



Developing a Bridge Preservation Guide for Local Agencies – Michigan's Transportation Asset Management Council

October 12, 2010 –Detroit



Presentation Outline

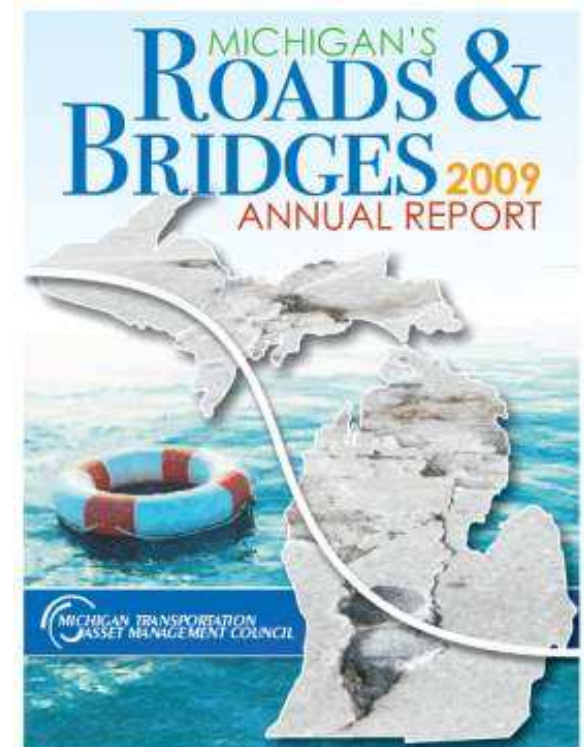
- TAMC Strategic Initiative on Bridges
- MDOT Local Agency Bridge Program
- Local Bridge Asset Management Guide



TAMC Strategic Plan Mission Statement:

“Support Excellence in Managing Michigan’s Transportation Assets by:

- Advising the Legislature and the State Transportation Commission
- Promoting Asset Management Principles
- Providing tools and practices for road agencies”





TAMC Website:

www.michigan.gov/tamc



TAMC Strategic Initiative on Bridges:

“Develop and implement a plan to promote and support bridge asset management practices on Michigan bridges, and integrate this plan with pavement asset management approaches.”

To that end, TAMC:

- Established a Bridge Asset Management Committee –June 2009
- Approved a Work Plan for Bridge Asset Management
- Aim is to promote and support Bridge Asset Management Practices in Michigan

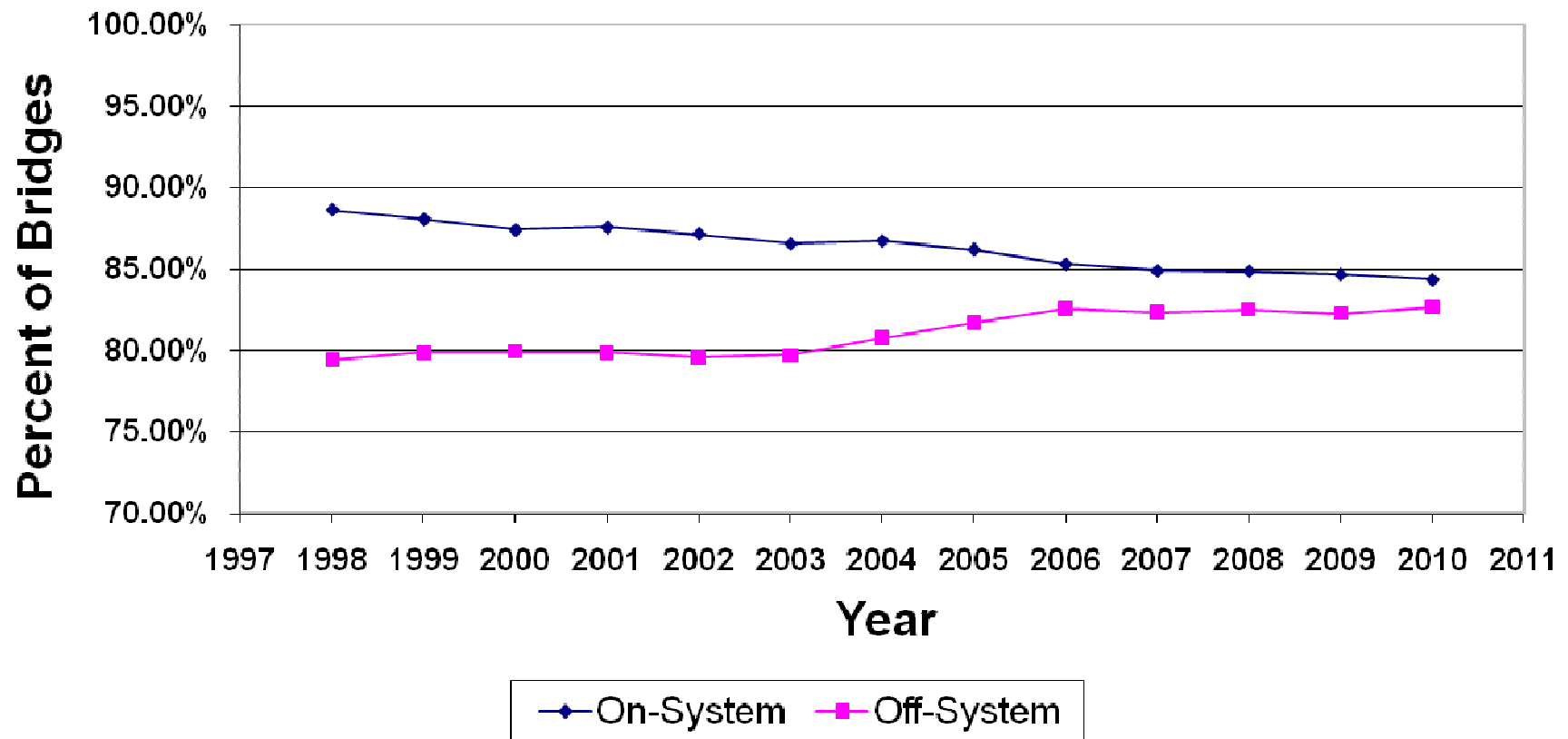


Bridge Asset Management Work Plan

- Review of current practices in Michigan
- Input from Federal Highway Administration
- Informal scan of best practices around the country
- Analyze and develop policy/best practice guide
- Survey done with local agencies in January of 2010 -results will be incorporated in Guide



Local Agency On-System and Off-System Bridges Percent Good and Fair





MDOT Local Agency Bridge Program:

A program to perform preventive maintenance and rehabilitation work, or to replace bridges on the local agency system of Michigan.

Partners:

County Road Association of Michigan, CRAM

Michigan Municipal League, MML

Michigan Department of Transportation, MDOT



MDOT Local Agency Bridge Program, cont.:

Working Groups:

Local Bridge Advisory Board, LBAB

Region Bridge Councils, RBCs

MDOT's Local Bridge Unit

Annual Budget of Approximately \$42 million

\$26 million –State Funds

\$16 million off system



Local Bridge Advisory Board

6 Voting Members, 2 Non-Voting Members

3 County Members - nominated by CRAM

3 City / Village Members - nominated by MML

2 MDOT Members - non voting

Regional Bridge Councils / Program

7 MDOT Regions

4 Voting Members, 1 Non-Voting Members

2 County Members - nominated by CRAM

2 City/Village Members - nominated by MML

1 MDOT Member - non voting



Local Agency Funding of Preventative Maintenance by FHWA

Local Bridge Advisory Board has allowed Preventive Maintenance for three years. Currently, the program uses state funds for PM.

On going discussions with FHWA on determining an acceptable systematic approach to allow federal funds to be used.



Local Bridge Asset Management Guide

Purpose

Assistance in understanding bridge condition and bridge maintenance

Guidance to decision makers and county bridge or highway engineers in the planning, developing, programming and implementing of effective and efficient capital programs and maintenance actions to preserve the bridges under their jurisdiction



Local Bridge Asset Management Guide

1.0 Introduction

2.0 Bridge Asset Management in Michigan

3.0 MDOT Local Agency Programs

4.0 Bridge Condition Assessment

5.0 Developing an Optimum Bridge Preservation Strategy

Bridge Asset Management
Guide for Local Agency
Bridges in Michigan

Local Bridge Asset Management Guide

1.0 Introduction

Two column format

Links

1.0 Introduction

1.1 Format

This *Bridge Asset Management Guide for Local Agency Bridges in Michigan* is presented in two-column format. The left column contains the Guide's text. Applicable references and other supporting material are contained in the right column with links to the source documents.

1.2 Purpose

The MDOT's *Bridge Asset Management Guide for Local Agency Bridges in Michigan* is intended to provide:

- Assistance in understanding bridge condition and bridge maintenance, and
- Guidance to decision makers and county bridge or highway engineers in the planning, developing, programming, and implementing of effective and efficient capital programs and maintenance actions to preserve the bridges under their jurisdiction.

1.0 References

MDOT *Asset Management Guide for Local Agencies in Michigan*
<http://michiganweb6.michigan.gov/michigan/council/AssetManagementPlans.aspx>

FHWA *Bridge Asset Management*
<http://www.fhwa.dot.gov/bridge/management/index.cfm>

AASHTO *Transportation Asset Management Guide*
<http://www.fhwa.dot.gov/air/lifecycle/asset.cfm>

AASHTO *Guidelines for Bridge Management Systems*
<https://bookstore.transportation.org/ItemDetails.aspx?id=343>



Local Bridge Asset Management Guide

2.0 Bridge Asset Management in Michigan

Developing a Systematic Plan –partnering with FHWA

Elements of a Systematic Plan

Sample Bridge Asset

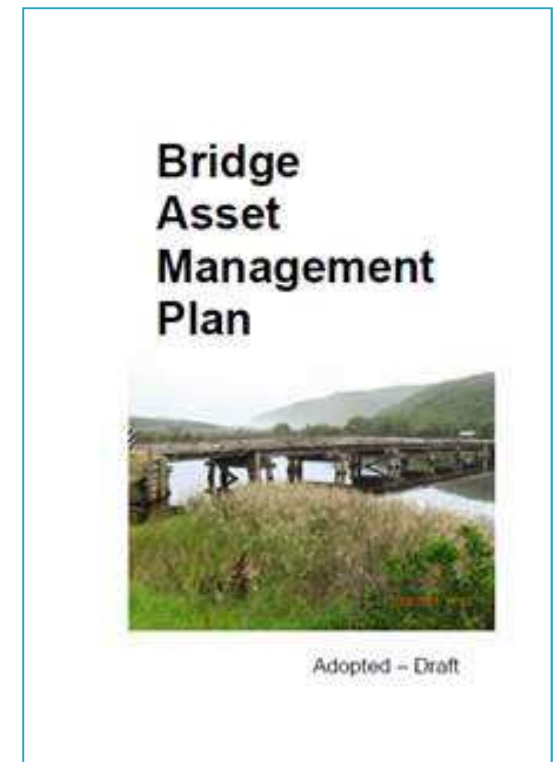
Management Plan(s)

Colac County (Australia)

TAMC Sample Bridge Asset

Management Plan

Funding Bridge Preservation





Local Bridge Asset Management Guide

3.0 MDOT Local Agency Program

Overview

Call for Applications (Bridge projects)

Local Bridge Advisory Board

Regional Bridge Council

Application Process

Develop Local Bridge Program Strategy

Local Bridge Asset Management Guide

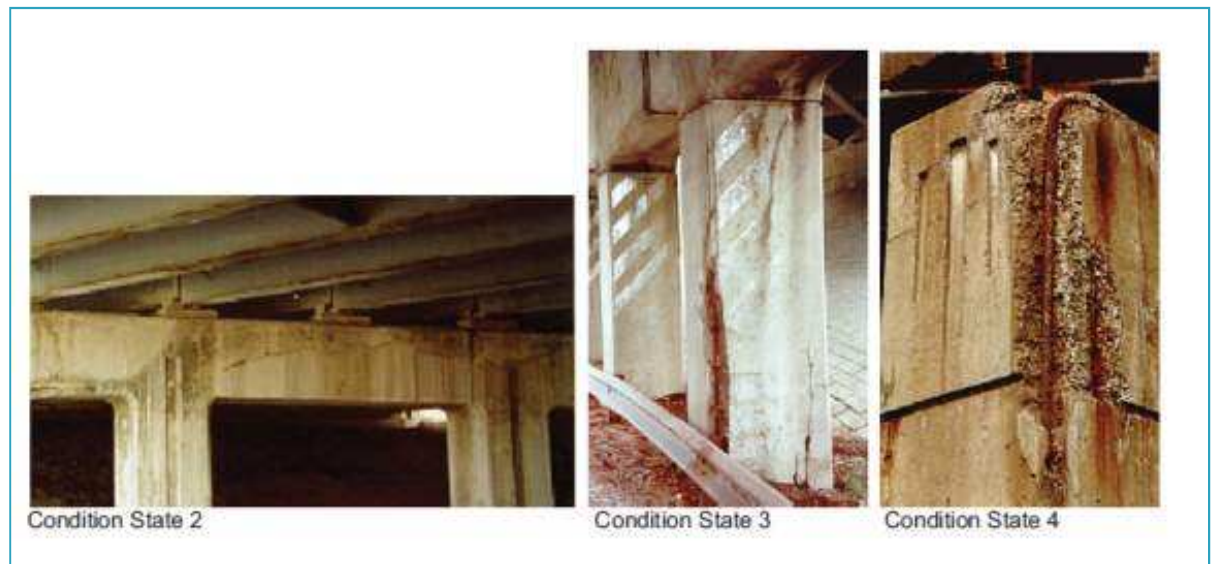
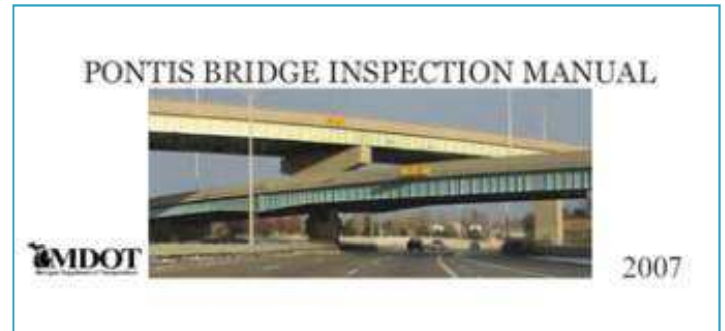
4.0 Bridge Condition Assessment

PONTIS Inspections

Inspection guide

Structure Evaluation

Risk





Local Bridge Asset Management Guide

5.0 Developing an Optimum Bridge Preservation Strategy

Alternate Types of Potential Fixes

Replacement

Structural Improvement

Rehabilitation

Preventative Maintenance

CPM

Routine Maintenance

Cost Estimating

Concept of 'Mix of Fixes'

The right fix in the right place
at the right time.

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Questions?