

## I-15 Gore Hill to Emerson Junction Corridor Planning Study

## Welcome and Introductions

$\square$ Introductions
$\square$ Partners
$\square$ MDT

- FHWA
- City of Great Falls
$\square$ Cascade County
$\square$ Consultant team



## Meeting Outline

$\square$ Title VI considerations
$\square$ What is a corridor planning study?
$\square$ Study area boundary
$\square$ Study schedule
$\square$ Study background
$\square$ Transportation system
$\square$ Environmental setting
$\square$ 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?

$\square$ 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

$\square$ 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

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

## Study Area

$\square$ Interstate 15

- South of Gore Hill
- North of Emerson Junction
$\square$ Interstate 315
$\square 10^{\text {th }}$ Avenue South
- West of Missouri River



## Study Schedule




## Public Involvement Activities

$\square$ Two informational meetings

- October 29, 2014
- Spring, 2015
$\square$ Outreach to interested parties, stakeholders, resource agencies, as warranted
$\square$ Study newsletters
- Website
- http://mdt.mt.gov/pubinvolveli15
$\square$ Other as needed



## Identified Stakeholder Groups

$\square$ Great Falls Air National Guard

- Malmstrom Air Force Base
$\square$ Great Falls International Airport Authority
$\square$ Great Falls Policy Coordinating Committee
- Great Falls

Transportation Technical Advisory Committee

- Great Falls Northern Industrial Task Force
$\square$ Others as Requested


## Local Planning

$\square$ 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

$\square$ Emerson Junction to Manchester
$\square$ Major rehabilitation of $\mathrm{I}-15$ beginning at RP 282.54 and ending at 286.42
$\square$ Bridge Preservation, Great Falls IM

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


## Physical Characteristics

$\square$ Interstate 15

- 65 mph speed limit
- 4 interchanges
$\square$ Interstate 315
- 55-45 mph speed limit
- 1 interchange

- Ends at Fox Farm Rd
$\square 10^{\text {th }}$ Ave S
- West of Missouri River
- 45 mph speed limit


## Area Features

$\square$ Land Use
$\square$ Private and public
$\square$ Mix of urban and rural
$\square$ Railroad

- Interstate crosses railroad at 2 locations

$\square$ Airport
- Great Falls International Airport
- Accessed primarily by Gore Hill Interchange


## Bridges

| Location |  | Feature Crossed | Year Built | Width <br> (ft) | Length <br> (ft) | Structure Condition | Deck Condition |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I-15 | RP 279.35 (NB) | Sun River | 1966 | $28^{(a)}$ | 485 | Good | Good |
|  | RP 279.35 (SB) | Sun River | 1966 | $28^{(a)}$ | 485 | Good | Good |
|  | RP 279.47 (NB) | 5th Ave SW | 1967 | $37{ }^{\text {(a) }}$ | 125 | Good | Good |
|  | RP 279.47 (SB) | 5th Ave SW | 1967 | $37{ }^{(a)}$ | 125 | Good | Good |
|  | RP 281.91 (NB) | Vaughn Rd/ BNSF RR | 1967 | $28^{(a)}$ | 354 | Good | Fair-1 |
|  | RP 281.91 (SB) | Vaughn Rd/ BNSF RR | 1967 | $28^{(a)}$ | 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 | $36{ }^{\text {a }}$ | 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 | $37{ }^{\text {(a) }}$ | 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 |

[^0]
## Existing AADT - Interstate



## Existing AADT - Non-Interstate



## Historic AADT Trends

| Location |  | 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\% |

[^1]
## Projected AADT

| Location |  | 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 |

[^2]
## Mainline Interstate

- Mainline traffic meets LOS performance standards
$\square$ 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

$\square$ 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 $10^{\text {th }}$ Ave S and $14^{\text {th }}$ St SW does not appear to meet current interchange spacing
 standards


## Intersections

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



## Safety

$\square 5$ years of data
$\square 525$ 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 <br> Driver Interaction Videos

## Gore Hill (Exit 277)



## Weaving / Merging / Diverging



## Weaving / Merging / Diverging



## Weaving / Merging / Diverging



## Environmental Resources

$\square$ Land Ownership
$\square$ Soil Resources and Prime Farmland
$\square$ Geologic Resources
$\square$ Water Resources
$\square$ Wetlands

- Floodplains and Floodways
$\square$ Hazardous Substances
$\square$ Air Quality
$\square$ Noise
$\square$ Visual Resources
$\square$ Biological Resources
$\square$ Vegetation
$\square$ Cultural and Archaeological
Resources
$\square$ Social


## Soil Resources and Prime Farmland

$\square$ Based on Natural Resource Conservation Service (NRCS) soil survey

- Prime if irrigated farmlands are found between RP 278.8-279.0 and 280.5284.3
- Farmlands of statewide importance are found between RP 266.8-278.0, 279.5-280.5, and 282.5284.3



## Water Resources

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


## Floodplains and Floodways

$\square$ Avoid adverse impact to floodplains to the extent possible


## Visual Resources

$\square$ Landscape character
$\square$ Visual Integrity
$\square$ Scenic Integrity
$\square$ Landscape visibility


## Biological Resources

Fish and Wildlife

$\square$ Vegetation


## Fish and Wildlife

## Cascade County

$\square$ Canada Lynx

- Threatened
$\square$ Red Knot
- Proposed
$\square$ Wolverine*
- Proposed
- Sprague's Pipit
- Candidate
$\square$ Whitebark Pine
- Candidate
*No longer proposed for listing


## Study Area

$\square$ No record of any threatened or endangered species found within the study area boundary ${ }^{(a)}$
$\square$ No species of concern were found within the study area boundary ${ }^{(a)}$
(a) Montana Natural Heritage Program - Natural

Heritage Map Viewer (report generated May 15, 2014)

## Fisheries

$\square$ Missouri and Sun Rivers listed as a substantial fishery resources
$\square$ Common fish species

- Brown trout
- Longnose sucker
- Longnose dace
- Stonecat
- Walleye
- White sucker



## Cultural and Archaeological Resources

$\square$ Parks

- Westside Viaduct Park
- West Hill Park
$\square$ Historic properties
- Missouri River Bridge
- At least 33 historic
 aged properties


## Areas of Concern Summary

$\square$ 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
$\square$ Biological Environment
- Threatened and endangered species



## Next Steps

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

## Conclusion

## Questions, answers and/or comments

$\square$ Study website:
http://www.mdt.mt.gov/pubinvolve/i15

- Study newsletters:
- Study Contact

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[^0]:    Source: MDT Bridge Management System, 2014
    (a) Width less than 38 feet on the Interstate System

[^1]:    Source: MDT Data and Statistics Bureau, Traffic Data Collection Section, 2014
    (a) Data unavailable

[^2]:    ${ }^{(a)}$ Average Annual Growth Rates calculated from traffic model developed for Great Falls Area LRTP

    - 2014

