City of Dallas

Fleet Efficiency Study Update

Government Performance and Financial Management
September 22, 2020

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Equipment and Fleet Management
City of Dallas

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City of Dallas

Presentation Overview

- Background/History
- Purpose
- Issues/ Operational or Business Concerns
- Preventative Maintenance (PM) Program
- Future policy and operational decisions impacting fleet management

Background/History

- Effective October 1, 2018, Equipment and Building Services (EBS) was split into (3) parts
  - Equipment and Fleet Management (EFM)
  - Building Services (BSD)
  - Building Security was absorbed by Court and Detention Services (CTS)
- In the Spring/Summer of 2018, a Fleet Efficiency Study was conducted by Alvarez and Marsal and the results briefed to City Council in December 2018
  - Scope of the study focused on opportunities for improvement and efficiencies
  - Staff provided 1st update to GPFM in April 2019 on status of action plan in response to consultant recommendations
    - Consultant report, briefing and 1st update are provided in the appendix

Purpose

This briefing will:

- Provide an update on the status and progress in response to consultant recommendations
- Provide an update on the preventive maintenance program (PM)
- Solicit feedback on future policy and operational decisions impacting fleet management

Issues/Operational Concerns

The Fleet Efficiency study was broken down into five (5) areas for improvement

- Organizational Assessment
- Follow Total Cost of Ownership (TCO) Approach
- Make Workshop Flow Improvements
- Underutilization, Right Sizing, & Motor Pool
- Technology and Data Quality

Organizational Assessment

Date	Consultant Observations	Completed	In-Progress	Next Steps
	Hiring			
December 2018	1. Develop "Temp" to "Hire" Program for Mechanics	√		
December 2018	2. Hired and assigned to work at various City service centers	√		
4th Quarter 2018	• 15 temporaries hired and assigned	√		
1st Quarter 2019	• 25 temporaries hired and assigned	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Program Summary; 93 temps hired since inception, 29 made permanent, 24 of 29 retained to-date, 7 temps currently in program, also expanded program to include Fleet Parts Specialist	√		
	Training			
December 2018	3. Modernize Training Program by increasing hands on instruction and utilizing free training opportunities from existing vendors		√	
1st Quarter 2019	• Chose 8+ Adjunct Trainers to begin curriculum development	√		
1st Quarter 2019	• City-wide Forklift training and shop orientation training for temporaries underway	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Basic automotive training administered for temporary employees	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Vehicle Information Box (VIB) training provided to enhance automated data collection (telematics)	√		

Organizational Assessment

Date	Consultant Observations	Completed	In-Progress	Next Steps
	Training			
2nd Qtr. 2019 – 3rd Qtr. 2020	• Implemented "The Fleet Academy" and began training in November 2019 at Hensley Field ○ Preventative Maintenance (PM) training update courses completed	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Interlocal Agreement executed with Dallas College – Cedar Valley Branch in March 2020 to allow for training in automotive and diesel technologies ○ Kick-off meeting held to discuss curriculum (postponed due to COVID-19)		√	
	Employee Compensation			
December 2018	4. Address tool/boot allowance and certification pay	√		
1st Quarter 2019	• Tool & Boot allowance increased	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Certification pay increased as part of FY19-20 Proposed Budget	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Automotive Service Excellence (ASE) award program implemented in December 2019.	√		
December 2018	5. Engage Human Resources in the City-wide Compensation Study	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• City Council to approve award for Compensation Study on August 28, 2019 Council Agenda	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Awaiting release/results from study to evaluate options and strategy for implementing and funding the recommendations		√	

Follow TCO Procurement Approach

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Fleet Governance			
December 2018	1. Establish a Fleet Advisory Board to establish standards		√	
1st Quarter 2019	• Inaugural meeting held April 8th	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Fleet Advisory Board is formally established, meetings held June 2019, January 2020, April 2020, with plans to meet quarterly	√		
December 2018	2. Ensure (PM) periodic maintenance compliance		√	
1st Quarter 2019	• Saturday PM program initiated in February 2019	√		
December 2018	3. Centralize decision making on fleet purchases		√	
1st Quarter 2019	• Administrative Directive 6-02 being revised to reflect the new process		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• Began new approach to development of annual fleet purchases to include individualized strategy meetings with customer departments and vetting of purchases in coordination with Office of Budget and Purchasing	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Developed "De-Fleet" process to decommission equipment after a cost benefit analysis in coordination with customer departments to vet the impact and any operational concerns	√		
	Vehicle Procurement			
December 2018	4. Evaluate the total cost of ownership versus short term initial purchase or operational reliance on rental equipment	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• August 28th, 2019 Council approved a Fleet purchase ID/IQ procurement to allow for greater flexibility	√		

Follow TCO Procurement Approach

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
December 2018	5. Determine the most cost-effective funding mechanism for fleet purchases	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Use of equipment notes and master lease funding for fleet purchases ○ FY 19-20 includes 19.6M up from $10M in FY18-19 ○ FY20-21 includes $17.5M		√	
	Enhance Outsource Contracting Options			
December 2018	6. Work with Office of Procurement Services for better specifications and timely execution of contracts		√	
1st Quarter 2019	• OEM master agreement out for bid for refuse parts/service to address gaps in Sanitation maintenance		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ City Council awarded contracts in May 2019	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Working with City Attorney's Office and Office of Purchasing to develop a procurement strategy that will allow for multi-award service and parts contracts to reduce the turnaround time on contracted repairs		√	

Make Workshop Flow Improvements

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Scheduling Improvements			
December 2018	1. Staff realignment by shift and service center	√		
1st Quarter 2019	• Adding additional Saturday shifts at service centers to support customer demands		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ Saturday shifts active at 4 of 5 locations, activation at Northeast Service Center anticipated by 1st quarter 2021		√	
December 2018	2. Add 3rd shift at the NW Service Center for Sanitation Services vehicle maintenance	√		
	Shop Infrastructure/Equipment			
December 2018	3. Purchase new shop equipment to increase safety, productivity and diagnostic capabilities		√	
1st Quarter 2019	• Developed prioritized list and identified funding and currently making purchases from master agreements		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ Purchased 29 pieces of equipment, mobile lifts, lube reel replacement at Southeast and Central Service Center	√		
1st Quarter 2019	• Working with ITS to enhance network and wi-fi capability, as well as purchase tablets and computers for shop operations		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ Wi-Fi has been installed, new tablets and computers for shop operations deployed, network speed enhanced	√		

Make Workshop Flow Improvements

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Revamp Intake/Outtake Process			
December 2018	4. Hire (6) Service Advisors to engage customers and perform better quality control		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• 4 of 6 Service Advisors hired		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	5. New communication strategy to include automated notifications in M5 to customers on vehicle ready for pickup, (PM) required, etc.	√		
	Change Workorder Management			
December 2018	6. Maintenance Triage to better address customer needs and improve turnaround time		√	
1st Quarter 2019	• Prioritization of maintenance requests at service centers aimed at reducing the need for outside rental of equipment		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• Work order process instructions completed; training for staff to follow		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• Updated preventative maintenance (PM) program to enhance care for newest and critical assets by setting increased maintenance intervals and automated monitoring	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Interlocal Agreement executed with Dallas County to allow the City to be a bonded agent and process vehicle registration renewals for vehicles owned by the City	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• City Council approved revisions to Dallas City Code – Chapter 15D to allow city-owned vehicles at are inoperable to receive emergency wrecker services	√		

Underutilization, Right Sizing & Motor Pool

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Underutilization			
December 2018	1. Identify potential surplus vehicles			√
1st Quarter 2019	• Developing cost avoidance/savings tracker to report metrics		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• Data driven analysis during fleet buy meetings with customer departments to include; outside rental review, demand for replacement of de-fleeted assets and justification for perceived underutilized assets		√	
December 2018	2. Validate mileage, use, and hours in operation of vehicles with low annual mileage as criteria for low utilization			√
1st Quarter 2019	• Review of DWU, PKR, AVI and EFM underway		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ Results included realigning of fleet in PKR to match their operational requirements and decommissioning of equipment in EFM, and specific equipment and vehicles being monitored in DWU for underutilization	√		
2nd Qtr. 2019 – 3rd Qtr. 2020	• Enhance and Increase use of GPS as tool to identify and address underutilization with fleet reductions or pooling of use		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ Working on GPS enhancement project that is funded in FY20-21 that will allow for utilization studies and additional management oversight on use of City vehicles and equipment		√	

Underutilization, Right Sizing & Motor Pool

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Right Sizing			
December 2018	3. Identify options to share vehicles			√
1st Quarter 2019	• Developing vehicle purchase strategy for motor pool to address fleet shortages and seasonality of operational needs and reduce expensive outside rentals		√	
December 2018	4. Determine requirements based on operational needs		√	
December 2018	5. Develop business rules to earn authorizations to validate requirements for fleet purchases or retention of their fleet			√
1st Quarter 2019	• Draft requirements under review		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• Presented draft requirements and documents to Fleet Governance Committee in June 2019, working on changes to AD 6-2		√	
	Increase Motor Pool			
December 2018	6. Identify city facilities for expansion of motor pool		√	
1st Quarter 2019	• Evaluating Jack Evans as potential new location		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ In April 2020, DPD developed a departmental motor pool at Jack Evans HQ utilizing 18 vehicles to reduce use of rental vehicles and evaluate fleet reductions		√	

Technology & Data Quality

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Maximize Use of the Fleet Management System (M5)			
December 2018	1. Enforce requirement to track all vehicles and equipment in M5		√	
December 2018	2. Evaluate implementation of M5 system modules currently not in use		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• Began use of Availability module, revisions to Notification Manager and PM/State Inspection Forecaster		√	
December 2018	3. Integrate with Risk Management System (Origami) on accident data			√
1st Quarter 2019	• Data sharing via system reports and access to M5 being granted to Risk Management		√	
December 2018	4. Offer refresher and on-going M5 training tailored to individual roles		√	
1st Quarter 2019	• DFR had basic M5 navigation training	√		
1st Quarter 2019	• Developing Train-the-Trainer strategy for roll-out city-wide		√	
	Assign staff support to monitor data quality			
December 2018	5. Hire/Train incumbent to fill role of Data Quality Senior Analyst		√	
1st Quarter 2019	• Working with current technology team and ITS to determine if additional support is needed		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	○ Existing resources can and has been utilized to monitor and revise data quality	√		

Technology & Data Quality

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Simplify and automate billing			
December 2018	6. Identify top disparities in lease rates and actual work order totals for transparency and customer service		√	
1st Quarter 2019	• Scheduling follow-up with consultant A&M in second quarter of 2019 on moving to more system-based streamline billing		√	
2nd Qtr. 2019 – 3rd Qtr. 2020	• Determined that EFM would work with AssetWorks and internal resources prior to additional consultant work		√	

FY19-20 Performance Measures

#	Performance Measure	Annual Target/Goal	Oct Data	Nov Data	Dec Data	Jan Data	Feb Data	Mar Data	Apr Data	May Data	Jun Data	Jul Data	Aug Data
1	% of fleet that is replacement eligible	<= 45%	47%	47%	48%	48%	47%	46.7%	46.4%	46.1%	45.6	44.4%	44%
2	% of PM Compliance-Citywide	>=68%	71%	73%	71%	71%	71%	74%	76.4%	78.6%	80%	84%	86%
3	% fleet that uses alternative fuels or hybrid fueling technologies	>=33%	47%	47%	47%	47%	47%	47%	46%	46%	46%	46%	46%
4	% fleet availability – Sanitization Collection (garbage/recycling)	>=80%	76%	74%	72%	73%	72%	73.5%	71%	70.5%	68%	76%	75%
5	% fleet availability DPD marked squad	>=74%	85%	83%	78%	83%	75%	79%	80%	80%	80%	77%	79%
6	% fleet availability -Citywide without DPD marked squad or SAN (garbage/recycling)	>=70%	87%	88%	86%	87%	86%	87.5%	88%	88.7%	89.1%	87.3%	86%
7	% stocked parts fill rate	>=92%	95%	95%	94%	93%	94%	94%	95%	95%	94%	94%	94%
8	% Fleet mechanic vacancy rate (including temporary help)	<=15%	5.66%	4.4%	0.63%	0%	0%	3.79%	0.64%	1.94%	1.94%	8.97%	9.6%

BIT: FY19/20 Fleet Buy, 18 departments with fleet purchase orders submitted totaling 621 units on order.

American Public Works Top 10 Metrics

Availability Since Keeping vehicles on the road is the essential purpose of a fleet services organization, the rate of fleet availability is perhaps the king of all fleet program fleet performance measures. **Many organizations track fleet availability performance by broad classes of vehicles (such as automobiles and light trucks, medium and heavy trucks, etc.) and establish different targets for each class.** A generally accepted benchmark in the industry is to have an availability rate of 95% or better across the entire fleet.

Downtime Decisions as to what constitutes downtime (as discussed above), and factors such as age of the fleet and the mix of vehicle types will have a major impact on the performance the fleet services organization can attain. **As with most of performance measures discussed in this publication, perhaps the greatest value in tracking fleet availability is to chart one's own performance over time.** This way the fleet manager can monitor trends and document the impact that decisions such as a reduction in fleet replacement funding have on a fleet availability.

Source: Top 10 Performance Measure for Fleet Managers
American Public Works Organization, 2016
ISBN978-1-60675-049-0

Preventative Maintenance Program Update

Preventative Maintenance (PM) Program

- **Implemented PM intervals to accommodate usage**
  - Add Mileage to oil change interval
  - Add Hours to oil change interval

- **Set *PM Priorities* for all units in M-5 and ranking Priority Units with highest priority rating**
  - Add sub jobs for newer unit for PMs to ensure services are performed.
  - Designate and Assign Operational Class Codes
  - Align Maintenance Class Codes for Priority and Non- Priority Units
  - PM deviations added to allow flexibility in scheduling

Preventative Maintenance (PM) Program

- **Invest in synthetic blend oils to meet OEM standards for mileage and hours**
  - Oil Analysis
  - Increase inventory of oils to accommodate newer engines
- **Invest in modern equipment to better maintain newer assets**
  - Diagnostic equipment and lifts
- **Actively engaging customer communications to improve *PM Compliance***
  - Automated *PM Jobs Due Report*
  - E-mails to Customers
  - Customer meetings and engagement
  - Developed Department Fleet Coordinator email notification and distribution strategy

Effective PM Management Strategy (Priority Units)

- **Priority Units Defined**
  - All units 2018 and newer
  - All police patrol units
  - Customer defined critical infrastructure assets (future)
- **Priority Units Identified**
  - 980 units 2018 and newer
  - 635 additional patrol units
  - 1615 Qualified as Priority Units (30% of the Fleet)
- **Priority Units PM Program Objectives**
  - Protect City's investment to update and modernize fleet assets
  - Improve *Unit Availability* for using departments
  - Maximize investment in fleet assets within reasonable lifecycle
  - Reduce repair costs

Three Year Comparatives

Comparative Data for Complete PMs, All Fleet as of August 2020

2018 PM Stats	Total	Completed
All Fleet	3,190	67%

2019 PM Stats	Total	Completed
All Fleet	3,553	69%

2020 PM Stats	Total	Completed
Non Priority	2,876	81%
Priority – Patrol Cars	3,307	91%
Priority - Non DPD	1,057	84%
All Fleet 2020	7,240	85%

Future Policy & Operational Decisions

Issues/Operational Concerns

Future Policy & Operational Decisions

- Global Positioning System Implementation
- Electrification of fleet assets
- Buy America concept
- Sedan and SUV choices

Next Steps

- Continue work on action plan in response to consultant recommendations
- Continue to brief GPFM Committee on status of action plan
- Document Council feedback for development of future policy and operational plans

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Appendix

Memorandum

CITY OF DALLAS

DATE November 30, 2018

TO Honorable Mayor and Members of the City Council

SUBJECT **City of Dallas Fleet Management Study**

On December 5, Donzell Gipson, Interim Director of Equipment and Fleet Management, will brief the City Council on the City of Dallas Fleet Management Study conducted by the firm Alvarez and Marsal. The briefing is attached for your review; it will provide an overview of the consultant's findings and recommendations including a status update on the implementation of process improvements.

The complete fleet management study can be found at the following link:

https://dallascityhall.com/departments/budget/financialtransparency/DCH%20Documents/FMS.pdf

If you have any questions on concerns, please contact Donzell Gipson, Interim Director of Equipment and Fleet Management at 214-671-5131 or via email.

M. Elizabeth Reich
Chief Financial Officer

c: T.C. Broadnax, City Manager
Chris Caso, City Attorney (I)
Carol A. Smith, City Auditor (I)
Bilierae Johnson, City Secretary
Preston Robinson, Administrative Judge
Kimberly Bizor Tolbert, Chief of Staff to the City Manager
Jon Fortune, Assistant City Manager
Joey Zapata, Assistant City Manager
Majed A. Al-Ghafry, Assistant City Manager
Nadia Chandler Hardy, Assistant City Manager and Chief Resilience Officer
Directors and Assistant Directors

City of Dallas
Fleet Management Study

City Council Executive Summary

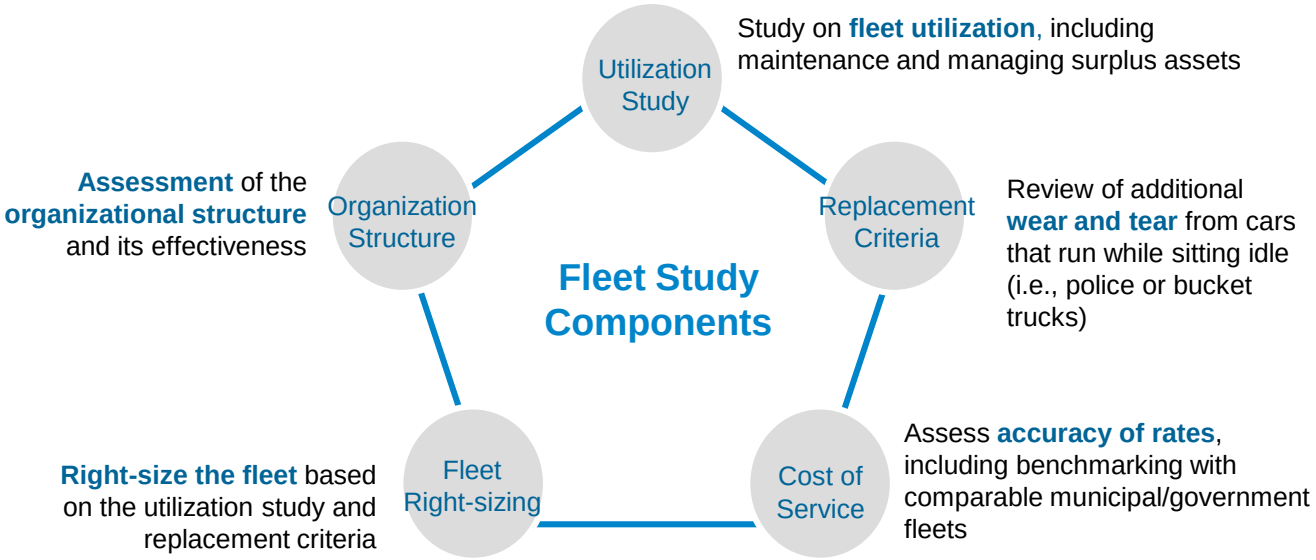
December 5, 2018

ALVAREZ & MARSAL

EXECUTIVE SUMMARY - PROJECT OVERVIEW

The Fleet Study, conducted from May to July 2017, reviewed five key areas: *Cost of Service, Utilization, Replacement Criteria, Organizational Assessment, and Right-sizing*.

- This report contains observations and recommendations made by Alvarez & Marsal (A&M) for the City of Dallas (City) 2018 Fleet Management Study (Fleet Study). The Fleet Study included five categories of review including:



- The objective of the Fleet Study was to assess the operational efficiency of the City's fleet management and operations in Equipment & Fleet Management (EFM) and other Departments that own and/or maintain vehicles, including:

Aviation (AVI)	**Fire & Rescue (DFR)**	**Parks & Recreation (PKR)**	**Police (DPD)**
Public Works (PBW)	**Sanitation (SAN)**	**Storm Water Management (DWU)**	**Water Utilities (DWU)**

EXECUTIVE SUMMARY - PROJECT OVERVIEW

Observations developed through benchmarking research, data analysis and interviews with department leadership and staff, informed A&M's recommendations for efficiency initiatives.

- **The City of Dallas is within benchmark ranges for age, mileage, maintenance, and utilization.**
  - Dallas' average vehicle age is 8.6 years, compared to a nationwide average of 7.9 and a Federal civilian average of 9.4.
  - Average annual mileage of 9,088, is in line with the nationwide average of 9,338 and Federal civilian average of 10,176.
  - Average annual maintenance cost is $8,903/vehicle, compared to $8,616 nationwide and $9,113 for Federal civilian.
  - With 47 vehicle/mechanic (actual headcount) in EFM, slightly higher than benchmarks of 55 – 60 vehicles/mechanic.
  - About 32 percent of total fleet is driven less than 5,000 miles per year, compared to 37% for the best in class benchmark.

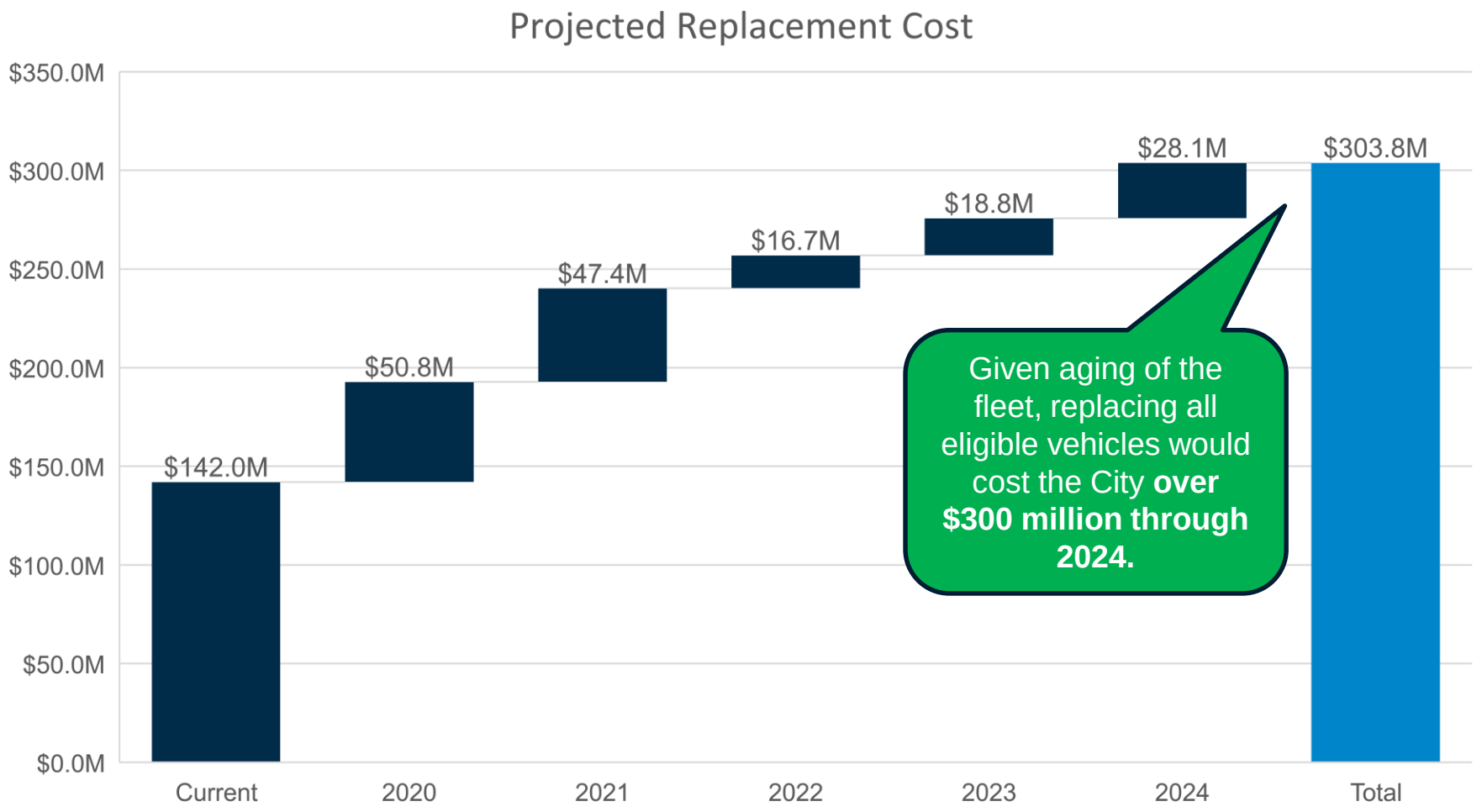
- **The City is challenged by high vehicle downtime, low preventative maintenance compliance, and the need for improved workflow.**
  - Departments experience high vehicle downtime which impacts their ability to operate effectively
  - Data quality issues prevent robust analysis and limit the City's ability to produce accurate reporting to support decision making
  - Vendor selection and management is not aligned to drive ongoing parts fulfillment and outsourcing of repair services
  - Maintenance facility infrastructure and processes lead to inefficient workflow which constrains operations
  - Inconsistent administration of vehicle replacement drives high late-stage maintenance costs and reduces revenue potential when vehicles are surplused.

- **There are several solutions proposed to improve operations.**
  - Improve data quality through regular reporting and enhanced coordination between the Departments and EFM.
  - Streamline maintenance facility workflow, through expanding dedicated bays and vehicle maintenance scheduling.
  - Enhance communication between EFM and customer departments to ensure mechanics repair vehicles effectively and department staff retrieve completed vehicles from maintenance facilities in a timely manner.
  - Establish a permanent Fleet Oversight Committee for input on vehicle acquisition, replacement criteria, and fleet right-sizing.
  - Consider consolidating fleet management operations within EFM to streamline maintenance and administrative processes.

Note: M5 is the fleet management software utilized by EFM to track and manage citywide vehicles and equipment.

REPLACEMENT CRITERIA – REPLACEMENT UNDER CURRENT STANDARDS

In 2019, 1,911 vehicles will be eligible for replacement using the current criteria, with a total cost of $142.0 million. The City faces over $300 million in replacement over the next five years.



NOTE: The projection reflects constant dollar projects without inflation or additional growth estimated included.

REPLACEMENT CRITERIA – REPLACEMENT UNDER CURRENT STANDARDS

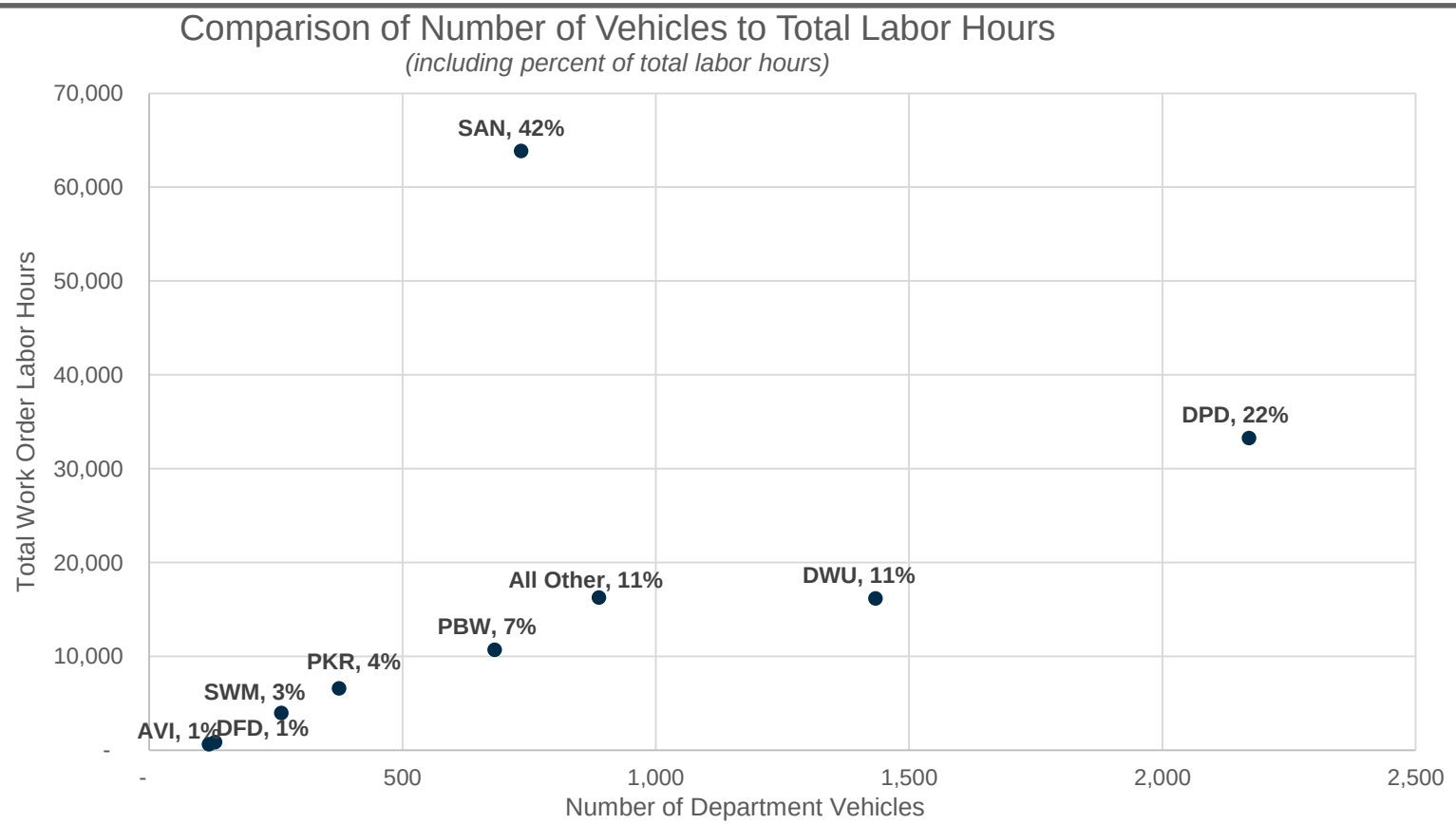
Of the $303.8 million required to replace all eligible vehicles under the current criteria, over $80 million is driven by DFD, with another $120 million driven by SAN and DWU, combined.

	Annual Cost for Replacement Eligible Vehicles						
Department	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Enterprise Fund							
AVI	1,205,398	906,580	377,035	613,720	149,580	216,014	3,468,326
DWU	22,760,316	11,973,917	7,284,957	2,936,976	2,794,734	5,271,307	53,022,209
DWU - Storm Water	5,407,424	3,185,694	2,612,421	203,584	512,126	555,552	12,476,801
SAN	25,473,132	7,713,672	10,259,681	3,050,779	3,117,745	3,600,500	53,215,510
Total Enterprise Fund	54,846,270	23,779,864	20,534,094	6,805,059	6,574,186	9,643,373	122,182,847
General Fund							
DFD - EFM Maintained	756,836	265,924	251,399	375,052	108,359	172,441	1,930,010
DFD - DFD Maintained	43,563,852	713,825	16,005,440	3,563,227	8,975,617	13,660,733	86,482,693
DPD	14,060,457	1,485,292	1,755,134	714,016	656,756	733,968	19,405,623
EFM	5,033,849	1,641,547	920,119	549,877	349,095	601,555	9,096,042
PBW	13,463,416	11,447,052	3,553,192	1,094,368	953,508	1,387,654	31,899,189
PKR	6,745,356	7,089,815	2,505,907	1,462,195	689,515	604,466	19,097,253
All Other	3,518,157	4,350,926	1,889,764	2,121,267	528,918	1,261,820	13,670,852
Total General Fund	87,141,921	26,994,379	26,880,955	9,880,002	12,261,769	18,422,637	181,581,663
Total	**141,988,191**	**50,774,244**	**47,415,050**	**16,685,061**	**18,835,954**	**28,066,010**	**303,764,510**

NOTE: The projection reflects constant dollar projects without inflation or additional growth estimated included.

FLEET MANAGEMENT WORKLOAD – TOTAL LABOR HOURS BY DEPARTMENT

While SAN has the sixth highest number of vehicles, closed work orders represent the highest total labor hours and hours per vehicle. This is likely driven by vehicle complexity.

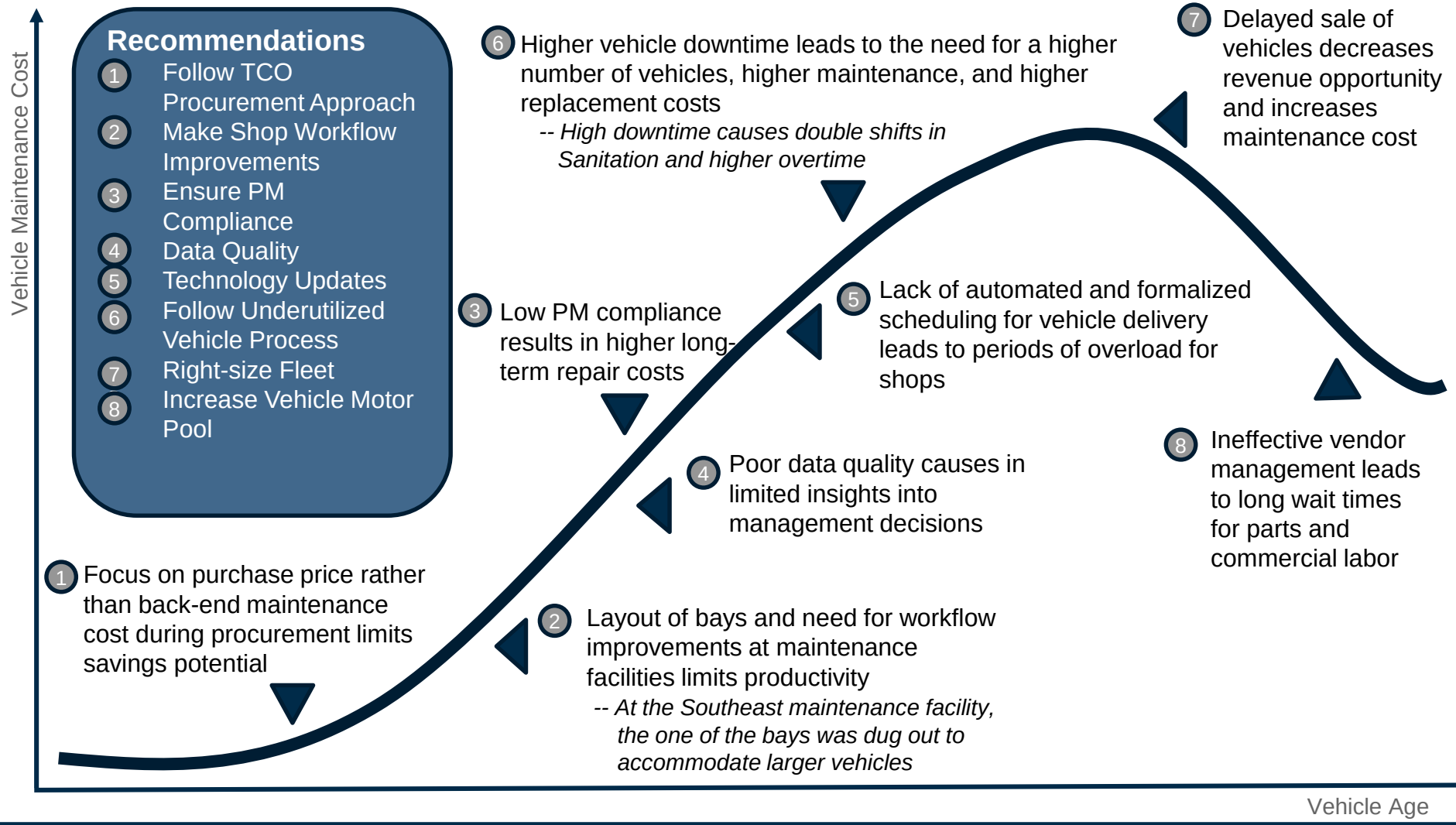


	AVI	DFD	DPD	DWU	PBW	PKR	SAN	SWM	All Other	Total
Total Vehicles	130	118	2,171	1,434	682	375	734	261	888	6,793
Percentage of Vehicles	*1.9%*	*1.7%*	*32.0%*	*21.1%*	*10.0%*	*5.5%*	*10.8%*	*3.8%*	*13.1%*	*100.0%*
Total Labor Hours	861	652	33,285	16,196	10,723	6,608	63,864	3,980	16,270	152,437
Percentage of Labor Hours	*0.6%*	*0.4%*	*21.8%*	*10.6%*	*7.0%*	*4.3%*	*41.9%*	*2.6%*	*10.7%*	*100.0%*
Labor Hours per Vehicle	**6.6**	**5.5**	**15.3**	**11.3**	**15.7**	**17.6**	**87.0**	**15.2**	**18.3**	**22.4**

NOTE: DFD includes only vehicles managed by EFM

EXECUTIVE SUMMARY – DOWNSTREAM CONSEQUENCES

A&M's recommendations are designed to address challenges across the vehicle lifecycle that lead to financial and operational inefficiencies and drive higher overall maintenance costs.



EXECUTIVE SUMMARY – ESTIMATED INVESTMENT AND IMPACT

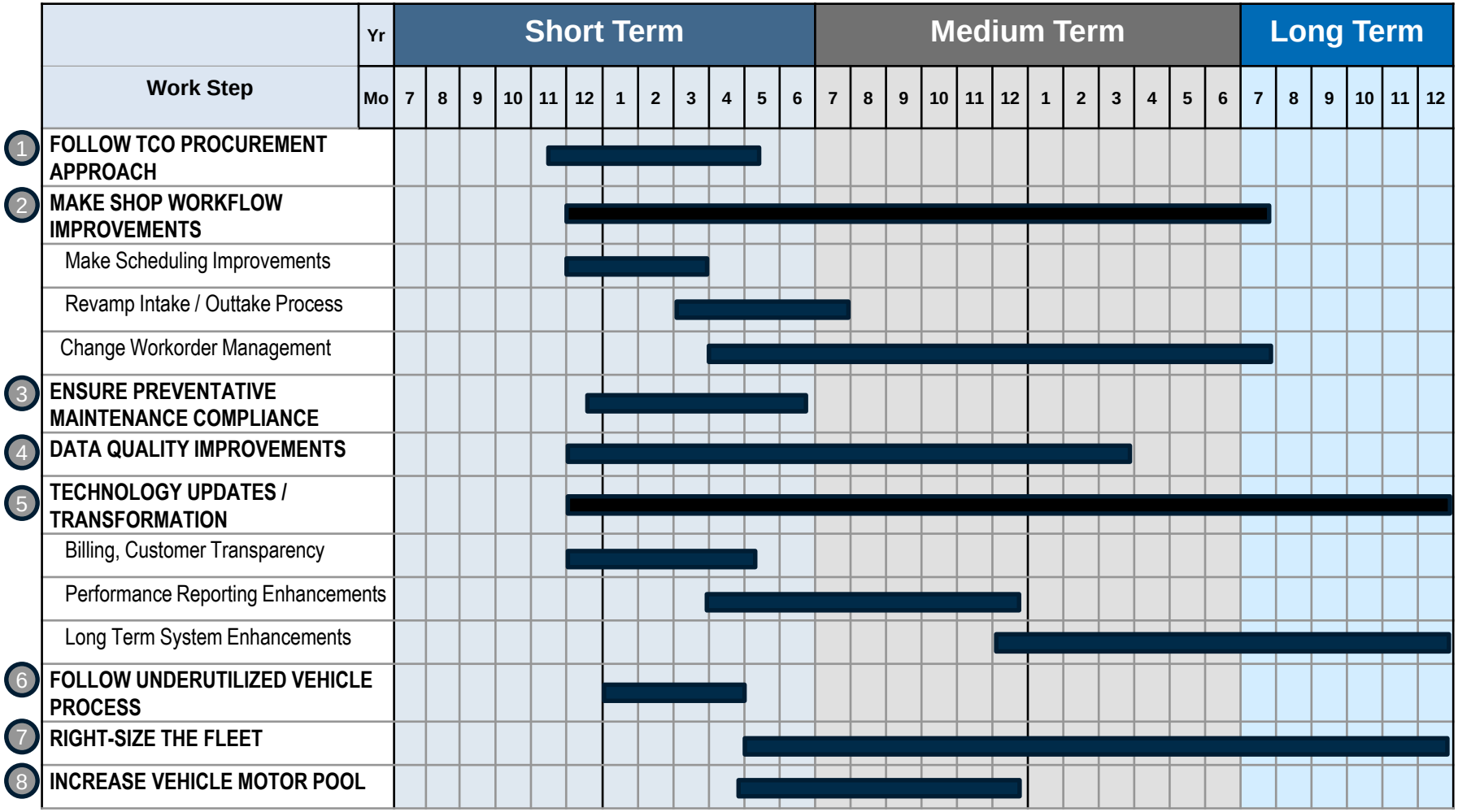
A&M estimated One-Time Investment of $2 million to 3 million to generate Annual Impact of $9 million to $12 million.**

		Est. One-Time Investment (Dollars)		Est. Annual Impact** (Dollars)	
		Low	High	Low	High
1	Follow TCO Procurement Approach	$ 160,000	$260,000	$ 175,000	$ 350,000
2	Make Shop Workflow Improvements	850,000	1,120,000	520,000	1,040,000
3	Ensure PM Compliance	100,000	150,000	290,000	510,000
4	Data Quality Improvements	150,000	230,000	-	-
5	Technology Updates / Transformation	230,000	310,000	160,000	210,000
6	Follow Underutilized Vehicle Process	60,000	90,000	3,660,000	4,870,000
7	Right-size Fleet	140,000	240,000	2,100,000	2,790,000
8	Increase Vehicle Motor Pool	50,000	70,000	2,360,000	3,140,000
	Total	**$ 1,740,000**	**$ 2,470,000**	**$ 9,265,000**	**$ 12,910,000**
	Cost Savings - General Fund			910,385	1,550,125
	Cost Savings - Enterprise Funds			666,023	1,134,047
	Cost Avoidance - General Fund			3,767,441	5,010,696
	Cost Avoidance - Enterprise Funds			3,921,151	5,215,131

**Note: Investment and savings ranges shown above reflect estimates of impacts of A&M recommendations.

EXECUTIVE SUMMARY – IMPLEMENTATION PLAN

The eight key improvement areas require a 24+ month implementation plan



EXECUTIVE SUMMARY – KEY ACTION ITEMS

Key next steps the City must take to improve fleet management fall into five categories – *Establish PMO and Governance Structure, Organizational Changes, Data and Technology, Shop Workflow Improvements, and Agency Communications*

Establish PMO & Governance	✓Establish Project Management Office ✓Establish Fleet Advisory Board ✓Establish Risk Management and Procurement Working Groups
Organizational Changes	✓Conduct staffing and pay scale assessments ✓Hire Service Advisors, Service Technicians, and a Data Quality Analyst ✓Conduct Total Cost of Ownership strategic sourcing exercise to improve pricing and vendor management
Data & Technology	✓Conduct an M5 system assessment to enhance system use and capabilities ✓Require tracking of all assets in M5 to improve data integrity ✓Activate key M5 modules to enhance capabilities and improve coordination with other systems
Shop Workflow Improvements	✓Enhance shop layout and workflow to reduce downtime and increase vehicle availability ✓Restructure work order management and establish quality control function ✓Refresh equipment and infrastructure to drive more efficient vehicle processing and repair
Department Communication	✓Simplify and automate the billing procedures for increased transparency and customer service ✓Incentivize PM compliance and proper user maintenance reduce non-target repair costs ✓Engage departments in regular reporting and analysis of fleet management data

EXECUTIVE SUMMARY – MAINTAINING THE MOMENTUM

The City should engage in four rapid assessments to continue the process of transforming fleet management, and make informed decisions on how to proceed.

Focus Area	Purpose	Timeframe
Procurement / Strategic Sourcing	Evaluate pain points and develop the Citywide requirements analysis to drive procurement for fleet operations	60 days
Billing / Transparency	Revise the City's billing process and integrate the process with M5 to increase transparency and accuracy of billing based on services received by each department.	90 days
Right-sizing	Develop utilization thresholds for each vehicle category and individually review each vehicle that falls below the threshold.	180 days
Mechanic Pay / Compensation	Evaluate the current mechanic compensation structure against the market to ensure that wages and other benefits are competitive and allow the City to attract and retain the best talent.	30 days

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City of Dallas Fleet Management Study

City Council Briefing
December 5, 2018

Donzell Gipson, Interim Director
Equipment and Fleet Management
City of Dallas

Eric Kuhns, Assistant Director
Equipment and Fleet Management
City of Dallas

Purpose/Presentation Overview

- Address consultant recommendations from the Fleet Efficiency Study
- Provide overview and status update on process improvements for Fleet Services
- Upcoming Agenda Items
- Next Steps

What We Learned From the Study

- How little fleet governance we had and what that has cost/caused
- The consultant's approach was an efficient way to align data across departments
- The City did not have an existing enterprise view or sustainable fleet strategy

Process Improvements

- Organizational Assessment
- Follow Total Cost of Ownership (TCO) Approach
- Make Shop Workflow Improvements
- Utilization, Right Sizing, and Motor Pool
- Technology and Data Quality

Organizational Assessment

Consultant Observations		Completed	In-Progress	Next Steps
Hiring				
1.	Develop “Temp” to “Hire” Program	√		
2.	15+ hired and assigned to work at various City service centers	√		
Training				
3.	Modernize Training Program by increasing hands on instruction and utilizing free training opportunities from existing vendors		√	
Employee Compensation				
4.	Address tool/boot allowance and certification pay		√	
5.	Engage Human Resources in the City-wide Compensation Study			√

Follow TCO Procurement Approach

Consultant Recommendation	Completed	In-Progress	Next Steps
Fleet Governance			
1. Establish a Fleet Advisory Board to establish standards		√	
2. Ensure (PM) periodic maintenance compliance		√	
3. Centralize decision making on fleet purchases		√	
Vehicle Procurement			
4. Evaluate the total cost of ownership versus short term initial purchase or operational reliance on rental equipment	√		
5. Determine the most cost effective funding mechanism for fleet purchases	√		
Enhance Outsource Contracting Options			
6. Work with Office of Procurement Services for better specifications and timely execution of contracts		√	

Make Workshop Flow Improvements

Consultant Recommendation	Completed	In-Progress	Next Steps
Scheduling Improvements			
1. Staff realignment by shift and service center	√		
2. Add 3rd shift at the NW Service Center for Sanitation Services Vehicle maintenance	√		
Shop Infrastructure/Equipment			
3. Purchase new shop equipment to increase safety, productivity and diagnostic capabilities		√	
Revamp Intake/Outtake Process			
4. Hire (6) Service Advisors to engage customers and perform better quality control		√	
Change Workorder Management			
5. Maintenance Triage to better address customer needs and improve turnaround time		√	

Underutilization, Right Sizing & Motor Pool

Consultant Recommendation	Completed	In-Progress	Next Steps
Underutilization			
1. Identify potential surplus vehicles			√
2. Validate mileage, use, and hours in operation of vehicles with low annual mileage as criteria for low utilization			√
Right Sizing			
3. Identify options to share vehicles			√
4. Determine requirements based on operational needs		√	
5. Develop business rules to earn authorizations to validate requirements for fleet purchases or retention of their fleet			√
Increase Motor Pool			
6. Identify city facilities for expansion of motor pool		√	

Technology & Data Quality

Consultant Recommendation	Completed	In-Progress	Next Steps
Maximize Use of the Fleet Management System (M5)			
1. Enforce requirement to track all vehicles and equipment in M5		√	
2. Evaluate implementation of M5 system modules currently not in use		√	
3. Integrate with Risk Management System (Origami) on accident data			√
4. Offer refresher and on-going M5 training tailored to individual roles		√	
Assign staff support to monitor data quality			
5. Hire/Train incumbent to fill role of Data Quality Senior Analyst		√	
Simplify and automate billing			
6. Identify top disparities in lease rates and actual work order totals for transparency and customer service		√	

Upcoming Agenda Items

- The December 12, 2018 City Council Agenda includes 1st phase of FY18-19 fleet purchase
- Working with DPD, CIS and City Attorney on changes to tow response for City Fleet
- City to operate as Vehicle Registration agent for Dallas County
- Working with Cedar Valley College on MOU to secure necessary training

Next Steps

Short Term

- Continue discussions with departments about potential underutilized vehicles and right-sizing their assigned fleet

- Expand the motor pool system to increase vehicle utilization thru sharing

Long Term

- Review funding strategy to address replacement eligible vehicles during future budget cycles

Fleet Services Update
(Dallas Fleet Management Efficiency Study)

City Council Briefing
December 5, 2018

Donzell Gipson, Interim Director
Equipment and Fleet Management
City of Dallas

Eric Kuhns, Assistant Director
Equipment and Fleet Management
City of Dallas

Memorandum

CITY OF DALLAS

DATE April 12, 2019

TO Honorable Mayor and Members of the City Council

SUBJECT **Quarterly Fleet Management Study Progress Update**

On December 5, 2018, we briefed City Council on the Fleet Management Study conducted by Alvarez and Marsal. The attached progress report provides a status update through the first quarter of 2019.

If you have any questions on concerns, please contact Donzell Gipson, Director of Equipment and Fleet Management, at 214-671-5131 or via email.

M. Elizabeth Reich
Chief Financial Officer

[Attachment]

c: T.C. Broadnax, City Manager
Chris Caso, City Attorney (Interim)
Bilierae Johnson, City Secretary
Preston Robinson, Administrative Judge
Kimberly Bizor Tolbert, Chief of Staff to the City Manager
Majed A. Al-Ghafry, Assistant City Manager
Jon Fortune, Assistant City Manager
Joey Zapata, Assistant City Manager
Nadia Chandler Hardy, Assistant City Manager and Chief Resilience Officer
Michael Mendoza, Chief of Economic Development and Neighborhood Services
M. Elizabeth Reich, Chief Financial Officer
Laila Alequresh, Chief Innovation Officer
Directors and Assistant Directors

Organizational Assessment

Date	Consultant Observations	Completed	In-Progress	Next Steps
	Hiring			
December 2018	1. Develop "Temp" to "Hire" Program	√		
December 2018	2. Hired and assigned to work at various City service centers	√		
4th Quarter 2018	• 15 temporaries hired and assigned	√		
1st Quarter 2019	• 25 temporaries hired and assigned	√		
	Training			
December 2018	3. Modernize Training Program by increasing hands on instruction and utilizing free training opportunities from existing vendors		√	
1st Quarter 2019	• Chose 8+ Adjunct Trainers to begin curriculum development	√		
1st Quarter 2019	• City-wide Forklift training and shop orientation training for temporaries underway	√		
	Employee Compensation			
December 2018	4. Address tool/boot allowance and certification pay		√	
1st Quarter 2019	• Tool & Boot allowance increased	√		
December 2018	5. Engage Human Resources in the City-wide Compensation Study			√

Follow TCO Procurement Approach

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Fleet Governance			
December 2018	1. Establish a Fleet Advisory Board to establish standards		√	
1st Quarter 2019	• Inaugural meeting held April 8th	√		
December 2018	2. Ensure (PM) periodic maintenance compliance		√	
1st Quarter 2019	• Saturday PM program initiated in February 2019	√		
December 2018	3. Centralize decision making on fleet purchases		√	
1st Quarter 2019	• Administrative Directive 6-02 being revised to reflect the new process		√	
	Vehicle Procurement			
December 2018	4. Evaluate the total cost of ownership versus short term initial purchase or operational reliance on rental equipment	√		
December 2018	5. Determine the most cost-effective funding mechanism for fleet purchases	√		
	Enhance Outsource Contracting Options			
December 2018	6. Work with Office of Procurement Services for better specifications and timely execution of contracts		√	
1st Quarter 2019	• OEM master agreement out for bid for refuse parts/service to address gaps in Sanitation maintenance		√	

Make Workshop Flow Improvements

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Scheduling Improvements			
December 2018	1. Staff realignment by shift and service center	√		
1st Quarter 2019	• Adding additional Saturday shifts at service centers to support customer demands		√	
December 2018	2. Add 3rd shift at the NW Service Center for Sanitation Services Vehicle maintenance	√		
	Shop Infrastructure/Equipment			
December 2018	3. Purchase new shop equipment to increase safety, productivity and diagnostic capabilities		√	
1st Quarter 2019	• Developed prioritized list and identified funding and currently making purchases from master agreements		√	
1st Quarter 2019	• Working with CIS to enhance network and wi-fi capability, as well as purchase tablets and computers for shop operations		√	
	Revamp Intake/Outtake Process			
December 2018	4. Hire (6) Service Advisors to engage customers and perform better quality control		√	
1st Quarter 2019	• Positions are posted. Candidates under review. Shop roles and responsibilities being updated.		√	
	Change Workorder Management			
December 2018	5. Maintenance Triage to better address customer needs and improve turnaround time		√	
1st Quarter 2019	• Prioritization of maintenance requests at service centers aimed at reducing the need for outside rental of equipment		√	

Underutilization, Right Sizing & Motor Pool

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Underutilization			
December 2018	1. Identify potential surplus vehicles			√
1st Quarter 2019	• Developing cost avoidance/savings tracker to report metrics		√	
December 2018	2. Validate mileage, use, and hours in operation of vehicles with low annual mileage as criteria for low utilization			√
1st Quarter 2019	• Review of DWU, PKR, AVI and EFM underway		√	
	Right Sizing			
December 2018	3. Identify options to share vehicles			√
1st Quarter 2019	• Developing vehicle purchase strategy for motor pool to address fleet shortages and seasonality of operational needs and reduce expensive outside rentals		√	
December 2018	4. Determine requirements based on operational needs		√	
December 2018	5. Develop business rules to earn authorizations to validate requirements for fleet purchases or retention of their fleet			√
1st Quarter 2019	• Draft requirements under review		√	
	Increase Motor Pool			
December 2018	6. Identify city facilities for expansion of motor pool		√	
1st Quarter 2019	• Evaluating Jack Evans as potential new location		√	

Technology & Data Quality

Date	Consultant Recommendations	Completed	In-Progress	Next Steps
	Maximize Use of the Fleet Management System (M5)			
December 2018	1. Enforce requirement to track all vehicles and equipment in M5		√	
December 2018	2. Evaluate implementation of M5 system modules currently not in use		√	
December 2018	3. Integrate with Risk Management System (Origami) on accident data			√
1st Quarter 2019	• Data sharing via system reports and access to M5 being granted to Risk Management		√	
December 2018	4. Offer refresher and on-going M5 training tailored to individual roles		√	
1st Quarter 2019	• DFR had basic M5 navigation training	√		
1st Quarter 2019	• Developing Train-the-Trainer strategy for roll-out city-wide		√	
	Assign staff support to monitor data quality			
December 2018	5. Hire/Train incumbent to fill role of Data Quality Senior Analyst		√	
1st Quarter 2019	• Working with current technology team and CIS to determine if additional support is needed		√	
	Simplify and automate billing			
December 2018	6. Identify top disparities in lease rates and actual work order totals for transparency and customer service		√	
1st Quarter 2019	• Scheduling follow-up with consultant A&M in second quarter of 2019 on moving to more system-based streamline billing		√	