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zero deaths • zero serious injuries

MONTANA DEPARTMENT
OF TRANSPORTATION

Montana Wildlife and Transportation Summit

MDT Project Development

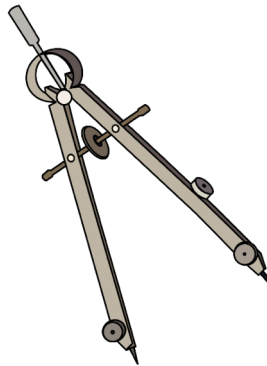
Dustin Rouse – Preconstruction Engineer



Presentation Outline

- Life of an MDT Project
- Plans and Studies
- Nomination Tools
- Statewide Transportation Improvement Program (STIP)
- Tentative Construction Plan (TCP)
- Challenges in Providing Wildlife Accommodations
- Successful installations
- Q & A

The Life of an MDT Project



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The Life of an MDT Project



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MDT has developed a set of goals and strategies reflecting public and stakeholder feedback and data analysis.

- **Goals** are statements of desired results for Montana's transportation network.
- **Strategies** are methods and business practices to achieve stated goals.

Goals and strategies are intended to provide broad policy guidance to inform and direct MDT decision making during the 20-year planning horizon set forth in TranPlanMT.



Planning for Montana's transportation future takes ongoing collaboration. Let's keep the conversation going!

Your input is welcome at any time! Stakeholders and members of the public may also participate at specific milestones through the opportunities noted in the graphic below. Thank you for your involvement in TranPlanMT.



For more information contact us at:

<http://www.mdt.mt.gov/tranplan> | 406-444-6201

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call: 406-444-9229, TTY: 800-335-7592, or the Montana relay at 711.

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Overview

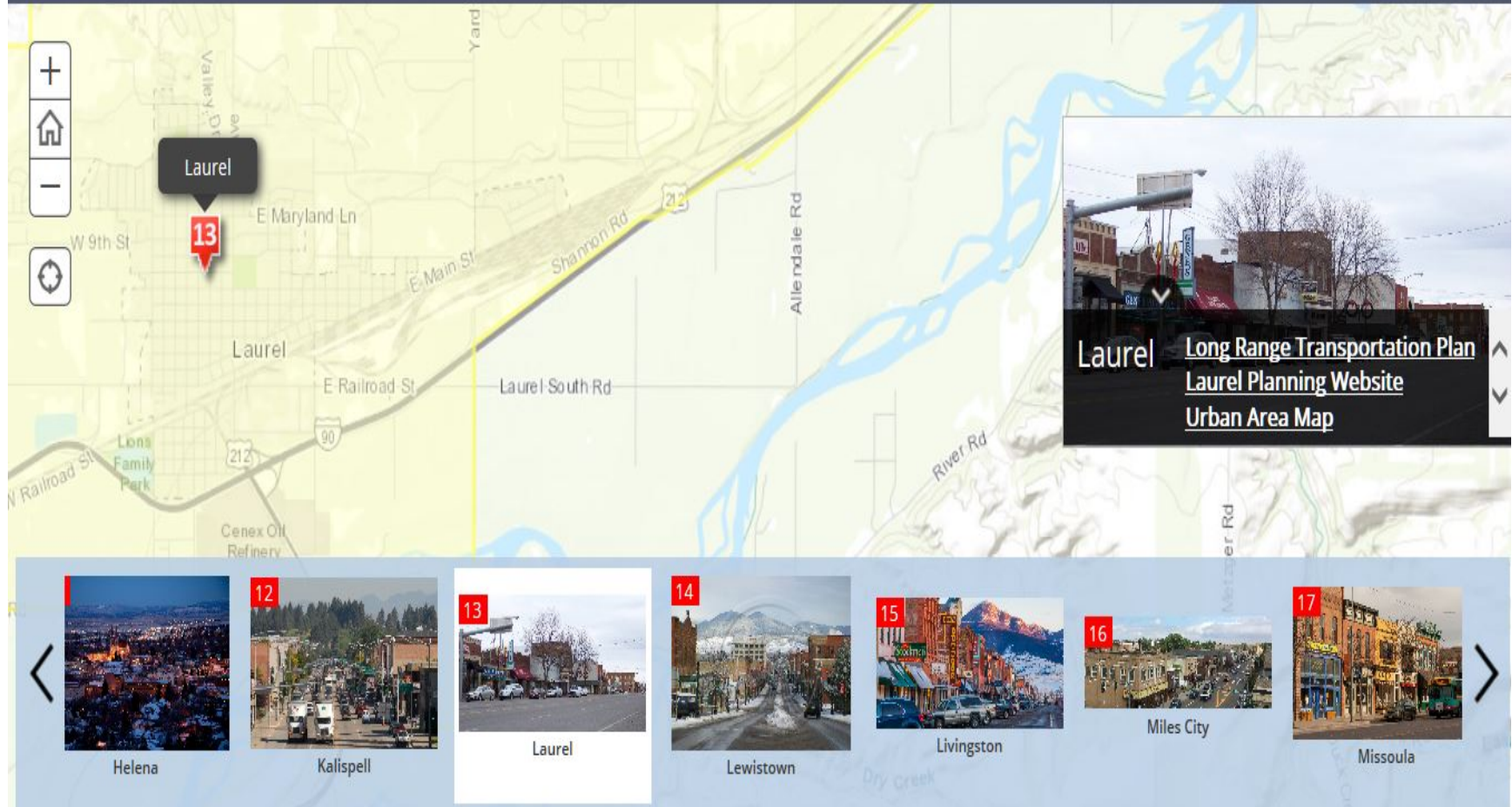


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Montana Urban Areas: Plans and Maps

A MDT story map [f](#) [t](#) [e](#)

Take a tour of the Montana Urban Areas and view their respective planning documents and Urban Area maps.



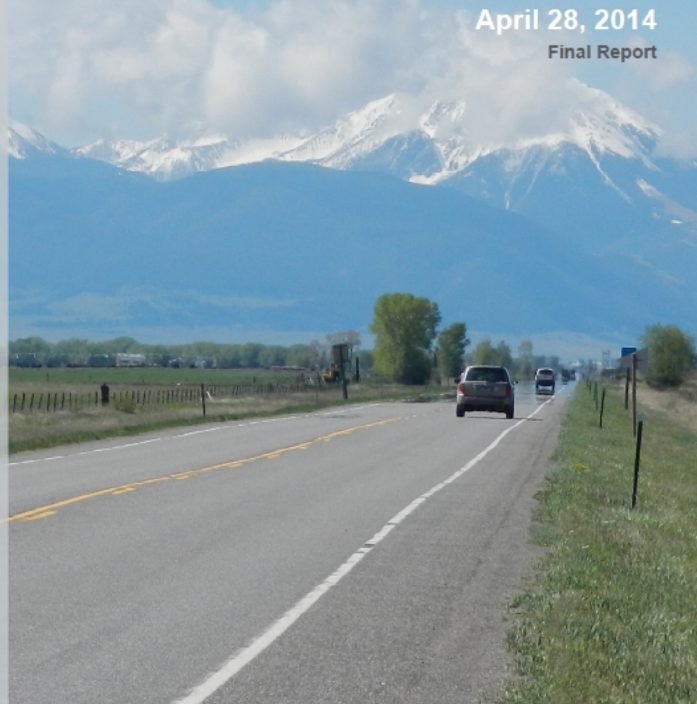
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Paradise Valley Corridor Planning Study

US 89 (Gardiner to Livingston)

April 28, 2014

Final Report



Prepared for:

Montana Department of Transportation
Helena, MT



Prepared by:

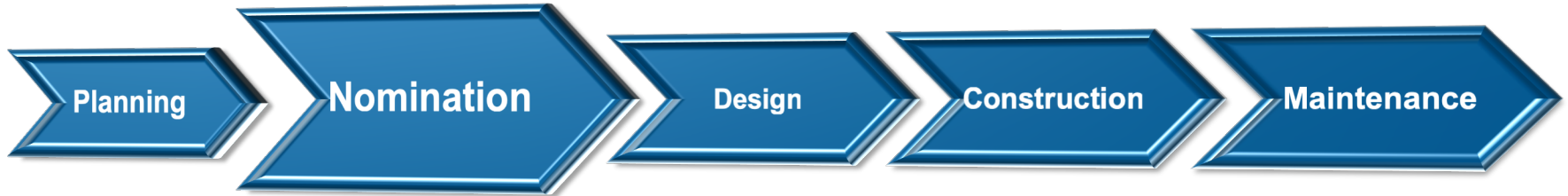
Robert Peccia & Associates
825 Custer Ave | Helena, MT 59604



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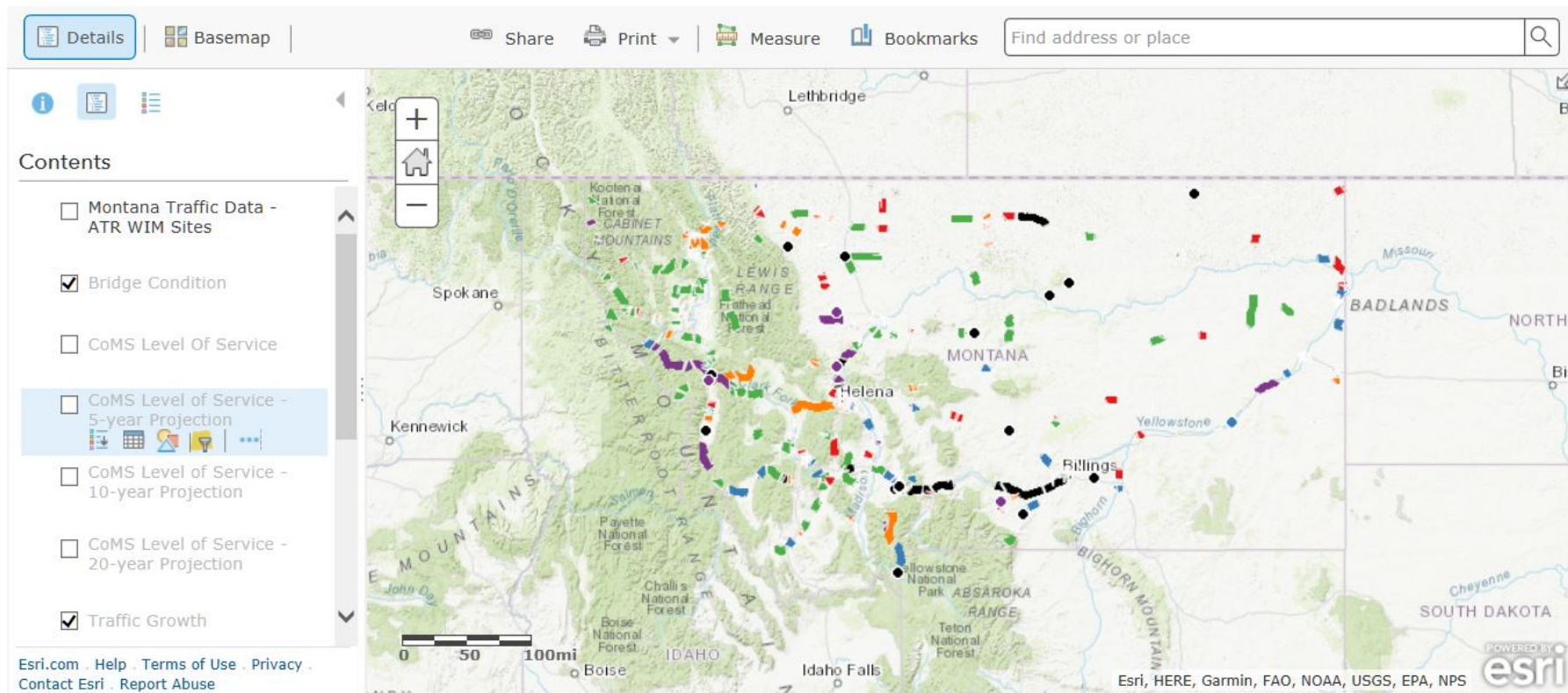


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MDT Nomination Tool

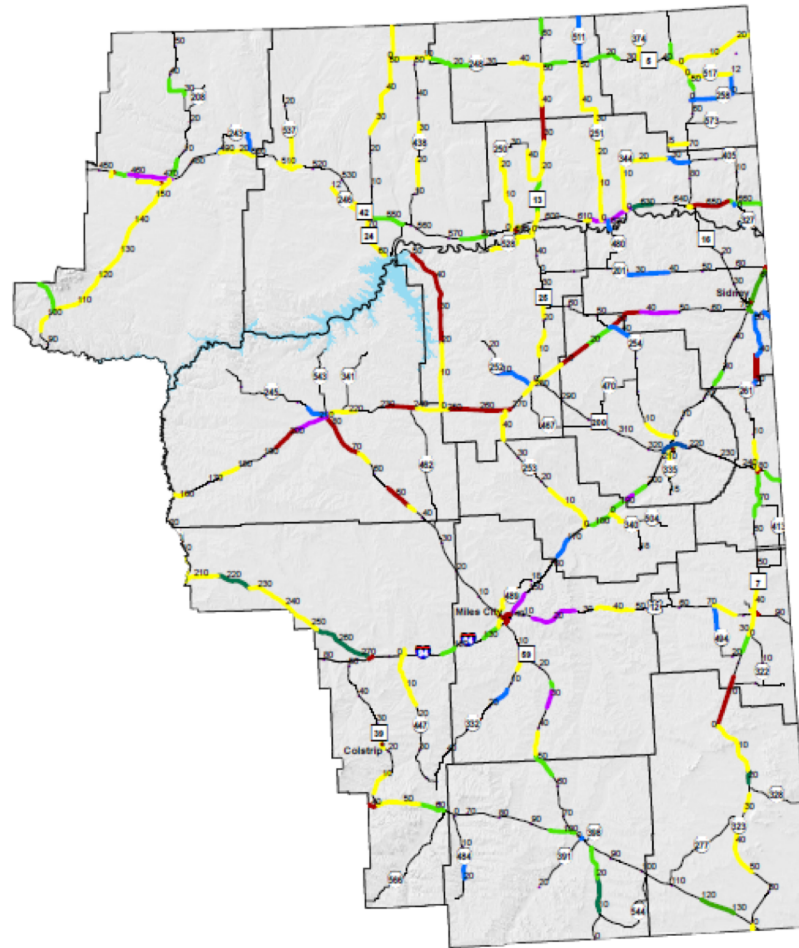
ArcGIS ▾ MDT Project Nomination Tool

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District 4 Recommended Treatments 2018



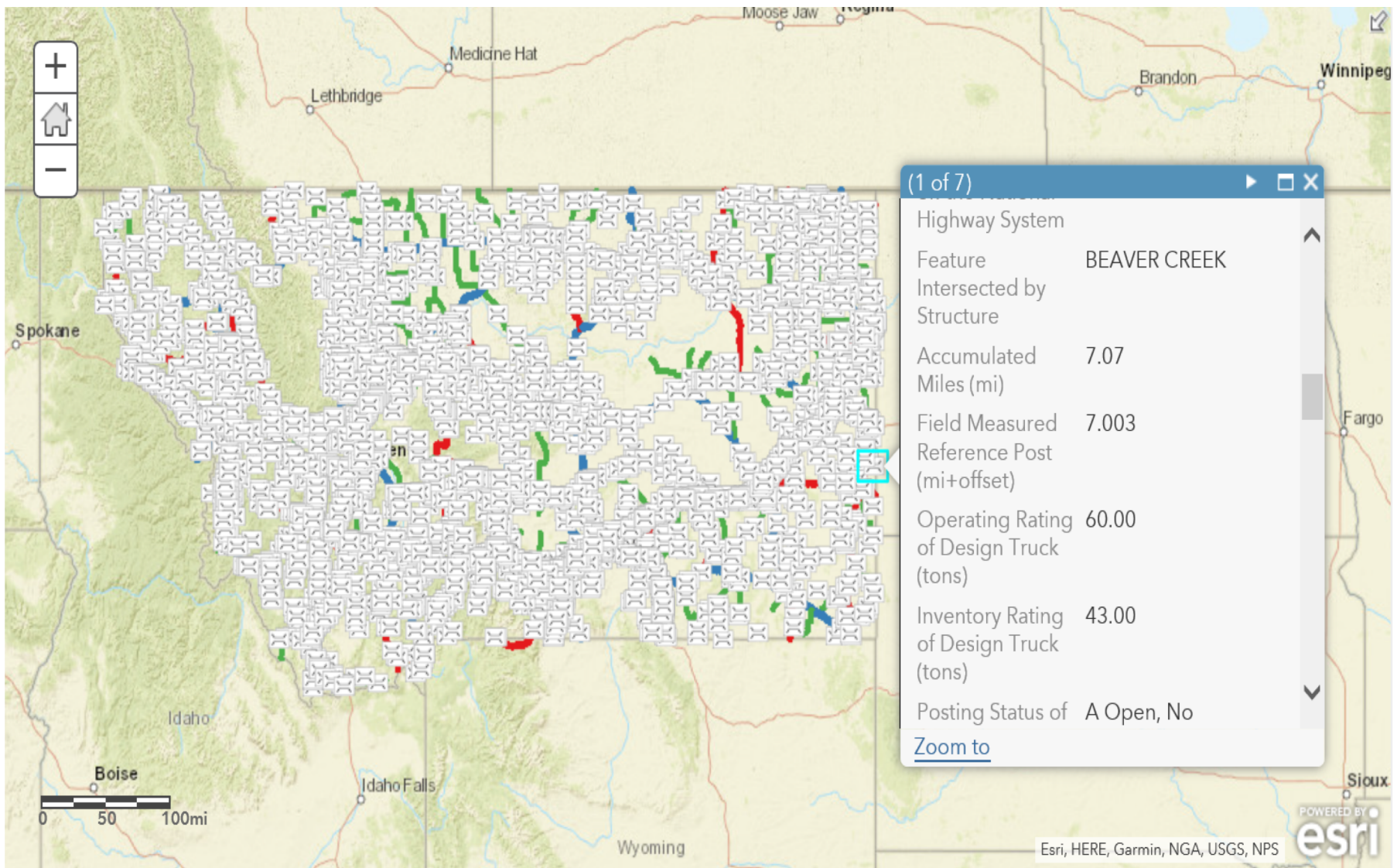
Legend

Treatments Type

- Do Nothing
- Reconstruction
- PCC Minor Rehabilitation
- PCC Major Rehabilitation
- Thin Overlay
- Thin Overlay_Engineered
- Minor Rehabilitation
- Minor Rehab_Rut
- Major Rehabilitation
- Crack Seal & Cover
- Crack Seal

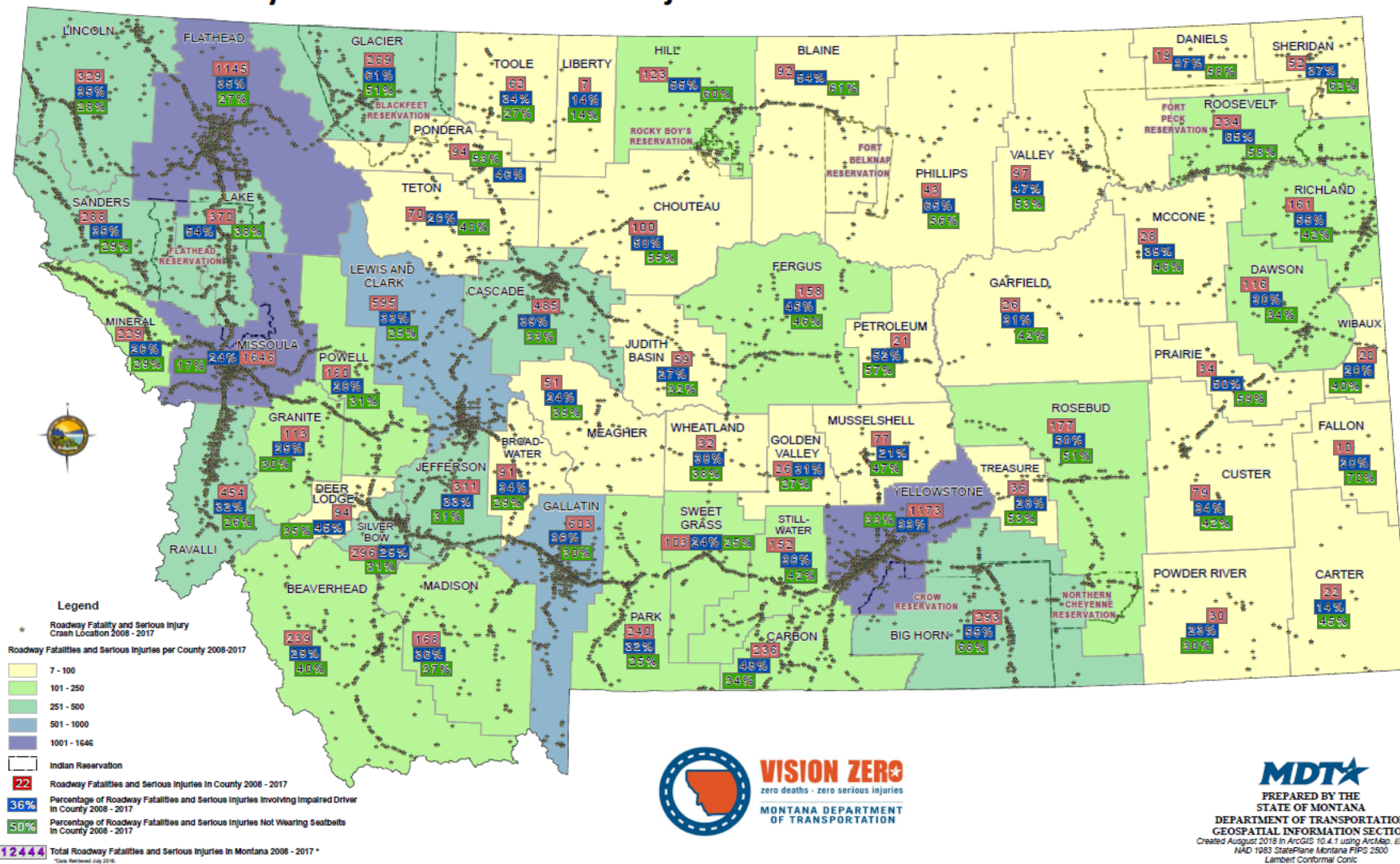


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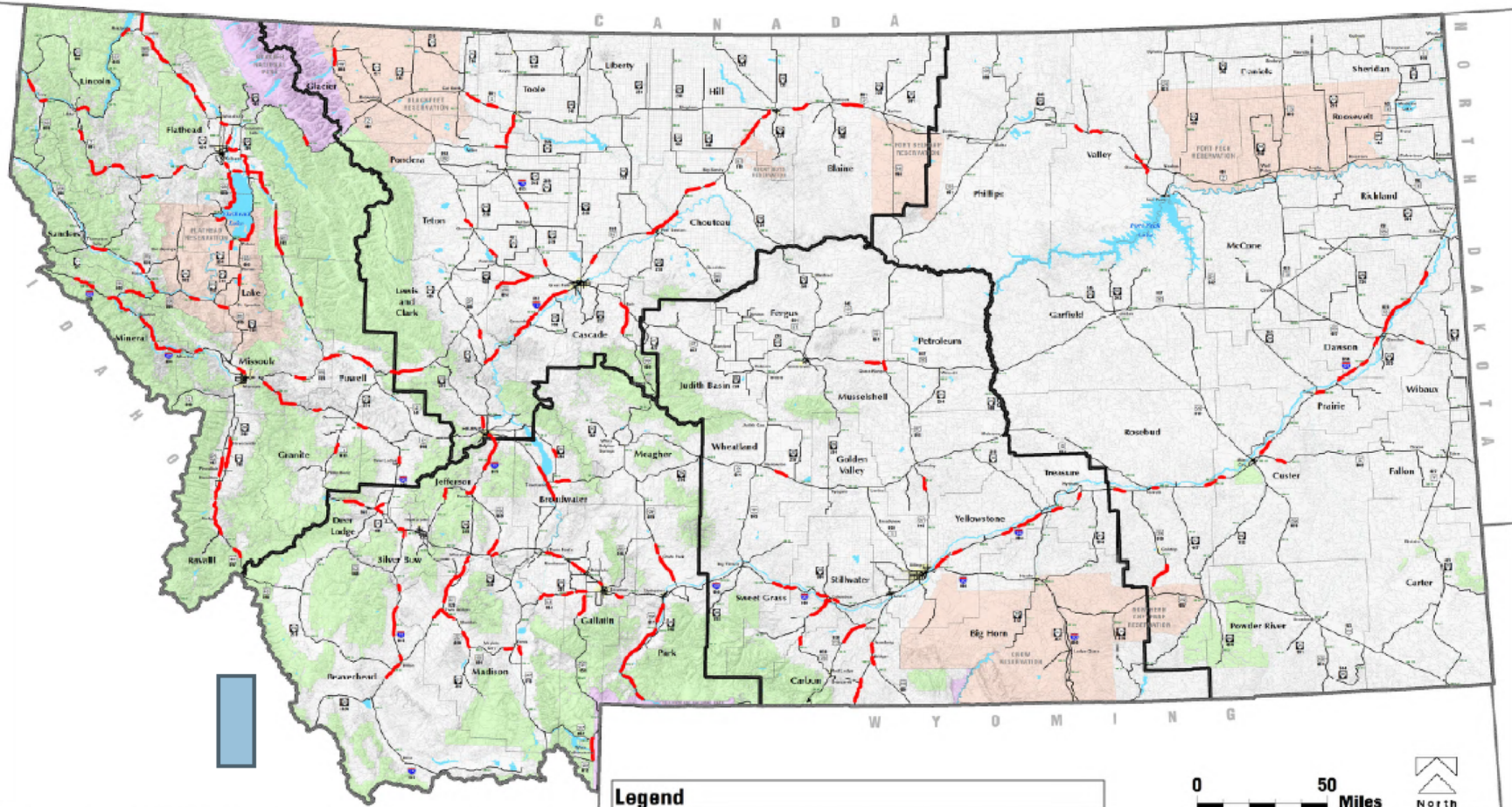
Roadway Fatalities and Serious Injuries in Montana Counties 2008 - 2017



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Roadway Departure Safety Implementation Plan

WILD ANIMAL CRASH PATTERNS



Map prepared May, 2014 by Felsburg Holt & Ullevig in coordination with DiExSys. Wild animal crash patterns were determined through modeling produced/revised in May, 2014 by DiExSys™. Map produced in ESRI ArcMap 10.2®. Land jurisdiction and highway information provided by MDT Hillshade provided by USGS. Mapped using lookup table (provided by MDT) for conversion between reference marker (RM) and true distance (DCMI) linear referencing systems. Map reduced from 34"x44".

Legend

- Wild Animal Crash Patterns
- Forest Service Lands
- County Boundaries
- National Parks
- Reservations
- MDT Districts

0 50 Miles



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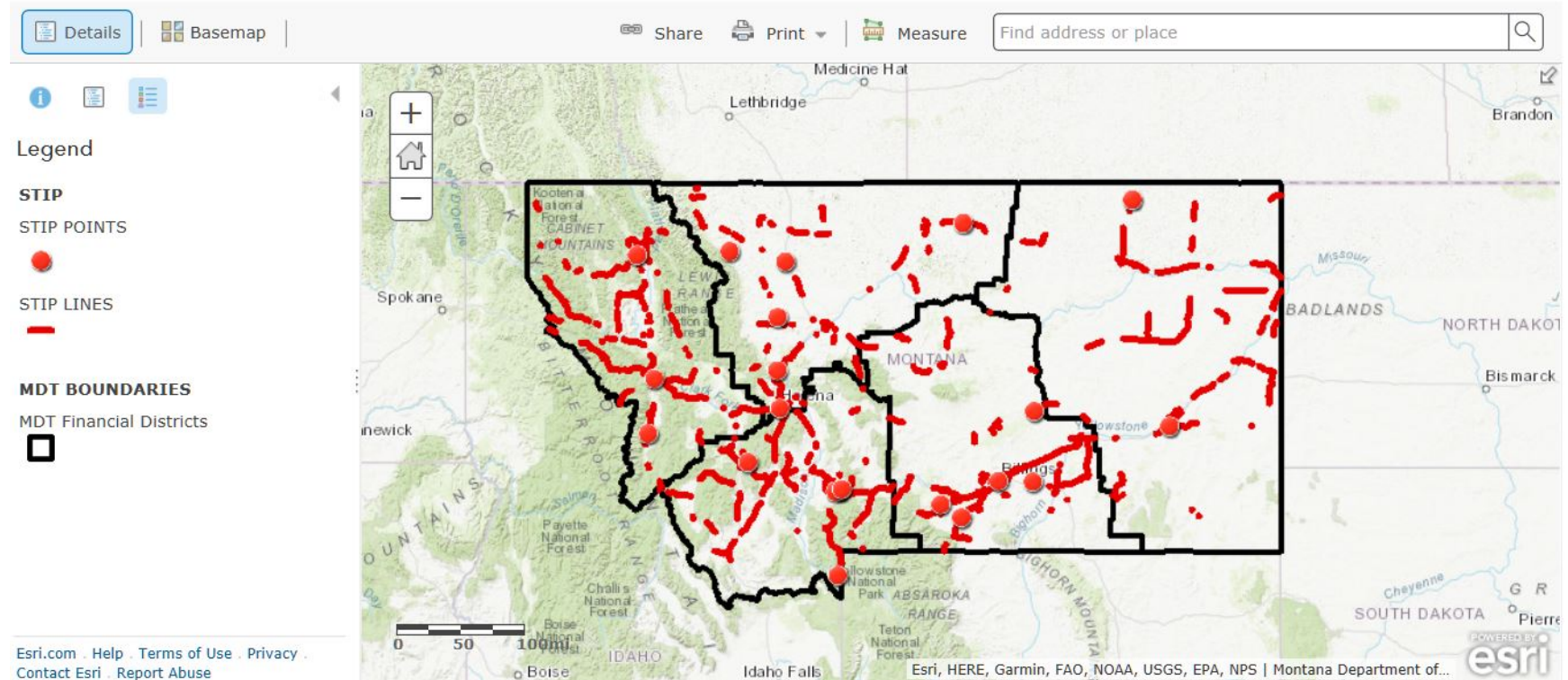


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Interactive STIP Map

ArcGIS ▾ MDT Statewide Transportation Improvement Projects (STIP) 2017-2021.

Modify Map ⓘ Sign In

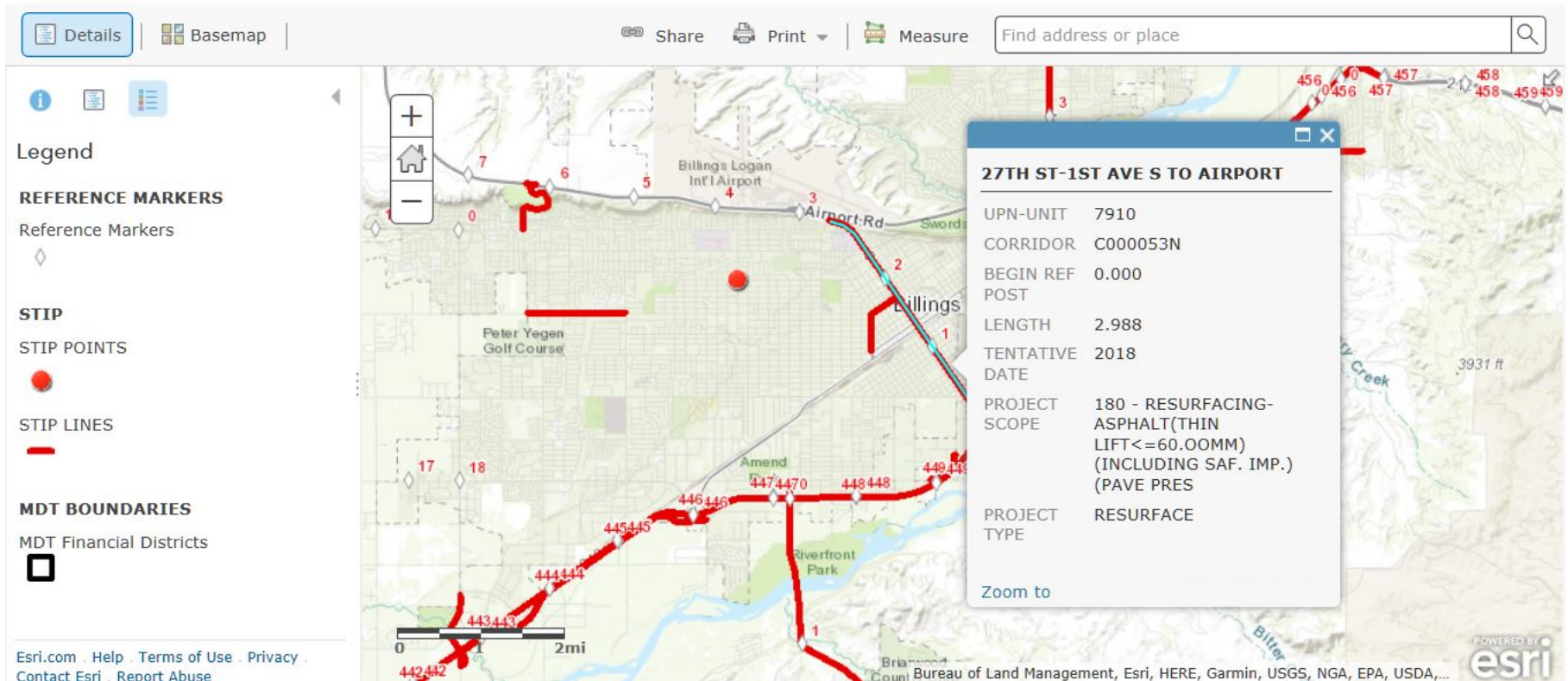


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STIP Project

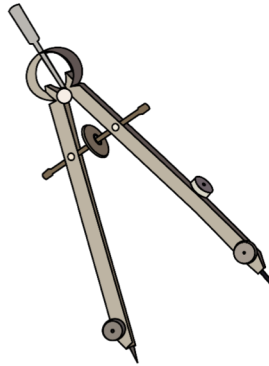
ArcGIS ▾ MDT Statewide Transportation Improvement Projects (STIP) 2017-2021.

Modify Map  Sign In



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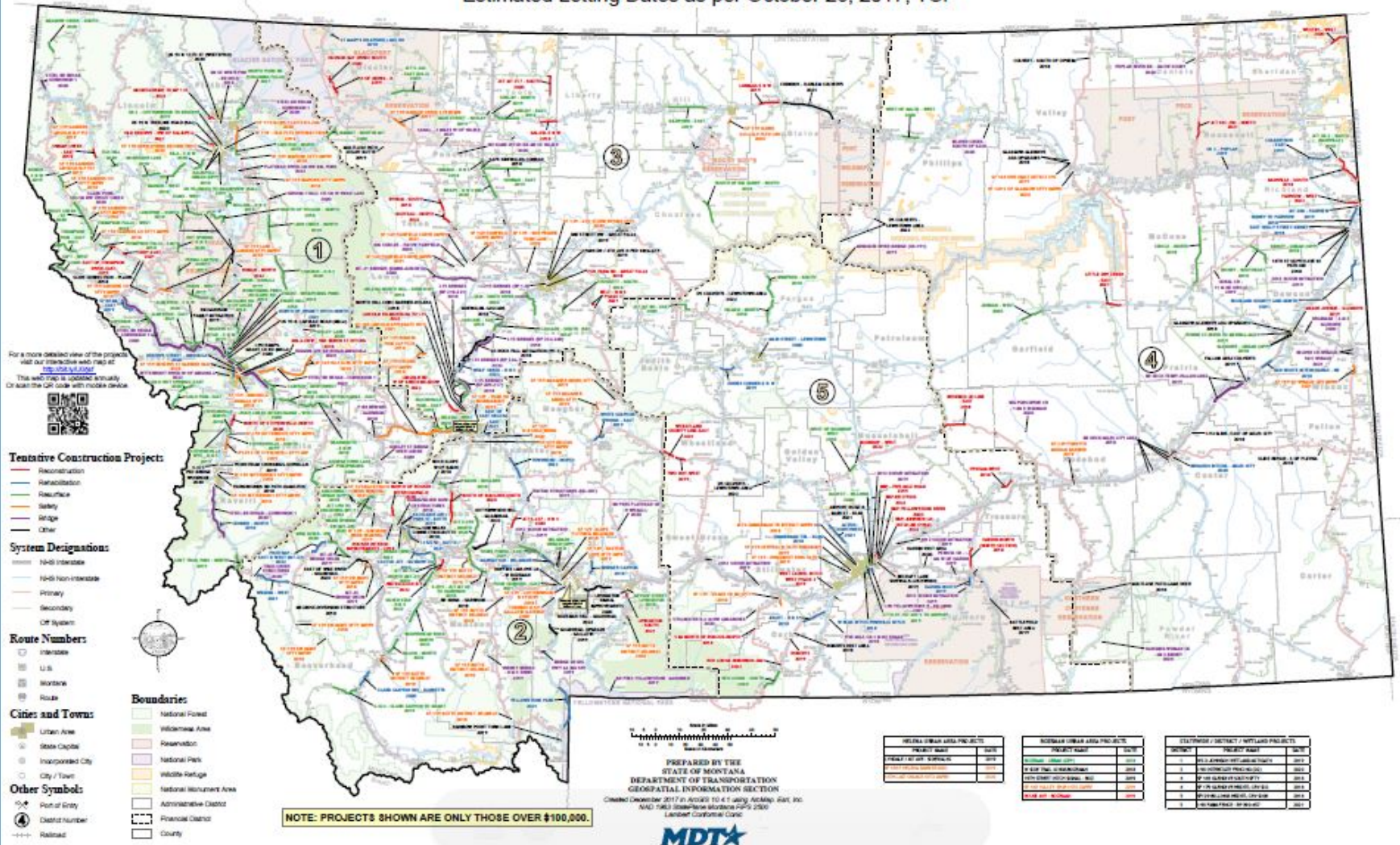
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FEDERAL & STATE TENTATIVE CONSTRUCTION PROJECTS 2018 - 2022

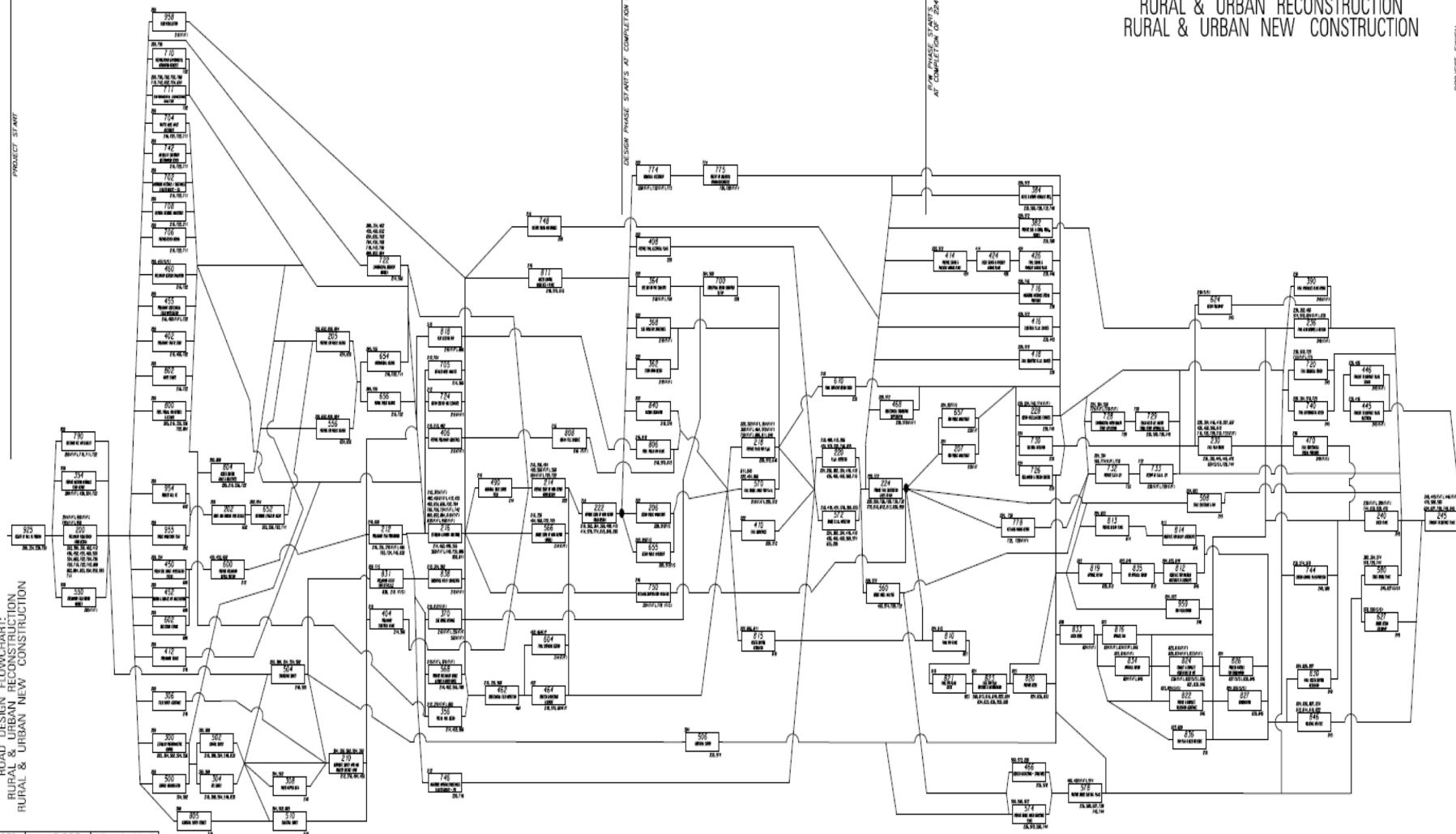
Estimated Letting Dates as per October 26, 2017, TCP



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RIGHT OF WAY

ROAD DESIGN FLOWCHART:
RURAL & URBAN RECONSTRUCTION
RURAL & URBAN NEW CONSTRUCTION



| | | |
|---------|----------|------------|
| REVISED | J. PIRRE | 07-12-2017 |
| REVISED | J. PIRRE | 10-24-2017 |
| REVISED | J. PIRRE | 01-23-2018 |
| REVISED | J. PIRRE | 02-20-2018 |



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Fox Farm Road project, 2018



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Challenges in Providing Wildlife Accommodations

- Adjacent Land Use
- Scale and location of wildlife accommodations
- Data Needs
- Trust and Understanding of NGO's
- Funding and Eligibility
- Installation and Future Maintenance Costs
- Paradigm Shift for Transportation

Montana Department of Transportation



Montana Wildlife and Transportation Summit

MDT Wildlife Accommodations

December 4, 2018

Tom Martin, PE MDT Environmental Services Bureau Chief



Why Does MDT Care about Wildlife?



- Vision Zero
- Mission Statement – Sensitivity to the Environment
- TranPlanMT – Environmental Goals
- Responsible for Safety of Travelling Public and Maintaining Wildlife Movement
- Natural Resources fuel Montana's economy

What is MDT Already Doing Regarding Wildlife?



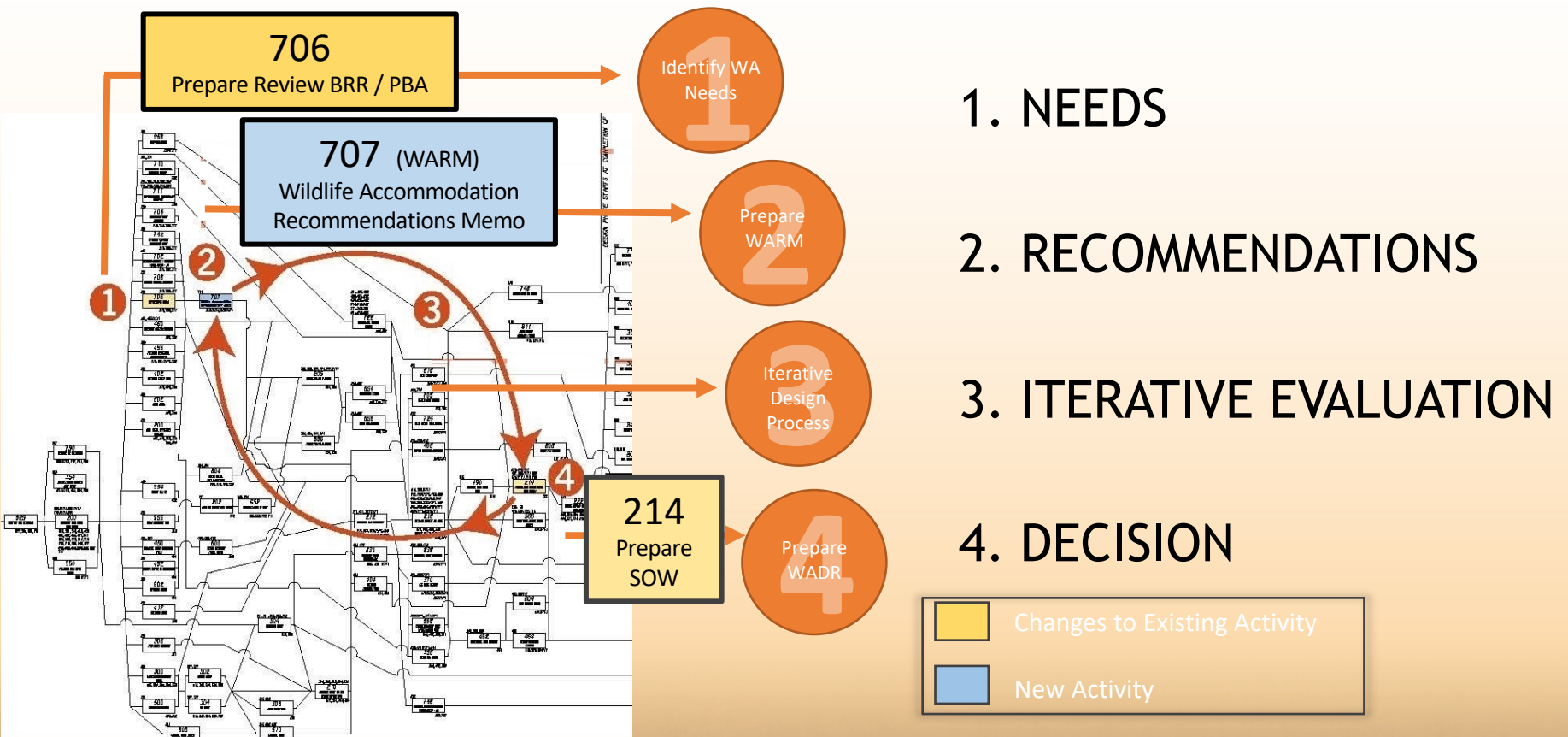
- Wildlife Accommodation Process
- MDT District Biologists
- Project Coordination with FWP
- Wildlife Data
- Project Example: Lincoln – East project

MDT's Wildlife Accommodation Definition

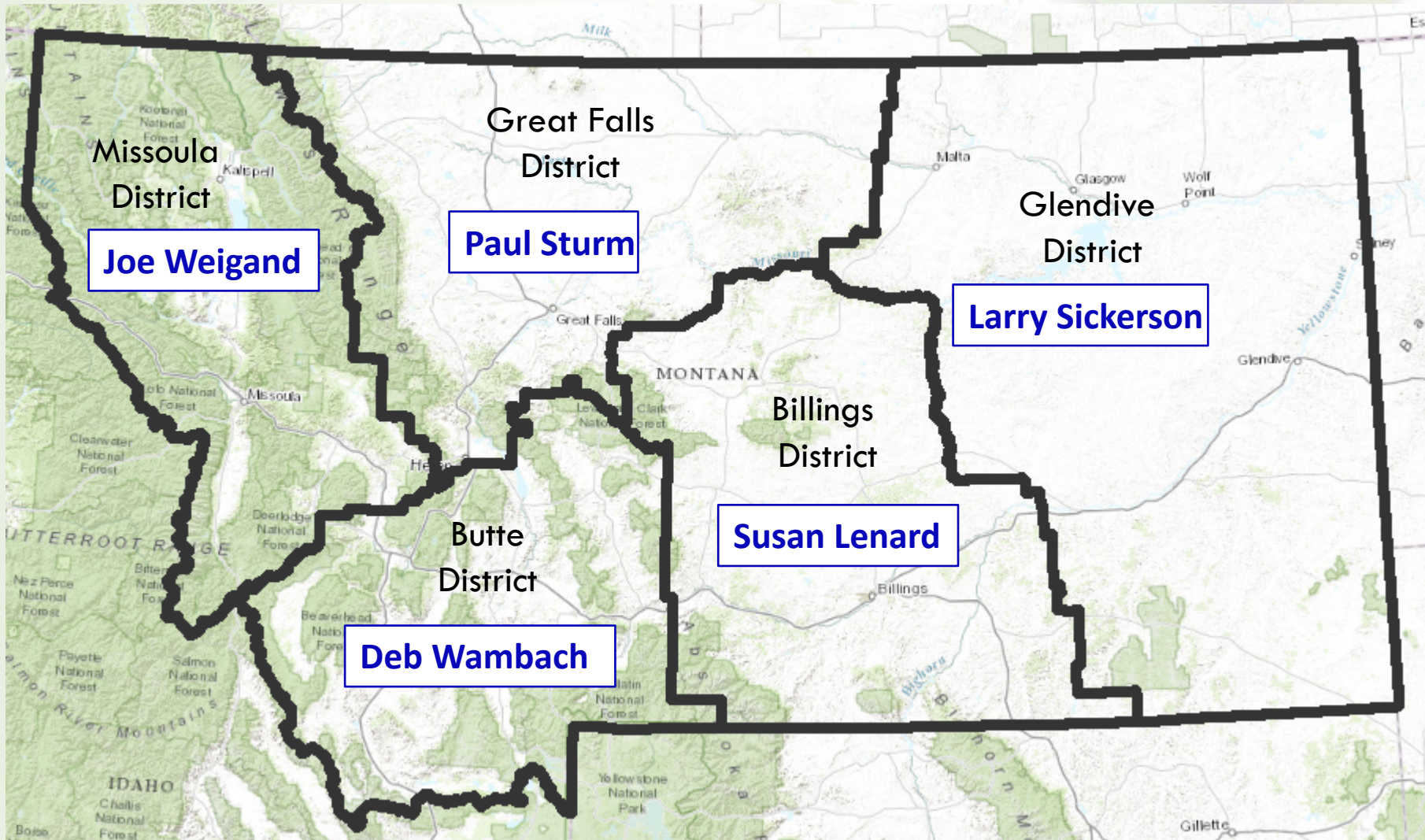
- Feature or a Strategy
- Designed and implemented into a transportation facility to moderate the effects of the infrastructure on wildlife and their habitat.



Wildlife Accommodations Process



MDT District Biologists



MDT District Biologists Duties



- Every project evaluated by Biologists
- Agency coordination (USFWS, FWP, etc.)
- Biological Resource Reports
- Biological Assessments (T&E Species)
- WA Needs and Feasibility analysis
- Project Impact Analysis
 - Avoidance/Minimization Recommendations
- MDT Design Team

FWP Project Coordination



- Biennial MDT/FWP Regional Meetings
 - Next one February 2019
 - ArcGIS Online Collaboration tool
- MDT/FWP Biologist coordinate on project by project basis
 - FWP Wildlife Biologists
 - FWP Bear Management Specialists
 - FWP Non-game Biologists
- Biologist field visits, call, email, etc.
- Montana Chapter of the Wildlife Society Meeting

MDT Wildlife Data



- Collision Data from the MHP
- Carcass Data from MDT Maintenance
- Other sources: (primarily mapping data)
 - FWP
 - USFWS
 - BLM
 - DNRC
 - Tribal
 - Heritage Program/NRIS
 - What else is out there?! Let talk about it.

Percent of Carcasses Collected by Species Statewide (Jan.1, 2013 to Nov. 13, 2018)

92.5%



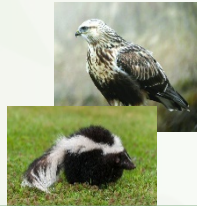
32, 047 total carcasses collected (Avg. = 5046/Year)

2.8%



Deer
n = 29,654

2.6%



Other
Wildlife
n = 830

1.1%



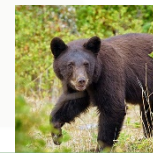
Antelope
n = 347

0.4%



Moose
n = 136

0.4%



Black
Bear
n = 117

0.2%



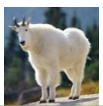
Bighorn
Sheep
n = 51

0.1%



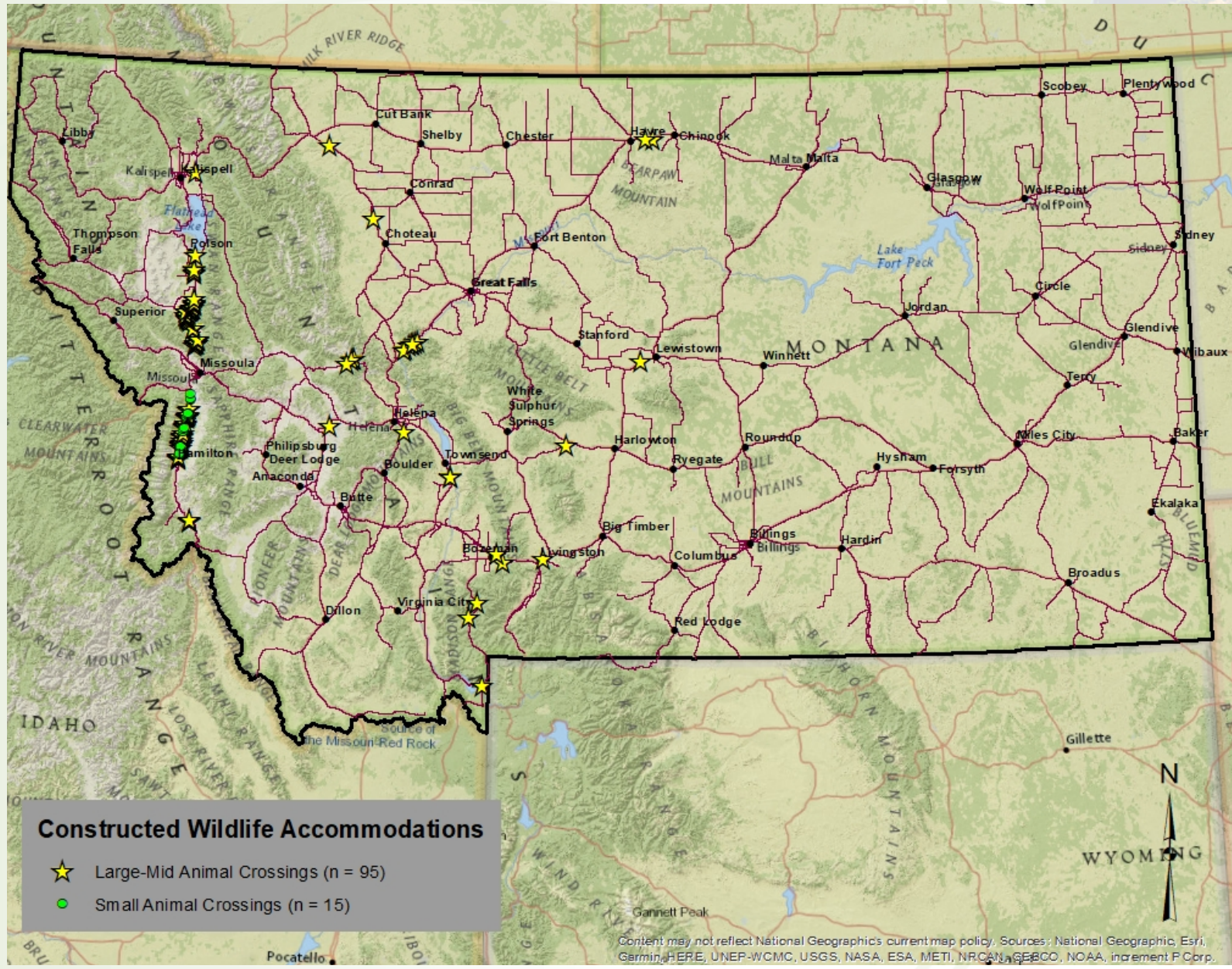
Mtn
Lion
n = 26

<0.1%



Mtn
Goat
n = 2

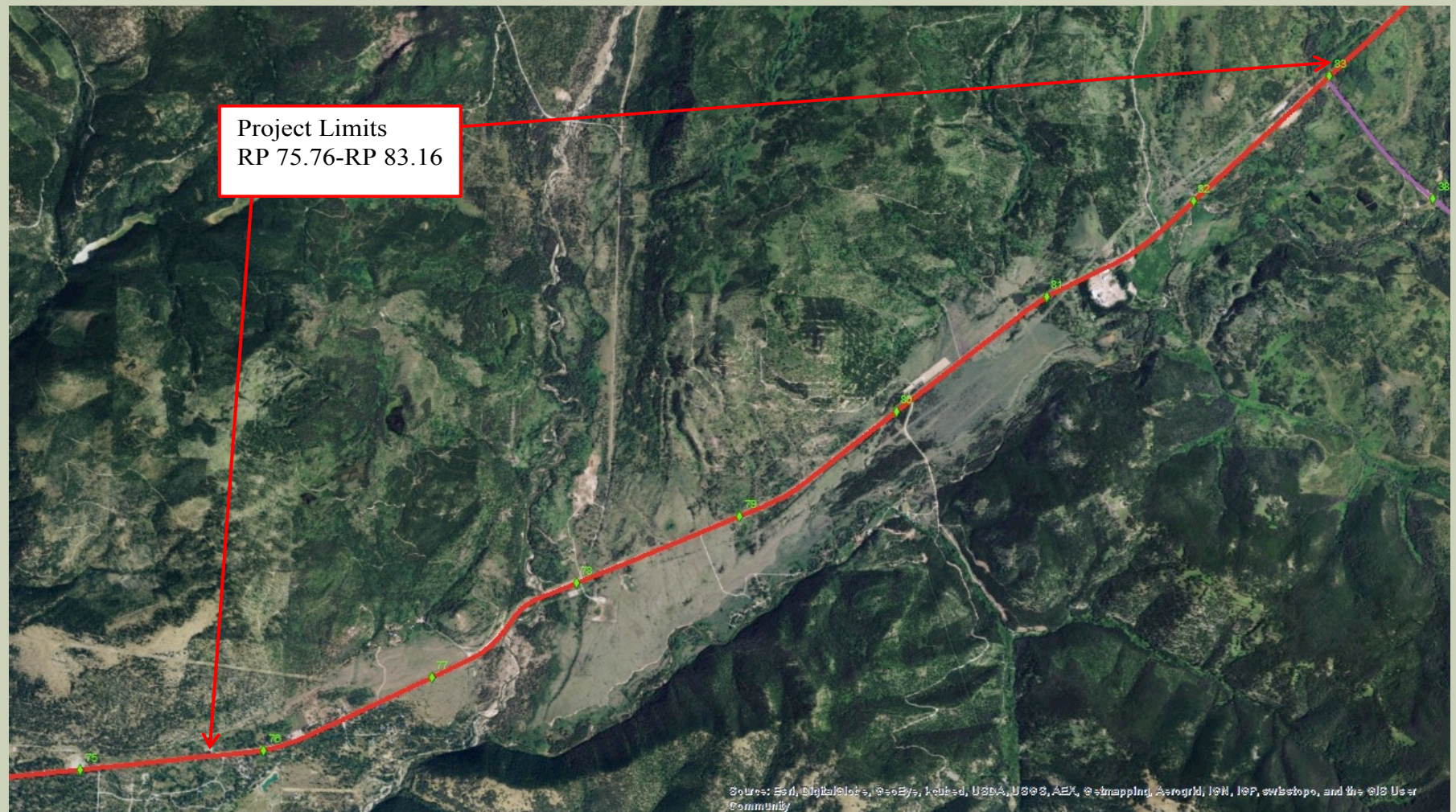
Statewide Crossings



LINCOLN-EAST WILDLIFE ACCOMMODATIONS

PROJECT AERIAL, MT 200

PROJECT LIMITS RP 76.7-83.1



EAST WILDLIFE BRIDGE/UNDERPASS 12 FEET TALL X 20 FEET WIDE



ALICE CREEK BRIDGE



06.03.2015 13:04

WEST WILDLIFE BRIDGE/UNDERPASS 12 FEET TALL X 20 FEET WIDE



CAMERAS USED FOR ADAPTIVE MANAGEMENT



TYPICAL JUMPOUT

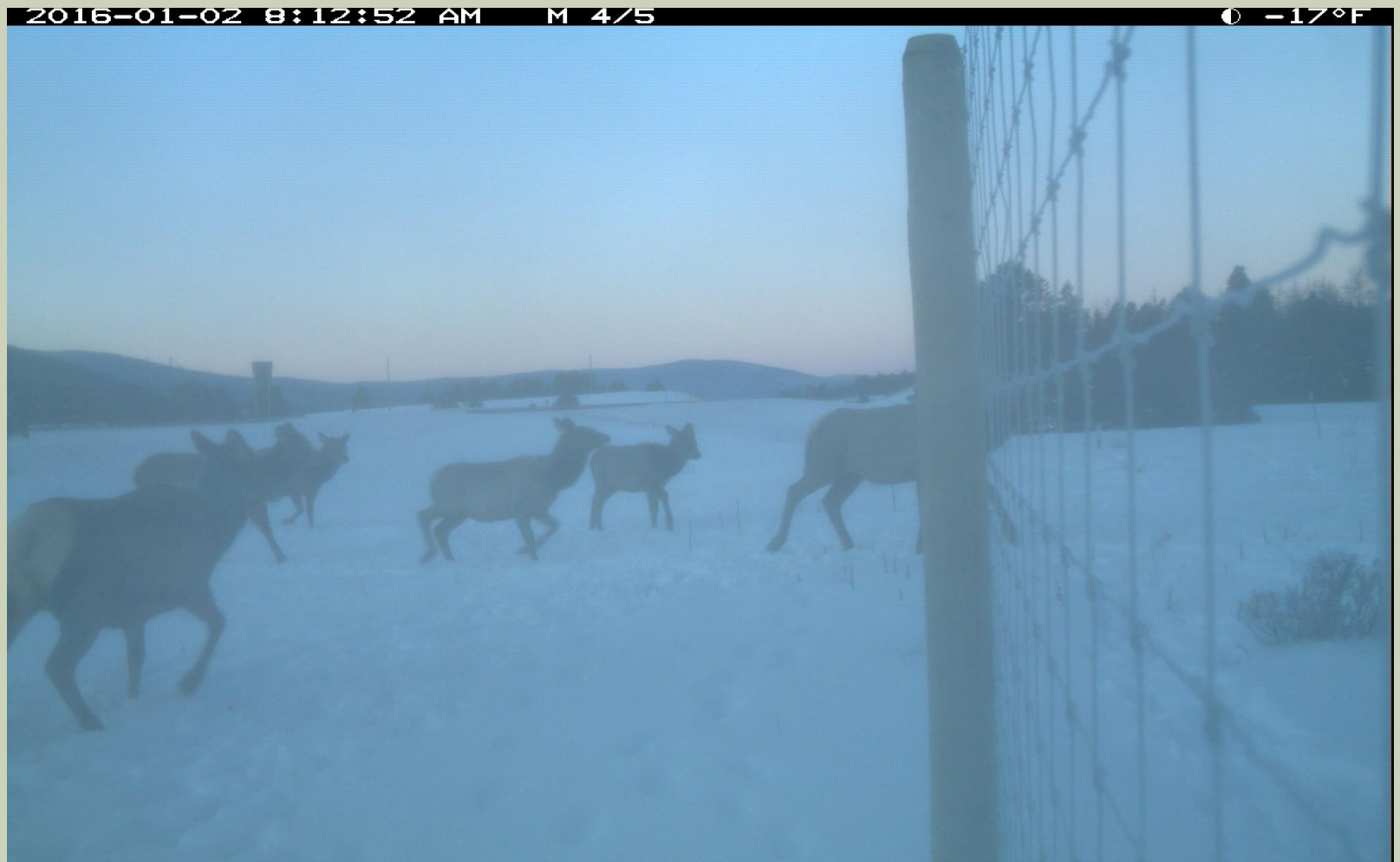


06.03.2015 14:39

ELK USING JUMPOUT



ASPEN GROVE FENCE END



MULE DEER



WHITETAIL USING ALICE CREEK BRIDGE



BLACK BEAR



COYOTE



MOUNTAIN LION



MOOSE



ELK---TOUGH TO GET THROUGH STRUCTURES



ELK



SANDHILL CRANE & CHICKS



WOLF



BIGHORN SHEEP



GRIZZLY



GRIZZLY - OTHER SIDE



KEY TAKEAWAYS

- Takes time for animals to adapt
- Adaptive Management – willingness
- Team Effort!

THE END



Paul Sturm, Great Falls District
Biologist
406-444-9438
psturm@mt.gov

How can NGOs and FWP support MDT?



- FWP/other agencies
 - Elevate importance of transportation/wildlife considerations
 - Data sharing (collar data, other?)
 - Recommendations that support MDT/projects
 - Share your knowledge and expertise
 - FWP Biologists at MDT field reviews with MDT Biologists or Design Team
- NGOs & Other Partners
 - Land acquisitions, easements
 - Alternative funding, grants
 - Public education outreach
 - Positive media for MDT
 - Improved communication/relationships
 - Monitoring new, existing crossings

How/when to engage?



- Inside STIP projects
 - MDT lead and engages outside entities for info, data, other needs
- Outside STIP projects
 - MDT partner at table
 - NGO, other agencies lead?
 - Funding
 - Priority areas
 - Collaborate before project becomes a project



The End