

Long Term Roads Program Update Proposal

Presented By:

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Outline

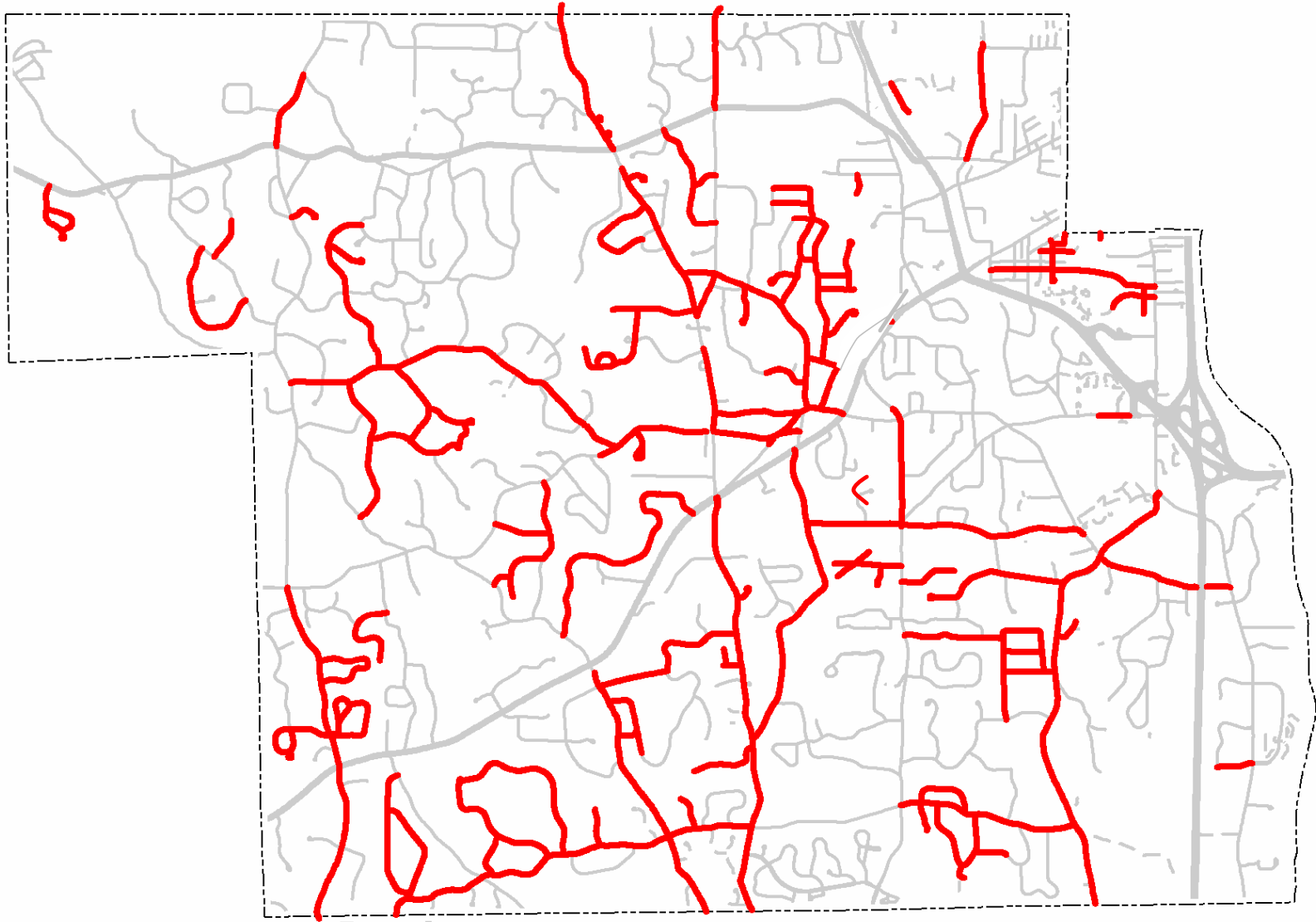
- Roads Program Background and Repair Strategy
- Current Conditions
- Project Selections and future outlook
- Tax Impact of Proposals

Program Background

- The Town Council requested a review of road conditions and authorized implementation of a Pavement Management System. A prioritized list of collector roads was created and repair strategy introduced.
- In 2003, the backlog of improvements was estimated at \$50,000,000. Given the extensive list of improvements needed, a long-term strategy was developed and funding mechanism using a combination of bonding and local appropriations established.
- Funding to date:

2003	\$8 million road bond
2005	\$12 million road bond
2003-2007	additional \$1 million/year Local Maintenance
- Completed 5th year of program with \$16 million of road bond spent and over 50 miles of roadway improved (rehabilitation, overlays and preventative maintenance)

2003-2007 ROADS PROGRAM

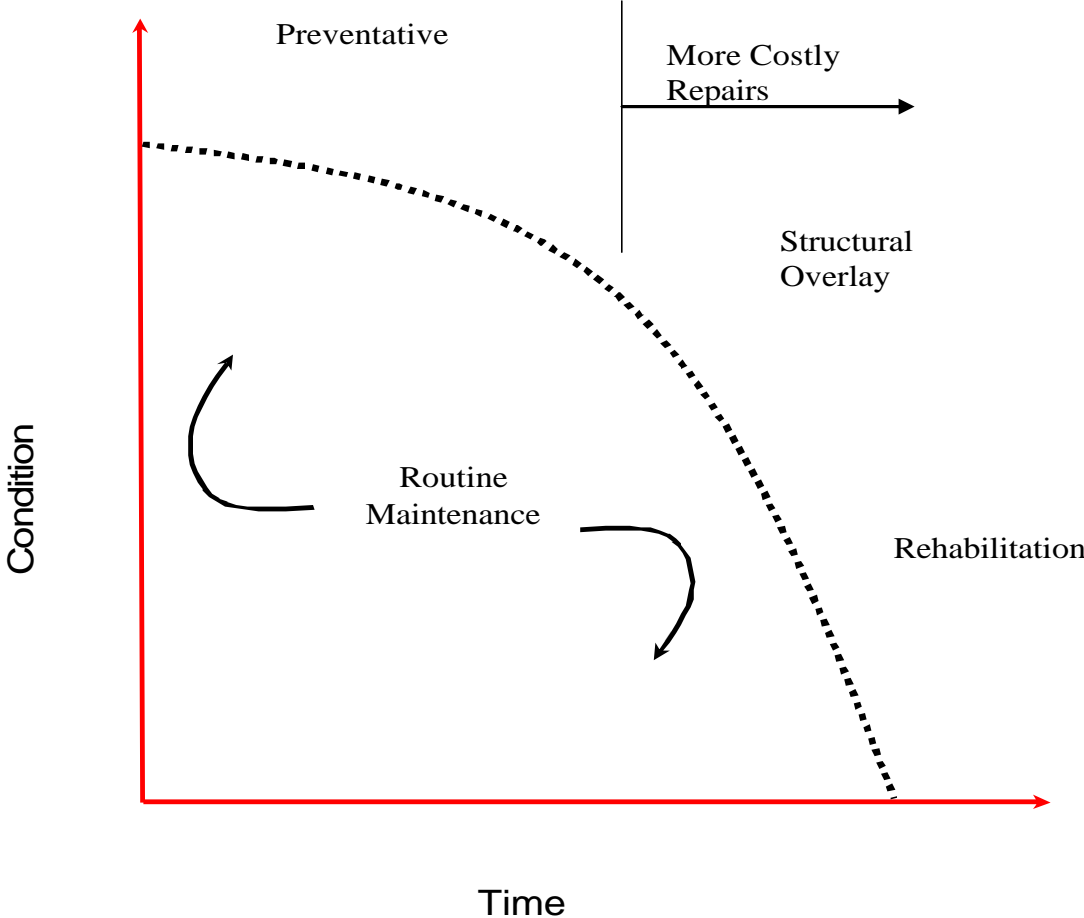


Repair Strategy

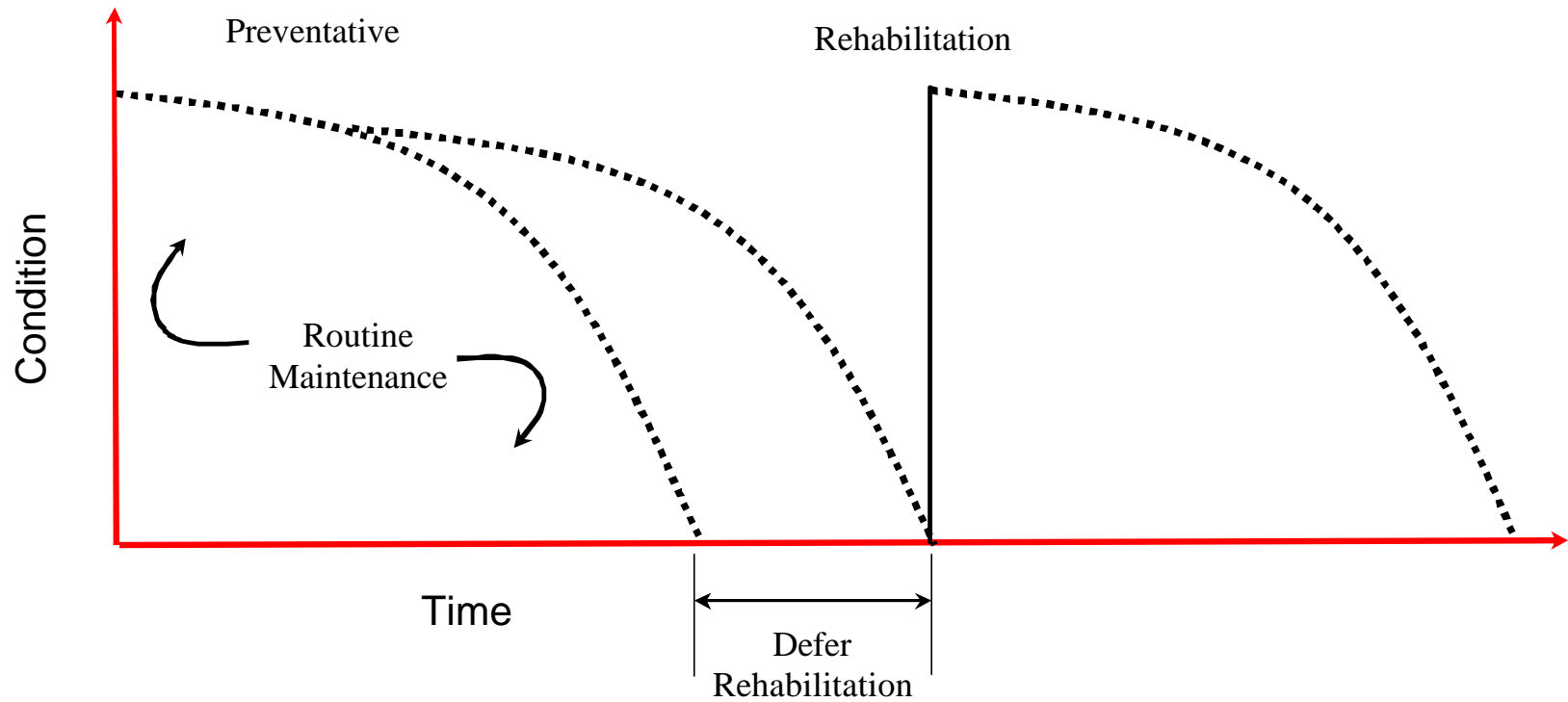
Program Goal - maximize limited funds by extending the life of each road - Long-Term approach

- Perform Preventive and Routine Maintenance (less \$ than rehabilitation) to maintain road condition
- Group collector roads into single project – improve local roads in vicinity of larger projects
- Rehabilitation rather than full reconstruction for collector roads. Local Roads receive reclaim and/or overlay
- Implement safety improvements/enhancements
- Coordinate projects with proposed developments

Typical Deterioration Curve



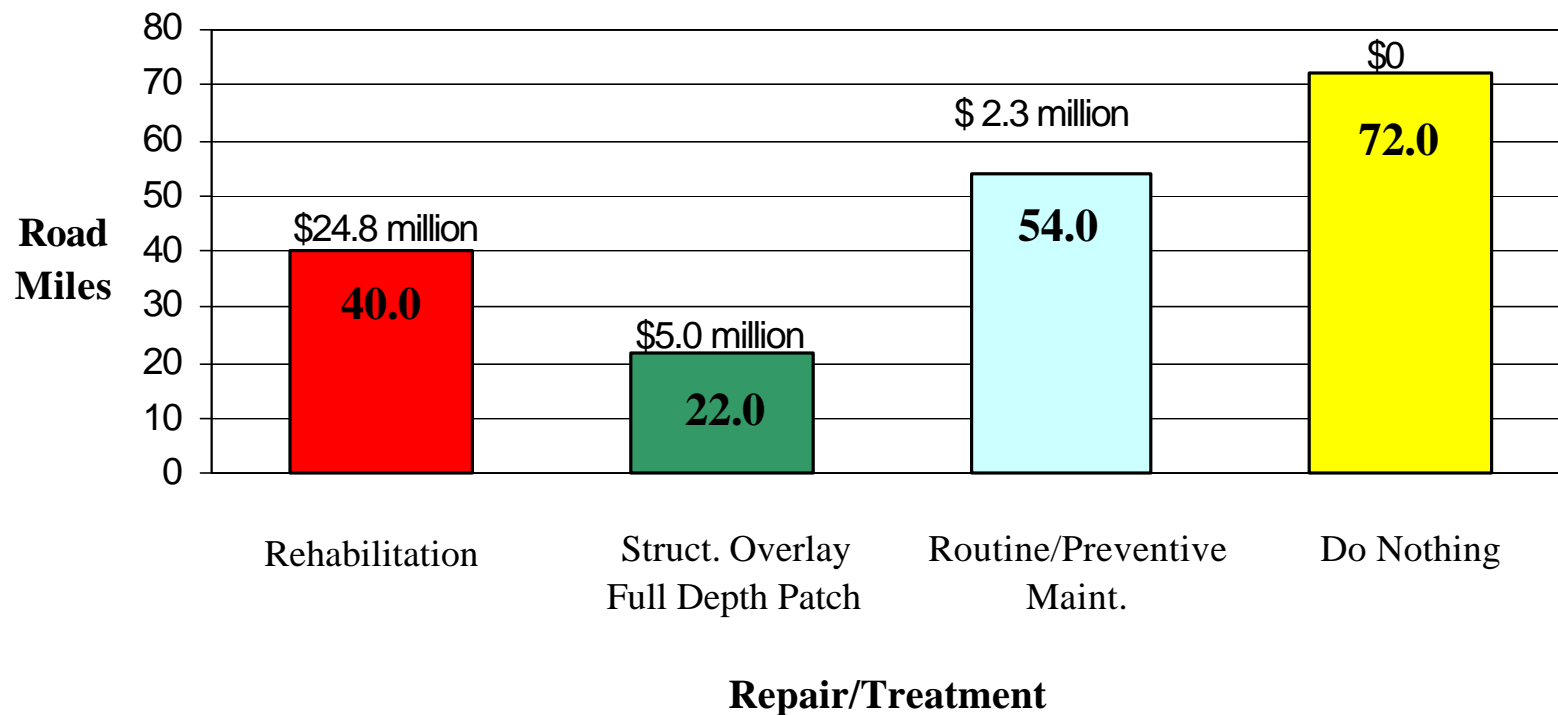
Deterioration Curve – Life Extended with Preventative Maintenance



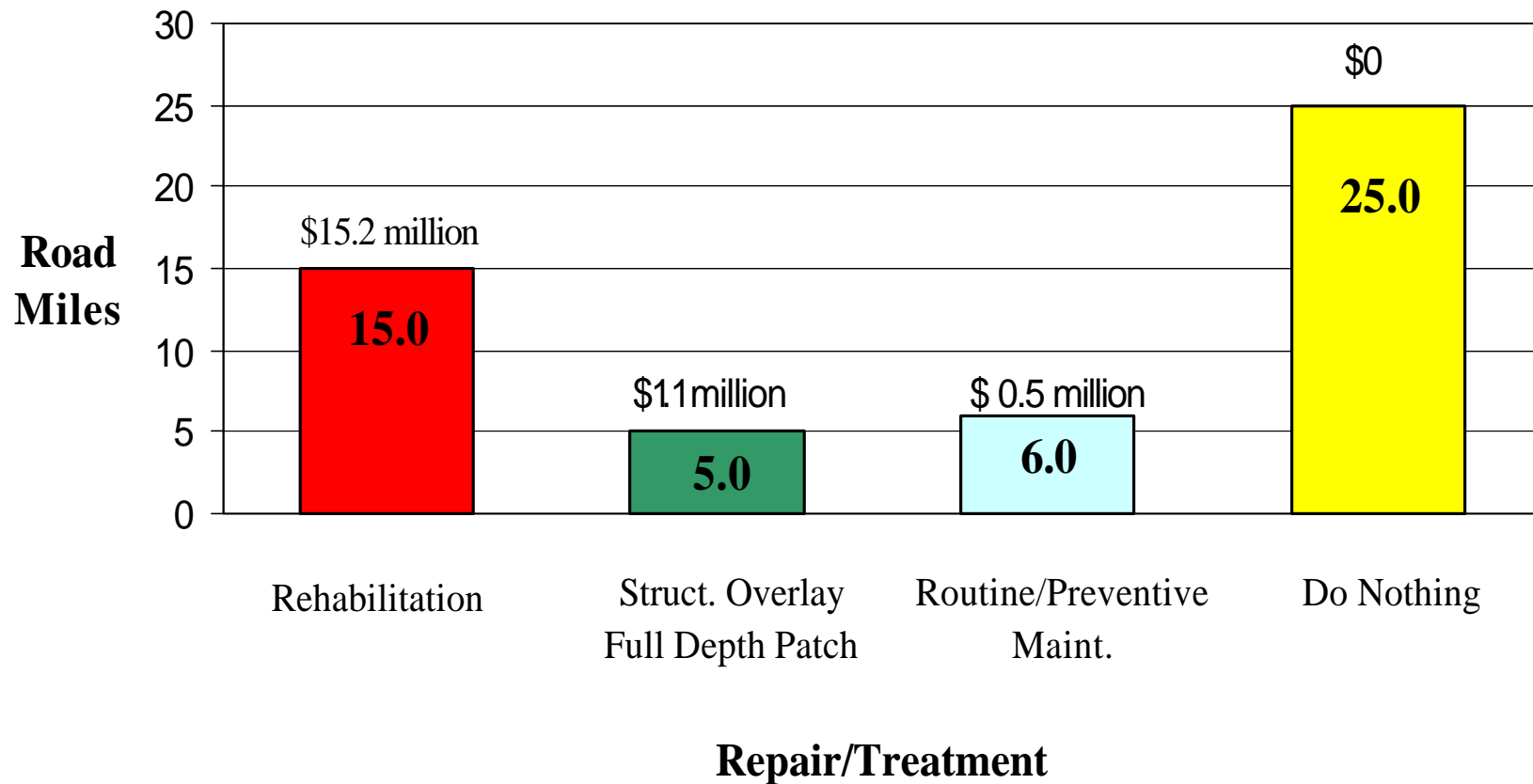
Current Conditions

- Total Backlog in *today's dollars* is **\$32,100,000**
- \$16.3 million in collector road – major improvements and
- \$13.5 million in local road improvements
- Another \$2.3 million is needed for routine/preventative maintenance

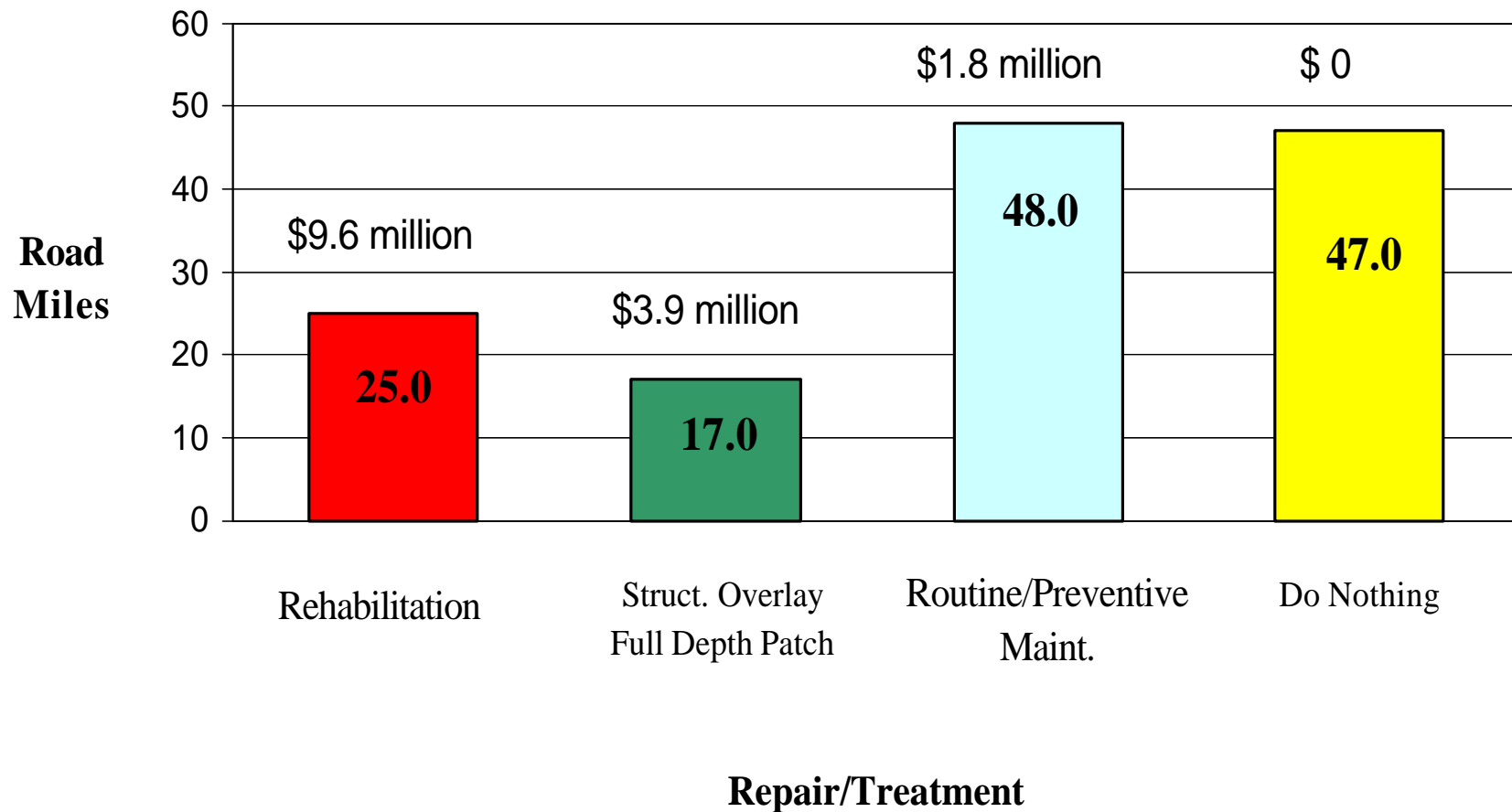
Distribution of Repairs Necessary (Combined)



Distribution of Repairs Necessary (Collector Roads)



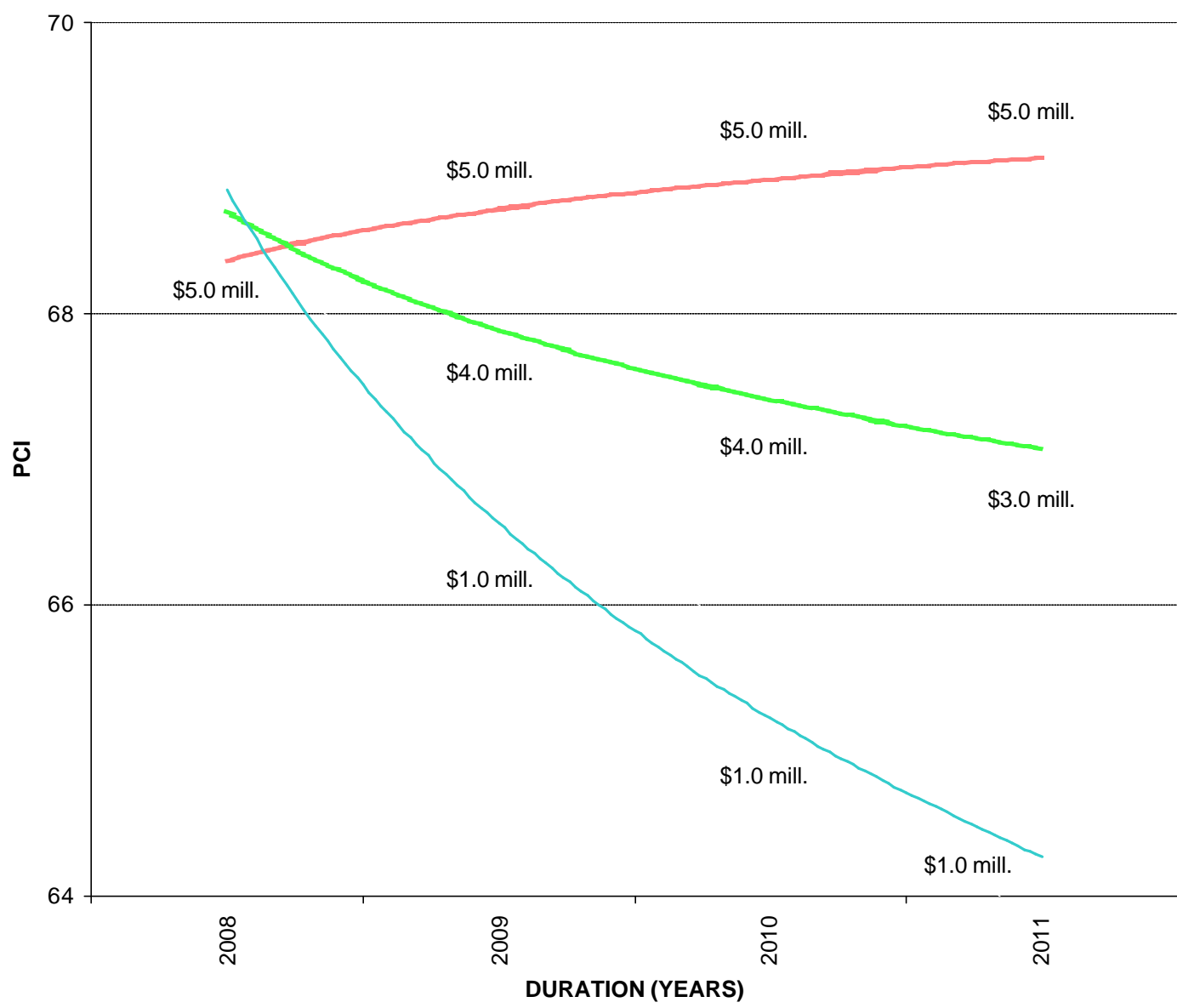
Distribution of Repairs Necessary (Local Roads)



Project Selection

- Available funding scenarios are reviewed and analyzed. Funding sources include: Road Bond, Local Appropriations and available developer funds.
- A list of projects is then generated within the Pavement Management System based on Benefit Value (BV) analysis for the various funding scenarios. Collector roads have the highest BV and therefore the plan focuses on these more heavily traveled roads.
- As the future funding process continues, a recommended three-year tentative plan is put together. On a yearly basis, as an actual budget is defined, an update for the upcoming construction season is finalized. This update factors in actual road conditions and impacts such as proposed developments.
- Local Roads are included within the collector road projects – these roads are selected based on proximity to larger projects and available funds once the project bids have been completed and the asphalt costs are known. The actual list may change throughout the construction season based on other maintenance obligations, however we are typically able to improve several local roads within a given neighborhood.

3 YEAR FUTURE NETWORK CONDITION Funding Scenarios



3 YEAR FUNDING TOTALS

\$12,000,000 Bond
\$3,000,000 Local

\$8,000,000 Bond
\$3,000,000 Local

\$0 Bond
\$3,000,000 Local

Tentative Proposed Road Work 2009

<u>Road Name</u>	<u>Location</u>	<u>PCI</u>	<u>Alternative</u>	<u>Total Cost</u>
Joppa Hill Road	N. Amherst Rd. to King Rd.	50	Base Rehabilitation	\$1,900,000
King Road	Joppa Hill Rd. to New Boston Rd.	40	Base Rehabilitation	\$1,300,000
Cider Mill Road ¹	McIntosh Rd. to end of Cul de Sac	48	Reclaim and Overlay	<u>\$400,000</u>
			Subtotal FY 09	\$3,600,000
			Contingency	<u>\$360,000</u>
			Total for 09	<u>\$3,960,000</u>
1. Cider Mill Rd is classified as a Local Road however can be treated as collector given that it is a feeder to the other local roads within the neighborhood				

Tentative Proposed Road Work 2010

<u>Road Name</u>	<u>Location</u>	<u>PCI</u>	<u>Alternative</u>	<u>Total Cost</u>
Perry Road	N. Amherst Rd. to Joppa Hill Rd.	55	Base Rehabilitation	\$940,000
South River Road	Various Sections between Back River Rd. and Manchester T.L.	42 (ave.)	Base Rehabilitation and Struct. Overlay	\$1,450,000
Liberty Hill Road	N. of Meetinghouse Rd. to Rt 101	56	Base Rehabilitation	\$600,000
Constitution Drive	Route 101 around to end	50	Structural Overlay	\$560,000
			Subtotal FY 10	\$3,550,000
			Contingency	\$355,000
			Total for 2010	<u>\$3,905,000</u>

Updated 1-9-08

Tentative Proposed Road Work 2011

<u>Road Name</u>	<u>Location</u>	<u>PCI</u>	<u>Alternative</u>	<u>Total Cost</u>
Boynton Street	Route 101 to Manchester T.L.	45	Base Rehabilitation	\$1,100,000
Wayside Drive	Palomino Rd. to Boynton St.	64	Structural Overlay	\$160,000
Holbrook Road	Old Bedford Rd. to New Boston Rd.	70	Structural Overlay	\$250,000
Wallace Road	N. Amherst Rd. to New Boston Rd. (includes section of N. Amherst Rd. at Riddle Brook Bridge)	46	Base Rehab/Struct Overlay	\$2,250,000
			Subtotal FY 11	\$3,760,000
			Contingency	\$376,000
			Total for 2011	<u>\$4,136,000</u>

Updated 1-9-08

Town of Bedford				
Debt Service Schedule				
Estimate Tax Rate Impact for July 2009 Issue for Continued Road Reconstruction				
	Amount			
Issue Amt:	\$ 12,000,000			
Payback Period:	10 years			
Est. Interest Rate:	4.95%			
		Tax Rate Impact of	Tax Rate Impact of	Combined Tax Rate Impact
Year	Annual Debt	New Debt	Current Debt	
2010	1,794,000	0.58	0.78	1.35
2011	1,734,600	0.56	0.75	1.31
2012	1,675,200	0.54	0.73	1.27
2013	1,615,800	0.52	0.71	1.23
2014	1,556,400	0.50	0.43	0.93
2015	1,497,000	0.48	0.42	0.90
2016	1,437,600	0.46	0.40	0.86
2017	1,378,200	0.44	-	0.44
2018	1,318,800	0.42	-	0.42
2019	1,259,400	0.40	-	0.40
				<i>prepared 1/2/08</i>

TAX RATE IMPACT FOR BONDING

April 2003 Bond Issue (\$8 million) and July 2006 Bond Issue (\$12 million) & Proposed July 2009 Bond Issue (\$12 million)

Aggregate Proposed General Obligation Bonds

April 2003 Issue (2.98% NIC) - July 2006 Issue (3.87% NIC) - July 2009 Issue (4.95% NIC estimate)

Period Ending	July 2006		July 2009		Combined Principal	Combined Interest	Total Debt Service	Aggregate Annual Impact	Tax Year
	\$8 mil Principal	\$8 mil Interest	\$12 mil Principal	\$12 mil Interest					
1/1/2008				213,000		-	213,000	213,000	
4/15/2008	800,000	72,400				800,000	72,400	872,400	
7/1/2008			1,200,000	213,000		1,200,000	213,000	1,413,000	
10/15/2008		62,000				-	62,000	62,000	0.821
1/1/2009				190,500		-	190,500	190,500	
4/15/2009	800,000	62,000				800,000	62,000	862,000	
7/1/2009			1,200,000	190,500		1,200,000	190,500	1,390,500	
10/15/2009		51,000				-	51,000	51,000	0.800
1/1/2010				168,000		297,000	465,000	465,000	
4/15/2010	800,000	51,000				800,000	51,000	851,000	
7/1/2010			1,200,000	168,000	1,200,000	297,000	2,400,000	2,865,000	
10/15/2010		39,000				-	39,000	39,000	1.354
1/1/2011				144,000		267,300	411,300	411,300	
4/15/2011	800,000	39,000				800,000	39,000	839,000	
7/1/2011			1,200,000	144,000	1,200,000	267,300	2,400,000	2,811,300	
10/15/2011		26,000				-	26,000	26,000	1.311
1/1/2012				120,000		237,600	357,600	357,600	
4/15/2012	800,000	26,000				800,000	26,000	826,000	
7/1/2012			1,200,000	120,000	1,200,000	237,600	2,400,000	2,757,600	
10/15/2012		13,000				-	13,000	13,000	1.269
1/1/2013				96,000		207,900	303,900	303,900	
4/15/2013	800,000	13,000				800,000	13,000	813,000	
7/1/2013			1,200,000	96,000	1,200,000	207,900	2,400,000	2,703,900	
10/15/2013						-	-	-	1.226
1/1/2014				72,000		178,200	250,200	250,200	
4/15/2014						-	-	-	
7/1/2014			1,200,000	72,000	1,200,000	178,200	2,400,000	2,650,200	
10/15/2014						-	-	-	0.931
1/1/2015				48,000		148,500	196,500	196,500	
4/15/2015						-	-	-	
7/1/2015			1,200,000	48,000	1,200,000	148,500	2,400,000	2,596,500	
10/15/2015						-	-	-	0.896
1/1/2016				24,000		118,800	142,800	142,800	
4/15/2016						-	-	-	
7/1/2016			1,200,000	24,000	1,200,000	118,800	2,400,000	2,542,800	0.862
1/1/2017						89,100	89,100	89,100	
7/1/2017					1,200,000	89,100	1,200,000	1,289,100	0.442
1/1/2018						59,400	59,400	59,400	
7/1/2018					1,200,000	59,400	1,200,000	1,259,400	0.423
1/1/2019						29,700	29,700	29,700	
7/1/2019					1,200,000	29,700	1,200,000	1,229,700	0.404
Totals	\$ 8,000,000	\$ 1,314,000	\$ 12,000,000	\$ 2,661,250	\$ 12,000,000	\$ 3,267,000	\$ 32,000,000	\$ 7,242,250	\$ 39,242,250

Comments and Questions

