



Town of Dover-Foxcroft, Maine

Pavement Management Study - 2015

PRESENTED TO: Dover-Foxcroft Board of Selectmen | PRESENTED BY: GORRILL PALMER | January 11, 2016

Presentation Outline

- Introductions
- Overview
- Data Collection
- Results
- Treatment Alternatives
- 10 Year Paving Improvement Plan
- Q & A



Introductions

- Staff: Will Haskell, PE & Owen Chaplin, EI
- 1,775 miles of pavement evaluations
- 17 Cities/Towns

Overview

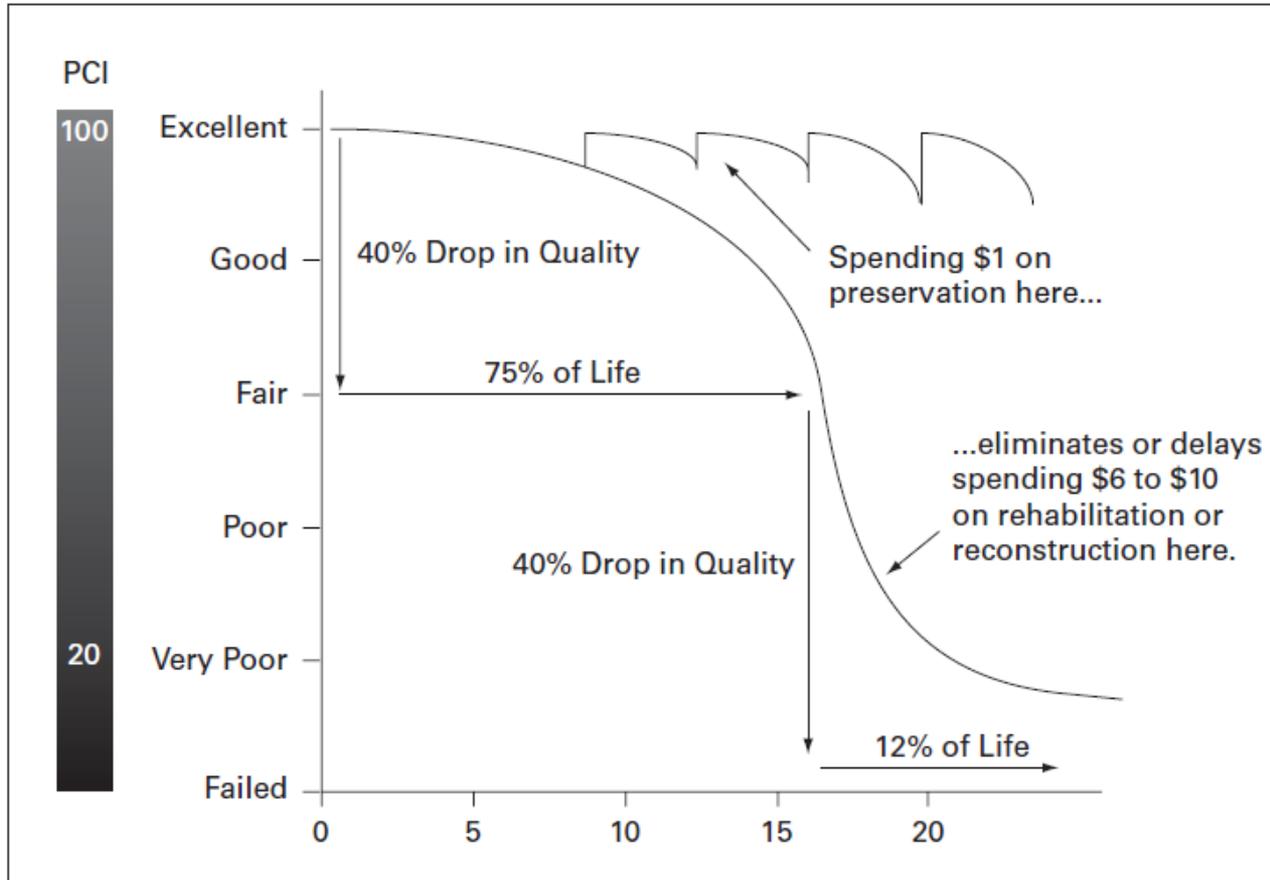
What is Pavement Management?

The practice of planning for pavement maintenance and rehabilitation with the goal of maximizing the value and life of a pavement network.

Overview

- Prioritize Roads
- Plan & Budget for Future Expenditures
- Identify Appropriate Treatments for Roads

Overview



Overview

Goals & Objectives Of This Study

- Update local road evaluations done in 2010
- Provide list of treatment alternatives
- Review current paving budget & provide recommended budget
- Prepare a 10 year paving improvement plan

Data Collection

- Methodology: Road Surface Management System (RSMS) Software, Version 11
- Maine DOT Local Roads Center

Data Collection

- Field work completed on October 15 & 16, 2015
- Observe 7 pavement distresses
- Determine extent & severity of distresses
- Windshield survey with periodic detailed inspections

Data Collection

- Alligator cracking
- Transverse/longitudinal cracking



Data Collection

- Edge cracking
- Patching/potholes



Data Collection

- Roughness
- Rutting



Data Collection

- Drainage



Data Collection

Paved Road Survey Form

Road Name: _____
 Section ID: _____
 From Road: _____
 To Road: _____
 From Milepost: _____ To Milepost: _____
 Width (ft.): _____
 Shoulder Width (if paved): _____
 Importance (1-5): _____
 Traffic (1-5): _____

Alligator Cracking

		Extent		
		<10%	10-30%	>30%
Severity	none			
	low			
	med			
	high			

Long/Tran Cracking

		Extent		
		<10%	10-30%	>30%
Severity	none			
	low			
	med			
	high			

Edge Cracking

		Extent		
		<10%	10-30%	>30%
Severity	none			
	low			
	med			
	high			

Patches/Potholes

		Extent		
		<10%	10-30%	>30%
Severity	none			
	low			
	med			
	high			

Roughness

		Extent		
		<10%	10-30%	>30%
Severity	none			
	low			
	med			
	high			

Rutting

		Extent		
		<10%	10-30%	>30%
Severity	none			
	low			
	med			
	high			

Roadside Drainage

		Extent		
		<10%	10-30%	>30%
Severity	none			
	low			
	med			
	high			

Results

- 34 miles of local roads
- 12 miles of state aid roads

Results

Maintenance Status

- No maintenance - excellent condition
- Routine – good condition
- Preventative – fair condition
- Rehabilitation – require significant repairs
- Reconstruction – reached end of useful life

Results



No Maintenance – Bear Hill Rd 4



Routine – Fairview Ave



Preventative – Lincoln St 3



Rehabilitate – Anderson Rd 2



Reconstruct – Dwelley St

Results

Maintenance Status of Local Roads

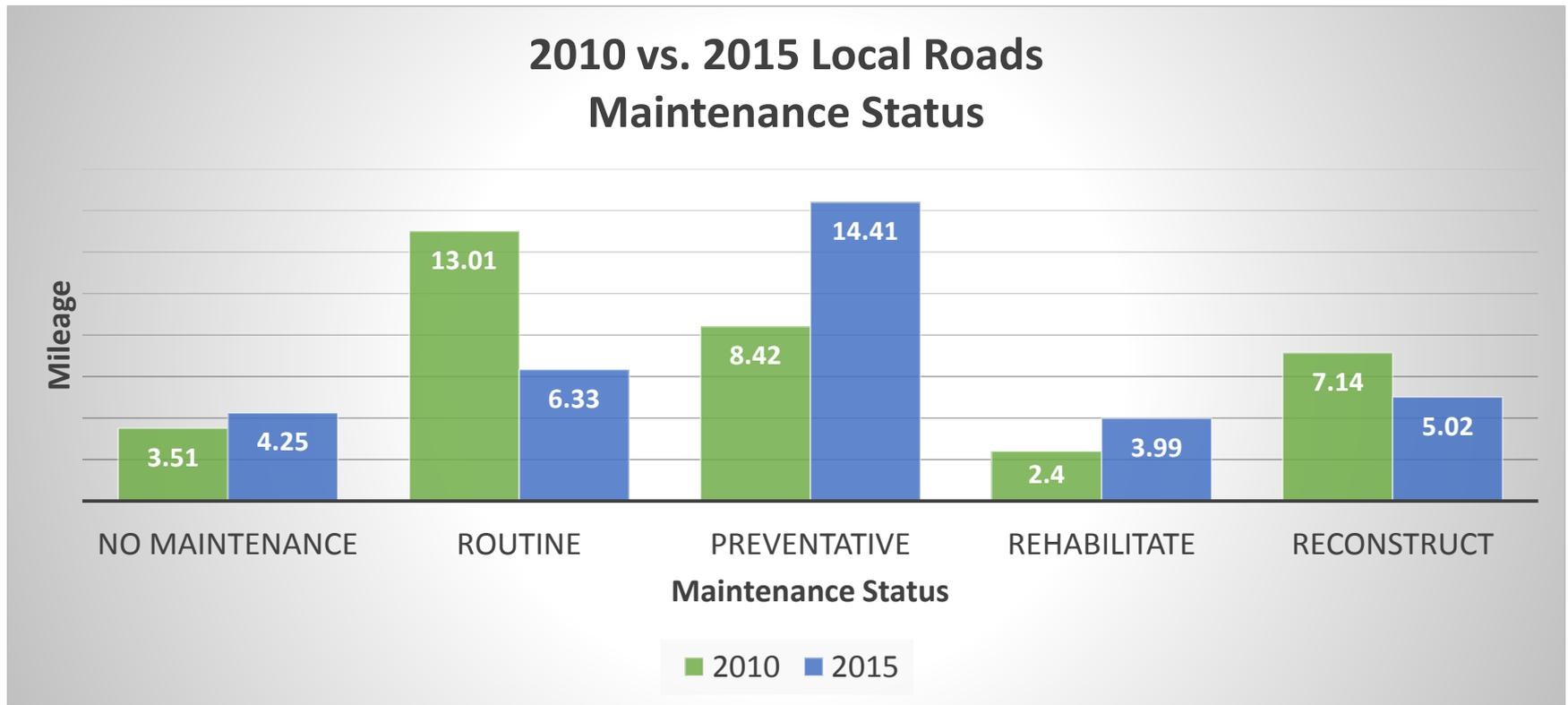
Maintenance Status	2010 Mileage	2015 Mileage	% Change
No Maintenance	3.51	4.25	+ 21%
Routine	13.01	6.33	- 49%
Preventative	8.42	14.41	+ 71%
Rehabilitate	2.40	3.99	+ 66%
Reconstruct	7.14	5.02	- 30%
Total	34.48	33.99	



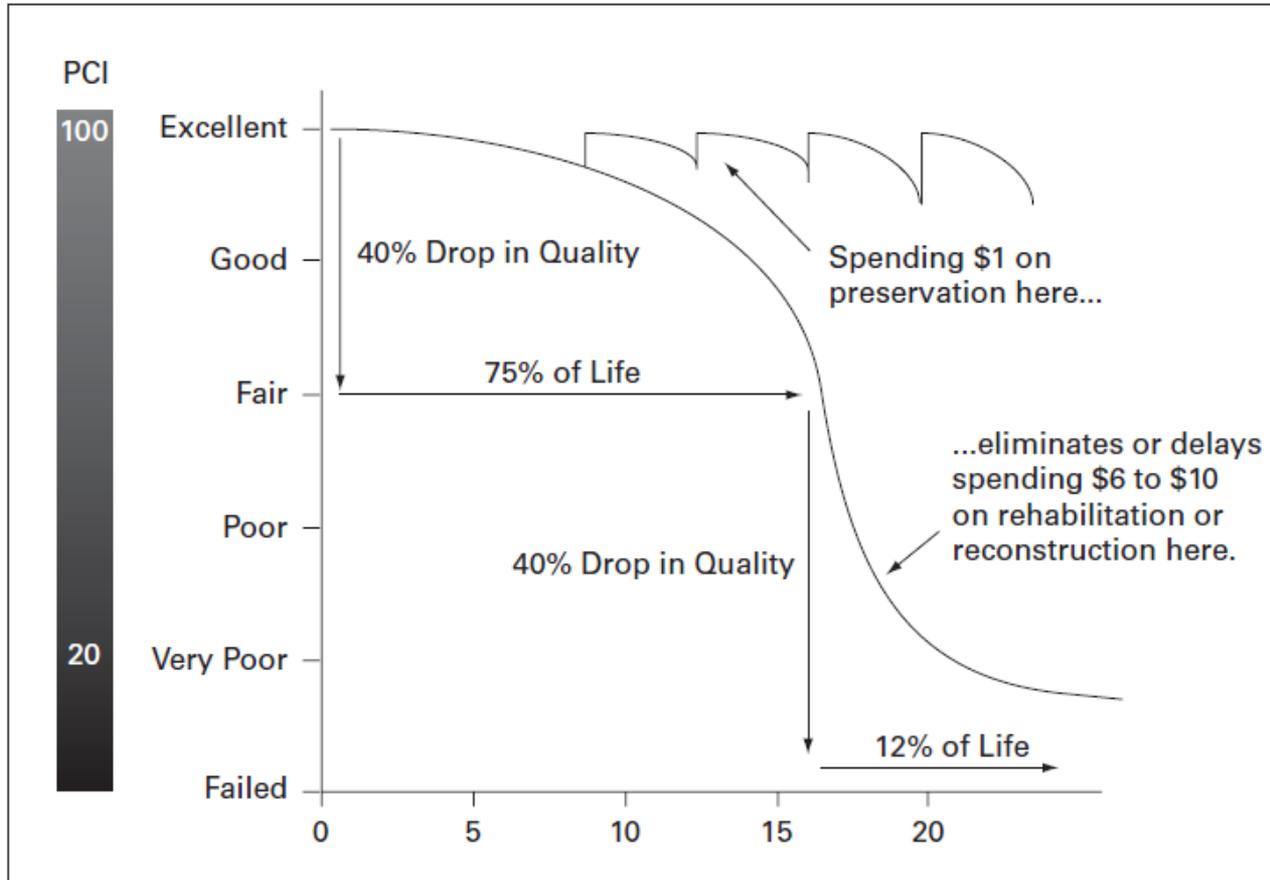
Note: Road lengths were confirmed by Gorrill Palmer in the field resulting in a new total mileage.

Results

Maintenance Status of Local Roads



Overview



Results

- 31% (10.6 mi) of local roads in ROUTINE or NO MAINTENANCE
- 42% (14.4 mi) in PREVENTATIVE
- 26% (9.0 mi) in REHABILITATE or RECONSTRUCT
- Decrease in RECONSTRUCT due to overlay or reconstruction work since 2010 (Bear Hill, Essex, Gellerson)

Results

- RSMS does not rank roads
- Roads with worst condition: Harvey St, Depot St, Spring St 2



Harvey



Depot



Spring 2

Treatment Alternatives

- Many options available specific for each maintenance status

Treatment Alternatives

Routine

- Patching
- Crack Seal



Treatment Alternatives

Preventative

- Sand Seal
- Chip Seal
- Drag Shim
- Thin Overlay
- Shim & Overlay/Mill & Fill
- Thick Overlay

Treatment Alternatives



Sand Seal



Chip Seal



Drag Shim



Thin Overlay – Skinny Mix

Treatment Alternatives

Rehabilitation

- Reclaim & revert to gravel
- Thick shim & overlay
- Reclaim & repave
- RAP Reclamation



Treatment Alternatives

Reconstruction

- Reclaim & revert to gravel
- Full reconstruction – remove existing gravel, replace and repave

Treatment Alternatives

- Cost Repair Options (Example)

Anderson Rd-1 [Paved] From: Dawes Rd To: Orchard Road (Length: 0.65mi., Width: 20.00ft.)

Surface Status: Preventive -4

	<u>Estimated Cost</u>
Sand Seal (L)	\$ 20,800
Chip Seal (Latex Modified) (L)	\$ 27,300
Drag Shim (3/4") (L)	\$ 39,000
Thin Overlay (3/4 - 1") (L)	\$ 51,350
Thick (>1") Overlay (L)	\$ 82,550
Shim & 1" Overlay (L)	\$ 82,550
Overlay w/ 2" Cold Mix, top w/ 1" HMA (L)	\$ 154,700
Mill & Fill 1.25" (L)	\$ 171,600

10 Year Paving Improvement Plan

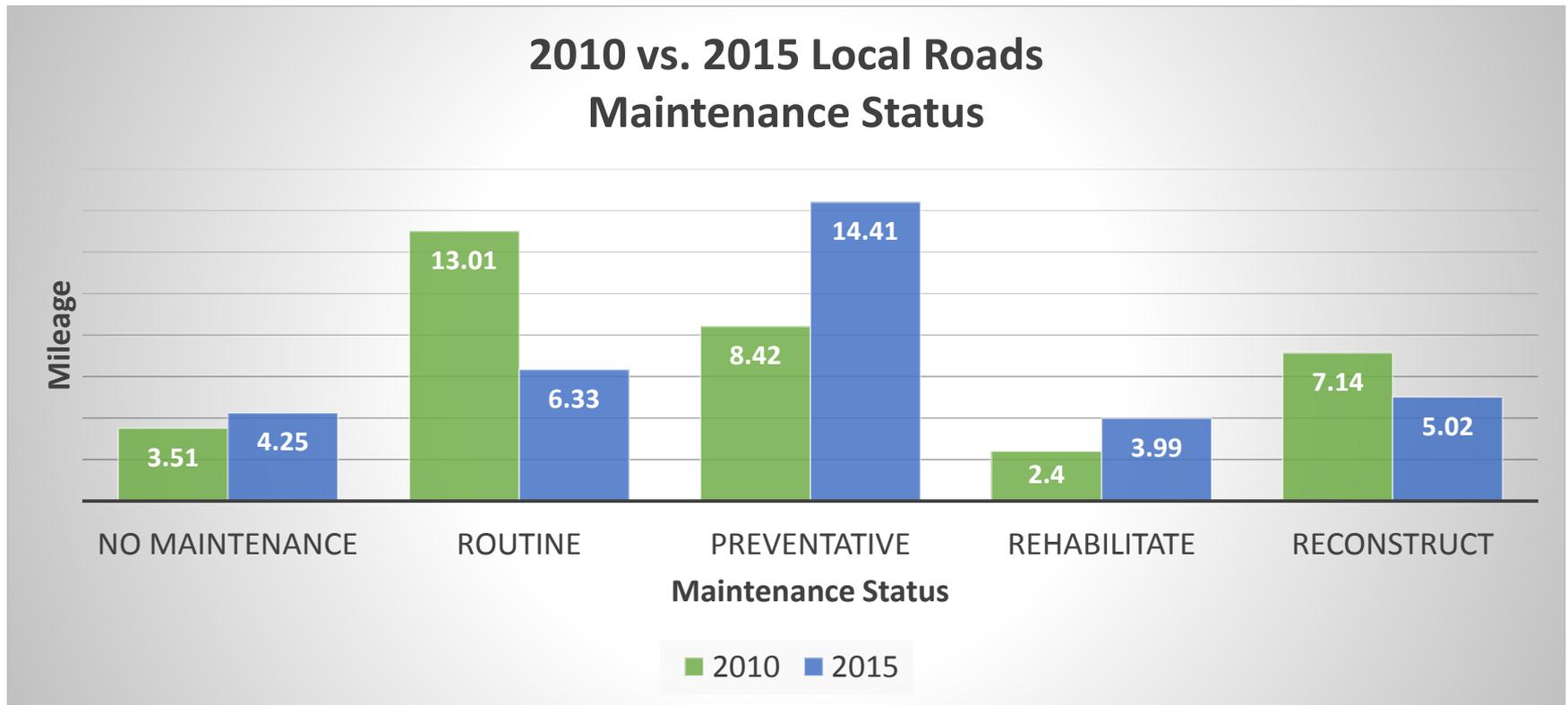
- Current \$100,000 annual paving budget inadequate to make progress
- \$400,000 annual budget will treat PREVENTATIVE roads in 3 years
- Bond or other funding source needed to adequately address REHABILITATE and RECONSTRUCT roads

10 Year Paving Improvement Plan

- Focus on 14.4 miles of PREVENTATIVE roads in first few years
- Important to treat PREVENTATIVE roads to prevent further decline
- Also address ROUTINE roads
- Begin work on REHABILITATE & RECONSTRUCT Roads towards middle and end of plan

Results

Maintenance Status of Local Roads



10 Year Paving Improvement Plan

2016

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Bear Hill Rd	11	Board Eddy Road	Norton Hill Road	0.70	Drag Shim (3/4")		44,100
Bear Hill Rd	12	Norton Hill Road	Pole 105 House1442	0.55	Drag Shim (3/4")		33,000
Bear Hill Rd	13	Pole 105 House1442	Pole 116 Hse. 1530	0.50	Drag Shim (3/4")		30,000
Bear Hill Rd	14	Pole 116 Hse 1530	Merrill Mills	0.25	Drag Shim (3/4")		15,750
Essex St	4	Cedar Street	Bridge	0.19	Mill & Fill 1.25"		71,201
Lincoln St	1	Essex Street	Fairview Ave	0.05	Drag Shim (3/4")		3,600
Lincoln St	4	Davis Street	North Street	0.40	Thin Overlay (3/4 - 1")		34,760
Range Rd	2	Pvmnt Change	Pole #26	0.90	Drag Shim (3/4")		56,700
Range Rd	3	Pole #26	1.5 Bog	0.50	Drag Shim (3/4")		33,000
Range Rd	4	1.5 Bog	East Dover Road	0.50	Drag Shim (3/4")		33,000
							355,111
Maintenance							
Bear Hill Rd	12	Norton Hill Road	Pole 105 House1442	0.55	Ditching		22,000
Bear Hill Rd	13	Pole 105 House1442	Pole 116 Hse. 1530	0.50	Grade Shoulders		12,000
Harvey St		Pleasant St.	Rt 7, South St	0.10		Maintenance	10,000
							44,000
Total	2016						\$399,111

10 Year Paving Improvement Plan

2017

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Anderson Rd	1	Dawes Rd	Orchard Road	0.65	Drag Shim (3/4")		37,700
Autumn Ave	2	Harrison Ave.	Morton Ave.	0.05	Sand Seal		2,080
Cherry St		Mechanic Street	North	0.13	Chip Seal (Latex Modified)		4,914
Court St	1	Lawrence	High St	0.10	Sand Seal		3,360
Court St	2	High Street	Pleasant St.	0.05	Sand Seal		1,680
Court St	3	Pleasant Street	East Main SR15	0.05	Sand Seal		2,000
Court St	4	East Main	River St	0.05	Sand Seal		1,600
Davis St	1	Summer St.	Pvmnt Change	0.18	Sand Seal		5,824
Deer View Ln		Park Street	Dead End	0.16	Drag Shim (3/4")		8,160
Hancock St		Park St.	Forest St.	0.25	Chip Seal (Latex Modified)		10,500
High St	1	South St.	Mayo Street	0.10	Thin Overlay (3/4 - 1")		7,900
High St	2	Mayo Street	Pleasant St.	0.23	Thin Overlay (3/4 - 1")		15,445
Lincoln St	3	1/10 old pavement	3/10 Davis Street	0.20	Drag Shim (3/4")		12,600
Monument Square		W Main	Moosehead Ln	0.02	Mill & Fill 1.25"		4,752
Morton Ave	2	Pvmnt Change	Town Office	0.17	Mill & Fill 1.25"		52,906
Norton Hill Rd	2	1.3 Start Pave	Vulner Road	0.50	Chip Seal (Latex Modified)		21,000
Norton Hill Rd	3	Vulner Road	End of Pavement	0.45	Chip Seal (Latex Modified)		17,955
Norton Hill Rd	4	Mile 2.7	Rt 15	0.30	Shim & 1" Overlay		36,195
Pleasant St	2	Court Street	Wiley St.	0.10	Mill & Fill 1.25"		36,960
Pleasant St	3	Wiley St.	East Main SR15	0.30	Mill & Fill 1.25"		102,960
							386,491
Maintenance							
Bear Hill Rd	08	House 843	J Raymond Pole 58	0.58	Crack Sealing		3,654
Bear Hill Rd	09	Raymond - Pole 58	Bryant Road	0.50	Crack Sealing		3,150
							6,804
Total	2017						\$393,295

10 Year Paving Improvement Plan

2018

Road/Section Name	#	From	To	Length	Recommended Repair	Other	Budget
Capital Improvements							
East Dover Rd	1	Doore Road	Range Road	1.20	Drag Shim (3/4")		68,400
Engdhall Dr		Rt 7	Dead End	0.42	Shim & 1" Overlay		64,008
Lilac Ln		Lincoln Street	Dead End	0.05	Drag Shim (3/4")		2,100
Park St	1	North Street	Sidewalk to Thayer	0.30	Sand Seal		13,920
Park St	2	Thayer, Sidewalk	Pleasant Meadows	0.40	Sand Seal		16,000
River St	2	Essex St.	Court St.	0.20	Sand Seal		5,440
River St	3	Court St.	Main St. SR15	0.30	Sand Seal		8,640
Shamrock Rd		Rt 15	End of Pavement	0.10	Sand Seal		2,880
Shaw Rd		Rt 7	Turns to dirt	0.80	Drag Shim (3/4")		45,600
Steadman's Landing Rd	2	Pole #13	House 418	1.00	Drag Shim (3/4")		60,000
Steadman's Landing Rd	3	House 418	Turns to dirt	0.25	Drag Shim (3/4")		14,250
Thayer Parkway		Park street	Dead End	0.33	Sand Seal		12,672
Union St		Summer St.	Lincoln St.	0.38	Sand Seal		12,768
Whittier St		North St.	Pole #2	0.10	Thin Overlay (3/4 - 1")		7,110
							333,788
Maintenance							
Anderson Rd	2	Orchard Rd	Town Line	1.65		Temporary Patching	15,000
Fairview Ave		Lincoln St	Summer St.	0.50	Crack Sealing		3,450
Foxcroft Center Rd	1	Foxcroft Estates	Steadman's Landing	0.70	Crack Sealing		4,410
Foxcroft Center Rd	2	Rt 16	Foxcroft Estates	0.70	Crack Sealing		4,200
Grove St	3	Pvmnt Change	Gravel	0.08		Temporary Patching	10,000
Shaw Rd		Rt 7	Turns to dirt	0.80	Grade Shoulders		19,200
Whittier St		North St.	Pole #2	0.10	Grade Shoulders		2,400
Winter St		North Street	West Main St.	0.20	Crack Sealing		1,920
							60,580
Total	2018						\$394,368

10 Year Paving Improvement Plan

2019

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Bear Hill Rd	03	A. Merrill Pole #8	Box 707	0.60	Reclaim (6-8" base), 2" Binder, 1.5" Surface HMA		246,330
Danforth St		Harrison Ave.	Morton Ave	0.06	Reclaim (6-8" base), 2" Binder, 1.5" Surface HMA		23,460
Grove St	1	East Main St.	Pleasant	0.05	Reclaim (6-8" base), 2" Binder, 1.5" Surface HMA		17,595
Sanford St		West Main Street	Dwelley	0.11	Reclaim (6-8" base), 2" Binder, 1.5" Surface HMA		38,709
							326,094
Maintenance							
Autumn Ave	1	Summer St.	Harrison Ave.	0.20	Crack Sealing		1,080
Autumn Ave	3	Morthon	North St.	0.18	Crack Sealing		1,188
Bear Hill Rd	05	House 722	House 766	0.20		Temporary Patching	5,000
East Dover Rd	3	Vaughn Road	Essex Street	0.45	Crack Sealing		2,700
Green St		West Main Street	Dead End	0.10	Crack Sealing		690
Mechanic St	1	Winter	Park	0.30	Crack Sealing		1,890
Mechanic St	2	Park	Whittier	0.15	Crack Sealing		855
Norton Hill Rd	1	Bear Bill	End of Pave 556	0.45	Crack Sealing		2,565
Paul St		Dwelley Ave	West Main St.	0.12	Crack Sealing		792
Pleasant St	1	Union Square	Court Street	0.20	Crack Sealing		1,980
Steadman's Landing Rd	1	Froxcroft Center R	Pole #13	1.00	Crack Sealing		5,700
							24,440
Future Overlays							
							50,000
Total	2019						\$400,534

10 Year Paving Improvement Plan

2020

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Bear Hill Rd	01	Top of Woodbury Hi	Rt 15 Dover Road	0.30	Reclaim (6-8" base), 2" Binder, 1.5" Surface HMA		211,140
Bear Hill Rd	02	.3 House 551	House 580 Pole #8	0.10	Reclaim (6-8" base), 2" Binder, 1.5" Surface HMA		41,055
Bear Hill Rd	10	Bryant Road	Board Eddy Road	0.40	Shim & 2" Overlay		110,880
							363,075
Maintenance							
Bear Hill Rd	04	House 707	.1 House 739	0.10	Grade Shoulders		2,400
Bear Hill Rd	07	House 773	House 843	0.32	Ditching		12,800
Bear Hill Rd	07	House 773	House 843	0.32		Temporary Patching	20,000
							35,200
Total	2020						\$398,275

10 Year Paving Improvement Plan

2021

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>	
Capital Improvements								
Starbird Siding Rd		Rt 7	Sangerville LineRd	0.72	Reclaim (6-8" base), 2" Binder, 1.5" Surface HMA		281,520	
							281,520	
Maintenance								
Dawes Rd	2	Anderson Road	Dirt	0.37		Temporary Patching	10,000	
Dwellely St		Sanford	Mechanic Street	0.50		Temporary Patching	10,000	
Essex St	1	Landfill Road	Pvmnt Change	0.18		Temporary Patching	10,000	
North Rd		Parsons Landing Rd	Town Line	0.30		Temporary Patching	10,000	
							40,000	
Future Overlays								
							80,000	
Total	2021							\$401,520

10 Year Paving Improvement Plan

2022

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Anderson Rd	2	Orchard Rd	Town Line	1.65	Shim & 2" Overlay		435,600
							<u>435,600</u>
Total							<u>\$435,600</u>

10 Year Paving Improvement Plan

2023

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
County St		Pleasant St.	East Main	0.10	18" Gravel, 2" Binder, 1" Surface HMA		61,740
Depot St		Union Street	349'	0.07	18" Gravel, 2" Binder, 1" Surface HMA		38,416
Oliver Hill Rd		Rt 7	Garland Line Road	0.29	18" Gravel, 2" Binder, 1" Surface HMA		208,887
							<u>309,043</u>
Maintenance							
Park St	3	Pleasant Meadows	Pvmnt Change	0.43		Temporary Patching	10,000
Parson's Landing Rd		Rt 16	North Road	0.75		Temporary Patching	20,000
							<u>30,000</u>
Future Overlays							
							<u>60,000</u>
Total	2023						<u>\$399,043</u>

10 Year Paving Improvement Plan

2024

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Bear Hill Rd	05	House 722	House 766	0.20	18" Gravel, 2" Binder, 1" Surface HMA		150,920
Bear Hill Rd	06	House 766	House 773	0.05	18" Gravel, 2" Binder, 1" Surface HMA		48,020
Cedar St		Vaughn Rd	Essex St.	0.20	18" Gravel, 2" Binder, 1" Surface HMA		130,340
Elm St		Essex St.	Vaughn Road	0.11	18" Gravel, 2" Binder, 1" Surface HMA		56,595
							385,875
Maintenance							
Forest St		Park Street	Dwelley	0.30		Temporary Patching	5,000
Grange St		West Main	Dead End	0.10		Temporary Patching	5,000
Spring St	2	Bridge by McKusick	Summer St.	0.04		Temporary Patching	5,000
							15,000
Total	2024						\$400,875

10 Year Paving Improvement Plan

2025

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Bear Hill Rd	07	House 773	House 843	0.32	18" Gravel, 2" Binder, 1" Surface HMA		241,472
Cotton Brook Rd		Greeley's Landing	Turns to dirt	0.20	18" Gravel, 2" Binder, 1" Surface HMA		130,340
							371,812
Future Overlays							
							30,000
Total	2025						\$401,812

10 Year Paving Improvement Plan

2026

<u>Road/Section Name</u>	<u>#</u>	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Recommended Repair</u>	<u>Other</u>	<u>Budget</u>
Capital Improvements							
Essex St	1	Landfill Road	Pvmnt Change	0.18	18" Gravel, 2" Binder, 1" Surface HMA		123,480
Gene Marden Field		Harrison Ave.	Town Office	0.07	18" Gravel, 2" Binder, 1" Surface HMA		43,218
Grange St		West Main	Dead End	0.10	18" Gravel, 2" Binder, 1" Surface HMA		72,030
Grove St	3	Pvmnt Change	Gravel	0.08	18" Gravel, 2" Binder, 1" Surface HMA		46,648
							<u>285,376</u>
Maintenance							
Mayo St	1	Penquis Hghr Ed	Court St	0.10		Temporary Patching	5,000
Railroad Ave		Lincoln St.	Turns to Dirt	0.10		Temporary Patching	5,000
Riverside Ave		West Main Street	Dead End	0.06		Temporary Patching	5,000
							<u>30,000</u>
Future Overlays							
							<u>80,000</u>
Total	2026						\$395,376

10 Year Paving Improvement Plan

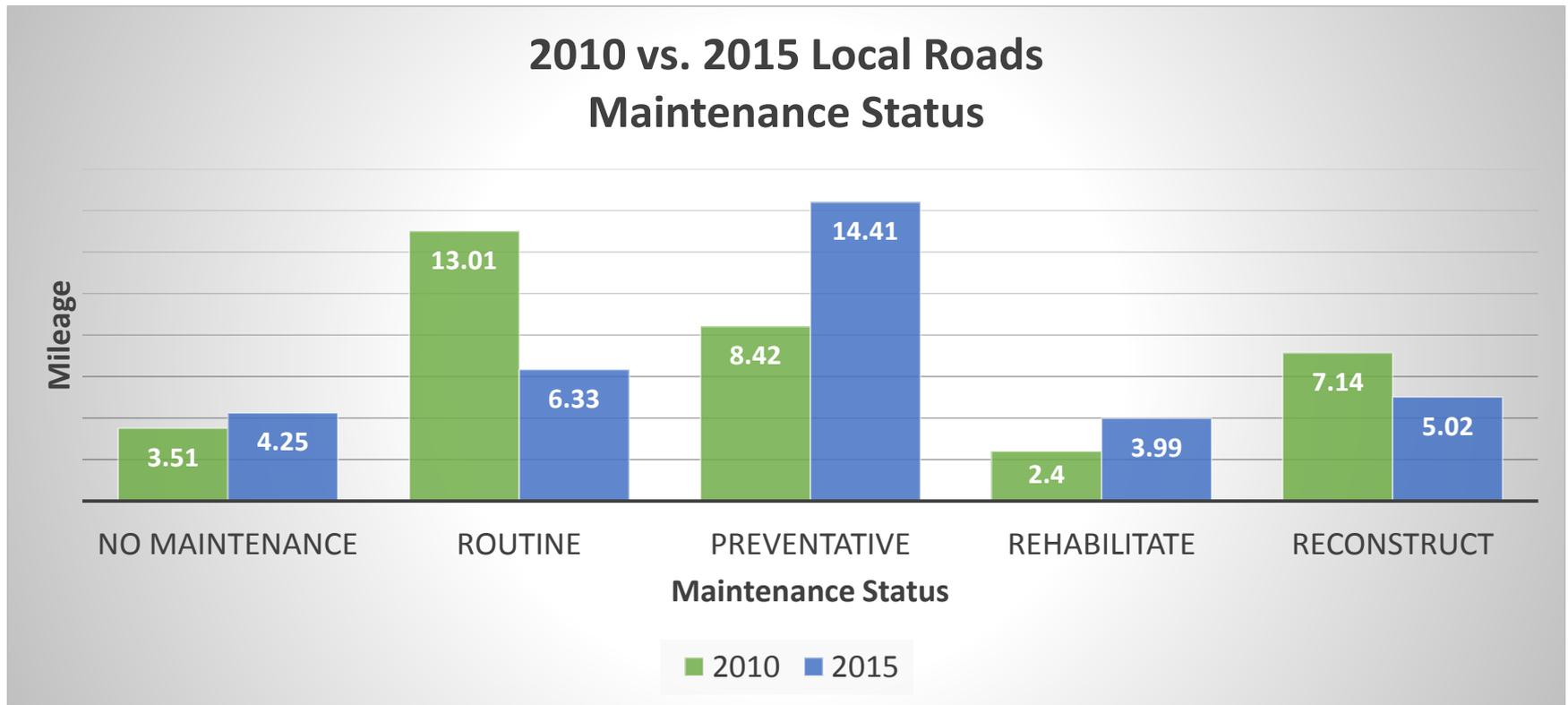
ROADS NOT INCLUDED IN 10 YEAR PAVING IMPROVEMENT PLAN

Reconstruct

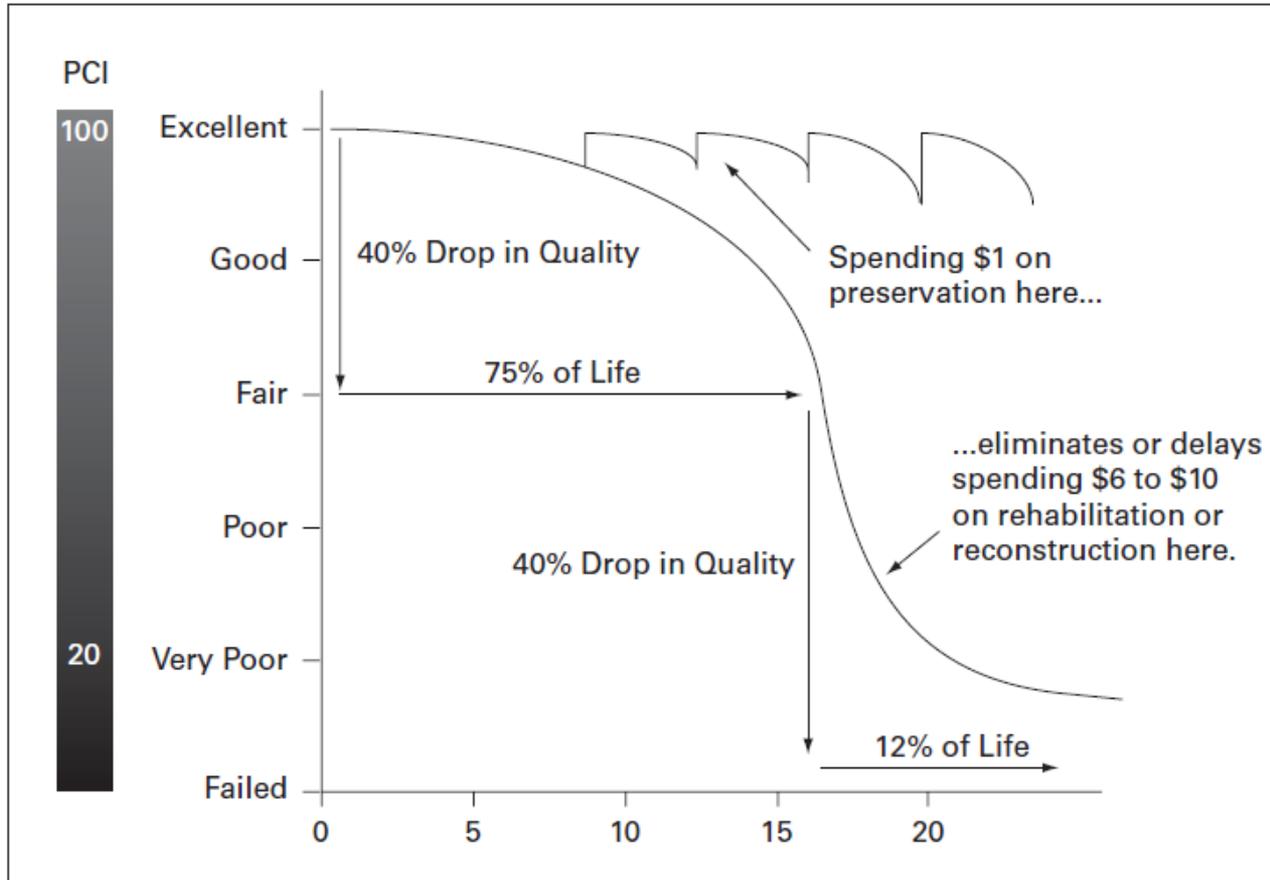
Road/Section	Section	From Road/Section	To Road/Section	Length	Division	Importance	Traffic	Drainage	Reclaim & Revert to Gravel	18" Gravel, 2" Binder, 1" Surface HMA	24" Gravel, 2" Binder, 2" Surface HMA
(4) Dawes Rd	2	Anderson Road	Dirt	0.37	PW	low-med	low-med	Poor	\$19,314	\$228,438	\$299,034
(4) Dwelley St		Sanford	Mechanic Street	0.50	PW	low-med	low-med	Good	\$30,450	\$360,150	\$471,450
(4) North Rd		Parsons Landing Rd	Town Line	0.30	PW	low-med	low-med	Good	\$18,270	\$216,090	\$282,870
(4) Park St	3	Pleasant Meadows	Pvmnt Change	0.43	PW	low-med	low-med	Poor	\$26,187	\$309,729	\$405,447
(4) Parson's Landing Rd		Rt 16	North Road	0.75	PW	low-med	low-med	Poor	\$47,850	\$565,950	\$740,850
(2) Forest St		Park Street	Dwelley	0.30	PW	low	low	Poor	\$17,400	\$205,800	\$269,400
(2) Harvey St		Pleasant St.	Rt 7, South St	0.10	PW	low	low	Poor	\$4,060	\$48,020	\$62,860
(2) Mayo St	1	Penquis Hghr Ed	Court St	0.10	PW	low	low	Good	\$6,380	\$75,460	\$98,780
(2) Railroad Ave		Lincoln St.	Turns to Dirt	0.10	PW	low	low	Poor	\$6,090	\$72,030	\$94,290
(2) Riverside Ave		West Main Street	Dead End	0.06	PW	low	low	Poor	\$2,088	\$24,696	\$32,328
(2) Spring St	2	Bridge by McKusick	Summer St.	0.04	PW	low	low	Poor	\$2,552	\$30,184	\$39,512
									\$180,641	\$2,136,547	\$2,796,821

Results

Maintenance Status of Local Roads



Overview



Impacts of Deferring Road Treatment (Continue to spend \$100,000/year)

- Table below shows the impact of deferring road treatments for 5 years – continue spending \$100,000/year for 5 years
- Over 3.5 miles of road drop to reconstruct category
- Over 15 miles of road drop into more expensive treatment categories

Maintenance Status of Local Roads

Maintenance Status	2015 Mileage	2020 Mileage*	% Change
No Maintenance	4.25	2.19	- 48%
Routine	6.33	9.52	+ 50%
Preventative	14.41	11.34	- 21%
Rehabilitate	3.99	2.38	- 40%
Reconstruct	5.02	8.56	+ 71%
Total	33.99	33.99	

*Estimated road mileage is based on the current town budget of \$100K (annually) for the next five (5) years.

Impacts of Deferring Road Treatment

- 2 Budget Options
- Option 1 - \$400,000/year for 10 years
- Option 2 - \$100,000/year for 5 years, then \$1,014,000/year for next 5 years
- Both options result in same total treatment at end of 10 years.
- Not deferring treatment, results in the lowest expenditure over the 10 year period (Option 1)

<u>Year</u>	<u>Option 1 Budget</u>	<u>Option 2 Budget</u>
2016	\$400,000	\$100,000
2017	\$400,000	\$100,000
2018	\$400,000	\$100,000
2019	\$400,000	\$100,000
2020	\$400,000	\$100,000
2021	\$400,000	\$1,014,000
2022	\$400,000	\$1,014,000
2023	\$400,000	\$1,014,000
2024	\$400,000	\$1,014,000
2025	\$400,000	\$1,014,000
Total:	\$4,000,000	\$5,570,000

Impacts of Deferring Road Treatment

- Cost of inaction -

Its \$1,570,000 cheaper over 10 years to start the plan now.

Questions

