

# Town of Winchester

## Department of Public Works



### Preliminary Discussion 2013 2014 Budget

*January 22, 2012*



# Discussion Overview

- Department Summary
- Achievements
- Major Initiatives
- Right Size Staff Level?
- Current State of Infrastructure
- Historical Data - What Have We Invested?
- How Are We Doing? – Report Card
- Vision For The Future
- Privatization – Pros, Cons and Possible Rewards
- Summary – Looking Forward & 2013/2014 Budget Needs



# Department Summary

## **Public Works 2012/2013 Statistics: \$4.4M Total Budget, 23 Employees**

- **Highway Department**
  - \$ 1,598,661.00 Budget
  - 12 Employees Total (6 Maintainers, 2 Mechanics, 1 Foreman, 1 Carpenter/Mason, 1 Director & 1 Administrative Assistant)
  - Oversee 81 Miles of Road
- **Water Filtration Plant**
  - \$ 384,345.00 Budget
  - 2 Employees Total (1 Chief Plant Operator, 1 Plant Operator IV)
  - Produce Approximately 850,000 gal/day
- **Wastewater Treatment Plant**
  - \$ 1,002,301.00 Budget
  - 4 Employees Total (1 Chief Plant Operator, 2 Plant Operators & 1 Senior Lab Technician)
  - Treat Approximately 1,800,000 gal/day (Average Daily Flow)
- **Water/Sewer Department**
  - \$ 558,627.00 Budget
  - 4 Employees Total (1 Foreman, 3 Utility Men)
  - 2,700 Customers, Oversee 40 Miles of Water Main, 35 Miles of Sewer Main, (9) Pump Stations
- **Buildings – Town Hall**
  - \$ 182,239.00 Budget
  - 1 Employee Total (Building Maintainer)
  - Maintains Town Hall, Public Works Office & Senior Center
- **Cemeteries**
  - \$ 42,611.00 Budget
  - 0 Employees – Cemetery Attendant Provided by Highway Department
  - Oversee (5) Town Cemeteries – (3) Are Active
- **Parks**
  - \$ 10,072.00 Budget
  - 0 Employees – Mowing Outsourced, Additional Maintenance Provided by Highway Department
  - (3) Parks



# Noteworthy Achievements

## **Town Departments**

- Thorough Review of Cemetery Ordinances Was Conducted. The Ordinances Were Rewritten & Cost Schedule Was Updated.
- Initiated Purchasing Through LHCEO Obtaining More Competitive Pricing (i.e. Treated Salt, Road Signs & Plow Blades)
- Initiated Treated Salt Program
- Created 1<sup>st</sup> Comprehensive Drainage Database Tabulating Catch Basins Town Wide
- Implemented New Road Repair Policy For Major Underground Utility Installation
- Sold All Old/Obsolete Equipment & Conducted Yard Reorganization
- Accomplished Utility Pole Relocation on Willow Street Outside of Town Sidewalks During CL&P Power Upgrade Project
- Administered STEAP, ARRA & Small Cities Projects: East End Park Fountain Restoration, Willow Street Parking Lot, Walker Field Restroom (In Progress), Wetmore Avenue Mill & Pave, Downtown Sidewalk Replacement, Phase II Main Street Streetscape

## **Water/Sewer Departments**

- Comprehensive Leak Detection Survey Conducted on Water Distribution Network. Identified Leaks Were Repaired Eliminating 150,000 gal/day in Wasted Water. Projected Savings: 54 Million Gallons/Year of Precious Resource (Water), Energy, Chemicals, & Wear & Tear on Equipment
- Rehabilitated Sewer Plant Corner Sewage Pump Station – Easier Maintenance & Improved Reliability
- Rehabilitated Oakdale Avenue Water Booster Station & Obtained Grant For Permanently Installed Back Up Generator From CT DPH

*For A Full Listing – See 2011-2012 Annual Report*



# Major Initiatives

## Treated Salt (Ice-B-Gone)

### Eliminate Winter Use of Sand on Roads

- Pollutes Highland Lake, Streams & All Other Natural Systems
- Clogs Drainage Systems
- Has No Melting Attributes
- Expensive, Public Perception is That Sand is Cheap – IT IS NOT  
Some estimates say cost = \$500/ton – Cradle to Grave)



### Benefits Resulting From Successful Implementation of Program

- Financial Savings Due to Significantly Less Cleanup in The Spring
- Cleaner Streams and Lakes
- Obtain Safer Roads Quicker

### Initial Investment/Commitment is Required to Support This Initiative

- New Salt Shed to Store More Material & Keep it Protected
- New Plow Trucks/Sanders With Center Lane Spinners
- Trucks With Liquid Tanks to Hold Chemicals
- Adequate Overtime in Initial Years to Support The Learning Curve



# Right Size Staff Level

## Highway Department - Work Force

- Work Force Has Been Reduced From 16 (2001) to 10 (2013)
- Need A Certain Minimum Level to be Able to Adequately Function & be Effective

## Management – Office Functions

- Both Highway & Water/Sewer Superintendent Positions Have Been Eliminated
- Elimination of These Positions Places More Burden on Director & Foremen

## Proposed Assistant to Public Works Director Could:

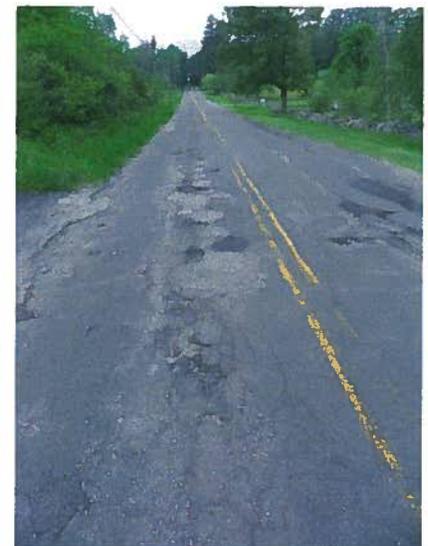
- Perform Construction Project Inspection
  - Could have saved \$75k on Wetmore Avenue ARRA Project
  - Could Have saved \$125k on Main Street Phase II Streetscape Project
- Design Small Construction Projects In-House
  - Walker Field Permanent Restrooms (STEAP Project)
  - Walker Field Parking Lot (STEAP Project)
- Write New Ordinances That Are Desperately Needed
  - Sidewalks
  - Snow
  - Drainage
- Draw & Follow up With Road Repair Details



# Current State of Infrastructure Roads



***Fruit Street***



***Newfield Road***



***Perkins Street***



# Current State of Infrastructure Roads



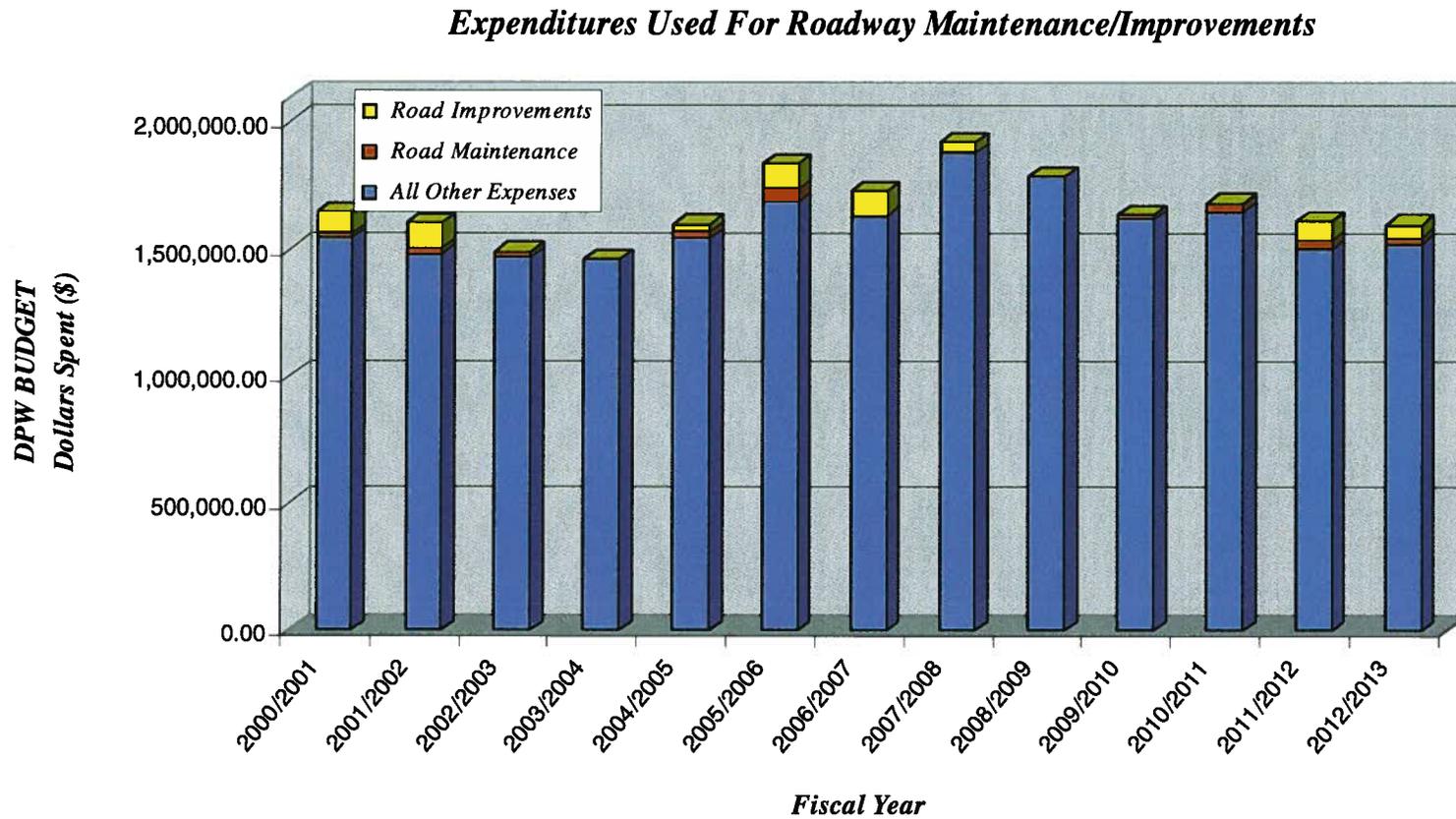
***Holabird Avenue***



***Mountain View Terrace***

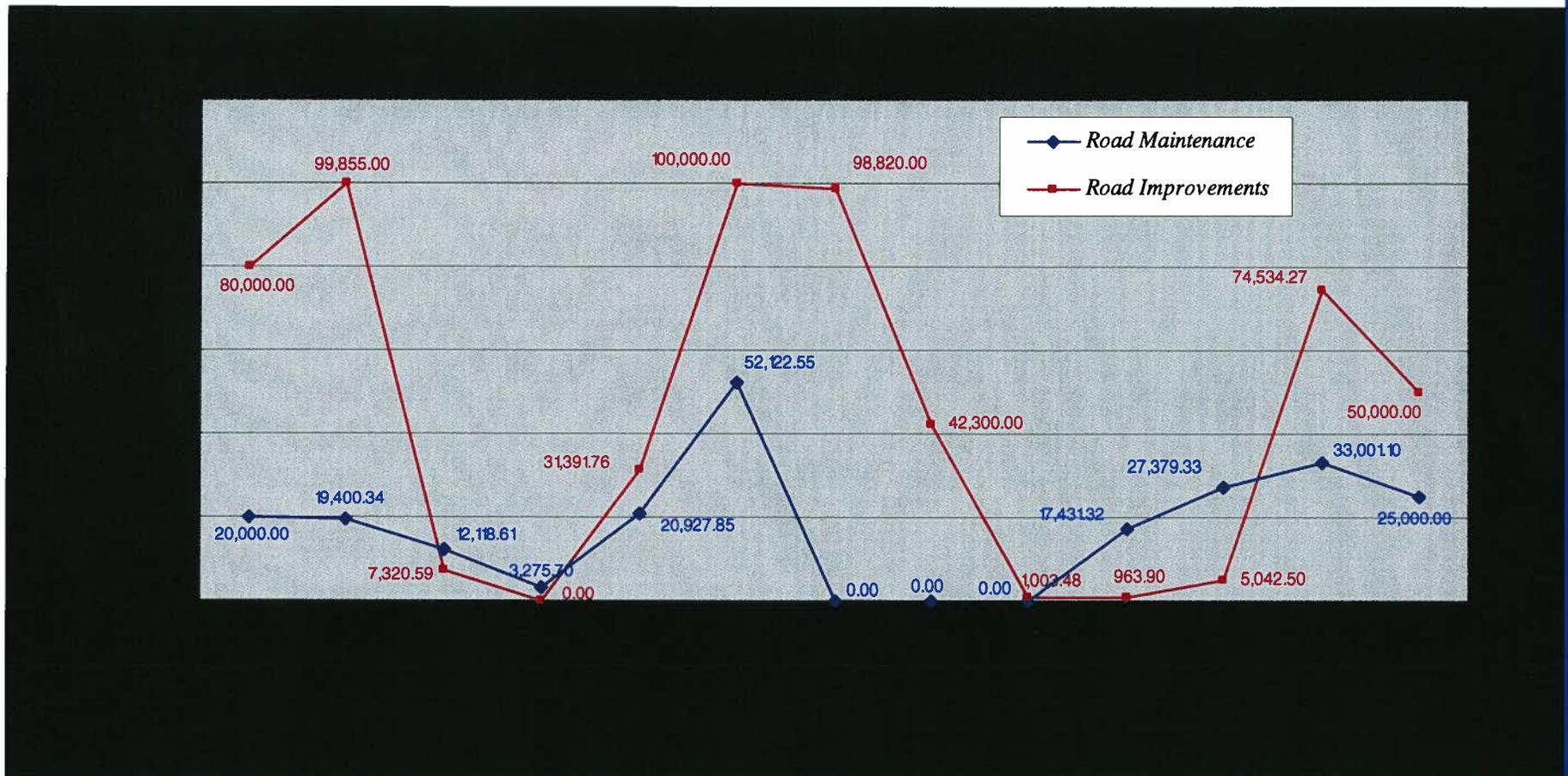


# Investment History - Road Maintenance





# Road Investment – A Closer Look

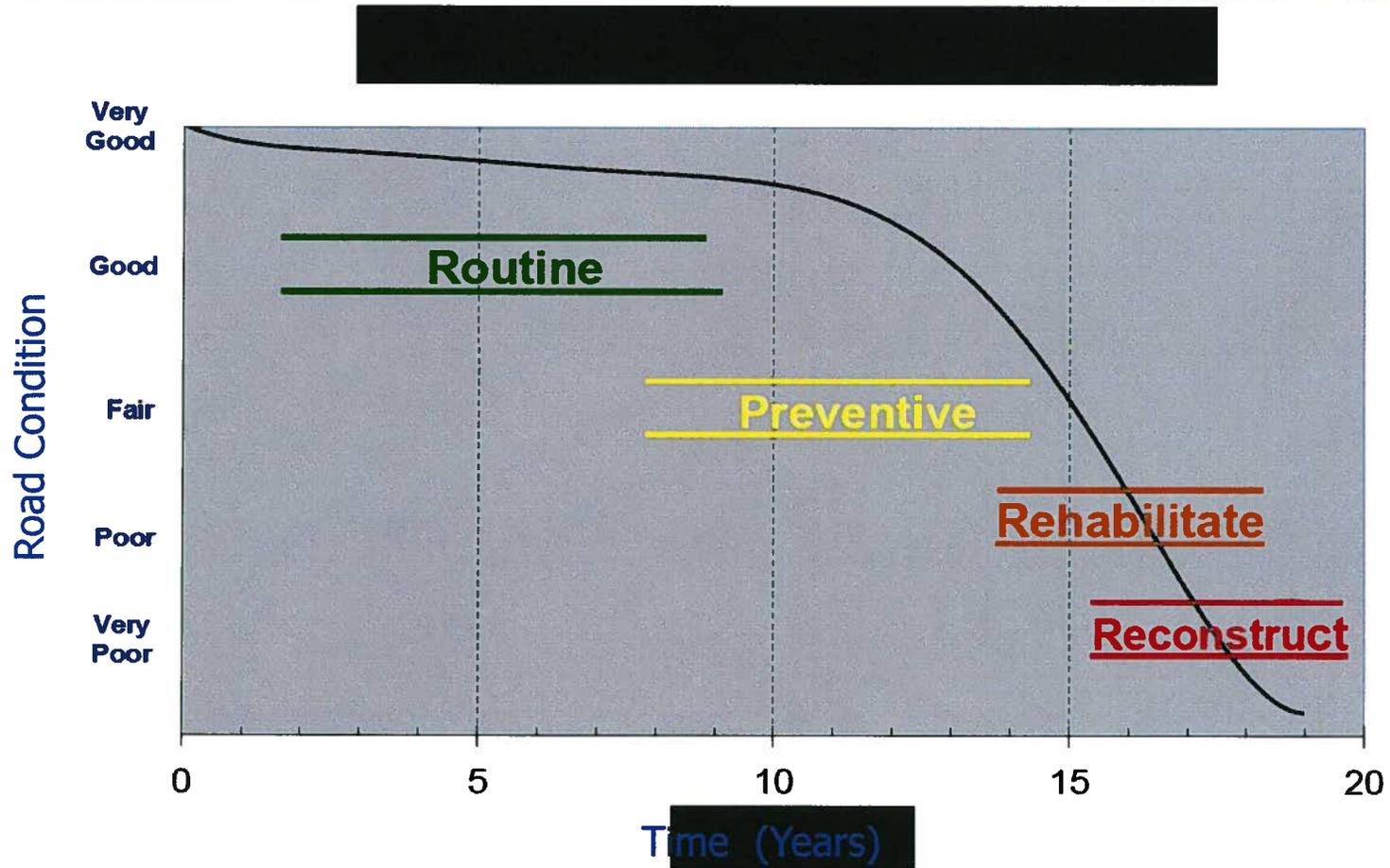


Preventative Maintenance Investment Has Been Insignificant

Roads Are Showing The Results of Years of Neglect



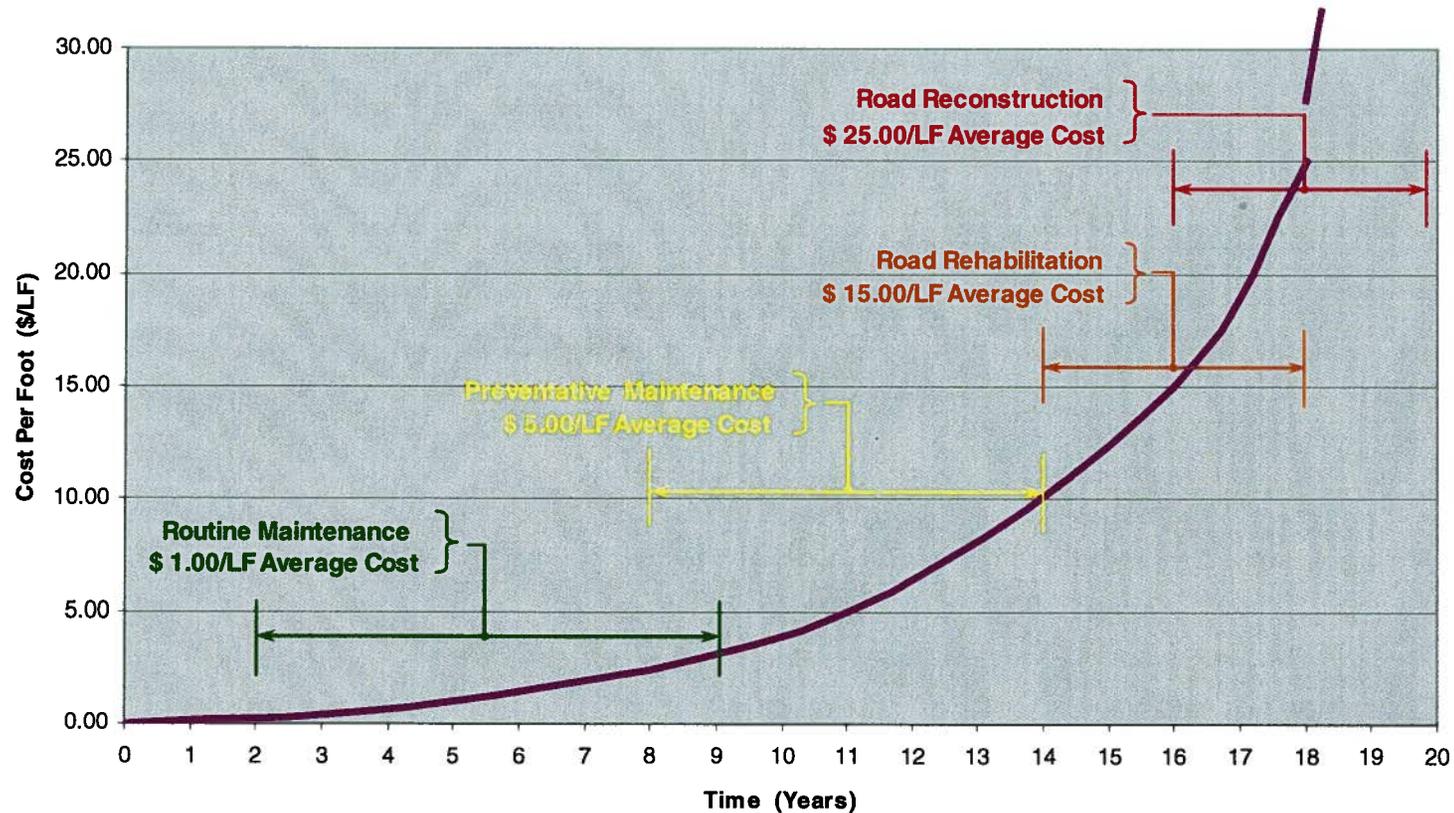
# Road Condition Decline Curve



Without Adequate Routine & Preventative Maintenance,  
Road Condition Declines Dramatically After 12 Years



# Road Investment Cost Curve



**It is Much More Cost Effective to Invest in Preventative Maintenance Than Rehabilitation/Reconstruction**



# Current State of Infrastructure Bridges

## Holabird Avenue Bridge

### Status of Design:

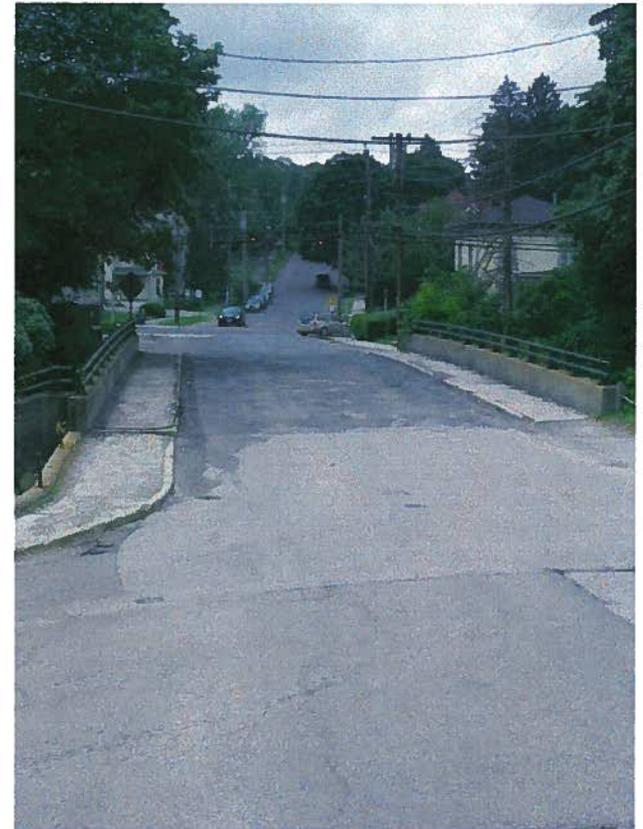
- \$ 110,000 in 2012/2013 Budget to Complete Design (Engineer Estimate Was \$ 127,000 to Complete Design)
- Currently Waiting For Revised Design Proposal
- Engineering Design Was Initiated in 2004
- Design Drawings Are 75% Complete

### Estimated Construction Costs:

- Total Estimated Replacement Cost = \$ 3,000,000
- \$ 2,695,000 Estimated 2012 Construction Cost
- Bridge Was Previously In Line For (2) Funding Installments of \$ 1.5 M (\$ 3.0 M total) From CTDOT Thru LHCEO
- Potential Construction Funding Needs to Be Confirmed

### Current Condition:

- CT DOT Has Rated This Bridge in **Serious** Condition
- Bridge is Open





# Current State of Infrastructure

## Bridges

### West Street Bridge

#### Status of Design:

- No Action Taken to Date
- Identified in 2010 5-Year Capital Plan For Replacement
- Identified in 2011 Proposed Municipal Bond For Replacement

#### Estimated Construction Costs:

- Total Estimated Replacement Cost = \$ 450,000
- (\$ 95,000 Estimated Design/Administration Cost)
- (\$ 355,000 Estimated Construction Cost)

#### Current Condition:

- This Bridge is in **Serious** Condition
- Westbound Shoulder is Closed
- Allowable Weight Limit Reduced to 15 Tons





# Current State of Infrastructure Bridges

## Sucker Brook Road Bridge

### Status of Design:

- Design Work Not Yet Started
- Accepted into Federal Local Bridge Program
- Staff Shortage is Hampering Progress

### Estimated Construction Costs:

- Total Estimated Replacement Cost = \$ 867,000
- (\$ 173,400) 20% Town Share Needs to be Appropriated
- (\$ 693,600) 80% Federal Share

### Current Condition:

- This Bridge is in **Serious** Condition
- Bridge Deck is in Need of Total Replacement
- Bridge Was Closed to Traffic on 10/26/2010





# Current State of Infrastructure

## Drainage

### Oakdale Avenue

- Drainage System is Failing & is in Need of Major Repairs/Replacement

### Stone Culverts

- Many Stone Culverts Throughout Town Are Failing & Are in Need of Replacement (i.e. @ Pratt Street, Litchfield Street & Platt Hill Road)

### Catch Basins

- 1,440 Catch Basins Throughout Town - Many in Need of Major Repairs or Replacement





# Current State of Infrastructure Facilities

## Town Hall

- Exterior Brick Facade is in Need of Major Repairs
- Front Doors Need Major Repairs or Replacement
- Stairs in Need of Major Repairs
- Front Vestibule in Need of New Lighting and/or Windows

## Public Works

- Emergency Generator is Needed
- New Salt Shed is Needed



# Current State of Infrastructure Equipment

## Roadside Mower

- Previous Machine was 25 Years Old, Obsolete & Inoperable
- Machine was sold in Town Auction
- Replacement Cost = \$ 110,000
- Mower is Needed to Remove Brush & Vegetation From Road Shoulders



## Snow Plow Trucks

- Average Age of Fleet = 11.2 Years Old
- (2) Truck Replacement Cost = \$ 335,000
- Bleeding Money via Maintenance & Repair Costs

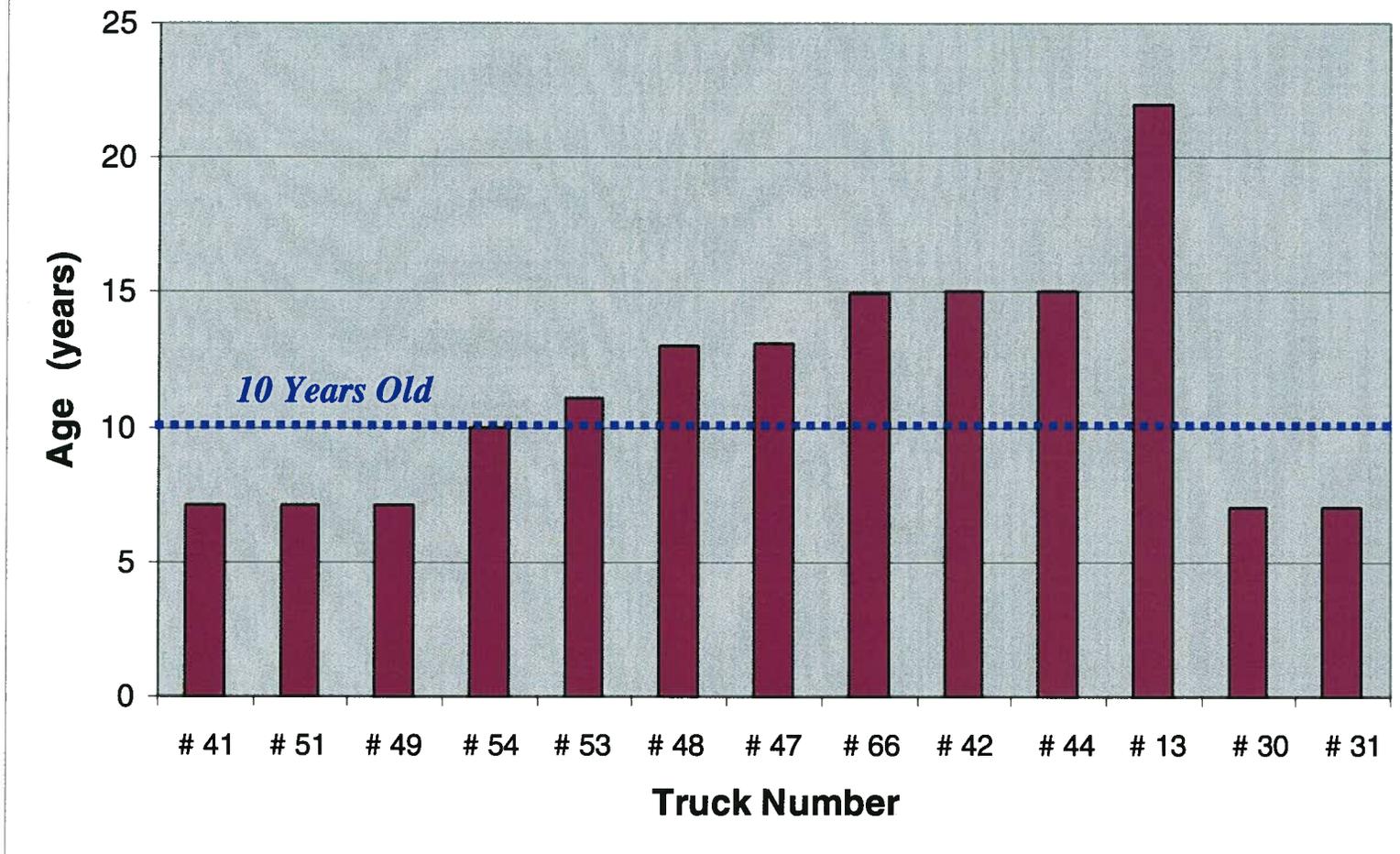


## 1 1/2 Ton Bituminous Roller

- Present Machine is 28 Years Old, Obsolete & Parts Unavailable
- Replacement Cost (1.5 Ton) = \$ 15,000
- Approximately \$4,000 Spent in Rental Charges This Season



## Current Age Distribution of Snow Plow Trucks 2013



*Average Age of Fleet = 10.2 Years Old  
(8) Trucks 10 Years Old or Older*

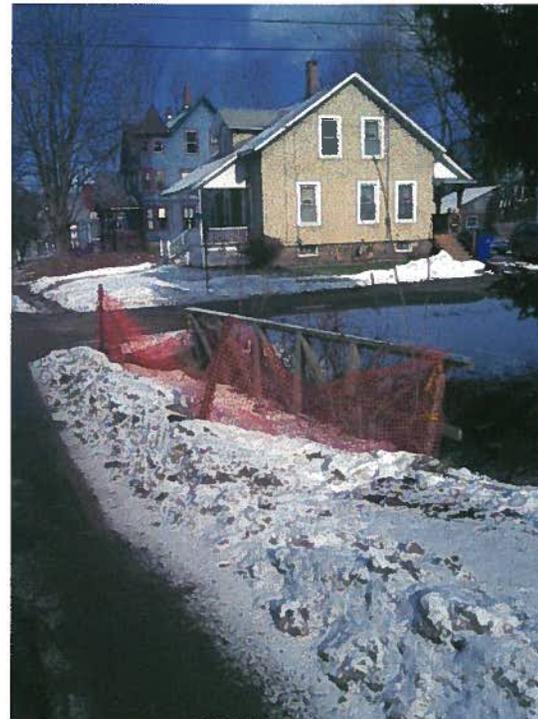


# Current State of Infrastructure Sidewalks & Pedestrian Bridges

- Many Sidewalks & Pedestrian Bridges Are in Desperate Need of Repair



***Highland Lake Spillways***



***Pratt Street***



# How Are We Doing?

## Report Card

### Roads: Poor

- We Have Not Made The Investment in Preventive Maintenance
- Have Many Roads That We Have Lost (i.e. Newfield) And Will Now Require Expensive Repair Options
- Many Roads Are on The Brink of Being Lost to Expensive Replacement Options

### Bridges: Poor

- Taking Too Much Time to Get Bridge Projects Designed & Funded (Holabird Avenue Bridge Started in 2004 and Design Still Not Complete)
- 3 Other Bridges CTDOT Rated in "Poor" Condition as of 8/3/2012. These Are Future Projects (Liabilities) Waiting in the Wings
- 20% Town Share For Sucker Brook Road Bridge Should Be Funded in 2013/2014 Budget

### • Facilities: Poor

- Town Hall Has Many Problems – Brick Façade, Roofing
- Senior Center Parking Lot Needs to be Permanently Paved
- Salt Shed Needed At DPW

### • Capital Equipment: Poor

- No New Equipment Purchased Since 2006 – No Way to Run An Operation
- Most Snow Storms – Can Count on Several Major Equipment Breakdowns

### • Sidewalks: Poor

- Several Pedestrian Bridges Need Major Repairs/Replacement (Spillways, Pratt Street)
- High Street Sidewalk Needs Complete Replacement



# Vision For The Future

- Curtail The Band Aid Approach to Infrastructure Maintenance
- We Should Have an Active Roadway Chip Sealing, Crack Sealing and Bituminous Overlay Program
- Maximize Use of LHCEO Equipment Cooperative & Regional Purchasing
- Continue Creation of a Nimble Highway Department Capable of Expeditious Cost Effective Repairs
- Improve Condition of Infrastructure to The Point Where Less Time & Money Can be Spent on Potholes & Major Emphasis Could be Redirected to More Productive Tasks
- Initiate a Proactive Guide Rail Replacement Program
- Implement The Federally Mandated Street Sign Upgrade Requirements
- Modernize Equipment Which Will Increase Productivity & Reduce Costly Breakdowns & Repairs
- Acquire a GIS System That Would be Used to Manage All Infrastructure



# Privatization

## Pros

- Potential Cost Savings in the Beginning
- Could Reduce The Need to Own Capital Equipment
- Could Reduce The Need For Maintenance Capabilities

## Cons

- Once Change is Made Difficult to Gear up to Change Back
- At the Mercy of the Market
- Loss of Experience & Local Knowledge
- Level of Service May Suffer (Profit Driven)
- ✓ Privatization May Be Beneficial For Some Limited Tasks
- ✓ Privatization Shouldn't Be Considered to be a Silver Bullet That Will Solve All Problems



# Summary

## **Things to Consider Moving Forward & in 2013/2014 Budget**

- **A Continuous, Adequately Funded Road Preventative Maintenance Program Needs to be Recognized and Accepted as an Integral Part of the Yearly Working Budget.**
- **Designated Infrastructure Maintenance & Improvement Funds Should be Dedicated & Immune From End of the Year "Spending Freezes".**
- **A Capital Equipment Replacement Program Needs to be Established to Maintain Safe, Dependable & Cost Effective Operation of Equipment.**
- **Commitment & Funding Needs to be Given to Major Initiatives (i.e. Treated Salt) Which Will Save Money Over Time**
- **Staff Level Needs to be Appropriately Sized to Plan and Accomplish Long Term Goals Above & Beyond Day to Day Operations**
- **It Must Be Recognized That Infrastructure Can Not be Adequately Maintained Through Infrequent Bonds and Grants Alone**
- **Accounting Rules Need to be Revised to Support Public Works Not Hinder it**
  - Town Aid Money Designated For Unimproved Roads Should be Utilized Accordingly
  - Revenues From Steel Scrap & Sales of Obsolete Equipment Should be Reinvested Within the Department
  - DPW Should be Reimbursed With Insurance Payments When Called Upon to Repair Town Infrastructure Damaged in Accidents