

**Town of Westborough
Road Management System
Executive Summary
FY12**

Purpose

To develop a prioritized rating system based on the functional classification of roads, road type and road condition and to estimate costs to maintain the Town's infrastructure at current costs over a five year planning period.

Background

Beginning in 2009 the Town Manager and DPW Manager worked to develop a complete listing of roads, functional classification of roads (as per MA DOT) and the road surface. In 2010, the Town Manager and DPW Manager inspected the road condition of every road in the community and rated these roads on the factors listed below. Through this analysis, the roads were rated and estimated costs and estimated life expectancy based on surface type was reviewed and an estimated annual budget required to maintain (not improve) roads in Town was developed. In the attached summary spreadsheet roads are listed in order of condition with the worse roads in town (and first to receive maintenance) listed first.

Rating Process

Functional Classification of Roads (MA DOT Standard)

- Class 5 = Urban minor arterial or rural major collector
- Class 6 = Urban collector or rural minor collector
- Class 0 = Local

Surface Type

- Surface Type 6 = Bituminous Pavement
- Surface Type 5 = Stone or Sand Sealed
- Surface Type 2 = Gravel

Criteria

The criteria to be reviewed on each road for the road program include:

1. Year Road was paved – If a road was paved within the past five years, it's possible for the road to be rated a 9 and above. If a road has been paved over five years ago and less than ten years ago, it's possible for the road to be rated up to a 9. If a road has been paved over 10 years ago and less than 15 years ago, it's possible for a road to be rated up to an 8. The actual road rating will depend on the other factors below affecting road condition.

2. Crack-Sealed – Has the road been crack-sealed to fill any cracks to prevent potholes. If so, has it been effective, does it provide a smooth surface for drivers? If so, add +1 to road surface rating. If not, subtract -1 to road surface rating if crack-sealing is needed but has not been undertaken.
3. “Rideability” – Does the road surface provide a smooth ride for vehicles? If so, add +2 for road surface rating. If not, subtract -1 to road surface rating.
4. Utility work – Has the road had utility work, has it been repaired or repaved? If not, subtract -1 from the road surface rating.
5. Quality of drainage – Is there substantial standing water during rain storms or does the road flood? If not, add +1 to road surface rating, if so, subtract -1 from road surface rating.
6. Cracking – Is the road in excellent condition with no cracking? If so, add +2; with minimal cracking +1; with additional cracking that does not effect rideability +.5. If there is severe cracking, rough riding surface and potholes, subtract -2; if there are some potholes and ride is somewhat rough subtract -1.
7. Roadside Deterioration – If the sides of the road are in good condition add +1. If the roadsides are deteriorating and there are sections missing, subtract -1.
8. Road Classification – If the road is a Class 5 and considered in excellent condition, add +1, if it is in poor condition, subtract -1. If the road is a Class 6 and in excellent condition add +.75, if it is in poor condition, subtract -.75. If the road is a Class 0 road in excellent condition, add +.5, and if it is in poor condition, subtract -.5.
9. Safety – If there are no safety concerns (adequate guardrail, lines of sight, etc.) add +1, if not subtract -1.
10. Snow Plowing – If the road is not rutted from traffic, add +1 if it is subtract -1.

As a general guideline, persons conducting the rating can give partial credit in increments of .25; .50 and .75.

Additionally, in developing the five-year road program, the following scale is used to determine the need for any particular road surface (by type of road):

0.0 – 3.0 Road condition is unacceptable, immediate work should commence to correct all problems.

3.1 – 4.0 Road condition is unacceptable for Functional Classification 5, Surface Type 5 and 6 roads; work should commence within five years to correct all problems. Road conditions may be acceptable for Functional Classification 6 or 0 and Surface Type 2 or 5 roads.

4.1 – 5.0 Road condition is acceptable, but has certain problems that need to be addressed for Functional Classification 5, Surface Type 5 or 6 roads (i.e. drainage or a section may need to be repaved), good for Functional Classification 6, Surface Type 5 and very good for Functional Classification 0, Surface Type 2 roads.

5.1 – 7.0 Road condition is average for Function Classification 5, Surface Type 5 or 6 roads, very good for Functional Classification 6 or 0, Surface Type 5 or 6 and excellent for Surface Type 2 roads.

7.1 – 8.5 Road condition is very good for Functional Classification 5, Surface Type 5 or 6 roads and excellent for Functional Classification 6 or 0 Surface Type 6, 5, or 2 roads.

8.6 – 10.0 Road condition is excellent for Functional Classification 5, 6 or 0 and Surface Type 5, 6 and 2 roads, resulting from recent improvements.

Summary of Town Roads

The Massachusetts DOT defines the functional classification of roads as follows¹:

Collectors

These roadways provide an intra regional level of mobility, connecting the arterial network with the local roadways. In rural municipalities with no arterial roadways, these roadways can provide the highest mobility. There are two subcategories for this type of roadway:

- **Major Collectors:** These roadways provide service to any areas of the state not serviced by arterials and service land use of a regional importance such as schools, parks, and smaller scale retail use. Vehicular speeds vary between 25 M.P.H. in urban areas to as high as 55 M.P.H in rural hinterlands. In many rural municipalities, these roadways travel through many town centers.
- **Minor Collectors:** These roadways collect traffic from the local roadway network and distribute them to the major collector or arterial system. In addition, these roadways provide service to smaller municipalities and link to important small scale land use serving the local community. Vehicular speed limits range between 25 M.P.H in the urban areas to as high as 50 M.P.H. in the rural hinterlands.

¹ FHWA Functional Classification Guidelines, Concepts, Definitions, and System Characteristics, US Department of Transportation, Federal Highway Administration, 2000. 2006 Massachusetts Highway Department Project Development & Design Guide, Executive Office of Transportation, Massachusetts Highway Department, 2006

Local Roadways

These roadways provide the lowest level of mobility by accessing adjacent land use, serving local trip purposes, and connecting to higher order roadways. Vehicular speed limits range between 15 M.P.H. in urban centers to 40 M.P.H. in the rural hinterlands.

Using the MA DOT standards, the following are statistics on Town roads:

<u>Type</u>	<u>Miles</u>
Local Gravel Roads	1.186
Local Stone Sealed Roads	40.119
Local Paved (bituminous)	26.344
Urban Collector/Rural Minor Collector Stone Sealed	7.392
Urban Collector/Rural Minor Collector Paved	1.120
Urban Minor Collector/Rural Major Collector Stone Sealed	14.685
Urban Minor Collector/Rural Major Collector Paved	4.030

The summary of surface types:

<u>Surface</u>	<u>Miles</u>
Gravel	1.186
Stone Sealed	62.196
Paved	31.494

As with many communities, Westborough seeks to be “walkable” with sidewalks for commuting around town and to generally promote a healthy community. Town staff has developed a “sidewalk map” which shows where sidewalks exist throughout town and will be developing a plan to link areas with additional sidewalks, however at this time, no additional sidewalks are being recommended. The following is a summary of how many miles of roadways there are with sidewalks on one side of the street, both sides of the street and how many miles where there are no sidewalks:

<u>Sidewalks</u>	<u>Miles</u>
1 Side	27.160
Both Sides	14.564
No Sidewalks	53.152

Using the rating system discussed above, the overall condition of the Town’s roads are as follows:

<u>Road Condition</u>	<u>Miles</u>
Unacceptable	5.395
Acceptable	7.869
Average	4.090
Very Good	26.417
Excellent	50.885

Five Year Plan

Using the analysis of town road conditions, life expectancy and current amounts budgeted the following roads are planned to be re-paved and/or stone-sealed based on the road's present road surface.

FY12

Summer Street Extension
 Glen Street
 Adams Street
 Gilmore Road
 Washington Street
 Walkup Street
 Baxter Street
 Belknap Street
 Franklin Avenue
 Gary Circle
 Hopkinton Road
 Mayberry Drive
 Bowman Street
 Juniper Circle
 King Grant Road
 Robinson Place
 Chestnut Street
 Woodman Avenue
 Breen Road
 Bridle Lane
 Park Street
 Underwood Court
 Valley Brook Road
 Bellows Road
 Bowman Lane
 Meadow Road
 Gleason Street
 Cedar Street
 Heath Street

John Street
Kimball Road
Ruggles Pond Road
Smith Street
Walker Street
Warren Street
Baylor Avenue
Canfield Street
Endicott Street
Old Flanders Road
Denny Street

FY13

Lee Ann Circle
ONeil Drive
Ruggles Street
West End Avenue
West Street
Forrest Lane
High Street
High Street Extension
Holmes Street
Main Street Rotary
Rogers Road
State Street
Upton Road
Water Street
Willow Street
Bickford Lane

FY14

Butterfield Drive
Chamberlain Court
Chauncy Circle
Chauncy Street
Cook Street
Fisher Street
Garfield Drive
Kay Street
Mill Road
Oak Street
Reed Avenue
Rocklawn Road

Roy Street
Sleigh Lane
Whippletree Lane
Byard Lane
David Way
Fisher Street
Flanders Lane
Flanders Road

FY15

Flanders Road
Grant Street
Haskell Street
Long Drive
Myrtle Street
Sampson Drive
Shepard Road
Smith Parkway
Spring Road
Uhlman Drive
Arch Street
Fairview Circle Road
Fairview Court
Fairview Road
Indian Pond Road
Beach Street
Beachmont Street
Boardman Street
Cottage Street
Doherty Road
Edmund Brigham Way
Elm Street
Fay Street
Green Street
Grove Street
Lawton's Way

FY16

Maple Avenue
Mount Pleasant Street
Orchard Street
Parkman Street
Pine Street

Pinecrest Drive
Spruce Street
Stevens Road
Storey Road
Wayside Road
Weld Street
West Main Street

It **must** be noted that the streets listed above are based on the overall ratings for these roads under their existing condition and funds available. The variables that will affect the Town's ability to maintain the infrastructure include:

1. The rate that a road may deteriorate – based on traffic patterns and road base, some roads will deteriorate at a faster rate than others, this rating system needs to be reviewed and analyzed on an annual basis. Based upon this, some roads that are not on the list currently may move up and others may drop off.
2. Funding – Using the current cost to stone seal and re-pave with bituminous pavement (asphalt) and a useful life expectancy of 12 years for the average paved road and 6 years for the average stone sealed road, the Town needs to be spending \$1,077,033 on an annual basis for the roads in town to be maintained before the useful life expectancy of the road expires. Currently, the Town receives \$632,000 from the State in Chapter 90 funds for roads. The Town budgets another \$106,689 for road maintenance/materials leaving the Town *short* of meeting this funding level by \$338,344. Not funding road maintenance adequately will result in long-term road conditions being unacceptable and replacement cost of roads to be higher if the roads need to be completely reconstructed.
3. Whether the Town chooses to upgrade or widen roads will add to expense, but may be necessary based on heavier traffic or road conditions.

Summary

Overall, the Town's roads are in relatively good condition through the efforts of the Public Works Department. However, without a systematic maintenance schedule that maintains roads on a rotating schedule based on the road conditions and adequate funding, the roads in Town will continue to deteriorate faster than they are maintained. Chapter 90 has been level funded (with minor variations up/down) for many years and has not been substantively adjusted for inflation related to paving (petroleum) costs which have doubled in the past decade. It is imperative that the Town either increase local funding for road maintenance or support all efforts to increase Chapter 90 funding at the State level.

Attached is a condensed summary spreadsheet of the rating of each road in Town, width, length, etc. and the cost for maintaining each road with its present surface and the additional cost to pave each road in town.

FY12

[illegible]

Road Management System Summary
FY12

						Left	Right													
		Functional	Surface	Surface	Sidewalk	Sidewalk	Section	Cumulative		Est		Tons for	Sq Yds for	Total	Annual Avg	If Paved,	If Paved,	Annual Avg	If Paved,	Road
Street Name	From St - To St	Classification	Width	Type	Width	Width	Length	Length	Total	Life	Sq Ft	this Section	this Section	Cost	Cost	Volume	Cost	Cost	Rating	
ENDICOTT STREET	BAYLOR AVENUE - DEAD END	0	22	5			0.16	0.16	5.75	6	18,586		2,065	3,614	602	347	39,904	3,325	5.75	
OLD FLANDERS ROAD	FLANDERS ROAD - FRUIT STREET	0	18	5			0.11	0.34	5.75	6	10,835		1,204	2,107	351	202	23,262	1,939	5.75	
OLD FLANDERS ROAD		0	16	5			0.23		5.75	6	19,092		2,121	3,712	619	356	40,993	3,416	5.75	
DENNY STREET	RUGGLES STREET - SOUTH STREET	0	17	6			0.18	0.18	6.00	12	16,157	302		34,689	2,891	302	34,689	2,891	6.00	
LEE ANN CIRCLE	SPRING ROAD - CUL DE SAC	0	30	6		5	0.13	0.13	6.00	12	20,592	384		44,212	3,684	384	44,212	3,684	6.00	
ONEIL DRIVE	WEST MAIN STREET - HARVEY LANE	0	26	5			0.39	0.51	6.00	6	53,402		5,934	10,384	1,731	997	114,657	9,555	6.00	
ONEIL DRIVE		0	19	5			0.12		6.00	6	12,139		1,349	2,360	393	227	26,062	2,172	6.00	
RUGGLES STREET	WEST MAIN STREET - UPTON TOWN LINE	0	28	5	4	6	0.53	2.72	6.00	6	78,355		8,706	15,236	2,539	1,463	168,233	14,019	6.00	
RUGGLES STREET		0	21	5			1.36		6.00	6	150,797		16,755	29,322	4,887	2,815	323,768	26,981	6.00	
RUGGLES STREET		0	21	6		4	0.10		6.00	12	11,088	207		23,806	1,984	207	23,806	1,984	6.00	
RUGGLES STREET		0	21	6			0.73		6.00	12	80,942	1,511		173,787	14,482	1,511	173,787	14,482	6.00	
WEST END AVENUE	ONEIL DRIVE - WEST MAIN STREET	0	29	5			0.21	0.21	6.00	6	32,155		3,573	6,252	1,042	600	69,039	5,753	6.00	
WEST STREET	FISHER STREET - WEST MAIN STREET	0	22	5		5	0.18	0.49	6.00	6	20,909		2,323	4,066	678	390	44,892	3,741	6.00	
WEST STREET		0	22	5	4	4	0.31		6.00	6	36,010		4,001	7,002	1,167	672	77,314	6,443	6.00	
FORREST LANE	ROGERS ROAD - CUL DE SAC	0	20	6			0.09	0.09	6.25	12	9,504	177		20,406	1,700	177	20,406	1,700	6.25	
HIGH STREET	WATER STREET - EAST MAIN STREET	0	28	5		4	0.17	0.28	6.25	6	25,133		2,793	4,887	814	469	53,961	4,497	6.25	
HIGH STREET		0	28	5	5	5	0.11		6.25	6	16,262		1,807	3,162	527	304	34,916	2,910	6.25	
HIGH STREET EXTENSION	WATER STREET - SUMMER STREET EXTENSION	0	20	5			0.16	0.20	6.25	6	16,896		1,877	3,285	548	315	36,277	3,023	6.25	
HIGH STREET EXTENSION		0	20	5		4	0.04		6.25	6	4,224		469	821	137	79	9,069	756	6.25	
HOLMES STREET	STATE STREET - DEAD END	0	19	5		4	0.06	0.06	6.25	6	6,019		669	1,170	195	112	12,924	1,077	6.25	
HOLMES STREET	WATER STREET - DEAD END	0	18	5	5		0.05	0.05	6.25	6	4,752		528	924	154	89	10,203	850	6.25	
MAIN STREET ROTARY	MILK STREET - MILK STREET	5	18	6			0.04	0.08	6.25	12	3,802	71		8,162	680	71	8,162	680	6.25	
MAIN STREET ROTARY		5	18	6			0.01		6.25	12	950	18		2,041	170	18	2,041	170	6.25	
MAIN STREET ROTARY		5	18	6			0.03		6.25	12	2,851	53		6,122	510	53	6,122	510	6.25	
ROGERS ROAD	EAST MAIN STREET - DEAD END	0	26	6			0.30	0.30	6.25	12	41,184	769		88,424	7,369	769	88,424	7,369	6.25	
STATE STREET	HIGH STREET - EAST MAIN STREET	0	20	5	4	4	0.09	0.14	6.25	6	9,504		1,056	1,848	308	177	20,406	1,700	6.25	
STATE STREET		0	20	5			0.05		6.25	6	5,280		587	1,027	171	99	11,336	945	6.25	
UPTON ROAD	HOPKINTON ROAD - UPTON TOWN LINE	5	23	5			2.26	2.26	6.25	6	274,454		30,495	53,366	8,894	5,124	589,267	49,106	6.25	
WATER STREET	HIGH STREET EXTENSION - EAST MAIN STREET	0	25	5	4	4	0.12	0.33	6.25	6	15,840		1,760	3,080	513	296	34,009	2,834	6.25	
WATER STREET		0	25	5	4		0.21		6.25	6	27,720		3,080	5,390	898	518	59,516	4,960	6.25	
WATER STREET	ORCHARD STREET - HIGH STREET	0	23	5		4	0.16	0.16	6.25	6	19,430		2,159	3,778	630	363	41,718	3,477	6.25	
WILLOW STREET	EAST MAIN STREET - WATER STREET	0	23	5		5	0.17	0.17	6.50	6	20,645		2,294	4,014	669	385	44,325	3,694	6.50	
BICKFORD LANE	CHAUNCY CIRCLE - DEAD END	0	23	6			0.08	0.08	6.75	12	9,715	181		20,859	1,738	181	20,859	1,738	6.75	
BUTTERFIELD DRIVE	CONNECTOR ROAD - BUTTERFIELD DRIVE	0	26	6	5		0.47	0.47	6.75	12	63,972	1,194		137,352	11,446	1,194	137,352	11,446	6.75	
CHAMBERLAIN COURT	BUTTERFIELD DRIVE - Cul-de-sac	0	26	6		5	0.09	0.09	6.75	12	12,904	241		27,706	2,309	241	27,706	2,309	6.75	
CHAUNCY CIRCLE	CHAUNCY STREET - OAK STREET	0	19	5			0.20	0.20	6.75	6	20,064		2,229	3,901	650	375	43,078	3,590	6.75	
CHAUNCY STREET	LYMAN STREET - OAK STREET	0	18	5			0.51	0.51	6.75	6	48,470		5,386	9,425	1,571	905	104,068	8,672	6.75	
COOK STREET	RUGGLES STREET - LONG DRIVE	0	24	6		5	0.50	0.50	6.75	12	63,107	1,178		135,493	11,291	1,178	135,493	11,291	6.75	
FISHER STREET		6	20	5			1.24		6.75	6	130,838		14,538	25,441	4,240	2,443	280,917	23,410	6.75	
GARFIELD DRIVE	RUGGLES STREET - CUL DE SAC	0	30	6		5	0.29	0.29	6.75	12	45,936	858		98,627	8,219	858	98,627	8,219	6.75	
KAY STREET	ADAMS STREET - WEST MAIN STREET	0	24	5	5	5	0.37	0.37	6.75	6	46,886		5,210	9,117	1,519	875	100,667	8,389	6.75	
MILL ROAD	FISHER STREET - WEST MAIN STREET	6	19	5			0.87	0.87	6.75	6	87,278		9,698	16,971	2,828	1,629	187,391	15,616	6.75	
OAK STREET	CHAUNCY CIRCLE - MILK STREET	0	18	5			0.36	1.26	6.75	6	34,595		3,844	6,727	1,121	646	74,276	6,190	6.75	
REED AVENUE	LONG DRIVE - Cul-de-sac	0	24	6	5		0.18	0.18	6.75	12	22,303	416		47,885	3,990	416	47,885	3,990	6.75	
ROCKLAWN ROAD	BUTTERFIELD DRIVE - Cul-de-sac	0	26	6	5		0.17	0.17	6.75	12	22,788	425		48,928	4,077	425	48,928	4,077	6.75	
ROY STREET	REED AVENUE - Cul-de-sac	0	24	6	5		0.10	0.10	6.75	12	12,799	239		27,479	2,290	239	27,479	2,290	6.75	
SLEIGH LANE	GARFIELD DRIVE - CUL DE SAC	0	30	6	5		0.13	0.13	6.75	12	20,592	384		44,212	3,684	384	44,212	3,684	6.75	
WHIPPLETREE LANE	FISHER STREET - CUL DE SAC	0	30	6		5	0.10	0.10	6.75	12	15,840	296		34,009	2,834	296	34,009	2,834	6.75	
BYARD LANE	HASKELL STREET - BYARD LANE	0	24	5	6	6	0.59	0.59	7.00	6	74,765		8,307	14,538	2,423	1,396	160,524	13,377	7.00	
DAVID WAY	BYARD LANE - HASKELL STREET	0	25	5	5	5	0.05	0.05	7.00	6	6,600		733	1,283	214	123	14,171	1,181	7.00	
FISHER STREET	ARCH STREET - MILK STREET	5	25	5		5	0.66	2.27	7.00	6	87,120		9,680	16,940	2,823	1,627	187,051	15,588	7.00	
FISHER STREET		5	20	5			0.37		7.00	6	39,072		4,341	7,597	1,266	729	83,890	6,991	7.00	
FLANDERS LANE	FLANDERS ROAD - FLANDERS ROAD	0	14	5			0.17	0.17	7.00	6	12,566		1,396	2,443	407	235	26,981	2,248	7.00	

Road Management System Summary
FY12

					Left	Right														
		Functional	Surface	Surface	Sidewalk	Sidewalk	Section	Cumulative		Est		Tons for	Sq Yds for	Total	Annual Avg	If Paved,	If Paved,	Annual Avg	Road	
Street Name	From St - To St	Classification	Width	Type	Width	Width	Length	Length	Total	Life	Sq Ft	this Section	this Section	Cost	Cost	Volume	Cost	Cost	Rating	
FLANDERS ROAD	EAST MAIN STREET - SOUTHBOROUGH TOWN LINE	5	25	5		5	0.30	3.29	7.00	6	39,600		4,400	7,700	1,283	739	85,023	7,085	7.00	
FLANDERS ROAD		5	22	5			2.44		7.00	6	283,430		31,492	55,111	9,185	5,292	608,539	50,712	7.00	
FLANDERS ROAD		5	22	5			0.32		7.00	6	37,171		4,130	7,228	1,205	694	79,808	6,651	7.00	
GRANT STREET	WEST STREET - CHURCH STREET	0	26	5	4	4	0.08	0.08	7.00	6	10,982		1,220	2,135	356	205	23,580	1,965	7.00	
HASKELL STREET	EAST MAIN STREET - LYMAN STREET	0	19	5			0.89	0.89	7.00	6	89,285		9,921	17,361	2,893	1,667	191,699	15,975	7.00	
LONG DRIVE	RUGGLES STREET - COOK STREET	0	24	6	5		0.58	0.58	7.00	12	73,878	1,379		158,619	13,218	1,379	158,619	13,218	7.00	
MYRTLE STREET	SCHOOL STREET - CHARLES STREET	0	24	5		4	0.19	0.19	7.00	6	24,077		2,675	4,682	780	450	51,694	4,308	7.00	
SAMPSON DRIVE	FLANDERS ROAD - FLANDERS ROAD	0	22	5			0.20	0.20	7.00	6	23,232		2,581	4,517	753	434	49,880	4,157	7.00	
SHEPHERD ROAD	EAST MAIN STREET - STEVENS ROAD	0	21	5			0.18	0.18	7.00	6	19,958		2,218	3,881	647	373	42,852	3,571	7.00	
SMITH PARKWAY	OTIS STREET - FISHER STREET	0	36	6			0.42	0.42	7.00	12	79,834	1,490		171,407	14,284	1,490	171,407	14,284	7.00	
SPRING ROAD	UPTON ROAD - HOPKINTON TOWN LINE	0	17	5			0.84	0.84	7.00	6	75,398		8,378	14,661	2,443	1,408	161,884	13,490	7.00	
UHLMAN DRIVE	BYARD LANE - BYARD LANE	0	24	5	5	5	0.19	0.19	7.00	6	24,077		2,675	4,682	780	450	51,694	4,308	7.00	
ARCH STREET	GLEN STREET - FISHER STREET	6	19	5			0.87	0.87	7.25	6	87,278		9,698	16,971	2,828	1,629	187,391	15,616	7.25	
FAIRVIEW CIRCLE ROAD	FAIRVIEW ROAD - CUL-DE-SAC	0	20	6			0.03	0.03	7.25	12	3,168	59		6,802	567	59	6,802	567	7.25	
FAIRVIEW COURT	MEADOW ROAD - FAIRVIEW ROAD	0	19	5			0.06	0.06	7.25	6	6,019		669	1,170	195	112	12,924	1,077	7.25	
FAIRVIEW ROAD	MILK STREET - FAIRVIEW CIRCLE ROAD	0	20	5			0.18	0.18	7.25	6	19,008		2,112	3,696	616	355	40,811	3,401	7.25	
INDIAN POND ROAD	MEADOW ROAD - Cul-de-sac	0	34	6	5		0.20	0.20	7.25	12	35,365	660		75,931	6,328	660	75,931	6,328	7.25	
BEACH STREET	SOUTH STREET - DEAD END	0	23	5	4	5	0.07	0.17	7.50	6	8,744		972	1,700	283	163	18,773	1,564	7.50	
BEACH STREET		0	23	5		5	0.10		7.50	6	11,901		1,322	2,314	386	222	25,552	2,129	7.50	
BEACHMONT STREET	PINE STREET - BEACH STREET	0	23	5			0.15	0.15	7.50	6	18,216		2,024	3,542	590	340	39,111	3,259	7.50	
BOARDMAN STREET	CHURCH STREET - MILK STREET	0	21	5	4	4	0.12	0.12	7.50	6	13,306		1,478	2,587	431	248	28,568	2,381	7.50	
COTTAGE STREET	SOUTH STREET - BRIGHAM STREET	0	26	5		5	0.17	0.17	7.50	6	23,338		2,593	4,538	756	436	50,107	4,176	7.50	
DOHERTY ROAD	WALKER STREET - STOREY ROAD	0	22	5			0.09	0.09	7.50	6	10,454		1,162	2,033	339	195	22,446	1,871	7.50	
EDMUND BRIGHAM WAY	MOUNT PLEASANT STREET - Cul-de-sac	0	24	6	5		0.20	0.20	7.50	12	25,217	471		54,143	4,512	471	54,143	4,512	7.50	
ELM STREET	SPRUCE STREET - GREEN STREET	0	22	5	5	5	0.09	0.16	7.50	6	10,454		1,162	2,033	339	195	22,446	1,871	7.50	
ELM STREET		0	22	5		5	0.07		7.50	6	8,131		903	1,581	264	152	17,458	1,455	7.50	
FAY STREET	MILK STREET - CHURCH STREET	0	26	5	4	4	0.10	0.10	7.50	6	13,728		1,525	2,669	445	256	29,475	2,456	7.50	
GREEN STREET	BRIGHAM STREET - PINE STREET	0	25	5	5	5	0.08		7.50	6	10,560		1,173	2,053	342	197	22,673	1,889	7.50	
GROVE STREET	MILK STREET - CHURCH STREET	0	22	5	5	5	0.19	0.19	7.50	6	22,070		2,452	4,291	715	412	47,386	3,949	7.50	
LAWTON'S WAY	MILK STREET - CUL-DE-SAC	0	26	6		4	0.15	0.15	7.50	12	20,592	384		44,212	3,684	384	44,212	3,684	7.50	
MAPLE AVENUE	SOUTH STREET - DEAD END	0	20	5			0.07	0.07	7.50	6	7,392		821	1,437	240	138	15,871	1,323	7.50	
MOUNT PLEASANT STREET	SOUTH STREET - RUGGLES STREET	0	21	5			0.30	1.00	7.50	6	33,708		3,745	6,554	1,092	629	72,372	6,031	7.50	
MOUNT PLEASANT STREET		0	20	5			0.70		7.50	6	73,498		8,166	14,291	2,382	1,372	157,803	13,150	7.50	
ORCHARD STREET	SPRING STREET - WATER STREET	0	26	5		4	0.08	0.08	7.50	6	10,982		1,220	2,135	356	205	23,580	1,965	7.50	
PARKMAN STREET	GROVE STREET - WEST MAIN STREET	0	22	5	5	5	0.12	0.12	7.50	6	13,939		1,549	2,710	452	260	29,928	2,494	7.50	
PINE STREET	GREEN STREET - ELM STREET	0	18	5			0.12	0.12	7.50	6	11,405		1,267	2,218	370	213	24,487	2,041	7.50	
PINECREST DRIVE	WEST MAIN STREET - PINECREST DRIVE	0	23	5	5	5	0.09	0.32	7.50	6	10,930		1,214	2,125	354	204	23,466	1,956	7.50	
PINECREST DRIVE		0	23	5		5	0.23		7.50	6	27,931		3,103	5,431	905	521	59,970	4,997	7.50	
SPRUCE STREET	COTTAGE STREET - ELM STREET	0	18	5	5	5	0.05	0.05	7.50	6	4,752		528	924	154	89	10,203	850	7.50	
STEVENS ROAD	LYMAN STREET - EAST MAIN STREET	0	23	5			0.30	0.30	7.50	6	36,432		4,048	7,084	1,181	680	78,221	6,518	7.50	
STOREY ROAD	EAST MAIN STREET - WALKER STREET	0	21	5			0.07	0.07	7.50	6	7,762		862	1,509	252	145	16,665	1,389	7.50	
WAYSIDE ROAD	RUGGLES STREET - RUGGLES STREET	0	30	6		5	0.88	0.88	7.50	12	139,392	2,602		299,282	24,940	2,602	299,282	24,940	7.50	
WELD STREET	BLAKE STREET - DEAD END	0	18	5			0.24	0.24	7.50	6	22,810		2,534	4,435	739	426	48,973	4,081	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	5	39	6	8	10	0.09	2.77	7.50	12	18,533	346		39,791	3,316	346	39,791	3,316	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	5	48	6	8	10	0.08		7.50	12	20,275	379		43,532	3,628	379	43,532	3,628	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	5	48	6	4	4	0.04		7.50	12	10,898	203		23,398	1,950	203	23,398	1,950	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	5	26	6	4	4	0.26		7.50	12	35,693	666		76,634	6,386	666	76,634	6,386	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	5	26	6			0.44		7.50	12	60,403	1,128		129,689	10,807	1,128	129,689	10,807	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	6	32	6	4		0.29		7.50	12	48,492	905		104,114	8,676	905	104,114	8,676	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	6	32	6			0.42		7.50	12	70,963	1,325		152,362	12,697	1,325	152,362	12,697	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	6	25	5			0.26		7.50	6	34,320		3,813	6,673	1,112	641	73,687	6,141	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	6	25	6			0.34		7.50	12	44,880	838		96,360	8,030	838	96,360	8,030	7.50	
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	5	32	6	4	4	0.34		7.50	12	56,940	1,063		122,252	10,188	1,063	122,252	10,188	7.50	

Road Management System Summary
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					Left	Right													
		Functional	Surface	Surface	Sidewalk	Sidewalk	Section	Cumulative		Est		Tons for	Sq Yds for	Total	Annual Avg	If Paved,	If Paved,	Annual Avg	Road
Street Name	From St - To St	Classification	Width	Type	Width	Width	Length	Length	Total	Life	Sq Ft	this Section	this Section	Cost	Cost	Volume	Cost	Cost	Rating
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	5	51	6		12	0.14		7.50	12	37,699	704		80,942	6,745	704	80,942	6,745	7.50
WEST MAIN STREET	MAIN STREET ROTARY - GRAFTON TOWN LINE	6	26	6			0.07		7.50	12	10,021	187		21,517	1,793	187	21,517	1,793	7.50
BUCKSKIN DRIVE	DEERSLAYER LANE - CUL_DE_SAC	0	30	6	5		0.14	0.14	7.75	12	22,176	414		47,613	3,968	414	47,613	3,968	7.75
CAROLYN DRIVE	JASPER STREET EXTENSION - LINDA STREET	0	24	6	5	5	0.25	0.25	7.75	12	31,680	591		68,019	5,668	591	68,019	5,668	7.75
DEERSLAYER LANE	RUGGLES STREET - MOUNT PLEASANT STREET	0	30	6		5	0.25	0.25	7.75	12	39,600	739		85,023	7,085	739	85,023	7,085	7.75
ERIC DRIVE	HYDER STREET - ARCH STREET	0	24	6	5	5	0.05	0.05	7.75	12	6,336	118		13,604	1,134	118	13,604	1,134	7.75
GLEN STREET	NOURSE ST TO NOURSE ST	0	16	5			0.34		7.75	6	28,723		3,191	5,585	931	536	61,670	5,139	7.75
HARVEY LANE	ONEIL DRIVE - WEST END AVENUE	0	26	5			0.23	0.44	7.75	6	31,849		3,539	6,193	1,032	595	68,381	5,698	7.75
HARVEY LANE		0	18	5			0.21		7.75	6	19,768		2,196	3,844	641	369	42,444	3,537	7.75
HUNDREDS ROAD	LONGMEADOW ROAD - BOSTON WORCESTER TPK	0	24	6		8	0.22	0.85	7.75	12	28,259	528		60,673	5,056	528	60,673	5,056	7.75
HUNDREDS ROAD		0	24	6	5	5	0.20		7.75	12	24,964	466		53,599	4,467	466	53,599	4,467	7.75
HUNDREDS ROAD		0	24	6		5	0.25		7.75	12	31,807	594		68,291	5,691	594	68,291	5,691	7.75
HUNDREDS ROAD		0	24	6			0.18		7.75	12	22,683	423		48,701	4,058	423	48,701	4,058	7.75
HYDER STREET	GLEN STREET - ARCH STREET	0	24	6	5	5	0.52	0.52	7.75	12	65,894	1,230		141,479	11,790	1,230	141,479	11,790	7.75
JEFFERSON ROAD	HUNDREDS ROAD - DEAD END	0	24	6	5		0.11	0.11	7.75	12	13,939	260		29,928	2,494	260	29,928	2,494	7.75
JENNINGS ROAD	HARVEY LANE - CHESTNUT STREET	0	23	5			0.22	0.22	7.75	6	26,717		2,969	5,195	866	499	57,362	4,780	7.75
LINCOLN STREET	WINTER STREET - SPRING STREET	0	24	5		4	0.10	0.10	7.75	6	12,672		1,408	2,464	411	237	27,207	2,267	7.75
LINDA STREET	HYDER STREET - JASPER STREET EXTENSION	0	24	6	5	5	0.47	0.47	7.75	12	59,558	1,112		127,875	10,656	1,112	127,875	10,656	7.75
LONGMEADOW ROAD	FLANDERS ROAD - BOSTON WORCESTER TPK	0	23	6		8	0.49	0.49	7.75	12	59,506	1,111		127,761	10,647	1,111	127,761	10,647	7.75
NOTTINGHAM STREET	HUNDREDS ROAD - LONGMEADOW ROAD	0	24	6			0.29	0.29	7.75	12	36,749	686		78,902	6,575	686	78,902	6,575	7.75
PHYLMOR DRIVE	LACKEY STREET - CUL_DE_SAC	0	24	6	5		0.33	0.33	7.75	12	41,818	781		89,784	7,482	781	89,784	7,482	7.75
PRIMROSE LANE	ADAMS STREET - Cul-de-sac	0	26	6		5	0.21	0.21	7.75	12	28,829	538		61,897	5,158	538	61,897	5,158	7.75
RAYMOND STREET	ARCH STREET - HYDER STREET	0	25	6	5	5	0.05	0.05	7.75	12	6,600	123		14,171	1,181	123	14,171	1,181	7.75
SHERBURN ROAD	JEFFERSON ROAD - HUNDREDS ROAD	0	24	6	5		0.17	0.17	7.75	12	21,542	402		46,253	3,854	402	46,253	3,854	7.75
SPRING STREET	HIGH STREET - MILK STREET	0	26	5		5	0.22	0.22	7.75	6	30,202		3,356	5,873	979	564	64,844	5,404	7.75
WINTER STREET	HIGH STREET - SUMMER STREET	0	20	5	4	4	0.08	0.08	7.75	6	8,448		939	1,643	274	158	18,138	1,512	7.75
YORKSHIRE CIRCLE	LONGMEADOW ROAD - CUL_DE_SAC	0	24	6	5	5	0.11	0.11	7.75	12	13,939	260		29,928	2,494	260	29,928	2,494	7.75
CROWNRISE ROAD	SPRING ROAD - SPRING ROAD	0	30	6		5	0.32	0.32	8.00	12	50,688	946		108,830	9,069	946	108,830	9,069	8.00
DAVIS STREET	MILK STREET - NORTHBOROUGH TOWN LINE	6	17	5			0.05	0.05	8.00	6	4,757		529	925	154	89	10,214	851	8.00
FOX LANE	CROWNRISE ROAD - CUL_DE_SAC	0	30	6		5	0.16	0.16	8.00	12	25,344	473		54,415	4,535	473	54,415	4,535	8.00
HARRISON AVENUE	RUGGLES STREET - SCHOOL STREET	0	19	5	4	4	0.10	0.10	8.00	6	10,032		1,115	1,951	325	187	21,539	1,795	8.00
MORSE STREET	HOPKINTON ROAD - WARREN STREET	0	18	5			0.79	0.79	8.00	6	75,082		8,342	14,599	2,433	1,402	161,204	13,434	8.00
NOURSE STREET	WEST MAIN STREET - GRAFTON TOWN LINE	5	28	5			2.38	2.38	8.00	6	351,859		39,095	68,417	11,403	6,569	755,459	62,955	8.00
ALPINE DRIVE	CRESTVIEW DRIVE - CUL_DE_SAC	0	24	5	4	4	0.08	0.08	8.25	6	10,138		1,126	1,971	329	189	21,766	1,814	8.25
ARROWHEAD LANE	CHESTNUT STREET - Cul-de-sac	0	24	6		5	0.49	0.49	8.25	12	61,839	1,155		132,772	11,064	1,155	132,772	11,064	8.25
ASSABET DRIVE	FISHER STREET - Cul-de-sac	0	24	6	5		0.19	0.19	8.25	12	24,330	454		52,238	4,353	454	52,238	4,353	8.25
BAKER WAY	EAST MAIN STREET - DEAD END	0	18	5			0.03	0.03	8.25	6	2,851		317	554	92	53	6,122	510	8.25
BENJAMIN DRIVE	JASPER STREET - WEST MAIN STREET	0	30	6		5	0.18		8.25	12	28,512	532		61,217	5,101	532	61,217	5,101	8.25
BERTIS ADAMS WAY	GABLE RIDGE ROAD - WARREN STREET	0	30	6		5	0.37	0.37	8.25	12	58,133	1,085		124,814	10,401	1,085	124,814	10,401	8.25
BIRCH DRIVE	OVERLOOK DRIVE - WHEELER ROAD	0	24	6	5	5	0.07	0.07	8.25	12	8,870	166		19,045	1,587	166	19,045	1,587	8.25
BLAKE STREET	WEST MAIN STREET - WHITNEY STREET	0	20	5		4	0.18	0.29	8.25	6	19,008		2,112	3,696	616	355	40,811	3,401	8.25
BLAKE STREET		0	20	5	4	4	0.11		8.25	6	11,616		1,291	2,259	376	217	24,940	2,078	8.25
BRADY ROAD	EAST MAIN STREET - HILLCREST DRIVE	0	24	5	4	4	0.17	0.19	8.25	6	22,049		2,450	4,287	715	412	47,341	3,945	8.25
BRADY ROAD	EAST MAIN STREET - HILLCREST DRIVE	0	24	5	4		0.02	0.19	8.25	6	2,028		225	394	66	38	4,353	363	8.25
BRADY ROAD EXTENSION	BRADY ROAD - CUL_DE_SAC	0	26	5			0.13		8.25	6	17,984		1,998	3,497	583	336	38,612	3,218	8.25
BRADY ROAD EXTENSION		0	26	5	4		0.06		8.25	6	8,100		900	1,575	262	151	17,390	1,449	8.25
BREWER DRIVE	NOURSE STREET - NOURSE STREET	0	30	6	5		0.45	0.45	8.25	12	71,280	1,331		153,042	12,753	1,331	153,042	12,753	8.25
BRICKYARD LANE	HASKELL STREET - THOMAS NEWTON DRIVE	0	30	6		5	0.28	0.28	8.25	12	44,352	828		95,226	7,935	828	95,226	7,935	8.25
BROOK WAY	OLD NOURSE STREET - OLD NOURSE STREET	0	30	6			0.24	0.24	8.25	12	38,016	710		81,622	6,802	710	81,622	6,802	8.25
CABOT CIRCLE	OLD COLONY DRIVE - CUL_DE_SAC	0	24	5	5	5	0.07	0.07	8.25	6	8,870		986	1,725	287	166	19,045	1,587	8.25
CAPTAIN SAMUEL FORBUSH RD	NOURSE STREET - CUL_DE_SAC	0	30	6	5		0.30	0.30	8.25	12	47,520	887		102,028	8,502	887	102,028	8,502	8.25
CARROLL DRIVE	FRANCES DRIVE - Cul-de-sac	0	30	6	5		0.16	0.16	8.25	12	25,027	467		53,735	4,478	467	53,735	4,478	8.25
CATIE DRIVE	BREWER DRIVE - CUL_DE_SAC	0	30	6			0.11	0.11	8.25	12	17,424	325		37,410	3,118	325	37,410	3,118	8.25

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					Left	Right														
		Functional	Surface	Surface	Sidewalk	Sidewalk	Section	Cumulative		Est		Tons for	Sq Yds for	Total	Annual Avg	If Paved,	If Paved,	Annual Avg	Road	
Street Name	From St - To St	Classification	Width	Type	Width	Width	Length	Length	Total	Life	Sq Ft	this Section	this Section	Cost	Cost	Volume	Cost	Cost	Rating	
CENTRAL STREET	WEST MAIN STREET - CROSS STREET	0	21	5	5	5	0.11	0.11	8.25	6	12,197		1,355	2,372	395	228	26,187	2,182	8.25	
CHARLES STREET	RUGGLES STREET - WEST MAIN STREET	0	21	5	4	4	0.20	0.27	8.25	6	22,176		2,464	4,312	719	414	47,613	3,968	8.25	
CHARLES STREET		0	21	5	4		0.07		8.25	6	7,762		862	1,509	252	145	16,665	1,389	8.25	
CHURCH STREET	WEST MAIN STREET - MILK STREET	6	29	5	5	6	0.47	0.47	8.25	6	71,966		7,996	13,993	2,332	1,344	154,515	12,876	8.25	
COPPERBEECH CIRCLE	OLDE HICKORY PATH - Cul-de-sac	0	26	6	5		0.12	0.12	8.25	12	16,062	300		34,485	2,874	300	34,485	2,874	8.25	
CRESTVIEW DRIVE	HILLCREST DRIVE - LYONS STREET	0	23	5	4	4	0.14	0.34	8.25	6	17,002		1,889	3,306	551	317	36,503	3,042	8.25	
CRESTVIEW DRIVE		0	23	5	4	4	0.20		8.25	6	24,288		2,699	4,723	787	453	52,148	4,346	8.25	
CROSS STREET	CHARLES STREET - SOUTH STREET	0	22	5	3	4	0.12	0.25	8.25	6	13,939		1,549	2,710	452	260	29,928	2,494	8.25	
CROSS STREET		0	20	5	3	4	0.08		8.25	6	8,448		939	1,643	274	158	18,138	1,512	8.25	
CROSS STREET		0	20	5	3	4	0.05		8.25	6	5,280		587	1,027	171	99	11,336	945	8.25	
CROSSMAN AVENUE	UPTON ROAD - PHYLMOR DRIVE	0	24	5		5	0.04	0.04	8.25	6	5,069		563	986	164	95	10,883	907	8.25	
DANE WAY	OLD COLONY DRIVE - WESTMINSTER WAY	0	24	5	5	5	0.04	0.04	8.25	6	5,069		563	986	164	95	10,883	907	8.25	
EDGEWOOD ROAD	WAYSIDE ROAD - CUL DE SAC	0	30	6		5	0.11	0.11	8.25	12	17,424	325		37,410	3,118	325	37,410	3,118	8.25	
EDWARD DUNN WAY	ASSABET DRIVE - Cul-de-sac	0	24	6	5		0.18	0.18	8.25	12	22,810	426		48,973	4,081	426	48,973	4,081	8.25	
ELIZABETH DRIVE	BREWER DRIVE - CUL DE SAC	0	30	6	5		0.09	0.09	8.25	12	14,256	266		30,608	2,551	266	30,608	2,551	8.25	
FORBES STREET	RUGGLES STREET - SOUTH STREET	0	24	5	4	4	0.20	0.20	8.25	6	25,344		2,816	4,928	821	473	54,415	4,535	8.25	
FRANCES DRIVE	KENDALL DRIVE -	0	30	6	5		0.20	0.20	8.25	12	31,838	594		68,359	5,697	594	68,359	5,697	8.25	
FRUIT STREET	HOPKINTON TOWN LINE - FLANDERS ROAD	0	30	5		5	0.15	0.17	8.25	6	23,602		2,622	4,589	765	441	50,674	4,223	8.25	
GABLE RIDGE ROAD	WARREN STREET - BERTIS ADAMS WAY	0	30	6	5		0.25	0.25	8.25	12	40,075	748		86,043	7,170	748	86,043	7,170	8.25	
GALE MEADOW WAY	WACHUSETT VIEW DRIVE - CUL DE SAC	0	30	6		5	0.09	0.09	8.25	12	14,256	266		30,608	2,551	266	30,608	2,551	8.25	
GRANGER ROAD	EAST MAIN STREET - DEAD END	0	21	5			0.12	0.17	8.25	6	13,195		1,466	2,566	428	246	28,330	2,361	8.25	
GRANGER ROAD		0	14	2			0.05		8.25	6	3,770		419	733	122	70	8,094	675	8.25	
GRINDSTONE COURT	PICCADILLY WAY - Cul-de-sac	0	24	6	5		0.14	0.14	8.25	12	18,248	341		39,179	3,265	341	39,179	3,265	8.25	
HERON WAY	ARROWHEAD LANE - OLD COLONY DRIVE	0	12	6			0.09	0.09	8.25	12	5,639	105		12,107	1,009	105	12,107	1,009	8.25	
HEYWOOD DRIVE	WEST MAIN STREET - CUL DE SAC	0	30	6	5		0.15	0.15	8.25	12	23,760	444		51,014	4,251	444	51,014	4,251	8.25	
HILLCREST DRIVE	EAST MAIN STREET - CRESTVIEW DRIVE	0	24	5	4	4	0.22	0.22	8.25	6	27,878		3,098	5,421	903	520	59,856	4,988	8.25	
JACOB AMSDEN ROAD	THOMAS NEWTON DRIVE - EAST MAIN STREET	0	30	6		5	0.48	0.48	8.25	12	76,032	1,420		163,245	13,604	1,420	163,245	13,604	8.25	
JANLYN CIRCLE	WATER STREET - CUL DE SAC	0	30	6			0.06	0.06	8.25	12	9,504	177		20,406	1,700	177	20,406	1,700	8.25	
JASPER STREET	WEST MAIN STREET - NOURSE STREET	0	18	5			0.45	0.45	8.25	6	42,768		4,752	8,316	1,386	798	91,825	7,652	8.25	
JASPER STREET EXTENSION	LINDA STREET - GLEN STREET	0	24	6			0.13	0.13	8.25	12	16,474	308		35,370	2,947	308	35,370	2,947	8.25	
JOANNE DRIVE	ELI WHITNEY STREET - OVERLOOK DRIVE	0	24	6	5	5	0.18	0.18	8.25	12	22,810	426		48,973	4,081	426	48,973	4,081	8.25	
JOHN PRATT CIRCLE	SAMUEL HARRINGTON ROAD - CUL DE SAC	0	26	6		5	0.12	0.12	8.25	12	16,474	308		35,370	2,947	308	35,370	2,947	8.25	
LACKEY STREET	SPRING ROAD - PHYLMOR DRIVE	0	23	5			0.48	0.80	8.25	6	58,170		6,463	11,311	1,885	1,086	124,893	10,408	8.25	
LACKEY STREET		0	16	5			0.32		8.25	6	27,118		3,013	5,273	879	506	58,224	4,852	8.25	
LONGFELLOW ROAD	WAYSIDE ROAD - CUL DE SAC	0	30	6		5	0.11	0.11	8.25	12	17,424	325		37,410	3,118	325	37,410	3,118	8.25	
LYDIAS PATH	MAYNARD STREET - Cul-de-sac	0	24	6		5	0.12	0.12	8.25	12	14,700	274		31,561	2,630	274	31,561	2,630	8.25	
LYMAN STREET	EAST MAIN STREET - NORTHBOROUGH TOWN LINE	6	30	5			1.48	1.89	8.25	6	234,432		26,048	45,584	7,597	4,377	503,337	41,945	8.25	
LYMAN STREET		6	30	5	4		0.41		8.25	6	64,944		7,216	12,628	2,105	1,213	139,438	11,620	8.25	
LYONS STREET	EAST MAIN STREET - COMPUTER DRIVE	6	18	5			0.18	0.23	8.25	6	17,107		1,901	3,326	554	319	36,730	3,061	8.25	
MARY LOU CIRCLE	MATHIEU DRIVE - CUL DE SAC	0	30	6	5		0.07	0.07	8.25	12	11,088	207		23,806	1,984	207	23,806	1,984	8.25	
MATHIEU DRIVE	OLD NOURSE STREET - ANDREWS STREET	0	30	6	5		0.31	0.31	8.25	12	49,104	917		105,429	8,786	917	105,429	8,786	8.25	
MAYNARD STREET	MILK STREET - FISHER STREET	0	19	5			0.59	0.59	8.25	6	59,189		6,577	11,509	1,918	1,105	127,081	10,590	8.25	
MCTAGGART STREET	HEYWOOD DRIVE - CAPTAIN SAMUEL FORBUSH RD	0	30	6	5		0.23	0.23	8.25	12	36,432	680		78,221	6,518	680	78,221	6,518	8.25	
NICHOLS TERRACE	FISHER STREET - Cul-de-sac	0	30	6		5	0.17	0.17	8.25	12	27,245	509		58,496	4,875	509	58,496	4,875	8.25	
OLD COLONY DRIVE	WEST MAIN STREET - CUL DE SAC	0	24	5	4	4	0.57	0.57	8.25	6	72,230		8,026	14,045	2,341	1,349	155,082	12,924	8.25	
OLD NOURSE STREET	NOURSE STREET - NOURSE STREET	0	22	5			0.55	0.55	8.25	6	63,888		7,099	12,423	2,070	1,193	137,171	11,431	8.25	
OLDE CONNECTICUT PATH	BERTIS ADAMS WAY - Cul-de-sac	0	30	6		5	0.11	0.11	8.25	12	16,790	313		36,050	3,004	313	36,050	3,004	8.25	
OLDE HICKORY PATH	NOURSE STREET - Dead end	0	28	6		5	0.48	0.48	8.25	12	70,224	1,311		150,774	12,565	1,311	150,774	12,565	8.25	
OLDE STONEBRIDGE PATH	NOURSE STREET - CUL DE SAC	0	30	6		5	0.14	0.14	8.25	12	22,176	414		47,613	3,968	414	47,613	3,968	8.25	
OVERLOOK DRIVE	ELI WHITNEY STREET - WEST MAIN STREET	0	24	6	5	5	0.49	0.49	8.25	12	62,093	1,159		133,316	11,110	1,159	133,316	11,110	8.25	
PHILLIPS STREET	CHURCH STREET - SUMMER STREET	0	31	5	4	4	0.11	0.22	8.25	6	18,332		2,037	3,565	594	342	39,360	3,280	8.25	
PHILLIPS STREET		0	31	5	4	4	0.11		8.25	6	17,677		1,964	3,437	573	330	37,954	3,163	8.25	
PICCADILLY WAY	MORSE STREET - MORSE STREET	0	24	6	5		0.95	0.95	8.25	12	120,384	2,248		258,470	21,539	2,248	258,470	21,539	8.25	

Road Management System Summary
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					Left	Right													
		Functional	Surface	Surface	Sidewalk	Sidewalk	Section	Cumulative		Est		Tons for	Sq Yds for	Total	Annual Avg	If Paved,	If Paved,	Annual Avg	Road
Street Name	From St - To St	Classification	Width	Type	Width	Width	Length	Length	Total	Life	Sq Ft	this Section	this Section	Cost	Cost	Volume	Cost	Cost	Rating
PROSPECT STREET	EAST MAIN STREET - STATE STREET	0	14	5			0.05	0.10	8.25	6	3,696		411	719	120	69	7,935	661	8.25
PROSPECT STREET		0	21	5			0.05		8.25	6	5,544		616	1,078	180	104	11,903	992	8.25
QUAIL HOLLOW	BROOK WAY - CUL_DE_SAC	0	30	6		5	0.10		8.25	12	15,840	296		34,009	2,834	296	34,009	2,834	8.25
SAMUEL HARRINGTON ROAD	JACOB AMSDEN ROAD - SAMUEL HARRINGTON RD	0	26	6			0.50	0.50	8.25	12	68,640	1,282		147,374	12,281	1,282	147,374	12,281	8.25
SANDRA POND ROAD	BOWMAN STREET - THOMAS RICE LANE	0	24	6			0.08	0.08	8.25	12	10,138	189		21,766	1,814	189	21,766	1,814	8.25
SAWMILL DRIVE	PICCADILLY WAY - Cul-de-sac	0	24	6	5		0.14	0.14	8.25	12	18,121	338		38,907	3,242	338	38,907	3,242	8.25
SCHOOL STREET	SOUTH STREET - WEST MAIN STREET	6	28	5	3	5	0.33	0.33	8.25	6	48,787		5,421	9,486	1,581	911	104,749	8,729	8.25
STONE HILL ROAD	WOODCREST ROAD - CUL_DE_SAC	0	30	6		5	0.11	0.11	8.25	12	17,424	325		37,410	3,118	325	37,410	3,118	8.25
STRATTON DRIVE	LACKEY STREET - CUL_DE_SAC	0	30	6			0.12	0.12	8.25	12	19,008	355		40,811	3,401	355	40,811	3,401	8.25
SUMMER STREET	MILK STREET - Dead end	0	21	5		5	0.13	0.36	8.25	6	14,414		1,602	2,803	467	269	30,948	2,579	8.25
SUMMER STREET		0	27	5	5	5	0.11		8.25	6	15,682		1,742	3,049	508	293	33,669	2,806	8.25
SUMMER STREET		0	27	5	5	5	0.12		8.25	6	17,107		1,901	3,326	554	319	36,730	3,061	8.25
THISTLE HILL LANE	Dead end - OLDE HICKORY PATH	0	24	6		5	0.04	0.04	8.25	12	5,576	104		11,971	998	104	11,971	998	8.25
THOMAS NEWTON DRIVE	EAST MAIN STREET - DEAD END	0	30	6		5	0.74	0.74	8.25	12	117,216	2,188		251,669	20,972	2,188	251,669	20,972	8.25
THOMAS RICE LANE	CUL_DE_SAC - CUL_DE_SAC	0	24	6			0.16	0.16	8.25	12	20,275	379		43,532	3,628	379	43,532	3,628	8.25
UNION STREET	EAST MAIN STREET - Dead end	0	37	5	4		0.18	0.20	8.25	6	34,969		3,885	6,800	1,133	653	75,081	6,257	8.25
WACHUSETT VIEW DRIVE	HASKELL STREET - BRICKYARD LANE	0	30	6		5	0.55	0.55	8.25	12	87,120	1,627		187,051	15,588	1,627	187,051	15,588	8.25
WARBURTON DRIVE	EAST MAIN STREET - EAST MAIN STREET	0	23	5			0.16	0.16	8.25	6	19,430		2,159	3,778	630	363	41,718	3,477	8.25
WARD LANE	WEST MAIN STREET - DEAD END	0	24	5	5	5	0.25	0.25	8.25	6	31,680		3,520	6,160	1,027	591	68,019	5,668	8.25
WESTMINSTER WAY	WARD LANE - DEAD END	0	24	5	5	5	0.31	0.31	8.25	6	39,283		4,365	7,638	1,273	733	84,343	7,029	8.25
WOODCREST ROAD	WAYSIDE ROAD - WAYSIDE ROAD	0	30	6		5	0.28	0.28	8.25	12	44,352	828		95,226	7,935	828	95,226	7,935	8.25
ELI WHITNEY STREET	RUGGLES STREET - WEST MAIN STREET	0	27	6		5	0.42	0.73	8.50	12	60,303	1,126		129,473	10,789	1,126	129,473	10,789	8.50
ELI WHITNEY STREET		0	27	5		5	0.21		8.50	6	29,938		3,326	5,821	970	559	64,278	5,356	8.50
ELI WHITNEY STREET		0	27	5		5	0.10		8.50	6	13,828		1,536	2,689	448	258	29,690	2,474	8.50
HADLEY LANE	MAPLE CIRCLE - CUL_DE_SAC	0	25	5			0.12	0.12	8.50	6	15,840		1,760	3,080	513	296	34,009	2,834	8.50
JACKSTRAW ROAD	OLDE COACH ROAD - CUL_DE_SAC	0	24	6		5	0.12	0.12	8.50	12	15,206	284		32,649	2,721	284	32,649	2,721	8.50
KENDALL DRIVE	WEST MAIN STREET - WEST MAIN STREET	0	24	6		5	0.37	0.37	8.50	12	47,013	878		100,940	8,412	878	100,940	8,412	8.50
MAPLE CIRCLE	MILK STREET - MILK STREET	0	21	5			0.20	0.20	8.50	6	22,176		2,464	4,312	719	414	47,613	3,968	8.50
MOHAWK CIRCLE	MOHAWK DRIVE - CUL_DE_SAC	0	24	6	5		0.07	0.07	8.50	12	8,870	166		19,045	1,587	166	19,045	1,587	8.50
MOHAWK DRIVE	MAYNARD STREET - MOHAWK CIRCLE	0	24	6	5		0.07		8.50	12	8,870	166		19,045	1,587	166	19,045	1,587	8.50
NAUSET AVENUE	MILK STREET - NIPMUCK DRIVE	0	28	6	5		0.11	0.11	8.50	12	15,967	298		34,281	2,857	298	34,281	2,857	8.50
NIPMUCK DRIVE	MILK STREET - Cul-de-sac	0	30	6			0.41	0.41	8.50	12	64,786	1,210		139,098	11,591	1,210	139,098	11,591	8.50
OLDE COACH ROAD	BOWMAN STREET - BOWMAN LANE	0	25	5	5		0.25	0.33	8.50	6	32,868		3,652	6,391	1,065	614	70,569	5,881	8.50
OLDE COACH ROAD		0	25	5			0.08		8.50	6	10,692		1,188	2,079	347	200	22,956	1,913	8.50
OLDE MEETING HOUSE ROAD	REV THOMAS HOOKER ROAD - CUL_DE_SAC	0	24	6			0.29	0.29	8.50	12	36,749	686		78,902	6,575	686	78,902	6,575	8.50
REV THOMAS HOOKER ROAD	BOWMAN LANE - OLDE MEETING HOUSE ROAD	0	24	6			0.28	0.28	8.50	12	35,482	662		76,181	6,348	662	76,181	6,348	8.50
ROBIN CIRCLE	ROBIN LANE - DEAD END	0	24	5	4	4	0.08	0.08	8.50	6	10,138		1,126	1,971	329	189	21,766	1,814	8.50
ANDREWS STREET	OLD NOURSE STREET - DEAD END	0	22	5			0.30	0.61	8.75	6	35,313		3,924	6,866	1,144	659	75,818	6,318	8.75
ANDREWS STREET		0	13	5			0.31		8.75	6	21,004		2,334	4,084	681	392	45,096	3,758	8.75
APPLESEED DRIVE	ADAMS STREET - Cul-de-sac	0	30	6	5		0.40	0.40	8.75	12	63,202	1,180		135,697	11,308	1,180	135,697	11,308	8.75
CIDER CIRCLE	APPLESEED DRIVE - Dead end	0	15	6	5		0.01	0.03	8.75	12	950	18		2,041	170	18	2,041	170	8.75
CIDER CIRCLE		0	15	6	5		0.01		8.75	12	1,109	21		2,381	198	21	2,381	198	8.75
COLONIAL DRIVE	EAST MAIN STREET - DEAD END	0	30	6	5		0.11	0.11	8.75	12	17,424	325		37,410	3,118	325	37,410	3,118	8.75
EDEN CIRCLE	APPLESEED DRIVE - Dead end	0	15	6		5	0.03	0.05	8.75	12	2,059	38		4,421	368	38	4,421	368	8.75
HARVEST WAY	NASH STREET - Cul-de-sac	0	30	6		5	0.20	0.20	8.75	12	31,997	597		68,699	5,725	597	68,699	5,725	8.75
ISSAC MILLER ROAD	ADAMS STREET - CUL_DE_SAC	0	20	5			0.27	0.27	8.75	6	28,512		3,168	5,544	924	532	61,217	5,101	8.75
NASH STREET	ADAMS STREET - DEAD END	0	20	2			0.51	0.51	8.75	6	53,856		5,984	10,472	1,745	1,005	115,632	9,636	8.75
OTIS STREET	FISHER STREET - NORTHBOROUGH TOWN LINE	6	23	5			0.04	1.29	8.75	6	4,858		540	945	157	91	10,430	869	8.75
OTIS STREET		5	23	5			0.63		8.75	6	76,993		8,555	14,971	2,495	1,437	165,308	13,776	8.75
OTIS STREET		5	17	5			0.53		8.75	6	47,124		5,236	9,163	1,527	880	101,178	8,431	8.75
OTIS STREET		6	16	5			0.08		8.75	6	6,758		751	1,314	219	126	14,511	1,209	8.75
EAST MAIN STREET	MAIN STREET ROTARY - SOUTHBORO TOWN LINE	5	40	6			1.34	3.05	9.00	12	283,008	5,284		607,632	50,636	5,284	607,632	50,636	9.00
EAST MAIN STREET		5	40	6		6	0.62		9.00	12	130,944	2,445		281,143	23,429	2,445	281,143	23,429	9.00

Road Management System Summary

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					Left	Right														
		Functional	Surface	Surface	Sidewalk	Sidewalk	Section	Cumulative		Est		Tons for	Sq Yds for	Total	Annual Avg	If Paved,	If Paved,	Annual Avg	Road	
Street Name	From St - To St	Classification	Width	Type	Width	Width	Length	Length	Total	Life	Sq Ft	this Section	this Section	Cost	Cost	Volume	Cost	Cost	Rating	
EAST MAIN STREET		5	30	6	6	6	0.60		9.00	12	95,040	1,774		204,056	17,005	1,774	204,056	17,005	9.00	
FAY MOUNTAIN DRIVE	MOUNTAIN VIEW DRIVE - CUL_DE_SAC	0	30	6			0.12	0.12	9.00	12	19,008	355		40,811	3,401	355	40,811	3,401	9.00	
IRVING STREET	WHITNEY STREET - CUL_DE_SAC	0	26	5			0.06	0.06	9.00	6	8,237		915	1,602	267	154	17,685	1,474	9.00	
MOUNTAIN VIEW DRIVE	ADAMS STREET - DEAD END	0	24	5	5	5	0.22	0.22	9.00	6	27,878		3,098	5,421	903	520	59,856	4,988	9.00	
OAK STREET	CHAUNCY CIRCLE TO CHAUNCY ST	0	24	5			0.90		9.00	6	113,921		12,658	22,151	3,692	2,127	244,595	20,383	9.00	
OAK STREET BRANCH	MILK STREET - OAK STREET	0	24	5			0.08	0.08	9.00	6	10,644		1,183	2,070	345	199	22,854	1,905	9.00	
ROBIN ROAD	MILK STREET - ROBIN LANE	0	24	5	4		0.20	0.49	9.00	6	25,471		2,830	4,953	825	476	54,687	4,557	9.00	
ROBIN ROAD		0	24	5		4	0.29		9.00	6	36,622		4,069	7,121	1,187	684	78,629	6,552	9.00	
ARMSTRONG DRIVE	WHEELER ROAD - OLDHAM ROAD	0	24	5			0.22	0.22	9.25	6	27,878		3,098	5,421	903	520	59,856	4,988	9.25	
BRIGHAM STREET	COTTAGE PLACE - GREEN STREET	0	31	5		5	0.04	0.04	9.25	6	5,892		655	1,146	191	110	12,651	1,054	9.25	
BRIGHAM STREET	EAST MAIN STREET - Dead end	0	31	5		5	0.20	0.20	9.25	6	32,736		3,637	6,365	1,061	611	70,286	5,857	9.25	
CORTLAND DRIVE	OLDHAM ROAD - WHEELER ROAD	0	23	5			0.23	0.23	9.25	6	27,931		3,103	5,431	905	521	59,970	4,997	9.25	
DENFIELD DRIVE	OLDHAM ROAD - WHEELER ROAD	0	25	5	4	4	0.21	0.21	9.25	6	27,720		3,080	5,390	898	518	59,516	4,960	9.25	
FOLLY LANE	WHITNEY STREET - DEAD END	0	20	5			0.08	0.08	9.25	6	8,448		939	1,643	274	158	18,138	1,512	9.25	
OLDHAM ROAD	WEST MAIN STREET - WHEELER ROAD	0	23	5			0.09	0.35	9.25	6	10,930		1,214	2,125	354	204	23,466	1,956	9.25	
OLDHAM ROAD		0	23	5	4	4	0.26		9.25	6	31,574		3,508	6,139	1,023	589	67,792	5,649	9.25	
PARTRIDGE ROAD	OLDHAM ROAD - MOUNTAIN VIEW DRIVE	0	24	6	5	5	0.15	0.15	9.25	12	19,008	355		40,811	3,401	355	40,811	3,401	9.25	
RICHARDSON COURT	PARTRIDGE ROAD - CUL_DE_SAC	0	24	5	5	5	0.16	0.16	9.25	6	20,275		2,253	3,942	657	379	43,532	3,628	9.25	
ROSEWOOD PLACE	PARTRIDGE ROAD - CUL_DE_SAC	0	30	6	5		0.14	0.14	9.25	12	22,176	414		47,613	3,968	414	47,613	3,968	9.25	
WHEELER ROAD	WEST MAIN STREET - DENFIELD DRIVE	0	20	5			0.15	0.42	9.25	6	15,840		1,760	3,080	513	296	34,009	2,834	9.25	
WHEELER ROAD		0	20	5	5	5	0.22		9.25	6	23,232		2,581	4,517	753	434	49,880	4,157	9.25	
WHEELER ROAD		0	20	5	4	4	0.05		9.25	6	5,280		587	1,027	171	99	11,336	945	9.25	
WHISPERING PINE	NOURSE STREET - OLDE HICKORY PATH	0	28	6	5		0.19	0.19	9.25	12	27,350	511		58,723	4,894	511	58,723	4,894	9.25	
ROBIN LANE	ROBIN CIRCLE - DEAD END	0	24	5	4	4	0.08	0.14	9.50	6	10,138		1,126	1,971	329	189	21,766	1,814	9.50	
ROBIN LANE	ROBIN CIRCLE - DEAD END	0	14	2			0.06	0.14	9.50	6	4,435		493	862	144	83	9,523	794	9.50	
WHITNEY STREET	CHURCH STREET - FOLLY LANE	0	23	5	4	4	0.18	0.28	9.50	6	21,859		2,429	4,250	708	408	46,933	3,911	9.50	
WHITNEY STREET		0	23	5			0.10		9.50	6	12,144		1,349	2,361	394	227	26,074	2,173	9.50	
SOUTH STREET	MAIN STREET ROTARY - HOPKINTON ROAD	5	65	5		6	0.13	0.95	10.00	6	44,616		4,957	8,675	1,446	833	95,793	7,983	10.00	
SOUTH STREET		5	48	5	6	6	0.15		10.00	6	38,016		4,224	7,392	1,232	710	81,622	6,802	10.00	
SOUTH STREET		5	48	5	5	5	0.24		10.00	6	60,826		6,758	11,827	1,971	1,136	130,596	10,883	10.00	
SOUTH STREET		5	28	5			0.24		10.00	6	35,482		3,942	6,899	1,150	662	76,181	6,348	10.00	
SOUTH STREET		5	28	5	5		0.18		10.00	6	26,611		2,957	5,174	862	497	57,136	4,761	10.00	
SOUTH STREET		5	40	5		10	0.01		10.00	6	2,957		329	575	96	55	6,348	529	10.00	
RICE LANE	MILK STREET - LYMAN SCHOOL ROAD	0	13	5			0.22	0.22	n/a	6	15,101		1,678	2,936	489	282	32,422	2,702	n/a	
		0 = Local		2 = Gravel			94.706			Total:				11,460,958	1,077,033		26,086,710	2,177,104		
										Chapter 90 Funds:					632,000			632,000		
		5 = Urban minor		5 = Surface						Annual Amount Required for Local Funding in addition to Ch. 90:					445,033			1,545,104		
		arterial or rural		Treated Road						Actual Amount Funded in FY11:					106,689			106,689		
		major collector								Amount Underfunded:					338,344			1,438,415		
				6 = Bituminous																
		6 = Urban collector		Pavement																
		or rural minor																		
		collector																		