



Roadway Management Program

Final Report

Town of Charlemont, Massachusetts

Date: June, 2016

Date of Inspections: March, 2016



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Town of Charlemont, Massachusetts



Roadway Management Program Table of Contents

1. Status Reports

- Roadway Status Summary

Roadway Status Map (11x17)

2. Repair Categories and Backlog Reports

- Roadway Repair Categories and Banding
- Roadway Backlog Summary - Accepted
- Roadway Backlog Summary - Functional Classification

Road Surface Ratings and Repair Categories Map – Paved Roads (11x17)

General Roadway Conditions Map – Gravel Roads (11x17)

3. Road Surface Rating (RSR) Reports

- Roadway Repairs Segment Description - Accepted
- Roadways Sorted – Alphabetically
- Roadways Sorted – Road Surface Rating (RSR)
- Roadways Sorted – Functional Class
- Roadway Repairs Segment Description - Gravel

4. Cost Benefit Value (CBV) Analysis & Prioritization Reports

- CBV Analysis With Cumulative Total
- CBV Analysis - Segment Description
- CBV Analysis – Modified Reclamation
- CBV Analysis – Shim and Overlay
- CBV Analysis – Chip Seal – 20% Rubber
- CBV Analysis – Crack Seal

5. Inventory Reports

- Roadway Sidewalk Location - Summary
- Roadway With Sidewalks – Segment Description
- Roadway Striping- Summary
- Roadway Striping - Segment Description

6. Photologs

- Pavement Roadway Photolog
- Gravel Roadway Photolog

Road Surface Ratings and Repair Categories Map – Paved Roads (24x36)

General Roadway Conditions Map – Gravel Roads (24x36)

Town of Charlemont, Massachusetts

Roadway Management Program

Roadway Status Summary

	Roadway Type	Length (Miles)
Status: Accepted		
	Asphalt	29.62
	Gravel	11.98
	Total:	41.60
Status: Unaccepted		
	Asphalt	0.07
	Gravel	1.72
	Total:	1.79
Status: State		
	Asphalt	12.02
	Unknown	0.32
	Total:	12.34
Status: Private		
	Asphalt	0.32
	Unknown	0.23
	Total:	0.55
	Total:	56.27

FY 2016 Chapter 90 Accepted Road Miles - 42

Town of Charlemont, Massachusetts

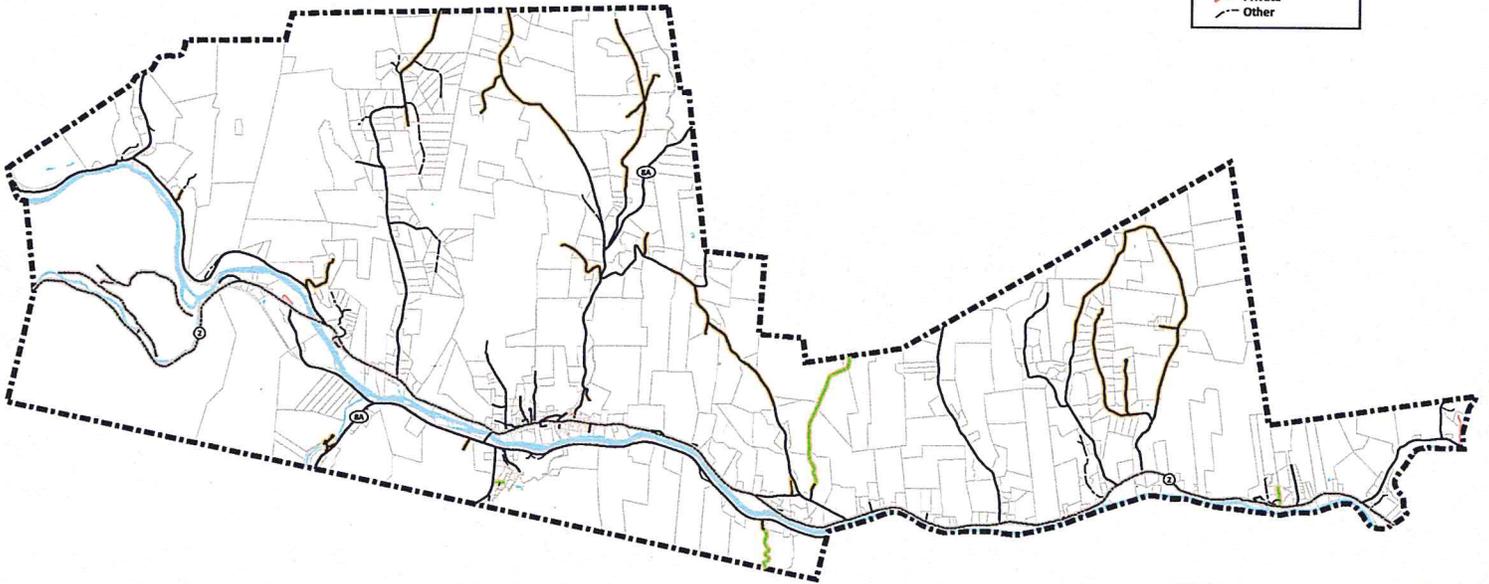
Roadway Management Program

Roadway Ownership and Status

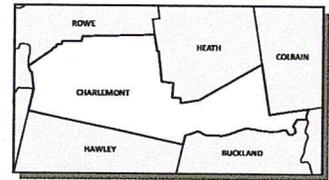


Roadway Status

- Town Accepted
- Town Unaccepted
- State
- Private
- Other



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Town of Charlemont, Massachusetts

Roadway Management Program

Roadway Repair Categories and Banding

Repair Method	Banding Low Range	Banding High Range	Unit Cost Sq.Yrd.
Reconstruction			
Reconstruction			\$45.00
Reclamation			
Modified Reclamation	0	50	\$24.00
Rehabilitation			
Rehabilitation			\$14.00
Cold-In-Place Recycling - 3" Top			\$18.00
Shim and Overlay	50	65	\$12.00
Mill and Overlay - 1.5"			\$10.50
Hot-In-Place Recycling - 1" Top			\$11.00
Level and Overlay - 1"- 1.5"			\$12.50
Preventative Maintenance			
Preventative Maintenance			\$6.00
Nova Chip			\$6.50
Double Microsurface - Fiber			\$4.50
Double Chip Seal - 20% Rubber			\$6.00
Cape Seal			\$5.50
Rubber Asphalt Chip			\$4.70
Micro Seal - Double			\$4.00
Micro Seal - Single			\$3.60
Chip Seal - 20% Rubber	65	80	\$5.00
Routine Maintenance			
Routine Maintenance			\$0.50
Crack Seal	80	92	\$0.50
Defer Maintenance			
Defer Maintenance	92	101	\$0.00
Gravel Roads			
Gravel Road Maintenance			\$0.00
Poor	0	50	\$25.00
Fair	50	75	\$25.00
Good	75	101	\$25.00
Annual Maintenance			\$0.16

Town of Charlemont, Massachusetts

Roadway Repair Backlog Summary - Accepted

Repair Method	Length (Miles)	Square Yards	Percent Repair	Estimated Cost
Modified Reclamation	6.73	88,256.93	22.74%	\$2,118,166.21
Shim and Overlay	3.91	46,902.97	13.21%	\$562,835.65
Chip Seal - 20% Rubber	3.75	47,556.36	12.68%	\$237,781.79
Crack Seal	10.67	139,836.40	36.04%	\$69,918.20
Defer Maintenance	4.54	64,963.20	15.34%	\$0.00
Total:	29.62	387,515.86	100.00%	\$2,988,701.85

Average RSR By Segment: 76.22

*Chip Seal Includes Crack Seal and Shim

**Modified Reclamation includes Strip, Grade, Binder and Top

Town of Charlemont, Massachusetts

Roadway Management Program

Roadway Repair Backlog Summary - Functional Classification

Repair Method	Length (Miles)	Square Yards	Estimated Cost		
Major Collector					
Modified Reclamation	3.91	56,470.01	\$1,355,280.22		
Shim and Overlay	0.74	10,451.02	\$125,412.20		
Crack Seal	4.91	77,451.02	\$38,725.51		
Defer Maintenance	3.54	52,717.66	\$0.00		
Totals for Class:	13.11	197,089.71	\$1,519,417.93	Avg. RSR By Segment:	82.88
Minor Collector					
Modified Reclamation	0.99	11,648.00	\$279,552.05		
Shim and Overlay	0.24	2,773.23	\$33,278.72		
Chip Seal - 20% Rubber	0.27	3,112.87	\$15,564.34		
Totals for Class:	1.49	17,534.10	\$328,395.11	Avg. RSR By Segment:	53.28
Local					
Modified Reclamation	1.52	18,093.34	\$434,240.13		
Shim and Overlay	2.94	33,678.73	\$404,144.73		
Chip Seal - 20% Rubber	1.63	20,630.02	\$103,150.09		
Crack Seal	4.73	51,206.84	\$25,603.42		
Defer Maintenance	0.77	9,311.75	\$0.00		
Totals for Class:	11.58	132,920.67	\$967,138.37	Avg. RSR By Segment:	72.92
Local Cul De Sac/Dead End					
Modified Reclamation	0.31	2,045.58	\$49,093.81		
Chip Seal - 20% Rubber	1.86	23,813.47	\$119,067.36		
Crack Seal	1.04	11,178.54	\$5,589.27		
Defer Maintenance	0.23	2,933.79	\$0.00		
Totals for Class:	3.44	39,971.38	\$173,750.44	Avg. RSR By Segment:	77.99
Class Totals:	29.62	387,515.86	\$2,988,701.85	Avg. RSR By Segment:	76.22

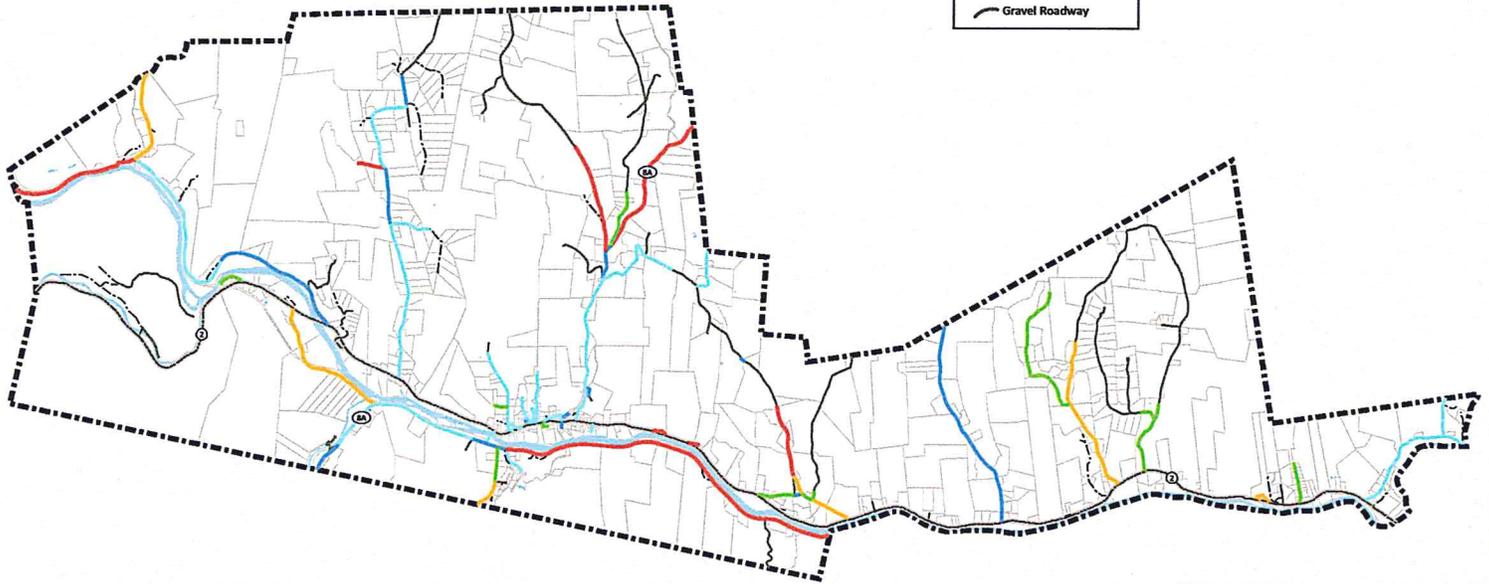
Town of Charlemont, Massachusetts

Roadway Management Program - Paved Roads

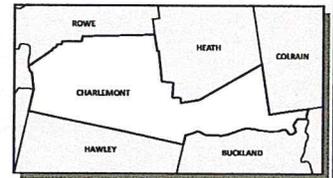
Road Surface Ratings & Repair Categories



- Repair Category**
- Defer Maintenance
 - Crack Seal
 - Chip Seal - 20% Rubber
 - Shim and Overlay
 - Modified Reclamation
 - Gravel Roadway



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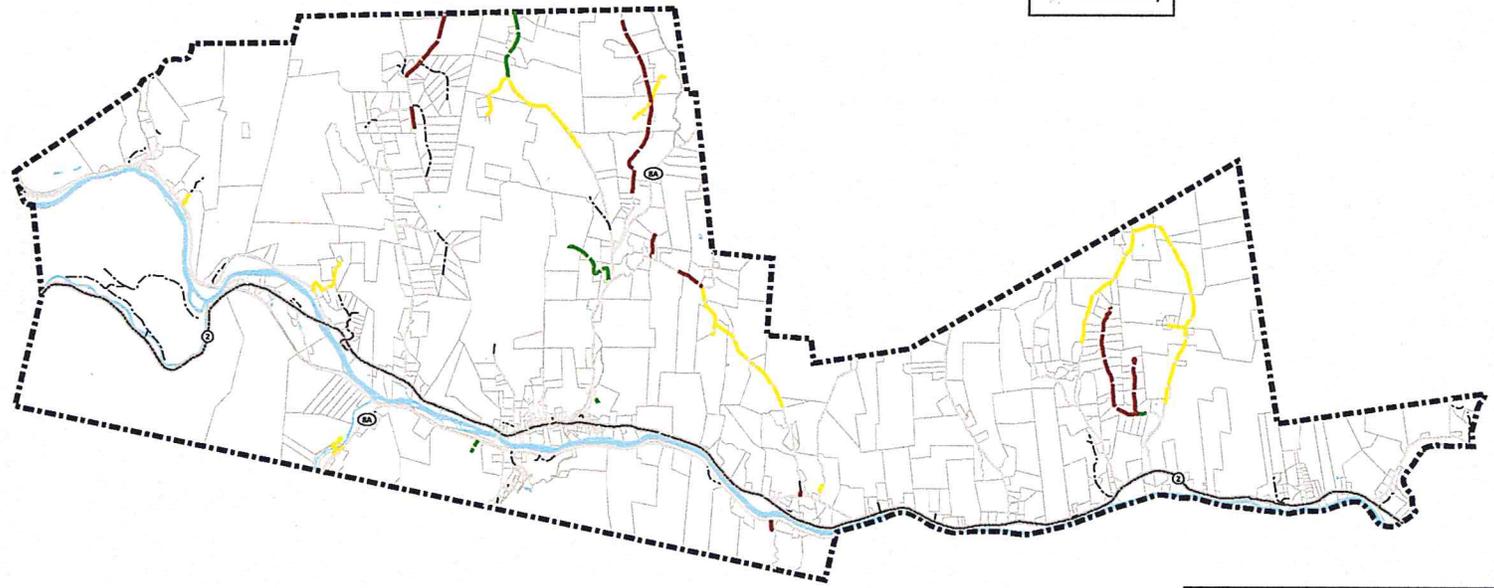


Town of Charlemont, Massachusetts
Roadway Management Program - Gravel Roads
General Roadway Condition



General Condition

- Good (Green line)
- Fair (Yellow line)
- Poor (Red line)
- Paved Roadway (Grey line)



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