MONTANA WILDLIFE AND TRANSPORTATION

DATA AND INFORMATION WORK GROUP

Meeting Notes

June 26, 2020

Purpose: To get to know each other and develop goals and objectives to meet the broader direction provided by the Montana Wildlife and Transportation Steering Committee (SC), which includes identifying data and information needed to make decisions about wildlife and transportation, inventorying existing data, and identifying data gaps.

Objectives:

- Understand the direction from the steering committee
- Develop more detailed goals and objectives for the work group
- Generate ideas and content for a work plan

Attendees:

- D&I Work Group: Paul Sturm (MDT- psturm@mdt.gov); Gabe Priebe (MDT- gpriebe@mdt.gov); Brian Andersen (MDT- brandersen@mt.gov); Liz Fairbank (MSWP- liz@largelandscapes.org); Joshua Theurer (MSWP – joshua@adventurescientists.org); Andrew Jakes (MSWP- jakesa@nwf.org); Justin Gude (FWP- jgude@mt.gov); Adam Messer (FWP- amesser@mt.gov);

- Planning and Implementation Team (PIT Crew): Deb Wambach (MDT- dwambach@mt.gov); Renee Lemon (FWP- rlemon@mt.gov); Nick Clarke (MSWP- nick@y2y.net); Laramie Maxwell (MSWP- laramie@largelandscapes.org); Hannah Jaicks (MSWP- hannah@future-west.org)

Agenda:

1. **Introduction**
    a. **Work group members introduced themselves and answered the following questions:**
        - When you think about wildlife and transportation, what do you care about most?
        - What do you bring to the Data and Information Work Group that will contribute to the success of this effort?
    b. **Members have a breadth of experience and networks of working relationships, different perspectives, and areas of commonality. Main themes included:**
        - addressing human safety and wildlife mortality
        - preserving wildlife movements and conserving wildlife populations
        - functional connectivity including a holistic view of the transportation network in the context of the larger landscape
        - collaborating and connecting to local communities
        - improving processes for transportation project-level accommodations
        - informing decisions about larger collaborative priorities and projects
        - identifying data needed to inform decisions and helping people do their jobs
        - creating mechanisms for data sharing

2. **Purpose and need for the Data and Information Work Group**
    a. **Wildlife and Transportation Summit Report (Theme 4 / Recommendation 4A – See Appendix)**
    b. **Direction from the Steering Committee**
        - The SC developed a 2020 Work Plan, which includes two specific action items relevant to the Data and Information Work Group:
            - Priority 1 (3rd quarter 2020) - Appoint members to a data and information work group. Provide direction for the work group, such as identifying data and information needed to make decisions about wildlife and transportation, existing data, and data gaps. The work group could also explore a mechanism for data and information sharing, as well as guidance for how analysis products should be used, managed, and made available.
            - Priority 3 (beyond 2020) -Determine an overall approach and next steps to Recommendation 4B, which is to develop statewide guidance that establishes consistency in identifying priorities at the local, regional, and district levels. After the SC has developed an overall approach, the SC may initiate prioritization work with the data and information work group.
    c. **Discussion**
        - The PIT Crew explained one of the main purposes of the summit was to align efforts between the agencies and non-governmental organizations, develop a common place of understanding, and build shared priorities. The agencies have limited capacity and resources and stakeholders have different missions and priorities so coordinated public engagement around wildlife and transportation is critical to implementing projects and securing long-term success.
        - The PIT Crew also noted the SC provided broad direction, so the Data and Information Work Group has latitude to chart their own course based on their expertise and experience.

3. **Draft goals and objectives for the Data and Information Work Group**
    a. **In the next 3-6 months, what is the critical work this group must do to help with decision-making about wildlife and transportation in Montana?**
        - Develop data standards and ways to disseminate the data
            - Develop standards for data, identify existing data and data gaps, figure out how to collect data to fill those gaps
            - Determine data that informs priority areas and think holistically about the landscape at a broad scale, not just the highway
            - Think about data sharing with each other, stakeholders, and how to share data with the public
        - Identify locations where there are needs for projects. Consider conflict areas and/or areas where there is a need based on wildlife connectivity.
        - Identify priority areas for wildlife accommodations. To start, the work group should develop objectives that define how those wildlife accommodations will be prioritized. There are various considerations we have to be explicit about. Develop a conceptual framework around those objectives that define what we want to accomplish. Identify how we will use data to inform and achieve those

objectives. That will determine what data we need and how we will use those data. Here are the steps:

    - Develop objectives for how wildlife accommodations will be prioritized (e.g., wildlife movement goals, human safety goals, long-term goals that consider human development, increased traffic, and climate change). Not all wildlife accommodations or projects will necessarily meet all these goals in one location. The objectives are not necessarily mutually inclusive or exclusive. This may depend on characteristics like rarity of the species, size of the animal related to chance for serious human injury or fatality, community support, land protections, etc.
    - Each of those objectives will have a conceptual framework to define it. What does it mean to achieve that wildlife movement goal, and how do we measure it? How we measure each objective will define what kind of data we need.
    - The third step is then defining which data layers will help with the measurement. Then we can identify what data layers we do or don't have to measure our objective. We have some wildlife data in some areas but not others, so this is a chance to clarify what data we do or don't have and where.
    - The work group can develop a work plan using the three steps outlined above.
- Figure out what kind of data is necessary for decision-making. A lot of factors come into play- spatial, temporal data sets, vulnerability over time
- Compile existing data and begin figure out what kind of products we want to share and with whom. This informs what the data sharing platform should look like.
- We could do a lot of this concurrently because there is a big enough team. We could clarify what data each entity has. We each may have data that others don't know we have or don't even know they want or need. It is still important to develop a "data dictionary" that includes what data we all have as well as data accuracy, our confidence level in that data, and any gaps. The group could develop one place to store data, which could be a reference.
- Identify the technology available to us and who is responsible for that technology. Identify roles and responsibilities. For example, if there is an application developed, we should determine who is responsible for ownership and management. It should be easy to maintain to be considerate of everyone's capacity.
- Identify the are target audience(s) and consider different products and platforms for different audiences.
- Increase information sharing within and across the agencies to streamline the process for project level decisions. MDT biologists make recommendations on transportation projects. This work group could improve the process for information sharing to support these recommendations at the project level. Consider ways the big picture information this group is working on can also inform MDT project nomination and wildlife accommodation recommendations at the project level.

- There is liability with using crash data. MDT is careful about what crash information is shared and with whom. MDT wants to share these data but has a responsibility to share data in a way that does not compromise the Safety Program or privacy concerns. This work group could talk through this constraint and develop potential solutions. For example, the work group could determine which crash data fields are relevant to this effort and understand the limitations. In some cases, not all fields are identified. The data is more likely to note a moose or elk since the crash was likely more severe. If a small animal like a rare fox was hit, it may not be noted in the crash data, but it may be important from a conservation perspective. The privacy and liability concerns around crash data is a good example of challenges to be addressed in data sharing and determining the appropriate products and platforms for various audiences.
- Should the work group have a goal to recommend wildlife accommodation type based on the characteristics of an area?
    - Makes sense because there are ecological, social, political, structural, temporal factors that need to be considered, and this work group can help with that.
    - There was hesitation about whether FWP or NGOs should recommend a particular type of wildlife accommodation. It could expose MDT to liability if recommendations are not implemented due to various constraints. There are many considerations that influence the feasibility of implementing a particular accommodation strategy at a particular location: engineering constraints, right-of-way, roadway geometrics, topography, public support, the "fit" and end-treatments, traffic, speed, funding, operations and maintenance, to name a few. The engineering considerations and design elements are critical and it's best to leave engineering to the engineers. The work group's approach would be more effective as a collaborative process that puts forth expectations, needs, and recommendations. Then a multi-disciplinary team can work on the design, feasibility, funding, etc. There are and will be cases when the ideal solution simply won't be feasible. It's best to identify the needs in this process and determine the feasibility of the appropriate accommodation later. This makes the case for why the work group's efforts are essential, because their approach can be more collaborative which can be used to inform recommendations for each project, and for the big picture collaborative projects, rather than anything project specific.
    - Where are the wildlife needs and what are those as they relate to the transportation sector (conflict/movement/both/other)? Consider how development of prioritization or answering this question may hamper or negatively influence other efforts. For example, if a highway project does not fall into a "priority area", does that mean that no wildlife accommodations should be considered with that project? Similar to designating big game corridors on a map – if an area is not on a map, does that mean its fair game for development? What, if any, limitations to this effort need to be identified?

- How might this framework/process inform decisions at the project level as well as at the broader scale? From the wildlife perspective, gaining information on where those problems are (collars, etc.) and then finding out what the best shared solutions are for everyone will be important.
- A data compiling and listing effort (e.g., data dictionary) could occur concurrently with developing objectives. MDT could make a list of available data, FWP could create the objectives, and then the group as a whole could flesh that out.
- What should that look like? A listing of everything that is available. Actively define how data is used, interpreted, and what is available for this group's purposes. A Word document or Excel file would be a good place to start.
- Without letting it become too broad, what are the sideboards? Must go back to the data owners and authoritative source. Could be helpful to have someone outline a template for what this list or database could look like.
- Project Level process versus broader scale process:
    - MDT already has a process in place for the highway project level projects. This is something that seems like it's already in existence but could use additional information and participation from others. Should the work group look at the bigger picture like where are the priority areas, and then the MDT process works on those priorities?
    - Sounds like there's a need to identify even broader geographic data, and then consider project level items from there. That will help inform some of what the Data and Information Work Group will do. There are places where empirical data has gaps, and that's just as important as what data we have—what data we lack will be somewhat geographically distributed, and it will differ for various reasons (MDT maintenance section hasn't reliably entered carcass data for some reason or FWP doesn't have collar data in a particular area).
    - Defining that process at the project level so that all the different districts, regions, and NGOs is important. Coming out of the summit and what the SC is recommending, is that broader picture for wildlife and transportation. Using the GIS specialists, for example, to generate products will help inform how the public will interface with that data and how they can engage with these efforts.
    - What criteria are important for success? What criteria are important for establishing a process for prioritization?

- **The work group did not complete the discussion about goals and objectives, but agreed to the PIT Crew drafting a goal statement based on the discussion for review and editing by the work group. Following were key points summarized at the end of the discussion:**
    - There is interest in defining objectives for prioritizing wildlife accommodations

- There is also interest in creating a list of existing data (e.g., data dictionary)
- Prioritization efforts are still down the road – we are focused on data and information, criteria and objectives, measurement and process, products and platforms – the pieces that will inform and guide a collaborative prioritization process and local/regional start-up efforts
- The work group can talk through solutions to data challenges
- A process element that address the two tracks – broader programmatic and project level
- Working on a data sharing mechanism

4. **Generate ideas for a work plan (did not get to this agenda item)**

5. **Logistics**
    a. **How often does the work group want to meet?**
        - Meet more frequently early on, especially to complete the goals and objectives. Once tasks are identified, the group could meet less frequently, and members could work more independently in between meetings.
        - MDT offered to facilitate discussion at the next meeting around their list of the crash data elements that are currently available. This will include publicly available data and non-publicly available data.
    b. **What's the role and responsibilities of members? (did not get to this agenda item)**
    c. **What's the structure of the work group? (did not get to this agenda item)**
    d. **What's the role and responsibilities of the PIT Crew?**
        - The PIT Crew facilitated this first meeting to enable people to get to know one another and provide initial direction from the SC. The facilitation, note-taking, structure and pace will fall more to the responsibility of work group members.
        - Renee Lemon (FWP) offered to help organize the meetings into the future.
        - The PIT Crew will continue to attend meetings in some capacity and support the work group, as well as serve as liaison between the work group and the SC.

6. **Review and Close**

ACTION ITEMS:

- PIT Crew will provide draft meeting notes for the work group to review, edit, and approve.
- PIT Crew will draft a goal statement for the work group to review, edit, and approve.
- PIT Crew will send out Doodle Poll to schedule next meeting the 2nd or 3rd week of July.
- Work group members should think about a work plan and logistics and bring ideas to the next meeting.

Appendix – Excerpt from Summit Final Report

Theme 4: Priorities, Data Collection, and Information Sharing

Objective: Establish collective priorities (e.g., information needs, projects, geographic areas) and address challenges with data collection, management, use, and sharing.

Recommendation 4A: Compile information at the local, regional, and district level, and identify information gaps. Develop a system to improve information sharing. Ensure all stakeholders are engaged including MDT, FWP, NGOs, and local government.

FWP should lead the wildlife movement and habitat conservation data compilation effort and be responsible for the development of relevant analysis products to be used in prioritization.

MDT should lead the carcass and collision data compilation effort and be responsible for the development of relevant analysis products to be used in prioritization.

NGOs and other stakeholders (e.g. county planners, local government, citizen groups) should identify other information (e.g. models, studies, mapping, land-use plans) to feed into this joint prioritization process.

Recommendation 4B: Develop statewide guidance that establishes consistency in identifying priorities at the local, regional, and district levels. This process should include standard criteria to be evaluated when establishing priorities to address safety and wildlife movement needs.

Recommendation 4C: Establish a collaborative process that originates at the local, regional, and district levels to prioritize information needs and wildlife accommodation projects.

Recommendation 4D: Develop opportunities for stakeholders to provide information for MDT's Wildlife Accommodation Process, which supports delivery of the Statewide Transportation Improvement Program.

Recommendation 4E: Explore additional data collection tools and technology to improve the consistency of carcass reporting. Explore options for citizen science to contribute to carcass reporting.