

HOW DO WE PICK WHICH ROADS TO FIX?

Two words: ASSET MANAGEMENT

We have 37.93 miles of road in the City; 2.7 miles are gravel.

To manage our assets, we use the free Roadsoft software provided by MTU's LTAP.

The roads are rated using the PASER System which is based on a scale of 1-10. (Pavement Surface Evaluation and Rating System)

8-10 GOOD: Requires routing maintenance like crack seal and patching.

5-7 FAIR: Preventative Maintenance like crack seal, patching, or surface treatment

1-4 POOR: Reconstruct

To rate the streets, we export our data to an independent consultant, they use the Roadsoft Laptop Data Collector (LDC) to collect current ratings, and export the info back to us. Capital Consultants performed the PASER ratings in 2005 as part of the Pavement Management Study. OHM performed the PASER ratings from 2009-2011. Due to inconsistencies in data, we switched to Roadway Data Services for the 2012 and subsequent annual surveys.

Now that we have more information in the database, we can utilize Roadsoft to determine surface condition trends, strategy evaluations and optimization, deterioration curves, and remaining service life.

There are three basic fixes:

Capital Preventative Maintenance (CPM) Crack seal; minor patching	short term fix	10 years or less
Rehabilitation (RH) Milling, ultra thin overlays, crack fill	medium term fix	10-20 year fix
Reconstruction (RC) Structural overlays, crush and shape, reconstruction	long term fix	20+ years

OUR OBJECTIVES:

Establish cost effective short and long range programs

Maximize pavement condition while minimizing costs

Manage the pavement, not the road condition.

PRESERVATION STRATEGY:

Use a mix of fixes

Use varying lives of fixes

Weigh the short term vs. long term fixes.

All that said:

We look at preserving the roads in the 4-7 and 8-10 range so that they don't fall into the total reconstruction scenario that is much more expensive.

We look at the roads in these ranges.

We remove those roads from the mix that have utilities under them that need to be replaced, unless there is money available for that.

Evaluate options and costs for the remaining streets.

Put together a project to meet the available dollars.

FUNDING:

TIP Projects receive a \$375,000 max State grant with an 80/20 match. We have used this money in 2006, 2012, 2016, 2019 and our next project in 2021. MDOT's new schedule shows that the Charlotte/Pottersville Small Urban Area should receive grant money in the odd numbered years. Our Small Urban Area consists of Charlotte, Pottersville, ETRAN, and the Road Commission, and the funds are supposed to be rotated among the entities. However, the State has the final say on who is awarded funds each year which explains the gaps. Projects in the queue for the 2020-2023 TIP are:

- East Harris Street from Cochran Avenue (M-50) to Lansing Street – 2021
- McClure/Washington/Hall from Cochran Avenue (M-50) to Lansing Street – Will be moved to 2023 through the TIP amendment process.
- West Harris Street from Cochran Avenue (M-50) to North Sheldon Street – 2023- Will be removed from the TIP until the 2023-2027 TIP call for projects.

To receive TIP money, roads must be on the Federal Aid Eligible list.

With TIP grants not being available, we successfully pursued Category A Economic Development grants (\$3M) for Reynolds Road and W. Shepherd Streets.

COSTS:

These costs are approximate and have several variables that could affect the overall cost.

Cost for Mill and Fill = \$300,000/ mile
Total Reconstruction= \$3.4 million/ mile

The roads currently in the 1-4 PASER rating (25.4 mi) would need reconstruction at an approximate cost of \$86.4 million in today's dollars.

Roads in the 5-7 range (6.6 mi) could be milled and resurfaced at \$300,000/mile, or approximately \$1.98 million.

(rev. of 2010 , 2012, 2015, 2020 document)