

MOUNTAIN-PLAINS CONSORTIUM

RESEARCH BRIEF | MPC 24-556 (project 682) | September 2024

Incorporation of Social Equity Considerations into Transportation Asset Management



the **ISSUE**

Transportation asset management (TAM) has traditionally been focused on minimizing cost and the physical performance of assets without much regard for how the assets are serving their purpose for society. This report seeks to support the incorporation of social equity into TAM decision making.

the **RESEARCH**

This study used interviews with transportation professionals working with diversity and equity issues within their organizations to broadly understand the importance of social equity in the transportation field. The study also conducted a survey with transportation agency asset managers to understand the status of specific social equity considerations in asset management.



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Project Title

Incorporation of Social Equity Considerations into Transportation Asset Management

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the FINDINGS

The suggested definition of equity to be used in TAM as proposed by this study is, “Socially equitable TAM assesses both existing and future assets through the lens of community needs and their impacts on various populations. This approach necessitates active community engagement and involvement in decision-making processes. Equitable TAM integrates social equity criteria into all aspects of asset management, including investment decisions, resource allocation, and maintenance strategies to ensure equitable distribution of benefits and burdens of transportation assets and systems. It recognizes that assets can disproportionately affect underserved communities and ensures that these impacts are considered in the evaluation and management of assets.”

The proposed indicators are divided into two categories. (1) User-related indicators focus primarily on demographic data to identify community needs and highlight disadvantaged populations. (2) System-related indicators evaluate the benefits and burdens associated with a transportation project, asset, system, or alternative, covering impacts across health, social, economic, environmental, and transportation dimensions. The choice and application of these indicators vary based on the alternatives being considered. Additionally, indicators related to staffing and contracting within an organization or agency are also relevant. Effective equity assessment also requires examining budgeting and resource allocation across different asset classes, regions, and demographic groups. The research underscores the importance of integrating qualitative indicators, such as community feedback, into the decision-making process to ensure a comprehensive approach.

These definitions and indicators can be incorporated into existing TAM decision-making tools and methodologies. Ongoing research is exploring how equity indicators can be utilized to establish criteria for more equitable decision-making processes.

the IMPACT

As this research progresses, we will contribute to new methods and guidelines that agencies can use to incorporate social equity into asset management. The long-term benefit is transportation asset networks that better meet the needs of all users.

For more information on this project, download the Main report at <https://www.ugpti.org/resources/reports/details.php?id=1227>

For more information or additional copies, visit the Web site at www.mountain-plains.org, call (701) 231-7767 or write to Mountain-Plains Consortium, Upper Great Plains Transportation Institute, North Dakota State University, Dept. 2880, PO Box 6050, Fargo, ND 58108-6050.



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