Road Improvement Study Committee
Capital Improvement Presentation

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Outline

- Background and Historical Information
- Process
- Current Road Conditions
- Financing
- Committee Recommendations
Background and Historical Information

- Raymond has just under 40 miles of Public Roads, 36 of which are paved.
- In 2011, the Town voted to create the Road Improvement Study Committee to recommend financial strategies in order to complete capital improvement work.
- Members are Chairman Rolf Olsen, Sam Gifford, Bob Harmon and Nathan White.
In 2004, there was a bond for $950,000 for road improvements.

Typically, the Town utilizes the “pay-as-you-go model” budgeting $240,000 or less to cover maintenance.

There has been a slight increase from 2008, but that was mainly to cover the cost of inflation for materials.
Background and Historical Information

Annual Expenditures from 2004 through Current Proposed Budget

- **Work done with money from bond**
- **Work done with budget money**
- **Value adjusted for CPI and oil**

Year:
- 04/05
- 05/06
- 06/07
- 07/08
- 08/09
- 09/10
- 10/11
- 11/12
- 12/13

$Spent:
- 0
- 100
- 200
- 300
- 400
- 500
- 600
The Committee set three major tasks to be accomplished:

- Determine the condition of road inventory;
- Determine the priority of roads to be worked on; and,
- Investigate and recommend ways of funding proposed work.
Current Road Conditions: Background

There are two types of roads based on how they serve the area:

- Commuter Roads: Any road that is a through street to other roads- higher traffic counts. These roads tend to need repair more often.

- Development Roads: Dead end roads that serve local areas or developments- lower traffic counts. Some can last 15 years on a 10 year maintenance schedule.
We used data from GPCOG and MDOT to determine traffic counts as well as seasonal influences, such as camps, and businesses to help relative use of local roads.
Current Road Conditions: Background

Roa ds can be:

- Private- Road association/landowner's responsibility to maintain roadway
- Town- Town funds the improvement and maintenance of roads
- State: MDOT is responsible for maintenance (eg Roosevelt Trail/Rte 302 & Webbs Mills Road/Rte 85 & Meadow Road/Rte 121)
Current Road Conditions: Data Collection

RSMS11 which is a program developed by MDOT used for:

- Prioritization of roads
- Budgeting improvements
- Maintaining road history
Current Road Conditions: Data Collection

RSMS11 gives guidelines via score sheet to survey roads based on severity and extent of:

- Alligator Cracking
- Longitudinal/Transverse Cracking
- Edge Cracking
- Patches/Potholes
- Roughness
- Rutting
- Roadside Drainage
Based on the data entered into RSMS11, the program objectively categorizes the road based on its surface and drainage status; help to prioritize the road within the maintenance schedule; and assist in creating a budget based on current tonage prices.
Current Road Conditions: Data Analysis

These are the road categorizations and how they relate to the condition of the pavement.

![Road Condition Decline Curve](image-url)
Current Road Conditions: Data Analysis

No Maintenance means road has had recent work and it in excellent condition.

Routine Maintenance would include:
- Crack Sealing
- Ditch Clean Up
- Shoulder Maintenance
- Striping

Preventative Maintenance would include all of the above plus 1” overlay.

Rehabilitation & Reconstruction would include all of the above except with 1.5” of overlay with 2” of binder/base and drainage improvements, including heavy ditching and culvert improvements.
Current Road Conditions: Data Results

Results from RSMS11 Program

Raymond 2012 Network Overview

Maintenance Category

- No Maint
- Routine
- Preventive
- Rehabiliatate
- Reconstruct
Current Road Conditions: 
Data Analysis

Drainage is either:

- **Good**, which requires routine maintenance and does not contribute to the degradation of the road.

- **Poor**, which means that drainage is either non existant or in poor condition and heavy ditching and/or culvert replacement is required.
Current Road Conditions:

Data Results

Results from RSMS11 Program

Raymond 2012 Network Overview

Paved

Miles

Good

Poor

Drainage Category

%
Current Road Conditions: Cost

Based on current tonnage costs for supplies and contract services:

- $160,689.23/mi for asphalt & reclaim
- $2.78/ft for ditching & erosion control
- $4,435.20/mi shoulder work
- $74.00/ft for culverts (as needed)

This includes labor but does not include the surface prep, patching, or crack sealing... etc.
It costs approximately $65,000 to complete 1 mile of 1.5” overlay every year. We should be doing about 4 miles a year to maintain a 10 year surface management cycle and preserve the life of the roadway*.

It costs an additional $30,000 in construction costs to cover ditching, surface prep, patching, cracking sealing...etc, on an as needed basis*.
The Committee reviewed four methods of financing reconstruction work:

- Pay-As-You-Go
- Local Bank Financing
- Maine Municipal Bond Bank
- Town Issued Bond
Financing: Pay-As-You-Go

This would involve budgeting $667,000, in addition to the $275,000 maintenance budget, over three years or $500,000 over four years.

The drawback is that it is subject to municipal budgeting and town meeting process and it is highly probable that this number will be modified, which makes scheduling work difficult.
Financing: Pay-As-You-Go

In FY2014-15, financial capacity could become available from several bond funds:

- Road Construction Bond $ 95,000
- FD Equipment Bond $ 55,000
- Mid-Maine Waste Bond $131,000

TOTAL= $281,000
Local banks are offering low, competitive rates and application process is relatively easy with a quick turn around.

- For loans under $500,000 and a repayment term of 5 years or less, the rates in the 3% range.
- For loans larger than $500,000 and repayment terms larger than 5 years, the rates will vary with only the first five years fixed and subsequent years tied to a variable index.
Financing: Maine Municipal Bond Bank

- Bonds are issued in May and October, and applications are due 4 months prior to the sale of the bonds;
- The only associated cost with the bond is bond counsel, which is the amount of $2500 and rolled into the amount of the bond;
- Current rates for a 10 year bond are 3%, which increase year to year and ends at 4% in year 10;
- There is not flexibility in tailoring payments over the life of the bond; and,
- Fund received must be spent within 3 years of receiving the bond.
Financing: Town Issue Bond

- Takes approximately 8-12 weeks;

- Issuance costs are a function of the size of the bond and are typically in the range of $40,000 and usually built into the financing;

- Issuance cost includes the cost for bond rating from Moody's and/or S&P, the preparation of the bond tender documents and the sale of the bonds;

- Part of the evaluation criterion includes review of current town assets, including capital items to determine potential unanticipated or unplanned capital expenditures that could impact repayment capabilities;

- The issue can take place at any time and there is some flexibility in the structuring the payment terms; and,

- Based on the current market, interest rates for 10 year loans are about 2%.
Committee Recommendations

The Committee is recommending that maintenance and reconstruction be handled separately.
Committee Recommendations: Maintenance

- Maintenance should be handled under annual budgeting at a rate of $275,000 indexed to COLA.
Committee Recommendations: Reconstruction

- Reconstruction should be financed under a 10 year, town issued bond;
- Priority should be guided by the pavement management program, but approved by the Board of Selectmen;
- The plan should include work on Routes 85 and 302, provided that the State pay a minimum of 50%; and,
- Allow for some deviation due to accelerated wear, environmental and other factors.
Committee Recommendations: Reconstruction

- The $2 million bond would rebuild an estimated 13.9 miles of road within the three year spending term;
- Continued maintenance of the roads would continue within the current budget;
- It is anticipated that a similar amount (indexed) will be required when the bond expires.
- Funding for new expenditure will need to be evaluated near that time to determine the optimal funding mix.
Summary

- Town owned roads in Raymond are fair to poor, and current budgeting is not keeping up with maintenance schedule.
- $2 million would cover a significant portion of roads that need reconstruction work combined with an increased maintenance budget.
- Town bonding is recommended because of low interest rates and the flexibility offered versus MMBB.
Questions?