Transportation Asset Management as Communication: Building the Case for Funding

Center for Transportation Research and Education

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Or…
What it Takes to Get Policy Makers to Give a Darn About Transportation Infrastructure Finance…

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Transportation Policy Institute

Communicate to whom and why:

- Citizens / Taxpayers / News Media / Advocates
  - To hold elected officials accountable
  - To help people understand value of the asset
  - To get people to recognize link between investment levels and system quality/performance
- Elected Officials (federal, state, local, & candidates)
  - So that policy makers can make informed judgments on budget priorities
  - So that investment decisions will be made with full knowledge of costs and consequences

Using Asset Management to convey infrastructure investment needs:

- Asset management can be an effective tool to build a persuasive case to enhance transportation investments
- For optimal effectiveness, asset management information should be just one element of a broader message.

Funding Street Construction and Maintenance in Minnesota Cities

Funding Street Construction and Maintenance in Minnesota Cities

Providing the tools to help cities preserve their road and bridge capital assets

January 2003

Sponsored by:
City Engineers Association of Minnesota
The Minnesota Chapter of the American Public Works Association
League of Minnesota Cities

Funding a Balanced Roadway Construction Program in Lake County

Funding a Balanced Roadway Construction Program in Lake County

A Report on the Status of the Lake County Highway Department's Efforts to Both Maintain and Improve the County's Roadway System

Prepared by the Transportation Policy Institute
for the
Lake County Highway Department

TPI Transportation Policy Institute
Research • Analysis • Outreach

State of Ohio Road and Bridge Transportation Funding Primer & Investment Needs report

The Ohio Road and Bridge Transportation Funding Primer & Investment Needs Report

Conducted by the Transportation Policy Institute for the Ohio Construction Information Association

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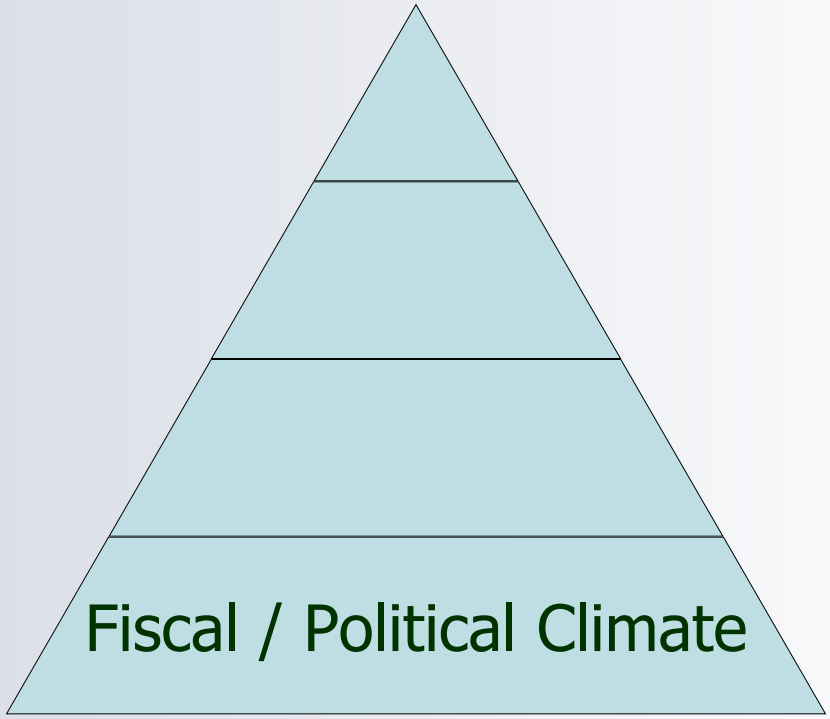
Research • Analysis • Outreach

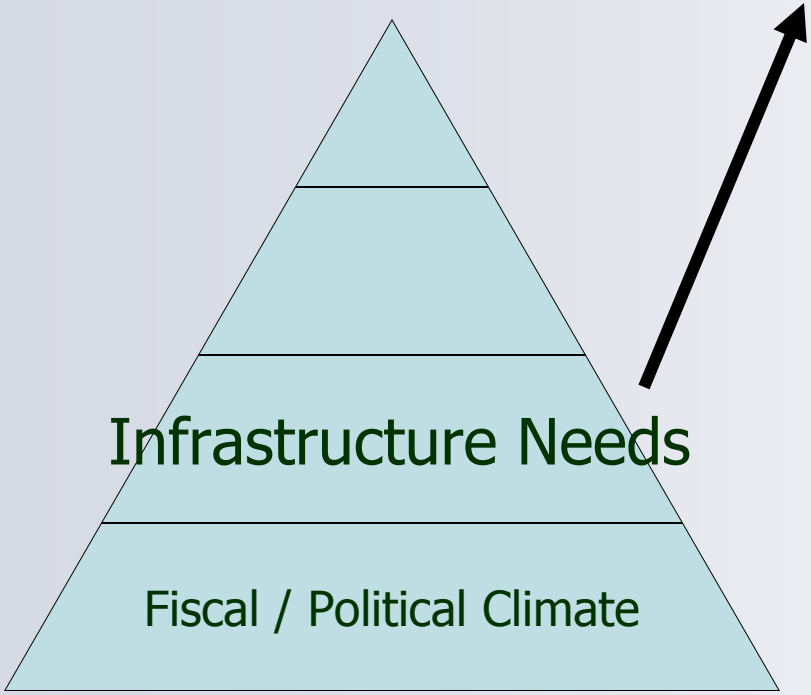
Foundation of message: Communicating Fiscal / Political Climate



Example: Minnesota's Fiscal Climate

- Faced a $4.5 billion general fund deficit prior to the 2003 Legislative session.
- Governor and many Legislators signed "No Tax Increase" pledge
- Dedicated funds (gas tax and vehicle registration fees) no longer adequate to support both expansion an maintenance needs

Communicate infrastructure needs

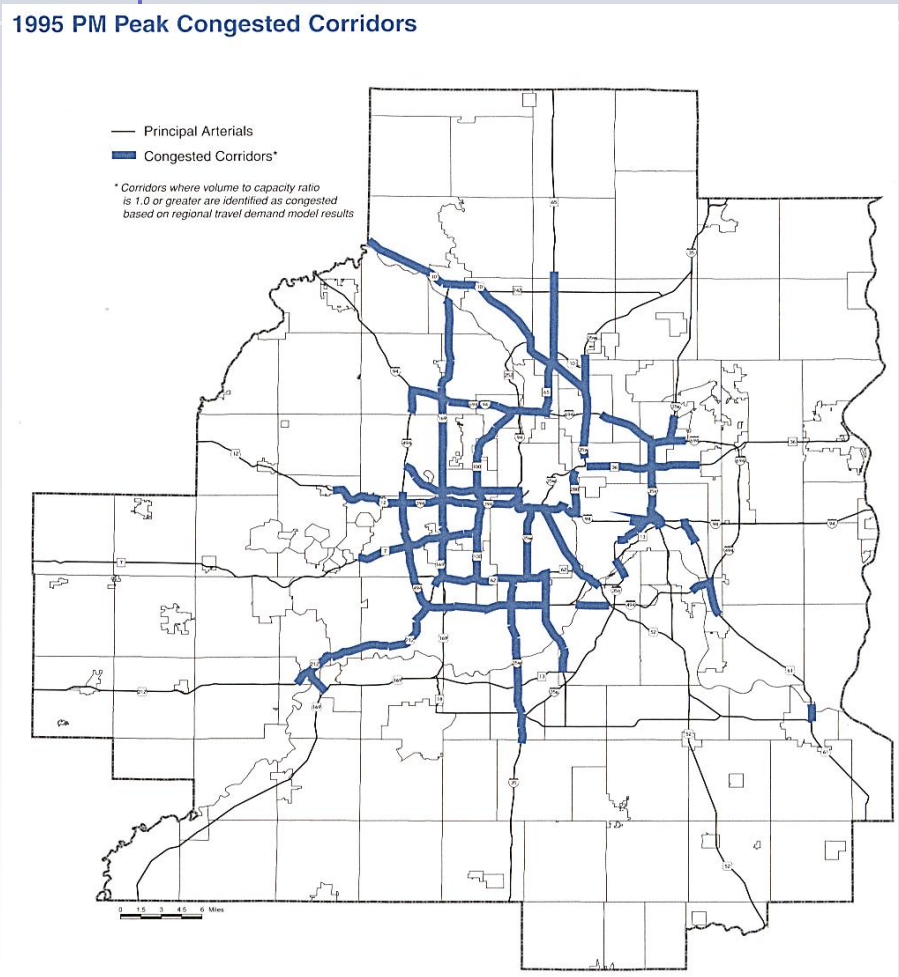


2 Elements of "Needs"

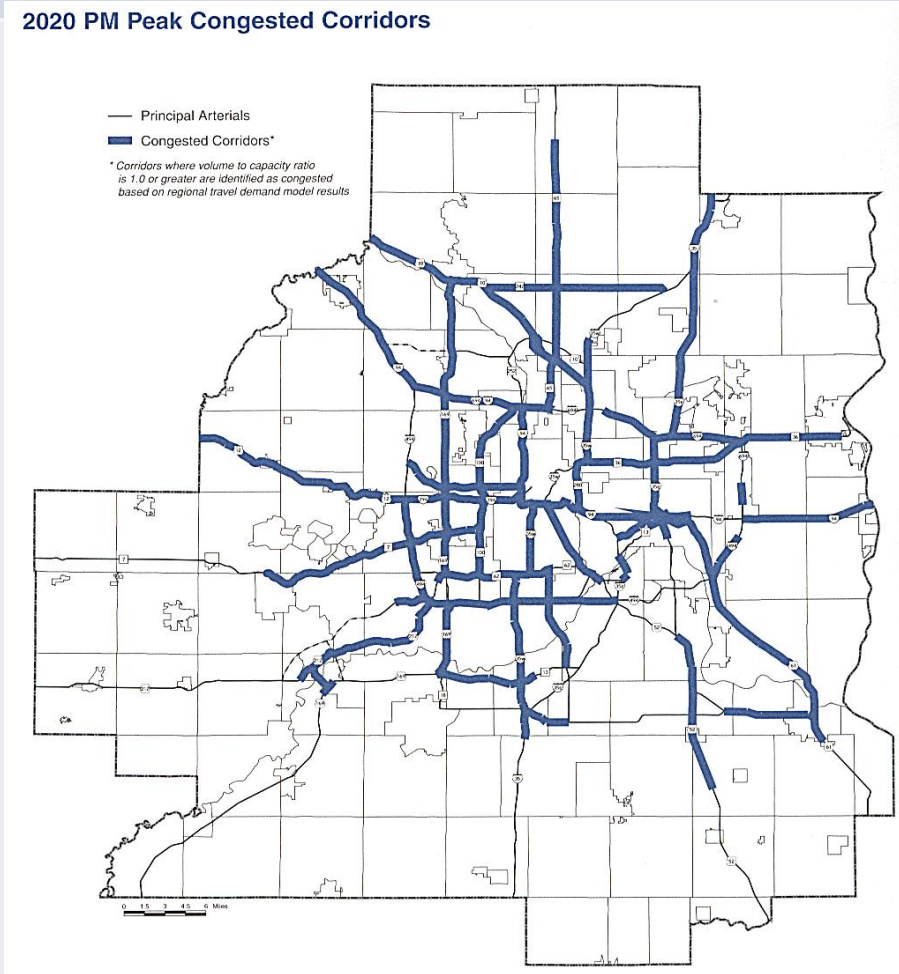
- Demands on system
- Funding trends

Traffic congestion is bad… and getting worse.

1995 PM Peak Congested Corridors

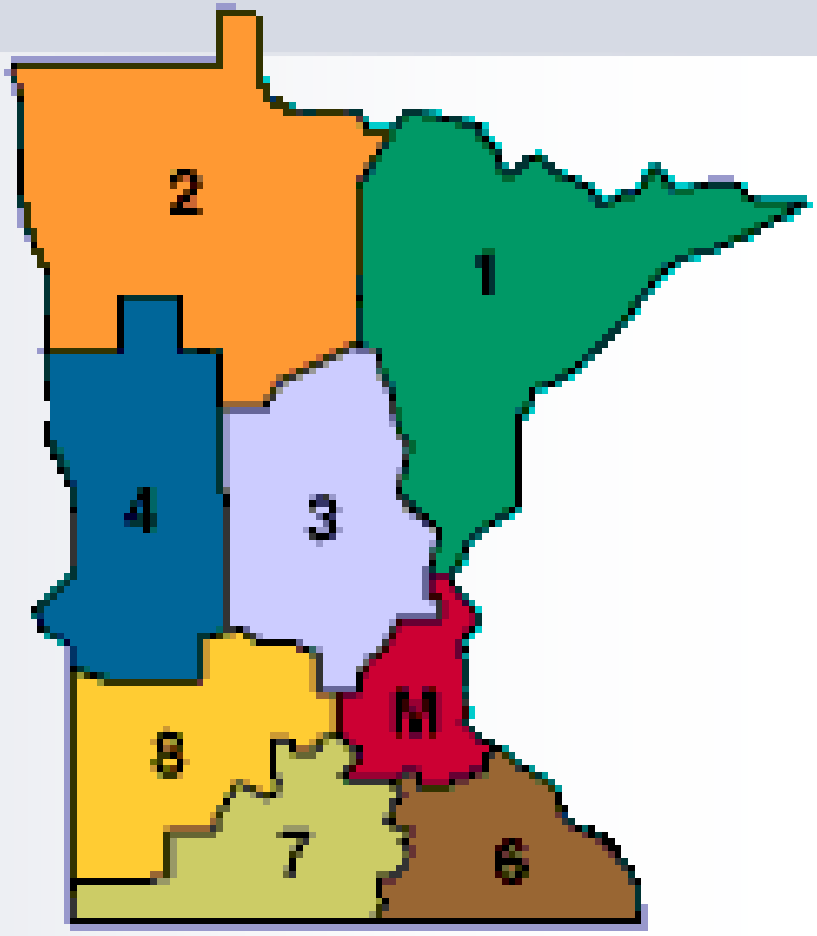


2020 PM Peak Congested Corridors

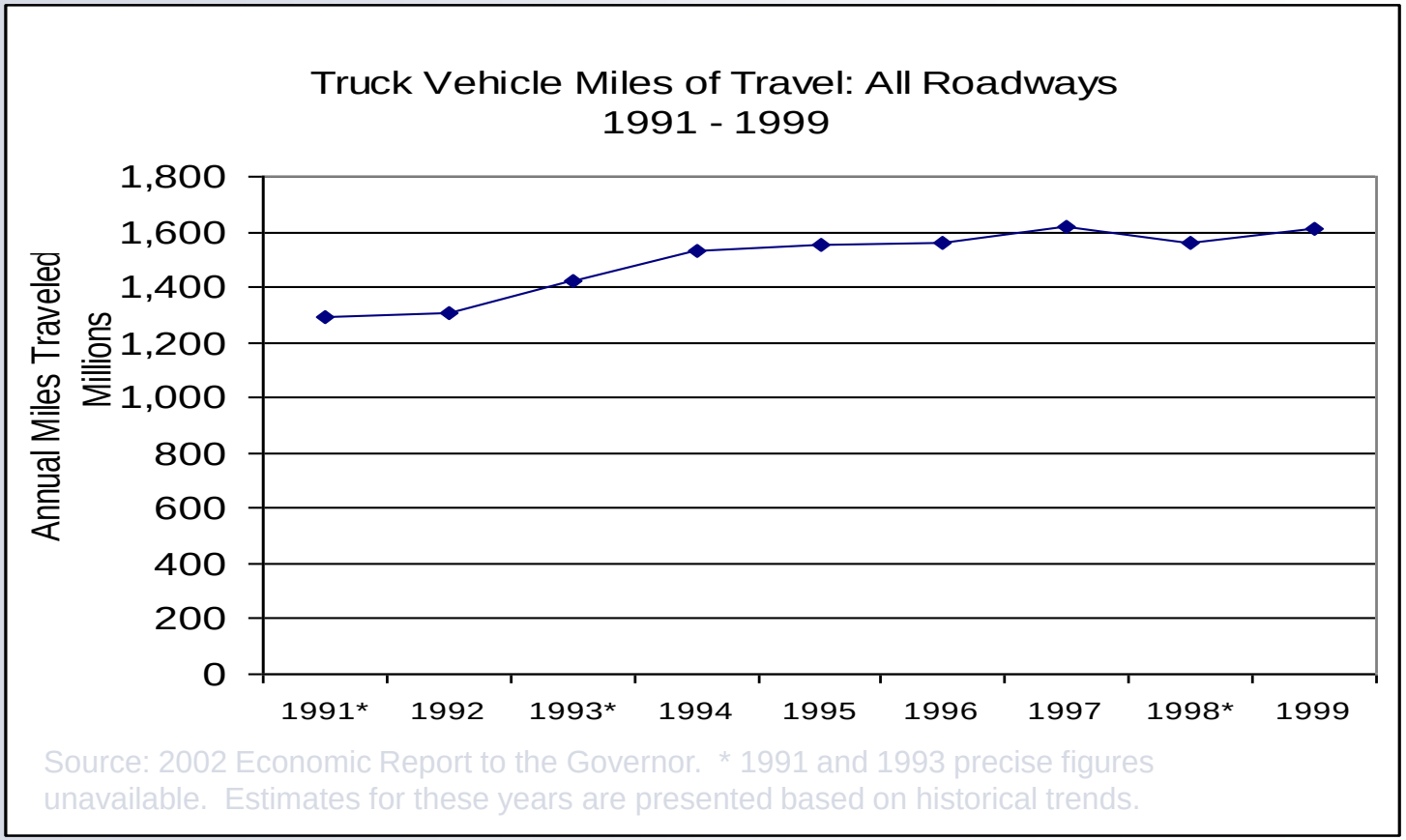


Traffic volumes are increasing across the entire state (1990-2000)

District 1	20%
District 2	22%
District 3	50%
District 4	24%
Metro	35%
District 6	29%
District 7	20%
District 8	21%
Source: Mn/DOT	

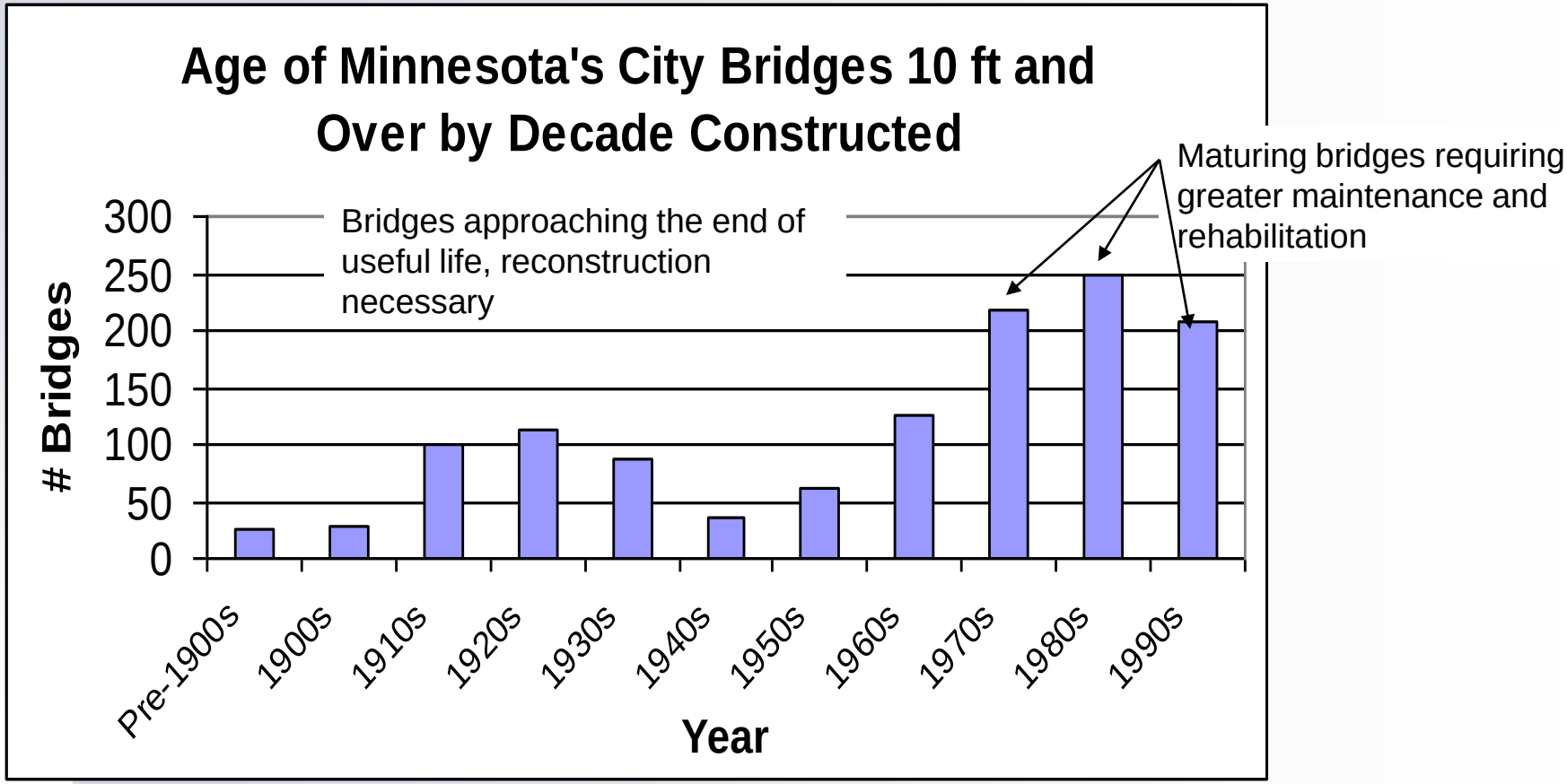


Freight movement is also increasing demands on city roadways and bridges.



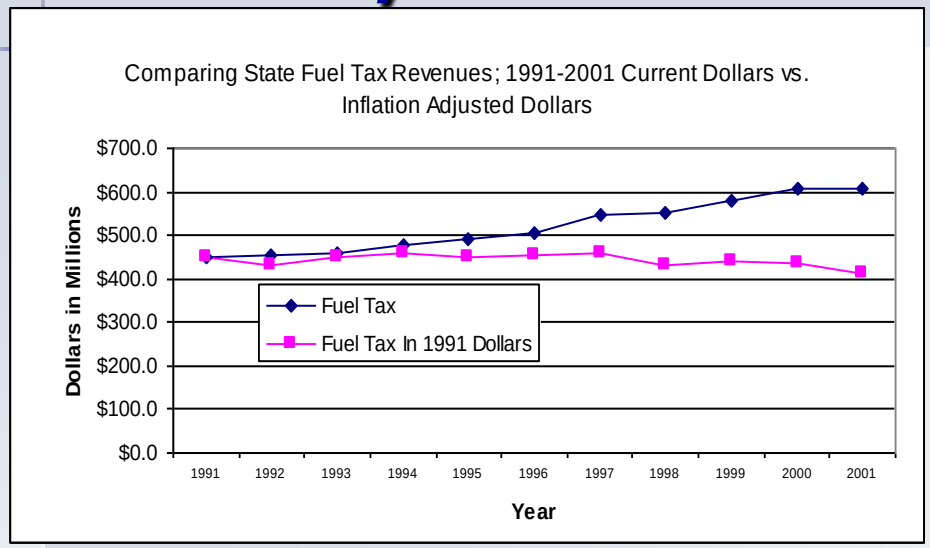
Source: 2002 Economic Report to the Governor. * 1991 and 1993 precise figures unavailable. Estimates for these years are presented based on historical trends.

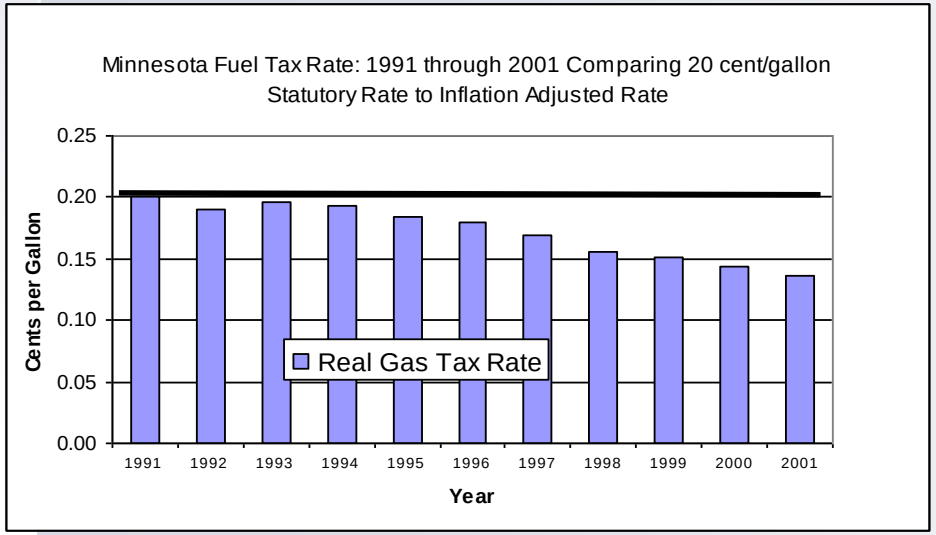
Aging infrastructure will require greater maintenance costs in the future (e.g. bridges)



Costs of road construction and maintenance is has grown rapidly in recent years…

… which means that the purchasing power of dedicated revenues has declined, in real terms.

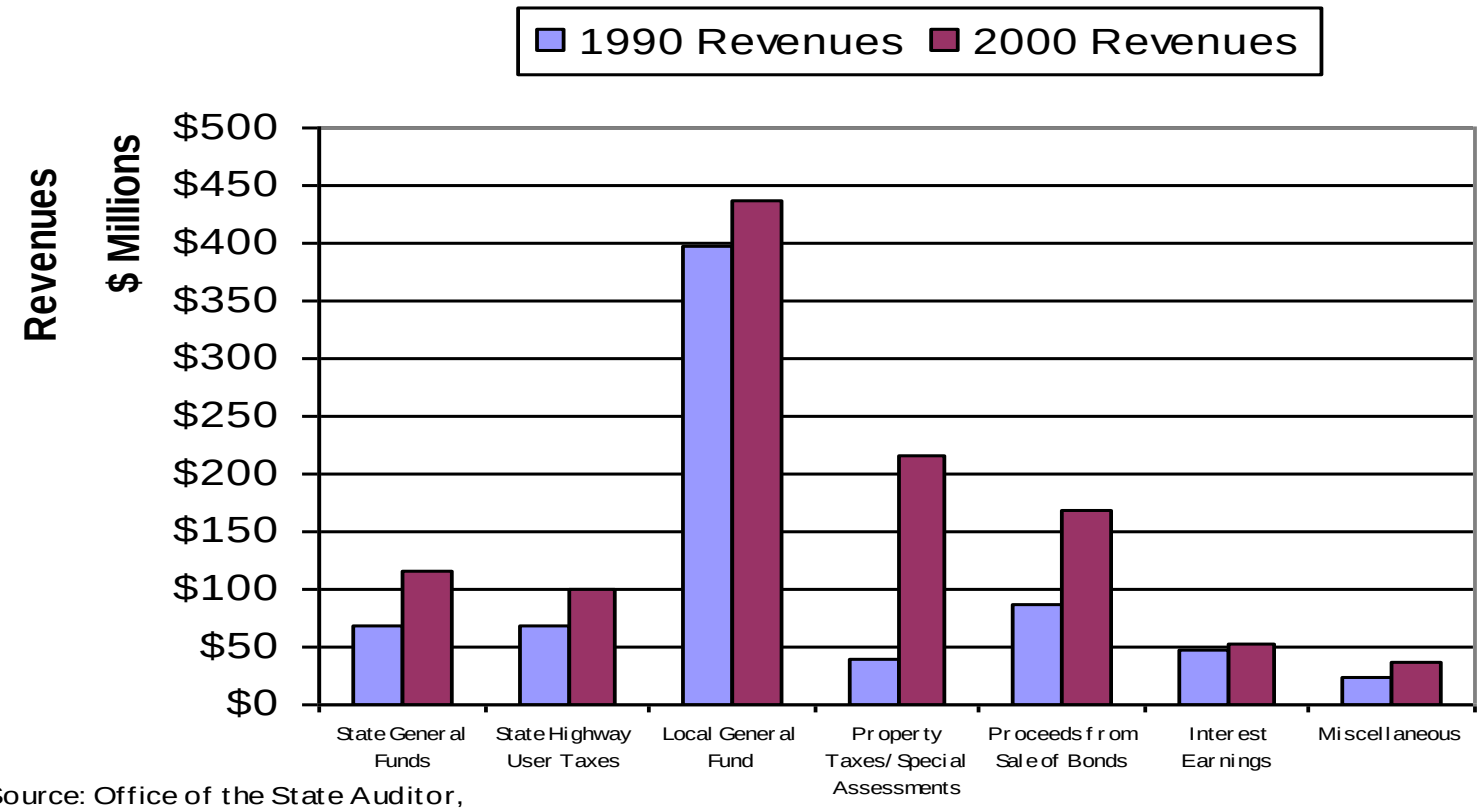




- The line chart compares total revenues in constant dollars compared to inflation adjusted dollars.
- The bar chart shows the inflation adjusted "value" of the 20 cent gas tax.

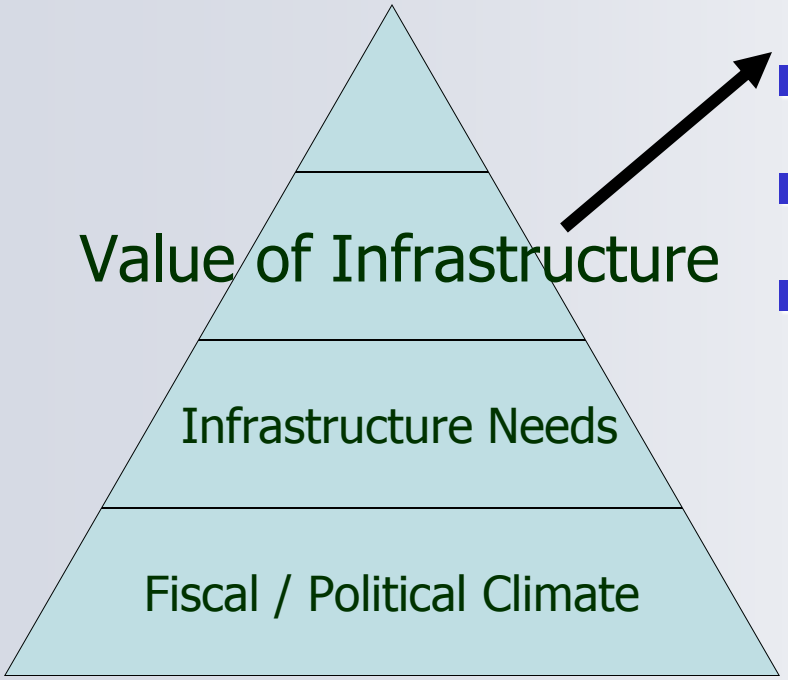
Largest source of new revenues since 1990 has been from property taxes and special assessments

Exhibit 7-A: The most significant new funding since 1990 for roads and bridges has come from property taxes and special assessments.



Source: Office of the State Auditor,

Communicate value of Infrastructure



"Value" can be defined as:

- Economic value
- Public safety value
- Contribution to property value

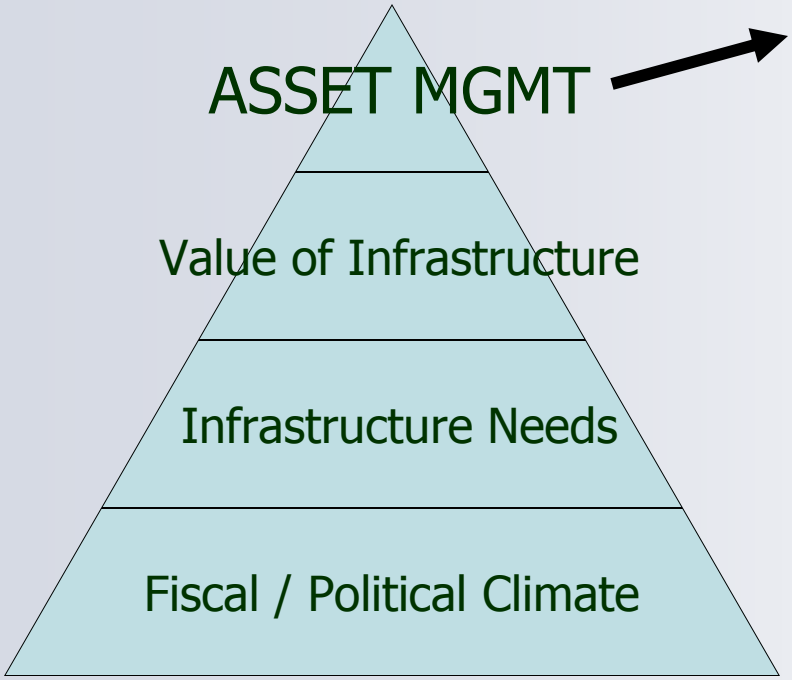
Scale and condition of the road and bridge network

Distribution of All Ohio Public System Mileage	
Roadway System	Total Mileage
Interstate	1,331
Turnpike	241
State System	17,970
County	29,199
Township	40,461
Municipal Streets	24,485
State Park Roads	2,500
US Forest Service Roads	25
National Park Service Roads	6
Total	**116,219**
Source: ODOT Transportation Facts Book	

Public Safety

- Typically, two-thirds of traffic fatalities occur on 2-lane, 2-way roads
- Identify specific projects that address safety hazards

The final piece: Asset Management data



Elements of Asset Management Piece:

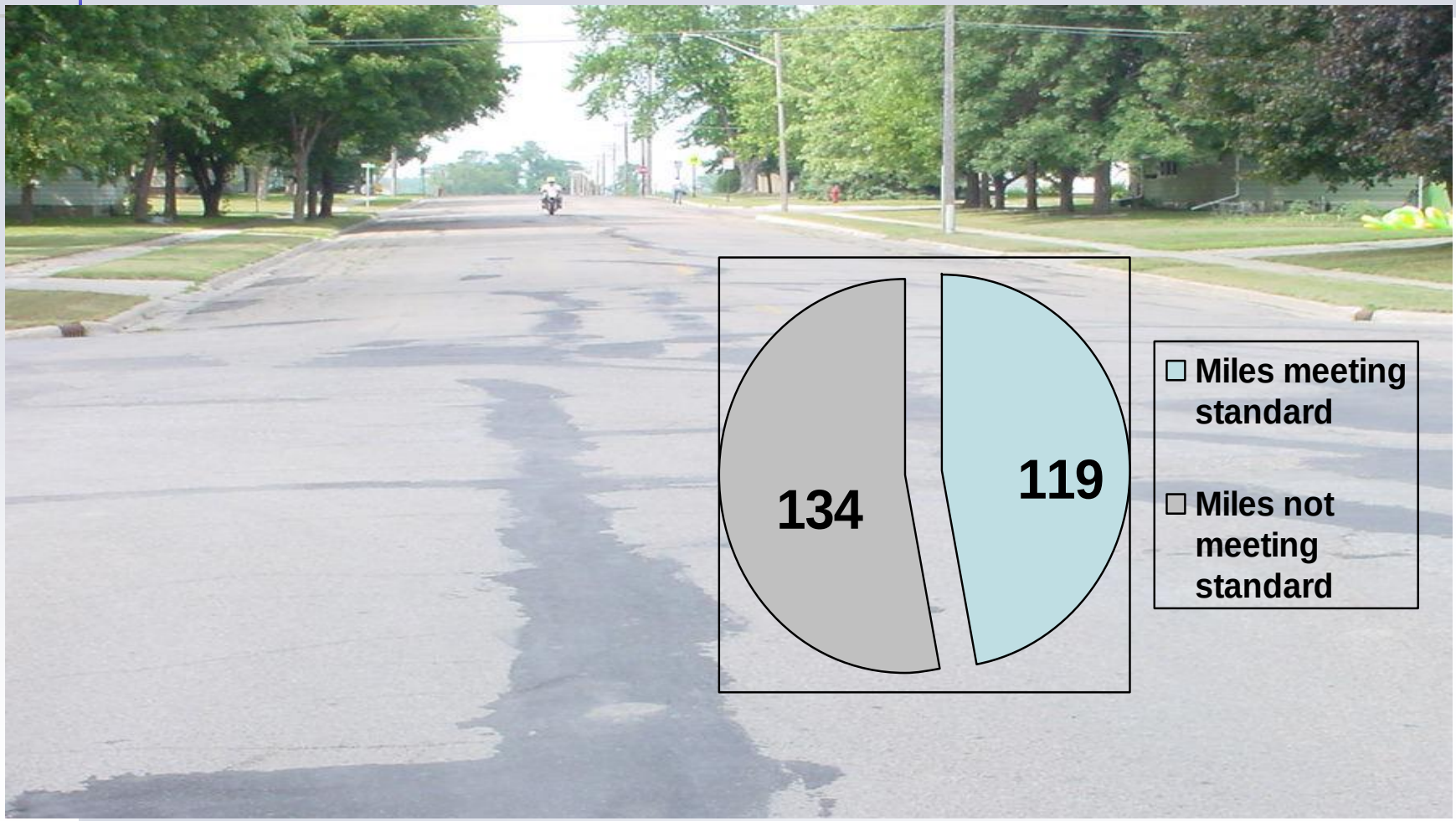
1. What is "Asset Management"?
2. Road and Bridge condition info
3. Budget scenarios

Asset management implies ACTIVE maintenance plan for public infrastructure

- What is PMP?
  - PMP is a maintenance plan for streets
  - It reduces the overall cost of street repair by taking the "right action at the right time" which reduces assessment rates:
    - to adjacent property owners (25% of reconstruct)
    - to all taxpayers by prolonging street life
- Why do we have PMP?
  - Existing methods were leading to system failure

Cost of roadway maintenance increases as roadways age

Example: McLeod County, MN: Provide statistical info on condition of road system.



Example: Lake County, MN bridges: condition, and current funding status

Lake County Bridges: Deficiency Status Based on 2001 Inspection Data			
Bridge #	**Feature Crossed**	**Deficiency Status**	**Sufficiency Rating**
R0309	Over LTVS Mining Co.	Functionally Obsolete	74.0
38504	East Branch Beaver River	Structurally Deficient	68.4
7227	West Branch Beaver River	Structurally Deficient	58.2
7914	Little Knife River	Structurally Deficient	49.2
88807	East Split Rock River	Structurally Deficient	11.1
92228	Knife River	Structurally Deficient	53.3
88814	Little Knife River	Structurally Deficient	53.2
92384	Little Stewart River	Structurally Deficient	40.6
L8087	8th St. over Skunk Creek	Structurally Deficient	54.3

Example: City of Woodbury, MN: What are projected costs? Projected funding levels?

2 Budget Scenario Projections

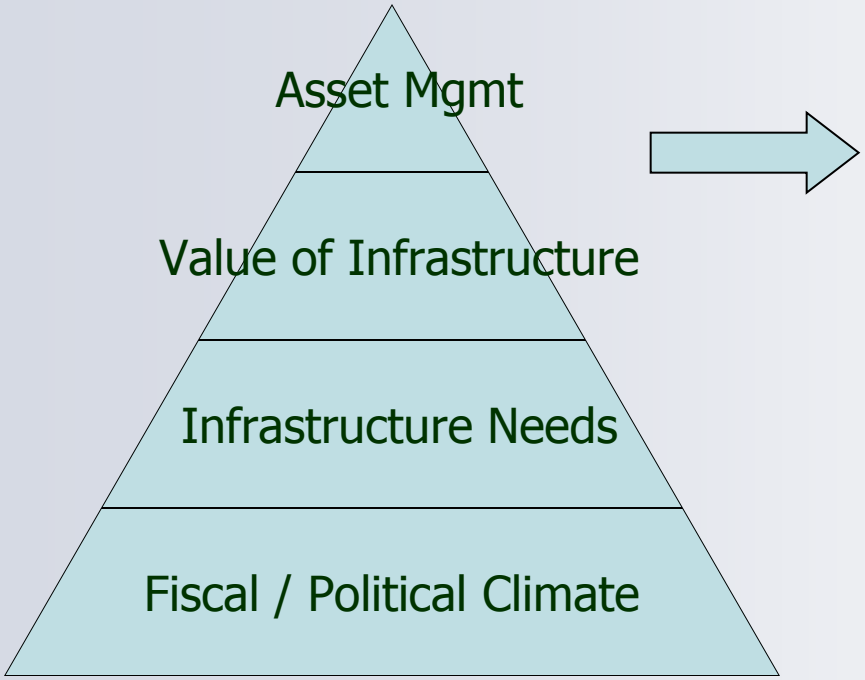
1. Scenario 1: Impact on pavement condition index (PCI) at current funding levels
2. Scenario 2: Estimated costs to maintain current PCI

Asset Management as communication: Elements of Message:

The right action at the right time…

- Prolongs pavement life
- Reduces the overall cost (taxes, assessments)
- Supports economic growth
- Enhances roadway safety
- Increases property values

Asset Management as communication: ultimate objectives



- Raise awareness of transportation infrastructure needs
- Achieve better budget outcomes