

# State Transportation Commission

**November 18, 2010**



## **2011-2015 FIVE-YEAR TRANSPORTATION PROGRAM**

**PRELIMINARY DRAFT  
NOVEMBER 10, 2010**

**Kirk T. Steudle, Michigan Department of Transportation Director**

# *Presentation Objectives*

- ❖ Review revenues available to support the program
- ❖ Identify MDOT's investment strategies and funding issues
- ❖ Provide overview of each program's objectives
- ❖ Obtain Transportation Commission agreement to post draft to website and seek public input and comment

# *Five-Year Transportation Program Key Messages*

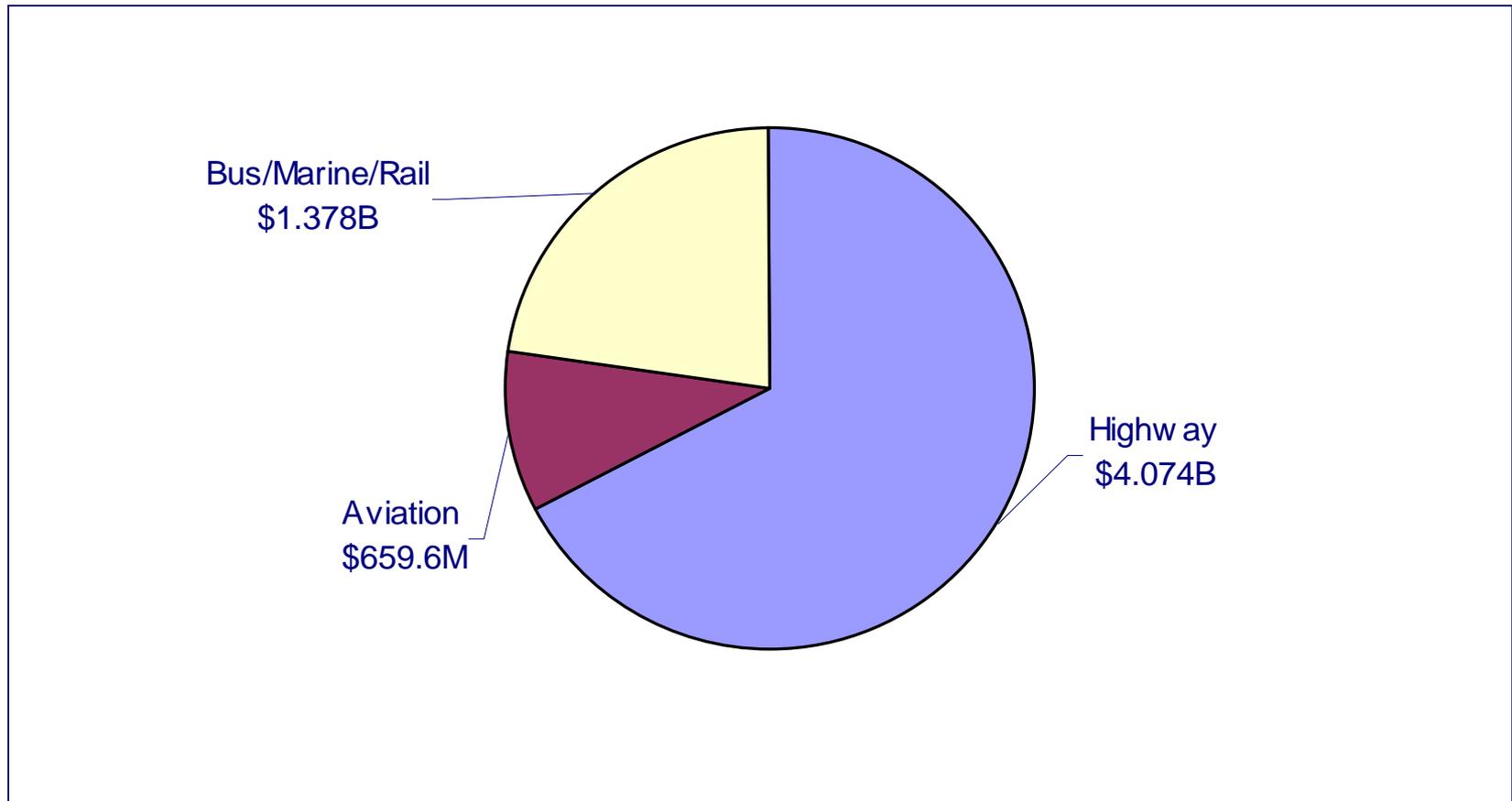
- ❖ Five-Year Program includes all modes: Highway, Passenger Transportation, Rail Freight, Ports and Aviation
- ❖ Continues to focus on system preservation and safety
- ❖ Document streamlined to provide focus on key messages

# *Five-Year Transportation Program Key Messages*

- ❖ State revenues continue to decline
- ❖ No additional state funding appears in sight
- ❖ Highway Program able to match all available federal aid in FY 2011 due to one-time budget adjustments, but significant shortfall begins in FY 2012. No highway category is completely cut
- ❖ Consequences of reduced investment are identified in the Five-Year Program

# 2011-2015 Transportation Program INVESTMENTS

Anticipated Investment = \$6.1 Billion



# *Highway Program*

Presenter- Denise Jackson

# *Revenue Assumptions Highway Program*

## ❖ Federal Revenue Assumptions

- No Federal Reauthorization Bill- operating under Continuing Resolution
- 2011 Revenue assumed same as 2010, then 3.2% annual growth from 2012-2015
- **\$4.1 billion** in federal funding would be available for the trunkline program, if state match funds are available

# *Revenue Assumptions Highway Program*

## ❖ State Revenue Assumptions

- Revenue based on Department of Treasury's Michigan Transportation Fund estimate
- Assumes flat to less than 1% growth on average for FY 2011-2015
- Total state revenue is estimated at **\$2.2 billion** for capital outlay, routine maintenance, and debt service
  - Includes bond proceeds to support the Blue Water Bridge Plaza Project

# *Inability to Match Federal Aid Highway Program*

## **FY 2012-2015 Annual Shortfall**

State Revenue Shortfall	\$120-\$160 million per year
Federal Aid Lost to MDOT Highway Capital Program	\$700-\$800 million per year

# Investment Strategy Highway Program

## Highway Program- (Annual/Avg)

	<u>FY 2011</u>	<u>FY 2012-2015</u>
❖ Repair & Rebuild Roads	\$493 M	\$111 M
❖ Repair & Rebuild Bridges	\$250 M	\$69 M
❖ Capacity Improvements/ New Roads	\$135 M	\$50 M
❖ Safety and System Operations	\$131 M	\$64 M
○ Safety	\$17 M	\$10 M
○ Congestion Mitigation and Air Quality	\$42 M	\$7 M
○ ITS	\$14 M	\$3 M
○ Operations	\$18 M	\$5 M
❖ Other	\$94 M	\$48 M
❖ Routine Maintenance	\$275 M	\$275 M
❖ TOTAL	\$1.378 B	\$677 M

# *Highway Program Impacts Pavement and Bridge Preservation*

## ❖ Pavement

- Over 180 projects (over 325 miles) either delayed or removed from this Five-Year Program.
- Nearly 700 miles of preventive maintenance work annually, removed or delayed.

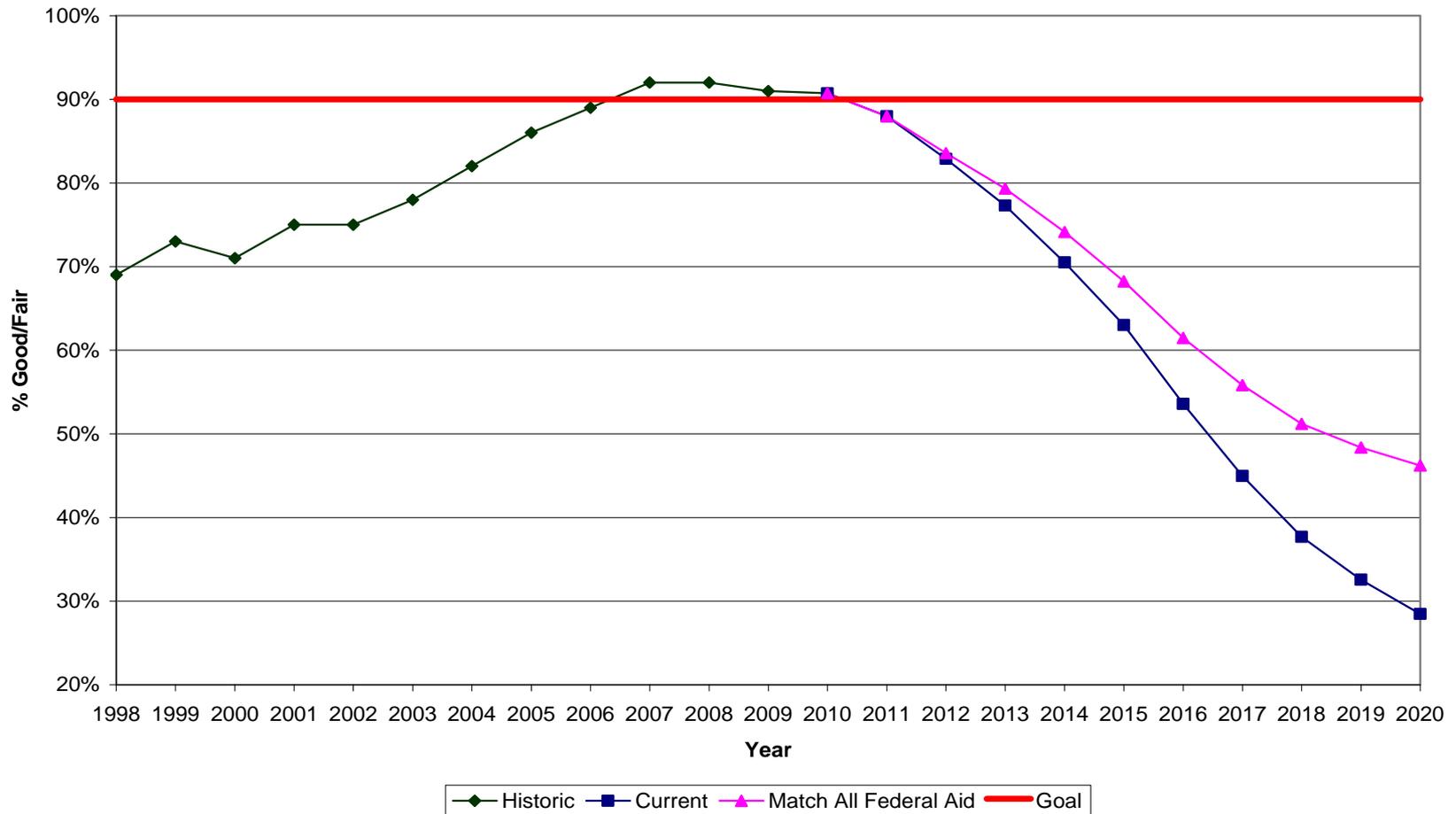
## ❖ Bridges

- Approximately 300 bridges will not receive repairs from the Bridge Replacement and Rehabilitation Program.
- Approximately 300 bridges will not be sufficiently maintained with preventive maintenance work. Each year, more susceptible to becoming structurally deficient.

# Preserving the Highway System

## How Long Will the Pavement Last?

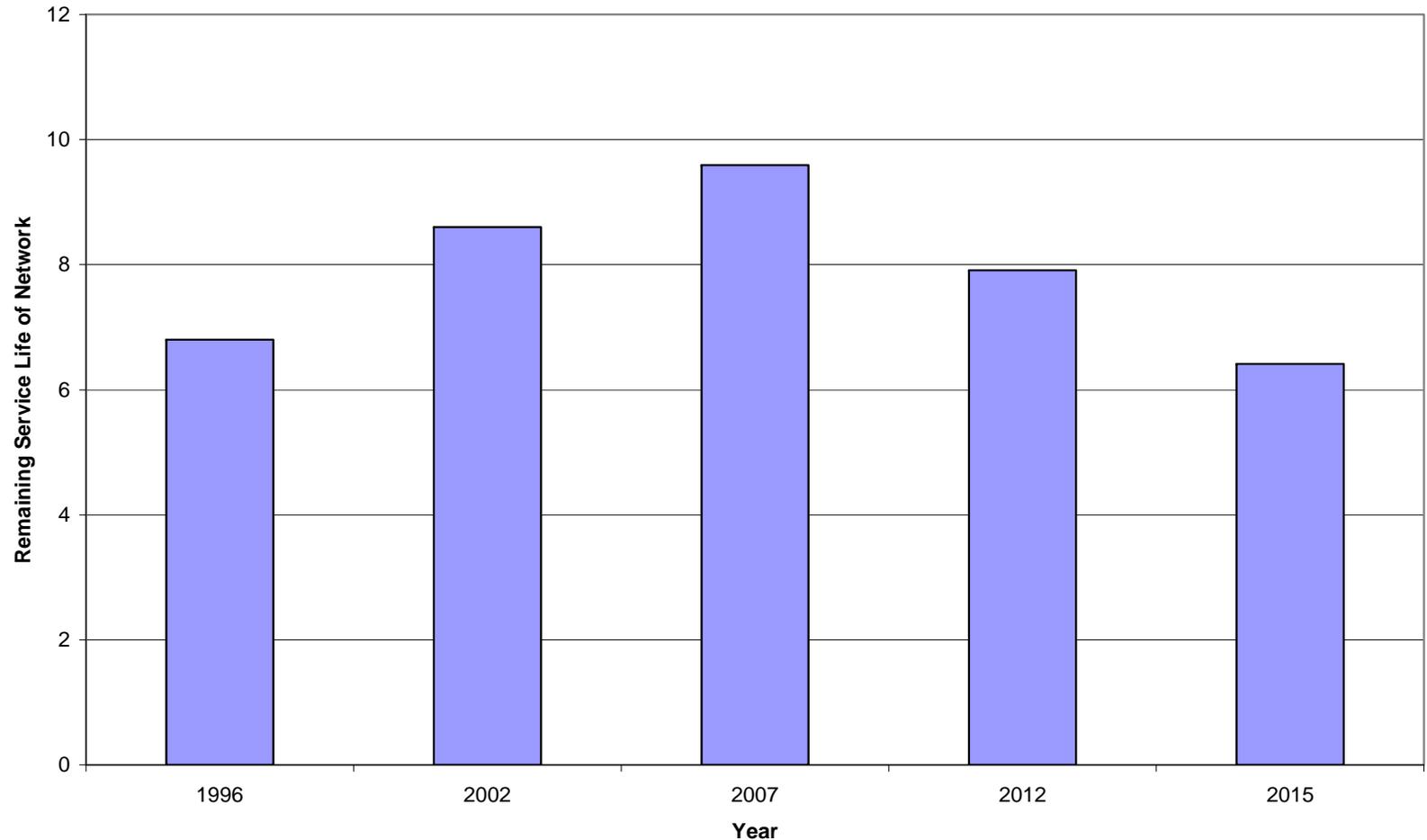
Historic and Projected RSL Pavement Condition  
Current Strategy vs Match All Federal Aid Strategy



# *Preserving the Highway System*

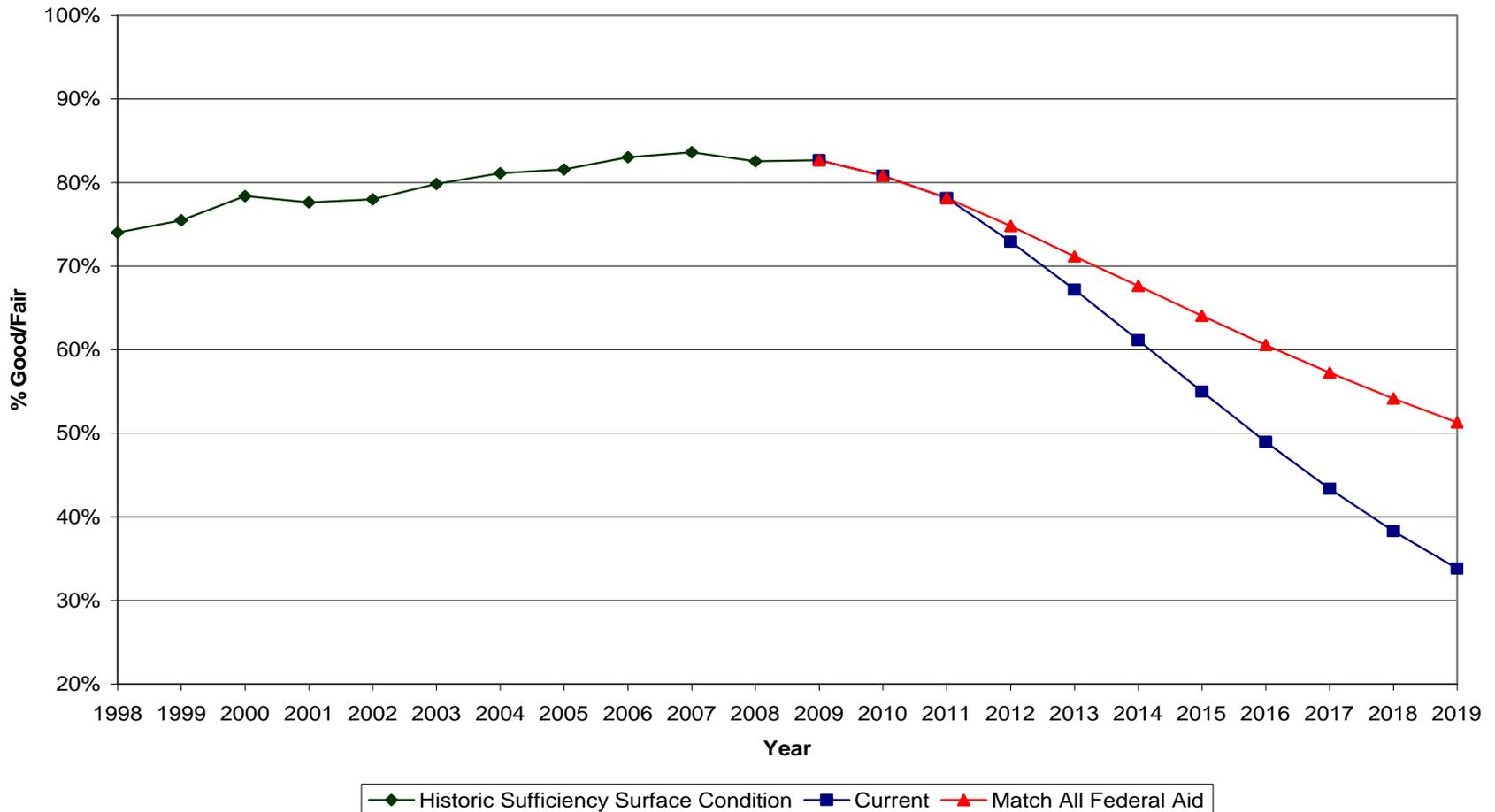
## *How Long Will the Pavement Last?*

**Historic and Projected Network Remaining Service Life**



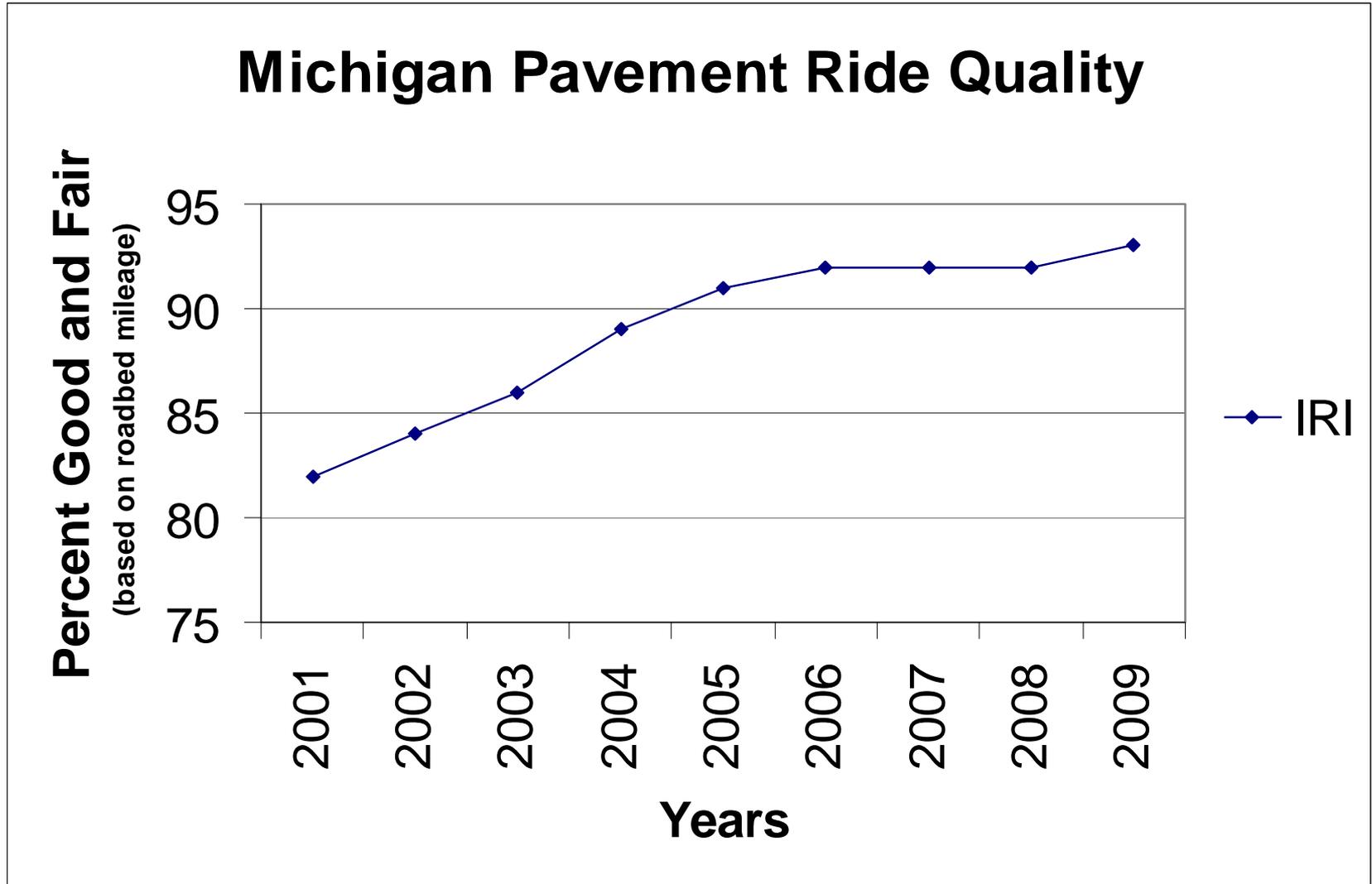
# Preserving the Highway System What Does the Driver Perceive?

Historic and Projected Sufficiency Pavement Surface Condition  
Current Strategy vs Match All Federal Aid Strategy

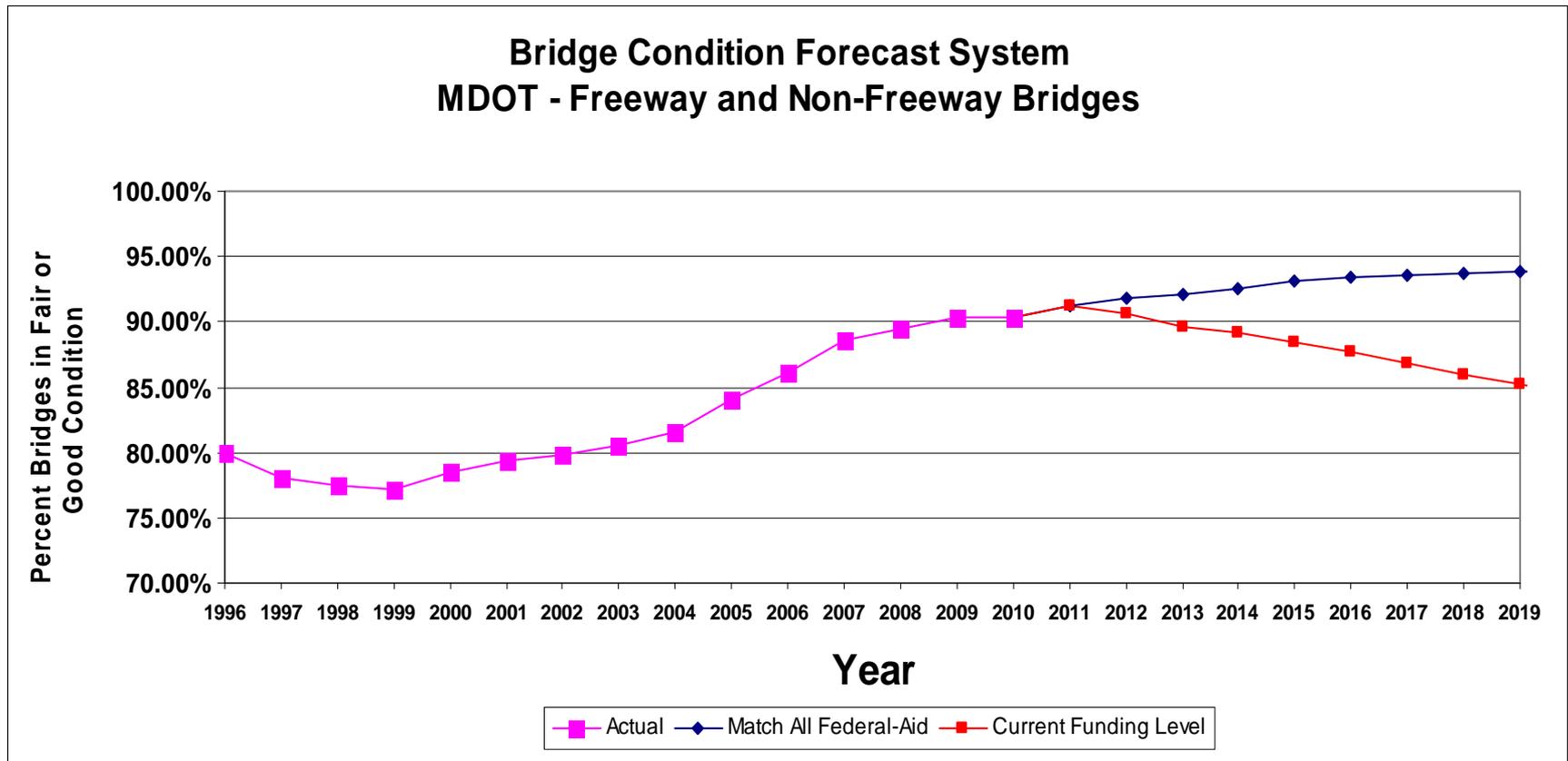


# Preserving the Highway System

## How Comfortable is the Driver's Ride?



# Preserving the Highway System Bridge Condition



❖ Will not meet the combined bridge condition goal of 92.5% Good or Fair under current funding levels

# *Highway Program Impacts Safety & System Operations*

## ❖ Safety

- Several projects will be delayed that would have addressed fatalities and severe injuries
- The Safety Work Authorization program will be eliminated

## ❖ Congestion Management and Air Quality

- \$2M shortfall in operation budget of MITS Center
- Increased risk if having to implement costly prescriptive measures

## ❖ Intelligent Transportation System

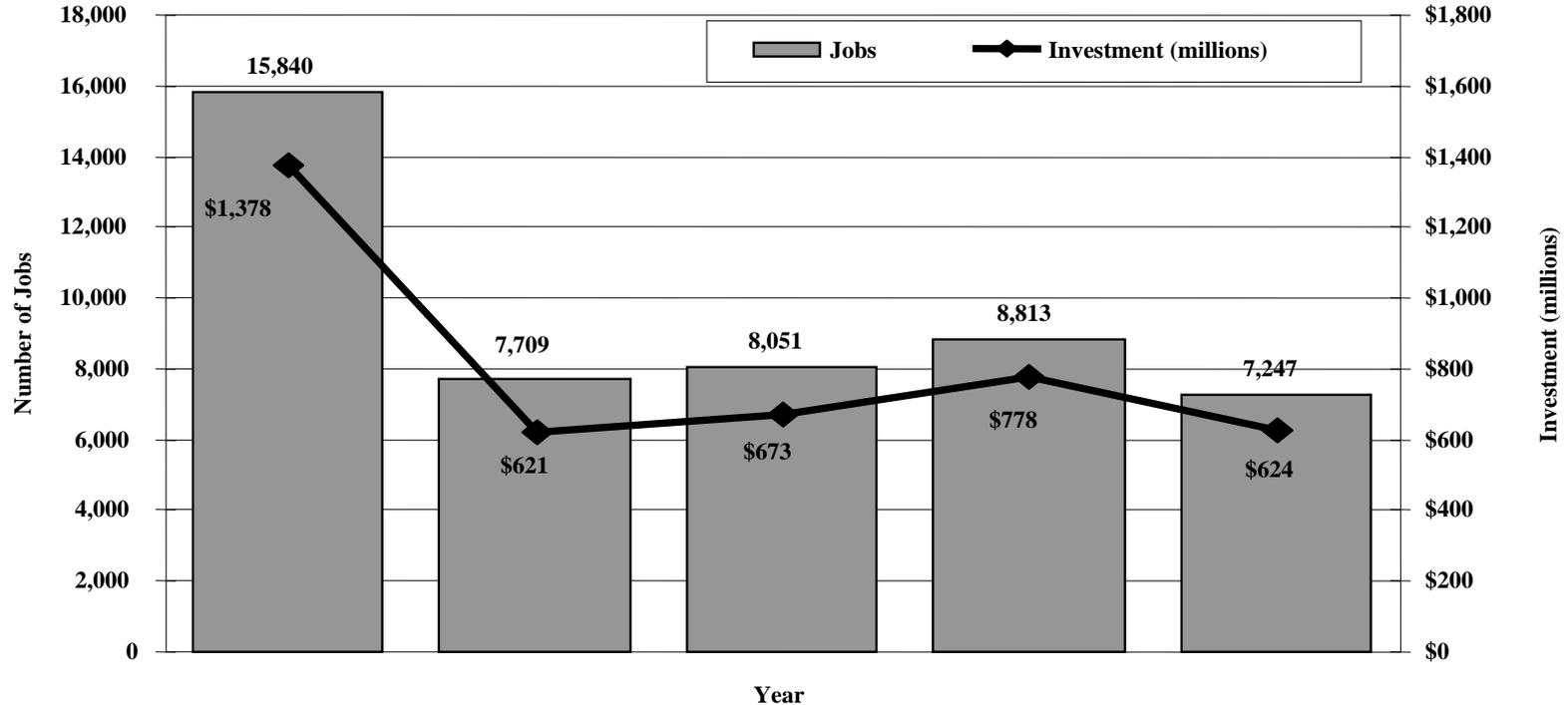
- Elimination of the entire capital program at MDOT for ITS deployment activities

# *Highway Program Impacts Expanding the Highway System*

- ❖ Less than 10% of MDOT's Highway Program Investments will go towards expanding the system.
- ❖ The projects anticipated to move forward include:
  - The Blue Water Bridge project is a major portion of the capacity program, supported by toll revenue.
    - Project will improve overall crossing efficiency, safety and security of entry, and I-94/I-69 corridor leading to the plaza.
  - M-231- Bridge over the Grand River in Ottawa County in 2011.
  - US-131- New bridge over the St. Joseph River, in St. Joseph County in 2013.

# Highway Program Impacts Supporting Economic Opportunities

## Effect on Employment of the Five-Year Highway Program 2011-2015



# *Passenger Transportation*

Presenter- Jean Ruestman

# Investment Strategy

## Multi-Modal ~ Passenger Transportation

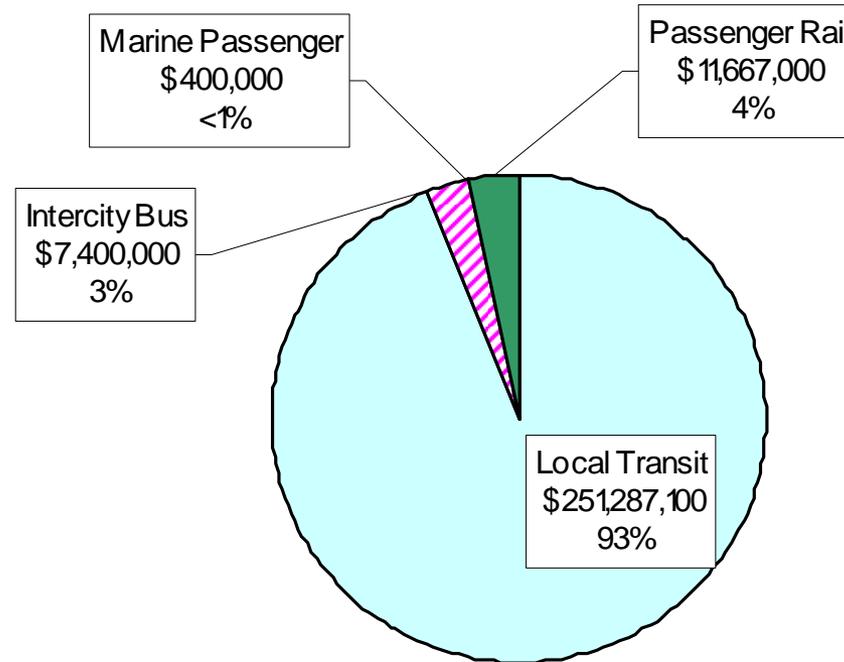
	Annual Average	Five-Year Total
<b>AVIATION</b>		
Aviation Improvement Program*	\$131.93 million	\$ 659.6 million
All Weather Airport Access Program	\$ 0.53 million	\$ 2.65 million
<b>PASSENGER TRANSPORTATION</b> (Local Transit, Intercity Bus, Passenger Rail)	\$270.8 million	\$1,354.00 million
<b>RAIL FREIGHT and PORTS</b>	\$ 4.83 million**	\$ 24.15 million
<b>TOTAL</b>	<b>\$399.65 million</b>	<b>\$1,998.25 million</b>

The Passenger Transportation Program is one component of the Multi-Modal Program

# Investment Strategy

## Multi-Modal ~ Passenger Transportation

**FY2011 PASSENGER TRANSPORTATION BY MODE**



Breakdown of Five Year Program by mode will likely look like FY2011

# *Revenue Assumptions*

## *Multi-Modal ~ Passenger Transportation*

### Federal Revenues - Local Transit/Rural Intercity Bus

- ❖ Annual formula apportionments from FTA
- ❖ Annual congressional earmarks to MDOT and rural transit agencies
- ❖ New emphasis on competitive grants
- ❖ Assumed continuation of FY2010 levels

### Federal Revenues - Passenger Rail/Marine

- ❖ Federal funds intermittent – Congressional earmarks, special projects, competitive grants



# Revenue Assumptions

## Multi-Modal ~ Passenger Transportation

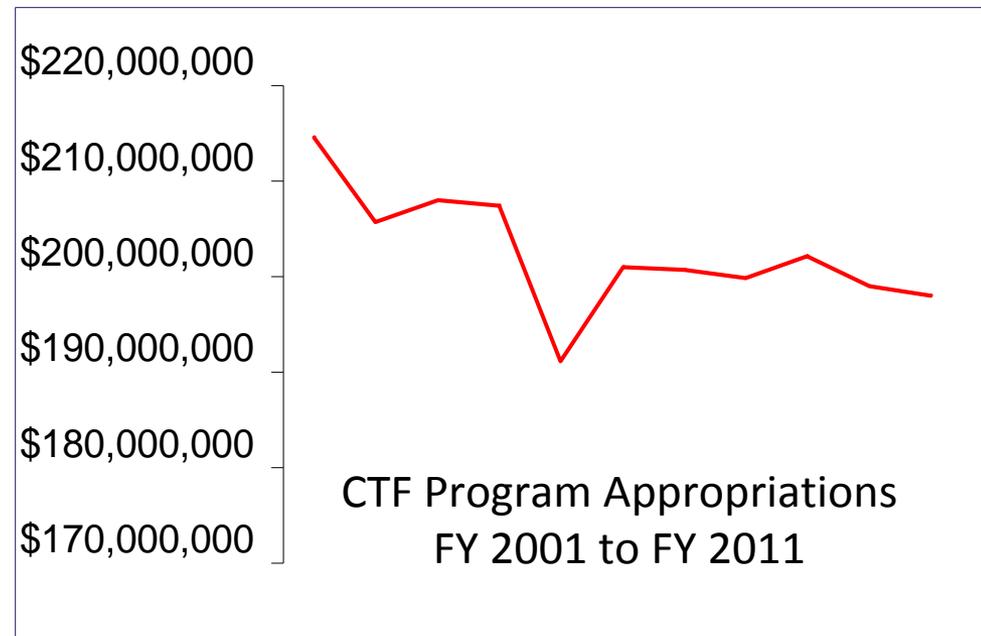
### State Revenues for Passenger Transportation

- ❖ Comprehensive Transportation Fund (CTF)
  - Motor fuel tax and vehicle license and registration fees
  - Auto related sales tax revenue
  - CTF revenues contribute 73% of total MDOT program

- ❖ Assumed continuation of FY 2011 CTF appropriation levels

- No sales tax diversions
- Gas tax revenues down

- ❖ Below where we were ten years ago



# *Revenue Issues*

## *Multi-Modal ~ Passenger Transportation*

- ❖ FY2011-2015 program represents the continuation of an already reduced program
- ❖ Program is adjusted each year to fit the revenues available
- ❖ No state funding for expansion
- ❖ Capital investments postponed – though ARRA helped narrow the gap

# *Revenue Issues*

## *Multi-Modal ~ Passenger Transportation*

- ❖ Investment not keeping up with increasing costs
- ❖ State operating assistance for public transit has remained static while expenses have increased an average of 4% annually over the last several years.
- ❖ MDOT was recently successful in discretionary FRA grant-making, but competitive applications require match which will be a problem for Michigan.

# *Program Objectives*

## *Multi-Modal ~ Passenger Transportation*

**Objective:** Preservation of existing services through support of local transit agencies and procurement of intercity services

❖ **Reality:**

- Insufficient revenues to meet cost of preservation
- Expect loss of service and deteriorating infrastructure

❖ **Objective:** Match all available federal funds

❖ **Reality:**

- Toll credits no longer available for transit and remaining bond revenues will not see us through the 5 year program
- Successfully competed for “State of Good Repair” grant – complicates our match situation.
- Lack of match commitment makes it more difficult for MDOT and local agencies to successfully compete for grants.

❖ **Objective:** Maintain Infrastructure

❖ **Reality:** Unsure of match for federal investment in infrastructure

# *Passenger Transportation System Condition*

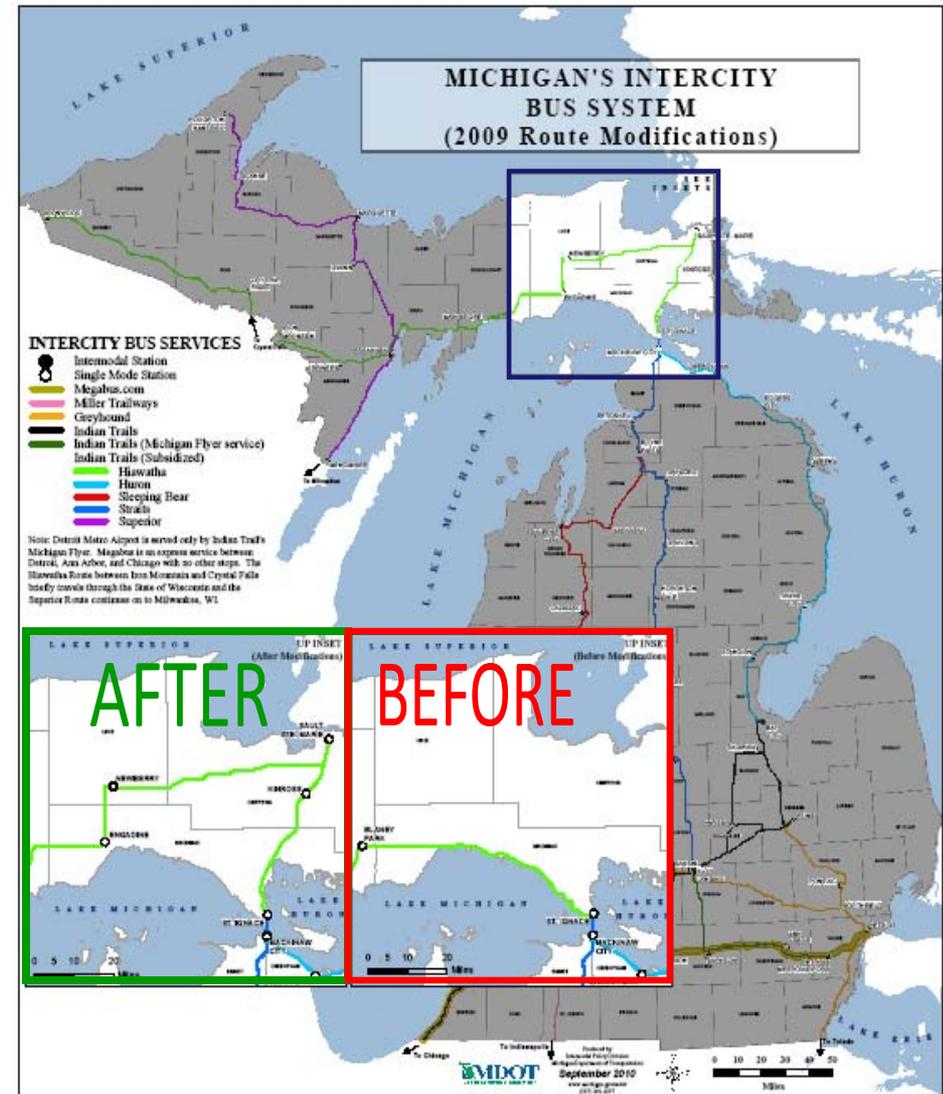
## *Intercity Bus and Rail Passenger*

### ❖ Intercity Bus and Rail Passenger Services

- System Condition Goals: Maintain existing subsidized service levels
- Passenger rail measured in daily train miles
  - Goal: Maintain one round-trip per day between Grand Rapids and Chicago (352 train miles) and one round-trip per day between Port Huron and Chicago (658 train miles.)
- Intercity bus measured in distance to a bus route
  - Goal: Maintain a statewide intercity bus network that is within 100 miles of every Michigan resident.
- Goals currently being met
  - Determining factor - availability of state revenues

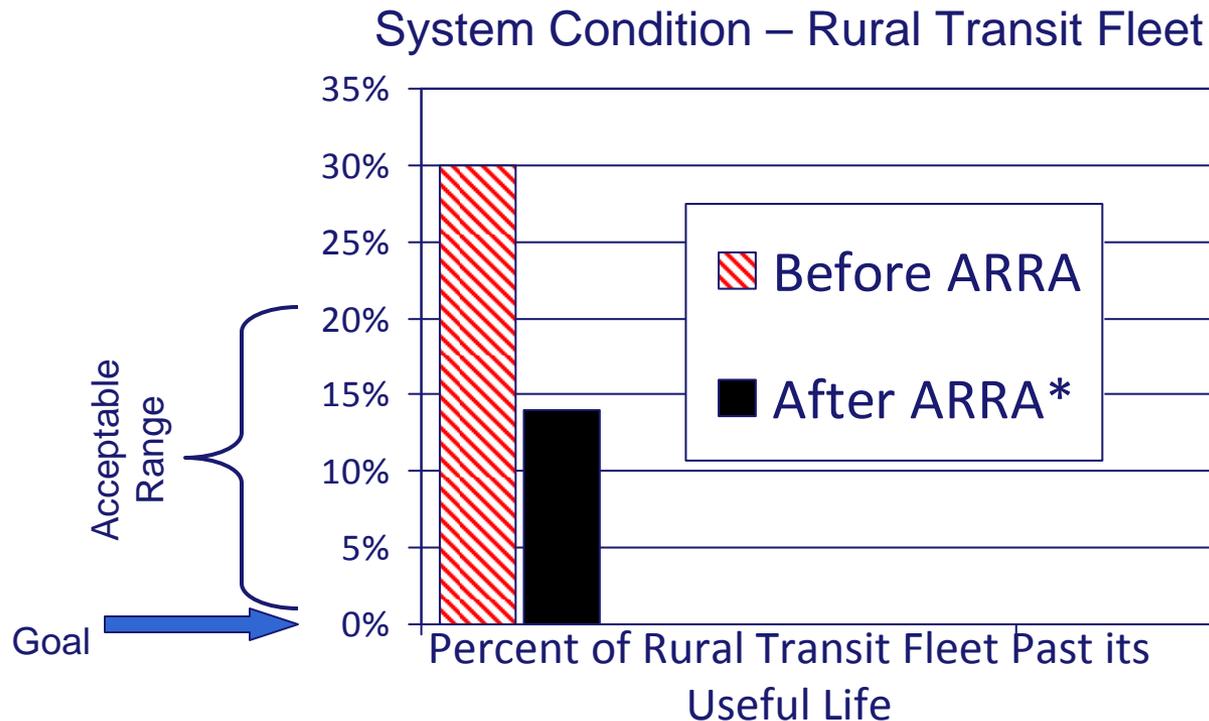
# Intercity Bus

- ❖ For intercity bus, system condition goal also used as a decision-making tool
- ❖ Indian Trails proposed to U.P. route modification to add Sault Ste. Marie
- ❖ Some communities no longer directly on route, but distance to new route did not exceed 100 miles
- ❖ Change was consistent with system condition goal



# System Condition: Transit Fleet

- ❖ System Condition Goal: No buses in rural transit fleet past useful life
- ❖ MDOT assesses condition of rural transit agency fleets annually
- ❖ Asset management approach used to improve overall condition of the fleet, on an agency-by-agency basis



*\* ARRA buses purchased in 2010 will not be on the road until 2011 or 2012*

# *Multi-Modal Economic Impacts*

- ❖ More than 100 million trips are made on public transit annually in Michigan
  - Satisfies the mobility needs when owning/driving a vehicle is not effective or affordable
  - Maintains access to employment, medical care and other essential services
  - Benefits extend beyond transit rider
- ❖ Michigan specific model calculates social benefits and economic output as a result of transit investment
- ❖ \$2.8 billion will be invested in operations in next 5 years
  - Will yield about \$4 billion in social benefits and \$6.7 billion in economic benefits

# *Rail Freight & Port*

Presenter- Nikkie Johnson

# Revenue Assumptions

## Rail Freight & Port

### ❖ \$53.65M for FY 2011-2015

- ❖ \$19M Federal Aid
  - ❖ \$10.5M MTF
  - ❖ \$12.8M CTF
  - ❖ \$ 9M additional *unfunded* expenditure authority
  - ❖ \$2.35 CTF (pass-through to Detroit/Wayne County Port Authority)
- 
- Diagram illustrating funding sources for Rail Freight & Port:
- \$19M Federal Aid and \$10.5M MTF are grouped together and point to a box labeled "Railroad crossing Safety".
  - \$12.8M CTF points to a box labeled "Rail Preservation & Development".

### ❖ Rail Freight investments: \$42.3M

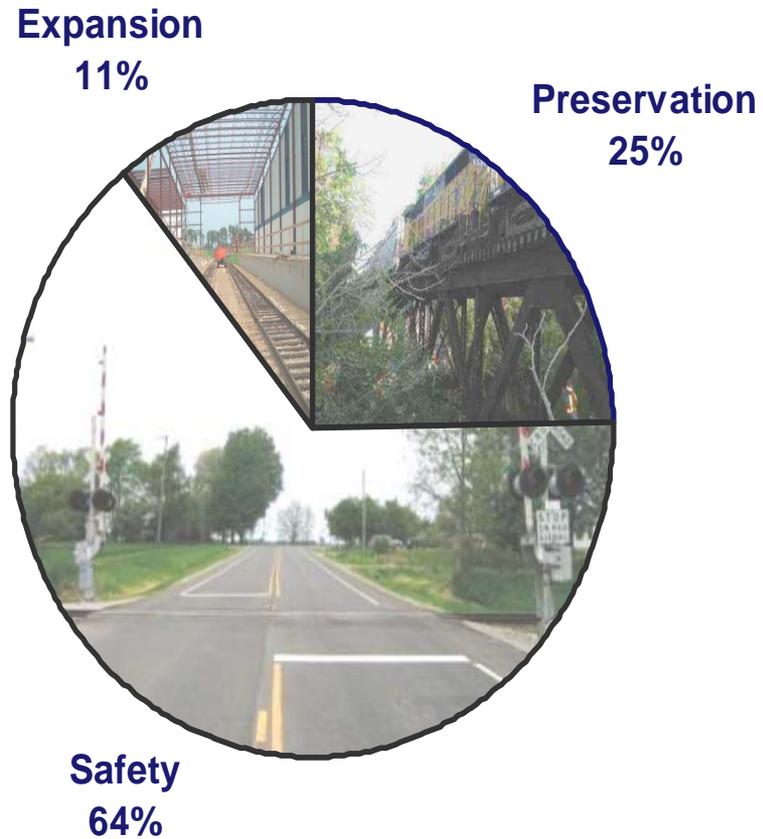
# Revenue Assumptions

## Rail Freight

Rail Freight Program Appropriation



# Investment Plan Rail Freight Overview



# *Investment Plan*

## *Rail Freight Program Investments*

- ❖ Local Grade Crossing Program
  - 40 railroad crossing safety enhancement projects annually
  
- ❖ State-owned rail property
  - 2 bridge repairs
  - Other critical repairs as identified
  - Property management costs
  
- ❖ Freight Economic Development Program
  - Available funding for approximately 10 projects within this five-year timeframe

# *Investment Plan*

## *Rail Freight Investment Realities*

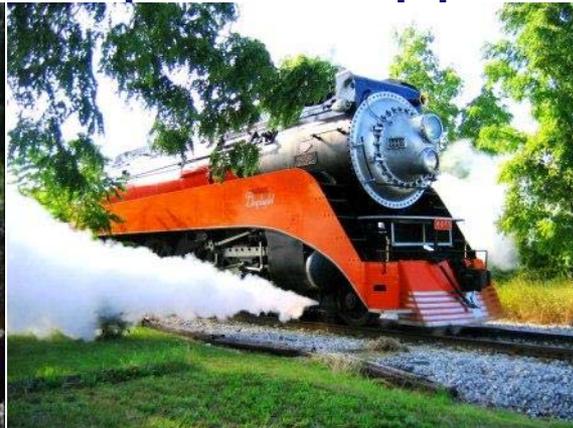
- ❖ Fewer railroad crossing safety projects
- ❖ Constrained economic development assistance
- ❖ Further investment in state-owned rail property limited to critical repairs
- ❖ Uncertain future for the Michigan Rail Loan Assistance Program (MiRLAP)



# *Investment Plan*

## *Rail Freight Investment Strategies*

- ❖ Identify grade crossing safety priorities annually
- ❖ Partner with operating railroads on state-owned lines to stretch available dollars
- ❖ Greater participation requirements for Freight Economic Development applicants



# *Economic Benefits Rail Freight*

❖ Michigan's rail system carries about 18% of Michigan's commodity movements

- Heavy/bulky materials
- Hazardous materials

1 train=  
280 trucks

❖ Railroads reportedly invest over \$145M annually in Michigan's system

❖ Rail system saves approximately \$250M of annual investment in roadway system



# *Aeronautics*

Presenter- Rick Hammond

# Revenue Assumptions (Annual)

## Aeronautics

### ❖ Federal Funding \$110M

#### Airport and Airway Trust Fund (AATF)

- Passenger ticket taxes
- Cargo taxes
- Aviation fuel excise tax

### ❖ State Funding \$4M

#### State Aeronautics Fund (SAF)

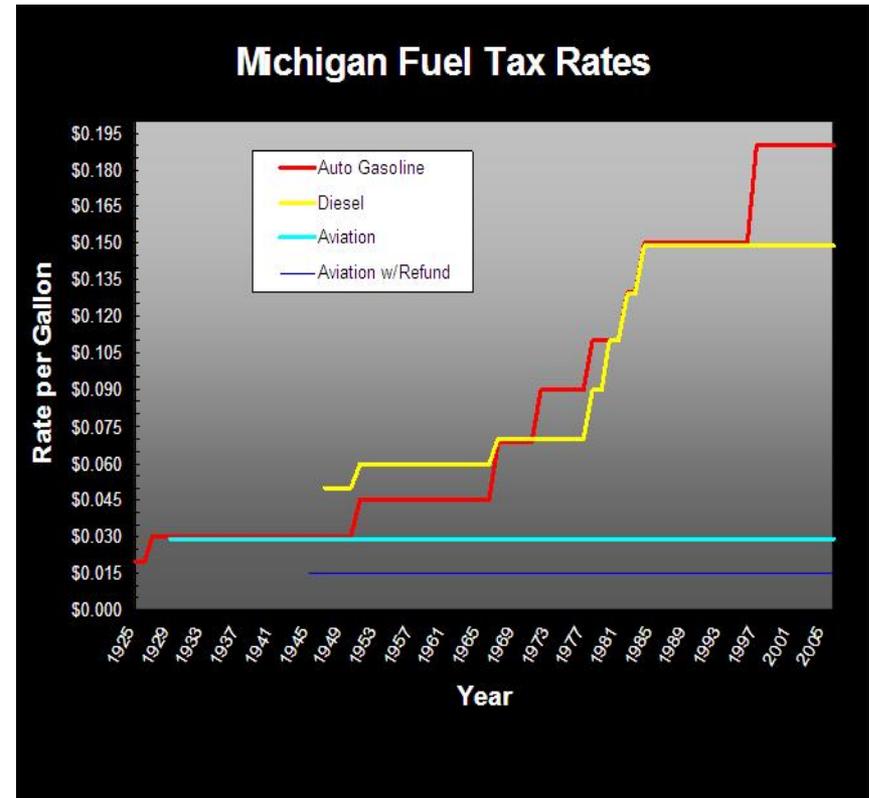
- Aviation fuel excise tax
- Aircraft registration
- Licensing & permits

### ❖ Total

**\$114M**

# FY 2011 Airport Capital Program Revenue Assumptions

- ❖ State Revenues
  - State Aeronautics Fund
    - Incl 3 cent per gallon aviation fuel tax
    - Detroit Metro parking tax
- ❖ Program reflects loss of
  - ASAP Bond revenue
  - All general fund support
  - Revenue from operating fund
  - 12.84% reduction of fuel tax revenue over 5 year average



# Funding Crisis Aeronautics

## Aviation Fuel Tax Revenue



\*2009 revenue is the lowest level in over a decade

# Funding Crisis Impacts Aeronautics

- All Weather Airport Access Program
- Airport Rescue and Fire Fighting (ARFF) Training
- Air Service Program
- Runway and Airport Approach Marking



# Average Annual Breakdown Aeronautics

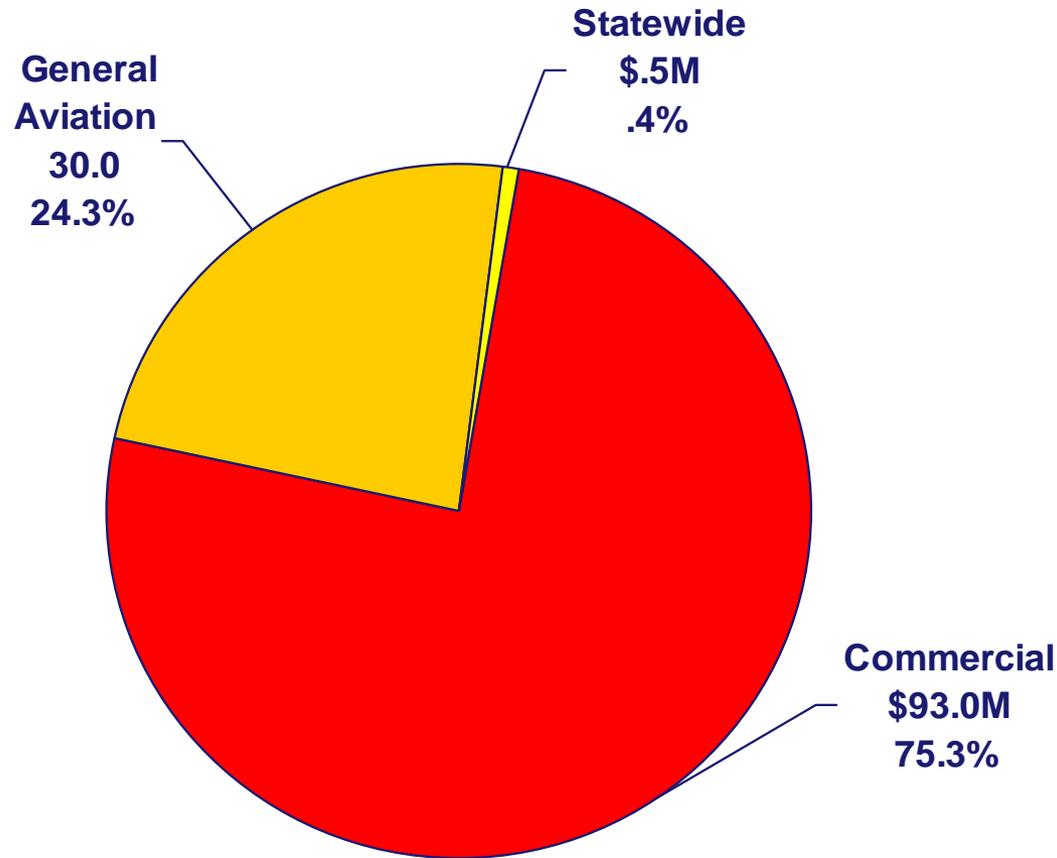
Commercial Service Airport Projects	\$100.0M
General Aviation Airport Projects	\$ 31.4M
<u>Statewide Capital Projects</u>	<u>\$ .5M</u>

Airport Improvement Program (AIP) \$131.9M



# *AIP Breakdown by Airport Type*

## *Aeronautics*

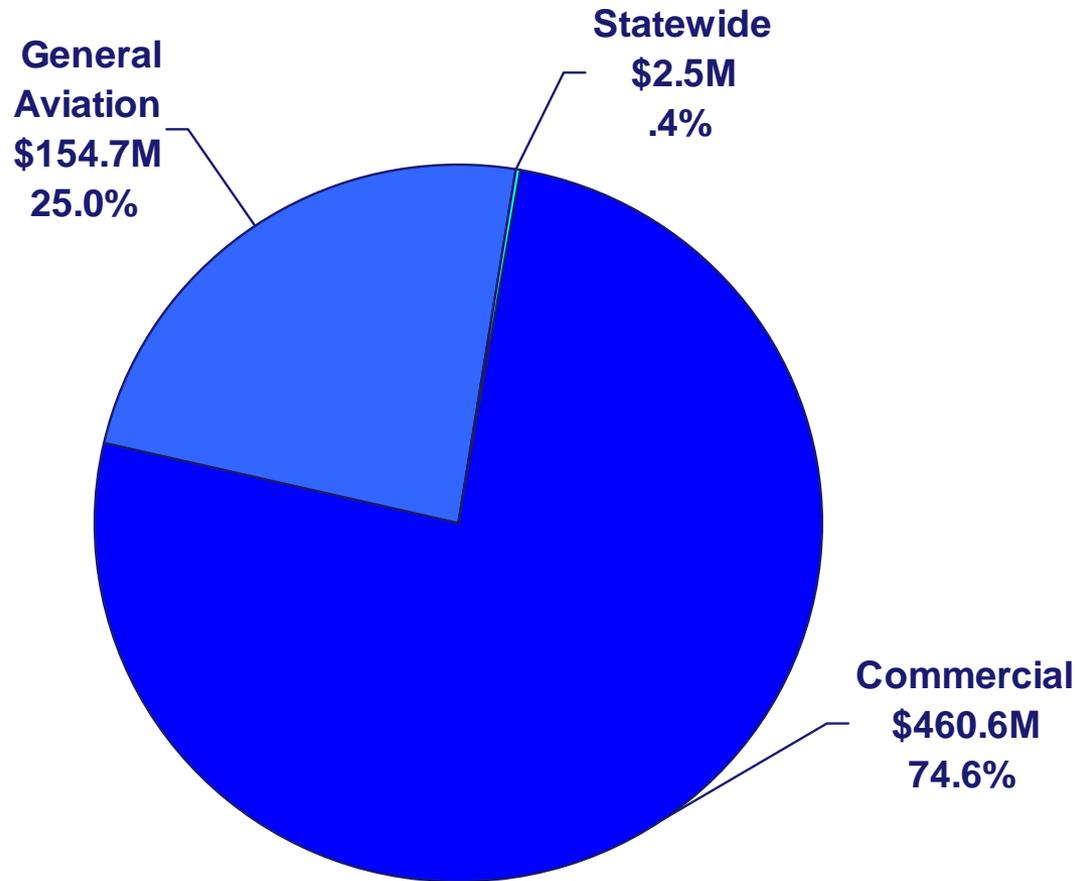


**Annual Average**

**\$131.9M**

# *AIP Breakdown by Airport Type*

## *Aeronautics*



**2010-2014**

**\$659.6M**

# *Investment Strategy (Continued)*

## *Aeronautics*

Approximately 3/4 of the FY2011-2015 Airport Improvement Program will be focused on *SYSTEM PRESERVATION*

- Runway reconstruction and maintenance
- Airfield lighting
- Terminal rehabilitation

The remaining 1/4 is devoted to *CAPACITY IMPROVEMENT*

- Runway extensions
- Terminal expansions
- New instrument approaches
- Economic development enhancements

# *FY 2011 Aviation Program Performance Measurement & System Condition*



- ❖ Measures both System and Facility goals
- ❖ Establishes Facility goals based on Service areas

# Project Highlights

## Aeronautics

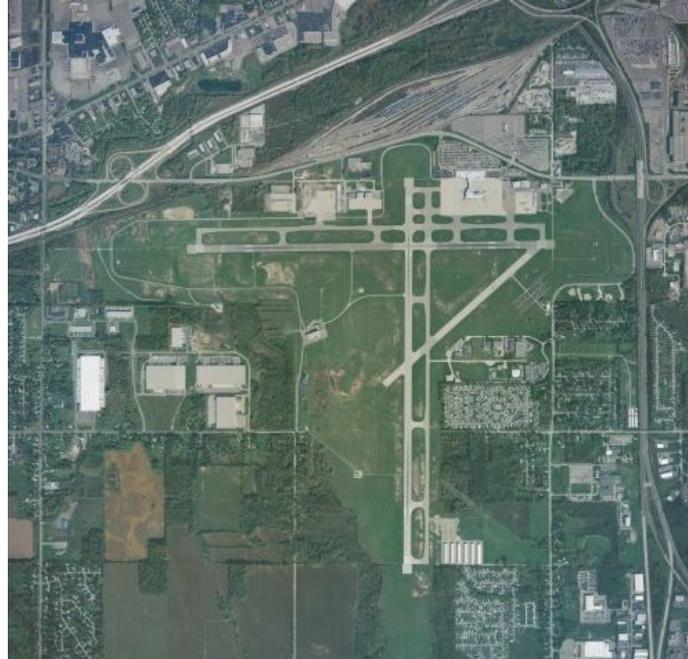
- **Southwest Michigan Regional Airport (Benton Harbor)**  
Primary runway extension to accommodate international & long range domestic flights
- **Kalamazoo / Battle Creek International Airport (Kalamazoo)**  
Terminal building improvements and modernization



# *Project Highlights (Continued)*

## *Aeronautics*

- **Jackson County - Reynold's Field (Jackson)**  
New primary runway to meet safety area requirements
- **MBS International Airport (Saginaw)**  
New Terminal Building



# *Next Steps*

- ❖ Review and incorporate Commission comments
- ❖ Post to Web site
- ❖ Summarize comments from the public
- ❖ Return for final approval in January
- ❖ Today's Action: Approval to post draft to the website and seek public input

# *Budgetary Reporting Requirements*

- ❖ Section 307 requires the Five-Year Program to be provided to the Legislature, the state budget office, and the House and Senate fiscal agencies before March 1<sup>st</sup>

*Questions?*