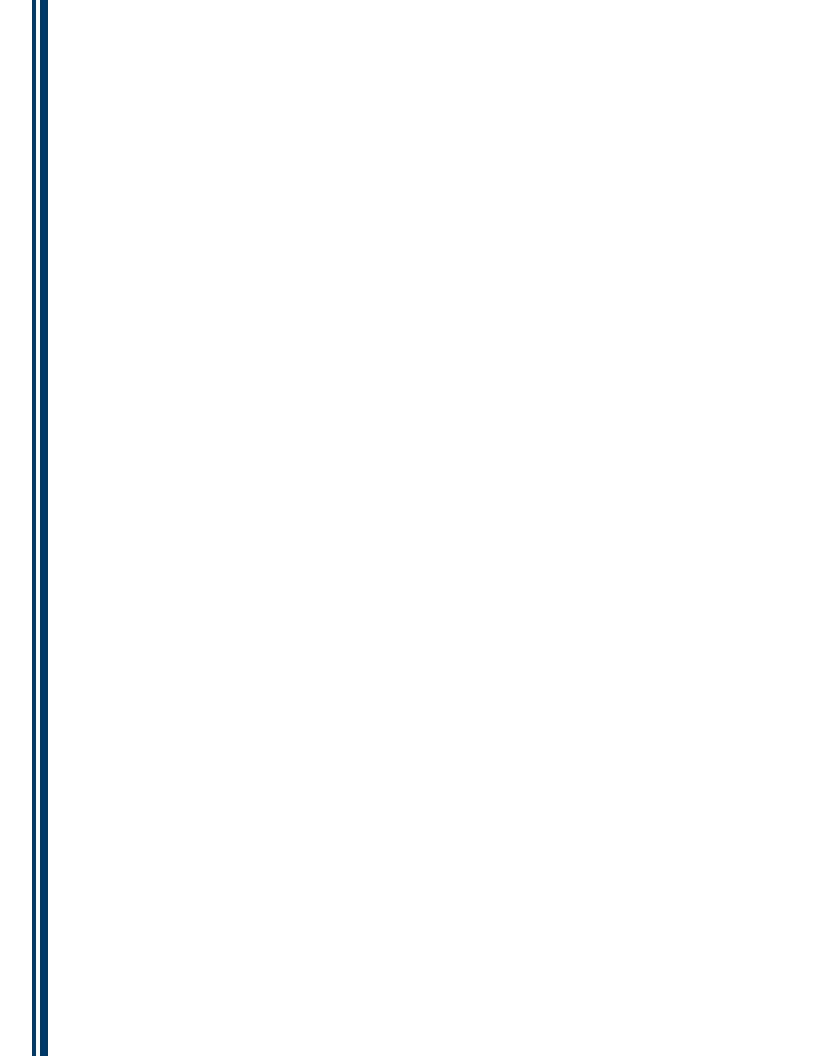


Biennial Report 2019-2020



MONTANA DEPARTMENT OF TRANSPORTATION



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#### Introduction

**TranPlanMT** is Montana's statewide long-range, multimodal plan for preserving and improving Montana's transportation system (<u>https://www.mdt.mt.gov/tranplan/</u>). Originally adopted in 1995 as TranPlan 21 and most recently updated in 2017, this plan is essential for a continuing planning process that guides the Montana Department of Transportation (MDT) decisions and business practices.

Policy goals and strategies are established through data analysis, identification of emerging trends, and an extensive public involvement process to ensure that MDT continues to address customer priorities and directs resources to programs and projects that reflect those priorities. MDT surveys the public and stakeholders every two years

(<u>https://www.mdt.mt.gov/publications/surveys.shtml</u>) to monitor progress toward these goals and identify changing public priorities.

The 2017 update established statewide transportation policy goals in six key areas within the Federally-required 20-year planning horizon. These policy areas are:

- ★ Safety
- ★ System Preservation and Maintenance
- ★ Mobility and Economic Vitality
- Accessibility and Connectivity
- \* Environmental Stewardship
- ★ Business Operations and Management

In addition to meeting the requirements of 23 USC Section 135 and 23 CFR 450, these policy goal areas reflect input from the public, transportation stakeholders, tribal governments, resource agencies, and others.

The policy goals and strategies identified in TranPlanMT provide broad guidance for MDT to manage, operate, improve, and maintain Montana's Transportation system given available resources. Other plans, such as the Montana Freight Plan, Transportation Asset Management Plan, and Statewide Transportation Improvement Program, are based on TranPlanMT and provide more specific information in supporting these goals.

This Biennial Report reflects the achievements of 2019-2020 in support of TranPlanMT goals and identifies future actions that support these goals and MDT's mission. Because TranPlanMT is a 20-year plan, all strategies may not be focused on every biennium, but all goal areas are.

#### Mission

To serve the public by providing a transportation system and services that emphasize quality, safety, cost effectiveness, economic vitality, and sensitivity to the environment.

#### **Strategic Vision**

Unity, Transparency & Effectiveness

### **Moving Montana Forward -- Goals and Strategies**

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

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

Goals and strategies provide broad policy guidance to inform and direct MDT decision-making during the 20-year planning horizon.

- Safety is an overarching goal and is applied in nearly every MDT decision-making process for all projects and programs.
- MDT makes roadway investment decisions by prioritizing (1) system preservation and maintenance, (2) mobility and economic vitality, and (3) accessibility and connectivity.
- Sensitivity to the environment and cost-effective management are underlying goals that inform decisions on a broad, department-wide basis.

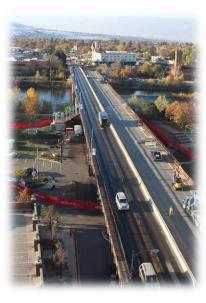




#### Safety



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





#### 2019-2020 Accomplishment, Highlights and Ongoing Activities

- Combined fatalities and serious injuries on Montana roadways in 2019 were 6% lower than in 2018.
- ★ Seat belt usage in the state reached 89% in 2020.
- Started to implement the 2020 Roadway Departure Plan update.
- Updating the Rest Area Implementation plan to include Health Assessment detailed Americans with Disabilities Act (ADA) information.
- Added snowplow dash cameras to provide real-time images for Traveler Information.
- Implemented a 24/7/365 Transportation Management Center (TMC) in the fall of 2020, providing improved communication for the traveling public, EMS providers, and MDT personnel.
- Partnered with Family, Career and Community Leaders of America (FCCLA) for promoting community traffic safety programs through 70 FCCLA middle and high school chapters in Montana.
- ★ Developing an Intersection Safety Plan for implementation.
- Published Guidance for Determining Pedestrian Crossing Treatment at Uncontrolled Locations.
- ★ Continuing traffic signal controller updates.
- Initiated use of higher-grade retroreflective signing and concrete pavement markings.
- Completed the 2020 Comprehensive Highway Safety Plan (CHSP) update, implementation is on-going.
- Continued support of the CHSP Executive Leadership Team, comprised of agency leaders.
- Awarded \$1 million in state fiscal years 2019 and 2020 to rural emergency medical service providers to purchase emergency vehicles and equipment.
- Streamlined the traffic safety grant process for electronic application submission.
- Continuing to improve the collection, management, and analysis of Montana's traffic safety data through the Traffic Records Coordinating Committee.



- Awarded \$705,000 to local law enforcement statewide for increased enforcement of seatbelt and impaired driving laws and \$964,000 to the Montana Highway Patrol for enforcement and related activities in federal fiscal year 2019. In 2020, local law enforcement was awarded \$702,000 and the Montana Highway Patrol received \$1.3 million for Occupant Protection and Impaired Driving programs and enforcement efforts.
- Installed centerline rumble strips throughout the state to address road departure and cross centerline crashes.
- Made 2016 to 2020 detailed statewide crash and carcass collection information available to the public via the MDT internet site.
- Completed the Montana Pedestrian and Bicycle Plan in 2019. The Plan outlines six strategies to reduce pedestrian and bicycle fatalities and serious injuries in support of Vision Zero.
- Continued ongoing community engagement efforts focusing on pedestrian and bicycle safety, including distribution of safety materials and literature, and increased public outreach.
- Provided \$5.65 million in combined loans and grants for statewide airport safety improvement projects.



#### 2021-2022 Safety Focus Areas

- The 2020 CHSP update included the addition of the Emergency Response-After-Crash Care Emphasis Area that includes the objective to reduce the morbidity and mortality of Montana motor vehicle crash victim. Strategies include promoting education of Traffic Incident Management System (TIMS) and awareness of Montana's Move Over law.
- Continue work on the new traveler information system to provide more accurate and timely information to the traveling public.
- Continue MDT's Partnership with Federal, Local and State agencies to expand the TIMS Programs.
- Work to develop lighting safety upgrades for our snow removal equipment.
- Work with the department's new Intelligent Transportation Systems architecture to deploy new systems focused-on safety.
- Implement the Intersection Safety Plan.
- Implement results of study for High Tension Cable Rail for interstate medians.
- Update the Roadway Departure Plan.
- Development of highway-rail grade crossing State Action Plan (SAP).
- Update the ADA Transition Plan in 2021.
- Implement the Rest Area Plan.
- Foster, promote, and supervise aviation and aviation safety coordinated through educational efforts and programs; register aircraft and pilots in accordance with Montana laws and Federal Aviation Administration (FAA) regulations; and coordinate and supervise aerial search and rescue operations.
- Implement a statewide webcam system to make images of near-real-time weather available to pilots to assist with their weather-related decision making.

Additional focus areas may be added throughout the biennium.



### Safety (S) Strategies

#### S1: Maintain infrastructure condition to provide safe conditions for the traveling public.

Upgrading and maintaining transportation infrastructure to enhance safety is a key component to improving traveler safety. MDT identifies safety issues and prioritizes safety improvements within available funding.

### S2: Continue improvements to the Safety Rest Area Program to provide safe stopping locations for the traveling public.

Traveler safety is a top MDT priority. MDT recognizes rest areas provide important safety functions, allowing drivers to stop, rest, and potentially avoid fatigued, drowsy, or distracted driving and hazardous roadside parking. MDT is committed to providing safe opportunities for resting adjacent to Montana's highways, and MDT encourages travelers to use all rest area services and amenities to provide respite from driving.

#### S3: Target safety improvement projects to address crash pattern locations.

An effective method to reduce fatalities and serious injuries is to focus prevention efforts in areas and locations with the highest and most severe occurrences. MDT has developed models that estimate normal expected crash frequency and severity for a range of traffic volumes among similar facilities. Using these models, MDT can compare actual safety performance against anticipated performance to identify locations with the highest degree of deviation. These spots typically represent the highest potential for crash reduction. MDT also uses pattern recognition techniques to identify abnormal crash patterns and target crash factors associated with severe injuries. MDT uses this information to identify cost-effective transportation improvements in support of the CHSP

#### S4: Incorporate technology advancements in project development to improve safety.

New technologies have the potential to improve safety performance on Montana roadways. MDT encourages innovation in design projects to deliver safety benefits to roadway users. Improvements in roadside safety hardware, pavement technology, vehicle to vehicle (V2V) and vehicle to infrastructure (V2I) communication, and traffic control measures can help combat driver distraction, roadway departure, and other common crash factors.

# S5: Leverage relationships with education, enforcement, emergency medical services, and engineering partners to foster a culture of safety on Montana roadways.

Behavioral factors significantly contribute to roadway safety issues in Montana. We know that crashes occur even on roadways designed to the most current safety standards and guidelines. With the understanding that engineering alone is not sufficient to eliminate severe crashes, MDT works with safety partners representing education, enforcement, and emergency medical services groups throughout the state. These partnerships enable a comprehensive approach to align goals and leverage resources in the common pursuit to save lives and prevent injuries.

### S6: Reduce unsafe driving behavior through targeted focus on transportation safety emphasis areas identified in Montana's Comprehensive Highway Safety Plan.

The CHSP provides a framework to engage Montana road users and traffic safety advocates to eliminate fatalities and serious injuries on Montana's roads. Through the CHSP development process, MDT reviewed crash data to identify critical crash factors that may have the biggest influence on reducing crash frequency or severity. In implementing the CHSP, MDT and safety partners throughout the state will focus on key transportation safety emphasis areas to address the most significant safety problems on Montana roadways.

#### S7: Enhance crash data integration and analysis to support decision making and datadriven problem identification.

MDT recognizes that accurate, complete information is key to making sounds decisions. MDT works with local, state, and federal partners to gather safety data to better understand crash trends. Focusing on data collection and analysis enables MDT to identify the top safety issues in Montana and cost-effectively target resources to save lives.

# S8: Provide leadership in air traveler safety through promotion of flight safety, accident prevention, and air search and rescue programs.

MDT oversees public airports and airways in Montana and assures adherence to federal safety regulations developed by the FAA. MDT provides local supervision, education, and technical assistance to the aviation community in an effort to promote safety in aeronautics.

#### System Preservation and Maintenance



Preserve and maintain existing transportation infrastructure.





### 2019-2020 Accomplishments, Highlights, and Ongoing Activities

- Implementation of the Transportation Asset Management Plan (TAMP) is on-going with annual consistency determinations received from FHWA.
- Established Guidelines for Nomination and Development of Pavement Projects and updated related Joint Agreement with the Federal Highway Administration (FHWA).
- Created Route Segment Plan map for highway system shoulder widths.
- Documented and formalized process for selecting Maintenance Division preservation projects.
- Utilizing the Maintenance Management System (MMS) and Equipment Vehicle Management System (EVMS) to make data-based decisions on maintenance activities.
- Developed and implementing Group Transit Capital Management Plan (TCMP).
- Completed record number of bridge deck rehabilitation projects based on maximizing the square footage of bridge condition improvements.
- Provided \$5.65 million in combined loans and grants for statewide airport safety improvement projects.
- Developed project nomination policy and procedures to enhance consistency of MDT District nominations with department plans, policies, and procedures.
- Submitted the mid-term performance report documenting MDT's evaluation of progress toward meeting our National Goal Performance Targets and confirmed our targets for NHS pavements and bridges for the full performance period (2022).
- Initiated upgrades to Pavement and Bridge Management systems to improve analytical capabilities of these management systems.
- Initiated research projects to enhance construction processes for MDT bridges in order to improve initial and future performance.

#### 2021-2022 System Preservation and Maintenance Focus Areas

- Continue to advance cost-effective bridge projects that align with MDT's Performance Programming Process (Px3) and Transportation Asset Management Plan (TAMP) strategies.
- Continue to use the Maintenance Management System and Equipment Vehicle Management System to make data-based decisions to ensure the right treatment at the right time.
- Continue to use the Maintenance Quality Assurance Program to ensure a B+ rating or better on regulatory signs statewide.
- Continue to update the Maintenance Management System and the Equipment Vehicle Management System to take advantage of state-of-the-art advances in those systems.
- Continue to meet performance goals for NHS bridges and pavements.
- Continue to remain in compliance with all federal requirements associated with Transportation Asset Management Plans. Implement TAMP consistent with federal rules.
- Update TAMP consistent with federal rules.
- Utilization of new and updated pavement data collection equipment to include LIDAR capabilities to further support asset management decisions.
- Continue upgrades and implementation of Pavement and Bridge Management Systems.
- Advance use of the new Linear Referencing System (LRS).
- Complete upgrade and implementation efforts for the new Program & Project Management System (PPMS).
- Initiated the Statewide Bridge Load Rating and Posting program to help MDT safeguard bridge longevity and protect public safety.
- Developing Bridge Rehabilitation and Preservation projects intended to costeffectively extend the useful life of bridges in good to fair condition.
- Provide outreach to new airport managers and owners to share available state/federal assistance and best practices for managing community airports.

Additional focus areas may be added throughout the biennium.

#### System Preservation and Maintenance (SPM) Strategies

#### SPM1: Employ an asset management approach to monitor infrastructure performance and develop an optimal investment plan ensuring like conditions throughout the state.

MDT is committed to managing transportation assets in a cost-effective manner to meet the needs of the traveling public. Using Px3 and other asset management methods, MDT regularly collects and assesses inventory, condition, and performance data; identifies needs; and makes fiscally responsible investment decisions to best maintain the transportation system.

## SPM2: Provide the right improvements at the right time to manage infrastructure assets using cost-effective strategies.

In contrast to a "worst first" philosophy, MDT focuses on preventive and rehabilitation efforts to costeffectively manage existing infrastructure and avoid expensive deferred maintenance. This approach enables prudent use of taxpayer funds by slowing deterioration rates and extending the life of infrastructure assets.

# SPM3: Design new facilities for durability and longer life cycles using state-of-the-art materials and methods.

MDT incorporates innovative solutions to improve the long-term performance of transportation assets. Through its focus on high-quality materials and advanced methods, MDT continually aims to improve system resilience and life span.

### SMP4: Support preservation of the existing rail, transit, and aviation systems in coordination with industry partners.

Rail, transit, and aviation facilities are a critical component of Montana's transportation system. MDT coordinates regularly with transportation partners to identify opportunities and support efforts to preserve existing assets.

#### SPM5: Perform routine repairs and maintenance to provide consistent levels of service.

Conducting routine maintenance activities is a cost-effective approach to extend the useful life of transportation infrastructure. These efforts reduce long-term life cycle costs and improve safety. MDT will continue to implement routine maintenance and repairs as needed to ensure reliable system performance.

#### Mobility and Economic Vitality



Facilitate the movement of people and goods recognizing the importance of economic vitality.





### 2019-2020 Accomplishments, Highlights, and Ongoing Activities

- ★ Established Level of Service Maintenance Guidelines.
- Supporting local efforts for long range plans, coordinated planning, travel demand modeling, and urban pavement preservation.
- Continued participation in the Great Northern Corridor Coalition.
- Deployed an integrated Automated Routing System enhancing and streamlining the oversize and overweight permitting system.
- ★ Continued to automate services for commercial motor carriers.
- Established Connected and Autonomous Vehicles Working Group.
- ★ Completed first Montana Pedestrian and Bicycle Plan.
- Completed several standalone ADA projects on state facilities to address identified deficiencies.
- Maintaining ongoing dialogue with congressional delegation regarding Essential Air Service (EAS) and Amtrak Service.
- Completed I-90 study to mitigate impacts of Livingston area weather-related interstate closures. In 2020, a project was nominated to implement all recommendations (aside from capital construction recommendations.).
- Participated in Montana Emergency Response Framework update.
- Upgrading fishing accesses when impacted by MDT projects.
- Providing tourist information at rest areas, through MDT Travel Information, and with highway and bike maps.
- Coordinated use of public transportation systems through integrated planning with providers.
- Expanding number of TowPlows in fleet and practicing just-in-time deicing.
- Established performance objectives for travel time and freight reliability consistent with federal guidelines. Successfully submitted performance information to FHWA via reporting tool. Implemented a statewide rural transportation management center with 24/7/365 coverage.

### 2021-2022 Mobility and Economic Vitality Focus Areas

- Continue use of the Maintenance Operations Reporting Tool to ensure the right treatment at the right time for snow and ice control. maintenance.
- Use focused Intelligent Transportation Systems (ITS) on corridors to ensure the safe and consistent flow of traffic through that corridor.
- Continue to deploy advanced snow removal equipment to enhance winter mobility and travel.
- Continue to update the Shared Use Path Maintenance plan.
- Traveler information system upgrade will be complete prior to the 2021/2022 winter season.
- Continue upgrades of identified ADA deficiencies.
- Complete the MDT ADA Transition Plan Update. Implement new Customer Credentialing System.
- Update the Bicycling Montana's Highways map
- Update the state freight plan.
- Participation in Big Sky Passenger Rail Authority meetings

Additional focus areas may be added throughout the biennium.



#### Mobility and Economic Vitality (MEV) Strategies

### MEV1: Maintain a transportation network that supports the economic health of Montana communities.

MDT recognizes the important role of Montana's transportation system in supporting economic growth and diversity. MDT continually monitors the existing transportation system's ability to keep pace with demand. In locations where demand exceeds capacity due to population growth, economic development, and other factors, MDT considers potential improvements to expand or reconfigure system components.

#### MEV2: Enhance the freight network with targeted improvements to freight corridors.

Trucking and rail modes carry the largest percentage of freight commodities within the state of Montana. These modes are critical to ensuring freight is adequately and efficiently moved throughout the state and the nation. MDT regularly monitors and studies freight commodities and travel patterns throughout the state and considers effects to freight modes as investments are made to the transportation network. The Montana Freight Plan addresses performance management related to freight movement and guides MDT decisions regarding investments in infrastructure and operational improvements to highways such as congestion reduction, improved safety, and improved reliability. The Montana Rail Freight Loan Program is a low-interest revolving loan program that helps preserve and enhance freight railroad service in Montana.

# MEV3: Consider the influence of user characteristics and technology advancements on travel demand patterns.

Understanding transportation user preferences is important to determine how these needs may inform transportation management and investment decisions. Population, household, and socioeconomic factors can influence mode choice and frequency and vary significantly across the state. Additionally, technology advancements such as autonomous cars and driverless vehicles have the potential to impact how users travel in the future. MDT evaluates historic and future modal, demographic, and technology trends to understand the implications on travel patterns that ultimately influence the transportation network.

## MEV4: Promote efficient traffic management and operations by implementing practices that manage travel demand, reduce delay, and enhance mobility.

With Montana's population and economy anticipated to continue growing over the next 20 years, MDT is focused on working with transportation partners across the state to adequately meet transportation demands. In particular, MDT works closely with local governments and Metropolitan Planning Organizations (MPO) to monitor traffic conditions and identify cost-effective solutions to enhance roadway and intersection operations.

#### MEV5: Preserve the federal Essential Air Service program and continue support for Montana communities and airport operators through education and funding opportunities.

EAS airports provide a level of scheduled air service to smaller communities through United States Department of Transportation air carrier subsidies. The future of the EAS program is uncertain due to changes in federal legislation and financial concerns, however, removal of EAS airports in Montana will likely have detrimental effects to the corresponding communities. MDT continues to promote and advocate for the EAS program through active participation in advocacy groups and related legislation.

### MEV6: Preserve existing Amtrak service and continue support for Montana communities served by Amtrak.

Amtrak's Empire Builder passenger rail services fulfill a critical transportation function across northern Montana. With limited public transportation options serving Montana's Hi-Line, Amtrak passenger rail facilitates transport of users to medical, shopping, education, and other important needs. Although MDT does not own or operate passenger rail, MDT continues to promote the Amtrak program through rail preservation activities, rail-highway crossing safety improvements, national conversations, and collaboration with Amtrak during the statewide rail planning process.

## MEV7: Preserve mobility on the highway system through access management and proactive corridor preservation in coordination with local jurisdictions.

One of MDT's key responsibilities is to facilitate movement and travel on Montana roadways. Proactively managing access on existing state highways and identifying potential corridors for future transportation facilities can assist in maintaining service levels. MDT works with local communities to identify and address current and future mobility needs.

# MEV8: Consistently apply the System Impact Action Process (SIAP) to ensure developers equitably mitigate their impacts to the highway system.

New developments often result in impacts to the state highway system by creating new access points and shifting traffic volumes. MDT works closely with developers to reasonably accommodate development needs while preserving the efficiency and integrity of the transportation network. Equitable application of this process protects taxpayer investment and fairly assigns costs associated with impacts.

# MEV9: Consider system redundancy to enable access to alternative routes during times of emergency.

During times of emergency, Montana communities require a reliable transportation network to provide multiple access points and travel routes. MDT considers system security needs when evaluating improvements to the transportation network.

### MEV10: Facilitate and coordinate access to recreational, historical, cultural, and scenic destinations for tourism purposes.

Tourism remains one of Montana's highest-earning sectors and provides support for funding through fuel taxes and other state revenue collection methods. MDT works to preserve and improve the transportation network to provide access to all of Montana's communities and destinations for residents and non-resident visitors.

### MEV11: Provide support for state and local economic development initiatives to allow for new economic opportunities.

As Montana communities focus on enhanced economic growth, MDT recognizes the transportation system plays a vital role in enabling safe and efficient travel, providing access to destinations, and facilitating movement of goods and services. MDT management works with partners throughout the state to provide transportation support for economic development efforts.

### MEV12: Perform winter maintenance activities to provide consistent levels of service and enable wintertime mobility.

Montana transportation users rely on state highways during winter months. MDT recognizes the importance of providing reliable, consistent maintenance to clear snow and ice and enable travelers and goods to safely reach their intended destinations.

#### Accessibility and Connectivity



Preserve access to the transportation network and connectivity between modes.





### 2019-2020 Accomplishments, Highlights, and Ongoing Activities

- Ongoing implementation of the ADA Transition Plan and incorporating ADA considerations into project development.
- Transitioning from the Montana Grants and Loans System (WebGrants) to the BlackCat Transit Management System (BlackCat).
- Designated Transportation Alternative (TA) program funding set aside for preservation of pedestrian and bicycle facilities.
- ★ Included multimodal design consideration of pedestrian and bicyclist accessibility in road design manual update.
- Many standalone ADA upgrade projects were completed, mainly using Congestion Mitigation and Air Quality (CMAQ) program funds.
- Dozens of construction projects were completed in recent years on MDT NHS, Primary, Urban, Secondary and State highway routes that include ADA upgrades (Note: Any project with SOW exceeding a chip seal is required to address ADA needs.)
- Numerous Rest Area projects have been advanced in recent years, with ADA being emphasized heavily in each Rest Area upgrade project.
- Realizing efficiencies through multi-year transit contracts for purchasing transit capital equipment.
- Assisting MPOs with purchasing equipment through MDT purchasing contracts.
- Coordinating use of public transportation systems through integrated planning with providers.
- Funding and assisting purchasing of specialized equipment and transit vehicles.
- Providing additional transit funding to Montana MPOs.
  Providing operating and capital funding to transit systems for essential services to the transit dependent.
- ★ Completion of Montana Pedestrian and Bicycle Plan.
- Continuing educational opportunities on pedestrian and bicycle facility design standards among MDT staff.
- Continuing to fulfill public requests for bicycle and pedestrian information.

#### 2021-2022 Accessibility and Connectivity Focus Areas

- Address existing ADA needs on the NHS and Primary systems in conjunction with construction projects and standalone ADA upgrades.
- Continue to address ADA needs on MDT Urban, Secondary, and State highway routes per current pavement preservation schedule and funding.
- Complete the MDT ADA Transition Plan Update.
- Continue Rest Area improvement strategies which heavily emphasize addressing ADA needs consistent with the Rest Area Plan.
- Provide guidance on pedestrian and bicycle elements for MDT projects and local plans.
- Implement strategies to encourage community education in pedestrian and bicycle safety.

Additional focus areas may be added throughout the biennium.



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### Accessibility and Connectivity (AC) Strategies

### AC1: Improve pedestrian, public transportation, and other MDT-owned facilities to ensure accessibility to individuals with disabilities.

MDT is leading a focused effort to provide accessible state-owned transportation facilities throughout the state. ADA accessibility is always considered and incorporated on projects involving construction of new facilities and alteration of existing infrastructure. MDT also pursues independent projects exclusively addressing ADA compliance. Through these efforts, MDT is working to eliminate accessibility barriers.

### AC2: Employ an asset management system to monitor and manage public transportation capital assets.

MDT uses an asset management approach to track public transportation assets, prioritize rehabilitation and replacement efforts, and maintain assets. This approach ensures sound, cost-effective investments to provide a consistent level of service for transit passengers.

### AC3: Implement a consistent approach for investment, design, connectivity, and maintenance of pedestrian and bicycle facilities.

MDT is continually improving and refining mechanisms to assure pedestrian, bicycle, and accessibility concerns are consistently addressed in projects. MDT coordinates with local jurisdictions to determine appropriate pedestrian and bicycle investments in consideration of local plans. Factors such as demand, connectivity, land use planning, right-of-way availability, safety issues, maintenance responsibility, and public input are considered and analyzed during the project development process to determine the most appropriate pedestrian and bicycle facilities.

# AC4: Identify and consider accessibility and connectivity needs on improvement projects.

MDT's ADA Transition Plan guides the department's efforts to provide an accessible transportation network within the state of Montana and provide equitable access to all transportation users. MDT complies with ADA regulations through a variety of methods used in project identification, design and construction, and operation and maintenance. Accessibility improvements are considered and implemented through bridge and roadway projects or stand-alone ADA improvement projects. MDT maintains an inventory of ADA curb ramps and continues to refine and expand upon reporting mechanisms that can aid in project development.

# AC5: Coordinate use of public transportation systems through integrated planning with providers.

MDT is required to develop a group transit asset management plan on behalf of subrecipients of federal funding. Coordinated planning assists MDT and transit providers throughout Montana to prioritize rehabilitation and replacement efforts to keep capital transit assets in a state of good repair and provide a consistent level of service for transit passengers. Collaboration enables identification of common objectives and mutually agreeable performance measures.

### AC6: Maximize efficiency of transportation options available to disadvantaged populations.

Low-income, elderly, and minority populations depend on public transportation to access employment, shopping centers, medical services, and education. MDT provides funding and support to transit providers to ensure efficient, reliable transportation services and enable disadvantaged populations to fully participate in society.

#### Environmental Stewardship



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





### 2019-2020 Accomplishments, Highlights, and Ongoing Activities

- Developed new Wildlife Accommodation Process for evaluation and identification of wildlife friendly features and accommodations on projects.
- Incorporating wildlife accommodations on projects to address human safety and wildlife connectivity concerns.
- Developed a Memorandum of Agreement with Montana Fish Wildlife & Parks to formalize the working relationship to protect Montana's citizens and wildlife.
- Developed the Montana Wildlife and Transportation Steering Committee in association with MontanaFish Wildlife & Parks and Montanans for Safe Wildlife Passage to address wildlife and Transportation issues in Montana.
- Championing MDT Research Studies focused on addressing wildlife and transportation challenges.
- Integrating Other (OT) Phase into project development to improve project scoping and early public input.
- Refined Transportation Alternatives funding application process to include pre-analysis by local agencies.
- Maintaining ongoing communication with resource agencies on MDT projects, and funding positions at the US Fish & Wildlife Service and Montana Fish Wildlife & Parks.
- Adopted enhanced public involvement and information process to expand public outreach and education efforts.
- \* Implementing Context Sensitive Solutions on project.
- Adding flowering plants to seed mixtures on highway projects to enhance pollinator communities.
- Using GIS mapping to identify environmental issues such as underground storage tanks.
- Reusing and recycling construction materials and providing materials such as timber stringers, asphalt millings, guard rail, and aluminum sign sheeting to other agencies.
- Implemented program to construct covered storage for highway sand/salt piles at MDT Maintenance Facilities.
- Continuing development of aquatic mitigation and purchase of credits to support project delivery.
- ★ Coordinating quarterly with tribal transportation planners.
- Curated archeological artifacts on project sites for Montana tribes.



- Allowing use of MDT facilities, signing, and traffic control for invasive species and wild game check stations.
- ★ Greater emphasis on contextual design methodology to balance design standards and environmental sensitivity.
- Continuing corridor study/pre-NEPA processes to exclude unfeasible projects from consideration.
- ★ Using LED luminaires (streetlights) to save resources.



#### 2021-2022 Environmental Stewardship Focus Areas

- Continue expanded public involvement efforts to increase engagement and awareness of MDT projects and business practices.
- Continue coordination and communication with resource and regulatory agencies.
- Continue to look for opportunities to create efficiencies in environmental processes.
- Develop an umbrella agreement with the US Army Corps of Engineers for creation and management of aquatic mitigation banks.
- Update the Department's MS4 Stormwater Management Plan (SWMP).
- Continue coordination with the Montana Contractors Association to improve environmental compliance during construction activities.
- Revise MDT geometric design standards and methodology to allow for greater flexibility for contextual design.

Additional focus areas may be added throughout the biennium.



#### **Environmental Stewardship (ES) Strategies**

### ES1: Evaluate environmental constraints and cost-effective opportunities during the planning process.

Early identification of resources within a study area enables MDT to better avoid, minimize, and mitigate potential project impacts. MDT uses planning efforts to determine cost-effective solutions to address transportation needs while enabling sensitivity to the built and natural environment.

## ES2: Foster positive working relationships with resource agencies and stakeholders through early coordination and consultation.

Agency and stakeholder coordination is an important step in the planning and project development processes. It provides an opportunity for representatives with specific knowledge and interest to offer their expertise, identify needs, and propose creative solutions. Early coordination enables MDT to better understand public needs and prepare for permitting requirements.

# ES3: Consider context sensitive solutions early in the planning process and through design to avoid and minimize adverse impacts to the built and natural environment while meeting the project purpose and need.

Context sensitive solutions is a collaborative, interdisciplinary approach that balances the stakeholder interests in providing a transportation facility that fits its setting. MDT uses this approach to preserve and enhance scenic, aesthetic, historic, community, and environmental resources while improving or maintaining safety, mobility, and infrastructure conditions.

#### ES4: Identify cost-effective mitigation solutions for unavoidable project impacts.

MDT strives to avoid and minimize project impacts to the extent practicable. However, in some instances, project-related impacts to the built and natural environment cannot be avoided. In these cases, MDT endeavors to identify appropriate mitigation solutions that balance short-term and long-term costs and benefits.

#### ES5: Meet regulatory requirements.

One of MDT's primary responsibilities is to comply with federal, state, and local regulations associated with protection of the built and natural environment. These requirements establish minimum thresholds for MDT actions. In some cases, MDT is able to exceed the minimum thresholds when it is cost-effective to do so. MDT complies with all applicable environmental regulations and serves as a steward of Montana's environmental resources.

# ES6: Consider transportation planning with tribal, federal, state, and local government management and resource planning efforts.

The best transportation planning efforts broadly represent the perspectives of all interested and affected parties. MDT strives to coordinate with tribal, federal, state, and local entities to ensure consistency with plans developed by others and to incorporate relevant data and information.

## ES7: Streamline environmental reviews through early identification of constraints and opportunities and early public engagement during planning.

The corridor planning process enables MDT to broadly consider a study area and identify creative transportation solutions while avoiding significant impacts to sensitive resources. Planning efforts can streamline subsequent project development and environmental documentation by developing an early understanding of public and stakeholder concerns, environmental considerations, and permitting and regulatory agency coordination requirements.

#### Business Operations and Management



Provide efficient, costeffective management and operation to accelerate transportation project delivery and ensure system reliability.



### 2019-2020 Accomplishments, Highlights, and Ongoing Activities

- ★ Upgrading various management systems.
- Deployed an integrated Automated Routing System (ARS) enhancing and streamlining the oversize and overweight permitting system.

### 2021-2022 Business Operations and Management Focus Areas

- Formally document the Px3 Process.
- Modernize the Federal billing system.
- Identify priorities and strategies from MDT employee Focus Group Report to increase employee engagement.
- Build relationships with state and federal partners that have responsibility for search and rescue, emergency services, and homeland security.
- Increase local law enforcement's awareness of protocol regarding missing and overdue aircraft.

Additional focus areas may be added throughout the biennium.



#### **Business Operations and Management (BOM) Strategies**

### BOM1: Coordinate with state and federal agencies to support transportation security and enable appropriate response and recovery from emergency and disaster situations

MDT emphasizes the importance of statewide coordination and consistency in its security plans and programs. MDT works closely with local, state, and federal security partners including the Montana Department of Disaster and Emergency Services (DES) to implement prevention efforts and ensure appropriate response to emergencies affecting the transportation system.

#### BOM2: Develop and implement a long-range multimodal transportation improvement program that addresses Montana's statewide transportation needs, is consistent with the statewide long-range transportation plan and management system output, and maximizes the use of federal funds through the Performance Programming Process (Px3) to ensure a cost-effective, efficient, and safe transportation system.

MDT's planning program is vital to identifying and prioritizing needed improvements to the transportation system. MDT works to maintain consistency with statewide, regional, and local plans and to optimize investment decisions through use of its Px3 method.

### BOM3: Recruit and retain a qualified workforce and conduct staff succession planning to sustain MDT business operations.

MDT employees are vital to the implementation of critical transportation programs. Without a qualified workforce, MDT would be unable to deliver transportation improvement projects and maintain and operate transportation assets. MDT is focused on recruiting and retaining competent staff members to fulfill key roles and ensure program delivery.

# BOM4: Exercise sound financial management to ensure business continuity, enable adequate matching funds for the federal-aid program, and ensure adequate state funding for system maintenance and operations.

MDT strives to wisely manage its fiscal resources and invest in the areas of highest priority. Reserving adequate state matching funds enables MDT to invest at higher levels in Montana's transportation system using federal grants. State funds are also critical for continued operation and maintenance activities.

# BOM5: Invest at the appropriate level to achieve performance targets given available funding.

Continued investment in the transportation system is critical to maintain adequate levels of service for transportation users. MDT uses the Px3 method to analyze performance data for each asset type and identify tradeoffs between competing needs. MDT develops funding levels based on consideration of performance targets and funding availability.

# BOM6: Employ proactive management strategies to ensure compliance with rules and regulations, identify risk to MDT and the transportation network, and facilitate equitable participation in MDT programs and services.

MDT programs are subject to numerous local, state, tribal, and federal regulations. MDT complies with all applicable requirements to safeguard transportation users and enable participation in MDT programs and services.

# BOM7: Enhance information technology products and services through modernization of legacy systems and implementation of new technologies to improve efficiency and cost-effectively meet customer and department needs.

MDT strives to stay well informed about rapidly evolving technology and communication opportunities as they apply to transportation infrastructure and management. Technologies are continually improving and evolving that incorporate advanced wireless communications, automated distribution of real-time data, application and web-based interfaces, and improved data management processes. Recognizing the challenge to fund and implement new technologies, MDT focuses on development of the Information Technology (IT) workforce and recruits skilled employees who are tasked with monitoring, researching, and developing cost-effective technologies for Montana. MDT's commitment to technology offers increased efficiencies and communications in the transportation system such as improved traffic management and safety, better communication with customers, and enhanced internal data management procedures and productivity.



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