







### I-15 Gore Hill to Emerson Junction

Corridor Planning Study

Informational Meeting No. 1

#### Welcome and Introductions

#### Introductions

- Partners
  - MDT
  - FHWA
  - City of Great Falls
  - Cascade County
- Consultant team



# **Meeting Outline**

- Title VI considerations
- What is a corridor planning study?
- Study area boundary
- Study schedule
- Study background
- Transportation system
- Environmental setting
- Conclusion and next steps

#### **Title VI Considerations**

This meeting is held pursuant to Title VI of the 1964 Civil Right Act which ensures that no person shall, as provided by Federal and State Civil Rights law, be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination on the basis of a protected status during any MDT project.

Further information is available in Title VI pamphlets available at the sign-in table.

# What is a Corridor Planning Study?

#### Corridor planning studies:

- Are a "high level scan"
- Define transportation issues/areas of concern
- Consider social, economic, and environmental effects at an early stage
- Identify cost-effective and feasible strategies
- Provide a level of analysis that can support informed and sustainable decisions
- Provide opportunities for early and continuous involvement

# What a Corridor Planning Study is Not

#### A corridor planning study is not:

- An environmental compliance document
- A preliminary or final design project
- A construction or maintenance project
- A right-of-way acquisition project

## Goal and Purpose of Study

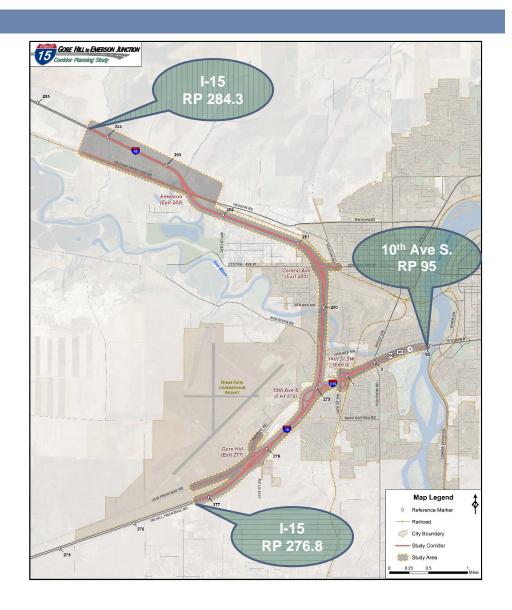
- Engage constituents early and often!
- Identify potential impacts and constraints
- Identify needs and objectives
- Identify short-range and long-range improvements
- Develop planning level cost estimates
- Develop information and data to be forwarded into the environmental process if a project moves forward from the study (dependent on available funds)

# Study Background

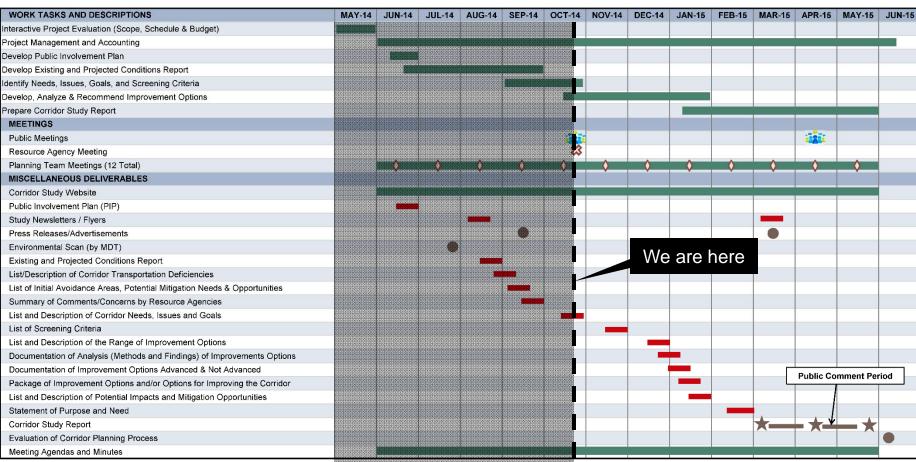
# Study Area

#### Interstate 15

- South of Gore Hill
- North of Emerson Junction
- Interstate 315
- □ 10<sup>th</sup> Avenue South
  - West of Missouri River



# Study Schedule





Public Meeting





#### **Public Involvement Activities**

- Two informational meetings
  - October 29, 2014
  - □ Spring, 2015
- Outreach to interested parties, stakeholders, resource agencies, as warranted
- Study newsletters
- Website
  - http://mdt.mt.gov/pubinvolve/i15
- Other as needed





#### Corridor Planning Study Focus

The Montana Department of Transportation (MDT), in partnership with the Federal Highway Administration (FHWA) and in coordination with the Great Falls MPO, is developing a corridor planning study of Interstate 15 (I-15) in the Great Falls Area. The Great Falls Area Long Range Transportation Plan (2014) identified the need for an Interstate corridor study. The LRTP states that, "due to the need for improvements to both Emerson Junction and Gore Hill interchanges and other identified needs for added lanes and operational improvements on I-15 and I-315, an Interstate Corridor Study for the Great Falls area is recommended."

The goal of the study is to identify short- and long-term improvements that address the needs and objectives developed for the study area. The study will identify feasible improvement options to address safety, operations, and geometric concerns within the study area and will include interchanges and ramps.

The study area includes Interstate 15 (I-15) through Great Falls, beginning southwest of the Gore Hill Interchange (I-15 Exit 277) near Reference Post (RP) 277 and ending northwest of Emerson Junction (Exit 282) near RP 284. The study area also includes Interstate 315 (I-315) and 10th Avenue South west of the Missouri River (RP 95).

View Study Area

#### Links

Corridor Planning Study Focus

Schedule

Newsletters/Documents

Comment on this Study Related Links

#### Contacts

#### Dave Hand

MDT Great Falls District 200 Smelter Avenue NE PO Box 1359 Great Falls, MT 59403-1359 406-454-5880 | Email

#### Corrina Collins

MDT Project Manager 2701 Prospect Ave PO Box 201001 Helena, MT 59620-1001 406-444-9131 | Email

#### Scott Randall

Project Manager Robert Peccia & Associates 825 Custer Ave Helena, MT 56904 406-447-5000 | Email

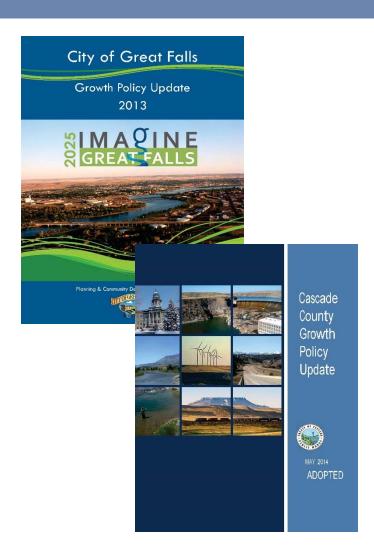
## Identified Stakeholder Groups

- Great Falls Air National Guard
- Malmstrom Air Force Base
- Great Falls International Airport Authority

- Great Falls PolicyCoordinating Committee
- Great Falls
   Transportation Technical
   Advisory Committee
- Great Falls Northern
   Industrial Task Force
- Others as Requested

# **Local Planning**

- Review past, current, and future planning documents:
  - Great Falls Area Long Range Transportation Plan - 2014
  - Cascade County Growth Policy Update (2014)
  - City of Great Falls Growth Policy Update (2013)
  - Great Falls International Airport Master Plan (Ongoing)
  - Great Falls Transit Development Plan (2010)



# **Planned Projects**

#### Emerson Junction to Manchester

Major rehabilitation of I-15 beginning at RP 282.54 and ending at 286.42

#### Bridge Preservation, Great Falls IM

Bridge deck preservation on I-15 and I-315 at RP 208.60

# 15 Transportation System

# **Physical Characteristics**

#### Interstate 15

- 65 mph speed limit
- 4 interchanges

#### Interstate 315

- 55 45 mph speed limit
- 1 interchange
- Ends at Fox Farm Rd

#### ■ 10<sup>th</sup> Ave S

- West of Missouri River
- 45 mph speed limit



#### **Area Features**

#### Land Use

- Private and public
- Mix of urban and rural

#### Railroad

Interstate crosses railroad at 2 locations

#### Airport

- Great Falls International Airport
- Accessed primarily by Gore Hill Interchange



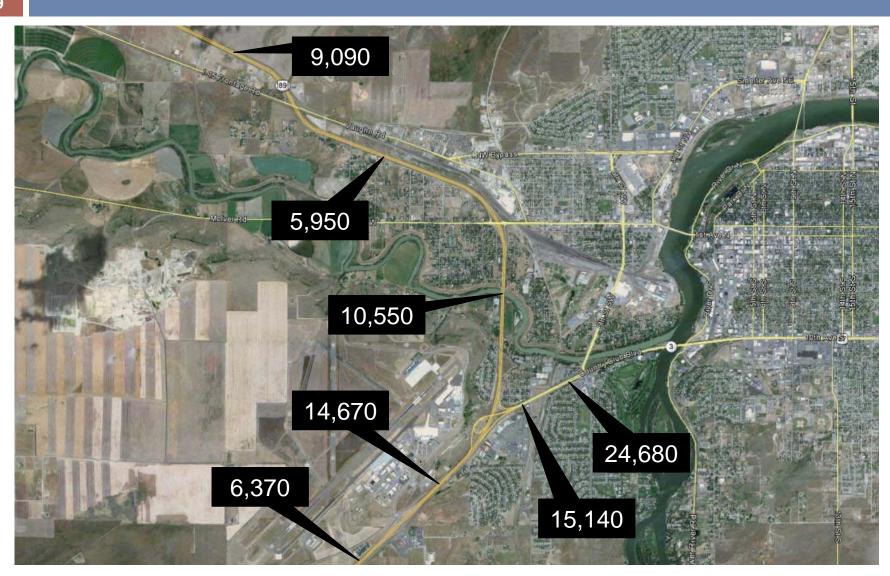
# Bridges

Lo	cation	Feature Crossed	Year Built	Width (ft)	Length (ft)	Structure Condition	Deck Condition
I-15	RP 279.35 (NB)	Sun River	1966	28 <sup>(a)</sup>	485	Good	Good
	RP 279.35 (SB)	Sun River	1966	28 <sup>(a)</sup>	485	Good	Good
	RP 279.47 (NB)	5th Ave SW	1967	37 <sup>(a)</sup>	125	Good	Good
	RP 279.47 (SB)	5th Ave SW	1967	37 <sup>(a)</sup>	125	Good	Good
	RP 281.91 (NB)	Vaughn Rd / BNSF RR	1967	28 <sup>(a)</sup>	354	Good	Fair-1
	RP 281.91 (SB)	Vaughn Rd / BNSF RR	1967	28 <sup>(a)</sup>	359	Good	Fair-1
	RP 283.6	Access Rd	1960	126	18	Good	Good
I-315	RP 0.01	I-15	1967	45	294	Good	Fair-1
	RP 0.34 (EB)	14th St SW	1967	36 <sup>(a)</sup>	150	Good	Fair-2
	RP 0.34 (WB)	14th St SW	1967	45	145	Good	Fair-1
	RP 0.34 (EB Off)	14th St SW	1997	23	136	Good	Good
	RP 1.06 (EB)	BNSF RR	1946	45	178	Good	Fair-2
	RP 1.06 (WB)	BNSF RR	1967	37 <sup>(a)</sup>	208	Good	Fair-2
	RP 1.06 (WB Off)	BNSF RR	1996	23	186	Good	Good
Central Ave	RP 0.16 (EB)	BNSF RR	1967	27	551	Good	Fair-1
	RP 0.16 (WB)	BNSF RR	1967	27	551	Good	Fair-1
10th Ave S	RP 94.61 (EB)	Missouri River	1983	40	2122	Good	Fair-1
	RP 94.61 (WB)	Missouri River	1951	28	2093	Good	Good

Source: MDT Bridge Management System, 2014

(a) Width less than 38 feet on the Interstate System

## **Existing AADT - Interstate**



## **Existing AADT - Non-Interstate**



### **Historic AADT Trends**

Lo	ocation	2013 AADT	1994-2013	2000-2013	2007-2013
I-15	S of Gore Hill	6,370	1.4%	0.4%	0.1%
I-15	N of Gore Hill	14,670	1.6%	1.3%	-0.1%
I-15	N of 10th Ave	10,550	1.5%	1.3%	0.3%
I-15	N of Central Ave	5,950	1.2%	0.5%	-1.8%
I-15	N of Emerson	9,090	0.9%	0.1%	-1.2%
I-315	W of 14th St SW	15,140	(a)	(a)	0.8%
I-315	W of Fox Farm	24,680	4.2%	1.8%	0.1%
31st St SW	S of Interchange	8,360	5.6%	4.7%	-0.8%
Airport Dr	N of Interchange	3,640	-0.1%	0.7%	2.3%
10th Ave S	Warden Bridge	29,800	1.5%	1.5%	0.4%
Central Ave	E of Interchange	12,514	0.0%	0.5%	3.0%
Central Ave	W of Interchange	7,746	0.6%	1.5%	4.4%
Vaughn Rd	E of Interchange	6,530	0.0%	-0.4%	1.5%
Vaughn Rd	W of Interchange	4,555	0.4%	0.7%	7.4%

Source: MDT Data and Statistics Bureau, Traffic Data Collection Section, 2014

(a) Data unavailable

# **Projected AADT**

L	ocation	2013 AADT	Traffic Model Projected AAGR (a)	2035 Projected AADT
I-15	S of Gore Hill	6,370	0.9%	7,681
I-15	N of Gore Hill	14,670	1.9%	22,358
I-15	N of 10th Ave	10,550	2.1%	16,693
I-15	N of Central Ave	5,950	0.6%	6,804
I-15	N of Emerson	9,090	0.9%	10,998
I-315	W of 14th St SW	15,140	0.8%	17,979
I-315	W of Fox Farm	24,680	0.7%	28,546
31st St SW	S of Interchange	8,360	2.3%	13,678
Airport Dr	N of Interchange	3,640	4.6%	9,887
10th Ave S	Warden Bridge	29,800	0.7%	34,630
Central Ave	E of Interchange	12,514	2.4%	21,270
Central Ave	W of Interchange	7,746	0.1%	7,974
Vaughn Rd	E of Interchange	6,530	1.4%	8,835
Vaughn Rd	W of Interchange	4,555	1.1%	5,762

<sup>(</sup>a) Average Annual Growth Rates calculated from traffic model developed for Great Falls Area LRTP - 2014

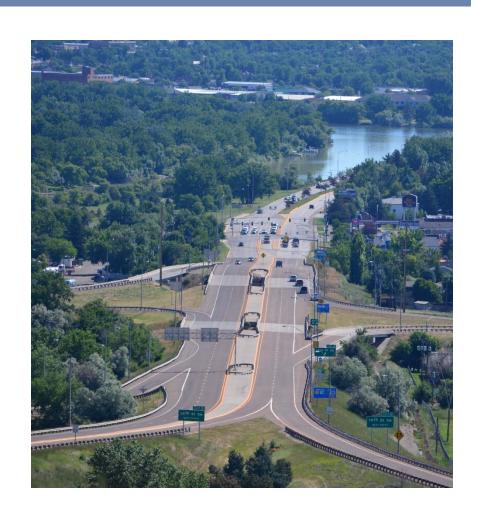
#### **Mainline Interstate**

- Mainline traffic meets LOS performance standards
- One vertical grade does not appear to meet current standards
- Two horizontal curves do not appear to meet current standards
  - Radius
- Two vertical curves do not appear to meet current standards
  - Curvature
  - Stopping sight distance



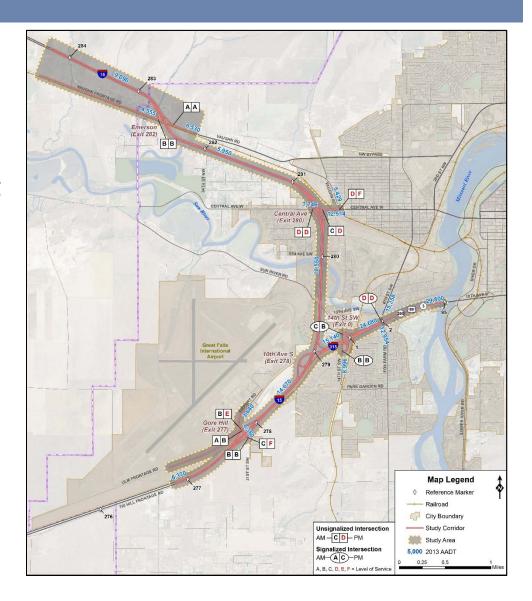
# Interchanges

- Interchange traffic meets LOS performance standards
- 7 of 8 on-ramps do not appear to meet current standards
  - Acceleration length
- 3 of 7 off-ramps do not appear to meet current standards
  - Deceleration length
- Spacing between 10<sup>th</sup> Ave S and 14<sup>th</sup> St SW does not appear to meet current interchange spacing standards



### Intersections

- Six intersections do not currently meet LOS performance standards
- One additional projected to not meet standards for traffic operations
- Three intersections do not appear to meet current standards
  - Queue length
  - Turn-bay length

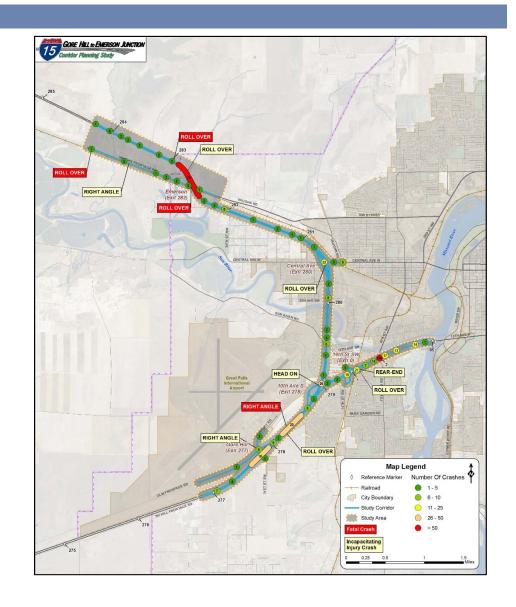


# Safety

#### 5 years of data

# 525 total reported crashes

- Four fatalities
- Eight crashes produced incapacitating injuries
- 53% multi-vehicle crashes
- 14% involved alcohol and/or drugs
- Most common types were rear-end and fixed object

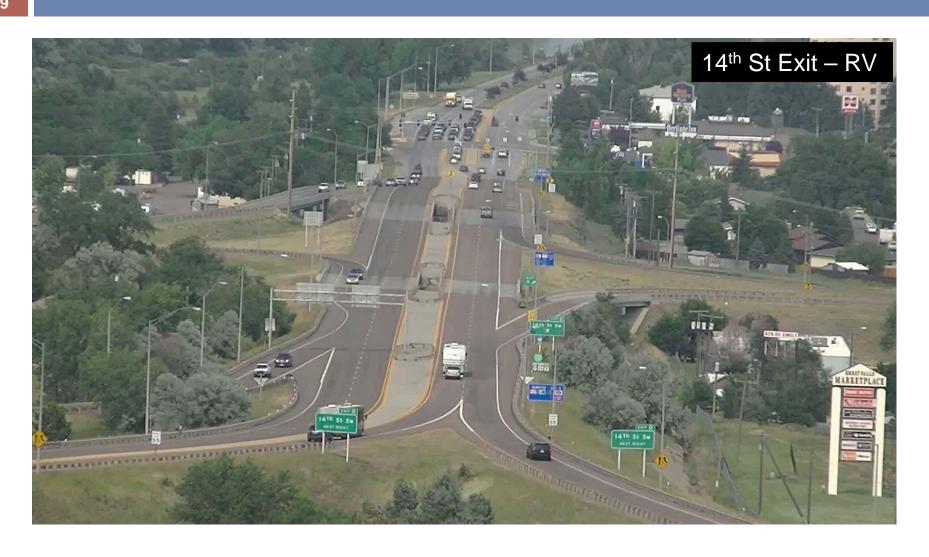


## 27 Driver Interaction Videos

# Gore Hill (Exit 277)



## Weaving / Merging / Diverging



## Weaving / Merging / Diverging



## Weaving / Merging / Diverging



# Environmental Setting

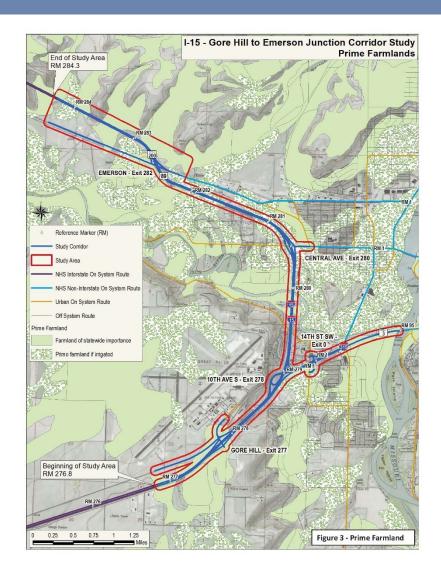
#### **Environmental Resources**

- Land Ownership
- Soil Resources and Prime Farmland
- Geologic Resources
- Water Resources
- Wetlands
- Floodplains and Floodways
- Hazardous Substances

- Air Quality
- Noise
- Visual Resources
- Biological Resources
- Vegetation
- Cultural and Archaeological Resources
- Social

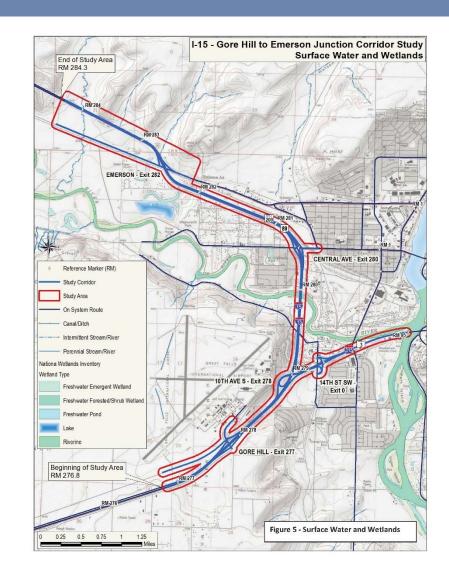
# Soil Resources and Prime Farmland

- Based on Natural Resource Conservation Service (NRCS) soil survey
  - Prime if irrigated farmlands are found between RP 278.8-279.0 and 280.5-284.3
  - Farmlands of statewide importance are found between RP 266.8-278.0, 279.5-280.5, and 282.5-284.3



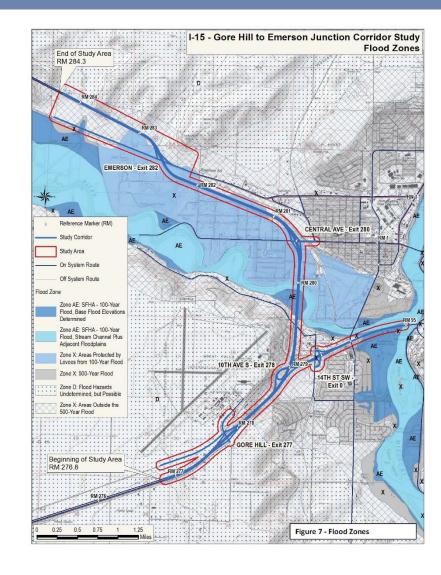
#### **Water Resources**

- Numerous drainage crossings
- Bridge across Sun River (RP 279.35)
- Steel drainage culvert (RP 283.4)
- Wetlands delineated if and when a project is identified and advances



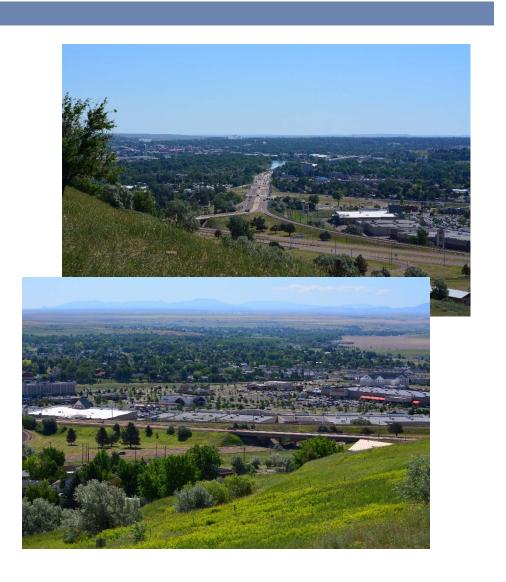
## Floodplains and Floodways

 Avoid adverse impact to floodplains to the extent possible



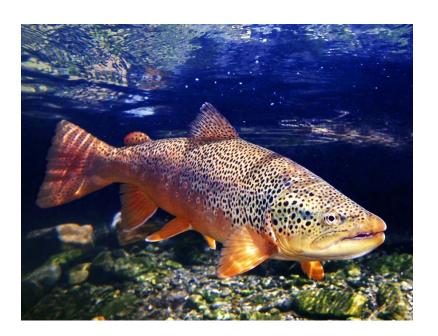
#### Visual Resources

- Landscape character
- Visual Integrity
- Scenic Integrity
- Landscape visibility



## **Biological Resources**

□ Fish and Wildlife



Vegetation



#### Fish and Wildlife

#### **Cascade County**

- Canada Lynx
  - Threatened
- Red Knot
  - Proposed
- Wolverine\*
  - Proposed
- Sprague's Pipit
  - Candidate
- Whitebark Pine
  - Candidate

#### **Study Area**

- No record of any threatened or endangered species found within the study area boundary<sup>(a)</sup>
- No species of concern were found within the study area boundary<sup>(a)</sup>

<sup>\*</sup>No longer proposed for listing

#### **Fisheries**

- Missouri and Sun Rivers listed as a substantial fishery resources
- Common fish species
  - Brown trout
  - Longnose sucker
  - Longnose dace
  - Stonecat
  - Walleye
  - White sucker



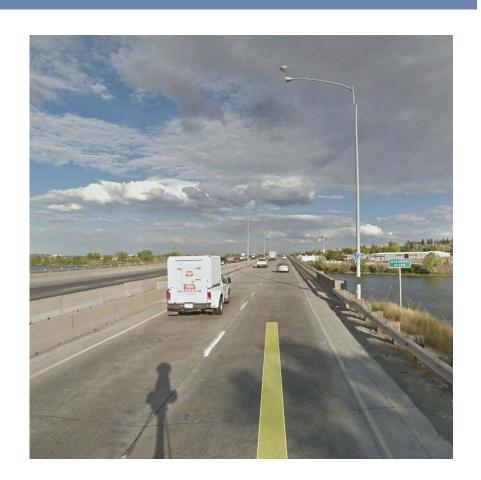
# Cultural and Archaeological Resources

#### Parks

- Westside Viaduct Park
- West Hill Park

# Historic properties

- Missouri River Bridge
- At least 33 historic aged properties



43

#### Bridges

Bridges with narrow widths

#### Mainline Interstate

Existing geometrics

#### Interchanges

- Ramp length
- Spacing

#### Intersections

- Traffic operation
- Queue lengths

#### Safety

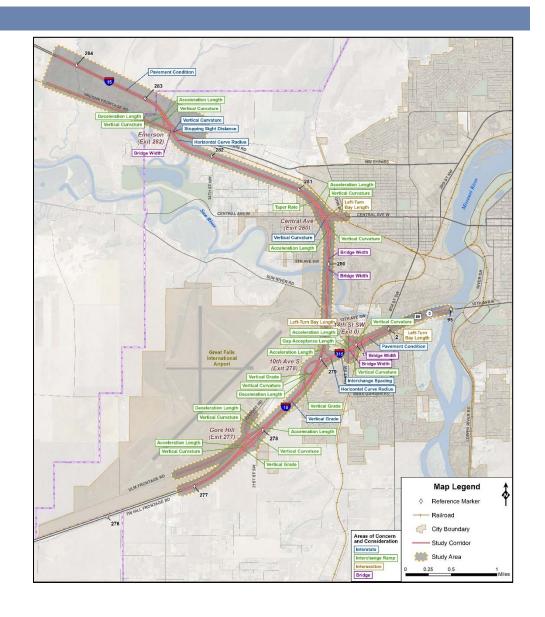
- Four fatal, eight incapacitating injury
- Fix object collision trend

#### Physical Environment

- Farmlands
- Water resources
- Parks & historic properties

#### Biological Environment

Threatened and endangered species



## **Next Steps**

- Continue study coordination and outreach
- Finalize Environmental Scan
- Finalize Existing and Projected Conditions Report
- Continue analysis of transportation needs
- Identify potential improvement options
- Draft corridor study report

### Conclusion

- Questions, answers and/or comments
  - Study website:
    <a href="http://www.mdt.mt.gov/pubinvolve/i15">http://www.mdt.mt.gov/pubinvolve/i15</a>
  - Study newsletters:
  - Study Contact

**Corrina Collins** 

MT Department of Transportation 2701 Prospect Avenue Helena, Montana 59620-1001 P.O. Box 201001 (406) 444-9131 ccollins@mt.gov



The study will include a comprehensive package of feasible short- and long-term recommendations intended to address the transportation needs of the corridor.

The study will identify feasible improvement

options to address safety, operational, and

2 Park Drive South

intended to explain the

planning study process

edback on issues and

geometrical concerns (i.e. road width, horizontal

within the study area based on needs identified

agencies. Data examined will include geometric

by the public, the study partners, and resource

characteristics, crash history, operational

characteristics, land uses, and environmental

curves, vertical grades, access density, etc.)

The Corridor Planning Study is a planning activity, rather than a design or construction project. The study is designed to facilitate a smooth and efficient transition from transportation planning to project development and environmental review if a project is forwarded from the study. The study includes consideration of multiple improvement options to address the needs and objectives within the study area. The planning process is distinct from NEPA/MEPA environmental compliance documentation and from the design, right-of-way acquisition, and construction phases of an individual

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