Town of Dudley, Massachusetts

Highway, Water and Sewer Organizational Assessment

Final Report
December 2018

Submitted by:
Municipal Resources, Inc.
120 Daniel Webster Highway
Meredith, NH 03253
## MRI Consultant Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alan Gould</td>
<td>Project Manager and President</td>
<td>Municipal Resources, Inc.</td>
</tr>
<tr>
<td>Robert (Bob) Mercier</td>
<td>Senior Management Consultant</td>
<td>Municipal Resources, Inc.</td>
</tr>
<tr>
<td>Reginald (Buzz) Stapczynski</td>
<td>Senior Management Consultant</td>
<td>Municipal Resources, Inc.</td>
</tr>
</tbody>
</table>
# Table of Contents

1 Executive Summary ................................................................. 5

2 Dudley Highway, Water & Sewer and other Infrastructure Departments.......... 9
   2.1 REVIEW OF CURRENT OPERATIONAL FUNCTIONS OF DEPARTMENTS AND EQUIPMENT INVENTORY ....... 9
   2.2 REVIEW OF COMPARABLE COMMUNITIES WITH SIMILAR OPERATING BUDGETS/ASSETS .................. 14
   2.3 CURRENT ORGANIZATIONAL STRUCTURE WITH REPORTING RESPONSIBILITIES ..................... 17
   2.4 REVIEW OF CURRENT/FUTURE CAPITAL PROJECTS IN ALL OPERATING DEPARTMENTS ................ 19

3 General Findings - Recommendations ............................................. 23
   3.1 MANAGEMENT SYSTEMS .......................................................... 23
       3.1.1 Capital Improvement Plan ..................................................... 23
       3.1.2 Strategic Planning ............................................................... 25
       3.1.3 Asset Management System .................................................... 25
       3.1.4 Work Order Management System ......................................... 26
       3.1.5 Water and Sewer SCADA System ....................................... 26
       3.1.6 Street Opening Permits ....................................................... 26
       3.1.7 GIS/GEO Database System .................................................... 26
       3.1.8 Planning and Coordination ................................................... 27
   3.2 PREVENTIVE MAINTENANCE ..................................................... 27
       3.2.1 Vehicle Replacement Schedule ............................................. 28
       3.2.2 Water and Sewer Pumping Stations ..................................... 28
       3.2.3 Pavement Management System ........................................... 28
       3.2.4 Inflow and Infiltration Study ............................................... 28
       3.2.5 Preventive Maintenance - Water/Sewer, Highway, Cemetery, Building and Grounds, Dams, and Storm Water Maintenance .......................................................... 29
   3.3 FINANCIAL MANAGEMENT .......................................................... 29
       3.3.1 Review Rates and Charges for Water/Sewer, Recycling and Cemetery .................. 29
       3.3.2 Water and Sewer Enterprise Fund ....................................... 29
   3.4 ORGANIZATIONAL SYSTEMS ..................................................... 30
       3.4.1 Key Management and Union Position Vacancies ......................... 31
       3.4.2 Cross Training ............................................................... 31
       3.4.3 Training Opportunities ........................................................ 31
       3.4.4 Compensation and Classification Review ................................ 31
4 Proposed Department of Public Works ................................................................. 33
4.1 WHY A DEPARTMENT OF PUBLIC WORKS FOR DUDLEY? ........................................... 33
4.2 THE BENEFITS AND EFFICIENCIES OF A DEPARTMENT OF PUBLIC WORKS .................. 34
4.3 STAFFING/EQUIPMENT: CONSISTENT POLICIES FOR PERSONNEL, PROCUREMENT AND CONTRACT
MANAGEMENT ........................................................................................................ 34
4.4 DEVELOPMENT OF MERGED CAPITAL IMPROVEMENT PLAN FOR PUBLIC WORKS DIVISIONS WITH
PRIORITY DESIGNATIONS .......................................................................................... 36
4.5 PROPOSED DPW ORGANIZATION CHART WITH REPORTING RESPONSIBILITIES AND STAFFING LEVELS 38
ORGANIZATION CHARTS .......................................................................................... 39
4.6 ROLE OF THE WATER AND SEWER COMMISSION .................................................... 42
5 Next Steps .................................................................................................................. 43
6 Appendices .................................................................................................................. 45
6.1 CEMETERY, RECYCLING, BUILDING & GROUNDS BEST MANAGEMENT PRACTICES ......................... 46
6.2 HIGHWAY BEST MANAGEMENT PRACTICES .................................................................. 51
6.3 WATER AND SEWER BEST MANAGEMENT PRACTICES .................................................. 57
6.4 SAMPLE JOB DESCRIPTIONS ...................................................................................... 64
6.5 TOWN OF DUDLEY, LONG-TERM DEBT SCHEDULE .................................................... 73
1 Executive Summary

The Town of Dudley Massachusetts, through its Town Administrator and the Board of Selectmen, retained the services of Municipal Resources, Inc. (MRI) to conduct an objective, impartial assessment of its current Highway and Water and Sewer Departments operations including organizational structure, staffing, funding, division tasks, accountability and span of control issues. Our team approached each task by reviewing in a systematic way the current overall organizational structure. The consultant team was tasked with determining whether the mostly independent units and their responsibilities are being delivered to the community in the most efficient and effective manner, now and into the future. Our primary focus was on the major Departments/Divisions which include Highway, Water and Sewer, Building and Grounds. The consultant team also looked at ancillary functions including the Town’s Recycling Department as well as Cemetery, Parks and Tree Warden Services. Our analysis and findings are based upon looking at all current operations and whether the utilization of universally accepted “best management practices” for DPW operations may be adopted to improve the efficient delivery of services. The consultant team looked at exploring possible efficiencies and opportunities to collaborate and coordinate the use of resources and manpower to eliminate duplication and redundancy in all aspects of a public works environment.

The consultant team utilized a wide variety of data collection and interviewing approaches to obtain input from management as well as line staff and elected officials. In addition, the consultant team utilized a variety of specific analytical approaches for each division and service area. The data collection and analytical activities included the following:

- At the beginning of the study the consultants interviewed the Town Administrator, department heads, line staff and appointed/elected officials. The purpose of these interviews was to obtain an overview of the operation of each department as well as to quickly identify areas of concern to these managers.
- Additional interviews were conducted with appointed/elected officials, supervisors and other staff with unique responsibilities within each department. These interviews were focused on gathering data, a deeper understanding of operations within each department and to further understand issues.
- The consultants gathered documents to understand policy issues and alternatives.
- In order to assess the operational strengths and improvement opportunities for each key department, the consultants developed a set of performance measures called “best management practices” against which to evaluate current services, workloads, staffing, and service levels in the Town of Dudley. The measures
have been developed both through the team’s collective experience in working with DPW departments throughout Massachusetts, and also through national Public Works industry standards. In both cases, these “standards” were adjusted to reflect the unique operating and service requirements in the Town of Dudley, MA. (See Appendices for Best Management Practices)

- The consultant team also conducted a comparative survey of communities in Massachusetts where other organizational data was collected and analyzed for benchmark purposes. Data was collected from similar-like communities in MA.
- The consultant team also evaluated the management systems in place in each of the departments with respect to key questions.
- Throughout this consulting engagement, the consultants met with and reviewed study progress with the Town Administrator and other officials.
- The consultant team combined all of the above approaches and methods in developing this final report.

As our engagement began, we learned that the Town of Dudley had previously reviewed the potential consolidation of typical public works services into a more formal Department of Public Works three (3) times since the year 2000. There have been efforts to create a Town Charter with a Department of Public Works as a main component of a government re-structuring. Although the effort in 2007 was unsuccessful, the community again began looking at a re-structuring of government by planning the creation of a formal Department of Public Works by 2012. This effort never really gained community support and also faltered. Finally, in 2015, the Town Administrator at the direction of the Board of Selectmen once again introduced the concept of a consolidated Department of Public Works for the Town of Dudley; that also failed to be voted upon by the Town Meeting albeit this effort elicited a lot of internal discussion on the pros and cons of such a Department structure within the community.

Ultimately these discussions led to Town officials seeking a consultant to provide an unbiased recommendation. It should be noted that at the October 29, 2018 Town Meeting, voters approved Article 24 and adopted a new General Bylaw defining the duties and responsibilities of the Town Administrator as the Chief Administrative Officer of the Town. With respect to personnel matters, the Town Administrator is also the Town’s appointing authority under the new Bylaw. The consultant team reviewed all of the materials related to these initiatives to get a sense of the dialogue within the community.

The recommendations contained in this report are wide-ranging, but they follow certain central themes and best practices. Primary among these themes is the centralization of responsibility and accountability. The Town of Dudley’s public works operations currently
operates under an extremely decentralized and archaic organizational structure. Over time, decentralization has eroded the ability of the Town’s public works department managers to coordinate efficiently. Effective fiscal planning and management, as well as policy development and implementation require greater centralization of responsibility and accountability into a consolidated public works department. The town government must act cohesively in order to serve its constituents well.

This report recommends the consolidation of a Public Works Department under one Director of Public Works accountable to the Town Administrator. Responsibility and accountability will be located more clearly in a single department head who will maintain authority and responsibility over an entire functional area under the direction of the Town Administrator. The consolidation of activities within the DPW functional area should be mirrored by a strengthening of the authority in the town government. The effectiveness of the town government is the controlling factor in ensuring that long-term management improvements are achieved in public works.

The consultant team determined the following key subject areas and, consequently, specific recommendations are made for each in the report. In the table below is a summary of our key recommendations to the Town.
The major recommendation of this study is for the consolidation of a Department of Public Works made up of the current Highway Department, Water and Sewer Department, and Ancillary Functions to be managed by a Director of Public Works. The following are the key recommendations for a new DPW. A complete list of the findings and recommendations can be found in Chapter 3 of this report.

<table>
<thead>
<tr>
<th>Management Systems</th>
<th>Capital Improvement Plan is needed to maintain and improve equipment and infrastructure.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strategic Planning sessions are needed annually to set Department goals and objectives.</td>
</tr>
<tr>
<td></td>
<td>Asset Management System and replacement plans are required to inventory the condition of existing equipment and infrastructure.</td>
</tr>
<tr>
<td></td>
<td>Planning and Coordination is required to eliminate duplication of effort and allow for sharing of resources, manpower and assets.</td>
</tr>
<tr>
<td>Preventive Maintenance</td>
<td>Inflow and Infiltration Study is essential to address deficiencies in the sewer system and plan for necessary improvements/remediation.</td>
</tr>
<tr>
<td></td>
<td>Pavement Management System requires updating for better analysis of road way conditions and priorities.</td>
</tr>
<tr>
<td></td>
<td>Water and Sewer Pumping Stations are at the age and condition where a proactive maintenance/replacement plan is required.</td>
</tr>
<tr>
<td>Financial Management</td>
<td>Review Rates and Charges annually to ensure they cover the cost of the services provided. Evaluate current billing and invoicing processes in all Divisions</td>
</tr>
<tr>
<td></td>
<td>Water and Sewer Enterprise Fund cost allocation between direct and indirect costs should be reviewed.</td>
</tr>
<tr>
<td>Organizational Systems</td>
<td>Cross Training and enhanced training opportunities should be considered by the DPW.</td>
</tr>
<tr>
<td></td>
<td>Key Management Vacancies need to be re-evaluated and filled according to the recommendations in this report.</td>
</tr>
</tbody>
</table>
2 Dudley Highway, Water & Sewer and other Infrastructure Departments

The Town of Dudley has a history of providing public works operations through two major, yet separate Departments, Highway and Water and Sewer. It has long been the desire of some Town officials to fully consolidate these two functions into one Department of Public Works to streamline operations, budgeting, and provide cross-training of employees; this will provide for a more efficient and effective town department that is accountable to the public. The Town has shown past ambitions in this endeavor, but has not been unsuccessful. Part of the problem may be the need for everyone to better understand the current organization, its operations, budgets, staffing. Simply put, the Town needs to know what they have, what they don’t have, where they are going with current demands and needs, in order for them to get there. Below describes the various operational areas of public works as it currently exists in the Town of Dudley.

2.1 Review of Current Operational Functions of Departments and Equipment Inventory

**Highway Dept:** The Highway Department is currently managed by an Acting Superintendent due to the recent retirement of a long time employee. The “acting” Superintendent reports to the Town Administrator and is a long time dependable employee of the Town who understands the overall operations and limitations inherent in a Public Works Department with a myriad of responsibilities with limited resources. He currently manages a staff of thirteen (13) that includes a mechanic for equipment maintenance. The Department has the responsibility of maintaining approximately 90 miles of roadways in the community with operations that include snow and ice removal, paving, catch basin cleaning, drainage construction/repair, brush trimming, fleet maintenance, raising and repairing structures (manholes/basins in preparation for paving), painting lines/crosswalks on streets, replacing and repairing directional signs/traffic signs as needed, street sweeping, public park maintenance, clean up of storm debris while also responding to everyday resident calls for service. The Department has recently procured a paving machine and much of the minor paving work in the community is done with in house staff which results in significant savings to the Town. The community has also been proactive recently and increased the amount of money in the Highway
Department line item for paving to provide additional funds to supplement the state Chap. 90 allocation. The Highway Department has been very frugal in spending for snow and ice operations and utilizes up to fifteen (15) of its own pieces of equipment to strictly limit the hiring of private contracted services to assist the Department during snow events. Like most small town Highway Departments, the employees also assist many civic organizations in preparing for town celebrations, fairs, and community events. The budget voted for Highway operations has remained consistent for the past few years and for FY-2019 the total is $893,961.

**Building and Grounds:** Although the Building and Grounds Department is organizationally under the umbrella of the Highway Department, its budget is voted separately at the Town Meeting. The employees of this division report to the Highway Superintendent. This division of the Highway Dept has two full-time employees and is responsible for preventive care and general cleaning and upkeep of the Dudley Municipal Complex which includes the Police Station as well as providing general maintenance of the Dudley Public Library. This division also assists in the clean-up of various parks and the town beach. Additionally, the staff in this division are responsible for the maintenance of five (5) town cemeteries including grave digging and lawn cutting. The voted budget for FY-2019 for this division is $141,618.

**Tree Warden:** The Tree Warden is a separate line item voted at Town Meeting albeit the interaction with Highway operations is a very common occurrence especially during construction projects and/or storm events. This is a statutory obligation for a Town to have someone perform these duties. The Highway Superintendent is the Tree Warden. The budget voted for FY-2019 operations is $11,250.

**Cemetery and Parks:** Both these operations have separately voted line items for Town Meeting, although as previously discussed, the functional needs of both the Departments are currently handled by the Building and Grounds Division. The Selectmen’s Administrative Assistant provides clerical support and contact with the public, making inquiries of the Cemetery and Parks Division. The voted budgets for both these entities for FY-2019 are: Parks $0 and Cemetery $1,200.

**Recycling Center:** The Recycling Center located off Indian Road is adjacent to the Town Highway Garage. This operation has 1 Full-Time employee and 1 Part-Time employee who fills in when the Full-Time employee is unavailable. The Center services the needs for trash disposal and recycling for the residents of Dudley. Since Dudley does not have municipal trash
pick-up, residents who choose to use this facility are required to obtain a “disposal permit” to dispose of their trash and recycled materials at this location. The Center charges $245 for a resident per year to use the site. Seniors are provided a slight discount of $185 per year for this service. This facility also allows disposal of tires, motor oils, grass clippings and Christmas trees. While these employees report to the Highway Superintendent, their budget is voted upon separately by Town Meeting. The Department has consistently generated more revenues than its cost to operate. The voted budget for FY-2019 is $146,550.

**Ancillary Operations:** During our evaluation of the current operations, the consultant team noted additional line items that have typically been the responsibility of either a Highway Department or an overall Public Works function. For our purposes, the consultant team identifies these subjects as a point of interest in evaluating the Town's current operations. These subjects are voted separately by the Town. These line items are: Street Lights voted for FY ‘19 at $27,000, Dams voted at $6,100, Storm water voted at $8,500 (although one item seems to be an assessment payment). We also noted individual articles voted at Town Meeting to augment the appropriation for Dam repair and reconstruction.

**Water and Sewer Commission:** The Water and Sewer operations in Dudley are funded through an Enterprise Fund which provides for the operation of these units entirely from fees/charges imposed on their customers (rate payers) by the elected Water and Sewer Commissioners. The Town adopted this process by accepting the provisions of MGL Chap 44 Section 53F1/2. The fees and charges can only be used to fund Water and Sewer operations including personnel, equipment, and benefits for employees, debt payments and any other reasonable direct and or indirect cost associated with delivering this service to its customers. The Town had, until 2012, elected both Water and Sewer Commissioners to run these operations. The Town voted to combine both these operational Departments into a Water and Sewer Department with a single group of five elected Commissioners to establish policies, oversee operations, set rates and plan for the future. The Commissioners employ a full-time administrative person to handle calls and run an office for billing, invoicing suppliers, customer responses, etc. This operation services approximately 2,200 water customers and 1,850 sewer customers.

**Water Operations:** The Water Division currently has three (3) full time employees along with an “acting” Superintendent in charge of both water and sewer operations. The Department
is responsible for all day-to-day needs of its customers. The Department is currently working to install new radio readers for all its customer base to provide accurate, timely data on water usage and accountability. The employees over the past three (3) years have responded to an average of 5-6 water main breaks per year, and that number is likely going to increase due to the deteriorating condition of old Asbestos Cement (AC) pipes throughout the community. The employees also install new services and replaces old or damaged services for its customers. The Water Division has two functioning wells that produce on average 500,000-550,000 GPD to meet customer demands.

One other well head is shut down due to the heavy presence of manganese in the water. There are concerns from staff and the Commissioners about the availability of future sources to potentially meet growth demands. The Department has done a good job of keeping its employees certified with appropriate licenses for water distribution and treatment. The Town and the Commissioners are concerned about all the recent DEP regulations regarding water suppliers in the Commonwealth and their own ability to manage the system with qualified and trained employees, although the current staff has availed itself of known programs and opportunities to expand their knowledge and expertise. The voted budget for FY-2019 for Water is $977,330.

**Sewer Operations:** The Sewer Division currently is staffed by two (2) Full-Time employees who manage the day to day operations for this Division. These employees are also overseen by the “Acting” Superintendent. The Town currently has nine (9) pumping stations and all sewage is pumped to a treatment facility in Webster, Mass. The community engaged in an Inter-Municipal Agreement (IMA) with Webster to process its sewerage and pays an annual assessment to Webster based upon flow and a calculation worked out within the IMA. The plant design in Webster is currently operating at about 60% capacity. The Commissioners are currently dealing with a demand letter from the DEP to address the Infiltration and Inflow (I&I) issue within its sewer lines. The Commissioners have hired a professional engineering firm to assist them in this task. They also upgraded their sewer video equipment (camera) to selectively view the flow within sewer lines in certain high impact areas. The Division has also begun the process of upgrading of pumps throughout the system albeit this is a slow and costly process. The Sewer Division budget for FY-2019 is $957,227.
**Equipment Inventory.** We have listed below the existing rolling stock of the individual Departments/Divisions listed above. We do not include items such as utility trailers, push lawn mowers, attachments, and others which all appear on the listing of insurance provided by the Town’s carrier. We make no judgment on the condition of equipment but share this detail to help ascertain a Department/Division ability to perform their responsibilities with adequate tools and equipment.

<table>
<thead>
<tr>
<th>Year</th>
<th>Brand</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highway:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>Ford Tractor</td>
<td>$20,000</td>
</tr>
<tr>
<td>1991</td>
<td>Kodiak Dump</td>
<td>$32,000</td>
</tr>
<tr>
<td>1997</td>
<td>International Dump</td>
<td>$49,961</td>
</tr>
<tr>
<td>2000</td>
<td>International Dump</td>
<td>$56,500</td>
</tr>
<tr>
<td>2001</td>
<td>Sterling Truck</td>
<td>$133,184</td>
</tr>
<tr>
<td>2002</td>
<td>International Dump</td>
<td>$86,335</td>
</tr>
<tr>
<td>2003</td>
<td>Ford Super Duty F450</td>
<td>$37,583</td>
</tr>
<tr>
<td>2003</td>
<td>Komatsu</td>
<td>$124,705</td>
</tr>
<tr>
<td>2003</td>
<td>Ford Super Duty F350</td>
<td>$33,211</td>
</tr>
<tr>
<td>1998</td>
<td>Chevy K3500</td>
<td>$30,777</td>
</tr>
<tr>
<td>2006</td>
<td>Komatsu Loader</td>
<td>$125,000</td>
</tr>
<tr>
<td>2008</td>
<td>Ford F250</td>
<td>$32,000</td>
</tr>
<tr>
<td>2009</td>
<td>International Dump</td>
<td>$104,000</td>
</tr>
<tr>
<td>2009</td>
<td>International Dump</td>
<td>$104,000</td>
</tr>
<tr>
<td>2010</td>
<td>Ford F350</td>
<td>$32,290</td>
</tr>
<tr>
<td>2012</td>
<td>Cat/Backhoe Loader</td>
<td>$123,200</td>
</tr>
<tr>
<td>2016</td>
<td>Ford F550</td>
<td>$63,306</td>
</tr>
<tr>
<td>2016</td>
<td>Ford F350</td>
<td>$27,869</td>
</tr>
<tr>
<td>2017</td>
<td>Mack Dump</td>
<td>$137,500</td>
</tr>
<tr>
<td>2017</td>
<td>Ford F350</td>
<td>$35,465</td>
</tr>
<tr>
<td>1987</td>
<td>Dodge D250</td>
<td>$18,000</td>
</tr>
<tr>
<td>1996</td>
<td>International</td>
<td>$49,961</td>
</tr>
<tr>
<td>2008</td>
<td>Deere Mower</td>
<td>$75,000</td>
</tr>
<tr>
<td><strong>Water:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>GMC Dump</td>
<td>$45,902</td>
</tr>
<tr>
<td>2003</td>
<td>Ford F150</td>
<td>$17,163</td>
</tr>
<tr>
<td>2011</td>
<td>Ford F550</td>
<td>$69,065</td>
</tr>
<tr>
<td>2012</td>
<td>Deere/Backhoe</td>
<td>$130,000</td>
</tr>
<tr>
<td>2007</td>
<td>Ford 150</td>
<td>$17,605</td>
</tr>
<tr>
<td>2018</td>
<td>Ford F150</td>
<td>$26,531</td>
</tr>
<tr>
<td><strong>Sewer:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>Ford F350</td>
<td>$39,800</td>
</tr>
<tr>
<td>2018</td>
<td>Ford F450</td>
<td>$65,650</td>
</tr>
</tbody>
</table>
2.2 Review of Comparable Communities with Similar Operating Budgets/Assets

Municipal Resources, Inc. conducted an external survey of comparable municipalities to benchmark or compare and contrast Dudley’s public works operations against other similar towns. The communities were selected at the suggestion of the Town Administrator, elected officials and staff. The Consultant Team collected data from the MMA, Department of Revenue, Division of Local Services’ Municipal Data Bank, Town websites, 2017 Tighe and Bond Water and Sewer Rate Survey and individual phone calls. The communities included are: Charleton, Leicester, Oxford, Rutland, Spencer and Webster. All six communities have comparable populations, square miles, road miles, bond rates, Highway or Public Works Departments, Water Departments, and Sewer Departments. The purpose for the comparable analysis was to evaluate Dudley’s organization, staffing, budget, water annual cost and sewer annual cost as to other similar municipalities. There are two charts in this section: Department Details – Comparable Communities, Water and Sewer Rates of Comparable Communities.

In the Department Details - Comparable Communities Chart it shows that Dudley has a Highway budget under the average and staffing at the average. The Water budget is difficult to compare because only three municipalities have public water systems, however Dudley is below the average. The Sewer budget is a bit easier to compare as five communities have sewer departments. However, the staffing is difficult to compare because the size of the Webster Sewer Department is so large. Taking Webster out of the sewer staffing comparison, shows that Dudley is under the average, 2 FTE’s vs. 2.4 FTE’s. The average of the total staffing of Highway or Public Works, Water and Sewer Departments is 20 Full Time Equivalents and Dudley’s is 21. A look at the Highway/Public Works and Water & Sewer Full Time Equivalents as compared to population, square miles and road miles shows Dudley to be less than the average in all three areas of comparison.

In the Water and Sewer Rates of Comparable Communities Chart, Dudley is well under the average in both the Annual Water Cost of 120 HCF, $500 compared to the average of $685 and the Annual Sewer Cost of 120 HCF, $639 compared to the average of $1,006. Of the six communities, three do not have Water and/or Sewer Commissioners, two have elected Commissioners and one has appointed Commissioners.
Water and Sewer Rates of Comparable Communities
From Tighe and Bond 2017 Water and Sewer Rate Survey

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Rate</td>
<td>Ascending 2 Blocks</td>
<td>Ascending 4 Blocks</td>
<td>Ascending 3 Blocks</td>
<td>Ascending 2 Blocks</td>
<td>Ascending 2 Blocks</td>
<td>Uniform $5.36/ HCF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Base Charge</td>
<td>$35.</td>
<td>$29.37</td>
<td>$70.</td>
<td>$15.61</td>
<td>$16.51</td>
<td>$137.71</td>
<td>$643.</td>
<td>$685.</td>
</tr>
<tr>
<td>Sewer Rate</td>
<td>$3.20/HCF</td>
<td>$8.72/HCF</td>
<td>Ascending 10.98/HCF</td>
<td>$6.20/HCF</td>
<td>Ascending 8.35/HCF</td>
<td>$8.35/HCF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewer Base Charge</td>
<td>$63.75</td>
<td>$30.</td>
<td>$50.</td>
<td>0</td>
<td>$46.25</td>
<td>$89.40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Annual Sewer Cost of 120 HCF</td>
<td>$639.</td>
<td>$1,166.</td>
<td>$902.</td>
<td>$1,318.</td>
<td>$929.</td>
<td>$718.</td>
<td>$1,002.</td>
<td>$1,006.</td>
</tr>
<tr>
<td>W/S Comm.</td>
<td>Elected</td>
<td>Elected</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Elected</td>
<td>Appointed</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>11,587</td>
<td>13,406</td>
<td>11,334</td>
<td>13,916</td>
<td>8,527</td>
<td>11,810</td>
<td>16,893</td>
<td>12,647.</td>
</tr>
<tr>
<td>Sq. Miles</td>
<td>21</td>
<td>42</td>
<td>23</td>
<td>11</td>
<td>35</td>
<td>33</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Road Miles</td>
<td>91</td>
<td>156</td>
<td>96</td>
<td>112</td>
<td>105</td>
<td>125</td>
<td>85</td>
<td>113</td>
</tr>
<tr>
<td>S&amp;P</td>
<td>AA</td>
<td>AA+</td>
<td>AA+</td>
<td>AA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moody</td>
<td>Aa3</td>
<td>Aa3</td>
<td>A2</td>
<td>Aa3</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highway or Public Works Budget</td>
<td>$1,221,579</td>
<td>$1,292,056</td>
<td>$931,134</td>
<td>$2,767,283</td>
<td>$1,272,232</td>
<td>$1,880,061</td>
<td>$1,048,969</td>
<td>$1,531,956</td>
</tr>
</tbody>
</table>
## Water and Sewer Rates of Comparable Communities

From Tighe and Bond 2017 Water and Sewer Rate Survey

<table>
<thead>
<tr>
<th>Dept. Details - Comparable Communities Chart</th>
<th>Dudley</th>
<th>Charleton Water via Southbridge</th>
<th>Leicester Private Water and Sewer System</th>
<th>Oxford Private Water System</th>
<th>Rutland</th>
<th>Spencer</th>
<th>Webster</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW or DPW FTEs</td>
<td>14</td>
<td>14</td>
<td>8</td>
<td>26</td>
<td>14</td>
<td>9</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Water Budget</td>
<td>$977,330</td>
<td></td>
<td>$737,413.</td>
<td>$1,455,763.</td>
<td>$2,450,000.</td>
<td>$1,547,725.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water FTEs</td>
<td>5</td>
<td></td>
<td>2.5</td>
<td>4</td>
<td>7</td>
<td>4.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewer Budget</td>
<td>$957,227</td>
<td>$1,986,626.</td>
<td>$464,719</td>
<td>$1,212,896</td>
<td>$1,376,732</td>
<td>$4,610,000</td>
<td>$1,930,195</td>
<td></td>
</tr>
<tr>
<td>Sewer FTEs</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1.5</td>
<td>4</td>
<td>13</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Total Water and Sewer FTEs</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>20</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Total HW/PW and W&amp;S FTEs</td>
<td>21</td>
<td>17</td>
<td>8</td>
<td>27</td>
<td>18</td>
<td>17</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td>HW-PW FTEs/Population</td>
<td>828</td>
<td>958</td>
<td>1,417</td>
<td>535</td>
<td>474</td>
<td>1,319</td>
<td>1,536</td>
<td>1,040</td>
</tr>
<tr>
<td>HW-PW FTEs/Square Miles</td>
<td>1.5</td>
<td>3.0</td>
<td>2.9</td>
<td>1.0</td>
<td>1.9</td>
<td>3.7</td>
<td>1.4</td>
<td>2.32</td>
</tr>
<tr>
<td>HW-PW FTEs/Road Miles</td>
<td>6.5</td>
<td>11.1</td>
<td>12.0</td>
<td>4.3</td>
<td>5.8</td>
<td>13.9</td>
<td>7.7</td>
<td>9.13</td>
</tr>
</tbody>
</table>
| Water FTE/Water Budget                     | $195,466 |                               | $294,965.                             | $388,941                    | $350,000.| $344,635.
2.3 Current Organizational Structure with Reporting Responsibilities

The Town of Dudley is governed by an Open Town Meeting, Board of Selectmen and Town Administrator form of government. There are eight boards or committees elected and three individual positions elected. The Board of Selectmen are the Chief Executive Officers of the Town and the Town Administrator is the Chief Administrative Officer of the Town. The Water and Sewer Commissioners are elected. For the purposes of this study the consultant team limited the organizational assessment to the Highway Department and the Water and Sewer Department.

The Highway Department comes under the responsibility of the five member Board of Selectmen. The Department is managed on a daily basis by the Highway Superintendent who works under the administrative direction of the Town Administrator and the policy direction of the Board of Selectmen. There are six operating units the Highway Department manages: Highway, Recycling Center, Building and Grounds, Cemetery, Trees, and Street Lights. There are fourteen (14) full-time positions in Highway, Recycling Center, Building and Grounds.

The Water and Sewer Department comes under the responsibility of the five member Water and Sewer Commission. The Department is managed on a daily basis by the Water and Sewer Superintendent who works under the administrative and policy direction of the Water and Sewer Commissioners. The Town Administrator has no direct control regarding the activities of the Department. The Department is responsible for providing water treatment and distribution and waste water collection and disposal. There are seven full-time positions.

The Town’s Highway Superintendent, Highway Foremen, Water and Sewer Superintendent, Water and Sewer Administrative Assistant, Building and Grounds Supervisor and Building and Grounds Assistant are all non-union positions. The Town has a collective bargaining agreement with S.E.I.U., Local 888 that covers the 5 union positions in Water and Sewer, 1 union position in Recycling and the 9 union positions in Highway. The agreement is for three years, ending in June, 2021.

The following organization chart shows the existing Water and Sewer and Highway Departments.
2.4 Review of Current/Future Capital Projects in all Operating Departments

In completing our analysis of current operations within the Dudley Highway, Water and Sewer as well as the other divisional components as identified above, the consultant team was charged with evaluating the overall planning and spending plans currently being utilized through a formal or informal Capital Improvement Plan to both maintain and improve the infrastructure in the community. To accomplish this task the consultants spoke to all appropriate parties such as the Town Administrator and his professional finance experts including the Town Accountant and the Treasurer/Collector, various staff members, elected officials, volunteers on Boards and Committees and outside experts that included the Town’s Financial Advisors (Unibank) for Bond Issuance guidance, members of the Massachusetts Dept. of Revenue, Division of Local Services, a private engineering firm and associates within MRI’s network of Public Works professionals. In addition, we reviewed multiple documents provided by the Town and also conducted a search of numerous Town archived reports to validate the historic perspective of our findings.

Although the Town has done an adequate job of providing individual operating units with appropriate resources to perform their day to day responsibilities especially when it comes to “rolling stock” (i.e. equipment such as Trucks, Loaders, basic functional trailers and the like) the Town, in general, has not invested the amount of resources needed to address the ongoing deterioration of long-term infrastructure assets in roadways and water and sewer systems and all appurtenances to these operations. This issue has long been recognized in the community as noted in the year 2000 Master Plan and again in the 2018 Economic Development Plan. In fact, in the 2018 Economic Plan, Goal #2 states, “It’s time to address the Water/Sewer Infrastructure as a Single, Complete Repair and Upgrade Project.” They cite the inadequate water and sewer system and infrastructure as the primary impediment for continued growth in the community. The Economic Development Committee also conducted a survey and one of the questions was, “Would you approve the use of Town funds to upgrade our existing infrastructure (roads, sewer and water) to attract new business or industry if it meant increasing our local taxes?” The responses were 77% yes. In addition, as we reviewed the last Official Statement issued prior to the sale of your latest round of General Obligation Bonds (GOB), the Standard & Poor’s analysts review kept the Town’s rating at AA but it was noted in their comments that although the Town’s financial policies are considered “good”, they followed that up with “we now
view these policies as **standard** due to the lack of a formal long-term financial plan related to reinvesting in the Town’s aging infrastructure”.

The Town’s Highway Department with the support of the Town’s leadership and the Town Meeting has recently added money to the annual operating budget specifically geared towards roadway maintenance and improvements. This additional money is added to the annual Chap. 90 State assistance which is $432,505 this year. The consultants were unable to find documents that would forecast expenditures on a priority basis for road repair in Dudley over the next 2-5 years. The residents have committed additional money for the Highway Department, and with carry over Chap. 90 funds the Highway Dept. will have access to over $600,000 for roadwork in this construction season. In addition, the Town has made recent equipment purchases (a paver) to help the Highway personnel keep some smaller paving work internal to the Department. The Town’s old Pavement Management forecasting tool is almost twenty (20) years old and should be updated to reflect the modern state of industry techniques for maintaining roadways, and to provide extended years of *wear and tear* for relatively minor dollars on so many of Dudley’s secondary roads while avoiding major costly reconstruction of these deteriorated roads. The creation of a forecasting expenditure modeling document along with an updated Pavement Management Plan that is data driven will help instill confidence in the public and improve the transparent process for roadwork in the community.

The consultants reviewed the facilities and found them to be in average to good condition. The Building and Grounds Department has been able to keep ahead of significant issues, except for the recent HVAC replacement and roof replacement for the Dudley Municipal Complex. The approval to borrow $450,000 to rectify this issue is a positive development for the Town. On a negative note, we could not identify any long term plan for building maintenance that should be on a formal CIP. The Highway facility appears to be well maintained as does the Library. Ancillary buildings for Water and Sewer operations are functionally adequate at this time.

The Water and Sewer operations are facing the most significant issues when it comes to capital needs. The Water and Sewer Department has a well-defined listing of all their physical assets which was presented to us for review. What is not evident is an “aging” assessment of pipes in the ground for both water and sewer. This is not atypical in municipal operations as many smaller Departments are essentially dealing with keeping day-to-day functions operating with limited staff and resources. In speaking with individuals within water and sewer operations, there is a general acknowledgment that a serious “hidden” expensive
problem for the community will be in addressing the so called Asbestos Cement (AC) water pipes that exist throughout the community. The staff revealed to the consultant team that the incidence of disruptive breaks within the system is increasing at a disturbing rate. To the credit of the Department, the Commissioners have identified an area of high impact on Mason Road that should be totally replaced, and it has a projected cost in excess of $700,000. This project is listed on their informal five (5) year plan in 2022.

Similarly, the Sewer Division has a significant “underground” issue dealing with infiltration and inflow within its sewer system. The Department of Environmental Protection has become very aggressive with communities and requires Sewer Departments to address this matter or face fines and penalties for non-conformance. The Water and Sewer Commissioners have engaged a professional engineering firm to help guide them in this process and sought $71,300+/-(and very recently added to this appropriation) to begin the inspections and monitoring. The remediation of this issue will be costly and the recommendations could include relining pipes, disengaging illegal connections from homeowners and commercial entities, manhole reconstruction, consistent annual monitoring, and more. The Commissioners are also projecting replacing some of their aging pumps. This item also appears on their modest five (5) year plan. The Water and Sewer Commissioners must begin the necessary planning to address the I & I issue with a pragmatic and responsible approach to using current available resources to deal with this significant issue. The long term debt schedule for water and sewer paid for by the Enterprise Fund shows ample opportunity to address their capital infrastructure needs in a meaningful and substantive manner.

In general, the Town has reacted on an annual basis to the capital needs based upon available resources, budgetary restrictions, political will and the sense of maintaining the “affordable” community mantra that currently is enjoyed by Dudley residents. We understand how important this argument is to the elected and appointed officials. However, Dudley has available resources to utilize in a disciplined manner to begin a systematic and pro-active approach to these public works infrastructure needs. Some of the resources are identified below:
<table>
<thead>
<tr>
<th>Year</th>
<th>Free Cash (Town)</th>
<th>Stabilization (Town)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$439,482</td>
<td>$118,405</td>
</tr>
<tr>
<td>2018</td>
<td>$309,632</td>
<td>$337,319</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Sewer RE</th>
<th>Water RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$488,877</td>
<td>$939,669</td>
</tr>
<tr>
<td>2018</td>
<td>$466,449</td>
<td>$1,017,227</td>
</tr>
</tbody>
</table>

In summary, the Town has been very frugal in managing all of its operations and delivering services at a high level. The lack of any formal planning document with a practical approach to financing these issues through existing or enhanced revenues will only aggravate the problem for future generations and potentially cause a failure within the system with negative effects on Dudley’s residents. Continuing on a path of deferred maintenance, “as needed” capital improvements and repairs on these “unforeseen” assets is an important matter that needs to be addressed by Dudley officials in the near future.
3 General Findings - Recommendations

This chapter in our report provides the consultant team’s detailed findings and recommendations, following a thorough assessment, evaluation and analysis of the current Highway, Water and Sewer operations. These findings take into consideration our primary recommendation, which is for the Town of Dudley to develop a consolidated Department of Public Works. This chapter is divided into four major sections including: Management Systems, Preventive Maintenance, Financial Management, and Organizational Systems. The examination of the public works related functions will provide the necessary tools for Dudley officials to strengthen their management and control of these operations. These recommendations will lead to improved service delivery and/or reduced cost of operations.

3.1 Management Systems

The driving force behind any high performing organization is clear direction and management systems that communicate and translate that direction into action. Overall, the management systems in the Town’s public works operation are not in keeping with best practices. (See Appendices for Best Management Practices.) The Town is now presented with significant opportunities to use its resources better, and more importantly, to redirect resources and invest in the enhancement of service delivery. The Town needs to pursue a coordinated and comprehensive effort to provide that direction and enhance its policies and procedures, management systems, management controls and business processes as they relate to all public works operations.

Finally, a fragmented organization results in uncoordinated service provisions, and makes for a most frustrating experience for customers. Tiring rounds of telephone tag, endless explanations to countless service representatives, circular referrals. Strong leadership focus on customers, continuous improvements, and implementation of effective/coordinated customer service delivery systems is needed.

3.1.1 Capital Improvement Plan

There is no formal Capital Improvement Plan for short term of five (5) years or long term of ten (10) to fifteen (15) years. Departments submit annual proposed capital requests over $20,000 to the Capital Improvement Planning Committee for their review and recommendation to Town Meeting. The Water and Sewer Commissioners have created a
modest document that needs to be expanded upon and incorporated into a town-wide Public Works CIP. As a fiscal and planning tool, the capital budget and planning process will allow the Town to monitor the timing and funding of all major capital purchases for the public works. Each year, the CIP should be reviewed, keeping in mind the Town’s priorities; on-going Town, State, and Federal programs/opportunities; economics, and then make adjustments as necessary.

Items included in a CIP generally have long life spans. All items with a value of $10,000 or more should be included in the CIP, as part of the Town’s budget. The CIP may include capital expenditures which are less than $10,000 in any one year if they are part of a multi-year project or focus which exceeds that amount. Items that are funded through a CIP generally fall into one of the following four categories: Equipment and Vehicle Purchases, Repairs, Construction, and Land Acquisition.

The Massachusetts Department of Revenue, Division of Local Services, has prepared a report entitled Developing a Capital Improvements Program: A Manual for Massachusetts Communities. This is an excellent resource for municipalities who are just beginning a formal CIP process.

The Town should develop the capital budget planning timeline. The Town Administrator should have an active and key role in guiding department heads through the process and ensuring the completion of all capital budget document requirements. One of the first tasks is to prepare a timetable for completing the CIP, developed by the Town Administrator. This schedule should be given to all local officials involved in the CIP process.

There are many benefits to be derived from the CIP. The program should provide a rational process for capital expenditures management and planning for the Town. The entire process will aid the Town in the deliberate selection, sequencing, and financial planning of major equipment purchases and other capital purchases for public works. Here is what the Town can gain:

- Stabilizing the cost impact on operating budgets.
- Long-range coordinated planning for a balanced program and/or minimum tax rate impact
- A uniform basis for justifying and prioritizing purchases and projects
- A vehicle for communicating capital spending plans to all departments and to the community so that others can coordinate their own plans with the CIP
- Increased public support for capital spending proposals because of respect for the CIP process

The Town has established a capital fund for the long-term replacement of equipment and vehicles. The Stabilization Fund is a special purpose fund, under the provisions of M.G.L. Chapter 40, Section 5 B. This helps the Town to save money towards their capital program. The Town should continue to fund the Stabilization Fund. The Water and Sewer Commissioners’, in consultation with the appropriate administration authorities, should strongly consider setting aside a portion of their annual Certified Retained Earnings from the Enterprise Fund into a capital improvement stabilization account to pay for capital needs as well as any debt service obligations. This should be a policy decision of the Commissioners to reflect their commitment to maintaining and investing in the assets under their control.

3.1.2 Strategic Planning

The Town should develop and implement an annual Strategic Plan for the whole Town but especially and most importantly for the Public Works Department. The annual plan should include the Board of Selectmen, Water and Sewer Commissioners and Town Administrator priorities, goals, objectives and DPW requirements and accomplishments. This would provide for overall guidance and direction for the Department. Workforce and succession planning needs to be part of the strategic plan, as it allows organizations to identify and manage changes in the workforce. The age of the workforce and growing retirement eligibility is a concern for positions within the Department of Public Works. Succession planning will allow management to project for and replace competencies and needed skills, in particular with those positions needing DEP Treatment or Distribution licenses.

3.1.3 Asset Management System

An asset management system does not exist in any formal manner. Highway, Water and Sewer each have their own inventory of equipment, vehicles, and infrastructure, but there isn't one place where an asset system or database identifies what is owned by the Town, by location, serial number or VIN number, age, condition, etc. The Town must develop and implement an asset management system, as well as an asset replacement plan.

This is vital as the public works environment is based on assets related to roads, drainage, storm water, bridges, sidewalks and ramps, water systems, sewer systems, storm drains, traffic control devices and lighting.
3.1.4 Work Order Management System

A work order management system, which is also known as a computerized maintenance management system, CMMS, does not exist. Highway, Water and Sewer track their own work but no formal work order system is used to schedule maintenance, repairs, identify costs of labor and materials, and account for work performed by Division: Water, Sewer, Highway, Cemetery, Tree, Building and Grounds, Dams or Recycling Center.

Public Work should have an established periodic and scheduled maintenance program for each piece of equipment. Records of maintenance, inspection, and testing should be available and computerized. Additionally, the municipality should have a pre-trip and pre-use inspection policy. Finally, there should be a system in place to assure that operators are qualified and licensed to operate the assigned vehicles and equipment.

3.1.5 Water and Sewer SCADA System

An enhanced Supervisory Control and Data Analysis System (SCADA) is needed. The Water and Sewer Department has a basic analog system and it is being upgraded to a new cellular system. Real time information about the water and sewer pumping stations and their functionality is crucial to operating the Department. SCADA is a core technology to support the water and sewer system. More up to date SCADA technology provides timely management information and feedback to ensure all systems are operating as planned.

3.1.6 Street Opening Permits

Street opening permits are issued by the Highway Department for all work in a public way and to keep track of that work; however, the Water and Sewer Division does not receive them because they operate under a “universal permit” and the gas company also is not required to get them. Both Water and Sewer and the gas company need to get street opening permits; this must be a requirement so that the Highway Department can keep track of all work performed in the public way. For emergency and after hours work they can get them the next business day. A Town street opening policy should be developed by the Board of Selectmen.

3.1.7 GIS/GEO Database System

The Town does not have a formal GIS software that could create a geodatabase mapping system. If the Town moves in the direction of establishing a Department of Public Works, then a priority for the Director should be the investigation of a GIS/GEO database
system specifically for public works operations. This type of system would allow a compilation of information related to road conditions, sign locations, catch basins, sewer/water lines (and dimensions, gate boxes), asset management and condition index, work order management, shut off valves, hydrants, drainage pipes, tree trimming, pot hole locations, and much more. All of this information would be instantly available for employees, utility companies, private contractors and residents. GIS software will assist the DPW to report better reaction time to citizen complaints, improved efficiencies in utilizing assets, and provide a tool to better inform residents of project schedules, delays in construction, detours, etc. This technology would more than pay for itself in the benefits received.

3.1.8 Planning and Coordination

Although the Town does a good job of providing routine public works services to the residents of Dudley, there is a weakness in the lack of responsibility and overall coordination and accountability in terms of an effective management structure. The current organization relies on the “good will” of the various operating Departments within the Town to cooperate in a crisis environment or on a project by project basis. Additionally, there is a lack of overall planning and coordination for the general needs within a public works environment because of separate reporting authorities.

In order to achieve organizational objectives efficiently and effectively, the managers have to give a common direction to group efforts and the working of different departments. In this case it would be the various Departments and Divisions that make up the public works operations. A DPW Director would develop the process by which Division managers integrate their activities to support all of public works and accomplish the goals set forth for the Department. It will also eliminate any duplication of effort and allow for the coordinated sharing of resources, manpower and assets.

3.2 Preventive Maintenance

Basic preventive maintenance is performed in the Town, but there are areas that need improvement. It was reported that the Water and Sewer Department has a basic preventive maintenance program for its vehicles, emergency generators and the pumping stations. The Highway Department also has a basic preventive maintenance program that includes vehicles and rolling stock; they have a Mechanic on duty. While this provides the minimum coverage for preventative maintenance, there is more that needs to be done and is
stated below. The equipment used by the Building and Grounds personnel is well maintained as is evident in the Dudley Municipal Complex facility.

3.2.1 Vehicle Replacement Schedule

There is not a town-wide vehicle replacement schedule. Each department has their own vehicle list and the Town has no comprehensive list or schedule as to when vehicles should be replaced. There is no multi-year plan to actually replace the vehicles. This needs to be included in the CIP as an annual cost.

3.2.2 Water and Sewer Pumping Stations

With regard to pumping stations, there is no hard and fast schedule to replace the infrastructure (pumps, valves, etc.) at the sewer and water pumping stations. As equipment like pumps age-out, the replacement parts become harder and harder to purchase from vendors. Therefore, this needs to be in the CIP for planning and budgeting purposes. The Department reacts to breakdowns on an as needed basis, albeit the Commissioners have begun to look at the issue of pump replacements particularly with Sewer which has some pumps that no longer have parts being manufactured.

3.2.3 Pavement Management System

The Town’s Highway Department has a twenty year old Pavement Management System; however, they do rate the streets annually that need repair, maintenance and ultimately repaving. A true Pavement Management System is needed so they may plan on a multi-year basis for the streets that need crack sealing, repaving, drainage, curbs, etc. This would be in the CIP. The Town has recently increased the annual pavement line item in the Highway budget to combine with the Chapter 90 State funds.

3.2.4 Inflow and Infiltration Study

An Inflow and Infiltration Study (typically referred to as an I and I Study) has never been conducted for the Dudley Water and Sewer. This is needed for the maintenance of the sewer system especially, since they received a letter from the Department of Environmental Protection concerning the lack of attention to this issue. It is now underway with Phase 1 of the study being conducted by Tighe and Bond, a professional engineering firm. The Water and Sewer Commissioners need to plan for the expensive remediation of this issue in a short and longer range CIP for this Department.
3.2.5  Preventive Maintenance - Water/Sewer, Highway, Cemetery, Building and Grounds, Dams, and Storm Water Maintenance

Preventive maintenance for Water/Sewer, Highway, and Building and Grounds is very limited, for just vehicles and equipment. A preventive maintenance system for all assets in the Department is needed to preserve the investment the Town has already made in these items. A work order management system would greatly assist a preventive maintenance program to track repairs, maintenance, and costs of the proactive maintenance performed.

3.3  Financial Management

A consolidated, financially managed all-in-one Department of Public Works would also result in a consolidated DPW operating budget and capital improvement budget. At this time, the Departments each submit their own budgets. The consequence of not having a consolidated Department could result in each Division developing their own internal accounting system. A Department of Public Works would benefit greatly from a unified accounting and budget management system, designed to track expenditures, analyze account activity, develop budget information for upcoming years and perform other related data operation for internal management purposes.

3.3.1  Review Rates and Charges for Water/Sewer, Recycling and Cemetery

The Town should undertake a review of its user fees to identify the full cost of providing those services. Full cost is defined to mean both the direct and the indirect costs (overhead). From that study, the Town can then determine its current cost recovery level by user type and the amount of tax or customer support required. Rates/Charges for Water and Sewer (Enterprise Fund), Recycling, Trash Disposal, Cemetery, all need to be reviewed annually to insure they are capturing the cost of providing the service and are in line with comparable communities.

3.3.2  Water and Sewer Enterprise Fund

With regard to the Enterprise Fund for Water and Sewer, the water and sewer rates need to be established to recover the actual full cost of providing the service including the direct and indirect costs. The last time a direct and indirect cost analysis of the water and sewer operations was conducted with Fiscal Year 2000 information. It is updated annually by using a
straight 2.5% increase. Indirect costs were updated by the Town Administrator in FY16 by using the current budget costs. There were no changes made to the original formula. It is time now for a true update as the original study is outdated and over eighteen (18) years old.

### 3.4 Organizational Systems

It is strongly recommended that the Town combine the operations of the Water and Sewer, Highway, Building and Grounds, Cemetery and Recycling Center into a consolidated Public Works Department. Under this plan, the Public Works Department would be administered by a Director of Public Works. (See organizational charts) The concept of a consolidated Public Works Department is practical in terms of bringing together functions which have operational relationships but now operate independently and, in some cases, less efficiently. Consolidated operations would allow supervisors to draw from a larger labor pool in busy months while maintaining a lower level of personnel in the other months. Sharing of equipment, vehicles, heavy equipment, facilities and resources will be better coordinated.

Town Meeting action may be needed to bring about these recommended organizational changes. If so, the Board of Selectmen should bring the proposed plan before Town Meeting with the appropriate wording developed by Town Counsel.

There are many benefits and cost savings to having a consolidated Department, not to mention that it is the current best management practice that many communities have adopted in Massachusetts and throughout New England. Below are some examples of benefits.

- Better utilization of personnel. Personnel will be more readily assigned, such as seasonal needs.
- Greater opportunity for cross-training, career development and advancement. A consolidated department, with several different divisions, as has been proposed, can serve to enhance the overall career development of employees in the department. The opportunities to rise to supervisory positions would be greater, which would have a positive impact upon employee morale. Also, the ability to learn a new skills within a department would also be present. An added benefit is likely to be a lower rate of turnover thereby eliminating the need for expensive training of new personnel.
- Increased use of technologies. A consolidated DPW would allow for use of technologies in areas where there is now little or no use of modern technology.
- The consolidated department would give the Director the flexibility and authority to assign personnel and equipment as needed to an operation.
- Improved management practices and communications: CIP, energy conservation plan/LED conversion, employee training, and communications with customers.
The accountability factor of all personnel within one department would certainly make the development of better management practices more realistic.

3.4.1 Key Management and Union Position Vacancies

There are currently three management positions vacant, and they include Highway Superintendent, Highway Foreman, and Water and Sewer Superintendent. The Superintendents and Foreman of those positions are currently filled with acting personnel. This is an opportune time for the Town to look at re-structuring the delivery of services through its Public Works operating divisions. This could involve reclassifying positions with a strong emphasis on top-down accountability and efficiency in allocating resources and eliminating potential conflicts within the overall operations.

There are also a number of union position vacancies that exist in the Highway Department, and these vacancies are making it difficult to keep up with the workload. These positions need to be filled immediately to address the workload needs of the Department.

3.4.2 Cross Training

Cross-training of personnel is needed overall. With the number of staff members in each Department relatively low, cross-training is important to actually get the jobs done at this time. The Water Department cross-training is limited by the fact that certain work requires a DEP Distribution or Treatment license. More staff need to get the DEP Treatment and Distribution Licenses. Incentivizing employees from Highway to get cross-trained and have an ability to get the licenses and certifications required for Water and Sewer responsibilities could reduce the overtime costs for these operations and provide better flexibility for the organization.

3.4.3 Training Opportunities

The Highway and Water/Sewer Departments do not take advantage of the low-cost training offered by the Bay States Roads Program at UMass Amherst. This public works training program is specifically designed to be practical for small to medium sized municipalities. The Town of Dudley should take advantage of this program.

3.4.4 Compensation and Classification Review

A compensation and classification review of the DPW positions would be beneficial for the public works positions to address the pay inequities between Water and Sewer and
Highway union positions. Also, it is needed for HR compliance to ensure the job descriptions are appropriately updated listing current essential functions, physical requirements, requisite requirements such as licenses and certifications, and to ensure titles are gender neutral, and there is pay equity according to the new Massachusetts Employment Pay Act. There has not been a review of this type conducted for the Dudley DPW positions.
4 Proposed Department of Public Works

In this chapter, Municipal Resources, Inc. concludes the need for a consolidated Public Works Department directed by a DPW Director. Here you will find MRI’s proposed new organizational chart.

4.1 Why a Department of Public Works for Dudley?

Following our assessment of current Highway, Water and Sewer operations, interviews with numerous stakeholders, review of historical and contemporary documents and reports, and benchmarking to other communities and best practices, it is apparent that there is a unique opportunity for the Town to look into the creation of a formal Department of Public Works especially in light of the senior management vacancies in the Highway and Water/Sewer Departments. By combining the current daily operations of Highway, Water and Sewer, Recycling, Building and Grounds and other public works operational units into one single central authority (Public Works Director) and who would also be in charge of special projects and mandates like Dam restoration, Storm Water Management, Street Lights and GIS integration. The Town will certainly benefit from an accountability, efficiency and coordination standpoint. In addition, a Director of Public Works will annually present the elected officials and other stakeholders with a uniform approach to evaluating program costs, a tracking of citizen complaints by division, staffing needs, resource sharing and project management, maintaining town assets both above and below ground, establishing an annual budget and funding priorities for all these public works functions as well as researching the costs and benefits of outsourcing some functions.

The recognized best management practice to deal with asset management in a public works environment is typically done by creating a formal 5-10 year Capital Improvement Plan for the entire consolidated Department that is evaluated yearly and adjusted according to needs and funding availability. This is an important task because the Director will be responsible for reviewing all Public Works wants and balancing decisions based upon the priorities of focused needs (public safety, health and safety threats, potential catastrophic incidents etc.) within the Dept. operations.
4.2 The Benefits and Efficiencies of a Department of Public Works

In any objective analysis of the potential benefits of a combined, fully functional Public Works Dept., we must begin with common industry standard best practices that include built-in efficiencies in overall service delivery by having the ability to combine resources (personnel and assets/equipment) to react to situations, assign appropriate staff to accomplish a task, avoid overtime payments to understaffed divisions by cross training personnel and reducing occasions where redundant services may be provided by independent authorities with no single entity being responsible for the eventual outcome. Again, on the operating efficiency side of the equation, there is a clear lack of coordinated planning around general projects in the community and certainly there is a lack of coordinated planning for the future simply because no one entity is in charge! An organized Public Works Dept. led by an accomplished leader and professional will help avoid unanticipated “surprises”, will be accountable and react in an appropriate and timely manner to changes in law and mandated regulations imposed by either the Federal or State government (a recent example in Dudley has been the I&I notice to the Town). Finally, an intangible benefit of having a formal Public Works Dept. is the concept of “One Stop Shopping” for the residents of Dudley. Although some residents are in the know because of their involvement in the Dudley government, most residents with an issue related to Public Works do not know who to call. As an example, a person with flooding on their property may think to call the Water Dept. Clearly, this call should be made to the Highway Dept. but most residents are not aware of the “responsibilities” inherent in the current individual Divisions in Town. Hence, frustration sets in and the resident gets upset and feels they are getting the run around. Under our proposal, a single call to the Dept of Public Works will have the issue addressed and tracked for future reference.

4.3 Staffing/Equipment: Consistent Policies for Personnel, Procurement and Contract Management

In our review of the current operations, we believe that the creation of a formal Department of Public Works can be staffed with the total number of employees currently funded in the FY-2019 budget with the assumption the three (3) current vacancies are filled by the Town. We will show a proposed organizational chart later in this section. We have identified
some issues within the current independent divisions that should be addressed in a new Public Works organization. Although responsibilities in each division are similar, there are specific requirements in the regulated divisions in terms of licensing and certifications. The pay plans across the board should be looked at for uniformity and fairness in the combined Department. As mentioned previously, one of the benefits of a combined Department could afford the opportunity for cross training for employees that would allow the Director to back fill and assign employees to fill vacancies created by vacations, sick, leave on an as needed basis. The point is that with a combined Department the sharing of personnel in specific, limited instances can be another effective tool for use by a Director. A specific example would be in the sewer operations currently staffed with only two individuals. MRI understands that much of this is subject to collective bargaining and we would urge the Town Administrator to look at this matter with his union representatives.

Similarly, MRI believes the Town has done an admirable job in supplying the equipment necessary to all its independent Divisions with limited resources. An evaluation and review by a new Director concerning the combined physical assets of these separate operations could result in a finding of duplicate equipment, redundant purchases that will not be needed in a combined Department. A further analysis by a Director could also determine a return on investment on the purchase of a piece of equipment which may not be in the best interest of the community, and perhaps a suggestion to privatize some routine tasks such as street sweeping, catch basin cleaning, line painting, and roadside mowing. In addition, the Director should research outsourcing routine office functions such as quarterly water/sewer bill preparation, mailing and collection, lockbox services, and other similar time consuming processes.

Finally, a combined Department will allow a Director to help develop a consistent personnel policy for all the Divisions. This would apply to union and non-union employees. Our experience as managers is that one of the great weaknesses of many local governments is dissimilar treatment of its employee groups. A singular manager of this combined Department would work with the Town Administrator to address this matter, avoid distrust and overall morale issues within the organization.

An organized Department that consolidates the various Divisions discussed above, will also provide consistency in two operational areas: (1) procurement policies, and (2) contract administration. In Massachusetts procurement is heavily regulated and virtually all towns have
appointed their Chief Administrator (TM, TA) as the Chief Procurement Officer. Dudley is in a good position with the Town Administrator serving that role. The question is more related to applying the same standards for all procurements. For example, are all RFP’s/RFQ’s developed by independent agencies within the Town utilizing similar benchmarks in their request? Have all elected and appointed officials with awarding authority gone through training in this important field? With a combined Department, all documents will be standardized and produced through the Director’s Office. All applicable standards and updates will be consistent in public works documents. In a similar vein, professional contracts for service (engineering, special projects etc.) are currently managed by independent authorities. A Public Works Director will manage all contracts for work/assignments on Public Works matters by private concerns and provide professional oversight and control over the final work product. This management will provide better accountability and efficiencies and may result in savings if the Director determines his staff can perform some of the routine task within the scope of the contract.

4.4 Development of Merged Capital Improvement Plan for Public Works Divisions with Priority Designations

The development of a Capital Improvement Plan for the Town of Dudley is strongly recommended. It is a well-recognized best management practice for any municipality. A well-organized CIP will have many benefits for the Town. It will create an orderly and systematic way to plan for and anticipate the replacement and rehabilitation of minor and major equipment, rolling stock, facilities and infrastructure needs. It will provide for an organized and effective evaluation of alternatives on a multi-year basis rather than on an annual basis or in crisis mode. It will also allow for designating projects that may need special and or immediate attention such as the replacement of old AC water mains or upgrades to the pumping stations. The Finance, Appropriation and Advisory Committee, the Capital Improvement Planning Committee and the community as a whole will be better able to see the relative needs of each Department and weight their requests against the limited resources available in a more transparent way. A CIP also gives the Town leaders the ability to facilitate the coordination of requests between the operating expense budgets and the capital budget. The Town’s rating agencies want to see a well-established and funded CIP as it shows the institutions that buy Dudley’s bond issues that a plan is in place to maintain and improve the community’s credit worthiness. Another advantage of a CIP is that it increases the opportunities of State and Federal grants. State and
Federal Infrastructure grants often rate “shovel ready” projects higher than ones that are simply on the “drawing board”.

A Capital Improvement Plan is really a capital investment plan for the community. The first step is for all departments to inventory their assets and then identify their short and long term capital needs. This includes all physical assets like vehicles/rolling stock, equipment, buildings, pumps/motors, roads, dams, traffic control devices, water/sewer mains, etc. With this in hand, the next step is to prepare a set of requests to replace, repair, maintain or retire the asset.

With respect to developing a Capital Improvement Plan for the Department of Public Works, in the fall, prior to the start of the operating budget process, all the Divisions would submit their annual, 5 year and 10-15 year requests and justification to the Director for review and inclusion in the Department’s CIP requests to the Town Administrator. The Water and Sewer Commissioners would work with the General Foremen and the Director to establish their annual, 5 year and 10-15 year set of requests and justification. The funding source for their projects would be the Water or Sewer Enterprise Fund or Retained Earnings. Their requests would be submitted to the Director to be included in the DPW request. This process would take several months and provide the Town Administrator with sufficient information and justification so the requests can be evaluated, prioritized, funding sources researched and recommendations developed. The Town Administrator’s Capital Improvement Plan would be submitted to the Capital Improvement Planning Committee in December or January for their review of proposed capital projects in excess of $20,000. Prior to the Annual Town Meeting the Selectmen and Finance, Appropriation and Advisory Committee would review the Capital Improvement Plan in detail so they too can provide recommendations to the Town Meeting.

The Town Administrator’s role during the CIP review is to present a short and long term financial forecast that shows the Town’s ability to afford the recommended CIP items. In this case there is tax revenue from the General Fund and water and sewer revenue from the Water and Sewer Enterprise Fund. The financing method can be direct appropriation or bonding depending on the life expectancy of the asset, bonding/borrowing capacity and the availability of funds. The concept is to balance the operating expenses and debt service with Dudley’s ability to pay.
4.5 Proposed DPW Organization Chart with Reporting Responsibilities and Staffing Levels

In the course of this study it became obvious that the Town of Dudley has an opportunity to take advantage of three key management vacancies in the Water and Sewer Department and Highway Department and to enhance the operations of both Departments by the creation of a Department of Public Works. As noted previously, today both Departments are using a number of best management practices already. The proposed reorganization takes advantage of the personnel and equipment/asset strengths of each Department. The creation of one Department with one Department Head strengthens the Town’s ability to address the current deficits and to put a plan in place to address those issues both short and long term.

The 2018 Economic Development Plan makes reference to the Highway Superintendent vacancy. As part of Goal #2, they state, “Explore the Creation of Dept. of Public Works: Does it Make Sense? With the current vacancy of the Highway Superintendent position, now is the optimal time for due diligence in having a 3rd party review our current municipal works and water/sewer setup and determine if things might run more efficiently and effectively by creating a DPW director position instead.”

Attached are two organizational charts. The first one is the Recommended Department of Public Works. The second one is the Recommended Department of Public Works with staffing for the Water and Sewer Division and the Highway, Recycling, Building & Grounds, Tree and Engineering Divisions. Note that the Engineering Division is added as a possible future function. It is recommended that the Water and Sewer Commissioners be elected and retain policy direction and make recommendations to the Town Administrator and the Board of Selectmen on matters of the operating budget, water and sewer rates and charges, rules and regulations, capital improvements, future expansion, etc.

There are a total of 21 positions currently budgeted for both Water and Sewer Department and the Highway, Recycling, Building and Grounds Departments. The proposed organization keeps the total positions at 21 with the Highway Superintendent position becoming the DPW Director, the Highway Foremen becoming the General Foremen for Highway and the Water and Sewer Superintendent becoming the General Foremen for Water and Sewer. The Administrative Assistant position for the Water and Sewer Department would become the Administrative Assistant position for the Department of Public Works. It is felt that this proposed reorganization can be accomplished with the existing personnel budget for these three
positions. For FY ’19 the budgeted amount for these three positions is $227,042. Staffing appears to be sufficient in each Department, therefore there are no other changes recommended or proposed. One issue to be aware of is the need to fill union vacancies as they come up either thru promotion, retirement or termination. Also, the span of control is clearly within the limits for a Department of Public Works of this size. The recommended Department with a DPW Director and two General Foremen managing a Department of 18 positions, five Water and Sewer, twelve Highway and one Administrative Assistant is within an acceptable span of control for a small DPW Department.

Two organizational charts follow in this section below.

Organization Charts

The following pages show recommended organizational charts for the Water and Sewer and Highway Departments.
Elected and advisory as to policies, rates and budgets.

Future additional function.
ORGANIZATION CHART
RECOMMENDED DEPARTMENT
of
PUBLIC WORKS

DPW DIRECTOR

ADMINISTRATIVE ASSISTANT

WATER & SEWER

1 WATER & SEWER GENERAL FOREMAN

SEWER

1 ASST PLANT OPERATOR
1 TRUCK DRIVER LABORER

WATER

1 ASST PLANT OPERATOR
1 MAINT/HEAVY EQUIP OPERATOR
1 LABORER

HIGHWAY

2 HWY HEAVY EQUIP OPER
1 HWY MECHANIC
5 HWY TRUCK DRIVER LABORER
1 HWY LABORER

RECYCLING

1 RECYCLING LABORER

BLDG & GROUNDS

1 RECYCLING LABORER

TREE

1 BLDG & GROUNDS SUPERVISOR
1 BLDG & GROUNDS ASSISTANT

ENGINEERING*

*Future additional function.
4.6 Role of the Water and Sewer Commission

The Water and Sewer Commission in the Town of Dudley has a long history of providing reliable service to residents and businesses. In 2012 it was voted by Town Meeting and enacted by the General Court that the separate Water Commission and Sewer Commission be made into one Water and Sewer Commission. Following that, the consultants are aware that a recommendation was made by the Town Administrator to abolish the elected Commission and that recommendation did not go to Town Meeting.

The recommendation in this study is to remain with an elected Water and Sewer Commission. Their role would be advisory to the Board of Selectmen and Town Administrator on matters of policy and budget. The Water and Sewer Commissioners would also be responsible for advising the Town on the present and future needs of the sewer system and the water system. This would include the recommendation to acquire land by purchase or eminent domain including providing for easements and right of way takings for maintenance or future expansion of the water system or sewer system. The Commissioners, in consultation with the Director of Public Works, would be responsible for recommending an operating and annual capital budget to the Town Administrator. As has been the established process in Dudley, all cost associated with the operating and functional responsibilities of the Water and Sewer Division will be paid through the Enterprise Account as established by Town Meeting. Any non-related cost associated with a combined Public Works Dept shall not be charged against the existing Enterprise Account for Water and Sewer. Once the budget is adopted by Town Meeting the Commissioners would be responsible for establishing the water and sewer rates and charges for the fiscal year after a public hearing and then inform the Board of Selectmen of any changes. The Commissioners would retain their oversight of abatement request by working with the Collector. In addition, the Water and Sewer Commissioners, in consultation with the Director of Public Works, shall have an advisory role in recommending to the Town Administrator the appointment of personnel for the Water and Sewer Divisions.

There is no best management practice for a municipality having elected or appointed Commissioners. In the review of six comparable Water and Sewer Departments for this study it was found that two had elected Commissioners, one had appointed Commissioners and three Towns didn’t have Commissioners. In some communities the role of Water and Sewer Commissioners is vested in the Board of Selectmen.
5  Next Steps

Previous chapters contain many recommendations which are intended to bring about needed improvements in the operations and management of a Public Works Department. Some recommendations can be implemented with very little effort; some will require significant planning and coordination. Dudley officials must decide which recommendations to implement first and how quickly.

The consultant team believes that all recommendations are a high priority. Of course, the most important recommendation is the reorganization of the various Public Works Divisions into a consolidated Department of Public Works. Many of the recommendations in this report cannot be achieved unless the reorganization occurs. While this report recommends a variety of public works enhancements, five actions are most critical.

1. Reorganize the Town of Dudley’s public works divisions into one consolidated Department of Public Works as outlined in this report’s proposed organization chart.

2. Hire one Director of Public Works to oversee the Department. The Director of Public Works would report directly to the Town Administrator.

3. Work with Town Counsel and Labor Counsel to ensure legal requirements of the reorganization. If required, receive approval from Town Meeting for this reorganization.

4. Develop a formal Capital Improvement Plan and Budget.

5. Fill all vacant positions on the new organization chart with permanent employees and provide cross-training.

The Town of Dudley needs to make DPW management a major focus and treat it as a major department in the Town. To increase the ability for total implementation of the recommendations within this comprehensive report, the consultant team recommends that the Town establish a *DPW Oversight Committee* explicitly for the implementation of this report. We predict that it may take up to two years for all recommendations to be fully and successfully implemented.
The DPW Oversight Committee would be composed of representatives from the employees, management, and appointed/elected officials, including the Town Administrator; not more than five people. Their charge would be for two years to oversee the implementation of this report and its DPW Department agenda only. The DPW Oversight Committee would help chart a course of action which will assist policy, managerial and administrative decision makers in all DPW operations.

The vision of making Dudley’s public works operations more efficient is well worth additional thought and a phased implementation over two years.
6 Appendices

Attached please find all report appendices for best practices and job descriptions.
6.1 Cemetery, Recycling, Building & Grounds Best Management Practices

1. Does the Board and Selectmen and Town Administrator have an annual 5 year Capital Improvement Plan for the Recycling and Buildings & Grounds functions to address immediate equipment, facility and infrastructure needs and a 10-15 year Capital Improvement Plan to identify and plan for long term needs?

   1.1 Finding: The Selectmen and Town Administrator do not have an annual CIP that identifies 5 year or 10-15 year capital needs.

   1.1.1 Recommendation: The Selectmen and Town Administrator develop a Town wide CIP that identifies the immediate 5 year capital needs as well as a long range 10-15 year look ahead for the replacement, upgrade and new capital assets for all Town Departments.

2. Do the Cemetery Commissioners have an annual 5 year Capital Improvement Plan for the Cemeteries to address immediate equipment, facility and infrastructure needs and a 10-15 year Capital Improvement Plan to identify and plan for long term needs?

   2.1 Finding: The Cemetery Commissioners/Selectmen do not have an annual CIP that identifies 5 year or a 10-15 year capital plan that identifies the needs for the Cemeteries.

   2.1.1 Recommendation: The Cemetery Commissioners/Selectmen develop and identify the immediate 5 year capital needs as well as a long range 10-15 year look ahead for the municipal cemeteries.

3. Are fees for the Cemetery reviewed annually by the Cemetery Commissioners to insure they are current and reasonable as compared to other cemeteries in the area for the services provided?

   3.1 Finding: The cemetery fees are reviewed as needed. It was felt that the Cemetery fees are very reasonable as compared to area Towns.
3.1.1. **Recommendation:** The Cemetery Commissioners/Selectmen review the Cemetery fees on a regular basis to insure they are reasonable as compared to the other cemeteries in the area and consider additional fees for services such as grave openings, installation of markers, cremations, etc.

4. Are fees for the Recycling Center reviewed annually by the Selectmen and Town Administrator to insure they are current and reasonable for the services provided?

   4.1. **Finding:** The Recycling Center fees are reviewed as needed. It was also felt that the “pay per throw” program is operating well, fees are reasonable and cover the cost of the services provided.

   4.1.1. **Recommendation:** The Selectmen, Town Administrator and Highway Department review the disposal and recycling fees on a regular basis to insure they are covering the cost of the services to the residents. Because the revenues cover the costs of operating the Center, it’s recommended that the Selectmen consider running this facility as a Revolving Fund.

5. Are the Cemetery Rules and Regulations reviewed annually by the Cemetery Commissioners to keep them up to date for the efficient operation of the Cemetery?

   5.1. **Finding:** The Cemetery Rules and Regulations were updated recently.

   5.1.1. **Recommendation:** The Cemetery Rules and Regulations be reviewed annually by the Cemetery Commissioners, Town Administrator and Highway Department to insure they meet the needs of the Town and preserve and protect the cemeteries.

6. Are the Recycling Center’s Rules and Regulations reviewed annually by the Selectmen and Town Administrator to keep them up to date for the efficient operation of the facility?

   6.1. **Finding:** The Recycling Center’s Rules and Regulations are kept up to date.
6.1.1. **Recommendation:** The Recycling Center’s Rules and Regulations be reviewed annually by the Selectmen, Town Administrator and Highway Department to insure they meet the need of the facility.

7. Are the buildings and grounds at Dudley Municipal Complex (Town Hall, Police Station) and other public facilities maintained to a standard acceptable to the Town Administrator?
   
   7.1. **Finding:** It appears that the Dudley Municipal Complex is well maintained and in good repair.
   
   7.1.1. **Recommendation:** The Dudley Municipal Complex appears to be in “good shape”. The immediate and long term capital needs should be included in the CIP so that predictable repairs and maintenance can be identified.

8. Is bulk purchasing, interlocal purchasing with other communities and purchasing from the State’s bid list utilized when appropriate?
   
   8.1. **Finding:** Bulk purchasing, interlocal purchasing and purchasing from the State’s bid list is used when appropriate.
   
   8.1.1. **Recommendation:** Continue to use bulk purchasing, interlocal purchasing programs and the State’s bid list when and as appropriate.

9. Are job descriptions are up to date and clearly define the duties and responsibilities of the position?
   
   9.1. **Finding:** Job descriptions appear to be up to date and clearly define the important elements in a job description; primary purpose for the position, essential duties and responsibilities, supervision, supervisory responsibilities, work environment, physical requirements, recommended minimum qualifications, education and experience, additional requirements and knowledge, ability and skill.
   
   9.1.1. **Recommendation:** Job descriptions need to be kept current to reflect changing State and Federal laws and changing position duties and responsibilities.
10. Are compensation and classification plans reviewed every 5 years to insure the pay is competitive with the labor market?
10.1. Finding: It does not appear that the compensation and classification plans are adjusted on any schedule outside of changes, including cost of living increases, negotiated with the unions.
10.1.1. Recommendation: The Town Administrator and the Personnel Board should undertake a comprehensive compensation and classification study for non-union positions on a regular basis (5 years is recommended) to insure the compensation and benefits are competitive with the Town’s labor market and balanced with internal equity. The Town Administrator should do the same for the union positions as well.

11. Does the staff have the necessary professional licenses and valid driver licenses and does management check to make sure?
11.1. Finding: It appears the various Town Departments check to make sure the employees have their necessary professional licenses.
11.1.1. Recommendation: This simple practice is important and often over looked. When professional licenses are not valid, the Town accepts the liability for errors and omissions.

12. Is there a preventive maintenance program for the equipment used by Building and Grounds?
12.1. Finding: It was reported that the equipment used by the Building and Grounds personnel is well maintained.
12.1.1. Recommendation: This practice of routine and preventive maintenance is the reason the Dudley Municipal Complex looks as good as it does.

13. Is there an annual employee performance evaluation system in place for all employees or at least the non-union employees and senior staff?
13.1. **Finding:** There is a performance review system in place for all non-union personnel and it’s used to base merit pay increases. There is no annual performance review system in place for the union personnel.

13.1.1. **Recommendation:** Continue with the best practice of performance evaluations of non-union personnel for merit pay adjustments.

14. Does the Town Administrator conduct staff meetings on a regular basis?

14.1. **Finding:** The Town Administrator has an “open door” policy and meets with Department Heads as needed individually and not in Department Head staff meetings.

14.1.1. **Recommendation:** The Town Administrator may want to consider the benefits of regular Department Head staff meetings for information sharing and coordination purposes.

15. Do the Department Heads provide the Town Administrator with annual goals and objectives and follow up with monthly reports as to the progress to reach those goals?

15.1. **Finding:** The Department Heads provide the Town Administrator with monthly reports. It was reported that the Highway Department provides a preliminary report to show what is on the list to accomplish for the next month.

15.1.1. **Recommendation:** This is an important management practice which keeps the Town Administrator and Selectmen informed as to progress made or obstacles encountered during the month. It also reduces the “surprise” factor.

16. Do the Selectmen and Town Administrator develop an annual “strategic plan” which includes priorities, goals and accomplishments they want to achieve?

16.1. **Finding:** It appears that there is no “strategic plan” developed annually by the Selectmen and Town Administrator.

16.1.1. **Recommendation:** The Selectmen and Town Administrator would benefit from the time spent developing an annual strategic plan.
plan and establishing goals and objectives for themselves and the direction of the Town.

6.2 Highway Best Management Practices

1. Does the Highway Department have an annual 5 year Capital Improvement Plan to address immediate equipment, facility and infrastructure needs and a 10-15 year Capital Improvement Plan to identify and plan for long term needs?
   1.1. Finding: The Highway Department does not have a comprehensive CIP. They have an annual request list that gets reviewed by the Capital Improvement Planning Committee and items placed on the Annual Town Meeting Warrant if recommended and sufficient funds are available.
   1.1.1. Recommendation: The Highway Department development an annual Capital Improvement Plan that identifies the immediate annual and 5 year capital needs as well as a long range 10-15 year look ahead for replacements, upgrades and new capital assets for the Department and the Town.

2. Is there a 5 year vehicle replacement schedule in the CIP?
   2.1. Finding: It was reported that there is a replacement schedule for Highway vehicles, however, the replacement of the vehicles is behind schedule because of insufficient funds.
   2.1.1. Recommendation: The Highway Department continue keeping the vehicle replacement schedule. Include it in the CIP so that the policy makers are aware of the condition of the Town’s rolling stock and the required maintenance and repair costs to keep an old vehicle in service.

3. Is there a preventive maintenance program for the vehicles?
   3.1. Finding: It was reported to us that here is a preventive maintenance program in place for the Highway vehicles. The Department has a
Highway Mechanic and another position, Mechanic’s Helper or similar position, that assists as needed.

3.1.1. Recommendation: The Department continue with the vehicle preventive maintenance program as it is reported to be working for the benefit of the Department.

4. Is there a Highway Department work order management system to record work performed, schedule and track maintenance and repairs, identify costs of labor (man hours) and materials used? Does Highway track work performed for Cemetery, Recycling and Buildings and Grounds?

4.1. Findings: It was reported that the Highway Department has no formal work order reporting system to record work performed, schedule and track maintenance and repairs, identify labor costs and material used for each vehicle. The Highway does track the work performed at the Recycling Center and for Building and Grounds, but not for Cemetery.

4.1.1. Recommendation: The Highway Department begin using a basic work order tracking system. There are a variety of work order system available, from some that are simply paper based to others that are computer bases (computer maintenance management systems). This actual cost information per vehicle is important in justifying replacement. It will also be important to show the cost of labor and materials for work performed for other Departments.

5. Are work crews deployed with due consideration of the scale of the project and the assets required?

5.1. Finding: It was reported that work is assigned with consideration to the project scale and equipment needed to do the job. It was also reported that the Highway Department can’t keep up with the workload because they are shorthanded due to a number of vacancies.

5.1.1. Recommendation: The Department fill the vacancies as they come up to keep them fully staffed.
6. Is there a catch basin cleaning program?
   6.1. Finding: The Department has a culvert cleaning and maintenance program.
   6.1.1. Recommendation: Continue with this best practice.

7. Is there a bridge and culvert maintenance plan to prolong the life and insure the safety of those assets?
   7.1. Finding: The Department maintains the culverts along with the catch basins. It wasn’t clear if there were any bridges that the Town owned that required routine maintenance.
   7.1.1. Recommendation: Continue with this best practice.

8. Does the Department have an automated fuel dispensing system?
   8.1. Finding: The Highway Department has a key based gas monitoring system. It was reported that it works, but it’s old technology and in need of replacement.
   8.1.1. Recommendation: The Department should look into a replacement gas monitoring system that has more functionality.

9. Are citizen complaints recorded and addressed promptly? Are the complaints kept on file as useful information and justification for budget requests and capital improvements?
   9.1. Finding: Citizen complaints and requests are called into either the Town Administrator’s Office or the Highway Office. They are written down and the appropriate Highway staff person is contacted to address the request or compliant. It was reported the calls fall into four categories: trees, snow and ice, potholes and drainage. Information about the specific call isn’t kept in any formal fashion.
   9.1.1. Recommendation: The complaint and requests calls are coming into the right offices and being handed to the correct staff person. The Town would benefit from using a request or complaint tracking system. There are a number of them available, from the basic call in to a central number (like is being used now) or to using...
a smart phone to take a photo of the problem and sending it and a message to the Town.

10. Is bulk purchasing, interlocal purchasing with other communities and purchasing from the Commonwealth’s bid list utilized when appropriate?
   10.1. **Finding:** The Department is using these group purchasing methods when appropriate to procure: sand and salt, tires and vehicles.
   10.1.1. **Recommendation:** Continue with this purchasing practice when it is in the best interest of the Town.

11. Are job descriptions kept up to date and clearly define the duties and responsibilities of the position?
   11.1. **Finding:** The job descriptions for non-union positions appear to be kept up to date by the Personnel Board. The union job descriptions appear to be accurate as well. Some job descriptions have dates at the top of the first page. That is a good practice.
   11.1.1. **Recommendation:** The job descriptions need to be up to date by either the Personnel Board or thru the collective bargaining process with the unions. When turn-over occurs in non-union positions the job descriptions should be reviewed and updated as needed prior to posting/advertising the vacancy.

12. Does the staff have the necessary professional licenses and valid driver licenses and does management check to make sure?
   12.1. **Finding:** The Highway Department verifies that the personnel have the necessary licenses and they are valid.
   12.1.1. **Recommendation:** This practice needs to continue for the obvious liability reasons of operating machinery without the appropriate licenses.

13. Are compensation and classification plans reviewed every 5 years to insure the pay is competitive with the labor market?
13.1. **Finding**: It appears that the compensation and classification plan for non-union and union positions has not been studied for some time. It was reported that Nichols College students are currently reviewing the compensation for the clerical positions.

13.1.1. **Recommendation**: The Town Administrator and Personnel Board should undertake a compensation and classification study for the non-union positions to insure the compensation is competitive with the labor market and internal equity. The compensation of union positions should be studied as well, however it may require collective bargaining as part of the process.

14. Are street openings coordinated between Highway Department and Water and Sewer Departments?

14.1. **Finding**: The Highway Department issues street opening permits for all private contractors except the gas company. It was reported that the Water and Sewer Department undertakes its work in public ways under a “universal permit” and this has the potential to create a conflict between Departments. It understood that a water or sewer emergency is not scheduled work.

14.1.1. **Recommendation**: There appears to be room to improve the street opening permit practice. The Water and Sewer Department needs to keep the Highway Department informed as to their work. Water and Sewer needs to obtain a street opening permit for all scheduled work so the Highway Department knows what is taking place in the public way and has a record of it. In addition, the gas company should be required to have a street opening permit for all their work. If not in place already, the Selectmen need to adopt a Street Opening Policy.

15. Does Highway Department personnel participate in the *Bay State Roads* program to continuously improve public works operating practices thru training and educational programs?

15.1. **Finding**: The Highway Department does not participate in the Commonwealth’s *Bay State Roads* program.
15.1.1. **Recommendation:** The Department should take advantage of the training and educational opportunities available thru the *Bay State Roads* program to enhance the productivity and efficiency of the staff.

16. Does the Highway Department utilize a pavement management program and a roadway condition index to establish a maintenance plan?

16.1. **Finding:** The Department does not have a formal pavement management program. The staff, because of their experience, has an annual list of streets that they grade as to the need for repair, maintenance, drainage and resurfacing. The list is addressed annually with Chapter 90 funds.

16.1.1. **Recommendation:** The Department and the Town would benefit from a pavement management system that ties into the annual and 5 year CIP for budget planning purposes. The staff would also benefit from training in the roadway condition index to rate the actual condition of the streets in Town.

17. Does Highway management use contractors for snow removal, street sweeping, line striping, paving, etc.?

17.1. **Finding:** The Highway Department hires contractors as needed for snow plowing, line striping and paving. They do street sweeping in house.

17.1.1. **Recommendation:** The Department uses private contractors for work or projects they can’t handle with existing manpower and equipment. This is typical for municipalities this size. Management should look at the cost/benefit of out sourcing street sweeping to free up manpower for needed projects.

18. Does the Town own the street lights and is there a program to convert the fixtures to LED?
18.1. **Finding**: The Town purchased the street lights from National Grid. The light fixtures are being converted to LED. This is another best practice for the Town.

18.1.1. **Recommendation**: Continue with the conversion to LED street light fixtures.

### 6.3 Water and Sewer Best Management Practices

1. Does the Water and Sewer Department has an annual 5 year Capital Improvement Plan to address immediate equipment, facility and infrastructure needs and a 10-15 year Capital Improvement Plan to identify and plan for long term needs?

1.1. **Finding**: It was reported that the Water and Sewer Department has a 5 year capital plan for the water and sewer systems. It is funded annually in the Town Budget from the Enterprise Fund to address the replacement of old transit water mains and to maintain the sewer pumping stations and conduct an I & I study due to the age and condition of the sewer mains and the inflow and infiltration problem.

1.1.1. **Recommendation**: The Water and Sewer Department develop an annual Capital Improvement Plan that identifies the immediate and 5 year capital needs and a 10 to 15 year look ahead for the replacement, improvement and expansion of the water and sewer system. This would also include the trucks and related equipment needed to operate the system.

2. Are the Water and Sewer rates established to recover the full cost of providing the service, including both direct and indirect costs?

2.1. **Finding**: A review of the Water and Sewer Department financials show that the water and sewer rates cover the operational costs of the Department and result in Certified Free Cash, also known as retained earnings, every year. In 2000, the Department of Revenue, Division of Local Services conducted a cost analysis of the water and sewer operations. This report “provided the town officials with a methodology for calculation indirect costs and to provide management information to be used during the rate-
setting process”. The results of this report have been used as the basis for calculating indirect and direct cost. It was reported that the indirect cost calculation methodology in the report has been updated or adjusted annually in an attempt to keep it current with actual indirect and direct costs.

2.1.1. Recommendation: In light of the fact that the DOR, DLS study was completed nearly 19 years ago, it is recommended that the Water and Sewer Commissioners and Town Administrator have another water and sewer costing analysis performed to clearly identify the costs attributable the respective operations and to make sure the indirect costs are captured accurately.

3. Are Water and Sewer services funded by an Enterprise Fund?
   3.1. Finding: The Water and Sewer Departments have operated based on funding thru an Enterprise Fund for a number of years. This is a best practice for water and sewer operations.
   3.1.1. Recommendation: Continue with the Enterprise Funds.

4. Are water users metered for water consumption and water meters replaced with remote read meters?
   4.1. Finding: The Department has a program of converting the existing water and sewer meters to remote radio read meters. This is a best practice for water and sewer operations.
   4.1.1. Recommendation: Continue converting the water and sewer meters to the new remote radio read meters.

5. Is there a Water and Sewer Department work order management system to record work performed, track maintenance and repairs, identify costs of labor (man hours) and materials used?
   5.1. Finding: It was reported that the work is tracked by account number in the Water and Sewer Department Office in Town Hall and the information kept in an information system.
5.1.1. **Recommendation:** The Department continue with this practice of keeping up to date information on each account.

6. **Is bulk purchasing, interlocal purchasing with other communities and purchasing from the Commonwealth’s bid list utilized when appropriate?**

6.1. **Finding:** The Department uses the State’s bid list to purchase equipment when appropriate. It was reported that a new truck for the Sewer Department was purchased off the State’s bid list. The used truck was handed down to another Department.

6.1.1. **Recommendation:** The Department continue with this practice when and if appropriate.

7. **Are job descriptions are up to date and clearly define the duties and responsibilities of the position?**

7.1. **Finding:** The job descriptions for non-union personnel appear to be kept up to date by the Personnel Board. The union job descriptions also appear to be accurate as well. Some job descriptions have dates at the top of the first page indicating when they were last changed.

7.1.1. **Recommendation:** The job descriptions need to up dated regularly by either the Personnel Board or thru the union collective bargaining process. When turn over occurs in non-union positions the job descriptions need to be revised and updated as necessary prior to posting or advertising the position. The work world is changing annually due to Federal and State laws and the job descriptions need to be in compliance.

8. **Are compensation and classification plans reviewed every 5 years to insure the pay is competitive with the labor market?**

8.1. **Finding:** It appears that the compensation and classification plan for non-union and union positions has not been studied for some time. It was reported that Nichols College students are currently reviewing the compensation for the clerical positions.
8.1.1. **Recommendation**: The Town Administrator and Personnel Board undertake a compensation and classification study for the non-union positions to insure the compensation plan is competitive with the labor market and internal equity.

9. Does the staff have the necessary professional licenses and valid driver licenses and does management check to make sure?

9.1. **Finding**: The Water and Sewer Department personnel indicated that the staff have the necessary DEP and driver licenses for their respective positions and they are valid.

9.1.1. **Recommendation**: This practice needs to continue for the obvious public safety and liability reasons of operating a water and sewer system.

10. Is a supervisory control and data analysis, SCADA, system utilized for water and sewer infrastructure to insure assets are operating efficiently on a real time basis and for tracking operations, repairs, maintenance and replacement?

10.1. **Finding**: It was reported the Department has a basic analog SCADA system in place. They are replacing it with a new cellular communication system for water. The sewer system does not have a communication system in place.

10.1.1. **Recommendation**: The Department is using a best management practice to update the water SCADA system. Management would benefit from a basic SCADA system in the sewer operation so they can track the activity in the nine sewer pumping stations.

11. Are hydrants and valves exercised annually and repaired/replaced as needed? Are water mains are flushed annually?

11.1. **Finding**: It was reported that the Department flushes the water mains twice a year and cleans the gate boxes monthly. It wasn’t clear if the Water Department maintains the hydrants or if that is done by the Fire Department.
11.1.1. **Recommendation**: Continue with this best practice of water main flushing and gate box maintenance. The fire hydrants require yearly inspection and maintenance. Either the Water Department or Fire Department needs to have responsibility for the keeping the hydrants in good working order.

12. Are water and sewer assets inventoried in an asset management system and data kept to assess its condition for preventive maintenance and capital planning purposes?

12.1. **Finding**: The Town Treasurer provided an inventory list of the rolling stock for all departments which shows the type of vehicle, year and mileage. The Department provided a vehicle list with basis information about each item and water and sewer maps of the Town showing the pumping stations and the size of the mains. It was reported that the Department has an asset list for the pumping stations.

12.1.1. **Recommendation**: The next step would be for the Department to develop an asset management system for all assets to be used for routine maintenance tracking and capital planning and replacement purposes.

13. Is there a documented preventive maintenance program in place?

13.1. **Finding**: It was reported that the Department has a preventive maintenance for the vehicles, emergency generators and the pumping stations.

13.1.1. **Recommendation**: Continue with this best practice and then record the work performed in the asset management system.

14. Does the Department have any water or sewer violations as cited by DEP or EPA?

14.1. **Finding**: The Department has no DEP or EPA violations. However, they are in Phase I of an I and I study with their consulting engineers, Tighe and Bond.
14.1.1. **Recommendation:** It was reported that this important I and I study is just beginning and it is one of the best management practices for a Sewer Department.

15. Is there an ongoing inflow and infiltration (I and I) program to reduce inflow and infiltration into the sewer system?
   15.1. **Finding:** Yes, the Department is working with Tighe and Bond in Phase One of an I and I study.
   15.1.1. **Recommendation:** The Department is going in the right direction by engaging an engineering firm to conduct the I and I study of the sewer system.

16. Does the Water Department inspect the commercial and industrial backflow devices and collect a fee for this service?
   16.1. **Finding:** The Department out sources the inspection of commercial and industrial back flow devices.
   16.1.1. **Recommendation:** It is a best practice to have commercial and industrial inflow devices inspected as required by DEP, twice a year for reduced pressure zone devices and annually for double check devices.

17. Is the staff cross trained for both water and sewer repairs and maintenance?
   17.1. **Finding:** It was reported that there is some cross training going on depending on the whether a DEP Treatment License or a Distribution License is required. If the work does not require a D or T License, then yes the staff is cross trained.
   17.1.1. **Recommendation:** The Department is following a best practice to have the staff cross trained and work as assigned if the licenses allow it.

18. Are the sewer lift stations inspected weekly and emergency generators exercised monthly?
18.1. **Finding:** The Department inspects the water and sewer pumping stations daily, water tanks monthly and the emergency generators at least once a month.

18.1.1. **Recommendation:** The Department continue with the schedule of inspection.

19. Are the sewer mains inspected via video equipment?

19.1. **Finding:** The Department inspects the sewer mains with a video camera. A new camera was purchased for this purpose.

19.1.1. **Recommendation:** This is an important practice especially as part of an inflow and infiltration study as it will show where the greatest amount of groundwater is getting into the system.

20. Are street opening permits required for all work performed in a public way, and if so, who issues them?

20.1. **Finding:** The Highway Department issues street opening permits. Water and Sewer does not obtain street opening permits for each and every job. It was reported they operate under a “universal permit” from the Highway Department.

20.1.1. **Recommendation:** There appears to be room for improvement here. The Water and Sewer Department needs to keep the Highway Department informed as to their scheduled work in public ways. Emergency or after hours work can be dealt with by informing Highway the next business day. The Highway Department need to know about all work done in a public street so they can keep a record of it and hold the responsible party accountable for maintaining a safe patch and then for final paving.
6.4 Sample Job Descriptions

These descriptions are samples only, but represent the roles needed in the new organization.

**DIRECTOR OF PUBLIC WORKS**

**Position Purpose:**
High visible, managerial and technical position, which involves supervisory, administrative and professional tasks directing the activity of the Department of Public Works. Responsible for the operation, planning, organization, and administration of all functions of the Public Works Department; performs all other related duties.

**Supervision:**
*Supervision Scope:* Performs complex and highly responsible duties requiring a high level of initiative and independent judgment in the execution of the department's programs and services, and in the direction of personnel; works independently in formulating decisions regarding department policies, procedures, operations and plans.

*Supervision Received:* Works under the policy direction of the Board of Selectmen and Water and Sewer Commissioners and the administrative direction of the Town Administrator establishing short- and long-range plans and objectives, and assuming responsibility for department results. Works according to established professional department and Town policies and procedures, standards, special directives, instructions and intent.

*Supervision Given:* Supervises all department employees, assists in the hiring process, develops job direction, assigns tasks and instructions, monitors personnel performance evaluations, and counsels and disciplines staff consistent with Town policies directly and through subordinates.

**Job Environment:**
For work outdoors, the Director is subject to variable weather conditions and the hazards associated with construction sites and public works projects. Administrative work is performed under typical office conditions. May be required to work on weekends and may be contacted at home at any time to respond to important situations and emergencies.

Regularly operates light trucks/automobiles, computer, telephones, and all standard office machines.

Makes frequent contacts with the general public, other Town departments/boards/committees, regional and state governmental agencies, vendors, contractors, developers, and real estate brokers. Contacts require a high level of persuasiveness and resourcefulness to influence the behavior of others. Contacts are in person, in writing, and by telephone and require discussing complex managerial, administrative, and technical matters.
Has access to all department-oriented confidential information including personnel records and bid proposals.

Errors in judgment and administration may have far-reaching effects on the Town’s ability to deliver services and may result in lower standards of service, sub-standard construction and inadequate maintenance programs with consequent danger to public safety. Errors in supervisory and financial decisions could have legal and financial repercussions.

**Essential Functions:**

(\textit{The essential functions or duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.})

Directs the development of department objectives, plans, and goals. Conceives of and recommends a range of programs/services designed to support objectives and strategic planning initiatives and to enhance the provision of quality programs and services.

Assigns, schedules, and supervises crews and equipment for all projects involving the design, construction, maintenance and repair of public ways, drainage structures, and designated Town-owned properties in conformance with sound engineering practices.

Directs the operations of all divisions. Sets divisional objectives with appropriate manager.

Responsibilities include the direction of the division supervisors and the management of labor employees plus contractors and seasonal help, as necessary, in all aspects of public works, maintenance, and construction activities required to supply water and sewer, roads and sidewalks, building maintenance, cemeteries, parks, snow removal and trees. Responsible for departmental labor relations, training, staffing, and evaluations of employees. Responsible for oversight of safe working conditions and observance of state and federal safety regulations.

Responsible for conformance to MA Public Construction Procurement Laws.

Ensures departmental compliance with all local, state, and federal laws and regulations. Serves as liaison to various state agencies, such as the Mass. Highway Department and the Department of Environmental Protection on various construction and environmental projects.

Prepares and manages the capital budget for department. Ensures the proper maintenance, construction, and repair of department facilities and infrastructure. Makes recommendations to the Town Manager as to capital equipment and construction needs of the department.

Evaluates public works needs and formulates short- and long-range plans to meet needs in all areas of responsibility. Advises the Town Administrator and committees on technical aspects of public works programs and projects. Maintains strong and positive relations with other Town boards, departments, officials, and citizens.
Oversees bid awards and contract purchases. Drafts and manages construction contracts, works closely with contractors to assure the proper fulfillment of the contract. Oversees project management for the construction of projects to ensure contractor compliance with time and budget parameters.

Oversees all civil engineering operations implemented on an in-house or contractual basis required for the design and construction of departmental projects.

Prepares the annual departmental budget for submission to the Town Administrator. Oversees the monitoring of all department expenditures.

Prepares for Town Counsel engineering documents related to land-taking proceedings.

Oversees the procurement of department equipment and vehicles.

Manages/oversees large complex departmental projects.

Reviews monthly utility billing. Approves monthly utility bills and abatements.

Meets periodically with senior staff from other Town departments, with boards and committees, and with resident groups. Helps coordinate projects with other departments. Keeps Town management, boards, and committees informed on project status and other department topics.

Receives and resolves public complaints. Meets with public on any Department-related issue.

Performs other miscellaneous assignments as needed by the department. Performs similar or related work as required, directed or as situation dictates.

**Recommended Minimum Qualifications:**

**Education, Training and Experience:**
Bachelor’s degree; and five - ten years of progressively responsible public works operations management experience; or any equivalent combination of education, training and experience.

**Special Requirements:**
Possession of a valid motor vehicle operator’s license.

**Knowledge, Ability and Skill:**
*Knowledge:* Complete knowledge of the concepts, methods, techniques, and materials of public works management. Knowledge of the principles and practices of highway maintenance, parks and trees maintenance, cemetery construction and maintenance, and solid waste disposal including recycling. Extensive knowledge of the principles and practices of civil engineering. Thorough knowledge of local, state, and federal laws and regulations governing municipal infrastructure.
Ability: Ability to recognize Town-wide priorities and work cooperatively to support their accomplishment within accepted guidelines of engineering practice. Ability to plan, assign and supervise the work of groups of employees engaged in a variety of department construction and maintenance operations. Ability to prepare, present, and administer budgets and capital expenditure/projects. Ability to read, understand, and interpret technical documents; ability to prepare technical reports. Ability to communicate effectively in both written and oral form. Ability to work effectively under time constraints to meet deadlines. Ability to deal tactfully and courteously with citizen groups and/or citizen complaints. Must be able to accomplish goals through negotiation and problem solving.

Skill: Moderate level skill in Microsoft Suite including Word, Excel, PowerPoint, and Outlook. Moderate skill with budgeting software, SCADA utility software, GIS work orders applications, Payroll software and Adobe PDF.

Physical Requirements:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Employee is regularly required to walk, stand, sit, talk, and hear; uses hands to finger, handle, feel or operate objects, tools, or controls, and reach with hands and arms as in picking up paper, files, and other common office objects. Must be able to traverse uneven terrain and access all areas of a construction site. May lift and/or move objects weighing up to 75 pounds such as books, equipment, supplies, etc. Vision and hearing at or correctable to normal ranges. Communicates verbally and in writing. Physical ability to operate a motor vehicle.

(This job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.)
GENERAL FOREMAN - HIGHWAY

Position Purpose:
The purpose of this position is to perform supervisory and technical construction work on all highways and roadways for the Town of Dudley. This position provides supervision of projects and day to day duties for work crews. Performs all other work as required.

Supervision:
Supervision Scope: Performs varied duties of a routine to complex nature following acceptable standards of quality and performance. Duties often require the exercise of judgment in operating and maintaining a variety of public works equipment and in applying technical expertise to a particular situation.

Supervision Received: Works under the general supervision of the DPW Director.

Supervision Given: Supervises a team of laborers and unit staff.

Job Environment:
Work is performed in highway conditions, with frequent exposure to exhaust fumes, chemicals, oil, dust and other airborne particles; work is also performed outdoors at which time the employee may be exposed to weather extremes of hot and cold temperatures and inclement weather. The employee is required to traverse uneven terrain and is subject to the hazards associated with working around heavy equipment. Work environment is loud to very loud.

Operates light trucks, heavy equipment, hand/power/pneumatic tools, computer, fleet maintenance management database, and telephones.(impact wrench, chain saw, torch, welder, tamper, wheel dolly, mowers, vehicle lift, front-end loader, backhoe, road sweeper, catch basin cleaner, bull dozer, dump trucks, sanders, brush chipper, police vehicles and fire apparatus)

Interacts frequently with other vendors and town departments. Communication is generally in person and by telephone and involves an information exchange dialogue. Employee is required to work beyond normal business hours in response to emergency situations.

Errors in judgment may impose undue and substantial expense recovering from errors, result in delays or loss of service, cause damage to buildings and/or equipment, injury to others and legal and/or financial ramifications.

Essential Functions:
(The essential functions or duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.)

Responds to residential issues in a timely manner. Meet with residents and contractors as needed. Evaluates and repairs infrastructure deficiencies.
Daily, direct supervision of work crews.

Obtaining contractors for snow removal, supervising and route distribution.

Assisting other town departments.

Repairing, light maintenance of equipment.

Reviewing plans; make recommendations.

Respond and evaluate all emergency weather conditions dispatch work force as needed.

Retrieve phone messages in office and support accordingly, assist with payroll, bills, and purchase orders.

Maintain fuel depot and employees in system Data entry, key encoding.

Order materials for road maintenance.

Schedule seasonal equipment for repair and maintenance.

Performs similar or related work as required, directed or as situation dictates.

**Recommended Minimum Qualifications:**

**Education, Training and Experience:**
Associates Degree required; (5+) five years of related work experience in a supervisory position with experience in the repair and maintenance of highways and roadways; or any equivalent combination of education and experience.

**Special Requirements:**
Possession of a CDL License with airbrake endorsement

**Knowledge, Ability and Skill:**
Knowledge: Working knowledge of the occupational hazards and safety precautions of the trade. Must have knowledge of town drainage system and outfalls. Must be able to comprehend brief instruction to carry out complex situations related to street maintenance and department policies. Must be educated in snow and ice removal and acquire all materials available for snow and ice treatments. Maintain fuel depot records, data entry, key encoding, department fuel usage, records, ordering gas and diesel. Working knowledge of heavy and special equipment operation and mechanics. Working knowledge of construction, maintenance and repair activities.

Ability: Ability to diagnose problems in and repair motor vehicles and equipment. Ability to use standard and special motor mechanic’s tools. Ability to perform welding and brazing operations. Ability to follow proper methods, procedures and safety precautions.
Skill: Position requires some data entry, word processing and spreadsheet design, capable of internet access, mainly for parts lookup and accessing information and purchases of parts and equipment. Skill in operating above mentioned equipment. Skill utilizing basic fleet maintenance systems.

Physical Requirements:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Moderate to heavy physical effort is often required to perform functions which involves frequent lifting of up to 75 pounds and occasionally lifting more than 100 pounds. Employee is required to drive heavy equipment for long periods of time during all types of weather conditions. While performing the functions of this job, the employee is required to stand, walk, talk, sit and hear for extended periods. Regularly required to use hands to finger, handle, feel objects, tools or controls; reaches with hands and arms, crawls and climbs. Vision and hearing must be at or correctable to normal ranges. Physical ability to operate heavy equipment.

(This job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.)
GENERAL FOREMAN - WATER/SEWER

**Position Purpose:**
The purpose of this position is to assist the Water and Sewer Commissioners and the Director of Public Works in carrying out all of the water/sewer activities assigned to the Public Works Department; all other related work as required.

**Supervision:**
*Scope and Judgment:* Performs a variety of supervisory and administrative duties, which require the independent exercise of judgment and initiative.

*Supervision Received:* Works under the general supervision of the Director of Public Works. Supervision is received based upon the nature of duty; general suggestions and/or special assignments are common basis for interaction.

*Supervision Given:* Has authority to supervise and manage various full-time maintenance workers and equipment operators. Supervises contractors as needed.

**Job Environment:**
Work is occasionally performed under normal office conditions, but more frequently out in the field under seasonal outdoor weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet, cold, humid conditions and vibration as well as other hazards associated with construction sites and public works projects. Noise is generally loud in level.

Regularly operates telephone, light trucks, computer, printer, hand tools, leak detection equipment, and standard office machines as needed.

Interacts frequently with contractors, suppliers, sales representatives and other municipal personnel. Communication is generally in person and by telephone.

Has access to all confidential division-related personnel information, which requires the application of appropriate judgment, discretion and professional protocols.

Errors could result in personal injury or loss, confusion, damage to buildings/equipment, delays or loss of service, adverse public relations, legal ramifications and financial loss.
Essential Functions:
(The essential functions or duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.)

Responsible for the maintenance, supervision, and operation of the Water/Sewer/Drain operations in an organized and professional manner; assures through planning and day to day operations that all public works facilities are operational, safe, well-maintained, and repaired as required; determines necessary or required repairs or maintenance.

Assists the Director of Public Works in planning and scheduling all public works activities such as storm/sewer drains, inspection of manholes, water distribution and supply, and snow and ice removal; maintains efficient operations, costs, workmanship and public safety/health.

Assists the Director in the monitoring and annual review of budgetary issues and preparation. Recommends the procurement of new departmental motor and mechanical equipment. Maintains all records, reports, clerical activities, licenses, certificates and related record keeping.

Manages the use of public works contractors and oversees their performance and adherence to contract terms and timing of project completion. Recommends staffing needs and assures proper training and development for all staff members; assigns equipment and workload schedule; ensures all equipment operators maintain proper current licenses.

Assures through planning and day-to-day operations that all specified Public Works facilities are operational, well maintained, and serviced and repaired as required.

Coordinates and cooperates with all other town agencies as required by the Division.

Keeps up-dated on new and improved materials and equipment related to public works needs.

Assures the proper licensing of all equipment operators.

Oversees the maintenance and repair of town water and sewer facilities.

Administers the complete and timely completion of all records, reports, general clerical activities, licenses, certificates and related record keeping as assigned by the Director.

Assumes availability for 24 hour by 7 day per week coverage for emergency situations such as water break and sewerage emergencies.

Performs similar or related work as required.
**Recommended Minimum Qualifications:**

**Education, Training and Experience:**
Associates Degree required; and at least five years of progressively responsible experience in the operation and maintenance of town water and sewer facilities, including three years of supervisory experience; or any equivalent combination of education, training and experience.

**Special Requirements:**
Possession of a valid motor vehicle operator's license
Water Distribution License – Grade 2
Water Treatment License – Grade 1

**Knowledge, Ability and Skill:**
*Knowledge:* Thorough knowledge of road construction, plumbing, and water operations systems, sewer and drain infrastructures and equipment. Considerable knowledge of the laws and ordinances affecting water distribution operations.

*Ability:* Ability to determine potential problem areas and coordinate work crews as required. Ability to plan, organize, assign, lead, and manage the work of groups of employees engaged in a variety of public works construction and maintenance operations. Ability to operate and maintain various equipment used in water distribution operations and repair.

*Skill:* Skill in operation of the listed tools and equipment.

**Physical Requirements:**
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. Frequently required to stand, talk or hear. Occasionally required to walk; sit; climb or balance; stoop, kneel, crouch, or crawl; and smell. Frequently lifts and/or moves up to 25 pounds and occasionally lifts and/or moves up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception, and the ability to adjust focus.

(This job description does not constitute an employment agreement between the employer and employee, and is subject to change by the employer as the needs of the employer and requirements of the job change.)

6.5 **Town of Dudley, Long-Term Debt Schedule**

The following pages contain the Town of Dudley’s long-term debt schedule.
## TOWN OF DUDLEY, MA

### INSIDE

<table>
<thead>
<tr>
<th>Project</th>
<th>Principal</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Remodel</td>
<td>Principal</td>
<td>285,000.00</td>
<td>285,000.00</td>
<td>285,000.00</td>
<td>285,000.00</td>
<td>285,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>58,567.50</td>
<td>45,885.00</td>
<td>32,917.50</td>
<td>19,771.88</td>
<td>9,590.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Remodel</td>
<td>Principal</td>
<td>95,000.00</td>
<td>95,000.00</td>
<td>95,000.00</td>
<td>95,000.00</td>
<td>95,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>19,296.87</td>
<td>15,318.75</td>
<td>11,162.50</td>
<td>6,768.75</td>
<td>2,256.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Station</td>
<td>Principal</td>
<td>325,000.00</td>
<td>320,000.00</td>
<td>320,000.00</td>
<td>320,000.00</td>
<td>320,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>220,200.00</td>
<td>207,200.00</td>
<td>194,400.00</td>
<td>181,600.00</td>
<td>168,800.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Enterprise Funds:

<table>
<thead>
<tr>
<th>Project</th>
<th>Principal</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer</td>
<td>Principal</td>
<td>60,000.00</td>
<td>60,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>6,720.00</td>
<td>3,360.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Mains</td>
<td>Principal</td>
<td>85,000.00</td>
<td>85,000.00</td>
<td>85,000.00</td>
<td>85,000.00</td>
<td>85,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>7,650.00</td>
<td>5,950.00</td>
<td>4,250.00</td>
<td>2,550.00</td>
<td>850.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Mains</td>
<td>Principal</td>
<td>45,000.00</td>
<td>45,000.00</td>
<td>45,000.00</td>
<td>45,000.00</td>
<td>45,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>4,050.00</td>
<td>3,150.00</td>
<td>2,250.00</td>
<td>1,350.00</td>
<td>450.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water DW-99-14</td>
<td>Principal</td>
<td>45,000.00</td>
<td>45,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>3,353.61</td>
<td>1,237.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Water:

<table>
<thead>
<tr>
<th>Project</th>
<th>Principal</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interest</td>
<td>15,053.61</td>
<td>10,337.50</td>
<td>6,500.00</td>
<td>3,900.00</td>
<td>1,300.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>190,053.61</td>
<td>185,337.50</td>
<td>136,500.00</td>
<td>133,900.00</td>
<td>131,300.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
**Bond Anticipation Notes:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Lights dtd 7-24-18</td>
<td>200,000.00</td>
<td>5-31-19</td>
</tr>
<tr>
<td>New Money</td>
<td>4,093.33</td>
<td></td>
</tr>
<tr>
<td>Municipal Complex dtd 7-24-18</td>
<td>450,000.00</td>
<td>5-31-19</td>
</tr>
<tr>
<td>New Money</td>
<td>9,210.00</td>
<td></td>
</tr>
<tr>
<td>Police Cruisers dtd 6-1-18</td>
<td>45,000.00</td>
<td>5-31-19</td>
</tr>
<tr>
<td>New Money</td>
<td>900.00</td>
<td></td>
</tr>
<tr>
<td>Ambulance dtd 6-1-18</td>
<td>165,000.00</td>
<td>5-31-19</td>
</tr>
<tr>
<td>Renewal</td>
<td>3,300.00</td>
<td></td>
</tr>
<tr>
<td>Asphalt Paver dtd 6-1-18</td>
<td>60,000.00</td>
<td>5-31-19</td>
</tr>
<tr>
<td>Renewal</td>
<td>1,200.00</td>
<td></td>
</tr>
</tbody>
</table>