VILLAGE OF ROSCOE

STREET STUDY

Maintenance Plan

Sept. 16, 2025

roscoeil.gov

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PROJECT OBJECTIVE

DATA COLLECTION METHODS

Objective

Inspect the Village of Roscoe's street network to establish current conditions, establishing metrics that will be used for a data-driven approach to developing the Village's Maintenance Plan.

Data Collection Methods

- ✓ Visual inspection of all 120 miles of Village streets was completed in summer 2025.
- ✓ A Pavement Rating Form was completed for each street segment, evaluating:
  - Riding conditions
  - Surface defects & deformations
  - Cracking
- ✓ Utilizing the Pavement Rating Form calculations, a Pavement Condition Rating (PCR) value was assigned to each roadway segment.
- ✓ Additional information for each roadway segment was also acquired, including:
  - Photo documentation
  - Verification of various cross-sectional elements (curb, sidewalks, drainage)
  - Presence of public water and/or sanitary sewer

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PAVEMENT DETERIORATION TYPES

- ✓ Raveling
- ✓ Flushing/Streaking
- ✓ Potholes
- ✓ Edge Cracking
- ✓ Manholes/Catch Basin Surface Defects
- ✓ Rippling/Shoving
- ✓ Wheel Track Rutting
- ✓ Utility Trenches
- ✓ Transverse/Longitudinal Cracking
- ✓ Map Cracking
- ✓ Alligator Cracking
- ✓ Poor Drainage

Condition Classification	Score Range
Poor	< 65
Fair	65 – 79
Good	80 – 89
Great	90 - 100

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Roads | Poor Condition

Windflower Way | Poor condition

PCR = 58.0

Pavement Rating Form

Segment No. 1 Street Wind Flower Ln Cnty

From Mcdonald Rd To Cul-de-sac

Pavement Surface Type HMA Width 18 Length Date 05-30-2025

Pavement Distress Manifestation			Riding Condition Rating (At Posted Speed) 0 Excellent Smooth and Pleasant; 1 Good Comfortable; 2 Fair Uncomfortable; 3 Poor Rough & Very Bumpy; 4 Very Poor Dangerous at Posted Speed	Severity of Distress: Slight 1	Moderate 2	Severe 3	Density of Distress % Extent of Occurrence: Intermittent <20 1	Frequent 20-50 2	Extensive >50 3	Multiplier	Sum of Severity and Density	Comments
Surface Defect	Revelling/Loss of Cover Aggregate	1				3	1				4	
	Flushing/Streaking	2										
	Potholes	3				3	1				4	
	Pavement Edge Break	4				3			3		6	
Suface Deformation	Rippling and Shoving	6		2			1				3	
	Wheel Track Rutting	7										
	Distortion	8										
	Utility Trenches	9										
Cracking	Longitudinal	10		2					3		5	
	Transverse	11										
	Pavement Edge	12				3			3		6	
	Map	13		2				2			4	
	Alligator	14				3			3		6	
Ride Condition Rating (RCR)											4	
									Sum of Defects		42	

Pavement Condition Rating (PCR) = 100 - Sum of Defects

Pavement Condition Rating (PCR) 42 = 58

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Roads | Fair condition

Edgefield | Fair condition

PCR = 73.0

Pavement Rating Form

Segment No. 1 Street Edgefield Cnty

From Prairie Flower To Cherrywood

Pavement Surface Type HMA Width 22 Length Date 05-30-2025

Riding Condition Rating (At Posted Speed)					Severity of Distress			Density of Distress % Extent of Occurrence			Multiplier	Sum of Severity and Density	Comments
0 Excellent	1 Good	2 Fair	3 Poor	4 Very Poor									
Smooth and Pleasant	Comfortable	Uncomfort-able	Rough & Very Bumpy	Dangerous at Posted Speed	Slight	Moderate	Severe	Intermittent	Frequent	Extensive			
Pavement Distress Manifestation					1	2	3	<20 1	20-50 2	>50 3			
Surface Defect	Revelling/Loss of Cover Aggregate			1									
	Flushing/Streaking			2									
	Potholes			3									Filled
	Pavement Edge Break			4									
Suface Deformation	Rippling and Shoving			6									
	Wheel Track Rutting			7		2				3		5	
	Distortion			8									
	Utility Trenches			9									
Cracking	Longitudinal			10	1					3		4	
	Transverse			11			3	1				4	
	Pavement Edge			12			3			3		6	
	Map			13									
	Alligator			14			3			3		6	
Ride Condition Rating (RCR)												2	
										Sum of Defects		27	

Pavement Condition Rating (PCR) = 100 - Sum of Defects

Pavement Condition Rating (PCR) 27 = 73

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Roads | Good condition

Targee Trail | Good condition

PCR = 85.0

Pavement Rating Form

Segment No. 2 Street Targee Trl Cnty

From Rambouillet To Mcdonald Rd

Pavement Surface Type HMA Width 22 Length Date 05-29-2025

Riding Condition Rating (At Posted Speed)					Severity of Distress			Density of Distress % Extent of Occurrence			Multiplier	Sum of Severity and Density	Comments
0 Excellent	1 Good	2 Fair	3 Poor	4 Very Poor									
Smooth and Pleasant	Comfortable	Uncomfort-able	Rough & Very Bumpy	Dangerous at Posted Speed	Slight	Moderate	Severe	Intermittent	Frequent	Extensive			
Pavement Distress Manifestation					1	2	3	<20 1	20-50 2	>50 3			
Surface Defect	Revelling/Loss of Cover Aggregate			1									
	Flushing/Streaking			2									
	Potholes			3									
	Pavement Edge Break			4		3		1				3	
Suface Deformation	Rippling and Shoving			6									
	Wheel Track Rutting			7									
	Distortion			8									
	Utility Trenches			9									
Cracking	Longitudinal			10	1					3		4	
	Transverse			11									
	Pavement Edge			12	1				2			3	
	Map			13									
	Alligator			14		2			2			4	
Ride Condition Rating (RCR)												1	
											Sum of Defects		

Pavement Condition Rating (PCR) = 100 - Sum of Defects

Pavement Condition Rating (PCR) 15 = 85

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Wildwood Walk | Great condition

PCR = 100.0

Pavement Rating Form

Segment No. 7 Street Wildwood Walk Cnty

From Red Rose Trl To Cul-de-Sac

Pavement Surface Type HMA Width 26 Length Date 06-02-2025

Riding Condition Rating (At Posted Speed)					Severity of Distress			Density of Distress % Extent of Occurrence			Multiplier	Sum of Severity and Density	Comments
0 Excellent	1 Good	2 Fair	3 Poor	4 Very Poor	Slight	Moderate	Severe	Intermittent	Frequent	Extensive			
Smooth and Pleasant	Comfortable	Uncomfort-able	Rough & Very Bumpy	Dangerous at Posted Speed									
Pavement Distress Manifestation					1	2	3	<20 1	20-50 2	>50 3			
Surface Defect	Revelling/Loss of Cover Aggregate			1									
	Flushing/Streaking			2									
	Potholes			3									
	Pavement Edge Break			4									
Suface Deformation	Rippling and Shoving			6									
	Wheel Track Rutting			7									
	Distortion			8									
	Utility Trenches			9									
Cracking	Longitudinal			10									
	Transverse			11									
	Pavement Edge			12									
	Map			13									
	Alligator			14									
Ride Condition Rating (RCR)													
											Sum of Defects	0	

Pavement Condition Rating (PCR) = 100 - Sum of Defects

Pavement Condition Rating (PCR) 100

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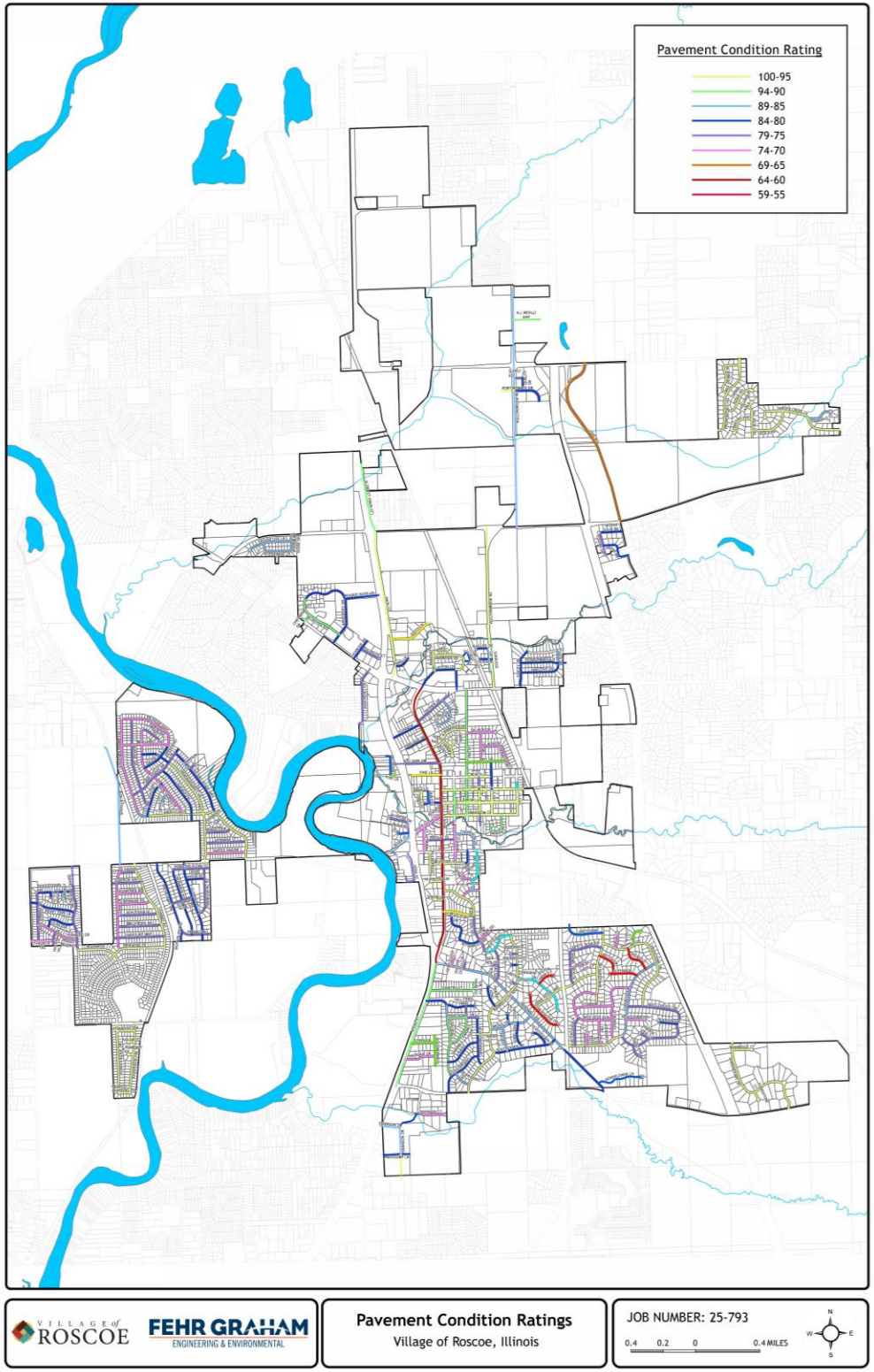
Pavement Condition Rating

PCR Map



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MAINTENANCE RECOMMENDATIONS

Maintenance Type	PCR Range	Condition Classification	$/SY	$/LF
Crack Filling/Sealing	90-100	Great	$0.39	$0.15
Surface Rejuvenation	80-89	Good	$6.45	$2.44
Mill & Overlay	65-79	Fair	$22.10	$8.37
Reconstruction	<65	Poor	$46.40	$17.58

Crack Filling/Sealing: hot asphaltic mixture fills cracks and prevents existing cracks from expanding

Surface Rejuvenation: a polymer modified asphalt emulsion fills in cracks and smooths roadway surface.

Mill & Overlay: removes road surface and replaces with new 6” of HMA surface.

Reconstruction: complete removal and replacement of aggregate subbase and base course, HMA binder course, and surface course.

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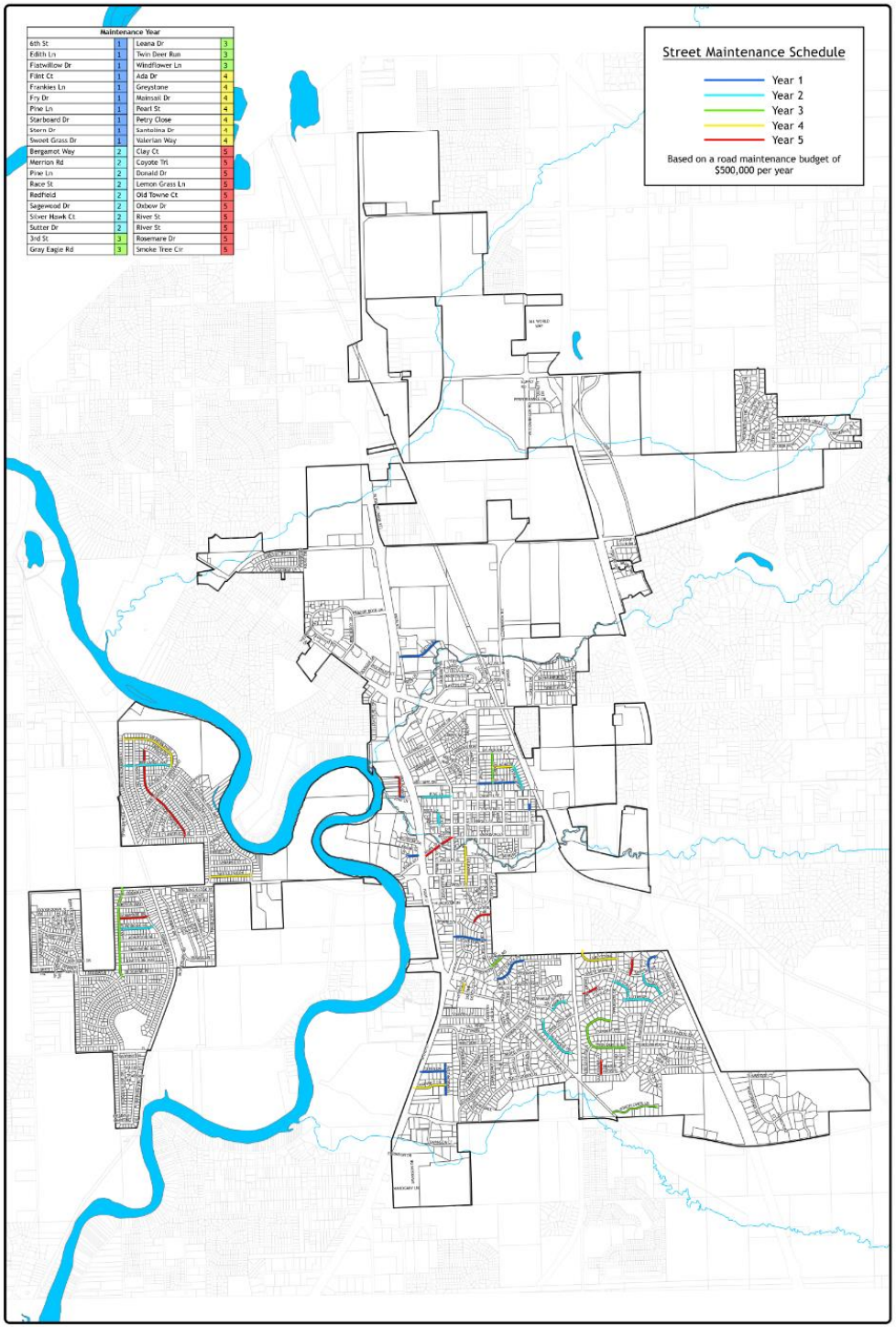
Proposed Maintenance Plan

PCR Map



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COSTS

Annual Budget	Length of Road Rehabilitated (mi)	Overall PCR for Residential Streets at End of 5 Years
$500,000	7.88	83.3
$1,000,000	15.72	87.8
$1,500,000	23.69	91.8

The current overall PCR is 84.0. PCRs are projected to decrease by 1.2 points every year.

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QUESTIONS

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