

University of Tennessee

# Transportation Programs Overview

***NTRC*** Open House and Transportation  
Manufacturers Showcase

May 6-7, 2002



# Presentation Overview

- Transportation Mission
- Resources and Partnerships
  - Center for Transportation Research
- Research Focus Areas



# UT's Transportation Mission

- Undergraduate and Graduate Education
- Public Service and Community Outreach
- **Transportation Research**



Tennessee's State and Land Grant University



# UT Transportation Resources



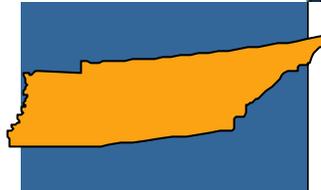
Center for Transportation Research

National Transportation  
Research Center



College of Engineering Departments  
Research Centers of Excellence  
College of Business and Other Departments

Oak Ridge National Lab



Institute for Public Service  
Government and Industry Partners





Center for Transportation Research

**Steve Richards, Ph.D., PE**

Executive Director

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HISTORY  
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STAFFING  
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# Center for Transportation Research

- Southeast Transportation Center

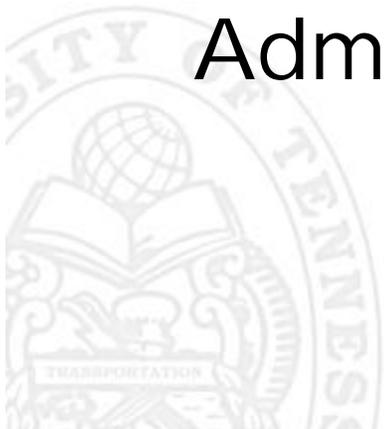
  - Lead Institution

- NHI Center of Excellence

- National Maritime Enhancement Center

- TNDOT Research Program

Administrator



# Transportation Education @ UT

Fundamentals · Technology · Institutions · Systems



Bachelor's  
Degree

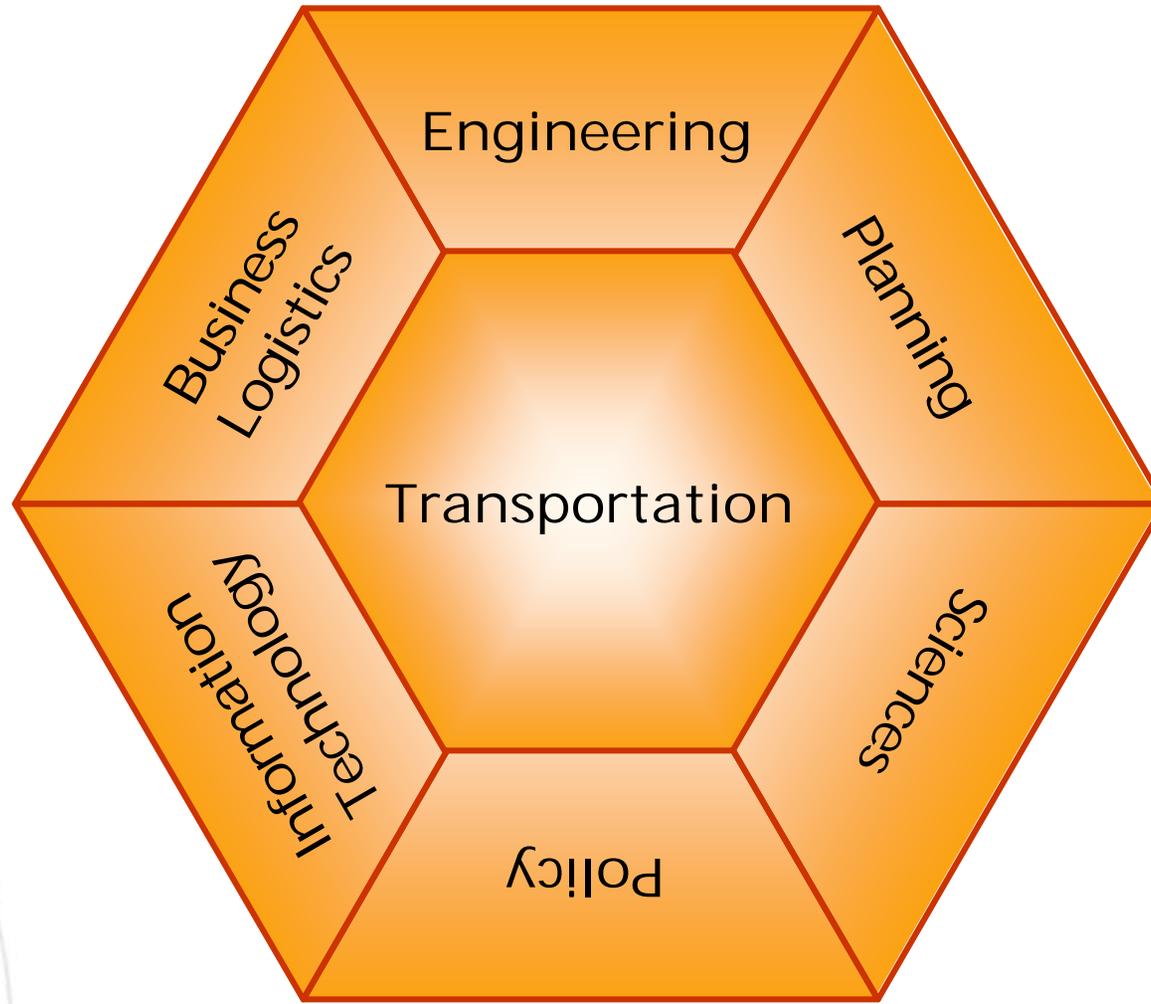
Transportation Workforce

Master's  
Degree

Expert Leadership



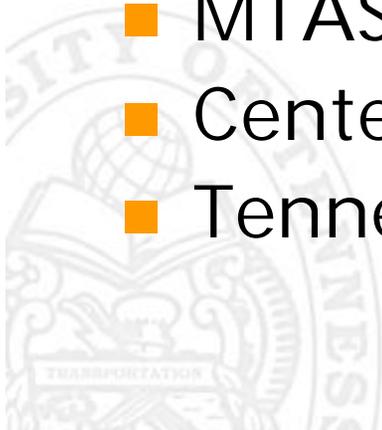
# Multi-disciplinary Opportunities





# Public Service/Community Outreach

- Tennessee Transportation Assistance Program
- Maintenance and Reliability Center
- Tennessee Academy for Transportation Engineering
- Center for Industrial Service
- MTAS & CTAS
- Center for Government Training
- Tennessee VANS



# UT Research Focus Areas



Safety



Operations



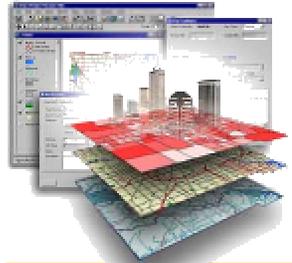
Planning/Policy



Public Transp.



Military/Defense



GIS & Info



Infrastructure



ITS & Technology



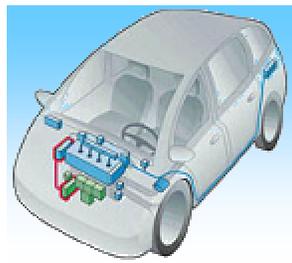
Environmental



Logistics



Security



Veh. Technology



Modeling



Data & Statistics



Visualization

# UT Research Focus Areas



Safety

- Fog Detection Warning
- Railroad Crossing Safety
- Fatal Crash Analysis

Alternative Fuel Vehicles

Highway Run-off

Air Quality



Environment

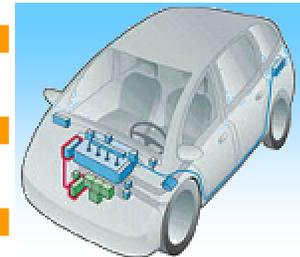


Operations

- Intelligent Transportation Sys.
- Emergency Evacuation
- Traffic Signal Priority

# UT Research Focus Areas

- Brake Technology
- Intelligent Cruise Control
- Truck Rollover Warning



Veh. Technology



Military/Defense

- JFAST
- DLA Supply-Chain Management
- Rail Network Model

- Public Transportation
- Highway Access Control
- Commercial Vehicle Enforcement



Planning/Policy





# Work on Key National Issues

1. Security
2. Safety
3. Congestion
4. Institutional Constraints
5. Environment
6. Energy
7. Aging Infrastructure
8. Finance
9. Human Resources
10. Industry Consolidation
11. Aging Population
12. Equity
13. Telecommunications
14. Innovation Barriers

Source: The National Academies, TR News 217, November – December 2001

