WISCONSIN TOWNS ASSOCIATION
Empowering Town Officials

Spring Road School 2025

PASER - Why You Can't Ignore This

April 23, 2025

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STAFF ENGINEEER

WISCONSIN LOCAL TECHNICAL ASSISTANCE PROGRAM

UNIVERSITY OF WISCONSIN - MADISON

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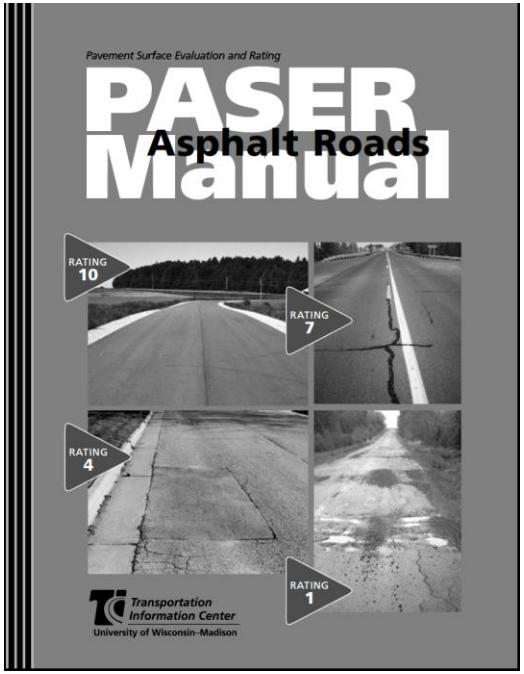
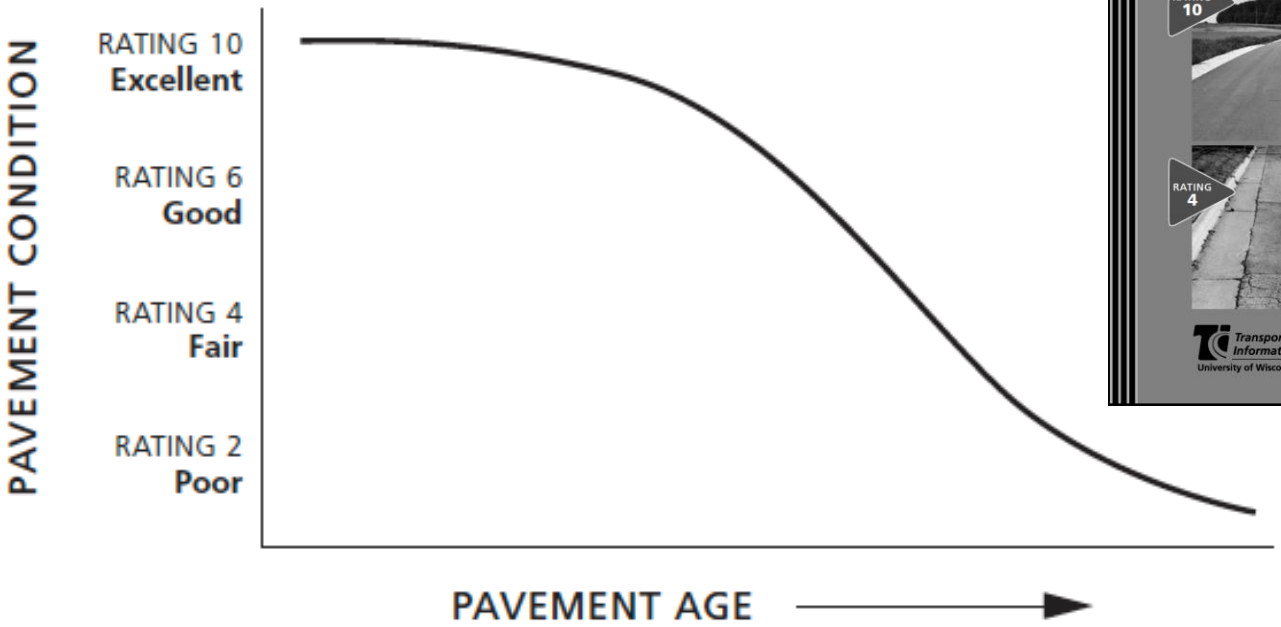
Using PASER for Pavement Asset Management

Pavement Ratings are required to be submitted to WisDOT every 2 years.

Due by Dec 15th in the odd numbered year





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Asphalt PASER Pavement Ratings - New or minimal distress

Surface rating	*Visible distress**	*General condition/ treatment measures*
10 Excellent	None.	New construction.
9 Excellent	None.	Recent overlay. Like new.
8 Very Good	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). All cracks sealed or tight (open less than ¼").	Recent sealcoat or new cold mix. Little or no maintenance required.

* *Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.*

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Asphalt PASER Ratings- Aging Related Distresses

Surface rating	*Visible distress**	*General condition/ treatment measures*
7 Good	Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open ¼") due to reflection or paving joints. Transverse cracks (open ¼") spaced 10' or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
6 Good	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open ¼"– ½"). Transverse cracks (open ¼"– ½"), some spaced less than 10'. First sign of block cracking. Sight to moderate flushing or polishing. Occasional patching in good condition.	Shows signs of aging. Sound structural condition. Could extend life with sealcoat.
5 Fair	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open ½" or more) show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge	Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2")

** Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.*

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Asphalt PASER Ratings – Structural Distresses, Severe Progression of Aging Distresses, Failed Pavements

Surface rating	*Visible distress**	*General condition/ treatment measures*
4 Fair	Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (½" deep or less).	Significant aging and first signs of need for strengthening. Would benefit from a structural overlay (2" or more).
3 Poor	Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (greater than ½" but less than 2" deep). Occasional potholes.	Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay.
2 Very Poor	Alligator cracking (over 25% of surface). Severe rutting or distortions (2" or more deep). Extensive patching in poor condition. Potholes.	Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective.
1 Failed	Severe distress with extensive loss of surface integrity.	Failed. Needs total reconstruction.

* *Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.*

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PASER rating issues observed:

- Raters do not always appear to be rating on based on observed condition.
- This results in mismatches between ratings and actual condition
- I believe that some agencies are selecting a rating that matches the maintenance treatment they have planned (or can afford) rather than actually rating condition based on observed distresses
- Do not WISHRATE!

What is the PASER rating for this pavement?

What is the PASER rating for this pavement?

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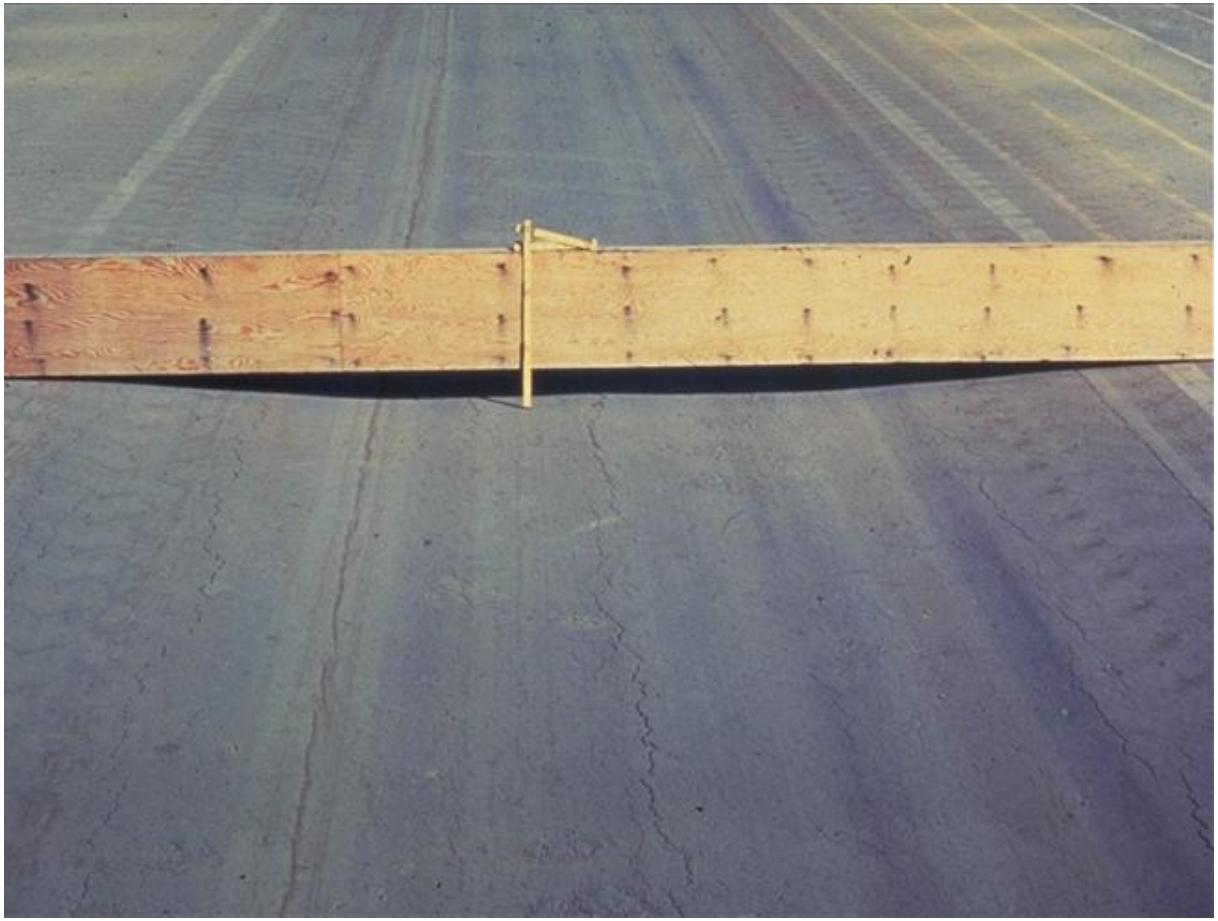

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PASER rating issues observed:

- You should update ratings when applying for grant funding.
- A grant application that has a mismatch between described condition and numerical PASER rating is likely to go to the bottom of the pile.
- Update ratings before submitting a project and rate based on distresses observed

PASER rating issues observed:

- In WISLR make sure that the last maintenance year is updated in the WISLR inventory
- Check the last maintenance year information when updating ratings.
- WisDOT have observed mismatches between ratings and age
  - For example , asphalt pavements that are seven years or more beyond their last maintenance date that are rated “10” – This is nearly impossible!!

So what's gonna happen?

Am I going to get arrested by the WISLR police?

- No, but you may mess things up for your town and adversely impact all towns

- Why ? How? …

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Why accurate WISLR ratings are important

- WisDOT aggregates the WISLR condition data to try to estimate the local agency need (backlog of work)
- If you are rating conditions higher than they actually are, WisDOT data estimates less overall need than the actual need
-

Why accurate WISLR ratings are important

- WTA uses the aggregate condition data for town roads when it estimates unmet need for funding of town road improvements

- If you are rating conditions higher than they actually are, WTA estimates less overall need than the actual need

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Getting ratings right in a grant application

If I applied for a grant to fund reconstruction of this road, but my application showed a PASER rating of 6, do you think I'd get awarded a grant?

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If you don’t rate pavements accurately, you can’t effectively use the pavement management tools in WISLR

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WISLR Inventory

Wisconsin Department of Transportation

Wisconsin Information System for Local Roads

application: home | main menu | route name discrepancy | log-off | manual and publications

County: CALUMET (08) Municipality: NEW HOLSTEIN (C) (261) Certification Year: 2014

Global Location

Rd/St Name: Eisenhower St Retrieve Entire Route

At: Hickory Ln (Termini)

Retrieve At/Toward

Physical Inventory | Administrative Inventory

Map	+	Attribute Name	Occurs	At Intersection	From Offset	To Offset	Section Length	Attribute V
	+	Surface	1 of 1	Hickory Ln (Termini)	0	950	950	Type: **70-Hot Mix Asphalt Pavement (HMAC)**, Width: **36 ft**, Year: **1986**
	+	Maintenance Treatment	0 of 0		0	0	0	
	+	Left Shoulder	1 of 1	Hickory Ln (Termini)	0	950	950	Type: **0-None**, Width: **0 ft**
	+	Right Shoulder	1 of 1	Hickory Ln (Termini)	0	950	950	Type: **0-None**, Width: **0 ft**
	+	One Way	1 of 1	Hickory Ln (Termini)	0	950	950	One Way: **No**
	+	Right-of-Way	1 of 1	Hickory Ln (Termini)	0	950	950	Indicator: **A**, Width: **70 ft**
	+	Median	0 of 0		0	0	0	
	+	Left Curb	1 of 1	Hickory Ln (Termini)	0	950	950	Type: **1-Standard (regular curb and gutter)**
	+	Right Curb	1 of 1	Hickory Ln (Termini)	0	950	950	Type: **1-Standard (regular curb and gutter)**
	+	Parking	1 of 1	Hickory Ln (Termini)	0	950	950	Parking: **3-Both Sides**
	+	Traffic Lanes	1 of 1	Hickory Ln (Termini)	0	950	950	Traffic Lanes: **2 Lanes**
	+	Average Daily Traffic (ADT)	1 of 1	Hickory Ln (Termini)	0	950	950	Indicator: **E**, Count: **30**, Year
	+	Pavement Rating	1 of 1	Hickory Ln (Termini)	0	950	950	System: **Paser Asphalt Pavement (Hot Mix or Cold Mix Asphalt)**, Rating: **6**, Year: **2011**

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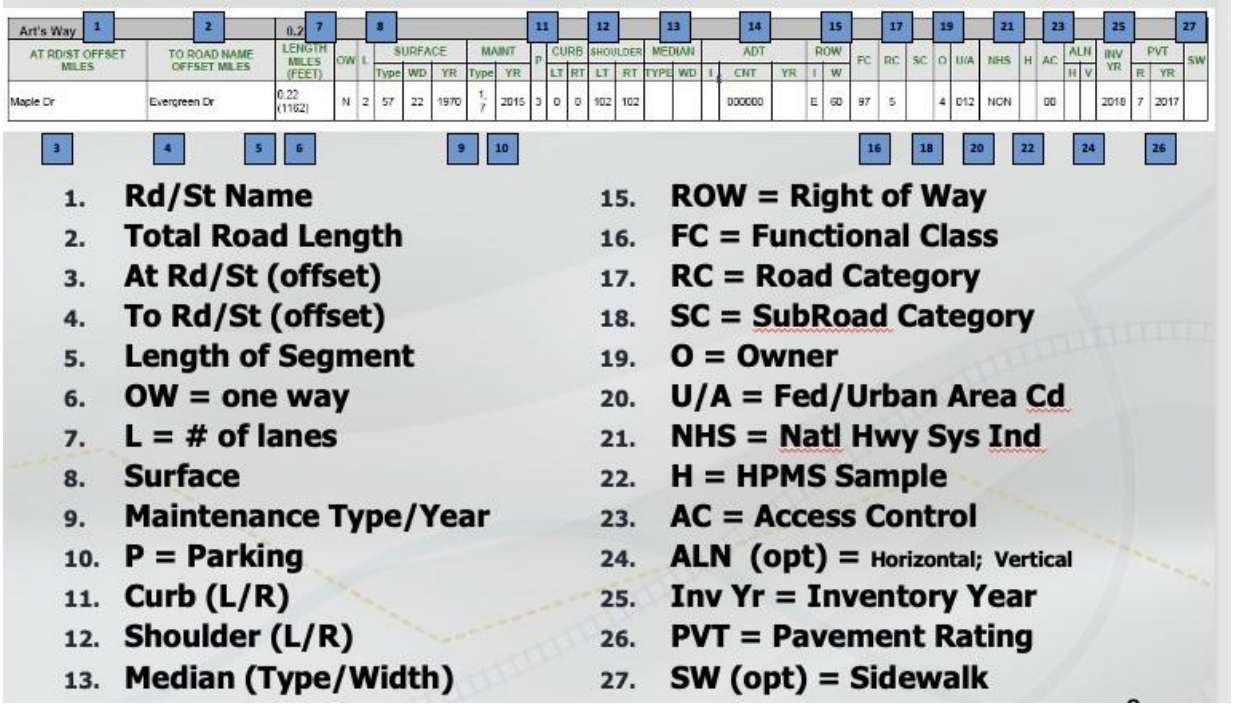
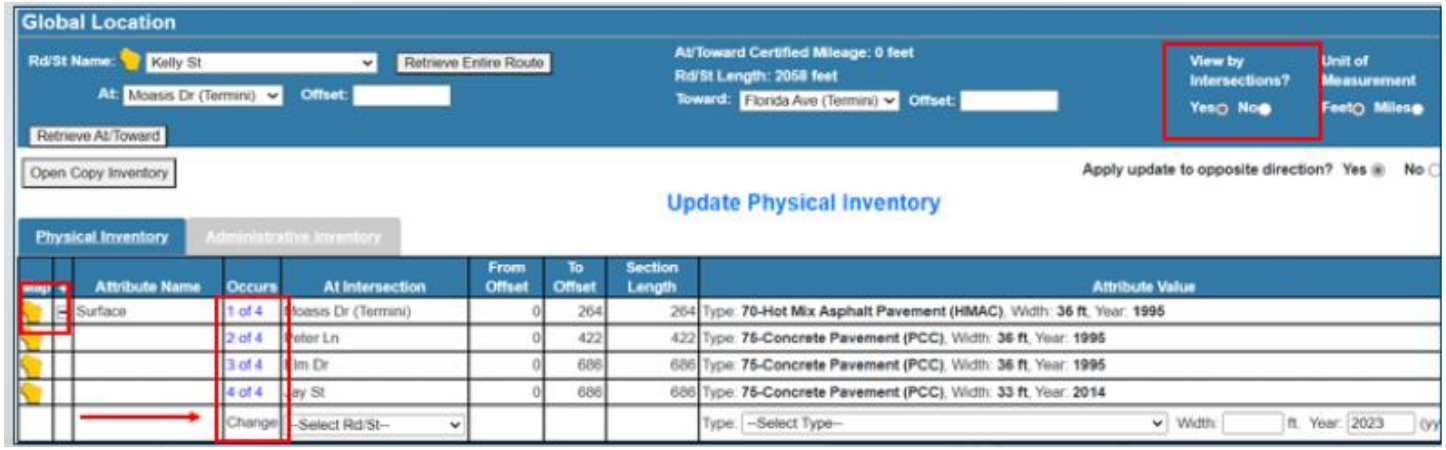
Updating surface year and/or maintenance year



Art's Way 1	2	0.2 7	8				11	12			13		14		15	17	19	21	23	25	27
AT RD/ST OFFSET MILES	TO ROAD NAME OFFSET MILES	LENGTH MILES (FEET)	OW	L	SURFACE Type	SURFACE WD	SURFACE YR	MAINT Type	MAINT YR	P	CURB LT	CURB RT	SHOULDER LT	SHOULDER RT	MEDIAN TYPE	MEDIAN WD	ADT I	ADT CNT	ADT YR	ROW I	ROW W	FC	RC	SC	O	U/A	NHS	H	AC	ALN H	ALN V	INV YR	PVT R	PVT YR	SW
Maple Dr	Evergreen Dr	0.22 (1162)	N	2	57	22	1970	1/7	2015	3	0	0	102	102				000000		E	60	97	5		4	012	NON		00			2018	7	2017	

3 4 5 6 9 10 16 18 20 22 24 26

1. Rd/St Name
2. Total Road Length
3. At Rd/St (offset)
4. To Rd/St (offset)
5. Length of Segment
6. OW = one way
7. L = # of lanes
8. Surface
9. Maintenance Type/Year
10. P = Parking
11. Curb (L/R)
12. Shoulder (L/R)
13. Median (Type/Width)
15. ROW = Right of Way
16. FC = Functional Class
17. RC = Road Category
18. SC = SubRoad Category
19. O = Owner
20. U/A = Fed/Urban Area Cd
21. NHS = Natl Hwy Sys Ind
22. H = HPMS Sample
23. AC = Access Control
24. ALN (opt) = Horizontal; Vertical
25. Inv Yr = Inventory Year
26. PVT = Pavement Rating
27. SW (opt) = Sidewalk



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Using WISLR Pavement Analysis Tools

- Condition Frequency Report
- Provides valuable summary information about the condition of pavement

Report Type

- ◉ Rudimentary Needs Analysis
- ○ Rudimentary Needs Analysis by Pavement Type
- ○ Rudimentary Needs Analysis by Functional Class
- ○ Condition Frequency Report

	Paved		Unpaved	
Series	Min Rating	Max Rating	Min Rating	Max Rating
1	1	2	1	1
2	3	4	2	2
3	5	6	3	3
4	7	8	4	4
5	9	10	5	5

Leave series blank to exclude it.

- ○ Average Rating by Pavement Type
- ○ Average Rating by Functional Class
- ○ Create New Five Year Budget Plan

Year	1	2	3	4	5
Budget	0	0	0	0	0

Create Report | Browse Saved Forecasts...

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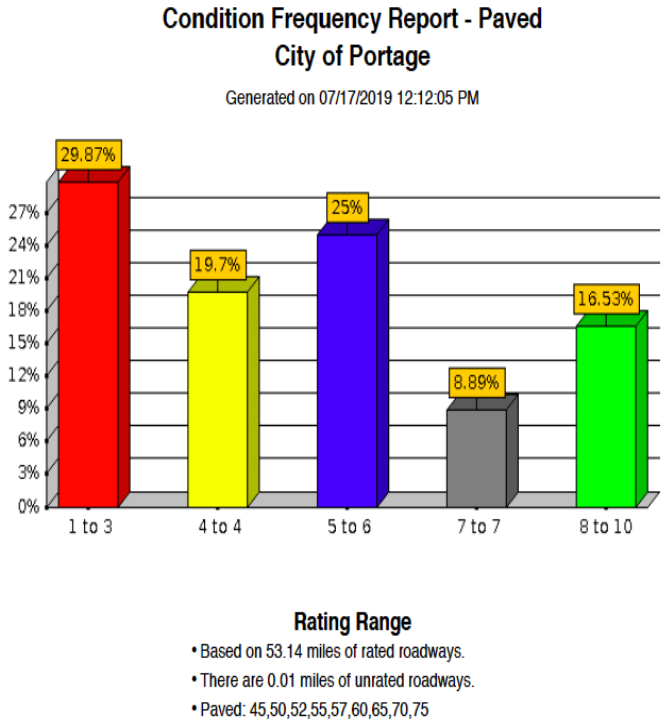
Example - Condition Frequency Grouping

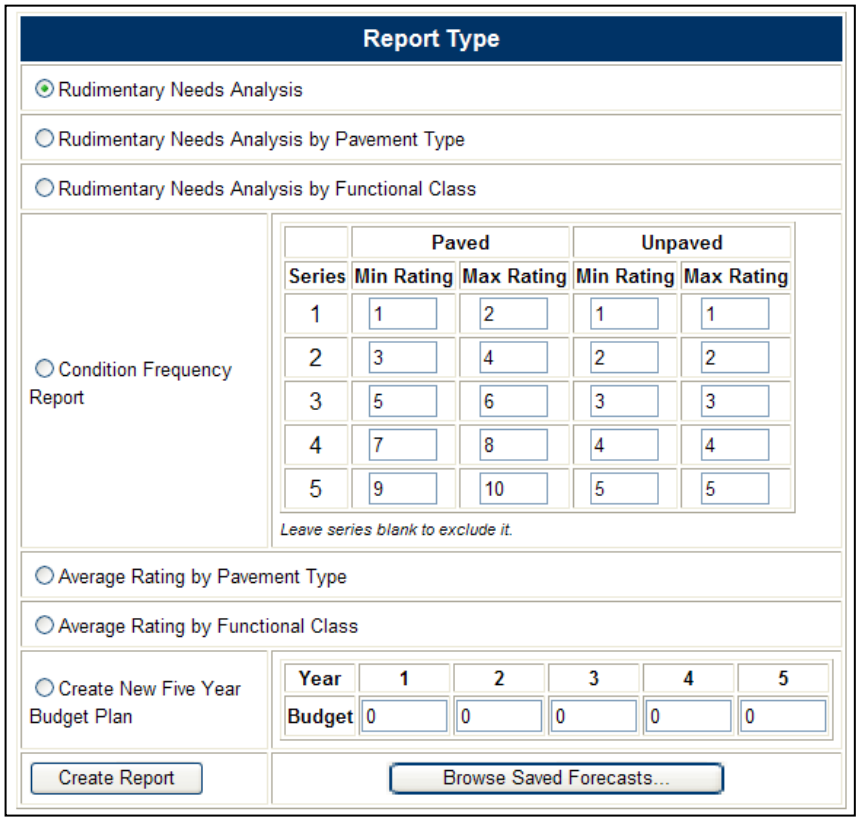


Treatments are the Basis of Grouping

1 to 3 rehab strategies
4 hot mix overlay
5 & 6 chip seal
7 crack fill
8 to 10 no action

Using WISLR Pavement Analysis Tools

- Five-year budget plan
- Produces a recommended list of streets and shows a projection of condition in five years
- Based on budget, M&R costs, and priorities you input



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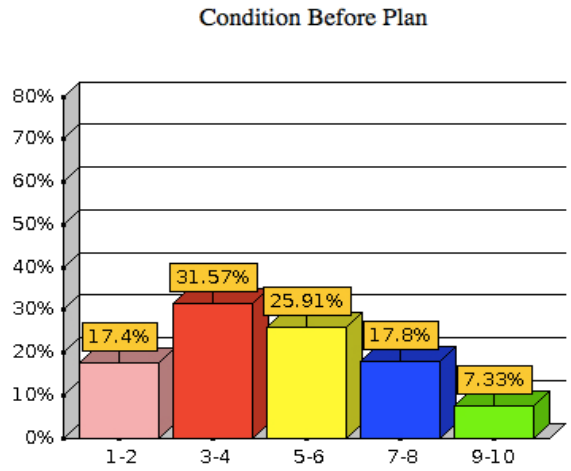
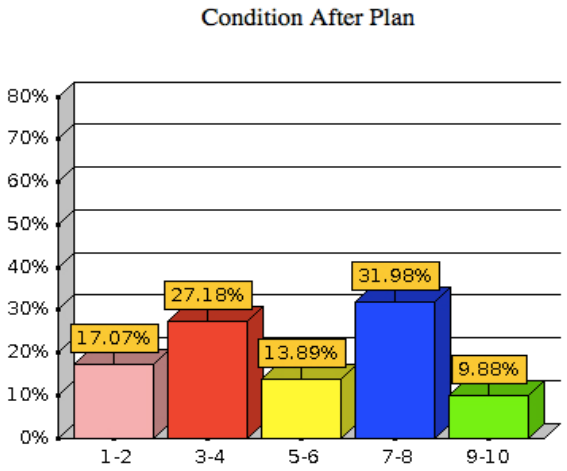
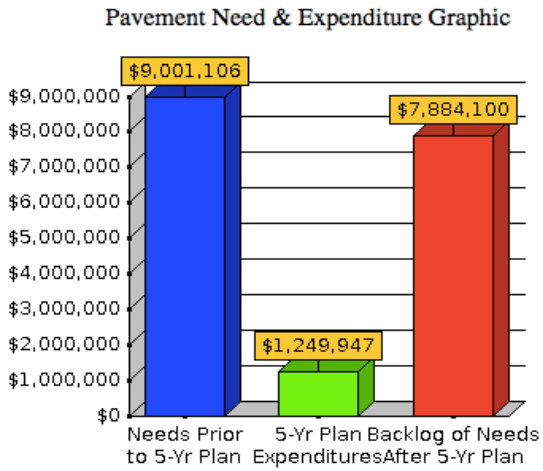
5- year projection of condition frequency







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Recommended 5-year project list

Year:	1	2	3	4	5
Budget:	80000	80000	80000	80000	80000
Expenditures:	53113	79487	106817	8731	150959

Stored Forecasts

Name and Description: Reload Saved | Save This Forecast

Application Functions

Sort by Year: 1 | 2 | 3 | 4 | 5 | Backlog | Map by Year | Map by Project Type | Print/Download Spreadsheet

BURNSIDE · 1 to 12 of 58

On Route	At Route	Toward Route	Pavement Sections	Details	Local ID	PMPC	Edit Options
Maule Coulee Rd	STH 93 / STH 121	Sather Hill Rd	Seg# 1 At 0 End 9557 Surf 70 Rtg 6 Width 18 Built 2007	Year: 1 Action(F): 6 WISLR Cost: 47040 User Cost: 0		LCL	Edit
Wolfe Rd	Prokop Ln	CTH Q / Jimmy Ln	Seg# 1 At 0 End 6072 Surf 55 Rtg 7 Width 20 Built 2010	Year: 1 Action(F): 7 WISLR Cost: 6071 User Cost: 0		LCL	Edit
Doris Guza Rd	CTH XX / Doris Guza Rd	STH 93	Seg# 1 At 2640 End 14890 Surf 70 Rtg 5 Width 24 Built 2012	Year: 2 Action(F): 5 WISLR Cost: 79487 User Cost: 0		LCL	Edit
Maule Coulee Rd	Sather Hill Rd	Gierok Rd / Maule Coulee Rd	Seg# 1 At 0 End 1637 Surf 70 Rtg 5 Width 18 Built 2007	Year: 3 Action(F): 5 WISLR Cost: 8056 User Cost: 0		LCL	Edit
Swede Valley Rd	CTH Q	STH 93 / STH 121	Seg# 1 At 0 End 10666 Surf 55 Rtg 5 Width 20 Built 2008	Year: 3 Action(F): 5 WISLR Cost: 58069		LCL	Edit

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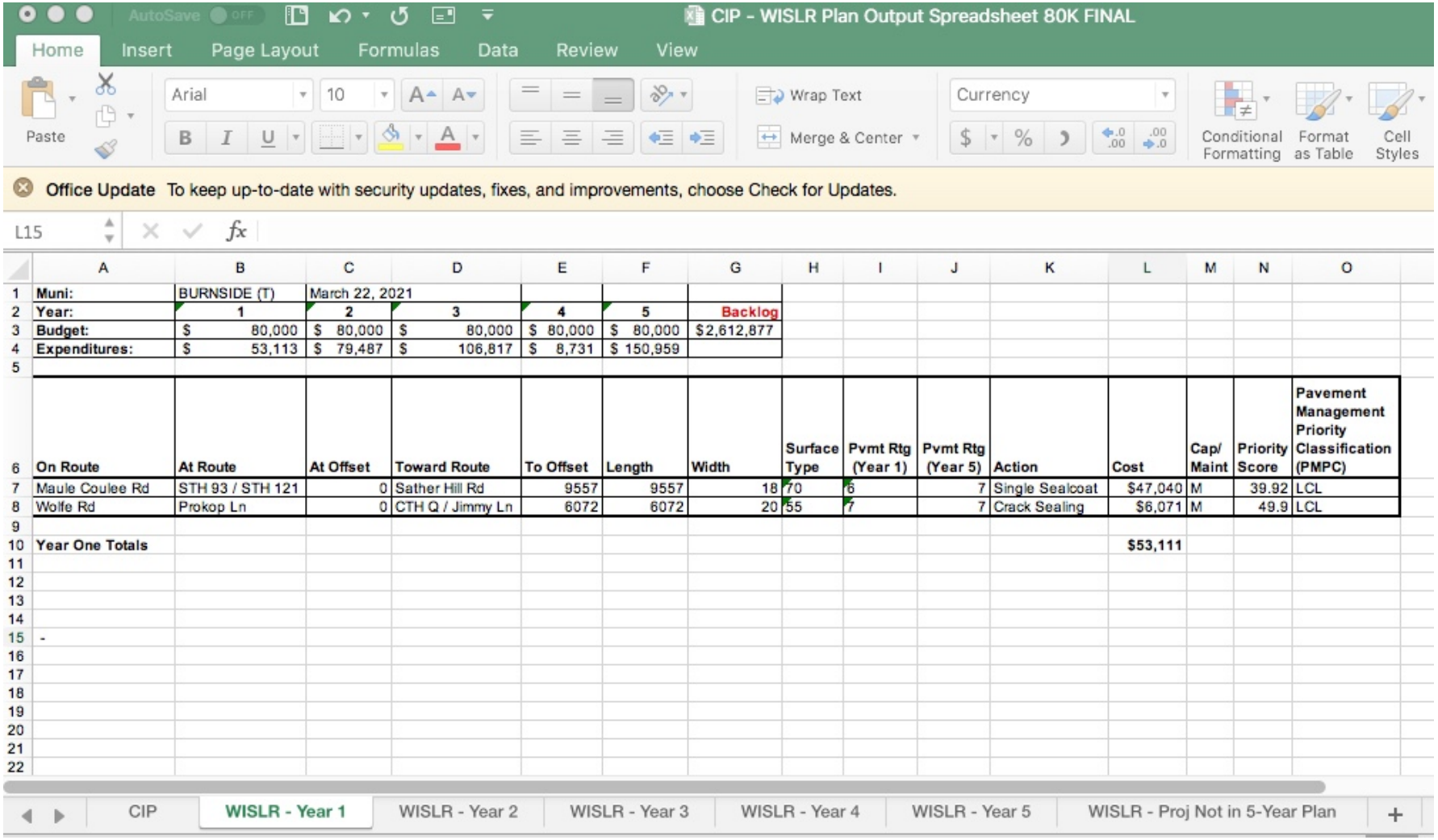
Output can be downloaded to a spreadsheet



CIP - WISLR Plan Output Spreadsheet 80K FINAL

Office Update To keep up-to-date with security updates, fixes, and improvements, choose Check for Updates.

Muni:	BURNSIDE (T)	March 22, 2021												
Year:	1	2	3	4	5	Backlog								
Budget:	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$2,612,877								
Expenditures:	$ 53,113	$ 79,487	$ 106,817	$ 8,731	$ 150,959									

On Route	At Route	At Offset	Toward Route	To Offset	Length	Width	Surface Type	Pvmt Rtg (Year 1)	Pvmt Rtg (Year 5)	Action	Cost	Cap/ Maint	Priority Score	Pavement Management Priority Classification (PMPC)
Maule Coulee Rd	STH 93 / STH 121	0	Sather Hill Rd	9557	9557	18	70	6	7	Single Sealcoat	$47,040	M	39.92	LCL
Wolfe Rd	Prokop Ln	0	CTH Q / Jimmy Ln	6072	6072	20	55	7	7	Crack Sealing	$6,071	M	49.9	LCL
Year One Totals											$53,111			

CIP | WISLR - Year 1 | WISLR - Year 2 | WISLR - Year 3 | WISLR - Year 4 | WISLR - Year 5 | WISLR - Proj Not in 5-Year Plan

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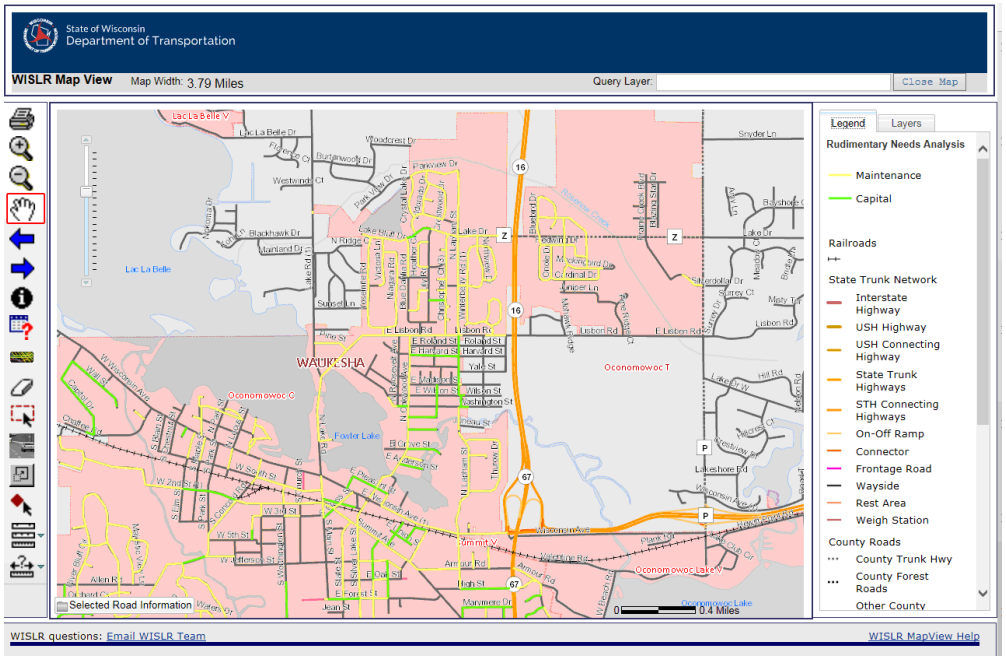
Using WISLR Pavement Analysis Tools

- Results can be viewed and printed as a list or displayed on a map

Roadway List

Roadway Name	Maint. Cost	Capital Cost
Bass Lake Ct	0.00	7946.93
Bass Lake Rd (1)	479.31	0.00
Bass Lake Rd (2)	4720.67	0.00
Biglow Rd	0.00	58791.18
Center Rd	7147.53	73767.32
Danks Rd	10504.30	0.00
Deer Point Dr	677.60	0.00
Franklin Rd	3960.00	0.00
Grouse Haven Rd	1750.11	0.00
Hildreth Rd	5890.13	0.00
Hill Rd	3342.66	0.00
Oak Lane Rd	6372.75	0.00
Oak Opening Dr	858.12	0.00
Oak Ridge Rd	0.00	64525.12
Old Stone Rd	37766.42	167211.82
Rutland-Dunn Town Line Rd	13785.98	0.00
Shady Willow Rd	4126.91	0.00
Starr School Rd	8491.14	0.00
Sunrise Rd	8690.42	0.00
Union Dane Rd	7578.14	0.00
Veek Rd	392.02	0.00
Windmill Rd	0.00	59358.79
Total	**126534.21**	**431601.16**

Show Map



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Using the WISLR 5-year Budget Tool

- Run a “Do Nothing” Budget (1$ for each of the 5 years)
- Run a “Reduced” Budget (Say 25% less than expected)
- Run an “Increased” Budget (Bigger but not outrageous)
- Run your “Normal” Budget (Already planned or expected)
  - Evaluate these alternatives
- Decide on a “Preliminary Proposed” Budget
  - Edit the proposed streets for the first 2 years
  - Evaluate how reasonable the streets are in remaining years
  - Adjust streets as necessary and develop your budget justification
- Consider using the importance feature to account for local priorities

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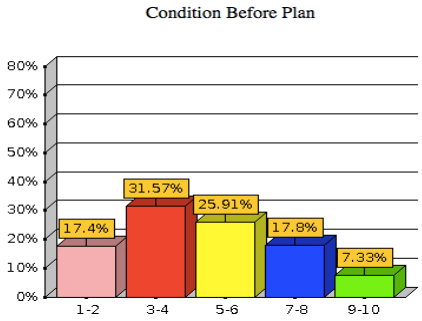
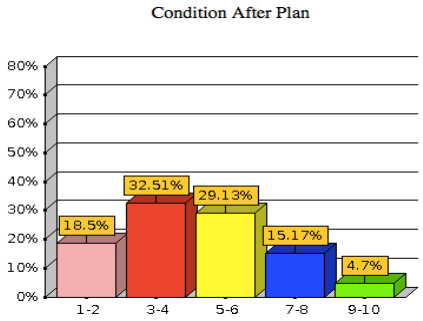
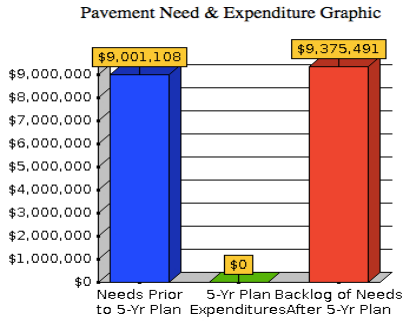
5-year plan impacts of each scenario

Do nothing 5-year plan (1-2, 3-4, 5-6 increase; 7-8, 9-10 decrease; **backlog increases $374,283**)

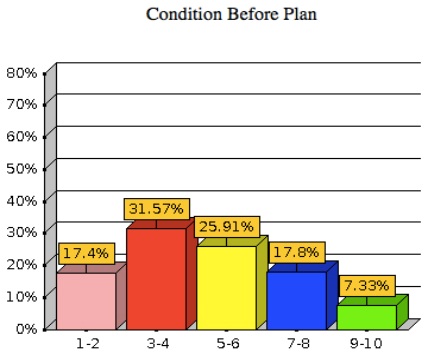


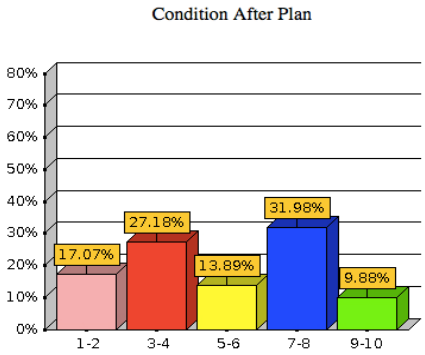


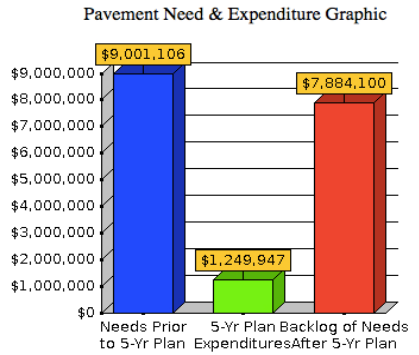


Reduced $250,000 / year

(1-2 no change, 3-4, 4-6 decrease; 7-8, 9-10 increase; **backlog decreases $1,117,008**)







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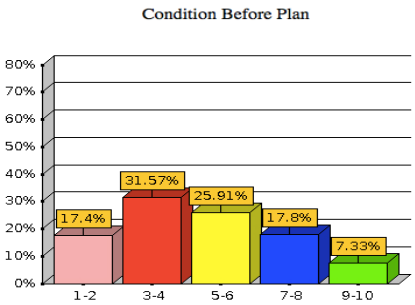
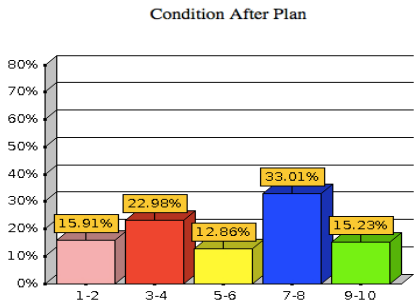
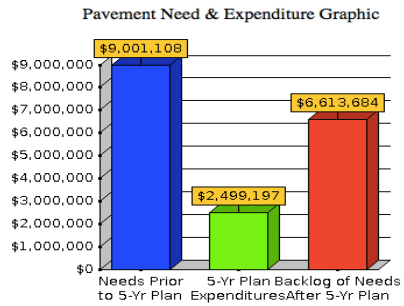
5-year plan impacts of each scenario

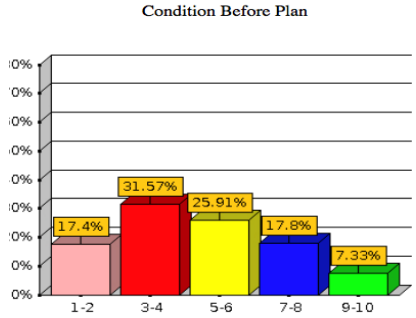
Increased $500,000/year (1-2 slight drop; 3-4, 5-6, decrease; 7-8, 9-10 increase; **backlog decreases $2,387,424)**

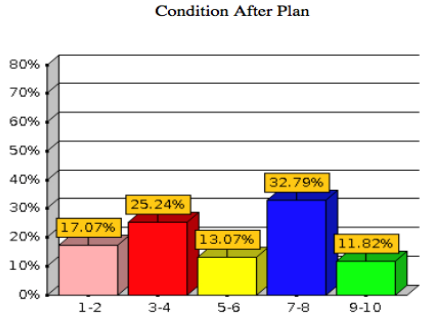


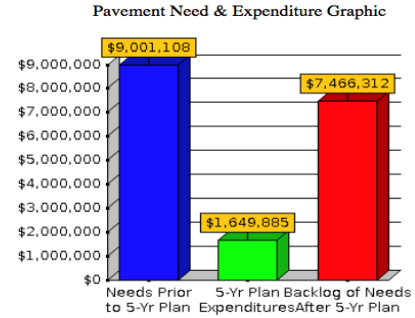




Normal $330,000/year (1-2 very slight drop; 3-4, 5-6, decrease; 7-8, 9-10 increase; **backlog decreases $1,534,796)**







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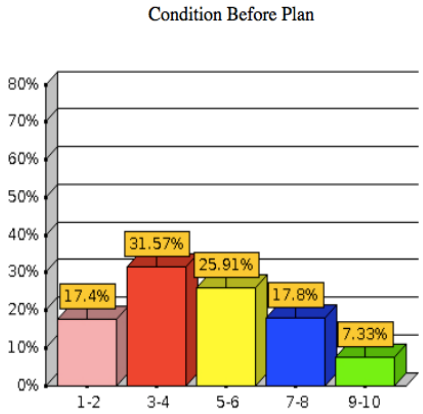
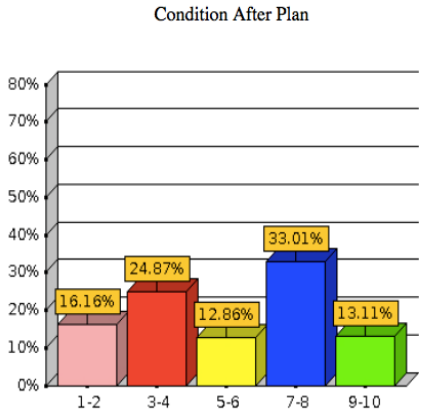
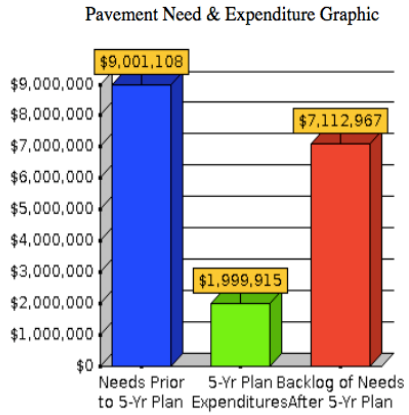
Propose a budget of $400,000

1,2,3,4,5,6 all decrease; 7,8,9,10 double; **backlog decreases $1,889,441**







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Another reason to Accurately Rate Pavements

- If you need to follow Government Accounting Standards Board (GASB) requirements including asset management

Does GASB apply to us?

- all towns, villages, cities and counties with a population of 25,000 or more are required to file financial statements conforming to generally accepted accounting principles (GAAP)

- “Generally accepted accounting principles" means those governmental accounting and financial reporting principles promulgated by the Governmental Accounting Standards Board (GASB) or its successor bodies.

Wisconsin Department of Revenue Administrative Code
Chapter Tax 16 LOCAL FINANCIAL REPORTING

Does GASB apply to us?

"GAAP-based financial information enables rating agencies to compare governments, while helping investors obtain more comprehensive and reliable information on a government's finances."

Financial Accounting Foundation
https://www.accountingfoundation.org/

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GASB 34 Allows Two Methods of Asset Management

- Method 1 is primarily an accounting method
  - Original $ cost of the asset
  - Expected life (design life?)
  - Depreciated each year over the expected life
  - At the end of the expected life, the value is $0

- Method 2 allows the government to establish an acceptable condition and maintain the asset at that condition or better. This is the “Modified Approach“ – an asset management approachh that can be accomplished using WISLR

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GASB 34 summary of Infrastructure Assets using Method 2

- Infrastructure assets that are part of a network or subsystem of a network are not required to be depreciated as long as the government manages those assets using an asset management system that has certain characteristics and the government can document that the assets are being preserved approximately at (or above) a condition level established and disclosed by the government.

Draft GASB Guidance on Infrastructure Assets – Modified Approach

- **The Board's preliminary view is that a government that reports infrastructure assets using the modified approach should have processes in place to (a) maintain an up-to-date inventory of infrastructure assets, (b) perform and summarize condition assessments on those infrastructure assets, and (c) estimate annual amounts to preserve infrastructure assets at the condition levels the government establishes.**

- **The Board's preliminary view is that a government that reports infrastructure assets using the modified approach should continue to perform and document complete condition assessments in a consistent manner at least every three years and that the results of the three most recent complete condition assessments should continue to provide reasonable assurance that the infrastructure assets are being preserved approximately at (or above) the condition level established and disclosed by the government.**

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What do we need to know to effectively manage our pavement assets?

- What assets do we own?
- Where are the assets located?
- What condition are the assets in?
- When were they constructed? Reconstructed? Last maintained?
- What is the replacement cost?
- How do the assets deteriorate?
- What minimum condition level have we established?
- What maintenance, rehabilitation, or replacement is needed based on condition of the assets in order to keep the assets in acceptable condition?

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