

# Opportunities to Address Climate Change through Reauthorization

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# + **Presentation Overview**

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- + • Introduction to the Pew Center on Global Climate Change
- + • Market Failures in Transportation
- + • Reducing Greenhouse Gas Emissions through Reauthorization
  - + – Opportunities
  - + – Key Hurdles
  - + – Criteria
  - + – Legislative Provisions
- + • **Pew Center Report Preview**

# + Pew Center Overview

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- + • Founded in May 1998
- + • Independent, non-profit, non-partisan
- + • Produces **research** on policy, economics, science & impacts, and solutions
- + • Works with **policy makers** at state, federal, and international levels
- + • Conducts **education** and outreach
- + • Engages the **business** community through the Business Environmental Leadership Council



# Market Failures in Transportation

The Environment, National Security, &  
Highway Trust Fund

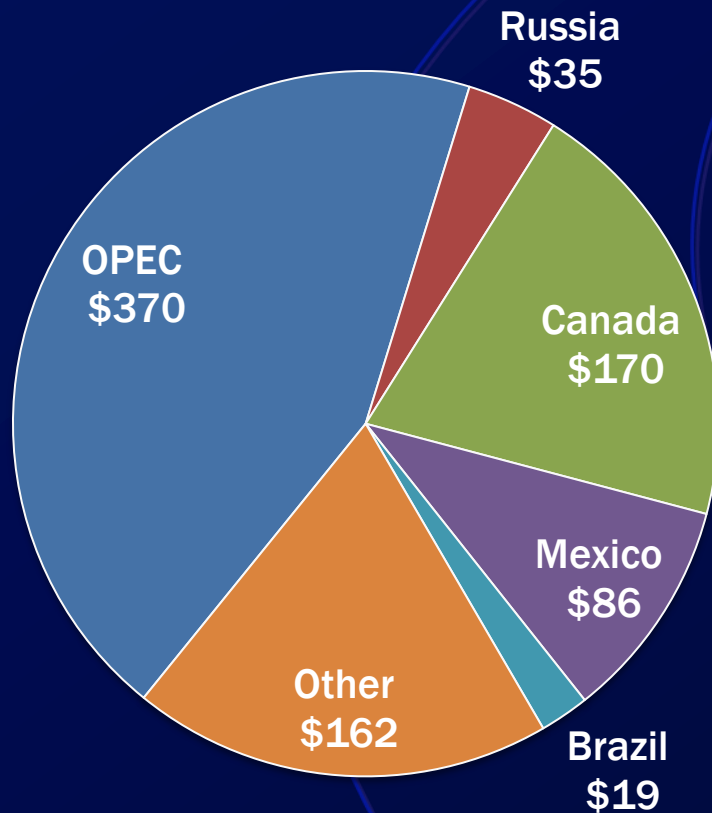
# Environmental Costs

- No market price to emit greenhouse gases (GHG) from transportation today
- 27% of GHGs in U.S. are from transportation with over 85% that from surface

*“A strong, credible body of scientific evidence shows that climate change is occurring, is caused largely by human activities, and poses significant risks for a broad range of human and natural systems.”*

*– National Academy of Sciences, 2010*

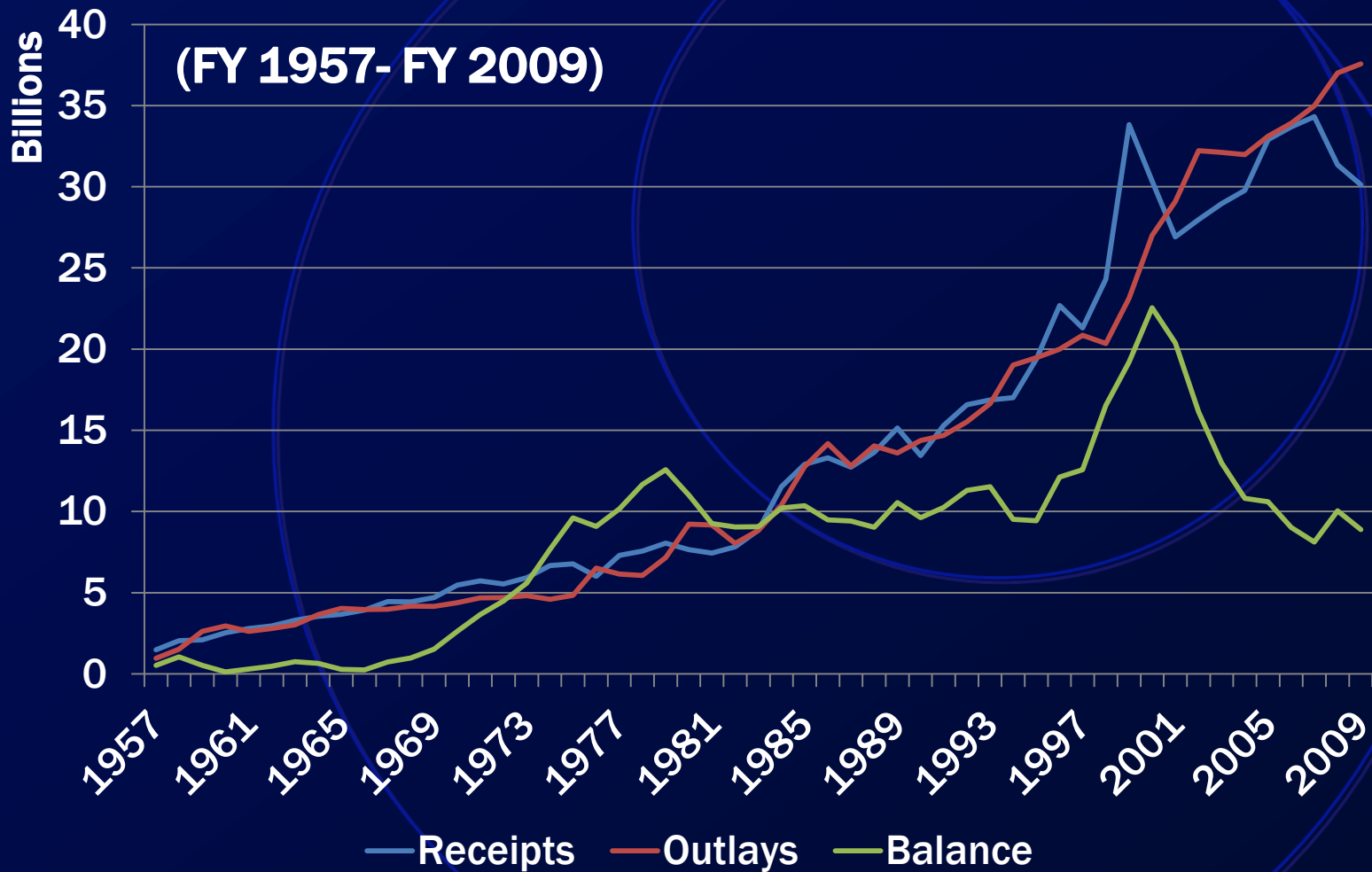
# National Security Cost



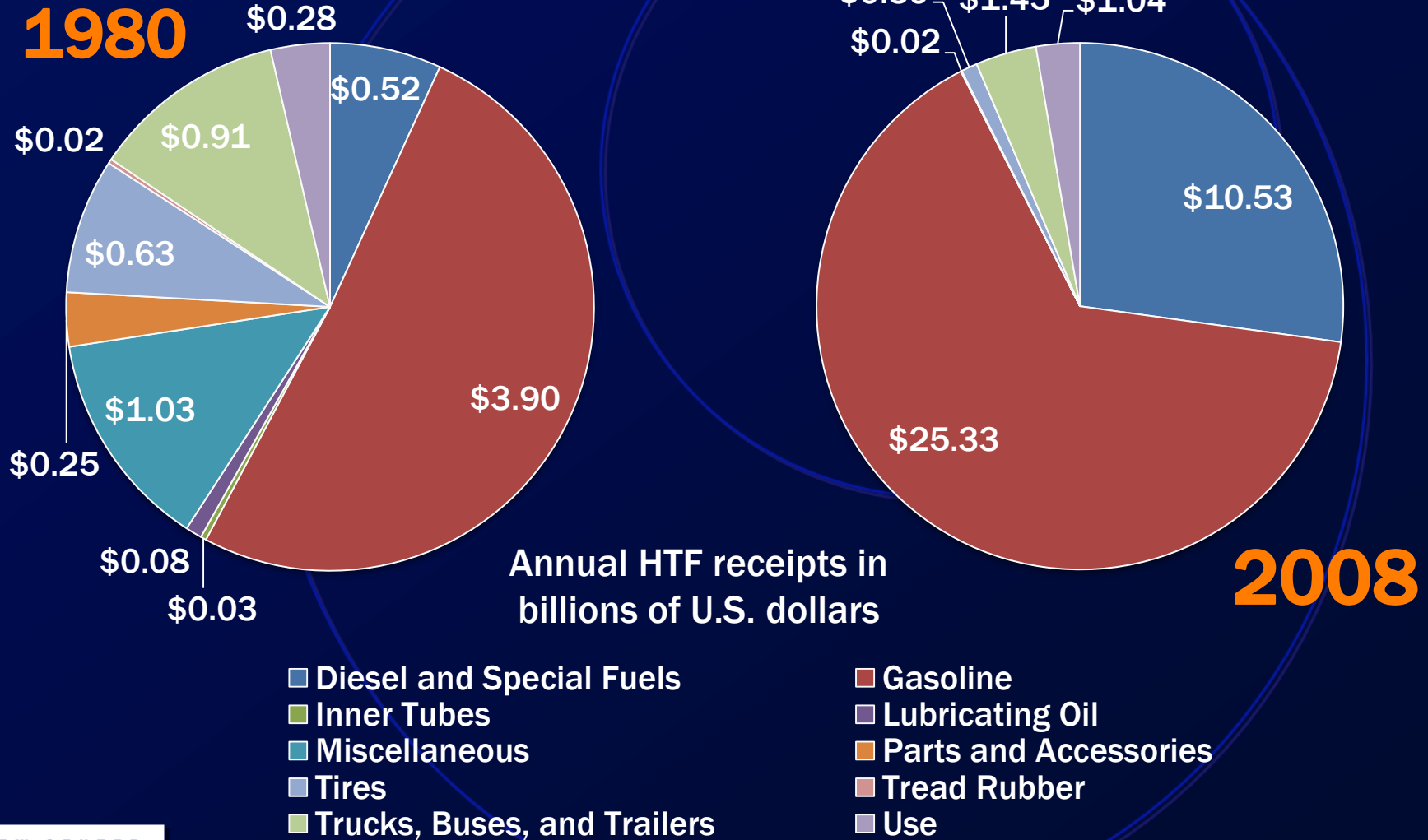
**U.S. Oil Imports**  
**01/08 - 05/10**  
**(billions of U.S. dollars)**

- National security cost
  - \$12.38/barrel security benefit for reduced consumption
- Incendiary devices from Iran (a petro-state) have killed U.S. soldiers
- DoD says climate change increases risk of conflict

# Highway Account Performance



# Reauthorization & Climate Change Link







# Reducing Greenhouse Gas Emissions with Reauthorization

## Opportunities, Key Hurdles, Criteria, & Legislative Provisions

# Opportunities to Reduce GHGs

- **System Efficiency**
  - ITS research
  - 55-MPH speed limit
  - Truck rest area electrification
- **VMT Reductions**
  - Carpool funding eligibility
  - Congestion pricing pilot
- **Fuels**
  - Fuel tax to encourage energy efficiency & less oil consumption



# Key Hurdles for GHG Reduction Provisions

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- The national economy and mood of the public
- Program purpose/structure
  - Desire for consolidation
  - Livability movement
  - Cost-effectiveness
- Insufficient funding (user fee problem)
- Funding distribution
- On and on...

# Criteria for GHG Reduction Provisions

- Efficacy of reducing GHG emissions
- Cost-effectiveness (\$ per ton of CO<sub>2</sub>)
- Extent of improving transportation mobility, accessibility, and safety
- Political feasibility
- Flexibility (geographical, implementation)
- Net benefits
- And more...

# **Legislative Provisions (1 of 2)**

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- 1. Change user fee structure**
- 2. Support transition to energy-efficient vehicles & low-carbon fuels for state & local governments**
- 3. Enable and incentivize expansion of transportation pricing**
- 4. Establish a transportation research & data collection program for GHGs**

## **Legislative Provisions (2 of 2)**

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- 5. Fund major performance-based multi-modal program**
- 6. Funding, incentives, & institutional support to for carpooling/vanpooling**
- 7. Establish national, state and/or metropolitan GHG emission reduction targets and a process to meet them**
- 8. \$100 million/year program to fund coordination between transportation and land use planning**



# Reducing Greenhouse Gases from U.S. Transportation

Preview of forthcoming report by the Pew  
Center on Global Climate Change

# + **Pew Center Report Preview (1 of 2)**

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- + • **Focuses on U.S. transportation sector**
- + • **Authors: David Greene and Steve Plotkin**
- + • **Report focuses on technology and policy**
  - + – **Technology includes vehicle engines, fuels, system efficiency, and more**
  - + – **Policy includes fuel-efficiency standards, pricing, and more**
- + •



# + Pew Center Report Preview (2 of 2)

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- + • 3 scenarios analyzed based on 4 criteria
  - + – Public attitude towards climate change
  - + – Public policy context
  - + – Rate of technological progress
  - + – Energy prices
- + • Result: *significant* reductions from transportation could be made cost-effectively beginning today
- +

**For More Information Visit**

[www.pewclimate.org](http://www.pewclimate.org)