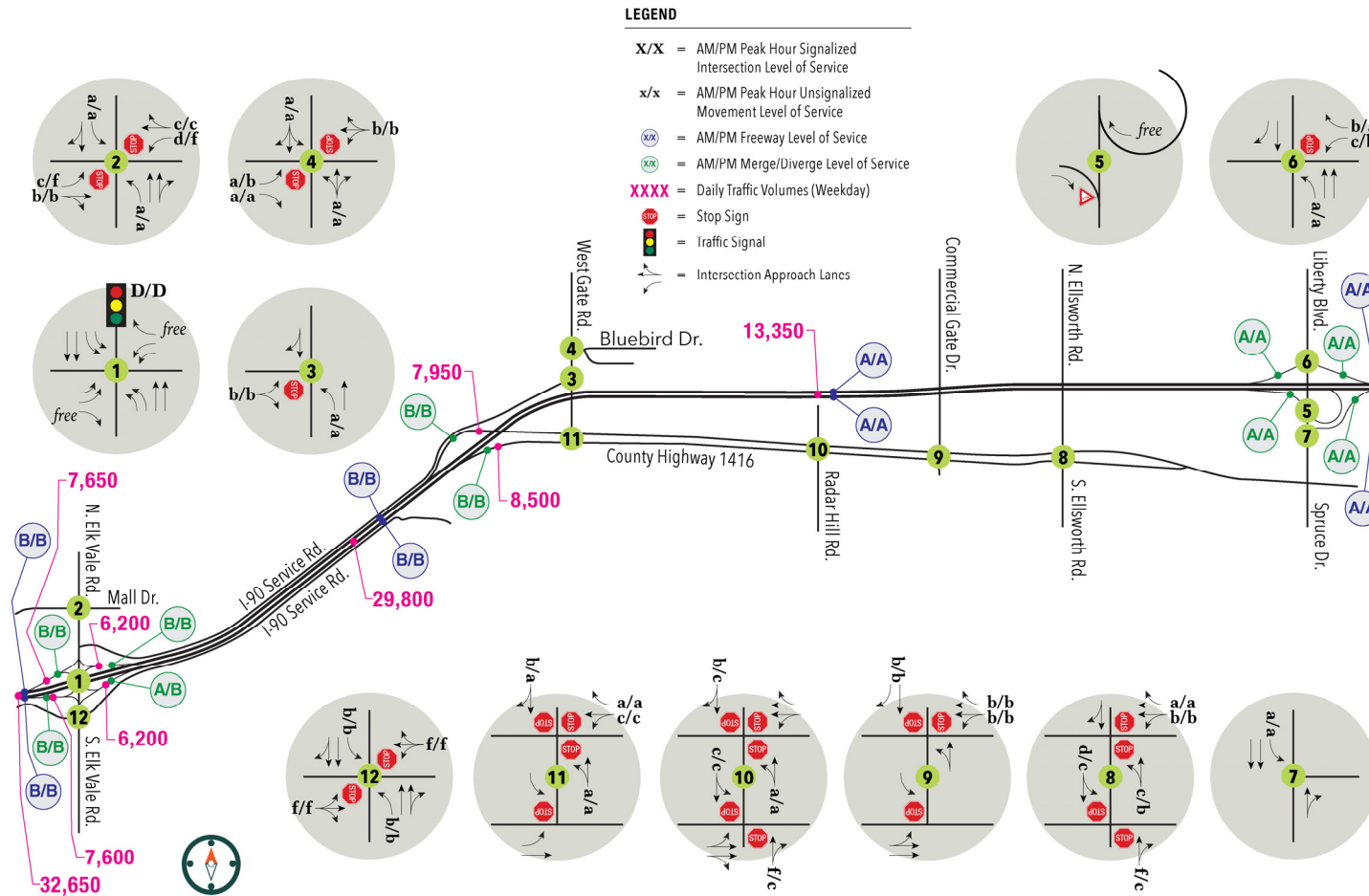
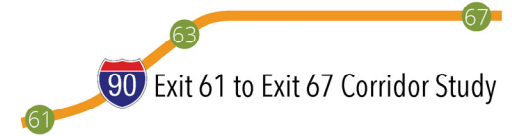






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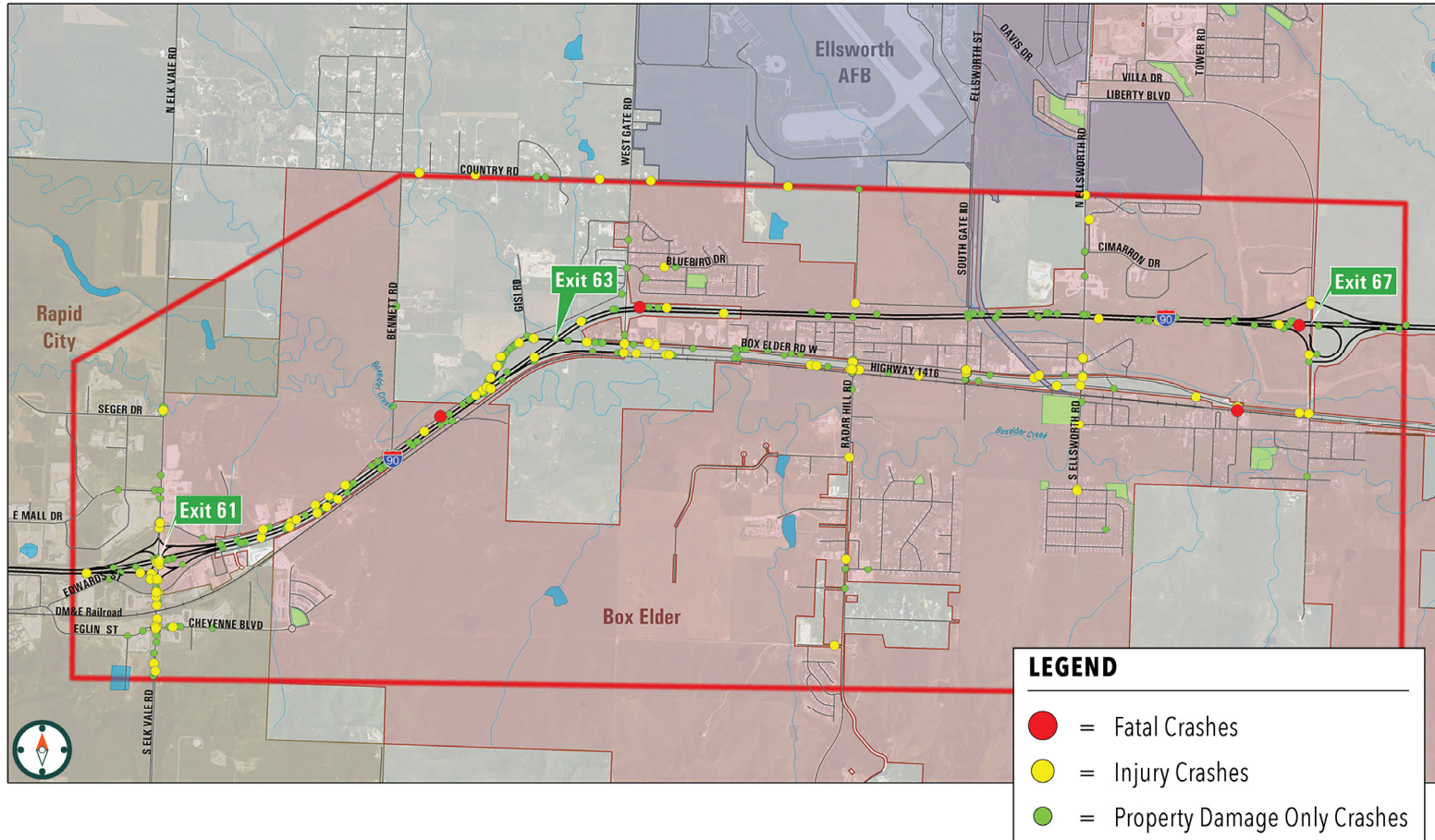
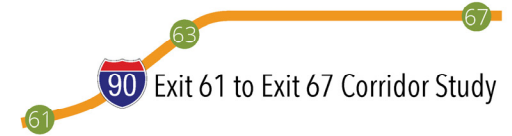
Current Traffic Volumes and Levels of Service



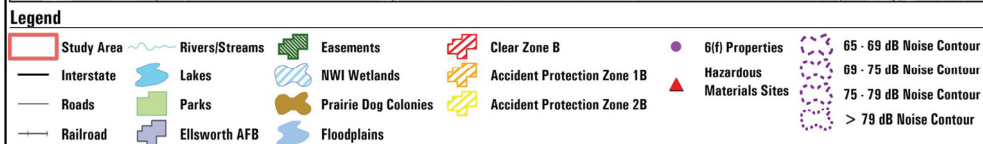
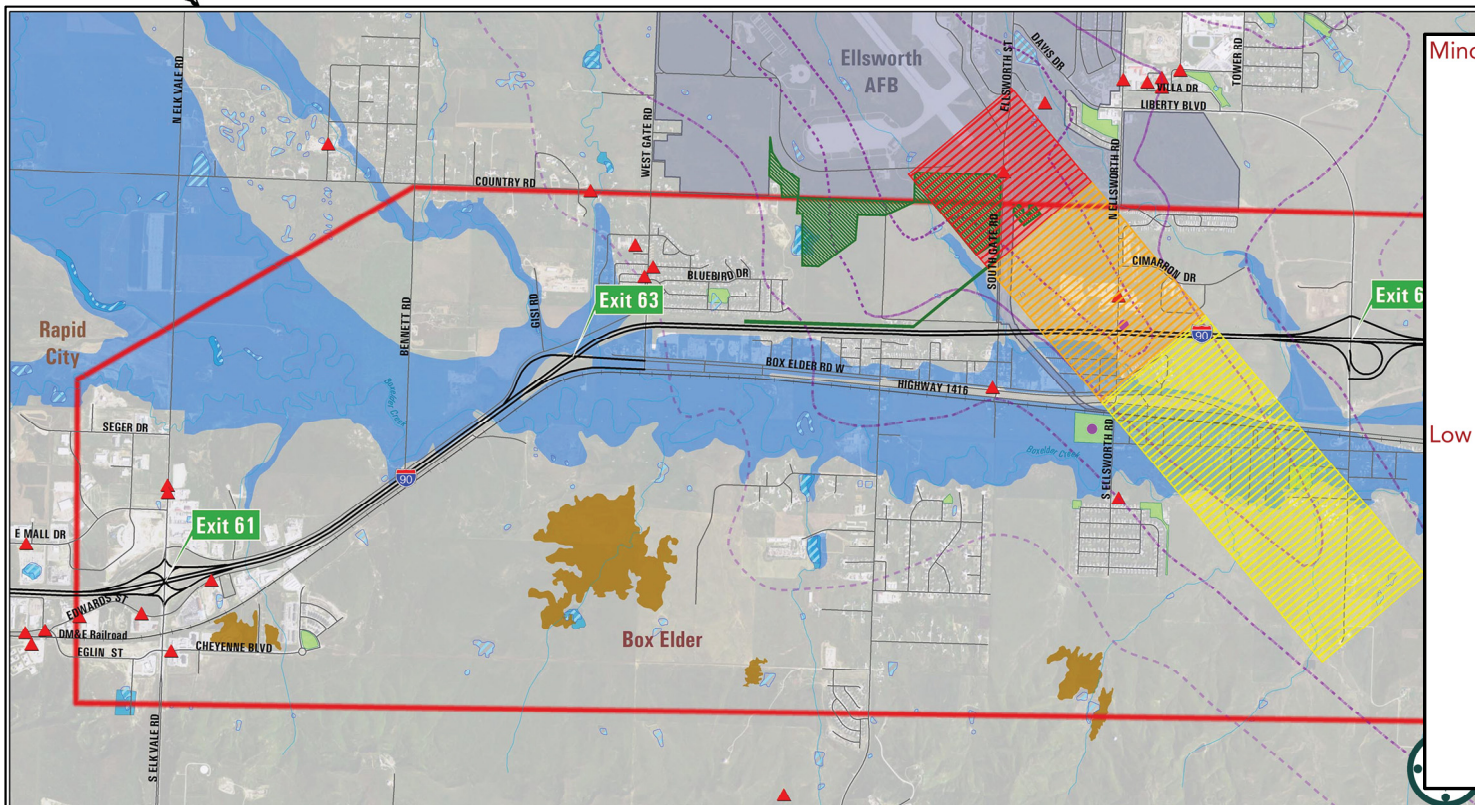


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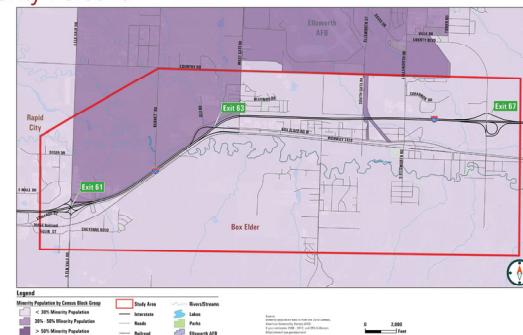
2011-2015 Corridor Crash History



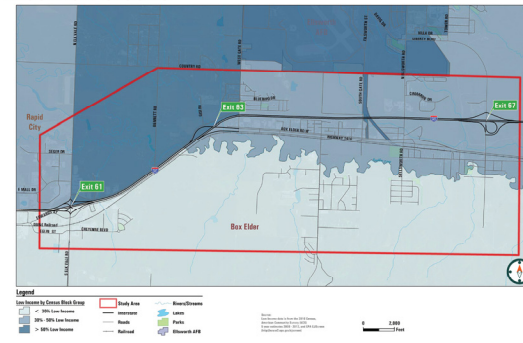
Environmental Resource Data



Minority Persons



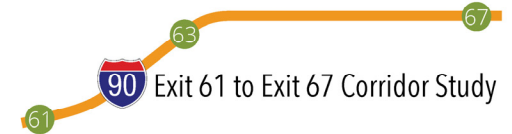
Low Income Persons





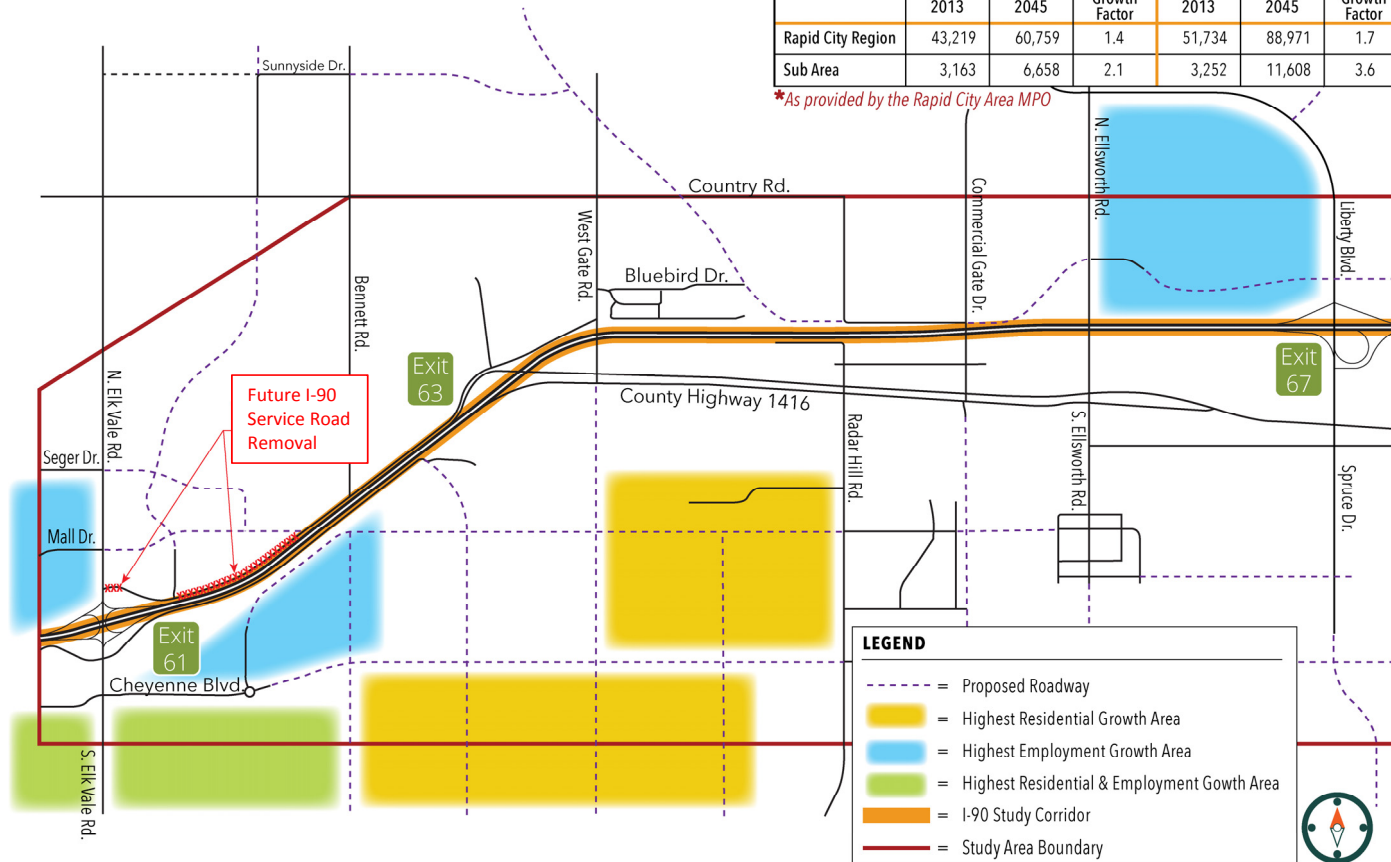
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Future Growth and Roadway Network



	HOUSEHOLDS *			EMPLOYMENT *		
	2013	2045	Growth Factor	2013	2045	Growth Factor
Rapid City Region	43,219	60,759	1.4	51,734	88,971	1.7
Sub Area	3,163	6,658	2.1	3,252	11,608	3.6

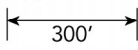
*As provided by the Rapid City Area MPO



Bridge Locations

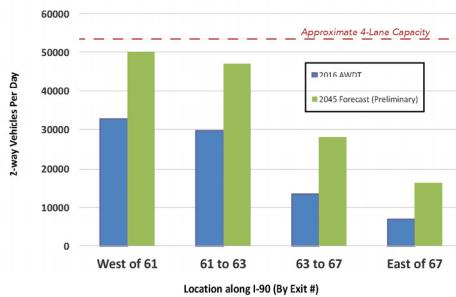
- 1 Elk Vale Road over I-90
- 2 I-90 & Service Road over Box Elder Creek
- 3 County Highway 1416 WB over I-90
- 4 West Gate Road over I-90
- 5 I-90 over Commercial Gate Road
- 6 I-90 over Abandoned RR Tracks
- 7 I-90 over Ellsworth Road
- 8 Liberty Boulevard over I-90

I-90 Characteristics:

Approximate

 Right-of-Way
 Through Corridor

4 Travel Lanes
 (2-WB, 2-EB)
 Separated by
 50' Depressed Median

Current and Forecast I-90 Weekday Traffic (Preliminary)



Typical I-90 Section



Significant Grade Differential



I-90 over Box Elder Creek



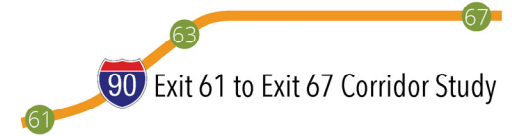
High Vertical Clearance





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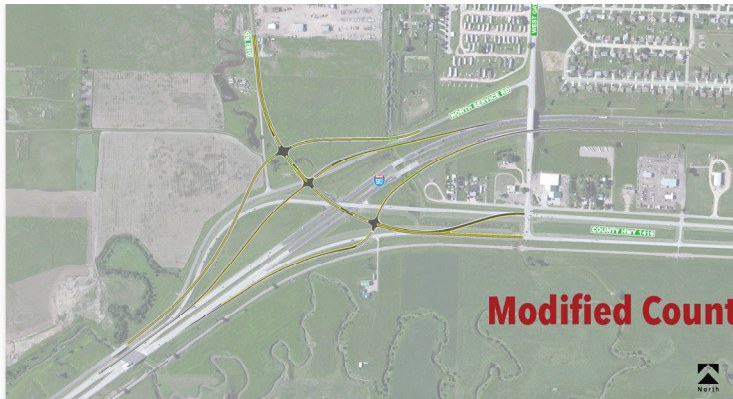
Prior Exit 63 Ideas



Radar Hill Road Diamond



West Gate Road Diamond



Modified County Hwy. 1416 Diamond





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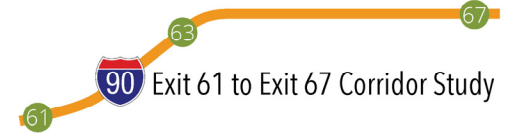
DRAFT Solution Evaluation Criteria



- Traffic Flow
- Traffic Safety
- Construction Cost
- Environmental Impacts
- Right-of-Way Impacts
- Compatibility with EAFB/JLUS
- Compatibility with Development
- Constructability



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I-90 Corridor Exit 61 to Exit 67 Corridor Study Open House Portion