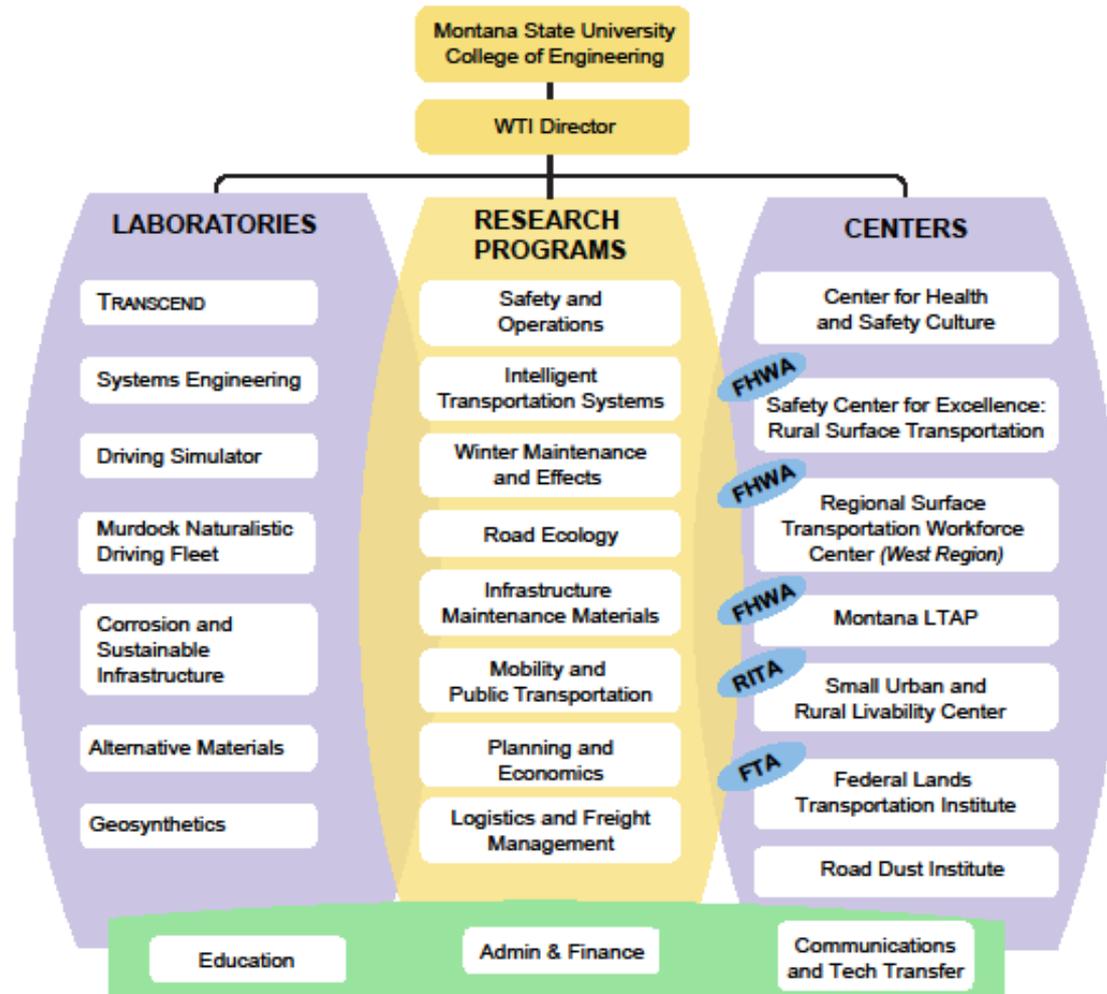


ADVANCING RURAL TRANSPORTATION: BUILDING A SOLID FOUNDATION

*Steve Albert, Director
Western Transportation Institute*

Western Transportation Institute

“Center of Centers”



Building the Foundation



Center for Health & Safety Culture: Purpose

We are an interdisciplinary center serving communities and organizations through research, training and guidance to cultivate healthy and safe cultures.

Research

Build Capacity

Effective Implementation

Improved Health and Safety

Core Questions

1. How to measure culture?
2. How to define the “ideal” culture?
3. How to grow a positive culture?

Core Questions

1. How to build knowledge¹ among a variety of leaders?
2. How to build skills² to apply this knowledge?

Topics

1. Traffic Safety
2. Substance Abuse
3. Violence
4. Child Wellbeing

1. Knowledge is the theoretical or practical understanding of a subject.
2. Skills are the ability to do something well.

Tier 1 UTC: Livability Center

Partnership between WTI & Upper Great Plains Transportation Institute (North Dakota State University)

Focuses on the six livability principles:

- Provide more transportation choices
- Expand location- and energy-efficient housing choices
- Improve the economic competitiveness of neighborhoods
- Target Federal funding toward existing communities
- Align Federal policies and funding
- Enhance the unique characteristics of all communities

WTI Safety Research

Sample Projects

- **Assessing Crash Risk Factors on Low-Volume Roads**
- **Assessing Safety Benefits of Active Traffic Management System Along OR-217 Near Portland Oregon**
- **Developing Weather-Responsive Variable Speed Limit System at an Urban Freeway Interchange**



Transportation Safety

Lead: Western Transportation Institute, Montana State
University
West Region Transportation Workforce Center
(Sponsor: FHWA)

FOCUS:

Engineering & technical occupations related to human factors, road safety, operations & maintenance, and highway construction.

OPPORTUNITIES:

Safety is a natural fit with industry self-interest.

CHALLENGES:

*Safety training typically offered on-the-job, not pre-career.
Academic institutions struggle with interdisciplinary content.*



FHWA supported National Network for the Transportation Workforce (NNTW)



- NNTW formed to provide a more strategic and efficient approach to transportation workforce development.
- The Centers act together to facilitate national partnerships with key public and private organizations
- Bring together the transportation, education, labor, and workforce investment communities
- Identify and promote effective transportation workforce activities, programs, and resources

National Transportation Career Pathways Initiative

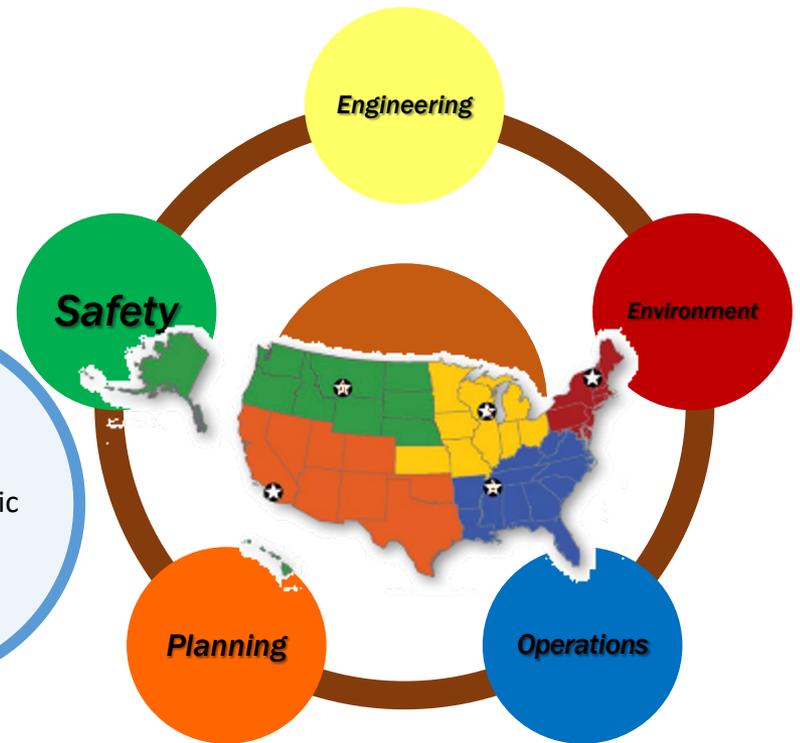


Career pathway templates

Drive curriculum at local schools

Long-term industry/academic working groups

Inspire and prepare greater numbers of students to pursue transportation career pathways



U.S. Department
of Transportation
**Federal Highway
Administration**



NNTW
National Network for the
Transportation Workforce

Collaborative Human-Automated Platooned Truck Alliance: CHAPTA



Economic Savings

Cooperative Human - Truck Platooning: 5 Vehicle Platoon	Assumed Aerodynamic Savings		Number of Human Driven/ Supervised Trucks in the Platoon			
	Lead Truck	Followers	5	4	3	2
Percentage of total operating costs saved: aerodynamics + driverless trucks	5%	10% - 20%	2% - 4%	9% - 11%	16% - 18%	23% - 25%

CHAPTA Goals

Promote: U.S. Competitiveness.

Ensure: Compatibility with existing highway traffic.

Focus: Human factors, safety and operations, and workforce development.

Address: Institutional issues affecting deployment.

Aerodynamics alone
(5 humans)

Aerodynamics +
Automation (2
humans)

Building the Foundation

