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# Future of the United States Transportation System

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U.S. Department of Transportation  
**Federal Highway  
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# Overview

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- **The United States Transportation System**
- **Challenges**
- **Meeting the Challenges**



## United States Transportation Network Today

US Transportation System	Miles
Highway	4,067,396
Freight Rail	93,921
Passenger Rail	21,178
Transit	10,661
Navigable Channels	25,320
Oil Pipeline	172,048
Gas Pipeline	1,539,911



# Transportation Statistics

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- As of 2009, 246.3 million vehicles were registered in the United States – nearly four times the 65.1 million registered in 1956, the first year of the Eisenhower Interstate Highway System.
- There are 210 million licensed drivers or 685 drivers for every 1,000 residents in the United States.
- In the United States there are 1,208,986 bridges.
- Although the Interstate System accounts for about 1.2 percent of the Nation's total public road mileage, it carries 24 percent of all highway travel.



# Challenges

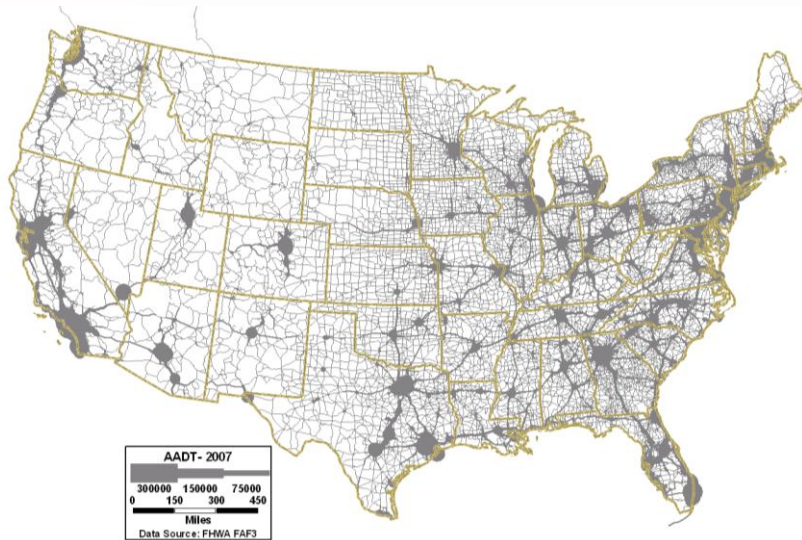
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- US Population -projected to grow nearly 1% per year
- US Freight - tonnage transported projected to grow 1.6% per year.
- Crashes - killed 30,000 people in 2009, a rate of 1.13 per 100 million miles traveled.
- Congestion – Public road length increased 5.4% while vehicle miles of travel increased 96% from 1980 to 2009.

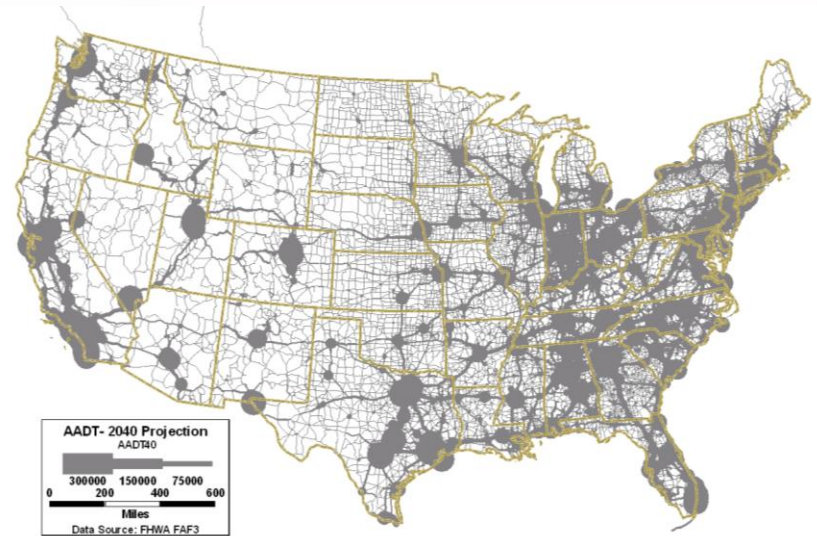


# Number of Vehicles Operating on Our Highways

## Annual Average Daily Traffic (AADT)



**Today**



**2040**



# Meeting the Challenges

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- Strengthening Infrastructure Investment
  - American Jobs Act of 2011
  - Future Federal Transportation Legislation
- Working Smarter - Every Day Counts Initiative
  - Shortening Project Delivery
  - Accelerating Innovation



# Future of the United States Transportation System

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President Obama speaking on the United States infrastructure:

***“We’re not going to reduce the deficit by sacrificing investments in our infrastructure.”***

***“Ask yourselves -- where would we be right now if the people who sat here before us decided not to build our highways, not to build our bridges, our dams, our airports? ”***





# Strengthening Infrastructure Investment

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## American Jobs Act

- \$50 billion in immediate investments for highways, transit, rail and aviation.
- Creation of a National Infrastructure Bank
  - \$10 billion initial investment
  - leverage private and public capital to invest in a broad range of infrastructure projects



# Strengthening Infrastructure Investment

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## Legislative Proposals

- Provide long-term stability for highway program through multi-year authorization and funding.
- Focus investment on safety, state of good repair, and livability.
- Increase attention to highways of national interest through the enhanced National Highway System.
- Establish a performance-based highway program



# Working Smarter - Every Day Counts Initiative

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- Launched in November 2009
- Driven by state, local, and industry partners' need to work more efficiently and be more accountable to the public.
- Identifies & deploys innovation to shorten project delivery, enhance safety and protects the environment.
- Better, faster, smarter approach



# Shortening Project Delivery

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- Average of 13 years to deliver a major highway project
- Frequently cited problem areas identified
- FHWA Leadership role helping States, MPOs, contractors
- Toolkit of approaches to reduce delivery times, including
  - Planning and Environmental Linkages
  - Use of Existing Regulatory Flexibilities
  - **Contracting Innovations**



# Contracting Innovations

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## State of Utah

- Employed 2 accelerated project delivery methods
  - Construction Manager/General Contractor (CM/GC)
  - Design –Build
- Contractor and designer worked together during design to identify and minimize future construction risks.
- The design and construction phases often overlap, leading to faster project completion.
- Resulted in savings of \$25 million on a \$140 million project with 14 bridges



# Accelerating Technology Innovation

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- Use National Leadership to leverage 21<sup>st</sup> century proven, market-ready technologies
- Work with the transportation community to achieve widespread use of technologies, such as
  - Warm mix asphalt
  - Adaptive Signal Control
  - **Pre-fabricated Bridge Elements**



# Pre-fabricated Bridge Elements

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- Major Time Savings
- Cost Savings
- Safety Advantages
- Convenience for Travelers
- Solving Constructability Challenges
- Revolutionizing Bridge Construction in U.S.



# Graves Bridge in Florida





# Future of the United States Transportation System

