

Pavement Management Program - Background

Started in 1996

Funding Sources

- State funded Chapter 90
- Capital Budget appropriation

Several Uses

- Road Reconstruction
- Maintenance
 - Cracksealing
 - Patching
- Design
- Police Details
- Leverage for federally funded projects

Pavement Management Program – Construction Process

Plant Oversight

- Personnel verifies mix design

Field Inspection

- Staff verifies compliance with all paving requirements
 - Mix temperature
 - Tack coat
 - Joint sealing

Contractor Accountability

- Gas gate / water gate
- Cold joint
- Final loaming and seeding
- Clean-up

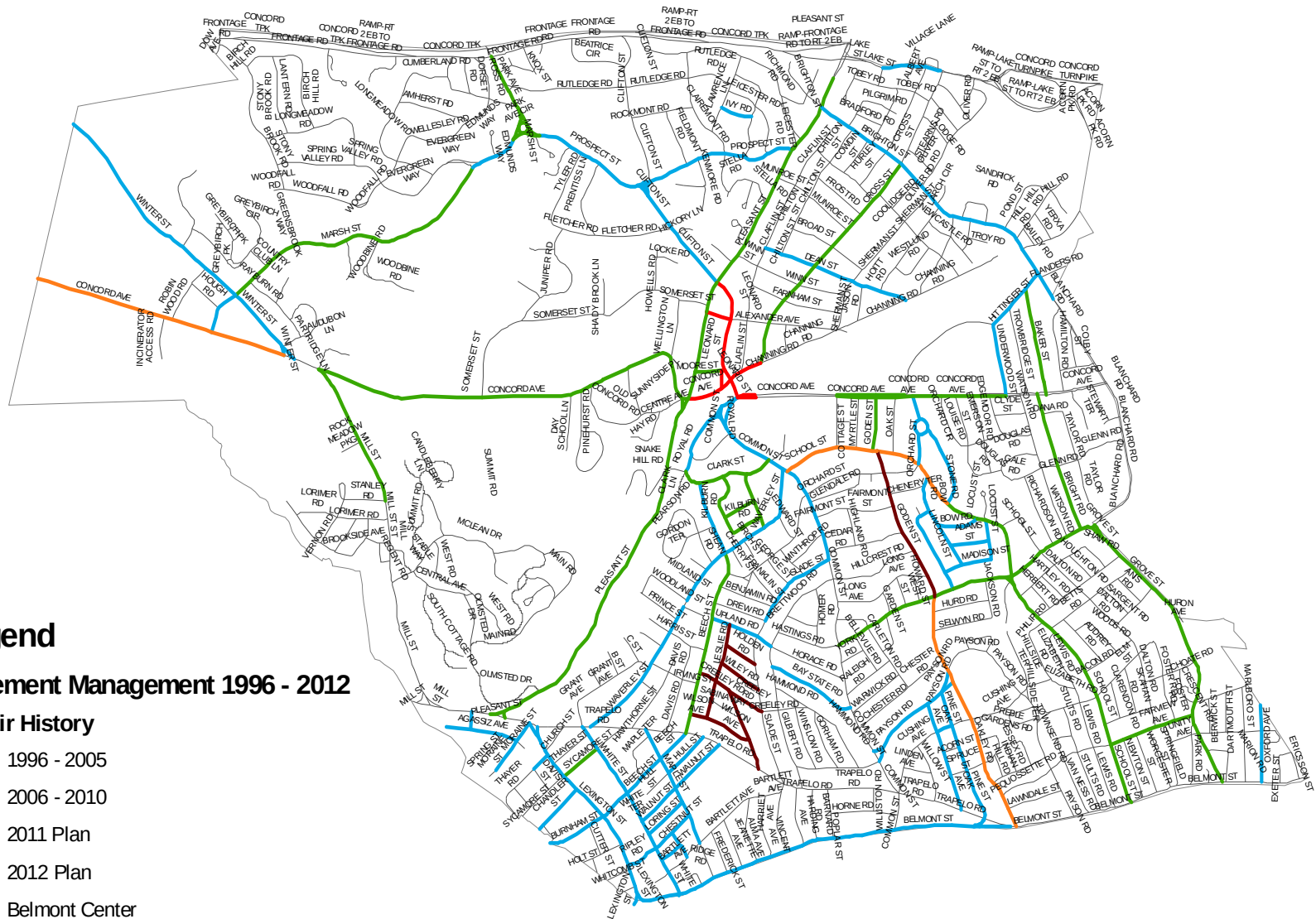
Pavement Management Program History

Legend

Pavement Management 1996 - 2012

Repair History

- 1996 - 2005
- 2006 - 2010
- 2011 Plan
- 2012 Plan
- Belmont Center



25 Year Funding Plan

Complete Arterial / Collector Roads by FY 13 (excluding Belmont Center)

Local Roads – Reclaim Mill/Overlay Combination FY 11 – FY 36

Inflation Factor = 3.934%								
	Budget with 2.5%	Federal project	Cracksealing	Design,	Arterials &			
<u>Year</u>	<u>annual increase</u>	<u>seed money</u>	<u>& patching</u>	<u>survey</u> <u>& details</u>	<u>collectors</u>	<u>Local roads</u>	<u>Total</u> <u>expenditures</u>	
FY11	1,693.3	100.0	108.0	169.1	924.2	355.0	1,656.3	
FY12	1,531.8	103.9	112.3	171.6	224.0	920.1	1,531.8	
FY13	1,560.1	108.0	116.7	174.2	346.3	814.9	1,560.1	
FY14	1,589.1	112.3	121.3	176.8	0.0	1,178.7	1,589.1	
FY15	1,618.8	116.7	126.1	179.5	0.0	1,196.6	1,618.8	
FY16	1,649.3	121.3	131.0	182.2	545.8	669.0	1,649.3	
FY17	1,680.5	126.1	136.2	185.0	567.2	666.1	1,680.5	
FY18	1,712.6	131.0	141.5	187.8	589.5	662.7	1,712.6	
FY19	1,745.4	136.2	147.1	190.7	612.7	658.7	1,745.4	
FY20	1,779.0	141.5	152.9	193.6	636.8	654.1	1,779.0	
FY21	1,813.5		158.9	215.8	661.9	776.9	1,813.5	
FY22	1,848.8		165.1	219.6	687.9	776.1	1,848.8	
FY23	1,885.0		171.6	223.5	715.0	774.9	1,885.0	
FY24	1,922.2		178.4	227.4	743.1	773.2	1,922.2	
FY25	1,960.2		185.4	231.5	772.4	771.0	1,960.2	
FY26	1,999.2		192.7	235.6	802.7	768.1	1,999.2	
FY27	2,039.2		200.3	239.9	834.3	764.7	2,039.2	
FY28	2,080.2		208.2	244.2	867.1	760.7	2,080.2	
FY29	2,122.2		216.3	248.6	901.3	756.0	2,122.2	
FY30	2,165.2		224.9	253.1	936.7	750.6	2,165.2	
FY31	2,209.4		233.7	257.7	973.6	744.4	2,209.4	
FY32	2,254.6		242.9	262.4	1,011.9	737.4	2,254.6	
FY33	2,301.0		252.5	267.2	1,051.7	729.6	2,301.0	
FY34	2,348.5		262.4	272.1	1,093.0	721.0	2,348.5	
FY35	2,397.2		272.7	277.1	1,136.0	711.3	2,397.2	
FY36	2,447.1		283.4	282.2	1,180.7	700.7	2,447.1	
SUM	50,353.5	1,196.9	4,742.4	5,768.5	18,815.9	19,792.7	50,316.4	
NPV of Art Coll								
road expenditures:	1,460.2							
Art Coll								
estimate (in FY 11 \$):	1,460.2							
NPV of local								
road expenditures:	12,848.6							
Local road								
Select reclaim & m/o								
estimate (in FY 11 \$):	12,685.7							

Pavement Management Program FY 11 – FY 15 Draft Five Year Plan (excluding Belmont Center)

Name	From	To	Class	Length	PCI	Est Cost	
2011							
OAKLEY RD	CUSHING AVE	WASHINGTON ST	Local Road	1709	39	\$186,896	
OAKLEY RD	BELMONT ST	CUSHING AVE	Local Road	1537	49	\$168,111	
SCHOOL ST	STONE RD	TEMPLE ST	Minor Collector 1	897	49	\$94,314	
SCHOOL ST	COMMON ST	OAK ST	Minor Collector 1	1583	61	\$142,717	
SCHOOL ST	OAK ST	STONE RD	Minor Collector 1	1033	73	\$93,072	
CONCORD AVE	MARSH ST	ROBIN WOOD RD	Major Collector	593	50	\$96,143	
CONCORD AVE	ROBIN WOOD RD	LEXINGTON TOWN LIN	Major Collector	1984	56	\$321,884	
CONCORD AVE	WINTER ST	MARSH ST	Major Collector	1077	70	\$176,092	
Total							\$1,279,230
Name	From	To	Class	Length	PCI	Est Cost	
2012							
WILSON AVE	BEECH ST	FLETT RD	Local Road	898	50	\$98,207	
FLETT RD	TRAPELO RD	CREELEY RD	Local Road	1102	47	\$120,517	
FRANCIS ST	CREELEY RD	WILSON AVE	Local Road	492	29	\$55,958	
CREELEY RD	BEECH ST	SLADE ST	Local Road	1019	34	\$115,897	
LESLIE RD	CREELEY RD	UPLAND RD	Local Road	747	50	\$84,961	
WILEY RD	LESLIE RD	SLADE ST	Local Road	620	49	\$70,516	
HOLDEN RD	SLADE ST	LESLIE RD	Local Road	484	49	\$55,048	
SABINA WAY	FLETT RD	FRANCIS ST	Local Road	370	64	\$36,071	
GODEN ST	SCHOOL ST	WASHINGTON ST	Minor Collector 2	2048	43	\$223,953	
Additonal Local Roads						\$282,925	
Total							\$1,144,053

Pavement Management Program FY 11 – FY 15 Draft Five Year Plan (excluding Belmont Center)

Name	From	To	Class	Length	PCI	Est Cost	
2013							
IRVING ST	BEECH ST	WAVERLEY ST	Local Road	706	54	\$77,086	
DAVIS RD	TRAPELO RD	IRVING ST	Local Road	700	47	\$76,431	
HAWTHORNE ST	TRAPELO RD	CUL-DE-SAC	Local Road	852	49	\$96,903	
CAMBRIDGE ST	WAVERLEY ST	HAWTHORNE ST	Local Road	283	30	\$20,600	
WHITE ST	TRAPELO RD	GRANT AVE	Local Road	346	50	\$44,075	
GRANT AVE	WHITE ST	C ST	Local Road	990	36	\$112,599	
C STREET	GRANT AVE	TOWN PROPERTY	Local Road	369	49	\$38,611	
SYCAMORE ST	WHITE ST	TRAPELO RD	Minor Collector 2	442	41	\$46,250	
CONCORD AVE (E.B.)	COTTAGE ST	POST OFFICE	Arterials	1200	65	\$150,000	
CONCORD AVE (W.B.)	COTTAGE ST	POST OFFICE	Arterials	1200	66	\$150,000	
Additional Local Roads						\$348,602	
Total							\$1,161,157
Name	From	To	Class	Length	PCI	Est Cost	
2014							
CUSHING AVE	PINE ST	PAYSON RD	Local Road	1096	47	\$119,270	
CUSHING AVE	LINDEN AVE	OAK AVENUE	Local Road	565	50	\$66,831	
TOWNSEND RD	PAYSON RD (N)	PAYSON RD (S)	Local Road	864	51	\$102,199	
ELM ST	SCHOOL ST	PAYSON RD	Local Road	958	31	\$145,047	
HILLSIDE TERR	PAYSON RD	PRIVATE LAND	Local Road	949	58	\$107,763	
PAYSON RD	OAKLEY RD	CUSHING AVE	Local Road	1420	48	\$208,277	
PAYSON TER	PAYSON RD (E)	PAYSON RD (W)	Local Road	667	38	\$53,650	
Additional Local Roads						\$375,663	
Total							\$1,178,700

