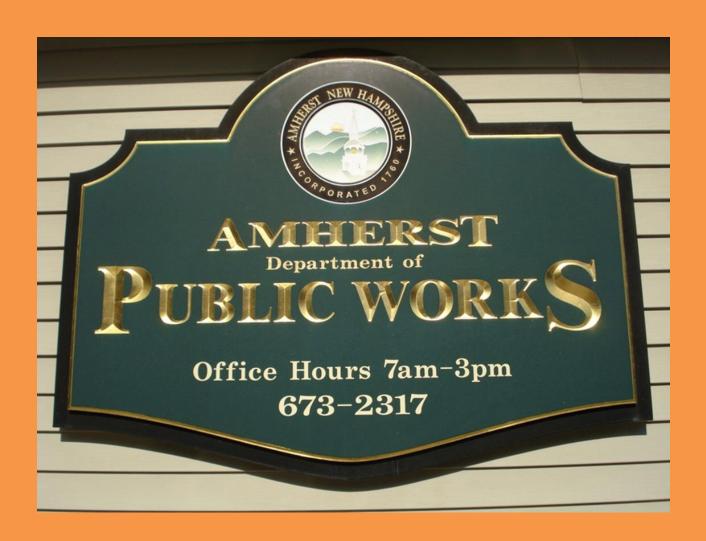
Town of Amherst 2017 DPW Strategic Update



Overview

- Roads
- Bridges
- Sidewalks
- Cemetery
- Town Buildings
- Transfer Station
- Baboosic Lake
- Stormwater
- Staff
- Vehicles/Equipment

Town of Amherst DPW Strategic Update

Roads

Infrastructure Roads

- Village Strategic Plan to bury utilities, in FY-17
 - 7,862 are direct buried
 - 4,204 are aerial
- Roads were electronically evaluated in 2008
 - Amherst participated as a test case evaluation in 2010
 - A dashboard road assessment was presented in 2015

\$11,419,209.46 Reconstruction

\$ 746,774.40 Mill and fill, and

\$ 3,695,293.20 1 ½ overlay

\$15,861,277.06 total

Infrastructure Roads

Previous Strategic Presentations targeted a new review in 2017. This should include,

- Data Management
- Condition Assessment
- Custom Reporting & GASB-34
- Search and Queries
- Customization
- GIS Mapping

Since 2006 Amherst has been impacted by ten of the 18 NH declared FEMA events.

- They are impossible to predict
- Damage varies widely
- Potentially leave either a hole or a surplus in budgeting

- Strengths,
 - Utilities, incorporating underground utilities into a road plan will channel it through an engineering review.
 Which in turn should minimize costly surprises
 - Pavement Management Software, a computer generated program that evaluates Pavement Condition Index (PCI) assists management both in the priority of repairs and the analysis of funding.
 - FEMA, we can't plan a weather event, but we can plan a reserve fund

- Weaknesses,
 - Utilities, bond money cannot be used for this work and road maintenance money once diverted would reduce road repair linear footage.
 - It would be quite a few years before an overall benefit was realized.
 - Pavement Management Software, evaluation scheduling, training and implementation
 - FEMA, because of the unpredictability, current practice is to hold some operating budget money in reserve which gives the appearance of poor management of funds

- Opportunities,
 - Utilities, placing all utilities underground, in time will reduce interruptions or outages.
 - Pavement Management Software, this is a tool in the toolbox that takes pressure off management, it is no longer someone's opinion of what should be done when.
 - FEMA, we must always finish a budget year in the black, a dedicated reserve fund allows for flexibility to spend funds on their intended purpose.

- Threats,
 - Utilities, funding, as the need will vary from road to road
 - Pavement Management Software, to be used to its full advantage, software should be updated annually, if resources are not committed, it becomes outdated.
 - FEMA, a serious weather event with inadequate funding resources to make repairs. Reimbursement is months later (sometimes in a different budget cycle) and goes to the town's general fund not DPW

- Increasing the Road Maintenance repair line (01-4312-10-2679) by a minimum of \$200,000 each of the next <u>four</u> years shifting from the Bedford model to the Goffstown model previously described in the FY-16 Strategic update.
- Increasing above in FY-17 from \$940,406 to \$1,140,406,
- Increasing above in FY-18 from \$1,140,406 to \$1,340,406,
- Increasing above in FY-19 from \$1,340,406 to \$1,540,406,
- Increasing above in FY-20 from \$1,540,406 to \$1,740,406,

- The FY-16 Strategic update recommended selecting and purchasing pavement management software that would include an independent analysis team. The strategic initiative for FY-17 estimated \$9,000 for this purchase.
- The FY-16 also recommended for FY-18 the establishment of an expendable trust for FEMA events. The account should be started with a minimum of \$20,000 and increased annually. New Hampshire has experienced eighteen (18) declared disasters in the last twelve (12) years ten (10) of which impacted Amherst.
- Continue working with Community Development Director to adopt updated road specifications that protect needs and taxpayers

Town of Amherst DPW Strategic Update

Bridges

Infrastructure update Bridges

- Manchester Road Bridge, completion in Nov
- New Boston Road Bridge, Scheduled FY-19
- Horace Greeley Road Bridge, Scheduled FY-20
 - Final plans completed and approved
- Mont Vernon Road Bridge Scheduled FY-22
- Thornton Ferry Road I Scheduled FY-23

 Change the "Bridge Capital Reserve" to "Bridge Repair or Replacement" and establish a repair fund

Town of Amherst DPW Strategic Update

Sidewalks

Infrastructure Sidewalk update

- Where there was once State and Federal financial assistance, more and more has shifted to the local level. Safe Routes to School Committee issued a final report with two major sidewalk recommendations;
 - Boston Post Road, from the Bean property to Homestead Circle (\$94,000), and
 - New Boston Rd, Jones Rd, Mack Hill Rd, and Manchester Road loop.

Infrastructure Sidewalk update

- Strengths,
 - By creating and funding a Sidewalk Capital Reserve Account, any repairs or upgrades would come from the fund instead of from the road repair account.
- Weaknesses,
 - Because Community Development plans to study sidewalks town wide, some decision makers may view establishing a Capital Reserve as premature because it will run concurrent with the study.
- Opportunities,
 - There are two solid recommendations by the Safe Routes to School Committee one where a lot of adults walk that might receive financial assistances from a grant and the second a busy road where a lot of students walk. Either way, we have an opportunity to be proactive.
- Threats,
 - Many of our roads are narrow and shoulders minimal or nonexistent. In many cases, the only option available is to walk in the street and dodge cars.

Infrastructure Sidewalk update

• Initial Strategic Goal & Initiative

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

DPW Recommends

- A \$45,000 Sidewalk Capital Reserve established in FY-17, with BOS authority to spend
- Add \$45,000 to the Sidewalk Capital Reserve (previously established) in FY-18
- Reapply for grant funding for the Jones Road loop in FY-18 (\$330,000)

Town of Amherst DPW Strategic Update

Cemetery

Infrastructure Cemeteries

Having purchased mapping software, Cemetery Trustees are reviewing available lots and reassessing the timetable for implementing the construction of Forestview Cemetery. Earlier engineering estimates for Section 8 (the former playground location) was \$160,000. The year of implementation is yet to be determined.

Town of Amherst DPW Strategic Update

Town Buildings

Town Building Improvements Capital Repairs

- DPW Sander hanger & winter storage \$ 18,000
- 40 X 50 Stand-a-lone DPW maint. Garage \$135,000
- Last phase of Town Hall renovations \$ 93,000
- FY-18
 - Safety Complex Driveway/parking area \$156,710
- Undetermined
 - New Public Works Garage \$5,536,600
 - Roof over Transfer Station (work stations.) \$ 70,000

Town Building Improvements Capital Repairs

• Strategic Goals & Initiative

 Only the Town Hall renovation slated for FY-15, Building Repair Capital Reserve, and a building budget increase, appear in previous Strategic Plans.

DPW Recommends

- Starting in FY-17, increase the DPW 01-4311-10-2430 building repair by \$12,000 annually for the next four years to construct one bay each year.
- In FY-17 create a warrant article of \$135,000 to fund the creation of a 40' X 50' stand-a-lone DPW Mechanic's garage.
- In FY-17 create a warrant article of \$93,000 to fund cosmetic surgery to the outside of town hall
- Establish a "Town Building Capital Reserve" account for a minimum of ten years 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)
- In FY-18 fund by warrant article \$165,710 to remove by milling the existing asphalt, add two new closed drainage catch basins, and repave at the Safety Complex on Amherst Street.

DPW Strategic Update Environmental Functions

Transfer Station

DPW Environmental Update Transfer Station

Initial Strategic Goal & Initiative

 We reached our goals to increase employee wages, and replace our scale. The new scale went into service in early July

Items to be addressed

- Have necessary staff to meet the EPA water sampling and NHDES requirements
- Construct a continuous truss roof full length of deck

DPW Recommends

- Have necessary staff to meet the EPA water sampling and NHDES requirements
- Construct a continuous truss roof full length of deck

DPW Strategic Update Environmental Funcitions

Baboosic Lake Septic

as it integrates with

EPA Stormwater mandates

DPW Strategic Update Baboosic Lake Septic

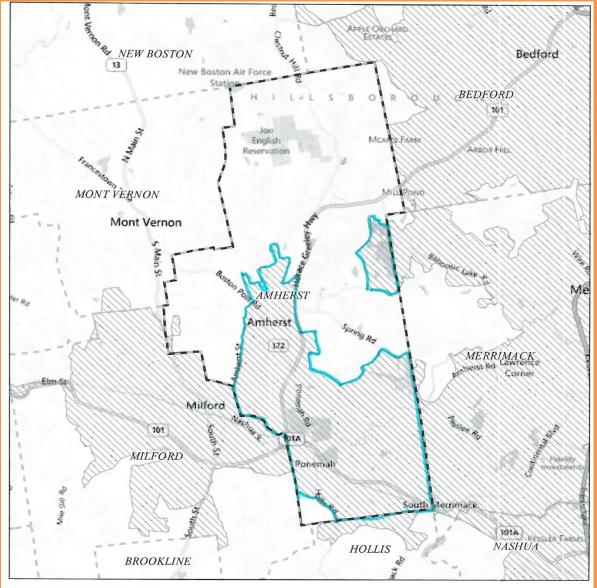
- The system as it sits, is five to ten years old, we are already experiencing some wear and items in need of replacement.
 - Phase One's ten year bond and interest commitment terminates in July 2016. Amherst Sewer Commissioners/BOS should strongly consider establishing a revenue account and establish a small fee structure that can be applied to each phase once bond/bond interest is paid off.

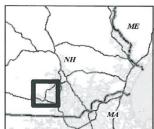
DPW Strategic Update Environmental Functions

Stormwater

Environmental functions Stormwater

- The significantly more restrictive draft general permit and fact sheet was published in the Federal Register in February 2013 for public comment.
 After receiving extensive feedback, four sections of the new regulation were rewritten and recently reposted for public comment (Sept-Nov 2015).
- The reposting for comment are;
 - Requirements to meet Water Quality Standards
 - Water Management in new development and re-development (Post Construction Stormwater Management
 - Requirements related to Improve Total Maximum Daily Loads (TMDL)
 - Requirements related to Discharge to certain water quality limited waterbodies.
- As discussed previously, once the new permit takes effect, the first six months will be critical in becoming compliant.





NPDES Phase II Stormwater Program Automatically Designated MS4 Areas

Amherst NH

Regulated Area (2000 + 2010 Urbanized Area)

Town Population: 11205
Regulated Population: 6671

(Populations estimated from 2010 Census)

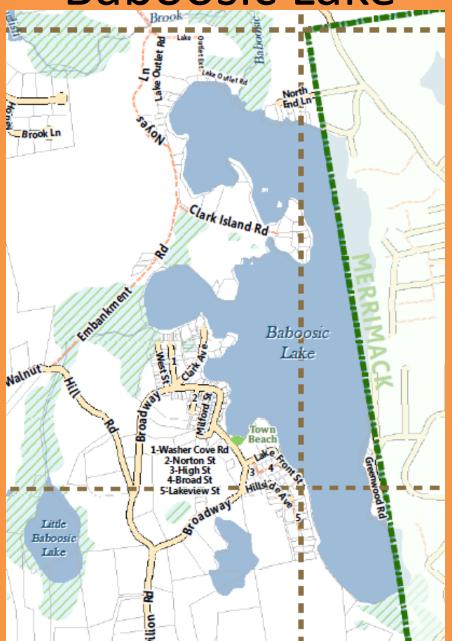


BEPA

Urbanized Areas, Town Boundaries: US Census (2000, 2010) Base map © 2010 Microsoft Corporation and its data suppliers

US EPA Region 1 GIS Center Map #8824, 11/19/2012

Baboosic Lake



Baboosic Lake Water Quality Conditions

- Section 303(d) of EPA's Clean Water Act requires states to determine the Total Maximum Daily Loads (TMDL's) for impaired water bodies.
- Baboosic Lakes impairments include:
 - Chlorophyll A
 - Cyanobacteria hepatotoxic
 - Escherichia coli
 - PH
 - Phosphorus
 - Excess Algal growth

Baboosic Lake Septic Phosphorus reduction

Site

Amherst

Estimated P Load Reduction, 2008

7.3-14.7

CEI estimate total pollutant

NA

All Site Locations from the 2008 Watershed Plan

On-site Wastewater Management Program

and the 2012 Implementation Status Report	Location	Plan (lbs. /yr.)	removal in 2011 (lbs./yr.)
Community septic system - Phase 1 (11 homes)	Amherst	11.66	NA
Community septic system - Phase 2 (10 homes)	Amherst	10.56	NA
Community septic system - Phase 3 (13 homes)	Amherst	13.64	NA
Community septic system - Phase 4 (9 homes)	Amherst	NA	NA
Area A: Community septic system (31 homes)	Amherst	32.78	NA
Area B: Community septic system (42 homes)	Amherst	44.44	NA
Area C: Community septic system (34 homes)	Amherst	35.86	NA
Area D: Community septic system (30 homes)	Amherst	31.68	NA
Area E: Community septic system (30 homes)	Amherst	31.68	NA

DPW Strategic Update

Stormwater

 Previous Strategic reports detailed how seriously the impairments of Baboosic Lake are with e-coli and Phosphorus leading the way. A full time engineering position whose initial time will be split between adding to the Community Septic and Stormwater management will be phased in starting January 2016 with the balance appropriated in the FY-17 budget (\$43,693.95)

DPW Recommends

- In FY-17 fund the remaining six months of the Stormwater/Septic position with \$43,693.95
- In FY-17, fund water (budget increase of \$12,000) testing and other operating expenses to meet Stormwater requirements

Town of Amherst DPW Strategic Update

Staff

DPW Strategic Update Staff

 The Matrix Public Works Management and Operations Study clearly demonstrated without the ability to document and review project and manpower needs from one centrally located resource, the debate "is it one employee for every ten miles of roads, fifteen miles of roads, or twenty miles of road and are adequate resources available," is moot at this point.

DPW Strategic Update Staff

- We are reviewing "Asset Management" software programs that would be downloaded on the DPW server, accessible to all office staff workstations and multifaceted that would ideally cover the following functions:
 - Work Orders
 - Preventative Maintenance
 - Inventory
 - Scheduling

We are not deep enough into the research to make an exact cost analysis but others have targeted this cost between \$50,000 and \$80,000

DPW Recommends

In FY-17 adding \$60,000 to the operating budget to purchase hardware and Asset Management software

Town of Amherst DPW Strategic Update

Vehicles / Equipment

DPW Strategic Update Vehicle & Equipment

- Following a lead from the Town of Derry, in December of 2014, a Manpower & Equipment bid was mailed directly to twenty-seven vendors covering everything from moving dirt to tree work. The initial response came from two contractors.
- From local feedback and with permission of the original bidders, the insurance requirements were clarified and the bid resent (same twenty-five, we held the two original bids). Results were still extremely disappointing; no one bid winter road maintenance and the financial impact to the DPW "Outside Hire" line significant.

	Туре	Model	Model Year	5 Year Lease Purchase Payment	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
Truck 7	Pick up	4X4 F350	2011		three	four	five	six	seven	eight	\$27,000.00
Truck 12	Pick up	F-250	2015		eleven	Substituted	two	three	four	five	six
Truck 13/gen use	1/2 Ton	F150	2002	Outright Purchase		\$24,000.00	one	two	three	four	five
Truck 11	Pick up	F250	2012	•	\$20,000.00	three	four	five	six	seven	eight
Rec 1	3/4	F350	2008		six	seven	eight	nine	ten	\$11,500.00	one
Rec 3	One Ton Dump	4X4 F550	2004		ten	eleven	\$35,200.00	one	two	three	four
Truck 5	One Ton Dump	4X4 F550	2011		three	four	five	six	seven	eight	nine
		4X4 F550	2006		eight	nine	ten	eleven	\$70,400.00	-	two
Truck 9	One Ton Dump			Outsight Durches							
Truck 1	One Ton Dump	4X4 F550	2016	Outright Purchase	Was Non-functional	\$70,400.00	one	two	three	four	five
Truck 4	6 Wheel Dump	IH	2013		two	three	four	five	six	seven	eight
Truck 2	6 Wheel Dump	IH	2008		six	seven	eight	nine	ten	eleven	\$155,000.00
Truck 8	6 Wheel Dump	IH	2008		six	seven	eight	nine	ten	\$155,000.00	one
Truck 14	6 Wheel Dump	IH	2005		nine	ten	eleven	\$155,000.00	one	two	three
Truck 15	6 Wheel Dump	IH	2005		nine	ten	\$155,000.00	one	two	three	four
Truck 6	6 Wheel Dump	IH	2015	\$31,696.8 <mark>0</mark>	\$155,000.00	one	two	three	four	five	six
		Food at table on	2010	#00.075.54		Alauna	£	fl	-1.		a la la la
Truck 17	10 Wheel	Freightliner	2012	\$39,975.52		three	four	five	six	seven	eight
Truck 10	10 Wheel	IH	2003		eleven	twelve	\$177,000.00	one	two	three	four
Back Hoe	Back Hoe	New Holland	2000	\$25,555.68	Fourteen	\$120,000.00	one	two	three	four	five
Tractor	Tractor	Trackless	2015	\$25,246.68	\$120,700.00	one	two	three	four	five	six
Loader 1	Loader	Hyundai	2001	\$30,089.64	Thirteen	\$140,000.00	one	two	three	four	five
Tractor M	Tractor	Massy	2007		seven	eight	nine	ten	\$55,000,00	one	two
			2008		six	seven	eight	nine	\$155,000.00		two
DPW Loader	Loader	Hyundai		\$7,056.21				nine		\$90,000.00	
Asphalt Zipper	Asphalt Zipper	AZ-580	2008	\$7,050.21		seven	eight		ten		
Chipper	Chipper	Bandit	2013		one	two	three	four	five	six	seven
Grader	Grader	Champion	1986								
This worksh	eet: ude the Ancillary	/ vehicles / no	budget impact	Flat Budget Method	Lease Purchase						
	ses on 2.5% 5 ye										
Is based on FY	/15 (todays) price	es		Lease Purchase FY 2015	Total Purch	Total Purch	Total Purch	Total Purch	Total Purch	Total Purch	Total Purch
Does NOT rep	lace the Grader			\$159.620.53	\$295.700.00	\$354.400.00	\$367.200.00	\$155.000.00	\$280.400.00	\$256.500.00	\$182.000.00
					L/P Committed	L/P Committed	L/P Committed	L/P Committed	L/P Committed	L/P Committed	L/P Committed
			60 Mo Rate 3.00%		\$78,728.53	\$159,620.53	\$112,588.80	\$187,209.01	\$220,218.43	\$248,236.73	\$215,219.72
			2.75%		Annual L/P Budget	L/P Budget	L/P Budget	L/P Budget	L/P Budget	L/P Budget	L/P Budget
			2.50%		\$129,400.00			\$187,209.01	\$220,218.43		\$296,111.72
			2.25%		\$125,400.00	φ125,400.00	\$125,400.00	\$107,209.01	Ψ220,210.43	φε19,900.00	φ200,111.72
			Payment Factor		L/P Delta	L/P Delta	L/P Delta	L/P Delta	L/P Delta	L/P Delta	L/P Delta
			1.75%		\$50,671,47						\$80,892.00
			1.99%		900,071.47	Q00,E20.00	ψ.0,011.20	ψ0.00	ψ0.00	ψο 1,000.00	ψ00,002.00
		10 Mo Data-	2.50	Pudget Delte	610 700 50	\$204.600.50	-\$350,388.80	\$1EE 000 00	¢000 400 00	\$20.4 BOO SO	\$101 100 CO
		12 Mo Rates	2.5%	Budget Delta	-\$43,728.53	-\$384,620.53	- გავს,388.80	\$155,000.00	-\$280,400.00	-\$224,803.20	-\$101,108.00
		24 mo rates	2.5%	(Required Warrant)							
		18 mo rates	2.50%								
		19 mo rates	2.50%								
		20 mo rates	2.50%	L/P Required Increase			\$57,809.01	\$33,009.42	\$59,715.11	\$16,178.19	
			V-								
Ancillary	Type	Model	Year	New L/P Balance			\$187,209.01	\$220,218.43	\$279,933.53	\$296,111.72	

Vehicle/Equipment Update

	clude the Ancilla		budget impact	Flat Budget Method	Lease Purchase						
Calculates leases on 2.5% 5 year terms until FY21 Is based on FY15 (todays) prices			Lease Purchase FY 2015	Total Purch	Total Purch	Total Purch	Total Purch	Total Purch	Total Purch	Total Purch	
Does NOT replace the Grader		\$159.620.53	\$295.700.00	\$354.400.00	\$367.200.00	\$155.000.00	\$280.400.00	\$256.500.00	\$182.000.00		
					L/P Committed	L/P Committed	L/P Committed	L/P Committed	L/P Committed	L/P Committed	L/P Committed
			60 Mo Rate		\$78,728.53	\$159,620.53	\$112,588.80	\$187,209.01	\$220,218.43	\$248,236.73	\$215,219.72
			3.00%								
			2.75%		Annual L/P Budget	L/P Budget	L/P Budget	L/P Budget	L/P Budget	L/P Budget	L/P Budget
			2.50%		\$129,400.00	\$129,400.00	\$129,400.00	\$187,209.01	\$220,218.43	\$279,933.53	\$296,111.72
			2.25%								
			Pavment Factor		L/P Delta	L/P Delta	L/P Delta	L/P Delta	L/P Delta	L/P Delta	L/P Delta
			1.75%		\$50,671.47	-\$30,220.53	\$16,811.20	\$0.00	\$0.00	\$31,696.80	\$80,892.00
			1.99%								
		12 Mo Rates	2.5%	Budget Delta	-\$43,728.53	-\$384,620.53	-\$350,388.80	\$155,000.00	-\$280,400.00	-\$224,803.20	-\$101,108.00
		24 mo rates	2.5%	(Required Warrant)							
		18 mo rates	2.50%								
		19 mo rates	2.50%								
		20 mo rates	2.50%	L/P Required Increase			\$57,809.01	\$33,009.42	\$59,715.11	\$16,178.19	
Amaillam.	Time	Model	Year	New L/D Palanes			£197.000.04	\$220 248 42	\$270.020.50	\$006 111 70	
Ancillary	Туре	iviodei	rear	New L/P Balance			\$187,209.01	\$220,218.43	\$279,933.53	\$296,111.72	
/ehicle 1	Sedan	Ford CV	2009		LP Schedule With in	ncreasing bud	get amounts a	nd no Warran	ts		
/ehicle 2	Sedan	Ford CV	2007	5 Year LP							
/ehicle 4	Sedan	Ford CV	2011	Prior LP Due	\$7,056.21	\$7,056.21					
/ehicle 3	Sedan	Ford CV	2011	Prior LP Due	\$39,975.52	\$39,975.52					
ehicle 5	Sedan	Ford CV	2010	Truck 6 FY 15	\$31,696.80	\$31,696.80	\$31,696.80	\$31,696.80			
/ehicle 6	Sedan	Ford CV	2009	Trackless FY 15		\$25,246.68	\$25,246.68	\$25,246.68			
				FY 16 LP Due		\$55,645.32	\$55,645.32	\$55,645.32			
				FY 17 LP Due			\$74,620.20	\$74,620.20			\$74,620.20
				FY 18 LP Due				\$33,009.42			\$33,009.42
				FY 19 LP Due					\$59,715.11		\$59,715.11
				FY 20 LP Due FY 21 LP Due						\$47,874.99	\$47,874.99 \$21,532.36
				FY 21 LP Due							\$21,532.36
				FY 23 LP Due							
				FY 24 LP Due							
				FY 25 LP Due							i -
				FY 26 LP Due							i
				FY 27 LP Due							
				(Required L/P Budget)	\$78,728.53	\$159,620.53	\$187,209.01	\$220,218.43	\$279,933.53	\$296,111.72	\$236,752.08
				Yearly Budget Delta	\$50,671.47	\$30,220.53	\$57,809.01	\$33,009.42	\$59,715.11	\$16,178.19	-\$59,359.64

DPW Strategic Update Vehicle & Equipment

- Our Strategic Initiative is/was
 - To formulate a plan within the budget to outright purchases (within a single year) vehicle/equipment similar to what is done for police cruisers. The Lease/Purchase line item is budgeted at \$179,950 and with small bites of the apple, and utilizing the municipal lease format, we will eventually work towards an outright purchase program.
- Starting in FY-17, DPW Recommends
- Increasing Lease/Purchase budget line item 01-4312-50-2760
 - FY-17 increasing from \$178,950.61 to \$198,950.61 a line increase of 11.17%
 - FY-18 increasing from \$198,950.61 to \$231,959.62 a line increase of 16.6%
 - FY-19 increasing from \$231,959.62 to \$291,674.73 a line increase of 15.74%

	FY-17	FY-18	FY-19	FY-20	FY-21	FY-22
Infrastructure						
Roads	\$ 200,000.00	\$ 200,000.00	\$ 200,000.00	\$ 200,000.00		
Road Software S	\$ 9,000.00					
FEMA Capital Reserve	\$ 20,000.00					
Bridges :	\$ 25,000.00	\$ 25,000.00				
Sidewalks :	\$ 45,000.00	\$ 45,000.00				
Cemetery						
Buildings & Grounds						
Sander hangers	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00		
50 X 40 Mechanic's garage	\$ 135,000.00					
Building Improvements	\$ 5,000.00	\$ 5,000.00	\$ 5,550.00	\$ 5,000.00	\$ 5,000.00	
Safety Complex Parking		\$ 165,710.00				
Town Building Capital Reserve	\$ 50,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
Environmental						
Transfer Station roof						
Baboosic Lake Septic						
Stormwater :	\$ 55,693.95	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	
Staffing and Equipment						
Asset Management Software	\$ 60,000.00					
Vehicle / Equipment Lease line	\$ 20,000.00	\$ 33,009.01	\$ 59,715.11	\$ 16,178.19		
Sub total :	\$ 636,693.95	\$ 507,719.01	\$ 299,265.11	\$ 255,178.19	\$ 27,000.00	\$ 10,000.00
Proposed operating budget	\$ 4,619,052.20	\$ 4,692,198.40				
Total initiatives and operating budget	\$ 5,255,746.15	\$ 5,199,917.41				
Percentage budget increase	13.78	10.82				

Town of Amherst DPW Strategic Update

Questions