

Village of Lake Isabella

1010 Clubhouse Drive  
Lake Isabella, MI, 48893

**Resolution 2009-05**

**LAKE ISABELLA ASSET MANAGEMENT PLAN**

**WHEREAS;** the Village of Lake Isabella has approximately 27 miles of streets; and,

**WHEREAS;** the Village of Lake Isabella receives funding from the State of Michigan via Act 51 to maintain its street network; and,

**WHEREAS;** to best manage and plan for the long term expenditure of public funds, the State of Michigan has created the Transportation Asset Management Council to help the Michigan Department of Transportation and local agencies effectively plan for long term transportation infrastructure spending; and,

**NOW, THEREFORE BE IT RESOLVED,**

The attached asset management plan is hereby approved by the Village of Lake Isabella.

I, Jeffrey P. Grey, the duly qualified and acting Clerk of the Village of Lake Isabella, Isabella County, Michigan (the "Village") do hereby certify that the foregoing is a true and complete copy of a resolution offered by Councilmember \_\_\_\_\_ and seconded by Councilmember \_\_\_\_\_ and by the Village Council at a meeting held on May 19, 2009, the original of which is on file in the Village Office. Public notice of said meeting was given pursuant to and in compliance with Act No. 267 of the Public Acts of Michigan of 1976, as amended.

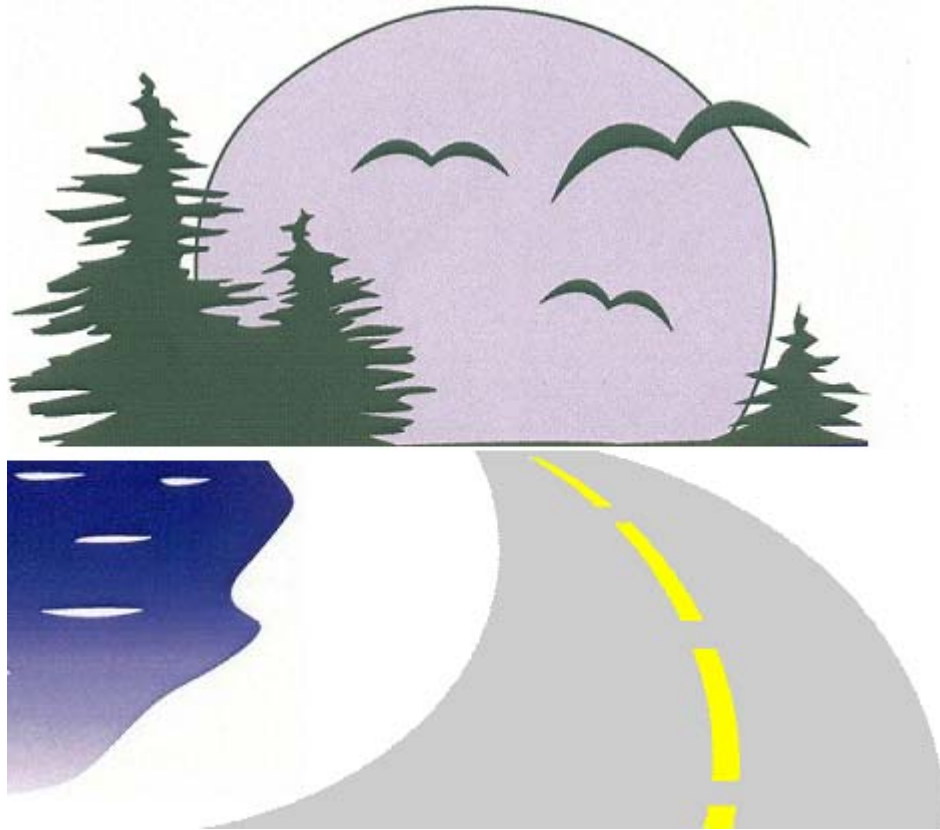
\_\_\_\_\_  
Date

\_\_\_\_\_  
Jeffrey P. Grey  
Lake Isabella Village Clerk

\_\_\_\_\_  
Timothy R. Wolff  
Lake Isabella Village Manager

# Village of Lake Isabella

## Asset Management Plan



Dave Torgerson  
Dan Pattison  
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Tim Wolff

Village President  
Village President Pro-Tempore  
Village Treasurer  
Village Clerk  
Councilmember  
Councilmember  
Councilmember

Village Manager

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## **Introduction**

Under Public Act 499 of 2002, all agencies that spend state transportation funds are encouraged to adopt an Asset Management Plan. “*Asset Management*” in Michigan is defined as “an ongoing process of maintaining, upgrading, and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment.”<sup>1</sup> Asset management consists of a set of business principles and practices for improving resource allocation decisions and long-term planning. It requires a shift from traditional project management and “*worst first*” approach, to a strategic, comprehensive systems management plan.

To best manage the transportation infrastructure of the Lake Isabella community, the Village of Lake Isabella has identified a five part plan to provide a high service quality with the fairest allocation of public resources.

### **Part I                      Routine Monitoring & Condition Inventories**

In order to establish a baseline for spending public funds, the transportation infrastructure of the Village of Lake Isabella will be rated and evaluated at least annually using the Pavement Surface Evaluation and Rating (PASER) system. The PASER system only focuses on the drivable portion of the public right-of-way. It does not factor in other conditions of the right-of-way such as drainage, ditches, shoulder gravel or line painting.

To best plan and budget for long-term financial forecasting, ratings should be conducted after the freeze/thaw cycle each spring. The ratings then are to be indexed and adjustments made to the upcoming fiscal year Capital Improvement Plan. Beginning in 2008, the Village of Lake Isabella began creating an inventory of ratings for all paved streets in the community.

### **Part II                      Needs Forecasting**

The PASER system is a widely recognized method of using visual observation of pavement conditions and then assigning a numerical rating to the observed conditions. With an understanding of the distress condition of the pavement, the life-span and routine deterioration can be forecasted based upon the normal life cycle of the pavement material.

### **Part III                      Goals, Objectives, and Performance Measures**

1. To provide the longest life of pavement in the Village of Lake Isabella.
2. Surveying and reporting the condition of roads by classification.
3. Assessing completed and planned investments in roads.
4. Identify roads that do not have structural distress to conduct capital preventative maintenance to extend the life of the pavement (PASER Rating 6 and above).
5. Promote wise investment of public funds to allocate appropriate resources based on the condition of the pavement and annual routine maintenance needs.
6. Use the collective PASER scores for Major Streets and Local Streets to determine the overall health of each respective infrastructure system of the Village of Lake Isabella.

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<sup>1</sup> Public Act 499 of 2002, Section 9(a)(1)(a).

## **Part IV                      Scenario Evaluation**

An asset management approach involves a tradeoff analysis between treatment options and network needs. This analysis is a balance between the goals for the respective street system and funding available for the various types of treatment (routine maintenance, capital preventative maintenance, and structural improvement).

The heart of the asset management process is capital preventative maintenance. The challenge is determining the most effective tradeoff within the mix of fixes that will compromise the plan. Common elements of the “mix of fixes” are as follows:

### Routine Maintenance (RM):

- New aggregate on existing gravel streets
- Patching existing asphalt
- Snow and ice removal
- Gravel road grading
- Cleaning ditches, drains, and spillways
- Street sweeping
- Road shoulder mowing
- Roadside brush removal
- Gravel road dust control
- Culvert cleaning

### Capital Preventative Maintenance (CPM):

- Micro-surfacing
- Chip sealing
- Crack sealing
- Shoulder graveling
- HMA overlay (less than 2”)
- Slurry or fog sealing
- Gravel road shoulder paving

### Structural Improvement (SI):

- Total reconstruction (ditches, sub-base, aggregate base, and hard surfacing)
- Resurfacing (2” or greater)
- Gravel Surfacing (3” or more of new aggregate)
- Gravel road paving
- Culvert replacement

## Part V Multi-year Plan

Beginning no later than the 2010-2011 fiscal year, as part of the annual budget, the Village Manager shall prepare as part of the 6 year Capital Improvement Plan a listing of planned routine maintenance, capital preventative maintenance, and structural improvement expenditures based on the goals of this plan and the data collected from annual PASER scores.

As part of the annual budget, a report on the overall condition of the transportation infrastructure of the Village shall be included. In this report, the results of funding changes, trade-off options, infrastructure investment, and other scenario variables should be considered and evaluated.

To the extent possible, a matrix should be developed as part of this report which details how the overall condition of each respective street system will age based on a continuation of current funding, X% increase in funding, X% decrease in funding over the next 6 years and 10 years. An example of this matrix is provided below:

### Funding & Investment Scenario Matrix Example:

<b>Major Streets</b> 6 Year Scenarios	% Budget RM	% Budget CPM	% Budget SI	% Good (PASER 6-10)	% Fair (PASER 4-5)	% Poor (PASER 1-3)
Proposed Fiscal Year	75%	25%	0%	78%	9%	13%
Static Funding	75%	25%	0%	63%	20%	17%
Static Funding Alt. Allocation	50%	25%	25%	61%	29%	10%
10% Reduction in Funding (static)	75%	25%	0%	63%	14%	23%
10% Increase in Funding (Static)	75%	25%	0%	71%	13%	16%