

# **APAM**

# **Asphalt Paving Conference**

**February 10, 2010**

**Director Kirk T. Steudle, P. E.**



**“Providing the highest quality integrated transportation services for economic benefit and improved quality of life.”**

# Today's Topics

- **Where We've Been**
- **Where We Are**
- **What the Future Looks Like**

# *Where We've Been*



# Partnerships

- Jointly completed a design deliverable Enhancement Project with ACEC
- Jointly delivered a \$1 Billion annual program effectively
- Construction Quality Partnership
- Work Zone Speed Limits
- Disadvantage Business Enterprise (DBE)



# Partnerships

- Meijer carpool lot partnership
- Diesel emissions reduction partnership
- Comprehensive traffic management strategy in partnership with Michigan International Speedway (MIS)
- Michigan State Police Partnership
- Government Performance Project



# Oversight

- Warranties
- Mobility Policy
- Prevailing Wage Awareness and Commitment to Compliance
- Program Management Chart

**Five Year Summary of MDOT Projects**

<b>Calendar Year</b>	<b>Original Contract Cost</b>	<b>Final Contract Cost</b>	<b>Percent Difference</b>
2005	\$941,448,620.30	\$937,237,709.98	-0.45%
2006	\$580,343,367.59	\$581,951,064.12	0.28%
2007	\$777,582,980.29	\$810,428,814.94	4.22%
2008	\$967,285,996.11	\$983,915,828.12	1.72%
2009	\$726,981,046.84	\$750,956,601.62	3.30%

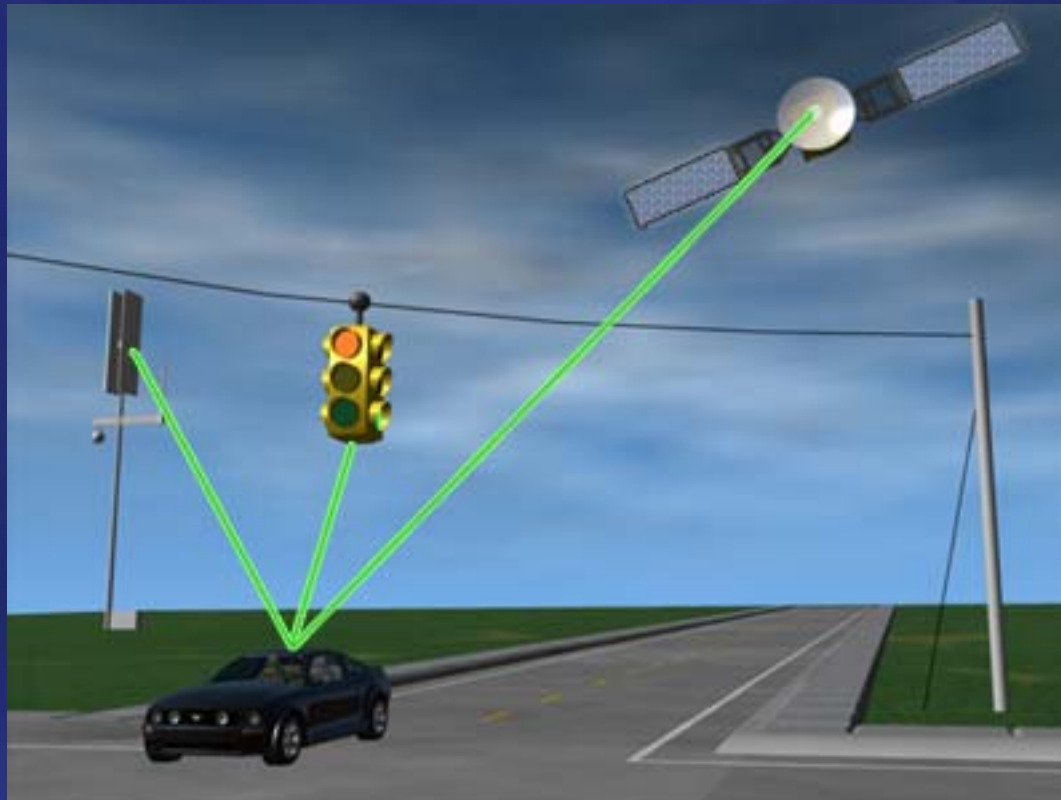
# Innovations

- **Conducted a pilot program for alternate pavement bidding**
- **Best Value Contractor Selection**
- **Design-Build**
- **Design-Build-Finance**
- **MI Transportation Plan: Moving Michigan Forward**

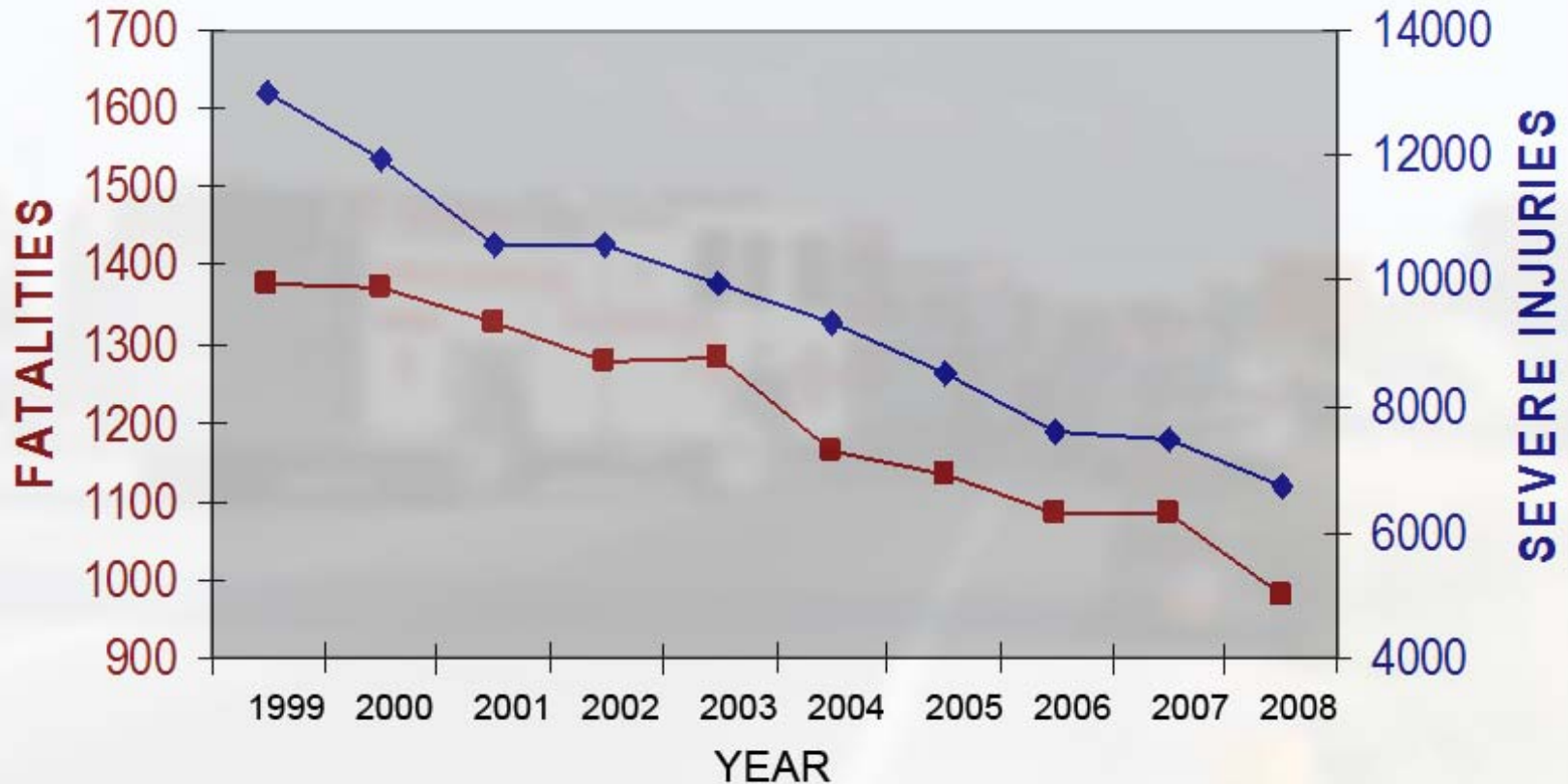


# Innovations

- Michigan Benefits Estimation System
- ITS/Intellidrive



# Michigan Traffic Fatalities and Severe Injuries



# Specifications

- **Revised construction claims process**
- **Recycled concrete**
- **Open Graded Drainage Course Specification (OGDC)**
- **New standard specifications for construction (Spec Book) underway**
- **Aggregate Operations Committee**
- **Launched a technical review of major issues**

# *Where We Are*



# Transportation Funding Task Force

- Created in response to Public Act 221 in December 2007
- Issued final report to Legislature, Governor and State Transportation Commission on November 10, 2008
- Report available online:

[www.michigan.gov/tf2](http://www.michigan.gov/tf2)



# TF2-Related Legislation Introduced

- **New Transit Services Program**
- **Enable Transit TIFA's**
- **Transit-Regionalization Grant Program**
- **Require transit asset management**
- **Enable Public-Private Partnerships**
- **Incentive for multi-county road projects**
- **Enlarge road asset management**
- **Act 51 Amendments; CTF share**
- **Diesel parity**



# TF2 Legislation to Come

- **Motor Fuel Tax Act adjustment**
- **Motor Carrier Tax (diesel fuel) adjustment**
- *Ad valorem* **registration-tax rates**
- **Weight-based (truck) tax rates**
- **Aviation revenues**
- **County-option user fees and taxes**



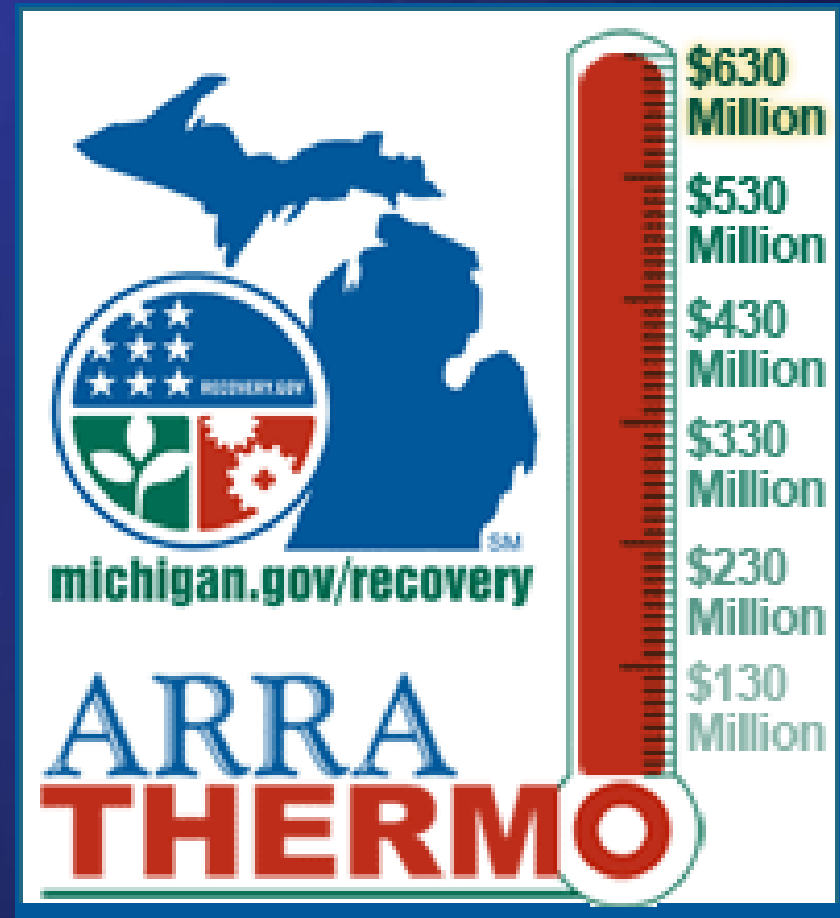
# American Recovery & Reinvestment Act

- President Obama signed a one-time economic recovery package totaling \$48 billion for transportation
- Package = roughly 1 year's worth of typical federal monies
- Monies would not support maintenance and other services



# ARRA Status

- **Funding allocated so far**
  - \$1.05 Billion
- **Projects let to date:**
  - 392 Highway Projects under contract
  - Engineers Estimates – \$783.8 Million
  - Low Bid - \$679.2 Million
- **High Speed Rail Funds**
  - \$40 Million



# ARRA Highlighted Projects

## M-59 Road Reconstruction & Widening

- **Eliminates 10-year traffic bottleneck**
- **Improves capacity & relieves congestion**
- **Previously tabled due to lack of funds**
- **Cost: \$50M**
- **Completion Date: 11/2010**
- **Jobs: 1,428**
- **Ripple Effects:  
Jobs to local businesses**



# ARRA Highlighted Projects

## M-13 Reconstruction - Hess to North of M-46

- Separates combined sewer
- New sanitary and storm sewer
- New water main, curb and gutter
- HMA resurfacing
- Safety improvements
- Sidewalk replacement and ADA ramps
- Signal upgrades and modernization

Cost: \$5,053,211

Completion Date: 10/29/10

Jobs: 259



# ARRA Highlighted Projects

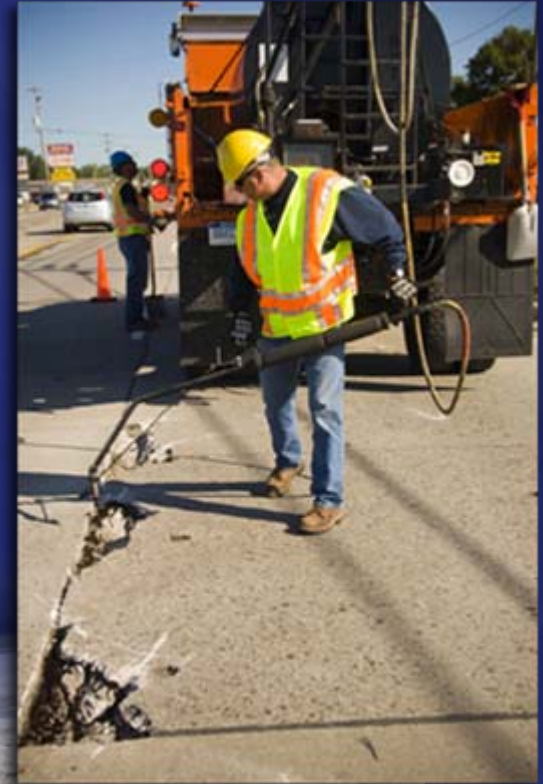
## I-196 Road/Bridge Reconstruction & Widening

- Replaces obsolete road/bridge infrastructure
- ARRA funding enabled additional lane
- Improves safety and mobility
- Cost: \$40M
- Open to Traffic Date: 11/2010
- Jobs: 325
- Ripple Effects:
  - Jobs to local businesses
  - Sustaining local investments



# Jobs for Main Street

- House passed bill provides \$37.3 B for transportation investment to create jobs
  - \$27.5 B for highways nationwide
  - \$8.4 B for transit nationwide
- For Michigan this could mean
  - \$850 million for highways
  - \$117 million for transit
- But there are significant challenges...



# Challenges

- **90 days from enactment to award funds for 50% of projects**
  - ARRA required 120 days to obligate funds
- **No exemption to this requirement for urbanized areas**
  - ARRA exempted MPOs from the 50% obligation requirement
- **Senate will consider the bill or pass their own, but not until February at the earliest**



# *What the Future Looks Like*



**Transportation**

# Transportation Futuring

## Currently Anticipated Mega-change Movers

Climate  
Change

Globalized  
Economy

Population  
Growth/Aging

Global Energy  
Independence

Lower  
Manufacturing  
Economy

Develop for  
Climate Change

Walkable  
Communities

Intelligent  
Transportation  
Systems

Nanotechnology

Transportation  
Mega-trends



# Transportation Futuring

*Reasonable to Anticipate that Transportation Systems Will be More:*

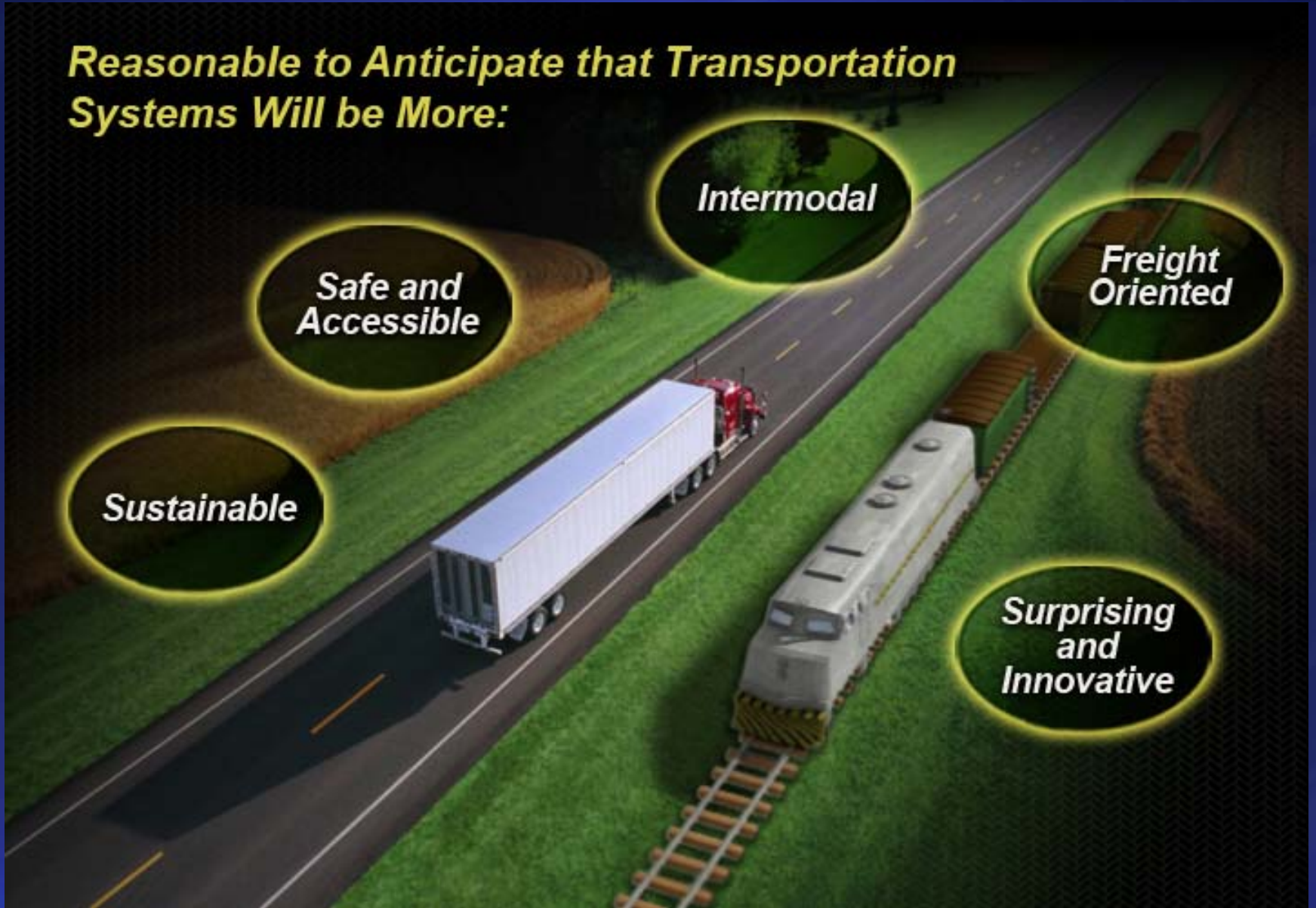
**Safe and Accessible**

**Intermodal**

**Freight Oriented**

**Sustainable**

**Surprising and Innovative**



# Michigan Trends

- **People living & working longer**
- **Decrease in Michigan's Population**
- **Increase in population diversity**
- **Changes in Michigan industry**
- **Increase in tourism, research/technology, and green manufacturing**
- **More classes of transportation**
- **More technology use vs. airline travel for meetings**
- **Enhanced virtual shopping**

# Technology Changes Transportation

- **Impact of smart vehicles/highways/roads will restore speed & flexibility, improve safety, and eliminate waste with more cars per vehicle mile**



# Technology Changes Transportation

- Improving technology to reduce driver distraction and increase safety





# Technology Changes Transportation

- Radio Frequency ID license plates will enable cheap tolling





# Technology Changes Transportation

- Individuals less dependent on personal transportation, but freight transportation will still bring them their purchases



# Technology Changes Transportation

- **Line-haul buses replaced by taxis dispatched electronically**



# Freight Transportation Will Continue to Grow

- Freight traffic
- Truck and auto freeway traffic
- Increasing carbon costs
- International trade



# Climate Change and Carbon Pricing

- **Electric and hybrid vehicles**
- **Repopulation of core cities**
- **Passenger air travel increasingly costly and unpleasant**
  - **Business travelers**
  - **Personal travelers**



# Infrastructure Footprint Smaller- But More Sustainable

- Smart highways/roads/vehicles
- Nanotechnology (i.e. carbon fiber)
- Operation focus



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*THANK YOU!*