VISION ZERO
zero deaths • zero serious injuries

MONTANA DEPARTMENT OF TRANSPORTATION

Montana Wildlife and Transportation Summit

MDT Project Development

Dustin Rouse – Preconstruction Engineer

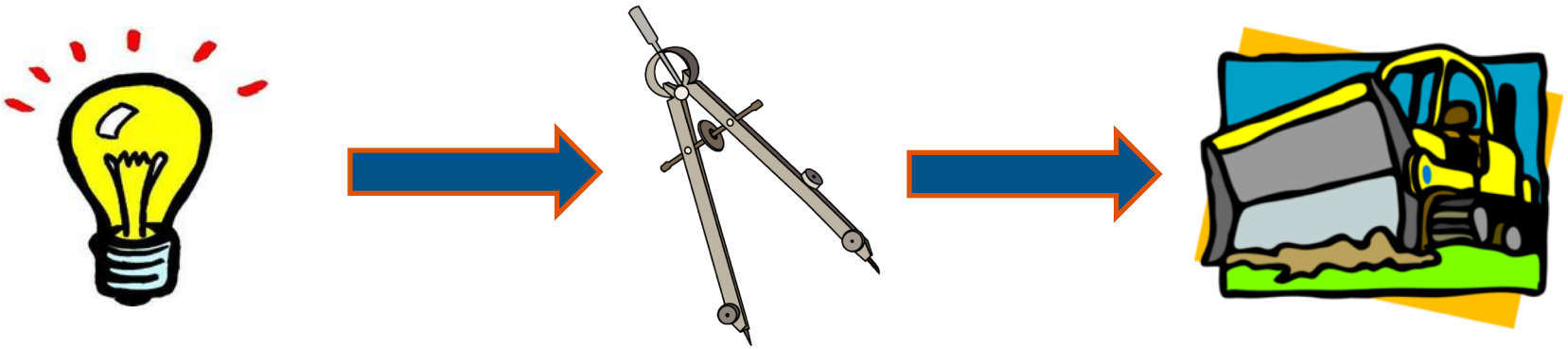


Presentation Outline

- 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





The Life of an MDT Project





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.

Safety is an overarching goal applied in nearly every MDT decision making process for all programs and projects.

SAFETY
GOAL:
Improve safety for all transportation users to achieve Vision Zero: zero fatalities and zero serious injuries.

SYSTEM PRESERVATION AND MAINTENANCE
GOAL:
Preserve and maintain existing transportation infrastructure.

MDT makes roadway investment decisions according to the following goals listed in order or priority.

MOBILITY AND ECONOMIC VITALITY
GOAL:
Facilitate the movement of people and goods recognizing the importance of economic vitality.

ACCESSIBILITY AND CONNECTIVITY
GOAL:
Preserve access to the transportation network and connectivity between modes.

Sensitivity to the environment and cost-effective management are underlying goals informing decisions on a broad department-wide basis.

BUSINESS OPERATIONS AND MANAGEMENT
GOAL:
Provide efficient, cost-effective management and operation to accelerate transportation project delivery and ensure system reliability.

ENVIRONMENTAL STEWARDSHIP
GOAL:
Support MDT's transportation mission through regulatory compliance and responsible stewardship of the built and natural environment.

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

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MONTANA MDT DEPARTMENT OF TRANSPORTATION

TranPlanMT

Moving Montana Forward. Together.

Overview

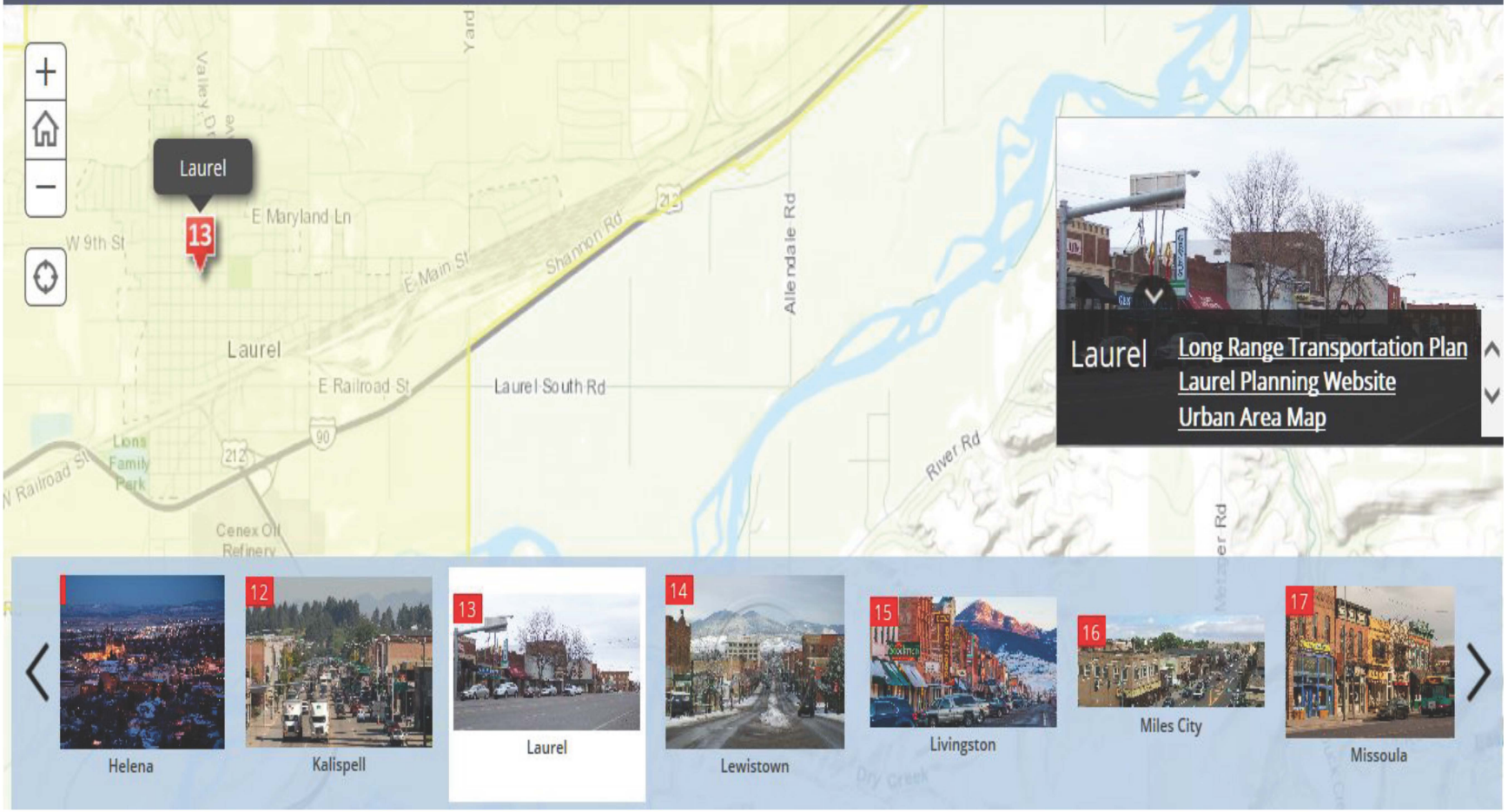


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Montana Urban Areas: Plans and Maps

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

A MDT story map



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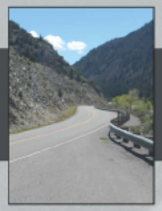
Paradise Valley Corridor Planning Study

US 89 (Gardiner to Livingston)









April 28, 2014

Final Report

Prepared for:

Montana Department of Transportation

Helena, MT

MONTANA MDT DEPARTMENT OF TRANSPORTATION

RPA

Prepared by:

Robert Peccia & Associates

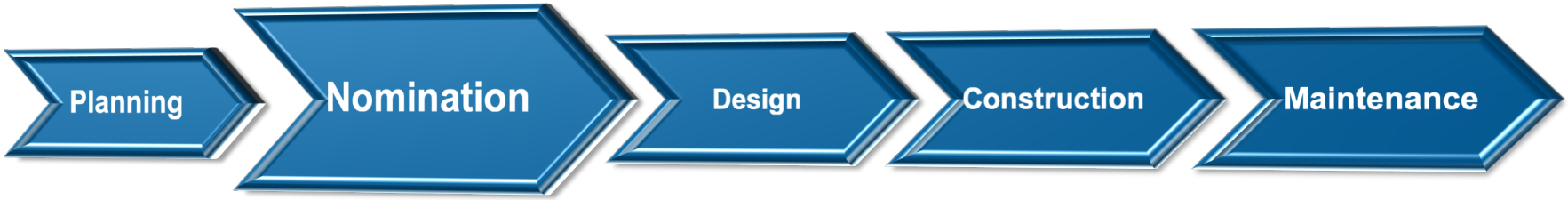
825 Custer Ave | Helena, MT 59604

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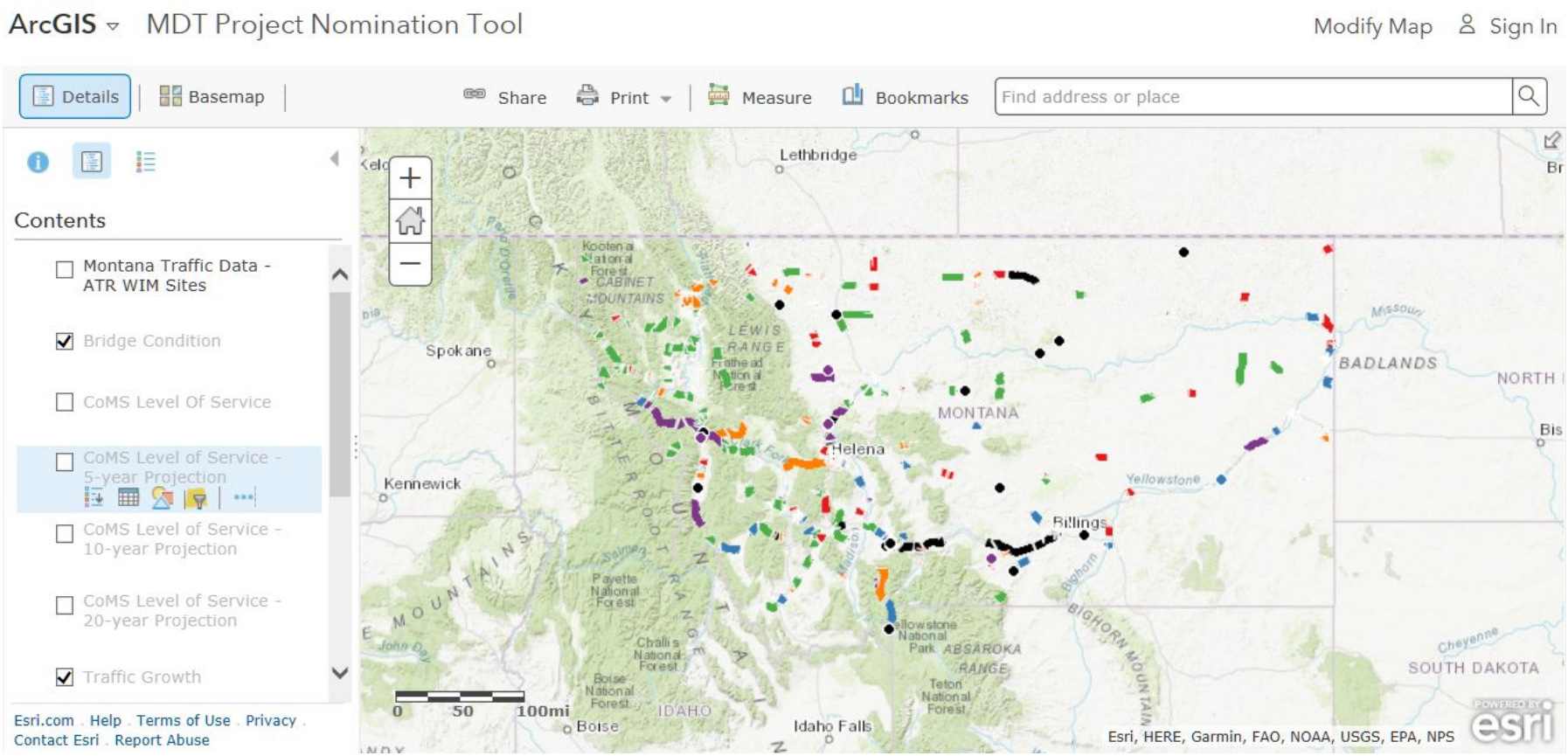
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The Life of an MDT Project



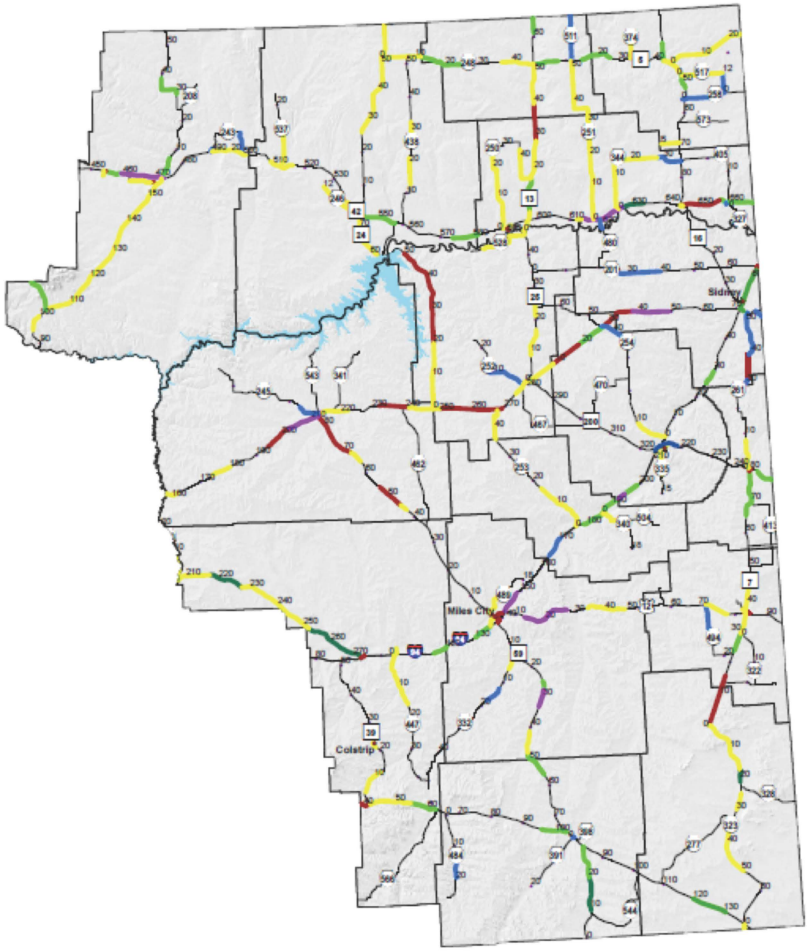


MDT Nomination Tool



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District 4
Recommended
Treatments 2018



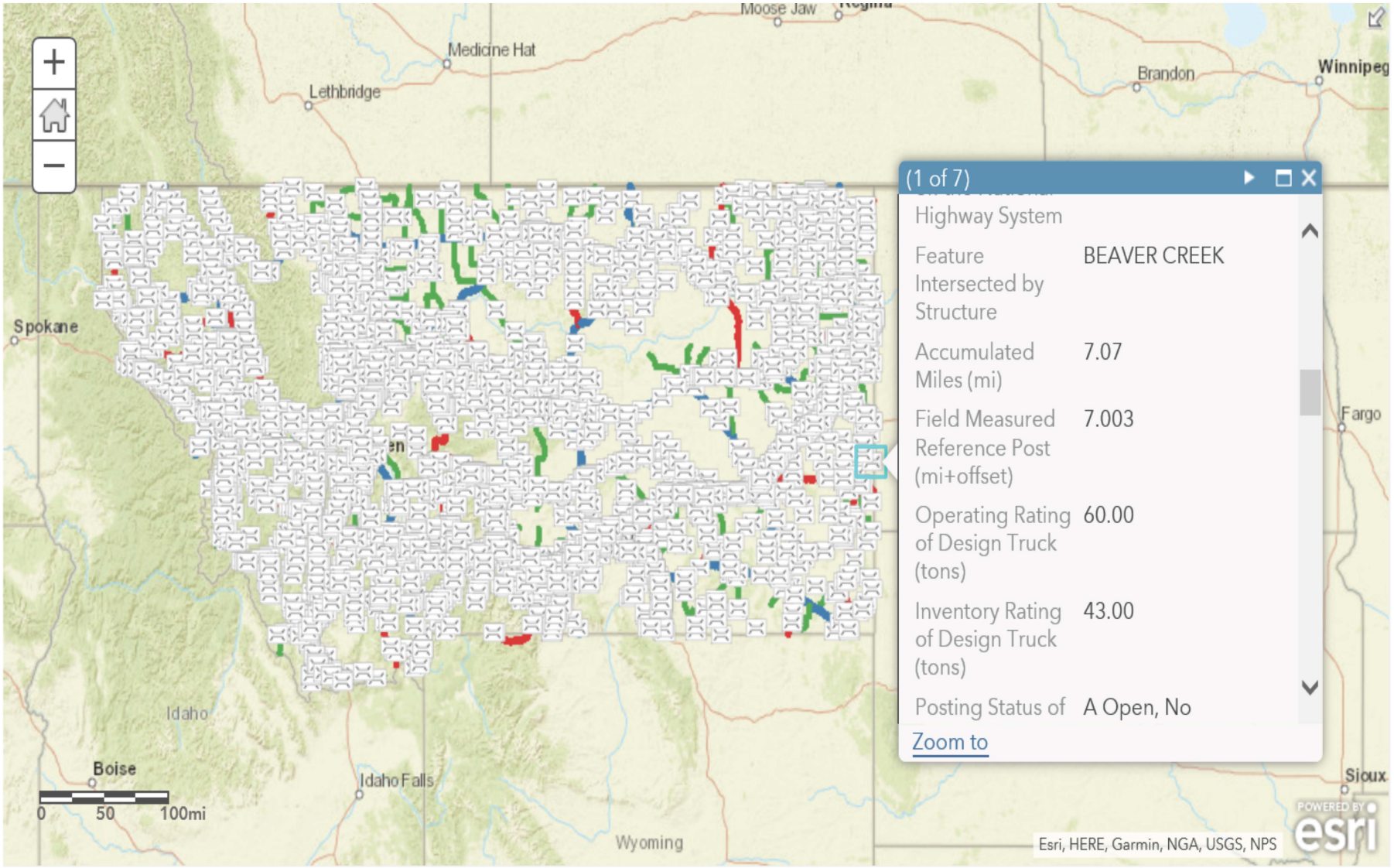
Legend

Treatments Type

- Do Nothing
- Reconstruction
- PCC Minor Rehabilitation
- PCC Major Rehabilitation
- Thin Overlay
- Thin O'lay_Engineered
- Minor Rehabilitation
- Minor Rehab_Rut
- Major Rehabilitation
- Crack Seal & Cover
- Crack Seal

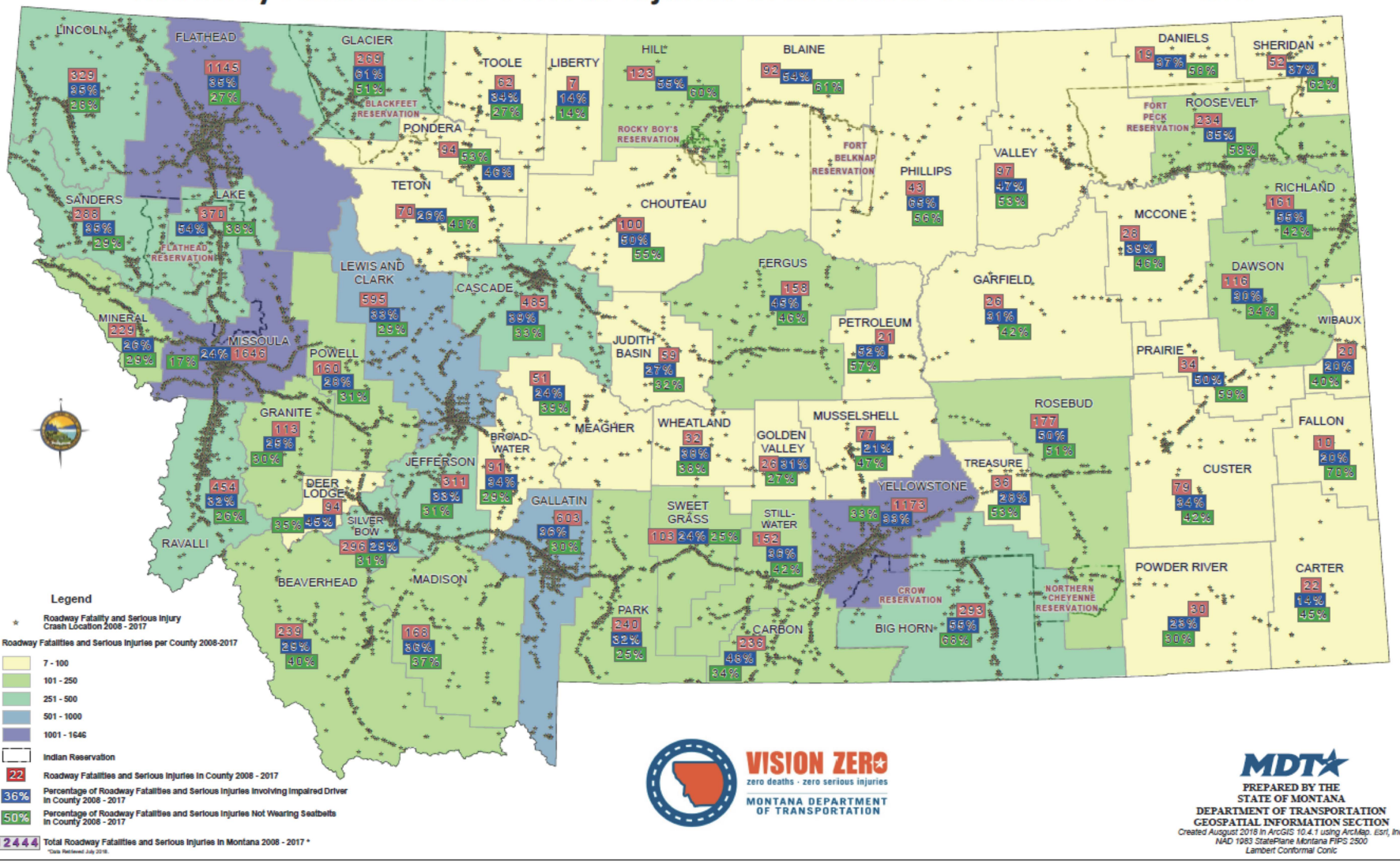
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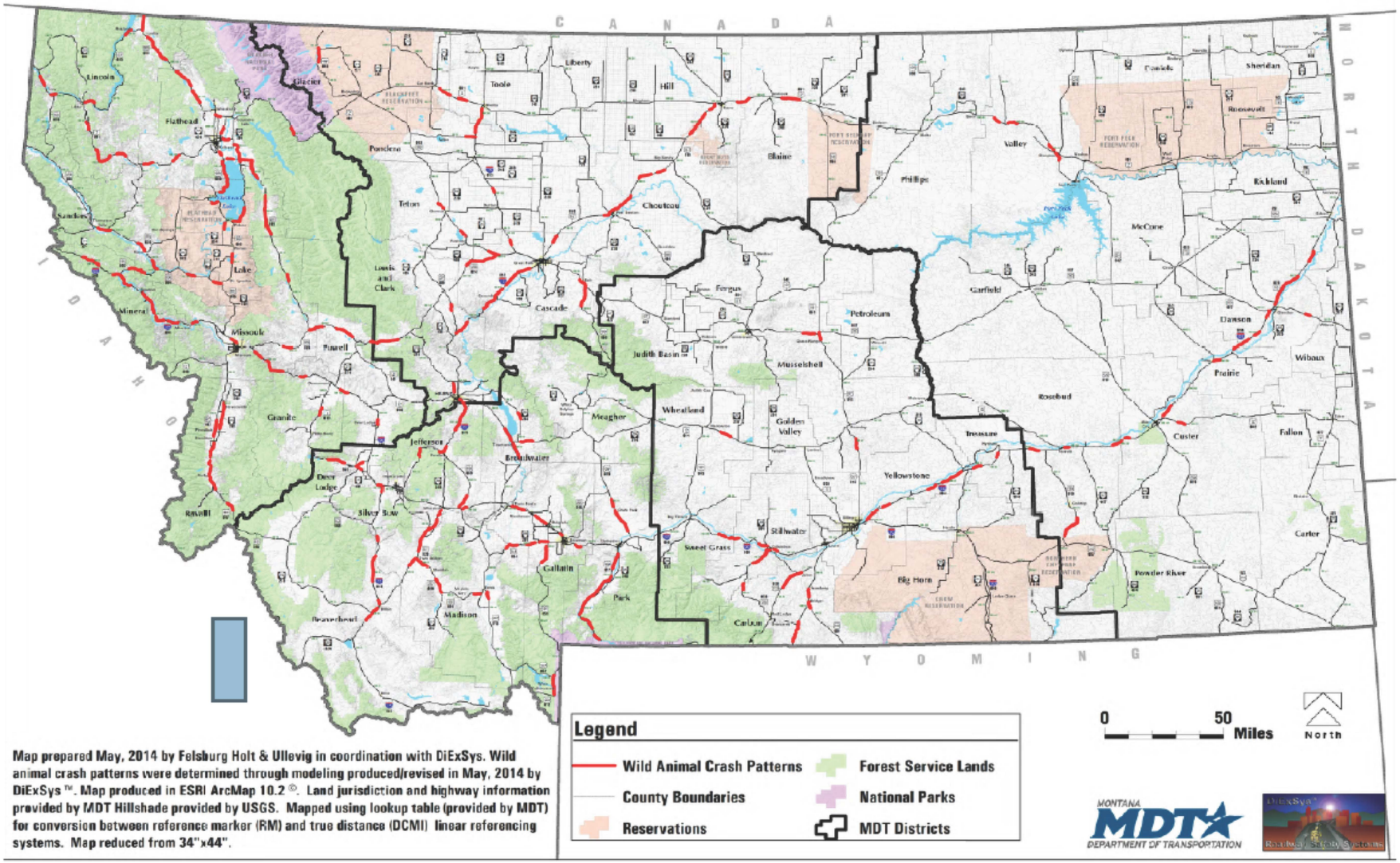
Roadway Fatalities and Serious Injuries in Montana Counties 2008 - 2017



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Roadway Departure Safety Implementation Plan

WILD ANIMAL CRASH PATTERNS

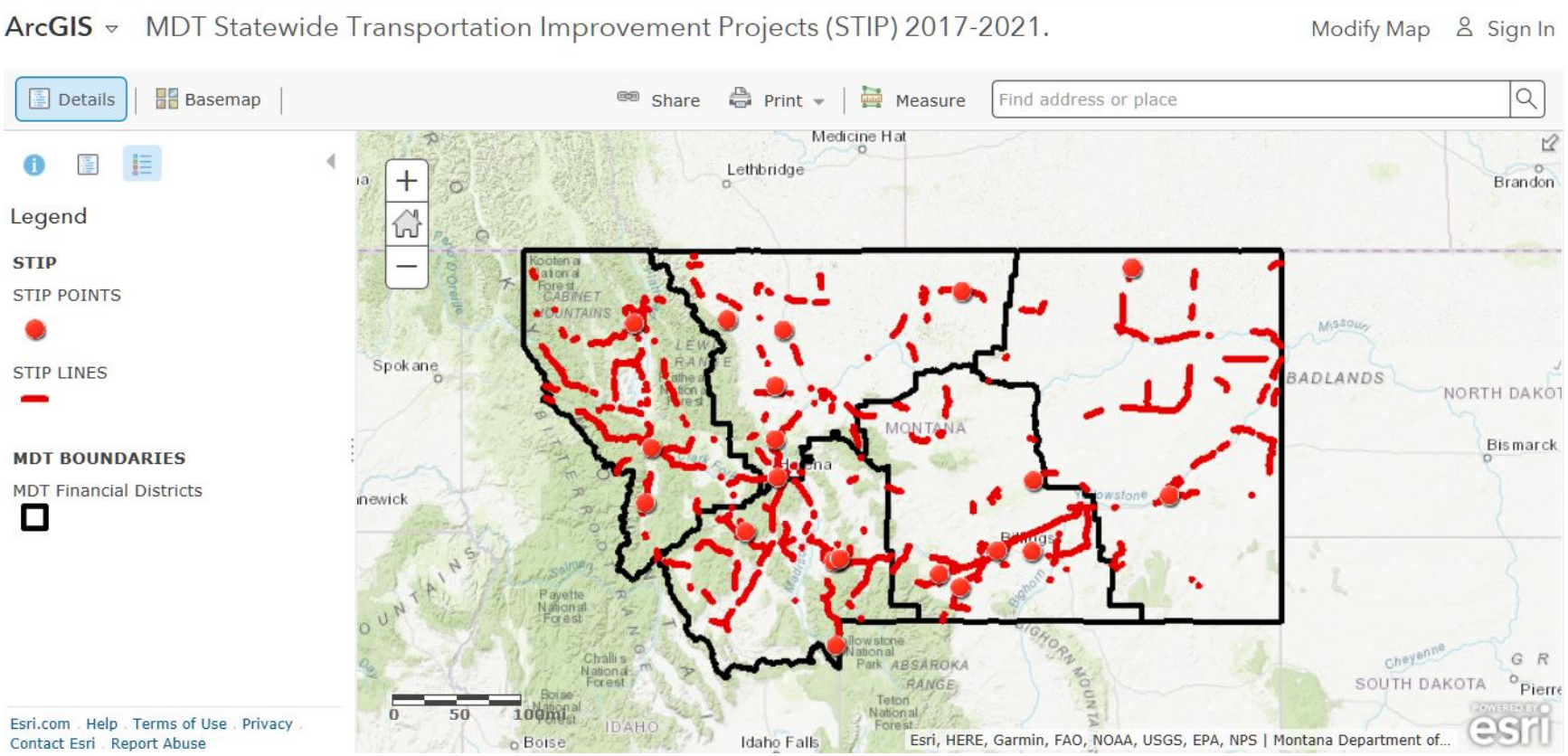


Map prepared May, 2014 by Felsburg Holt & Ullevig in coordination with DiExSys. Wild animal crash patterns were determined through modeling produced/revised in May, 2014 by DiExSys ™. Map produced in ESRI ArcMap 10.2 ©. Land jurisdiction and highway information provided by MDT Hillshade provided by USGS. 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".

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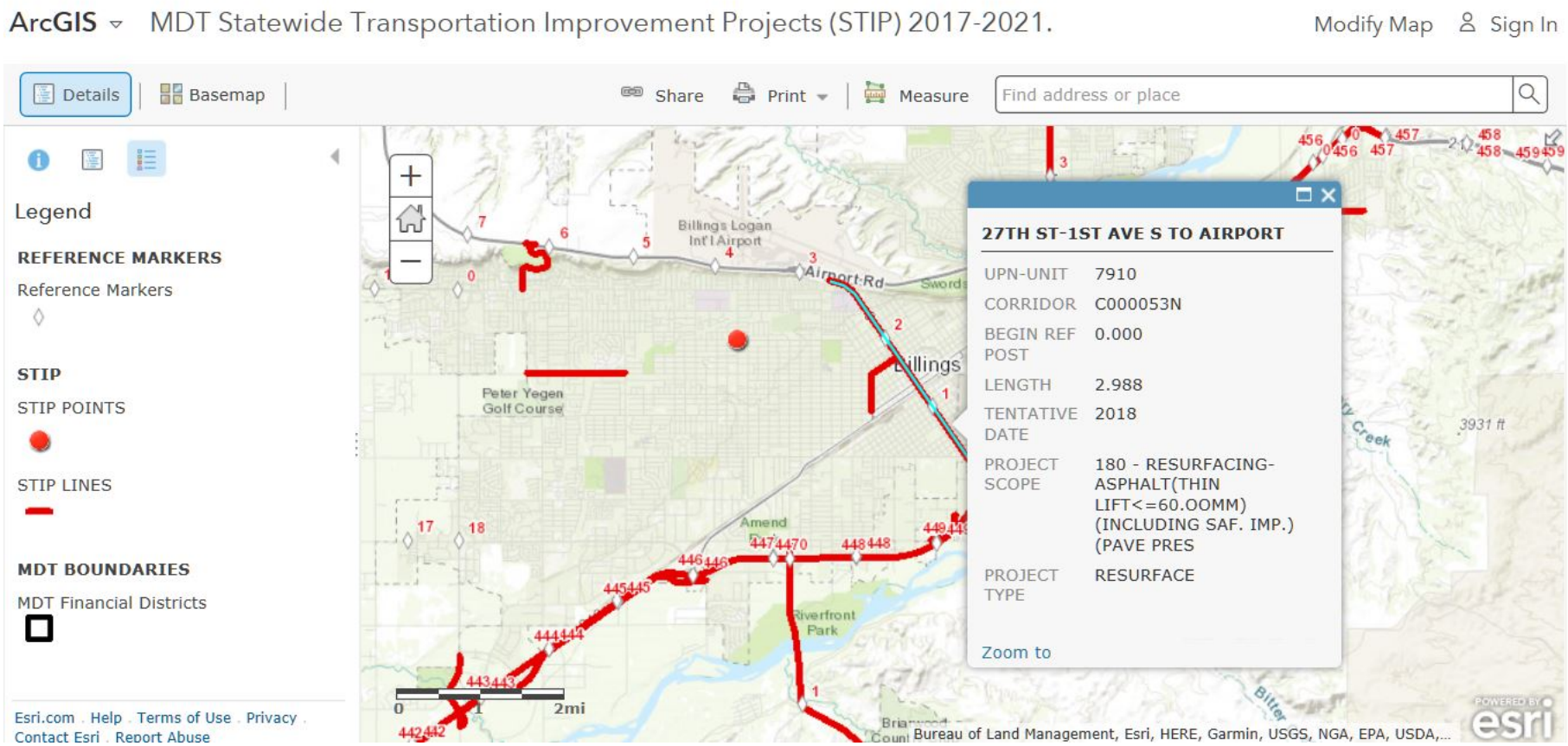
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Interactive STIP Map



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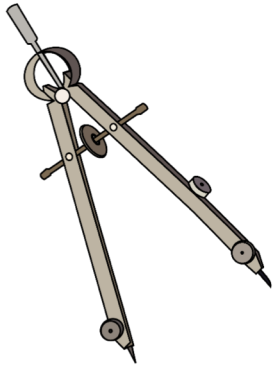
STIP Project



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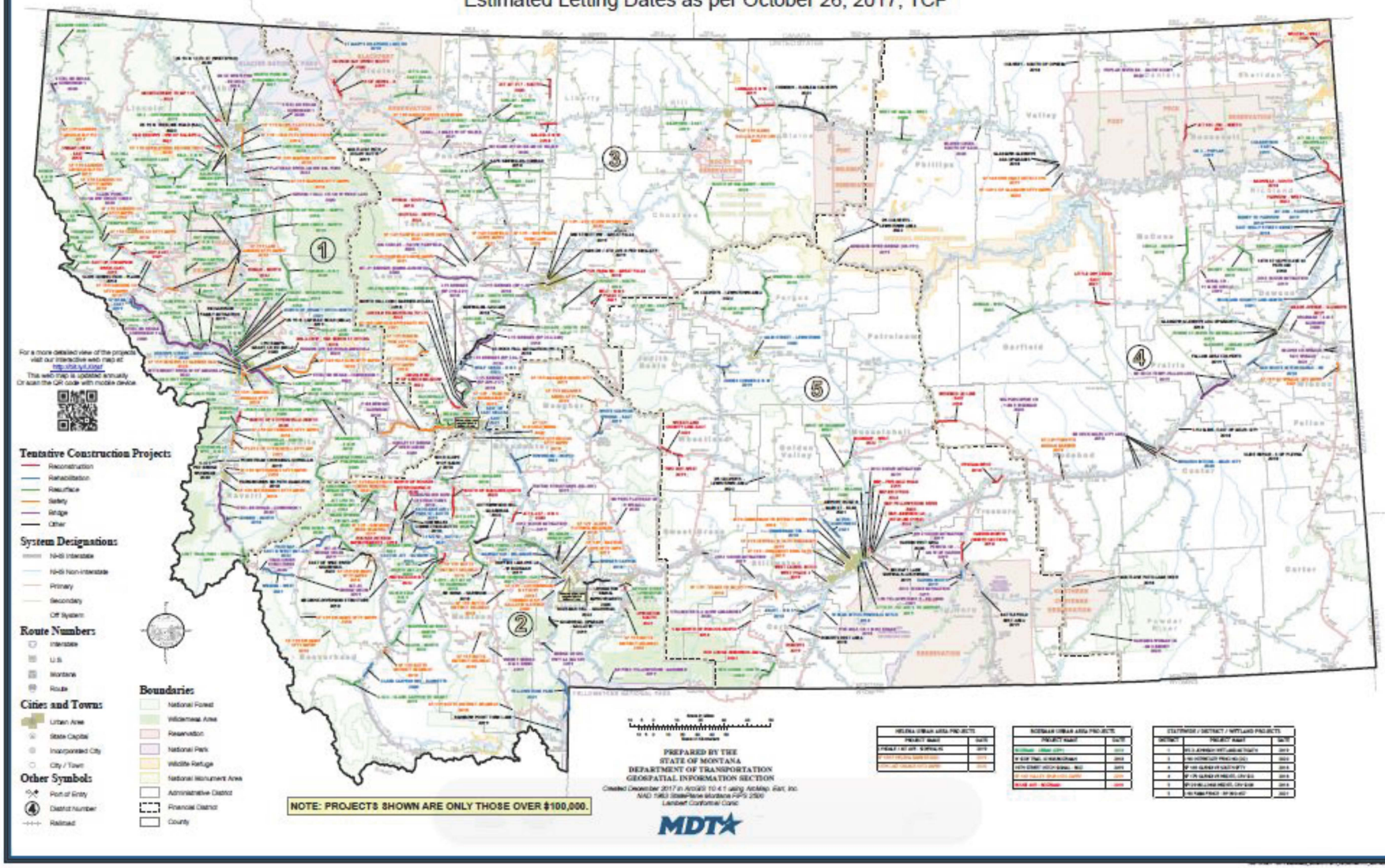
The Life of an MDT Project





FEDERAL & STATE TENTATIVE CONSTRUCTION PROJECTS 2018 - 2022

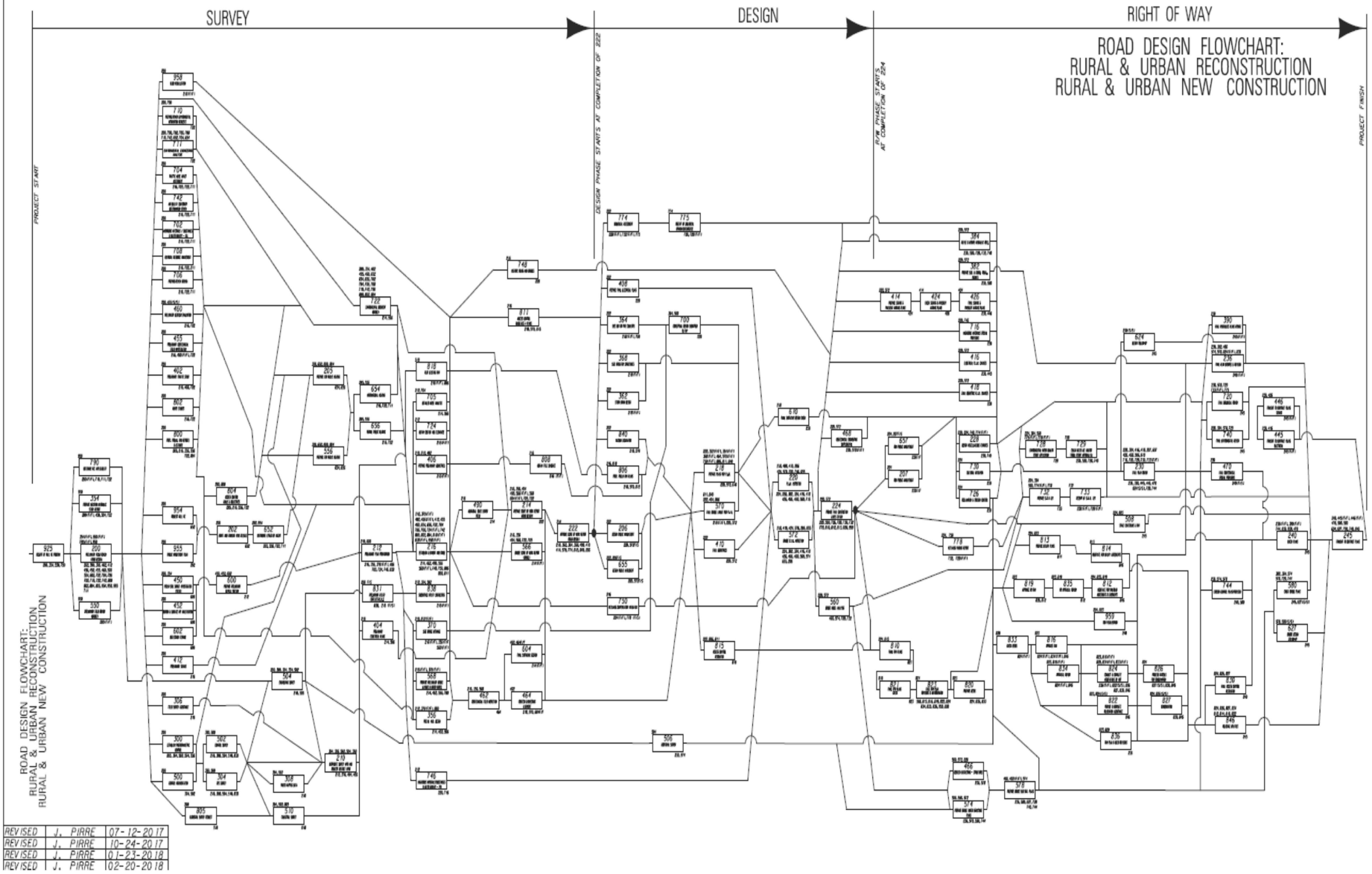
Estimated Letting Dates as per October 26, 2017, TCP



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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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The Life of an MDT Project

Planning → Nomination → Design → **Construction** → Maintenance





Fox Farm Road project, 2018

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The Life of an MDT Project





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

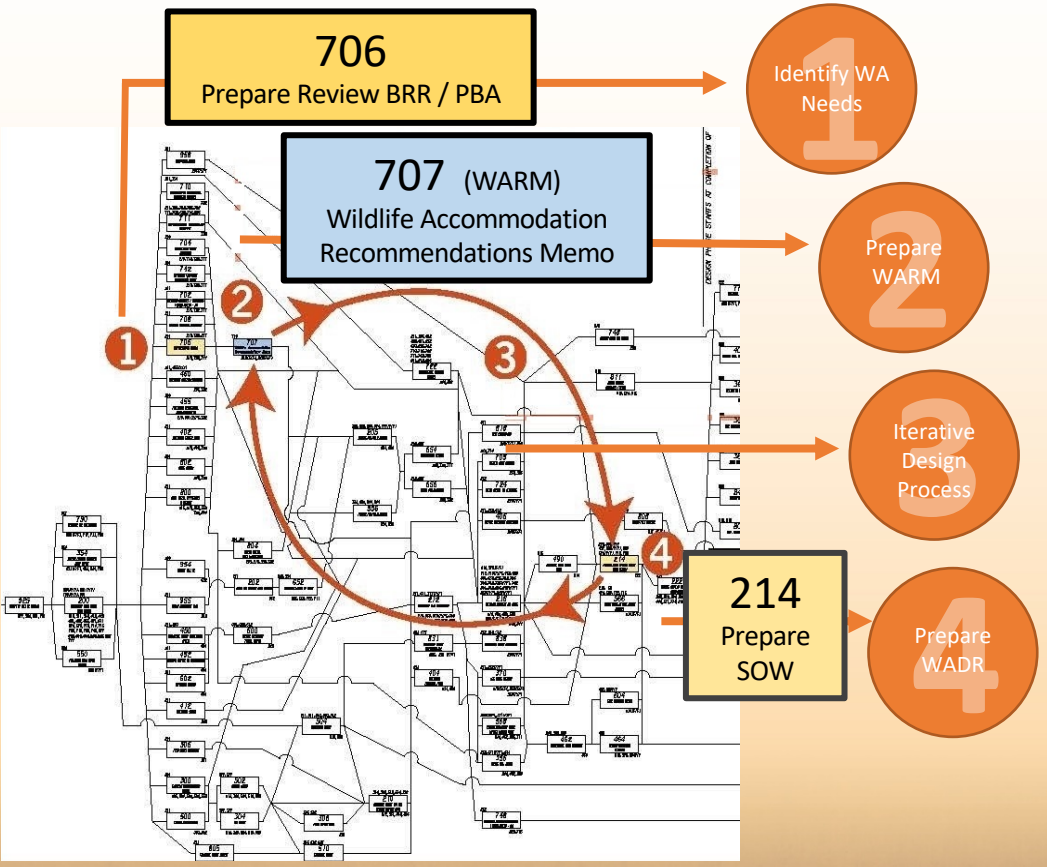
- Feature or a Strategy
- Designed and implemented into a transportation facility to moderate the effects of the infrastructure on wildlife and their habitat.







Wildlife Accommodations Process



Identify WA Needs

Prepare WARM

Iterative Design Process

Prepare WADR

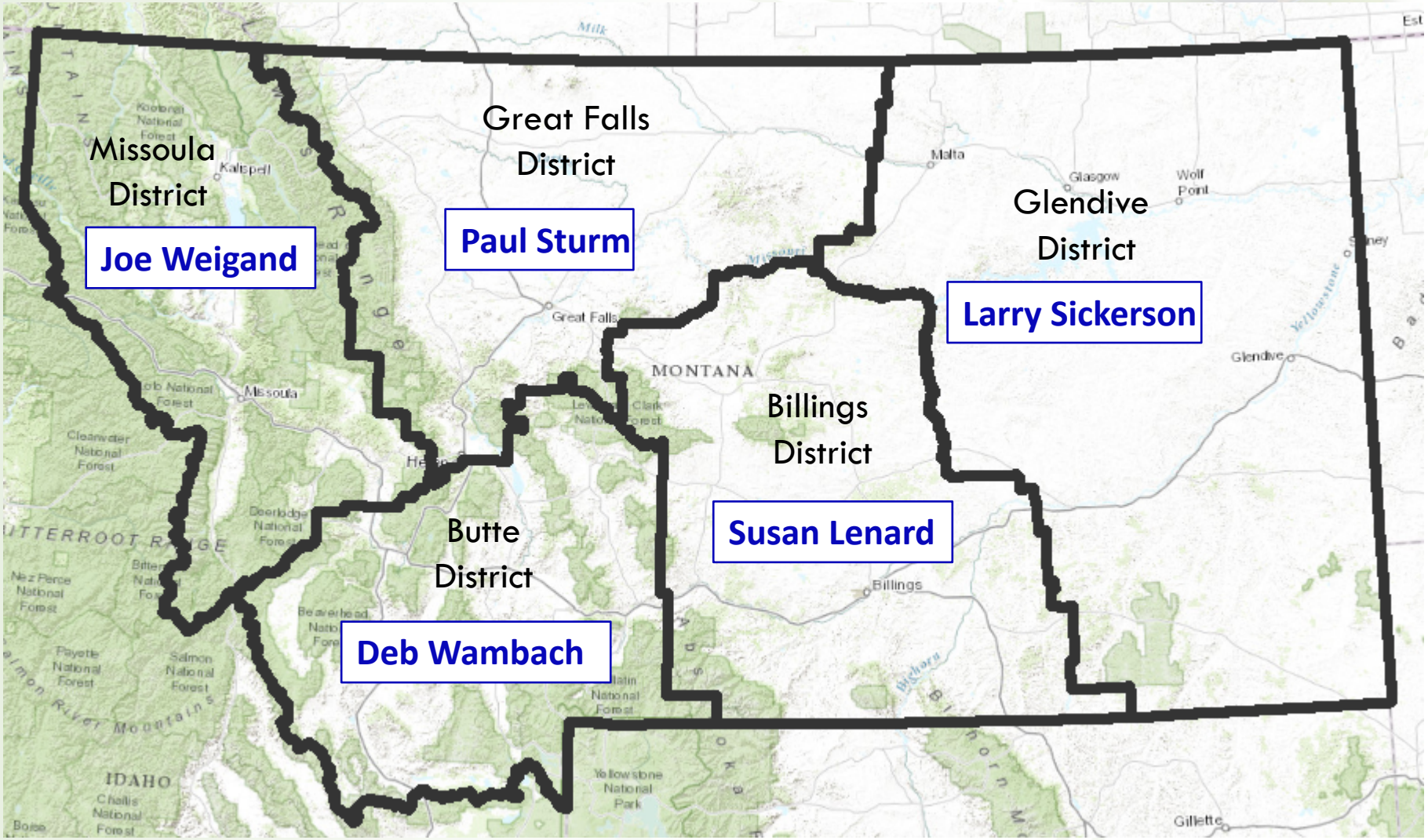
1. NEEDS
2. RECOMMENDATIONS
3. ITERATIVE EVALUATION
4. DECISION

Changes to Existing Activity

New Activity

https://www.mdt.mt.gov/research/projects/env/wap.shtml

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

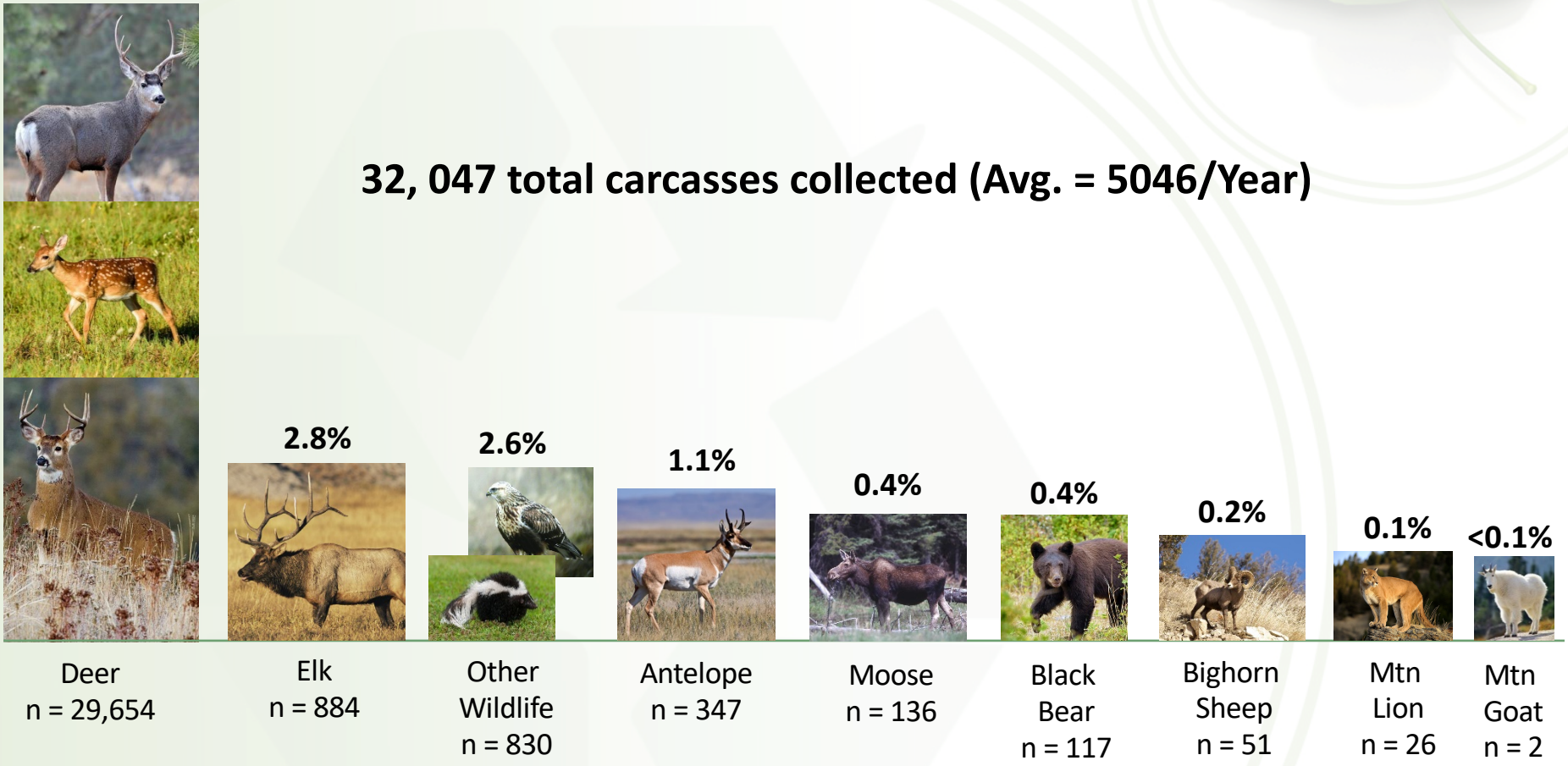
- Biennial MDT/FWP Regional Meetings
  - Next one February 2019
  - ArcGIS Online Collaboration tool
- MDT/FWP Biologist coordinate on project by project basis
  - FWP Wildlife Biologists
  - FWP Bear Management Specialists
  - FWP Non-game Biologists
- Biologist field visits, call, email, etc.
- Montana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

MDT Wildlife Data

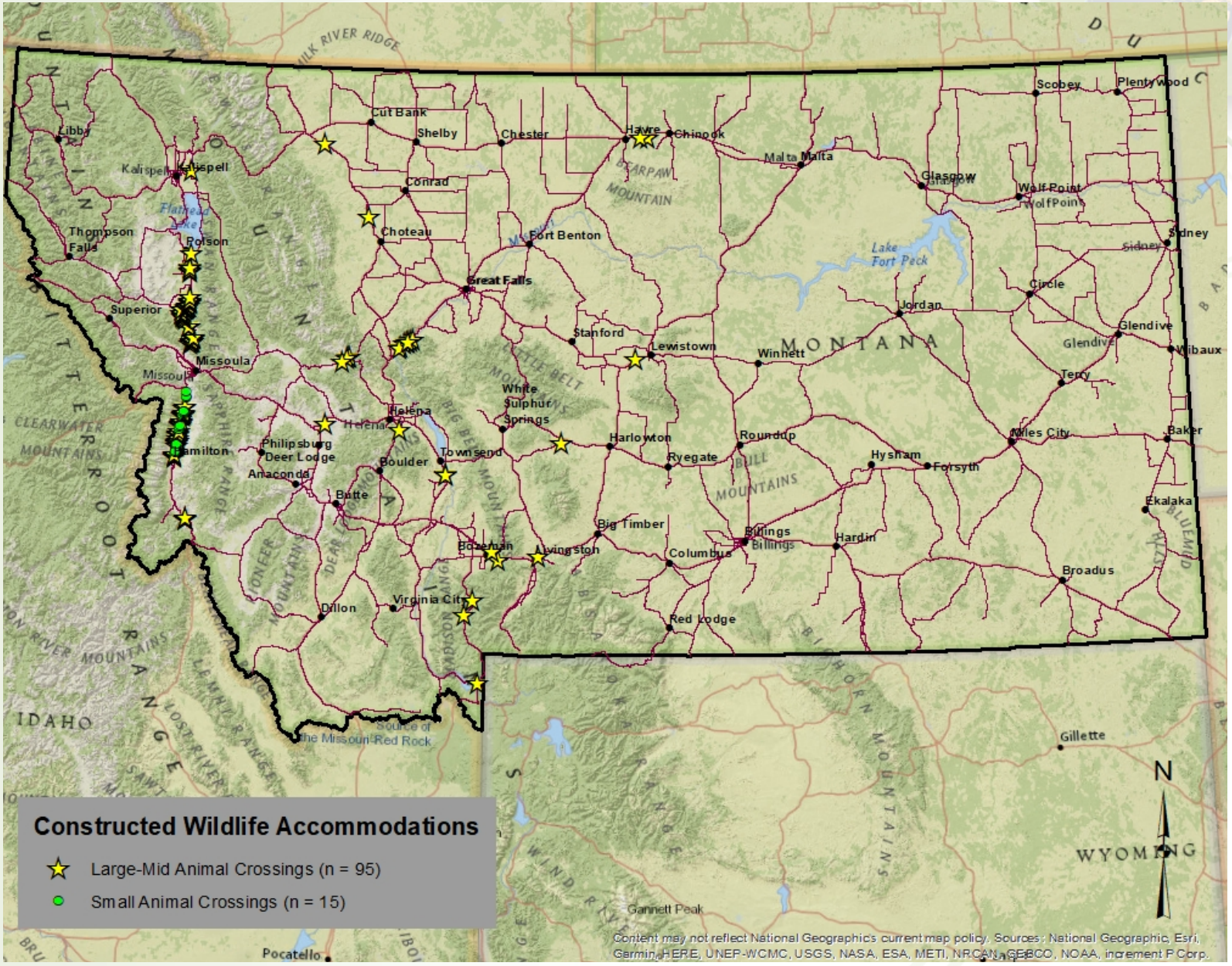
- Collision Data from the MHP
- Carcass Data from MDT Maintenance
- Other sources: (primarily mapping data)
  - FWP
  - USFWS
  - BLM
  - DNRC
  - Tribal
  - Heritage Program/NRIS
  - What else is out there?! Let talk about it.

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

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

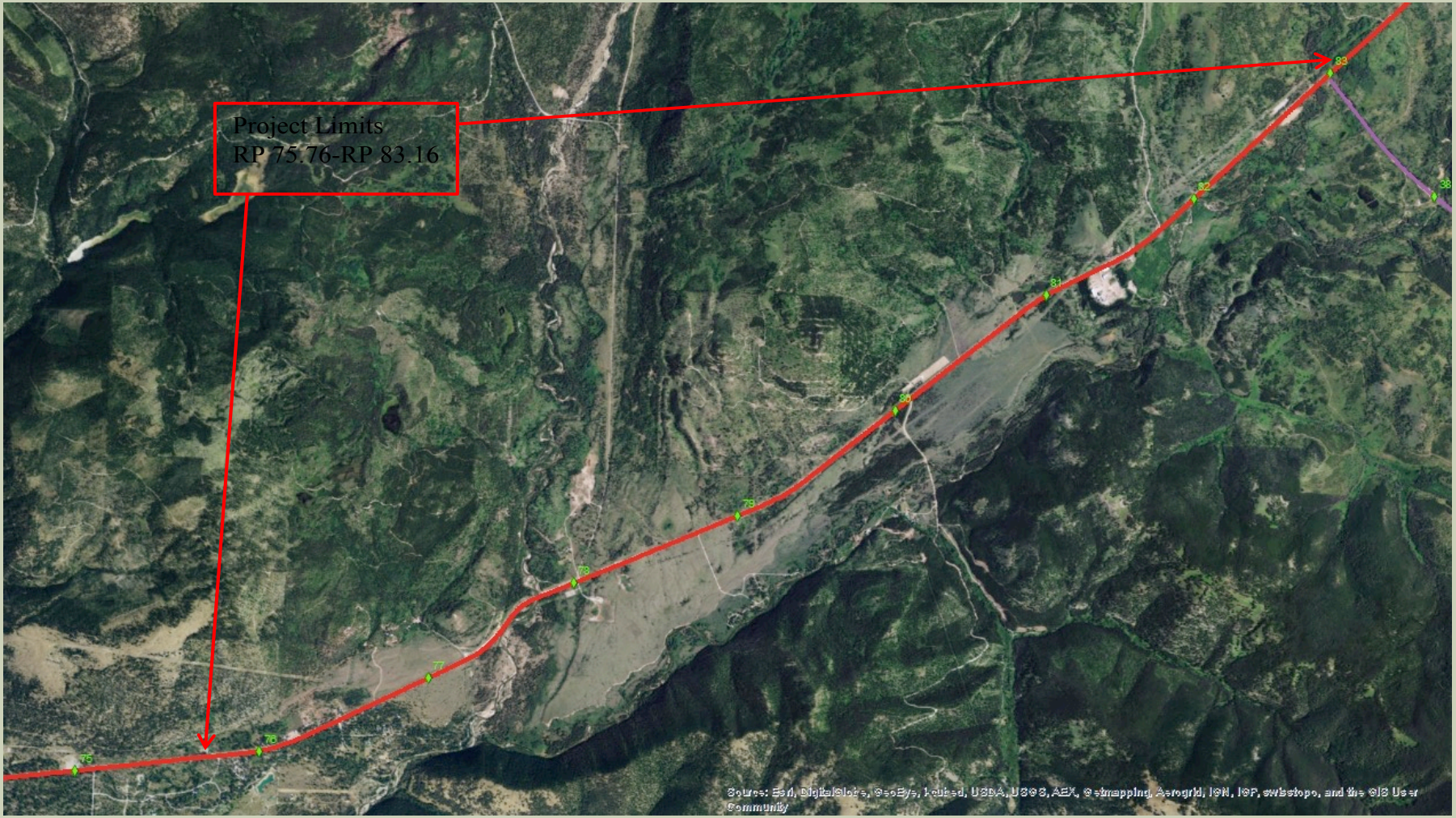


Statewide Crossings



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



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



CAMERAS USED FOR ADAPTIVE MANAGEMENT



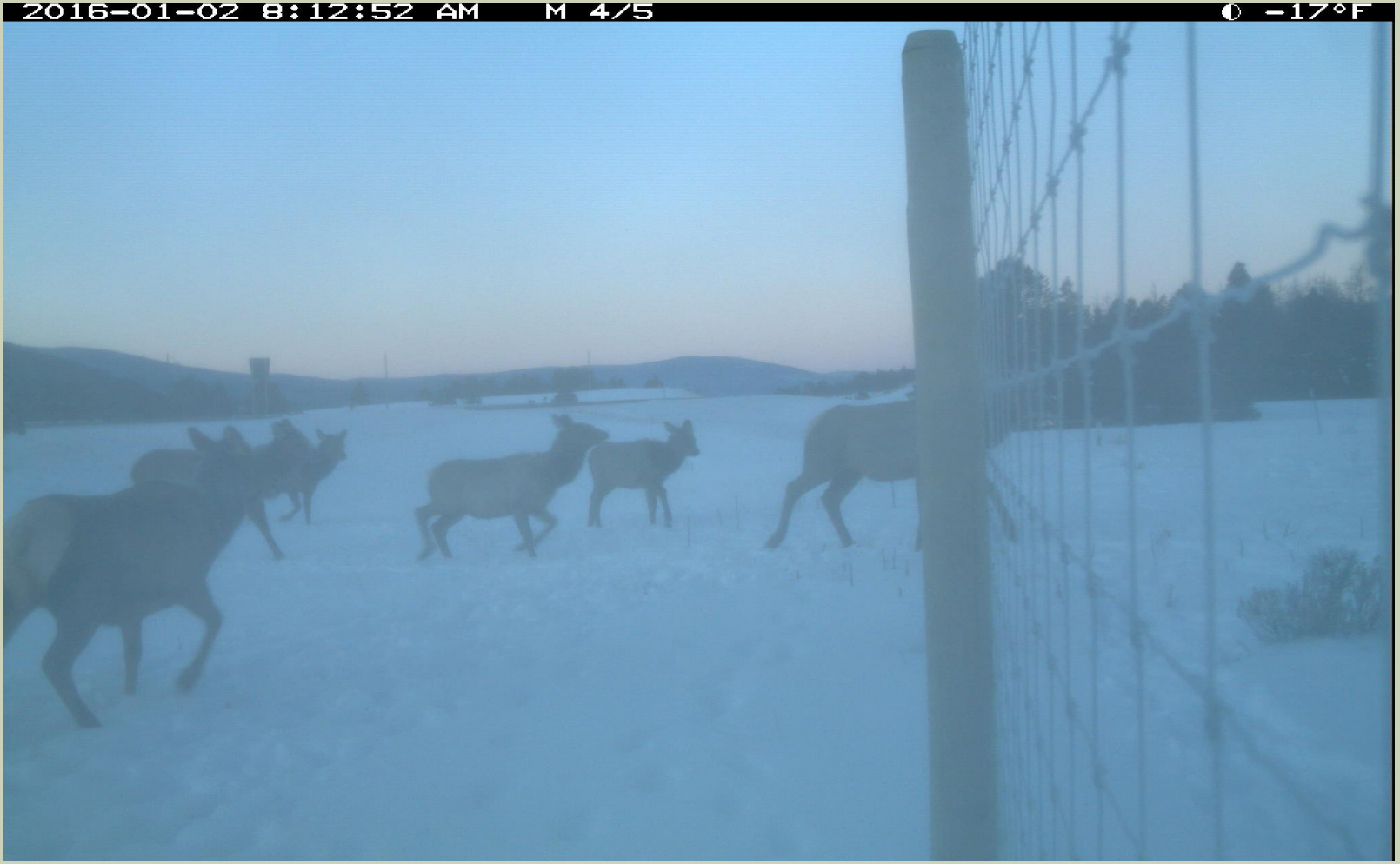
TYPICAL JUMPOUT



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


2015-12-27 6:56:12 AM M 1/10 3°F
Paul Sturm, Great Falls District Biologist
406-444-9438
psturm@mt.gov
PC800 PROFESSIONAL
RECONYX

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