

Town of Amherst

DPW Strategic Plan



Mission Statement

The Department of Public Works Department is responsible for providing the citizens of Amherst with an extensive variety of services on a daily basis. These services are divided into six groupings: Public Administration, Roads, Buildings and Grounds, Fleet Maintenance, Solid Waste, & Cemeteries.

Vision Statement

Commitment to our mission enhances the quality of life, promotes economic prosperity and improves mobility for the citizens of Amherst. As a recognized public works leader, we strive to continuously improve our operations in order to provide a safe sustainable environment.

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Introduction

This is a Strategic Plan document spanning budgets FY-15-18 that describes where the Department of Public Works is today, where we think it needs to be, and how to get there. Below are brief descriptions of the various aspects of the town that DPW is responsible for maintaining and that are covered in this strategic plan.

Public Works maintains or manages

- A vehicle/equipment fleet with an estimated replacement cost of \$2.9 million
- Approximately 114 miles of paved roads (or 228 lane miles)
- Approximately 8 miles of gravel roads (or 16 lane miles)
- 14 bridges, three of which are “red listed” and two are near “red listing”
- One and one half miles of sidewalks
- Baboosic Lake Septic (4 phases totaling 44 homes)
- Amherst’s Stormwater Management Plan
- Eight town buildings
- Solid Waste, Transfer Facility
- 23 acres of grass (Cemeteries & Commons)

The Department of Public Works is staffed with full and part-time employees who provide high quality technical municipal road, building, and environmental services to the town. Our department maintains 28 DPW vehicles and heavy equipment (of various ages) and to keep up with needs, we must explore alternative ways to replace, upgrade, and improve our fleet.

The department’s road responsibilities are twofold. First is: routine road maintenance which includes a wide variety of summer and winter work and requires sufficient staffing and equipment, Second, road reconstruction work which includes in-house layout, contract documents, oversight, and decision making. The latter has brought about an array of engineering challenges, the use of a variety of repair strategies and the need for another assessment of our infrastructure.

Our existing facility on Dodge Road (approximately 6,800 square feet) was originally constructed in the 60’s and added on to in the 70’s, 80’s and 2003. This houses the administrative and operations divisions of Public Works and can shelter a maximum of five vehicles; it lacks the ability to wash vehicles and cannot support a vehicle lift. As we work towards meeting physical and environmental demands, further building adjustments are required.

A bridge is a structure having a clear span of ten feet or more while crossing a waterbody. Amherst’s 14 bridges are inspected by the NHDOT every two years, except for those classified as “red listed” which are inspected annually. With one bridge closed, and State aid not available before FY-18, the town faces immediate and difficult decisions.

Public Works maintains approximately 1.5 miles of sidewalk in the village. A committee of residents managing a \$15,000 “Safe Routes to School” grant studied our existing infrastructure and made recommendations to the BOS for improvements. Nashua Regional Planning Commission is assisting the committee in applying for a construction grant for new sidewalks on Boston Post Road near the Amherst Middle School.

Forty-four homes make up the four phases of Baboosic Lake Community Septic. This is managed and maintained by the Department of Public Works.

The Clean Water Act is the driving force behind EPA’s Stormwater Management program. In 2003 approximately forty (40) percent of Amherst property had to meet these mandates. A new more restrictive permit is in draft form. If adopted as written, the town will be required to spend millions of dollars and devote

more man hours and seek greater expertise. Eight hundred summer hours worked by two engineering interns will not be enough.

DPW manages the repair and maintenance of eight town buildings. Depending on the scope, some work is done by DPW personal and some through competitive bid.

The \$1.1 million facility and equipment upgrades to the transfer station were very successful. The cost was shared between the town and the solid waste district. Amherst is reaping the benefits of this investment. We have also seen savings in the renegotiated trash contract.

Town Commons and Cemeteries account for approximately 23 acres of grass. Both are managed by DPW; share the same equipment, and part-time help supervised by the Buildings and Grounds Foreman.

Given the breath of its responsibilities and budget, this plan actually constitutes several separate strategic plans organized by main categories – infrastructure, buildings and grounds, environmental issues, and staffing and equipment.

Infrastructure

Roads

History

Between 1960 and 2000 the most common practice for road maintenance was asphalt overlay. There are areas in town that have as much as twelve inches of 3/8 asphalt. This practice is not unique to Amherst, it is an acceptable practice, but it adds little or no structure, doesn't address drainage, and in a short period of time the road distress such as reflective cracking reappears. The state overlay of US Route 122 in 2010 is one such example.

A computer generated program called Road Surface Management System (RSMS) was used by two engineering interns in 2008 to evaluate all roads in Amherst. What resulted was a Pavement Condition Index (PCI) survey that helped determine the best course of action for road repair.

The PCI evaluates road sections for the following;

Asphalt road

- Alligator Cracking
- Longitudinal/Transverse Cracking
- Edge Cracking
- Patching/Potholes
- Roughness

Gravel roads

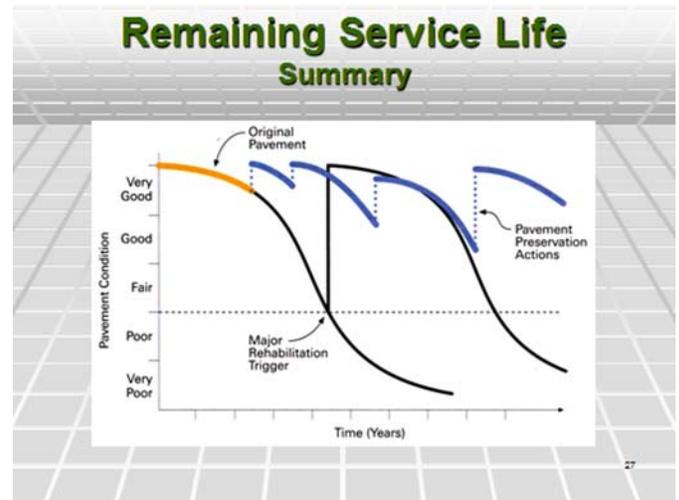
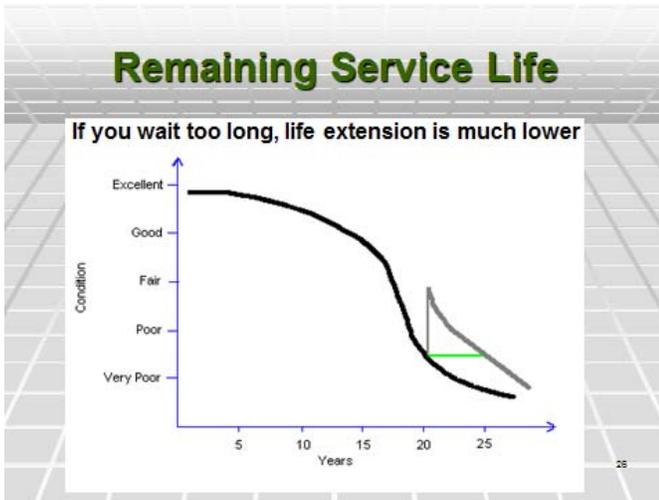
- Dust
- Potholes
- Washboarding

A winter PCI would include the severity of frost heaves and could possibly produce slightly different conclusions. The difficulty is we lack sufficient staff, to complete such a survey. In fact without the Intern program, we lack summer staff as well.

The following was the 2008 RSMS recommended repair strategies. This road analysis should be updated yearly. All roads were reevaluated during the summer of 2010 (the only follow-up) by a different team of interns using the same computer analysis and reaffirmed the progression of asphalt failure.

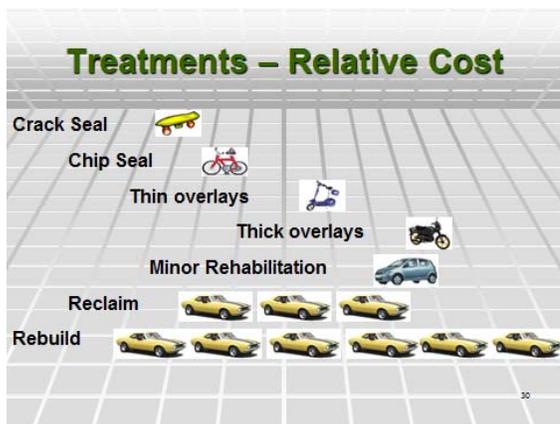
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|-------------------|-------------|----------------------|--------------------------------|
| • Crack Seal | 22.03 miles | 2-3 year life span | \$ 0.50 per square yard |
| • Patch | 15.84 miles | limited life span | \$110.00 per ton |
| • Surface Coat | 16.37 miles | 3-5 year life span | \$ 4.15 per square yard (chip) |
| • Overlay | 33.45 miles | 4-6 year life span | \$ 7.55 per square yard |
| • Rebuild/Replace | 12.39 miles | 18-20 year life span | \$ 24.65 per square yard |
| • Rebuild | 10.86 miles | 18-20 year life span | \$ 29.10 per square yard |
| • Unrated | 0.383 miles | | |

If we are unable to implement the above recommendations, over time, each section of road will either drop one or two category levels reducing “service life”.



The road repair strategy above left demonstrates what happens when you wait too long and must rebuild at (\$24-\$29 per square yard). Many road distresses can be directly attributed to poor drainage, pockets of loam, clay, marginally free draining base gravels, and traffic load, but it is not financially practical to rebuild/reconstruct every road in town. In a time when tax dollars are difficult to come by, it is more important than ever to produce the best possible product at the most economical price.

The summary above right could be a crack seal or thin overlay (\$0.50-\$4.50), which is asphalt preventative maintenance that keeps the good roads in good condition.



Another way of comparing treatment costs is the graph on the left. Early maintenance intervention is cost effective.

While asphalt maintenance is a major component of road repairs (included below), there are other functions of road maintenance that cannot be left unattended

So where are we today?

There are three levels of road repairs:

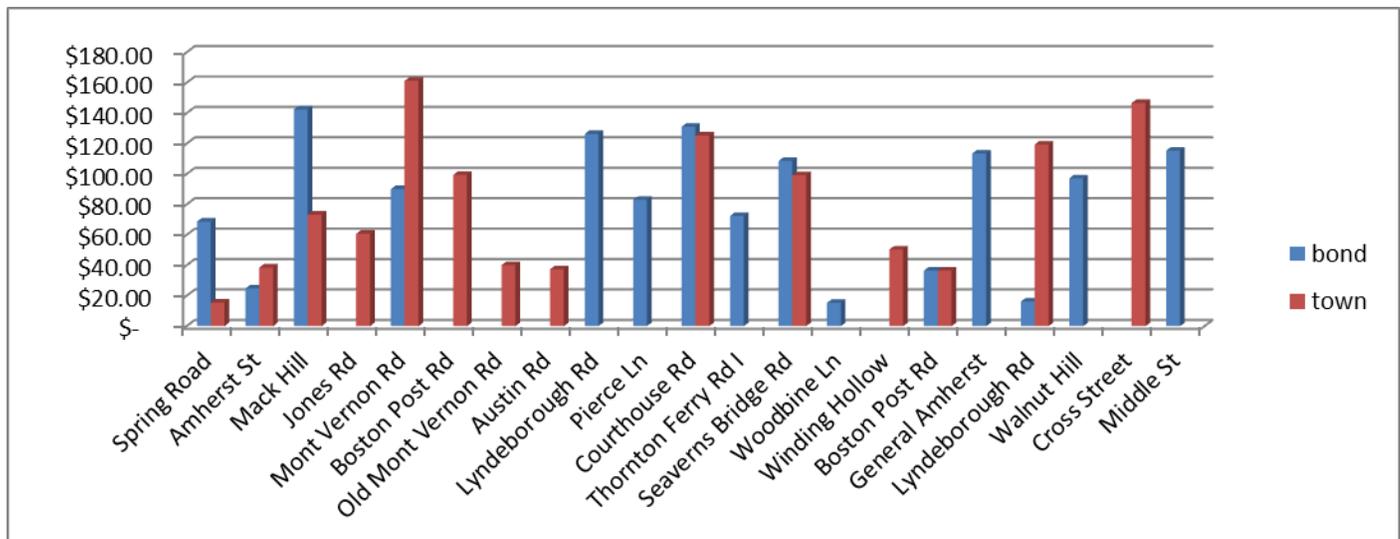
- Maintain (crack seal and patch) – Crack sealing requires editing an already prepared bid specification.

- Overlay (Surface coat, overlay, & mill-fill) – For a surface coat, or a light overlay, requires a bid specification with significant more detail. If a mill and fill is the selected surface treatment, asphalt road corings are performed first, after which a bid specification is prepared and published.
- Rebuild (Rebuild/reconstruct) – to produce and publish a bid specification package detailing construction quantities by February, (in time for a spring construction), road layout must occur months and preferably a year in advance. This is especially true when it comes to coordinating with local utilities. We have waited as much as a year for utilities to move utility poles and upgrade water mains.

We estimate that the town now has the following deficiencies requiring over \$18 million in related expenses to address;

- Maintain, 49 miles \$ 1,366,022
- Overlay, 25 miles \$ 2,038,578
- Rebuild 40 miles \$14,987,212

The bar graph below highlights road reconstruction work completed since the 2010 reconstruction article and splits between “bond” (in blue) and “town budget” work (in red). This graph demonstrates the complexities involved in road engineering and is based on linear footage to show that no two roads (or road sections) are the same.



The necessary components to prepare a road or road section for reconstruction are:

1. Road layout
 - a. Select roads or road sections for upcoming year
 - b. measured in 50 foot increments (pinned and painted on the road)
 - c. Field notes on existing conditions, and
 - d. Recommended road improvements to meet existing needs (using the stationing)
 - e. Bid Engineering/ inspections services (we are under contract through 2015)
 - f. Plan review with consulting engineer (for each road section)
 - g. Submittal to NHDES for wetland permits
 - h. Calculate quantities (for each road section) and
 - i. Prepare bid specification (approximately 75 pages)
 - j. Place document out to bid

- k. Pre-bid meeting with perspective construction companies
- l. Recommend and seek award from BOS
- m. Property owner easements where needed
- n. Mailings to residents on pending reconstruction
- o. Public information meeting
- p. Constant one on one with affected road residents throughout the process
- q. Work closely with consulting engineer and contractor and approve layout changes (the engineer is there to be sure the plan is followed; only the town can/should approve changes to the plan)

Similar to rust on a car that isn't attended to, in just five short years, other road sections adjacent to identified bond pieces have failed. Neglecting those areas (especially when the repair crews are on site raises the ire of citizens), but addressing those areas is taxing to the budget and causes deferments of other repair strategies for other roads.

From the chart on the right,

Amherst allocates \$5,738 per road mile
 Bedford allocates \$6,024 per road mile
 Derry allocates \$7,879 per road mile
 Goffstown allocates \$17,692 per road mile

The Goffstown number is disproportionately skewed because their road reconstruction funding is included in their operating budget, thereby eliminating the need for constant rebonding and the constant budget spikes generated by "new" bond interest.

	Road Mileage	Annual Budget
Amherst	122	\$0.7 M*
Bedford	166	\$1 M
Derry	165	\$1.3 M
Goffstown	130	\$2.3 M

*Increased from \$0.3M in FY2007

DPW SWOT Analysis

Strengths

1. Engineering is both strength and a weakness. We enjoy the expertise of specific disciplines (for instances (T.F. Moran is under a three year contract for road reconstruction) but we are paying the average of a fulltime wage for part-time work.
2. The strength of the maintenance programs are its employees and our short and long term planning. The more pro-active repairs made to roads, bridges, and sidewalks minimize the need for expensive unplanned reactive repairs that taxes a budget.
3. Though the study is five years old, there is a road strategy plan in place. Based on recent repairs, we also have current data on the cost of each strategy.

Weaknesses

1. During the application process for new road construction, the Amherst Planning Board place specific requirements on new construction by developers, but the written specifications are dated 1971 and references a 1969 NH DOT Road and Bridge book, making it out dated and inadequate. Over the next few years, the Community Development director and DPW director will collaborate and prepare new road construction specifications for Planning Board approval.
2. The Town does not have construction requirements for new or replacement domestic water lines or septic mains (public or private). New water mains are installed under town roads, to Pennichuck's standards not the town's. This has been problematic for waterline extensions.
3. A formal bid is a legal contract, putting the brakes on spending in March and receiving a green light in late May or early June leaves inadequate time to go out to bid, and get the bid before the Board of Selectmen for award prior to the end of a budget cycle.
4. We sometimes run into staffing issues to perform maintenance functions because of earned time usage.

Opportunities

1. The most important opportunity, is the ability to take a fresh look at what we are doing, how we are doing it, and how can we do it better.
2. To better define road maintenance and road reconstruction. Maintenance funding currently subsidizes reconstruction. As a result, many repairs are deferred and service life is not extended.
3. We anticipate the current road bond will be completed by the end of the 2017 construction season. I also believe there will be another 20-25 miles of road needing reconstruction. For example, the only part of Amherst Hills covered by the bond is 1,750 feet of Col. Wilkins Road; however, every road in Amherst Hills (with unprotected buried cable) needs rebuilding.

Threats

1. In the past 12 years, the town has experienced seven (7) FEMA events. A surprise weather nightmare can occur anytime (including the last week of a budget cycle). The unplanned work is initially financed one hundred percent from the DPW operating budget. Depending on the timing of the 75% reimbursement. If returned to the highway budget, depending on timing, it may or may not, cause deferment of other planned projects.
2. Portions of the road budget normally reserved for summer and fall road work must act as a reserve (mostly overtime and outside hire) to subsidize winter road maintenance.
3. The original reconstruction model used in Amherst, came from a similar process used successfully in Bedford. It includes going to the voters for bonding approval to draw on funds and pay as you go. The bond interest that comes from doing \$2 million dollars of annual road reconstruction increases the town budget by 3%.
4. In five of the previous six years, spring work (late March – June) has been compromised from declining town wide revenue.

Goal: To annually maintain a PCI of 70%.

To achieve this goal, Amherst needs to:

Patch and Crack Seal 20% (10 mi) of our 49 miles of roads @	\$ 273,204
Overlay 20% (5 mi) of our 25 miles of roads @	\$ 407,715
Rebuild/Reconstruct (5 mi) 12.5% of our 40 miles of roads @	<u>\$1,873,401</u>
Annual road maintenance	\$2,554,321

9.93 miles of the 22.9 miles of road sections identified in the bond for reconstruction will be completed this year, so 12 of the estimated 40 miles would be financed from the bond. The balance needs to come from other sources. The chart on page 9 of this report helps explain how much budget money has been diverted towards reconstruction in the past few years.

Strategic Initiatives

1. Support the creation of a bookkeeping system that doesn't restrict spending in March, April, and May. In cases where the town finds there is budget money in June, it is very difficult to create bids (legal documents) and schedule work within that timeframe before the end of the fiscal year.
2. To verify the accuracies of the projected strategy estimates, implement an annual road evaluation program. Estimated cost of software \$5,000+-.
3. Create a Capital Reserve or expendable trust dedicated for FEMA events and *maintain a \$200,000 balance.*
4. Work with the Community Development Director to adopt updated road specifications that protect needs and taxpayers.

DPW recommends increasing the Road Maintenance repair line (01-4312-10-2679) by \$200,000 each of the next three years. This approach shifts from the "Bedford" approach and towards the "Goffstown" approach for maintenance and road reconstruction.

Line item increase in 2015 from \$740,406 to \$940,406 is a 27% increase to the budget line

Line item increase in 2016 from \$740,406 to \$1,140,406 is a 21.3% increase to the budget line

Line item increase in 2017 from \$1,140,406 to \$1,240,406 is a 17.5% increase to the budget line

The draft CIP plan calls for a \$100,000 increase in each of the above budget cycles.

Infrastructure

Bridges

History

In the 70's, 80's, and very early 90's, it was a common and economical solution to construct bridges from large steel culvert pipes. We now know that, due to the anaerobic sulfate-reducing bacteria in our water, large holes appear in the metal and cause them to fail at a high rate as Amherst's are.

There are 14 municipal bridges in Amherst, seven made from steel culvert pipes. For 36" and smaller diameters, we have not used metal in Amherst for the last 13 construction seasons. Of those, two are red listed, and one of them is now closed. Manchester Road Bridge (series of three large culvert pipes) closed to vehicular traffic. Horace Greeley Road, (series of three culvert pipes) suffers from significant distortion and deflection throughout and extensive corrosion with pitting is "red listed" and because it is almost totally submerged it is inspected yearly with divers. State inspections of three additional culvert bridges revealed headwall settling, moderate distortion and deflection in at least one section with significant corrosion. Of the remaining two (culvert type bridges), one has light to moderate pitting on inverts, and some headwall settling with mortar cracks. The other is aluminum and in good condition.

In today's numbers, DOT states the average cost of a bridge replacement is \$800,000 with an inflation rate of 3-5% per year. Therefore, replacing seven bridges @ \$800,000 in today's dollars, equals \$5.6 million.

The New Boston Road Bridge (near the Mont Vernon town line) is a concrete slab "Red Listed" bridge. Permanent repairs made three years ago improved its rating, but it is still on the State's red list as a 2019 place holder and still needs approximately \$45,000 worth of repairs to bring it to completion.

Application to the State for preliminary estimates and to secure a town's place in the "Bridge Aid Program" requires submittal years in advance and carries no funding guarantees. Our place holders on the New Hampshire Department of Transportation (NHDOT) for bridge aid are construction years 2018, 2019, 2020, & 2022.

Under the Municipal Managed process we have two options available to conduct the design and construction phases of work.

- Design Phase
 - Municipal staff provided the designer is a Licensed Professional Engineer for Structural Bridge design. *Or*
 - Hire a consultant following the procedures listed in RSA 21-I:22
 - *Either way, requirements are,*
 - Engineering Study, to include thirteen different disciplines.
 - State and Federal Environmental Regulations
 - Compliance with nine different State permits or certificates
 - Compliance with twenty three Federal Acts or Executive Orders

Other regulation/requirements may also apply, during project development (pre-construction), construction, or post-construction (maintenance).

- Construction Phase
 - Construction may be performed by municipal forces using existing municipal contracts for materials.
 - Construction may be contracted out through an “approved” competitive bid process.

If the state has the money, and after Amherst fronts the total cost initially, the town will be “reimbursed” 80% of design costs incurred that are deemed appropriate and within the acceptable range approved in advance by NHDOT. The following are deemed reimbursable:

- Design Costs
- Construction Costs
- Construction Engineering Costs
- Miscellaneous Costs (contract plans, proposals, bid ads, property right-of-ways)
- Consultant and Contractor Evaluations

Prior to construction approval, NHDOT must confirm a municipality has set aside its portion or 20% of estimated cost and verify it has the ability to front the 80% portion of the project.

Today

On March 8, 2011, Amherst voters passed a \$2,100,260 Bridge Replacement bond. This was presented at both the budget and bond hearing and deliberative session with the understanding that the three “Red Listed” bridges would be replaced ahead of their DOT scheduled date and the town would be reimbursed on its DOT anniversary date. After bond passage, the State of New Hampshire abandoned this previously accepted practice.

DPW SWOT Analysis

Strengths

1. Amherst’s strongest point is the citizens desire not to be inconvenienced with closed bridges. Voters have already empowered the Board of Selectmen to bond necessary repairs and reconstruction.
2. For several identified bridges, we have time on our side which allows the opportunity to better prepare in planning their replacements.

Weaknesses

1. The town currently has seven bridges made from steel pipes, six of which suffer various rates of decay.
2. There is no certainty State Bridge Aid will be available in any of our assigned reconstruction years. The State passes a two-year budget and has proposed significant cuts in the DOT operating budget.

If the town chooses to wait until the state funding year, initial construction funds could come from either the bridge bond (with the town funding the bond interest), or the operating budget, stalling any road construction work for that construction cycle.

3. Keeping all reimbursement paperwork straight and in order requires additional supervisory staff time and bookkeeping hours.

Opportunities

1. The town has three funding options;
 - Wait until state funding becomes available in 2018, 2019, and 2020 respectively.
 - Two State Representatives filed legislation that will be acted upon in this upcoming legislative cycle (HB-575, Room 201, Sept 4th State Legislative building). This bill allowing early construction went to sub-committee was debated on September 11th, and additional hearings are pending.
 - Hold a series of public hearings and with approval, use the bridge bond money (approved by Amherst voters in 2011) to fund replacements at taxpayers' expense.
2. Review each bridge on its own merits of temporary repair verses replacement (before availability of State funding).

Threats

1. The Manchester Road Bridge is closed, the closure created a ninety degree road turn and a 1.1 mile drive-around.
2. The town must pay the bills, and follow the states rules and regulations to the letter to receive reimbursement, and holds all the risk.
3. By waiting until 2018, Amherst incurs higher construction costs (3-5% annually) with no guarantees or assurances that State funding will be available.

Strategic Goals

1. Reconstruct and open the Manchester Road Bridge in in FY-15. In its current state, it:
 - Creates additional traffic on Jones Road and Manchester Road
 - Creates an additional winter maintenance work load (it is still open to pedestrian traffic and is hand shoveled)
 - Generates continuous complaints about the corner and traffic that must reverse direction on the dead end side (significant complaints from the neighbors)
2. Prioritize constructing and maintaining the remaining bridges within the community.

Strategic Initiative

1. Amherst voters approved “early construction with reimbursement”, either public hearings need to be held to give voters input on the previously passed article.
2. Pass a new warrant article authorizing construction.
3. Hope our legislators are successful in their efforts to reestablish early construction without losing the town's placeholder for reimbursement.

DPW Recommends

1. \$1.2 million dollars be raised and appropriated to replace the Manchester Road Bridge in FY-15, bonding this would raise the overall budget (bond interest) approximately 1.5%.
2. Reestablish the “Bridge Capital Reserve” fund and add \$100,000 to said fund annually, with the Board of Selectmen empowered to expend those funds, as needed. This won’t be enough money to rebuild those bridges but it will guarantee Amherst will have raised its 20% should State funding become available. Currently there are no capital reserve funds available and the draft CIP recommends \$233,120 in FY-18

Infrastructure

Sidewalks

History

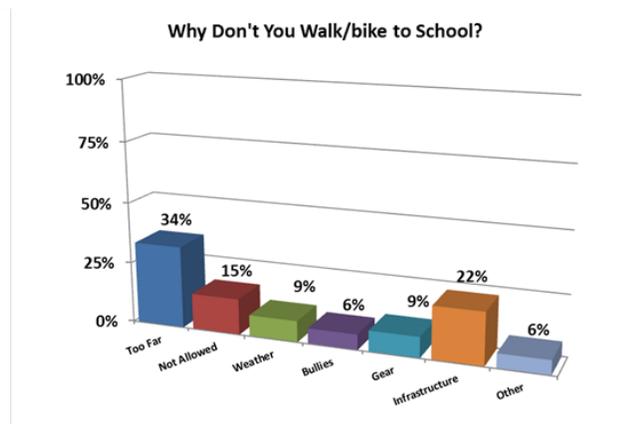
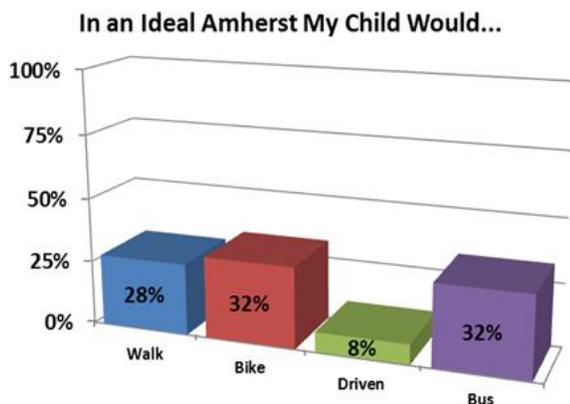
Amherst has 1.5 miles of sidewalks in and around the center of Amherst. Additionally, there are sidewalks scattered in sections along 101A that were created through commercial development, that due to logistics (distance and manpower) are not being maintained by the town.

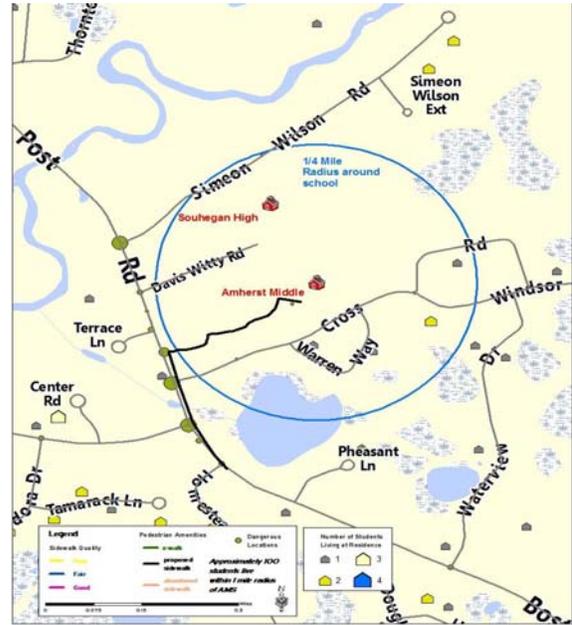
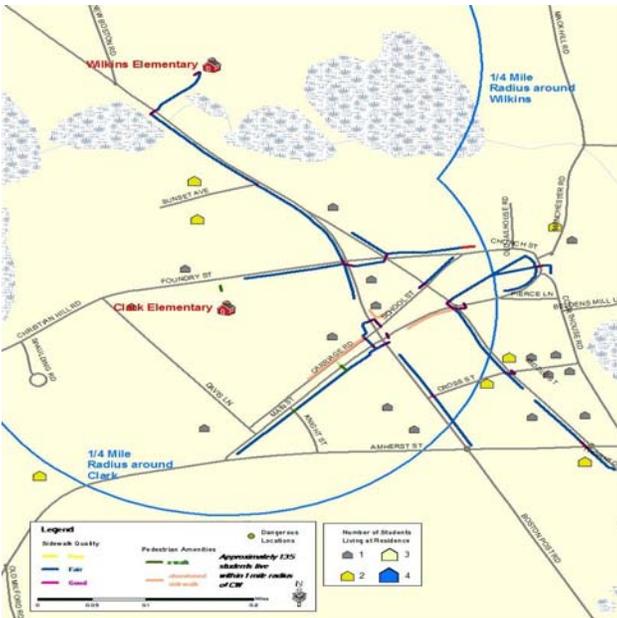
Improvements have been limited and hap-hazard. In fact, in some locations residents have been given permission to remove deteriorated sidewalk remains from in front of their homes, leading to sidewalks that go nowhere.

The center of town is very flat and drainage is difficult. As a result, sidewalks are susceptible to large puddles or winter ice patches. In 2001, DPW replaced its residential walk behind snow blower with a motorized sidewalk machine (with attachments) and reduced its routine summer and winter maintenance time 75%.

Today

The town recently benefited from a \$15,000 “Safe Routes to School” grant. The Safe Routes to School Committee presented their report to the Board of Selectmen which included hiring a consultant, who evaluated the habits of school children and adults, existing and proposed sidewalks, and an action plan to increase walking and biking.





This year, utilizing town budgeted funds, we reconstructed Middle Street’s sidewalks in conjunction with major road reconstruction. The cost to reconstruct the 1,600’ was approximately \$14,800 dollars.

To continue this type work on the remaining 6,320’ of sidewalk requires an additional \$46,768.

This does not take into consideration any new sidewalk, such as Mack Hill and Jones Road (a common walking loop taken by adults).

The town should be budgeting \$25,000 annually to start addressing these needs and concerns. However at this time, DPW will not be asking for sidewalk funding consideration.

DPW SWOT Analysis

Strengths,

1. Many young children and their parents near the center of town use our sidewalks to and from school.
2. Sidewalks are used daily by a walking group as part of a loop walk

Weaknesses

1. Some dilapidated sidewalk sections have been eliminated (Church St, Courthouse Rd, and Carriage Ln.) forcing walkers into the street.
2. There are many puddles, and the consultant study revealed users feel these sidewalks are dangerous.
3. The DPW budget does not have dedicated budget line to repair sidewalks; funding for existing repairs comes from road maintenance.

Opportunities

1. The discussion of sidewalks could be used to heighten not only the condition of our existing sidewalks but also the need for new sidewalks in new areas.

Threats

Within the last couple of years, the equipment used for sidewalk maintenance (used for roadside mowing as well) is tired and planned for replacement. The Trackless is our only machine for this purpose, if replacement is not supported, maintenance will be difficult to perform.

Strategic Goal:

Continue reconstructing sidewalks as part of our road reconstruction program and vigorously pursue all grant opportunities.

Strategic Initiative

The Safe Routes to School's consultant identified several small missing sidewalk sections. For Boston Post Road (our busiest road), both in the center of town, and between the bean fields and Homestead Road, it means sharing the asphalt with vehicle traffic. For DPW it means identifying available right-of-way space and working towards new sidewalks in those locations.

The committee has prioritized its findings and plans to submit a \$250,000 (non-matching) Federal grant application to the New Hampshire Department of Transportation this fall. If approved, the grant requirements are similar to bridge funding (the town fronts the cost initially and is completely reimbursed throughout construction).

If the town does not receive this grant, new sidewalk from the Bean property to Homestead Road will not be constructed.

DPW recommends

For now, we continue with the sidewalk plan (combining sidewalk reconstruction with road reconstruction) started this year and funded by road repair dollars.

The CIP committee supports the fully federally funded Safe Routes to School grant, and because repair work was not submitted for consideration, a position was not taken.

Buildings and Grounds

Town Buildings

History

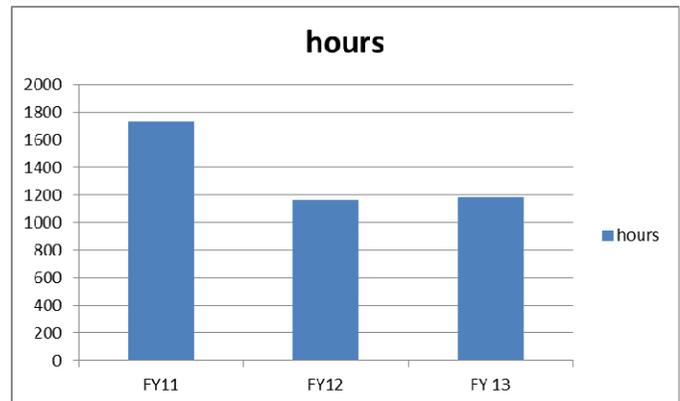
Public Works manages the day-to-day maintenance of eight town buildings and the Congregational Church steeple (town owned) with a yearly budget of \$115,000. This budget line is informally split into two categories- routine repairs and upgrades/improvements (capital repairs).

For too many years municipal buildings were ill maintained or neglected (due to budget constraints and minimal oversight). This resulted in the difficult task of catching up. The challenge has never been how to carefully spend building repair money, but how to prioritize needs, and stay within the budget allocation.

For repair work such as HVAC, Electrical, Elevator, Sprinkler, Plumbing, and Janitorial services, the town has developed a multi-year relationship with vendors who as a result, developed an intimate knowledge of our buildings. Upgrades and improvement projects, such as painting (inside and out), roof replacements, flooring, and structural repairs/renovations have always had detailed specifications and gone through the bidding process.

Today

The everyday non-contractor maintenance work has grown to the extent that we seem to regularly assign one or two DPW employees to building maintenance. For instance, two employees spent over a week fabricating the temporary quarters at Central Fire for town hall staff. This work typically requires a vehicle (pickup) and because we lack space to bulk purchase, frequent trips for incidental supplies. While a program like this benefits the town as a whole, it robs staff from road projects.



Eight building air conditioning condensers are 10+ years old, and the coolant is obsolete, when these units fail, it will require replacing both the condenser and air handler. Cost in today's dollars is approximately \$6,800 each or \$54,400.

Each year is a new challenge. For instance, this year, approximately \$35,000 of the \$115,000 budgeted is already committed to Town Hall repairs and incidentals. We are 25% into the budget cycle, with 35-40% of the line spent.

Existing Structures

The DPW facility was built in the 60's on the site of the town's old burning dump with several add-ons throughout the 70's. Additional office space was added in the 80's and again in 2003. The five bay roof is low, flat, and unable to house a vehicle lift for the fulltime mechanic who performs most of his work on a creeper and competes for space within the facility.

The existing five-bay facility, protects five of the 26 motorized vehicles / heavy equipment and the majority of our assets sit either outside year round or are housed under temporary “garage in a box” buildings (plugged into block heaters during cold weather).

EPA requirements discuss specific mandates for DPW garages. These requirements come from a history of disbursing rather than capturing grease and oil residue. New proposed requirements include parking vehicles and heavy equipment on a non-porous surface.

Public works maintains the equivalent of \$ 2.8 million dollars of vehicles and heavy equipment. A new facility should include a dedicated wash bay available 24/7 for all municipal vehicles (estimated at \$120,000), a dedicated mechanic’s area with heavy truck lift (estimated at \$80,000), and adequate parts storage.

A new facility was submitted to the CIP process and in broad terms, is/was a 20,000 square foot garage space @ \$160 per square foot and 1,600 feet of office space @ \$110 per square foot. This is purely a rough estimate place holder based on cost analysis projections from a 2011 BNI Public Works Costbook with no construction schedule submitted. Cost of building (not including land or facility feasibility study) \$4,066,000

Even with capital renovations completed to date, the town hall still needs basic maintenance. Identified items include but are not limited to window repair, pointing of bricks, and painting of the red addition section.

The Recreation office has two small basements and the remaining sections built over the ground. At the very least, this section needs to be sealed to minimize dampness.

PMEC is a relatively new building. We do need to address a new (well) discharge port for the geo-thermal. Other repairs are just routine maintenance.

The top floor of the Police Station was never completed and the existing footprint is too small. There are cracks in the sally port floor causing some interaction with the steel reinforcement.

The second floor of Central Fire is unfinished and vehicle washing residue is only protected by a water/oil separator. The apparatus housed in South Station is somewhat restricted by the building size, it is on well water, and has no system for capturing vehicle wash water runoff.

DPW SWOT Analysis

Strengths

1. The funding for routine everyday maintenance of town buildings is adequate. Within the last eight years, we have replaced almost all building gas and oil fired furnaces, some have insulation upgrades, and three have had new roof sheathing.

Weaknesses

1. The building maintenance repair line becomes jeopardized when we include necessary capital repairs.
2. Additional specifics are needed for a lot of ‘minor’ capital expenses that we haven’t budgeted for.

Opportunities

1. To continue working with the Town Administrator and department heads to prioritize capital repairs for all town buildings.
2. To plan the systematic replacement of air condensers and air handlers at several buildings.
3. To engineer and layout drainage and parking lot repairs at Central Fire, PD/EMS and South Station.

Threats

1. Inadequate funding

Strategic Goal

Continue managing basic building maintenance in conjunction with capital repairs.

DPW Recommends

1. Incremental increases of \$5,000 in the building repair line each of the next two years, for a total increase of \$10,000.
2. Establish a “Town Building Capital Reserve” account for a minimum of ten years, and granting the Board of Selectmen the authority to expend.
 - The first year startup would be \$50,000 and \$10,000 each subsequent year (threshold requests must exceed \$75,000).

Budget impact

In FY-15 a \$5,000 increase in building repairs 4.16% increase

In FY-16 a \$5,000 increase in building repairs 4% increase

C.I.P. Recommendations

• Town Hall window restoration	FY-15	\$ 51,177
• Town Hall brick repair	FY-15	\$ 24,000
• Fire Station second floor restorations	FY-16	\$195,000
• Police Station renovations	T.B.D.	\$150,000
• Land for DPW facility	T.B.D.	\$820,000
• DPW facility	T.B.D.	\$4,066,000

Buildings and Grounds

Town Commons

History

There are nine town commons of various sizes and additional mowing around eight town buildings equaling approximately nine acres.

Today

On a daily basis, between late March and early November two part-time employees operate two, zero turn (2006 and 2010) lawn mowers either mow grass or vacuum leaves. Other work involves fertilizing, over seeding, and aeration of sod, using a small Kubota tractor (shared with the Transfer Station).

DPW SWOT Analysis

Strengths

1. With lots of diligence, the commons have transformed from August dustbowls to green grass, and It's wonderful to see young families enjoying the town's main common

Weaknesses

1. Scheduling winter trash barrel pick-up
2. Mowing equipment is used every day, but there is down time every day as well. Usage and timing makes it difficult to share with another department

Opportunities

1. The main common is used frequently for both town and private functions. We continue to find ways to improve turf maintenance.

Threats

1. Soil compaction from over usage continues to be challenging not only for turf, but tree roots as well.

Strategic Goal

Continue maintaining our commons in the current manner.

Buildings and Grounds

Cemeteries

History

Amherst has five cemeteries - Old Town Cemetery (behind Town Hall), Cricket Corner, Chestnut Hill, the Pauper's, and Meadowview. Both Cricket and Chestnut have extremely limited internments left with Meadowview being the primary and active cemetery.

The Director of Public Works job description indicates this person is responsible for cemetery maintenance. This responsibility aligns with the Director also being appointed as Cemetery Sexton by the Cemetery Trustees. Most of the work is delegated to part-time laborers through the Buildings and Grounds Foreman. Cemeteries accounts for 15 of the 24 acres of grass maintained.

Today

Seasonal tasks

- Mow and trim
- fertilize
- aerate the soil
- raise flush markers
- adjust sunken lots
- remove leaves (during fall cleanup)
- keep cemetery software up to date (sale of lots and who is interred where)

Demand tasks

- sell and process deeds
- take care of internments
- attend meeting with Cemetery Trustees
- manage the budget under the direction of the Trustees

Strategic Planning is the responsibility of the Cemetery Board of Trustees.

Environmental Functions

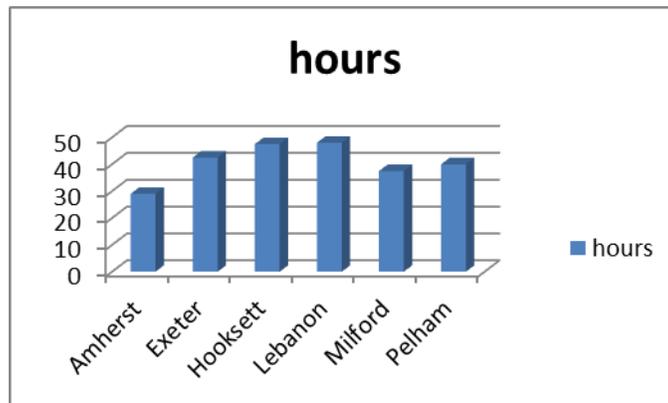
Solid Waste

History

In the early 1970's, Amherst along with Hollis, Mont Vernon, and Brookline formed the "Souhegan Regional Landfill District" (SRLD). Amherst was the recipient of all four towns' trash and the SRLD board was accountable for administration. Each member town holds financial responsibility for the two landfill sections, (one capped and one lined and capped) for as long as the landfill exists.

In the mid 1980's the New Hampshire Department of Environmental Services (DES) required landfill closure and the district's mission changed from landfill to transfer stations (in each community) still managing trash (trash contracts) but now adding the separation, collection, and marketing of recyclables. Every item removed from the waste stream is cost avoidance.

Our "Drop-off" facility is open 29 hours per week which is less than most communities our size (12,500 – 14,900 pop). Staffing consists of;

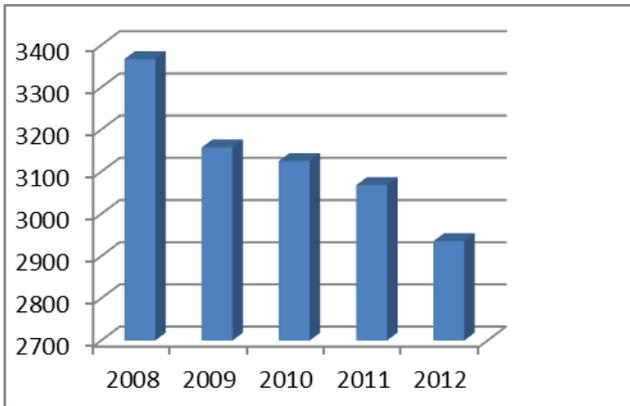


DES requires every transfer station employee be state certified (level 1). Every facility must have a minimum of one, state certified level 3 or 4. The full-time employee spends one eight-hour shift working on the highway side. All part-time employee hours are dedicated to the transfer station facility. Additional employee hour coverage includes earned time and winter maintenance.

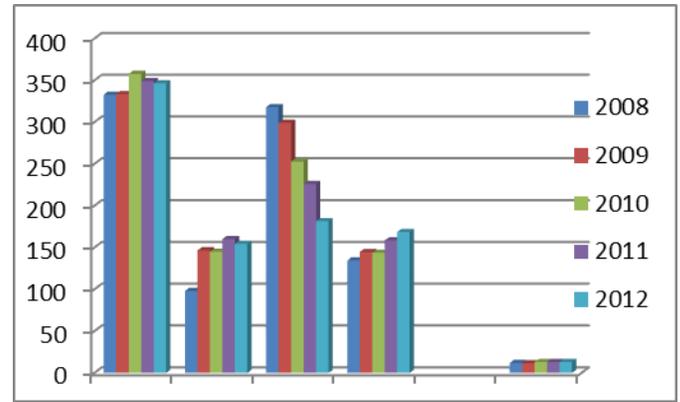
In 2004, a Recycling Committee was appointed with a mission to improve recycling. After a lengthy study finalized in 2004, the committee sent the Board of Selectmen a 31 page report detailing existing conditions and ways to streamline and improve recycling. Many of those recommendations were implemented and are being used today.

In 2008 the Transfer Station was renovated with most recyclables now being compacted, with the immediate benefit being that the districts trucking costs dropped dramatically, translating into a savings to the community.

One planned housekeeping measure that was not resolved is how much of the facility is left open to the elements. There are roofs over each individual recycling table and chute, but the overall facility (including the walking deck) was designed for one continuous roof with lighting for nighttime usage would protect recyclables and users alike. Funding was not available to complete this.



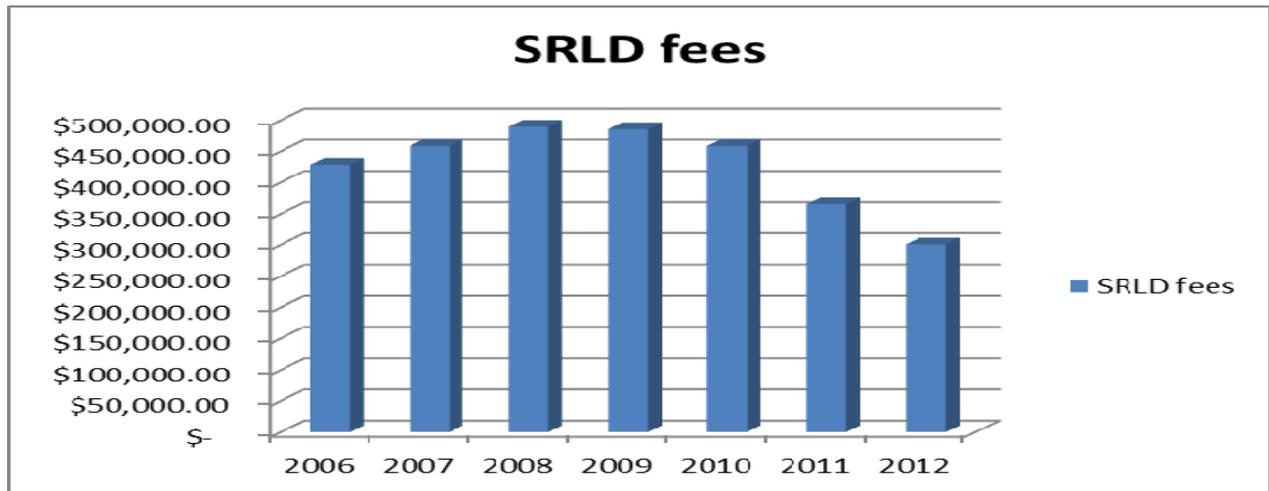
Trash



Commingles, OCC, #8 News, Mixed Paper, Alum can

Today

Glass (included in Commingles) account for almost 265 of last year's 340 tons (listed above). The district pays \$20 per ton disposal fees (not including transportation, but still a \$48 savings as opposed to trash). With either the purchase of the appropriate crushing equipment and some storage or large storage and hiring an outside vendor (to crush), Amherst glass could be converted into a usable commodity (replacing drainage stone at \$14.50 per ton). Amherst would need to negotiate a fee structure with the district to compensate the town.



The SRLD does not manage electronics, tires, propane tanks, white goods, scrap steel, demolition, scrap lumber, or yard waste. These are managed by the town.

Yard waste covers two areas, leaves and grass clippings and brush. Leaves and grass clippings are composted (turned on a regular bases for 1-2 years) and shredded into a loam material. This material is either sold back to residents (\$10/ton, \$2 minimum) or used in the cemetery or for dressing up road projects.

Brush is shredded on site by a commercial vendor for bark mulch at an agreed upon rate and hauled off site in trailer dumps.

Scrap wood and pallets are a little tougher to get rid of. We do have a local company that will take the wood for the cost of the trucking.

Similar to tires and white goods, Demolition is not something that impacts all users and therefore has its own assessment fee.

Value new (1995)	\$40,000
Repairs between 2008 and 2013	\$27,905
Estimated value now	\$13,000
Move and replace (new) in-kind	\$48,000 not including building
Replace with new surface mounted scale	\$60,000 not including building

Other budget items covered under the demolition line are florescent light bulbs and electronics.

In calendar year 201,1 the scale processed 414.47 tons of demolition at \$0.10 (\$82,834), the weighmaster also collects fees for tires, electronic (screens), Freon, logs (over 15” circumference) and stumps, and propane tanks.

Swap Shop: The Sway Shop finds homes for items that otherwise would find their way into the waste stream. It is managed by volunteers and opens only when volunteers are present.

Stormwater: The transfer station has the stand-alone requirements that must be met with a report filed yearly explaining the following;

- Minimum exposure to and management of Stormwater
- Good housekeeping measures (everything off the ground and covered)
- Preventative measures
- Best management practices
- Spill prevention and Response measures
- Employee training
- Results of quarterly water sampling (multiple sampling within 30 minutes of an initial storm event)

SWOT Analysis

Strengths

1. The renovations completed in 2008 created a very efficient facility of “one stop dropping” which accommodate approximately 2,800 weekly users.
2. Even in a difficult economy (contributing to the decline in newsprint) recycling has either held its own or increased, and it is exciting to see that trash tonnage has declined (see graphs above).
3. Several years ago, hours of operation were standardized (eliminated “summer and winter” hours), the peaks (especially around holidays) could be further improved by adding additional hours of operation.

Weaknesses

1. It is difficult to hire, train, and sustain part-time labor at a pay rate of ten or twelve dollars an hour.
2. We rely too much on summer interns for maintaining year-round Stormwater requirements for EPA.

3. Potential vehicular traffic conflicts between trash/recycling and scalehouse users.

Opportunities

1. To continue refining the “reduce, reuse, recycle” success story.

Threats

1. Mechanical scale failures and lost revenue
2. Noncompliance of Stormwater rules

DPW Goal

1. Replace demolition scale in FY-15 and continue waste management best practices.

Strategic Initiative

1. Replace and relocate (in a stand-a-lone area near the entrance) the demolition scale. Besides eliminating the traffic conflict, it brings all money transactions to the facility entrance.
2. Increase to include fulltime employees.
3. Increase drop-off time by an additional eight hours.
4. Create Supervisory role within existing staff.
5. Have necessary staff to meet the EPA water sampling requirements.
6. Construct a continuous truss roof full length of deck.

DPW Recommends

In FY-15 replacing the demolition scale for \$70,000

In FY-15 increasing the wage (and benefit line) \$46,762.64

Environmental Functions

Baboosic Lake Septic

History

Baboosic Lake Community Septic started conceptually in 2003 as a partnership between the Town and taxpayers around the lake. It is/was funded through grants (three different types) and user fees. To the best of our knowledge this design/concept is a one of a kind system in New Hampshire.

Phase I: A more expensive and politically correct version of Phase I (\$365,322) passed in March of 2005 (12 homes) covering West Street and Washer Cove. It was funded by a Watershed Grant, a State Aid Grant, and a ten year bond. With the departure of Town Administrator Carl Weber, DPW became responsible for all but the financial services of this system.

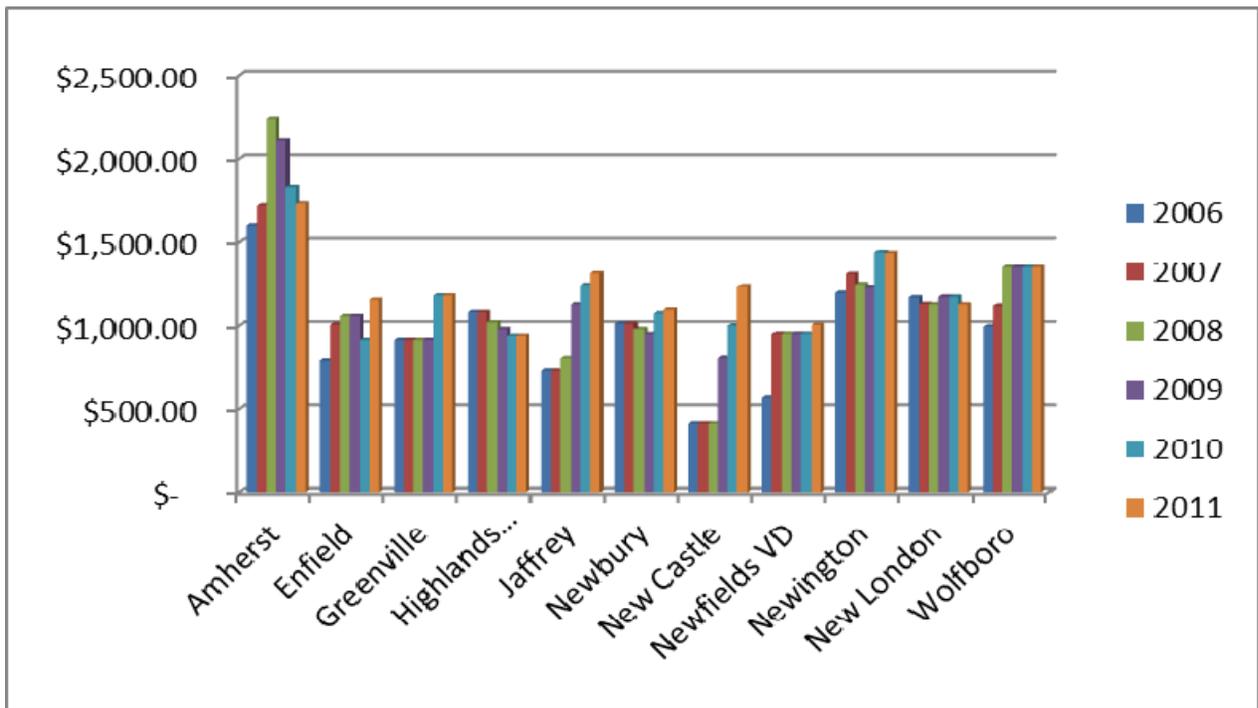
Phase II: approved by voters in March 2006 authorized a total expenditure of \$418,500 reimbursed by Watershed Grant, and a 15 year bond (10 homes) covering a portion of Broadway. In 2007, A State Aid Grant was approved by DES, but not funded by Governor and Council.

Phase III: approved by voters in March 2007 authorized a total expenditure of \$650,000 reimbursed by Watershed Grant, and a 15 year bond (13 homes) covering Clark Ave and Clark Ave extension. In 2008, A State Aid Grant was approved by DES but not funded by Governor and Council.

Phase I, II, & III were all approved by Department of Environmental Services (DES) for both grants. The Watershed Grant is processed as a reimbursement during construction. The pre-grant “State Aid” application process cannot be completed without the town spending money on preliminary engineering and analysis with the hope that Amherst’s submittal will be approved and funded. We were fortunate that each of the three phases were approved by DES, however the second step requires Governor and Council approval a year later. Budget funding was dissolved after project completion in 2008, but has been restored in this year’s state budget.

Phase IV: in 2009 was approved in two parts. In March of 2009 voter approved \$14,500 for the Baboosic Lake Phase IV Community Septic “Design”. At a special town meeting held July 14, 2009 voters authorized \$425,000 as part of the American Recovery and Reinvestment Act (ARRA). The balance of this too would be offset by a bond (9 homes).

The graph below highlights Amherst’s sewer rates in comparison to other communities.



Today

The Baboosic Lake Community Septic system has had a positive impact on lake water quality.

DES regulations require either two Wastewater 1 certified employees on staff, two certified per diem employees or some combination of both, Amherst has one, and only the public works director and building inspector have a working knowledge of the system.

Besides quarterly bond payment and bond interest payment, users also pay telephone fees to monitor individual pump chambers, electricity for low pressure pumps, monitoring and maintenance fees, and pumping fees (individual storage tanks).

Name - address	Phone & Electric, 3 months	quarterly bond	Bond interest	WTI monitoring contract and maintenance fee	Pumping fee	
individual tank	\$ 152.69	\$ 218.85	\$ 97.39	\$ 36.77	18.75	\$ 524.45
two share a tank	\$ 83.74	\$ 218.85	\$ 97.39	\$ 18.39	9.38	\$ 427.75
two share a tank	\$ 83.74	\$ 218.85	\$ 97.39	\$ 18.39	9.38	\$ 427.75
three share a tank	\$ 61.09	\$ 218.85	\$ 97.39	\$ 12.26	6.25	\$ 395.84
three share a tank	\$ 61.09	\$ 218.85	\$ 97.39	\$ 12.26	6.25	\$ 395.84
three share a tank	\$ 61.09	\$ 218.85	\$ 97.39	\$ 12.26	6.25	\$ 395.84

Tank options at time of construction and associated costs

Baboosic Lake is compromised with phosphorous. The common trace causes of phosphorous are fertilizer and septic. This DES 303 (d) listing is based on ten year sampling average. This listing feeds into EPA’s Stormwater, but the financial impact to the town is unclear at this time.

Residents with failed septic systems and insufficient real estate to meet today’s standards, have benefited from this state supported grant program. It also benefits lake quality by helping manage total phosphorous levels.

Future

Being a relatively new system, we have experienced minimal breakdowns. As bonds are paid off, the Sewer Commissioner (Board of Selectmen) should strongly consider setting up a revenue account and replacing bond payments with a small maintenance fee so future bonds will not be necessary.

DPW SWOT Analysis

Strengths

1. Lake water analysis demonstrates water quality has improved. The lack of algae blooms found in the lake would reinforce these findings.
2. Homes once considered summer residents only are now considered year-round residences.

Weaknesses

1. Availability of funding

Opportunities

1. Consider Phase V in the area of Lakeview Street along the water's edge, is narrow, and dead-ends making sewer-main construction difficult.

Threat

1. Lack of grant funding opportunities,
2. Ongoing Septic and Cesspool failures threatening our environment
3. One component of funding (state aid grant) for Phase II and Phase III never materialized, squaring this away needs to happen, but there is a risk it will dampen voter support.

Strategic Goal

For the town to continue its partnership with residents around the lake and offer a way to manage existing cesspools, holding tanks, and quality of life.

Strategic Initiatives

1. Since 2003, Amherst voters approved four phases of Baboosic Lake Septic.
2. Before a Phase V can begin,
 - The town needs to task a municipal employee with investigating all grant funding possibilities.
 - Make application for said funding (which will include design work)
 - Seek support and commitment from potential users

DPW Recommends

Public Works does not plan to pursue a Phase V until firm financial planning and commitments can be secured with the State of New Hampshire.

Environmental Functions

Stormwater Management

History

Stormwater requirements originated in 2003 as part of the Clean Water Act mandated by the Federal Government, portions of Amherst (about 1/3 of town) fall under this population density based requirement.

Each year a required activities progress report is filed with the Boston office of the Environmental Protection Agency (EPA) and New Hampshire Department of Environmental Services (DES) covering 6 Best Management Practices.

The report is authored by the DPW Director, edited by the Community Development Director, and reviewed and signed by the Town Administrator, prior to its May deadline.

Today

Since 2003, 10 weeks each summer, 2 Stormwater Interns (engineering students) work on compliance research.

The second (five year) permit was drafted and presented in a public hearing format in January of 2008 (it was not issued) and has now been redrafted with greater complexity in 2013.

The Office of Community Development Director and DPW Director have actively participated in two coalition groups (Nashua & Manchester) to attempt to identify the costs associated with the new permit. Amherst is neither adequately staffed, nor financially budgeted to meet the new requirements.

Future

As written, the new permit (scheduled for implementation, summer 2014) places every community in non-compliance and immediate action is necessary. Each of the items covered below is time sensitive.

The Notice of Intent (NOI) showing the path the town will take to reach those timelines must be filed with EPA within 90 days of the permits implementation.

- The items to be addressed in the NOI are:
 - Water bodies that receives flow from the MS-4
 - Number of outfalls into receiving water
 - Pollutant list (water analysis)
 - Impairment
 - Pollutants causing the impairment and how the town will remove those impairments, and
 - Does the waterbody segment have an applicable Total Maximum Daily Load (TMDL)

For Baboosic Lake and the Souhegan River the answer (to the 6 points above) is yes, and it will be the town's responsibility to explain and then describe and implement the reduction of Phosphorous, Chlorophyll, Dissolved Oxygen Saturation, Escherichia Coli, and ph.

The application also requires that the town meet the provisions of the Endangered Species Act and National Historic Preservation Act.

To address the proposed Phosphorus TMDL loading target, the town need to:

- Describe potential sources and estimate the existing phosphorus loading to the lake
- Estimate the loading capacity
- Allocate the load amount sources
- Provide alternate allocation scenarios
- Suggest elements to be included in an implementation plan
- Suggest elements to be included in a monitoring plan
- Provide reasonable assurances that the plans will be acted upon
- Describe public participation in the TMDL process

Many communities have either hired an outside firm to manage these requirements or have hired staff dedicated to this program. Amherst needs to decide which approach best fits its needs.

The State of New Hampshire Department of Environmental Services has modified their Section 305(b) and 303 (d) impairment lists. These lists are what EPA uses for its water impairments. DPW submitted procedural comments prior to the Oct 11th deadline.

SWOT Analysis

Strengths

1. We have been very successful to manage the first EPA Stormwater permit with 2 interns, ten weeks, per year.
2. We have a strong foundation upon which to build the new permit.

Weaknesses

1. The engineering complexity of the new permit will cause us to fall behind almost immediately.
2. EPA through actions already taken in NH has made it clear that not meeting their timetable because “the voters didn’t fund it” holds no credibility.

Opportunities

1. Amherst is currently a member of a coalition formed to demand the requirements and standards include current environmental data.

Threats

1. Existing staffing levels are inadequate to manage this additional work within the required timeframe.

Strategic Goal

Create either a half time position dedicated to meeting the towns Stormwater management program (discussed elsewhere) or hire a fulltime engineer/ Asst. DPW director and make this part of their responsibility.

DPW Recommends

1. In FY-15 fund water testing and other operating expenses to meet Stormwater requirements.
2. In FY-15, fund a halftime position dedicated to meeting EPA’s Stormwater requirements.

Budget impact

01-4311-20-1115	wages	\$26. X 1040=\$27,040 (a 245% budget line increase)
01-4311-20-6382	Stormwater projects	\$40,000 (a 400% budget line increase)

Staffing and Equipment

Staffing

Today

FTE DPW Year Round staffing consists of

1	Director
1	Executive Assistant
2	Foremen
2	Heavy Equipment Operators
2	Light Equipment Operators
5	Laborer/drivers
1	Mechanic
1	40 hour Transfer Station Attendant
0.4	Laborer/driver, 880 hours / year
0.5	Secretary, 1,040 hours / year
<u>2.5</u>	4 Part Time Transfer Station Attendants - 5,278 hours / year (ranging 10 to 31 hours / week)
18.4	Year Round Full Time Equivalents (FTEs)

FTEs DPW Seasonal Staffing

1.2	6 Summer Part-time laborers (40 hrs. for approximately 10 weeks)
0.8	3 Seasonal lawn maintenance (approximately 520 hours each)
1	4 Winter on call as needed drivers (approximately 500 hours each)
<u>0.4</u>	2 Stormwater Engineering Interns (400 hours each)
3.4	Seasonal Full Time Equivalents (FTEs)

21.8 Total DPW Full Time Equivalents

Current staffing levels are barely adequate to meet the responsibilities and demands placed upon the department. We rely heavily on seasonal help and outside hires to supplement our work force.

The road maintenance list summarizes the repair strategy, the number of employees (on average) it takes to perform the repair strategy by deploying our 10 full-time people and a few seasonal employees on to various projects) and the equipment necessary to perform the task. It is possible for two or three tasks to be going on simultaneously.

Winter road maintenance	crew of 16+1 Rec.	12 town trucks, 4 hired
Winter sand yarding	crew of 1	Town loader
Roadside brush and tree trimming	crew of 5-7	2 dumps, chipper & 1 or 2 pickups
Crosswalk/stop bar painting	crew of 2	pickup & trailer
Overlay paving / surface treatment	2 flaggers	1 or 2 pickups
Citizen complaints	Foreman	1 Pickup
Animal control	crew of 1-2	pickup or backhoe
Roadside asphalt patching	crew of 4-7	1 dump truck, hot box, 1-2 pickups
Street Sweeping	crew of 1-2	1 or 2 dump trucks
Roadside mowing	crew of 1	trackless

Culvert replacement	crew of 5-7	2 dump trucks, 1-2 pickups, backhoe
Signage repair/replacement	crew of 2	1 pickup
Roadside ditching	crew of 4-5	2-3 dump trucks, 2 flaggers
Asphalt Zipper	crew of 5-7	loader, Massy, dump trucks, flaggers
Shoulder stabilization	crew of 2-3	1 pickup
Grading gravel roads	crew of 1-3	grader, dump trucks, Massy w/rake
Town wide trash runs	crew of 2	pickup or one ton
Catch basin cleaning	crew of 1	hired out
Catch basin repair	crew of 3-5	backhoe, dump truck, one ton
FEMA events	crew of 12	all DPW vehicles
Traffic Control	usually 2	Pickup

Future

Many of the topics presented throughout this document can be tied to a phase of engineering. The graph below ties itself to distinctly different projects and disciplines within the engineering field. They are:

- community septic
- the safety project in front of town hall
- road reconstruction
- bridge preparation
- sidewalk and
- building reconstruction

In that 13 year period, the town has spent an average of \$89,000 using a variety of engineering firms representing a variety of disciplines. Shorten the time span and the average increases. The end result is a probable full year’s wage, for part-time work. The need for engineering will increase with the addition of new Stormwater requirements, discussed (in depth) earlier in this report.

As mentioned throughout this document, additional staffing will be necessary to achieve stated goals.

SWOT Analysis

Strengths

1. The crew is trained in the work assignments listed above and how to preform them in a safe manner.
2. Each team member has an assigned winter plow route and is accountable for its condition. This same accountability is used for a variety of work assignments.
3. We hire multi-talented employees who may preform building maintenance one day, and install a culvert the net

Weaknesses

1. Scheduled tasks are often interrupted by urgent situations and weather causing delays, which lead citizens to perceive incomplete work or inattention to detail.

Opportunities

1. Educate the community on the multitude of tasks required of this department

Threats

1. Failure to obtain community support for goals.
2. Increased requirements by regulatory agencies.
3. We lack sufficient employees to meet the growing expectations.

Strategic Goal:

To adequately staff DPW to meet community expectations.

DPW Recommends

1. Funding a Town Engineer/ Deputy Director of Public Works position @ \$87,267.90. This proposal will not eliminate all that's shown in the bar graph on page 34, although it may allow us to reduce our spending on outside engineering services twenty (20) to forty (40) percent and it does not take into account the provisions of engineering services to other departments that are now contracted out.
2. Current staffing levels suffer both in summer and winter, however with all the recommendations brought forth by DPW makes it impossible to project any additional fulltime employees. I am asking that \$20,000 be added to the part-time labor line

Staffing budget impact:

FY-15					
01-4312-10-1110	wage line	increase of \$20,000	= \$426,321	or a 4.7%	line increase
FY-16					
01-4311-10-1110	wage line	increase of \$87,267.90 + \$414,588.57	or a 21%	line increase	

Staffing and Equipment

Vehicles & Heavy Equipment Inventory

Today

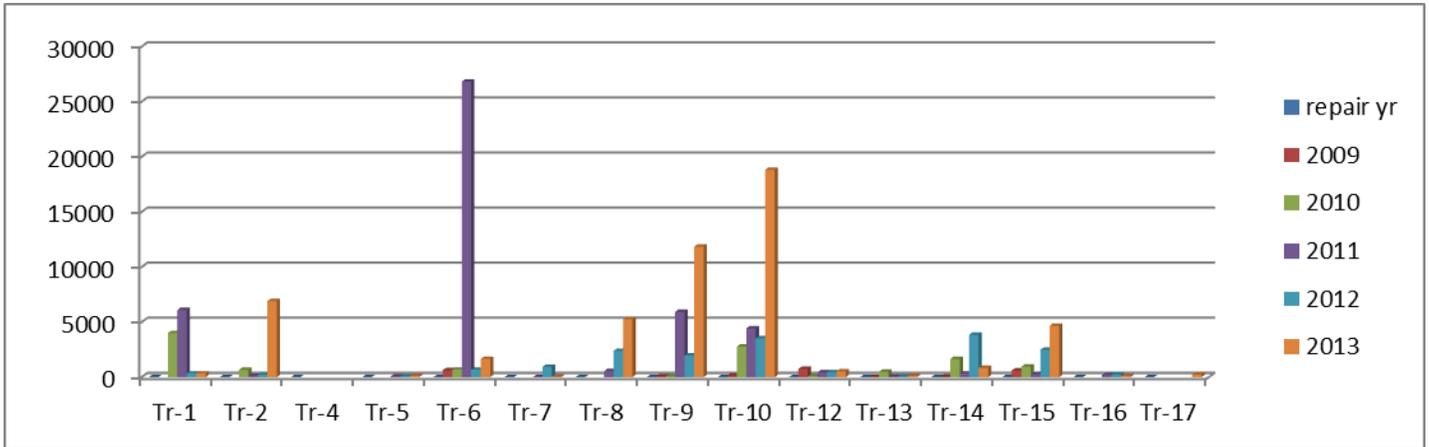
The following chart inventories the various DPW vehicles and heavy equipment. Vehicles and equipment valued above \$75,000 are included in a CIP plan. Vehicles and equipment that fall under that threshold are included within a department plan.

Existing vehicles and equipment are as follows;

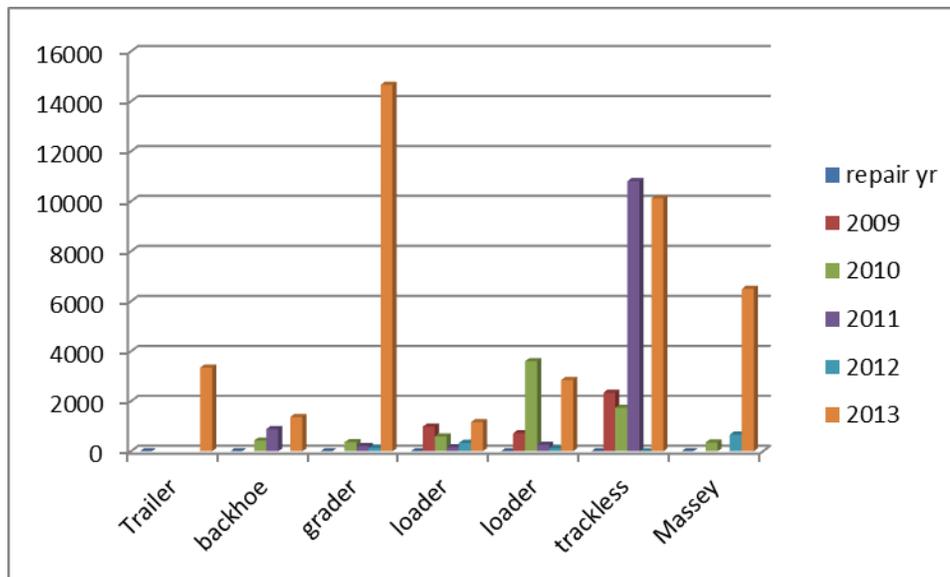
Vehicle year	Vehicle number	CIP year	Make	Model	GVW	Mileage	Miles per gal	Gas Diesel	condition	notes	Useful Life	Kelly Blue Book Value or computer research (today's) value	Estimated C.I.P. replacement cost w/sander, plow & wing value
1996	Tr-1	FY-15	GMC	Dump	25,300	115,319	9.5	Diesel	poor		10 yrs.	\$3,100	\$96,750
2008	Tr-2		International	6x2 dump	36,000	27,659	4.4	Diesel	good	Sand blasted	8 yrs.	\$46,300	
2012	Tr-4		International	6x2 dump	36,000	3,602		Diesel	excellent		8 yrs.	\$96,275	
2011	Tr-5		Ford	4x4F-550	17,500	22,211	7.8	Diesel	excellent		10 yrs.	\$50,375	
1999	Tr-6	FY-16	International	6x2 dump	36,000	76,782	3.7	Diesel	fair/poor		8 yrs.	\$9,475	\$169,314
2008	Tr-8		International	6x2 dump	36,000	29,676	3.8	Diesel	good	Sand blasted	8 yrs.	\$46,300	
2006	Tr-9		Ford	4x4F-550	17,500	74,001	9	Diesel	good	new dump	10 yrs.	\$22,050	
2003	Tr-10	FY-16	International	10x2 dump	52,000	60,963	4.2	Diesel	fair	Body work	8 yrs.	\$22,650	\$200,000
2005	Tr-15	FY-17	International	6x2 dump	36,000	44,273	4.1	Diesel	good		8 yrs.	\$32,225	\$177,780
2005	Tr-14	FY-18	International	6x2 dump	36,000	33,360	4.9	Diesel	good		8 yrs.	\$32,225	\$186,669
2012	Tr-17		Freightliner	10x2 dump	52,000	6,574		Diesel	excellent		8 yrs.	\$92,990	
2009	Car-1	From PD	Crown Vic	sedan		110,916	16.2	Gas	good	Director	6 yrs.	\$5,954	
2007	Car-2	From PD	Crown Vic	sedan		145,899	11.6	Gas	good	Interns	6 yrs.	\$3,542	
2005	Car-4	From PD	Crown Vic	sedan				Gas	poor	Crew	6 yrs.	\$1,620	
2003	Car-3	From PD	Crown Vic (at Rec)	sedan				Gas	poor	Recreation Director	6 yrs.	\$1,200	
2011	Tr-7		Ford	4x4F-350	10,200	35,981	8.6	Gas	excellent	Foreman	10 yrs.	\$20,900	
2003	Tr-12		Ford	Ranger	½ ton	164,257	16	Gas	fair	Foreman	10 yrs.	\$7,094	
2002	Tr-13		Ford	F-150	½ ton	147,788	14.5	Gas	fair		12 yrs.	\$1,497	
2001	Tr-16		Ford	F-150	½ ton	195,485	11	Gas	fair		12 yrs.	\$4,042	
2000		FY-15	New Holland	backhoe				Diesel	poor		5 yrs.	\$25,000	\$120,000
2001	Transfer	FY-17	Hyundai	Loader				Diesel	Fair/poor		10 yrs.	\$25,000	\$140,000
2008	DPW		Hyundai	Loader				Diesel	good		10 yrs.	\$68,000	
1996		FY-19	Champion	Grader				Diesel	good/fair		20 yrs.	\$65,000	\$320,000
2007			Massy	Tractor				Diesel	good		12 yrs.	\$21,000	
2001		FY-15	Trackless	Tractor				Diesel	fair		10 yrs.	\$25,000	\$143,000
2013			Bandit	Chipper				Diesel	excellent		10-12 yrs.	\$26,134	
2008			Asphalt Zipper	AZ-580				Diesel	good		15 yrs.		
2002-2013			(14) Swenson	Hydraulic sanders					good		12-15 yrs.	\$140,000	
											Totals	\$894,948	\$1,555,513

Using projected data, the blanks on the right most columns adds an additional \$1,320,095 for a total projected replacement value fleet total of \$2,875,608. Based on the average life expectancy of eight years, the town should be budgeting an average of \$359,451 for vehicle/equipment replacement.

Vehicle Repairs



Heavy Equipment Repairs



In some cases, the cost of repairs exceeds the value of the item. Two examples are:

1. March 13, 2007 (article 4) voters were asked to replace a 1987 Trojan loader with an estimated value of \$8,000. We identified the need to spend \$18,375 worth of (hydraulic cylinder, air compressor, brake, & transmission) repairs to continue using the loader. Voters turned down this request, budgeted funds were transferred (placing other projects on hold) and repairs were made. A year later, (article 23) the loader was replaced for \$110,000 (plus the cost of repairs) and the old loader was traded for **\$6,000**. The failure of the warrant article ended up costing the taxpayers an additional \$20,375.
2. 1996 GMC Topkick, was planned for replacement through lease/purchase in FY 12-13, the budget went into default, \$734 in repairs were made to safely get it through the winter season. It was again budgeted for lease/purchase in FY-13-14, we are again in default, it will not currently pass inspection. The truck's blue book value is \$1,800 and needs at least \$3,600 in repairs to pass inspection. It is now parked (will be used as a yard truck this winter at the Transfer Station) and unplanned/unbudgeted money will be spent from the outside hire line to replace its former winter maintenance role

SWOT Analysis

Strength

1. DPW has its own dedicated mechanic and many repairs that were previously sent out are now repaired in house.
2. We have our own state recognized municipal inspection station.
3. New purchases were moved into the budget by means of a lease purchase line,
4. DPW maintains the town fuel depot

Weaknesses

1. When funding is not made available to replace vehicles and equipment, repair costs increase.
2. In addition to the fulltime mechanic we utilize another employee to assist with vehicle repairs.
3. Inadequate funding for vehicles and/or equipment.

Opportunities

1. Through this planning process, we have a unique opportunity to reassess and evaluate this system and find a better funding plan that voters will approve.
2. Not including the grader, if our fleet was new and we averaged an eight (8) year turnaround, its value would be around \$2,875,600 which averages the need for approximately \$360,000 each year.

Threats

1. Lack of voter support for new vehicles and equipment.
2. Public Works has advertised on two previous occasions for plow equipment with limited success (one ton responses) and has not addressed the issue of investing the same technology dollars into equipment for hired vehicles.

Strategic Goal:

Replace vehicles and heavy equipment in a logical and systematic order.

Strategic Initiatives

1. Formulate a plan within the budget to outright purchase (within a single year) vehicles/equipment similar to what is done for police cruisers. The Lease/Purchase line is budgeted at \$129,000 if that was increased by \$360,000 it would cover trucks and equipment, (small and large) except the grader, which could be treated separately. This would however require an adjustment to the recent Capital Improvement Plan (CIP) submittals and the existing purchases still funded on time from the lease purchase line.

2. Work with Town Administrator and Amherst Police Chief to establish an approved rotation of retired cruisers. This would allow Amherst to dispose of them while they still retain value to the tow

DPW recommend Starting in FY-15,

1. I recommend retitling the 4312-50-2760 line from “Equipment Lease Payments” to “Vehicle/Equipment Purchases” and increase the dollar amount by \$360,000 from \$129,045 to \$489,045 to make additional immediate outright purchases and reduced as leases are paid off.
2. Fund all DPW related Capital Reserves

Budget impact is;

FY-15 is increased by 278% from \$129,045 to \$489,045

FY-15 – 20 \$100,000 per year, each reserve fund.

CIP Committee recommends funding a regiment of vehicle/equipment lease purchases.

Budget Impact

		FY-15	FY-16	FY-17
Infrastructure				
Roads	\$	200,000.00	\$ 200,000.00	\$ 200,000.00
Bridges	\$	1,200,000.00		
Bridge Capital Reserve	\$	100,000.00		
Sidewalks	\$	-		
Building and Grounds				
Town Buildings	\$	5,000.00	\$ 5,000.00	
Town Commons	\$	-		
Cemeteries	\$	-		
Environmental Functions				
Solid Waste	\$	116,762.64		
Baboosic Lake	\$	-		
Stormwater Management	\$	67,040.00		
Staffing and Equipment				
Staffing	\$	20,000.00	\$ 87,267.90	\$ -
Vehicles/Heavy Equipment	\$	460,000.00	\$ (84,045.00)	\$ (89,045.00)
Totals	\$	2,168,802.64	\$ 208,222.90	\$ 110,955.00
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Proposed operating budget	\$	4,139,087.93	\$ 4,201,285.68	\$ 4,266,455.80
Total (Initiatives and Operating Budget)	\$	6,307,890.57	\$ 4,409,508.58	\$ 4,312,240.68
Percentage budget Increase		52%	4.95%	1.07%

The proposed FY 2015-FY 2017 operating budgets were derived based on annual steps, an 8% increase in health insurance, a 5% increase in gasoline, diesel, and home heating oil, and a 2% increase in dental insurance, telephone, electricity, and water.