



Pavement Management Basics

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Presentation Approach

- ◆ What do I need in a pavement management program?
- ◆ How does my program compare with programs in other states?
- ◆ What are some trends in pavement management?

What's Needed in Pavement Management?

- ◆ Database information and tools
- ◆ Analysis models
- ◆ Prioritization/optimization tools
- ◆ Reporting mechanisms

The Need For Database Information and Tools

- ◆ Repeatabile and objective condition information
 - Historical and current conditions
- ◆ Last resurfacing or construction date
- ◆ Surface type (or structure)
- ◆ Priority factors
 - Functional classification
 - Traffic volumes
- ◆ Tools to aggregate data from different sources

Data must be reliable

Deciding What's Enough

- ◆ Be sure you have what's critical to support decisions
- ◆ Add additional detail when:
 - It adds value to the decision process
 - It can be collected and maintained over time within the resources available
 - It supports a performance measure used by the agency

The Need for Analysis Models

◆ Condition indexes

- Individual distress data (or indexes) for treatment selection
- Combined indexes for reporting conditions

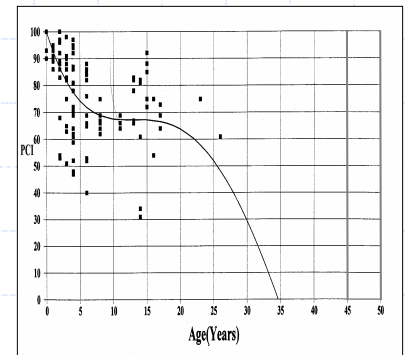
◆ Performance models

- Family models
- Individual models

◆ Treatment rules, costs, and consequences

- Rehabilitation treatments
- Preservation treatments

Models must reflect actual conditions



The Need for Prioritization or Optimization Tools

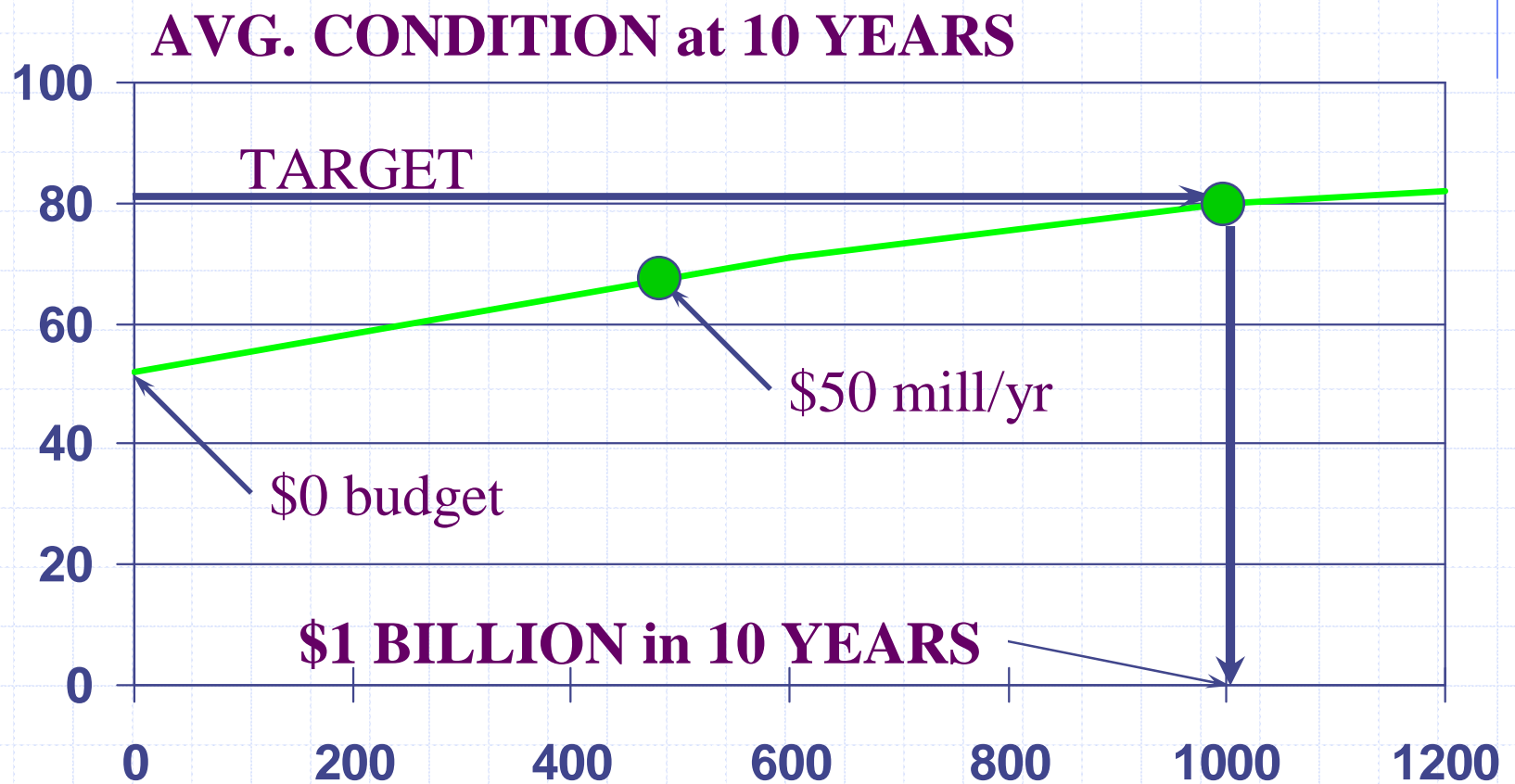
- ◆ Project selection for anticipated budget levels
- ◆ Budget needs to meet performance targets
- ◆ Long-term consequences of various strategies

Recommendations must impact
treatment selection

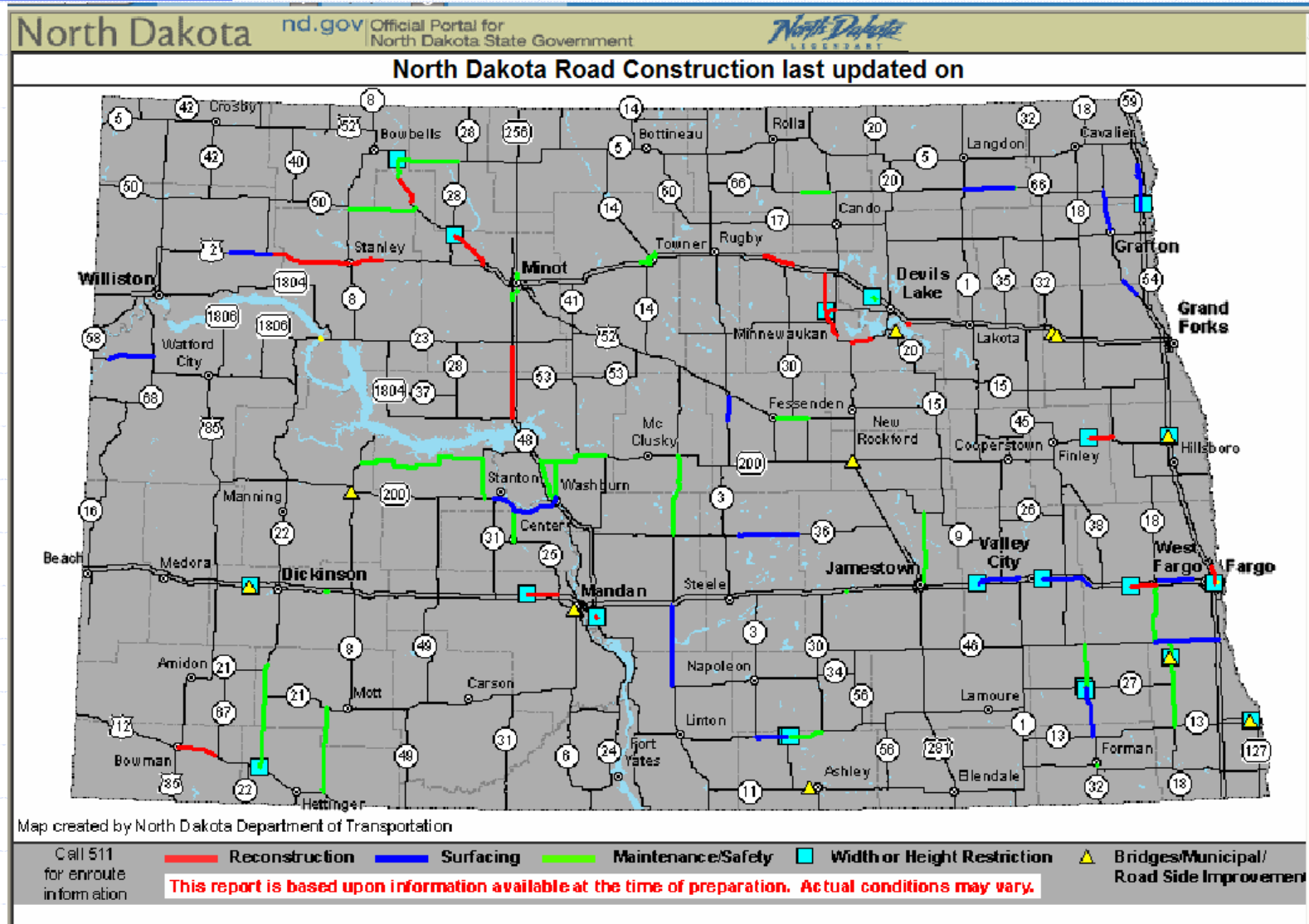
The Need for Reporting Mechanisms

- ◆ Conditions
 - Current and predicted
- ◆ Planned work activities
- ◆ Long-term consequences of various strategies
- ◆ Progress towards agency goals

Dollars Needed To Achieve Goals



Use of GIS For Reporting



Comparing to Other Programs

- ◆ Surveys of state practice
- ◆ Regional meetings
- ◆ Benchmarking exercises
- ◆ FHWA Pavement management user's group

A. Policy and Strategic Guidance

How are policy and strategic activities supported through the use of pavement management?

	Strongly Disagree		Strongly Agree		Comments
<i>Policy Decisions</i>					
A1. Agency pavement preservation policies are supported through the use of pavement management activities.	1	2	3	4	
A2. The agency's capital and maintenance funding allocations for roads are based on an assessment of pavement needs.	1	2	3	4	
A3. The agency's policies for project and treatment selection are based on the results of a cost-effectiveness analysis.	1	2	3	4	
A4. Agency policies are based on an appropriate balance of technical information and other factors (such as customer input and fiscal considerations).	1	2	3	4	
A5. Agencies policies would benefit from enhancements to the pavement management system.	1	2	3	4	
<i>Agency Pavement Preservation Goals</i>					
A6. Our agency has a business plan or strategic plan with comprehensive, well-defined goals for pavement preservation.	1	2	3	4	
A7. Our agency's pavement preservation goals are based on information provided by the pavement management system.	1	2	3	4	
A8. Our agency's pavement preservation goals are linked to performance measures that are monitored through the pavement management system.	1	2	3	4	
<i>Resource Allocation for Pavement Preservation</i>					

Trends in Pavement Management

- ◆ QC/QA in data collection
- ◆ Use of remaining service life (RSL)
- ◆ Matching projects to pavement management recommendations
- ◆ Incorporating preventive maintenance treatments into the models
- ◆ Use of pavement management information to support the new M-E design programs

Thank You!

Questions?

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