APPLICATION

City Name City of Southaven

Population ☐ Under 10,000 ☒ Over 10,000

Category ☐ Public Safety ☒ Planning & Economic Development
☐ City Spirit ☐ Public Works

Title of Entry City of Southaven Pavement Preservation Plan

Description of Project An overall evaluation of existing roadways which allowed the city to create a system that can be used as a reference tool for preserving the life of the roads and utilizing the budget in an efficient and fiscally responsible manner.

Project Summary (use additional pages if necessary)
Please see attached

Signature of Chief Elected or Appointed Official

Please provide the following information in case of questions about the application.

Contact Name Whitney S. Choat-Cook

Title Director of Planning + Development

Address 8710 Northwest Dr.

City Southaven Zip 38671

Phone 662-280-2489 Email wchoat@southaven.org

CITY OF SOUTHAVEN PAVEMENT PRESERVATION PLAN

Project Summary:

The City of Southaven teamed up with Civil Link, LLC to initiate one of the first projects of this kind in the state of Mississippi. The project was a municipal effort to be more fiscally responsible with the city's street improvement budget. The hope was to create a standardized system for yearly improvements which allowed for prioritization of roads and alternative repair methods other than a standard milling and overlay program. This plan gives the Board of Alderman forecasting abilities in the budgetary process by creating a ranking system for the roads and also a management system to determine the type of repair needed.

The preservation plan was put into action in 2016 and has shown to triple road maintenance production with the existing yearly fiscal budget. Prior to the adoption of this plan, the City used the entire street improvement budget for milling and overlay, which is costly and less efficient. This method allowed the city to complete 4 miles of road repairs per year with the $1,000,000 budget in place at a cost of $250,000 per mile. Identification of repairs and needed road improvements were done by citizen complaints or window surveys by city officials with no review or assessment procedure to prioritize these requests. The adopted plan categorized the roads and then assessed the damage so that a repair method could be implemented. The plan uses overlay as an option but also uses alternative preservation methods of seal coating and crack/joint sealing, which are less expensive and can preserve roads that are in categories of good and fair. In 2016, the city was able to use the same $1,000,000 budget to repair 11-12 miles of roads. The city's ability to preserve roads keeps them from transitioning into a more severe category which would require the costly overlay repair. It is the city's hope that a scheduled maintenance and preservation plan will eventually get every road out of a "poor" or "lost" category, allowing the yearly budget to go even further and eventually put all roads on a city wide general improvement cycle.

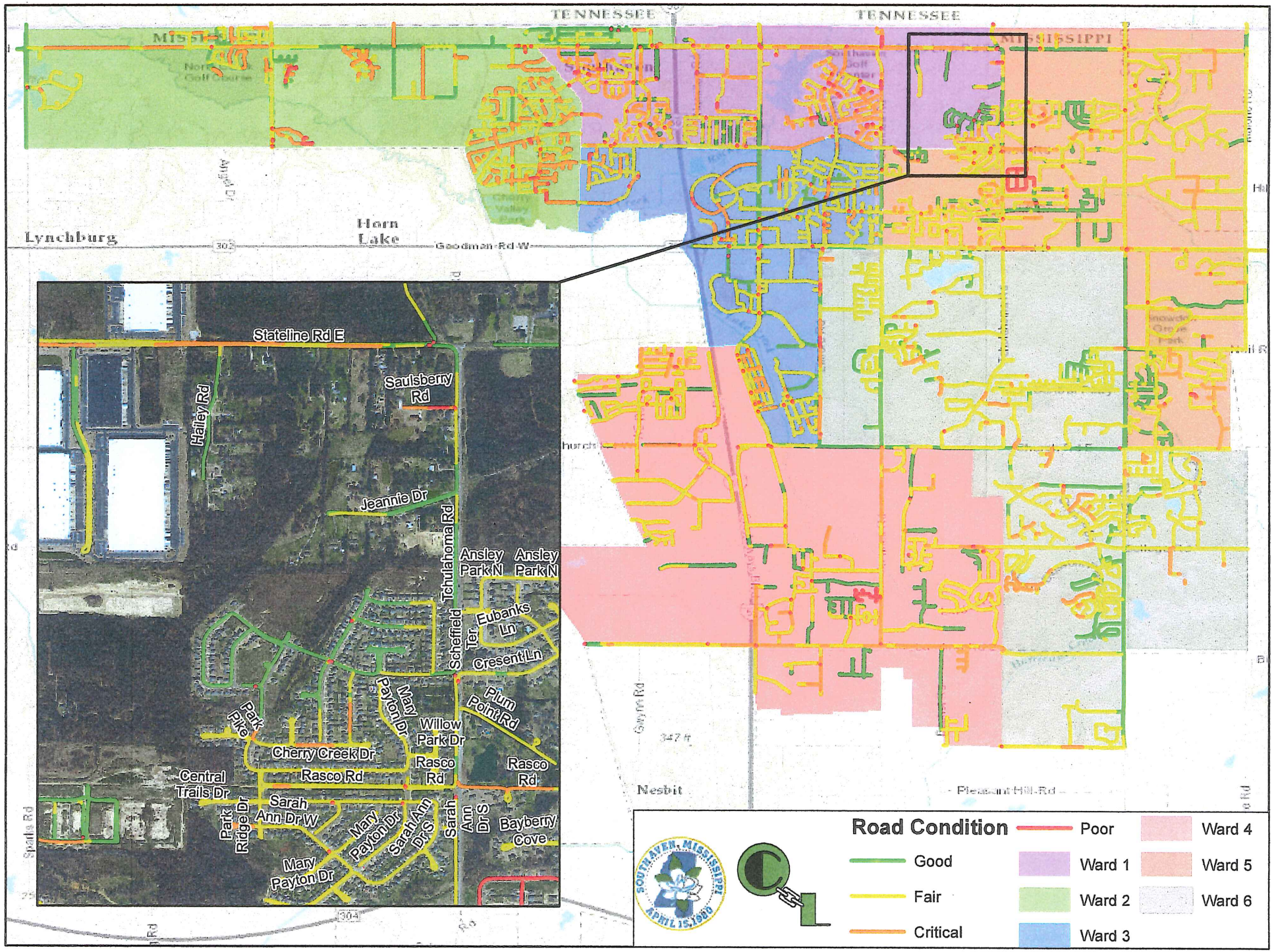
This plan also inadvertently created a pot hole maintenance program which is now incorporated into the day to day operation of the Public Works Department. Works orders for routine maintenance and pothole repairs are sent out daily via a computer program which creates a more efficient system on the labor side of the department. Citizens can still report repairs needed via the citizen request tracker (CRT) on-line or by phone and the information will be added to the management database.

The overall process took approximately 90 days. The first step was the assessment of the existing 1,100 roadways which was done via a video/camera system attached to a vehicle. These videos captured high quality images of the roads at ground level from curb to curb. The videos were then analyzed and each road or segment of road was placed into a categorical

area: good, fair, poor or lost. This process took approximately 2-4 weeks. It took an additional 2-3 weeks to build the data base and make it website accessible. The remainder of the time involved further compilation of the data and the creation of a city wide road map and a layered system that allowed for real time data management and an "eyes on the street" citizen response system.

The initial cost for videoing and mapping the roadways was $45,000 with a proposed additional cost every three years of $20,000 for re-videoing. This video surveying of the roads was an important first step because it allowed the city to inventory and to assess the roads which had never been done before. The ongoing database updating and mapping can be budgeted for in-house or under a consultant contract.

This system provides a real time history of the roads life and maintenance, which has been a huge help in answering concerns and requests from the citizens. Public response to the plan has been 100% positive. This plan has improved work efficiency in both Public Works and the Office of Planning and Development. It has also allowed the city's Mayor and Board of Alderman to forecast upcoming budget with justification based on prior year's data and the cycling of road repairs.


TENNESSEE
TENNESSEE
MISSISSIPPI
Lynchburg
Horn Lake
Goodman Rd W
Stateline Rd E
Saulsberry Rd
Hailey Rd
Jeannie Dr
Tchulahoma Rd
Ansley Park N
Ansley Park N
Scheffield Ter
Eubanks Ln
Cresent Ln
Mary Payton Dr
Park Pike
Willow Park Dr
Plum Point Rd
Cherry Creek Dr
Rasco Rd
Rasco Rd
Rasco Rd
Central Trails Dr
Park Ridge Dr
Sarah Ann Dr W
Mary Payton Dr
Sarah Ann Dr S
Sarah Ann Dr S
Bayberry Cove
Mary Payton Dr
Nesbit
Pleasant Hill Rd
Road Condition
Good
Fair
Critical
Poor
Ward 1
Ward 2
Ward 3
Ward 4
Ward 5
Ward 6
SOUTHAVEN, MISSISSIPPI
APRIL 15, 1980

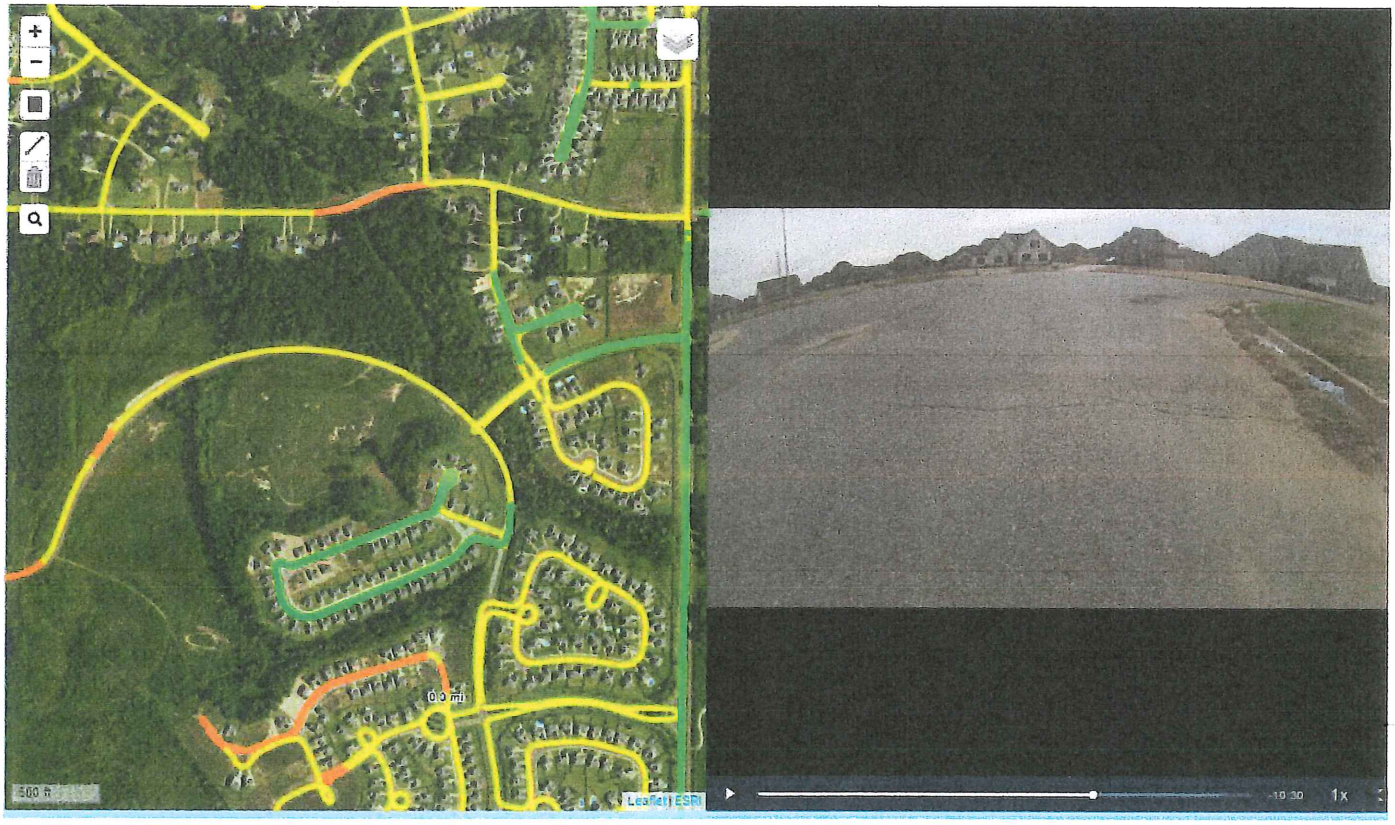
City Wide Pavement Evaluation

Totals		
	Mileage	**Potholes**
Good	69.35 (18%)	23 (4%)
Fair	273.89 (70%)	342 (61%)
Critical	44.29 (11%)	166 (30%)
Lost	3.76 (1%)	29 (5%)
Total	**391.29**	**560**

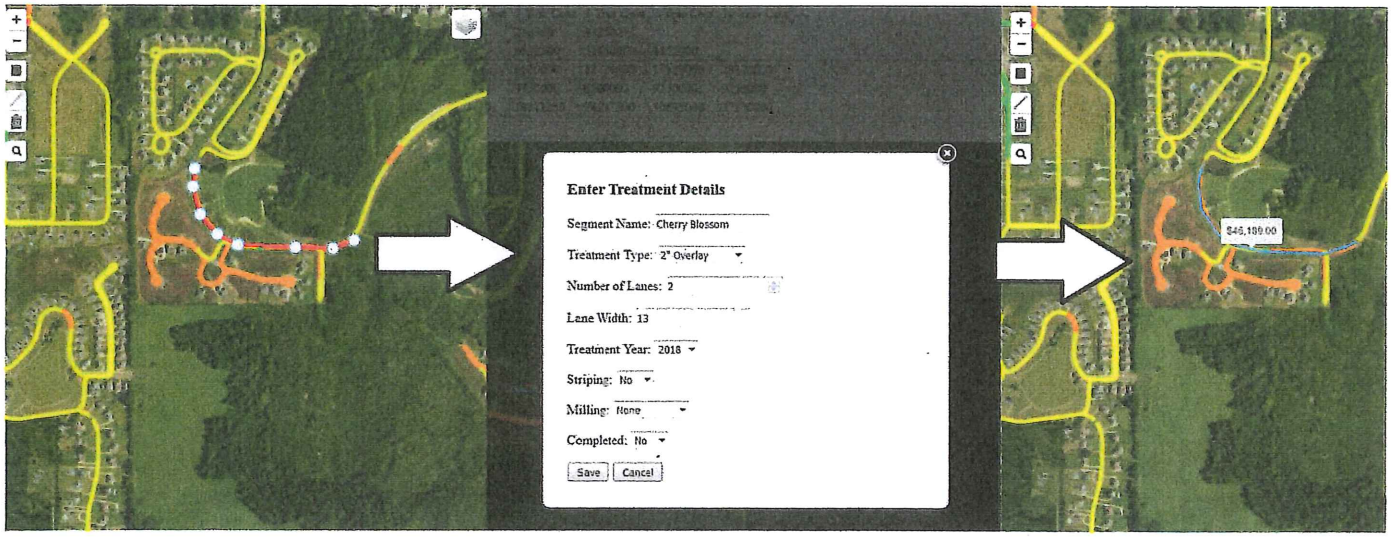
	Condition		**Miles**
Ward 1	Good	(18%)	8.16
Ward 1	Fair	(60%)	26.96
Ward 1	Critical	(20%)	9.06
Ward 1	Lost	(2%)	0.70
Ward 1 Total			**44.88**
Ward 2	Good	(21%)	10.73
Ward 2	Fair	(54%)	27.10
Ward 2	Critical	(23%)	11.68
Ward 2	Lost	(1%)	0.65
Ward 2 Total			**50.17**
Ward 3	Good	(14%)	6.74
Ward 3	Fair	(73%)	34.48
Ward 3	Critical	(12%)	5.57
Ward 3	Lost	(0%)	0.20
Ward 3 Total			**46.99**

	Condition		**Miles**
Ward 4	Good	(19%)	11.93
Ward 4	Fair	(67%)	41.94
Ward 4	Critical	(12%)	7.46
Ward 4	Lost	(1%)	0.92
Ward 4 Total			**62.25**
Ward 5	Good	(15%)	15.00
Ward 5	Fair	(78%)	76.10
Ward 5	Critical	(5%)	5.26
Ward 5	Lost	(1%)	1.25
Ward 5 Total			**97.61**
Ward 6	Good	(19%)	16.80
Ward 6	Fair	(75%)	67.30
Ward 6	Critical	(6%)	5.27
Ward 6	Lost	(0%)	0.03
Ward 6 Total			**89.40**

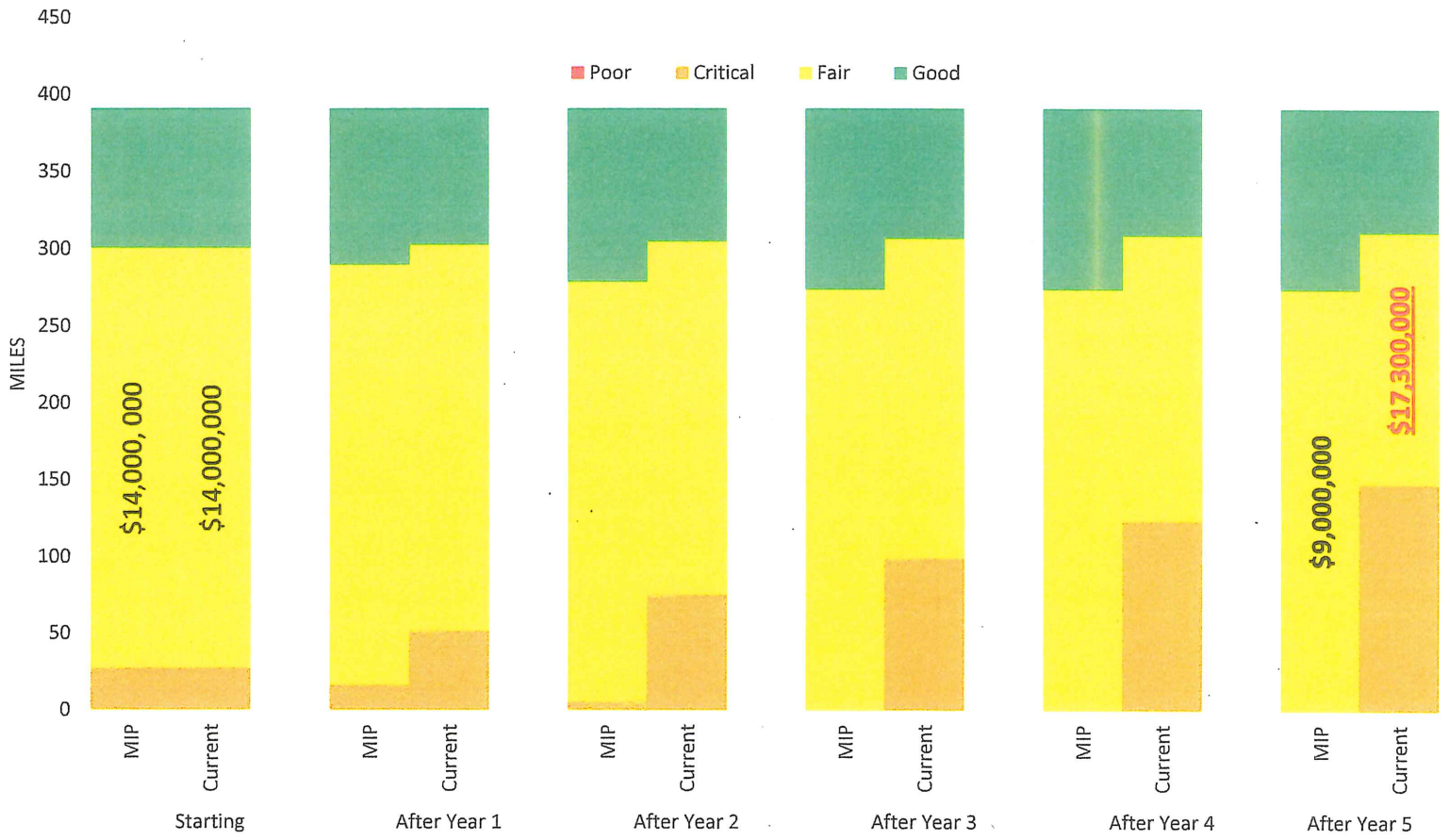
WEBSITE SCREENSHOTS



BUDGETING & PLANNING TOOLS



OVERALL COST OF THE ROADS: MAINTAINING PREVIOUS STRATEGY VS IMPLEMENTING MIP



Current Budget: $1,000,000 **MIP Budget: $2,200,000**

After 5 years of MIP, roads are in good quality, and less money is needed for potholes and mill-and-overlay type fixes.