

Public Works

Section 4



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Public Works Departmental Statement

The Department of Public Works (DPW) consists of multiple Divisions collectively responsible for maintaining and improving the Town's public spaces and infrastructure. This includes the maintenance and development of Town roads, sidewalks, public trees, cemeteries, parks, public grounds and buildings, as well as the Town water supply system and wastewater/sewerage system. In addition to general administration, the Divisions within the Department include: Highway, Parks, Cemetery, Engineering, Water and Sewer. For budget information regarding the Water and Sewer Divisions, please see Enterprise Funds, Section 8 of this document.

Highway Division

The Highway Division is responsible for all repairs, street openings, new construction of public ways, sidewalk construction and repair, drainage, snow removal and other matters having to do with the proper maintenance and development of the Town's road system. The Highway Division also maintains the trees within the right-of-way along the public roads.

Parks Division

The Parks Division is responsible for maintaining and developing public playgrounds, parks and related facilities. Given the reduction in staffing over the years, there has become very little distinction between Highway Division employees and Parks Division employees.

Cemetery Division

The Cemetery Division operates, maintains and develops the public burial grounds of the Town and related facilities. There is a small cemetery on Brigham Street which has few headstones and is often referred to as the old "Indian Burial Ground". The main burial ground in Town is the Howard Street Cemetery which has two portions: the older, historic section and the north section, or the Kizer Cemetery, named for the family from whom the land was purchased. The original section is 18.65 acres and the active North section is 21.71 acres.

Engineering Division

The Engineering Division provides technical support to all Town Departments, Boards, and Committees as requested. The Town Engineer reviews a variety of projects for the Planning Board, Conservation Commission, Earthwork Board, Groundwater Advisory Committee and Zoning Board of Appeals. The Division is also responsible for oversight of the Town Pay-As-You-Throw solid waste program which is shown separately under the Solid Waste Enterprise Fund portion of this budget document. The Town Engineer works with various state agencies as a Town representative on local issues (e.g., Mass Highway, Central Mass Regional Planning Commission, MA Executive Office of Environmental Affairs, and US Department of Environmental Protection).

Water and Sewer Divisions (Enterprise Funds)

The Water and Sewer Divisions operate, maintain and develop the Town's public water and sewer systems and related facilities. The Water and Sewer Divisions are operated as enterprise funds. Briefly, an enterprise fund as authorized under MGL Ch. 44 §53F½ is a separate accounting and financial reporting mechanism for municipal services for which a fee is charged in exchange for goods or services. It allows a community to demonstrate to the public the portion of total costs of a service that is recovered through user charges and the portion that is subsidized by the tax levy, if any. With an enterprise fund, all costs of service delivery—direct,



indirect, and capital costs—are identified. This allows the community the option to recover total service costs through user fees.

For purposes of providing a departmental overview and personnel summary, the Water & Sewer Division is included here within the DPW Section 4 of the budget. The actual budgets associated with the Water and Sewer enterprise funds are contained in Section 8 of this budget document.

Related Advisory Boards and Commissions

In addition to the various DPW Divisions, there are several advisory Boards and Commissions related to the DPW's mission and functions. These include:

Cemetery Commission

The Cemetery Commission consists of three members appointed by the Town Administrator for three-year terms. The Commission is responsible for the development of policies, fees, rules and regulations pertaining to the care, superintendence and management of all public burial grounds. The DPW Director serves as the staff liaison to the Cemetery Commission.

Parks & Recreation Commission

The Parks & Recreation Commission consists of five members appointed by the Board of Selectmen for three-year terms. The Commission is responsible for the development of policies, rules and regulations pertaining to the care, superintendence and management of the public recreation programs, facilities and public parks and playgrounds under its control. The DPW Director serves as one of the staff liaisons to the Parks & Recreation Commission and is responsible for the physical maintenance of the facilities. The other staff liaison is the Recreation Director, who is responsible for the Recreation Department programs on those facilities.

Water & Sewer Commission

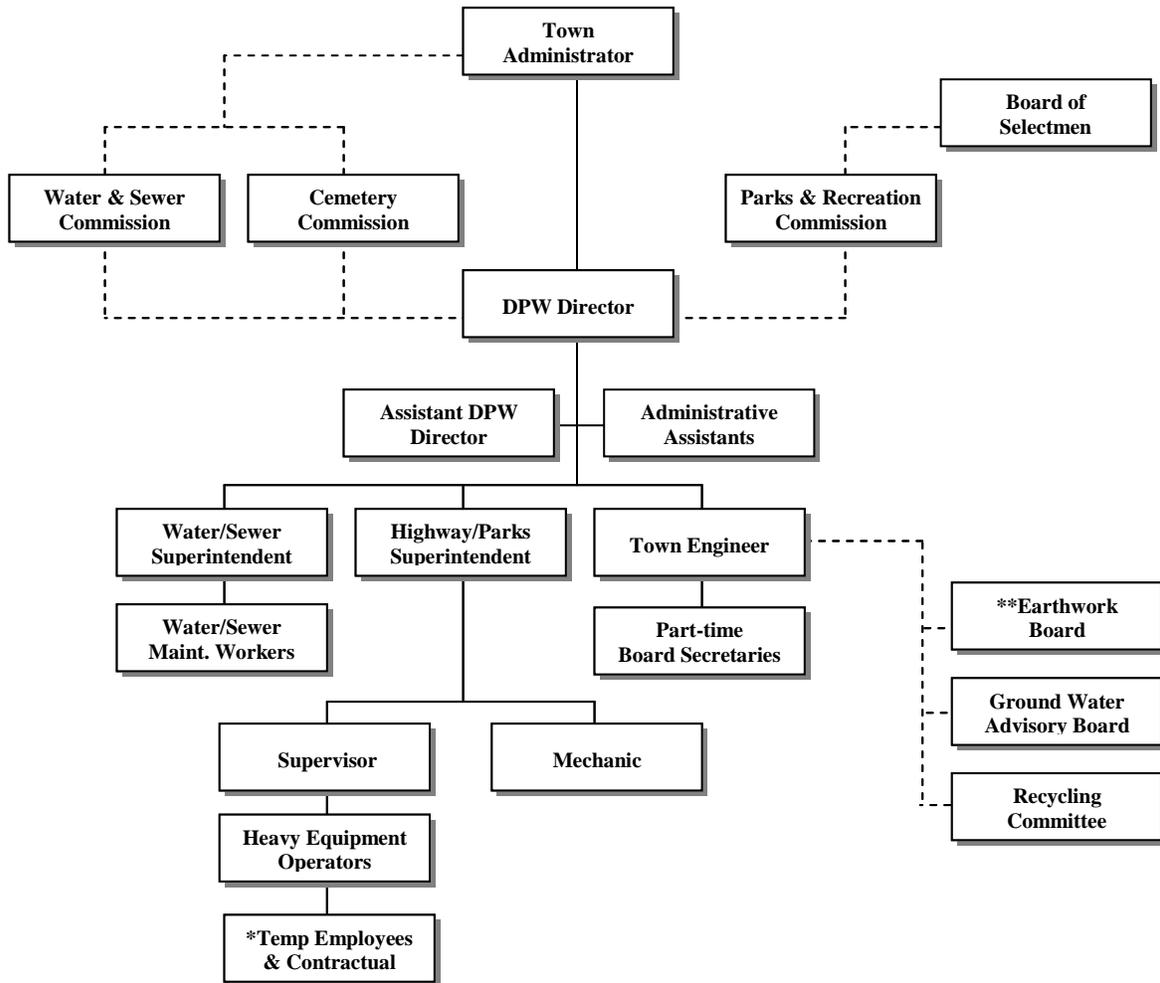
The Water & Sewer Commission consists of three members appointed by the Town Administrator for three-year terms. The Commission is responsible for the development of policies, fees, rules and regulations pertaining to the care, superintendence, development and management of the Town's water supply and facilities and the Town's sewerage system. The DPW Director serves as the staff liaison to the Water & Sewer Commission.

Groundwater Advisory Committee

The Groundwater Advisory Committee consists of five members, one each appointed by the Planning Board, the Conservation Commission, the Board of Health, the Board of Selectmen and the Water & Sewer Commission for indefinite terms. The Committee exists to protect, preserve and maintain the existing and potential groundwater supply and groundwater recharge areas within the known aquifers of the town.



DPW Organizational Chart



Organizational Chart Notes:

*The Highway/Parks Division and Cemetery Division use temporary, seasonal employees to augment park maintenance in the summer months and contractual snow plow operators to supplement DPW staff during winter operations.

**The Earthwork Board is budgeted under Planning & Conservation

**DPW FY2017 Initiatives and Accomplishments****Highway/Parks & Cemetery Divisions:**

1. Funded various projects and equipment acquisitions as part of the approved FY2017 Capital Budget, including: the purchase of a 6-wheel Mack dump truck with plow and spreader and a sidewalk machine with numerous attachments. The Department continues to identify and plan for future projects and equipment needs through the Town's Capital Improvement Plan.
2. Completed design and bidding of the Church Street Culvert Project. Bids were opened in January 2016; construction got underway shortly thereafter and is scheduled for completion in the Spring of 2017.
3. Performed a town-wide roadway and guardrail condition evaluation as part of our Pavement Management Program; result shows a slightly improved pavement condition index of 73 due to the continued funding support for this program.
4. Implemented approximately 19 miles of roadway maintenance and improvements including overlay, full depth patch, crack fill, and chip seal.
5. Replaced over 1,400 linear feet failing guardrail with new steel guardrail and installed 275 linear feet of new timber guardrail.
6. Conducted snow plowing and treatment of over 90 miles of roads for all winter weather events in what turned out to be a lighter than normal 2015/2016 winter season.
7. Completed a historic property line survey of the Brigham Street Cemetery.
8. With help from the Assabet Valley Technical High School, we rehabilitated the Ellsworth-McAfee Park pavilion and gazebo, replaced the roofs on the cemetery tomb and the Town Hall pump station.
9. Observation platform construction was completed at the Memorial Field concession stand.
10. Pruned or completely removed over 56 unhealthy, dead, or dying street trees located within the Town's right of way.

Engineering Division:

1. The Engineering Department worked with the Recycling Committee on the annual swap meet "Take It or Leave It Day." The event included the collection of scrap metal, hard plastics and cardboard in order to assist residents with some of the items which are not collected at the curb throughout the year. The Northborough Junior Women's Club also organized Styrofoam recycling as part of this event.
2. The annual Household Hazardous Waste Day continues to be successful each fall. This past year the event was again held at the DPW Garage at 190 Main Street and included the collection of scrap metal.
3. During 2015 the Massachusetts Department of Environmental Protection (DEP) restored some Grant programs which had been eliminated a number of years ago due to the



constraints on the state budget. In 2016, the Town received a \$4,200 grant under the Sustainable Materials Recovery Program which will be used to offset the cost of purchasing recycling bins as well as to offset the cost of producing and mailing the annual recycling calendar to each household in June.

4. The Town Engineer represented Northborough as its liaison to the Central Massachusetts Regional Stormwater Coalition (CMRSWC) as they work towards finding feasible ways to protect stormwater quality and to remain in compliance with the Federal Environmental Protection Agency. The CMRSWC is also working to form a statewide coalition to share stormwater resources as future grants are not anticipated.

Water and Sewer Divisions:

1. Achieved substantial completion of the installation of new electronic water meters as part of the Town-wide water meter upgrade program which was funded as part of the approved FY2015 Capital Budget. The remaining 5% of meter changes will be performed by Town personnel during the coming months.
2. Completed \$1.5 million in upgrades and improvements to the Hudson Street Sewer Pump Station.
3. Funded equipment acquisitions as part of the approved FY2017 Capital Budget including the purchase of a one-ton dump body with plow and a water valve maintenance trailer.
4. Began the first year of a 15-year Sanitary Sewer Inflow and Infiltration Elimination Program as mandated by new State and Federal clean water regulations.
5. Adopted an updated *Regulations for Users of the Northborough Water Supply and Distribution System* (last revised in 1996).
6. Continued working on an update to the *Regulations Governing the Discharge of Waters and Waste into the Public Sewer System* (last revised in 1993).

Department of Public Works FY2018 Goals and Initiatives

1. Continue the all-inclusive approach to infrastructure management and improvement by combining the recommendations from the pavement management program, water master plan and the comprehensive wastewater management plan to efficiently manage operations and prioritize future capital improvement projects.
2. Selectively implement the pavement management plan according to recommendations by the consultants and Public Works staff.
3. Replace roadside guardrail identified in our recently completed inventory assessment.
4. Continue compliance with unfunded drinking water mandates including:
 - a. Revised Total Coliform Rule;
 - b. Reduction of Lead in Drinking Water Act;



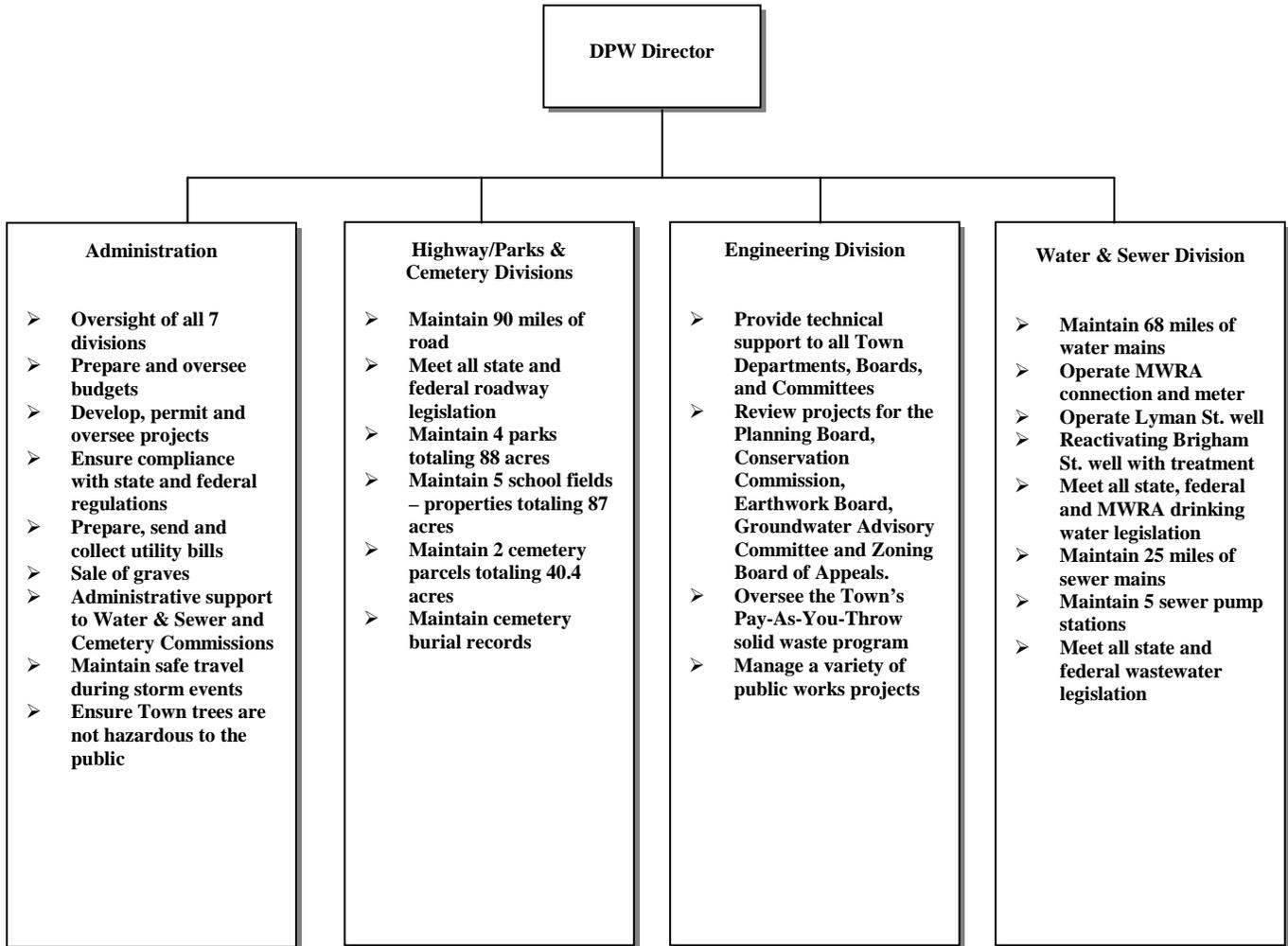
- c. Revisions to the Water Management Act (WMA) including the Sustainable Water Management Initiative (SWMI).
5. Oversee the Town's Stormwater Management Plan and administer a new plan with the Environmental Protection Agency (EPA) based on the recent release of the final Small Municipal Separate Storm Sewer System (MS4) permit.
6. Implement the first year of physical improvements of the sanitary sewer inflow and infiltration elimination program.
7. Prepare design and construction cost estimate documents for improvements to the Fisher Street culvert.
8. Begin a system wide program of sanitary sewer pump station improvements.
9. Complete construction improvements to the Church Street culvert.
10. Assist with the ongoing infrastructure GIS system.
11. Develop design documents for Town Common.

Significant Budget Changes or Initiatives

Overall, the Department of Public Works General Fund budget is up \$82,626 or 3.29%. The majority of the increase is due to a \$40,800 increase in funding for snow and ice to better reflect actual historic spending. The FY2018 budget also includes a 2% general wage increase for all contractual and non-union personnel. The major department initiatives supported by the General Fund address safety and environmental compliance and improvements. These include mandated safety inspections of the new fuel island and fire alarm systems, development and implementation of the required DPW facility Spill Prevention, Control, and Countermeasures Plan, and compliant removal and disposal of street sweeping and catch basin debris.



DPW Programs and Subprograms





DEPARTMENT OF PUBLIC WORKS					
Personnel Summary					
Position	FY 2014 FTE	FY 2015 FTE	FY 2016 FTE	FY 2017 FTE	FY 2018 FTE
<u>Administration</u>					
DPW Director	1	1	1	1	1
Assistant DPW Director	0	0	1	1	1
Administrative Assistants	2	2.48	2.48	2.48	2.48
<u>Engineering Division</u>					
Town Engineer	0	1	1	1	1
<u>Highway/Parks Division</u>					
Highway/Parks Superintendent	0	1	1	1	1
Highway/Parks Supervisors	2	1	1	1	1
Mechanic	1	1	1	1	1
Heavy Equipment Operators	6.25	6.25	6.25	6.25	6.25
Light Equipment Operator	0	0	1	1	1
<u>Cemetery Division</u>					
Cemetery Superintendent	0	0	0	0	0
Heavy Equipment Operator	.75	.75	.75	.75	.75
<u>Water & Sewer Division</u>					
Water/Sewer Supervisor	1	1	1	1	1
Water/Sewer Maintenance Workers	3	3	3	3	3
Total Full-time Equivalents	17	18.48	20.48	20.48	20.48

*Personnel Explanation: Full-time Equivalents are based upon 40 hrs per wk (30hrs/40hrs = .75 FTE).

- The FY2016 budget restored the Assistant Director position and a Light Equipment Operator position which were cut from the budget during the recent recession.
- The Highway/Parks & Cemetery Divisions use seasonal staff to augment park maintenance in the summer and contract snow plow operators to supplement staff during winter operations.
- The DPW Director's salary, Assistant Director's salary and wages for the two full-time Administrative Assistants are budgeted 50% in the General Fund (under Highway Administration), 30% in the Water Enterprise Fund and 20% in the Sewer Enterprise Fund budget (See Section 8 of this budget document for Enterprise Fund detail). Wages for the Water/Sewer Maintenance Workers and the 19 hr/week per week Administrative Assistant added in FY2015 are budgeted 60% in the Water Enterprise Fund budget and 40% in the Sewer Enterprise Fund budget.
- The Town Engineer was moved into DPW as part of a 2013 Town Meeting approved reorganization. The Town Engineer position was previously part of the Planning Department.



Department of Public Works

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DPW Personnel Table of FTEs by Division Budgets

DEPARTMENT OF PUBLIC WORKS					
Personnel Summary					
Position	FY 2014 FTE	FY 2015 FTE	FY 2016 FTE	FY 2017 FTE	FY 2018 FTE
<u>Administration</u>					
Budgeted in Divisions below					
<u>Engineering Division</u>					
Town Engineer	0	1	1	1	1
<u>Highway/Parks Division</u>					
DPW Director	.5	.5	.5	.5	.5
Assistant DPW Director	0	0	.5	.5	.5
Administrative Assistants	1	1	1	1	1
Highway/Parks Superintendent	0	1	1	1	1
Highway/Parks Supervisors	2	1	1	1	1
Mechanic	1	1	1	1	1
Heavy Equipment Operators	6.25	6.25	6.25	6.25	6.25
Light Equipment Operator	0	0	1	1	1
<u>Cemetery Division</u>					
Cemetery Superintendent	0	0	0	0	0
Heavy Equipment Operator	.75	.75	.75	.75	.75
<u>Water Division Enterprise Fund</u>					
DPW Director	.3	.3	.3	.3	.3
Assistant DPW Director	0	0	.3	.3	.3
Administrative Assistants	.6	.89	.89	.89	.89
Water/Sewer Superintendent	0	0	0	0	0
Water/Sewer Supervisor	.6	.6	.6	.6	.6
Water/Sewer Maintenance Workers	1.8	1.8	1.8	1.8	1.8
<u>Sewer Division Enterprise Fund</u>					
DPW Director	.2	.2	.2	.2	.2
Assistant DPW Director	0	0	.2	.2	.2
Administrative Assistants	.4	.59	.59	.59	.59
Water/Sewer Superintendent	0	0	0	0	0
Water/Sewer Supervisor	.4	.4	.4	.4	.4
Water/Sewer Maintenance Workers	1.2	1.2	1.2	1.2	1.2
Total Full-time Equivalents	17	18.48	20.48	20.48	20.48

The table above represents how personnel in the table on the previous page are budgeted, as opposed to how many full-time equivalents exist by title. The distinction is important due to the existence of the Water and Sewer Enterprise Funds and the accounting required to capture all of the costs associated with these services, so that the fee structures may be set to cover 100% of the direct and indirect costs. For more detail on enterprise fund budgets, please refer to Section 8 of this budget document.

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Department of Public Works



	FY2014 ACTUAL	FY2015 ACTUAL	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 SIX MONTHS	FY2018 PROPOSED
HIGHWAY ADMINISTRATION						
Personnel Services						
¹ 51100 DPW Director Salary (50%)	55,180	57,305	58,928	60,107	27,602	56,611
51100 Assistant DPW Director (50%)	0	0	22,502	47,500	15,918	47,500
51410 Longevity Pay	0	0	0	0	0	0
SUBTOTAL	55,180	57,305	81,430	107,607	43,520	104,111
Expenses						
52110 Utilities	28,927	32,377	29,359	35,506	7,503	33,768
54290 Office Supplies	1,969	2,393	913	2,000	320	2,000
54490 Building Maintenance	6,338	5,960	15,656	14,700	5,703	14,700
57110 Travel/Mileage	326	227	833	1,000	298	1,000
57310 Dues	1,083	1,069	1,719	2,000	230	1,830
SUBTOTAL	38,642	42,026	48,480	55,206	14,053	53,298
TOTAL: HIGHWAY ADMINISTRATION	93,823	99,330	129,909	162,813	57,573	157,409

¹ Line 51100 includes 50% of the DPW Director and Assistant Director Salaries with 30% carried in the Water Enterprise Fund Budget and the other 20% included in the Sewer Enterprise Budget (see Section 8 of this Budget Document for detail on the Enterprise Budgets)



Department of Public Works

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FY2014	FY2015	FY2016	FY2017	FY2017	FY2018
ACTUAL	ACTUAL	ACTUAL	BUDGETED	SIX MONTHS	PROPOSED

HIGHWAY DIVISION CONSTRUCTION & MAINTENANCE

Personnel Services

51010 Labor Wages	531,401	558,785	621,532	641,574	302,652	659,771
51100 Salaries Full-time	0	0	0	0	0	0
51140 Wages Part-time Permanent	56,888	58,109	59,411	59,977	31,910	58,473
51300 Overtime	93,343	109,174	107,302	89,444	64,183	92,709
51410 Longevity Pay	4,725	4,725	5,400	5,550	5,150	5,150
51920 Uniforms	6,555	6,750	7,500	7,500	3,750	7,500
51970 Stipends	1,080	0	0	0	0	0
SUBTOTAL	693,991	737,543	801,145	804,045	407,645	823,603

Expenses

52690 Equipment Maintenance	80,304	81,625	86,391	81,815	22,750	81,815
52800 Contractual Services	24,220	345,558	21,676	33,000	6,985	37,750
55320 Materials & Supplies	6,119	11,296	12,393	16,000	4,044	13,500
55420 Safety Training, Dues & Licenses	4,916	2,218	3,810	6,910	64	6,910
58690 New Equipment	8,756	22,404	569	10,000	1,403	5,025
58710 Roadway Maintenance	54,993	47,007	170,502	400,000	88,052	400,000
58715 Storm water/Drainage	46,499	53,419	95,032	127,400	95,647	147,400
SUBTOTAL	225,806	563,527	390,374	675,125	218,945	692,400

TOTAL: HIGHWAY CONST & MAINT.

919,797	1,301,071	1,191,519	1,479,170	626,590	1,516,003
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Department of Public Works



FY2014	FY2015	FY2016	FY2017	FY2017	FY2018
ACTUAL	ACTUAL	ACTUAL	BUDGETED	SIX MONTHS	PROPOSED

PARKS DIVISION

Personnel Services

² 51130 Labor Wages	0	0	0	0	0	0
51220 Seasonal Temporary Labor	58,859	60,987	51,796	60,000	26,608	60,000
51300 Overtime	0	216	0	0	0	0
51410 Longevity Pay	0	0	0	0	0	0
SUBTOTAL	58,859	61,202	51,796	60,000	26,608	60,000

Expenses

51920 Uniforms	600	0	764	1,800	0	1,700
52110 Utilities	1,621	1,554	1,668	2,000	1,322	2,000
52610 Materials & Supplies	29,749	36,555	42,338	47,200	13,817	48,200
52800 Contractual Services	0	0	0	0	0	0
54710 Building Maintenance	2,500	20,562	294	2,500	2,684	4,000
58690 New Equipment	8,425	7,204	9,500	14,500	12,029	14,500
SUBTOTAL	42,895	65,875	54,564	68,000	29,851	70,400

TOTAL: PARKS DIVISION

101,754	127,077	106,360	128,000	56,459	130,400
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² Funding previously included in Line 51130 has been collapsed into Line 51220 to fund seasonal/temporary help instead of a permanent laborer position



Department of Public Works

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	FY2014 ACTUAL	FY2015 ACTUAL	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 SIX MONTHS	FY2018 PROPOSED
CEMETERY DIVISION						
Personnel Services						
51010 Labor Wages	39,009	40,187	41,977	42,175	21,037	44,663
³ 51100 Superintendent's Salary	0	0	0	0	0	0
51300 Overtime	1,708	0	2,908	7,067	0	7,389
51410 Longevity Pay	350	350	350	350	350	500
51920 Uniforms	750	750	750	750	375	750
SUBTOTAL	41,817	41,287	45,985	50,342	21,762	53,302
Expenses						
52110 Utilities	387	603	743	500	715	750
52690 Equipment Maintenance	2,436	0	4,561	3,000	355	3,000
54490 Building Repair	771	12,159	0	8,600	3,512	6,600
54690 Materials & Supplies	10,363	18,675	13,490	16,300	839	17,000
58690 New Equipment / Capital	11,346	7,204	8,652	16,000	12,029	16,000
SUBTOTAL	25,302	38,642	27,445	44,400	17,451	43,350
TOTAL: CEMETERY DIVISION	67,119	79,929	73,430	94,742	39,213	96,652

³ During FY2009 the Cemetery Superintendent position became vacant and the duties were subsequently absorbed into the highway/parks and administration functions.

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Department of Public Works



	FY2014 ACTUAL	FY2015 ACTUAL	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 SIX MONTHS	FY2018 PROPOSED
ENGINEERING						
Personnel Services						
51100 Town Engineer Salary ⁴	101,412	103,440	105,508	107,620	51,874	109,772
51120 Administrative Assistant wages	20,335	0	0	0	0	0
51410 Longevity Pay	500	500	500	500	500	500
SUBTOTAL	122,246	103,940	106,008	108,120	52,374	110,272
Expenses						
52800 Contractual Services	0	3,000	4,000	40,000	4,000	39,200
54290 Office Supplies	353	451	357	350	70	350
55980 Field Supplies	68	0	0	100	0	100
57110 Travel/Mileage	1,722	1,587	1,420	1,500	489	1,500
57310 Dues	211	218	224	350	380	285
57320 Subscriptions	56	150	150	150	0	150
57340 Meetings	80	155	175	500	0	300
SUBTOTAL	2,490	5,561	6,325	42,950	4,939	41,885
TOTAL: ENGINEERING	124,736	109,501	112,334	151,070	57,312	152,157

⁴ The Town Engineer was moved from the Planning Department into DPW in FY2015. The shared administrative assistant stayed with the Planning Office and was deleted from the Engineering budget in FY2015.



Department of Public Works

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	FY2014	FY2015	FY2016	FY2017	FY2017	FY2018
	ACTUAL	ACTUAL	ACTUAL	BUDGETED	SIX MONTHS	PROPOSED

SNOW & ICE

Personnel Services

51220 Miscellaneous Labor	0	0	0	0	0	0
⁵ 51300 Overtime	134,227	159,665	62,874	82,200	18,766	82,000
SUBTOTAL	134,227	159,665	62,874	82,200	18,766	82,000

Expenses

⁶ 52800 Contractual Services	109,885	151,894	46,666	91,000	6,288	91,000
55350 Salt	233,137	178,221	180,327	160,000	58,063	180,000
55360 Sand	0	0	0	0	0	0
57810 Materials & Supplies	37,071	70,073	31,338	13,000	1,471	34,000
SUBTOTAL	380,092	400,187	258,331	264,000	65,822	305,000

TOTAL: SNOW & ICE	514,320	559,852	321,205	346,200	84,588	387,000
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⁵ Line 51300 contains Overtime funds for DPW employees that plow snow during winter operation

⁶ The DPW uses contractual snow plow services to supplement Town staff and equipment during winter operations

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Department of Public Works



	FY2014 ACTUAL	FY2015 ACTUAL	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 SIX MONTHS	FY2018 PROPOSED
TREES						
Expenses						
52690 Equipment Maintenance	4,224	3,143	1,795	3,000	823	3,000
52800 Contractual Services	20,111	19,930	22,558	30,000	14,800	35,000
54700 Supplies	513	1,736	175	3,000	0	3,000
SUBTOTAL	24,849	24,809	24,528	36,000	15,623	41,000
TOTAL: TREES	24,849	24,809	24,528	36,000	15,623	41,000

	FY2014 ACTUAL	FY2015 ACTUAL	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 SIX MONTHS	FY2018 PROPOSED
STREET LIGHTING						
Expenses						
52130 Utilities	100,484	104,121	110,854	114,000	37,785	114,000
SUBTOTAL	100,484	104,121	110,854	114,000	37,785	114,000
TOTAL: STREET LIGHTING	100,484	104,121	110,854	114,000	37,785	114,000

NOTE: Please see Section 8 Enterprise Fund of this document for the detailed Water & Sewer Division budgets.