

# Social and Economic Issues Facing Highway Agencies in the United States



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# Social and Economic Issues

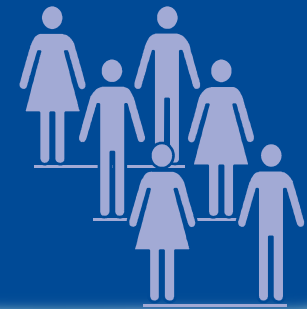
## Topic Outline

- **Background**
- **Current Events**
- **Future Trends**
- **Needed Changes**

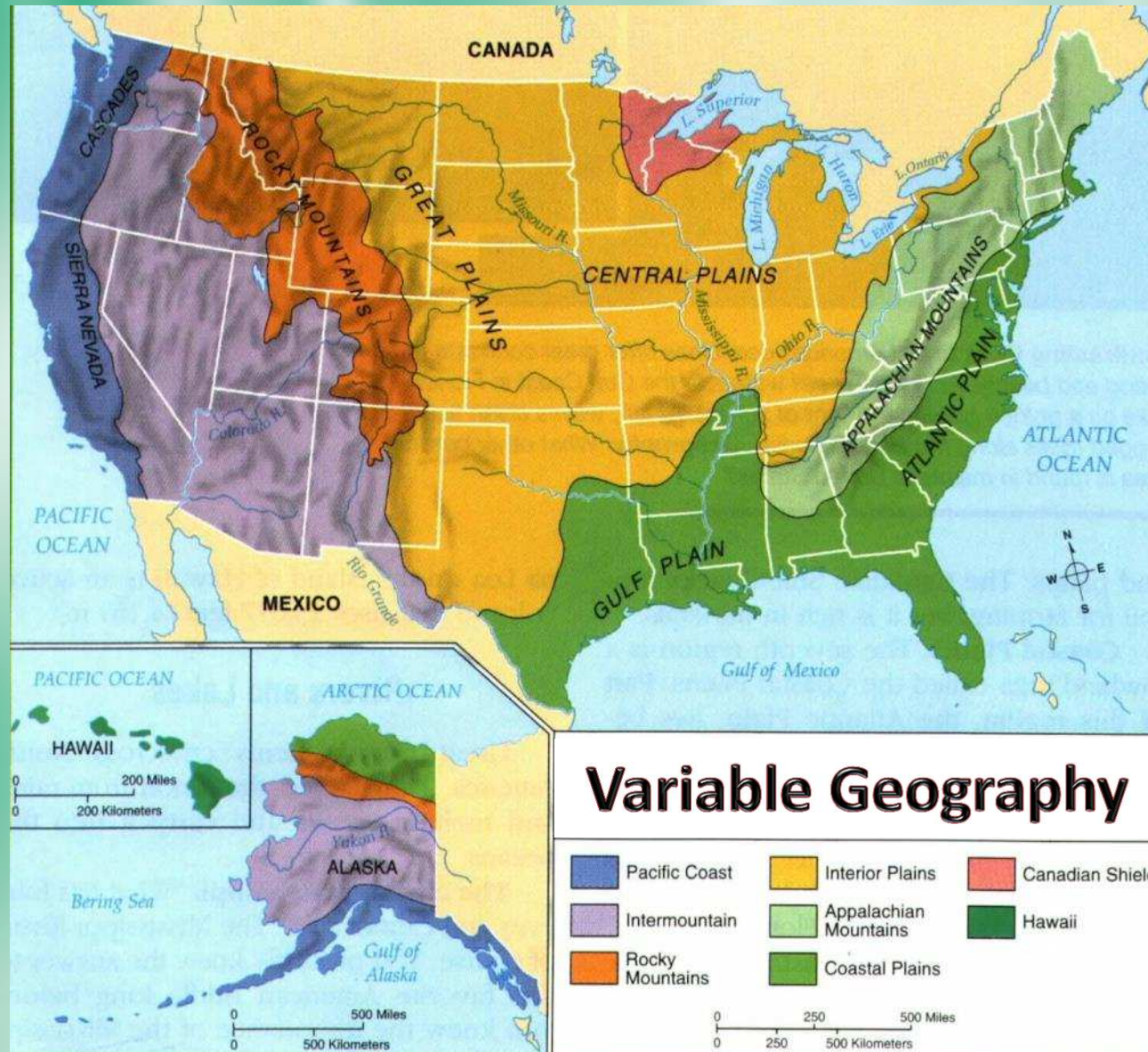
**Economic  
Impacts**



**Social  
Impacts**

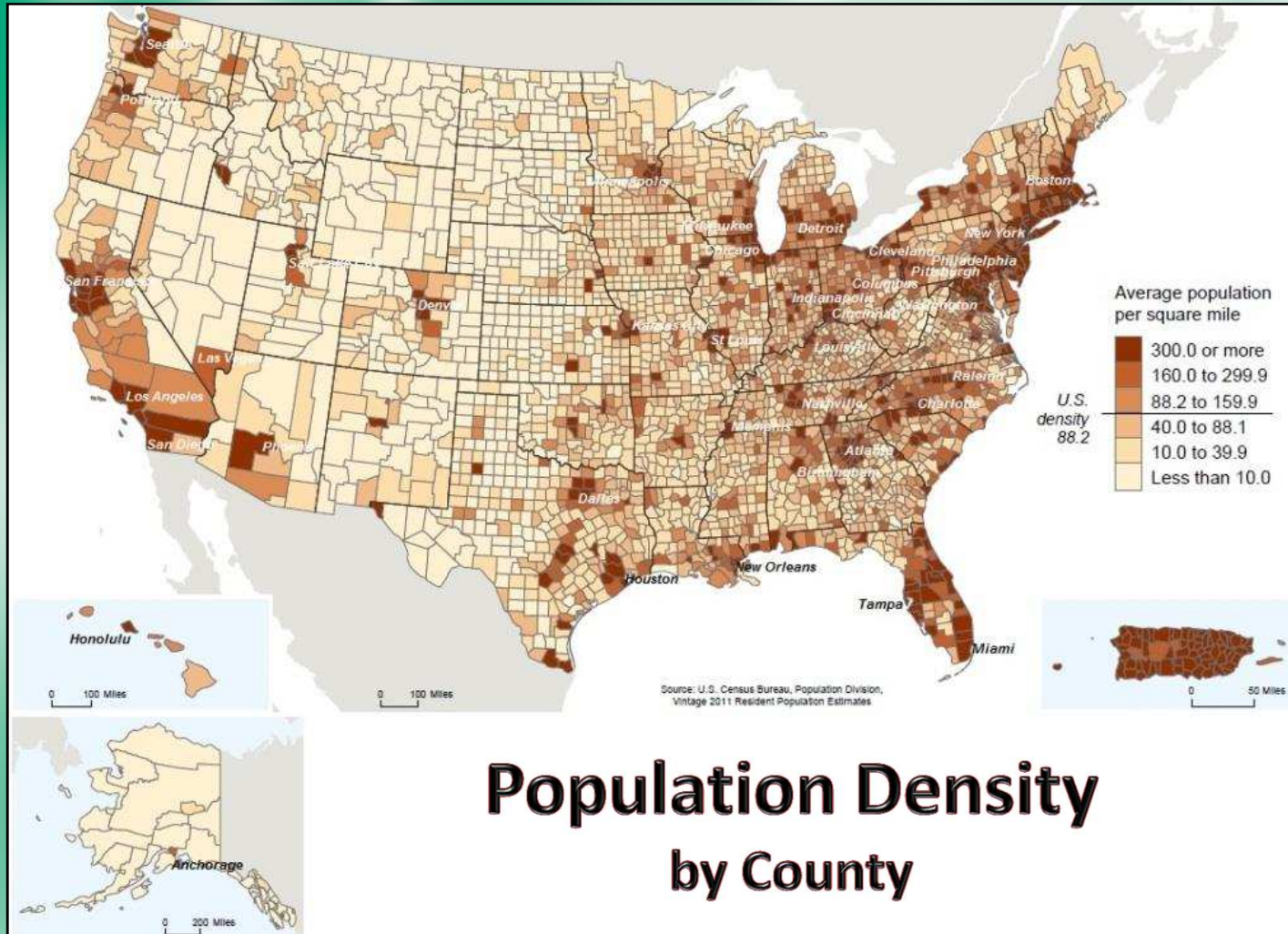


# Background - Social and Economic Issues





# Background - Social and Economic Issues



## Population Density by County

# Background - Social and Economic Issues

## Population Density Comparisons (People per square kilometer of land area)

<u>United States</u>	<u>35</u>
New Jersey	467
Massachusetts	331
Florida	141
California	95
Michigan	68
Montana	3

Area = 9,147,592 km<sup>2</sup>

<u>Australia</u>	<u>3</u>
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Area = 7,659,861 km<sup>2</sup>

<u>European Union</u>	<u>112</u>
Netherlands	394
Belgium	344
United Kingdom	246
Germany	225
France	111
Sweden	20
Finland	16

Area = 4,422,773 km<sup>2</sup>

# Background - Social and Economic Issues

## Road Infrastructure in the United States

Interstate Highway System	47,182 miles <i>(75,932 km)</i>
National Highway System	160,000 miles <i>(256,000 km)</i>
State and Local Roads	3,980,817 miles <i>(6,406,504 km)</i>



# Background - Social and Economic Issues

## *Highway Functional Classification System*

- **Principal Arterials**
  - Interstates
  - Freeways
  - Expressways
- **Minor Arterials**
- **Collectors**
  - Major
  - Minor
- **Local Roads**

## *Highway Jurisdictional Authority*

- **Federal Government**
- **State Governments**
- **Local Governments**
- **Toll Authorities**

# Background - Social and Economic Issues

## Finances

- **Federal Highway Trust Fund** — Fuel Consumption
- **State Trust Funds** — Fuel, Miscellaneous
- **Local Taxes** — Income, Property, Sales

### Federal Highway Trust Fund

Approximately 40% diverted for non-highway  
and non-transportation purposes



# Background - Social and Economic Issues

## Federal Role



# Background - Social and Economic Issues

## Non-Federal Role



# HIGHWAY OPERATIONS & MAINTENANCE

Responsibility of State and Local  
Transportation Agencies

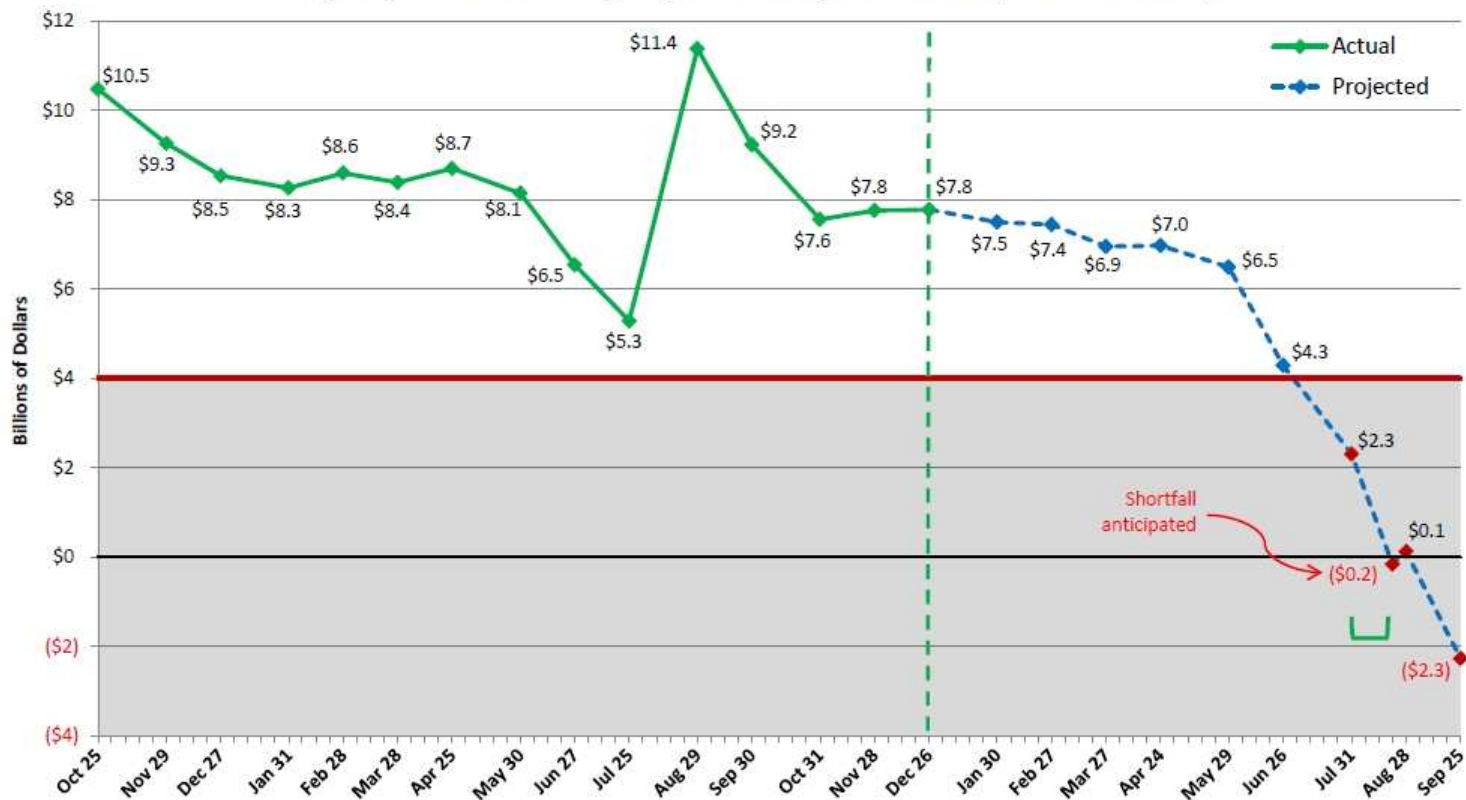


# Current Events - Social and Economic Issues

## Highway Trust Fund

FY 2014 & FY 2015 Projected Estimates for End-of-Month Cash Balances (as of 12/26/14) <sup>1/ 2/ 3/ 4/</sup>

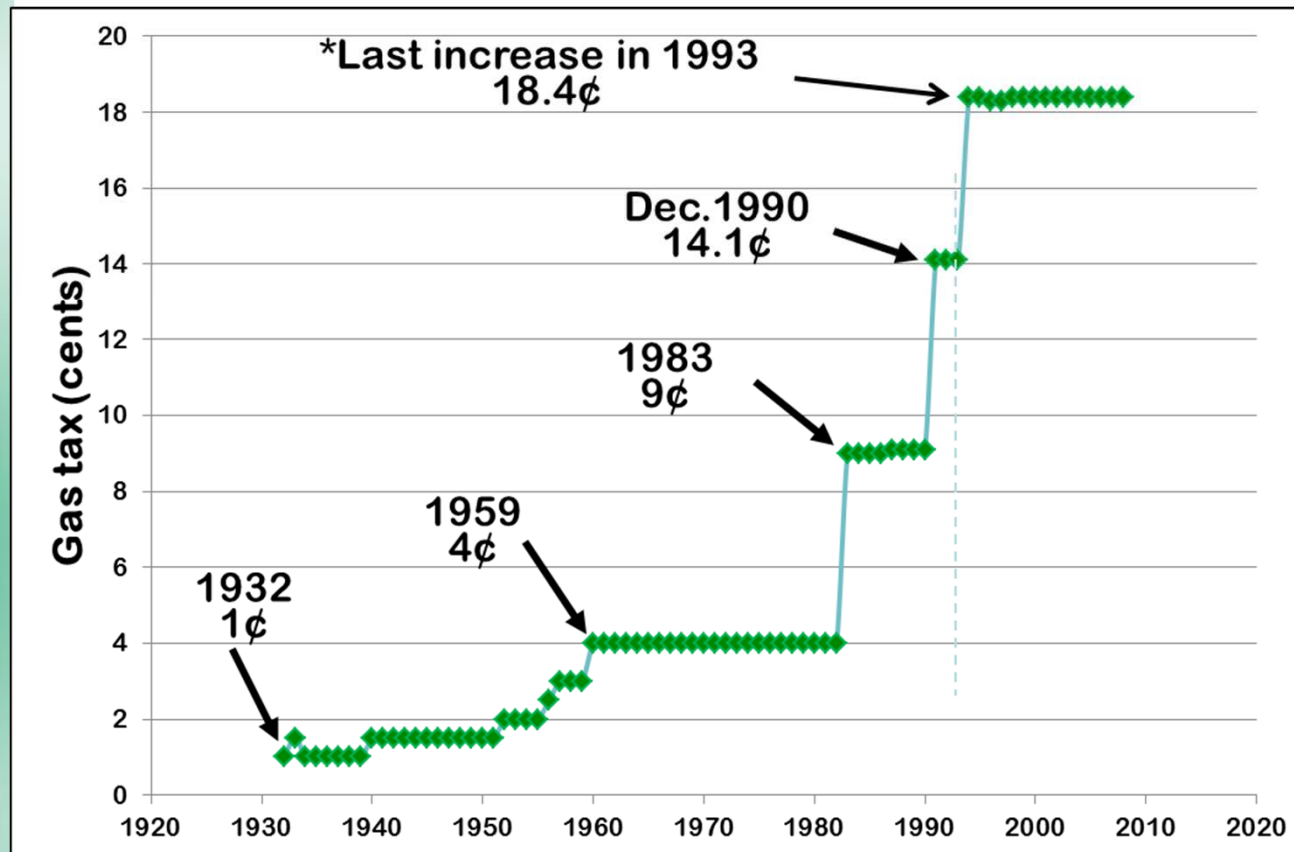
Highway Account of the Highway Trust Fund (Includes FHWA, FMCSA & NHTSA)



# Current Events - Social and Economic Issues

## Highway Trust Fund

### Federal Gasoline Tax

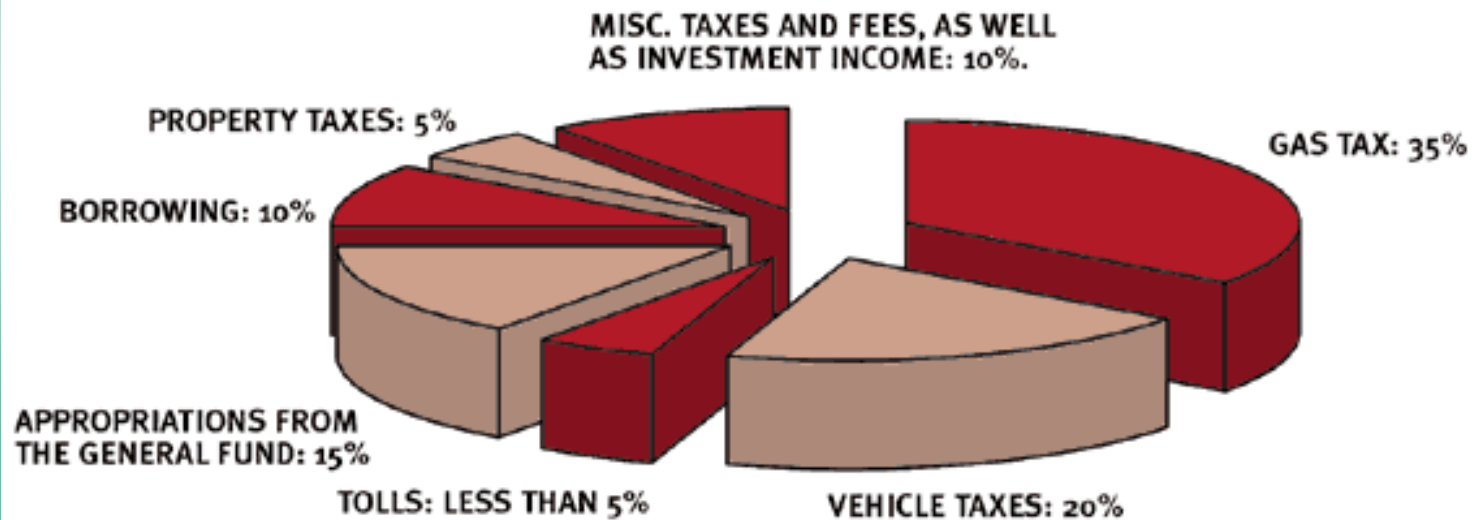




# Current Events - Social and Economic Issues

## State & Local Highway Funding

### Revenue Streams Used by the States to Fund their Road and Highway System



# Current Events - Social and Economic Issues

## The New Transportation Revolution



**The public depends on a robust highway system.**

**The highway infrastructure is decaying from neglect.**



**Politicians lack the will to provide leadership on difficult issues.**



# Future Trends - Social and Economic Issues



## Transparency

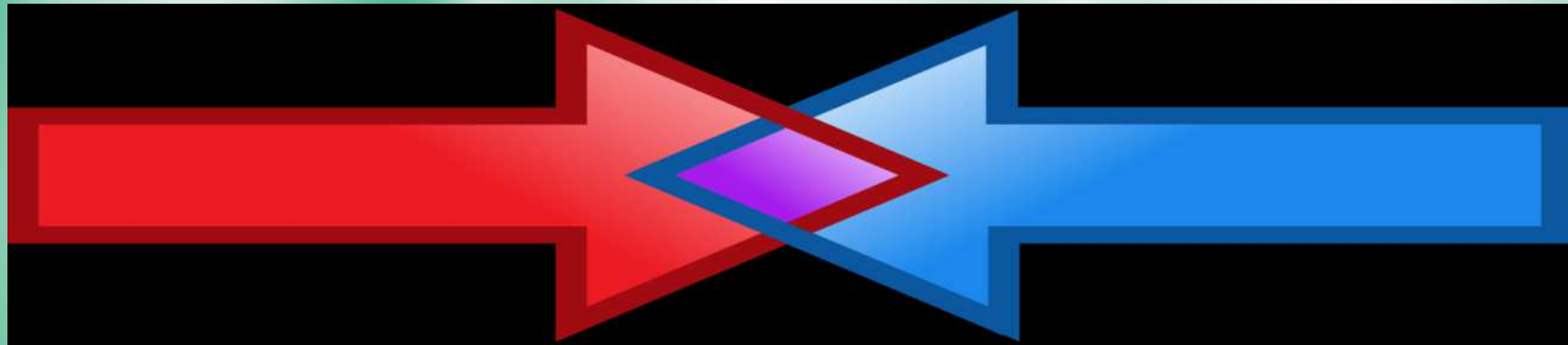
- Development of Pavement Performance Measures to achieve national goals.
- Development of Asset Management Plans to:
  - Preserve asset and minimize whole life cost;
  - Operate in a financially sustainable manner; and,
  - Create a framework to improve performance on a long-term basis.

# Future Trends - Social and Economic Issues



## Asset Management

**Applied Pavement Preservation is Asset Management**



**Applied Asset Management is Pavement Preservation**

# Future Trends - Social and Economic Issues

## Collaboration



- **Transportation agencies are continuing to lose their senior and experienced personnel due to retirements and job changes.**
- **The private sector (contractors & suppliers) will need to provide expertise in both technical and non-technical areas.**



# Future Trends - Social and Economic Issues

## Innovative Financing



- 1. Index motor fuel tax to inflation**
- 2. Capture part of vehicle registration and license fees**
- 3. Tax on vehicle sales dedicated to transportation**
- 4. Tolls on roads and bridges**
- 5. Base fees on Vehicle Miles Traveled (VMT)**

# Future Trends - Social and Economic Issues

## Innovative Financing



- 6. Beneficiary Charges (mortgage recording fees, lease fees, etc.)**
- 7. Sales Taxes (State & Local Options)**
- 8. Earmark general fund revenues**
- 9. Public-Private Partnerships (PPPs)**

# Needed Changes - Social and Economic Issues

- 1. Simplify transportation funding**
- 2. Create sustainable methods for raising revenues**
- 3. Remove non-transportation use of funds**
- 4. Mandate greater emphasis on system preservation**
- 5. Harmonize pavement condition standards**



# Needed Changes - Social and Economic Issues

- 6. Increase public education on the sources and uses of transportation funding**
- 7. Inform public about link between safety and pavement condition**
- 8. Publicize link between a viable transportation system and healthy economy**

MICHIGAN STATE  
UNIVERSITY



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