



2013 Road Report

Background

The 2013 Road Report marks the fifth year that the City of Marshall has published information concerning the local road system. The City of Marshall maintains over 40 miles of roadway under two classifications. The majorities of these roads are known as "local" and are generally made up of residential streets. "Major" roads typically have higher traffic volumes and are eligible for state and federal grant money. Figure 1 shows the location these classifications. There have been no changes to the system since last year

The City of Marshall has been using a software program called RoadSoft since 2005 to create an asset management database. RoadSoft is a graphically designed integrated roadway management system developed for Michigan's local agency engineers and managers to use in the analysis and reporting of roadway inventory, safety, and conditional data. Roadsoft is provided free of charge from the Local Technical Assistance Program (LTAP).

Methodology and Analysis

One of the goals identified by City Council was to preserve, rehabilitate, maintain, and expand all city infrastructure assets and to identify and determine funding options. Last year the City of Marshall utilized a motor vehicle highway bond to fund a number of projects that were completed and to help fund additional projects over the next two years.

Staff completed the 2013 road rating in September (figure 2). The busy 2013 construction year has caused an increase in the remaining service life (RSL) of both road systems. Figure 3 shows the average RSL over the past six years. The major and local streets system demonstrated an RSL of 4.09 years and 2.33 years respectively. The goal of both of the road systems is to maintain a RSL of four, or better, which was accomplished on the Major Street system this year.

Figure 4 shows the past investments that the City of Marshall has made in road infrastructure. The 2013 investment does not show dollars spent during the 2014 fiscal year even though the road rating was taken in September.

Major Streets

Figure 5 shows the percentage of miles rated excellent, good, fair and poor as collected over the past seven years for major roads. In the past year, the system has shown a shift from roads rates fair to good mostly driven by the projects completed on North Drive and Mansion Street. The City of Marshall continues to utilize the Michigan Department of Transportation Small Urban Program to fund capital improvements on the major street system, like that accomplished on Mansion Street in the past year. The following is a list of prioritized projects which has been proposed in the Capital Improvement Plan:

- 1. Monroe Street from S. Marshall Avenue to Locust
- 2. North Drive from N. Kalamazoo Avenue to Brewer Street
- 3. Eagle Street from Green Street to Mansion Street
- 4. Jefferson Street from Green Street to Mansion Street

5. North and East Drives from Madison Street to Michigan Avenue

To date there has not been a call for projects but the City of Marshall typically has received a grant biannually.

Local Street

Figure 6 shows the percentage of miles rated excellent, good, fair, and poor as collected over the past seven years for local roads. In general the system saw increases in the excellent and good rated roads and declines in the fair and poor rated roads. The projects that were completed in the past year on the local street system were at the Fairgrounds area and Division Street. The remaining bond revenue is anticipated to be \$400,000 which was planned to be split over the next two fiscal years along with maintaining the \$170,000 general fund transfer. While the model argues that a minimum funding level be \$250,000 over the next ten years, the additional expenditure will allow The City of Marshall obtain an RSL of four sooner. The report recommends the following projects which have been proposed in the Capital Improvement Plan:

Fiscal Year 2015

N. Madison Street from Michigan Avenue to North Drive Maple Street from Washington Street to Montgomery Street Washington Street from Maple Street to dead end

Fiscal Year 2016

W. Green Street from Dobbins Street to S. Kalamazoo Avenue

N. Liberty Street from Michigan Avenue to Forest Street

E. Hanover Street from Hamilton Street to Exchange Street

S. Hamilton Street from Spruce Street to Green Street

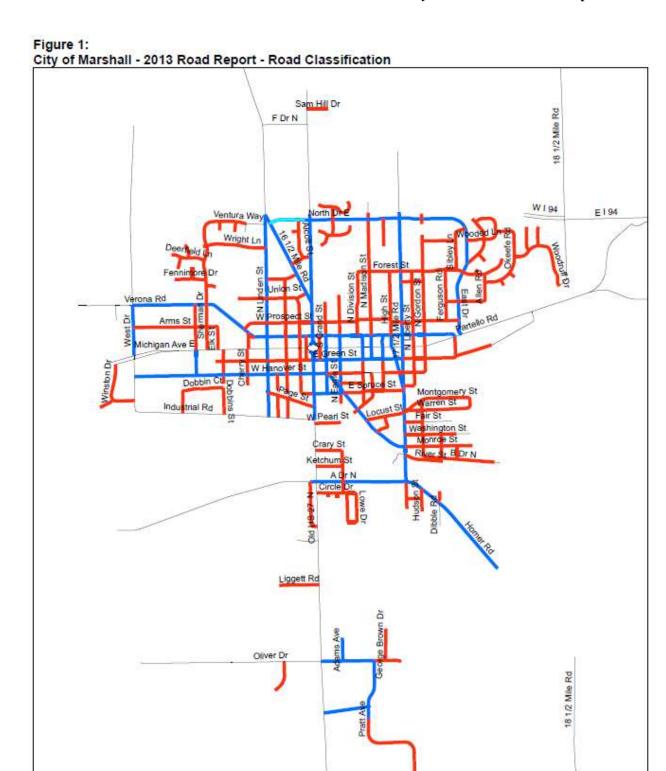
Recommendation

Staff's recommendation is that the funding levels in the major streets system continue to fluctuate in order to provide matching resources toward MDOT small urban program grants. Typically this requires \$132,000 in matching funds biannually. Staff also recommends that the funding level in the local street system be increased to \$250,000 over the next ten years due to the rising cost of construction. It is also recommended that the excess bond revenue to be expend over the next two year to help boast the local road system RSL.

Figure 7 shows the anticipated RSL for the next ten years if no investment were to be made on the major street system. Figure 8 shows the anticipated RSL on the local street system if no investment was made and the impacts of a variety of different financial investments were made over the next ten years.

If you have any questions about this information please feel free to contact me by e-mail at cfedders@cityofmarshall.com or by telephone at (269) 781-3985.

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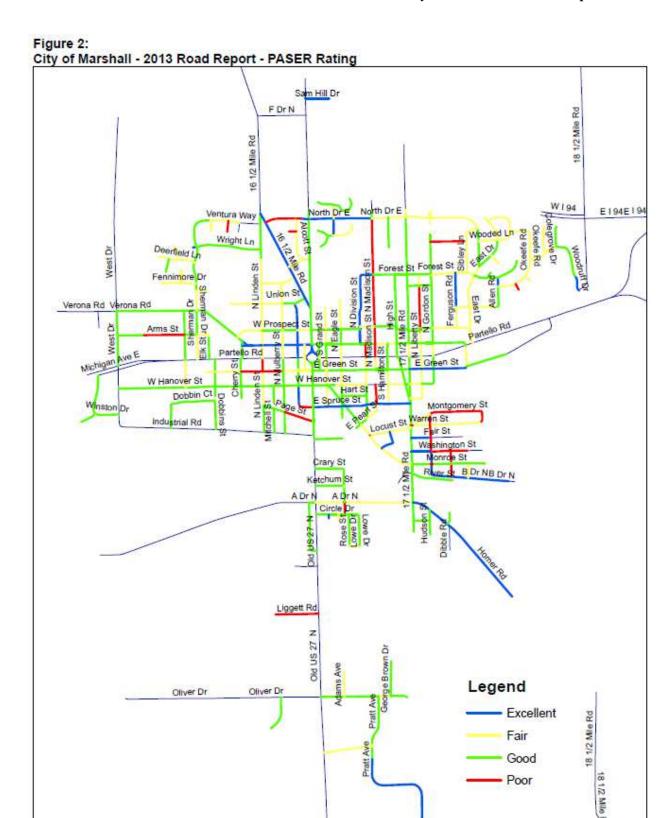


Figure 3: Observed RSL

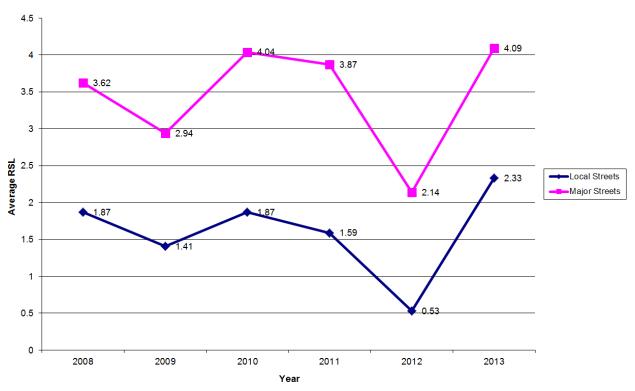


Figure 4: Past Investiment (does not include new road construction)

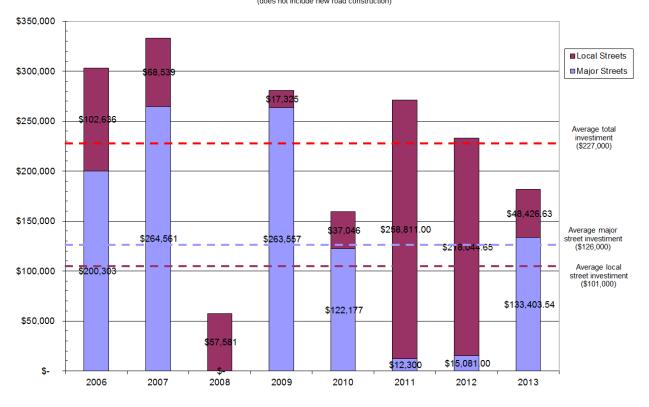


Figure 5: Major Street System Condition

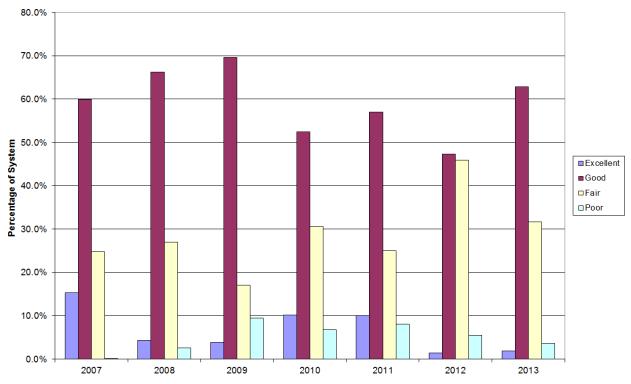


Figure 6: Local Street System Condition

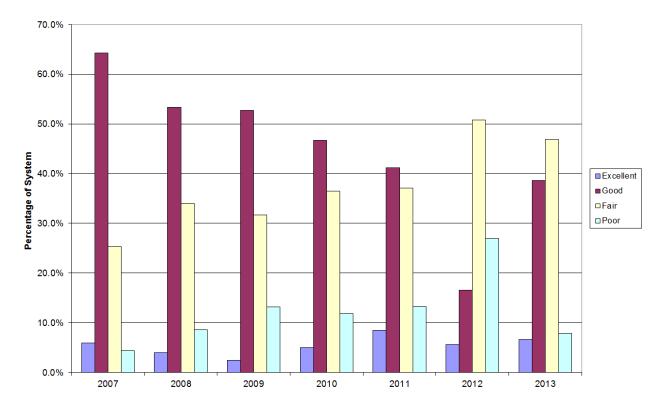


Figure 7: Major - RSL

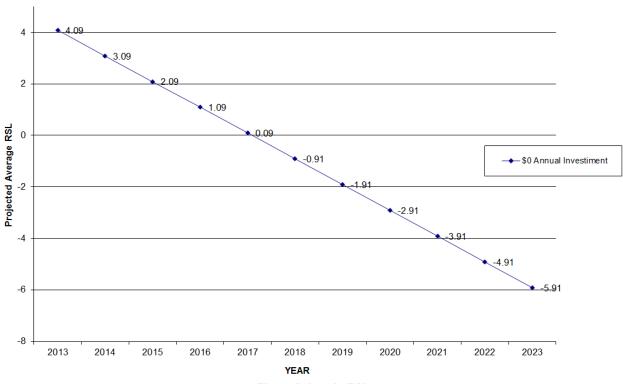


Figure 8: Local - RSL

