



City of Blaine

City Council Workshop

April 10, 2023 | 5:30 PM
Blaine City Hall
10801 Town Square Drive NE
Blaine, MN 55449

AGENDA

NOTICE OF WORKSHOP MEETING

In accordance with the provisions of Section 3.01 of the Blaine City Charter, a Council Workshop meeting is scheduled for the following purpose:

1. Call to Order

2. New Business

2.1. 2023-110 Closed Session Pursuant to MN Statute 13D.05(3)(c)(3) - Property Acquisitions Related to 105th Avenue Development Area
Sponsors: Erik Thorvig, Community Development Director

2.2. 2023-111 Veterans Memorial Park Update
Sponsors: Michelle Wolfe, City Manager

2.3. 2023-69 35W Logistics Center (Corner of 109th and Sunset)
Sponsors: Sheila Sellman, City Planner

2.4. 2023-104 Fleet Rightsizing Discussion
Sponsors: Joe Huss, Finance Director/Asst. City Manager

3. Other Business

4. Adjournment



City of Blaine Staff Report

File Number:

Agenda Date	Status
April 10, 2023	

In Control	File Type
City Council	Report

New Business - Erik Thorvig, Community Development Director

Agenda Item # 2.1

Closed Session Pursuant to MN Statute 13D.05(3)(c)(3) - Property Acquisitions Related to 105th Avenue Development Area

Background

Staff and the developer will present information on the property acquisition plan for the 105th Avenue Redevelopment Area. Confidential information will be provided to the City Council prior to the meeting.

Staff Recommendation

Questions for Council

Attachment List

None



City of Blaine Staff Report

File Number:

Agenda Date

April 10, 2023

Status

In Control

City Council

File Type

Workshop Item

New Business - Michelle Wolfe, City Manager

Agenda Item # 2.2

Veterans Memorial Park Update

Background

Steve Guider will provide Council with an update on the Veterans Memorial Park.

Staff Recommendation

Questions for Council

Attachment List

None



City of Blaine Staff Report

File Number:

Agenda Date	Status
April 10, 2023	
In Control	File Type
City Council	Workshop Item

New Business - Joe Huss, Finance Director/Asst. City Manager

Agenda Item # 2.4

Fleet Rightsizing Discussion

Background

In late 2020, toward the end of the 2021 Budget process, the City Manager proposed a fleet rightsizing initiative. The desired outcomes of the study were:

- To deliver data-driven information that would provide the most cost effective, economical processes for determining fleet additions and replacements such that the optimal number of vehicles and equipment needed to support operations would be achieved; and
- To bring operational efficiencies to vehicle maintenance, including the creation of a separate Fleet Services operations internal service fund and establishing a reliable method of charging departments to fund fleet maintenance operations and capital additions and replacement.

In November, 2021, the City Council approved a contract with Management Partners for a Fleet Rightsizing study. The study was completed in May 2022 with Management Partners providing a comprehensive report containing 63 recommendations.

Since that time, staff has worked diligently with Management Partners to understand the recommendations and determine the feasibility of implementing the recommendations. To facilitate implementation, the recommendations were placed into eight categories. For each category, cross-functional teams, representing departments across the city, were formed and have been assigned responsibility for the implementation of the recommendations that fell into their respective categories. The eight categories are:

- Chargeback Implementation - In collaboration with Management Partners, this team will develop a system that properly allocates and charges the various city divisions an equitable share of the costs of Fleet Services.
- Condition Assessment & Disposal - Assess the condition of current vehicle and equipment stock and make the determination to retain, dispose (either by sale, trade-in, or donation), or re-purpose each piece of equipment.
- Dossier Implementations - Dossier, the city's fleet management software, provides one of the more robust systems on the market, but is under-utilized. Quite a few recommendations will rely on a fully functional Dossier system to achieve optimal implementation. This team is responsible for coordinating the full implementation of Dossier to enhance the city's fleet management.
- Facilities Improvements - To assess recommendations that, if implemented, would require renovations to buildings or reorganizing of work stations.
- Maintenance Standards - To ensure best practices and manufacturer maintenance standards are maintained.
- Policy Development - To develop and maintain policies governing fleet management.
- Service Standards - To ensure that end-users' needs are being met.
- Staffing - To assess and implement recommendations pertaining to staffing

Each of the 63 recommendations also fall into one of the following subcategories:

- Implemented - Per recommendation or with some adjustment of recommendation
- To be implemented - Per recommendation or with some adjustment of recommendation
- Will not be implemented

Staff will present to the Council a summary of the work to-date and the actions remaining for full implementation of the plan.

Staff Recommendation

The presentation is informational, to bring the Council up to date on the status of the plan recommendations and next steps to implement the plan. Staff will lead a presentation to Council summarizing the work to-date on the Fleet Rightsizing plan and are prepared to respond to Council questions and feedback on the Fleet Rightizing study.

Questions for Council

Attachment List

1. Blaine Fleet Rightsizing Report

City of Blaine

Fleet Operations Assessment and Rightsizing Study

April 2022

**Management
Partners**





April 25, 2022

Ms. Michelle Wolfe
City Manager
City of Blaine
10801 Town Square Drive
Blaine, MN 55449

Dear Ms. Wolfe:

Management Partners is pleased to transmit this fleet assessment and rightsizing report. It contains our analysis and recommendations to help improve the functionality and effectiveness of the Vehicle Maintenance Division of Public Works. The rightsizing section identifies underutilized and misapplication of units and suggests alternative means of transportation.

We are preparing a draft Implementation Action Plan that will be provided to you under separate cover. The draft plan sets forth the steps required for implementation, assigns responsibility for action, and suggests a priority level (immediate, near or long term) for initiating each recommendation. It is provided as a draft so that you and your staff can adjust the plan to suit the specific circumstances and workload in Blaine.

We appreciate the support of this project provided by City staff members who gave their time, insight and expertise that was critical to our analysis.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jerry Newfarmer', written over a light blue horizontal line.

Jerry Newfarmer
President and CEO

Table of Contents

Executive Summary	1
Vehicle Maintenance Assessment	3
Background and Methodology.....	3
<i>Methodology</i>	<i>4</i>
Fleet Organization, Policies, Feedback, Performance and Reporting.....	6
<i>Vehicle Maintenance Organization</i>	<i>6</i>
<i>Policies</i>	<i>6</i>
<i>Customer Feedback</i>	<i>8</i>
<i>Performance Measurement</i>	<i>9</i>
<i>Management Reports</i>	<i>11</i>
Fleet Facilities.....	12
Fleet Delivery Programs.....	15
<i>Maintenance and Repair Program.....</i>	<i>16</i>
<i>Sublet (Commercial Work) Program</i>	<i>19</i>
<i>Parts Program.....</i>	<i>21</i>
<i>Fuel Program</i>	<i>22</i>
<i>Administration and Asset Management Program</i>	<i>23</i>
Staffing.....	23
<i>Current Staffing.....</i>	<i>23</i>
<i>Recommended Staffing.....</i>	<i>24</i>
Labor Rates and Markups.....	27
<i>Shop Labor Rate</i>	<i>27</i>
<i>Markups</i>	<i>29</i>
Budgeting and Chargeback Practices	30
<i>Budgeting.....</i>	<i>30</i>
<i>Chargeback System</i>	<i>31</i>
Fleet Replacement Planning, Funding and Optimal Economic Life Point	32
<i>Fleet Replacement Planning</i>	<i>33</i>
<i>Optimum Economic Life Point</i>	<i>34</i>
<i>Replacement Funding</i>	<i>37</i>

Fleet Rightsizing	39
Background	39
Project Approach	40
<i>Document Review</i>	40
<i>Applying Best Practices</i>	40
<i>Data Collection</i>	40
<i>Data Analysis</i>	40
<i>Collaboration with Staff</i>	41
Fleet Rightsizing Best Practices	42
<i>Monitor Vehicle Life Cycles</i>	42
<i>Effective Vehicle Allocation</i>	42
<i>Monitor the Fleet Utilization Rate</i>	42
<i>Measure Results to Systemically Gauge Performance</i>	42
<i>Vehicle Maintenance Information System</i>	43
Utilization Analysis	43
<i>Vehicle and Equipment Functional Categories</i>	43
<i>Utilization Criteria</i>	46
Vehicle Cost Analysis	49
<i>Using City-Assigned Vehicles vs. Mileage Reimbursement</i>	49
<i>Daily Trip Cost Comparisons</i>	51
<i>Monthly Auto Allowance Rates and Mileage Reimbursement</i>	53
Fleet Reductions, Reassignments and Pooling	54
<i>Fleet Reductions</i>	54
<i>Reassignments and Pooling</i>	58
Vehicle Assignment and Utilization Policies	63
<i>Vehicle Assignment of Units to Individuals</i>	63
<i>Utilization Policies</i>	66
Conclusion.....	68
Attachment A – List of Recommendations.....	69
Attachment B – Sample Performance Measures	73
Attachment C – Sample Fleet Manager Principal Duties.....	74
Attachment D – Units Recommended for Reduction, Reassignment or Pooling	76
Appendix 1 – Sample Fleet Management Business Plan.....	78
Appendix 2 – Sample Service Level Agreement	79
Appendix 3 – Sample Service Request.....	80

Tables

Table 1.	Fleet Inventory Summary	3
Table 2.	Vehicle Maintenance Operations Budget Summary for FY 2021-22	4
Table 3.	Vehicle Maintenance Staffing.....	6
Table 4.	Recommended Vehicle Maintenance Metrics	11
Table 5.	Comparison of Current Mechanic Staffing to Calculated and Recommended Mechanic Staffing.....	25
Table 6.	Comparison of Current Mechanic Staffing to Calculated and Recommended Mechanic Staffing.....	26
Table 7.	Commercial Repair Shop Rates.....	28
Table 8.	Calculated Shop Labor Rate Compared to Local Market Shop Labor Rates	28
Table 9.	Comparison of Calculated Markups with Fleet Industry Markup Standards	29
Table 10.	Fleet Age	33
Table 11.	Vehicle and Equipment Replacement Intervals.....	34
Table 12.	Scoring System for Evaluating Vehicle Condition and Replacement Need	36
Table 13.	Summary of Condition Assessment	37
Table 14.	Number of Units by Functional Category	45
Table 15.	Summary of Total Fleet Utilization	48
Table 16.	Ownership and Operational Costs for Ford Explorer SUV	50
Table 17.	Breakeven Analysis for City-Assigned Ford Explorer SUV vs. Mileage Reimbursement	50
Table 18.	Ownership and Operational Costs for Ford Explorer SUV	51
Table 19.	Comparison of Pool Vehicle, Mileage Reimbursement and Commercial Rental Costs	52
Table 20.	Cost Savings and Cost Avoidance from Recommended Fleet Reductions	58
Table 21.	Equipment Recommended for Reassignment to the City Hall Motor Pool.....	59
Table 22.	Permanently Assigned Take Home Vehicles	64
Table 23.	Standby and On-Call Vehicles	64

Figures

Figure 1.	Breakeven Point for a City-Owned Ford Explorer SUV Compared to Personal Car Reimbursement	51
Figure 2.	Single Trip Cost Comparison of Pool Vehicle, Employee Reimbursed Mileage and Commercial Rental Vehicle	52

Executive Summary

Management Partners was engaged by the City of Blaine to evaluate the City's Vehicle Maintenance operation and develop a plan to implement the improvements. This review identified several best fleet management practices that, if implemented, could improve the functionality of the City's maintenance efforts.

Our work also included a rightsizing study of the City's fleet. It included a detailed review of each vehicle and piece of equipment to ensure the fleet is appropriately sized and configured to meet transportation needs as efficiently and effectively as possible. It also provided an opportunity to explore alternative transportation options that may be less costly, such as reimbursing mileage for individuals who use their own vehicle, downsizing to less expensive and more economical units, centralizing and/or pooling vehicles, sharing equipment with other public agencies, and using commercial car rental companies.

After further analysis and collaboration with department representatives, Management Partners identified 17 vehicles that should be removed from the fleet inventory. Disposing of these units would generate approximately \$100,000 in one-time revenues. Additionally, there would be first-year savings of more than \$65,000 in avoided operational costs and more than \$1million in avoided replacement costs. Together, these avoidance costs equate to savings of about \$1.7 million over the next 10 years.

The recommendations in this report address the following major issues:

- A lack of awareness about the real cost of the City's Vehicle Maintenance operation relative to the marketplace.
- Commercial repair work and parts purchases that have not been competitively bid and are not supported with vendor agreements.
- An underutilized fleet software system.
- The absence of a financial and chargeback system that would give Vehicle Maintenance customers a sense of the ownership, an understanding of the operational costs of their vehicles, and encourage them to modify their behavior in terms of minimizing fleet units.

- The need for performance measures to evaluate the fleet operation's effectiveness.
- The lack of appropriate mechanics and parts personnel to support the fleet operation.
- The need for increased oversight of the fleet operation by a qualified manager.

This report is organized into two segments. The first segment contains our assessment of the Vehicle Maintenance operation and contains 37 recommendations that address the issues listed above. The second segment contains the results of our rightsizing review and contains 26 recommendations. Attachment A provides a list of the recommendations.

Vehicle Maintenance Assessment

The Vehicle Maintenance Assessment segment of this report is divided into the following sections:

- Background and Methodology;
- Fleet Organization, Policies, Feedback, Performance and Reporting;
- Fleet Facilities;
- Fleet Delivery Programs;
- Administration and Asset Management;
- Labor Rates and Markups;
- Budgeting and Chargeback Practices;
- Performance Measurement, and Reporting; and
- Fleet Replacement Planning, Funding and Optimum Economic Life Point.

Background and Methodology

Vehicle Maintenance is a division of the Public Works Department. Staff in the division are responsible for maintaining the City's fleet, which is comprised of a total of 591 units. These include 126 light-duty sedans, pickups, vans and SUVs, 58 medium/heavy-duty trucks, 41 law enforcement units, 23 pieces of construction-type equipment and 343 pieces of miscellaneous equipment. Table 1 provides a summary of all units maintained by Vehicle Maintenance.

Of the City's entire fleet of 591 units, 344 units were identified to be included in this study and are commonly referred to as "rolling stock." The remainder of the fleet, some 247 units, consisting of attachments and other non-motorized equipment, were not included in our analysis except for calculating the annual Vehicle Maintenance workload.

Table 1. Fleet Inventory Summary

Equipment Type	Number of City Units
Law Enforcement Patrol	41
Sedans (including undercover units)	8
Light-Duty (class 1 through 3)	118

Equipment Type	Number of City Units
Medium-Duty Trucks (class 4 through 6)	21
Heavy-Duty Trucks (class 7 and 8)	37
Motor-Driven Construction Equipment (e.g., loaders, dozers, graders, pavers)	23
Miscellaneous Equipment (e.g., trailers, compressors, landscape equipment)	343
TOTAL FLEET UNITS	591

Vehicle Maintenance's general operations budget for FY 2021-22 totals \$1,636,150 and consists of \$527,850 in salaries and benefits, \$309,000 in parts costs, \$168,000 in sublet (commercial repair) work, \$465,500 in fuel costs and \$165,800 in overhead costs. Table 2 reflects a summary of these costs.

Table 2. Vehicle Maintenance Operations Budget Summary for FY 2021-22

Item	Budget
Salaries and benefits	527,850
Parts	309,000
Sublet (commercial repairs) work	168,000
Fuel	465,500
Overhead expenses (e.g., utilities, office supplies, training)	165,800
Capital costs (e.g., shop equipment, fuel dispensers)	0
TOTAL BUDGET	\$1,636,150

Methodology

Management Partners used a variety of analytical and management techniques in completing this study. This included reviewing pertinent documents, interviewing City staff and internal customers, conducting site visits of the fleet facilities and applying best fleet management practices. Each is briefly described below.

Document Review

Management Partners reviewed the following documents to gain an understanding of the existing fleet inventory and its management:

- Results of Management Partners' Vehicle Maintenance Data Request,
- Vehicle Maintenance Budget for FY 2021-22,
- Fleet inventory,
- Preventive Maintenance Checklist,
- Repair Order Form,
- Life-to-Date Costs per Unit – Dossier Report,
- Number of Repair Orders per Unit – Dossier Report,
- FY 2022-26 Five-Year All Fund CIP (Updated 11-8-2021) Final,

- Hours Analysis Report 01/01/21 to 12/31/21,
- Personnel Policy – Use of City Vehicles Beyond Standard Work Hours/Duty,
- Personnel Policy—Employee Expense Reimbursement Policy, and
- Commercial invoices and fueling information.

Interviews

We conducted individual interviews with the city manager and the finance director/assistant city manager. We also interviewed the public works director, deputy public works director, asset management coordinator, lead mechanic and senior clerk. The purpose of the interviews was to understand the fleet operations and hear issues of concern.

Additionally, we interviewed various fleet customers, including representatives from Safety Services, Community Development, Community Standards, Engineering, Geomatics and Data Services, Parks and Recreation, and Public Works Divisions. The purpose of the interviews was to understand the strengths and weaknesses of Vehicle Maintenance, the level of satisfaction with the services they obtain, and hear ideas for improvement.

Site Visits

We visited the City's Public Works Facility where maintenance is performed to assess existing equipment and tools and shop layout. While there, we observed the maintenance practices of staff in the Vehicle Maintenance Division. We also visited the Cold Storage Facility and the City Hall Garage where various vehicles and equipment are stored.

Fleet Condition Assessment

Management Partners also assessed Vehicle Maintenance's rolling stock. We used the Optimal Economic Life Point System to evaluate the overall condition of each fleet unit taking into account age, utilization, physical condition, maintenance and repair costs, reliability and downtime. An electronic version showing how each fleet unit scored in each of the six categories is being provided separately.

Best Practices

Management Partners applied best practices associated with highly efficient and effective fleet operations to identify improvements relevant to Blaine's operations.

Activity-Based Cost Analysis

Our team performed an activity-based cost analysis of the Vehicle Maintenance Division. We identified all fleet-related costs and distributed them across the major functions common to most fleet organizations. We then calculated a shop labor rate for the maintenance and repair function, as well as markups for parts procurement, sublet work, administration and asset management and fueling. This enabled us to compare the shop labor rate with local dealerships and benchmark the markups against industry standards. The activity-based cost analysis in MS Excel worksheets shows our calculations. An interactive electronic version of these worksheets is being provided separately.

Fleet Organization, Policies, Feedback, Performance and Reporting

Vehicle Maintenance Organization

Currently, the City's asset management coordinator is responsible for supervising a lead mechanic, four mechanics and two seasonal, part-time mechanic trainees. The asset management coordinator reports to the director of Public Works. A senior clerk spends about 11% of her time on fleet-related tasks and the rest of her time on other Public Works tasks. More specific information about staffing is discussed later in this report.

Table 3 reflects each budgeted Vehicle Maintenance staff member and those, non-budgeted employees who support Vehicle Maintenance.

Table 3. Vehicle Maintenance Staffing

Vehicle Maintenance Positions	Full-time Equivalent Employee
Lead Mechanic	1.00
Mechanic	1.00
Mechanic	1.00
Mechanic	1.00
Mechanic	1.00
Mechanic Trainees	0.24
Public Works Support Positions*	
Asset Management Coordinator	0.16
Senior Clerk	0.11

**Not contained in the Vehicle Maintenance budget.*

Policies

Policies that govern how vehicles are assigned and how they are to be utilized and cared for are a common practice in local government agencies. The most important policy management functions for any successful fleet organization should include:

- Fleet Policy and Financial Management,
- Customer Service Management,

- Fleet Cost Control and Chargeback Management,
- Assignment and Fleet Size Management,
- Fleet Replacement (Cycling) Management, and
- Fleet Service Delivery Management.

Aside from a policy addressing employee expense reimbursements and use of City vehicles beyond standard work hours/duty, we did not find a fleet management policy. Such a policy would typically address fleet management responsibility, assigned vehicles, fueling, maintenance, damage, abuse, accidents, fleet size, vehicle replacement and acquisitions and disposal.

Recommendation 1. Develop a fleet management policy and procedures manual that addresses the functions and issues indicated above.

Another best fleet practice is to develop a Fleet Management Plan, also referred to as a business plan. Such a plan should contain a mission statement, as well as goals, and identify how service-level objectives will be fulfilled.

An example of a goal might be to provide quality customer service. This can be accomplished by developing service-level agreements between Vehicle Maintenance and each of its customer departments. The agreement would identify the responsibilities of each party, along with performance measures that measure their effectiveness. An example of a performance measurement goal might be *“downtime related to preventive maintenance work should not exceed three hours.”*

A sample Fleet Management Business Plan from the City of Sacramento, California, is provided as Appendix 1.

Recommendation 2. Develop a Fleet Management Plan that addresses the areas outlined in this report.

The City’s Vehicle Maintenance program does not utilize written service-level agreements. This type of agreement should contain the services to be provided as well as the charges and responsibilities of both parties. Performance standards should be included in each agreement, along with reporting requirements. (A sample service-level agreement between Seattle City Light and the Department of Finance and Administrative Services is provided in Appendix 2.)

Recommendation 3. Develop service-level agreements between Vehicle Maintenance and its customers.

Meetings are held on an as-needed basis between the lead mechanic and various departments that own fleet units to discuss upcoming vehicle and equipment replacements and additions to the fleet.

The formation of a Fleet Committee is a best fleet practice. Such a committee could be used to develop meaningful criteria to determine when a unit should be replaced and other fleet policies. The committee should be comprised of representatives from the various departments who utilize Vehicle Maintenance. A committee chair, preferably a manager from a neutral department such as Finance, should lead the group.

The committee's purpose should be to address fleet-related issues such as developing policy and guidelines relating to vehicle assignment criteria, standby, and take-home use of personal vehicles. A fleet manager or person responsible for managing vehicle maintenance should staff the committee and bring topics and analyses to the committee for discussion.

Further, the committee can act as a platform for Vehicle Maintenance staff and customers to communicate about ongoing fleet service-related issues. It can also act as a review board to evaluate all requests for additions to the fleet.

Recommendation 4. Establish a Fleet Committee whose main task is to develop comprehensive administrative policies for vehicles and equipment. The committee can act as a platform for Vehicle Maintenance and its customers to communicate about ongoing fleet service-related issues and act as a review board to evaluate all vehicle requests.

Customer Feedback

An important mechanism for measuring performance is to solicit feedback from customers. Customer surveys are considered a best fleet management practice and should be done annually. However, Vehicle Maintenance does not regularly ask customers for feedback on the quality of service being provided.

Recommendation 5. Conduct an annual survey to obtain customer feedback on Vehicle Maintenance services.

As mentioned previously, we interviewed Vehicle Maintenance customers from Police, Community Development, Community Standards, Engineering, Geomatics and Data Services, Park and Recreation, and all Public Works divisions to solicit feedback and hear

their ideas about the services they receive from Vehicle Maintenance. We also interviewed the City Manager.

Generally, fleet customers were very satisfied with the service Vehicle Maintenance provides. “They take good care of us,” was echoed by the individuals interviewed. Most said mechanics are quick to respond to their needs and that they take pride in the care of the vehicles. Customers are notified via email when their vehicles are due for preventive maintenance servicing, and work is done when promised.

The following observations and suggestions for improvement were offered:

- There is a need for the car wash to have a vacuum to clean the inside of a vehicle. A contract with a detail shop is also desired.
- Customers would like to receive information on operational costs and ownership (replacement) costs.
- There is a need for written fleet policies and procedures.
- Ordering vehicles and equipment takes a long time.
- No formal process is in place to request a new or replacement vehicle.
- Good use of contractors used to upfit police vehicles.
- Preventive maintenance work has always been backlogged, probably due to the lack of mechanics.
- Preventive maintenance work lacks a complete inspection of the vehicle.
- Some fleet staff have a negative attitude towards customers who have a reputation for turning in broken fleet units.
- A pool at City Hall with decent vehicles and a formal check-out/reservation system would be helpful.
- There is a need for more indoor parking spaces at City Hall.
- Adopt a policy to reimburse City staff for mileage when using their personal vehicle. (Note: we were told staff are not allowed to use their personal vehicles unless they are driving to a training or conference.)

Performance Measurement

Performance measurement is the process of identifying indicators that demonstrate an organization’s efficiency and effectiveness in delivering a program or service. A performance measurement system relies on regular data collection and analysis to assess outcomes. It is a tool to identify successes and needed improvements, as well as gauge customer satisfaction.

Tracking key indicators and analyzing performance are the foundations of process improvement. The regular analysis of performance metrics enables managers to make informed decisions about how to improve service delivery. Best management practices include the use of metrics for:

- Making resource allocation decisions;
- Evaluating service effectiveness (quality and efficiency);
- Assessing and improving customer satisfaction;
- Focusing on and increasing accountability;
- Identifying emerging issues and problems;
- Tracking positive or negative trends;
- Serving as the basis for policy and practice changes;
- Comparing and benchmarking with other agencies; and
- Educating, informing, and communicating improvements and successes.

Understanding that budget allocations should be tied to policy goals and objectives is critical for any government agency, especially in the face of constrained revenues. Performance measures provide important operating information and enable managers to develop solid budget justification by either demonstrating program effectiveness or demonstrating a gap between needs and service levels. This, in turn, ensures that short-term resource allocation decisions are consistent with long-term goals and objectives.

The Vehicle Maintenance Division does not use performance measures. As a result, it has been difficult to assess the efficiency of the Vehicle Maintenance operation. Some of the data used to formulate performance measures are being tracked through the Dossier fleet software system, but the data have not been used to track performance measures common to well-run fleets. Examples of data being tracked include:

- Scheduled and unscheduled repairs, and
- Labor, parts, fuel and sublet costs (year-to-date and life-to-date).

Examples of important metrics that should be tracked as well as suggested targets are provided Table 4.

Table 4. Recommended Vehicle Maintenance Metrics

Measure	Description	Suggested Target
Fleet availability	The degree to which the fleet service provider is able to ensure the regular availability of fleet units to their user departments.	95% to 98%
Turnaround time for repairs	Measures the percent of service and repair activities completed within daily timeframes. This measure is related to fleet availability but focuses on minimizing lengthy repairs.	80% in 24 hours 90% in 72 hours
Preventive maintenance (PM) compliance	Measures the number of PMs performed on the date scheduled.	95% on time
Repeat repairs	Measures the percent of time a customer returns a unit back to the shop for the same problem within a specified period of time. It is a measure of service quality that reflects the accuracy of service writing and diagnostic activities as well as repair quality.	2% or less
Mechanic productivity	Ratio of direct mechanic labor hours to indirect mechanic labor hours.	70% direct 30% indirect
Road call response time	Measures amount of time between being notified of the need for roadside service to arriving at scene.	45 minutes from notification

Recommendation 6. Establish performance measures and monitor them against industry and shop standards.

Attachment B contains a list of performance measures used in best practice fleet services.

Management Reports

Vehicle Maintenance does not produce any reports for its customers unless requested to do. The Police Department requests a monthly utilization report that identifies vehicles due for servicing and receives this on a regular basis. One of the common themes among the fleet customers we interviewed was the need for information about their vehicles, including the type and cost of services, mileage data, downtime, etc.

The Dossier system is one of the leading dedicated, standalone fleet information software systems on the market today. The system is web-based and allows Vehicle Maintenance customers the ability to look up the status of a job, view a work order, and the anticipated time that repairs will be completed. Currently, customers do not have access to the system. However, it would not be difficult to provide this service, given the Dossier system's capabilities.

Managers of well-run fleets require analysis and reporting of certain fleet activities to properly assess operations. Typical reports should, at a minimum, address the following activities:

- Number of repeat repairs,
- Percent of preventive maintenance work completed compared with those scheduled,
- Fleet availability rate,
- Operational costs compared with budgeted costs, and
- Shop productivity (percent of wrenching hours).

Dossier software can generate these types of reports and the asset management coordinator should make every effort to provide them to fleet customers, as well as develop any other reports of interest.

Recommendation 7. Provide information to customers about the operating and depreciation costs for each of their units on a quarterly basis. Information such as work order services and related costs, fuel consumption, mileage/hour utilization and fleet replacement accumulation costs should be included in customers' reports.

Fleet personnel have received some online training on the use of Dossier software. However, the asset management coordinator and senior clerk have received very little training on the software. Once our report is finished and has been reviewed, Vehicle Maintenance leaders should determine what performance measures and reports they are interested in developing and how best to accumulate the fleet information needed to support them.

Recommendation 8. Contact Dossier to discuss how to obtain the data needed to track the performance measures and produce the reports of interest. This would also be an opportune time to ask for additional software training.

Fleet Facilities

Vehicle maintenance and repair work is performed at one location at the City's Public Works Facility located at 1801 101st Avenue NE. Vehicle Maintenance is open Monday through Friday from 7:00 a.m. to 3:00 p.m.

A fueling facility is maintained at the Public Works yard where fleet customers can access both unleaded and diesel fuel. However, there is no means to clean windshields or to check and add air to tires.

Recommendation 9. Purchase and install windshield cleaning receptacles and air pressure equipment at the fuel island.

The Vehicle Maintenance facility is 12 years old. It consists of an office, parts room, tool room, library area, fabrication bay, oil and chemical room, tire repair area, mezzanine where tires and spare parts are stored, restrooms and the maintenance and repair area. The shop where maintenance is performed consists of 8 single bays, one of which is a drive-through bay. There are six, two-post above ground 12,000 lb. lifts, one drive on a 72,000 lb. scissor lift and one in-ground two-post lift. The sixteen bays are more than sufficient to support a staff of five mechanics.

There is also a separate, enclosed bay where fabrication work is performed. The bay contains welding and tooling equipment and is used quite frequently by mechanics and employees from other Public Works divisions. We were informed that there have been examples of users from other divisions damaging equipment due to lack of training. Access to the fabrication shop should be limited to only Vehicle Maintenance mechanics who have had training and experience with this equipment.

Typically, any fabrication work performed on fleet equipment is the responsibility of a fleet operation, not its customers, whether it is performed in-house or by commercial vendors.

Recommendation 10. Limit all equipment fabrication to Vehicle Maintenance mechanics. Fleet customers in need of fabrication work to their fleet equipment should complete a service request and submit it to Vehicle Maintenance who will determine if the work should be accomplished in-house or be contracted.

The parts room is well-organized. However, we saw parts stored in various other locations throughout the shop. For example, the tool room, located at the west wall of the shop contained numerous small equipment parts (e.g., blades, belts). The absence of a storekeeper position means that mechanics and other Public Works staff have access to the parts room. This is not a best fleet practice for a fleet the size of Blaine's. Parts rooms should be secure and only one or two people should have the responsibility of issuing parts and maintaining inventory control.

Recommendation 11. Centralize the parts function by placing all parts into one secure location. Reducing the size of the shop office would free additional space to expand the parts room. Office staff could cover for a parts person in the event s/he was not available.

Most of the tires are stored on the mezzanine above the office, oil and parts room and take up much valuable space. To access tires, mechanics must bring them down two flights of stairs or throw them down to the shop floor. Heavy equipment tires are lowered to the shop floor via an overhead hoist. This is not an efficient means of storing or transporting tires.

A more efficient means of storing and accessing tires is through a tire carousel. A motorized carousel is designed to stack tires overhead, saving about 70% of the space normally used by storing tires on racks. Additionally, the tire carousel delivers tires directly to the operator, eliminating the need for a forklift or ladder to retrieve tires. Another benefit is the reduction in employee back strain and the physical requirement to handle bulky and heavy tires.

The tire repair area is located at the bottom of the staircase and contains equipment to breakdown, mount and balance tires. A more efficient use of this space might be to transfer the tire equipment and tire inventory to the tool room and transfer the tools and parts currently there to the tire repair area, enclose it, and make it accessible to the parts area. In this way the storekeeper would have the responsibility of both issuing parts to the mechanics, as well as tools.

We observed tires mounted on rims and set aside to be used on police patrol units. It is customary for shops to have several sets of tires to be used on patrol units, already mounted and ready to be installed in case of an emergency. This is a best fleet practice.

Bar coding is used to label most parts and the lead mechanic is in the process of labeling the remainder of parts in the parts room as well as tires that are stored in the mezzanine. This is a best fleet practice and reduces the number of data entry errors. Bar coding saves time and is more accurate than manual data entry. The Dossier fleet software system used by Vehicle Maintenance is able to link bar coding to work orders and purchase orders, spare parts and equipment.

The shop office is well organized and there are plenty of windows to observe work being performed on the shop floor. A counter exists for customers to fill out service requests, but there is no area for fleet customers to use while waiting for their service to be completed.

We observed mechanics using several of the four computers in the office to do research on repair tasks and to order parts as needed. Mechanics have laptops at their workstations on the shop floor; however, they are old and slow.

Recommendation 12. Upgrade all laptops on the shop floor. This should alleviate the need to use the computers in the office.

The shop floor is designed in such a way that allows anyone access to the area where maintenance and repair work is being performed. During our time at the fleet facility, there were many instances when we saw fleet customers conversing with the mechanics. This not only distracts a mechanic from the tasks to be performed, but also subjects those visitors to dangerous conditions (e.g., the movement of vehicles and equipment and exposure to chemicals and shop equipment). There are significant liability issues when non-fleet staff are permitted to be on the shop floor and the fabrication shop, which should raise considerable concern.

Most fleet agencies post signs limiting access to shop operations. Signage with instructions for visitors to follow to conduct fleet business at the shop office is another means of keeping visitors out of the maintenance area.

Recommendation 13. Allocate designated pathways with partitions and proper signage to safely guide visitors to the shop office to conduct business.

There are two garages adjacent to the maintenance shop where vehicles and equipment are stored when not in use. There are designated, marked parking stalls where fleet units are parked overnight. Vehicles and equipment enter from one end of the garage and exit at the opposite end. This one-way arrangement is an excellent way to avoid accidents.

An indoor, drive-through touchless car wash is located in one of the garages. Approximately 2,000 car washes are performed at this facility annually. Shop vacuums are available for operators to use but are not often utilized. A more permanent, commercial vacuum should be made available and placed near the car wash or at the fuel station.

Recommendation 14. Purchase a commercial vacuum and place it near the car wash or at the fuel station.

Fleet Delivery Programs

We have identified five major program areas for this assessment of the City's Vehicle Maintenance operation. They are 1) maintenance and repair, 2) sublet (commercial work), 3) parts, 4) fuel, and 5) administration/asset management. Each is discussed below.

Maintenance and Repair Program

The centerpiece of any vehicle maintenance program is its preventive maintenance (PM) program, which should minimize breakdowns and unscheduled repairs, allowing for vehicles and equipment to remain in service without interrupting the daily tasks of customers. The ratio of preventive maintenance work to unscheduled repairs in well-run fleet operations is 60% PMs to 40% repairs. According to estimates from Vehicle Maintenance staff the ratio of scheduled preventive maintenance to unscheduled repairs is 67% PMs to 33% repairs. We believe this ratio is overstated because Vehicle Maintenance mechanics do not record all the tasks they perform on a daily basis.

According to Vehicle Maintenance staff, 97 fleet units were overdue or currently scheduled for servicing when this report was being written. This includes 23 mowers that can be serviced throughout the winter as they are not utilized during this time. The backlog can be attributed to a lack of mechanics.

Vehicle Maintenance does not utilize a generic progressive, multi-level preventive maintenance checklist for all fleet units. Instead, a generic checklist is used for all fleet units. It is important not to apply the same standard PM servicing intervals for all fleet units. A preventive maintenance program must be designed around each vehicle and equipment classification to ensure that manufacturer service requirements are followed and are specific for the conditions under which the units operate.

Mechanic checklists should indicate which actions were performed for each task such as inspected and ok, adjustments made, and/or repair required. We have provided an example of this PM checklist from Fort Worth, Texas, under separate cover.

Recommendation 15. Develop a formal, progressive, multi-level preventive maintenance program based on manufacturer requirements. It should include class-specific preventive maintenance checklists and a servicing schedule that incorporates time and mileage thresholds.

Oil changes are performed every 5,000 miles for most fleet units, except for police patrol units that are serviced at 4,000-mile intervals and for units that operate on an hour basis, like a backhoe. Newer vehicles are serviced with synthetic blend oils.

While the 4,000-mile interval for police units is normal, changing oil on non-police units at 5,000-mile intervals is premature. Manufacturers

recommend that oil should be changed at between 8,500 miles and 10,000 miles depending on usage and climate conditions.

Recommendation 16. Review manufacturers' recommended oil change intervals for non-police patrol fleet units and adjust oil change intervals where applicable.

Vehicle Maintenance does not utilize an oil sampling program for its heavy equipment. This type of program helps determine the optimum intervals to change oil and is a best fleet practice.

Recommendation 17. Contract with vendor(s) to perform oil sampling tests on heavy equipment to determine optimum oil change intervals.

The fleet software system used by Vehicle Maintenance has the ability to track the time preventive maintenance services are due. However, fleet staff do not plan for the yearly preventive maintenance workload. This is a best fleet practice and enables managers to organize daily and monthly workloads.

There are several advantages to mapping out an entire year's worth of scheduled maintenance. Doing so exposes those times when an excess of PMs/inspections might impact the shop workload. By identifying the peaks and valleys of PM/inspection servicing ahead of time, the lead mechanic can make adjustments by rescheduling PMs over a longer timeframe. Mapping workload can also be used to determine the number and types of parts that will be needed.

Recommendation 18. Develop a preventive maintenance workload schedule for the entire year. The schedule should incorporate time and mileage/hour thresholds.

Vehicle Maintenance uses a repair order form generated by the Dossier fleet software system as a service request for fleet customers to report vehicle defects or malfunctions. A service request should be a separate form that includes the driver's name, department/division, contact number, equipment ID number, mileage, and a checklist of vehicle systems (i.e., air conditioning, electrical, brakes) that the driver can use to easily indicate the system(s) on the vehicle not working properly. It also should contain an area in which the operator can indicate a written description of the malfunction.

The form should also include an area to record what time the operator dropped off the vehicle, an estimate of the time the work is expected to be completed, when the operator was notified that the unit was ready to be

picked up, and the date and time it was picked up and by whom. This type of information can be used to help measure the efficiency of the fleet operation. A duplicate of the completed form should be given to the driver for their department to track as well. A sample service request used by the City/Parish of Baton Rouge provides an example of such a form in Appendix 3.

Recommendation 19. Develop a new service request form to include the items listed above in this report.

Recommendation 20. Develop a performance metric that measures when a Vehicle Maintenance customer was promised their vehicle would be ready, compared with the time the customer was notified their vehicle was ready to be picked up.

Repeat repairs, commonly referred to as comebacks, occur when work must be redone because the issue was not correctly resolved originally. Vehicle Maintenance does not track comebacks, which makes it difficult to ascertain the quality of repair work being performed. Vehicle Maintenance estimates the number of annual repeat repairs to be 20.

According to industry standards, repeat repairs should comprise less than 2% of all tasks. Vehicle Maintenance staff should begin tracking the number and types of comebacks that occur to identify reoccurring system breakdown trends. They can then use the information to determine the causes of the comebacks (i.e., reoccurring part failure, improper repair technique, driver error, or lack of training on the part of the mechanic). Addressing the causes will allow the number of repeat repairs to be reduced, which will improve operational efficiency.

Recommendation 21. Monitor and analyze a repeat repair performance metric to identify trends and proactively address them. Establish a target of no more than 2% of all repair work performed.

The Vehicle Maintenance program does not use equipment classification codes. Vehicle and equipment classification codes are used to group similar fleet units for analysis. The American Public Works Association (APWA) and the National Association of Fleet Administrators (NAFA) publish classification codes Vehicle Maintenance should consider using.

Recommendation 22. Adopt vehicle and equipment class descriptions to coincide with American Public Works Association or the National Association of Fleet Administrators class descriptions.

Vehicle Maintenance does not have a formal, written, warranty or guarantee for its maintenance and repair work. However, the shop will honor their workmanship and customers are encouraged to bring their vehicles back for service if problems are not corrected initially.

We were informed that Vehicle Maintenance mechanics have attained Automotive Service Excellence (ASE) certifications, but they have let them expire. These certifications are awarded to mechanics who have passed tests covering various mechanical systems (i.e., brakes, suspension, transmission, electrical) relating to light- and heavy-duty vehicles and equipment.

According to Vehicle Maintenance staff, mechanics receive about 16 hours of training per year, although only \$2,000 is budgeted this year for training purposes. A common industry practice recommends that 2% of a technician's annual salary and benefits be budgeted for training (or about 40 hours per year). This type of investment promotes and rewards mechanics for attaining ASE certifications and enables them to keep abreast of modern maintenance techniques. It can also make the fleet operation less dependent on work being taken to commercial repair vendors.

Recommendation 23. Increase the training budget to reflect costs to train mechanics on a regular basis and update their ASE certifications.

Sublet (Commercial Work) Program

A total of \$168,000 is budgeted for work performed by commercial vendors. This represents about 15.4% of the total Vehicle Maintenance budget (excluding fuel) and falls within the higher range of the industry benchmark of 10% to 15%. Typical services that government agencies contract include:

- Alignments,
- Bodywork,
- Dialectic testing,
- Engine work,
- Glass,
- Outfitting new vehicles,
- Painting,
- SMOG testing/certification,
- Smoke opacity testing,
- Towing,
- Transmission,
- Upholstery,

- Large tires repair and replace,
- Washing,
- Lift certifications,
- Fuel tank repair and replace, and
- Auction strip out.

Vehicle Maintenance uses independent repair shops as well as dealerships to perform repairs. Sublet services with commonly used repair vendors are not routinely bid. Soliciting competitive bids generally ensures the City is getting the best cost for the services rendered. Furthermore, such contracts would typically contain warranties, provisions for pickup and delivery of units, standards to ensure timeliness of work, and billing stipulations.

Vehicle Maintenance contracts with commercial vendors for most of its vehicle and equipment buildups. New police units are sent to Everest Emergency Vehicles in Little Canada, about 10 miles from Blaine, for buildups. The cost for buildup of a new police patrol unit ranges from \$12,000 to \$15,000. Stripping off the equipment from units to be retired and preparing them for auction is done in-house.

In our discussions with Vehicle Maintenance staff, we were surprised to learn that no one was aware of the hourly rates charged by commercial vendors that normally perform work on City vehicles and equipment. This, coupled with an unrealistic shop labor rate, makes it difficult for Vehicle Maintenance to determine what services should be outsourced and which should remain in house.

Our review of repair invoices from various vendors indicate they do not reveal the hours spent on each repair task and the hourly shop labor rate used to compute the labor cost of each service. The majority of invoices only indicated a "total labor cost." A contract would normally detail the hourly shop labor rate and the markup on parts that the City should expect. Furthermore, invoices should reflect the number of hours spent on each service rendered.

Recommendation 24. Bid sublet services as needed and develop agreements with vendors that contain provisions for warranties, pickup and delivery of units, shop labor rate(s), parts markups and standards to ensure timeliness of work.

The City of Blaine uses the Minnesota Department of Administration's Surplus Property Program to surplus its public assets. Admin Surplus Services conducts live auctions as well as online auctions (MinnBid.org) throughout the year. The City of Blaine participates in both types of

auctions to surplus their vehicles and other City equipment. The fee charged by Admin Surplus Services is 10% of the selling price. These services are used by many government agencies in the State of Minnesota.

The City uses bulk purchasing, multi-year bids and piggybacking on local, state or federal contracts to reduce acquisition costs. This is a best fleet practice.

Parts Program

The Vehicle Maintenance staff are in the process of reducing the number of parts carried in its parts room. The only parts stored at the shop are fast-moving filters, belts and hoses, a few tires and a variety of nuts and bolts. Vehicle Maintenance relies on several parts vendors (Napa, O'Reilly and Carquest) to supply the bulk of the parts required. These vendors can usually deliver parts within 20 minutes and are also used to source hard-to-find parts according to the lead mechanic. Dealerships and specialty suppliers are used when needed.

Parts represent \$309,000 in the current Vehicle Maintenance budget. According to fleet staff the inventory value as of December 2021 was \$138,860. Fleet staff were unaware of the number of parts carried in inventory, only that there were between 25 and 30 lines of parts.

The annual parts inventory turnover rate is not tracked. This is a common performance measure that is designed to show how many times parts are replaced over time. A parts inventory turnover rate of three times is an industry target. The longer a part stays on the shelf the more likely it is to become obsolete. Maintaining obsolete inventory is costly for the City because there is unrealized revenue that could be gained by selling the unneeded items and a management cost of having to account for these items.

We were told the lead mechanic performs an annual inventory. However, no audit has been performed in the last two years. Well-run parts programs will use cycle counting, commonly referred to as "ABC Analysis." Conducting cycle counts throughout the year is a best fleet practice and provides information about what parts move the fastest and which sit on the shelf.

Vehicle Maintenance staff perform "spot bidding" and use a purchase order process to obtain the best possible pricing. However, the City does not have contracts with any of its parts vendors and may not be receiving the best prices.

Recommendation 25. Bid parts services as needed and develop agreements with vendors to obtain the best possible prices. Agreements should contain provisions for pickup and delivery of parts and standards to ensure timeliness of work.

Downtime due to parts availability is not being tracked. Tracking the vehicle hours/days lost waiting for parts is an important key performance indicator and should be monitored through the Dossier system. As mentioned previously, Attachment B provides a list of performance measures.

Fuel Program

The City operates one fueling station located at the Public Works facility. There are two, 10,000-gallon inground tanks, one for unleaded fuel and the other for diesel fuel. Both tanks are in compliance with federal, state and local laws.

The City uses Fuel Master as its fuel management system and VeeterRoot as its fuel monitoring system. This Fuel Master fuel management software is designed to interface with the VeeterRoot fuel site controllers, enabling simultaneous, real-time tracking of tank gauges and fuel management for organizations that have multiple fueling facilities. This equipment enables comprehensive reconciliation of data from fueling sites, together with consolidated reporting and management of fuel cards.

Four trucks have fuel cells and are able to provide mobile fuel deliveries when fleet customers run out of fuel in the field. According to the lead mechanic, this happens on a regular basis and mechanics are requested to respond to the situation. Doing so interrupts the mechanic's workload for something that, in most cases, could be avoided by having users pay attention to fuel levels prior to leaving the yard.

Holding employees accountable for checking their fuel levels would normally be a topic for discussion at a Fleet Committee meeting. One solution might be to have the local towing company respond to the need for fuel and charge the department for the service provided.

Fuel is purchased from Mansfield Oil, who delivers fuel to the City's fuel site. The City fees are based on the Oil Price Information Service (OPIS) rack price average plus a markup for transportation, profit and applicable taxes. At the time of this report the City was paying \$1.595 per gallon for unleaded fuel and \$1.925 per gallon for diesel fuel (winter pricing). These prices are based on deliveries of 7,000 to 7,500 gallons.

A total of \$441,250 was budgeted for fuel in 2020. However, only \$360,836 was expended. According to Vehicle Maintenance data, the City purchased 115,067 gallons of unleaded fuel and 46,428 gallons of diesel fuel in 2020. A total of \$465,500 has been budgeted in 2021 for fuel and \$343,295 has been spent year to date. It appears that there will be sufficient funds to cover the fuel expenses this year. About 250 gallons of non-oxy fuel is purchased from commercial fuel stations annually.

The City does not have any written policies and procedures that cover fueling practices. A best fleet practice requires that every City employee who drives a vehicle should read a written policy and procedure and indicate they understand it. (Recommendation 1 addresses the need for a fleet management policy and procedures manual.)

Administration and Asset Management Program

The director of Public Works is responsible for managing the Vehicle Maintenance operation. The asset management coordinator supervises a lead mechanic and four full-time mechanics and reports to the Public Works director. He spends about 16% of his time in this capacity and the rest of his time on other public works tasks.

A senior clerk is responsible for processing parts, fuel and sublet invoices, reconciling odometer readings through the fuel management system, auctioning surplus units and licensing of new fleet units. About 11% of her time is spent on tasks related to the Vehicle Maintenance Division. The remainder of her time is devoted to other public works tasks.

Staffing

Management Partners performed an activity-based cost analysis (provided under separate cover) of the fleet operation to identify all fleet-related labor and overhead costs associated with each of the major functions: administration/asset management, maintenance/repair, fuel, parts, and commercial repair work. The analysis also enabled us to compute mechanic productivity (wrenching hours). This, along with the Statistical Vehicle Reference System, that computes Vehicle Equivalent Units (VEU) (level of maintenance required for each fleet unit), help to determine required staffing levels.

Current Staffing

Currently the following Vehicle Maintenance staff are allocated to this function.

- Lead Mechanic (1 FTE)
- Mechanics (4 FTE)

- Mechanic Trainees – Part-time seasonal (0.24 FTE)

As mentioned previously, the Asset management coordinator spends about 16% of his time on Vehicle Maintenance-related tasks, but his salary and benefits are not included in the Vehicle Maintenance budget. This also applies to the senior clerk, who is assigned to Public Works but spends about 11% of her time on Vehicle Maintenance tasks.

Recommended Staffing

The number of technicians required for a maintenance and repair operation is primarily driven by the size, condition and composition of the fleet they support. Because most public fleet operations maintain a wide variety of vehicles and equipment, it is necessary to establish a relative measure that allows for the evaluation and comparison of staffing needs.

As mentioned previously, a vehicle equivalent unit (VEU) calculation is used to equate the level of effort required to maintain dissimilar types of vehicles and equipment to a passenger car, which is given a baseline value of 1.0. This concept was originally developed for use by the United States Air Force's Transportation Bureau to determine necessary staffing levels for vehicle maintenance. In addition to helping identify staffing levels, VEU assignments are also used to assess cost competitiveness and make other comparative calculations and recommendations.

We have found from working with other public fleets that a VEU of 1.0 is equal to between 8 and 12 annual maintenance labor hours depending on a variety of factors unique to each agency. All other types of vehicles are allocated a value relative to the value of the passenger car. For example, a patrol car requires 2.5 times the annual maintenance and repair of a passenger car, or between 20 and 30 hours per year.

Management Partners calculated a VEU for the City's current fleet of 591 units. By assigning a VEU value to every unit in the fleet, we derived a total of 889.16 VEUs. When this total is multiplied by the benchmark annual maintenance requirement of 8 to 12 hours per unit, it equates to between 7,113 and 10,670 annual hours of required maintenance.

As a result, we are able to evaluate the appropriate mechanic staffing level required to support the City's entire fleet by dividing the range of total required annual maintenance hours (7,113 to 10,670) by the current estimated average annual wrenching hours of those fleet employees who perform maintenance and repair tasks (1,183.28 hours based on a wrenching productivity rate of 56.89%). The result is that 6.01 to 9.02 mechanics would be needed. Based on the age and condition of the fleet,

we estimate the number of mechanics would fall at the low end of the range.

The Vehicle Maintenance Division currently has four FTE positions responsible for wrenching and a lead mechanic who wrenches about 26% of the time. The two mechanic trainees provide wrenching assistance estimated to be about 24% of their time. In total, about 4.50 FTEs are responsible for wrenching. However, each of the four mechanics spends about 8% of their time on non-vehicle maintenance work, such as snow plowing, while the lead mechanic spends 2% of his time on non-vehicle maintenance work.

As Table 5 shows, we have compared the City's current mechanic staffing with the range we believe is needed to support the fleet of 591 units. Based on these data, the City will need three additional FTE mechanics in addition to the 4.50 FTEs currently responsible for wrenching.

Table 5. Comparison of Current Mechanic Staffing to Calculated and Recommended Mechanic Staffing

Number of Fleet Units	Current Mechanic Staff (FTEs)	Management Partners' Calculation of Required Mechanics (FTEs)*	Recommended Mechanic Staff (FTEs)
591	4.50**	6.01 to 9.02	7.50

*Assumes a wrenching productivity rate of 56.89% or 1,183.28 annual hours per mechanic.

**Includes lead mechanic and mechanic trainees time devoted to wrenching.

As noted previously, the mechanics' productivity (wrenching hours) is estimated to be 56.89%. National government fleet surveys suggest that productive time for average to well-managed public sector fleets ranges from 70% to 75%. Some government fleets achieve between 75% and 80%. In the private sector, this number is estimated to be at least 90%.

Our team believes an opportunity exists for the Vehicle Maintenance Division to increase mechanics' productivity (wrenching hours) to between 70% and 75% or 1,456 to 1,560 hours per mechanic. One way to achieve this is to reduce the time mechanics spend on non-wrenching activities such as obtaining parts, cleaning the shop, and transporting vehicles to and from commercial repair shops.

Using mechanics to operate snow-plowing equipment during storms also impacts their wrenching productivity and ultimately the shop labor rate. We understand the need for snow plowing operators, but it does take a toll on wrenching time.

Well-run fleet operations use lower-level, part-time employees to perform non-wrenching tasks. This enables technicians to focus on more productive wrenching hours that can ultimately lower shop labor rates and markups. Hiring part-time people who would be available

throughout the year instead of just during the summer, would make it possible for mechanics to achieve a better wrenching productivity rate, closer to 70% or 75%. In this way, only two additional FTE mechanics would be required to maintain the workload at a wrenching productivity rate of 70%. Under this arrangement the wrenching time that the lead mechanic and the mechanic trainees would be offset by the addition of the two additional mechanics.

Table 6 reflects the number of mechanics required if a 70% wrenching productivity is achieved as well as if a 75% productivity rate is achieved.

Table 6. Comparison of Current Mechanic Staffing to Calculated and Recommended Mechanic Staffing Levels Based on 70% and 75% Wrenching Productivity

Number of Fleet Units *	Current Mechanic Staff (FTEs)	Management Partners' Calculation of Required Mechanics (FTEs)**	Recommended Mechanic Staffing (FTEs) @ 70% Wrenching Productivity	Recommended Mechanic Staffing (FTEs) @ 75% Wrenching Productivity
591	4.00***	6.01 to 9.02	6.0	5.7

*Does not include small equipment

**Assumes a wrenching productivity rate of 56.89% or 1,183.28 annual hours per mechanic.

***Does not include the time that the lead mechanic and mechanic trainees spend wrenching.

Recommendation 26. Hire part-time staff who are available throughout the year to perform non-mechanic work tasks.

Recommendation 27. Hire an additional two FTE mechanics.

Many well-run fleets will incorporate a night shift or overlapping shift when the appropriate number of staff members are available. Typically, scheduled preventive maintenance is done on the later shift and repair work is performed during the day with a limited number of mechanics. This can pay great dividends because vehicles and equipment can be worked on when they are not being used, resulting in less time out of service and fewer interruptions to field operations. The staffing additions recommended in this report will give City leaders the opportunity to consider adding an additional shift to the vehicle maintenance operation.

As mentioned previously, the responsibility for maintaining the parts inventory now rests with the lead mechanic. The four mechanics are free to access parts as needed as are other Public Works employees. Most fleet operations the size of Blaine's have a storekeeper position as part of their staffing complement. Our recommendations to increase the number of Vehicle Maintenance staff will further justify the need for a parts person.

Recommendation 28. Hire a full-time parts person or storekeeper whose responsibility is to issue, source and inventory all fleet parts.

An alternative to this recommendation would be to outsource the parts function to a nationally recognized supplier of parts, such as NAPA. Based on our experience, national parts suppliers have superior buying power and can usually purchase parts cheaper than government agencies (on average between 2% and 5% less). More important, they are able to fully staff the parts function and guarantee parts availability better than local vendors. This means that mechanics can keep wrenching rather than waiting for parts to be delivered.

As noted previously, the director of Public Works is responsible for managing the Vehicle Maintenance Division and the asset management coordinator is responsible for supervising the Vehicle Maintenance staff. He spends about 16% of his time in this capacity which includes some fleet analysis work. A fleet operation the size of Blaine's would normally be managed by a full-time fleet manager. (See Attachment C for fleet manager responsibilities). While hiring a fleet manager may not be feasible at this time, increasing the time that the asset management coordinator spends on fleet-related work should be considered.

Expanding the Vehicle Maintenance staff, as recommended in this study, will require more supervision. Consequently, we recommend elevating the lead mechanic position to a supervisory position.

Recommendation 29. Review the responsibilities of the asset management coordinator and lead mechanic positions and consider elevating their positions as appropriate.

Labor Rates and Markups

Shop Labor Rate

According to Vehicle Maintenance staff, their fully burdened labor rate is \$43.14 per hour. This rate is used to price work orders for maintenance performed on all vehicles and equipment they maintain. No markups have been developed for parts, commercial work, or fuel.

To determine fleet's competitiveness relative to the local marketplace, Management Partners calculated a fully burdened shop labor rate of \$130.27 per hour. We did this by performing an activity-based costs analysis in which Vehicle Maintenance's labor and overhead costs were distributed among five major programs: administration/asset

management, fuel, parts, sublet (commercial work), and maintenance/repair. The overhead cost associated with the maintenance and repair program was calculated and then divided by the average wrenching productivity of all mechanics.

Our \$130.27 per hour rate assumes there are no markups or charges in place to capture the overhead costs associated with parts, fuel and commercial repair work, and administration/asset management, as is currently the case with Vehicle Maintenance. If markups for parts, fuel and commercial work were in place, along with a charge per vehicle for administration/asset management, the shop labor rate would be \$104.20 per hour.

This rate was then compared with the range of hourly rates that local dealerships and independent repair shops charge the City for services. Some of these rates are illustrated below in Table 7.

Table 7. Commercial Repair Shop Rates

Type of Equipment	Rate per hour
Light-duty cars and trucks	
Midway Ford	\$124.00
Luther Chevrolet	\$164.75
Medium- and heavy-duty trucks	
I-State Truck Shop	\$163.00
Blaine Brothers	\$148.00
Construction Equipment	
Ziegler Inc.	\$159.00

Based on our calculation of the shop labor rate of \$104.20 per hour, Vehicle Maintenance appears to be competitive with local dealerships and independent repair shops, as illustrated in Table 8 below.

Table 8. Calculated Shop Labor Rate Compared to Local Market Shop Labor Rates

	Current City Shop Labor Rate	Management Partners' Calculation of City's Shop Labor Rate*	Local Market Shop Labor Rates
Fully Burdened Shop Labor Rate	\$43.14/hour	\$104.20/hour	\$124 to \$164.75/hour

*Shop labor rate assumes that shop overhead and administrative/asset management cost will be recouped and that the cost of parts, commercial work and fuel are recouped through a direct charge with markups to fleet customers as found in the private sector.

The shop labor rate computed in this study could be reduced by following some of the staffing recommendations in this report and

increasing mechanic wrenching productivity. To support labor rates in the future, actual wrenching and non-wrenching time for all personnel involved with supporting the fleet operation should be tracked. Currently, the documentation of work performed by mechanics is only partially being posted on work orders. Non-wrenching time is not being documented at all.

Recommendation 30. Implement procedures that require mechanics to document all time spent on wrenching and non-wrenching tasks.

Markups

Markups are intended to cover the cost of the overhead associated with delivering a particular fleet service. As part of the activity-based cost analysis we calculated markups for parts, commercial work and fuel, as well as a charge for administration/asset management. When computed, they can be compared with fleet industry markup standards as reflected in Table 9.

Table 9. Comparison of Calculated Markups with Fleet Industry Markup Standards

Fleet Functions	Current Vehicle Maintenance Markups	Management Partners' Calculation of City's Markups	Fleet Industry Markup Standards
Parts Markup	N/A	14.88%	25% to 35%
Commercial Repair Work Markup	N/A	26.87%	10% to 15%
Administration/Asset Management Charge	N/A	\$61.51/unit/year	\$350 to \$400/unit/year
Fuel Markup	N/A	\$0.09-\$0.11/gallon	\$0.12 to \$0.18/gallon

The markups for Vehicle Maintenance that should be included with a fully burdened shop rate are described below.

Parts Markups. Based on our activity-based cost analysis, we computed a parts markup of 14.88%. This is lower than the industry average of between 25% and 35%.

Another means of measuring the efficiency of the parts program is to apply the total number of Vehicle Equivalent Units (VEUs) to the total cost of parts. The result is a parts cost per Vehicle Equivalent Unit (VEU), which computes to \$348. This is near the high end of the \$200 to \$400 industry average. It may reflect the costs of performing preventive maintenance servicing prematurely on many fleet units.

Sublet Markups. We calculated a commercial repair work markup of 26.87%, which is far greater than the industry average of between 10% and 15%. This is due in part to the amount of overhead associated with

this function and the amount of work being outsourced. Vehicle Maintenance contracts about 14.4% (\$168,000) of its maintenance and repair work, which is at the higher end of the industry average of between 10% and 15%.

When the total sublet costs are divided by the total number of VEUs the result is \$188.98 per Vehicle Equivalent Unit (VEU). This is within the range of best-in-class municipal fleet organizations or with maintenance contractors that range from \$50 to \$300 per VEU.

Fuel Markups. Based on our activity-based cost analysis we calculated a fuel markup of 5.70% or about \$0.09 to \$0.11 per gallon. This markup is less than the industry range of between \$0.12 and \$0.18 per gallon.

Administration/Asset Management Fee. Vehicle Maintenance does not charge an administration/asset management fee. Such a fee would reflect the salaries and benefits of those who manage and support the operation and its assets, as well as operational overhead. Using the City's current budget and those personnel who support the Vehicle Maintenance program, Management Partners computed a charge of \$61.51 per unit (rolling stock) per year, which is considerably lower than the industry standard of \$350 to \$400 per unit per year. Missing from this calculation are the costs of the asset management coordinator and senior clerk who spend only part of their time on fleet-related tasks as well as the salaries and benefits of those personnel who support Vehicle Maintenance such as human resources, finance and legal. If these costs were part of the Vehicle Maintenance budget it would certainly increase the administrative/asset management charge per unit.

Recommendation 31. Develop a comprehensive methodology, such as the activity-based cost analysis worksheet, to calculate shop labor rates and markups/charges. The methodology would appropriately allocate labor and overhead costs, including the functions of administration/asset management, maintenance/repair, fuel, parts, and commercial repair work.

Budgeting and Chargeback Practices

Budgeting

The current Vehicle Maintenance operations budget of \$1,636,150 consists of \$527,850 in salaries and benefits, \$309,000 in parts costs, \$168,000 in sublet (commercial repair) work, \$465,500 in fuel costs and \$165,800 in overhead costs.

As mentioned previously, the asset management coordinator and senior clerk support the fleet function, but their salary and benefits are not included in the Vehicle Maintenance budget. Together they represent about \$32,656 in salary and benefits and play an important role in the fleet operation.

If City leaders elect to reclassify the asset management coordinator position, serious thought should be given to including the salaries and benefits for this position in the budget. The proportion of time the senior clerk spends on vehicle maintenance should also be included, as well as any positions that directly support the function. In this manner the true, overall cost of providing fleet services will be accounted for.

Chargeback System

There is no chargeback mechanism in place to recover the costs associated with any ownership (depreciation) costs or operational costs provided by Vehicle Maintenance. As a result, fleet customers are not aware of the costs to own and operate a vehicle or piece of equipment. Additionally, the lack of a chargeback system makes it difficult to hold fleet customers accountable for any damage or abuse they may cause.

The purpose of a chargeback system is to recover the costs of ownership and operations of city vehicles and equipment. A properly designed chargeback system should recoup and differentiate among the actual costs of goods and services such as maintenance and repair, fuel, parts, and commercial repair work services provided by the fleet services organization. The chargeback system should promote the equitable treatment of fleet customers based on the concept that they should pay only for the resources they consume with no cross-subsidization of fleet costs and no subsidies from the City's General Fund.

Chargeback systems should be transparent and give departments with vehicles and equipment a sense of the costs associated with fleet ownership and maintenance. They should encourage fleet customers to modify their behavior in terms of optimizing fleet size and influence efficiency in the vehicle support system.

Public agencies utilize various chargeback structures to recoup fleet costs. Some agencies recoup their operational costs through a work order system similar to those used by commercial shops. With this system, the number of hours of work performed at the time of the service is multiplied by a shop labor rate that captures all operational overhead costs plus a direct charge for parts, fuel and sublet work. Another version applies a reduced shop labor rate to hours worked and applies markups and charges associated with parts, fuel, sublet and administrative/asset

management to capture the overhead associated with each of these activities. Shop labor rates, markups and charges were addressed earlier in this report and are illustrated in the activity-based cost analysis.

Another structure that is more useful in controlling fleet size and has proven successful for other fleet operations is a three-tiered system that incorporates: 1) a monthly flat fee that recoups the replacement costs over the life of the unit, 2) a standing or flat fee that captures the administrative overhead cost of the unit, and 3) a direct charge or cost per mile/hour rate that recovers the operational costs of the unit (costs associated with fuel, tires, maintenance and repair).

Recommendation 32. Develop a comprehensive and accountable chargeback system that incorporates fleet replacement, overhead and all operational costs.

Vehicle Maintenance does not provide loaner vehicles to their customers while their vehicles are at the shop for servicing. This places a burden on fleet customers who must bring their vehicles from various city sites for servicing, which takes two people to deliver the vehicle and two people to pick it up once servicing is completed. Developing a shop loaner pool or providing a pickup and delivery service should be considered, as well as utilizing rental cars. These options will be covered in more detail in the right-sizing portion of this report.

Recommendation 33. Evaluate the costs and benefits of developing a pool of shop loaner vehicles or providing pickup and delivery service.

Fleet Replacement Planning, Funding and Optimal Economic Life Point

An effective fleet replacement program has the following three components:

- A replacement planning process (e.g., replacement intervals) that projects when each vehicle and equipment should be replaced and its projected cost.
- Procedures and criteria to identify when a vehicle has reached its optimum economic life point and should be replaced given the available resources.
- A financing and funding process that ensures there are sufficient funds available to purchase vehicles and equipment when the replacement date is reached.

Fleet Replacement Planning

The City's fleet of 344 rolling stock units is comprised of 160 light-duty sedans, pickups, vans and SUVs, 41 police patrol units, 58 medium/heavy-duty trucks, 40 pieces of construction-type equipment, and 45 pieces of miscellaneous equipment. A total of 42% of the fleet units are less than five years old, while 11% of the fleet is more than 20 years old. Table 10 shows the age and number of fleet units that range between five years or less and those that are more than 20 years old.

Table 10. Fleet Age

Fleet Age	Number of Units	Percent
5 Years or Less	143	42%
6 to 10 Years	69	20%
11 to 15 Years	36	10%
16 to 20 Years	59	17%
More than 20 Years	37	11%
TOTAL	344	100%

As shown above, the age of all rolling stock units is significantly older than we recommend as a best practice. The average age is 9.4 years, a number that corresponds to an average computed replacement cycle of 18.8 years. This is almost double the 10-year average replacement cycle that is common for municipal fleets. An older fleet has consequences, because it requires more maintenance, vehicles are out of service for longer periods of time and are more costly to repair, and more mechanics are required to keep them in service.

The City does not have established vehicle replacement criteria (cycles) for vehicle types. We took a cursory review of the age of various fleet units and compared them with standard life cycles practiced by well-run fleet agencies. In many cases the City is keeping vehicles beyond their typical life cycles. This is quite evident among sedans, pickups, vans and SUVs that are kept between 15 and 20 years. By keeping these aged vehicles in service, the City may be sacrificing safety features, improved gas mileage, and lower emissions, all of which are found on newer models.

Unit 1115, a 20-year-old sweeper and unit 1262, a 10-year-old sweeper, are examples of units being kept beyond their typical life cycle. Typical life expectancy for sweepers is six to seven years.

In some cases, we were told that Safety Services patrol units are being transferred to other departments to use at around 3 years, 60,000 miles.

Repurposing patrol units for use by other City departments is not advisable because patrol vehicles are exposed to very rigorous conditions (i.e., high-speed chases, driving over curbs, and excessive braking).

Recommended replacement intervals for some of the major classes of vehicles and equipment were developed using best practice data and are illustrated in Table 11 below.

Table 11. *Vehicle and Equipment Replacement Intervals*

Vehicle Type	City's Replacement Interval – Years	City's Replacement Interval – Miles	Recommended Replacement Interval – Years	Recommended Replacement Interval – Miles
Sedans, Pickups, Vans, SUVs	15 to 20 years	120,000 to 150,000 miles	10 years	100,000 to 120,000 miles
Patrol Units	5 years	100,000 miles	4 to 5 years	100,000 miles
Dump Trucks	20 to 25 years	150-200,000 miles	15 to 20 years	150,000 miles
Trailers	15 to 36 years	N/A	15 to 20 years	N/A

Recommendation 34. Establish vehicle replacement intervals to more closely reflect industry practices.

There are a few instances where fleet units have been refurbished by Vehicle Maintenance. They include several dump trucks and plow trucks, as well as a Vac Con Jetter truck. Refurbishing makes sense with fleet units that are used seasonally and remain dormant the rest of the year and do not accumulate mileage or hours. This will typically extend the life cycle of those units. Refurbishing non-seasonal units requires an analysis of historical maintenance and repair costs and the future availability of parts.

The most common reasons agencies keep their fleet units beyond their economic life point include:

- Lack of available new units to purchase due to Covid-19,
- Insufficient funds available to purchase fleet units due to less than adequate replacement contributions,
- Insufficient funds to replace units due to an inordinate number of units needing to be replaced at one time, and
- The methodology used to determine when to replace a vehicle or piece of equipment is flawed.

Optimum Economic Life Point

Keeping units in the fleet beyond their optimum economic life puts a burden on the customers who must endure greater equipment downtime

due to more extensive repairs, which impacts their ability to accomplish their goals. It also creates a drain on Vehicle Maintenance, forcing them to expend more labor hours and parts to keep the units on the road. Surplus units prematurely leads to higher costs associated with the purchase of replacement units.

Management Partners conducted an assessment of the City's fleet using a point system that takes into account six factors: 1) age, 2) utilization (miles/hours), 3) maintenance/repair costs, 4) physical condition, 5) reliability, and 6) downtime. Each of these factors is based on a 1 to 5-point scale. When these points are totaled, and a unit has attained 23 or more points, the vehicle or piece of equipment becomes a candidate for replacement or disposal.

This type of system is used by many public agencies today and is typically referred to as the Optimal Economic Life Point as illustrated below.

Optimal Economic Life Point

Points are assigned to each set of criteria as follows:

- **Age.** One point for each year of chronological age, based on the date it was put in service.
- **Miles/Hours.** One point for each 10,000 miles or 750 hours of service.
- **Maintenance/Repair Costs.** One to five points based on total life-to-date maintenance and repair costs (not including accident damage repairs) as a percentage of the vehicle's original purchase price. For example, a vehicle whose total maintenance and repair costs equal the unit's original purchase price would receive a score of five while a unit whose maintenance and repair costs equal 20% or less of the vehicle's original purchase price would receive a score of one, and any costs equal to or greater than the original purchase price would receive a score of five.
- **Condition.** This takes into account a unit's body condition, interior condition, accident history, rust, and anticipated repairs. A five-point scale is used with one being excellent condition and five being poor condition.
- **Reliability.** Operators assigned to the vehicle are typically asked to assess the reliability of the various components, systems and equipment of each vehicle. A five-point scale is used with one being excellent and five being poor. Another means to measure reliability is to assign one, three, or five points depending on the frequency the unit is in for repair. A rating of five would be

assigned to a vehicle that is in the shop two or more times per month on average, while one point would be assigned to a vehicle in the shop an average of once every three months or less.

- **Downtime.** Typically, this category would take into consideration the amount of time that a unit is out of service. A five-point scale is used with five indicating excessive downtime (20% or more) and a score of one indicating little downtime (6% or less). In cases where downtime is not tracked, the average number of repair work orders per month for each unit can be substituted. Those units with two or more work orders per month would be assigned a score of five, while units with less than one work order per month would be assigned a score of one.

Points for all six criteria are then totaled for each unit and compared with the point ranges found in Table 12.

Table 12. *Scoring System for Evaluating Vehicle Condition and Replacement Need*

Point Range	Condition
Under 18 points	Excellent condition
18 to 22 points	Good condition
23 to 27 points	Qualifies for replacement
28 or more points	Needs immediate consideration for replacement

The results of our condition assessment found that about 33% of the fleet (115 units) should be considered for immediate replacement. Five of them are currently scheduled for replacement according to Vehicle Maintenance.

It should be noted that data we compiled from Dossier fleet software reports titled “*life-to-date costs per unit*” and “*number of repair orders per unit*” may be understated due to several factors. The lack of repair orders being generated, and mechanics’ time not being recorded accurately. Additionally, the shop labor rate of \$43.15 per hour used to price work orders is far less than the rate we have computed at \$130.27 per hour. This again demonstrates the need to compile accurate and up-to-date fleet information to properly perform life cycle analysis.

A summary of the results of our assessment is found in Table 13. An electronic version entitled “*Blaine Fleet Condition Assessment Worksheet*” showing how each fleet unit scored in each of the six categories mentioned above is being provided separately.

Table 13. Summary of Condition Assessment

Point Range	Condition	Number of Units
Under 18 points	Excellent condition	161
18 to 22 points	Good condition	29
23 to 27 points	Qualifies for replacement	39
28 or more points	Needs immediate consideration for replacement	115

One of the primary factors contributing to the overall condition of the 115 units requiring immediate consideration for replacement is their age. Ninety-three of these units are between 10 and 36 years old. Three units are more than 48 years old. Most of these units far exceed the average age that government agencies keep their vehicles and equipment. Thirty-one of the 115 units were rated in “poor” condition due to rust and body damage.

Management Partners is aware of the need to keep a large number of vehicles available for part-time help to drive during the summer months. This most certainly has an impact on the results of our condition assessment, and we will address this topic in more detail in the right-sizing section.

Recommendation 35. Develop a methodology to support the replacement of vehicles and equipment based on the optimum economic life point of a unit. To obtain more accurate data to support the downtime and reliability factors used in the optimum economic life point system, Vehicle Maintenance should more accurately track downtime and the number of times a unit is in the shop. A more realistic shop labor rate to work orders should also be applied.

Replacement Funding

The City of Blaine does not have an internal service fund devoted to the replacement of vehicles and equipment. Instead, City departments are required to include requests for funding replacement vehicles in their budgets each year and obtain approval from the City Council. We were informed that in recent years the Council has not approved all requests for replacement vehicles.

This process contradicts the importance of a dedicated vehicle replacement fund, where replacement vehicles would automatically be replaced as needed based on Vehicle Maintenance’s evaluation. In most

jurisdictions, they would not have to compete with other budget requests during the budget process or obtain approval from an elected body.

The City should consider establishing a separate, dedicated internal service fund that accumulates funds for future replacements. It should not be commingled with operational costs. Fleet customers should be responsible for contributing to the future replacement cost over time.

Recommendation 36. Establish a separate dedicated fund for vehicle replacement only to which departments contribute. This fund should not be commingled with operational costs. Doing so will guarantee that funds will always be available to replace fleet units.

Recommendation 37. Develop a 15-year long-term replacement plan that identifies units by type and factors in age, future replacement costs, salvage value and auction fees.

Fleet Rightsizing

The Fleet Rightsizing segment of this report is divided into the following sections:

- Background;
- Project Approach;
- Fleet Rightsizing Best Practices;
- Utilization Analysis;
- Vehicle Cost Analysis
- Fleet Reductions, Reassignments and Pooling; and
- Vehicle Assignment and Utilization Policies.

Background

The 344 units identified for the purpose of this rightsizing assessment consist of everything from ride-on lawn mowers to construction equipment. These units support Blaine's staff of approximately 216.4 full-time employees and 100 part-time employees. The City's fleet represents a sizeable investment of resources to provide important community services.

It is common for government fleets to expand over time. Many factors contribute to this, including retaining vehicles or equipment that have been replaced by newer units, adding "free" surplus equipment or grant-obtained vehicles to the inventory, and reassigning high-use units to lower-use applications. A lack of economic incentives to manage fleet resources efficiently or a lack of explicit policy guidelines for the acquisition and use of vehicles can result in a larger fleet inventory than required. Without periodic evaluation, this "fleet creep" may go undetected for years.

This fleet rightsizing analysis reviewed each vehicle or piece of equipment in Blaine's inventory in detail to identify who is using it and for what purpose, as well as the frequency of use. Identifying underutilized vehicles that are no longer needed for their current purpose and either reassigning or eliminating them from the inventory is a financial best practice for the effective management of fleet resources.

Project Approach

Management Partners' team reviewed documents, collected and analyzed data, applied best practices, and consulted with department directors, division managers, and other staff responsible for vehicles managed and maintained by Vehicle Maintenance. Each of these analytical components is discussed below.

Document Review

Management Partners reviewed the following documents to gain an understanding of the utilization and costs of the City's fleet inventory:

- City of Blaine Personnel Policy-Employee Expense Reimbursement Policy,
- City Mileage Reimbursements Paid in FY 2020-21,
- City of Blaine Personnel Policy – Use of City Vehicles Beyond Standard Work Hours/Duty,
- Master Labor Agreement Between City of Blaine and The International Union of Operating Engineers Local NO.49, AFL-CIO,
- City of Blaine Purchasing Policy,
- Damage to Vehicle Report Form,
- Blaine Public Works Supervisor's Incident Report (SIR),
- Current fleet inventory listing, and
- Various Dossier fleet reports.

Applying Best Practices

We conduct best practice research to document how best-in-class cities manage their fleets to maximize customer service, efficiency, and cost-effectiveness. A section on best practices is included in this report.

Data Collection

Vehicle Maintenance staff provided inventory data that included each unit's make, model, year and the department they belong to. Using these data, Management Partners created a questionnaire for each unit. The questionnaire was designed to collect information about intended and actual use, including, for example, the equipment and loads it transports, destinations, and frequency of use and current miles/hours.

Questionnaires were sorted into groups for each department and distributed to department staff to be completed and returned.

Data Analysis

Although vehicle utilization is frequently measured by annual miles driven, mileage alone is not always the best indicator of use. Management

Partners' team reviewed the questionnaires and assigned each unit to one of eight functional categories:

- General use vehicles,
- Mobile workstation vehicles,
- Project or short-term fixed duration vehicles,
- Specially designed or modified emergency vehicles,
- Specially designed or modified vehicles and equipment (non-emergency),
- Construction and allied equipment,
- Miscellaneous equipment – metered; and
- Miscellaneous equipment – non-metered.

We analyzed usage data (either hours or miles) and developed criteria for evaluating levels of usage, which were applied to each fleet unit. Each unit was then classified as having high, medium, or low usage. Low usage vehicles typically offer the best opportunity for improved efficiency through reassignment or disposal.

We analyzed each department's permanently assigned and temporary vehicle requirements to determine the best options for meeting transportation needs in a more cost-effective manner. Alternatives included the continued use of a permanently assigned vehicle, departmental pooling, citywide pooling, and vehicle and equipment rental or leasing. Finally, Management Partners evaluated the City's use of vehicle allowances and personal mileage reimbursement.

Collaboration with Staff

The data-intensive nature of a fleet rightsizing study requires extensive interaction with City staff to ensure the methods and applications being used are well understood. Management Partners' team worked closely with staff from the Department of Public Works and the Vehicle Maintenance Division during this analysis.

Once underutilized vehicles were identified, we met again with managers and supervisors from each department. The purpose of these follow-up meetings was to discuss departmental transportation requirements and explore more cost-effective means of meeting those requirements. We then confirmed that underutilized vehicles could be removed or reassigned without compromising the operational functionality required for effective service delivery.

Fleet Rightsizing Best Practices

Best management practices for fleet utilization emphasize both efficiency and customer-driven planning and operation. The following five best practices are particularly relevant to Blaine's fleet.

Monitor Vehicle Life Cycles

Tracking the total cost of ownership and accurately depreciating vehicles helps ensure replacement funds are available when required. Monitoring the vehicle life cycle and ensuring that vehicles are replaced in a timely manner can lower the total cost of ownership. Alternatively, when vehicles are kept in service past their useful life, maintenance costs climb, resale value decreases, vehicle condition and vehicle safety declines, and downtime increases (making users less productive). In addition, older units often consume more fuel and produce more pollution.

Effective Vehicle Allocation

A well-run fleet is "right-sized" for the organization it serves, providing both the right number and mix of vehicles and equipment to meet user needs as cost-effectively as possible. Annual evaluation of fleet units against established criteria ensures each vehicle is correctly sized for service delivery and is appropriate for accomplishing the agency's mission.

Monitor the Fleet Utilization Rate

Having an unnecessarily large fleet is an inefficient use of public resources, yet is a common challenge for local governments. City staff should periodically measure their fleet utilization rate and incorporate the results into capital planning and disposition schedules to ensure the supply of vehicles and equipment aligns with demand. Lack of alignment can lead to higher than necessary fixed costs for underutilized vehicles and missed opportunities to reassign vehicles to other operational needs as an alternative to purchasing new ones.

Measure Results to Systemically Gauge Performance

It is important to track performance metrics for effectiveness to aid in management decisions about fleet resources. Useful indicators include the following:

- Total cost of ownership,
- Vehicle utilization,
- Relative costs for transportation alternatives,
- Preventive versus corrective repairs,
- Scheduled versus unscheduled work,

- Downtime,
- Number of miles driven between road calls,
- Number of miles driven between accidents, and
- Customer satisfaction data.

Vehicle Maintenance Information System

As mentioned previously, the Vehicle Maintenance Division uses Dossier, which is a best practice. Division staff could make better use of the system, as discussed earlier in this report, as is the discussion about each of these best practices.

Utilization Analysis

A fleet rightsizing study has two main components: a utilization analysis and a vehicle cost analysis. The utilization analysis determines how much and how often vehicles and equipment are used. The vehicle cost analysis determines the most economical means of meeting the City's transportation requirements by comparing the costs of an assigned city vehicle or piece of equipment with alternative means of transportation.

Alternate transportation approaches may include departmental and centralized light-duty pooling, heavy equipment pooling, commercially available rental vehicles or equipment, and mileage reimbursement for the use of personal vehicles to conduct city business.

Management Partners' analysis and recommendations are organized into the following areas:

- Vehicle and Equipment Functional Categories,
- Utilization Criteria,
- Vehicle Cost Analysis,
- Fleet Unit Reductions,
- Vehicle and Equipment Pooling, and
- Vehicle Assignment and Utilization Policies.

Each is discussed below.

Vehicle and Equipment Functional Categories

To facilitate the utilization analysis, the Blaine fleet was divided into eight functional categories within two broad classifications: "general use" and "special use."

General Use Categories

Three functional categories are classified for general use. They offer greater flexibility for assignment and utilization by numerous departments and functions.

General Use Vehicles

General use vehicles are typically used to transport personnel and material without the need for special equipment. These vehicles are readily subject to rotation between high and low mileage assignments. Specific examples in the City's fleet include sedans, vans, SUVs, and light-duty trucks.

Mobile Workstation Vehicles

Mobile workstation vehicles transport craft workers along with tools and equipment to perform specialized work and may have specially installed equipment. These vehicles normally have established replacement mileage criteria and may be rotated with other general use vehicles because the cost to remove or transfer any special equipment is minimal.

Examples of mobile workstation equipment include two-way radios, cross-boxes, camper shells, utility bodies, mounted equipment, small cranes, hydraulic lift gates, and racks. The City's mobile workstation vehicles include vans, light- and medium-duty trucks, and flatbed trucks.

Project or Short-term Fixed Duration Vehicles

These vehicles are required for a specific activity for a fixed, limited amount of time. They are typically rented or leased from local commercial rental agencies if not readily available in the City's light- and heavy-duty equipment pools.

Special Use Categories

Special use vehicles and equipment are designed, outfitted or configured for a single activity or are used solely in support of a single activity. There are five special use functional categories in the fleet, as described below.

Specially Designed or Modified Emergency Vehicles

Some vehicles and equipment are designed specifically for emergency response and are outfitted with radios, light bars, mobile data computers, and other specialized equipment. They support activities required by law or policy to be available at all times (i.e., on standby) and are utilized to respond to emergencies or unusual events. Examples include police patrol units, police motorcycles, fire apparatus, and ambulances.

Specially Designed or Modified Vehicles and Equipment (Non-Emergency)

Some non-emergency units are designed, modified and/or outfitted for a unique job requirement. Transfer of specialty equipment to allow rotation with other vehicles would either require extensive modification or adversely impact safety. Because they have permanently installed features that cannot be easily or economically removed, these vehicles cannot be used for any purpose other than the one for which they were designed. Examples include utility trucks, digger derricks, boom trucks, sewer cleaners, and sweepers.

Construction and Allied Equipment

This group of vehicles includes mobile or other construction equipment uniquely designed for a specific use. Utilization of construction and allied equipment is typically measured by hours of usage rather than mileage. Examples include backhoes, loaders, tractors, graders, rollers, and auxiliary engines.

Miscellaneous Equipment – Metered

As the name implies, metered units are equipped with hour meters to measure usage. They primarily consist of gas or electric-powered riding and non-riding equipment such as generators, compressors, forklifts, gang mowers, and golf carts.

Miscellaneous Equipment – Non-Metered

This group of equipment has no meters but may include gas- or electric-powered riding and non-riding equipment. Examples include trailers and sprayers.

Table 14 shows the City's fleet of 344 units organized into the eight functional categories.

Table 14. Number of Units by Functional Category

Functional Category	Number of Units
General Use	
General Use Vehicles	7
Mobile Workstation Vehicles	80
Project or Short-term Fixed Duration Vehicles	17
Special Use	
Specially Designed or Modified Emergency Vehicles	90
Specially Designed or Modified Vehicles (non-emergency)	38
Construction and Allied Equipment	35

Functional Category	Number of Units
Miscellaneous Equipment – Metered	36
Miscellaneous Equipment – Non-Metered	41
TOTAL	344

Utilization Criteria

Using mileage and hour data collected from the questionnaires, we calculated the average use per vehicle and piece of equipment for each class of vehicles in the eight functional categories. We then established criteria to evaluate levels of usage and justification for inclusion in the fleet based on our knowledge of fleet operations and best management practices.

This section presents the recommended utilization criteria for the vehicle and equipment classes within the functional categories. One set of utilization criteria is designed for vehicles for which usage is measured in miles. The second set of criteria is applicable to hourly metered units.

Criteria for Units Measured in Miles

The functional categories that measure usage by mileage are:

- General Use Vehicles,
- Mobile Workstation Vehicles,
- Project or Short-term Fixed Duration Vehicles,
- Specially Designed or Modified Emergency Vehicles, and
- Specially Designed or Modified Vehicles and Equipment (non-emergency).

We grouped similar types of vehicles into classes within each functional category (e.g., sedans, or light-duty trucks). Average yearly miles were computed based on current odometer readings. Typically, we would use data based on the last 12 months of usage. However, data from this period would be questionable based on the limited use of some vehicles due to COVID-19. We developed three criteria to evaluate the utilization of Blaine vehicles and equipment based on miles used.

- High Use: Use exceeds 80% of annual average mileage.
- Medium Use: Use falls between 50% and 80% of annual average mileage.
- Low Use: Use averages less than 50% of annual average mileage.

Applying mileage usage criteria allows individual vehicles to be identified as having high, medium, or low usage within their specific

class. For example, the annual average mileage for SUVs in the General Use Category was calculated to be 6,216 miles per year.

Using the criteria presented above, any unit averaging more than 4,973 miles per year (i.e., 80% of 6,216 miles) would be considered high use. Units averaging between 3,108 and 4,973 miles per year (i.e., between 50% and 80% of 6,216 miles) would be medium use vehicles. Units averaging fewer than 3,108 miles per year (i.e., 50% of 6,216 miles) would fall into the low use category.

Criteria for Units Measured in Metered Hours

Management Partners used information collected from department questionnaires for all hour-based metered units to evaluate relative usage. Such units were assigned to either the Construction and Allied Equipment or the Miscellaneous Equipment – metered functional categories. Similar classes within each category were grouped together.

Three criteria were developed for evaluating the utilization of vehicles and units based on hours used.

- High Use: Use meets or exceeds 80% of average yearly hours.
- Medium Use: Use falls between 50% and 80% of the average yearly hours.
- Low Use: Use averages below 50% of average yearly hours.

These criteria were applied to the yearly hours to identify low use, medium use and high use ranges for class groupings and became the basis for evaluating and justifying the existence of units with hourly metered usage.

For example, the class of skid-steer loaders within the Construction and Allied Equipment category has a calculated average usage of 222 hours per year. Applying the usage criteria above to this average, any skid-steer loader utilizing more than 178 hours per year (i.e., 80% of 222 hours) is considered high use, while one utilizing between 111 and 178 hours per year (i.e., 50% of 222 hours and 80% of 222 hours) would be considered medium use. Skid steer loaders that are used fewer than 111 hours per year (50% of 222 hours) would fall into the low use category.

Current Fleet Utilization

The mileage and hourly utilization criteria were applied to Blaine's current fleet of rolling stock to identify which units fall into the high, medium, and low use categories. A summary of these results is provided in Table 15 below. It shows that of the 267 total units for which high use,

medium use, and low use utilization criteria could be applied, 30 units (approximately 11%) currently demonstrate low usage.

Table 15. Summary of Total Fleet Utilization

Usage Category	Mile-Metered Units	Hour-Metered Units	Non-Metered Units	Total
High Use	122	45		167
Medium Use	60	10		70
Low Use	16	14		30
SUB-TOTALS	198	69		267
Not Applicable ¹	31	5	41	77
TOTALS	229	74	41	344

¹Includes non-metered miscellaneous equipment as well as units we were unable to classify due to a lack of units in their classification.

It is important for fleet staff to continue to track usage for all vehicles and equipment in the fleet to effectively evaluate utilization. Actual miles/hours per month, by class should be tracked over the next year. The formulas for calculating low, medium, and high usage have been developed to support annual utilization review.

The functional categories assigned to individual units as part of this study should continue to be appropriate unless a unit's function has changed. The percentage formulas for determining levels of use should remain the same, but adjustments to the annual miles/hours may be necessary based on the average for each vehicle and equipment classification.

The calculations to develop the usage criteria should be evaluated annually to see if adjustments need to be made, and units should be evaluated annually against the usage criteria. However, the utilization methodology as a whole should not need to be updated more frequently than once every two years.

Recommendation 38. Update the utilization analysis methodology every two years. A review of the calculations should be performed and adjustments should be made as necessary for factors such as downtime and fueling time that can vary with changes in fleet age, composition, and maintenance practices.

Recommendation 39. Review units against established usage criteria annually. Confirm the need to retain units not meeting established criteria with their assigned departments.

As a separate deliverable, Management Partners is providing the City with spreadsheets documenting the utilization methodologies and their application to each unit. Low, medium and high use units are identified by color code as follows:

- Red font indicates low use (less than 50% of the class average)
- Blue font indicates medium use (50% to 80% of the class average)
- Black font indicates high use (above 80% of the class average)

Vehicle Cost Analysis

Transportation to perform municipal services is provided in a variety of ways. This includes assigning city-owned vehicles, making pooled vehicles available to employees, renting or leasing equipment from commercial agencies, or reimbursing employees for the use of their personal vehicles. Efficient fleet operations use a combination of these methods, striving to match the most cost-effective method with the specific transportation need.

As mentioned previously, a vehicle cost analysis determines the most economical means of meeting the City's transportation requirements by comparing the costs of an assigned city vehicle or piece of equipment with alternative means of transportation. This is done by conducting a breakeven analysis to identify the point at which an enterprise moves from a "loss" to a "profit" position.

In the context of a municipal motor pool, the breakeven point is where it becomes more economical to own, operate, and maintain a city vehicle than to provide mileage reimbursement for driving a personally owned vehicle, use a motor pool unit, or provide a commercial rental vehicle for city business.

Using City-Assigned Vehicles vs. Mileage Reimbursement

Management Partners conducted a breakeven analysis to compare the cost of using city-assigned vehicles with the cost of mileage reimbursement for the use of a personal vehicle. Cost-effectiveness is a function of the average number of miles driven per month for city business.

For the breakeven analysis we compared the ownership and operational costs per mile for a city-owned Ford Explorer (Unit 3420) with the Internal Revenue Service (IRS) mileage reimbursement rate of \$0.585 per mile. The Ford Explorer SUV was chosen for this analysis because it is one of the most widely used vehicles in the Blaine fleet.

Table 16 below summarizes the City's ownership and operational costs for a Ford Explorer SUV. The operational costs were obtained from Vehicle Maintenance.

Table 16. *Ownership and Operational Costs for Ford Explorer SUV*

Ownership Costs	
Ownership Cost/Month	\$237.50
Operational Costs (Maintenance and Repair, Fuel, Sublet)	
Cost Per Mile for Maintenance, Repairs	\$0.13
Cost Per Mile for Fuel	\$0.07
Total Cost Per Mile for Maintenance, Repairs and Fuel	\$0.20

The average mileage for an assigned Ford Explorer SUV in the General Use Category is 6,216 miles per year or 518 miles per month. Table 17 compares the monthly cost of using a Ford Explorer with mileage reimbursement costs, depending on the number of miles driven per month. It shows that mileage reimbursement is a more cost-effective option unless city business requires more than 617 miles per month.

Table 17. *Breakeven Analysis for City-Assigned Ford Explorer SUV vs. Mileage Reimbursement*

Miles Per Month	City-Assigned Vehicle ¹	Mileage Reimbursement ²
100	\$258	\$59
200	\$278	\$117
300	\$298	\$176
400	\$318	\$234
500	\$338	\$293
518 ³	\$341	\$303
600	\$358	\$351
617	\$361	\$361
700	\$378	\$410

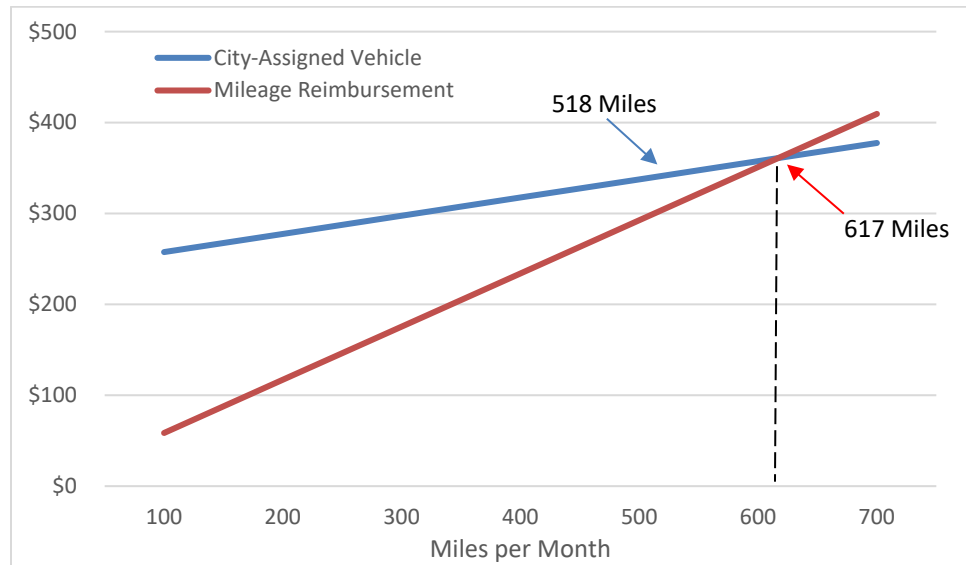
¹Ford Explorer SUV ownership and operational costs

²IRS reimbursement rate of \$0.585 per mile for 2022

³Average monthly mileage for Ford Explorer SUV in the General Use Category

Figure 1 presents this analysis graphically.

Figure 1. Breakeven Point for a City-Owned Ford Explorer SUV Compared to Personal Car Reimbursement



Daily Trip Cost Comparisons

Sometimes transportation is needed infrequently to conduct city business. Typically, a city has pool cars available for such single-use trips and/or may reimburse employees for the use of their personal cars.

To determine the relative cost effectiveness of various single-use transportation options, we compared the costs of trips with different mileages using a Ford Explorer SUV as a pool vehicle with the cost to provide mileage reimbursement and the cost of a car rental. Ownership and operational costs for the Ford Explorer SUV are shown in Table 18 below.

Table 18. Ownership and Operational Costs for Ford Explorer SUV

Ownership Costs	
Ownership Cost/Month	\$237.50
Ownership Cost/Day ¹	\$10.46
Operational Costs (Maintenance, Repairs, Fuel, Sublet)	
Cost Per Mile for Maintenance, Repairs, Sublet	\$0.20
Cost Per Mile for Fuel	\$0.07
Total Cost Per Mile for Maintenance, Repairs, Sublet and Fuel	\$0.27

¹ The ownership cost/day is based on an average of 22.7 working days per month.

Table 19 shows that for a single roundtrip of 34 miles or less it is more cost effective to reimburse an employee to use their personal vehicle. For roundtrips of 280 miles or greater it is more economical to rent a vehicle.

Table 19. Comparison of Pool Vehicle, Mileage Reimbursement and Commercial Rental Costs

Miles Traveled Daily	City Pool Vehicle ¹	Mileage Reimbursement ²	Daily Commercial Rental ³
10	\$13.16	\$5.85	\$67.00
20	\$15.86	\$11.70	\$67.70
30	\$18.56	\$17.55	\$68.40
34	19.64	\$19.89	\$68.68
40	\$21.26	\$23.40	\$69.10
50	\$23.96	\$29.25	\$69.80
100	\$37.46	\$58.50	\$73.30
200	\$64.46	\$117.00	\$80.30
280	\$86.06	\$163.80	\$85.90
300	\$91.46	\$175.50	\$87.30

¹ Ownership and operational costs

² IRS mileage reimbursement rate of \$0.585 per mile for 2022

³ Enterprise daily rental costs for standard SUV under government contract (includes applicable taxes and fuel)

Figure 2 presents this analysis graphically.

Figure 2. Single Trip Cost Comparison of Pool Vehicle, Employee Reimbursed Mileage and Commercial Rental Vehicle

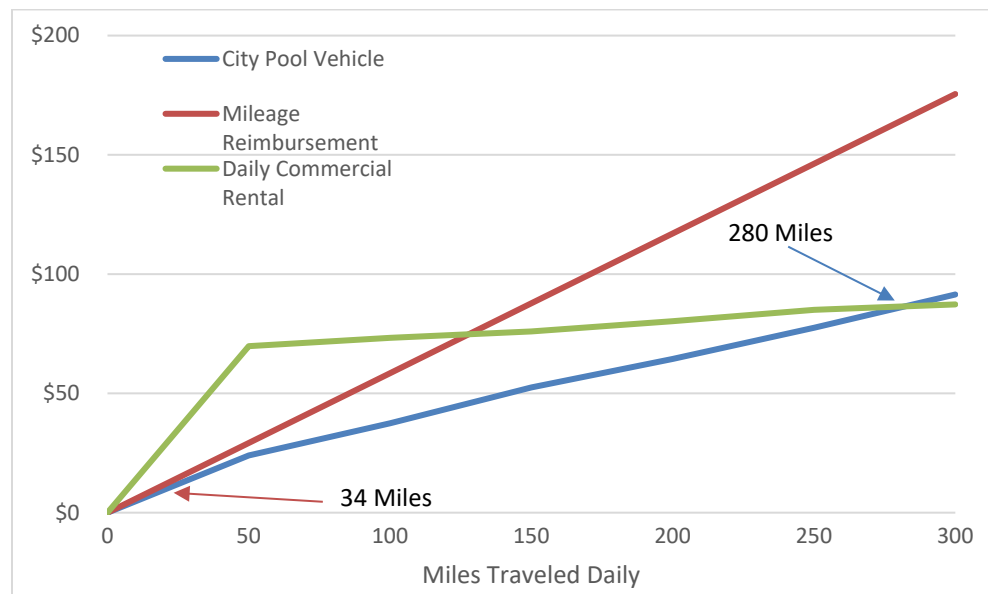


Figure 2 illustrates that for trips between 34 and 279 miles (roundtrip), it is more economical for a city vehicle to be used. However, it would be more economical to rent a car than use a city vehicle for a trip to Duluth, (which is approximately 296 miles roundtrip from Blaine), for example.

Both the breakeven analysis and the daily trip cost analysis demonstrate that the cost effectiveness of the various transportation alternatives is highly dependent on the number of miles driven. With the ever-changing cost of fuel as well as ongoing ownership and operational costs, regular analysis of the costs of various alternatives helps ensure the City's transportation needs are being met in the most efficient manner.

The City of Blaine's Personnel Policy No. 3.16, entitled Employee Expense Reimbursement Policy, states *"Employees of the city who, in the conduct of official city business, are authorized or required to use their personal automobiles for transportation shall be reimbursed at the mileage rate established by the IRS."* There is no mention of alternative methods of transportation as reflected in the breakeven analysis and the daily trip cost analysis above. City leaders should consider revising this section of the policy.

Recommendation 40. Revise guidelines and policies for the use of city-owned vehicles compared with personal and commercially rented vehicles to provide the most economic means of transportation.

Recommendation 41. Update the breakeven and daily trip cost analyses every year to confirm and compare relative costs for different transportation alternatives.
Make adjustments in established guidelines as necessary.

Monthly Auto Allowance Rates and Mileage Reimbursement

Mileage reimbursement is a common practice to address short, single-use transportation needs; however, the City of Blaine does not pay mileage reimbursement for business-related trips within the City limits. This appears to contradict Section 3.6 of the Employee Expense Reimbursement Policy mentioned earlier in this report.

To help understand mileage reimbursement practices in the context of overall fleet utilization, we typically review mileage reimbursement records paid to city employees. City-wide mileage reimbursement data compiled by the City's Finance Department shows that nine employees were paid a total of \$1,193 for using their personal vehicles during FY 2020-21. These employees traveled a total of 2,126 miles during this period.

The miles employees travel on city business using their own vehicles is important to monitor. Any significant increase or decrease in these miles may suggest a greater or lesser reliance on using the City Hall Motor Pool vehicles (as discussed later in this report) and may require an adjustment to the number of units that comprise the pool.

Recommendation 42. Develop a method to track the miles employees travel using their personal vehicles.

A significant benefit of using mileage reimbursement to meet some transportation needs is that Blaine pays only for the actual mileage used rather than the total costs associated with owning a vehicle that is used inconsistently. On the other hand, there are situations where it may not be desirable for employees to use their private vehicles for city business.

City vehicles typically are clearly marked, providing residents with information about the users' purpose and the expectation that those using the vehicle are on official business. In such cases, the availability of a City Hall Motor Pool is an excellent alternative to having either individually assigned vehicles or mileage reimbursement. Motor pools are commonly used in government and corporate fleets to minimize the overall size of the fleet, maximize the use of existing fleet resources, and achieve cost efficiency.

Fleet Reductions, Reassignments and Pooling

Fleet Reductions

When "fleet creep" has occurred, reductions can be accomplished by selling underutilized units as surplus or reassigning them to an existing vehicle or equipment pool. Based on the utilization analysis and subsequent discussions with City staff, Management Partners identified 21 vehicles and equipment for potential reduction, reassignment, or pooling. A complete list of these vehicles and their recommended disposition is provided in Attachment D.

Of the 21 units identified, 16 are recommended for removal from the fleet inventory. This represents 4.7% of the City's fleet. Prior to being sold or disposed, however, Vehicle Maintenance should evaluate whether they are in better condition than comparable, more highly used units in the fleet inventory. Units that are in the best condition should be retained and those in the worst condition should be disposed of.

Several of the units being recommended for surplus are underutilized and could be rented on an as-needed basis. They are discussed in more detail below.

Unit 1119, a 1991 Caterpillar Motor Grader, has been used less than 36 hours per year. It is primarily used to grade only a handful of gravel roads in the City. In discussions with Street personnel, we suggested that the City surplus the 31-year-old grader and either rent a grader when needed or explore contracting out the need to grade gravel roads.

Recommendation 43. Surplus unit 1119, a motor grader.

Rent a grader if needed or consider contracting out the need to grade gravel roads.

Unit 1102 is a 2001 Ingersoll Rand blacktop roller. It has been used a total of 552 hours in the past 20 years, averaging only 27.6 hours per year. Based on the infrequent hourly use of this roller Public Works should determine how many days of the year the roller needs to be onsite. Once determined, the asset and operational costs of unit 1102 should be compared with the cost of renting a roller.

Recommendation 44. Track how many days unit 1102, a blacktop roller, is used and then determine whether a rental is more economical.

Following are several examples of fleet units that can be eliminated by purchasing a single piece of equipment or attachments capable of performing the tasks that multiple units do.

There are three mowers located at City Hall. Unit 4463, which belongs to Water is used to mow grass, while units 2309, which belongs to Parks, and 4484, which belongs to Facilities, are used for snow removal tasks. We recommend that the City surplus all three mowers and purchase an articulating work machine, estimated to cost \$38,000, with the capability to blow and brush snow from the City Hall premises. It should also have the capability to unload deliveries that come to City Hall. This will eliminate the need to transport a forklift from Vehicle Maintenance to City Hall each time a large delivery is required.

The responsibility for mowing the City Hall premises, currently being performed by Facilities personnel using unit 4463, should be transferred to the Parks Division who mows the park located across the street from City Hall.

Recommendation 45. Surplus mower units 4463, 2309 and 4484 and replace them with a new articulating work machine capable of blowing and brushing snow and loading and unloading deliveries at City Hall. This will require assigning the responsibility for mowing the City Hall premises to the Parks Division who currently mows the park across the street from City Hall.

Unit 1276, a backup tractor used to remove snow in cul-de-sacs does not have the capability to scoop snow. Purchasing a pless plow and attaching it to this tractor would give it the capability to scoop snow and free up

unit 1310, a loader, to replace 1212 in the two yards. The pless plow costs about \$40,000.

Recommendation 46. Purchase a pless plow attachment for unit 1276 to enable it to be a front-line cul-de-sac snow removal tractor.

The remaining fleet units recommended for surplus are underutilized and are no longer needed or whose tasks can be replaced by using existing units in the fleet.

Unit 1156, a 1994 plow truck belonging to the Streets Division, is one of three backup plow trucks. After discussions with Streets Division representatives, they agreed to surplus this truck and rely on the other two backup trucks.

Recommendation 47. Surplus unit 1156, a backup plow truck.

Unit 1210 is a 2002 dump truck assigned to the Parks Division. It is used to flood ice rinks and collect garbage and haul dirt in the summer. It has only traveled 2,000 miles in the last five years. Parks representatives thought they could give this truck up if drill holes could be configured on other dump trucks to continue to flood the ice rinks.

Recommendation 48. Surplus unit 210, a dump truck.

Unit 2224, a 1994 tractor with a loader attachment, is used by the Parks Division to drag ballfields and load trucks with materials. These tasks can be performed by using an existing utility work machine.

Recommendation 49. Surplus unit 224, a tractor.

Unit 2340 is a 2007 all-terrain vehicle (ATV), used by the Parks Division. It is a backup unit and has traveled only 20 hours in the last year and a half. Parks is willing to give up this unit.

Recommendation 50. Surplus unit 340, an all-terrain vehicle.

Unit 2360 is a pontoon boat that has not been used by Parks for more than four years. Parks personnel agree that the boat and its trailer should be surplus.

Recommendation 51. Surplus unit 360, a pontoon boat and unit 2360-1, a pontoon boat trailer.

Engineering agreed that two pickups, units 5140 and 3389, could be surplus. They agreed to draw from the City Hall Motor Pool when

needed. Building Inspection uses two older pickups (units 3386 and 3384) during the summer months for their interns and agreed to draw from the Vehicle Maintenance Loaner Pool as needed. Unit 2254, a 1990 utility trailer in the Water Division, is no longer needed and should be surplused.

Recommendation 52. Surplus pickup units 5140, 3389, 3386 and 3384 as well as unit 2254, a utility trailer.

The Streets Division is responsible for clearing snowbanks that form during the winter season. Currently, snow blowers are used on small tractors and machines to clear small, accumulated snowdrifts; however, during heavy snowfall, loaders with buckets are used to push back snowbanks. This causes considerable damage to sod, among other things.

The addition of a blower that could be attached to unit 1294, a Caterpillar loader, would enable operators to blow snow back further and remove large amounts of snow using dump trucks. It will also allow operators to get through the bridge deck sidewalks and trails and blow into trucks with less manpower.

Unit 2306 is a Zamboni ice resurfacer used at the Lexington Athletic Complex to groom the ice. It is owned by the Hockey Association, not the City. The Zamboni is a 1973 model and has accumulated 1,973 hours over a 50-year period. The relative life expectancy of this type of equipment is between 10 and 20 years. Vehicle Maintenance informed us that it has major maintenance problems and should be considered for replacement soon.

In our discussions with Safety Services, we recommended that they explore using hybrid patrol SUVs. Studies have shown that patrol vehicles idle 60% of the time or about 4.8 hours per 8-hour shift. Police vehicles must keep their engines running to power such things as computers, lighting packages, radios, air conditioners, heaters and other electrical equipment. Research has shown that every hour an engine idles equates to 33 miles. As a result, odometer readings that indicate 100,000 miles may well be closer to 150,000 miles of usage when idling is taken into account.

We were interested in determining the amount of fuel that could be saved by utilizing a hybrid police SUV versus a gas-powered police SUV. Using Ford's idling cost calculator, we compared unit 5301, a 2020 Ford Police Interceptor Utility gas-powered SUV in the Safety Services Department with a 2021 Ford Police Interceptor Utility Hybrid Electric Vehicle (HEV).

Unit 5301 is driven six days a week spanning two 12-hour shifts and travels approximately 30,000 miles per year. Its estimated idling time is 7.2 hours per 12-hour shift and uses about .465 gallons per hour while idling. In contrast, a hybrid SUV uses only .204 gallons per hour while idling. That equates to a savings of about 1,885 gallons of fuel per year, assuming an average idling time of 7.2 hours per 12-hour shift.

An additional 514 gallons of fuel per year could be saved based on the EPA's estimated combined (city/highway) ratings of 24 mpg for the Ford HEV Police Interceptor and 17 mpg for the gas-powered Ford Police Interceptor. Additionally, we estimate a reduction of about 33,327 lbs. of CO2 output per year based on this example.

Disposing of the 16 underutilized units will generate only modest revenue but will allow Blaine to avoid the ongoing costs of maintenance, fuel, and replacement. Some of these savings may, however, be offset by charges imposed for renting out pool or commercial units as needed.

Table 20 below summarizes the potential savings and cost avoidance associated with disposal of the 16 underutilized units. It shows first-year savings (including revenues from the disposal of the units) of approximately \$165,000 . This savings increases to almost \$1,700,000 over 10 years.

Table 20. *Cost Savings and Cost Avoidance from Recommended Fleet Reductions*

Savings and Cost Avoidance	First Year	Over 10 Years
Operational costs (including fuel)	\$65,502	\$655,020
Replacement Avoidance		\$1,026,500
One-time revenue from disposal of 16 units	\$100,000	N/A
TOTAL	\$165,502	\$1,681,520

Five units in total are recommended for reassignment to a City Hall pool. Specific recommendations concerning these units are provided in the following section.

Reassignments and Pooling

Central Motor Pool

A motor pool best practice is to maximize the use of central and departmental motor pools and minimize the number of individually assigned vehicles to personnel whose needs for transportation can be met through pooling. There is currently no pool of vehicles at City Hall for employees to use on city business. Instead, employees use a vehicle

assigned to their department or use their personal vehicle and claim mileage reimbursement.

Convincing employees to give up their assigned vehicles to use a shared motor pool arrangement can be a difficult task. Developing a fleet policy governing utilization thresholds, as addressed in this study, usually takes the subjectivity out of whether to assign a vehicle or have an employee use a pool vehicle.

One means of convincing employees is to show them they only need to pay for a vehicle during the time when it is used, as opposed to paying for an assigned vehicle day in and day out. It is important to remember that an assigned vehicle is typically the most expensive means of transportation when depreciation, maintenance, fuel and insurance are taken into account.

In interviews with fleet customers, some department staff expressed a willingness to give up their assigned vehicle and use a pool vehicle if they could be assured one was always available and convenient to access. This is a legitimate request that needs serious attention when establishing a motor pool. Because of this, the right number and composition of vehicles making up a motor pool must have considerable analysis, along with a convenient method to access the vehicles.

As mentioned previously, several departments were willing to give up some of their assigned vehicles if they had access to a centralized motor pool at City Hall. Based on limited usage data and interviews with fleet customers, Management Partners estimates a total of five vehicles will be required to meet department staff members' needs. If this number is not sufficient, the pool could be supplemented by a local rental car agency. Table 21 reflects the units we are recommending for reassignment from the Community Development and Recreation departments to a new City Hall Motor Pool.

Table 21. Equipment Recommended for Reassignment to the City Hall Motor Pool

Unit Number	Department/Division	Type of Unit
5238	Recreation-Administration	SUV
5259	Recreation-Administration	SUV
3410	Community Development-Building Inspection	SUV
3428	Community Development-Building Inspection	SUV
3412	Recreation-Youth Program	15-Passenger Van

Recommendation 53. Reassign units 5238, a Ford Explorer, 5259, a Chevrolet Tahoe and 3412, a Chevrolet passenger van from the Recreation Department, and units 3410 and 3428, Ford Explorers from Community Development to the City Hall Pool and supplement vehicles from commercial rental agencies as needed.

The establishment of a City Hall Motor Pool will require someone at City Hall to check out vehicles and keep detailed use records, including trip descriptions and the number of times a pool unit is requested but not available. Regular analysis of usage data will provide Vehicle Maintenance with the information needed to provide motor pool customers with the right number and type of vehicles, which will enhance the pool's utilization. Blaine may also want to evaluate using an automated pooling management (e.g., Agile, Invers) to perform on-line reservations, self-service kiosks, as well as providing assistance with data collection and analysis.

Recommendation 54. Monitor daily utilization of the City Hall Motor Pool during the next six months to determine the type and number of units required to meet customer needs.

An alternative option is to use a local commercial rental car agency to supply pool vehicles on demand. This approach is becoming increasingly popular among public agencies because of the following advantages:

- Broader choice of available vehicle classes (compact, intermediate, standard, full-size, cargo vans, SUVs, 4x4 pickups, passenger vans);
- Delivery and pickup of vehicles by the rental agency;
- Access to new, low-mileage vehicles;
- Vehicles are always clean and fully fueled;
- 24-hour road service; and
- Choice of daily, weekly or monthly rates.

The State of Minnesota currently has contracts with Enterprise Rent-A-Car to provide a variety of sedans, pickup trucks, SUVs and vans for as-needed use. Blaine is able to piggyback on this contract to secure the best rates with a local rental car agency. Doing so would help support or even replace an in-house motor pool. In the meantime, such a contract would ensure the availability of pool vehicles when units are going to be out of service for an extended period or when demand exceeds supply.

Recommendation 55. Utilize the State of Minnesota rental car contract to supplement the City Hall Motor

**Pool or Shop Loaner Pool when units are out of service
for extensive repair work or to address peak needs.**

We previously recommended that guidelines and policies be established regarding the use of city-owned vehicles, personal vehicles and commercially rented vehicles. Providing training to employees about these guidelines and policies will help them use good judgment in matching their specific transportation needs for city business with the most cost-effective alternative.

**Recommendation 56. Train employees about established
guidelines and policies for addressing transportation
needs.**

City managers may also want to consider establishing a rental rate system to fully recover the City Hall Motor Pool costs. For example, a per hour or half-day rates could be charged in addition to a daily rate. The recently completed fleet activity-based cost analysis should aid Vehicle Maintenance staff with formulating rental rates.

**Recommendation 57. Adopt a methodology to calculate
rental rates to recover ownership and operational costs of
all pool units.**

Shop Loaner Pool

As mentioned previously, Vehicle Maintenance does not have a dedicated pool of vehicles to loan to customers having their city vehicles maintained and repaired. Occasionally, the shop supervisor will loan a pickup from the seasonal pool of trucks used during the summer months.

Management Partners recommends that Vehicle Maintenance have a small pool of vehicles available year-round for customers to use when their vehicles are being serviced. This would eliminate the need for a second person (and vehicle) to accompany the customer to the shop and deliver the customer when the service is completed. Vehicle Maintenance should choose four of the most reliable units from the seasonal pool of trucks and SUVs to place in the shop loaner pool.

**Recommendation 58. Establish a shop loaner pool
consisting of four units from the seasonal pool of trucks
and pickups.**

Ensuring that the size and makeup of shop loaner pools have a direct correlation to the productivity and efficiency of a fleet's operation is a best management practice. For example, the need for a large number of

pool vehicles suggests that maintenance and repair work is not being accomplished in a timely manner.

The cost associated with keeping a large number of pool units on hand ultimately adds to the overall costs of the fleet operation and drives up overhead. In addition, fleet customers should not be expected to pay for shop loaner vehicles unless their vehicles are being repaired as a result of operator negligence or abuse. For such cases, the fleet customers should be required to use the City Hall Motor Pool or a commercial rental car agency and pay the rental fees incurred.

Central Heavy Equipment Pool

Most departments and divisions located at the Corporation Yard share construction-type equipment with one another. Rarely do Blaine departments share equipment with other public agencies.

Currently, the costs for maintaining and replacing heavy equipment are born by the department or division to which they are assigned. This does not appear to inhibit sharing between departments. However, the depreciation and maintenance costs may not be evenly apportioned. The lack of an ownership and maintenance chargeback system makes this difficult to analyze.

An alternative approach is to place a few pieces of heavy equipment in a pool administered by Vehicle Maintenance. City departments draw from this pool on an as-needed basis and pay only for the time they use the equipment. This is a fairer approach for spreading the costs of ownership and replacement among those who use it if a chargeback system is adopted as recommended in this study.

Renting equipment on an as-needed basis when it would otherwise sit idle for a good part of the year is a motor pool best practice. The Streets, Parks and Water Divisions will occasionally rent equipment such as compressors, trench boxes, pumps and stump grinders. These divisions take it upon themselves to rent this equipment instead of consulting with Vehicle Maintenance.

A best fleet practice would be to have a process in place in which one person, notably the asset management coordinator, has the responsibility of securing needed rental equipment. In this way, there is one point of contact who is in the position to determine if there is existing fleet equipment that could be used and, if not, to obtain the best vendor and pricing possible. The City of Blaine should establish contracts with local equipment rental firms to supplement the need for equipment on an as-needed basis.

Recommendation 59. Establish contracts with local rental firms for heavy equipment. Requests for heavy equipment rental should be approved through a single source such as the asset management coordinator to ensure proper coordination of City resources and private vendor contracts.

Recommendation 60. Centralize responsibility for approving requests for equipment through a commercial vendor with Vehicle Maintenance.

Vehicle Assignment and Utilization Policies

Vehicle Assignment of Units to Individuals

The City's guidelines and conditions for the use of City-owned vehicles state that employees *"have a City vehicle available for use as required by the nature of their work"* but fails to address criteria assigning vehicles. This policy should stipulate guidelines for assignment based on both specific performance indicators (i.e., anticipated miles traveled, actual hours of usage, downtime, and standby and utilization percentages) and a comparative cost evaluation of other transportation alternatives such as mileage reimbursement, using a departmental or centralized pool vehicle, or renting a vehicle. These alternatives and the conditions under which they become most efficient have been previously discussed.

Recommendation 61. Expand the City's guidelines and conditions for the use of City-owned vehicles to include specific criteria based on a cost evaluation of other transportation alternatives.

Permanently Assigned Take Home Units

Ten vehicles in the City's fleet are designated as permanently assigned take home units. Two are in Public Works and eight are in Safety Services. A list of the vehicles and the number of daily roundtrip miles traveled between the office and home, as well as the number of callouts per month are reflected in Table 22.

Table 22. *Permanently Assigned Take Home Vehicles*

Unit Number	Type of Unit	Department/Division	Employee Title	Roundtrip Miles	Estimated Number of Callouts per Month
1295	Pickup	PW-Streets	Streets Supervisor	30 miles	3 to 4
3422	SUV	PW-Administration	Public Works Director	40 miles	4
5274	SUV	Safety Services-Administrative Services	Chief of Police	8 miles	4
5286	SUV	Safety Services-Emergency Preparedness	Captain	28 miles	4
5317	SUV	Safety Services-Administrative Services	Special Operations Captain	16 miles	4
5316	SUV	Safety Services-Special Ops	Deputy Chief	9 miles	4
5029	SUV	Safety Services-Special Ops	Detective DTF	40 miles	4
5031	SUV	Safety Services-Special Ops	Detective DTF	32 miles	4
5283	SUV	Safety Services-Patrol	Captain	28 miles	4
5285	SUV	Safety Services-Administrative Services	Administrative Captain	4 miles	4

Standby and On-Call Units

There are 20 units in the fleet designated as standby or on-call vehicles. Twelve units belong to Safety Services and eight belong to Public Works. These units are listed in Table 23 along with the title of the employee and their department/division. The number of roundtrip miles between each employees' workplace and their residence is also reflected in the table as are the estimated number of callouts per month.

Table 23. *Standby and On-Call Vehicles*

Unit Number	Type of Unit	Department/Division	Employee Title	Roundtrip Miles	Estimated Number of Callouts per Month
5222	SUV	Safety Services-Special Ops	Detective	8 miles	4
5241	SUV	Safety Services-Special Ops	Detective	16 miles	4
5273	SUV	Safety Services-Special Ops	Detective	30 miles	4
5276	SUV	Safety Services-Special Ops	Detective	8 miles	4
5284	SUV	Safety Services-Special Ops	Detective	20 miles	4
5296	SUV	Safety Services-Special Ops	Detective	30 miles	4
5298	SUV	Safety Services-Special Ops	Detective	8 miles	4
5304	SUV	Safety Services-Special Ops	Detective	34 miles	4

Unit Number	Type of Unit	Department/Division	Employee Title	Roundtrip Miles	Estimated Number of Callouts per Month
5308	Sedan	Safety Services-Special Ops	Detective	24 miles	4
5264	Van	Safety Services-Special Ops	Detective	30 miles	4
3406	SUV	Safety Services-Fire Inspection	Fire Marshal	6 miles	1
3405	SUV	Safety Services-Fire Inspection	Deputy Fire Marshal	6 miles	1
4605	Pickup	Public Works-Water	Public Service Worker	44 miles	1 to 10
4603	Pickup	Public Works-Water	Public Service Worker	44 miles	1 to 10
4496	Pickup	Public Works-Water	Public Service Worker	8 miles	1 to 10
4488	Pickup	Public Works-Water	Public Service Worker	72 miles	1 to 10
4604	Pickup	Public Works-Water	Public Service Worker	46 miles	1 to 10
4606	Pickup	Public Works-Water	Water Foreman	36 miles	1 to 10
4486	Pickup	Public Works-Water	Public Service Worker	10 miles	1 to 10
5249	SUV	Public Works-Stormwater	Various*	Varies*	12

*Unit 5249 is used by various Stormwater personnel who take this truck home when they are on standby/on-call duty.

According to information contained in the utilization questionnaires, employees on standby or on-call duty travel anywhere from 8 to 72 roundtrip miles between their offices and their residences. Employees were also asked to record the number of times per month they are called out to respond to emergencies. The responses indicated on each of the questionnaires were exactly the same for both Safety Services-Special Ops (four times per month) and from Public Works-Stormwater (one to ten times per month). Callouts should be tracked and analyzed in more detail to avoid the use of callout ranges.

The Stormwater Division designates one truck to be driven on a rotational basis by the person on call. The Water Division, on the other hand, lets each person on standby duty take their own truck home. The Master Labor Contract between the City of Blaine and The International Union of Operating Engineers Local No, 49, AFL-CIO states, *"The employee scheduled to be on call is required to have the City-provided cellphone/pager with them at all times and must be able to respond to the City within 30 minutes."* Water Division representatives informed us that being able to drive directly from home to an emergency rather than having to drive to the yard and then to the emergency site saves time. Furthermore, each person is familiar with their truck and the tools they normally carry during their daily work.

Unit 4488, driven by one of the Public Works Water Division employees, travels 36 miles between the corporation yard and his residence. It is the farthest distance recorded by any of the City's standby units. Based on this distance it is questionable that he would be able to respond to an emergency within the 30-minute timeframe set out in the City's labor contract and whether this person should be assigned a take-home vehicle.

Utilization Policies

As previously mentioned, the City's guidelines and conditions for the use of City-owned vehicles state that employees *"have a City vehicle available for use as required by the nature of their work."* This guideline is too broad and lacks any criteria that must be met before assigning a standby/call-out vehicle. The minimum number of callouts and/or a maximum number of miles that a vehicle can be taken home outside the City limits are examples of criteria usually contained in such a policy.

A best fleet practice is to annually monitor the usage (miles and number of callouts) of each assigned take-home vehicle. In addition, each employee should be required to complete a questionnaire that asks how the vehicle is being utilized to respond to after-hours service. Together, the survey and utilization data should be reviewed to justify retaining each vehicle's take-home status.

Vehicle Maintenance staff should be responsible for conducting an economic analysis for each request to compare the total cost of each take-home vehicle with reimbursing the employee for using his/her personal vehicle. This information would be summarized in a report provided to the City Manager's Office for review and approval.

Recommendation 62. Require employees assigned take-home vehicles to justify their need and monitor their usage (miles/number of callouts) on an annual basis.

Accident/Damage Reporting

The Public Works Employee Handbook contains instructions to be followed when any visible damage occurs to a City vehicle or piece of equipment. In the event of an accident or collision a "Damage to Vehicle Report" incident report must be completed and submitted to the employee's supervisor who, in turn, must fill out a form entitled, "Blaine Public Works Supervisor's Incident Report (SIR)." Both forms are well-designed and contain all of the pertinent information that should be documented.

Safety Services has its own “Damage to Vehicle Report” incident report that is similar to the form Public Works uses. However, it does not contain questions asking if the employee involved in the accident is concerned with safety issues relating to the “equipment” or “training on the use of equipment,” as does the Public Works form. The form further asks whether the employee wants to present any safety-related issues to the City’s Safety Committee. This, according to the Human Resources director, is not a valid question. Any safety-related issues should automatically be presented to the Safety Committee.

The Public Works “Damage to Vehicle Report” and a Minnesota Insurance Identification Card are supposed to be placed in all City vehicles. However, we were informed that mechanics do not check to see if these documents are present when conducting a preventive maintenance service.

Other than Public Works Employee Handbook, we saw no evidence of any City-wide administrative policy that contains procedures for reporting damages to or accidents involving City vehicles, and the duties and responsibilities in the accident review process. A unified set of accident reporting documents should also be developed.

Recommendation 63. Develop a City-wide policy and instructions about the procedures to be followed when involved in a vehicle accident.

Instructions should be part of a City-wide fleet management policy that addresses vehicle accidents. Instructions should also be placed in each fleet unit and operators instructed in the procedures to be followed when involved in an accident.

Conclusion

The City of Blaine has invested millions of dollars in vehicle and equipment resources required for the provision of quality public services. While some best practices are in use, the Vehicle Maintenance operations can be improved by implementing the recommendations in this report. Establishing a Vehicle Maintenance User Committee would help address the lack of communication between Vehicle Maintenance and its fleet customers and could be used to further develop fleet policies. Additional training on the Dossier fleet software system should help maximize the system's capabilities.

A comprehensive and accountable chargeback system needs to be developed that incorporates fleet replacement, overhead, and all operational costs. The chargeback system should be transparent and give departments with vehicles and equipment a sense of the costs associated with fleet ownership and maintenance. The system should encourage fleet customers to modify their behavior in terms of optimizing fleet size.

City leaders should establish a dedicated replacement fund to which departments contribute. It should incorporate replacement intervals common to industry norms. A more sophisticated means of determining when a vehicle has reached its optimum economic life point is also needed and is addressed in this report.

Management Partners identified opportunities to improve fleet utilization by reducing, reassigning, and pooling 21 units. Developing more precise policies and guidelines to determine when personal mileage reimbursements, pool vehicles, or vehicles from rental agencies should be used will help generate ongoing savings for the City and ensure that the fleet will be sized at the most economical level.

Attachment A – List of Recommendations

- Recommendation 1. Develop a fleet management policy and procedures manual that addresses the functions and issues indicated above.
- Recommendation 2. Develop a Fleet Management Plan that addresses the areas outlined in this report.
- Recommendation 3. Develop service-level agreements between Vehicle Maintenance and its customers.
- Recommendation 4. Establish a Fleet Committee whose main task is to develop comprehensive administrative policies for vehicles and equipment.
- Recommendation 5. Conduct an annual survey to obtain customer feedback on Vehicle Maintenance services.
- Recommendation 6. Establish performance measures and monitor them against industry and shop standards.
- Recommendation 7. Provide information to customers about the operating and depreciation costs for each of their units on a quarterly basis.
- Recommendation 8. Contact Dossier to discuss how to obtain the data needed to track the performance measures and produce the reports of interest.
- Recommendation 9. Purchase and install windshield cleaning receptacles and air pressure equipment at the fuel island.
- Recommendation 10. Limit all equipment fabrication to Vehicle Maintenance mechanics.
- Recommendation 11. Centralize the parts function by placing all parts into one secure location.
- Recommendation 12. Upgrade all laptops on the shop floor.
- Recommendation 13. Allocate designated pathways with partitions and proper signage to safely guide visitors to the shop office to conduct business.
- Recommendation 14. Purchase a commercial vacuum and place it near the car wash or at the fuel station.
- Recommendation 15. Develop a formal, progressive, multi-level preventive maintenance program based on manufacturer requirements.
- Recommendation 16. Review manufacturers' recommended oil change intervals for non-police patrol fleet units and adjust oil change intervals where applicable.
- Recommendation 17. Contract with vendor(s) to perform oil sampling tests on heavy equipment to determine optimum oil change intervals.
- Recommendation 18. Develop a preventive maintenance workload schedule for the entire year.
- Recommendation 19. Develop a new service request form to include the items listed above in this report.

Recommendation 20. Develop a performance metric that measures when a Vehicle Maintenance customer was promised their vehicle would be ready, compared with the time the customer was notified their vehicle was ready to be picked up.

Recommendation 21. Monitor and analyze a repeat repair performance metric to identify trends and proactively address them.

Recommendation 22. Adopt vehicle and equipment class descriptions to coincide with American Public Works Association or the National Association of Fleet Administrators class descriptions.

Recommendation 23. Increase the training budget to reflect costs to train mechanics on a regular basis and update their ASE certifications.

Recommendation 24. Bid sublet services as needed and develop agreements with vendors that contain provisions for warranties, pickup and delivery of units, shop labor rate(s), parts markups and standards to ensure timeliness of work.

Recommendation 25. Bid parts services as needed and develop agreements with vendors to obtain the best possible prices.

Recommendation 26. Hire part-time staff who are available throughout the year to perform non-mechanic work tasks.

Recommendation 27. Hire an additional two FTE mechanics.

Recommendation 28. Hire a full-time parts person or storekeeper whose responsibility is to issue, source and inventory all fleet parts.

Recommendation 29. Review the responsibilities of the asset management coordinator and lead mechanic positions and consider elevating their positions as appropriate.

Recommendation 30. Implement procedures that require mechanics to document all time spent on wrenching and non-wrenching tasks.

Recommendation 31. Develop a comprehensive methodology, such as the activity-based cost analysis worksheet, to calculate shop labor rates and markups/charges.

Recommendation 32. Develop a comprehensive and accountable chargeback system that incorporates fleet replacement, overhead and all operational costs.

Recommendation 33. Evaluate the costs and benefits of developing a pool of shop loaner vehicles or providing pickup and delivery service.

Recommendation 34. Establish vehicle replacement intervals to more closely reflect industry practices.

Recommendation 35. Develop a methodology to support the replacement of vehicles and equipment based on the optimum economic life point of a unit.

Recommendation 36. Establish a separate dedicated fund for vehicle replacement only to which departments contribute.

Recommendation 37. Develop a 15-year long-term replacement plan that identifies units by type and factors in age, future replacement costs, salvage value and auction fees.

Recommendation 38. Update the utilization analysis methodology every two years.

- Recommendation 39. Review units against established usage criteria annually.
- Recommendation 40. Revise guidelines and policies for the use of city-owned vehicles compared with personal and commercially rented vehicles to provide the most economic means of transportation.
- Recommendation 41. Update the breakeven and daily trip cost analyses every year to confirm and compare relative costs for different transportation alternatives.
- Recommendation 42. Develop a method to track the miles employees travel using their personal vehicles.
- Recommendation 43. Surplus unit 1119, a motor grader.
- Recommendation 44. Track how many days unit 1102, a blacktop roller, is used and then determine whether a rental is more economical.
- Recommendation 45. Surplus mower units 4463, 2309 and 4484 and replace them with a new articulating work machine capable of blowing and brushing snow and loading and unloading deliveries at City Hall.
- Recommendation 46. Purchase a pless plow attachment for unit 1276 to enable it to be a front-line cul-de-sac snow removal tractor.
- Recommendation 47. Surplus unit 1156, a backup plow truck.
- Recommendation 48. Surplus unit 210, a dump truck.
- Recommendation 49. Surplus unit 224, a tractor.
- Recommendation 50. Surplus unit 340, an all-terrain vehicle.
- Recommendation 51. Surplus unit 360, a pontoon boat and unit 2360-1, a pontoon boat trailer.
- Recommendation 52. Surplus pickup units 5140, 3389, 3386 and 3384 as well as unit 2254, a utility trailer.
- Recommendation 53. Reassign units 5238, a Ford Explorer, 5259, a Chevrolet Tahoe and 3412, a Chevrolet passenger van from the Recreation Department, and units 3410 and 3428, Ford Explorers from Community Development to the City Hall Pool and supplement vehicles from commercial rental agencies as needed.
- Recommendation 54. Monitor daily utilization of the City Hall Motor Pool during the next six months to determine the type and number of units required to meet customer needs.
- Recommendation 55. Utilize the State of Minnesota rental car contract to supplement the City Hall Motor Pool or Shop Loaner Pool when units are out of service for extensive repair work or to address peak needs.
- Recommendation 56. Train employees about established guidelines and policies for addressing transportation needs.
- Recommendation 57. Adopt a methodology to calculate rental rates to recover ownership and operational costs of all pool units.
- Recommendation 58. Establish a shop loaner pool consisting of four units from the seasonal pool of trucks and pickups.
- Recommendation 59. Establish contracts with local rental firms for heavy equipment.

Recommendation 60. Centralize responsibility for approving requests for equipment through a commercial vendor with Vehicle Maintenance.

Recommendation 61. Expand the City's guidelines and conditions for the use of City-owned vehicles to include specific criteria based on a cost evaluation of other transportation alternatives.

Recommendation 62. Require employees assigned take-home vehicles to justify their need and monitor their usage (miles/number of callouts) on an annual basis.

Recommendation 63. Develop a City-wide policy and instructions about the procedures to be followed when involved in a vehicle accident.

Attachment B – Sample Performance Measures

Maintenance and Repair Performance Measures

- Ratio of direct technician labor hours to indirect technician labor hours
- Downtime (or uptime) percentage by class of vehicle (excludes accidents)
- Percent of repairs that are repeat repairs (comebacks by shop)

Performance Measures that Monitor Preventive Maintenance (PM) Compliance

- Technician Performance: Measures technician performance against time standard for each PM service (A, B, C, D) for each class of vehicle over a given period.
- PM Compliance: Measures the percentage of PM inspections performed against PMs due and scheduled on a monthly basis. PM labor hours backlogged at month end.

Parts Services Performance Measures

- Downtime due to missing parts
- Percent of repairs delayed due to out-of-stock/lack of parts
- Percent charge or markup on the price of parts, by light-duty and heavy-duty
- Parts turnover ratio (total number of parts used during a specified period divided by the average number of parts on hand at any given time)

Fuel Services Performance Measures

- Fully burdened cost of fuel per gallon
- Average fuel consumption (miles per gallon) by vehicle and class
- Fuel cost per mile

Acquisition, Replacement and Disposal Performance Measures

Replacement performance measures

- Proportion of vehicles driven below minimum miles/hours criteria
- Average annual utilization (miles/hours) by vehicle class and type of assignment; Ratio of annual utilization (miles/hours) by vehicle class to type of assignment (or output available)

Disposition Performance Measures

- Average salvage value per class by method of disposition
- Ratio of salvage value to original purchase price

Other Performance Measures

Agency Profit/Loss

- Net annual revenues compared with operating expenditures (profit/loss) by fleet by class and by vehicle

Fleet Costs

- Total vehicle cost per mile/hour by fleet, by department, by class, by vehicle function
- Capital cost per mile/hour by fleet, by department, by class, by vehicle function
- Annual unit cost of each vehicle by class
- Operating and maintenance cost per vehicle by class
- Administrative overhead and replacement cost per vehicle by class

Attachment C – Sample Fleet Manager Principal Duties

FLEET MANAGER

DEFINITION

Under direction, plans, organizes, and directs, through subordinate supervisors, the activities of the Fleet Section; performs related work as assigned.

CLASS CHARACTERISTICS

This class is responsible for the administration of the Citywide vehicle and equipment maintenance program within general policy guidelines. The incumbent is responsible for formulating policy, developing goals and objectives, supervising staff, providing leadership, administering the division budget, and directing day-to-day activities. This class is distinguished from Deputy Public Works Director/Operations and Maintenance, which is responsible for the administration of several assigned programs.

PRINCIPAL DUTIES

1. Plans, organizes, coordinates, administers and directs the work of the Fleet Section; develops and directs the implementation of goals, objectives, policies, procedures and work standards for the Section.
2. Develops and implements management systems, procedures, and standards for program evaluation; prepares or directs the preparation of a variety of studies and reports related to current and long-range City needs and develops specific proposals to meet them.
3. Develops and implements systems, policies and procedures for chargebacks to City departments to recover fleet operation and replacement costs.
4. Directs maintenance and repair activities, including planning, estimating, scheduling, inspection and monitoring work being performed.
5. Directs the preparation and administration of the annual budget for the Fleet Internal Service Fund.
6. Analyzes and develops fleet quality control strategies and management programs to establish continuous fleet management improvement opportunities, standard maintenance and repair methods and time elements, predictive maintenance, life-cycle costing, and vehicle repair/replacement models.
7. Provides analytical services and develops fleet management programs to enhance fleet performance and capabilities.
8. Provides leadership and works with staff to develop and maintain a high-performance, customer service-oriented work environment.
9. Directs the selection, supervision, work evaluation, and discipline of staff and provides for their training and development; interprets City personnel and MOU provisions; directly supervises staff as required.
10. Prepares or reviews reports for the city manager, boards, commissions and other organizations.

11. Works closely with public and private organizations or individuals to explain or coordinate proposed programs; responds to complaints or inquiries by phone or in person.
12. Coordinates the work of the Fleet Section with other City divisions and departments, outside vendors or concerned groups.
13. Ensures compliance of Fleet Section activities to pertinent State and Federal codes, regulations and guidelines.
14. Monitors developments related to equipment maintenance, evaluates their impact and implements policy and procedure improvements; provides technical assistance to staff.
15. Prepares and maintains a wide variety of written records and correspondence.
16. Integrates new program activities into maintenance schedules.
17. Prepares specifications and makes recommendations on the purchase, sale and disposal of new and used vehicles and equipment.
18. Plans and implements an on-going safety program.
19. Authorizes and approves work contracted to outside vendors; determines the necessity for contracting out major repairs; directs and approves purchasing activities.

Attachment D – Units Recommended for Reduction, Reassignment or Pooling

Department	Division	Unit Number	Description	Disposition
Public Works	Streets	1119	Grader	Surplus
Public Works	Streets	1156	Plow Truck	Surplus
Public Works	Water	2254	Utility Trailer	Surplus
Public Works	Water	4463	Mower	Surplus
Public Works	Parks	1210	Dump Truck	Surplus
Public Works	Parks	2340	ATV	Surplus
Public Works	Parks	2360-1	Trailer	Surplus
Public Works	Parks	2360	Pontoon	Surplus
Public Works	Parks	2224	Tractor	Surplus
Public Works	Parks	2309	Mower	Surplus
Public Works	Facilities	4484	Mower	Surplus
Public Works	Facilities	3393	Pickup	Surplus
Engineering	Engineering	5140	Pickup	Surplus
Engineering	Engineering	3389	Pickup	Surplus
Community Development	Building Inspection	3386	Pickup	Surplus
Community Development	Building Inspection	3384	Pickup	Surplus

Department	Division	Unit Number	Description	Disposition
Community Development	Building Inspection	3410	SUV	Transfer to City Hall Motor Pool
Community Development	Building Inspection	3428	SUV	Transfer to City Hall Motor Pool
Recreation	Youth Program	3412	15-Passenger Van	Transfer to City Hall Motor Pool
Recreation	Administration	5238	SUV	Transfer to City Hall Motor Pool
Recreation	Administration	5259	SUV	Transfer to City Hall Motor Pool

Appendix 1 – Sample Fleet Management Business Plan

Business Plan

2018



Fleet Management

I. Table of Contents

I.	Table of Contents	1
II.	Message from the Fleet Manager	2
III.	City of Sacramento, Fleet Management.....	3
	Core Services.....	3
	Operating Methodology.....	3
IV.	Division Goals.....	4
V.	Value	5
	Value and acknowledge Employees	5
	Deliver Quality Services	6
	Take pride in our work	7
	Employee Scorecard	7
VI.	Fleet Scope of Core Services	10
VII.	Fleet Organization Chart	11
VIII.	Fleet Fast Facts	12
IX.	Fleet Management Benchmark & Results	13
X.	Fleet Management Top 10 Goals for 2018	22
XI.	Fleet Management Division Employees	23
XII.	Recognition and Awards	29

II. Message from the Fleet Manager

It is my pleasure to present the City of Sacramento's 2018 Business Plan for the Fleet Management Division of the Department of Public Works. I present this plan on behalf of all Fleet Management employees, through their dedication and hard work.

The City of Sacramento Fleet's business plan is designed for long term sustainability. Our fleet has achieved measurable outcomes as a direct result of following a strategic business plan that served as a road map to the destination of being recognized as a quality fleet operation while demonstrating cost competitiveness to remain financially sustainable and meeting the needs of our customers and the taxpayers.

The 2018 Fleet Business Plan reflects our mission to provide our customers, the employees of the City of Sacramento, with safe and dependable vehicles, equipment and service facilities. Our goal is to work in partnership with our customers and employees to provide high quality products and services in a cost-effective manner.

Thank you for your interest in our division.

Sincerely,
Mark Stevens
Fleet Manager
Department of Public Works

III. City of Sacramento, Fleet Management

Mission Statement

Provide our customers, the employees of the City of Sacramento, with safe and dependable vehicles, equipment and service facilities.

Core Services

- ✓ Maintenance and repair of city vehicles and equipment
- ✓ Providing vehicles and equipment for customers including those with only occasional needs through our Pool Fleet available throughout various city facilities
- ✓ Asset management, budgeting and reporting; this includes vehicle and equipment replacement, scheduling, forecasting and specific analytics such as fuel usage, vehicle location, driving habits, etc.
- ✓ Fuel management, fuel system management, consumables tracking and reporting
- ✓ Specification development for procurement of vehicles and equipment with customer involvement to provide the most cost effective, reliable, and environmentally concise and sustainable vehicle and/or equipment for their operations

Operating Methodology

The Fleet Management Division is an internal service fund organized to administer the City's fleet of vehicular assets and to provide all appropriate services, such as design, procurement, maintenance, analytics, contracts and fuel as necessary. All services provided by the division are charged to other City operational units in 2 ways, as a fee for service on a direct charge basis and a monthly assessment per unit to cover all administrative costs.

IV. Fleet Division Goals

Fleet's 2018 Business Plan aligns with the Strategic Plan Goals and Values for the Department of Public Works as noted below:

Department of Public Works Strategic Plan Goals:

Quality Customer Service
Optimize Operations
Employee Development
Reliable and Sustainable Funding

These goals are achieved through the following Core Values:

Teamwork
Integrity
Accountability
Dedication

Fleet Management efforts support the City Manager's Performance Goals:

Budget and Financial
Management Economic
Development
Public Safety and Neighborhood Support

V. Value

Value and acknowledge Fleet employees

We recognize that because of the dedication and professionalism of our employees we are able to successfully operate and provide essential services to the City of Sacramento.

Fleet Management acknowledges and recognizes shop personnel with lunches, barbecues, and ice cream socials, to celebrate team accomplishments and individual accomplishments that benefit Fleet Management and staff. Fleet Management recognized all staff for being one of the 100 Best Fleets for five consecutive years since 2009 and recognized as the number 1 of the 100 Best Fleets in 2015. Celebration banners congratulating shop personnel were placed in each shop as well as a poster explaining the criteria and naming all shop personnel.

The Fleet Manager has developed a Wall of Recognition for Fleet personnel who have used their own time to attend numerous training classes to earn the various Automotive Service Excellence (ASE) Certificates. These certificates are displayed in the shop where the employee works as well as in the building where the main Fleet Administration offices are housed. Shop personnel who obtain ASE Master Certification receive a monthly cash incentive with every paycheck.

Additionally, we recognize staff for exceptional accomplishments and customer service in our department-wide newsletter as well as the potential of receiving a "Challenge Coin". Shop successes and recognition of staff is a routine standing agenda item during monthly leadership team meetings.

Deliver quality services

Our commitment to our employees as well as our customers throughout the City includes continuous improvement, organizational development, and efforts to make data-driven decisions. We use the following continuous improvement framework and phased structured approach to transform our Fleet Operations through Business and System Improvements:

- Phase 1:** Assess and inventory the fleet division's functions and responsibilities by current business units and determine core services and programs.
- Phase 2:** Align tasks, activities, functions, and responsibilities with core services and programs. Determine, evaluate, and remove service duplications using proactive evaluation criteria.
- Phase 3:** Refine core services, programs and priorities and align them with technology investments or best practices and process improvement initiatives.
- Phase 4:** Finalize and prioritize streamlined core services, programs and tasks with division leadership and staff.
- Phase 5:** Enlist employee design teams to proceed with the creation of process improvement and budget saving initiatives.
- Phase 6:** Implement roadmap for each of the initiatives using City and Fleet's business processes and systems.
- Phase 7:** Establish financial and budgeting cost saving targets based on new core services, programs, priorities, technologies and improvement initiatives.
- Phase 8:** Establish performance trend measurements to evaluate, determine and adjust internal and external impacts.

Take pride in our work

Fleet Management creates a monthly report identifying key performance indicators and goals for all city customer departments. This report provides an overview of all aspects of Fleet operations such as Business & Support, Asset Management, Operations, Inventory, Fuel Management and Motor Pool. Quarterly meetings are scheduled with each Fleet customer to review Fleet operations and discuss any potential for improved service required by Fleet or the customer.

Employee Scorecard

The Employee Scorecard Report was developed as a tool to monitor the productivity of Fleet's Technicians (chargeable staff). Productivity goals are calculated for all Technicians based on how many direct, chargeable hours are available during the year. Technicians goals have been set between 70% and 75% direct time productivity depending on leave time earned and allowed. The Scorecard shows the hours booked in the Fleet Management software system, Asset Works/M5. This report is used as a coaching and development tool and is attached to each employee's annual performance review, as well as available at any time an employee or supervisor requests to review it.

Employee Scorecard

Fleet Management
From 7/1/17 to 2/23/18

Employee: [REDACTED] Emp. No.: [REDACTED]
Job Title: EQUIPMENT MECHANIC II
Start Date / Employment Length: 12/07/1987 / 30.24 years

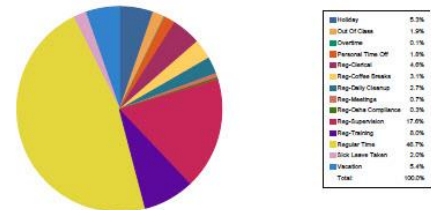
Current Location: 01MAIN - 24th ST Maintenance Shop
Supervisor: DICKENS, FRANK L
Supervisor Title: EQUIP. MAINTENANCE SUPERVISOR

TOTAL HOURS: 1,356.09

Employee Labor Breakdown					
Labor w/ Planned Hours			Labor w/o Planned Hours		
WOs	Jobs	Hours	Est. Hours	Difference	
411	1,221	658.84	0.00	-658.84 (0.00%)	
WOs	Jobs	Hours			
0	0	0.00			

Shop Average Labor Breakdown For: 01MAIN				
Job Classification	Direct Hours	%	Indirect Hours	%
	297.78	69.3%	132.05	30.7%
EQUIP. MAINTENANCE SUPERVISOR			1,854.19	100.0%
EQUIPMENT MECHANIC I	601.71	78.7%	162.52	21.3%
EQUIPMENT MECHANIC II	6,807.95	63.7%	3,882.11	36.3%
EQUIPMENT MECHANIC III	560.88	39.8%	850.03	60.2%
EQUIPMENT SERVICE WORKER	4,838.91	79.9%	1,220.61	20.1%
FLEET SERVICE COORDINATOR			1,353.41	100.0%

Time Type Breakdown

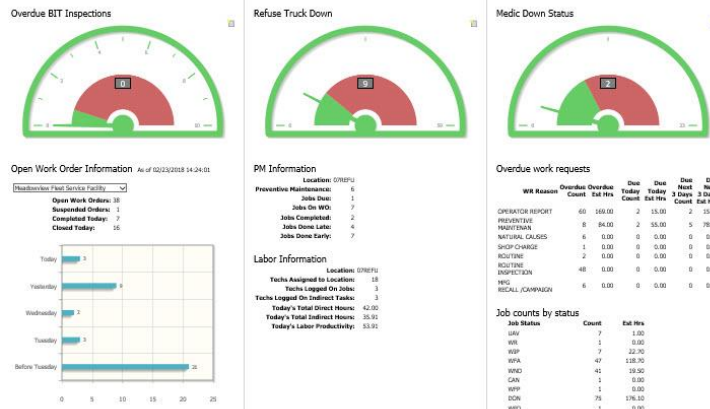


* Indirect "REG" time type can include, but not limited to, the following time types: Supervision, Clerical, Training, Coffee breaks, Cleanup, Meetings, Time Corrections, Inventory, etc.

Sick Leave Verification Status: N/A / Sick Leave Verification Date: / Days Since: 0

Employee Sick Time Breakdown							
Employee ID	Issue Date	Day of Week	Start Time	End Time	Hours	Location	Entered By
0001978	09/05/2017	TUESDAY	9/5/17 6:00:00AM	9/5/17 2:00:00PM	8.00	01MAIN	FDICKENS
0001978	12/01/2017	THURSDAY	11/30/17 10:18:57AM	11/30/17 1:51:57PM	3.55	01MAIN	FDICKENS
0001978	12/01/2017	THURSDAY	11/30/17 10:18:57AM	12/1/17 6:35:47AM	20.28	01MAIN	FDICKENS
0001978	12/01/2017	THURSDAY	11/30/17 10:18:57AM	12/1/17 6:35:47AM	-20.28	01MAIN	FDICKENS
0001978	02/21/2018	WEDNESDAY	2/21/18 6:00:00AM	2/21/18 2:00:00PM	8.00	01MAIN	FDICKENS
0001978	12/01/2017	FRIDAY	12/1/17 6:00:00AM	12/1/17 2:00:00PM	8.00	01MAIN	FDICKENS
Total Sick Hours Booked:					27.55		

Welcome, Meadowview KPI

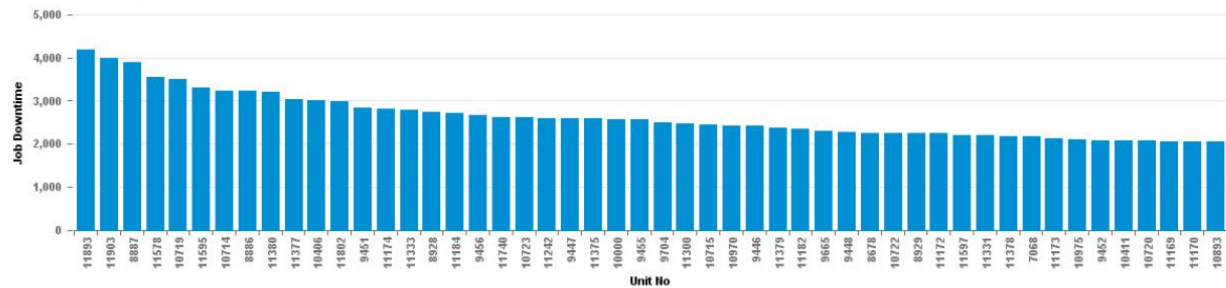


Additionally, Fleet has implemented "Real Time" Key Performance Indicators (KPI's) on the shop floor for more interaction and responsiveness at all levels of the organization.

At the management level, Fleet Manager, Mark Stevens, reiterates his open door/open email policy to shop staff and all employees through regularly scheduled shop meetings. It is the Fleet Manager's hope that those employees who are more hesitant than others to share ideas or concerns in an open forum, would utilize his open door/open email policy to communicate their thoughts. Suggestion boxes are also located in each shop for confidential communication to Fleet Management staff from employees.

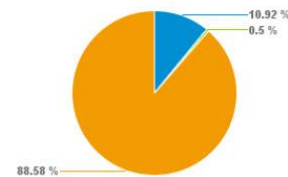
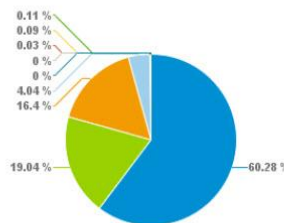
Transparency and Accountability

Vehicle Downtime Top 20



Unit No	Year	Make	Model	Category	Cate Name	Category Class	Vehicle Status Name
11893	2014	AUTOCAR	ACX 64	C3014	TRK,REFUSE SL,GVW 33000+	S LOADER	Active Unit

Job Reason	Job Downtime
ACCIDENT/COLLISION	2,520.51
PREVENTIVE MAINTENAN	796.18
ROUTINE	685.73
OPERATOR REPORT	168.84
NATURAL CAUSES	4.66
BREAKDOWN	3.88
CAPITAL IMPROVEMENT	1.08
MODIFICATION	0.13
	0.01
Sum:	4,181.01



Fleet Business Intelligence (FBI) is a self-service, robust, flexible and simple way of sharing information and making information available to and from a variety of sources. FBI converts data into plain business terms and enables easy access, which allows for better decision making by users. FBI also makes information consumption simple, personalized, and timely, which in turn, increases the responsiveness rate when information is requested.

VI. Fleet Scope of Core Services

Maintenance and repair of City vehicles and equipment

City of Sacramento Fleet Management Division is responsible for: repairing and maintaining 2,400 vehicles and equipment; providing vehicles and equipment for customers including those with occasional needs; maintaining the operating safety and regulatory compliance of the City's fleet and fleet infrastructure; procuring necessary vehicles and equipment through the Fleet Management Division Asset management; budgeting and reporting, including vehicle and equipment replacement, scheduling and forecasting (Asset Works/CAM); managing the Fleet Business Intelligence (FBI)/Customer Information Portal, allowing Fleet Management to provide accurate and timely information.

The Fleet Division also develops specifications for procurement of vehicles and equipment with customer involvement to provide the most cost effective and efficient "tools" for their operations.

Fleet Asset Management encourages customer departments' staff to work closely with them in developing specifications for equipment to best suit their operational needs.

Fleet Management ensures that equipment complies with specifications that meet our customers' needs.

Staff review and give input which allows mechanics an opportunity for skills development, while also ensuring that equipment meets the City's fleet needs.

Fuel Management, Fuel System Management, Consumables tracking and reporting

- ✓ 14 Underground Fuel Tanks
- ✓ 30 Above Ground Fuel Tanks
- ✓ 4 LNG Above Ground Tanks
- ✓ 3 Propane tanks

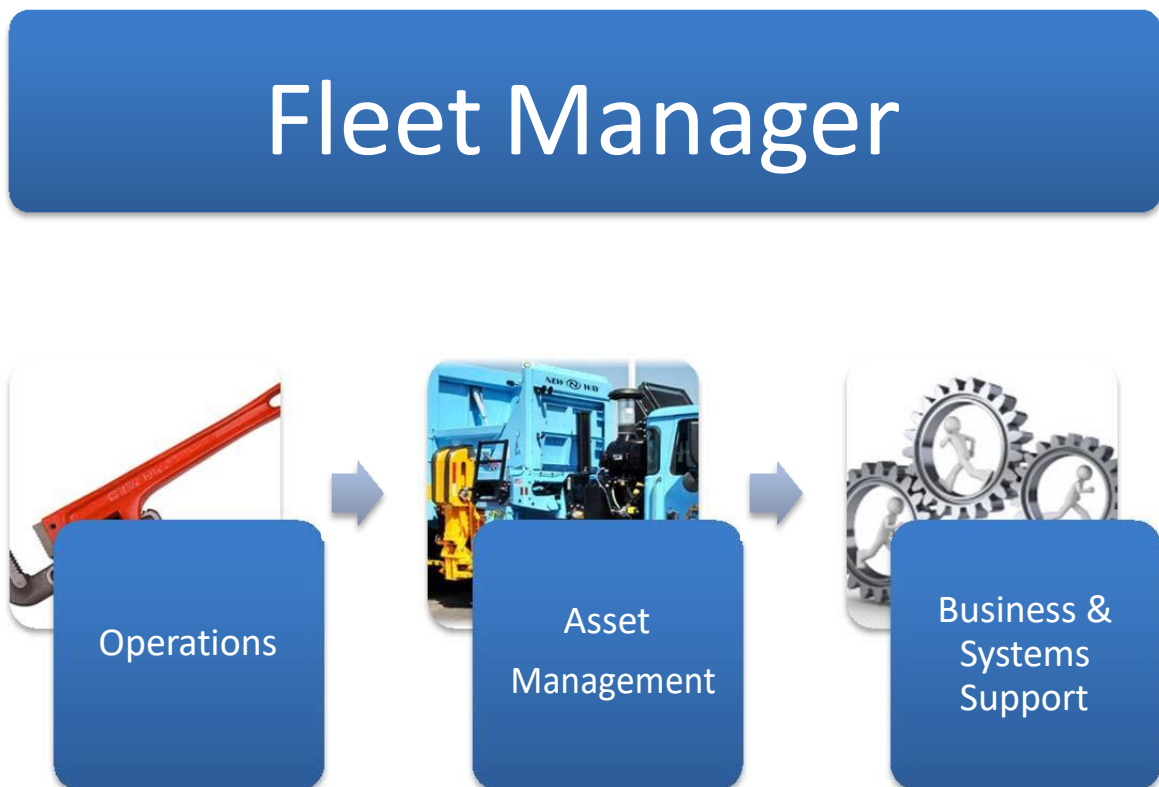


Regulatory Compliance

City of Sacramento Fleet monitors and maintains compliance with the following California Air Resources Board (CARB) and California State regulations:

- ✓ Portable Equipment Registration Program (PERP)
- ✓ Diesel Off-road Online Reporting System (DOORS)
- ✓ Fleet Rule for Public Agencies and Utilities
- ✓ Solid Waste Collection Vehicle Rule
- ✓ Basic Inspection of Terminals Program
- ✓ ARB SMOG and SMOKE program
- ✓ All County and State Fuel Regulations

VII. Fleet Organization Chart



VIII. Fleet Fast Facts

Fleet Management oversees the City's fleet assets listed by department below:

Department Description	No. of Vehicles or Equipment
CITY ATTORNEY	1
COMMUNITY DEVELOPMENT	96
CONVENTION CULTURAL SERVICES	10
FIRE	241
HUMAN RESOURCES	42
PARKS & RECREATION	302
POLICE	619
PUBLIC WORKS	633
TECHNOLOGY	5
UTILITIES	504
Total No. of Vehicles/Equipment	2,453

Fiscal Year 2014-15 Budget Consists of the Following:

- ✓ 87 Fleet positions (includes 15 unfunded & frozen positions)
- ✓ \$29.9 million operating budget
- ✓ \$23.1 million acquisition budget
- ✓ \$7 million in parts purchased each year
- ✓ 1.7 million gallons of petroleum-based fuel utilized last year
- ✓ 1.8 million gallons of alternative fuels (E85, Propane, LNG and CNG) utilized last year

IX. Fleet Management Benchmark & Results

Past Accomplishments

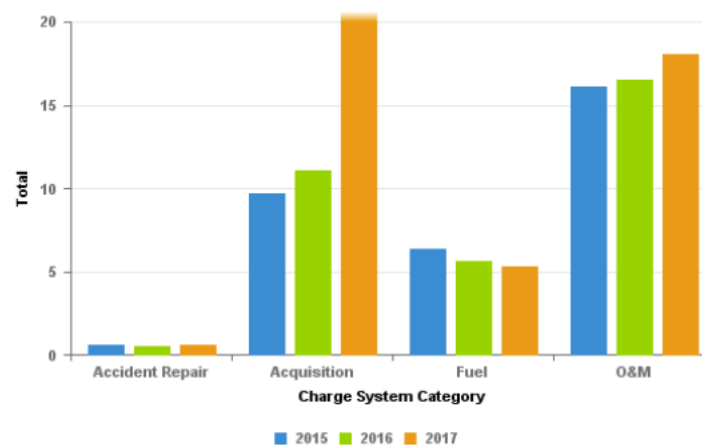
- Implementation of restructured vehicle replacement program
- Standardization of Fleet vehicle and equipment procurement
- Updated Fleet Sustainability Policy
- Implemented Ambulance Remount Program
- Granted approval of over \$300,000 in electric vehicle purchase rebates

Performance Trends

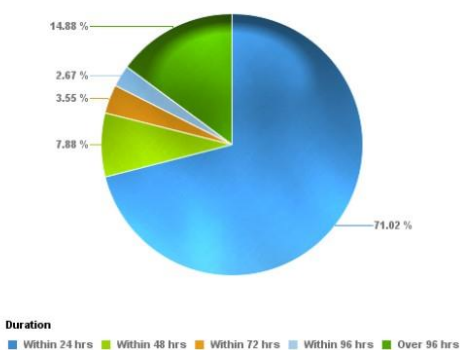
Operating Cost Savings - Fleet

Management made the significant progress over the last three fiscal years. The Operating and Maintenance (O&M) expenditure cost was reduced by 18% from \$18.3M in 2012 to \$15.3M in 2014. The reduction in operating expenditure cost can be attributed to modernization of City's fleet assets and other initiatives to reduce operating costs. These initiatives include but not limited to vehicle downsizing, an increase in use of motor pool vehicles and use of oil analyzers.

Fleet Cost Trend - Yearly (in Million)



Work Order Completion Duration



Work Order Statistics - Work orders are consistently monitored and closed/completed in a timely manner. On average 87% of the total work performed by all shops were completed within 96 hours. Fleet Management implemented dashboards to show clocked in job hours in real-time. This helps each mechanic to be more observant of their time spent on each job and better monitoring tools.

Alternative Fuel Technology Vehicle Purchases - Since fiscal year 2010, Fleet Management procured 18 compressed natural gas vehicles, 11 battery electric zero emission vehicles, 17 unleaded hybrid sedans, 63 liquefied natural gas refuse trucks, 9 propane vehicles, 2 diesel hybrid refuse trucks and 220 E85 flex fuel vehicles. It is Fleet Management's goal to minimize our reliance on foreign petroleum-based fuel products to support sustainability initiatives and reduce carbon emissions.

2014 Green House Gas (GHG) Emissions - City of Sacramento Fleet Management participated in using Utilimarc's Municipal Fleet Benchmarking Study in 2014. Utilimarc is a nationally recognized fleet benchmarking, reporting and analysis firm which has developed a reliable benchmarking methodology that is nationally recognized in the fleet industry.

Fleet Management was provided a report containing the results of two separate analyses based upon data pulled from the Utilimarc® database. These analyses include fuel consumption by type as a percentage of fleet and Greenhouse Gas Emissions (GHG) analysis. This methodology gives an industry comparison and provides access to the industry methods, practices and processes. This report quantifies the City's reduction in petroleum consumption and increases in alternative fuel usage with the associated emissions benefits. This information has been extremely effective in further educating and influencing the City Council and our fleet customer departments resulting in the adoption of our enhanced Fleet Sustainability Policy.

City of Sacramento Fleet Management is pleased to share the significant progress that has been made over the past few years. The summary report results are as follows:

- ✓ Gasoline and diesel consumption reduction of 24.2% since 2009
- ✓ CNG & LNG fuel consumption increased 274% since 2012
- ✓ Alternative fuel consumption increased 19% since 2012
- ✓ In 2017, decrease of 26% in total fuel consumption compared to 2010
- ✓ Greenhouse gas emissions decreased by 7438 metrics tons since 2010

Total Number of Vehicles available at 6 am – In fiscal year 2017, 94% of the vehicles were available to the city clients to provide city services at 6 am. There were approximately 2,400 vehicles and equipment in service throughout the period.

Right Sizing – Since implementing annual utilization reviews of fleet equipment in 2011 the City has reduced the total number of active vehicles in the fleet nearly 18% from 2010. An annual review of all underutilized vehicles and equipment is created by Fleet and supported by City Manager. This program is ongoing which helps to maintain right sizing.

New Initiatives

Fleet Management continuously assesses the operations to identify areas of improvement and with multiple initiatives and prioritizes them in the order of highest significance. The new ongoing initiatives are listed as follows:

Initiative 1: Remote Vehicle Analytics Monitoring Tools

In the fall of 2014, Fleet Management began a program to install Remote Vehicle Analytics (RVA) devices into light duty vehicles to monitor not only vehicle data but monitor as well as driver's habits. This information includes data such as hard braking, hard cornering, excessive speeding, idling, vehicle location, GEO fencing and acceleration to name a few. Based on authorized usage, departments are sent daily electronic data typically when established base line criteria is exceeded. Labor Agreements precluded management from issuing discipline based solely on this data; however, recent agreements now allow management to issue such discipline if so warranted. Fleet estimates that RVA data will help reduce accidents, reduce maintenance costs, reduce fuel consumption, reduce the risk of liability to the city and increase vehicle safety.

Initiative 2: Renewable Natural Gas and Diesel

The city currently is utilizing only renewable LNG delivery to the City owned fuel tanks at our Meadowview facility, for our solid waste fleet of trucks. We are also purchasing only renewable diesel fuel to be used by all diesel-powered vehicles and equipment as well as purchasing only renewable CNG for our newer solid waste fleet of trucks. The city is migrating away from LNG in favor of CNG. These moves will help to reduce the City's Green House Gas

Carbon emissions. Working with Ascent Environmental and GreenTraks, the City of Sacramento Fleet Management is constantly analyzing the amount of greenhouse gas carbon emission we are achieving through its sustainability efforts.

Initiative 3: Sustainability Initiatives

- Zonar telemetric installed on 535 City vehicles. ROI study of 184 different fleet vehicles in 14-vehicle class types found that the City achieved a fuel savings of nearly 25%.
- City Manager extended the existing five-minute idling time limitation to all vehicles in the City's fleet.
- Fleet Management launched Idling Gets You Nowhere and Drive Smart anti-idling campaigns.
- Renewable Natural Gas from Clean Energy Redeem is available at Altas Refuel
- Renewable diesel fuel purchased from local provider Hunt & Sons for all diesel tanks throughout the city
- Fleet Management has replaced refuse trucks which have been kept in the Solid Waste fleet beyond their useful lives with 81 Natural Gas trucks to meet expanded service levels. Among the many benefits, replacing these vehicles now provides the benefit of reduced carbon emissions by taking out of service old, inefficient diesel burning vehicles and replacing them with cleaner Natural Gas units.
- Fleet Management was guaranteed 100% renewable liquefied natural gas delivery to the City owned LNG tanks in 2014. This guarantee is estimated to reduce carbon emission by 6,770 Short Ton CO₂e.
- Memorandum of Intent between the CITIES of Indianapolis, Indiana and Sacramento, California was made in May 2014 to work cooperatively to foster the areas of common interest as follows: 1) Reduction of Foreign Oils in Municipal Fleets; 2) Promotion of Alternative Fuel Technologies; 3) Development of New Clean Energy Technologies; 4) Development of New Alternative Transportation Technologies; 5) Financing Mechanisms; 6) Bi-directional Green Energy Technology Transfer; 7) Grant Funding; 8) Behavior Change among Constituents; 9) Sharing of Best Practices; and 10) Educational Forums and Summits;

Initiative 4: Capital Asset Management Implementation

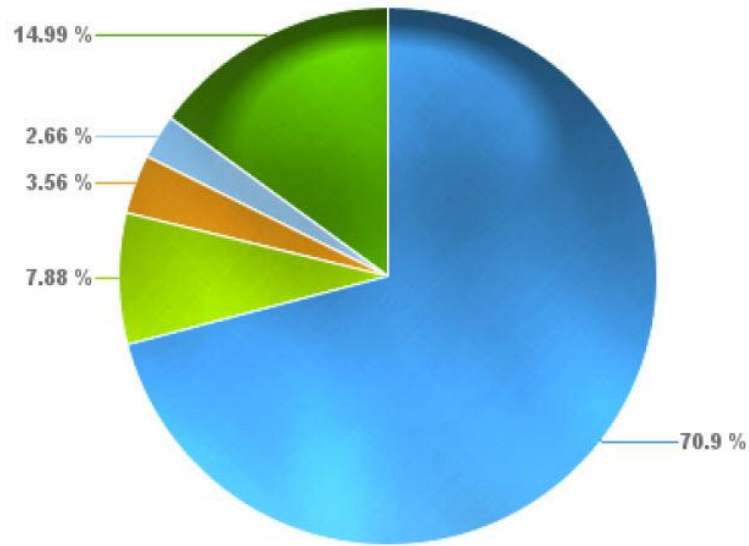
Since October of 2012, Fleet Management has been participating in the Special Interest Group led by AssetWorks, LLC in developing a new fleet asset management application that can help the City economically manage vehicular assets through their life-cycle. This application will allow fleet managers to conduct life-cycle cost analysis, strategic fleet planning, capital budget management, procurement management and remarketing. In 2018, Fleet Management implemented the Capital Asset Management (CAM) application with plans to use the system to confirm the optional replacement criteria and right sizing the fleet required to deliver emergency services and determining an adequate spare ratio to minimize downtime.

Initiative 5: Citywide Performance Measure

In May 2014, the City of Sacramento hired Management Partners to establish the Citywide Performance Measures. The goal of this project is to establish citywide performance measures to measure the City's effectiveness and quality of services being provided. Fleet Management provides 15 different performance measures in the following areas: Workload; Efficiency; and Effectiveness Measure. This report is being provided to the City Manager's office on a quarterly basis.

The following are 2017 baseline performance measures:

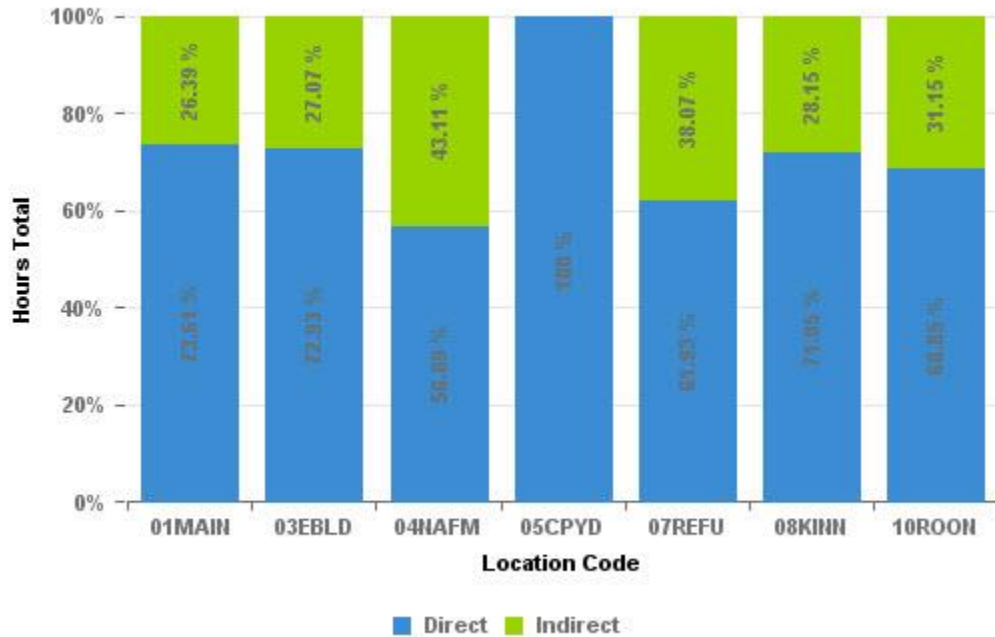
Work Order Completion Duration



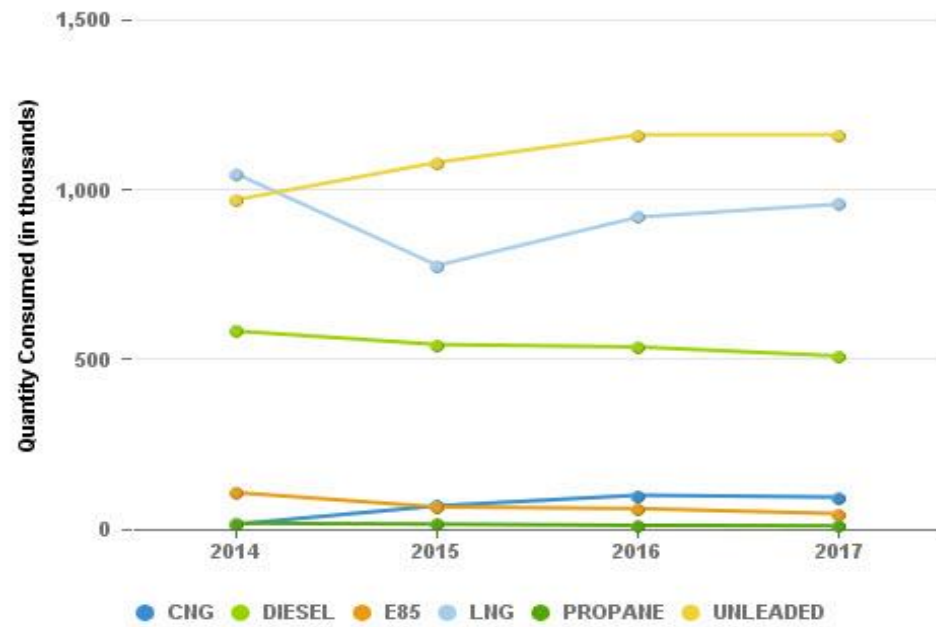
Duration

■ Within 24 hrs
 ■ Within 48 hrs
 ■ Within 72 hrs
 ■ Within 96 hrs
 ■ Over 96 hrs

Labor Allocation Percentage by Location



Fuel Usage Trend



Vehicle/Equipment Purchase



Initiative 6: PS Energy Fuel Management Reporting

In 2014, the City entered into an Agreement with PS Energy for a Fuel Inventory Monitoring and Reporting Services pilot. During this pilot, PS Energy is developing Fuel Monitoring reports for different audiences, exception reporting and fuel shrinkage. In the upcoming year, Fleet Management plans to enhance fuel management internal controls, inventory reconciliation process and the customer reporting system.

Initiative 7: Evaluation of Fire Fleet with Mercury Associates, LLC

Fleet Management has partnered with Mercury Associates, Inc. to evaluate the management of the City of Sacramento Fire Department fleet. This project consists of the following: the determination of optimal replacement cycle for Fire Apparatus and Ambulances; and the development of a multi-year fleet replacement plan which quantifies the future costs of replacing the Fire Department fleet in accordance with appropriate replacement cycle for the various types of assets.

Initiative 8: Smart Applications Implementation

Since December 2014, Fleet Management began participating in the Special Interest Group with AssetWorks, LLC in developing Smart Mobile Application that will integrate with the City FleetFocus M5 system. This application will run on various operating systems and include the following components: Work Center; Reservation Center; Pre- Post trip inspections; and Smart Dashboard. It is projected to save the City over 50K annually.

X. Fleet Management Top 10 Goals for 2018

- Goal 1.** Expand Remote Fleet Analytics Monitoring Tools to remainder of light duty General Fund Fleet except PD Patrol and Undercover. Recommended General Fund Fuel Savings in department budgets be utilized for this purpose.
- Goal 2.** Establish Compressed Natural Gas (CNG) Fueling Infrastructure at SACY
- Goal 3.** Expand Alternative Fuel/Advanced Technology Vehicle Purchases (>50%) – CNG/EV or Hybrid. Funding for future Alternative Fueled and ZEV's (Zero Emission Vehicles) will be incorporated into the initial cost of the annual budget replacement plan. These include higher costs for hybrids and ZEV's, as well as electrical infrastructure for electric vehicles. State funded rebate programs will help offset the cost of necessary infrastructure improvements.
- Goal 4.** Enhance fuel management internal controls, inventory reconciliation process and customer reporting system. Evaluate locking in Fuel Pricing.
- Goal 5.** Implement a comprehensive fleet asset management system that includes confirming optimal replacement criteria & right sizing the fleet to deliver emergency services including adequate spare ratios to minimize downtime. (Fire, Police and Utilities)
- Goal 6.** Update Long Term Fleet Sustainability Policy & Goals through 2025 to eliminate reliance on foreign oil wherever practical.
- Goal 7.** Establish Citywide EV Charging Policy – Public & Workplace for employees.
- Goal 8.** Evaluate and implement "on-line" auction surplus disposal alternatives. Recommend net surplus disposal proceeds be appropriated in various MYOPs to provide for incremental costs of Alt. Fuel & Advanced Technology Vehicles.
- Goal 9.** Restructure & right size the Fleet Management Division & centralize all Business Operations that support it.
- Goal 10.** Government Fleet Management Alliance Certification
- Goal 10.** #1 Leading Fleet in North America.

XI. Fleet Management Division Employees

Fleet Administration

Mark Stevens, Fleet Manager
Ron Kammerer, Operations General Supervisor
Kindelberg Morales, Program Specialist
Alison Crandall, Program Specialist
Bobbie Small, Program Analyst
Justin Shaw, Fleet Management Technician
Victor Basulto, Fleet Management Technician
Robert Forrester, Fleet Management Technician
Song Moua, Administrative Technician
Tiffoney Pitts, Accounting Technician

Shop Supervision

Chris Kerhulas, Equipment Maintenance Supervisor
Frank Dickins, Equipment Maintenance Supervisor
Vern Heffner, Equipment Maintenance Supervisor
Manuel Azevedo, Equipment Maintenance Supervisor

Main Shop - South Area Corporation Yard

Herman Osby, Equipment Mechanic III
Kevin Barbee, Equipment Mechanic II
Everett Barnes, Equipment Mechanic II
Leon Cranford, Equipment Mechanic II
Shawn Powers, Equipment Mechanic II
Jeffrey Crowder, Equipment Mechanic II
Hoa Tran, Equipment Mechanic II
Greg Beauchamp, Equipment Mechanic II
Francisco Romo, Equipment Mechanic I
Bret Champion, Equipment Service Worker
Luis Chavez, Equipment Service Worker

Angel Wittington, Equipment Service Worker
Rakesh Prasad, Equipment Service Worker
Tyler Young, Equipment Service Worker
Vacant, Equipment Service Worker
Vacant, Equipment Service Worker
Vacant, Equipment Service Worker
Vacant, Equipment Service Worker
George Snavelly, Fleet Service Coordinator
Vacant, Vehicle Service Aide (0.5)
Vacant, Vehicle Service Aide (0.5)

Equipment Build Shop

Michael Thoms, Equipment Mechanic II
Paul Weisgarber, Equipment Mechanic II
Frank Williams, Equipment Mechanic II
Robert Flachsbarth, Equipment Service Worker

North Area Corporation Yard

Randall McCrum, Equipment Mechanic III
Steven Honan, Equipment Mechanic III
Eric Hansen, Equipment Mechanic II
Chris Headley, Equipment Mechanic II
Gabriel Santos, Equipment Mechanic II
Jeffrey Dorton, Equipment Mechanic II
Marty Monroe, Equipment Mechanic II
Jeff Comer, Equipment Mechanic I
Casey Moore, Equipment Service Worker
Gabriel Morales Jr., Equipment Service Worker
Juan Cervantes, Equipment Service Worker
Vacant, Equipment Service Worker
Ralph Snodgrass, Fleet Service Coordinator



Meadowview Fleet Service Facility

Mark Denhart, Equipment Mechanic III
Walter Molina, Equipment Mechanic III
Steven Bosworth, Equipment Mechanic II
Derek Bourque, Equipment Mechanic II
Steven Jimenez, Equipment Mechanic II
John O'Hare, Equipment Mechanic II
Jaime Venegas, Equipment Mechanic II
Gustavo Zamora, Equipment Mechanic II
Jason Young, Equipment Mechanic I
Enrico Cruz, Equipment Mechanic I
Andrew Purcell, Equipment Mechanic I
Juan Esquivel, Equipment Service Worker
Joseph Pennington, Equipment Service Worker
Michael Montez, Equipment Service Worker
Eric Benoit, Equipment Service Worker
Darwin Cranor, Fleet Service Coordinator
Esteban Mejia, Vehicle Service Attendant
Vacant, Vehicle Service Aide (0.5)
Vacant, Vehicle Service Aide (0.5)

Kinney Police Garage - Light Duty Shop

Sal Cortez, Equipment Mechanic III
Abdon Aguilar, Equipment Service Worker
Vacant, Equipment Service Worker

Rooney Police Substation - Light Duty Shop

Guillermo Rodriguez, Equipment Mechanic II
William Green, Equipment Service Worker
Philip Lau, Equipment Service Worker
Peggy Baker, Vehicle Service Attendant
Vacant, Equipment Service Worker

SE Certified Fleet Employees



Corporation Yard, 24th Street Service Center

<i>Frank Dickens</i>	ASE Master Automobile Technician ASE Advanced Emissions Specialist ASE Advanced Automotive Specialist Smog Check Technician
<i>Herman Osby</i>	RVIA Master Technician CNG Certification Ford Certification ASE (A-1, A-4, A-5, A-6, A-7) Certification
<i>Kevin C. Barbee</i>	ASE Master Automobile Technician ASE Master Medium/Heavy Truck Technician Advance Level Specialist – Automobile Advanced Engine Performance Smog Check Technician
<i>Gregory Beauchamp</i>	ASE Master Automobile Technician ASE Master Medium/Heavy Truck Technician Advanced Emissions Specialist Smog Check Technician ASE Service Consultant ASE Alternative Fuels Technician
<i>Everett Barnes</i>	ASE Master Automobile Technician Undercar Specialist
<i>Shawn Powers</i>	ASE (A-7, A-8) Certification Certified Diesel Emission Technician MAC A/C Certification
<i>Hoa Tran</i>	ASE Master Automobile Technician ASE A/C Recovery
<i>Francisco Roma</i>	ASE (A-6, A-8, L-1) Certification Smog Check Technician
<i>Luis Chavez</i>	Ford (Diesel Engine, Brake, Electrical Systems, Steering & Suspension, Gasoline Engine Repair) Certification Smog Check Technician
<i>Angel Whittington</i>	Smog Check Technician

Corp Yard, Equipment Build Shop

<i>Vern Heffner</i>	ASE Master Collision Rep/Refinish Technician
<i>Paul Weisgarber</i>	ASE Master Collision Rep/Refinish Technician Collision Repair Estimator
<i>Frank Williams</i>	ASE Master Automobile Technician ASE Advanced Emissions Specialist Smog Check Technician



North Area Corporation Yard, Service Center

<i>Eric Hansen</i>	ASE Master Automobile Certification ASE Master Medium/Heavy Truck Certification Smog Check Technician
<i>Jesus Mejia</i>	Advanced Engine Performance Electrical and Electronic Systems Automobile Technician Smog Check Technician
<i>Casey Moore</i>	ASE (A-4, A-5, G-1) Certification
<i>Gabriel Morales</i>	Smog Check Technician
<i>Ralph Snodgrass</i>	Advanced Emissions Specialist Advanced Engine Performance Electrical and Electronic Systems Automobile Technician Smog Check Technician

Meadowview Service Center

<i>Mark Denhart</i>	ASE (A-8) Certification
<i>Walter Molina</i>	ASE Master Automobile Certification ASE Master Medium/Heavy Truck Certification Advanced Emissions Specialist

Smog Check Technician

Steve Bosworth

ASE Master Medium/Heavy Truck Certification
Caterpillar 2126B/E Dual Fuel Systems Operation

Steve Jimenez

ASE Master Medium/Heavy Truck Certification
State Certified Fire Mechanic II
Fire Apparatus Electrical System 2A
Fire Mechanic Allison Transmission 2B
Fire Mechanic 2C

Jaime Venegas

State Certified Fire Mechanic
Fire Mechanic Allison Transmission
2B Fire Pump and Accessories

Jason Young

ASE Master Automobile Certification
ASE (A-9) Certification

Kinney Police Garage

Abdon Aguilar

ASE (A-4, A-5, A-6, A-8, X-1) Certification

Rooney Police Garage

Guillermo Rodriguez

Master Automobile Certification
Master Medium/Heavy Truck Certification
Advanced Level Specialist – Automobile Advanced Engine Performance
Smog Check Technician

XII. Recognition and Awards

The 100 Best Government Fleets in North America

City of Sacramento Fleet has received national recognition as one of the top fleets in the 100 Best Fleets in North America program.

- ✓ 2015 – Ranked No. 1 of Top 100
- ✓ 2014 – Ranked No. 2 of Top 100
- ✓ 2013 – Ranked No. 9 of Top 100
- ✓ 2012 – Ranked No. 8 of Top 100
- ✓ 2011 – Ranked No. 16 of Top 100
- ✓ 2010 – Ranked No. 21 of Top 100
- ✓ 2009 – Ranked No. 81 of Top 100

Government Fleet Magazine Leading Fleets

City of Sacramento Fleet has received national recognition as one of the top leading fleets by the Government Fleet Magazine Leading Fleets.

- ✓ 2015 – Ranked No. 2 of Top 100
- ✓ 2014 – Ranked No. 7 of Top 100

The Government Green Fleet

City of Sacramento Fleet has received national recognition as one of the top government green fleets in North America.

- ✓ 2013 – Ranked No. 1 of Top 40
- ✓ 2012 – Ranked No. 2 of Top 40
- ✓ 2011 – Ranked No. 7 of Top 40
- ✓ 2011 Clean Air Government Award.



Clean Air Champion Government Award from Breathe California

City of Sacramento Fleet was named 2011 Clean Air Champion Government Award winner

Beacon Spotlight Award Winner

- ✓ 2017 – Silver Level
- ✓ 2015 – Platinum Level
- ✓ 2014 – Silver Level

2009 Sacramento Sustainable Business Award

City of Sacramento Fleet was awarded the 2009 Sacramento Sustainable Business Award for the implementation of the E85 fuel program.

Department of Energy Workplace Charging Challenge Award

The award was presented by the U.S. Department of Energy for supporting the development of the national plug-in electric vehicle charging infrastructure and demonstrating leadership by fulfilling the voluntarily requirements of the **Challenge in 2014**. The City of Sacramento is one of fewer than 20% of all Workplace Charging Challenge partners to receive the **"Leading the Charge"** recognition.

Energy Vision Leadership Award

Energy Vision, a national non-profit organization that promotes clean, renewable, petroleum-free transportation fuels, presented its **2013 Energy Vision Leadership Awards**. The City of Sacramento was honored as host to the first municipal initiative in the U.S. creating a closed-loop, waste-to-fuel system.

Appendix 2 – Sample Service Level Agreement

SERVICE LEVEL AGREEMENT

Between

Seattle City Light

and

***Department of Finance and Administrative
Services***

April 2012

Table of Contents

Purpose Statement	3.
Statement of Agreement	3.
Maintenance Management	3.
Vehicle Priority for PM Safety Inspections and Repair	3.
Preventive Maintenance	4.
Unscheduled Maintenance	5.
Accident and Vandalism Damage	6.
Cleaning Facilities	6.
Crane Operations and Maintenance	7.
Non-FMD Services	7.
Defect Reporting and Response	8.
In-Service Vehicle Modifications, Fabrications, and Improvements	8.
Maintenance Facilities	9.
Manufacturer Recall	9.
Manufacturer Warranty	10.
FMD In-House Repair Warranty Program	10.
Operator and Technician Training	10.
Parking and Seasonal Vehicle Storage	11.
Repair Authorization	11.
Service Calls	12.
Testing of New Products, Services, and Procedures	12.
Towing	12.
Financial Management	13.
Operations and Maintenance Rates	13.
Fleet Administration	13.
Insurance, Claims, and Subrogation	13.
FAS Motor Pool Vehicles	14.
Vehicle Acquisition, Replacement, and Disposal	14.
Vehicle Acquisition Process	14.
Vehicle Replacement Process	14.
Vehicle Disposal Process	15.
Fuel Management	16.
Fuel System Operations	16.
Green Fleets	16.
Fuel and Emissions Reduction	16.
Green Fleets Technology	17.
Education and Outreach	17.
Customer Satisfaction	18.
Data, Records, and Reports	18.
Performance Measures	19.
Satisfaction Surveys	19.
Signature Page	20.

Purpose Statement

Seattle City Light (SCL) and Finance and Administrative Services' (FAS) Fleet Management Division (FMD) establish this formal service level agreement (SLA) to:

- establish clear performance roles and responsibilities for SCL and FMD;
- focus attention on SCL's and FMD's priority needs;
- encourage a service quality culture and continuous improvement;
- provide a mechanism for SCL and FMD to plan for the future;
- provide a useful tool for SCL and FMD to monitor performance;
- place FMD in a better position to plan its delivery functions; and
- minimize SCL's emergency response vehicle and vehicle downtime

Statement of Agreement

Both SCL and FAS agree to fulfill the roles and responsibilities listed in this SLA, to abide by the City fleet policy, and to adhere to all other referenced documents.

In the event that one party perceives that responsibilities are not being performed in accordance with this SLA, both parties will meet and consider all the facts and agree on a plan to mutually resolve the issue.

SCL and FAS agrees to meet and share input regarding operational changes that will impact the biannual budget process at least six months prior to developing rates. Both SCL and FAS agree to meet and discuss budget impacts, issues, maintenance costs, and any future projections on a yearly basis.

For the purpose of this SLA, "vehicle" refers to all SCL motorized fleet vehicles, trucks, equipment, vessels and trailers.

Maintenance Management

Vehicle Priority for Preventive Maintenance Safety Inspections and Repair

Goal: Create a priority rating for repairs and Preventive Maintenance (PM) Safety Inspections.

1. Aerial and crane repairs shall be a priority during the storm season. Additionally, all SCL line service-related vehicles shall be provided priority repair service during any emergency such as storms, power outages, natural disasters, in times of emergency response and on call response when the SCL Incident Management Team or the Emergency Operations Center is activated.
2. Completing PM Safety Inspections on time is a shared goal of SCL and FMD. During storm season (October 1st thru March 31st), or during any emergency crisis, repairs to priority one vehicles take precedence over completing PM Safety Inspections on non-critical vehicles and equipment.

FMD Responsibilities:

1. Work with the SCL Fleet and Mobile Equipment Office to establish which vehicles are "line service-related". Create a priority vehicle list of vehicles such as:
 - #1 bucket trucks
 - #2 crane trucks
 - #3 digger derrick trucks etc.
2. Immediately notify the SCL Fleet and Mobile Equipment Office Manager and the Fleet Management Coordinator of any priority vehicle that is out of service with the estimated time to repair.

SCL Responsibilities:

1. Work with FMD to meet PM Safety Inspection expectations.
2. Work with FMD to establish a "line service related" priority list.

Preventive Maintenance

Goal: Develop processes and practices that minimize unscheduled maintenance and return vehicles requiring repair to service as soon as possible to maximize the availability of SCL vehicles.

FMD Responsibilities:

1. Make PM Safety Inspections a priority on par with achieving other established performance measures.
2. Schedule vehicles for PM Safety Inspections with the SCL Fleet Management Coordinator and the Fleet Manager.
3. Provide a one-month advance notice for PM Safety Inspections coming due.
4. Provide a two-year aerial truck major inspection schedule updated quarterly to the SCL Fleet and Mobile Equipment Office.
5. Send a Garage Report that indicates the status of deadlined vehicles to the Fleet and Mobile Equipment Office and Fleet Management Coordinator on a daily basis.
6. Establish agreed upon service levels that include test driving vehicles before and after PM Safety Inspections and when repairs are performed. Test drives evaluate vehicle performance that includes items such as braking (all modes), engine transmission, and overall drivability performance.
7. Make every effort to schedule vehicle PM Safety Inspections outside SCL's normal usage hours, but ultimately schedule vehicles so that 100 percent of PM Safety Inspections can be completed when they become due.
8. Remove a vehicle from service immediately when any safety defect is noted during a PM Safety Inspection that renders it unsafe to operate.
9. Inform SCL staff when vehicles are ready for pick up following completion of the PM Safety Inspection. In the event a safety defect prevents return of the vehicle, FMD will promptly provide an explanation and estimated availability date to the SCL Fleet Management Coordinator and Fleet Manager.

10. Repair minor vehicle defects noted during PM Safety Inspections that will take one hour or less. Although operational commitments may prevail, FMD will attempt to repair all defects noted on PM Safety Inspections while they have possession of the vehicle.
11. If necessary, schedule vehicle follow-on repairs.
12. Partner with SCL and establish an oil analysis program for heavy equipment.
13. Staff the maintenance shop(s) with maintenance and warehouse support that accommodates SCL normal hours of operation.
14. Each week, provide an auto-generated PM Safety Inspection that lists overdue inspections.

SCL Responsibilities:

1. Comply with the PM Safety Inspection schedule generated by FMD.
2. Distribute the two-year aerial bucket truck major inspection schedule to the crew chiefs so they can plan this service around affected work schedules.
3. Communicate additional required repairs on vehicles when delivering them for PM Safety Inspections.
4. Make vehicles available for follow-on repairs.
5. Perform daily operator inspections and maintenance on vehicles in accordance with state law and vehicle manufacturer recommendations or as otherwise agreed to with FMD.
6. Partner with FMD and establish an oil analysis program for heavy equipment.

Unscheduled Maintenance

Goal: Repair defects that make vehicles inoperable, unsafe, (as defined by the *North American Standard Out-of-Service Criteria* adopted through WAC 480-30-999), or degraded and return them to service as soon as possible so as to maximize the availability of SCL vehicles.

FMD Responsibilities:

1. Immediately place out of service any vehicle that has been determined to be unsafe to operate.
2. If repair costs of vehicles exceed \$2,000 the SCL Fleet Management Coordinator and Fleet Manager shall be notified so that an evaluation can be made to repair or dispose the vehicle.
3. Credit the SCL maintenance fund for any FMD reimbursed in-house warranty repair(s).
4. Notify the SCL Fleet and Mobile Equipment Office when patterns (trends) of vehicle failures have been discovered.

SCL Responsibilities:

1. Report vehicle safety-related defects to FMD immediately. Do not operate vehicles with safety-related defects.
2. Notify FMD as soon as breakdowns occur so that repairs can be scheduled according to established priorities.

3. Deliver vehicles to the assigned maintenance location unless roadside service or towing is required.
4. Make vehicles available for follow-on repairs. Non safety-related repairs that take more than one hour will be scheduled at the mutual convenience of SCL and FMD.

Accident and Vandalism Damage

Goal: Restore as quickly as possible SCL vehicles with accident or vandalism damage to a functioning condition with an appearance that reflects positively on the City of Seattle.

FMD Responsibilities:

1. Provide an estimate for repair within one working day of inspecting damage.
2. Schedule damaged vehicles for repair within one week of providing the estimate to the SCL Fleet Management Coordinator and Fleet Manager.
3. Honor SCL's request to postpone repairs for the purposes of accident investigation within a reasonable period of time.
4. Inspect all repairs completed by outside vendors prior to placing the vehicle back in service.
5. Schedule unreported vehicle damage discovered during routine maintenance with the SCL Fleet and Mobile Equipment Office.

SCL Responsibilities:

1. Report accident or vandalism damages promptly to FMD.
2. Deliver vehicles to the Charles Street body shop for damage estimates.
3. Determine if SCL vehicles will be repaired or replaced.
4. Pay for all damage repairs, regardless of fault.

Cleaning Facilities

Goal: Provide a facility to wash and clean SCL vehicles that reflects favorably on the City of Seattle.

FMD Responsibilities:

1. Provide an automated car wash for light-duty vehicles at the Charles Street maintenance facility 24/7 excluding days with freezing temperatures.
2. Provide trash cans and vacuums at the Charles Street maintenance facility and Haller Lake fuel station.

SCL Responsibilities:

1. Follow posted car wash instructions.
2. Keep car wash facilities clean and report any concerns about the functioning of the facility.
3. Wash and clean SCL vehicles as necessary in order to maintain a vehicle appearance that reflects favorably on the City of Seattle.

Crane Operations and Maintenance

Goal: Comply with Washington State law, American National Standards Institute (ANSI) standards, and manufacturer recommendations regarding crane maintenance and operations.

FMD Responsibilities:

1. Perform periodic inspections and maintenance in accordance with applicable Washington State law, ANSI standards, and manufacturer recommendations.
2. Conduct annual certification of SCL-designated construction cranes.
3. Report crane inspection findings to the SCL Fleet Management Coordinator and the Fleet Manager.
4. Immediately contact the SCL Fleet Management Coordinator and the Fleet Manager whenever SCL cranes are overdue for required inspections.

SCL Responsibilities:

1. Perform frequent inspections, wire rope inspections, and operator maintenance in accordance with applicable Washington State law, ANSI standards, and manufacturer recommendations.
2. Certify and train operators for the cranes they operate in accordance with applicable Washington State law, ANSI standards, and manufacturer recommendations.
3. Designate which cranes will be used in construction as defined by Washington State law. Provide a list of designated construction cranes to FMD.
4. Report to FMD any incidents (such as power line contact or overloads) that void a crane's certification.

Non-FMD Services

Goal: Maximize effectiveness of service to SCL's vehicle fleet by avoiding division of resources to perform non-fleet services.

FMD Responsibilities:

1. Perform non-vehicle fabrication work only after special consideration and approval by the FMD Director or designee(s).

SCL Responsibilities:

1. Refrain from requesting services that are available through commercial vendors.
2. Pay the full cost of any SCL-approved work.

Defect Reporting and Response

Goal: Establish clear communication of vehicle defects and the maintenance action taken to repair defects.

FMD Responsibilities:

1. Accept defects in writing on approved forms or by email.
2. Review defects before the next business day and repair any safety-related defect before the vehicle is placed back in service.
3. Provide a written explanation of maintenance action taken to the operator and the SCL Fleet and Mobile Equipment Office.
4. Complete the federally-required vehicle DVIR form assigned to all CDL (26,000 lbs. and greater GVWR) vehicles, sign off the reported defect as either repaired or that the vehicle is safe for operation.

SCL Responsibilities:

1. Perform pre-trip inspections prior to driving vehicles.
2. Immediately report safety-related defects noted prior to or during vehicle operation.
3. Report non safety-related defects noted prior to or during operation at the completion of each day's work.
4. Deliver the vehicle to the designated maintenance facility for repair unless it is unsafe to operate.
5. Follow up with the operator to verify the repair was performed to the operator's expectations.

In-Service Vehicle Modifications, Fabrications, and Improvements

Goal: Outfit and equip vehicles to meet SCL business needs, but avoid altering any vehicle that makes it unsafe, prevents it from operating in accordance with its designed specifications, or reduces its resale value.

FMD Responsibilities:

1. Provide a recommendation and cost estimate to perform vehicle modifications, fabrications, and improvements.
2. Respond only to requests from the SCL Senior Automotive Engineer, Fleet Management Coordinator, or Fleet Manager to perform vehicle modifications, fabrications, and improvements.
3. Disapprove requests for vehicle modifications that may violate warranties, inhibit safe operation, prevent it from operating in accordance with its designed specifications, or reduce its resale value.
4. Inspect and approve all vehicle modifications or fabrications performed by SCL in-house fabrication staff or outside contractors.
5. Fleet Anywhere (FA) documentation:
 - a. Enter all chassis and capital costs into FA.
 - b. Enter in-service dates in FA for all vehicles.
 - c. Enter replacement date per SCL's direction. (10 years, 16 years etc.)
 - d. Enter warranty information and track in FA.

- e. Input data relating to all chassis and body information into the subsystems and parts section of FA. (engine, trans, axles etc.)

SCL Responsibilities:

1. Do not request vehicle modifications that violate warranties, inhibit safe operation, prevent it from operating in accordance with its designed specifications, or reduce resale value.
2. Pay the full cost of approved modifications, fabrications, and improvements.
3. Ensure all vehicle modifications or fabrications performed by SCL in-house fabrication staff or outside contractors are inspected and approved by FMD staff.

Maintenance Facilities

Goal: Balance the need to accomplish maintenance in reasonable proximity to the vehicle domicile while achieving economies of scale for maintenance facilities.

FMD Responsibilities:

1. Provide maintenance facilities at Haller Lake, SeaPark Garage, Charles Street, and South Service Center.
2. Provide mobile vehicle servicing ability (in-house or contracted).
3. Pay cost-based space rent, manage, and operate SCL-owned maintenance facility at the South Service Center in accordance with a separate lease agreement.

SCL Responsibilities:

1. Provide FMD a maintenance facility at South Service Center in accordance with a separate lease agreement with the SCL Facilities Division.
2. Transport vehicles scheduled for maintenance to the designated maintenance location.

Manufacturer Recall

Goal: Comply with manufacturer recalls to ensure vehicles remain safe, reliable, and available for use.

FMD Responsibilities:

1. Schedule safety-related manufacturer recalls immediately with the SCL Fleet Management Coordinator and Fleet Manager.
2. Coordinate and schedule non safety-related manufacturer recalls with the SCL Fleet Management Coordinator and Fleet Manager.
3. If possible, complete in-house manufacturer recalls during PM Safety Inspections.

SCL Responsibilities:

1. Provide manufacturer recall notices to FMD upon receipt.

2. Perform operator inspections when directed by manufacturer recall notices.

Manufacturer Warranty

Goal: Reduce SCL operating costs by receiving maximum value from manufacturer warranties.

FMD Responsibilities:

1. Identify repairs under manufacturer warranty coverage and take action to pursue claims. Credit money collected to the SCL Maintenance Fund.
2. Seek reimbursement for in-house warranty work performed by FMD. Credit the money collected to the SCL Maintenance Fund.

SCL Responsibilities:

1. Manage the SCL fleet to maximize the use of vehicles still under manufacturer warranty versus those vehicles with expired warranties.
2. Report vehicle defects so that they may be repaired while still under manufacturer warranty coverage.

FMD In-House Repair Warranty Program

Goal: Reduce SCL operating costs and downtime by receiving maximum value from quality FMD repairs.

FMD Responsibilities:

1. Provide a labor and parts repair warranty (rework) equivalent to industry standards on all FMD-provided vehicle repairs to SCL vehicles with the exception of aerial overhauls. Track this warranty on each repaired vehicle in FA.
2. This warranty tracking shall include individual components separately such as; starters, alternators, transmissions, engines, aerals, etc.
3. Track all in-house warranty repairs and provide a quarterly report showing repairs performed under warranty to include downtime associated with the warranty repairs.
5. Provide detailed warranty reimbursement information regarding all manufacturer reimbursements for SCL-owned vehicles upon request.

Operator and Technician Training

Goal: Provide qualified vehicle operators who safely operate vehicles and perform required inspections and maintenance checks in accordance with Washington State law and manufacturer recommendations.

FMD Responsibilities:

1. Include operator and technician training in specifications for general City vehicle purchase contracts.
2. Provide factory diagnostic and repair training for all technicians to efficiently diagnose and repair the SCL highly technical computerized mobile equipment, aerial equipment and new green technologies as they become available to include hybrid and all electric vehicles etc.

3. Provide a vendor point of contact to schedule operator training.
4. Assist SCL staff to develop operator inspection and maintenance checklists.

SCL Responsibilities:

1. Include operator and technician training in specifications for SCL vehicle purchase contracts of specialized, highly technical vehicles such as aerial work platforms.
2. Maintain an operator qualification program in accordance with Washington State law.
3. Ensure only qualified operators or persons under the supervision of qualified operators are allowed to operate vehicles.

Parking and Seasonal Vehicle Storage

Goal: Develop processes to manage limited maintenance facility parking and properly prepare seasonal vehicles for storage.

FMD Responsibilities:

1. Provide parking for SCL vehicles at maintenance facilities while vehicles are being maintained.
2. Notify SCL when vehicles are ready for pick up.
3. Jointly develop checklists with SCL to prepare vehicles for seasonal work or storage such as winterization checklists for designated vehicle or checklists that prepare vehicles for long-term storage.

SCL Responsibilities:

1. Deliver vehicles for scheduled maintenance to the maintenance facility.
2. Pick up vehicles within one business day after receiving notification from FMD.
3. Respond to repair authority requests within two business days to expedite the repair process and minimize on-site parking.
4. Prepare and store seasonal vehicles in accordance with manufacturer recommendations or checklists developed jointly by FMD and SCL.

Repair Authorization

Goal: Ensure that maintenance resources are not unnecessarily expended on vehicles scheduled to be withdrawn from the fleet. Ensure requested modifications are approved by SCL prior to conducting work.

FMD Responsibilities:

1. Immediately take vehicles with safety-related defects out of service while waiting for repair authorization.
2. Obtain prior approval for major repairs from the SCL Fleet Management Coordinator and Fleet Manager on SCL-owned vehicles that will exceed \$2,000 to determine whether SCL-owned vehicles in need of major repairs will be repaired or taken out of service for disposal.

3. Obtain prior approval from the SCL Fleet Management Coordinator and Fleet Manager for any in-service vehicle modifications, fabrications and improvement estimates.

SCL Responsibilities:

1. Determine whether SCL-owned vehicles in need of major repairs will be repaired or taken out of service for disposal.
2. Provide repair authorization in writing or email within two business days for major repairs on all SCL-owned vehicles.

Service Calls

Goal: Provide on-site service to repair disabled vehicles.

FMD Responsibilities:

1. During normal working hours, after hours and weekends within city limits, respond to SCL requests for on-site service to repair disabled vehicles.
2. Repair the vehicle or arrange for towing within one hour after responding to the service call.

SCL Responsibilities:

1. Provide a qualified operator to meet FMD staff responding to the service call. SCL staff may be requested to remain on-site during repairs.

Testing of New Products, Services, and Procedures

Goal: Provide a process to continually improve fleet effectiveness and efficiency and reduce environmental impacts by evaluating and implementing new products, services, and procedures.

FMD Responsibilities:

1. Participate in SCL-sponsored evaluations.
2. Pay costs associated with mutually agreed upon evaluations that are sponsored by FMD.

SCL Responsibilities:

1. Participate in FMD-sponsored evaluations.
2. Pay costs associated with mutually agreed upon evaluations that are sponsored by SCL.

Towing

Goal: Provide towing services for disabled vehicles.

FMD Responsibilities:

1. During normal working hours and within city limits, respond to SCL towing requests within one hour of notification.
2. Provide SCL an updated list of service providers and contact information to arrange towing requests outside normal working hours annually.

3. Seek warranty reimbursement on all manufacturer-related towing operations and refund them to the SCL Maintenance Fund.
4. Reimburse or provide at no charge all towing services resulting from warranty work or shop rework if the failure was related to the quality of FMD's work.

SCL Responsibilities:

1. Provide a qualified operator to meet the FMD staff or vendor responding to the towing request. Under special circumstances, the operator may have to assist in unloading the vehicle at the shop.

Financial Management

Operations and Maintenance Rates

Goal: Establish monthly rates that recover the fixed overhead costs associated with fleet management, the fully-burdened rate for maintenance, and fuel purchased.

FMD Responsibilities:

1. Bill SCL monthly for goods and services delivered. Provide supporting documentation.
2. Notify SCL in writing of any rate increases two months prior to the following year's budget cycle approval.
3. Define how rates are calculated and define any annual rate changes.
4. Clarify what is included in the fixed overhead costs associated with fleet management and explain the cost break down including how the rates are applied.
5. Clarify what is included in the "fully-burdened shop rate for maintenance and fuel billed" with a cost break down to include how the rates are calculated and applied.

SCL Responsibilities:

1. Pay FMD the overhead recovery rate and actual costs for maintenance and fuel charges.

Fleet Administration

Insurance, Claims, and Subrogation

Goal: Follow City policy regarding insurance, claims, and subrogation.

FMD Responsibilities:

1. Provide repair information on SCL vehicles as required by investigators, insurance adjusters, or other parties.

SCL Responsibilities:

1. Report accidents as required by the FAS Risk Management Division and Washington State law.

2. Defend claims for accidents occurring during the course of vehicle operations.
3. Pursue subrogation claims against adverse parties.

FAS Motor Pool Vehicles

Goal: Provide SCL with clean and dependable vehicle transportation alternatives to meet its business needs.

FMD Responsibilities:

1. Provide clean, dependable, alternative transportation 24/7 in accordance with the Motor Pool Operating Guidelines, <http://inweb/Fleetsfacilities/FSmotorpool.htm>

SCL Responsibilities:

1. Follow the established FAS Motor Pool Operating Guidelines.

Vehicle Acquisition, Replacement, and Disposal

Vehicle Acquisition Process

Goal: Replace vehicles in a timely manner to control overall costs, vehicle availability, reliability, and efficiency.

FMD Responsibilities:

1. Each year, meet with SCL to determine new vehicle requirements and standards such as models, purchase price, fuel economy, emission data, operation and maintenance requirements and efficiencies resulting from a standardized fleet.
2. Upon receipt of the new vehicle, check in the vehicle and verify vehicle specification compliance.

SCL Responsibilities:

1. Develop and adhere to a vehicle replacement schedule.
2. Acquire vehicles by the method most beneficial to the City.
3. SCL shall order, purchase, and pay for all vehicles directly.
4. Meet with FMD to determine new vehicle requirements such as purchase price, fuel economy, emission data, operation, and maintenance requirements while working towards a standardized fleet.
5. On some specialized vehicles the fleet standard may be deviated from.
6. Comply with established fleet standardization guidelines regarding make, model, major components, and accessories.
7. Supply FMD a vehicle up-fitting form when FMD is selected to perform the scope of work.

Vehicle Replacement Process

Goal: Expedite the process of providing SCL new vehicles and recovering replaced vehicles for disposal.

FMD Responsibilities:

1. Inspect and verify with SCL staff that the new vehicle has been built in accordance with the SCL approved specifications.
2. Install all required SCL decals.
3. Install any required basic components such as Vehicle Identification Boxes and motor pool hardware.
4. For medium and heavy-duty vehicles, specification compliance inspection shall be started within one week of arrival and establish a goal for completion within four - six weeks of arrival.
5. Notify SCL when the inspection and subsequent vendor compliance repairs are complete.
6. Schedule the new vehicle for pickup within one month of acceptance.

SCL Responsibilities:

1. Pick up the new vehicle within one week after receiving notification by FMD that it is ready for pickup.
2. Inspect and verify with FMD that the new vehicle has been built in accordance with approved specifications.
3. Sign for and take possession of the new vehicle.
4. Take possession of the replaced vehicle upon issuing the new vehicle. (key for key)
5. Transfer equipment from the replaced vehicle to the new vehicle.
6. Store specialized replacement vehicles for a short period of time to allow for operational adjustments to the new vehicle.

Vehicle Disposal Process

Goal: Dispose of vehicles as soon as possible to recover salvage value.

FMD Responsibilities:

1. Prepare vehicle for disposal.
2. Bill disposal costs to SCL.

SCL Responsibilities:

1. Pay vehicle disposal costs.
2. Dispose of vehicles in accordance with city policy.
3. Send proceeds from sale of assets directly to SCL.

Fuel Management

Fuel System Operations

Goal: Provide high quality fuel for the efficient operation of SCL vehicles. Capture and provide accurate information regarding fuel transactions including location, quantity, cost, vehicle miles traveled, and both vehicle and employee identification.

FMD Responsibilities:

1. Enter new SCL vehicles into the fuel management information system. Remove SCL vehicles that have been stricken from the fleet.
2. Work with the SCL Fleet and Mobile Equipment Office to establish vehicle-specific restrictions on fuel transactions, provide emergency response availability yet prevent fuel theft, and provide accurate vehicle mileage data.
3. Manage wet hose (mobile fuel truck) fueling services to all SCL-designated emergency response medium and heavy-duty vehicles.
4. Collect accurate records of SCL's fuel purchases including location, quantity, cost, vehicle miles traveled along with vehicle and employee identification.
5. Provide fuel records to SCL on a monthly basis and upon demand.
6. Ensure all fuel transactions reconcile with billing.
7. Review, enter, and reconcile commercial fleet fuel card transactions. Provide high quality fuel that meets approved specification to sustain SCL operations.
8. Train SCL staff on approved FMD fueling procedures.

SCL Responsibilities:

1. Inform FMD when new vehicles enter service or are removed from service.
2. Provide FMD accurate SCL personnel rosters whenever employees are hired, transferred, or leave employment.
3. Follow approved FMD fueling procedures.
4. Pay for all fuel transactions.
5. Work with FMD to establish wet hose fueling requirements. Set up a wet hose fueling plan that is reasonable to all and still meets SCL emergency response requirements.

Green Fleets

Fuel and Emissions Reduction

Goal: Reduce petroleum fuel use and Greenhouse Gas (GHG) emissions as defined in the City's Green Fleet Action Plan.

FMD Responsibilities:

1. Research fuel types and vehicle capabilities and characteristics to reduce SCL's petroleum fuel use.

2. Research life-cycle impacts of fuels and make environmentally preferable recommendations to SCL.
3. Recommend opportunities to reduce GHG emission levels by increasing operational efficiency and using alternative fuels.
4. Provide monthly reports that illustrate SCL's progress in reducing fuel use and emissions.
5. Assist SCL to achieve petroleum fuel use and emission reduction goals.

SCL Responsibilities:

1. Use recommended alternative fuels in SCL vehicles.
2. Implement recommended operational efficiency measures to reduce GHG emissions.
3. Comply with measures and targets defined in the City's Green Fleet Action Plan.

Green Fleets Technology

Goal: Implement innovative technologies that will improve the overall environmental impact from SCL's fleet operations in alignment with the City's Green Fleet Action Plan.

FMD Responsibilities:

1. Evaluate and research innovative technologies applicable to SCL vehicles that reduce fuel and emissions.
2. Facilitate opportunities to demonstrate innovative technologies and evaluate the impact on SCL vehicles.
3. Make vehicle purchase recommendations that meet the City's long-term goal to operate a fleet that is 100 percent clean and green as defined in the City's Green Fleet Action Plan.

SCL Responsibilities:

1. Purchase and/or upgrade vehicles with innovative green fleets technology when costs and technical feasibility are aligned.
2. Evaluate technical and cost effectiveness of innovative technologies that improves the operational efficiency of vehicles.
3. Provide detailed functional requirements of vehicles to ensure "right-size" design and construction.

Education and Outreach

Goal: Communicate to SCL staff how they personally impact fuel and emission reduction goals in alignment with the City's Green Fleet Action Plan.

FMD Responsibilities:

1. Provide technical information that potentially leads to a reduction of fuel.
2. Provide information designed to promote behavior change to better operate vehicles that achieves maximum fuel efficiency.
3. Provide appropriate information that best communicates citywide green fleet policies.

SCL Responsibilities:

1. Disseminate information to SCL staff.
2. Adopt policies and procedures to reduce fuel use.

Customer Satisfaction**Data, Records, and Reports**

Goal: Provide useful fleet costs and management reports on a regular basis and upon request.

FMD Responsibilities:

1. Standardize vehicle descriptions and maintenance class codes in the FA to provide accurate report generation.
2. Input all in-service costs, in-service date and life cycle data.
3. Provide appropriate access to the SCL fleet office to FA to include expansion to the SCL Skagit and Boundary Hydroelectric Project fleet maintenance facilities.
4. Provide read-only access to the Fleet Anywhere Billing Reports System.
5. Provide specific SCL fleet management data within two working days of request.
6. Develop web-based Crystal Reports for standard and ad hoc queries and automated scheduled reports.
7. Provide bi-annual fleet mileage/hour usage reports broke down into monthly usage increments with exception reporting parameters included.
8. Provide FA and Fuel Focus training to SCL-selected employees annually, when upgrades are installed and any time new modules are introduced.
9. Assist SCL to integrate FA, Fuel Focus, and Key Valet into the SCL Seattle, Skagit and eventually Boundary facilities.
10. Assist SCL to upgrade, integrate and automate the fueling systems at Skagit and Boundary to the Fuel Focus system.

SCL Responsibilities:

1. Work with FMD to develop useful reports.
2. Change vehicle assignments and Low Org numbers as needed in FA.
3. Supply FMD with in-service documentation, total vehicle costs and life cycle expectations.
4. Work with FMD to upgrade the Skagit and Boundary fueling systems to FA.

Performance Measures

Goal: Quantify the effectiveness and efficiency of fleet management to assess whether progress is being made toward reaching established goals and how competitive FMD and SCL are in using resources.

FMD Responsibilities:

1. Develop a performance measurement system to reflect best fleet management practices that lists the performance measure, description, target, and success in achieving the established target(s).
2. Negotiate with SCL and agree upon through SLA, desired performance measures. Examples of recommended performance measures include:
 - a. Scheduled Repair Rate
 - b. Fleet Availability Rate for Priority 1 vehicles (based on 24/7 schedule)
 - c. Vehicle Downtime Report
 - d. Detailed monthly billing statements
 - e. PM Safety Inspection Completion Rate
 - f. Work Order Completion Rate
 - g. Number of Road Calls per Month
 - h. Paint & Body Shop Repair Cost
 - i. Fleet Utilization
3. Partner with SCL to successfully achieve performance measure targets.
4. Provide SCL quarterly updates on performance measures.
5. Annually benchmark with other local public sector and commercial enterprises, where there are appropriate comparables for a public fleet, labor rates, parts markup, commercial markup, and fuel markup. Provide results to SCL.
6. Attain established performance measure goals.

SCL Responsibilities:

1. Define the fleet performance measures that are important to its operations.
2. Negotiate with FMD what performance measures and targets to track.
3. Attain established performance measure goals.

Satisfaction Surveys

Goal: Provide SCL and FMD a tool to gain insight on how well each other's needs are being met and how performance can be improved.

FMD Responsibilities:

1. Conduct satisfaction surveys that target all aspects of maintenance repair and fleet management categories listed in this SLA.
2. Collaborate with SCL and design satisfaction surveys that evaluate SCL's performance regarding the SLA.
3. Analyze survey results with SCL staff.
4. Develop and implement corrective action as required.

SCL Responsibilities:

1. Conduct satisfaction surveys that target applicable aspects of maintenance repair and fleet management categories listed in this SLA
2. Collaborate with FMD and design satisfaction surveys that evaluate FMD's performance regarding the SLA.
3. Analyze survey results with FMD's staff.
4. Develop and implement corrective action as required.

The terms of this SLA shall be reviewed annually and revised as necessary.

Seattle City Light

Bernie O'Donnell, Director USSD
Seattle City Light

Date

Department of Finance and Administrative Services

Fred Podesta, Director
Department of Finance and Administrative Services

Date

CENTRAL GARAGE
(225) 389-3179 (PH) • (225) 389-4782 (FAX)
CITY OF BATON ROUGE
PARISH OF EAST BATON ROUGE
333 CHIPPEWA ST. • BATON ROUGE, LA 70805

WR 19107

Mechanic / Vendor: _____

Unit: _____ Odometer / Hour Meter Reading: _____

Type of equipment: _____

Name of operator: _____ Phone (Work): _____ (Home): _____

Operator's Signature: _____

Date: _____ Time: _____ Supervisor's Approval (if needed) _____

Date Needed: _____ Work Order / P.O. #: _____

☐ **Oil Change?** ☐ Are there any warning lights on? ☐ Are your brakes making noises?

Are any warning lights coming on?
(Check all that apply)

- ☐ Check Engine
- ☐ Temperature
- ☐ Oil
- ☐ Brakes
- ☐ Battery
- ☐ Other

- ☐ Engine Starting
- ☐ Will not turn over
- ☐ Will turn over, but will not run
- ☐ Will turn over & start when boosted Battery
- ☐ Battery is dead
- ☐ Low on water
- ☐ Acid odor
- ☐ Dirty Terminals

- ☐ Leaking oil
- ☐ Smoking
- ☐ Hard start Hot/Cold
- ☐ Hesitates/Misses on acceleration
- ☐ Backfires
- ☐ Runs rough
- ☐ Dies at stops
- ☐ No power
- ☐ Surges at cruise speed

- ☐ Jerks
- ☐ Leaks fluid
- ☐ Slips
- ☐ Will not shift
- ☐ Noisy
- ☐ Vibrates

- ☐ Windshield
- ☐ Windshield/Wiper/Washer
- ☐ Doors
- ☐ Door glass
- ☐ Horn
- ☐ Speedometer
- ☐ Locks
- ☐ Mirrors

DATE OF LAST OIL CHANGE

☐ Broken
☐ Burned or Melted

- ☐ Amp, Volt, Oil, Pressure, Temp, Fuel
- ☐ Does not work
- ☐ Reads low

- ☐ Coolant leaking
- ☐ Fan belt
- ☐ Running hot
- ☐ Antifreeze check

- ☐ Not normal ride
- ☐ Hard or tight
- ☐ Too much play
- ☐ Shimmies
- ☐ Pulls
- ☐ Tire Wear LF RF LR RR
- ☐ Noise
- ☐ Bottoms out
- ☐ Steering wheel off center

- ☐ Head
- ☐ Tail
- ☐ Stop
- ☐ Backup
- ☐ Emergency lights
- ☐ Interior light
- ☐ Other lights

FOR CENTRAL GARAGE
PERSONNEL ONLY

- A Accident
- B Breakdown (To open WO only
Should be replaced with specific
cause when determined.
- D Damage/No Fault/Act of Nature
- E Extra/Modifications/Add-ons
- F Extras/Modifications/Add-ons
- I Inspection
- N Normal Wear
- O Operator Error/Abuse/Misuse
- P Preventive Maintenance
- S Acquisition/Disposal Preparation
- V Vandalism
- W Warranty/Rework

- ☐ Fan
- ☐ Not cooling
- ☐ Not heating
- ☐ Control problem
- ☐ Noise

☐ Loud
☐ Rattling
☐ Fumes

- ☐ Noise
- ☐ Pull
- ☐ No brakes
- ☐ Fluid leak
- ☐ Hard pedal
- ☐ Light on

- ☐ Leaks
- ☐ Fumes
- ☐ Accelerator

Other repairs needed: _____

* PLEASE NOTIFY CENTRAL GARAGE, IN WRITING, FOR THE APPROVAL OF NEW REPAIRS FOUND. *

DFM-101 (R 7/16)

WHITE - ORIGINAL/KEPT • YELLOW - PARTS/ORDER SLIP • PINK - MECHANIC/OPERATOR