

## HOW DO WE PICK WHICH ROADS TO FIX?

Two words: ASSET MANAGEMENT

We have 37.93 miles of road in the City:

12.17 miles are classified as Major Streets (Federal Aid Eligible)

25.76 miles are classified as Local Streets

2.7 miles of the 37.93 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 (RDS) for the 2012 and subsequent annual surveys. RDS closed in 2019, and we have not found a replacement company to date.

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

### 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 analyze 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 in the Water & Sewer Fund to replace them.

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, 2021 and our next project in 2025. MDOT's schedule for the Charlotte/Pottersville Small Urban Area is to 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 2023-2026 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 – 2023
- The 2025 project has been allocated to Pottersville.

To receive TIP money, roads must be on the Federal Aid Eligible list (Major Streets).

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

Eaton County residents passed a 12-year road millage in 2014. The funds captured from properties within the city are returned to the City. That amount has increased steadily from \$309,678 in FY 14-15 to \$341,271 in FY 21-22.

### **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.

# Purpose of Today: Agree to Do PM!





