



# Funding Montana's Highway Infrastructure

Performance Audit: 17P-06



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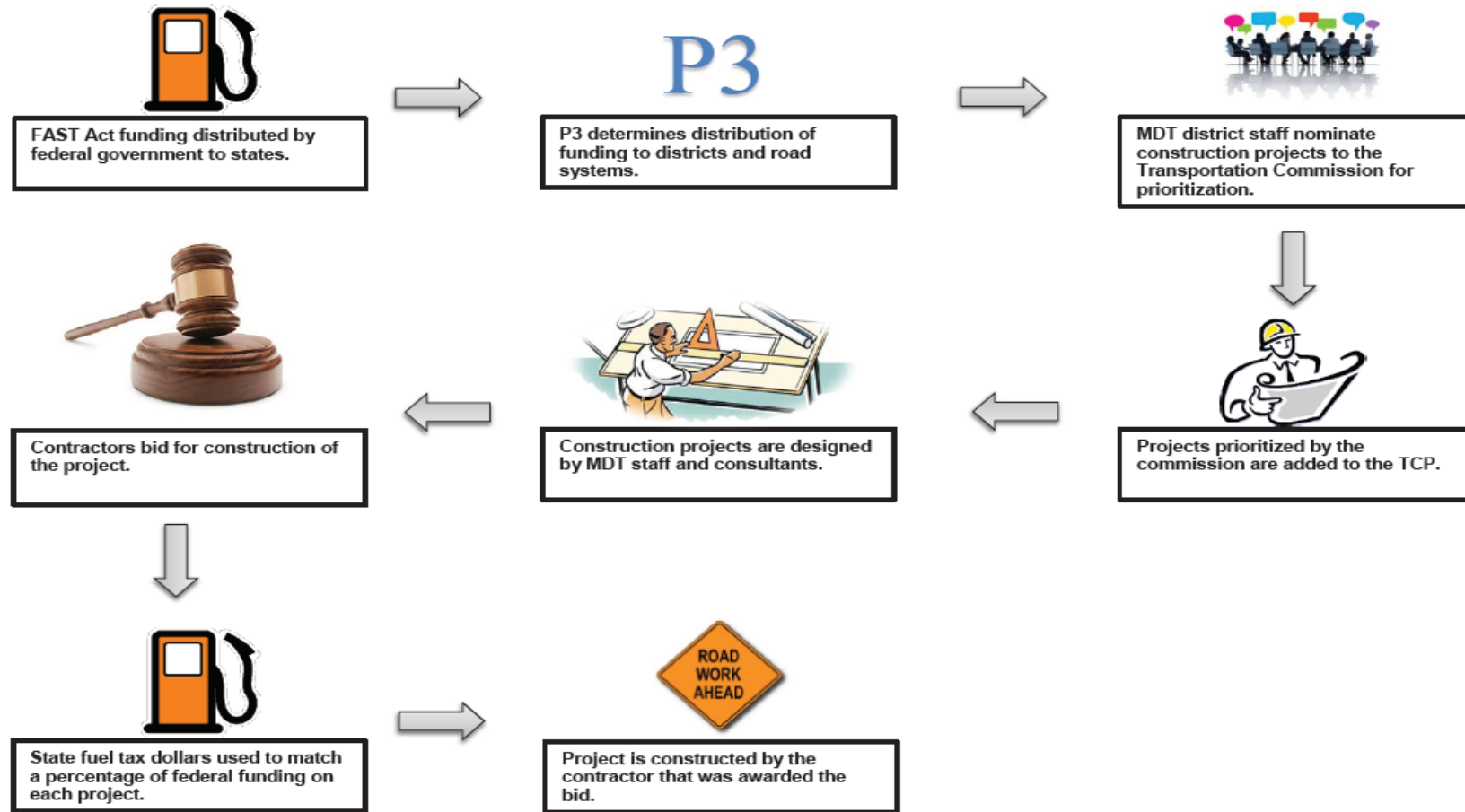
# Infrastructure Funding Background

- State infrastructure funding increased by HB 473
- Federal FAST Act authorized \$305 billion for FFY 2016-2020
- TranPlan MT outlines high level MDT goals
- P3 adopted in 2009 for core system and district distributions
- Construction projects nominated by district staff



# Federal Funding to Construction

Figure 2  
**Federal Funding to Project Construction**




Source: Reproduced by the Legislative Audit Division from MDT information.



# Audit Objectives

- ▶ How do operations of MDT compare with similar transportation agencies in other state and provinces?
- ▶ Does MDT distribute fuel tax dollars based on accurate and complete road condition data and industry best practices?
- ▶ Does MDT have a process for nominating state infrastructure projects statewide and between districts according to state and federal requirements and industry best practices?

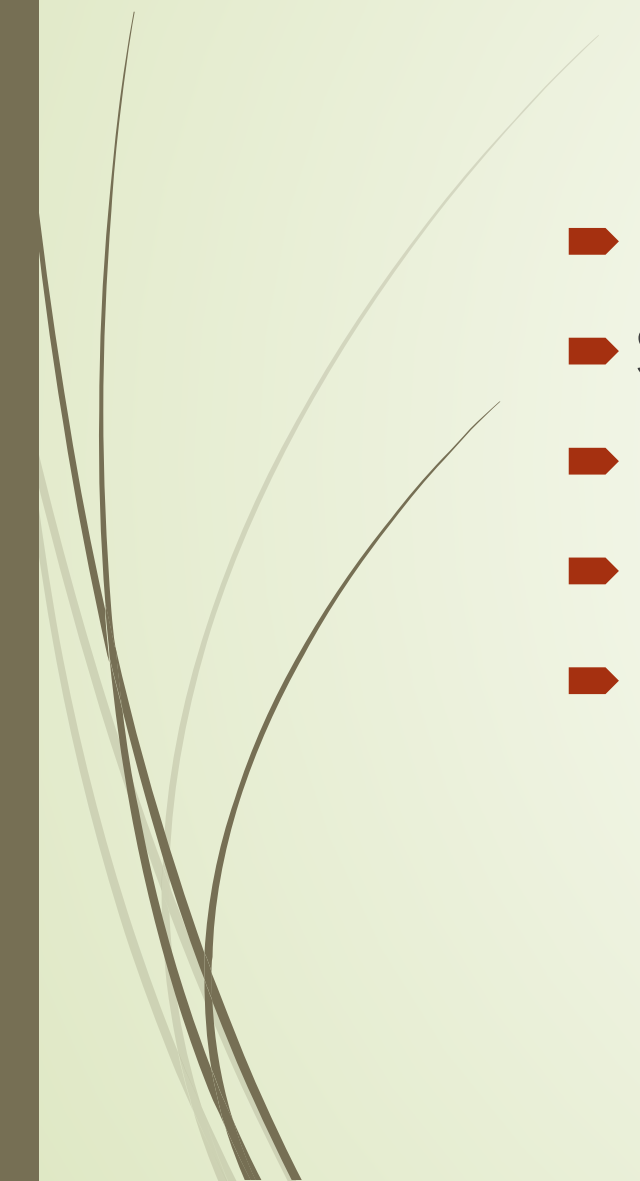


# Objective 1: HB 473 MDT Operations Comparison to Other DOTs

- Required performance audit of MDT to other DOTs
- Gathered transportation data for six DOTs
- Compared data per lane mile or per FTE when applicable



# Significant differences in DOT operations

- ▶ Lane Miles DOTs are responsible for maintaining
  - ▶ State infrastructure funding
  - ▶ Use of indirect cost rate
  - ▶ Roadway definitions and treatment types
  - ▶ Engineering division responsibilities
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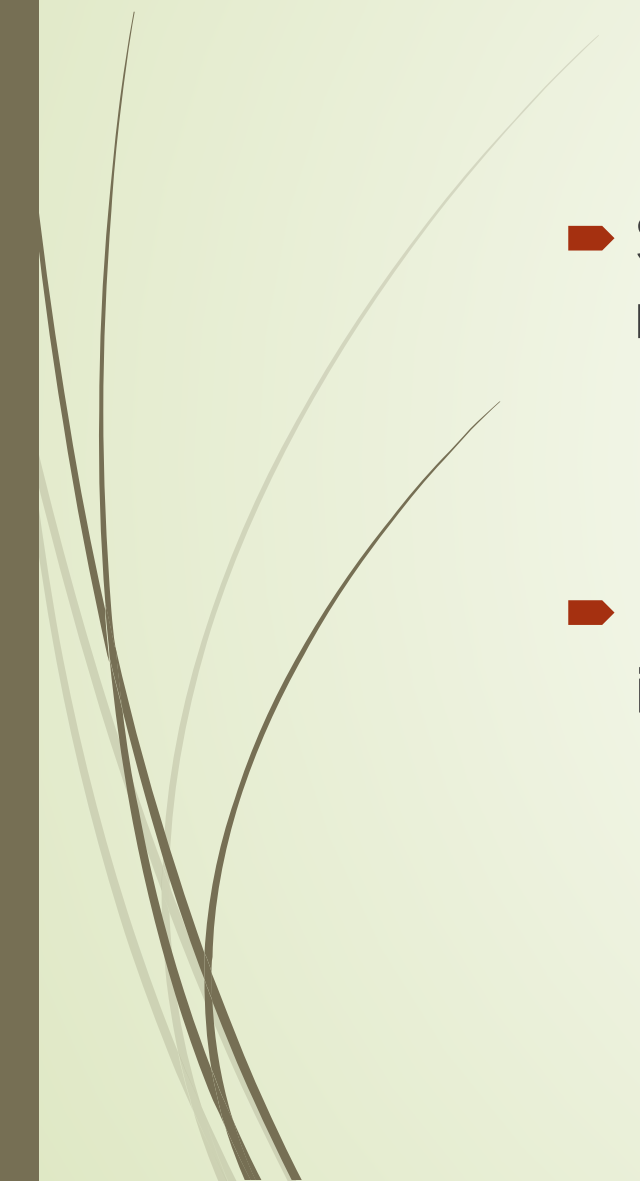
# HB 473 Results

- ▶ 10 Year MDT Analysis
  - FTE levels have decreased while expenditures have increased
- ▶ MDT was closest to the average in:
  - % of FTE classified as manager/supervisor
  - Federal funding per lane mile
- ▶ MDT was comparable in:
  - Lane Miles per FTE
  - Pavement preservation costs
  - Capital construction costs
  - Engineering Costs Varied Widely





# DOT Privatization

- ▶ Some DOTs privatize engineering services at a higher rate than MDT
    - ▶ Utah
    - ▶ Alberta
  - ▶ DOTs did not have support for privatization levels including MDT
- 

## Objective 2: P3

Figure 11

D3 Business Processes

Table 1

### Interstate System Distribution Over Time and as a Percentage of Total Core System Funding

Interstate System	2012	2013	2014	2015	2016	2017	Anticipate Future Performance and Funding				
							2018	2019	2020	2021	2022
Ride Index	81.4	81.2	81.6	81.9	81.9	82	80+	80+	80+	80+	80+
Level of Investment (\$M)	60	68.9	64.6	57.8	59	54	54.4	55.3	56.5	59.2	?
Percentage of Core System Funding	25%	34%	28%	24%	24%	23%	22%	22%	22%	21%	?

Source: Reproduced by the Legislative Audit Division from MDT records.

Source: Created by the Legislative Audit Division based on MDT interviews.



# P3 Audit Findings

- Policy does not clarify roles of staff in P3
- P3 not widely understood by MDT staff including PvMS capabilities in P3
- Past expenditures do not align with P3 distributions



# Recommendation #1

- ▶ MDT implement procedure that includes:
  - Roles and involvement of department staff in P3
  - Outlines decision making process for inputs into PvMS that influence distributions
  - Formalized business process for P3



# PvMS Data Oversight

- District staff had concerns regarding the accuracy of PvMS Data
- 22% of PvMS data reviewed by district staff did not align with district staff's judgement
- MDT does not have verification process for PvMS data after it is gathered
- Other states review a sample of PvMS routes to review for anomalies and overall accuracy


## Recommendation #2

- MDT implement policy requiring annual review of PvMS road segments to determine data accuracy





# Primary Highway System Distributions

- Currently distributed by MDT based on P3 calculations
  - State statute outlines outdated process for primary highway system distributions
  - FHWA supports P3 and verified it was in line with their move to performance-based asset management
- 



## Recommendation #3

- ▶ MDT pursue statutory change to align statutory primary highway system distributions with current industry best practices



## Objective 3: District Nomination Process

- Districts use various information to make nomination decisions
- Information considered varies for pavement preservation and capital construction projects
- District nomination decisions made in a meeting with district and maintenance staff





# District Nomination Process



## Audit Work

- Reviewed 25 projects across all five MDT districts
- Interviews with staff regarding the district nomination process, and the nomination of each project reviewed
- Documentation review for each project

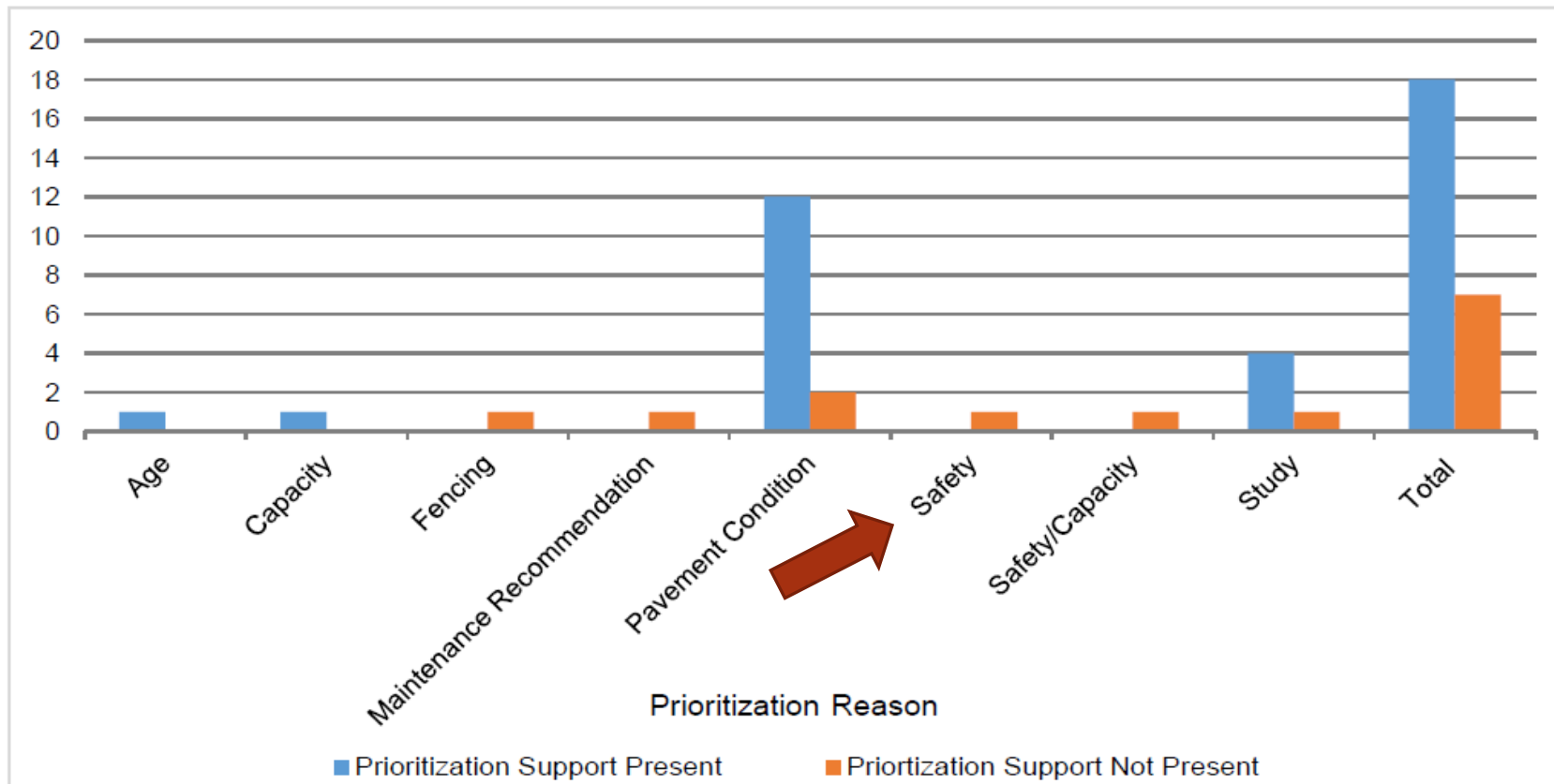


## Findings

- District nomination processes not documented
- Inconsistent information considered by districts when making nomination decisions
- No standard criteria for what should be considered in nomination decisions
- No standard for how different criteria should be weighed
- Other states had specific criteria for nomination decisions



Figure 16  
**Base Nomination Support for 25 Sampled Projects**



Source: Compiled by the Legislative Audit Division from MDT records.


## Recommendation #4



- MDT implement policy establishing:
  - Criteria upon which project nomination decisions should be based
  - How criteria should be applied to projects
  - Required documented support for nomination decisions



# Centralized Nomination Review

- No centralized process for review of district nomination decisions
  - MDT Planning Division receives nominated projects
  - Transportation Commission prioritizes projects nominated by districts
  - No established nomination criteria has limited a centralized review process
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## Recommendation #5

- ▶ MDT implement policy requiring centralized review of districts project nomination to ensure statewide consistency
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Questions?

