



Research Problem Statement

RESEARCH PROGRAMS USE ONLY	
RESEARCH IDEA NO:	25-006
DATE OF RECEIPT:	5-10-24
TOTAL MDT COST WITH IDC:	

Title: Strategies to Advance MDT as an Employer of Choice for Diverse Talent

Yes  No Are you an MDT Employee?

Name: Susan Gallagher

Affiliation: MSU Western Transportation Institute

Phone Number: +1 (406) 994-6559

Email: sgallagher@montana.edu

Yes  No A research idea must have an MDT employee as its' champion. Have you contacted an MDT employee regarding your research idea?

MDT Contact: Megan Handl, Bureau Chief, Civil Rights

1. Problem Statement: What issue or situation are you trying to solve?

State departments of transportation face a variety of challenges with recruitment and retention of staff. The transportation workforce is older than the national average with a significant portion of staff eligible to retire. New technologies and evolving agency mandates are also changing the nature of work and the type of skillsets required by personnel, intensifying competition with private industry for in-demand workers. Recruitment and retention challenges are likely exacerbated by the gender imbalance at state DOTs. Female applicants may be put off by the prospect of a male-dominated workplace, and female workers may find male-dominated workplace climates less hospitable.

According to the Montana Department of Transportation's Equal Employment Opportunity and Affirmative Action Five-Year Plan 2020-2024, white females were identified as underutilized in six of the seven job categories, and females from minority ethnic or racial groups were underutilized in four job categories. According to the AASHTO's 2021 Human Resources Metrics survey, MDT's staff was 19% female, although Montana's current population is 49.3% female (US Census Bureau, 2023). As women begin to outpace men in degree attainment and to make up almost half of all employed workers (US Bureau of Labor Statistics 2022), MDT will want to increase the gender diversity of its workforce to successfully compete for qualified workers among a diverse talent pool.

2. Research Proposed: What work will be completed and accomplished to address the problem?

The proposed research will assist MDT in developing strategies to diversify its workforce. The focus of the research will be in assessing three primary areas related to gender diversity:

1. Characterize Leadership Motivation and Goals. How does MDT leadership formulate its gender diversity goals and how

*Note: All research ideas submitted become public property and submitters are not guaranteed to receive a contract for any work that may result from this research idea.*



### Research Problem Statement

are they communicated and operationalized through internal and external communications, policies, and practices? Are current approaches effective in achieving goals? The research will review agency communications, strategic plans, and other documentation in conjunction with staff interviews to identify existing attitudes, accountability measures, programs, and organizational structures in place to advance gender equity in the workplace, as well as to identify challenges or barriers.

2. **Workplace Culture Assessment.** The project will develop and distribute a survey about workplace culture to MDT employees. The researchers will work with MDT Civil Rights staff to ensure that the survey includes relevant demographic classifications and follows agency protocols. The survey will be augmented by in-depth interviews with staff from a variety of occupational groupings, career stages, and departments/divisions within the agency. The purpose of the culture assessment is to identify any gaps that exist between how male and female employees perceive their workplace environment and characterize MDT's culture of diversity and inclusion.

3. **Recruitment Survey.** A survey of students from common "feeder programs" at community colleges and universities in the state will explore student attitudes toward careers at public sector transportation organizations, and their perceptions of benefits and drawbacks to pursuing careers at state DOTs. Survey data will be analyzed to identify gaps between different demographic groups and to formulate communication strategies for improved outreach to entry level recruitment pools.

**3. Background: What led you to this topic?** Provide sufficient background in non-technical language (no jargon) to help reviewers understand your thoughts behind the issue or statement (problem).

Conversations with MDT Civil Rights and Human Resources staff while conducting related NCHRP research on advancing gender equity at state departments of transportation highlighted the persistent challenge MDT has in achieving its affirmative action goals related to gender diversity.

**4. Expected benefits to MDT: What benefits do you anticipate this project would offer?** How would results be used within MDT (District and Divisions)?

Information gathered from the research will inform the development of evidence-based strategies to improve workplace climate, enhance outreach communications, and strengthen organizational leadership focused on creating a welcoming environment for all employees. The long-term outcome is to increase recruitment and retention among diverse groups at the agency.

Yes  No **Has the problem statement been vetted through initial review by the Research Section, which includes a literature review completed by the MDT Librarian?**

**5. Research Objectives: Identify the outcome of the research.** Basic listing of deliverables or sets of deliverables. *This should be a basic list of what is "likely" to be required as a part of this research. This does not have to be detailed but will help any reviewers and proposal responders understand your thoughts behind the problem. We don't want to tell them how do to the research but we want to state what the objectives are.*

The research will accomplish the following objectives:

- Clarify MDT's workforce diversity goals, motivation, internal and external communications, and accountability mechanisms and measures.
- Identify primary barriers to meeting workforce diversity goals.
- Assess MDT's workplace culture from the point of view of diverse employees.
- Assess perspectives/attitudes of potential recruits from talent pipeline about career opportunities at MDT.
- Develop recommendations for strategies and actions to advance MDT as an employer of choice for diverse talent.

The research findings will be synthesized and documented in a report that will include strategic action plans for enhancing recruitment and retention of diverse talent at MDT.

**Note: All research ideas submitted become public property and submitters are not guaranteed to receive a contract for any work that may result from this research idea.**



### Research Problem Statement

**6. Deliverables and Products: What tools and outcomes would help MDT implement the results or findings of the research?** How would you expect results to be used by MDT. Include work units within the Agency that would need to implement (use) the results. Examples of products are: specifications, manuals, processes, tools, training courses, additional resources needed, models, or updated designs.

Research outcomes will include strategies and recommendations to implement findings. These findings will encompass recruitment and retention strategies that will be of interest to management across all work units, as well as executive leadership teams, to improve workplace culture and agency public image, and to enhance recruitment, hiring, and retention practice. Findings will be of special interest to Human Resources and Civil Rights divisions directly engaged in outreach, recruitment, and diversity initiatives. The research will also highlight potential partnerships that can be leveraged to implement findings (e.g., state educational institutions, etc.).

**7. IT Component: Most research projects produce and/or use data. If you think this idea would use or create data, the project has an IT component.**

Yes  No Does this idea have an IT Component?

**8. Cost Estimate - include assumptions and timeline to support the estimate.**

The estimated timeline to complete this project is 24 months. The timeline assumes the literature review, review of agency materials, and leadership interviews will be conducted in the first 12 months. The workplace culture survey will also be developed, approved, and distributed to MDT staff within the first year of research. Analysis of the workplace culture assessment and follow-up staff interviews will occur in Year 2, as will the development, implementation, and analysis of surveys to “feeder” education programs on potential recruits’ perspectives. The final report and strategic action plan will be completed and submitted by the end of the 24-month contract. The estimated total project cost is \$230,000. This estimate includes research staff time, administrative oversight, human subjects payments, indirect costs, and limited travel support for MDT interviews and project meetings.

**9. Sponsor. Your division administrator will become the sponsor of this idea. Please state what Division you are in and who is the Division Administrator.**

Megan Handl, Bureau Chief, Office of Civil Rights

**10. Additional Information: What else would you like to share to elevate the importance of your problem statement?** *Include any additional information you think is relevant to the proposal. Key information could include units and personnel that were consulted during the development of the research idea, or any additional business units that would be beneficial to implementation.*

Renae Lang, MDT's Workforce Planning Manager has also been consulted in the development of the research idea and is interested in participating in results implementation.

**Note: All research ideas submitted become public property and submitters are not guaranteed to receive a contract for any work that may result from this research idea.**