Appendix 1

2021

CORPORATE ASSET MANAGEMENT PLAN

Saskatoon Fleet Services

We invest in what matters...financial and physical resources under our care are used to address the needs of citizens today—and tomorrow.

City of Saskatoon

INTRODUCTION

The City's Fleet Services (Fleet) group is part of the Roadways, Fleet and Support Department within the Transportation and Construction Division. The services provided by Fleet include maintenance, repair, replacement, purchasing and leasing of vehicles and equipment.

Fleet is funded through revenue generated from rental rates that are charged to Civic Departments and Boards.

Rental rates are reviewed and adjusted to ensure sufficient funding is available for timely replacement of vehicles and equipment in accordance with their service life expectancy.

At the current funding level, Fleet is positioned to replace vehicles and equipment according to the assigned life cycles.

The City's active fleet assets are estimated to have a replacement value of

$112.7 million.

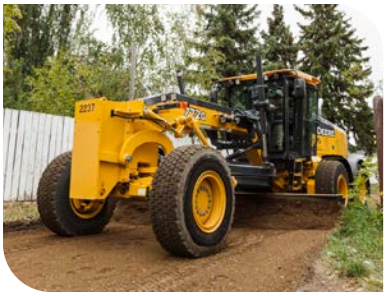
CURRENT INVENTORY

Table 1 is a summary of the fleet asset groups while Table 2 is a more detailed breakdown of the asset categories of the fleet. Tables 1 and 2 show the asset group or category's replacement value and the percent of the value that each asset group/category represents.

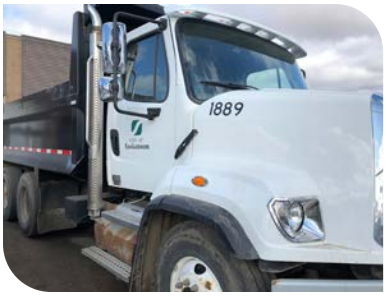
Table 1: Summary Fleet Asset Inventory (In Millions of $)

Asset Group	Inventory	Replacement Value	% Fleet (Replacement Value)
Heavy Equipment (HE)	265	$74.09	65.73%
Light Vehicle (LV)	479	$22.31	19.79%
Saskatoon Police Service (SPS)	178	$8.17	7.25%
Other	81	$8.15	7.23%
Grand Total	**1,003***	**$112.73**	**100%**

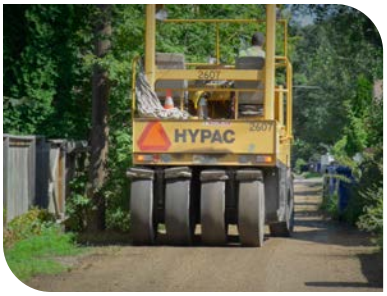
Note: Inventory count includes leased units as these are still considered Capital Assets



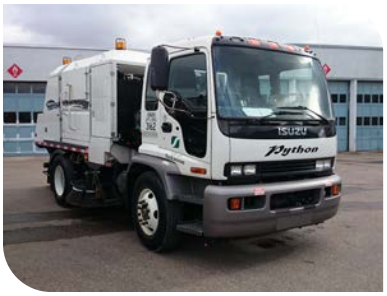
Grader



Heavy Tandem



Packer



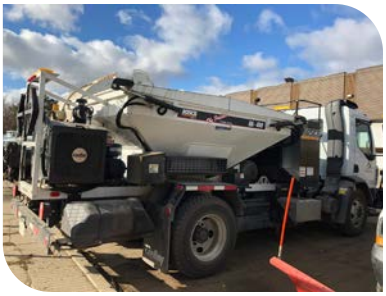
Sweeper

Table 2: Detailed Fleet Asset Inventory

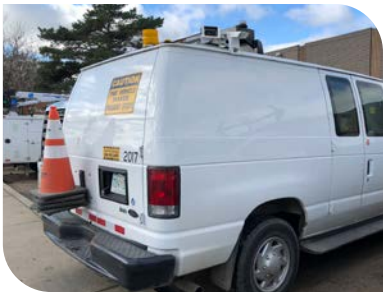
Asset Category	Group	Unit Count	Replacement Value	% of Fleet (Count)	% of Fleet (Replacement Value)
Backhoe	HE	4	$895,949	0.4%	0.8%
Boiler Trucks	HE	3	$504,043	0.3%	0.4%
Bucket Trucks	HE	22	$6,039,517	2.2%	5.4%
Digger Derricks	HE	4	$1,075,395	0.4%	1.0%
Excavator - Track	HE	2	$1,192,460	0.2%	1.1%
Excavator - Wheel	HE	7	$3,390,646	0.7%	3.0%
Garbage Truck - Side Arm	HE	27	$10,636,318	2.7%	9.4%
Garbage Truck - Curbster	HE	1	$187,962	0.1%	0.2%
Garbage Truck - Rear Load	HE	3	$845,975	0.3%	0.8%
Garbage Truck - Roll Off	HE	3	$539,495	0.3%	0.5%
Garbage Truck - Front Fork	HE	5	$1,849,599	0.5%	1.6%
Graders	HE	17	$6,757,298	1.7%	6.0%
Heavy 1 Ton Truck	HE	51	$4,154,287	5.1%	3.7%
Heavy Units - Tandems	HE	42	$9,476,846	4.2%	8.4%
Knuckle Crane Trucks	HE	2	$483,068	0.2%	0.4%
Medium Units	HE	13	$2,306,059	1.3%	2.0%
Oil Distributor	HE	1	$200,475	0.1%	0.2%
Packers	HE	9	$1,418,414	0.9%	1.3%
Rigid Crane Trucks	HE	1	$291,244	0.1%	0.3%
Sweepers	HE	19	$6,056,684	1.9%	5.4%
Track Loaders	HE	1	$378,034	0.1%	0.3%
Trash Compactor	HE	3	$3,982,146	0.3%	3.5%
Vactor Trucks	HE	9	$5,360,575	0.9%	4.8%
Washer Truck	HE	1	$264,508	0.1%	0.2%
Water Trucks	HE	4	$713,910	0.4%	0.6%
Wheel Loaders	HE	11	$5,092,765	1.1%	4.5%
Total Heavy Equipment		**265**	**$74,093,672**	**26.4%**	**65.7%**

Table 2: Detailed Fleet Asset Inventory *- Continued*

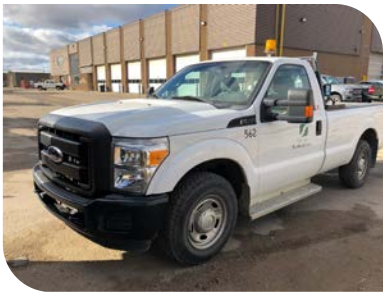
Asset Category	Group	Unit Count	Replacement Value	% of Fleet (Count)	% of Fleet (Replacement Value)
Asphalt Patchers	Other	2	$662,457	0.2%	0.6%
Compressors	Other	5	$702,384	0.5%	0.6%
Farm Tractors	Other	6	$1,120,745	0.6%	1.0%
Floor Scrubber - Battery	Other	2	$207,457	0.2%	0.2%
Forklift - Electric	Other	3	$125,667	0.3%	0.1%
Forklift - Fuel	Other	3	$554,801	0.3%	0.5%
Forklift - Propane	Other	4	$143,258	0.4%	0.1%
Sidewalk Units	Other	10	$1,692,271	1.0%	1.5%
Skid Steer	Other	15	$1,070,711	1.5%	0.9%
Snow Blower	Other	3	$526,343	0.3%	0.5%
Trailers (Engine Equip)	Other	12	$1,050,998	1.2%	0.9%
Trailers (Haulers)	Other	16	$295,606	1.6%	0.3%
Total Other		**81**	**$8,152,698**	**8.1%**	**7.2%**
Electric Vehicle	LV	4	$190,432	0.4%	0.2%
1-Ton Truck	LV	74	$4,296,797	7.4%	3.8%
1/2-Ton Truck	LV	97	$4,113,498	9.7%	3.6%
1/4-Ton Truck	LV	69	$2,667,585	6.9%	2.4%
2-Ton Truck	LV	4	$314,684	0.4%	0.3%
3/4-Ton Truck	LV	58	$2,814,753	5.8%	2.5%
Heavy Vans	LV	82	$4,692,880	8.2%	4.2%
Hybrid Light Vehicles	LV	3	$95,526	0.3%	0.1%
Mini Vans	LV	49	$1,665,707	4.9%	1.5%
Sedans	LV	5	$117,951	0.5%	0.1%
Sport Utility	LV	34	$1,337,330	3.4%	1.2%
Total Light Vehicles		**479**	**$22,307,143**	**47.8%**	**19.8%**



Pothole Patcher

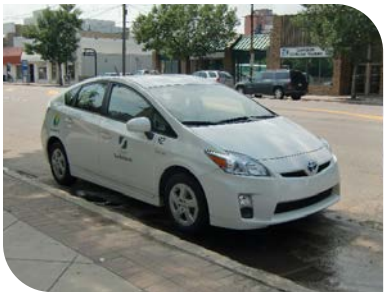


Heavy Van

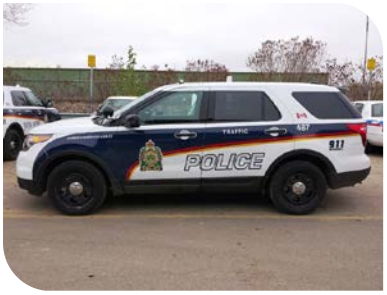


Half-tonne Truck

SL&P Electric Vehicle



Compact Hybrid Car

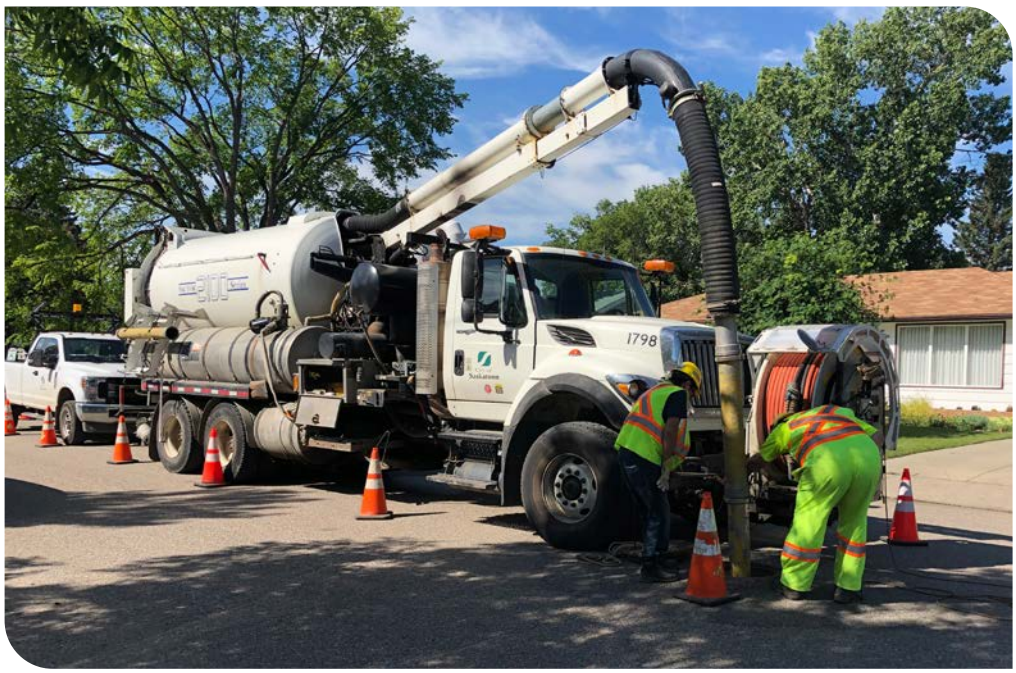


Police SUV

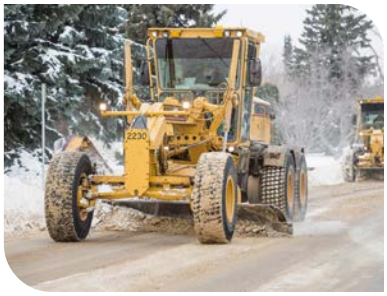
Table 2: Detailed Fleet Asset Inventory *- Continued*

Asset Category	Group	Unit Count	Replacement Value	% of Fleet (Count)	% of Fleet (Replacement Value)
Marked Police SUV	SPS	71	$4,177,841	7.1%	3.7%
Motorcycle	SPS	2	$74,895	0.2%	0.1%
Police < 1-Ton	SPS	8	$391,648	0.8%	0.3%
Police > 1-Ton	SPS	2	$117,079	0.2%	0.1%
Police Armoured Vehicle	SPS	1	$312,071	0.1%	0.3%
Police RV	SPS	0	$ -	0.0%	0.0%
Police Sedan	SPS	38	$1,016,855	3.8%	0.9%
Police Sedan in miles	SPS	1	$27,427	0.1%	0.0%
Police SUV	SPS	15	$620,592	1.5%	0.6%
Police Trailers	SPS	3	$35,226	0.3%	0.0%
Police Van	SPS	37	$1,397,956	3.7%	1.2%
Total SPS Equipment		**178**	**$8,171,590**	**17.7%**	**7.2%**
TOTAL ASSETS		**1,003**	**$112,725,103**		

Sewer Flusher Vac Truck



PHYSICAL CONDITION OF FLEET



Graders

The City's vehicles and equipment assets are evaluated for condition based on Estimated Service Life (ESL) of the asset compared to actual service life using either the age of the asset or timeframe when it is estimated to reach its end of service life based on usage. For example, a minivan is estimated to have an ESL of 12 years or 230,000 km. If the actual age of the vehicle is 8.4 years but it has 242,443 km on it, this minivan is at the end of its service life (100%+) because of the excess usage. The rating structure shown in Table 3 has been used in the industry to rate vehicles and equipment from "Very Good" to "Very Poor" condition.

Table 3: Rating Structure

Condition Description	% of Estimated Service Life Used	Explanation
Very Good (VG)	0–20% ESL	New unit, no wear/tear.
Good (G)	21–50% ESL	Normal maintenance costs, good overall condition, low km.
Fair (F)	51–80% ESL	Maintenance costs begin to rise, moderate km usage.
Poor (P)	81–100% ESL	Unit needs to be replaced, high km, maintenance costs at a steep incline, body condition deteriorating.
Very Poor (VP)	>101% ESL	Unit no longer operational, potential safety issues, not economically feasible to maintain.

Service life or kilometres/hours used are the two main factors considered to determine the condition of the fleet assets. However, before Fleet considers assets for replacement, the asset is inspected and prioritized on a few factors, including safety, cost of maintaining, technological advancements, etc.

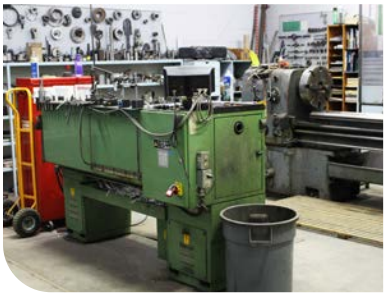
Ideally, equipment would be replaced at its optimum point based on its economic life cycle, which is before the equipment becomes more costly to maintain.

Table 4 shows a summary of the fleet asset condition assessment by replacement value, which shows that 59% of the total value of the asset pool are in "Good" to "Very Good" condition, 25% are in "Fair" condition and 16% are in "Poor" to "Very Poor" condition.

On average, the City's vehicle and equipment fleet is in "Good" to "Very Good" condition, indicating that less than 50% of its useful life has been utilized. This assessment is based on the age of each asset and the amounts are based on the replacement values. The goal is to have the average asset condition in the good category.

Table 4 - Condition Assessment – Profile of Assets by Replacement Value

Type	Very Good	Good	Fair	Poor	Very Poor	Total
Total	20.68%	37.97%	25.67%	8.5%	7.18%	100.00%



Fleet Shop Equipment

EXPENDITURE LEVELS

The Administration evaluates the condition of the City's assets to develop annual programs to maintain the assets at a minimum life cycle cost. Condition assessments or evaluations are conducted and used to establish condition levels as well as develop annual capital improvement plans.

The expected usage for each type of asset is defined; however, as the actual usage increases for the asset so does the cost of maintaining the asset. To compare the level of investment for all assets corporate-wide, five levels of expenditures are identified below. It should be noted that expenditure levels are not condition assessments but lead to a change in the asset condition over time.

"A" represents the highest level of expenditure and "F" represents no expenditure.

As previously shown, the City's fleet is in a relatively "Good" state of condition, therefore an Expenditure Level C is targeted to maintain the assets in the current condition.

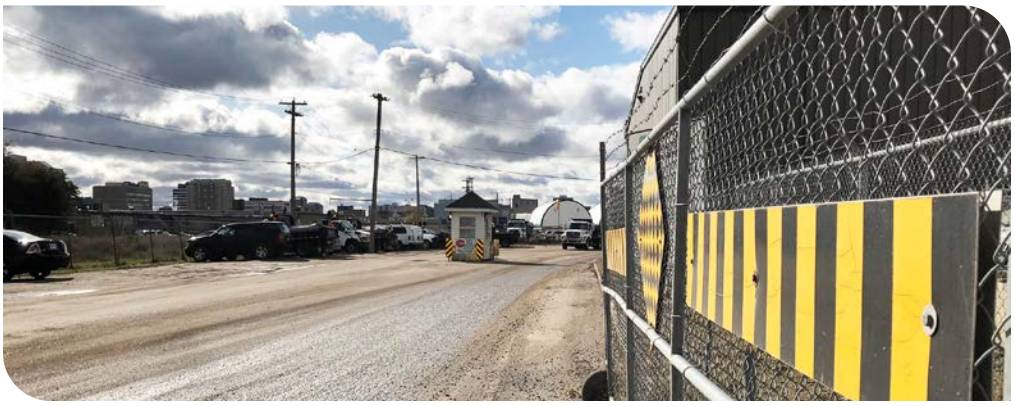
Table 5 - Expenditure Levels

Expenditure Level	Asset Condition	Description
"A"	Getting Better Quickly	Sufficient expenditures to keep assets in the desired condition and to increase asset condition/value quickly over time
"B"	Getting Better	Sufficient expenditures to keep assets in the desired condition and to increase asset condition/value slowly over time
"C"	Maintain Assets in Current Condition	Sufficient expenditures to keep asset in constant condition over time
"D"	Getting Worse	Insufficient expenditures to maintain asset condition. Over time asset condition will deteriorate
"F"	Getting Worse Quickly	No expenditures. Asset condition/value decreased rapidly

Equipment in the desired "Good" condition generally has normal maintenance costs, good overall condition, and low kilometres. Overall, the fleet is in "Good" condition and, once the replacements have been made for 2021, the average condition will continue to fall within the desired "Good" condition level.

Table 6 – Asset Performance

Asset	Performance	
Heavy Equipment	**16%**	Very Good
	41%	Good
	26%	Fair
	12%	Poor
	5%	Very Poor
Light Vehicles	**20%**	Very Good
	26%	Good
	31%	Fair
	10%	Poor
	13%	Very Poor
Other	**15%**	Very Good
	28%	Good
	25%	Fair
	15%	Poor
	17%	Very Poor
SPS	**10%**	Very Good
	34%	Good
	31%	Fair
	12%	Poor
	13%	Very Poor



City Yards

The Fleet maintenance program is currently funded through the Fleet Services operating budget at an amount of

$17 million.

PRESERVATION PROGRAMS

Fleet Services manages the maintenance of its assets using an electronic fleet management system. Each unit is assigned a preventative maintenance schedule once it is put into service based on OEM recommendations. From these set parameters, the unit is then monitored based on hours or kilometres used to determine the preventative maintenance schedule.

FLEET SERVICES FUNDING

As presented in this Asset Management Report, the current level of funding for Fleet is currently sufficient to keep the existing fleet in "Good" condition. The fleet maintenance program is currently funded through the Fleet Services operating budget at an amount of $17 million per year. The rental fee charged to the various departments covers the maintenance cost of $17 million, including the contribution to the Capital Replacement Reserve.

The capital replacement reserve provides funding for fleet replacements. Any additions to the fleet are funded through the individual departments requiring the vehicle. However, once this additional piece of equipment is purchased it becomes the responsibility of Fleet to maintain and replace at the end of its life cycle. The current level of funding allows for the replacement of fleet to be made in a timely manner, which will ensure the average condition continues to remain within the "Good" condition category.

CLIMATE ADAPTION STRATEGY

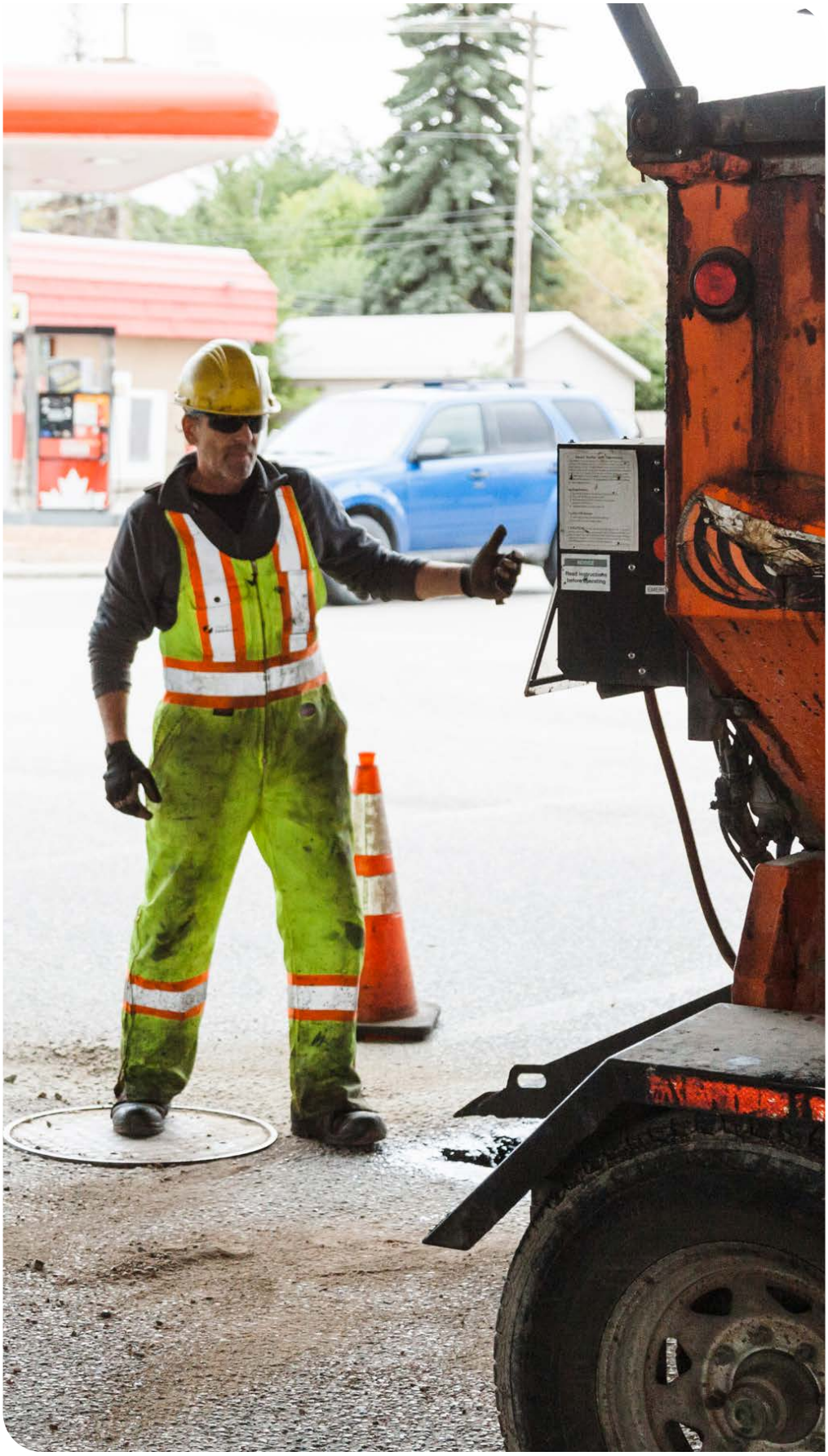
Fleet implemented Global Positioning System (GPS) with the installation of a GPS device in every civic fleet vehicle and all heavy equipment. The data and routing technology will be used to reduce unnecessary idling times and promote efficient use of assets.

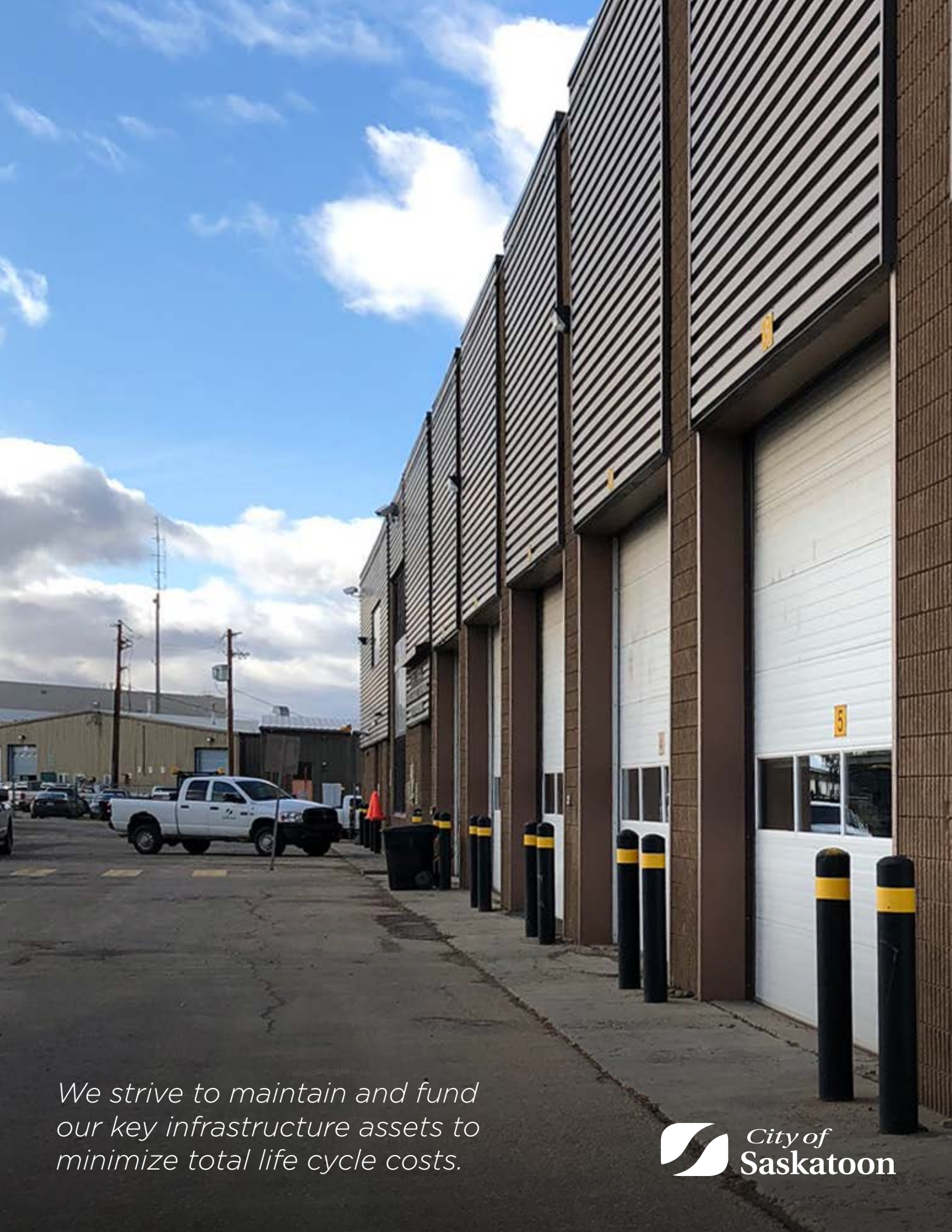
Fleet is also working with the Sustainability Department to take steps towards corporate fleet electrification to reduce fuel usage and greenhouse gas emissions. Four electric vehicles were introduced in 2020 as a pilot project to determine potential savings before expanding the fleet of electric vehicles. The pilot supports the City's Low Emissions Community Plan objectives to lower greenhouse gas (GHG) emissions and electrify the municipal fleet over the near term. Although purchasing an electric vehicle comes with a higher capital purchase price, savings will be realized with reduced maintenance and fuel costs.

THE WAY FORWARD

Fleet Services will continue to:

- Deliver a high level of routine and preventative maintenance to maintain civic fleet assets in good condition.
- Deliver best practices and quality service to internal clients.
- Carefully monitor and manage the equipment rental rates and replacement reserves.
- Bring forward innovative ideas for reducing costs or improving functionality.
- Monitor and actively participate in emerging trends, such as electric and autonomous vehicles.
- Improve our outreach and better understand the needs of other civic departments.
- Stay committed to maintaining and carefully investing in civic fleet.
- Use the allocated financial and physical resources to address the needs and expectations of Saskatoon citizens today, and for the future.





We strive to maintain and fund our key infrastructure assets to minimize total life cycle costs.

City of Saskatoon