

Alabama Transportation Systems: Insuring a Competitive Future

David Ellis, PhD
Senior Research Scientist and Program Manager
Infrastructure Investment Analysis Program
Texas A&M Transportation Institute
College Station, Texas
d-ellis@tamu.edu

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ATI Directions

- Address Societal Needs
 - **Current, Emergent, Long-Term**
 - Advance Research, Broaden Impacts
 - Enhance Graduate Education
 - Be Inclusive, Foster Diversity
 - Support Work-Life Balance
- Cross-disciplinary / multi-disciplinary
- Across UA and more ...

Alabama Transportation Systems

- Current Conditions

Current Conditions: “State of the System”

- **Key System Indicators**

- Condition
- Performance

- **Top “N” list**

- Freight Movement
- Road, Bridge Conditions
- Accessibility and Mobility
- Travel Time Reliability
- Delay and Congestion

Alabama Transportation Systems

- Current Conditions
- Desired Conditions

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- Desired Conditions
- Investments Needed: Financial, Human, ...

Alabama Transportation Systems

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- Desired Conditions
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- What Do We Get?

Alabama Transportation Systems

- Current Conditions
- Desired Conditions
- Investments Needed: Financial, Human, ...
- What Do We Get?
- The Cost of Doing Nothing

Illustrative Efforts

- “Smart” Infrastructure
- Information Systems and Technologies
- Connected, Automated, and Autonomous Vehicles
 - V2X
- Sensors, Sensor Systems, and Networks
- Examples
 - Law Enforcement and Emergency Management
 - Operational Improvements of Signalized Corridors
 - Bridges and Structures
 - Energy and Power Systems for Vehicles

Emerging Considerations

- Trends, Opportunities, and Concerns
 - Technologies
 - Financing
 - Policy
 - Planning
 - Design
 - Construction
 - Operations
 - Management
 - Social-Behavioral Changes
 - ...
- Impacts of Efforts in Proximate states
- Revenue Trends

Key Factors for Success

- Commitment (Professionals, Policy Makers, Institutions, Public)

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- What Do We Get? What Does it Cost?

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- Commitment (Professionals, Policy Makers, Institutions, Public)
- “Bottom Up” not “Top Down”
- What Do We Get? What Does it Cost?
- Transparency and Accountability

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Senior Research Scientist and Program Manager
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E-mail: d-ellis@tamu.edu
979-845-6165