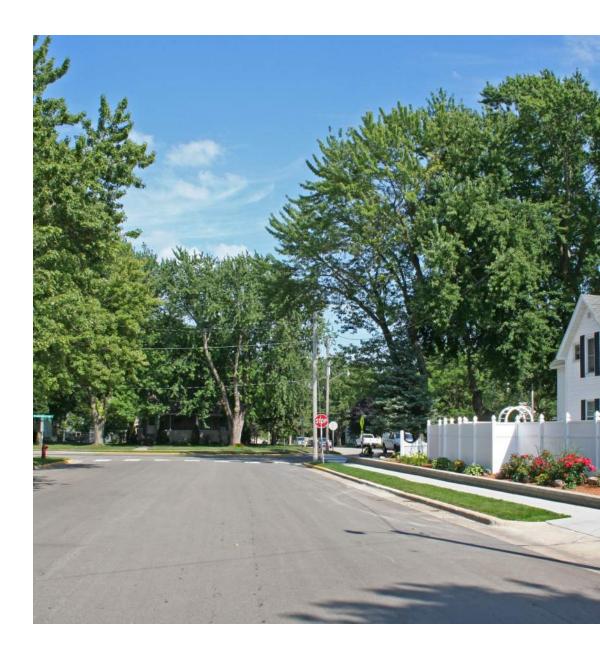
Comprehensive Street Condition Survey Vergas, MN

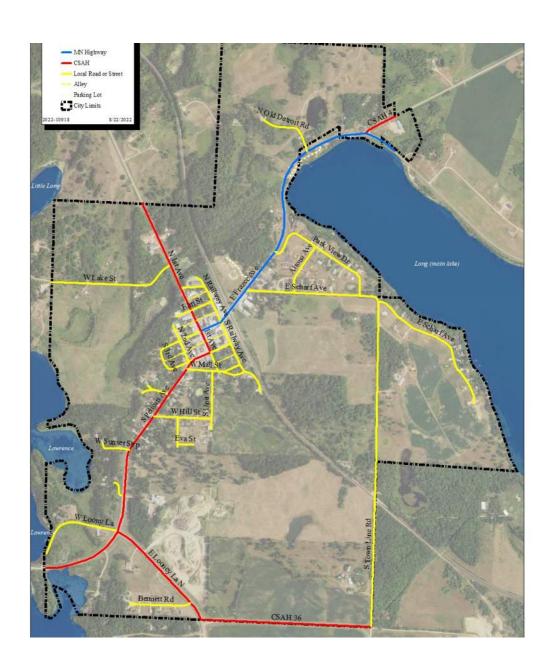


Overview

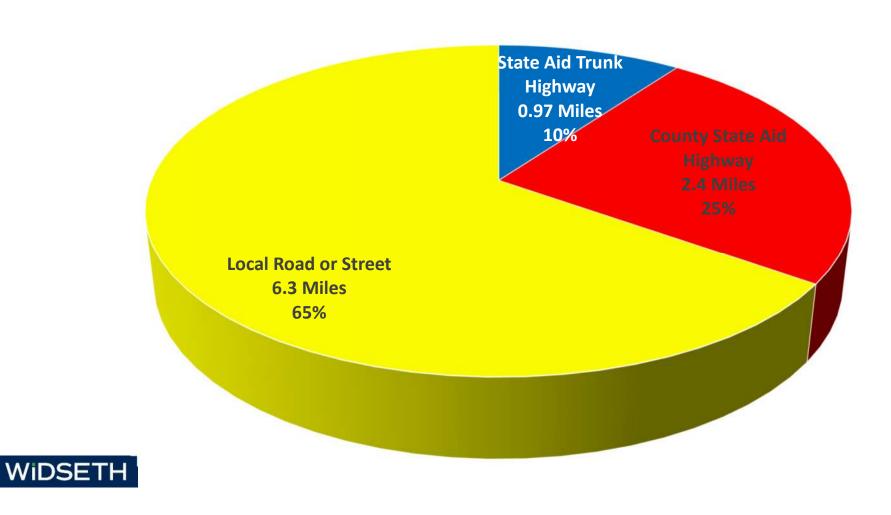
- Bituminous Streets
- Pavement Management System
- Move away from "worst first"







Lengths by Classification



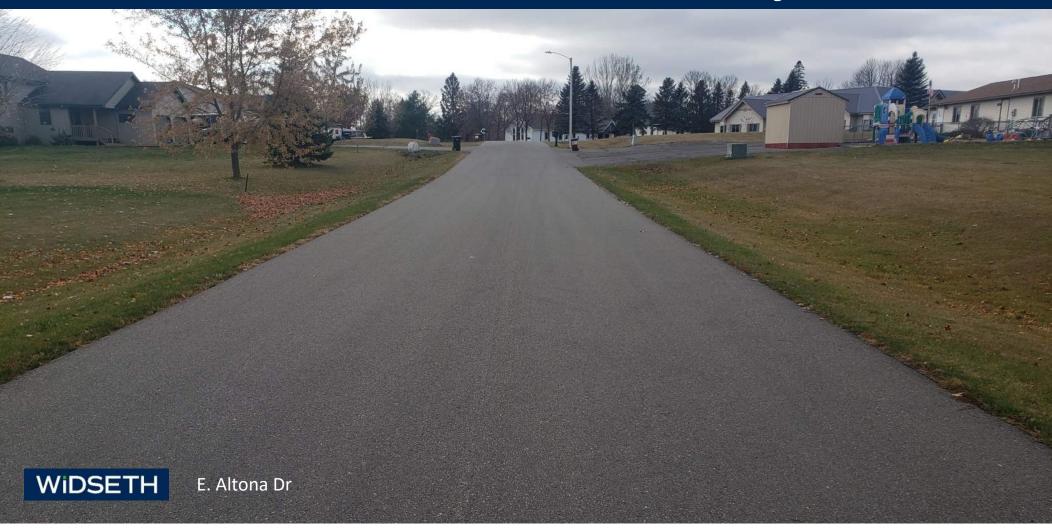
Pavement Conditions

- Engineer and street staff complete field review
- Enter data into GIS (Geographic Information Systems)





Pavement Condition 1: Nearly New



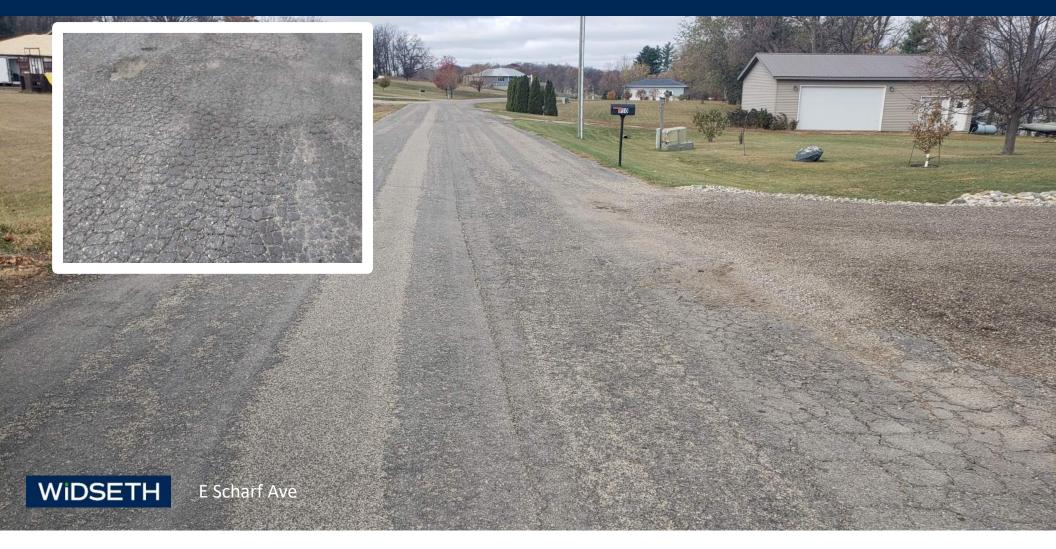
Pavement Condition 2: Thin Overlay



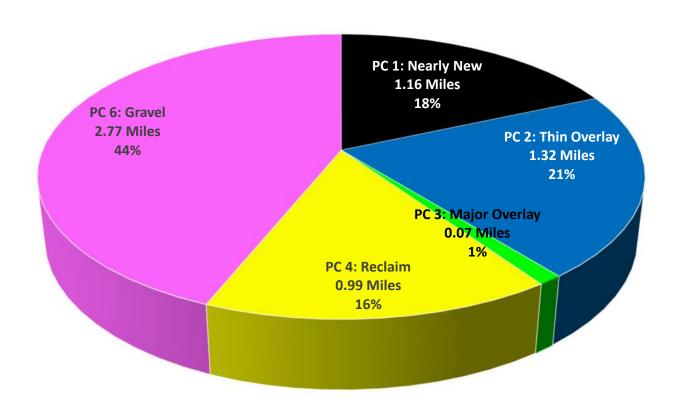
Pavement Condition 3: Major Overlay



Pavement Condition 4: Reclaim

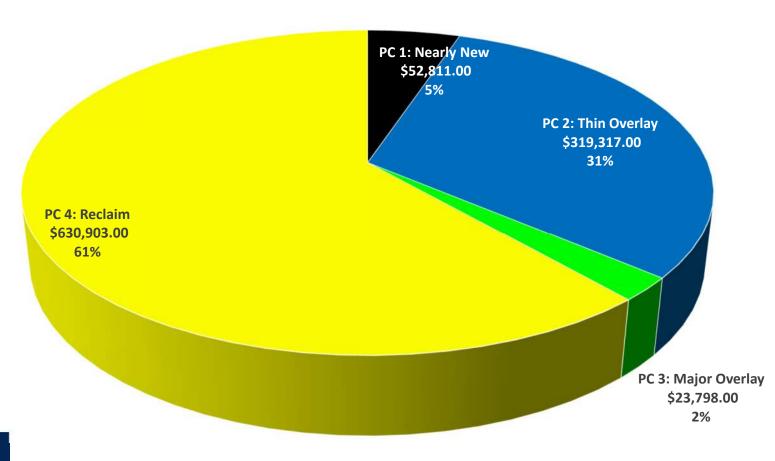


Street Conditions By Length



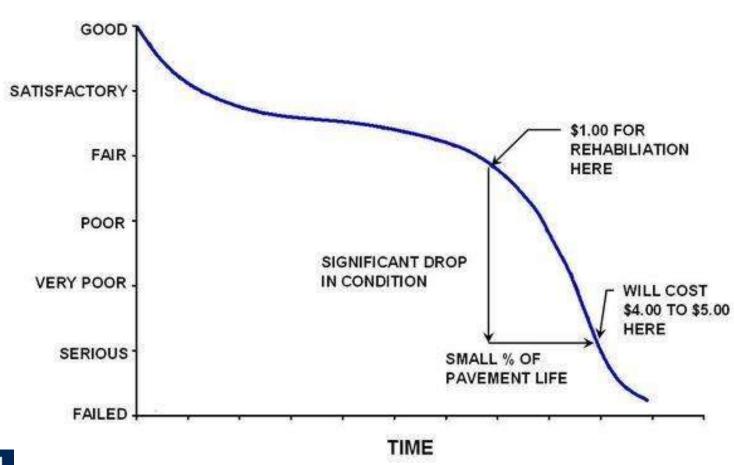


Cost of Street Improvements



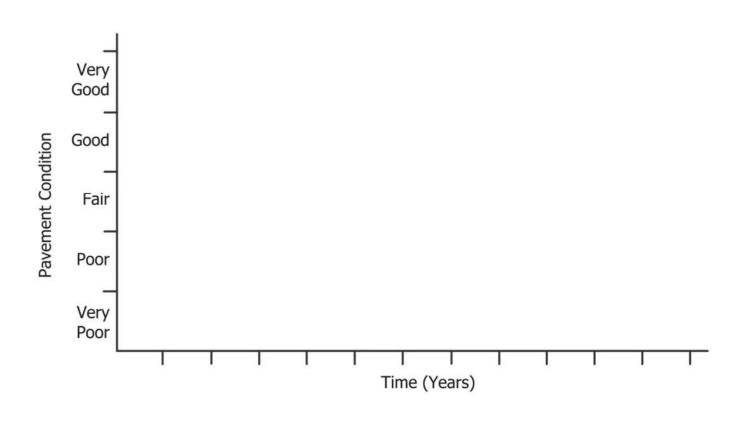


Pavement Life Cycle





Pavement Life Cycle



Cost of Street Improvements

Pavement Conditions	Miles	Cost
Pavement Condition 1	1.16 miles	\$52,811
Pavement Condition 2	1.32 miles	\$319,317
Pavement Condition 3	0.07 miles	\$23,798
Pavement Condition 4	0.99 miles	\$630,903
Pavement Condition 5	0.00 miles	\$0
Pavement Condition 6	2.77 miles	\$0
Total	6.31 miles	\$1,026,829

Value of Overlay Program

With Overlay Program	Miles	Cost
Pavement Condition 2	1.32 miles	\$319,313
Pavement Condition 3	0.07 miles	\$23,798
Total	1.39 miles	\$343,115

Without Overlay Program	Miles	Cost
Pavement Condition 2 becomes 4 (5+ yrs.)	1.32 miles	\$710,560
Pavement Condition 3 becomes 5 (5+ yrs.)	0.07 miles	\$28,431
Total	1.39 miles	\$738,991

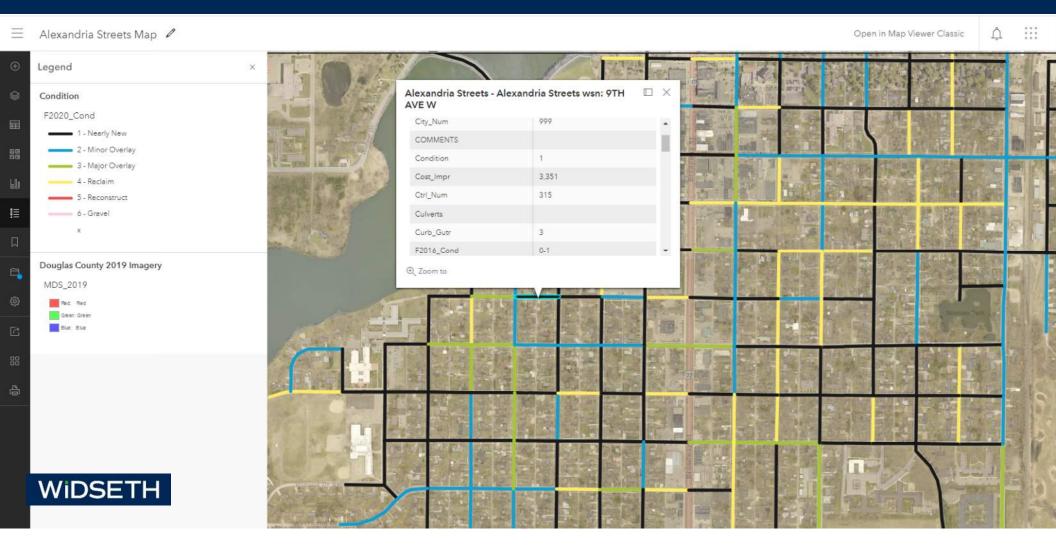
Benefits of the system

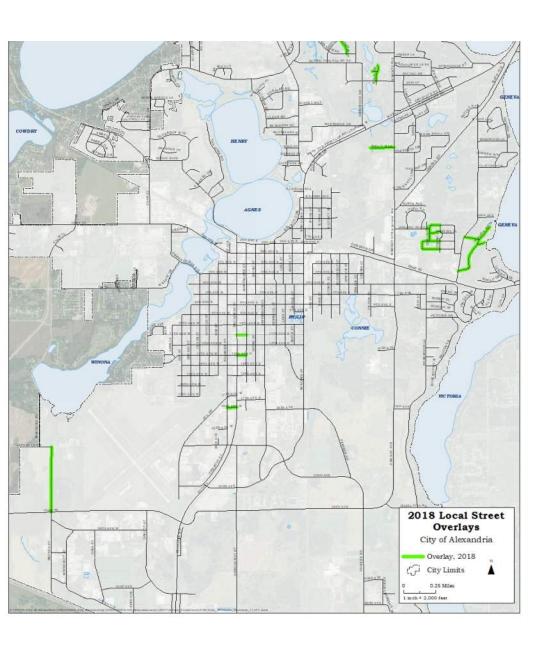
- Cost Savings
- Capital Improvement Plan (CIP)
- Geographic Information Systems (GIS)





ArcGIS Online





Overlay Program

- Develop five-year plan
- Plan for future construction season

Value of Overlay Program

With Overlay Program	Miles	Cost
Pavement Condition 2	1.32 miles	\$319,313
Pavement Condition 3	0.07 miles	\$23,798
Total	1.39 miles	\$343,115

Without Overlay Program	Miles	Cost
Pavement Condition 2 becomes 4 (5+ yrs.)	1.32 miles	\$710,560
Pavement Condition 3 becomes 5 (5+ yrs.)	0.07 miles	\$28,431
Total	1.39 miles	\$738,991

Invest in the 2s and 3s





