

Pavement Management Program Town of Canton 2015 Update

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Presentation Outline



- Conditions in Canton
- > Recommendations

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.

"Getting the Biggest Bang for your Buck"

The Process

- 1. Pavement Section Inventory
- Pavement Distress Identification & Quantification by Visual Inspection
- 3. Pavement Condition Index (PCI) Calculation on a 0 to 100 Scale
- 4. GIS Integration
- 5. Define Repair Strategies and Costs
- 6. Test Various Budget Scenarios
- 7. Develop Annual Road Program





Routine Maintenance73-92 PCI(Crack Seal)()



Preventive Maintenance59-72 PCI(Crack Seal & Patch, Micro surface, Chip Seal)



Structural Improvement Condition 52-58 PCI (Overlay or Mill & Overlay)





Restoration Condition (Reclamation)

40-51 PCI









Funding History

Funding 2000 to 2010

> \$200,000 +/- Year

Funding 2011 to 2015

- > \$1,727,000 Year
- > \$8,635,000 Total



Initial Program Implementation Strategy

2011 Repair work strategy was performed using standard **"Book Job"** method.

Example:

Lower Dyer Avenue

Engineering Services – Utilized pre-bid on-call engineering vendor, plans were developed.

Repair Services - Went out to bid, contractor awarded job, contractor hired sub-vendors (paving, drainage, road marking etc.) – town made one payment to contractor after the road was finished.

Let's review how we made out.

Work In Progress – Program Strategy

2012 Repair work strategy executed with new **"In-House"** method.

- Example: Scoville Road
- Engineering Services Performed in combination with Town staff {Project Administrator/Engineer and DPW}
- Repair Services Drainage work performed by DPW, reclaiming/grading services and paving directly hired by DPW utilizing the CT State Bid Contract.

Town staff took over role of general contractor!

Current Program Strategy

2013 – 2015 Repair work strategy directed by town staff solely with **"Hybrid"** method.

Example:

All roads

- Engineering Services Performed in combination with Town staff {Project Administrator/DPW} and pre-bid on-call engineering vendor.
- Road Improvements Incidental Roadwork bid containing 107 different menu items that established distinct costs for each.
- Pavement Services/Rehab Directly hired by DPW utilizing the CT State Bid Contract.

\$7 Million + Work performed the last three years!!!

















2011 – 2015 Historic Repairs



Current Pavement Condition Index (PCI) - 76



Ridge Road



Anticipated 2016 Roadway Improvements Schedule

Unfinished Projects From 2015:

- East Hill Road Reclaim (Arterial/Collector) w/drainage \$298,791
- Pine Acres Drive -Reclaim (Local) w/drainage \$195,000
- > Breezy Hill Road Chip Seal \$41,000
- Indian Hill Road Chip Seal \$52,000

Unfinished Projects Total - \$586,791

New Projects:

- West Mountain Road Thin Overlay \$161,946
- Powder Mill Road Thin Overlay \$42,897
- Atwater Road Thin Overlay \$28,366
- Various Roads Crack Sealing \$30,000
- Full Depth Patching/Misc. Drainage \$25,000
- Testing and Engineering Services \$25,000 New Projects Total - \$313,209

Total - \$900,000

Future PCI vs. Funding Level PCI - Pavement Condition Index **\$0**/year for 10-years -----\$600,000/year for 10-years years \$1,500,000/year for 10-years

Conclusions & Recommendations

- Average conditions have gradually improved with previous five year funding level
- > Town should allocate sufficient budget to achieve the desired condition goal
- Continue to include pavement preservation in program while funding major projects
- Provide resources to check quality during construction
- Perform updated road survey
- Continue to monitor conditions and progress



Pavement Management Program Town of Canton Questions & Answers