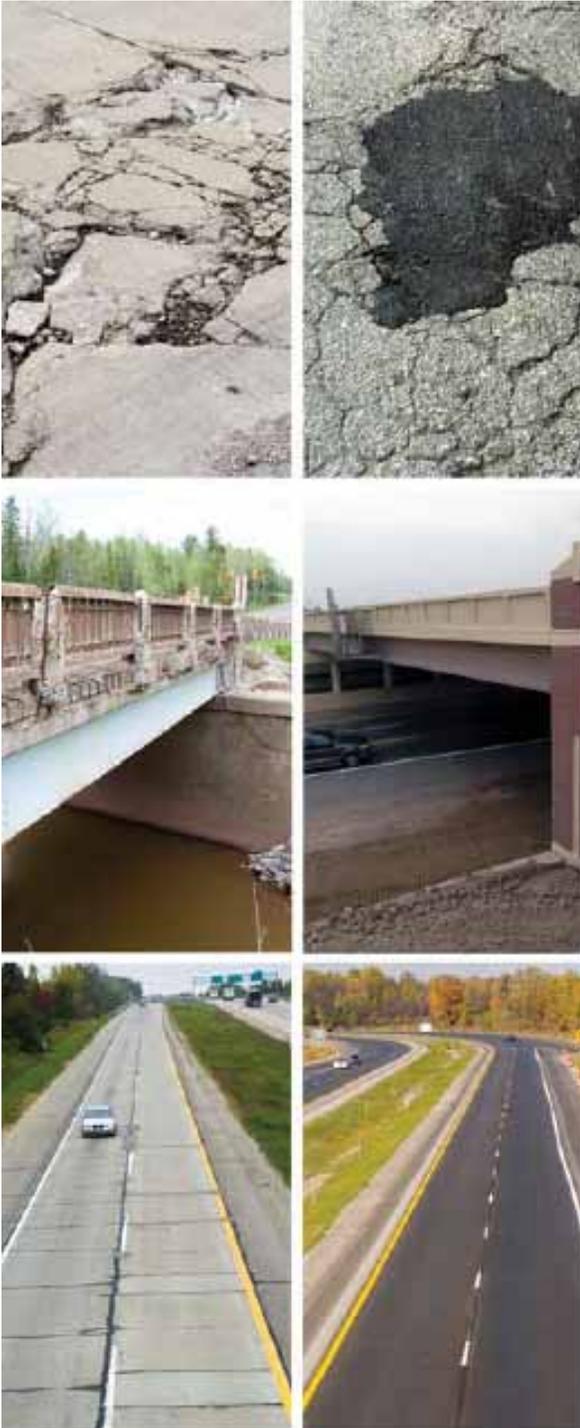


# *Asset Management & Act 51*



*MICHIGAN TRANSPORTATION  
ASSET MANAGEMENT COUNCIL*

*Brian Sanada* *Asset  
Management Coordinator*



## *In the Beginning...*

---

**Act No. 499**

**Public Acts of 2002**

**Established the  
Transportation Asset  
Management Council;  
Uniform Road Rating**

**Act No. 338**

**Public Acts of 2006**

**Major Street Funding for the  
Local Street System**

**Act No. 199**

**Public Acts of 2007**

**Report Projects &  
Expenditures to TAMC**

# *Transportation Asset Management Council*



## *Public Acts 499 & 199*

---

**Section (7): “The department, each county road commission, and each city and village of this state shall annually submit a report to the transportation asset management council (*TAMC*). This report shall include a multiyear program developed through the asset management process described in this section. Projects contained in the department’s annual multiyear program shall be consistent with department’s asset management process and shall be reported consistent with categories established by the *TAMC*. Projects contained in the annual multiyear program of each local agency shall be consistent with the asset management process of each local road agency and shall be reported consistent with categories established by the *TAMC*.”**

# *2008 Annual Report*

---

## MICHIGAN'S **ROADS & BRIDGES** 2008 ANNUAL REPORT



 MICHIGAN TRANSPORTATION  
ASSET MANAGEMENT COUNCIL

# *PASER Condition Rating*

---

**Good**

**Fair**

**Poor**



**PASER = 10, 9, 8**

**PASER = 7, 6, 5**

**PASER = 4, 3, 2, 1**

**Routine Maintenance**

- Crackseal
- Minor Patching
- Snow Removal

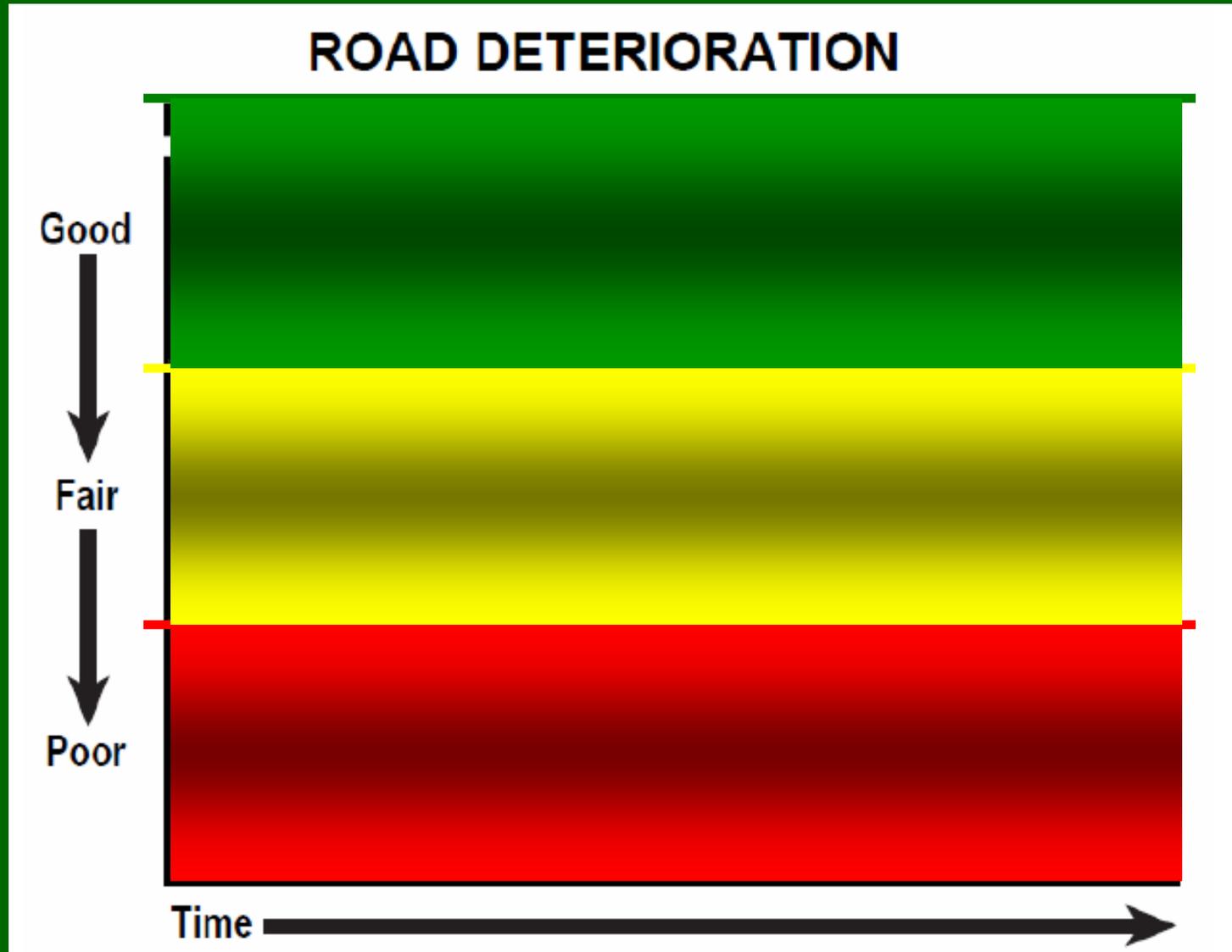
**Preventive Maintenance**

- Crackseal/Patch
- Surface Treatment
- Non-structural Overlay
- Concrete Joint Repair

**Rehab/Reconstruct**

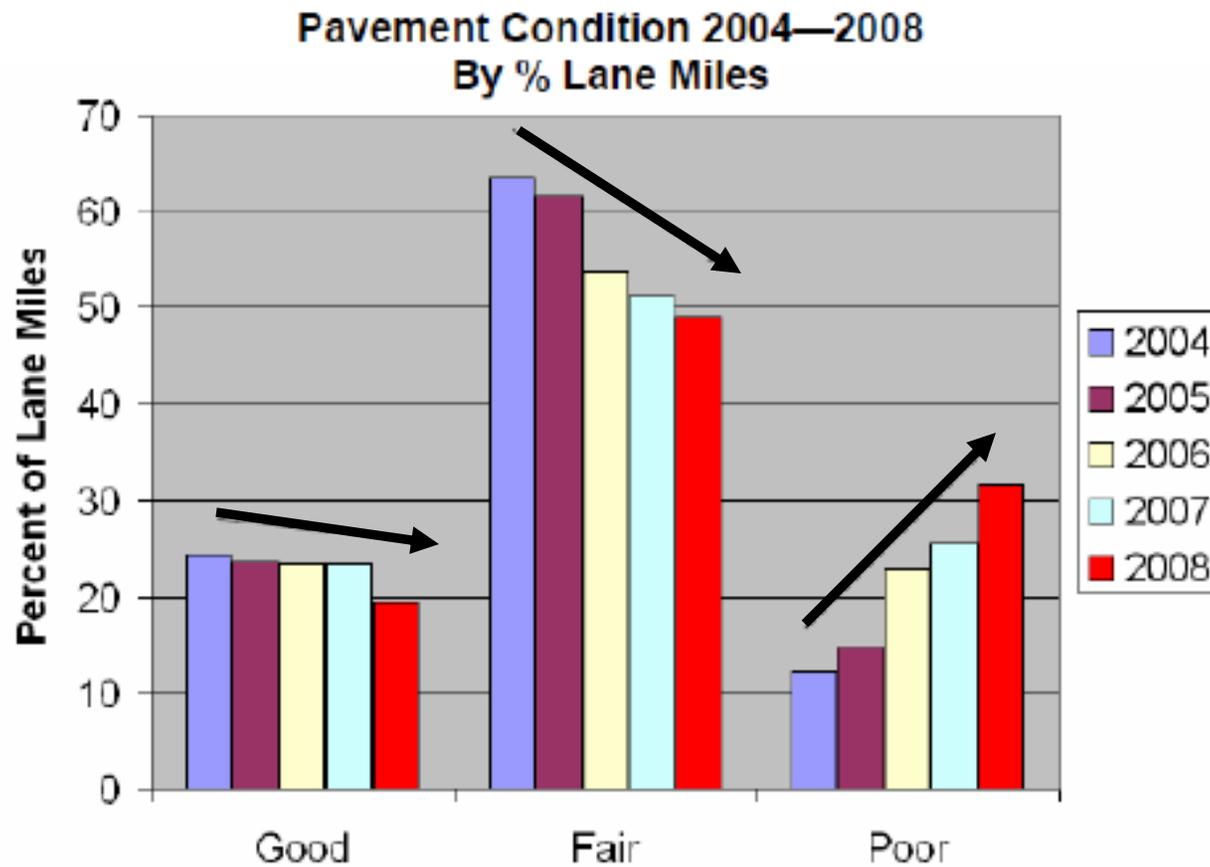
- Resurface
- Structural Overlay
- Replace Concrete Slab
- Complete Reconstruct

# *Window of Opportunity*

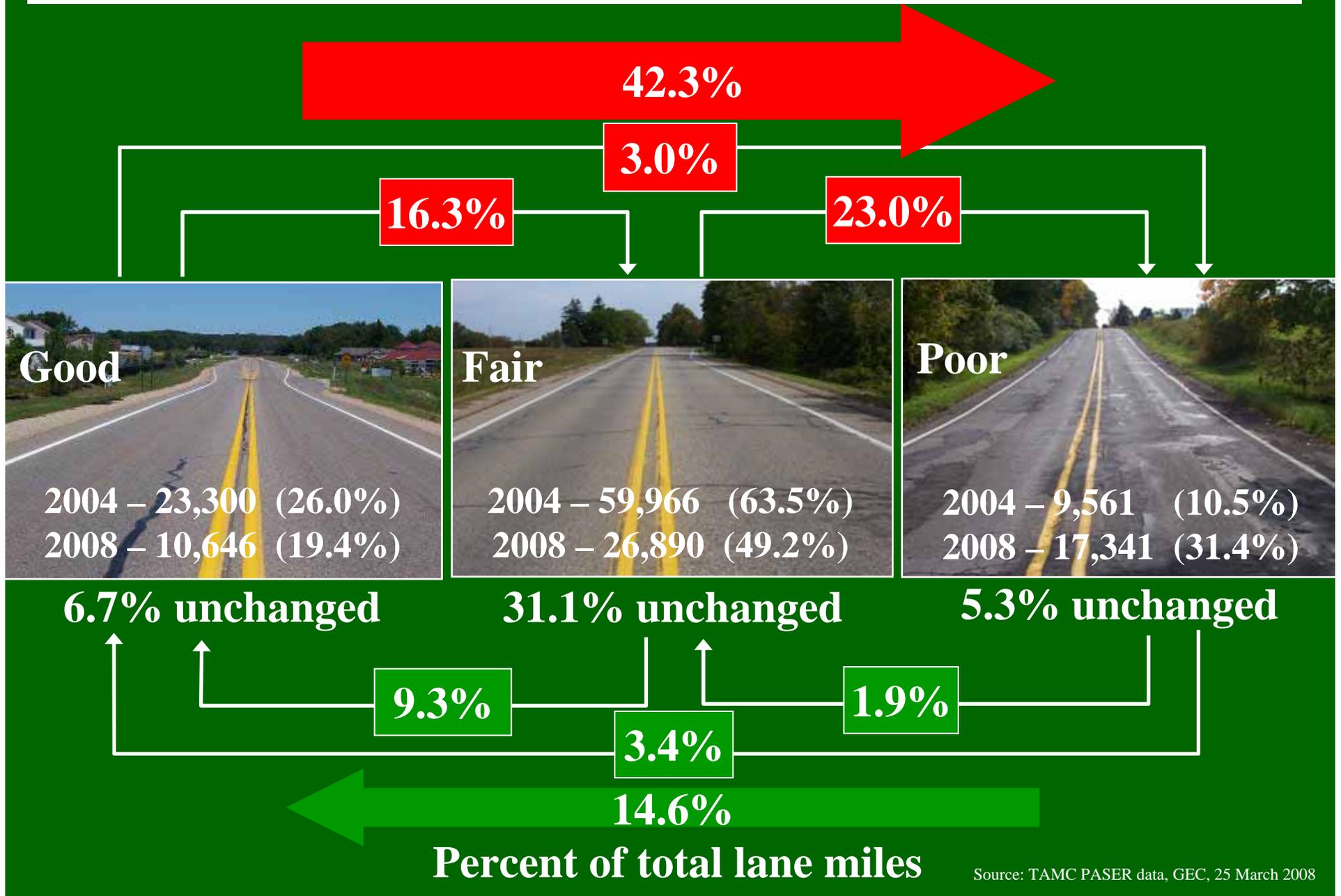


Source: 2008 TAMC Annual Report

# *Paved Federal-Aid Eligible Roads*



# Changes in Road Condition 2004 – 2008



# TAMC Website

# NEW WEBSITE COMING SOON!

[www.michigan.gov/mdotamc](http://www.michigan.gov/mdotamc)

The screenshot shows the current MDOT TAMC website. The header includes the MDOT logo and the Michigan.gov logo. The navigation bar contains links for Michigan.gov Home, MDOT Home, Site Map, Contact MDOT, FAQ, and State Web Sites. A search bar is located on the right. The left sidebar contains a menu with categories: about MDOT, Commissions, Councils & Committees, Asset Management Council, Executive, Finance & Administration, Highway Delivery, Highway Development, Transportation Planning, Aeronautics & Freight, Jobs & Careers, roads & travel, rail & public transit, bridges, borders & ferries, news & information, projects & programs, maps & publications, doing business, and aeronautics. The main content area features the ASSET MANAGEMENT COUNCIL logo and contact information for Brian Sanada. A 'Spotlight' section highlights the 2009 Michigan Transportation Asset Management Conference. Below this are sections for Meetings, Reports, Resources, and Paser Data Collection.

The screenshot shows the new MDOT TAMC website interface. The header and navigation bar are identical to the current version. The left sidebar menu is the same. The main content area is titled 'Council Members' and lists ten members with their photos, names, and contact information. The members listed are Carmine Palombo, Robert Slattery Jr., Spencer Hebel, Dave Bee, Don Disselkoen, William McEntee, Susan Mortel, Gerald Richards, and Kirk T. Steudle, P.E. Director. A 'Quick Links' section is visible on the right side of the page.

# Funding for Local Streets

## *Public Act 338 of 2006*

---

**Section (6): “A City or Village shall not transfer more than 50% of its annual major street funding for the local street system *unless it has adopted and is following an asset management process* for its major and local street systems...”**

# Asset Management Plan



## City of Keego Harbor

### Road Asset Management Plan

Anderson, Eckstein and Westrick, Inc.

*“Engineering Strong Communities”*

May 21, 2009

**1. Condition Assessment**

- How was the condition of your system determined?
- Include Rating System & Procedures Used

## Current Road Conditions



## Current Road Conditions

- 2005 – City streets were rated in terms of Pavement Quality Index (PVI), which is based on pavement surface condition and ride comfort ratings
- PVI ranges from 1 to 10 as follows:
  - 10 – 8.5      Excellent
  - 8.5 – 7.0      Very Good
  - 7.0 – 5.5      Good
  - 5.5 – 4.0      Fair
  - 4.0 – 2.5      Poor
  - < 2.5      Very Poor/Failed
- **The Average PVI Rating for City streets was 3.6**

## **2. Mix-of-Fixes, Estimated Costs and Funding Levels**

- **How were your improvement needs identified?**
- **Include Preferred Improvement (Mix-of-Fixes) Types**
- **Include Estimated Costs**
- **Describe Anticipated Funding Sources & Levels**

## Revenue

- Act 51 funds
  - Averages approximately \$140,000 each year
    - Current split: 70% Major Streets/30% Local
  - Up to 50% of major street funds may be transferred to local streets
    - MDOT approval required
  - Projected annual funds, if 50% is transferred to local streets:
    - 35% Major Streets (\$49,000)
    - 65% Local (\$91,000)
      - Both funds cover eligible operating expenses, as well as winter maintenance, repairs and reconstruction

## Revenue

- Fund Surplus
  - Approximately \$700,000
    - Split 50% Major / 50% Local
    - \$350,000 Major / \$350,000 Local
- Grants and other funding mechanisms
  - Grant opportunities limited
  - Bond measure was not passed

### **3. Future Conditions, Performance Measures and Targets**

- **How were future system conditions determined?**
- **Methodology Used ( Pavement Management System, RoadSoft, other? )**
- **Performance Measures ( e.g. % of pavement conditions by PASER Rating )**
- **Targets ( e.g. 70% of Primary Roads with a PASER Rating Greater than 5 in year 2020 )**

#### **4. Trade-off Analysis and Candidate Projects**

- **How does your agency go about the process of trade-off analysis?**
- **Investment Decisions between Treatment Options (e.g. routine maintenance vs. capital preventive maintenance vs. structural improvement)**
- **How do Performance Measures and Targets Influence this Process?**

## 5. Priorities for the Multi-Year Program

- How does your agency prioritize projects and develop its improvement program?
- Factors Considered in Prioritization Process? ( e.g. pavement / bridge condition rating, traffic volume, coordination with utility work, impact on land use, economic development, funding )
- Planning Horizon – how many Years does Multi-Year Plan cover? How often is it Update?

## *Capital Improvement Considerations*

- Planned utility repairs
  - Currently no sewer or water main projects are planned
- Drainage
  - Drainage problems may affect pavement life
  - The following plan does not address ongoing drainage issues
  - City intends to address drainage using DPW staff
- Existing driveways
  - The following plan does not consider grade changes which may affect existing driveway aprons
- Design and Construction Administration
  - Recommended to comprehensively address concerns
  - Quality Assurance

## *Capital Improvement Considerations*

- Basic Routine Maintenance
  - For streets with PQI greater than 7
  - Includes patching minor potholes, sweeping, sealing tight cracks
- Capital Preventive Maintenance
  - Necessary for streets with PQI ratings between 5.5 and 7
  - Extends pavement life by preventing structural failure
  - Reduces need for reconstruction
  - Includes crack sealing, chip seals, microsurfacing, surface milling and thin asphalt overlays
- Structural Improvement
  - For streets with PQI less than 5.5
  - Includes structural overlays, crush and shape or reconstruction

# The Plan

# Keego Harbor

## Capital Improvement Plan

### ■ Year 1 – 2009 – Total Cost: \$364,395.08\*

#### ■ Rehabilitation with Base Repair / Mill and Resurface

Road	Classification	Average PQI Rating	Construction Cost*
Beechmont Street – Orchard Lake to Hensman	Major	2.9	\$83,062.40
Maddy Lane – Orchard Lake to Beland	Major	4.4	\$11,938.47
Beechmont Street – Hensman to Cordell	Local	3.0	\$55,374.92
Maddy Lane – Beland to end	Local	2.9	\$107,446.25
Kenrick Street – Willow Beach to Cass Lake Road	Local	4.2	\$50,170.40
Sylvan Glen – Hensman to end	Local	3.5	\$56,402.64

### ■ Year 2 – 2010 – Total Cost: \$75,000

#### ■ Rehabilitation with Base Repair

Road	Classification	Average PQI Rating	Construction Cost
Kessler Drive – Cass Lake to City Limits	Local	3.5	\$73,000

#### ■ Preventive Maintenance - \$2,000 Budgeted

- Pine Lake Avenue – Nagle Court to Elam
- Kliest Court
- Hester Court – Nagle to South End

### ■ Year 3 – 2011 – Total Cost: \$142,000

#### ■ Rehabilitation with Base Repair

Road	Classification	Average PQI Rating	Construction Cost
Knowlson Street – Beechmont to Maddy	Local	2.4	\$70,000
Hensmen Street – Beechmont to Rustic	Local	3.2	\$20,000
Hensmen Street – Cass Lake Road to Beechmont	Major	3.7	\$50,000

#### ■ Preventive Maintenance - \$2,000 Budgeted

- Pine Lake Avenue – Nagle Court to Elam
- Kliest Court

### ■ Year 4 – 2012 – Total Cost: \$97,000

#### ■ Rehabilitation with Base Repair

Road	Classification	Average PQI Rating	Construction Cost
Schroeder Boulevard – Beechmont to Maddy	Local	2.5	\$55,000
Beechmont Street – Orchard Lake to South end	Major	N/A	\$25,000
Nagle Court – Kendall to Hester	Local	3.6	\$15,000

#### ■ Preventive Maintenance - \$2,000 Budgeted

- Beechmont – Cordell to North End
- Willow Beach Avenue – Park Circle to Canal
- Cass Lake Avenue – Willow Beach to Cass Lake Road

### ■ Year 5 – 2013 – Total Cost: \$100,000

#### ■ Rehabilitation with Base Repair

Road	Classification	Average PQI Rating	Construction Cost
Beland Street – Cass Lake to Maddy	Major	4.0	\$98,000

#### ■ Preventive Maintenance - \$2,000 Budgeted

- Norcott Street – Cass Lake Front to Cass Lake Road
- Glenbroke Avenue – Cass Lake Front to Cass Lake Road

## *Concluding Items*

- Keego Harbor's Management Plan must continually evolve
  - Update as projects are completed
  - Update as road conditions change
  - Update as actual prices / bid prices are obtained
  - Make changes if other funding sources become available
  - Make changes as utility upgrades are planned
- Ongoing evaluation is needed



## **6. Report Results**

- **Have you Participated in the TAMC Three-Tiered Reporting Process?**
  - 1. Annual PASER Survey on Federal-Aid Network**
  - 2. Survey of Completed Projects on the Federal-Aid Network**
  - 3. Submitted Multi-Year Asset Management Plan**

## *The Plan*

## *Tips from the Coordinator*

---

- Create an Asset Management Plan that fits your Agency.
- The Plan is a living document, the effort put into it directly relates to its effectiveness.
- Be inclusive in its creation and implementation, include elected officials, managers, administrators and staff in the process.
- In the end, the Asset Management Plan needs to make sense to you first, Coordinator second.
- If you have questions, visit the TAMC website:  
[www.michigan.gov/mdotamc](http://www.michigan.gov/mdotamc) or EMAIL/Call the Coordinator:  
[sanadab@michigan.gov](mailto:sanadab@michigan.gov) / 517.373.2220

---

# Asset Management Guide for Local Agencies in Michigan

*sponsored by*

Michigan Transportation Asset Management Council



*prepared by*

Cambridge Systematics, Inc.

*revised by*

Michigan's Local Technical Assistance Program

---

December 2007

## Within Next 6 - 8 Months:

Revising Guide for Local Agencies

Developing a Sample Asset Management Plan

- Template for Agencies
- Scalable

## *The Plan*

## *Submitting a Plan*

- A resolution from governing board indicating you are following an Asset Management Process.
- Send a digital (CD) & hard copy of the plan to:

**Brian Sanada**

**Asset Management Coordinator**

**Michigan Department of Transportation**

**Bureau of Transportation Planning**

**P.O. Box 30050**

**Lansing, MI 48909**

## *I have an approved Plan, what's next?*

---

1. City of Beaverton
2. City of Ionia
3. City of Madison Heights
4. City of Marquette
5. City of Romulus
6. Village of Springport
7. Walled Lake
8. City of Wayne
9. City of Westland
10. City of New Baltimore
11. City of Lansing
12. City of DeWitt
13. City of Wakefield
14. City of Manistee
15. City of Monroe
16. City of St. Clair
17. City of Fraser
18. City of Roseville
19. Village of Wolverine
20. City of Taylor
21. Kent County
22. City of Keego Harbor

• **22 of Michigan's 615 eligible agencies have approved Asset Management Plans.**

• **For More Info Contact:**

**Lori Cole – Financial Analyst**

**517.335.2556 / [colet@michigan.gov](mailto:colet@michigan.gov)**



Thank You!