EXHIBIT 1
DATE 1/07/09
SB organizational

# Report to House Transportation Committee

Jim Lynch, Director
Montana Department of Transportation
January 7, 2009

Montana Department of Transportation
serving you with pride

# Topics

- **Introduction**
  - Organizational Structure
- **Construction Program**
  - Asset Management – P3
  - 2009-2013 Program
  - Economic Stresses
- **Highway Safety**
  - Safety Initiatives
- **MDT Support for Local Programs**
- **Other Programs**
  - Aeronautics
  - Motor Carrier
  - Maintenance
  - Transit
  - Rail
  - Rest Areas
- **Federal Program Status**
  - Reauthorization
  - Economic Stimulus Package

# Montana Department of Transportation

**Aeronautics Board**

**Transportation Commission**

**DIRECTOR**

**DEPUTY DIRECTOR**

**LEGAL SERVICES**

**INTERNAL AUDIT**

**PUBLIC INFORMATION**

## OPERATIONS MANAGER

### ADMINISTRATION
- Accounting
- Budgeting
- Management of federal obligation
- Payroll/vendor payments
- Purchasing
- Revenue collection

### AERONAUTICS
- State owned airport management
- Safety and training
- Pilot registrations
- Aircraft registrations
- Search & rescue
- Airport grants administration

### INFORMATION SERVICES
- Network operations
- Application development
- IT Project management
- User support
- Records management
- Printing services

### RAIL, TRANSIT & PLANNING
- Urban & rural highway planning
- Rail planning
- Transit planning/grant administration
- Transportation policy analysis
- Construction program development
- Data collection and analysis
- System impact analysis
- State highway traffic safety program

## OPERATIONS MANAGER

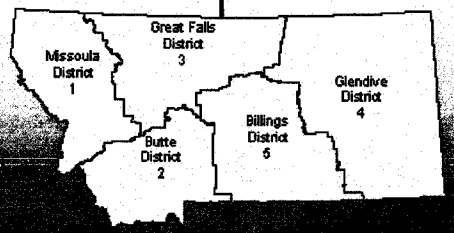
**CIVIL RIGHTS**

**HUMAN RESOURCES**

**EMPLOYEE RELATIONS**

**ORGANIZATIONAL DEVELOPMENT**

### DISTRICT OFFICES
- Preconstruction
- Construction
- Right-of-way
- Maintenance




**BUSINESS PROCESS SOLUTIONS**

## OPERATIONS MANAGER

### HIGHWAYS & ENGINEERING
- **Preconstruction**
  - Right-of-way
  - Bridge design
  - Highway design/survey/hydraulics
  - Traffic and safety
  - Environmental compliance/permits
  - Consultant/CTEP
- **Construction Engineering**
  - Contracting
  - Oversight, QA/QC, Design-build/VE
  - System support/specifications
  - Geotechnical/materials/surfacing

### MAINTENANCE
- Highway maintenance
- Equipment management
- Motor pool
- Facilities management
- Disaster & emergency services
- Sign manufacturing
- Mobile communications
- Road condition reporting

### MOTOR CARRIER SERVICES
- Truck size and weight enforcement
- Interstate truck licensing and registration
- Oversize/overweight permitting
- Truck & driver safety enforcement
- Dyed fuel enforcement

December 2008

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# Construction Program

# Montana Transportation Commission

***Statute***

- **TITLE 60. HIGHWAYS AND TRANSPORTATION**
  **CHAPTER 2. STATE ADMINISTRATION –**
  **Part 1. Transportation Commission**
- **The Transportation Commission is a quasi-judicial board consisting of five members, each of whom is appointed by the Governor for a four-year term.**
- **Duties include**
  - **Selecting and prioritizing projects**
  - **Awarding monthly contracts**
  - **Allocating Federal-aid highway funds**
  - **Designating highways**
  - **Designating special speed zones and maximum speeds on bridges and overpasses**
  - **Designating access control highways or facilities**
  - **Resolving outdoor advertising appeals**
  - **Abandonment of highway right-of-way**

# Asset Management

***Asset Management is a Key Element of Montana's Approach to Addressing Challenges & Avoiding Need to Raise State Fuel Taxes***

++++++++++++++++++++++++++++++++++++++++++++++++

- Asset management is a systematic and ongoing process that seeks to maximize the life of the asset in the most cost effective way

- Major features of asset management
  - Goals linked to policy objectives
  - Performance measures are measurable
  - Analysis and evaluation are data driven
  - Results inform investment decisions
  - Monitoring and feedback

# Transportation Planning Umbrella

***TranPlan 21***

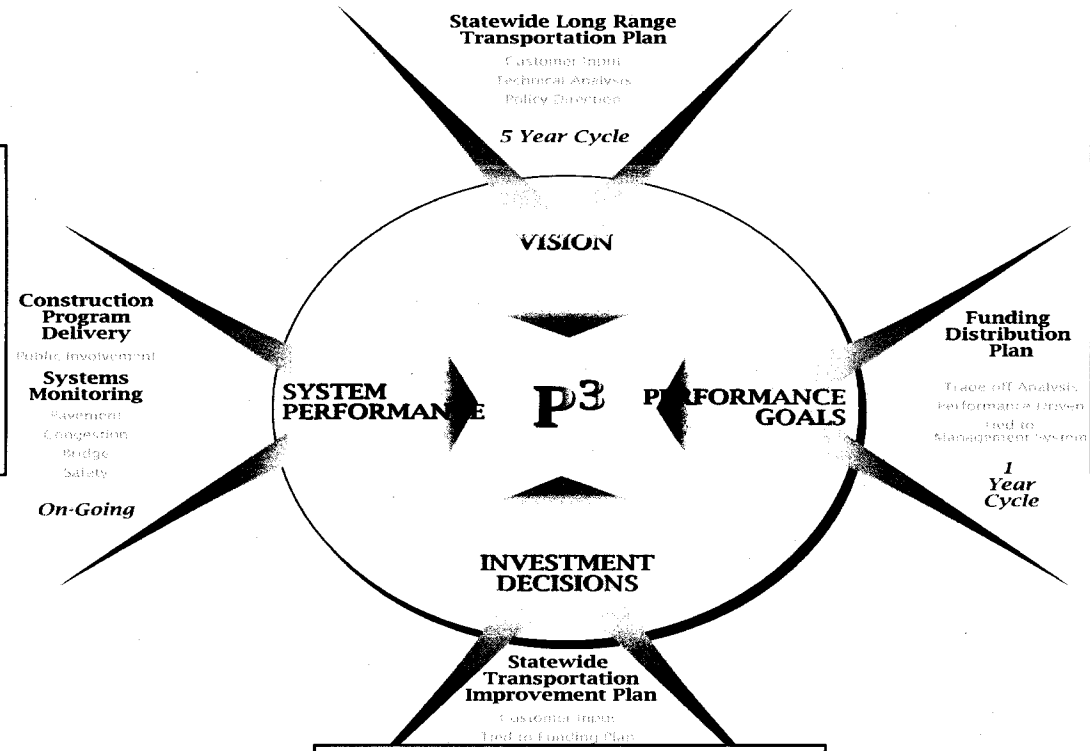
- **Federally-required statewide multimodal transportation policy plan**
  - **Access Management & Land Use Coordination**
  - **Bicycle and Pedestrian Transportation**
  - **Economic Development**
  - **Public Transportation**
  - **Roadway System Performance**
  - **Traveler Safety**
- **Extensive public & stakeholder involvement**
- **Most recent amendment completed: March, 2008**

***Comprehensive Highway Safety Plan***

# Montana's Performance Programming Process ($P^3$)

The Plan establishes a future vision and policy direction for the Program.

Program Delivery & System Performance continually monitored.



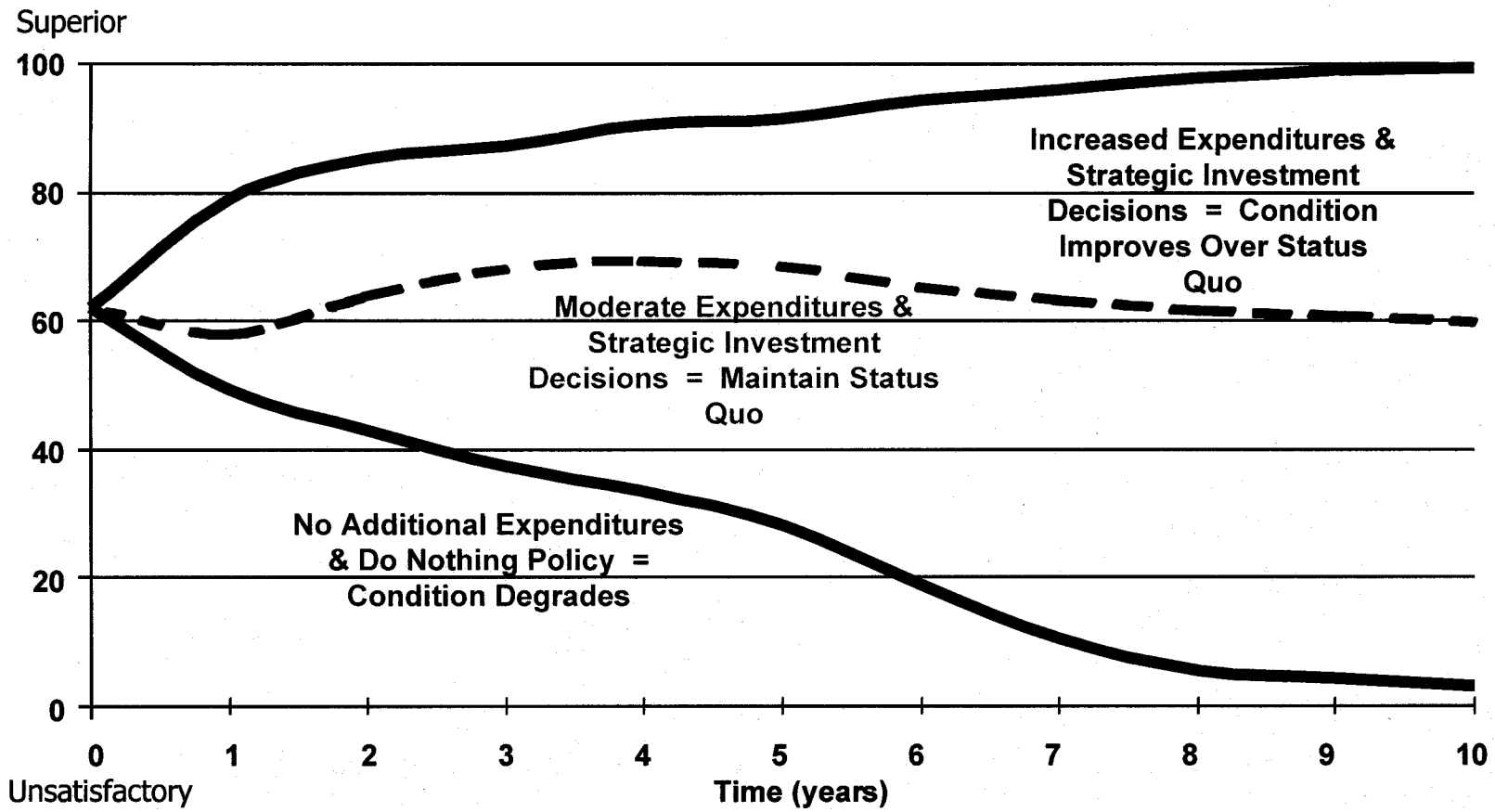

Funding Plan based on optimizing performance through Trade-off Analysis.

Projects in STIP tied to performance through Fund Plan and Query Tool.

# Theory of Asset Management

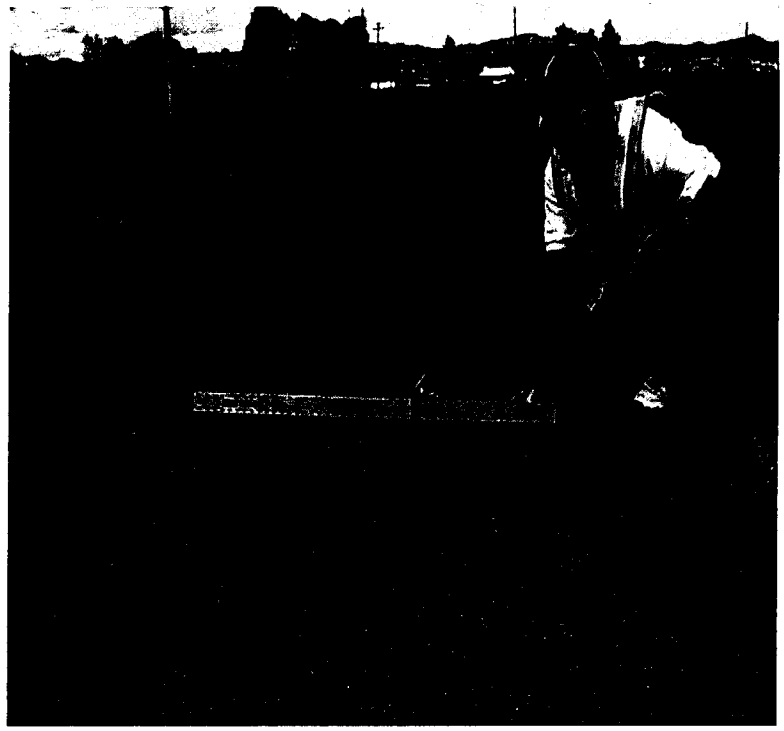
## Asset Management Predicts Performance

( As a Function Of Budget & Investment Strategies Over Time)



# Tradeoffs in Highway Project Work Types

**Resurfacing and Rehabilitation Stretch Resources**
**Reconstruction Work needed when Pavement Life is Over**
***Ideal Mix = Best Package to Meet Performance Goals***



# Performance Programming – Goals

**Pavement Condition (Interstate, Primary, NHS System)**

**Performance Goal:** **Maintain average ride in the desirable (or superior) range with less than 3% of the miles in unsatisfactory condition.**

***Note: Ride is defined as the quality (smoothness) of the ride as perceived by the highway user.***

**Bridge Condition**

**Performance Goal:** **Reduce the number of functionally obsolete and structurally deficient bridges on the state's highway system.**

**Congestion**

| | |
|---|---|
| **Interstate:** | **Maintain Level of Service at "B" or Above** |
| **NHS:** | **Maintain Level of Service at "C" or Above** |
| **Primary:** | **Maintain Level of Service at "C" or Above** |

Note: A driver experiences noticeable discomfort when experiencing conditions below Level of Service "C".

**Safety**

**Performance Goals:** **Numerous – Outlined in Montana's Comprehensive Highway Safety Plan**

# Bridge Condition

- **Montana Bridge Status**

  **5,002 Total Bridges**

  - **2,662 state---remainder local and Federal**

  **Structurally Deficient Bridges: 500**

  **Functionally Obsolete Bridges: 540**

  **Bridges posted with load limits: 450**

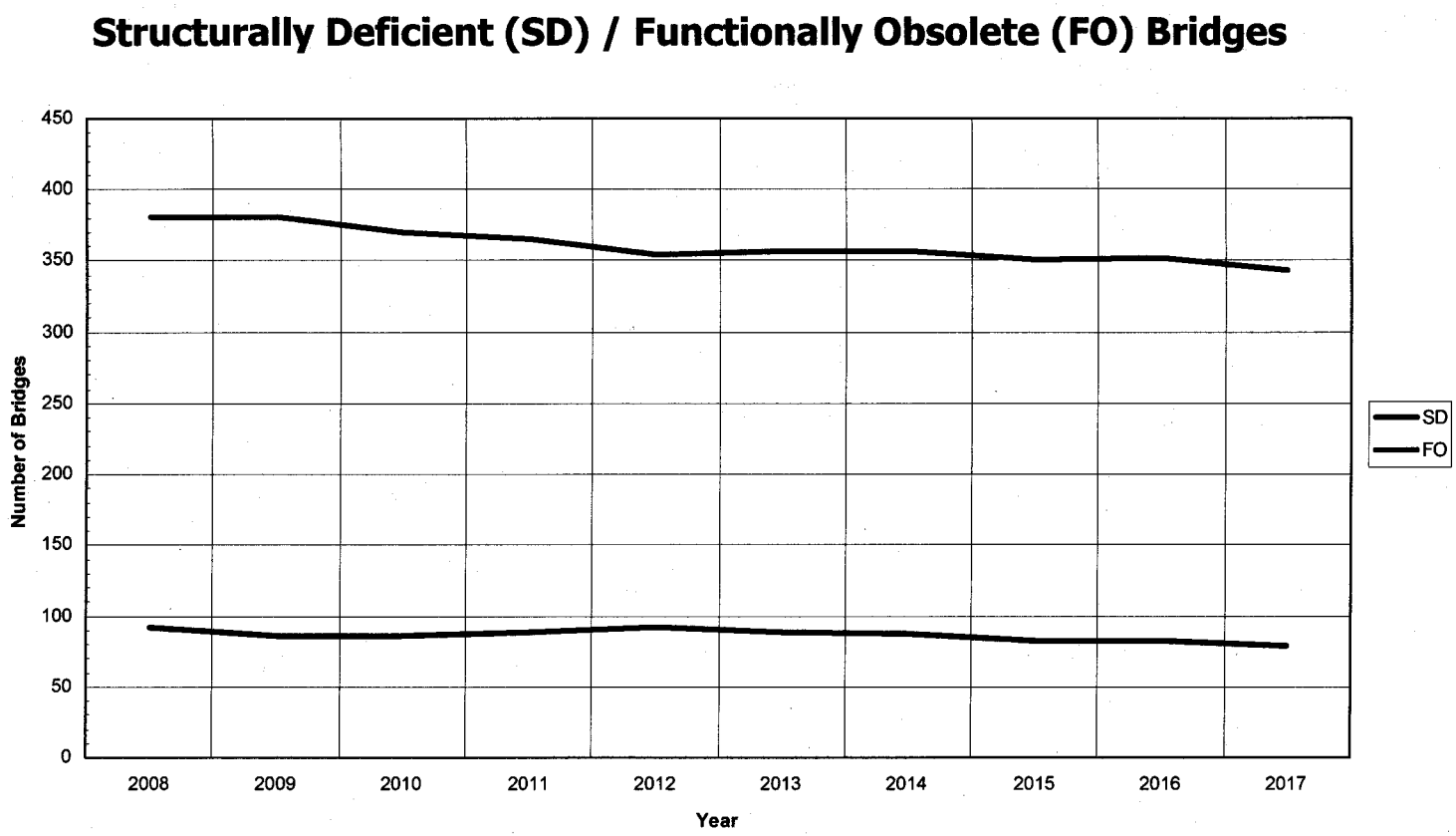
***Structurally Deficient:*** *Indicates something on the bridge is in need of attention. This could range from minor repairs such as paint or more serious problems such as structural damage or erosion.*

***Functionally Obsolete:*** *Describes a bridge that does not meet current standards or demands.*

# Bridge Condition

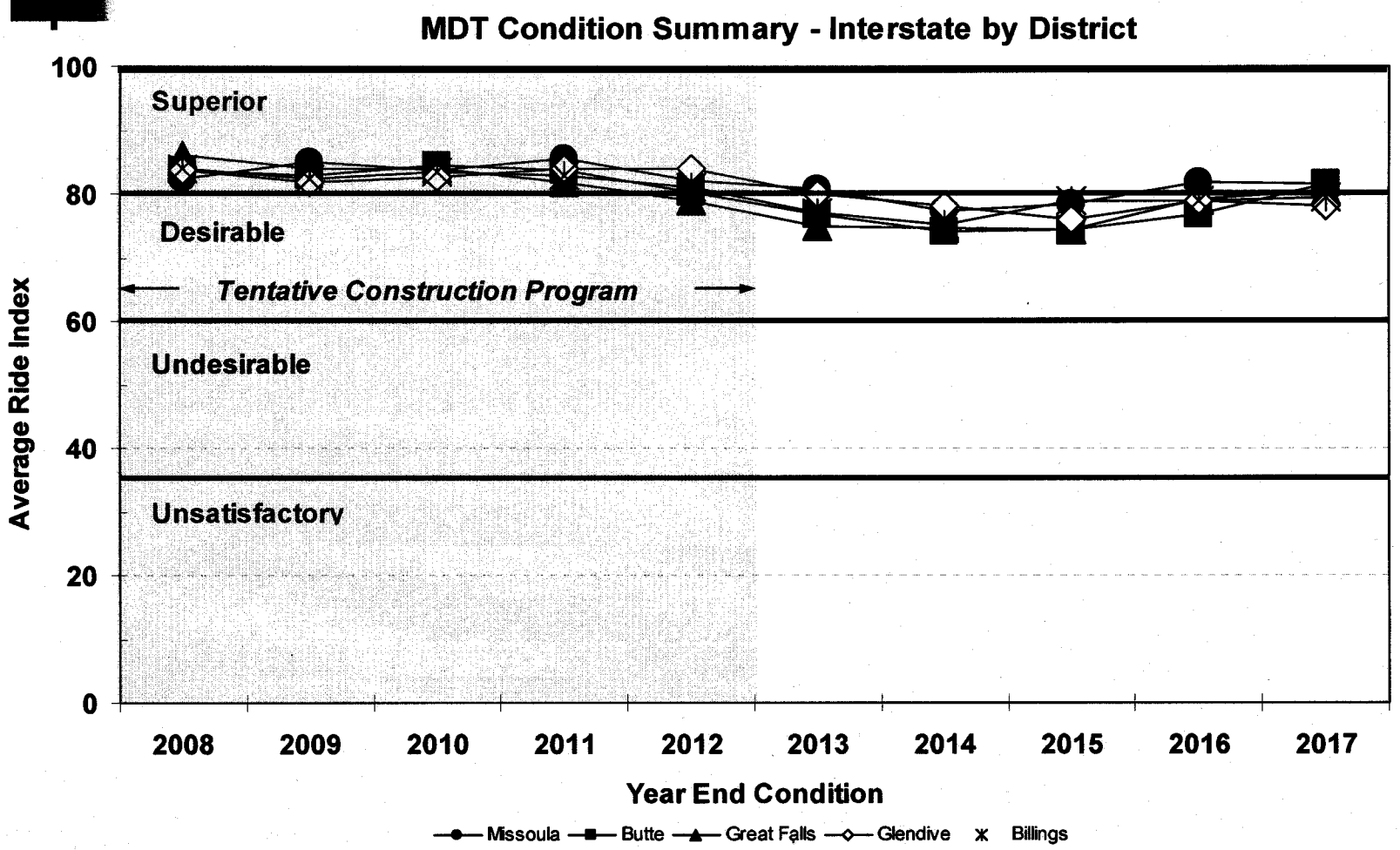
- **MDT Bridge Activities**
  - **MDT staff inspects all bridges at least once every two years-more often if problems identified**
  - **MDT added twelve inspectors since 2004**
  - **MDT added two new structural engineers**
  - **MDT purchased two snooper trucks-now one in each district**
  - **MDT increased training of bridge inspectors**
  - **Approximately $1.5 million for bridge inspection-related activities annually**
  - **$29 million in bridge projects in FFY '08, $30 million in FFY '09**

# Bridge Condition (2008)

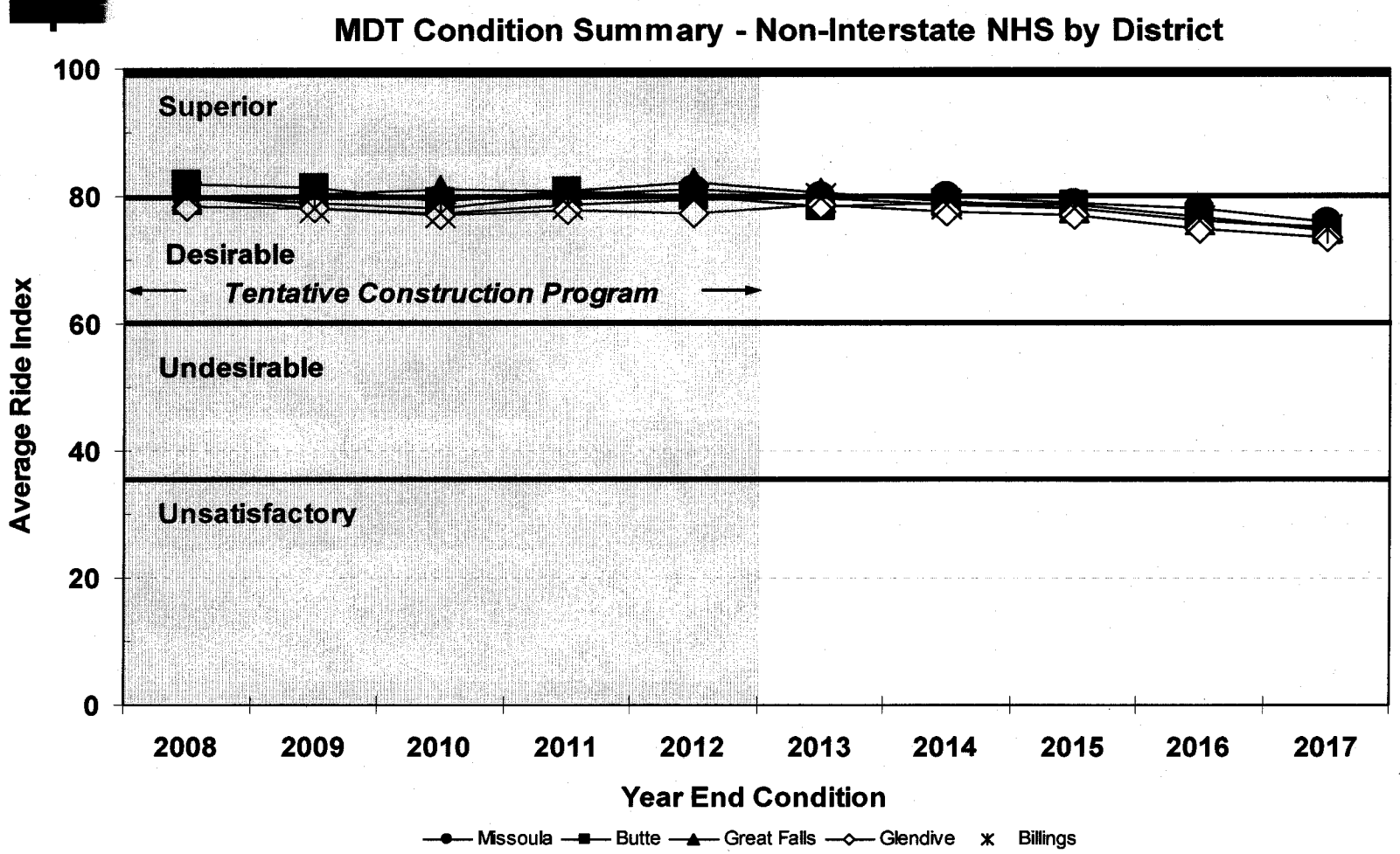



Performance Goal = Reduce Total Number of Structurally Deficient / Functionally Obsolete Bridges

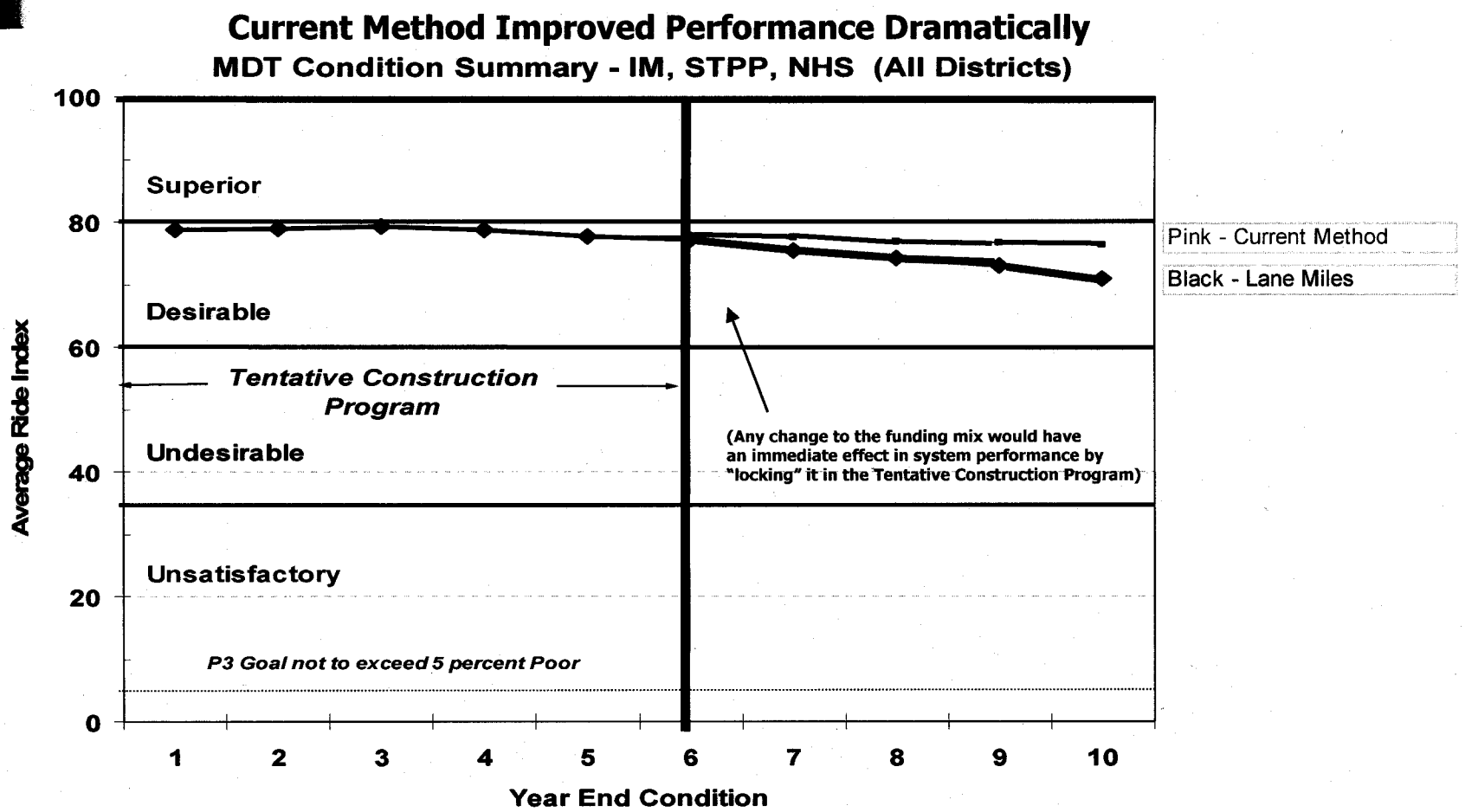
# Pavement – Interstate by District



# Pavement – NHS by District

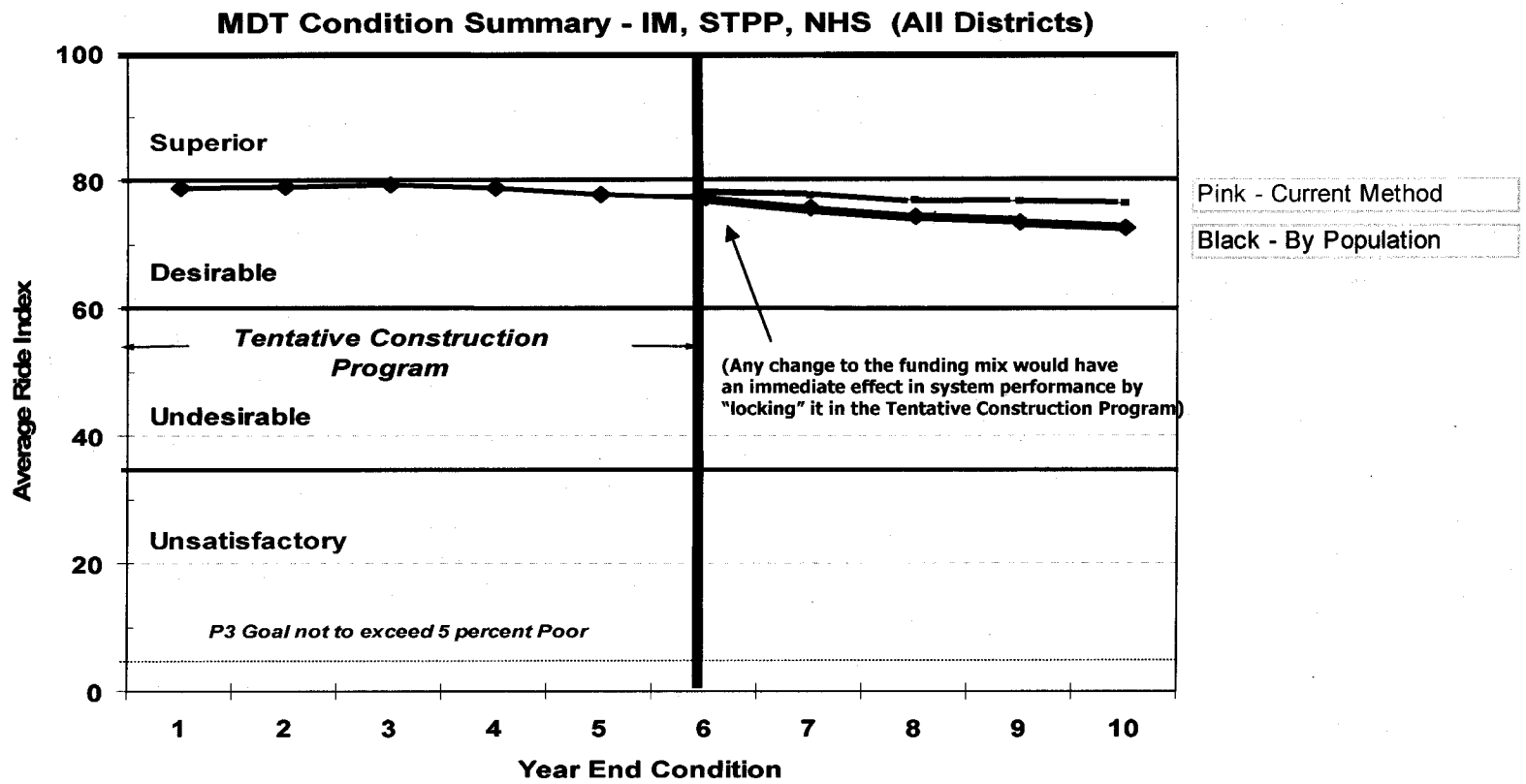


# Current Method vs. Lane Miles Formula



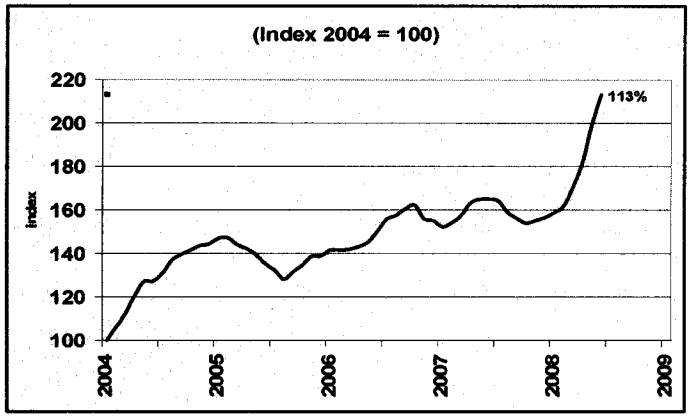
# System Performance would Decline

**If distributed to each District by Population (instead of Current Method)**



# Material Price Increases*

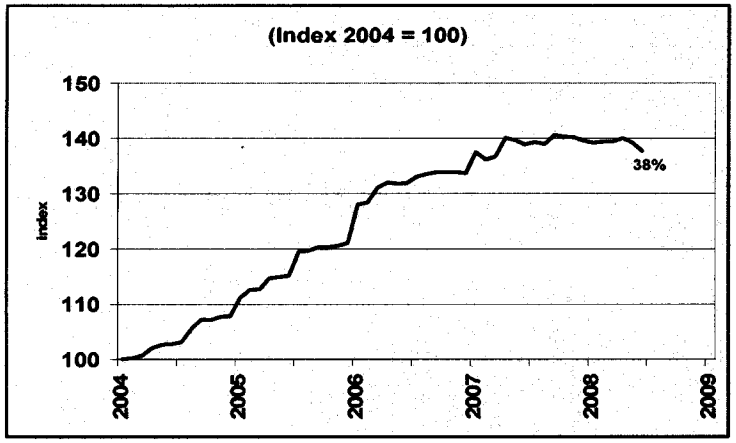
*Data available as of December, 2008



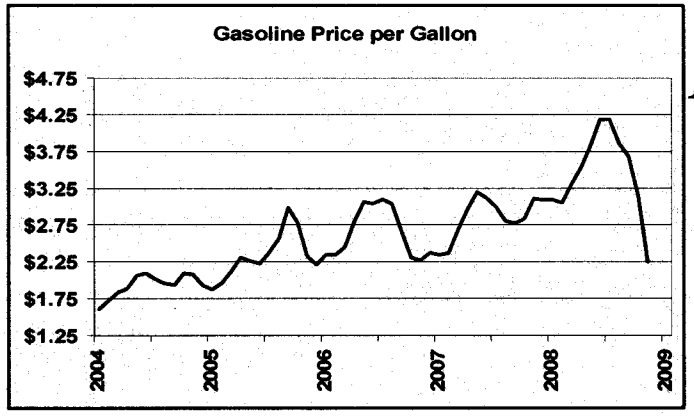

*Source – BEA Producer Price Indices*

***Steel***

***Cement***



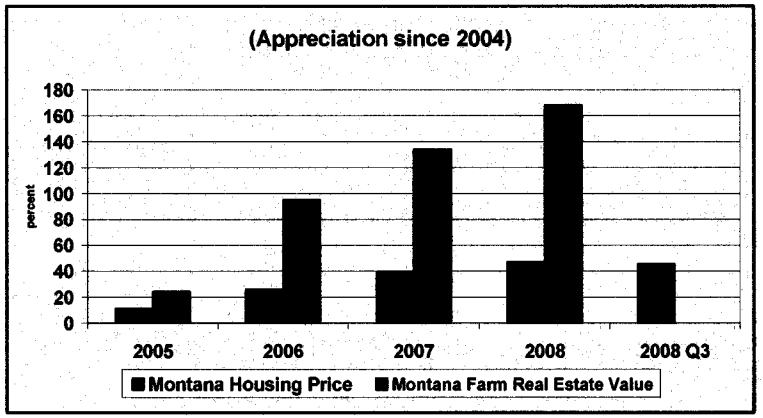

*Source – BEA Producer Price Indices*




*Source – Energy Information Administration*

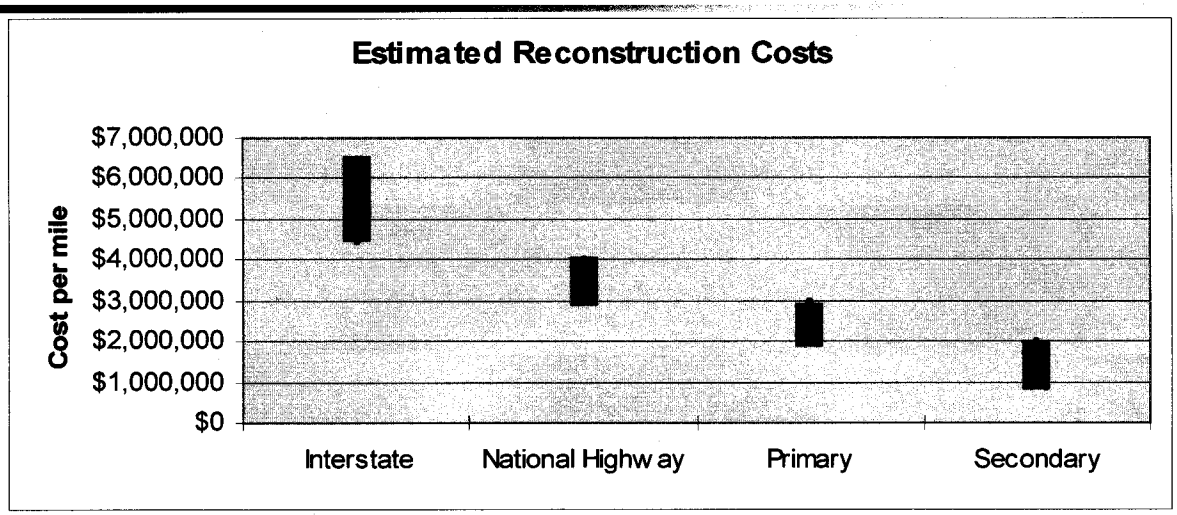
***Fuel***

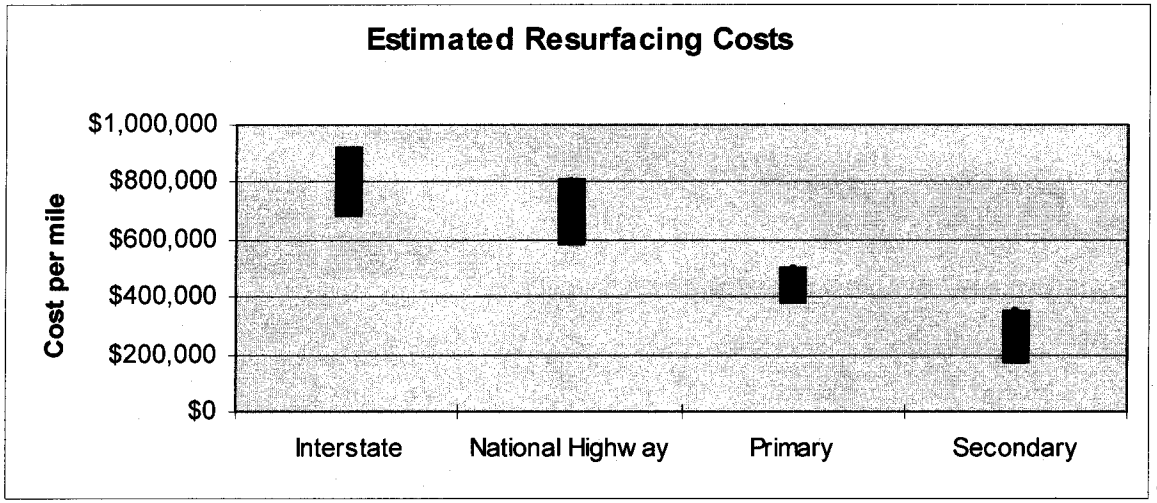
***Real Estate***




*Source – Office of Federal Housing Enterprise Oversight*
*Source - USDA*

# Improvement Costs



# Typical Timeline To Complete A Complex Project

PLANNING

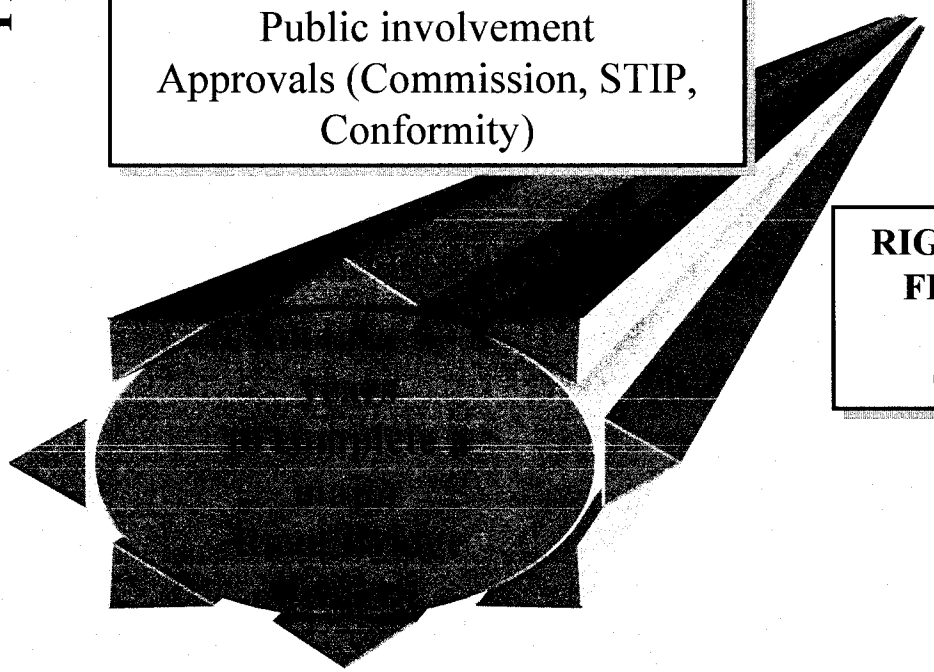
**DEVELOPMENT PHASE**
12 Months
Project Nominations
Analysis based on statewide plans and performance objectives
Public involvement
Approvals (Commission, STIP, Conformity)

**SURVEY PHASE**
8 - 24 Months
*Environmental Begins*

**PRELIMINARY DESIGN PHASE**
15 - 24 Months
*Final Environmental Document*

**RIGHT-OF-WAY & FINAL DESIGN PHASE**
6 - 12 Months

**CONSTRUCTION PHASE**
8 - 24 Months

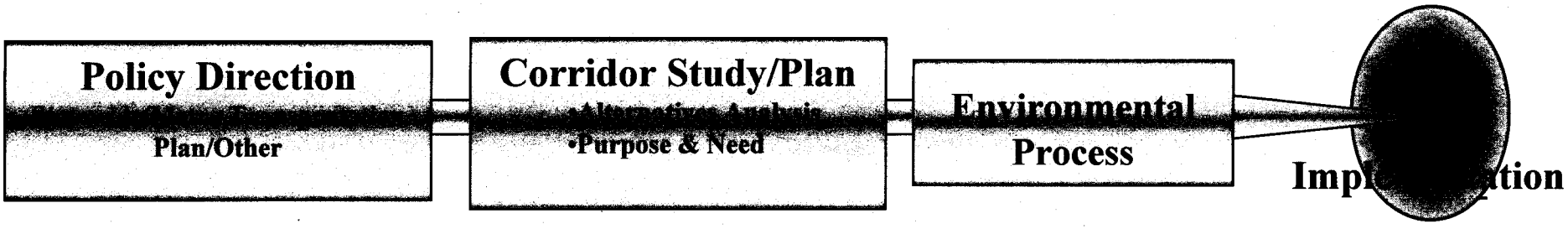


# Corridor Planning

- **Inform & help streamline environmental process**

- **Provide for early & continuous involvement of environmental, regulatory, resource agencies, local governments, businesses, and public,**

- **Reduce cost of environmental process & speed project delivery:**
  - **Early identification of potential transportation improvements, costs, and fundability,**
  - **Facilitate early coordination of resource issues**
  - **Identify low-cost corridor management strategies**
  - **Enhances ability to phase implementation.**



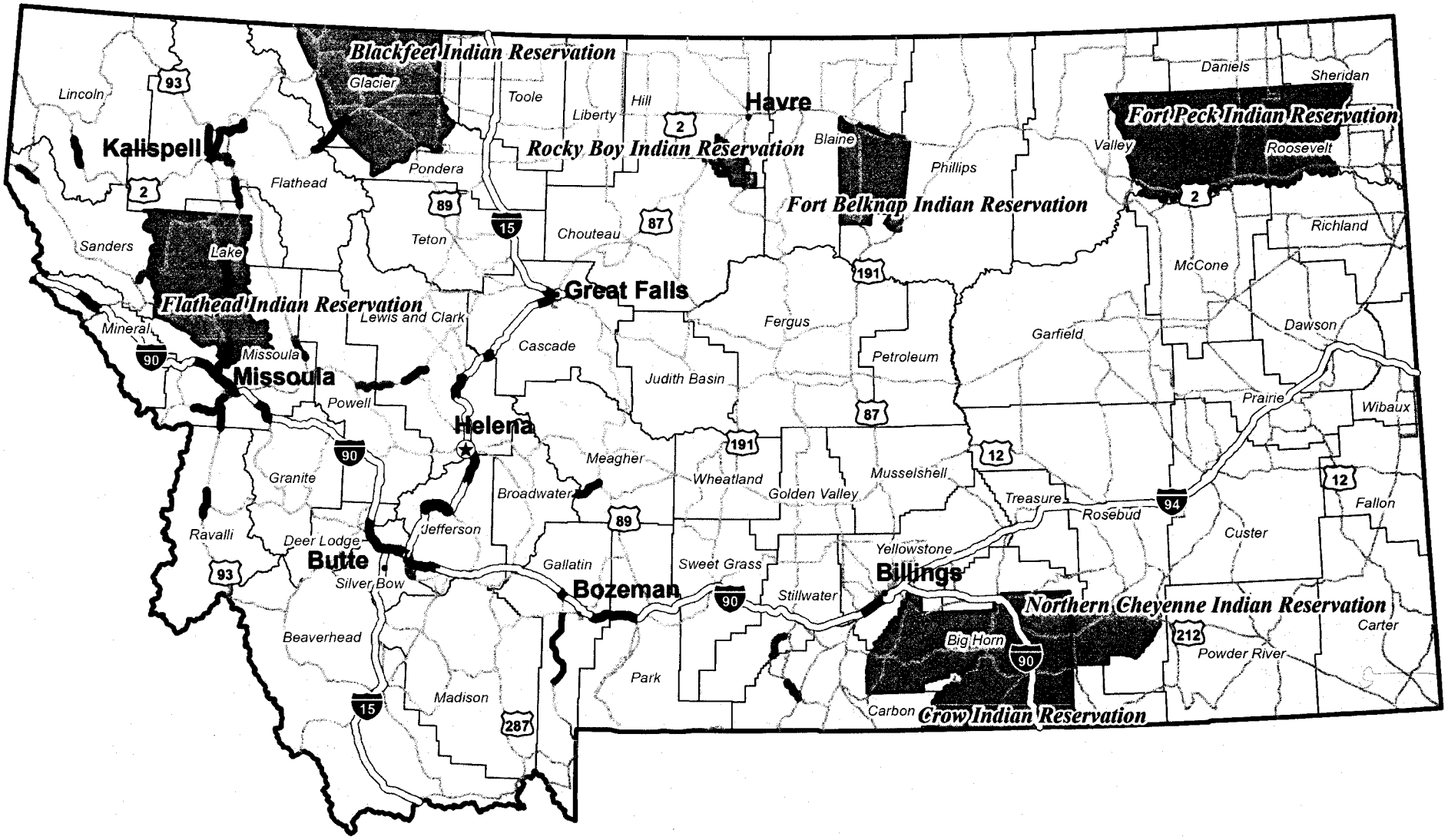
# Safety Initiatives

# Safety Objectives

1. 90% **Seat Belt** Use
2. Reduce **Alcohol and Drug-impaired** fatal and incap. injury crashes
3. Reduce **Native American fatal** crashes
4. Reduce **single-vehicle Run-off-the-Road** fatal and incap. injury crashes
5. Reduce crashes for **Young Drivers** (under age 21).
6. Implement an **Integrated Transportation Records and Crash Reporting System** accessible to all stakeholders to manage and evaluate transportation safety
7. Reduce crashes, injury crashes, and fatal crashes along identified **High-Crash Corridors**

# Montana High Crash Corridors

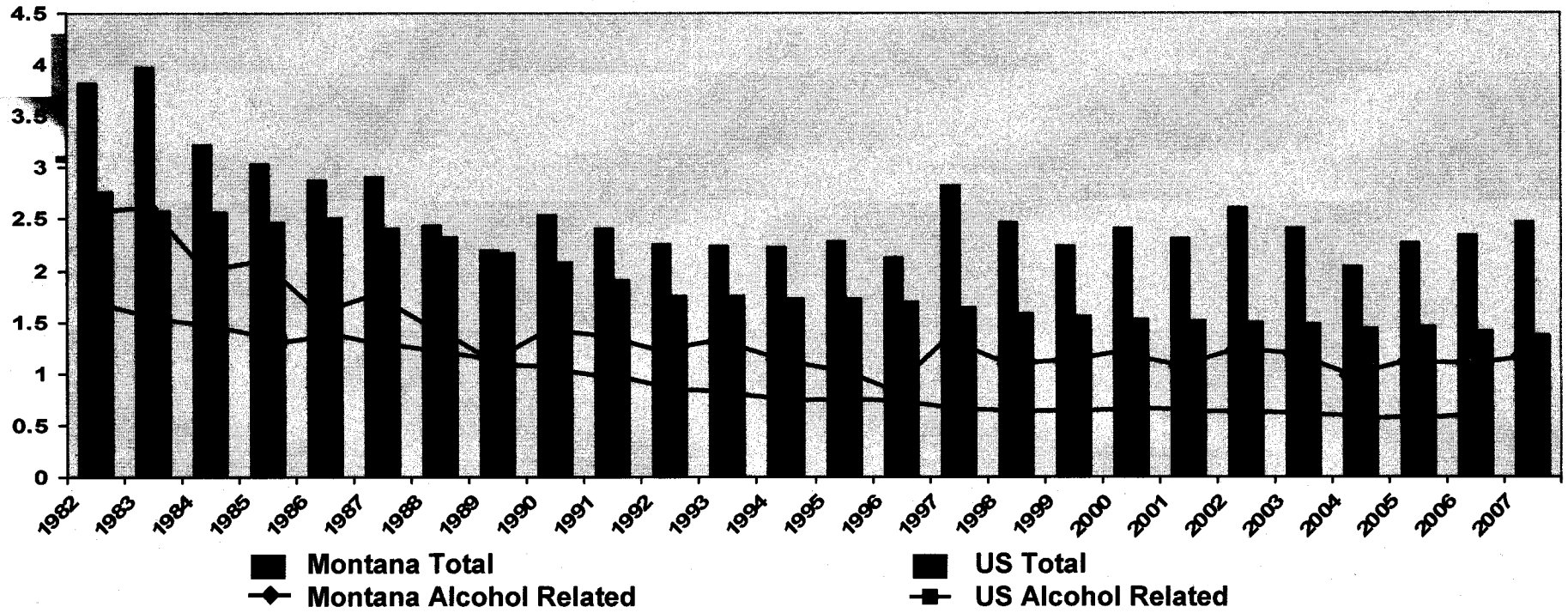
Interstate Highways — US Highways — Montana Highways

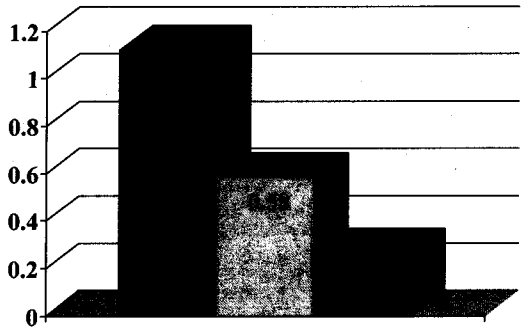



**Current as of July 2007**
**Subject to Further Revision.**

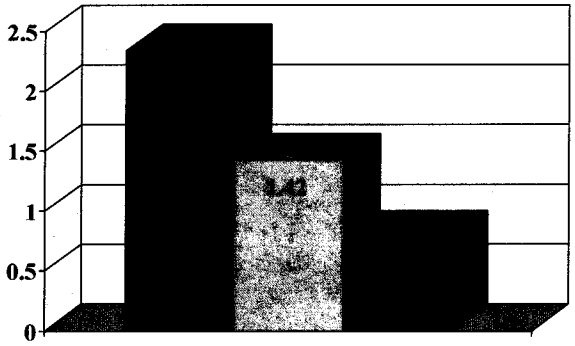
# Historic Fatal Crash Statistics Comparison

Crashes per 100m VMT

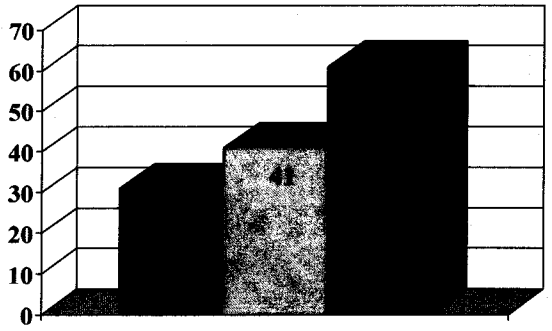



2006 Alcohol-Related Fatalities Rate (per 100m VMT)




2006 Fatility Rate (per 100m VMT)




2006 Safety Belt Use Rate In Fatal Crashes

Montana US Best State

# Fatality Comparison between 2008 and 2007

| | 2007 | 2008 | Percent Change |
|---|---|---|---|
| Fatalities to Date | 276 | 227 | -17.8% |
| Motorcycles | 36 | 37 | 2.8% |
| Pedestrians | 15 | 11 | -26.7% |
| Bicycles | 4 | 3 | -25.0% |
| Alcohol Related* | 107 | 90 | -15.9% |
| Occupant Fatalities | 221 | 176 | -20.4% |
| SB Not Used* | 173 | 136 | -21.4% |
| Percent Occupants w/o SB | 78.3% | 77.3% | -1.3% |

*these data items are preliminary and could change as more information is received

| January 1 - September 30 | 2007 | 2008 | Percent Change |
|---|---|---|---|
| Native American Fatalities | 32 | 19 | -40.6% |

# Support for Local Programs

# Support for Local Programs

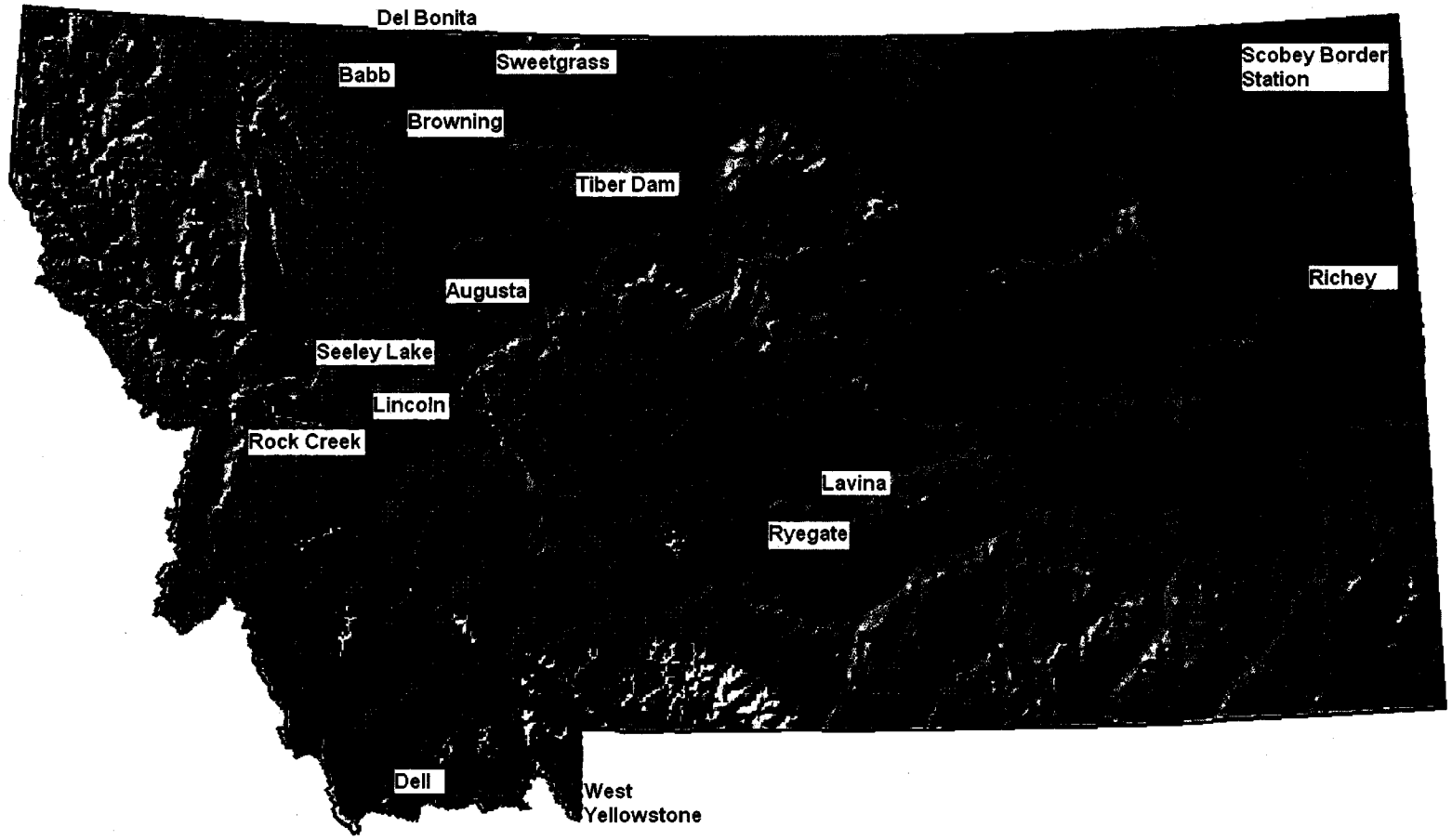
- **Infrastructure:**
  - Urban Highway Program
  - Enhancement Program (CTEP)
  - Transit Programs
  - Montana Air & Congestion Initiative
  - Secondary Highway Program
  - Safe Routes to School
  - Fuel Tax Allocations
- **Planning & Technical Assistance**
  - Multimodal Transportation Plans
  - Travel Demand Forecasting
  - Systems Impact Analysis Process
  - Safety Planning
  - Data & Mapping
- **Information & Education**
  - Research Program
  - Bicycle & Pedestrian Clearinghouse
  - Training Courses

# Other Programs

# Aeronautics Programs

- **Airport loans/grants**
  - **Development, Courtesy cars, Airfield pavement, Pavement preservation, Other infrastructure**
- **Airport assistance (public and private)**
  - **Engineering, Inspections, Unicoms/NDBs, Resale, Cones, airport/airway beacons**
- **Publications**
  - **Airport directory, Aeronautical chart, Rates and Charges survey, State Aviation System Plan**
- **Manage State Owned/Operated Airports**
  - **15 airports -- including commercial service airport at West Yellowstone**

# State Owned & Operated Airports



# Aeronautics Safety and Education Bureau

- Air Search and Rescue
- Aircraft/pilot registration
- FAA certified clinics, workshops
- Aviation education and promotion; Aviation Career Academy, Resource Library

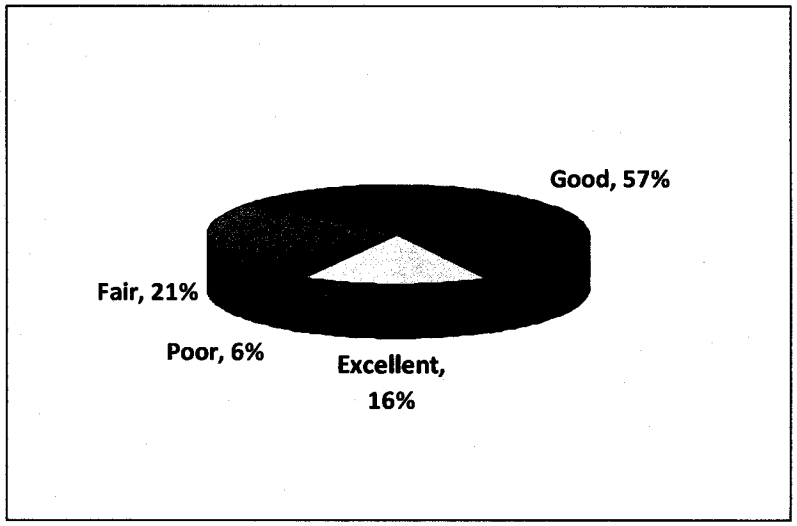
# Motor Carrier Services Programs

- **Protect Montana roadways from vehicle overweight damage**
  - **28 Weigh Stations**
  - **Weigh over 870,000 trucks annually**
- **Assure Commercial Vehicle safety on Montana Highways**
  - **Inspectors and officers conduct approx. 37,000 safety inspections annually**
  - **Inspectors conduct approx. 280 Motor Carrier compliance reviews annually**
  - **Inspectors conduct approx. 200 Motor Carrier safety audits annually**
- **Commercial Vehicle Credentialing**
  - **Officers and technicians issue over 94,000 permits, fuel licenses and vehicle registrations annually**
- **Motor Fuel Enforcement**
  - **MCS Officers conduct over 27,000 dyed fuel inspections annually**
- **Enforcement**
  - **MCS officers issue approx. 7,500 citations annually for violations of vehicle weight, motor fuel and safety laws**

# Maintenance Program

- MDT has 127 maintenance crews located throughout the state
- Each winter MDT crews cover about 3 million miles of road while plowing, sanding and applying deicing chemicals – the equivalent of driving around the world 120 times.
- In fiscal year 2007, MDT crews spread 239,180 cubic yards of sand and 3,782,691 gallons of deicer.

- MDT also conducts a survey of Montana residents concerning their views on highway maintenance.
- 73% of respondents rated winter maintenance excellent to good.

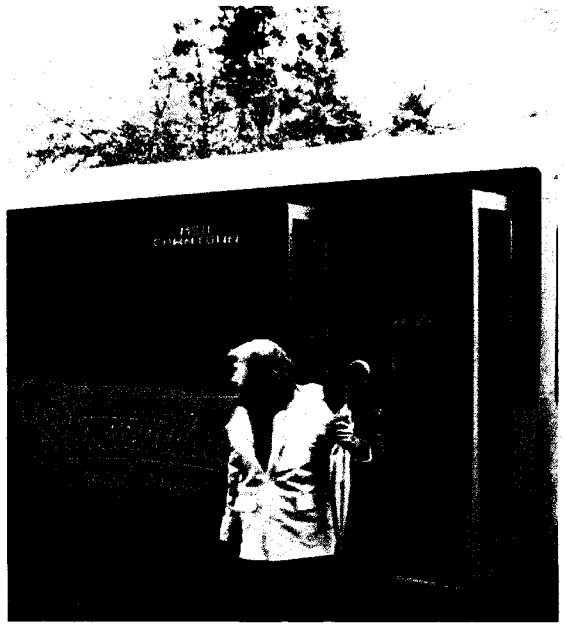


# Montana's Travel Information

- **511 Phone System**
  - Average between 400-500,000 calls annually
- **Web - www.mdt511.com**
  - Travel info page accounts for more than 90% of MDT's total web traffic
  - 16-18 million hits annually
- **Road Weather Information System (RWIS)**
  - 69 sites
- **Highway Cameras**
  - 31 sites
- **Variable Message Signs**
  - 36 signs

511 Montana Travel Info

# Transit Programs

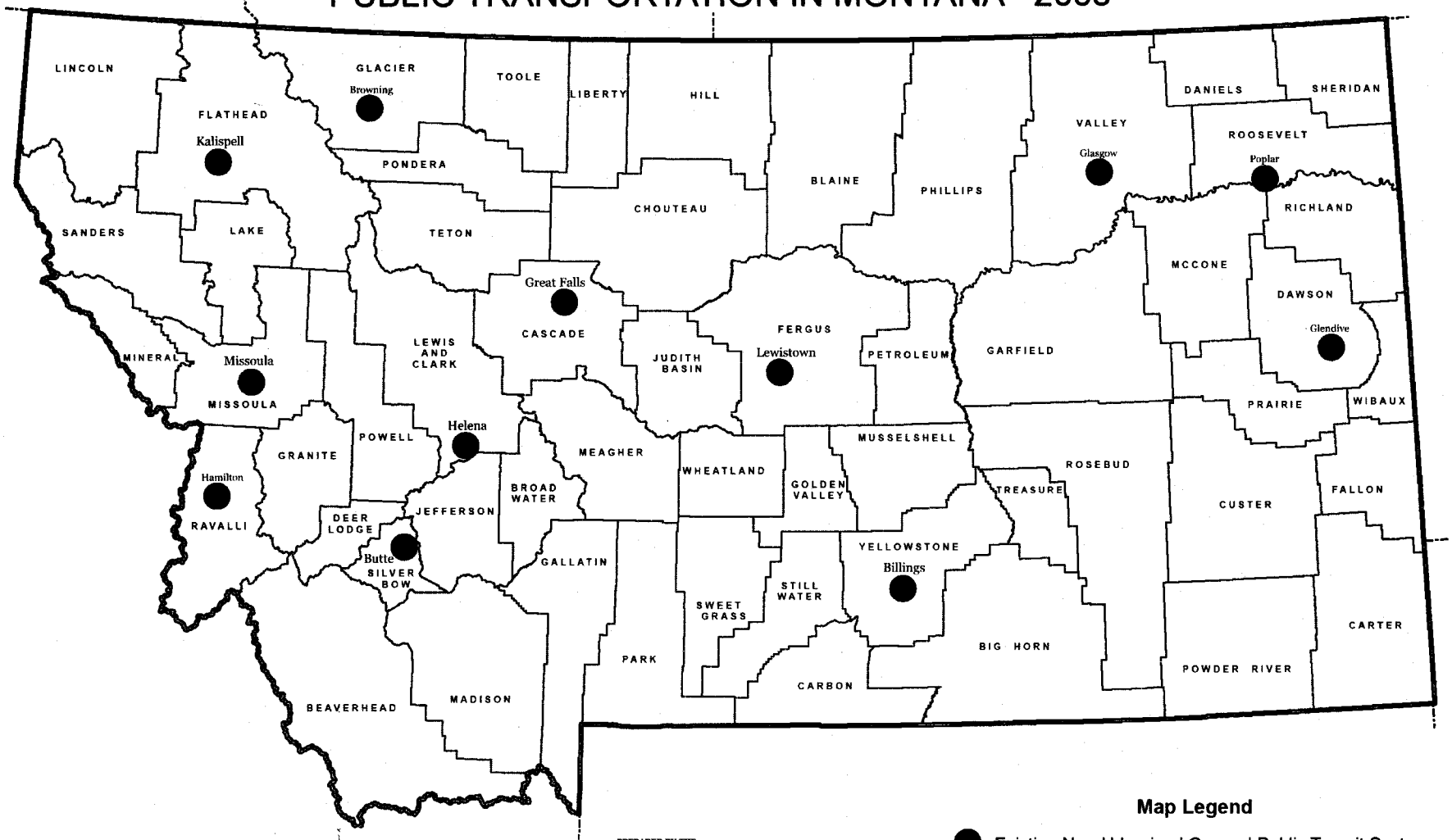


**Montana Public Transit Systems**

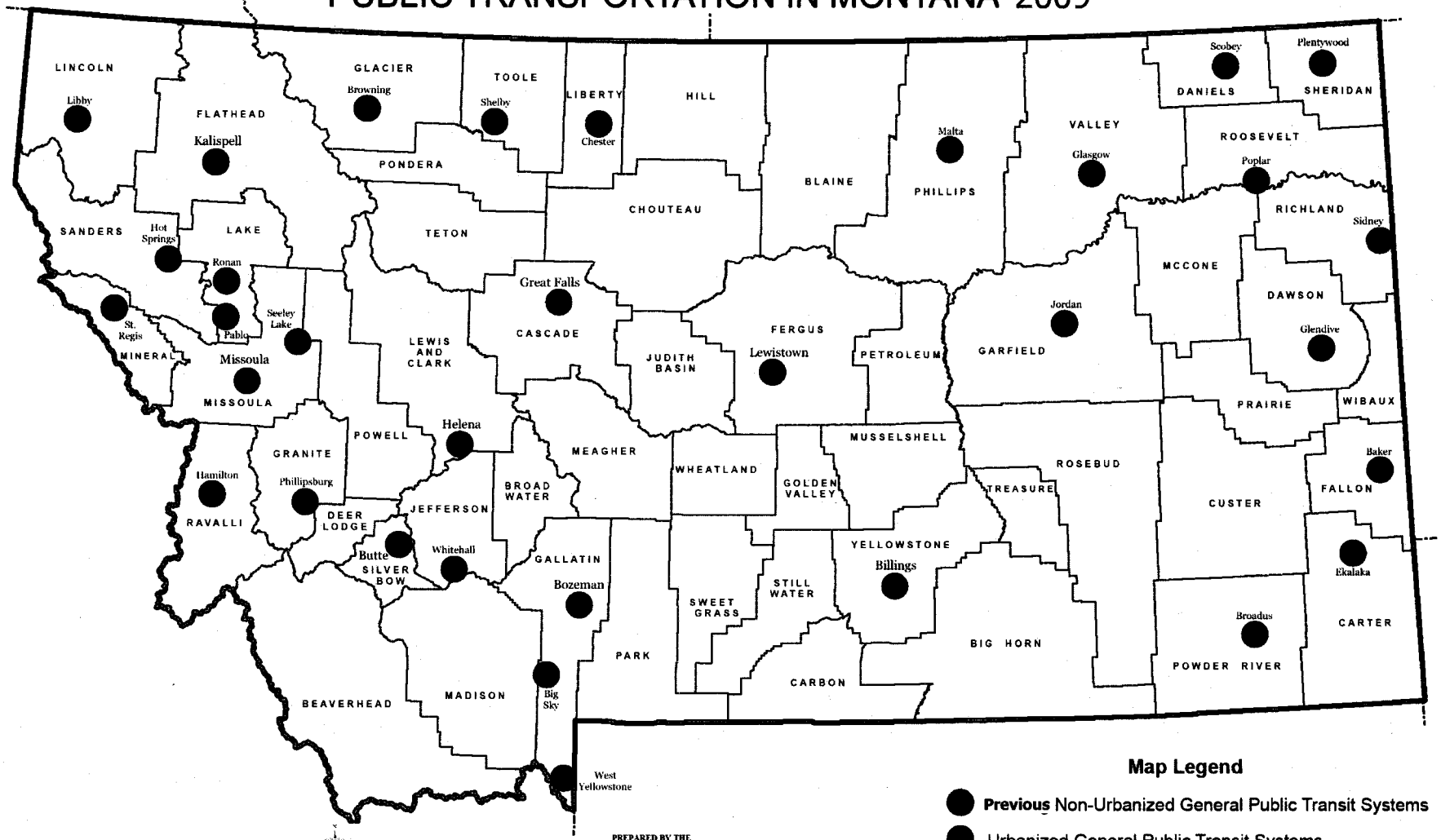
**2005: 12**

**2008: 36**

# PUBLIC TRANSPORTATION IN MONTANA - 2005



# PUBLIC TRANSPORTATION IN MONTANA 2009



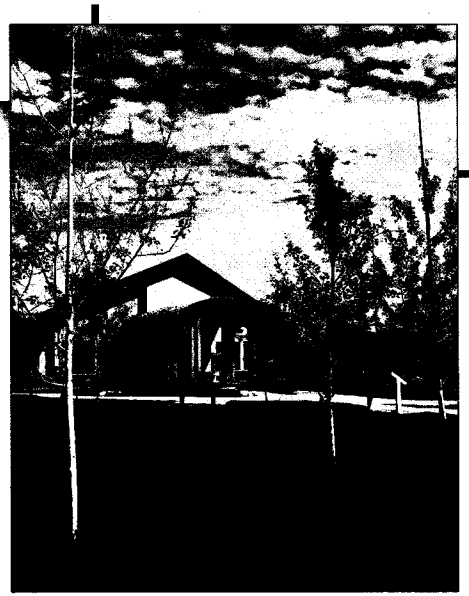
# Rail

- **Rail Plan Update**
  - **Update of rail plan first developed in 1970's, last updated in 2000**
  - **Updates technical information about Montana rail system**
    - **Mileage, ownership, track condition, volumes, commodities**
    - **Status of passenger rail service**
  - **Addresses special issues**
    - **Impacts of 110-car grain shuttle loading facilities**
    - **Potential branch line abandonment targets**
    - **Analysis of feasibility of Southern Montana passenger route**

# Rail

- **Southern Montana Passenger Route Analysis**
  - **Amtrak assisting with analysis**
  - **Two scenarios:**
    - **Billings to Missoula (update of analysis in 2000 update)**
    - **Spokane to Williston**
  - **Results will inform decisions regarding further actions:**
    - **Pursuit of Federal capital funding**
    - **Identification of sources of operating funds and 20% non-federal match for capital assistance**
    - **Agreements with railroads**
    - **Necessary amendments to state rail plan**
  - **Analysis sensitive to potential impacts to Empire Builder**

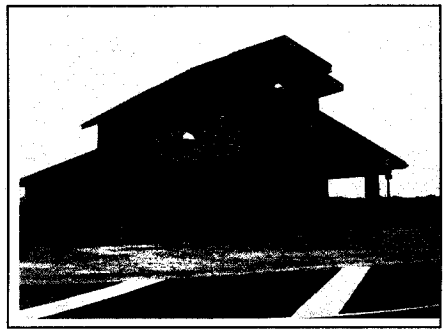
# Rest Areas



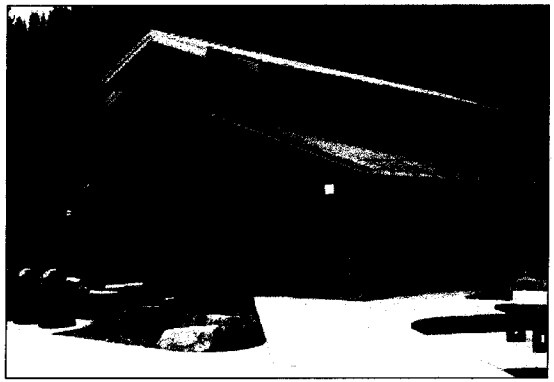
***Bozeman - 2000***

***Lost Trail Pass - 2001***

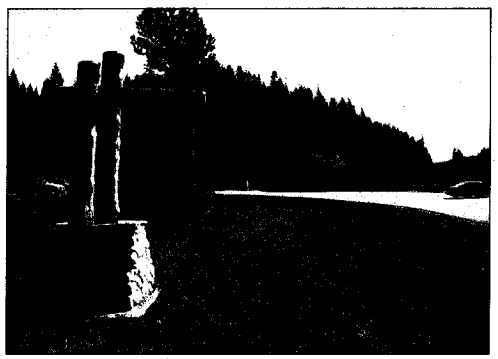
***Sweet Grass - 2002***



***Mosby - 2005***



***Dena Mora (Lookout Pass) - 2004***



***Lolo Pass - 2002***

***Anaconda - 2008***

# Federal Program Status

# Reauthorization

- SAFETEA-LU expires September 30, 2009
- Federal Highway Trust fund cannot support current authorized funding levels
- National discussions regarding "Nextea" not favorable for Montana
  - Emphasis on congestion relief
  - Public Private Partnerships (Tolling)
- Pressure to direct Federal funding to "Bottlenecks"
  - Ports
  - Metropolitan Areas

# Reauthorization

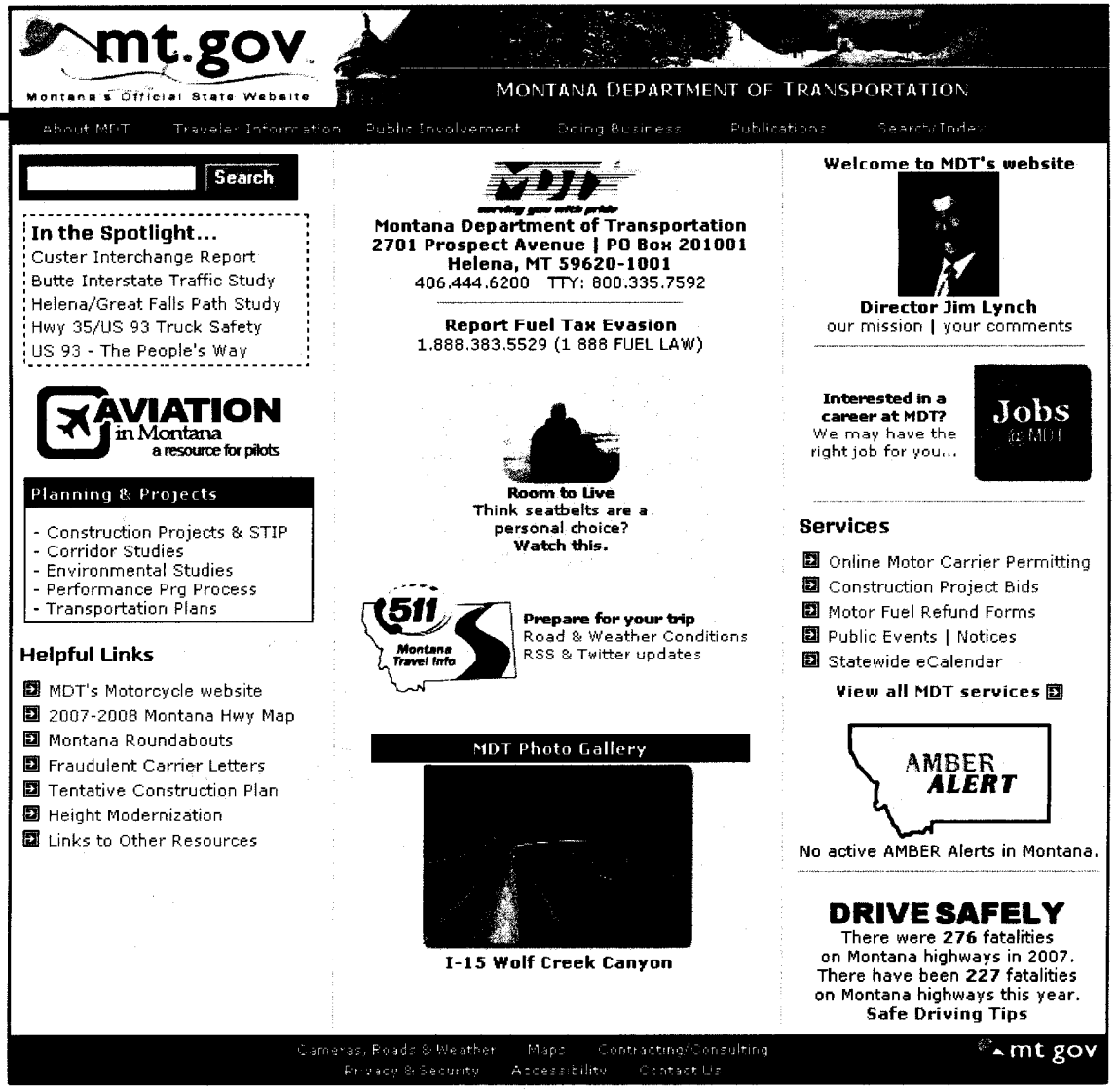
- What would be most beneficial to Montana in Nextea:
  - Maximum funding to core programs
  - States rather than USDOT should pick projects
  - No reliance on tolls or PPP
  - Protect Montana's share of at least 0.9758% of Federal formula funds
  - No new designer programs
  - Simplify program delivery

# Economic Stimulus Package

- No details yet
- Preliminary guidance from FHWA
  - Projects must be "shovel ready"—Ready to go to contract within 180 days
  - Must meet all usual 23 USC requirements
  - 100% Federal funding
  - Strict accountability standards
- MDT activities
  - Working to ensure package criteria benefit Montana
  - Conducting preliminary screen of projects that meet unofficial guidance

# Federal Program Summary

- Recent increased fuel prices and other factors have resulted in decreased travel and declining fuel tax revenue
- Montana's transportation system faced with many other challenges
- Asset management approach will help Montana adjust and respond to changes
- National discussions biased towards solutions not beneficial to Montana and other rural states
- Historic and new partnerships promise beneficial results for Montana

# MDT Web Page

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