



THE CITY OF SAN DIEGO

Report to the City Council

DATE ISSUED: September 26, 2016 REPORT NO: 16-082

ATTENTION: Committee on Budget and Government Efficiency

SUBJECT: Status of Fleet Operations Department Transformations Report

REFERENCE: 1) Status of Fleet Services Division Operations, Report # 16-009 REV, Issued January 21, 2016
2) CST Fleet Services Report, City of San Diego Fleet Analysis: Fleet Inventory, Lifecycle, Right Sizing, Capital Planning, Resource and Fleet Management Overview, Distributed May 13, 2016

REQUESTED ACTION:

Accept the report. Note: This is an informational only item.

STAFF RECOMMENDATION:

Accept the report.

EXECUTIVE SUMMARY OF ITEM BACKGROUND:

The City owns and maintains a fleet of approximately 4,200 pieces of equipment varying from air compressor trailers to Fire aerial ladder trucks. These assets are the lifeblood of department operations throughout the City. Without the appropriate type of equipment in safe operating condition City services cannot be provided effectively and efficiently.

In the spring of 2015 the City transferred the Fleet Services Division to the Internal Operations Branch to better align internal services being provided to City departments. The move provided a direct focus of consistent and superior customer service to meet the expectations of the City's internal support functions. This organizational change was a key step in transforming Fleet operations, the management of the division and the beginning of a new era in the City's fleet management.

In September 2015, a new Deputy Director was appointed and a full evaluation of the division began. At the same time, CST Fleet Services (CST), was invited back to perform an in-depth evaluation of the Fleet operations. CST had previously performed a higher-level evaluation of Fleet under the direction of Huron Consulting, which had performed other City reviews in FY 2014.

CST provided their analysis to the City in May of 2016 in a report titled *City of San Diego Fleet Analysis: Fleet Inventory, Lifecycle, Right Sizing, Capital Planning, Resource and Fleet Management Overview*. The report by CST was subsequently distributed to the City Council on May 13, 2016.

This report to the Committee on Budget and Government Efficiency provides a summary of key developments in alignment with the recommendations presented in the CST Fleet

Analysis Report; highlights progress made to-date on many initiatives and outlines future goals.

CITY STRATEGIC PLAN GOAL(S)/OBJECTIVE(S):

Goal #1: Provide high quality public service.

Objective #1: Promote a customer-focused culture that prizes accessible, consistent, and predictable delivery of services.

Objective #2: Improve external and internal coordination and communication.

FISCAL CONSIDERATIONS:

None with this action.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (if applicable): N/A

PREVIOUS COUNCIL and/or COMMITTEE ACTIONS: N/A

COMMUNITY PARTICIPATION AND OUTREACH EFFORTS: N/A

KEY STAKEHOLDERS AND PROJECTED IMPACTS: N/A

Signature on File

Alia Khouri
Director
Fleet Operations Department

Signature on File

Ronald H. Villa
Deputy Chief Operating Officer
Internal Operations Branch

Attachment 1:

Status of Fleet Operations Department Transformations Report, NO.16-082

Status of Fleet Operations Department Transformations

In the spring of 2015 the City transferred the Fleet Services Division to the Internal Operations Branch to better align internal services being provided to City departments. The move provided a direct focus of consistent and superior customer service to meet the expectations of the City's internal support functions. This organizational change was a key step in transforming Fleet operations, the management of the division and the beginning of a new era in the City's fleet management.

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OVERVIEW OF RECOMMENDATIONS

The CST Fleet Analysis Report (Report) summarized the recommendations into four main groupings:

1. Fleet Maintenance Management and Management Tools
2. Fleet Asset Management
3. Resource Management
4. Parts Management

FLEET MAINTENANCE MANAGEMENT & MANAGEMENT TOOLS

The Report identified that over the last two years since the original evaluation (in FY 2014) *“positive steps have been made in the maintenance operations and overall leadership practices within the division”*. Also identified in the Report was that since the management changes the maintenance operations had improved due to an increase in shop floor supervision and an increased level of accountability.

The Report concluded that the *“organizational recommendations need to be addressed first and foremost...these changes will be key in effectively implementing any of the other recommendations...”* The organizational recommendations included adding a Fleet Maintenance Manager, adding analytical staff, establishing a Vehicle Steering Committee and overhauling the Fleet Asset Management Software System. These recommendations are discussed in greater detail below.

Fleet Maintenance Manager

The Report found a lack of consistency in operations to be the key cause of low levels of efficiency and effectiveness in maintenance operations. The pre-existing structure of the Fleet Division was the result of the merging of three separate fleet operations and in many instances the consultant observed disparate operations between the now merged garage locations.

To reflect the now larger and more complex operation, the City upgraded the Fleet Services Division to a standalone Fleet Operations Department (Department) that could operate at a level equal to the importance and value that Fleet provides to every City Department.

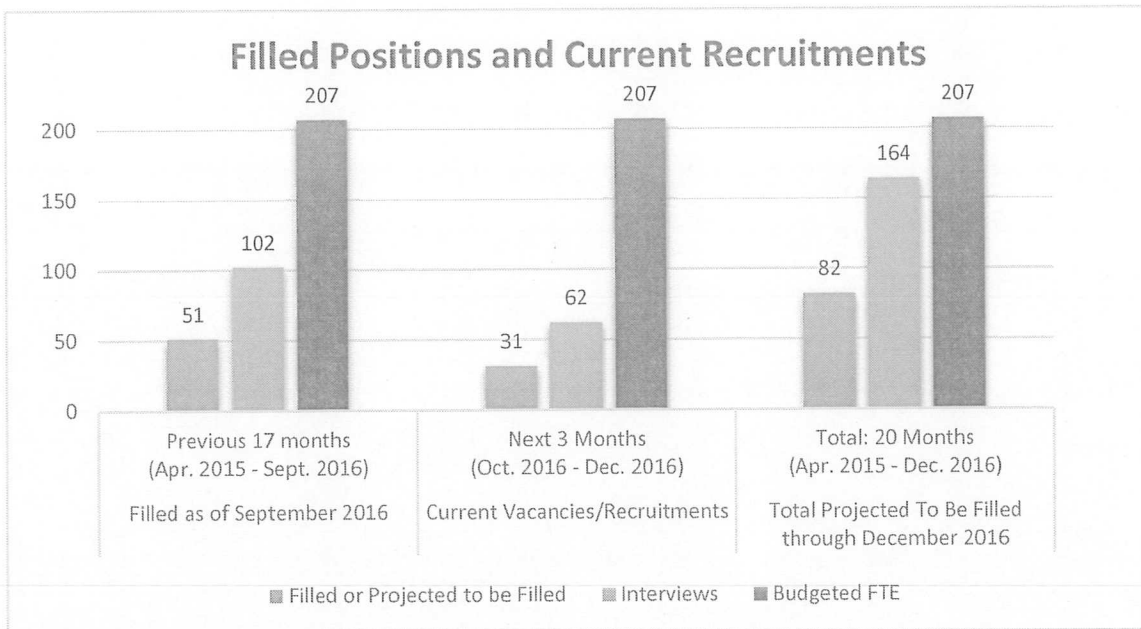
With a new Department Director overseeing the financial, information technology and administrative functions of the new Department, the structure allows the existing Deputy Director position to serve as the Fleet Maintenance Manager (CST recommendation) providing a single point of responsibility and oversight for the maintenance operations. This change was approved by the City Council and included in the FY 2017 Adopted Budget. A Director was appointed in July and the recruitment for the Deputy Director is underway with a selection anticipated within 30 days.

Analytical Staff

A lack of business analyst expertise was also recognized by CST. The Report noted that this was clearly evident in the inconsistency of data in the Fleet Asset Management Software System (Fleet Focus) as well as the analysis required to make both short and long-term decisions. The Report noted that this specific lack of analytical staff directly lead to the City engaging in CST for the development of the Asset Management Plan, including; Life Cycles, Right Sizing, Capital Planning and Resource Analysis. CST recommended the addition of two business analysts. The first analyst would support the Fleet Focus system, primarily serving as the “system champion” responsible for the operational use of the system and the systems overall integrity as an asset management tool, now and for future initiatives. The second analyst would be responsible for reviewing and analyzing the data in Fleet Focus by summarizing data, creating and recommending reports and dashboards, as well as creating analytical models for decision making.

Similar deficiencies were identified during the immediate evaluation of the Division upon transfer to the Internal Operations Branch in 2015. Subsequently, a Program Manager position was created in the FY 2016 budget to oversee the administrative functions of the Department, in advance of the CST recommendations. This position was filled in November 2015.

The Department has filled more than 50 positions since its transition to the Internal Operations Branch and filled approximately 90% of the positions added in the FY 2016 Adopted Budget. The table on the next page illustrates the efforts of the Department to fill vacancies. Based on the improved recruitment and hiring strategy, the Department will have hired the equivalent of nearly 40% of the total budgeted positions in less than 2 years.



In direct response to the recommendations for analytical staff in the CST Report the Department fully funded 1.00 FTE Associate Management Analyst in the FY 2017 Adopted Budget. The position had previously only been funded as 0.50 FTE and had remained unfilled. Additionally, a Sr. Management Analyst was upgraded to a Supervising Management Analyst to reflect the complexities of the Department’s operational data. Both of these positions are scheduled to be filled by December 2016.

Vehicle Steering Committee

An organizational recommendation in the Report was the creation of a committee whose charter will be to approve strategies for new vehicle procurement, approve vehicle disposition and vehicle reassignment, evaluate and review vehicle usage and recommend improvements to the policies and procedures that define the operational steps between the Department and its customers.

The City fully supports this recommendation and anticipates establishing the committee in the first quarter of 2017. The committee will consist of only Department Directors which will emphasize the importance of the City’s overall fleet strategy. The implementation of this committee has been delayed due to the minimal availability of reliable operational data as evidenced in CST’s recommendation for additional analytical support.

Fleet Asset Management System (Fleet Focus)

The Department currently uses Fleet Focus, an industry recognized fleet management software application. It was determined that although the system was not being used to its maximum capability, it remains an excellent solution and does not need to be replaced; however, the current data and procedures for data integrity and overall maintenance of Fleet Focus needs improvement. In response, the Department has engaged in a complete overhaul and upgrade of the system which began in August 2016 and is anticipated to conclude in July 2017.

The project has been separated into two distinct phases. Phase One is primarily a data clean-up phase coupled with procedural changes to ensure accurate data will be consistently

collected in accordance with the Department operations, industry best practices and manufacturer recommendations. Phase Two will be the technical upgrade of the system from the current version of 6.1 to version 15.05.

ASSET MANAGEMENT

The City owns and maintains a fleet of approximately 4,200 pieces of equipment varying from air compressor trailers to Fire aerial ladder trucks.¹ These assets are the lifeblood of department operations throughout the City. Without the appropriate type of equipment in safe operating condition, our City services cannot be provided effectively and efficiently. Upon initial investigations, it was determined that many of the fleet inventory and historical records were not updated, incomplete or in some cases, non-existent. Over the last 8 months, staff has worked to correctly identify vehicle types, locations and ages of all equipment owned by Fleet. This information has been cross referenced and verified along with a physical inventory and a supervisory inspection for every asset. The work being completed to update the procedures for Fleet Focus will remediate the possibility of future discrepancies. (Attachment 1 provides information on the current vehicle inventory)

In order to maximize the usage and value of each asset, Fleet must determine the appropriate length of use and then schedule for the appropriate replacement of the asset based on replacement cost, repair and operation cost and available budget. This practice of *Fleet Asset Management* includes three components:

1. Life Cycle Analysis – This analysis is used to determine when an organization should replace a vehicle. It is based on the total cost of ownership (TCO) including acquisition expense (including financing cost), utilization, expense for preventive maintenance, fuel and repair and the depreciated value at auction. Ideally, the TCO should never exceed the replacement cost of the new vehicle.
2. Right Sizing – This analysis provides for the optimum number of vehicles for departments to operate efficiently. It is based on how frequently vehicles are used or not being used. Additionally, mileage driven in one department is compared to the mileage of a similar vehicle in another department. The goal is to maximize vehicle usage evenly across City departments through potential reassignment and to not have vehicles that are not being used effectively.
3. Capital Planning – Upon the conclusions reached in the Life Cycle and Right Sizing analysis, Fleet must then plan for the capital expense for the future fiscal years. This aspect provides a predictable schedule for future budget dollars.

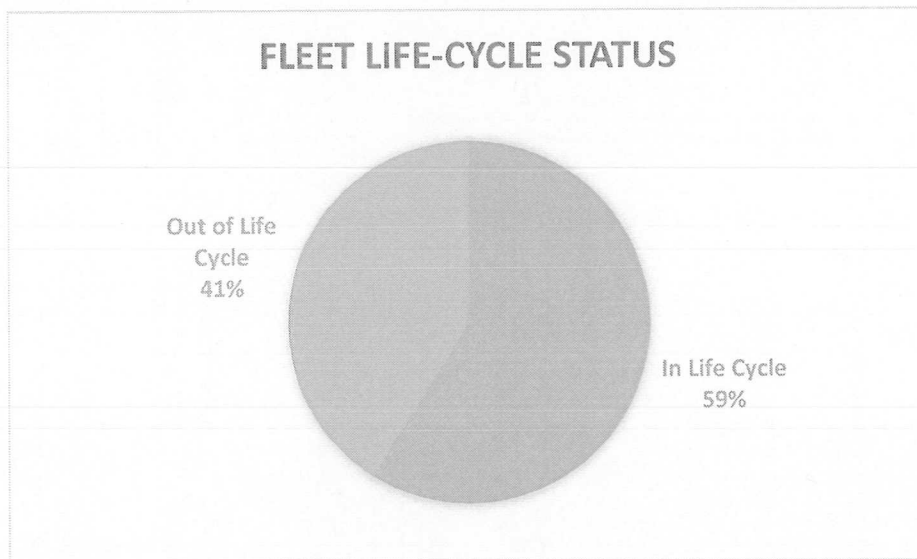
CST staff reviewed these primary areas based on the City's inventory although they concluded that the incomplete data found in Fleet Focus at the time did not provide enough evidence to accurately provide recommendations for life-cycle projections and right sizing. This reinforced the recommendation to overhaul and update the system.

Without clear data, CST was still able to provide two preliminary findings based on assumptions and the data available. The first finding is that the fleet is considerably overaged, meaning outside of the ideal lifecycle where the TCO is at its lowest. The second finding was there will be an opportunity to reduce the fleet by disposing or reassigning of

¹ The actual inventory changes daily as vehicles are decommissioned and new vehicles are put into service

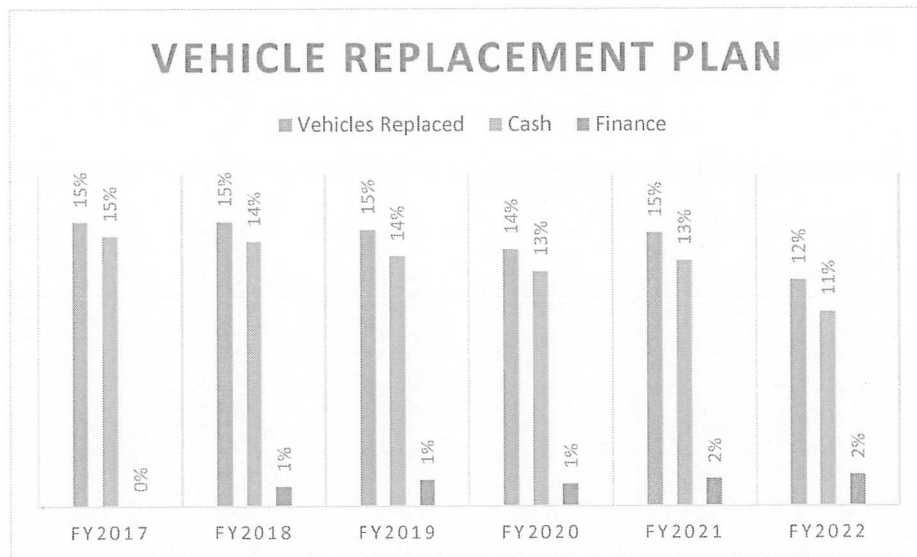
unused vehicles through right sizing. CST concluded that this can be done without reducing services, however, this reduction is dependent on Fleet improving maintenance operations and thus reducing the requirement for spare vehicles.

In January 2016, Fleet began an aggressive campaign to replace vehicles. By June 2016, Fleet staff had ordered nearly 500 new and replacement vehicles including 31 fire apparatus and 170 public safety patrol and command vehicles. This represents an approximately 300% increase in vehicle acquisition over the previous two years. The goal was to begin reducing the TCO of certain types of vehicles that were costing the City more to repair than to replace. The Department continues to identify vehicles with high operating and maintenance expenses and will be prioritizing these vehicles for replacement throughout Fiscal Year 2017. The chart above displays the ratio of the fleet and the life-cycles.



Fleet determined that CST's recommended right-sizing analysis would not produce expected results until the overall vehicle inventory was updated and able to accommodate vehicle transfers. Surplus vehicles are still required to serve as reserves while front line vehicles are being repaired. As the fleet inventory is modernized and Fleet Focus is upgraded, the right sizing of vehicles will be a continual exercise to maximize the usage of each asset.

The Capital Planning model provided by CST recommended a smoothing of the replacements of overaged vehicles to balance spending while renewing the fleet. Fleet staff worked with Financial Management Department staff to provide a complex review of the replacement plan to deliver a comprehensive fleet management and replacement plan including a financing policy. The table on the following page displays the most recent replacement plan which outlines specific replacements for the current fiscal year and the next five years, FY2018 – FY2022. This replacement plan is based on assumptions and data currently available, which as previously stated is not the most precise. Fleet management is still confident moving forward with this plan beginning this fiscal year and as improved data becomes available the replacement plan for future years may be revised.



Although the development of a financing policy was not a recommendation contained in the Report, Fleet management deemed it necessary to combine the replacement plan with a financing policy for improved budgeting and cash management. This financing policy developed by the Financial Management Department and the Fleet Operations Department preserves two primary objectives: 1) Decrease volatility in budgeting requirements; and 2) Consider both lifecycle and acquisition costs. With these objectives in mind the Departments have agreed to debt finance vehicles that meet the three criteria:

- 1) Acquisition costs exceed \$100,000
- 2) Lifecycle exceeds 5 years
- 3) General Fund acquisition

Cash financing will be utilized for all vehicles that do not meet the criteria. It's anticipated that non-general fund vehicle replacements will continue to be cash-funded; however, this will continue to be analyzed by the Financial Management and Debt Management Departments during the annual budget development process.

RESOURCE MANAGEMENT (Technician Staffing & Shop Space)

CST reviewed both staffing levels and the shop (bay) space for the current operations. The Report concluded that although increased staffing is not necessary at this time, inefficiencies due to insufficient bay space, an overaged fleet and inconsistent operations lead to unproductive use of staff time, which should not be confused with unproductive staff. An example is the lack of bay space.

Industry practice allows an average of two bays for each technician. The technician can use one bay to park a vehicle that may require a longer repair and while they are waiting for parts they can use the second bay to work on a different vehicle that may require a simpler repair. With the City's existing facilities, a current Fleet technician may dismantle and diagnose a vehicle but then while parts are on order, the technician has to tow the vehicle out of the bay in order to bring another vehicle in to repair. Additionally many times at the end of a shift technicians have to partially reassemble vehicles to allow them to be towed out

in order to make bay space available for the next shift. Although sometimes the next shift can work on the same vehicle, many times the different shifts are working on completely different vehicles due to competing priorities. These examples lead to unproductive time as the technicians are spending time repositioning vehicles instead of actually working on the vehicles.

The primary recommendation was to separate fire and refuse packer repairs into separate facilities. This would provide enough bay space to improve the efficiencies of the technician's time for both the fire and packer fleets. The Real Estate Assets Department immediately started searching for solutions and has identified a potential location. Lease negotiations are currently under way. The former fire repair facility was considered as a solution, although it was deemed outdated and too small when it was vacated in FY 2013. It has since been decommissioned and was converted to support consolidated Fire Department logistics operations.

PARTS MANAGEMENT

The City entered into an agreement with NAPA in 2014 to provide parts on an as-needed basis and to provide an inventory of stock parts for each of the parts rooms. Although this agreement had a difficult implementation, improvements in policies and procedures for both NAPA staff and City staff has increased responsiveness for parts availability. CST agreed that the contract with NAPA is working; nevertheless CST did identify parts management as a major operational inefficiency due to the inability to get parts on an "as needed" basis primarily due to low inventories.

Increase Parts Inventory

CST's recommendation focused on the size of available inventory at each of the City's facilities. The recommendation was for the City to maintain an inventory of approximately \$2.5 million on hand to reduce waiting on parts. Prior to the transition to the Internal Operations Branch the inventory level was roughly \$500,000 and has since increased to \$800,000. Further increases in parts room inventories will continue after various procedures within the section are implemented. Additionally, as Fleet Focus data is improved, frequently used parts will be identified for addition to the inventory. Increased parts inventory will improve repair times as technicians will not have to wait for common parts to be delivered.

An additional critical component of proper inventory management is cyclical inventory counts. Over the last year, Fleet management has determined that previous management had not completed inventory counts for many years. It was also discovered that obsolete parts from retired vehicles and in-valid parts locations from older systems continue to exist in the parts management module of Fleet Focus. This was attributed to a lack of proper management of the application and is causing significant issues in overall parts management and availability. Part of Phase One of the Fleet Focus overhaul and upgrade project is to modify procedures within the parts section that will result in significant improvements to the parts availability inventory.

Additional Parts Staff

The FY 2017 Adopted Budget included the addition of 1.00 Fleet Parts Buyer, and 2.00 Stock Clerks. The recruitments for all three positions are under way and the positions should be filled in the second quarter of FY 2017. These positions were identified as necessary to

ensure that the parts room at all major repair facilities were staffed during all operating shifts.

Improved Training of Parts Staff

CST found the majority of parts staff did not have proper training particularly in the correct ordering of parts for heavy duty and specialty vehicles. Fleet staff has started to pilot procedures and policies at the Chollas Parts Shop. This shop has the most senior Fleet Parts Buyer and experienced support staff who will serve as the flagship throughout the Department. Staff is being rotated through the Chollas Parts Shop to receive hands-on training to ensure seamless implementation of procedural changes to all other shops. Additionally, new staff are assigned to the Chollas Parts Shop for training for two to four weeks until placed permanently. More robust and specific inventory training will continue and become a more prominent program within the Department in FY 2018.

Revise Parts Issuing Process

The final recommendation regarding Parts Management is the process of issuing parts. CST discovered that parts were sometime issued to technicians rather than to work orders which inserted an unnecessary step and created inconsistencies. CST noted this change seems rather simple but is a critical component to proper checks and balances and inventory control. This process change was implemented immediately and parts are now issued directly to work orders. The improvements below have also been implemented:

- Only parts room staff are permitted in the parts room.
 - Previously technicians could enter and retrieve parts directly off the shelves in the parts room.
- Technicians are no longer assigned to the parts room when on light/modified duty.
 - Technicians on light/modified duty are now assigned meaningful technician work within their limitations.
- Parts rooms are secured at all times during work hours as well as after hours.
- All parts rooms are being rekeyed to maintain inventory control.
- A road call parts cage was constructed to support after-hours and emergency road call services when parts room staff are not available.
 - Parts staff will stock the road call parts cage after inventory of the Miramar Place shop is complete, which is scheduled for late October.

Fleet Management is working with the City Comptroller to implement internal controls and anticipates many more procedural changes in parts room operations to occur during Phase One of the Fleet Focus overhaul and upgrade project. Proper parts room management plays a vital role in the success of shop operations; both shop and parts room staff realize the importance and reliance they have on each other, and are eager to improve the operations.

ADDITIONAL TRANSFORMATIONS

In addition to recommendations included in the CST Report, Fleet management and staff have made many other adjustments to increase efficiency and improve overall operations.

Centralizing Support Services

Nearly 40% of the fleet is serviced at the Chollas Operations Yard in addition to the Fabrication and Repair Shop and the acquisitions and dispositions section. In November, 2015, working with MEA and the administrative staff, the first change was centralizing the administrative support services at the Chollas Operations Yard, creating a central hub for the

Department. This move created an enhanced support level where administrative staff are cross trained on a variety of tasks providing more consistent and reliable support for operations. Administrative staff hours of operation were increased to provide enhanced customer service to vendors and greater support services to the shop operations, which operate 24 hours a day. Previously, the standard hours for support services staff were 6:00AM to 2:30PM, the new hours of operation are 6:00AM to 5:00PM.

Facility and Tool Improvements

Many facility and tool upgrades have also been completed. The supervisor's offices at both Chollas and Rose Canyon Repair Shops have been remodeled to provide improved visibility throughout the shop. Although the offices were located in the middle of the shop floor, the offices had small and high windows which made it difficult to see if the supervisor was in the office. Now, with floor to ceiling glass doors technicians can glance from across the shop to see if the supervisor is in the office for questions or issues. The Department also recently completed renovations to the break room at the Chollas Repair shop and will be renovating the break rooms at the Rose Canyon and Miramar Repair Shops this fiscal year. All of these minor changes are intended to bring about significant improvements to operations and morale.

The Department also re-opened the "Greenhouse" in FY 2016 to improve customer service by providing a central drive-up kiosk for vehicle drop off. Prior to this change there was no central point for customers to drop off vehicles. The Greenhouse is staffed with a senior technician during core working hours enabling an extremely efficient method for operators to drop off their vehicles. It also allows for a discussion between the senior technician and the operator which provides valuable information for proper diagnosis of the necessary repairs. This improvement also allows for "drive-ups" which are minor repairs that can be completed in less than 15 minutes such as replacing a burned out brake light. Previously, technicians were called away from their work to complete these repairs which impacted their current work orders.

Other smaller upgrades to the shops such as; upgraded alignment racks, new hoists and lifts, and the addition of safety ladders, mobile parts/tool washers and chilled water fountains have also been completed. The Department upgraded the lighting at both the Chollas and Rose Canyon Repair Shops to energy efficient LEDs. Significant repairs to a long-time leak-prone roof at the Miramar Repair Shop was completed as well as the installation of berms at each bay entry point to stop rain water intrusion at the Chollas and Rose Canyon Repair Shops. Rain gutters were also installed at the Rose Canyon Repair Shop. Again, these rather small upgrades and repairs make a significant impact in establishing a highly productive work environment and demonstrate that the Department is committed to safety and improved operations.

Fleet management also decided to re-open previously unused shop space in the Chollas Operations Yard to establish a "fitting building". This small building with 3 shop bays is situated directly adjacent to the section of the yard that houses the new vehicles and the vehicles that are being prepped for sale. Opening this facility will allow for the fitting technicians to operate out of this building, freeing up bay space in the main repair shop. As mentioned earlier in this report increasing bay space can increase shop productivity.

Labor Organization Support

Through all the improvements that the Department has made thus far, both AFSCME Local 127 and MEA have provided guidance and support. Through our shared values of creating a

productive and rewarding work environment the relationship has grown to be resilient and effective. Department management met with labor organization representatives monthly to discuss overall concerns, specific issues, and areas for improvement through the Labor Management Committee. Due to the effectiveness of these meetings and the collaboration of AFSCME Local 127 and MEA, the Committee recently unanimously agreed to meeting bi-monthly. This example of great support and partnership by the labor organizations and Department management is fundamental in creating a highly productive and rewarding work environment. The City is appreciative of the support the labor organizations have provided and is looking forward to continued progress.

SUMMARY

The evaluation and subsequent recommendations provided by CST serve as the basis towards the Fleet Operations Department becoming a more effective and efficient operation. This is in addition to the other improvements that have been identified and implemented throughout the Department. The Fleet Focus project as well as the aggressive replacement schedule and the continual and on-going fleet asset management assessment are all contributing to improved levels of service and increasing expectations from City Departments.

Fleet staff have been tasked with learning new procedures while continuing to perform their daily tasks. In some instances fleet staff have been reassigned in support of the Fleet Focus project. The below excerpt from the CST's Report summarizes the extent of the changes.

The City of San Diego and the Fleet Services Division are dealing with the reality of an aging fleet, old technology, and fleet culture rooted in 20 plus years of operating in basically the same mode. Positive changes have been made, but changing both the operating environment and overhauling the fleet will take time and requires good staff. as improvements are made the initiatives identified to this point will need to be continually monitored and the plan altered as conditions both within the Fleet Services Division and the City of San Diego change.

Change of this magnitude is never easy and can take a toll on staff and customers. However the support of the Mayor and City Council, in addition to the support displayed from AFSCME Local 127 and MEA demonstrates that everyone recognizes the importance of the success of the Fleet Operations Department and are ready to support the transformations necessary to improve operations for all.

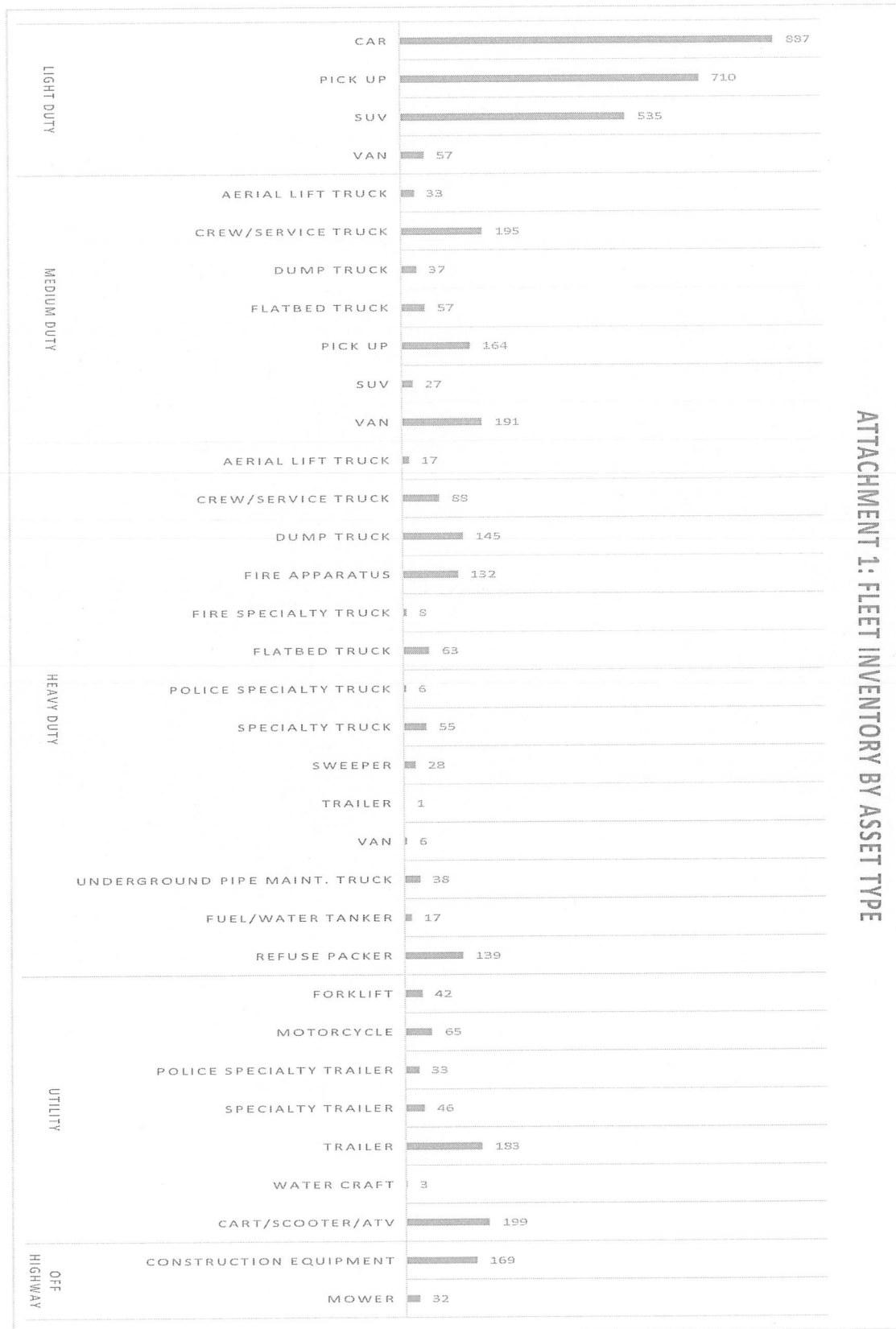
Attachment 1 Fleet Inventory by Asset Type

Signature on File

Alia Khouri
Director
Fleet Operations Department

Signature on File

Ronald H. Villa
Deputy Chief Operating Officer
Internal Operations Branch



ATTACHMENT 1: FLEET INVENTORY BY ASSET TYPE