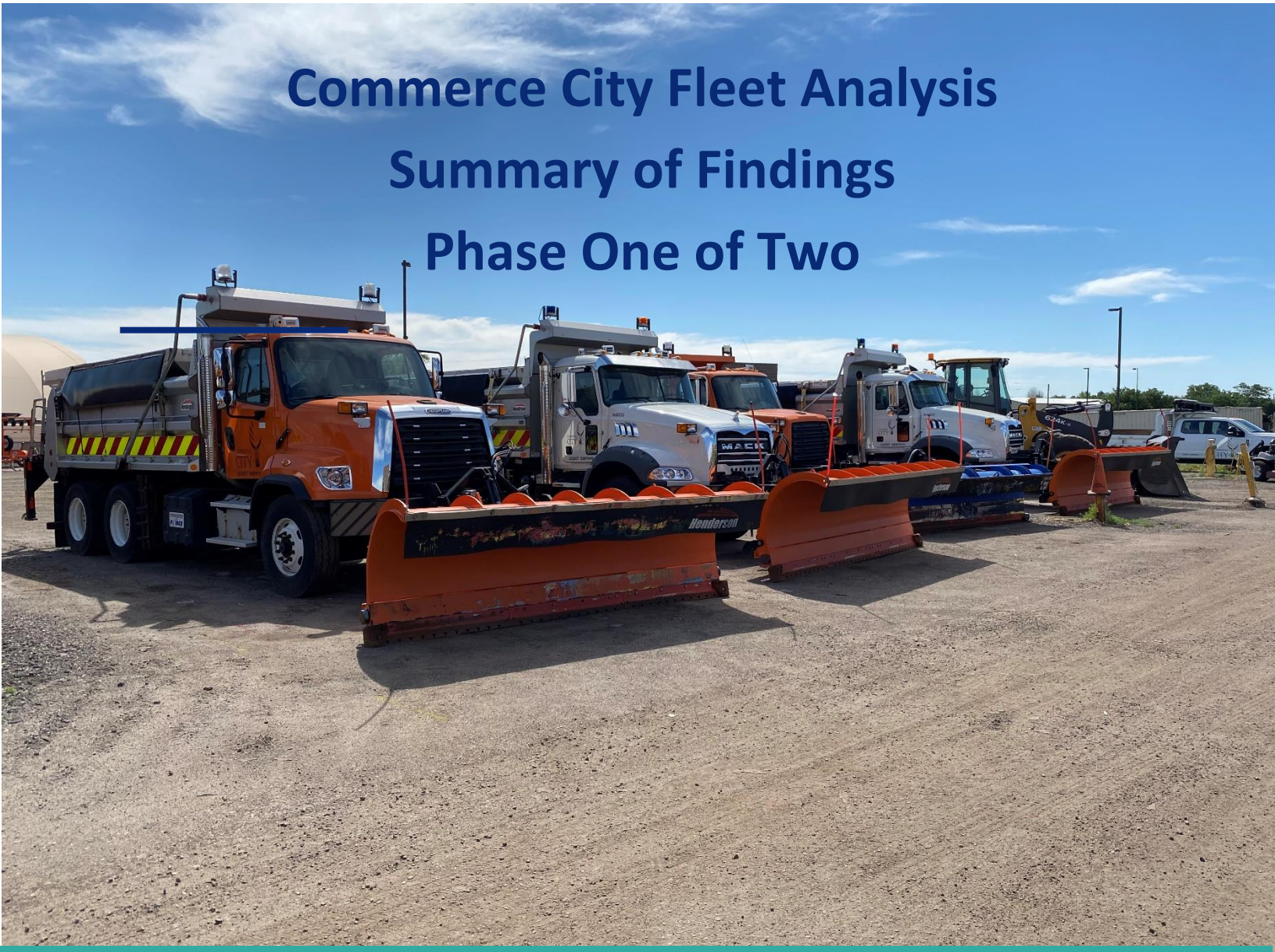
Commerce City Fleet Analysis
Summary of Findings
Phase One of Two



July 29, 2022

Presented by: Fleet Innovative Technology Systems LLC
616 Silver Circle
Westcliffe, CO 81252

July 29, 2022

City of Commerce City
Public Works
7887 East 60th Avenue,
Commerce City, CO 80022

Fleet Innovative Technology Systems (FITS) contracted with the city of Commerce City to conduct a Fleet Analysis Late-June 2022.

FITS prides itself in the Fleet Industry as a small firm that delivers big results. We provide innovative and creative solutions that provide our customer's options for transforming fleets into cost saving, sustainable solutions that meet the needs of these departments while providing the best possible services to the public.

Rego Omerigic is founder of FITS, having over 35 years' experience. He has dedicated his entire career to Fleet Management and is a member of several leading organizations including the National Association of Fleet Administrators (NAFA) and the Emergency Vehicle Institute. Prior to founding FITS, Rego held positions as the Fleet Director for several city, county, and federal agencies.

Rego started consulting and Fleet Management services in 2012, and since then the company has completed numerous Fleet Studies and Fleet Analysis for both private and governmental agencies including: a Fleet Study and use analysis related to alternative fuels for United States Department Agriculture, a Fleet Analysis for the Department of Interior, provided Fleet consultations to the Town of Basalt, Sopris Fencing Corporation and continues to work with a wide range of private and government organizations in the Fleet Management Sector.

FITS will have a team of four personnel working on this project. A list of key personnel is shown in Exhibit A.

This summary report is phase one of a two phase process conducted by Fleet Innovative Technology Systems (FITS) and includes information for review and discussion with city staff and stakeholders. All observations and recommendations contained in this summary report are from data provided by the city, on-site visits, interviews with key employees and stakeholders, and physically evaluating vehicles and equipment. All items in this report are intentionally designed to facilitate discussions that will improve the overall effectiveness and efficiency of the city's Fleet Division. The recommendations contained in this report are based on research and knowledge of industry standards and best practices that are used in standard fleet management processes.

Note that in many cases the complete context of the recommendations cannot be fully explained in this brief overview and will be expanded upon in phase two after this report is reviewed by city staff. To facilitate and implement the recommendations in this report and guide the long-range planning in phase two of this process it will be important to sequence in a logical and financially feasible manner that will meet the needs of the city. We are confident that the recommendations included in this report will augment the fleet division's ability to provide quality fleet management services to the city. Implementing these recommendations will require careful coordination and attention from the leadership as well as support from departments and city administration.

Thank you for the opportunity to present this study.

Sincerely,
The FITS team

Fleet Composition and Inventory

The Fleet Management Division is responsible for maintaining the city's vehicles and equipment and for providing recommendations on the purchase of new or replacement vehicles and equipment. The Fleet Management Division currently maintains an inventory of 787 fleet units including 234 over the road vehicles, 13 pieces of heavy equipment and 491 pieces of light equipment that include small maintenance and construction equipment such as grounds keeping equipment and handheld tools, trailers, and attachments.

The original acquisition value of these assets is over 15.5 million dollars, but an exact figure is unknown due to lack of consistent data from FASTER and Tyler software systems. The vehicles and assets managed by the Fleet Division have a major impact on the city's greenhouse gas score and the city does not own or operate a single hybrid or alternative fueled unit.

Utilization Standards

Utilization parameters may be set by vehicle class or by individual unit. Utilization numbers can be acquired by polling other fleets of similar size, composition, municipal setting, and function. Most of the usage data shall be from historical fleet records such as analyses of usage patterns for a class or unit for a period of two to four years. The department class usage patterns may be further separated to compensate for seasonal usage peaks and valleys. Utilization must be evaluated from a mileage, fuel consumption, hour meter reading, and monthly or yearly assignment basis.

When utilization is not available from normal usage input sources such as fueling, odometer, or hour meter updates, departments may have to be contacted for usage updates.

Most departments have special application units that can be excluded from analysis, such as a lift truck for street light maintenance or emergency vehicle used on an unforeseen incident, but all such units should come under scrutiny at least once in a yearly budget cycle. The analysis should include alternatives to owning the unit, such as arranging a short-term rental or lease, contracting for short-term service with another department that owns a similar unit, or utilizing a contract vendor to perform the service. The unique needs and characteristics of the departments should be kept in mind. The city needs to develop usage standards that meet the needs of the departments, and citizens of the community. The following 4 tables show utilization standards from other agencies.

Utilization Standards from other Governmental Agencies

Vehicle/Equipment Type	Minimum Utilization (Annual Mileage or Hours)	Minimum Utilization (Days per Year)
Passenger carrying vehicles – sedans, station wagons, vans, buses	10,000 mi	96 Days
Light 4x2 trucks (< 10,000 GVWR)	7000 mi	96 Days
Light 4x4 trucks (< 10,000 GVWR)	7000 mi	96 Days
Light 4X2 carryalls, cargo vans and SUV's (<10,000 GVWR)	7000 mi	96 Days
Light 4X4 carryalls, cargo vans and SUV's (<10,000 GVWR)	7000 mi	96 Days
Medium trucks (10,001 to 20,500 GVWR)	6000 mi	72 Days
Heavy trucks (>20,501 GVWR) and all other heavy equipment	6000 mi or 400 hrs. annually.	72 Days

Source: GSA non-DOD vehicles part 41 CFR-101-39.301 DEC-1993 Revised Dec 2021

Vehicle Type	Years	Miles
Sedans	3	36,000
Pickup Trucks	7	60,000
Medium Trucks	10	100,000

Source: Department of Interior Motor Vehicle Management March 2020

Vehicle Type	Years	Miles
Pickup Trucks	7	100,000
Dump Trucks	7-10	150,000
Backhoes/Loaders/Graders	7-10	150,000 or 3500 hours

Source: American Public Works Association Vehicle Replacement Guide 2nd addition 2021

Vehicle Type	Years	Miles
Pickup Trucks	7	80,000
Light Dump Trucks	7	80,000
Heavy Dump Trucks	7	80,000
Utility Trucks	7	80,000
Street Sweeper	7	90,000
Backhoes	8-10	N/A
Front End Loaders	8-10	N/A
Tractors	6-8	N/A

Source: Federal Standard Vehicle Replacement Schedule Feb 2022

The city has a very wide and diverse structure of vehicles so use standards are calculated by both the class and the intended use of the vehicle, for example a sedan in an administrative role will have a different use standard from a sedan used in Police patrol.

The standing city fleet inventory is summarized in the following table by unit type.

Functions	Over the Road	Over the Road "Utilized"	Heavy Equip	Light Equipment	Trailers
Community Development	6	0	0	0	0
Building Dept	5	4	0	0	0
City Manager	3	1	0	0	0
Housing	1	0	0	0	0
Neighborhood SVC	6	1	0	0	0
Police Admin	17	11	0	0	2
Police AC	6	2	0	0	1
Police Det	21	9	0	0	0
Police Patrol	56	48	0	0	6
Parks Rec Admin	12	2	0	0	0
Parks Rec Golf	1	0	0	2	0
Parks Maint	42	11	5	165	21
Public Works Admin	1	0	0	0	0
Public Works Engineering	7	3	0	0	0
Public Works Facilities	5	5	0	0	0
Public Works Fleet	3	1	1	1	0
Public Works Streets	42	8	7	89	19
Totals	234	106	13	491	49

DEFINITIONS:
Over the Road – Anything registered/licensed as a highway legal vehicle
Utilized – generally meets a prescribed mileage/hourly standard for usage
Heavy Equipment (examples) – Loader, backhoe, grader, skid steer, etc.
Light Equipment (examples) - ride-on mowers, sand-pro, etc.
Trailers – tow behinds (hauls light equipment)

NOTES:

- 128 “Over The Road” vehicles are underutilized by a combined estimate of 40+%
- 12 pieces of heavy equipment are underutilized.
- Average age of over the road fleet is 5 years
- Average age of heavy equipment is 8.4 years
- 3 out 15 large tandem dump trucks are utilized, most dump trucks sit all summer with little use – these vehicles are primarily for snow removal operations

Factors Influencing Low-Use Vehicle Retention

- **Emergency Response & Special Needs:** During interviews, some departments referenced that they maintain depth in some vehicle and equipment classes specifically for emergency response or special needs. For example, a lift truck in public works with low use is needed to provide the basic services that they are required to accomplish.
- **Staffing Levels:** During interviews, some departments have stated that staffing levels are very low, and they are reluctant to release vehicles in hopes of hiring and retaining employees.
- **Covid:** The recent pandemic has changed the process how employees work, meet and accomplish needed tasks. Some departments believe the remote work environment will gradually transition back to traditional levels and other departments believe a permanent shift in working remote will stay long term.
- **Funding Allocations for New and Replacement Equipment:** Operating departments believe vehicle replacement funds are uncertain from one year to the next, so they feel compelled to retain some vehicles rather than dispose of them if replacement funding is reduced. Moreover, some departments hold onto low-use vehicles as a “placeholder” because it is much easier for departments to replace a vehicle than to add a new vehicle if mission requirements change.

Some changes are necessary to enhance the level of service provided to the fleet management division customers and transform the role of the division in managing the city fleet. A list of recommendations is below for review, refinement, and discussion.

First, the city must take steps to manage the size and composition of its fleet aggressively and consistently. Once the size of the city fleet is addressed, the focus will

shift toward implementing policies and processes to manage the use, procurement, and retention of the fleet proactively and collaboratively.

The following table summarizes those recommendations.

Summary of Recommendations

Section	Recommendation
Utilization	Remove from service and auction underutilized vehicles, convert others to hybrid or alternative fuels. Set policy and procedures for use.
Pool vehicles	Create a motor pool and vehicle check out system at each city location and or departments.
Fleet Composition Right-sizing for function	Change size of vehicle from trucks/SUV to compact or sedans. The city has 140 trucks, and some may be transitioned to smaller vehicles.
Shared Assets	Some underutilized vehicles are of the same class and utility and could be shared or loaned between departments.
Use of Alternatives	Uber, Lift, Telework, POV use, driver behavior.
Outsource	Contract work for ongoing tasks i.e., grading, pavement, or asphalt work.
Renting Vehicles and Equipment	Renting vehicles and equipment for known tasks can be utilized with proper planning.
Procurement	Change the vehicle replacement fund to capture resale values and limit the amount of holdover vehicles, i.e., the money received from the sale of vehicle needs to be captured for that replacement vehicle. Vehicles slated for auction need to be auctioned and not held for another department without justification.
Guaranteed Buyback Options	Use guaranteed buyback options for city-owned heavy equipment when applicable.

When evaluating the utilization, the entire group needs to look at the following.

1. **The right quantity** – Does the City have the right quantity of vehicles, i.e., not too many and not too few?

2. **The right location** – Are the vehicles available where they are needed? If the city has vehicles yet they are not readily accessible at the location where the work or the drivers are located, then vehicles are effectively not available. Alternatively, if a seldom used class of vehicle is accessible just a short distance away, perhaps that class of vehicle is not needed at each fleet location. There are some pieces of equipment that are so vital to supporting a mission, that they are critical at more than one location, such as people movers used at one or both recreation centers
3. **Right type / class** – Does the city have the right type or class of vehicle? Is the size and utility correct for the intended use to complete a task or duty?
4. **The right time** – Do drivers have access to vehicles at or when they are needed? If a motor pool is created can vehicles be used on weekends or after hours? Drivers need access to vehicles at the time the job needs to be completed. One department may have idle vehicles on certain days while other departments have the need to use them. The peak needs for vehicles across departments need to be considered.

Fleet Management Information System

The fleet information and tracking software used at the city is FASTER. It is a robust and powerful application used in many large fleet applications including a significant amount of government and municipal settings. It has been in use for over 40 years and provides one of the best tracking and information systems used by fleet managers, business analysts and accounting professionals.

During site visits and preparing data downloads it became apparent the system is not being utilized as intended and made for extensive hours of research incorporating other data from Tyler Technologies used in finance and custom-made spreadsheets used in human resources risk management. The lack of tracked labor or inaccurate labor in the system is making the true cost per mile and life cycle analysis of the vehicles and equipment unusable. Missing financial information, lack of in-service dates and inconsistent classification codes are causing delay in the analysis of depreciation and use parameters needed to conduct cradle-to-grave costs on vehicles and

equipment. The FASTER system needs to be managed and used as the primary place holder for a master list of vehicles and equipment that can be used not only for fleet management but also used in finance and human resources for budget and insurance purposes. Training for fleet technicians should take place on the use of FASTER within the labor and parts record modules.

The following table recommends changes in the use, training, and data management within the FASTER system.

Discrepancy	Recommendation
Recording Labor	Tracking and recording labor on each work order for every piece of equipment is paramount. The use of tablets at technician workstation may be helpful along with training modules in the FASTER network.
Sublets	Sublets or outsourced work needs to be recorded with parts, labor and preferably a copy of the invoice downloaded to the work order.
Class Codes	Some of the class codes are based by function and not true vehicle classification and may need to be changed.
Vehicle and Asset Numbers	The asset number created in Tyler needs to be used on the equipment master section. All the data in FASTER and Tyler need to match and be updated as needed.
Parent Child Relationship	This module in FASTER will help track add-on items such as plows, sanders and equipment purchased with the unit.
Hours and Miles	Some units have an hour meter and an odometer and both need to be recorded and updated when work orders are complete. Use the secondary meter box.
Main Equipment Screen	On some units the in-service date, purchase price, year, make, and model are listed as unknown or left blank. More detail in the description box would help identify equipment. This will greatly facilitate insurance reporting and updates with CIRSA annual reviews.
Reporting	Quarterly reports should be pulled and distributed to department users for review and to identify usage and total costs. This will bring needed equipment ownership and transparency agency wide.

Motor Pool Module	If the city decides to use motor pools at various locations, the Motor Pool Module should be installed and utilized.
Admin Privileges	A minimum of two people should have administrative privileges for needed data administration in the system. Extensive training may be required.

Procurement

Lease of Vehicles and Equipment

A lease may not be right for every situation, but for agencies or departments that are seeking new ways to stretch limited budgets, it can reduce or eliminate annual payments into the vehicle replacement fund. Lease Purchasing is a cultural shift for some government agencies and usually focus on high level expenditures such as heavy equipment that can cost upwards of $300,000-$400,000.

Some other advantages include using the capital in other areas such as operations or core functions of the agency. It allows the equipment to be replaced on time or when needed reducing operation costs from extended maintenance on older equipment and the time value of money is saved as prices of equipment may increase 4%-6% per year.

Some drawbacks of a lease include the city-required contract clauses requiring limitations on year-to-year budget appropriations. Those clauses are not attractive to leasing companies and may cause higher rates. A lease may complicate the bidding process for the equipment needed.

Leasing is a great tool for short term when capital funds are not sufficient to maintain a stable fleet of vehicles but always cost more in the long term. Governmental agencies are offered the same or lower price incentives from the manufacturers that are offered to large volume purchasers such as leasing and rental companies. See Exhibit B.

After evaluating the lease agreement on city vehicles and extensive research of past and present financial conditions of the city annual budget appropriations, we have determined that in the long-range efforts of the agency, purchasing vehicles will create

a more attractive and financially stable fleet of vehicles. A hybrid of leasing and purchasing may need to take place over a period determined from attrition of vehicle life span. In today's worldwide vehicle shortage, it may be an advantage to have full control of your vehicle fleet. Resale markets are at the highest level in history and the city may have options for substantial gains when remarketing used and excess units.

Leasing is costing the city 12%-30% more compared to State Bid price agreements and total cost per mile is elevated relative to the increased purchase price.
We have attached spreadsheet related to cost comparison and cost per mile for your review. See Exhibit C.

Guaranteed Buy Back Purchasing

Some of the City's heavy equipment sees low hours or limited use but is a mission-critical piece of equipment that must be on hand and ready to use when needed. This includes loaders, backhoes, skid steers, and some tractors. Cycling this type of heavy equipment on 2, 3, or 5 year guaranteed buy-back options has many advantages including: the piece of equipment is always under warranty and does not require any expensive repairs; the city is guaranteed a set buyback price from the manufacturer and lowers the risk for needed capital expediters; the city can take advantage of new equipment types that consume less fuel and have better emissions; equipment that is no longer needed can be returned to the manufacturer for the guaranteed price and not repurchased; the elimination of administrative processes such as bidding, sending out request for proposals and auctioning off older equipment; and commitment from the manufacturer for product support.

Some of the drawbacks for Guaranteed Buyback Purchasing programs include:
the piece of equipment must stay within agreed hours of use; the equipment must always be in good working order; and the city must have the capital for the first purchase during the contract.

We recommend the following actions.

- Investigate Guaranteed Buyback Options for city-owned heavy equipment when applicable.

Renting Vehicles and Equipment

The city has some pieces of equipment that are needed but have limited or seasonal use applications. Renting would relieve any maintenance charges, allow for access to the latest models and less administrative work for vehicle management.

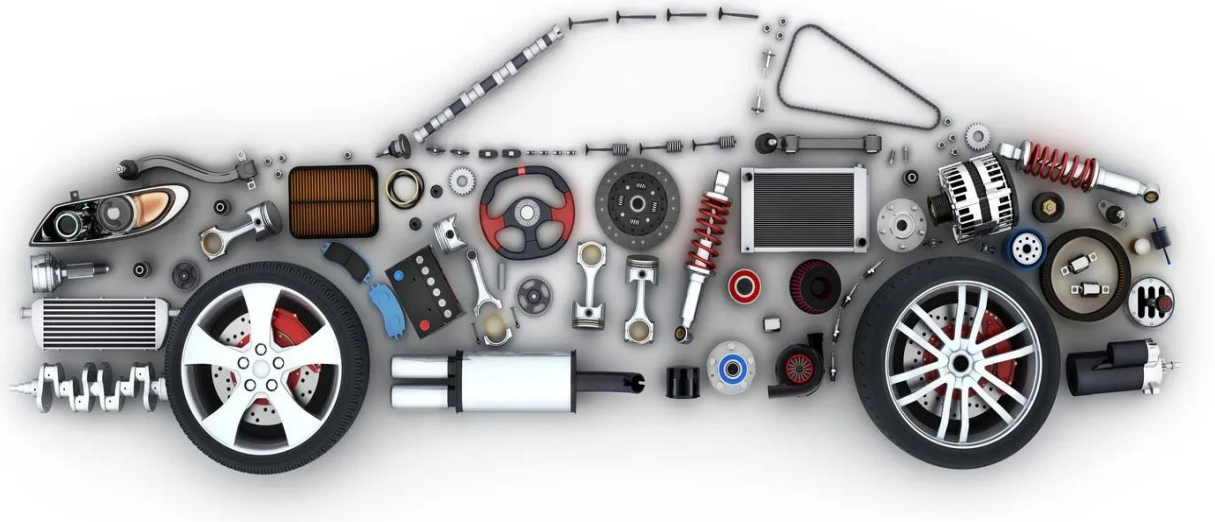
The drawback of renting would be limitations on miles and wear and tear limitations.

Methodology

The methodology used in this study include the following elements:

- **Benchmarking and Performance Measurement.** We used performance measurement techniques in this study to quantify suitable industry and internal benchmarks. The process included activity-based costing, cost per vehicle equivalent analysis, fleet use analysis, life cycle cost analysis, utilization standards and performance measurements.
- **Business Process and Document Guidance**. One of the components used to evaluate processes and procedures and find ways to improve quality is evaluating the Fleet Standard Operating Procedures and Policies provided by the fleet department and the city police department. This involved: 1. How the procedures and processes are formally defined, 2. Consistency with industry best practices, 3. Compliance with regulations, and 4. Nature of the actual execution and holding employees accountable for using them.
- **Analysis of Quantitative Data**. Information was pulled from the fleet database FASTER, finance database Tyler Technologies and data provided to CIRSA from HR Risk Management.
- **Interviews**. We conducted interviews and had meetings with frontline city staff and departments including Fleet and Facilities, Police, Parks and Recreation, Finance, and Human Resources. We contacted outside agency members including Enterprise Fleet, Lotus Engineering and Sustainability and State of Colorado bid award members for vehicles and equipment price agreements. We conducted random spot checks on vehicles and equipment at city owned buildings to check accuracy of data driven by Faster.

Fleet Innovative Technology Systems "FITS"



Fleet Innovative Technology Systems FITS

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Exhibit A

Fleet Innovative Technology Systems

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Key Personnel

Rego Omerigic is founder of Fleet Innovative Technology Systems (FITS) the company's Team Leader. He has over 33 years in the Fleet Industry, Rego has worked with and for numerous government organizations and has been a public servant. He has conducted presentations on fleet management for the American Public Works Association, the USDA Forest Service, the Bureau of Land Management; conducted research studies for USDA Forest Service Eco Fleet and Drive Team and US Sustainable Operation Coalition; and served as a board chair for the Eco Fleet and Drivers Team. He also has completed fleet studies and fleet analysis consultations for private, governmental, and not profit organizations. He has developed written policies and guidelines used in the fleet industry for governmental organizations.

Prior to founding FITS, Rego held positions as Director of Fleet Management for USAD Forest Service, Fleet Director for Pitkin County Colorado, and Grand Junction Regional Airport. He holds degrees from Colorado Northwestern in Aviation Management and Maintenance.

Ashlee Trejo is the Business Manager for FITS, she steers the day-to-day coordination and clerical operations for FITS and the Clients we serve. Prior to joining FITS, Ashlee was an administrative data manager for health care institutions and develops and managed social media platforms for health care professionals. She holds a Bachelor of Arts in Interdisciplinary Studies with concentrations in Technical Communication, from Colorado State University.

Wade Montano is the technical IT Specialist/Engineer, he works behind the scenes for FITS and the customers we serve in software and hardware installations, operating systems, spreadsheet applications, troubleshooting, networking, and advanced database manipulation. Wade maintains the accuracy and quality of data we review from client's and formats all the internal and external organization data. He is a key specialist that oversee the maintenance, backing up, and securing of data from Fleet Information Systems, as well as retrieving files from client's when needed.

Denise Gergen is the external data base miner and the Geographic Information Specialist (GIS) for FITS. She manages geo fencing and vehicle tracking services for clients and assist those organizations that use vehicle tracking software connected to GIS platforms. Prior to FITS Denise worked as a GIS specialist for the Bureau of Land Management and US Forest service. She holds a cartography degree from Colorado University Boulder.

Exhibit B

STATE BID VERSUS LEASE

Colorado State Bid Price Agreement

Body Code Description	Price Agreement Number	Dealer	Make	Model	Base Price	Miles Per Gallon		*Turn Key up-fit cost*	***Total Vehicle Cost***
						City	Highway		
Pass Util Medium AWD Patrol 2020 Ford Intercepter Utility	142084	Sill TerHar Jon Hansen 303-588-3052	Ford	2020 Intercepter Utility	$44,250	15	18	$12,350	$56,600.00
Pass Util Medium Hybrid AWD Patrol 2020 Ford Intercepter Utility	142084	Sill TerHar Jon Hansen 303-588-3052	Ford	2020 Intercepter Utility Hybrid	$43,500	23	24	$12,350	$55,850.00

Fleet Allocation phase 1.3 2021 Budget from Comerce City Finance

Department	Replacement Asset Number	Driver**	Delivery Date	VIN	Make	Model	Lease Term	End Month	Months In Service*	Delivered Price
2017/2018 Budget Adds										
PD-P	1080		Ordered			PD Outfitted Utility Police Interceptor			48	$83,256.64
PD-P	1081		Ordered			PD Outfitted Utility Police Interceptor			48	$83,256.64

Exhibit C

LEASE PURCHASE COST COMPARISON

Unit #	Year	Unit Description	Price New	Dept	Odo Type	MILES/HR TYPE	Maint/Fuel	CPH/M	CPM/Maint	Avg Miles	Meets Utilization	% of Cost	Cost Per Mile Year	Utilization	Age
2137 Leased	2018	Chevrolet Tahoe	$47,290	PD-A	M	48,896 OTR	$0.00	$0.97	$0.00	12224	TRUE	0.0%	$11,822.46	7000	4
State Bid	2018	Chevrolet Tahoe	$36354	PD-A	M	48,896 OTR	$0.00	$0.74	$0.00	12224	TRUE	0.0%	$9,088.50	7000	4
		Procurment savings	**$10,936**				Cost per mile savings	**$0.22**					**$2,733.96**		
2127 Leased	2018	Ford F250	$41,820	PD-A	M	31,611 OTR	$0.00	$1.32	$0.00	7903	TRUE	0.0%	$10,455.07	7000	4
State Bid	2018	Ford F250	$26,107	PD-A	M	31,611 OTR	$0.00	$0.83	$0.00	7903	TRUE	0.0%	$6,526.75	7000	4
		Procurment savings	**$15,713**				Cost per mile savings	**$0.50**					**$3,928.32**		
Lease	2018	PD Outfitted Utility Police Interceptor	$83,257	PD-P	M	26,234 OTR	$0.00	$3.17	$0.00	6559	FALSE	0.0%	$20,814.16	12000	4
State Bid	2018	PD Outfitted Utility Police Interceptor	$56,697	PD-P	M	26,234 OTR	$0.00	$2.16	$0.00	6559	FALSE	0.0%	$14,174.25	12000	4
		Procurment savings	**$26,560**				Cost per mile savings	**$1.01**					**$6,639.91**		