

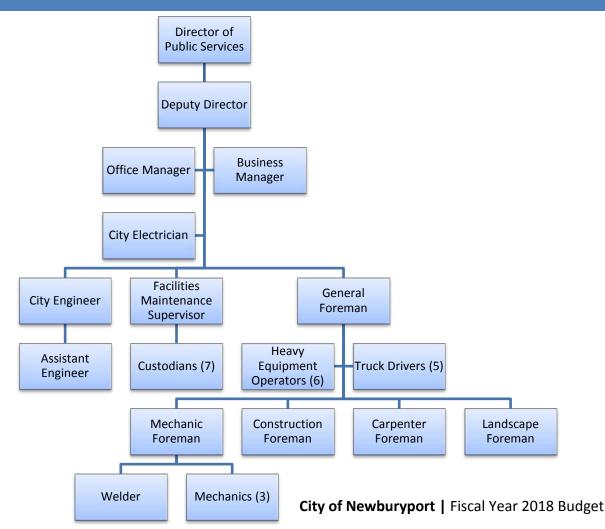
# DEPARTMENT OF PUBLIC SERVICES: HIGHWAY DIVISION

#### **MISSION STATEMENT**

The Mission of the Newburyport Department of Public Services Highway Division is to maintain and improve the city's infrastructure, which include; roadways, sidewalks, drainage system, trees, cemeteries and grounds. The Highway Division also provides full service fleet maintenance to all City vehicles and equipment from all City Departments. Our goal is to maintain and improve infrastructure in a safe, cost effective and environmentally sensitive manner for the short and long term benefit of the city and the environment. The Division also maintains, manages and oversees public facilities under the direction of our Facilities Manager and City Electrician. Our Engineering team provides technical assistance, such as detailed design of roadway and sidewalk layouts, grading and drainage, hydrology and hydraulic analysis, review of proposed developments and infrastructure improvement projects, construction oversight and inspections, and compliance oversight of federal, state and local storm water permits.

#### **ORGANIZATIONAL OVERVIEW**

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Position	FY2016 Actual	FY2017 Actual	FY2018 Budgeted
Public Services Director	0.33	0.33	0.33
Public Services Deputy Director	0.33	0.33	0.33
Business Manager	0.33	0.33	0.33
City Engineer	0.33	0.33	0.33
Assistant City Engineer	0.33	0.33	0.33
Electrician	1.0	1.0	1.0
Dispatch Foreman	1.0	1.0	1.0
Grounds Maintenance Foreman	1.0	1.0	1.0
Heavy Equipment Operator	6.0	6.0	6.0
Truck Driver	5.0	5.0	5.0
General Foreman	1.0	1.0	1.0
Senior Construction Foreman	1.0	1.0	1.0
Mechanic Foreman	1.0	1.0	1.0
Carpenter Foreman	1.0	1.0	1.0
Mechanic	3.0	3.0	3.0
Welder	1.0	1.0	1.0
Special Heavy Equipment Operator-Tree	1.0	1.0	1.0
Facilities Maintenance Supervisor	1.0	1.0	1.0
Custodian 1	4.0	5.5	7.0
Total Full Time-Equivalents	29.7	31.2	32.7

# PERFORMANCE MEASUREMENTS

Performance Indicator	Unit of Measure	Actual FY2015	Actual FY2016	Actual FY2017	Estimated FY2018
Number of crosswalks painted or repainted (360 total citywide)  (a) Actual unavailable	# of Crosswalks	(a)	305	310	315
Roadway crack-sealant applied	Gallons	0	6,050	2,000	2,000
High hazard trees removed	#	32	45	157	75
Trees pruned	#	145	145	125	125
Sidewalks installed, replaced or upgraded	Linear feet	4,585	4,585	6,145	2,500
Catch basins rebuilt	#	23	23	46	30
Roadways repaved	Linear feet	8,211	8,211	6,148	3,000

#### **FY2017 ACCOMPLISHMENTS**

- Roadway Construction and Maintenance Roadway Crack-Sealing of many streets in the wards 1, 2, 3, and 5. Also paved; Green Street, Hale Street, Harris Street, Marlboro Street, Washington Street and Water Street.
- Sidewalk Construction Reconstructed sidewalks on Charles Street, Green Street, Harris Street,
   Marlboro Street, Washington Street and Water Street.
- Tree Planning and Care Worked with Tree Commission to plant over 40 trees city wide. Removed a record number of high hazard trees.
- Prepared a draft "Complete Streets" document with anticipated City Council review by late spring
  and will use this document to apply for additional sidewalk and roadway construction funds from
  MassDOT to increase the safety around our schools.
- A condition audit of all sidewalks within the city was completed by BETA Engineering. This report
  will assist with the prioritization of funds and scheduling of sidewalk replacement. We also
  updated our roadway material condition report and will use this data to assist with the
  prioritization of future roadway improvement projects.
- The Engineering Division performed project management assistance for the construction of the new DPS Administration Building which reached substantial completion on October 3, 2016.
- The Engineering Division performed a number of design projects to improve our city's infrastructure, including drainage Improvements at Market Square, Parker Street Sidewalk MBTA Station to Rt. 1, Malcolm Hoyt Drive Roadway Improvements, and Noble Street Drainage Improvements. Construction will begin on these projects in calendar year 2017 and some will continue into 2018.
- Engineering played a vital role in and attended multiple task force group meetings and workshops
  for the National Wildlife Federation Great Marsh Climate Change Adaptation and Resiliency grant
  project and the City's Climate Change Resiliency Committee. Both groups are preparing Resiliency
  Plans to assist Newburyport and the Great Marsh communities in dealing with impacts from
  climate change, including impacts to our roads, culverts, and drainage system.
- DPS completed many improvements in the redesigned Water Front Trust parking lot, including moving the pay by space parking kiosks, installing a ADA complainant sidewalk, and new street lighting. Highway Division staff was instrumental in the construction of the redesign.
- Street Lighting Managed the LED conversion of the overhead street lighting city-wide.
- Snow and Ice Continued to operate and adhere to our Snow and Ice Plan in the most efficient and safe manner as possible.

#### **FY2018 TRENDS**

The Highway Division focuses efforts on repairing and improving the City infrastructure. A primary focus is placed on improving efficiency and communication to enhance the level of service and safety within the community.

The Highway Division is responsible for the maintenance and improvement of all City roads. The roads are continually in need of repair, resurfacing or reconstruction. Roadway resurfacing is funded by the Chapter 90 State Program. Our current Chapter 90 funding is \$516,000 a year and includes both roadway and sidewalk construction. The trend City-wide is that the standard rate of roadway deterioration continues to outpace the Chapter 90 funding that the City receives. Recently, we have asked the public for more input into the design and construction of our roadways and this outreach will continue by offering community meetings and/or on-line surveys. This type of communication regarding construction has become a standard practice and we can use this feedback to assist us with the design of our streets and sidewalks.

Future roadwork priorities are decided by many factors, which include using a pavement management system and combination of other factors including utility conditions, timeframe for utility replacement, sidewalk conditions, curbing condition, drainage problems, large scaled area development or reconstruction, and funding.

The Highway Division is also responsible for sidewalk installation, repair and replacement. Current funding is through the Chapter 90 program, DPS Highway budget and additional funds through 50% of meal tax receipts. Sidewalk replacement is determined similarly to roadwork and in conjunction with road repair. Sidewalk replacement / repair is one of most requested services that will continue for many years to come.

The Highway Division is also responsible for all the electrical needs within the City. These include all public facilities, properties, traffic signals and infrastructure that require electrical maintenance and improvements. The City Electrician maintains over 1,850 street lights throughout the City and will continue to respond to any outage problems in a timely manner.

The Facilities Department is also under the oversight of the Highway Division. This small group of employees clean and maintain most city-owned buildings, including seasonal public restrooms.

The Engineering Department will continue to provide technical assistance, design, and construction oversight, which includes drainage improvements, roadway and sidewalk layouts, grading and drainage, hydrology and hydraulic analysis, traffic management, and drainage system retrofits. The engineering team will also continue to facilitate and participate in climate change adaptation and resiliency workshops and help draft the City's first resiliency plan this year.

The NPDES MS4 Storm-Water program continues to add more requirements on the City-wide drainage system. This requires an increased effort by the Highway Division and Engineering to repair, maintain, monitor, map, test and improve the storm water collection system. New and future requirements, mandated under the NPDES permit, will require more direct involvement of both Engineering and Highway staff to keep the City in compliance and additional manpower resources will be needed in order to meet the permit requirements. The City is already working on a multi-year plan to systematically clean and inspect all catch basins.

We will continue to attend workshops and educational webinars to ensure that we continue to comply with all Massachusetts procurement laws. Our focus will be to expand our solicitation for goods and services beyond our local region and seek companies outside the state and region to get the best product and the lowest cost.

The Highway Division continues to promote the growth of its employees. As such, some personnel movement between the Water, Sewer and Highway Divisions has allowed staff members to take on different roles and acquire new skills in the process.

#### **FY2018 GOALS & OBJECTIVES**

**GOAL 1:** IMPLEMENT A PROACTIVE PROCESS TO ENSURE PREVENTATIVE MAINTENANCE IN ALL CITY FACILITIES.

#### **Objectives:**

- Create a standard bi-annual inspection spreadsheet of roofs, HVAC, drainage, and electrical issues.
- Develop a log to track all preventative maintenance performed to all City Facilities for which DPS is responsible.
- Incorporate all information obtained from the above objectives into CMMS system when it goes
  online.

**GOAL 2:** FULL IMPLEMENTATION OF CMMS SYSTEM TO IMPROVE EFFICIENCY AND MANAGEMENT OF ASSETS

#### **Objectives:**

- Continue to work on seamless transition of software system to all users within DPS.
- Implement to all DPS Divisions; staff, supervisors, foremen and field crews.
- Conduct training and QAAC of process and data.

#### GOAL 3: PLANT OVER 40 NEW STREET TREES CITY WIDE

#### **Objectives:**

- Collaborate with Tree Commission to plant new street trees.
- Assist with the oversight of tree planting contractor.

**GOAL 4:** INSPECT ALL 360 CROSSWALKS AND PREPARE A SCHEDULE FOR THE REPAINTING OF ANY FADED CROSSWALKS

#### **Objectives:**

- Conduct yearly inspection of all crosswalks.
- From data gathered from the yearly inventory, prepare schedule to repaint at least 90% of all faded crosswalks.

#### GOAL 5: DOWNTOWN WATER/SEWER/DRAINAGE UTILITY UPGRADE PROJECT

#### **Objectives:**

- Install a storm water relief path to reduce flooding in Market Square.
- Continue to work on master plan that includes design of a replacement drainage system that will be incorporated within the sewer and water replacement master plan.

#### GOAL 6 NPDES MS4 STORM-WATER PROGRAM

#### **Objectives:**

- Continue effort to repair, maintain, monitor, map, test and improve the storm water collection system.
- Continue multi-year plan to systematically clean and inspect all catch basins.
- Prepare master plan for the management of this new permit.

#### **PROGRAMS & SERVICES**

# Streets & Sidewalks

- Maintain 79 miles of streets and sidewalks
- Yearly street paving and crack sealing
- •Street line painting
- Street sweeping
- •Snow and ice removal
- •Respond during storm events
- Maintain city wide drainage infrastructure including yearly catch basin cleaning to meet state requirements

#### Cemeteries, Parks & Trees

- Assist with the maintenance of 740 acres for Park and school properties.
- Maintain two Cemeteries, including the preparation of burials.
- Landscaping of all City-owned property
- Advise and assist City Tree Commission regarding grants and funding

#### General Maintenance

- •Tree maintenance, trimming and removals
- Maintain city wide drainage infrastructure including yearly catch basin cleaning to meet state regulations
- •Trash receptacle pick up city wide

#### Facilities Management

- Maintain all city owned facilities (except schools)
- •Custodial Services for City Hall, Library, Emma Andrews, Youth Services, Senior Community Center
- Maintain downtown lighting
- Electrical maintenance for city facilities and traffic lighting

#### Engineering

- •Technical
  Assistance to
  resolve problems
  and provide
  solutions
- Design roadway and sidewalk layouts, grading and drainage, and intersections.
- Perform hydrologic and hydralic analysis
- Review of roadway, sidewalk and bike path designs
- ConstructionOversight

### **DEPARTMENT OF PUBLIC SERVICES: HIGHWAY DIVISION (01-421)**

	FY2015	FY2016	FY2017	FY2018	\$	%
	ACTUAL	ACTUAL	BUDGET	ADOPTED	CHANGE	CHANGE
001 - PERSONNEL SERVICES						
51101 - DPS SAL DIRECTOR	35,866	37,704	37,315	39,762	2,447	6.6%
51102 - DPS SAL DEPUTY DIRECTOR	29,201	32,048	31,717	33,895	2,177	6.9%
51103 - DPS SAL BUSINESS MANAGER	21,315	23,762	23,884	22,880	(1,004)	-4.2%
51107 - DPS SAL ELECTRICIAN	35,000	36,211	39,409	40,196	787	2.0%
51117 - DPS SAL ASST ENGINEER	12,892	15,949	20,315	20,642	327	1.6%
51119 - DPS SAL CITY ENGINEER	28,582	30,515	30,199	30,685	486	1.6%
51131 - HWY SAL OFFICE MANAGER	0	0	59,418	60,606	1,188	2.0%
51150 - HWY SAL FACILITIES MAINT	136,308	220,031	294,782	367,064	72,282	24.5%
51158 - HWY SAL LABOR	849,696	848,894	967,845	1,002,933	35,089	3.6%
51166 - HWY PART TIME EMPLOYEES	5,515	3,285	6,000	6,000	0	0.0%
51190 - HWY SAL SUMMER EMPLOYEES	8,030	16,680	17,280	17,280	0	0.0%
51301 - HWY OVERTIME	79,686	97,927	117,148	118,568	1,420	1.2%
51401 - HWY LONGEVITY	9,962	9,143	11,310	11,987	676	6.0%
51402 - HWY LICENSE STIPENDS	0	0	6,500	8,000	1,500	23.1%
51405 - HWY CLOTHING REIMBURSEMENT	15,402	18,357	20,450	21,833	1,383	6.8%
51416 - HWY TOOL REIMBURSEMENT	3,471	4,000	3,500	3,500	0	0.0%
51420 - HWY EDUCATION CREDITS	0	0	1,125	1,125	0	0.0%
001 - PERSONNEL SERVICES Total	1,270,926	1,394,506	1,688,198	1,806,956	118,758	7.0%
002 - PURCHASE OF SERVICES						
52101 - HWY HEAT	10,379	5,085	9,600	9,600	0	0.0%
52102 - HWY ELECTRICITY	41,803	55,286	59,000	59,000	0	0.0%
52103 - HWY STREET LIGHTS	152,296	139,689	125,000	125,000	0	0.0%
52401 - HWY MAINT-BUILDING	23,622	39,609	32,200	32,200	0	0.0%
52402 - HWY MAINT-CITY HALL	14,335	11,394	14,000	15,750	1,750	12.5%
52403 - HWY MAINT-VEHICLES	83,862	86,517	95,300	95,300	0	0.0%
52404 - HWY MAINT-TREE	15,224	34,723	54,500	67,000	12,500	22.9%
52405 - HWY MAINT-MANAGEMENT SYSTEM	2,327	5,000	5,167	7,667	2,500	48.4%
52409 - HWY MAINT-DOWNTOWN	1,414	0	0	0	0	0.0%
52410 - HWY MAINT-CITY-WIDE	5,816	17,464	19,000	19,000	0	0.0%
52411 - HWY GROUNDS MAINT	4,085	0	0	0	0	0.0%
52413 - HWY LINE PAINTING	6,901	10,500	30,500	30,500	0	0.0%
52415 - HWY MAINT-SR COMM CENTER	0	5,908	6,500	6,500	0	0.0%
53002 - HWY MEDICAL/DRUG TESTING	2,708	4,472	4,820	4,820	0	0.0%
53700 - HWY TRAIN/TRVL/CONFR	5,305	5,491	10,000	10,000	0	0.0%
002 - PURCHASE OF SERVICES Total	370,077	421,137	465,587	482,337	16,750	3.6%

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	FY2015	FY2016	FY2017	FY2018	\$	%
	ACTUAL	ACTUAL	BUDGET	ADOPTED	CHANGE	CHANGE
004 - SUPPLIES						
52411 - HWY ELECTRICAL SUPPLIES	27,331	24,987	30,000	30,000	0	0.0%
54301 - HWY FACILITIES MAINT SUPPLIE	7,174	13,886	16,000	16,000	0	0.0%
54311 - HWY PURCH ROAD MATERIAL	60,732	66,328	72,390	83,000	10,610	14.7%
54312 - HWY STREET SIGNS	14,799	15,110	20,000	20,000	0	0.0%
54313 - HWY SUPPLIES	12,600	12,875	15,600	15,600	0	0.0%
54314 - HWY RADIOS 2-WAY (10)	3,905	3,980	4,000	4,000	0	0.0%
54801 - HWY PURCH FUEL/OIL	202,873	158,596	89,875	89,875	0	0.0%
004 - SUPPLIES Total	329,414	295,763	247,865	258,475	10,610	4.3%
008 - CAPITAL OUTLAY						
58462 - HWY STREET SWEEPER	61,222	0	0	0	0	0.0%
58901 - HWY SIDEWALKS	240,351	249,616	280,740	293,287	12,547	4.5%
008 - CAPITAL OUTLAY Total	301,573	249,616	280,740	293,287	12,547	4.5%
<b>Grand Total</b>	2,271,989	2,361,022	2,682,390	2,841,055	158,665	5.9%

# **SNOW & ICE (01-423)**

	FY2015	FY2016	FY2017	FY2018	\$	%
	ACTUAL	ACTUAL	BUDGET	<b>ADOPTED</b>	CHANGE	CHANGE
001 - PERSONNEL SERVICES						
51301 - SNW SNOW & ICE LABOR	173,007	38,277	100,000	100,000	0	0.0%
001 - PERSONNEL SERVICES Total	173,007	38,277	100,000	100,000	0	0.0%
002 - PURCHASE OF SERVICES						
52901 - SNW SNOW & ICE EXPENSE	712,489	179,791	100,000	100,000	0	0.0%
002 - PURCHASE OF SERVICES Total	712,489	179,791	100,000	100,000	0	0.0%
Grand Total	885,496	218,068	200,000	200,000	0	0.0%