FEEL THE ZEEL

City of Zeeland

City Services & Infrastructure Staffing Evaluation

Table of Contents

Page:

Introduction

The City of Zeeland partnered with the Ottawa County Planning and Performance Improvement Department (PPID) to evaluate staffing levels within the City Services & Infrastructure departments—also known as the Facilities Maintenance Department and the Street/Parks/Cemetery/Motor Pool Department. These departments are responsible for completing an array of jobs including building maintenance, building custodial work, street maintenance, bike path maintenance, storm sewer system maintenance, vehicle service and maintenance, parks maintenance, and cemetery maintenance.

The City proactively requested the evaluation in light of impending retirements by the supervisors of these two departments. In addition to the retirements, the City's downtown maintenance contract with a private company is set to expire in early 2021. The goal of this evaluation is to answer the following questions:

1. Can the two departments be merged into one department with a single supervisor? If yes, will additional staff be needed to complete some of the work that is currently completed by two supervisors?
2. Are the existing staffing levels in the two departments adequate to handle current workloads as well as projected workloads within the next five years?
3. Can the downtown maintenance contract be brought in-house? If yes, how many staff will be needed?

Methodology

The PPID completed this evaluation using data from three primary sources: City of Zeeland administration, interviews with staff members who work in the City Services & Infrastructure departments, and national and local benchmarking sources. An overview of the data obtained from each source is provided below.

City of Zeeland Administration

The City Manager and Assistant City Manager collaborated with the PPID throughout the evaluation process to provide data, insights, and feedback. They provided information about the existing downtown maintenance contract, including the annual hours to complete different tasks within the maintenance contract. They also provided job descriptions as well as a breakdown of annual hours by employee by work task. Finally, in order to determine adequate staffing levels, the City of Zeeland provided the following metrics at three points in time—as they currently exist, how they have changed over the last five years, and how the City sees them changing over the next five years:

- Buildings – square footage maintained and cleaned
- Streets – miles maintained
- Bike paths – miles maintained
- Vehicles – number serviced/maintained
- Parks – acres maintained
- Cemeteries – acres maintained, number of burial plots

Staff Interviews

The PPID developed interview questions using the evaluation questions, downtown maintenance contract information, job descriptions, information from national benchmarking sources (described on the next page), and survey questions developed as part of a 2013 Organizational Efficiency Analysis of the county's equalization department. The original plan was for the PPID to conduct in-person interviews with each staff member who works in the two departments. However, COVID-19 negated this option. As a result, the decision was made to complete the interviews electronically using the Zoom platform. At the start of each interview, staff members were informed about the PPID's confidentiality policy, told that the interview would be recorded for the purpose of allowing the PPID to transcribe the interview, and provided with an explanation of how interview data would be utilized.

Staff Interviews (continued)

The PPID conducted 16 individual staff interviews from May 5, 2020 through June 18, 2020. The City of Zeeland provided a confidential space and computer equipment for each staff member to use during the interview. Each interview was scheduled for an hour-long time slot, with interviews lasting between 17 and 65 minutes. Typically, supervisors and employees with longer tenure had more insights than part-time staff and newer employees. PPID transcribed each interview and used that information to conduct a thematic analysis. Themes mentioned by two or more staff members were summarized and included in this report.

Benchmarking Sources

Prior to conducting staff interviews, the PPID reviewed national benchmarking sources that are specific to the tasks completed by the City Services & Infrastructure departments. The benchmarking sources provided insight into factors that may influence workloads, such as cleanliness standards employed by custodians or the types of vehicles maintained by mechanics. These insights helped shape the interview questions. The national benchmarking sources also provided staffing to workload ratios to include in the benchmarking analysis.

Following the completion of staff interviews, the PPID devised a plan to collect benchmarking data from comparable cities. Comparable cities were identified using population, population density, and taxable value as metrics. The City of Zeeland also identified comparable cities to include in the analysis; these are identified with an asterisk in the table below. The PPID reached out to eight comparable cities with the goal of obtaining comparison data from five. Benchmarking data was obtained from the five comparable cities included in the table below.

City	Population (2019)	Population Per Square Mile	Taxable Value (2019)
Zeeland	5,536	1,839	$475,286,308
Allegan*	5,020	1,299	$129,326,930
Grand Haven*	11,047	1,804	$603,614,565
Hudsonville*	7,348	1,720	$237,023,014
Marshall*	6,964	1,129	$210,555,591
St. Clair	5,262	1,790	$205,279,116

The PPID began the benchmark data collection process with a phone call to each city manager. The phone call provided an opportunity for introductions, an explanation of objectives, and a verbal agreement to participate in the data collection process. An email followed the phone call with instructions on how to access and complete a short survey, which was distributed through Qualtrics. The surveys were distributed to the city managers or department directors, depending on how each city wanted to proceed. Data from the surveys were analyzed in Excel. Clarifications and supplemental data were requested via email and phone calls.

Limitations

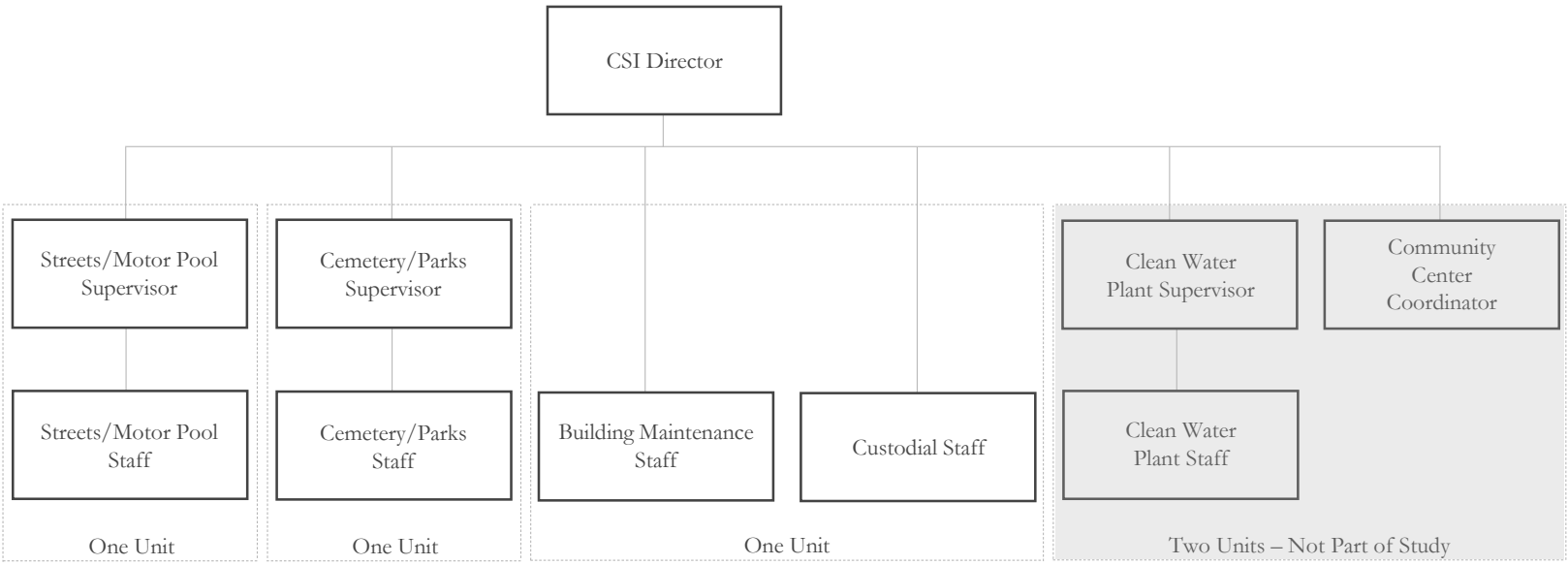
It is inherent that every evaluation will face limitations. Two primary limitations surfaced during this evaluation. The first involves the use of the Zoom platform for conducting staff interviews. During one staff interview, the connection was completely lost, and the interview had to be rescheduled for another day. In other interviews, the sound quality was poor, which resulted in some difficulties when it came to transcribing the interviews. The second involves the use of benchmarking, in general. The PPID had access to much more data for Zeeland City than the comparable cities. In addition, many factors play a role in determining suitable staffing levels for departments that cannot be controlled for in a benchmarking analysis. These factors include the experience and skill level of existing staff members, building and facility characteristics such as age and amount of use, fiscal constraints such as the annual capital improvement budget, the amount and type of work contracted out, and routine and preventative maintenance standards. These limitations do not affect the validity of the evaluation findings.

Zeeland City Department Overviews

This section of the report includes an overview of how the City Services & Infrastructure departments were structured historically, how they are currently structured, as well as an assessment of annual hours spent on major departmental work tasks.

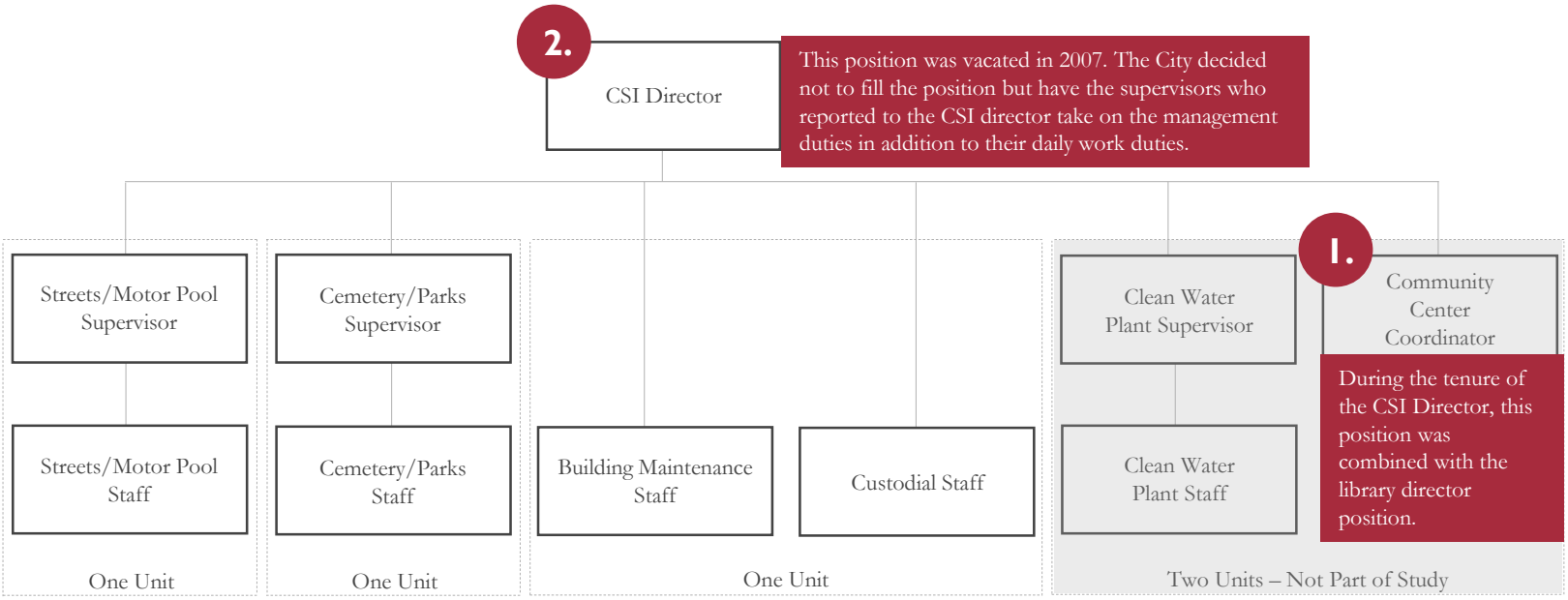
Historical Department Structure

The departments included in this study, as well as a couple of departments that are not, were once under the supervision of a single City Services & Infrastructure Director (CSI Director), a position the City created in 2002. According to City Administration, the CSI Director oversaw the functions that are illustrated in the organizational chart below, with the five units operating as distinct and separate from each other while reporting to a single director.

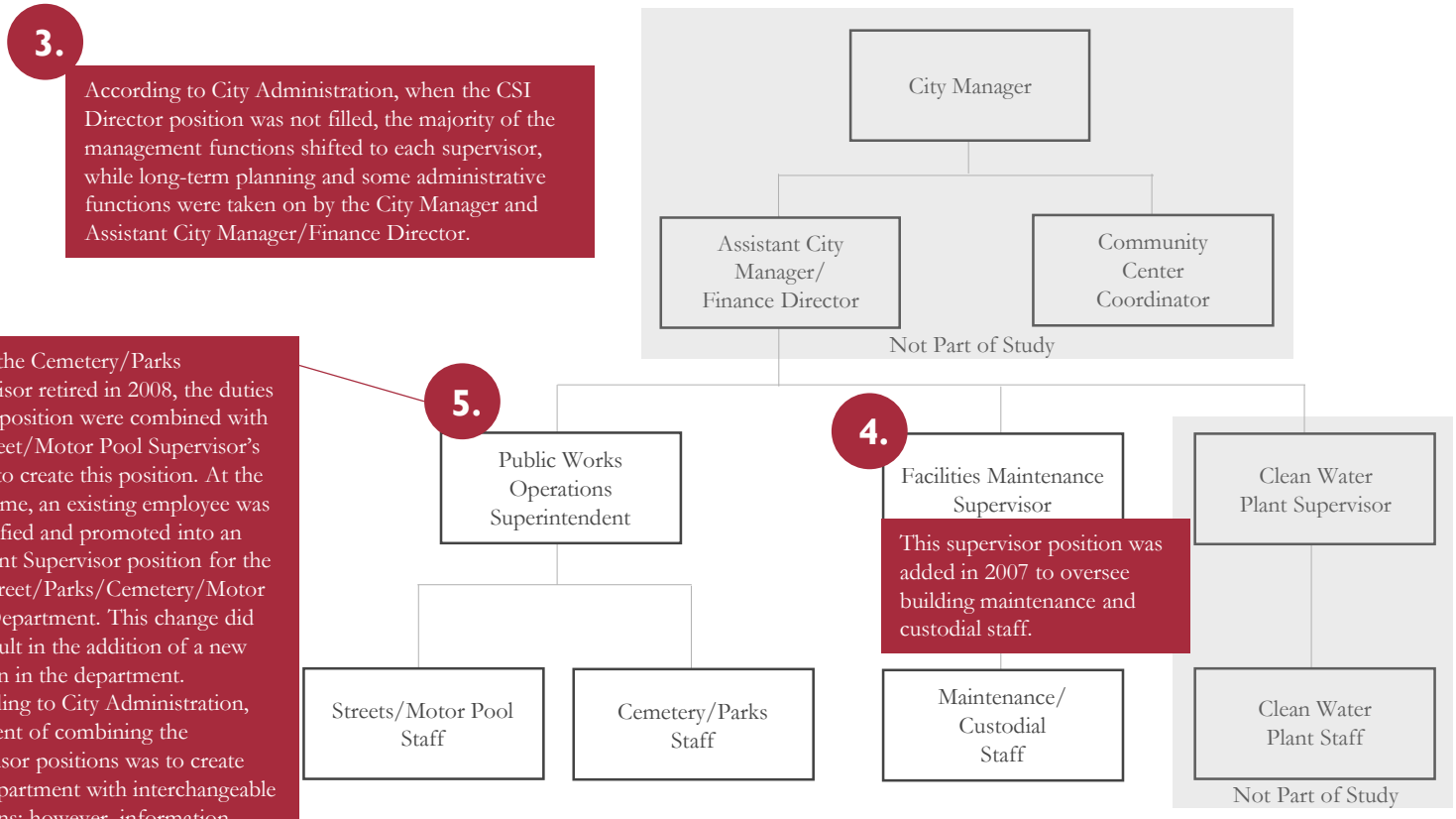


City Services & Infrastructure Staffing Evaluation

The major changes to the organizational structure of the City Services & Infrastructure departments from 2002 until today are illustrated in the organizational charts below. The changes are numbered chronologically, with an explanation of each change provided in the red boxes.



Additional changes occurred in late 2007 and 2008 that led to the organizational structures that closely reflect those in place at the City today, as illustrated below.

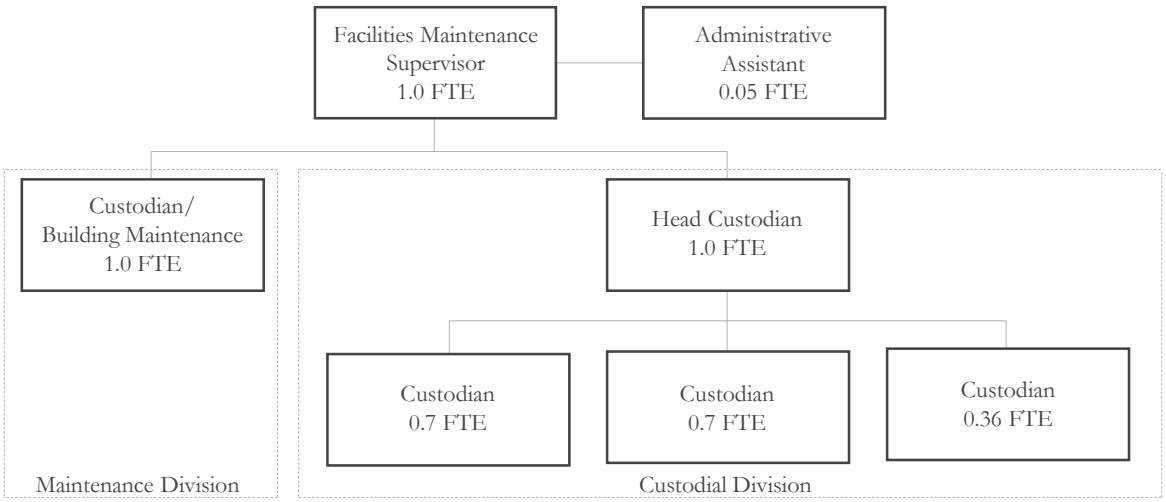


Facilities Maintenance Department – Current Structure

The Facilities Maintenance Department is the City's internal resource for maintenance, capital improvement and cleaning of City Hall, Roosevelt Fire Station, the Police/Fire/Rescue Building, the Howard Miller Library and Community Center, the Street Maintenance Facility, the Cemetery Building, the Clean Water Facility, and the Splash Pad. The goal of the department is to ensure the safety, comfort and attractiveness of city buildings.

Department Structure

The department consists of approximately 3.0 full-time and 1.76 FTE part-time positions as illustrated in the organizational chart below. The Administrative Assistant, a full-time position at the City, splits time between this department, the Street/Parks/Cemetery/Motor Pool Department, the Clean Water Department, and the City Manager's Office.



During staff interviews, the PPID learned that the department is organized into three primary functional divisions: Management; Maintenance Division; and Custodial Division.

The management division works during daytime business hours and is responsible for overseeing the internal services budget, capital improvement, building upgrades and major maintenance projects. These tasks involve writing project specifications, obtaining bids from contractors, ensuring that all work is done correctly, making sure that all buildings are following federal and state laws and regulations, and staff supervision. This division is also responsible for completing many of the same tasks as the maintenance division.

The maintenance division works during daytime business hours and is responsible for setting up furniture in five activity rooms for events held at the Howard Miller Community Center. Set-ups can range from small meetings to large gatherings. Maintenance and repair of HVAC, electrical, plumbing, mechanical equipment, structural, fire protection and security are also responsibilities of this division in combination with the management division.

The custodial division works during the evening hours and is responsible for cleaning all facilities. This can involve everything from dusting surfaces to refinishing floors and carpet cleaning. This division also assists with setting up for events and meetings if it cannot be completed by the daytime crew. The Head Custodian acts as a team lead for the part-time custodians. A theme that emerged during staff interviews is that more supervisory duties could be delegated to the Head Custodian.

The staffing levels in this department remain the same as they were in 2015.

Notes:
The Administrative Assistant estimates that she provides 0.05 FTE of time to the Facilities Maintenance Department.

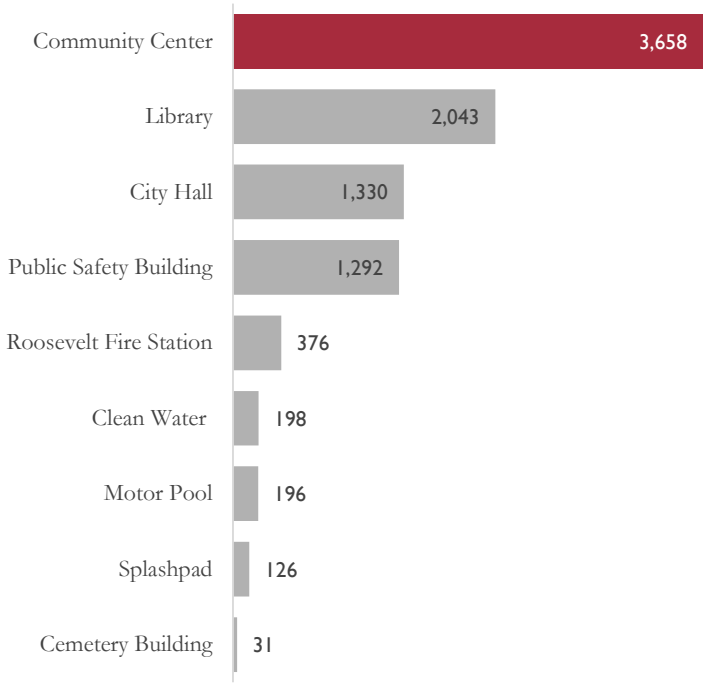
Department Structure (continued)

In addition to the theme mentioned on the previous page, a couple other themes emerged during staff interviews. One theme is that the work of the custodial division is very structured, with staff having a daily schedule of buildings to clean and time allotted to clean each one. The management and maintenance divisions' activities are not as structured. A second theme is that vacuuming the floors can be done less frequently, with staff suggesting performing the task a couple times per week instead of every day.

Department Hours by Building (Fiscal Year 2019)

The Facilities Maintenance Department maintains and cleans 105,000 square feet of City buildings. The annual hours invested to maintain, clean, and set-up for events in these buildings in Fiscal Year 2019 was 9,250. As shown in the graph to the right, the largest amount of staff time is spent in the Community Center—with nearly 40% of staff time dedicated to this building.

According to City Administration and confirmed during interviews with staff members, nearly 30% of the hours in the community center are dedicated to event set-up and tear down. City Administration estimates that approximately 0.5 FTE or 1,040 hours per year are dedicated to this activity.



Department Hours for Benchmarking

For the purpose of benchmarking the City's Facilities Maintenance Department against local cities, the 4.76 FTE in the department were split into three categories as shown in the table to the right. Since staff in the City's Facilities Maintenance Department report hours worked by building rather than by task, information from staff interviews and City Administration was used to delineate staff hours between management, maintenance, and custodial work.

Category	FTE
Total	4.76
Management	0.50
Maintenance	1.50
Custodial	2.76

Notes:

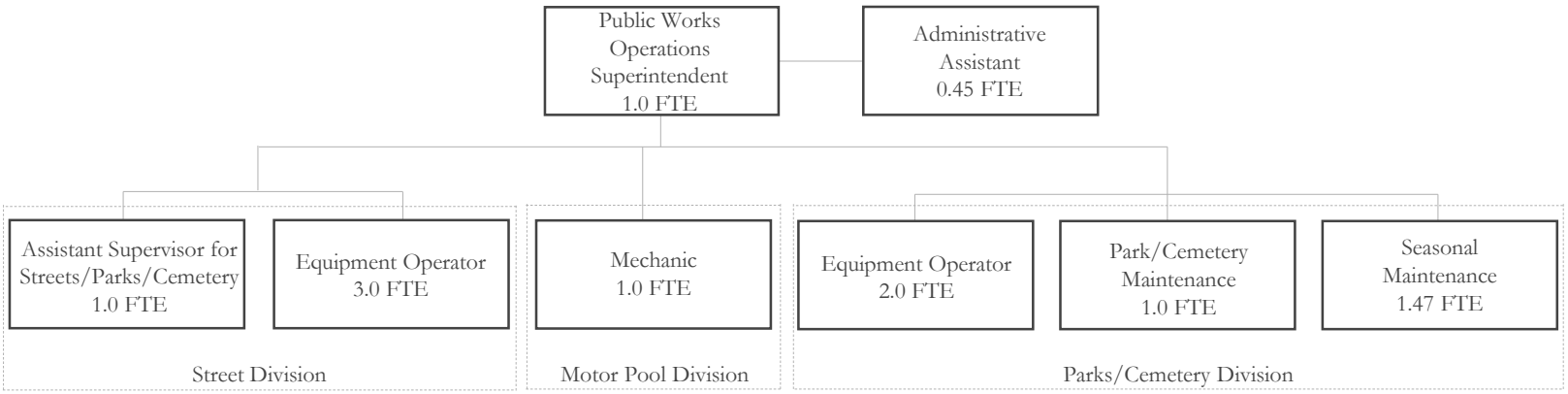
1. Annual hours by building do not equate to department FTE for several reasons that include personal, sick, and vacation time being reported separately, staff turnover, and overtime hours.
2. In the benchmarking table, maintenance work includes event set-up and tear down as well as maintenance work. Since comparable cities could not separate hours dedicated to event work from maintenance and custodial work, Zeeland's hours were classified as maintenance since those staff primarily complete the event work.

Street/Parks/Cemetery/Motor Pool Department – Current Structure

The Street/Parks/Cemetery/Motor Pool Department is responsible for street maintenance, snow plowing, cleaning storm sewer catch basins, sanitary sewer system maintenance, bike path maintenance, cemetery maintenance, parks maintenance, as well as fleet maintenance. The department is also responsible for some of the work that was previously contracted out as part of the downtown maintenance contract.

Department Structure

The department consists of approximately 9.0 full-time and 1.47 FTE part-time positions as illustrated in the organizational chart below. The Administrative Assistant, a full-time position at the City, splits time between this department, the Facilities Maintenance Department, the Clean Water Department, and the City Manager's Office.



Through staff interviews, the PPID learned that the department is organized into four primary functional divisions: Management; Street Division; Motor Pool Division; and Parks/Cemetery Division.

The management division is responsible for overseeing the department budget and invoices, planning of street and bike path projects, MISDIGs, the strategic action plan, vehicle and equipment specs, cemetery records, purchase of burial plots, and staff supervision. This division is also responsible for completing many of the same tasks as the street division.

The street division is responsible for a variety of duties including blacktopping and patching, grading gravel, street sweeping, trimming trees, mowing road shoulders, cleaning storm sewer catch basins, cleaning ditches, repairing manholes and catch basins, painting streets, installing and repairing signs and signposts, maintaining traffic signals, snow plowing and snow removal from city streets, sidewalks and parking lots. Tasks also include salting of city streets and roadways along with maintenance and cleaning of the city's sanitary sewer system. This division also repairs brick pavers and light bollards in downtown Zeeland as well as repairs and maintains the city's sidewalk and shared use path systems. Special services include curbside cleanup, leaf pick-up and Christmas tree disposal.

The motor pool division is responsible for servicing and maintaining the City's fleet of vehicles including police cruisers, fire trucks, E.M.S. vehicles, dump trucks, salt trucks, loaders, tractors, sweepers, as well as all staff vehicles.

The parks/cemetery division is responsible for the care and maintenance of the City's parks and cemeteries. Park tasks include spring set-up of parks, cleaning restrooms, repairing picnic tables, mowing, trimming, and other landscape work. Cemetery tasks include mowing, trimming, and irrigation to maintain proper upkeep and the aesthetic beauty of the cemetery. This division is also responsible for burials.

A theme that emerged during staff interviews is that more supervisory duties, as included in their job description, could be delegated to the Assistant Supervisor for Streets/Parks/Cemetery.

Notes:
The Administrative Assistant estimates that she provides 0.45 FTE of time to the Street/Parks/Cemetery/Motor Pool Department.

Department Structure (continued)

It is important to note that employees assist with tasks outside of their primary work division. For example, employees in the motor pool and parks/cemetery division assist the street division with snow plowing tasks. Employees in the parks/cemetery division also assist the street division with sidewalk and shared use path maintenance tasks. Likewise, employees in the street division assist the parks/cemetery division with maintenance as needed. While the collaborative nature of the department is a positive thing, the interviews revealed that there appears to be a hierarchy regarding the importance of departmental work tasks and staff needs, with the work of the street and motor pool divisions taking priority over cemetery work and park maintenance work.

In addition to this theme, two more themes emerged during staff interviews: One theme is that the workload in this department is impacted by the seasons, with staff being busiest in the spring and summer. There can be downtime in the winter months, particularly if there isn't much snow to plow, but staff stay busy with maintenance activities such as painting picnic tables, repairing lawn mowers, washing and waxing vehicles, and cleaning the garage. A second theme is that the splash pad was added to the department's responsibilities over the last five years.

New Seasonal Staff and the Loss of SWAP

The downtown maintenance contract was split into multiple task groups in early 2020, with one group being brought in-house. The in-house component includes weeding, pruning, downtown trash maintenance, power washing sidewalks, downtown irrigation system set-up, maintenance and winterization, as well as bollard repair. The Street/Parks/Cemetery/Motor Pool Department has taken on the work that has been brought in-house. Using data from the 2017 downtown maintenance contract bid, the annual hours for this work are approximately 273 hours or 0.13 FTE. The staffing levels in this department were increased by nearly 1.0 FTE as the result of adding additional Seasonal Maintenance positions to assist with existing workload as well as the workload that has been added to the department.

When the PPID began this project, the City had a contract with the Ottawa County Sheriff's Office SWAP program where jail inmates assisted with cemetery and park maintenance. During interviews with department staff members, a theme emerged that it would be helpful to have the SWAP crew work more often than they currently do in order to help with the workload in the cemetery. SWAP was not available during the summer of 2020 due to COVID-19. During the completion of this study, the PPID learned that the SWAP program had officially ended. In the summer of 2020, the work previously completed through SWAP was done in-house. City Administration has not determined how the loss of hours provided through SWAP will be handled in the coming years. One solution they envision is to continue using existing staff members as was done this past summer.

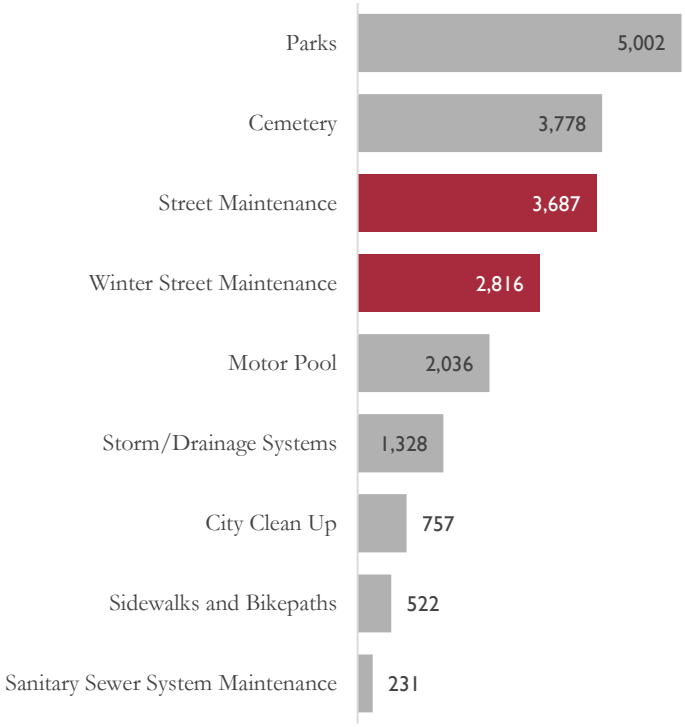
The PPID obtained data from City Administration to provide some insight into the number of hours of work previously provided by the SWAP crews. As shown in the table to the right, the total hours provided by SWAP crews in the last year were 766 hours or 0.37 FTE. City Administration estimates that 80% of SWAP hours were dedicated to cemetery maintenance tasks, while the remaining 20% were dedicated to park maintenance tasks. SWAP officer hours were excluded from the analysis because they serve in a supervisory role to the inmates rather than completing work tasks.

Month	Inmate Hours of Work Provided
Jul 2018	168
Sep 2018	72
Oct 2018	126
Dec 2018	32
Apr 2019	80
May 2019	136
Jun 2019	152
Total Hours	**766**

Notes:
Annual hours for the downtown maintenance contract by task group are based on hours included in the 2017 contract bid. City Administration indicated that the hours are likely less than what is required to complete the work.

Department Hours by Task (Fiscal Year 2019)

The Street/Parks/Cemetery/Motor Pool Department maintains 29.89 miles of street, 26.4 miles of bike path, 16.9 miles of storm sewer, 80 vehicles, 38.5 acres of park, and 15 acres of cemetery. To accurately reflect annual hours invested to maintain these facilities with current staffing levels, full-time staff hours from Fiscal Year 2019 and seasonal staff hours from the summer of 2020 were obtained. As shown in the graph below, 20,157 annual hours were invested by staff, with the largest amount of staff time (32%) spent maintaining the streets.



Overtime Hours (Fiscal Year 2019)

Staff in this department had a total of 781 hours of overtime work in Fiscal Year 2019, which is the equivalent of a 0.38 FTE. Of the overtime hours, 370 were for winter street maintenance tasks and 294 were for park and cemetery maintenance tasks. One explanation for the amount of overtime hours in the department is that the workload in the department varies by season, a theme that emerged during interviews with department staff members. The winter months can be very busy with plowing during snowy winters, while the summer months bring nice weather and an increase in park and cemetery maintenance work. Another explanation is that employees may be working overtime hours to complete work that isn't being done while employees are off on personal, vacation, or sick leave. While it's a testament to the longevity of staff members in the department, the nine full-time staff members used a total of 2,140 hours of personal, vacation, sick and comp leave in Fiscal Year 2019. This equates to nearly six weeks of time off for each employee.

Department Hours for Benchmarking

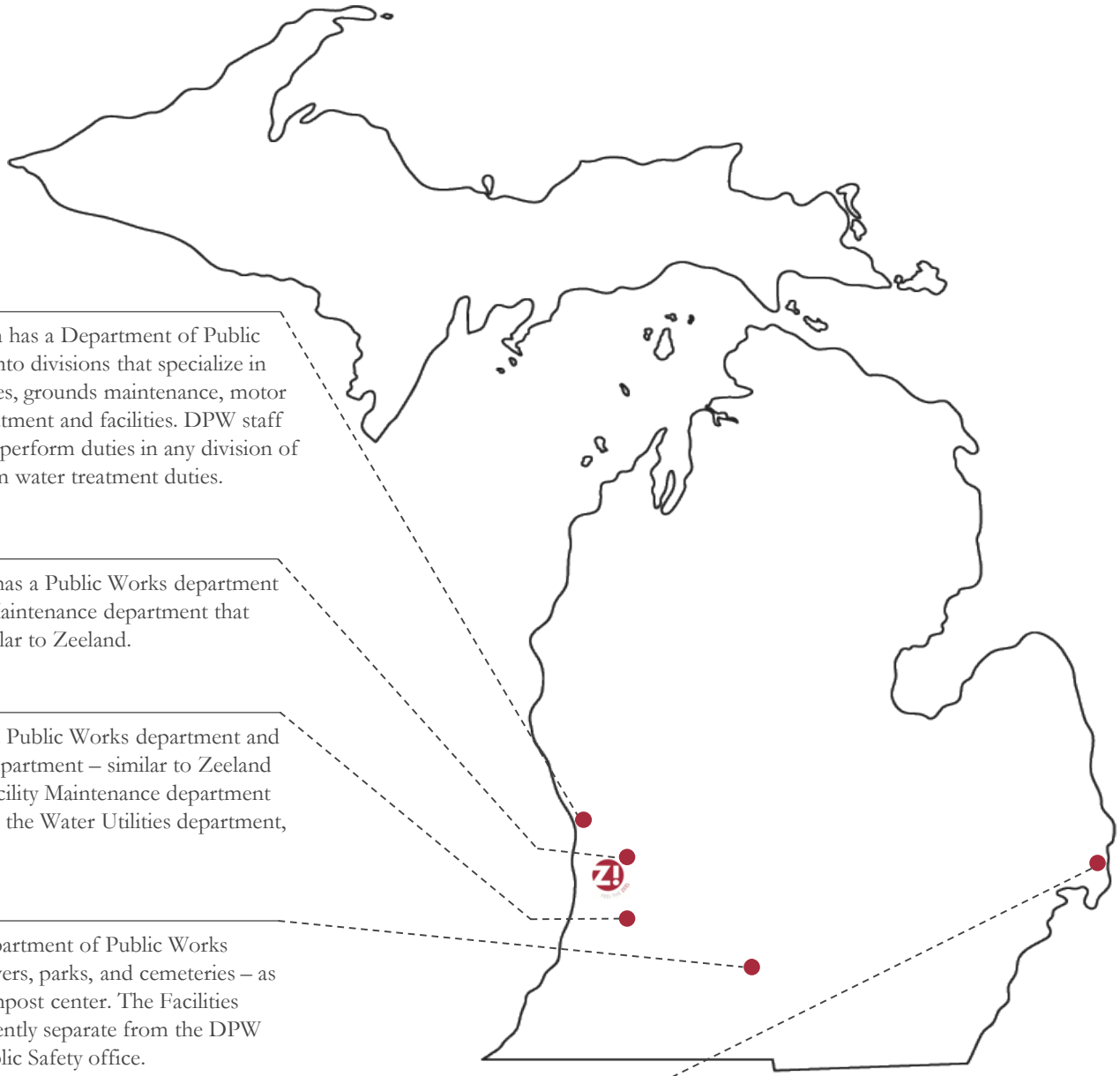
For the purpose of benchmarking the City's Street/Parks/Cemetery/Motor Pool Department against local cities, the 10.47 FTE in the department were split into nine categories as shown in the table to the right. Information from staff interviews as well as staff hours by work task were used to delineate staff hours between the various department work tasks. For benchmarking purposes, it's important to include the 2,140 hours of personal, vacation, sick and comp leave in the categories so that the total 10.47 FTE hours are represented. To do this, PPID calculated the percent of actual hours worked for each employee work task and then applied this percentage to the total hours that an employee could work per year (2,080 for a full-time employee). Calculations are provided in Appendix A.

Category	FTE
Total	10.47
Management	0.40
Street Maintenance	3.14
Bike Path Maintenance	0.27
Vehicle Maintenance	1.09
Park Maintenance	2.50
Cemetery Maintenance	1.87
Storm Sewer Maintenance	0.68
Sanitary Sewer Maintenance	0.12
City Clean Up	0.40

Notes:
Annual hours by department task do not equate to department FTE for several reasons that include personal, sick, and vacation time being reported separately, staff turnover, and overtime hours. Tasks with fewer than 25 annual hours are excluded from the graph.

Benchmarking

Provided below is a map that shows the location of Zeeland City relative to the five local comparable cities for which benchmarking data was obtained. Each city's organizational structure differs when it comes to offering similar services to those provided by Zeeland's City Services & Infrastructure departments. The organizational structure of each comparable city is explained below, and organizational charts are included in Appendix B (except for St. Clair that does not have an organizational chart available).



Grand Haven

The City of Grand Haven has a Department of Public Works that is organized into divisions that specialize in street maintenance, utilities, grounds maintenance, motor pool, custodial, water treatment and facilities. DPW staff are cross-trained and can perform duties in any division of the department apart from water treatment duties.

Hudsonville

The City of Hudsonville has a Public Works department in addition to a Facility Maintenance department that function separately – similar to Zeeland.

Allegan

The City of Allegan has a Public Works department and a Facility Maintenance department – similar to Zeeland and Hudsonville. The Facility Maintenance department works hand-in-hand with the Water Utilities department, as well.

Marshall

The City of Marshall Department of Public Works maintains city streets, sewers, parks, and cemeteries – as well as forestry and a compost center. The Facilities Maintenance staff is currently separate from the DPW and works out of the Public Safety office.

St. Clair

The City of St. Clair's Public Works department includes both street maintenance and facilities maintenance.

Many factors play a role in determining suitable staffing levels for departments. For services like those provided by Zeeland's City Services & Infrastructure departments, these factors include the following:

Experience and skill level of existing staff members

Building characteristics such as age, amount of use, type of systems, and number of buildings

Road and bike path characteristics such as age, amount of use, composition, and weather

Type of vehicle, and complexity of maintaining and repairing a vehicle

Type of park (active, passive, athletic facilities, playground equipment), and mow-able park acres

Mow-able cemetery acres, type of irrigation system, number of burial plots/headstones, and number of burials

Fiscal constraints such as the annual capital improvement budget

The amount and type of work contracted out

Routine and preventative maintenance standards

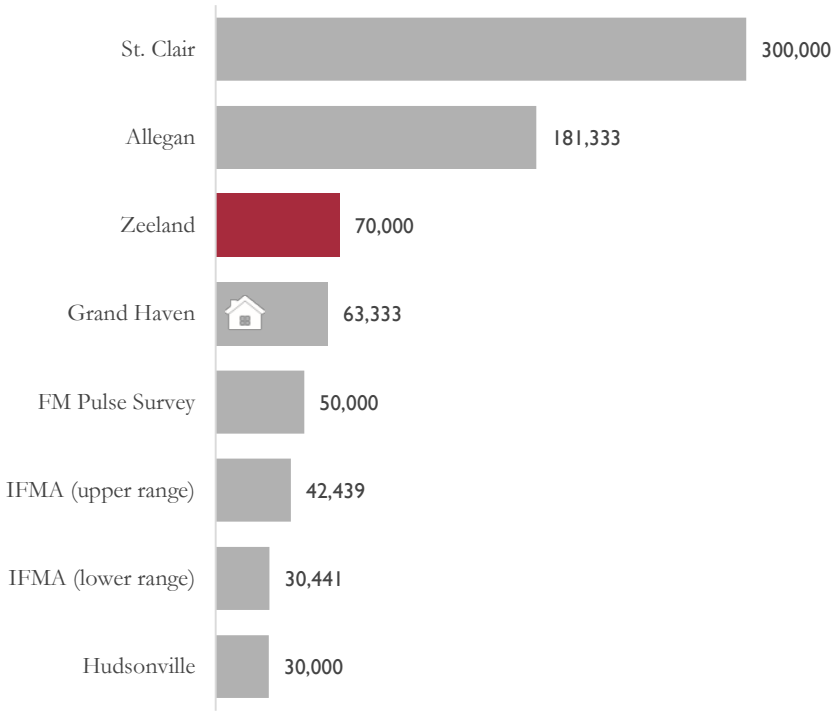
Despite the variations that exist among departments, it is a common practice to estimate staffing needs based on the square footage of buildings, miles of street, bike path and storm sewers, number of vehicle equivalent units, as well as acres of park and cemetery maintained by in-house staff. The PPID reviewed several national sources and conducted a survey to obtain local benchmarking ratios for similar activities. This information is presented in the next several pages.

Facilities Maintenance

National benchmark data from two sources is included in the graph to the right, with a range of 30,441 to 50,000 square feet per facility maintenance FTE. Zeeland City is about 1.4 times higher than the highest national benchmark at 70,000 square feet per maintenance FTE and falls in the middle of the comparable cities.

Zeeland City and the five comparable cities provide most services using a combination of in-house staff and outside contractors. Since this is the case, the symbol is included in the graph when a city uses in-house staff only. Cities that exclusively use outside contractors for a service are excluded from the graph and referenced in the notes at the bottom of the page.

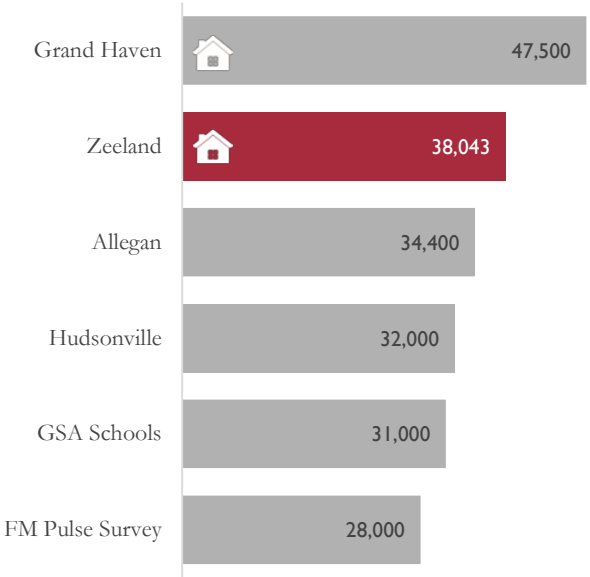
Square Feet of Facilities Maintained per FTE



Custodial

National benchmark data from two sources is included in the graph below, with a range of 28,000 to 31,000 square feet per custodial FTE. Zeeland City is above these national benchmarks at 38,043 square feet per custodial FTE. It falls in the middle of the comparable cities.

Square Feet of Facilities Cleaned per FTE



Factors impacting benchmark data:

- Zeeland City staff report a high standard of cleanliness in their daily cleaning activities.
- Allegan expects all employees to keep their work areas and public areas clean; they have a saying—Sweep the Shed— meaning regardless of staffs' place in the organization, everyone keeps their own areas clean.

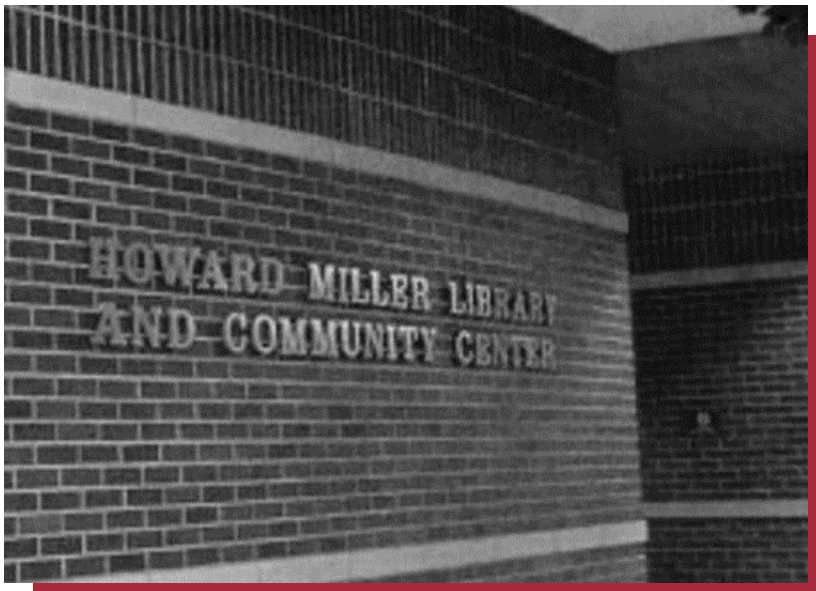
Notes:
Marshall is excluded from facility maintenance and custodial benchmarking because square footage information was not available. Benchmark sources are included in Appendix C.

Community Centers

As previously mentioned, staff in Zeeland's Facilities Maintenance Department invested 3,658 hours in the community center in Fiscal Year 2019, with approximately 1,040 hours dedicated to event set-up and tear-down. Of the local comparable cities, Grand Haven and Hudsonville each have a large community center or event space that is comparable to Zeeland's community center. However, neither city tracks staff hours spent on these buildings separately from maintenance and custodial duties. As a result, the PPID was unable to calculate staffing level ratios for community center work as part of this evaluation. Regardless, an overview of how this work is completed within Grand Haven and Hudsonville is explained below.

In Grand Haven, the community center is maintained by employees of the Department of Public Works. Two DPW divisions work together to perform maintenance and cleaning/set-up operations. The facilities division performs all building maintenance including repairs, renovations and HVAC controls. The custodial division along with some help from the community center staff does all the cleaning and set-up duties.

In Hudsonville, the Terra Square event center is maintained by city employees who work in the Facilities Maintenance Department as well as Terra Square staff. They handle daily cleanings as well as set-up and tear-down of tables and chairs. This work was contracted out previously, but it was found to be more cost effective to use in-house staff to perform the work.



Administrative Assistants for Facility Maintenance and Custodial
Zeeland and Marshall each have an administrative assistant who helps with some or all the following facility maintenance and custodial work: facilitating requests for supplies or repairs of buildings as well as assisting with bids.

Notes:
Benchmark sources are included in Appendix C.

Street Maintenance

Before diving into staffing level ratios for street maintenance, it's important to discuss the condition of a city's streets. As streets age, the condition of the pavement will deteriorate. A standard practice for assessing the condition of asphalt streets is using PASER—Pavement Surface Evaluation and Rating. A rating of 10 is excellent while a rating of 1 means the pavement has failed. A PASER of 4 or less indicates that streets are in fair to failing condition.

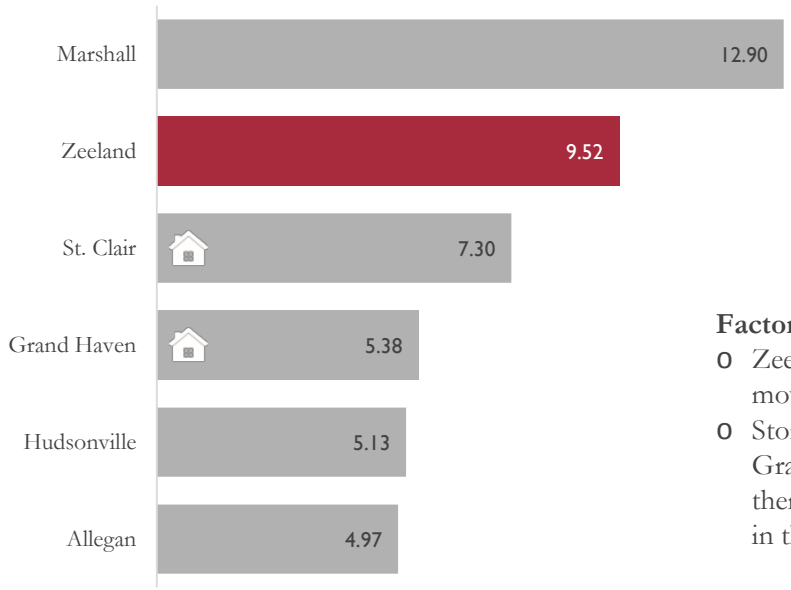
The percentage of streets with a PASER of 4 or less for each city include:

- Marshall - 5%
- Zeeland - 13%
- Hudsonville - nearly 60%

The remaining comparable cities were unable to provide PASER data.

As shown in the graph below, Zeeland City is near the top of the comparable cities with 9.52 miles of street maintained per FTE. Zeeland's rate is nearly double that of Allegan. A reliable source for national benchmark data could not be located.

Miles of Street Maintained per FTE



Zeeland City and the five comparable cities provide most services using a combination of in-house staff and outside contractors. Since this is the case, the symbol is included in the graph when a city uses in-house staff only. Cities that exclusively use outside contractors for a service are excluded from the graph and referenced in the notes at the bottom of the page.

Factors impacting benchmark data:

- Zeeland City staff report that street maintenance FTE may be mowing more off-street areas than is necessary.
- Storm sewer maintenance staff are included in the FTE count for Grand Haven and Marshall because they were unable to separate them out. This means that the miles of street maintained per FTE in these cities is higher than what is shown in the graph.

Administrative Assistants for Street Maintenance

Zeeland, Grand Haven, Hudsonville and Marshall each have an administrative assistant who helps with some or all of the following street maintenance work: issuing permits for street work, fielding phone inquiries from residents, assisting with bids, and assisting with receptionist duties.

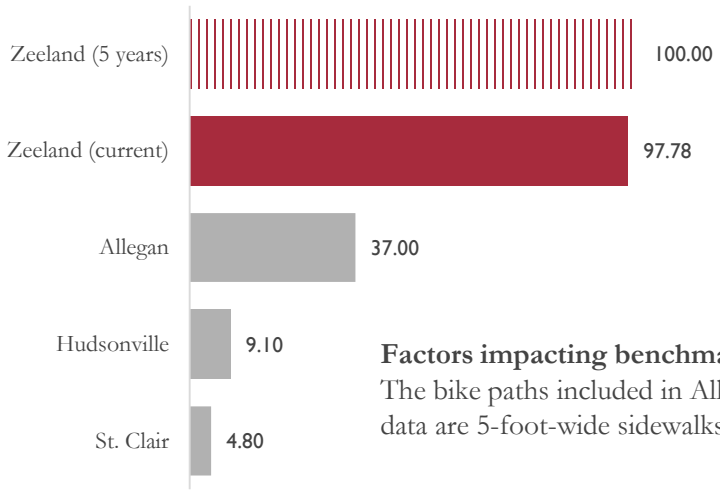
Notes:
Benchmark sources are included in Appendix C.

Bike Path Maintenance

The City of Zeeland currently maintains 26.4 miles of bike path. Zeeland has plans to add 0.6 miles of new bike path in the next 5 years. During staff interviews, PPID learned that the additional bike path mileage will primarily affect the amount of time required by staff to plow the bike paths in winter.

As shown in the graph to the right, Zeeland City has the highest ratio of miles of bike path maintained per FTE of the comparable cities with 97.78 miles of bike path maintained per FTE. If staffing levels for bike path maintenance remain the same in Zeeland, this ratio will increase to 100 miles per FTE when the new bike path is built. Zeeland's rate is 2.5 times higher than in Allegan. A reliable source for national benchmark data could not be located.

Miles of Bike Path Maintained per FTE



Factors impacting benchmark data:
The bike paths included in Allegan's data are 5-foot-wide sidewalks.

Storm and Sanitary Sewer Maintenance

Storm and sanitary sewer maintenance in the City of Zeeland is currently performed by staff members from the Street/Parks/Cemetery/Motor Pool Department. During Fiscal Year 2019, 0.68 FTE were invested into storm sewer maintenance and 0.12 FTE into sanitary sewer maintenance.

A couple of themes emerged during staff interviews regarding storm and sanitary sewer maintenance. One theme is that storm and sanitary sewer work should be reassigned to the Clean Water Department. City Administration confirmed that there have been internal discussions about moving this work out of the Street/Parks/Cemetery/Motor Pool Department and into the Clean Water Department. A second theme that emerged is that more education on how to use the camera equipment used in storm sewer maintenance is needed.

The PPID was unable to calculate staffing level ratios for storm and sanitary sewer maintenance as part of this evaluation. However, since there have been internal discussions about moving this work out of the Street/Parks/Cemetery/Motor Pool Department and into the Clean Water Department in Zeeland, the table below explains how storm sewer maintenance, sanitary sewer maintenance, and clean water work is completed within each of the comparable cities.

City	Storm Sewer Maintenance	Sanitary Sewer Maintenance	Clean Water
Zeeland	Street/Parks/Cemetery/Motor Pool Dept	Street/Parks/Cemetery/Motor Pool Dept	Clean Water Dept
Allegan	DPW Storm Sewer Division	Water Utilities Dept	Water Utilities Dept
Grand Haven	DPW Utilities Division	DPW Utilities Division	DPW Water Filtration Division
Hudsonville	DPW Dept	DPW Dept	Contracted with the City of Wyoming
Marshall	DPW Dept	DPW Dept	Water Dept
St. Clair	DPW Dept	DPW Dept	Water Dept

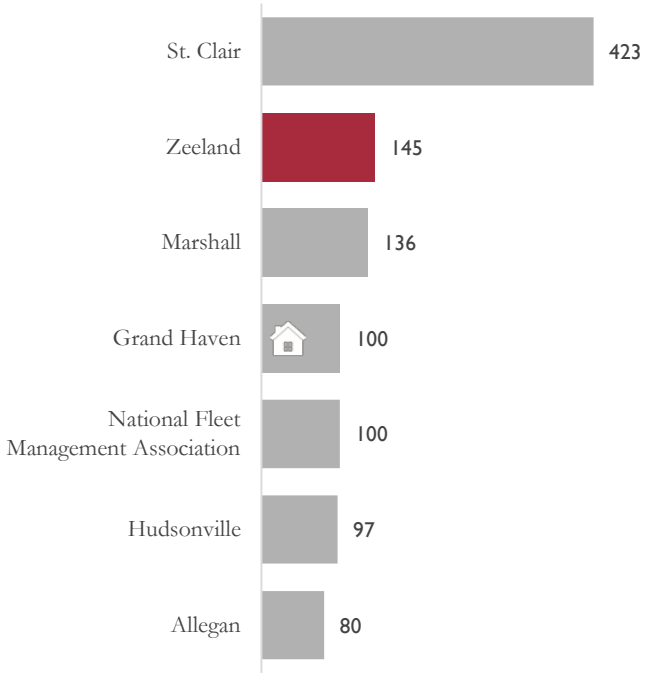
Notes:
Grand Haven and Marshall do not have bike paths maintained by their cities. Benchmark sources are included in Appendix C.

Vehicle Maintenance

Despite the variations that exist with vehicle maintenance departments, it is a common practice to convert the vehicle fleet into Vehicle Equivalent Units (VEUs). The first step in this process is to determine the Maintenance Repair Units (MRUs) for each vehicle type. As an example, a street sweeper, which is a high maintenance vehicle, has an MRU of 14 which means it has 14 times the maintenance requirements of a passenger car with an MRU of one. If a fleet has two street sweepers, the VEU for that fleet is 28 (two sweepers multiplied by 14 MRU for each sweeper). The VEUs of the entire fleet are then used to estimate staffing needs for vehicle maintenance departments.

National benchmark data is included in the graph below, with 100 VEUs maintained per FTE. Zeeland City is above the national benchmark at 145 VEUs per FTE. St. Clair has the highest ratio at 423 VEUs per FTE.

Vehicle Equivalent Units Maintained per FTE



Zeeland City and the five comparable cities provide most services using a combination of in-house staff and outside contractors. Since this is the case, the symbol is included in the graph when a city uses in-house staff only. Cities that exclusively use outside contractors for a service are excluded from the graph and referenced in the notes at the bottom of the page.

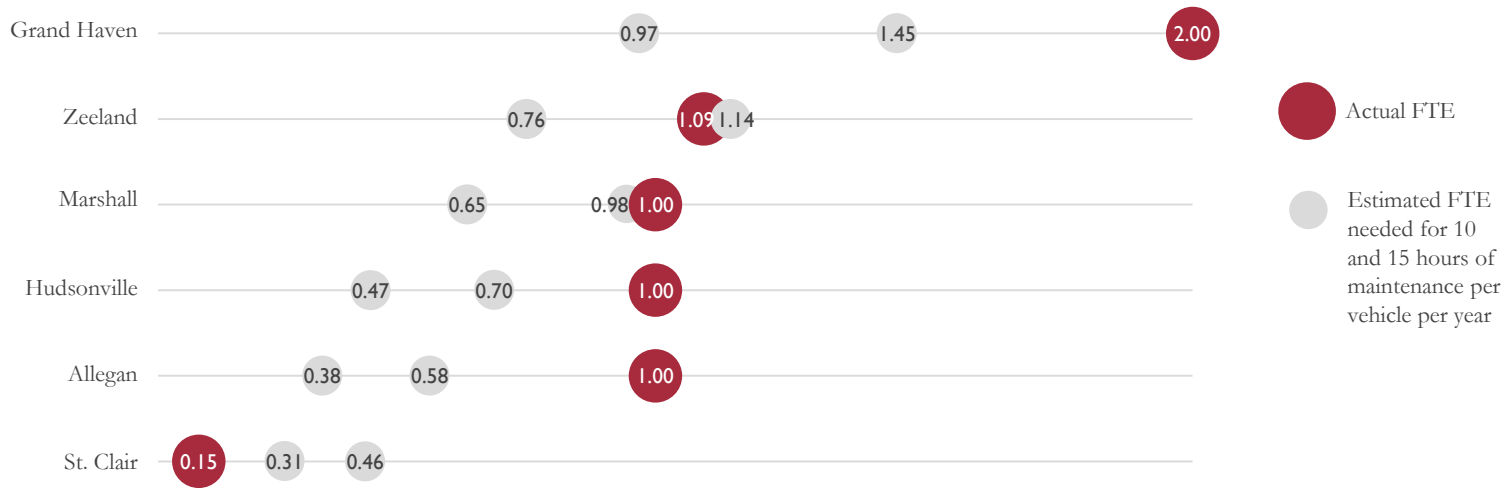
Factors impacting benchmark data:

- Zeeland is expected to get five new vehicles over the next five years. Based on information learned during staff interviews, the new vehicles will be replacing the older, existing vehicles and will likely reduce maintenance work.
- Hudsonville uses GPS planning/route planning for tasks such as snowplow route planning.

Notes: Benchmark sources are included in Appendix C.
VEU calculations are included in Appendix D.

Vehicle Maintenance (continued)

Another method for estimating staffing needs for vehicle maintenance departments is to calculate staffing needs using the assumption that each VEU requires between 10 and 15 hours of maintenance per year. The graph below illustrates the actual FTE for vehicle maintenance in Zeeland and each comparable city as well as the estimated FTE needed using this methodology. Zeeland's staffing levels for vehicle maintenance work appear to be adequate when this methodology is utilized..



Administrative Assistants for Vehicle Maintenance
Grand Haven and Hudsonville each have an administrative assistant who helps with some or all of the following vehicle maintenance work: ordering parts, assisting with bids, and assisting with work order management.

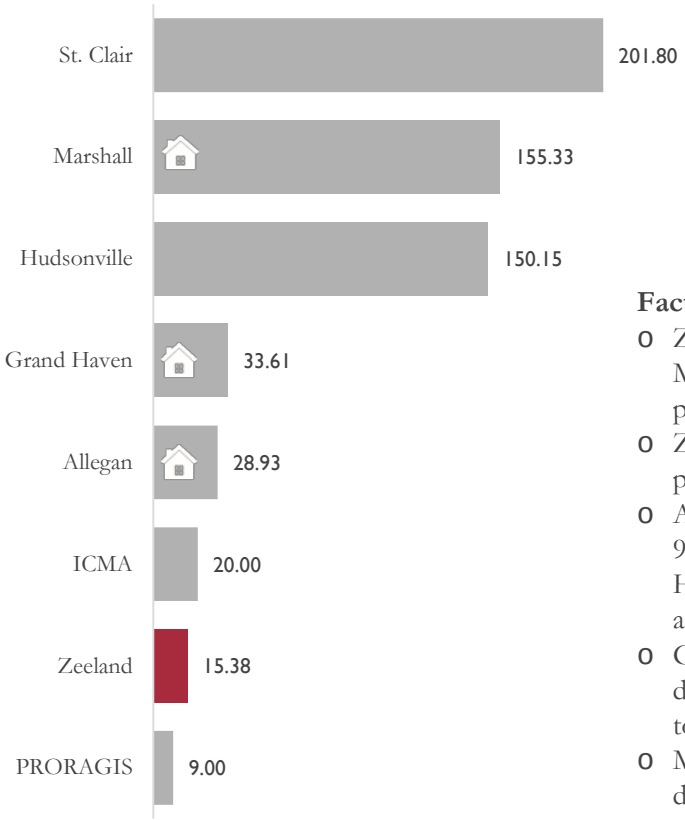
Notes: Benchmark sources are included in Appendix C.
VEU calculations are included in Appendix D.

Park Maintenance

National benchmark data from two sources is included in the graph below, with a range of 9 to 20 acres of park maintained per FTE. Zeeland City falls in between these national benchmarks with 15.38 FTE for every acre of park maintained and has the lowest staffing to acre ratio of the comparable cities.

During interviews with Zeeland City staff members, a theme that emerged is that the parks could be maintained better if additional staff are hired. It's important to note that the interviews were conducted prior to the City hiring 1.0 FTE in additional seasonal staff members, while the graph below reflects staffing levels dedicated to park maintenance tasks with the new seasonal staff member hours that were added in the summer of 2020.

Acres of Park Maintained per FTE



Zeeland City and the five comparable cities provide most services using a combination of in-house staff and outside contractors. Since this is the case, the symbol is included in the graph when a city uses in-house staff only. Cities that exclusively use outside contractors for a service are excluded from the graph and referenced in the notes at the bottom of the page.

Factors impacting benchmark data:

- Zeeland has seven parks, with one containing a splash pad. Marshall and Hudsonville are comparable in the number of parks, with 8 and 9, respectively.
- Zeeland and Marshall each have the same amount of mow-able parks acres, at 15 acres each.
- Allegan has the highest percent of acres that are mow-able at 97%, followed by Grand Haven at 44%, Zeeland at 39%, Hudsonville at 23%, and Marshall at 6%. St. Clair contracts out all mowing of their parks.
- Grand Haven has a crew of 15 seasonal maintenance workers dedicated to park maintenance. These part-time positions equate to 2.0 FTE.
- Marshall and Hudsonville don't have a dedicated parks department. Both use their DPW departments to maintain parks.

Administrative Assistants for Park Maintenance

Zeeland, Grand Haven, Hudsonville and Marshall each have an administrative assistant who helps with some or all of the following park work: managing park rentals and assisting with bids.

Notes:
Benchmark sources are included in Appendix C.

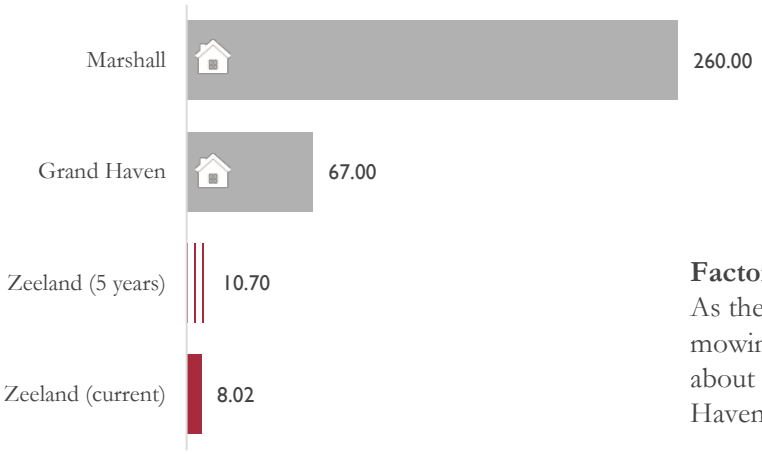
Cemetery Maintenance

The City of Zeeland currently maintains 15 acres of cemetery. Zeeland has plans to open a second cemetery in the next five years that will add 5 acres of cemetery to be maintained. Themes that emerged during staff interviews are that the new cemetery will require more staff and equipment.

As shown in the graph below, Zeeland City has the lowest ratio of acreage maintained per FTE of the comparable cities with 8 acres of cemetery maintained per FTE. If staffing levels for cemetery maintenance remain the same in Zeeland, this ratio will increase to 10.7 acres per FTE when the new cemetery is open. A reliable source for national benchmark data could not be located.

During interviews with Zeeland City staff members, PPID learned that cemetery irrigation is a labor-intensive process where a sprinkler system is placed in the cemetery each day and then manually rotated every couple hours. Grand Haven reported having underground irrigation lines throughout their cemeteries that are remote operated. Marshall has a similar irrigation process to Zeeland City in that there is no underground sprinkler system—the lawn is watered manually.

Acres of Cemetery Maintained per FTE



Zeeland City and the five comparable cities provide most services using a combination of in-house staff and outside contractors. Since this is the case, the symbol is included in the graph when a city uses in-house staff only. Cities that exclusively use outside contractors for a service are excluded from the graph and referenced in the notes at the bottom of the page.

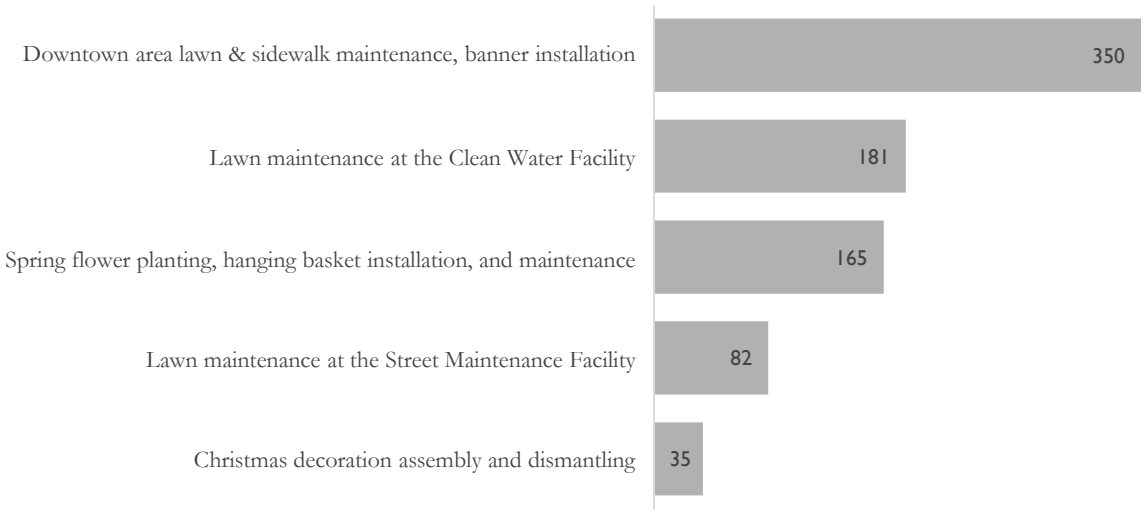
Factors impacting benchmark data:
As the number of headstones in a cemetery increases, mowing and trimming become more difficult. Zeeland has about 4,000 headstones in their cemetery, while Grand Haven has about 2,500 and Marshall has about 14,000.

Administrative Assistants for Cemetery Maintenance
Grand Haven and St. Clair each have an administrative assistant who helps with some or all of the following cemetery work: public relations with residents and funeral homes, coordinating with the clerk's office on deeds, coordinating with the DPW on burials and maintenance, processing burial requests and assisting with lot purchases.

Notes:
St. Clair is excluded from cemetery benchmarking because acreage information was not available; St. Clair's DPW performs burials in-house and contracts out all mowing and repair of damaged headstones. Allegan contracts out all cemetery work. Hudsonville doesn't have a cemetery to maintain. Benchmark sources are included in Appendix C.

Downtown Maintenance Contract

The remaining task groups of the downtown maintenance contract include annual flower planting and maintenance, Christmas decoration installation and removal, downtown maintenance, as well as lawn maintenance at the Clean Water Plant and Street Garage. The annual hours to complete the work included in these task groups is depicted in the graph below. Using data from the 2017 downtown maintenance contract bid, the annual hours for all of this work is approximately 813 hours or 0.4 FTE.



For this evaluation, one of the goals is to determine if some of the work included in these five task groups can be brought in-house. This could involve some work being absorbed by existing staff and/or hiring additional staff. The themes that surfaced during staff interviews regarding the downtown maintenance contract include:

1) Bringing more of the downtown maintenance contract in-house is not possible with current staffing levels. However, more of the downtown maintenance contract could be brought in-house if additional employees are hired.

2) If more of the downtown maintenance contract is brought in-house by hiring additional staff, it would be difficult to add these staff to the current structure that's in place in the Street/Parks/Cemetery/Motor Pool Department.

3) The Clean Water Department should be responsible for mowing around their building.

4) If more of the downtown maintenance contract is brought in-house, additional equipment will be needed including a vacuum, mower, and scissor lift.

Notes:
Annual hours by task group are based on hours included in the 2017 contract bid. City Administration indicated that the hours are likely less than what is required to complete the work.

Thematic Analysis from Staff Interviews

The complete list of themes mentioned by two or more staff members are summarized and included below. Several of these themes have already been discussed in previous sections of this report, as applicable.

Department Structure

- Street employees and Parks/Cemetery employees should work in separate departments.
- The work in the custodial division of the Facilities Maintenance Department is highly structured, while the work in the maintenance division is not.
- It is not possible to combine the Facilities Maintenance Department and the Street/Parks/Cemetery/Motor Pool Department with the department structures that are currently in place. However, it may be possible to combined these departments into a single department if new first-level supervisor roles are created.
- If the Facilities Maintenance Department and the Street/Parks/Cemetery/Motor Pool Department are combined into one department, it would be ideal to have the director focus on departmental administration while the new first-level supervisors supervise the work being done in the field.
- There appears to be a hierarchy regarding the importance of departmental work tasks and staff needs in the Street/Parks/Cemetery/Motor Pool Department, with the work of the street and motor pool divisions taking priority over cemetery work and park maintenance work.

Staffing Levels

- Parks could be maintained better if additional staff are hired.
- It would be helpful to use the SWAP crew more frequently for cemetery maintenance.
- It is not possible to maintain the new cemetery without the addition of new staff.
- The new bike path will add to the amount of time required to plow bike paths in the winter.

Downtown Maintenance Contract

- Bringing more of the downtown maintenance contract in-house is not possible with current staffing levels. However, more of the downtown maintenance contract could be brought in-house if additional employees are hired.
- If more of the downtown maintenance contract is brought in-house by hiring additional staff, it would be difficult to add these staff to the current structure that's in place in the Street/Parks/Cemetery/Motor Pool Department.
- The Clean Water Department should be responsible for mowing around their building.
- If more of the downtown maintenance contract is brought in-house, additional equipment will be needed including a vacuum, mower, and scissor lift.

Supervisors

To determine personality and work style traits for City Administration to consider when hiring a future supervisor(s), staff were asked to provide feedback about what works well and what doesn't work well with their current supervisor as well as what they'd like to see in a future supervisor(s). This input was used to create the following list of traits to consider in a future supervisor(s).

Someone who will…

- Boost morale of staff members by providing positive feedback for a job well done.
- Delegate work to staff members, including supervisory duties to the Assistant Supervisor and Head Custodian.
- Listen to staff member input and suggestions.
- Provide staff with autonomy over work processes and decisions that are within their purview.
- Trust staff members.
- Communicate openly with staff members.

Tasks to Reassign

- Responsibility for the splash pad should be assigned to one department. Some staff consider it a responsibility of Park employees.
- Storm and sanitary sewer maintenance work should be reassigned to the Clean Water Department.

Workload

- Vacuuming the floors can be done less frequently. Staff suggest going to a couple times per week.
- Street maintenance staff may be mowing more off-street areas than is necessary.
- The only new departmental responsibility over the last five years is the splash pad.
- The workload in the Street/Parks/Cemetery/Motor Pool Department varies by season. This can create down-time in some seasons, but staff stay busy with other tasks.

Equipment

- More education on how to use the camera equipment used in storm sewer maintenance is needed.
- It will be difficult to maintain the new cemetery without purchasing more equipment.

Miscellaneous

- The work performed by several staff members in the City Services & Infrastructure departments is inconsistent with the duties included in their job descriptions.
- There appears to be a staff member who is creating a rift within one of the departments.
- There's the sense that City Administration may not be aware of the work performed and/or department staffing dynamics.

Findings

The PPID will answer the evaluation questions using the information that's been presented in this report. The evaluation questions will be answered in reverse order because the answer to Question 3 will impact the answer to Question 2 which will, in turn, impact the answer to Question 1.

Question 3: Can the downtown maintenance contract be brought in-house? If yes, how many staff will be needed?

The PPID believes that the downtown maintenance contract can be brought in-house if additional staff are hired for this work. Based on staff interviews and benchmarking data, it is clear to the PPID that the additional work cannot be absorbed by existing staff members.

The best data that the PPID could obtain to determine how many staff will be needed once the downtown maintenance contract is brought in-house is the 2017 downtown maintenance contract bid. The annual hours for this work is approximately 813 hours or 0.4 FTE. Since City Administration indicated that the hours in the bid are likely less than what is required to complete the work, the PPID recommends that a 0.5 FTE position be created to handle the workload.

Although it is not part of the question, a theme that emerged during interviews with staff members is that additional equipment will be needed to bring the downtown maintenance contract in-house. At a minimum, it would require a vacuum, mower, and scissor lift. Another theme that arose from the interviews is that if more of the downtown maintenance contract is brought in-house by hiring additional staff, it would be difficult to add these staff to the current structure that's in place in the Street/Parks/Cemetery/Motor Pool Department.

Question 2: Are the existing staffing levels in the two departments adequate to handle current workloads as well as projected workloads within the next five years?

Based on staff interviews and benchmarking data, it is clear to the PPID that the Facilities Maintenance Department is adequately staffed for the foreseeable future. Certain areas of the Street/Parks/Cemetery/Motor Pool Department are also adequately staffed, while some areas will require additional staff to handle the anticipated workload increases.

The Facilities Maintenance workload is not expected to change in the next five years. Their workload is about 1.4 times higher than the national benchmark at 70,000 square feet per maintenance FTE and falls in the middle of the comparable cities. Based on interview themes and benchmarking, PPID does not recommend additional staff for facilities maintenance.

The Custodial workload is not expected to change in the next five years. Their workload is slightly higher than the national benchmark at 38,043 square feet of facilities cleaned per FTE and falls in the middle of the comparable cities. Based on interview themes and benchmarking, PPID does not recommend additional staff for custodial work.

The Street maintenance workload is not expected to change in the next five years. Their workload is in the top third of the comparable cities regarding miles of street maintained per FTE. Based on interview themes and benchmarking, PPID does not recommend additional staff for street maintenance work.

The Bike Path maintenance workload is expected to increase by 0.6 miles in the next five years. Their workload is the highest of the comparable cities regarding miles maintained per FTE. Based on interview themes and benchmarking, PPID does not recommend additional staff for bike path maintenance work.

The Vehicle maintenance workload is not expected to change in the next five years—the five new vehicles will be replacing old vehicles, which will decrease workload. Zeeland City currently has 145 VEUs per FTE, which is above the national benchmark of 100 VEUs per FTE. They currently have 1.09 FTE dedicated to vehicle maintenance. Using the standard of each VEU requiring 10-15 hours of maintenance per year, Zeeland City's staffing level is adequate. Based on interview themes and benchmarking, PPID does not recommend additional staff for vehicle maintenance work.

The Park maintenance workload is not expected to change in the next five years. Their workload is between the national benchmarks and is in the lowest staffing to acre ratio of the comparable cities. Based on benchmarking, PPID does not recommend additional staff for park maintenance work.

The Cemetery maintenance workload is expected to grow over the next five years with an additional five acres to be added. Zeeland City is currently at eight acres maintained per FTE—the lowest out of the comparable cities. Like Grand Haven, Zeeland City could benefit from the use of automated irrigation as it would free up staff hours for other tasks in addition to being more environmentally friendly than manual irrigation. Benchmarking considered, themes from the interviews showed that the workload is currently too high for staff to manage effectively and will continue to increase in the next five years. Therefore, PPID recommends additional staff for cemetery maintenance work.

Question 1: Can the two departments be merged into one department with a single supervisor? If yes, will additional staff be needed to complete some of the work that is currently completed by two supervisors?

The PPID believes that it is not possible to combine the two departments with the structures that are currently in place. However, it may be possible to combine these departments into a single department if new first-level supervisor positions are created.

If the two departments are combined into one, it would be ideal to have a director position to handle the majority of administrative/managerial tasks that the current supervisors handle. This director position could be created by forming a new director position or could be created by reorganizing the existing structure of the organization to accommodate these administrative/managerial tasks. The current supervisors of the two departments spend a combined 1,854 hours per year or 0.9 FTE on administrative/managerial tasks. The new first-level supervisor positions would then pick up the 1.1 FTE workload that the current supervisors spend on department specific work tasks, while also serving as a direct supervisor for staff within each division.

This proposed structure is similar to the one that was in place in Zeeland from 2002 through 2007, which worked well at the time. It is also close to the one currently utilized in the City of Grand Haven.

The table below provides a summary of the director and first-level supervisor work tasks for the proposed structure.

Position Title	New or Reclassified Position	Total FTE	FTE per Work Task		
			Management	Existing Work Tasks	New Work Tasks
Director	New or Reclassified	1.0	1.0	0.0	0.0
Facilities Maintenance First-Level Supervisor	Reclassified	1.0	0.25	0.5	0.25
Street/Motor Pool First-Level Supervisor	Reclassified	1.0	0.25	0.6	0.15
Parks/Cemetery First-Level Supervisor	New	1.0	0.25	0.0	0.75
	Total FTE by Task:		**1.75**	**1.1**	**1.15**
	Net Change in FTE by Task:		**+ 0.85**	**0.0**	**+ 1.15**

The proposed structure will create 1.15 FTE in time to dedicate to new work tasks that will include taking on the 0.5 FTE in work required to bring the downtown maintenance contract in-house. The remaining 0.65 FTE can be utilized in the cemetery division since this area will need additional staff to handle the existing and anticipated workload increases. This 1.15 FTE for downtown maintenance contract work and new cemetery work tasks could be allocated among staff members as Zeeland City sees fit. For example, the work could be allocated to existing staff members, while some of their current work tasks could be assigned to the first-level supervisors.

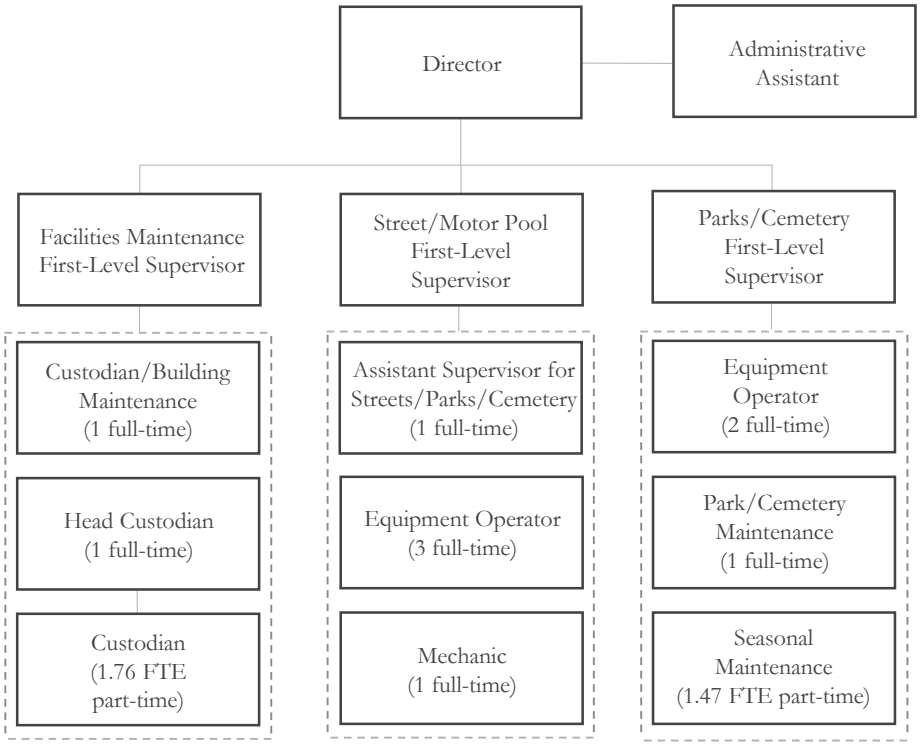
The proposed structure will also create 0.85 FTE in additional time to dedicate to administrative/managerial tasks. The distribution of this time among three divisions of the department can enhance trust and communication within the department as well as diminish the divisional hierarchy that currently exists in the Street/Parks/Cemetery/Motor Pool Department.

Notes:
The ideal percent of time to dedicate to management duties varies by source. The PPID utilized 25% as cited by the U.S. Office of Personnel Management. The data source is included in Appendix C.

Question 1 (continued)

The proposed first-level supervisor positions will each require less time dedicated to management tasks than is spent by the current supervisors of the two departments. As a result, the PPID is proposing that the City reclassify these positions into lower paygrades. The savings from the reclassification can be used, in combination with the contractual savings from the downtown maintenance contract, to help fund the new director or staff reorganization and parks/cemetery first-level supervisor positions. Similar to Grand Haven, it could be highly beneficial to cross-train staff to ensure they can perform duties in any division of the department.

The organizational chart for this proposed structure is provided below.



Another scenario for the City to consider involves reassigning storm and sanitary sewer work to the Clean Water Department as well as assigning lawn maintenance work at the Clean Water Department—currently part of the downtown maintenance contract—to staff in that department. These would result in 0.8 FTE of time being reassigned out of the Street/Parks/Cemetery/Motor Pool Department and 0.1 FTE being assigned from the downtown maintenance contract to the Clean Water Department. If this occurs, it may be possible to structure the department with one director and two first-level supervisor positions. However, the PPID cannot recommend this structure without further analysis of existing staffing levels and workloads in the Clean Water Department.

Other Findings

During this evaluation, other findings that are not explicitly related to the three evaluation questions surfaced. The PPID thinks the following are worth further review and consideration by the City of Zeeland.

- The work performed by several staff members in the City Services & Infrastructure departments is inconsistent with the duties included in their job descriptions. In addition, a theme that emerged during staff interviews is that more supervisory duties, as included in their job descriptions, could be delegated to the Head Custodian as well as the Assistant Supervisor for Streets/Parks/Cemetery. The City should consider reviewing job descriptions and, as retirements occur, consider reclassifying positions if the supervisory duties are no longer needed of the position.

- The workload of the custodial division could be reduced if vacuuming is performed fewer times per week, such as 2 or 3 times rather than everyday.

- The workload of the street maintenance division could be reduced if staff mow less off-street areas. If the areas that are currently being mowed are the responsibility of the City, the PPID sees an opportunity for enhanced communication with staff members in this department to explain why that work is being performed.

- During staff interviews, a few staff members mentioned retiring in the next few years. As retirements occur and positions are filled with staff who receive less vacation time, the City may see an increase in hours available to complete work tasks.

Appendix A - Street/Parks/Cemetery/Motor Pool Department Hours by Employee by Task

	Public Works Operations Superintendent			Assistant Supervisor for Streets/Parks/Cemetery				Equipment Operator (Street Division)				Equipment Operator (Street Division)			
	Regular Hours	Regular Hours as a Percent of Total Work Hours	Benchmark Hours per Task	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task
Department Administration															
Department Administration	0	0.0%	814.00	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Street Maintenance															
Highways, Streets & Bridges	0	0.0%	0.00	48	0	2.5%	52.23	61	0	3.2%	66.61	15	0	0.8%	16.68
Major Street - Surface Maintenance	55.9	3.1%	39.10	154.5	8.5	8.5%	177.37	159	0	8.3%	173.62	161	0	8.6%	179.03
Major Street - Off-Surface Maintenance	55.75	3.1%	38.99	104	1	5.5%	114.26	153	0	8.0%	167.07	145	0	7.8%	161.24
Major Street - Traffic Services	223	12.3%	155.98	25	0	1.3%	27.20	21	0	1.1%	22.93	41	0	2.2%	45.59
Local Street - Surface Maintenance	113	6.2%	79.04	247	10.5	13.5%	280.20	218	2	11.5%	240.23	203	0	10.9%	225.74
Local Street - Off-Surface Maintenance	89.6	5.0%	62.67	75.5	0	3.9%	82.16	110	0	5.8%	120.12	143	0	7.6%	159.02
Local Street - Traffic Services	292.8	16.2%	204.80	40	0	2.1%	43.53	26	0	1.4%	28.39	36	0	1.9%	40.03
Winter Street Maintenance															
Municipal Parking System	0	0.0%	0.00	54	0	2.8%	58.76	71	0	3.7%	77.53	17	0	0.9%	18.90
Municipal Parking - Satellite System	0	0.0%	0.00	41	0	2.1%	44.61	55	0	2.9%	60.06	8	0	0.4%	8.90
Major Street - Winter Maintenance	281	15.5%	196.54	134	32.5	8.7%	181.18	145	37	9.6%	198.74	129	30.5	8.5%	177.36
Local Street - Winter Maintenance	357.6	19.8%	250.12	139	40.5	9.4%	195.32	136	21.83	8.3%	172.34	164	29	10.3%	214.62
Bike Path Maintenance															
Sidewalks and Bike paths	0	0.0%	0.00	69.5	0	3.6%	75.63	90	0	4.7%	98.28	47	0	2.5%	52.26
Vehicle Maintenance															
Motor Pool	181.6	10.0%	127.02	33	0	1.7%	35.91	26	0	1.4%	28.39	49	0	2.6%	54.49
Park Maintenance															
Parks	0	0.0%	0.00	114	0	6.0%	124.05	65	0	3.4%	70.98	42	0	2.2%	46.70
Splashpad	0	0.0%	0.00	22	0	1.2%	23.94	2	0	0.1%	2.18	10	0	0.5%	11.12
Cemetery Maintenance															
Cemetery	14	0.8%	9.79	31	4	1.8%	38.09	16	0	0.8%	17.47	10	0	0.5%	11.12
Storm Sewer Maintenance															
Major Street - Storm/Drainage Systems	55.75	3.1%	38.99	160	0	8.4%	174.10	141	0	7.4%	153.97	239.5	0	12.8%	266.32
Local Street - Storm/Drainage Systems	90	5.0%	62.95	157	0	8.2%	170.84	58	0	3.0%	63.33	169	0	9.0%	187.93
Sanitary Sewer Maintenance															
Clean Water - Transmission	0	0.0%	0.00	18	0	0.9%	19.59	99	0	5.2%	108.10	11	0	0.6%	12.23
City Clean Up															
City Clean Up	0	0.0%	0.00	140	0	7.3%	152.34	183	5	9.9%	205.29	170.5	0	9.1%	189.60
Miscellaneous															
Maintenance - City Hall	0	0.0%	0.00	0	0	0.0%	0.00	2	0	0.1%	2.18	1	0	0.1%	1.11
Building Maintenance - Roosevelt Fire Station	0	0.0%	0.00	8	0	0.4%	8.71	2	0	0.1%	2.18	0	0	0.0%	0.00
Total Work Hours	**1,810.00**			**1,814.50**	**97.00**			**1,839.00**	**65.83**			**1,811.00**	**59.50**		
Personal, Sick, Vacation, COMP Hours	270			265.5				241				269			

Notes:

1. Regular hours and overtime hours provided by City Administration for Fiscal Year 2019, with the exception of hours for seasonal maintenance which were provided for the summer of 2020 to reflect the increase in staffing levels for these positions.
2. Benchmark hours per task were calculated to include the hours of time off in each work task category to ensure an employee's full hours are reflected in the benchmarking analysis. To do this, PPID calculated the Regular and Overtime Hours as a Percent of Total Work Hours for each employee work task and then applied this percentage to the total hours that an employee could work per year (2,080 for a full-time employee).
3. Department administration hours were provided by the Public Works Operations Superintendent.

Appendix A - Street/Parks/Cemetery/Motor Pool Department Hours by Employee by Task

	Equipment Operator (Street Division)				Mechanic				Equipment Operator (Parks/Cemetery Division)			
	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task
Department Administration												
Department Administration	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Street Maintenance												
Highways, Streets & Bridges	36	0	1.9%	40.52	0	0	0.0%	0.00	0	0	0.0%	0.00
Major Street - Surface Maintenance	68	1	3.7%	77.67	0	0	0.0%	0.00	8	0	0.4%	8.56
Major Street - Off-Surface Maintenance	145	0	7.8%	163.22	0	0	0.0%	0.00	0	0	0.0%	0.00
Major Street - Traffic Services	35	0	1.9%	39.40	0	0	0.0%	0.00	0	0	0.0%	0.00
Local Street - Surface Maintenance	224	2	12.2%	254.40	2	0	0.1%	2.32	8	0	0.4%	8.56
Local Street - Off-Surface Maintenance	88	0	4.8%	99.06	0	0	0.0%	0.00	0	0	0.0%	0.00
Local Street - Traffic Services	17	0	0.9%	19.14	0	0	0.0%	0.00	0	0	0.0%	0.00
Winter Street Maintenance												
Municipal Parking System	72	0	3.9%	81.05	0	0	0.0%	0.00	0	0	0.0%	0.00
Municipal Parking - Satellite System	74	0	4.0%	83.30	0	0	0.0%	0.00	4	3	0.4%	7.49
Major Street - Winter Maintenance	106	23.5	7.0%	145.77	0	0	0.0%	0.00	0	0	0.0%	0.00
Local Street - Winter Maintenance	130	30.33	8.7%	180.47	39	32.83	4.0%	83.15	0	0	0.0%	0.00
Bike Path Maintenance												
Sidewalks and Bike paths	69	0	3.7%	77.67	0	0	0.0%	0.00	84	25	5.6%	116.57
Vehicle Maintenance												
Motor Pool	23	0	1.2%	25.89	1,715	8	95.9%	1,994.53	0	0	0.0%	0.00
Park Maintenance												
Parks	96.5	0	5.2%	108.62	0	0	0.0%	0.00	872	30	46.4%	964.61
Splashpad	26	0	1.4%	29.27	0	0	0.0%	0.00	0	34	1.7%	36.36
Cemetery Maintenance												
Cemetery	21	0	1.1%	23.64	0	0	0.0%	0.00	809	42	43.8%	910.07
Storm Sewer Maintenance												
Major Street - Storm/Drainage Systems	88.5	0	4.8%	99.62	0	0	0.0%	0.00	0	0	0.0%	0.00
Local Street - Storm/Drainage Systems	169	0	9.1%	190.23	0	0	0.0%	0.00	0	0	0.0%	0.00
Sanitary Sewer Maintenance												
Clean Water - Transmission	103	0	5.6%	115.94	0	0	0.0%	0.00	0	0	0.0%	0.00
City Clean Up												
City Clean Up	194	0	10.5%	218.38	0	0	0.0%	0.00	26	0	1.3%	27.80
Miscellaneous												
Maintenance - City Hall	1	0	0.1%	1.13	0	0	0.0%	0.00	0	0	0.0%	0.00
Building Maintenance - Roosevelt Fire Station	5	0	0.3%	5.63	0	0	0.0%	0.00	0	0	0.0%	0.00
Total Work Hours	**1,791.00**	**56.83**			**1,756.00**	**40.83**			**1,811.00**	**134.00**		
Personal, Sick, Vacation, COMP Hours	289				324				181			

Notes:

1. Regular hours and overtime hours provided by City Administration for Fiscal Year 2019, with the exception of hours for seasonal maintenance which were provided for the summer of 2020 to reflect the increase in staffing levels for these positions
2. Benchmark hours per task were calculated to include the hours of time off in each work task category to ensure an employee's full hours are reflected in the benchmarking analysis. To do this, PPID calculated the Regular and Overtime Hours as a Percent of Total Work Hours for each employee work task and then applied this percentage to the total hours that an employee could work per year (2,080 for a full-time employee).
3. Department administration hours were provided by the Public Works Operations Superintendent.

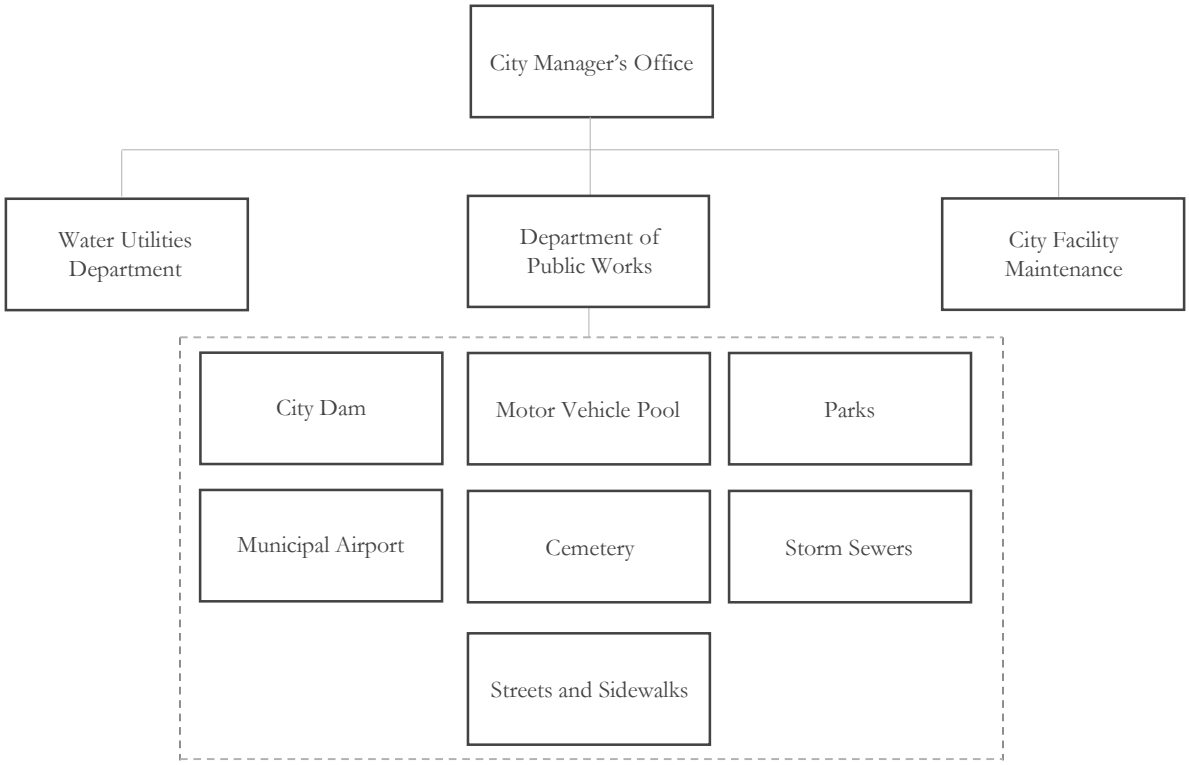
Appendix A - Street/Parks/Cemetery/Motor Pool Department Hours by Employee by Task

	Equipment Operator (Parks/Cemetery Division)				Park/Cemetery Maintenance				Seasonal Maintenance			
	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task	Regular Hours	Overtime Hours	Regular and Overtime Hours as a Percent of Total Work Hours	Benchmark Hours per Task
Department Administration												
Department Administration	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Street Maintenance												
Highways, Streets & Bridges	0	0	0.0%	0.00	0	5	0.2%	4.80	0	0	0.0%	0.00
Major Street - Surface Maintenance	4	0	0.2%	4.17	0	0	0.0%	0.00	0	0	0.0%	0.00
Major Street - Off-Surface Maintenance	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Major Street - Traffic Services	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Local Street - Surface Maintenance	4	0	0.2%	4.17	0	2	0.1%	1.92	0	0	0.0%	0.00
Local Street - Off-Surface Maintenance	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Local Street - Traffic Services	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Winter Street Maintenance												
Municipal Parking System	0	0	0.0%	0.00	19	67	4.0%	82.64	78	0	2.7%	81.26
Municipal Parking - Satellite System	4	0	0.2%	4.17	16	0	0.7%	15.38	0	0	0.0%	0.00
Major Street - Winter Maintenance	0	0	0.0%	0.00	8	0	0.4%	7.69	0	0	0.0%	0.00
Local Street - Winter Maintenance	0	0	0.0%	0.00	164	22	8.6%	178.74	0	0	0.0%	0.00
Bike Path Maintenance												
Sidewalks and Bike paths	90	29	6.0%	124.04	4	10	0.6%	13.45	4	0	0.1%	4.17
Vehicle Maintenance												
Motor Pool	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Park Maintenance												
Parks	1,113	20	56.8%	1,180.98	808	45	39.4%	819.70	1,654	14	56.8%	1,737.68
Splashpad	4	10	0.7%	14.59	4	16	0.9%	19.22	0	0	0.0%	0.00
Cemetery Maintenance												
Cemetery	662	35.5	35.0%	727.04	917	31.5	43.8%	911.47	1,185	0	40.4%	1,234.50
Storm Sewer Maintenance												
Major Street - Storm/Drainage Systems	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Local Street - Storm/Drainage Systems	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Sanitary Sewer Maintenance												
Clean Water - Transmission	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
City Clean Up												
City Clean Up	16	4	1.0%	20.85	14	4	0.8%	17.30	0	0	0.0%	0.00
Miscellaneous												
Maintenance - City Hall	0	0	0.0%	0.00	0	0	0.0%	0.00	0	0	0.0%	0.00
Building Maintenance - Roosevelt Fire Station	0	0	0.0%	0.00	8	0	0.4%	7.69	0	0	0.0%	0.00
Total Work Hours	**1,897.00**	**98.50**			**1,962.00**	**202.50**			**2,921.00**	**14.00**		
Personal, Sick, Vacation, COMP Hours	183				118							

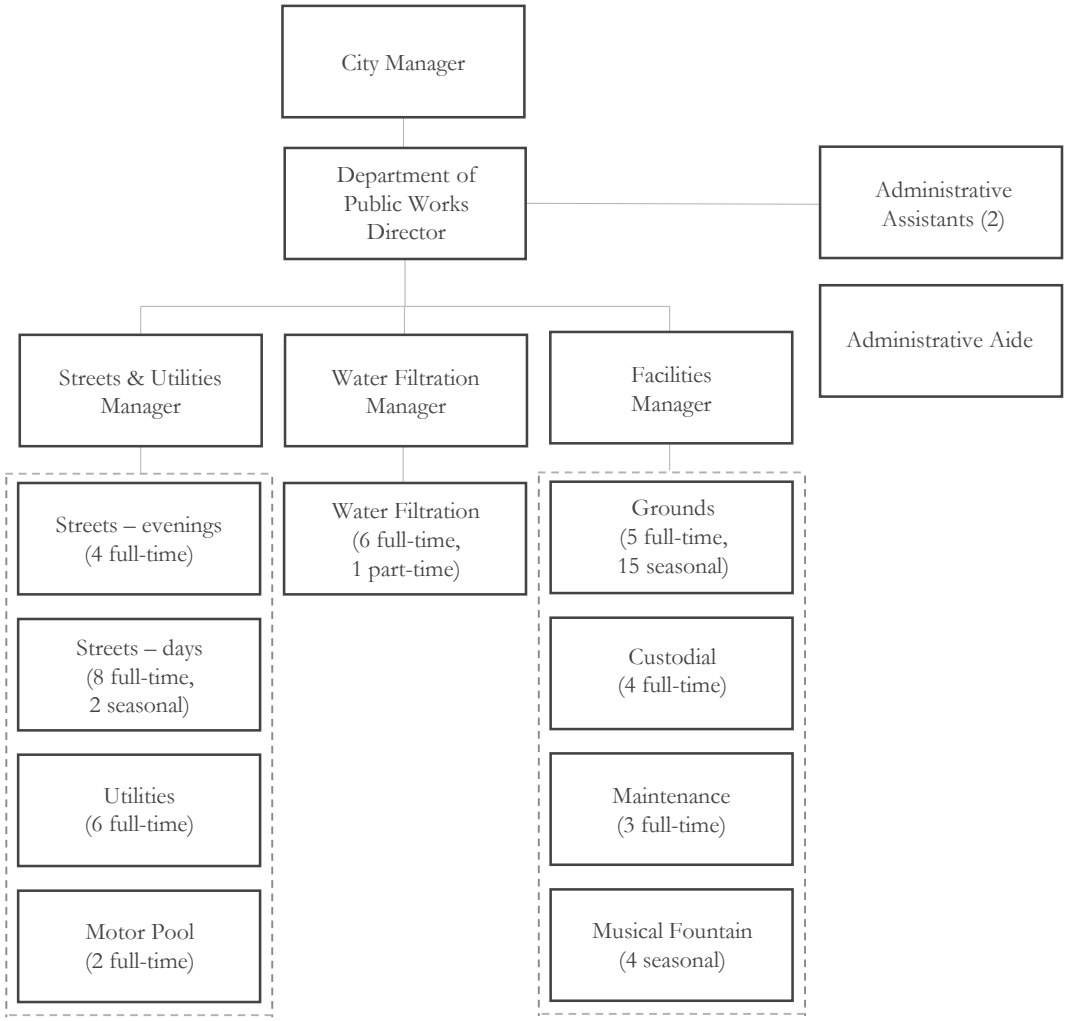
Notes:

1. Regular hours and overtime hours provided by City Administration for Fiscal Year 2019, with the exception of hours for seasonal maintenance which were provided for the summer of 2020 to reflect the increase in staffing levels for these positions.
2. Benchmark hours per task were calculated to include the hours of time off in each work task category to ensure an employee's full hours are reflected in the benchmarking analysis. To do this, PPID calculated the Regular and Overtime Hours as a Percent of Total Work Hours for each employee work task and then applied this percentage to the total hours that an employee could work per year (2,080 for a full-time employee).
3. Department administration hours were provided by the Public Works Operations Superintendent.

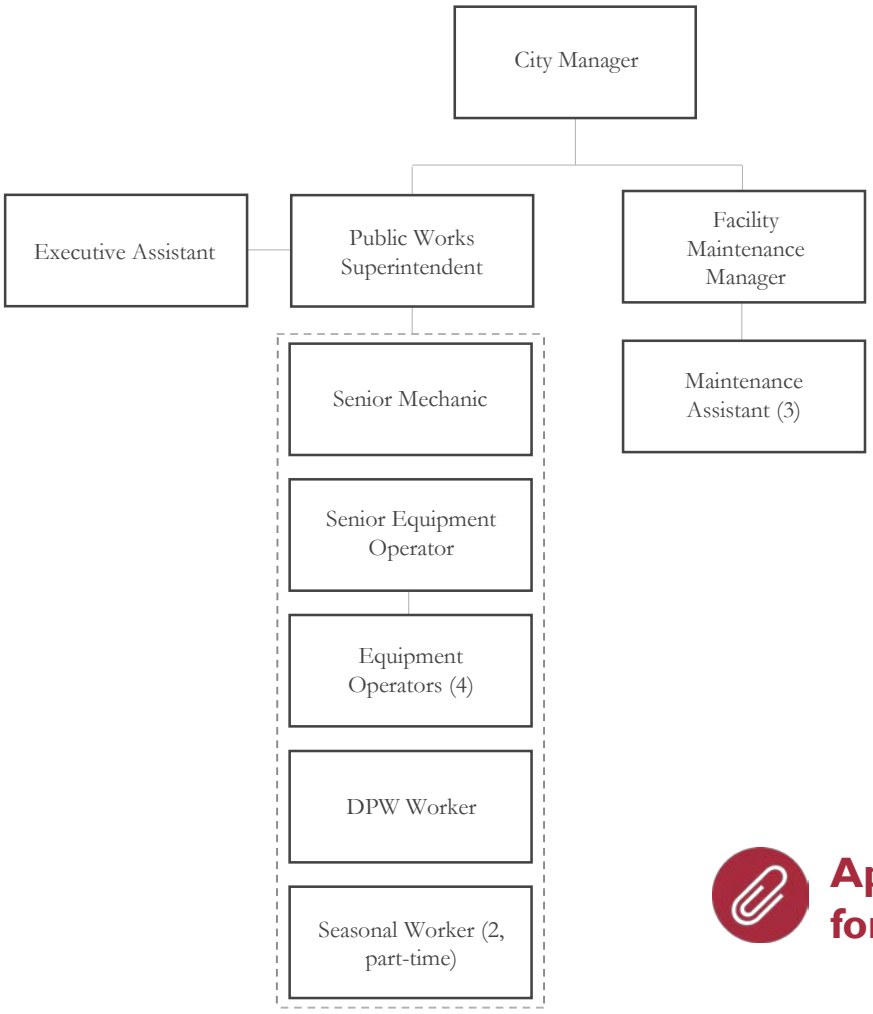
Appendix B1 – Organizational Chart for the City of Allegan



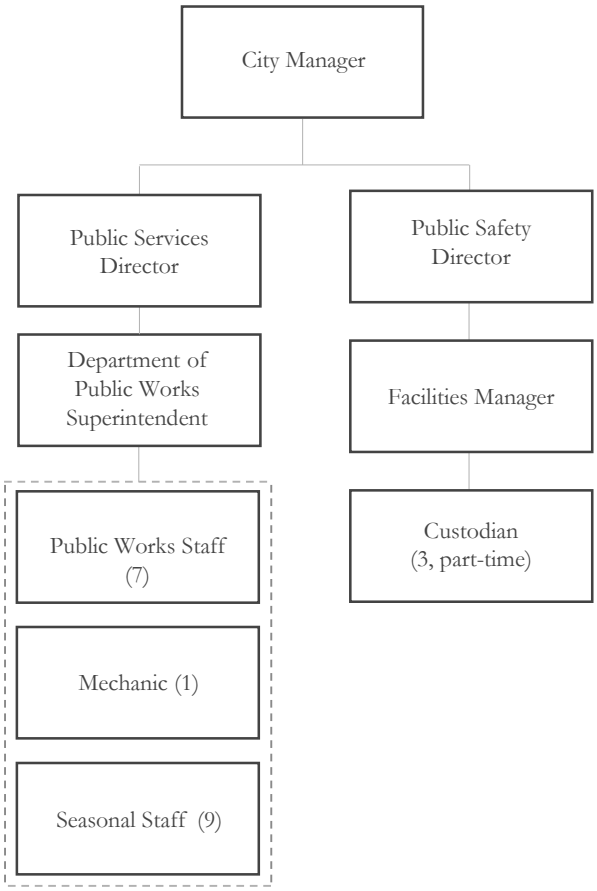
Appendix B2 – Organizational Chart for the City of Grand Haven



Appendix B3 – Organizational Chart for the City of Hudsonville



Appendix B4 – Organizational Chart for the City of Marshall



Appendix C – Data Sources

Facility Maintenance & Custodial

1. Georgia School Superintendents Association & Hanover Research. "Best Practices for School District Facilities and Maintenance". https://www.gssaweb.org/wp-content/uploads/2015/11/Best-Practices-for-School-District-Facilities-and-Maintenance.pdf
2. Facilities Net Building Operating Management. "Facility Staffing Levels: Maintenance, Custodial, and Grounds Care". https://www.facilitiesnet.com/facilitiesmanagement/article/Facility-Staffing-Levels-Maintenance-Custodial-and-Grounds-Care--17471
3. International Facility Management Association (IFMA). "Facility Management Staffing Report". https://community.ifma.org/cfs-file/__key/telligent-evolution-components-attachments/13-471-00-00-01-05-76-16/Facility_5F00_Management_5F00_Staffing_5F00_Report_5F00_33.pdf

Vehicle Maintenance

1. NAFA National Fleet Management Association. "Accounting for VEU Variations". https://www.nafa.org/Resource-Center/Research-Guides-Studies/Whitepapers/Papers/Accounting-For-VEU-Variations.aspx
2. The Novak Consulting Group. "The City of Charlottesville Fleet Maintenance Study". https://www.charlottesville.gov/DocumentCenter/View/4141/Novak-Consulting-Group-Fleet-Management-Assessment
3. Government Fleet. "Calculating Mechanic Staffing Requirements". https://www.government-fleet.com/146344/calculating-mechanic-staffing-requirements

Park Maintenance

1. National Recreation and Park Association. "2020 NRPA Agency Performance Review". https://www.nrpa.org/publications-research/research-papers/agency-performance-review/
2. NRPA, PRORAGIS. "Parks and Recreation National Database Report". https://cdn.ymaws.com/www.mparks.org/resource/collection/FCDE1F43-B9E7-4491-9DD7-C35E083BA88F/2014National-Database-ReportNRPA.pdf
3. International City County Managers Association (ICMA), PRORAGIS (Warner Robins, GA). "Maintenance & Operational Cost Assessment". https://wrga.gov/DocumentCenter/View/1914/14233_08_Section_5_Maintenance_and_Operational_Cost_Assessment.

Comparable Cities and Contacts

1. City of Allegan. City Manager: Joel Dye. https://www.cityofallegan.org/
2. City of Grand Haven. City Manager: Pat McGinnis. https://grandhaven.org/
3. City of Hudsonville. City Manager: Patrick Waterman. https://www.hudsonville.org/
4. City of Marshall. Special Projects Director: Eric Zuzga, City Manager: Tom Tarkiewicz. http://www.cityofmarshall.com/
5. City of St. Clair. City Manager: Warren Rothe. http://www.cityofstclair.com/

Other Sources

1. U.S. Merit Systems Protection Board. "A Call to Action: Improving First-Level Supervision of Federal Employees". https://www.mspb.gov/mspbsearch/viewdocs.aspx?docnumber=516534&version=517986&application=ACROBAT
2. Jack Owens, U.S. Fish and Wildlife Service. "OPM Definitions of Team Leader, Manager & Supervisor". https://nctc.fws.gov/courses/references/job-aids/supervisors/documents/Definitions-TeamLeader-Supervisor-Manager.pdf

Appendix D - Vehicle Equivalent Unit Analysis

Vehicle Class	Zeeland					Allegan					Grand Haven				
	Number of Vehicles	MRU Factor	VEU	Annual Staff Hours Needed if 10 Hours per VEU	Annual Staff Hours Needed if 15 Hours per VEU	Number of Vehicles	MRU Factor	VEU	Annual Staff Hours Needed if 10 Hours per VEU	Annual Staff Hours Needed if 15 Hours per VEU	Number of Vehicles	MRU Factor	VEU	Annual Staff Hours Needed if 10 Hours per VEU	Annual Staff Hours Needed if 15 Hours per VEU
Passenger Cars (non-police)	1	1.0	1.0	10.0	15.0	0	1.0	0.0	0.0	0.0	2	1.0	2.0	20.0	30.0
Pickups, vans, and other light trucks	11	1.5	16.5	165.0	247.5	10	1.5	15.0	150.0	225.0	30	1.5	45.0	450.0	675.0
Police Patrol	5	1.5	7.5	75.0	112.5	5	1.5	7.5	75.0	112.5	11	1.5	16.5	165.0	247.5
Non-Pursuit Vehicles	3	1.0	3.0	30.0	45.0	0	1.0	0.0	0.0	0.0	7	1.0	7.0	70.0	105.0
Fire Trucks	4	7.6	30.4	304.0	456.0	0	7.6	0.0	0.0	0.0	3	7.6	22.8	228.0	342.0
Dump Trucks	6	4.0	24.0	240.0	360.0	4	4.0	16.0	160.0	240.0	10	4.0	40.0	400.0	600.0
Street Sweepers	1	14.0	14.0	140.0	210.0	1	14.0	14.0	140.0	210.0	1	14.0	14.0	140.0	210.0
Sewer Trucks	2	3.8	7.6	76.0	114.0	0	3.8	0.0	0.0	0.0	1	3.8	3.8	38.0	57.0
Backhoes, Loaders, Trenchers	6	2.7	16.2	162.0	243.0	2	2.7	5.4	54.0	81.0	5	2.7	13.5	135.0	202.5
Rollers	1	3.5	3.5	35.0	52.5	1	3.5	3.5	35.0	52.5	1	3.5	3.5	35.0	52.5
Bucket Trucks	1	3.2	3.2	32.0	48.0	1	3.2	3.2	32.0	48.0	2	3.2	6.4	64.0	96.0
Other Trucks	1	3.6	3.6	36.0	54.0	1	3.6	3.6	36.0	54.0	1	3.6	3.6	36.0	54.0
Mowers	11	1.0	11.0	110.0	165.0	4	1.0	4.0	40.0	60.0	12	1.0	12.0	120.0	180.0
Other Non-Motorized Equipment	25	0.6	15.0	150.0	225.0	10	0.6	6.0	60.0	90.0	18	0.6	10.8	108.0	162.0
Trailers	2	0.6	1.2	12.0	18.0	3	0.6	1.8	18.0	27.0	0	0.6	0.0	0.0	0.0
Total	**80**		**157.7**	**1,577.0**	**2,365.5**	**42**		**80.0**	**800.0**	**1,200.0**	**104**		**200.9**	**2,009.0**	**3,013.5**
FTE Needed				**0.76**	**1.14**				**0.38**	**0.58**				**0.97**	**1.45**

Notes:

1. It is a common practice to convert vehicle fleets into Vehicle Equivalent Units (VEUs). The first step in this process is to determine the Maintenance Repair Units (MRUs) for each vehicle type. MRU factors obtained from https://www.government-fleet.com/146908/how-to-calculate-technician-to-vehicle-ratios.

2. Other trucks include vehicles such as a vactor truck for cleaning catch basins and storm sewers. Other non-motorized equipment includes plows, concrete mixers, pavement marking sprayers, pavement crack sealer, snow blowers, sewer jet, air compressor, etc.

Appendix D - Vehicle Equivalent Unit Analysis

Vehicle Class	Hudsonville					Marshall					St. Clair				
	Number of Vehicles	MRU Factor	VEU	Annual Staff Hours Needed if 10 Hours per VEU	Annual Staff Hours Needed if 15 Hours per VEU	Number of Vehicles	MRU Factor	VEU	Annual Staff Hours Needed if 10 Hours per VEU	Annual Staff Hours Needed if 15 Hours per VEU	Number of Vehicles	MRU Factor	VEU	Annual Staff Hours Needed if 10 Hours per VEU	Annual Staff Hours Needed if 15 Hours per VEU
Passenger Cars (non-police)	0	1.0	0.0	0.0	0.0	8	1.0	8.0	80.0	120.0	0	1.0	0.0	0.0	0.0
Pickups, vans, and other light trucks	14	1.5	21.0	210.0	315.0	10	1.5	15.0	150.0	225.0	4	1.5	6.0	60.0	90.0
Police Patrol	0	1.5	0.0	0.0	0.0	8	1.5	12.0	120.0	180.0	4	1.5	6.0	60.0	90.0
Non-Pursuit Vehicles	0	1.0	0.0	0.0	0.0	2	1.0	2.0	20.0	30.0	1	1.0	1.0	10.0	15.0
Fire Trucks	2	7.6	15.2	152.0	228.0	3	7.6	22.8	228.0	342.0	0	7.6	0.0	0.0	0.0
Dump Trucks	4	4.0	16.0	160.0	240.0	5	4.0	20.0	200.0	300.0	4	4.0	16.0	160.0	240.0
Street Sweepers	1	14.0	14.0	140.0	210.0	1	14.0	14.0	140.0	210.0	1	14.0	14.0	140.0	210.0
Sewer Trucks	1	3.8	3.8	38.0	57.0	1	3.8	3.8	38.0	57.0	1	3.8	3.8	38.0	57.0
Backhoes, Loaders, Trenchers	4	2.7	10.8	108.0	162.0	2	2.7	5.4	54.0	81.0	3	2.7	8.1	81.0	121.5
Rollers	0	3.5	0.0	0.0	0.0	0	3.5	0.0	0.0	0.0	0	3.5	0.0	0.0	0.0
Bucket Trucks	0	3.2	0.0	0.0	0.0	4	3.2	12.8	128.0	192.0	0	3.2	0.0	0.0	0.0
Other Trucks	0	3.6	0.0	0.0	0.0	1	3.6	3.6	36.0	54.0	1	3.6	3.6	36.0	54.0
Mowers	3	1.0	3.0	30.0	45.0	10	1.0	10.0	100.0	150.0	2	1.0	2.0	20.0	30.0
Other Non-Motorized Equipment	20	0.6	12.0	120.0	180.0	6	0.6	3.6	36.0	54.0	4	0.6	2.4	24.0	36.0
Trailers	2	0.6	1.2	12.0	18.0	5	0.6	3.0	30.0	45.0	1	0.6	0.6	6.0	9.0
Total	**51**		**97.0**	**970.0**	**1,455.0**	**66**		**136.0**	**1,360.0**	**2,040.0**	**26**		**63.5**	**635.0**	**952.5**
FTE Needed				**0.47**	**0.70**				**0.65**	**0.98**				**0.31**	**0.46**

Notes:

1. It is a common practice to convert vehicle fleets into Vehicle Equivalent Units (VEUs). The first step in this process is to determine the Maintenance Repair Units (MRUs) for each vehicle type. MRU factors obtained from https://www.government-fleet.com/146908/how-to-calculate-technician-to-vehicle-ratios.

2. Other trucks include vehicles such as a vactor truck for cleaning catch basins and storm sewers. Other non-motorized equipment includes plows, concrete mixers, pavement marking sprayers, pavement crack sealer, snow blowers, sewer jet, air compressor, etc.