

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 10, 2020</b>
<b>FROM:</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>REQUEST FOR PROPOSAL (RFP) 19-47 AWARD – SUPPLY &amp; DELIVERY OF LIGHT DUTY FLEET VEHICLES</b>

<b>RECOMMENDATION</b>
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That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN**:

- a) The submission from Guelph Toyota, 635 Woodlawn Rd W, Guelph, Ontario N1K 1E9 **BE ACCEPTED**, for the supply and delivery of compact cars, hybrid compact cars, plug in hybrid electric vehicles (PHEV), sport utility vehicles (SUVs), and hybrid SUVs (Class 1 vehicles) for a seventeen (17) month term at a total price of \$361,487 (2020) and \$385,162 (2021) (excluding HST), with an option to extend the contract for four (4) additional, one (1) year terms at the sole discretion of the City based on performance and price;
- b) The submission from Oxford Dodge Chrysler, 1249 Hyde Park Rd, London, Ontario N6H 5K6 **BE ACCEPTED**, for the supply and delivery of small and large cargo vans and passenger minivans (Class 2 vehicles) for a seventeen (17) month term at a total price of \$32,324 (2020) and \$142,140 (2021) (excluding HST) with an option to extend the contract for four (4) additional, one (1) year terms at the sole discretion of the City based on performance and price;
- c) The submission from Cotrac Ford Lincoln, 204 Currie Rd, Dutton, Ontario N0L 1J0 **BE ACCEPTED**, for the supply and delivery of pick-up trucks (1/2 ton to 1 ton), and cab and chassis units (Class 3 vehicles) for a seventeen (17) month term at a total price of \$76,184 (2020) and \$618,381 (2021) (excluding HST) with an option to extend the contract for four (4) additional, one (1) year terms at the sole discretion of the City based on performance and price;
- d) Civic Administration, **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this purchase;
- e) Approval hereby given **BE CONDITIONAL** upon the Corporation entering into a formal contract or having a purchase order, or contract record relating to the subject matter of this approval; and
- f) That the funding for this purchase **BE APPROVED** as set out in the Source of Financing Report attached hereto as Appendix "A".

<b>COUNCIL'S 2019-2023 STRATEGIC PLAN</b>
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Municipal Council has recognized the importance of Fleet Services and its role as part of service delivery, climate change and asset management in its 2019-2023 - Strategic Plan for the City of London as follows:

#### **Building a Sustainable City**

London's infrastructure us built, maintained, and operated to meet long-term needs of our community

- Maintain or increase current levels of service

- Manage the infrastructure gap for all assets
- London has a strong and healthy environment
- Conserve energy and increase actions to respond to climate change and severe weather

### Leading in Public Service

Londoners experience exceptional and valued customer service

- Increase community and resident satisfaction of their service experience with the City
- Increase responsiveness to our customers
- Increase efficiency and effectiveness of service delivery

## PREVIOUS PERTINENT REPORTS

Relevant reports that can be found at [www.london.ca](http://www.london.ca) under City Hall (Meetings) include:

- Climate Change Emergency – Update (November 25, 2019 meeting of the Strategic Priorities and Policy Committee, Item # 4.1)
- 2019-2023 Corporate Energy Conservation and Demand Management Plan (October 22, 2019 meeting of the Civic Works Committee - CWC, Item #2.8)
- RFP 15-54 – Supply and Delivery of Light Supply Replacement Vehicles (December 1, 2015 meeting of CWC, Item 7)
- RFP 19-23 Light Vehicle – Brand Standardization (January 17, 2011 meeting of the Built and Natural Environment Committee, Item # 5)

## BACKGROUND

### PURPOSE

The purpose of this report is to provide the necessary background information and seek approval to award multi-year contracts through RFP 19-47 for the supply and delivery of various light duty vehicles (Figure 1) that will reach their optimum life cycle during the term of this contract (between 2020 and 2025).

**Figure 1: Light Duty Vehicles**



## CONTEXT

### Current Situation

The City of London fleet includes 268 light duty vehicles (25 cars, 55 SUVs, 74 vans and 114 pick-up trucks). Fleet Services has forecasted that over the next two years, approximately 54 of these vehicles (including five (5) Fire Services light vehicle units) will be up for replacement as they have reached their optimum service life.

Fleet Services completes vehicle replacement assessments at the end of the optimum lifecycle to explore the possibility of extending the lifecycle, ensuring the right fit vehicle for the purpose, reviewing utilization patterns and also implementing green fleet alternatives.

The life cycles for most of the light vehicle classes range between 7 and 10 years based on specific use, asset management analysis, experience, condition, technological advancements, wear and tear, mileage, optimum remarketing value, repair costs, and reliability. Fleet Services have been undertaking continuous improvement steps to enhance efficiency and effectiveness which has included adopting a vehicle brand standardization philosophy whenever possible and advantageous to the City of London.

Over the full term of this contract (to the end of 2025), if the City exercised all four option years, approximately 70% of the existing light vehicles will reach their optimum life cycle. London Fire Service also has the choice to utilize this contract under the terms of the procurement policy.

The light duty vehicle class includes a range of vehicle types that are outfitted to meet the diverse needs of the services they provide, as noted below:

- Standard, Hybrid, and Electric Compact Cars – By-law Enforcement Officers, Parking, Planning, Information Technology (ITS), Building Control Inspectors, Environmental & Engineering Technologists, Project Managers and Inspectors, Fire Services.
- Mini Vans - Cargo and Passenger type – Construction, Fleet, Facilities, Environmental & Engineering Inspector type applications, Urban Animal Management, Fire Services; shared vehicles.
- Standard and Hybrid SUVs - Building Inspectors, Technologists, Inspectors, Training Division, Minimum Maintenance Road Patrollers, Program Supervisors and Managers.
- Standard and 4x4 Pick-up trucks – Outside Works Supervisors, Parks Maintenance Crews, Transportation and Roadside Crews (winter ploughing/sanding operations).
- Full Size Vans – Fleet operations, Facilities skilled trades (e.g., plumbers, electricians, HVAC), Water Meter Servicers, Library vehicles
- Heavy Duty and Super Duty Pick-up Trucks - Equipped with a variety of attachments such as dump bodies, power tailgates, sanders and plows for winter operations, Transportation and Roadsides crews and Parks and Horticulture crews.

### Addressing the Need for Action on Climate Change

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

*Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.*

On November 26, 2019, Council approved the development of a Climate Emergency Action Plan (CEAP) to be completed by the end of 2020. Part of the development includes an increased emphasis on the climate change impacts associated with the City's fleet and equipment.

The City of London's Corporate Energy CDM Plan has identified a near-term target to reduce the vehicle fleet's GHG emissions by 3.5 percent from 2018 levels by 2023.

### **Green Fleet and Outcome**

The Green Fleet Review process has been in place since 2009 and in the last five years has seen increased activity. The process is used to improve Fleet services and the City's use of fleet and equipment in 4 areas:

1. GHG Emissions Reductions
2. Environmental Considerations
3. Operational Considerations
4. Financial Considerations

The process has been a collective accountability partnership between Fleet Services, Environmental Programs and the Service Areas (customers) with a specific target of building a culture of conservation and an emission reduction framework.

The process has been responsible for many achievements including the implementation of hybrid vehicles, on board GPS and telematics systems, electric vehicle and charging infrastructure, and several anti-idling strategies. More recently the program has expanded to include major initiatives like fuel switching from diesel to compressed natural gas for waste collection trucks, a proposal to switch to full electric ice resurfacers for arenas, as well as increasing conversion rates from standard gas compact cars and SUVs to Hybrid cars and SUVs.

The process continues to evolve and will be focusing on new strategic priorities in line with the Corporate Energy Management Conservation and Demand Management (CDM) Plan, the development of the Climate Emergency Action Plan (CEAP), and utilizing the upcoming screening Climate Emergency Evaluation Tool (CEET) for many City projects and programs.

Heading into this RFP process, there was a good understanding of which vehicles could be purchased that would have better fuel efficiency and/or use less gasoline or no gasoline (Hybrid, Electric, Right Sizing). This review and comparison is contained in Appendix B and applies to the first two years of this contract period (2020 and 2021).

Additional Green Fleet Reviews will continue in 2020 and 2021 and more detailed reviews will occur in future years, in order that all the vehicles undergo a full assessment prior to replacement that will include greening options (Hybrid, Electric, Right Sizing) to help meet emission reduction targets, vehicle utilization assessment criteria and any opportunities for alternative transportation solutions like vehicle sharing, bikes or e-scooters.

## **DISCUSSION**

### **Purchasing Process and Evaluation**

The current Light Vehicle Supply contract expired January 31, 2020. Fleet Planning, through Purchasing and Supply, initiated the proposal process for the Supply and Delivery of Light Duty Vehicles on October 23, 2019. The original Request for Proposal (RFP) was planned to close in late November but was extended by 15 business days to ensure full circulation, pre-bid information sessions and to ensure a transparent and competitive process was conducted.

The RFP requested responses from new car dealers to supply all of the City's light vehicle needs for a contract period of seventeen (17) months with the option to renew

for four (4), additional one (1) year terms at the sole discretion of the City based on performance and pricing competitiveness. The June expiry and option year cycle allows the City to align their purchases with the most current model years for vehicle production which helps maximize asset value, verify pricing of new models and supports best practices for warranties and remarketing. The annual option year renewal process also provides the City with greater control, flexibility and accountability from the vendor as contract renewals are dependent on continued good performance, service and price competitiveness.

Nine (9) potential vendors downloaded the RFP documents, four (4) attended the mandatory bidders meeting.

The evaluation criteria and weighting provided in the RFP is shown on Table 1.

**Table 1: RFP Evaluation Criteria and Weighting**

Evaluation Criteria	Weighting
Company Experience and Past Performance	10%
Vehicle Specifications – Base Specifications & Specific Requirements	40%
Service Agreement, Delivery, Training, Administrative Requirements, and Warranty	15%
Additional Services and Innovation	10%
Price	25%
Total	100%

The evaluation methodology included three parts to maximize competitiveness and provide the best overall value to the City. This still provides levels of brand standardization by vehicle class however opens the bid up to alternative vehicles, models and dealerships who specialize in particular vehicle categories. The three classes are:

- “Class 1” Vehicles (Standard, Hybrid and Electric Compact Cars, SUVs);
- “Class 2” Vehicles (Passenger and Cargo Vans); and
- “Class 3” Vehicles (Standard, 4x4s, Heavy Duty and Crew Cab Pickups.)

The RFP closed on December 11, 2019, and resulted in five compliant bids to evaluate. The evaluation team was chaired by a Purchasing and Supply official and made up of representatives from Fleet Maintenance, Fleet Specialist Technical Training, Fleet Planning and Fleet Administration.

Fleet Services and Purchasing and Supply evaluated the proposals received on the basis of meeting all the required terms and conditions, specifications, and value added criteria identified by the City of London in the RFP. Proponents were scored based on the following aspects:

- Vehicle Specification Standards set by the City of London identified for each vehicle class
- 2020 and 2021 vehicle pricing - standard vehicle base price
- Options and efficiency of models proposed
- Alternative fuel technologies
- Administrative requirements
- Warranty policies
- Recall processes
- Technician training
- Mechanical service support
- Maintenance and service manuals
- Additional value added features
- Cooperative buying options for other City services (i.e. Fire Services, Library Services)

## Evaluation Results

A key part of the recommendation revolved around the efficiency of the vehicles offered. In almost all classes and vehicle types there are vehicle choices available that will result in a reduction of fuel consumption and produce lower emissions. This will allow Fleet in conjunction with the end users to make selections and choices that are in line with the Corporate Energy Management Conservation and Demand Management (CDM) Plan and the development of the Climate Emergency Action Plan (CEAP).

The evaluation team reviewed potential impacts of “Out of City” dealerships with respect to warranties and recall work. Prior to recommending these submissions confirmation was provided to the City by the dealerships that will mitigate service level impacts and downtime including pick-up and delivery services and local original equipment manufacturer (OEM) dealer warranty and recall service options.

After scoring the various submissions, for key characteristics and priorities, costs were then added to the scoring to identify the recommended vendor for each class. The results were as follows:

### “Class 1” Vehicles

Recommended Make: Toyota

Recommended Dealership: Guelph Toyota, Guelph Ontario

Vehicle Type	Model
Compact Car	Corolla
Hybrid Compact Car	Corolla Hybrid
SUV	Rav4
Hybrid SUV	Rav4 Hybrid
Plug in Hybrid Electric	Prius Prime

### “Class 2” Vehicles

Recommended Make: Dodge, Chrysler, Ram

Recommended Dealership: Oxford Dodge Chrysler, London, Ontario

Vehicle Type	Model
Passenger Mini Van	Grand Caravan
Small Cargo Van	Ram Promaster City
Full Size Cargo Van	Ram Promaster
Full size Cargo Van (extended body)	Ram Promaster

### “Class 3” Vehicles

Recommended Make: Ford

Dealership: Cotrac Ford Lincoln, Dutton, Ontario

Vehicle Type	Model
2x4 Regular Cab ½ Ton Pick-up	F150
4x4 Regular Cab ¾ Ton Pick-up	F250
Crewcab 1 ton Pick-up	F350 crewcab
Heavy Duty Series Pick-ups	F350,450,550

## Financial Impact

The estimated costs based on the proposed vehicle replacement schedule and the recommended vendor pricing is \$469,995 (excluding HST) in 2020 and \$1,145,683 (excluding HST) in 2021. These values are based on the forecasted replacement of 16 units in 2020 and 33 units in 2021 (not including Fire Services' units).

Depending on the results from the Climate Emergency Evaluation Tool (CEET) analysis (that will take place on every replacement project), additional funding may be required in order to optimize emission reductions. Work is underway to determine the impact on the 10 year capital budget and recommend modification to these projects as required.

Fleet Services estimates a light vehicle capital budget of \$432,665 (excluding HST) in 2020 and \$1,020,030 in 2021 for standard replacements. Green fleet initiatives of \$24,822 will be available in 2020 and \$70,658 will be available in 2021. Therefore there is an estimate shortfall of approximately \$12,508 (about 3% over estimate) in 2020 and \$54,995 (about 5% over estimate) in 2021. This shortfall is addressed through surplus funding that is available in ME201801 from other vehicle purchases that were below budget. Potential future budget impacts will be mitigated to the extent possible by utilizing external incentives and managing replacement timing and model options. Fleet Services will also continue to work with Financial Planning & Policy through the capital monitoring process to identify surplus funding from prior year vehicle purchases that impact the availability of funds in the VERF.

The overall improvement in fuel economy of the new vehicles is also expected to reduce Operating Budgets by about \$18,000 per year once the vehicles acquired in 2020 and 2021 are in service. In these two years, GHG emissions from the City fleet would be reduced by 23 tonnes per year, about 0.3% of the annual emissions from fleet vehicles. Between 2022 and 2025 the GHG decreases will be larger for light duty vehicles based on further Green Fleet Reviews (in 2020 and 2021) and subsequent replacements.

Vehicles and Equipment continue to be subject to price increases between 4% and 10% over budget due to various factors including prices of materials like steel and aluminum, emission reduction technology and the impact of trade, tariffs and currency value.

The financing for these purchases is funded through contributions from the programs to the VERF. At the end of the optimum life cycle of the asset the VERF has typically recovered the necessary funds to replace the vehicle. Each vehicle purchased under this contract is subject to budget approval and will follow the procedures as defined in the City of London's Procurement of Goods & Services Policy.

All retiring units will be sold after the replacement is commissioned at public auction as per the Procurement of Goods and Services Policy.

The Source of Financing Report is attached as Appendix "A".

<b>CONCLUSION</b>
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Based on the discussion and analysis above, Fleet Services, in conjunction with Purchasing and Supply, recommend that RFP 19-47 – Supply and Delivery of Light Duty Vehicles be awarded to three vendors as follows:

- Class 1 Vehicles - Guelph Toyota, 635 Woodlawn Rd W, Guelph, Ontario
- Class 2 Vehicles - Oxford Dodge Chrysler, 1249 Hyde Park Rd, London, Ontario
- Class 3 Vehicles - Cotrac Ford Lincoln, 204 Currie Rd, Dutton, Ontario

The term of the contracts will be 17 months with an option to extend the contracts with each vendor for four (4) additional, one (1) year terms at the sole discretion of the City based on performance and competitive pricing. Each of the recommended submissions

scored the highest in the respective vehicle class evaluations based on the specified value criteria categories.

Staff from Fleet Services and Purchasing believe the recommended vendors and vehicle selections provide the best value for the City of London maintaining economic responsibility but also securing options and flexibility within the light vehicle procurement program to react to the need for increased actions for mitigating climate change as part of the development of the Climate Emergency Action Plan.

As noted, in 2020 and 2021, GHG emissions from the City fleet would be reduced by 23 tonnes per year, about 0.3% of the annual emissions from fleet vehicles. Between 2022 and 2025 the GHG decreases will be larger for light duty vehicles based on further Green Fleet Reviews (in 2020 and 2021) and subsequent replacements. Additional GHG reductions are possible and will be considered during light duty vehicles reviews with user groups.

<b>SUBMITTED BY:</b>	<b>REVIEWED &amp; CONCURRED BY</b>
<b>MIKE BUSHBY, BA DIVISION MANAGER, FLEET &amp; OPERATIONAL SERVICES</b>	<b>JAY STANFORD, MA, MPA DIRECTOR, ENVIRONMENT, FLEET &amp; SOLID WASTE</b>
<b>RECOMMENDED BY:</b>	
<b>KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>	

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Appendix A Source of Financing

Appendix B Green Fleet Review

C: John Freeman, Manager of Purchasing & Supply  
Steve Mollon, Manager of Fleet Planning  
Barrie Galloway, Manager of Fleet Maintenance  
Sarah Denomy, Procurement Officer

**APPENDIX 'A'**

Chair and Members  
Civic Works Committee

#20031  
March 10, 2020  
(Award Contract)

**RE: Request for Proposal RFP 19-47 Award - Supply & Delivery of Light Duty Fleet Vehicles**  
**Capital Project ME202001 - Vehicles & Equipment Repl - TCA (Work Order 2487279-2487293)**  
**Capital Project ME202101 - Vehicles & Equipment Repl - TCA**  
**Capital Project ME201801- Vehicles & Equipment Repl - TCA (Work Order 2487296)**  
**Guelph Toyota - \$746,649.00 (excluding H.S.T.)**  
**Oxford Dodge Chrysler - \$174,464.00 (excluding H.S.T.)**  
**Cotrac Ford Lincoln - \$694,565.00 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director of Environmental and Engineering Services and the Manager of Purchasing & Supply, the detailed source of financing for this project is:

<b><u>SUMMARY OF ESTIMATED EXPENDITURES</u></b>	<b><u>Approved Budget</u></b>	<b><u>Committed to Date</u></b>	<b><u>This Submission</u></b>	<b><u>Balance for Future Work</u></b>
<b><u>ME202001 - Vehicles &amp; Equipment Repl - TCA</u></b>				
Vehicle & Equipment	\$5,885,194		\$465,539	\$5,419,655
<b><u>ME202101 - Vehicles &amp; Equipment Repl - TCA</u></b>				
Vehicle & Equipment	4,462,241		1,109,884	3,352,357
<b><u>ME201801 - Vehicles &amp; Equipment Repl - TCA</u></b>				
Vehicle & Equipment	6,469,253	4,581,249	68,690	1,819,314
<b>NET ESTIMATED EXPENDITURES</b>	<b><u>\$16,816,688</u></b>	<b><u>\$4,581,249</u></b>	<b><u>\$1,644,113</u></b>	<b><u>\$10,591,326</u></b>

**SUMMARY OF FINANCING:**

<b><u>ME202001 - Vehicles &amp; Equipment Repl - TCA</u></b>				
Capital Levy	\$701,267		\$465,539	\$235,728
Drawdown from Vehicles & Equipment R.F.	5,183,927			5,183,927
	<u>5,885,194</u>	<u>0</u>	<u>465,539</u>	<u>5,419,655</u>
<b><u>ME202101 - Vehicles &amp; Equipment Repl - TCA</u></b>				
Capital Levy	117,460		117,460	0
Drawdown from Vehicles & Equipment R.F.	4,344,781		992,424	3,352,357
	<u>4,462,241</u>	<u>0</u>	<u>1,109,884</u>	<u>3,352,357</u>
<b><u>ME201801 - Vehicles &amp; Equipment Repl - TCA</u></b>				
Capital Levy	250,000	250,000		0
Drawdown from Vehicles & Equipment R.F.	6,165,891	4,277,887	68,690	1,819,314
Drawdown from Self Insurance R.F.	42,500	42,500		0
Funded from Operations	10,862	10,862		0
	<u>6,469,253</u>	<u>4,581,249</u>	<u>68,690</u>	<u>1,819,314</u>
<b>TOTAL FINANCING</b>	<b><u>\$16,816,688</u></b>	<b><u>\$4,581,249</u></b>	<b><u>\$1,644,113</u></b>	<b><u>\$10,591,326</u></b>

**1) FINANCIAL NOTE:**

	<b><u>ME202001</u></b>	<b><u>ME202101</u></b>	<b><u>ME201801</u></b>	<b><u>TOTAL</u></b>
Contract Price	\$457,488	\$1,090,688	\$67,502	\$1,615,678
Add: HST @13%	59,473	141,789	8,775	210,037
Total Contract Price Including Taxes	516,961	1,232,477	76,277	1,825,715
Less: HST Rebate	51,422	122,593	7,587	\$181,602
Net Contract Price	<u>\$465,539</u>	<u>\$1,109,884</u>	<u>\$68,690</u>	<u>\$1,644,113</u>

- 2) ME202101 is included in the 2020-2023 Multi-Year Budget capital plan and is subject to Council re-confirmation of the 2021 Annual Budget Update. The actual expenditure committed to this project will not occur until 2021.
- 3) There is an anticipated Operating savings due to improvement in fuel economy of about \$18,000 per year once the vehicles acquired in 2020 and 2021 are in service.

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Jason Davies  
Manager of Financial Planning & Policy

## **APPENDIX B GREEN FLEET REVIEW**

### **Background**

Prior to 2005, procuring light vehicles would typically create up to thirty tenders annually which required significant staff time and also resulted in various makes and models of vehicles in the fleet compliment. Since 2005, Ford has been the successful Light Vehicle supply vendor as they were able to supply the greatest amount of vehicles in most of the class categories. Since the brand standardization RFP process was adopted it has reduced administrative time through establishing a vendor of record for various classes of vehicle. Technical training requirements for Motor Vehicle Technicians and auto parts supply staff have been reduced through standardization, expertise and efficiency. Brand standardization also allows for focused and lean purchasing and commissioning processes, making the vehicle replacement process more predictable and seamless.

Recent trends in the light duty vehicle market have resulted in the discontinuation of low demand vehicle models that have impacted supplier's ability to meet the City of London's requirement for efficient, low emission vehicles. Therefore, this RFP was designed to allow the City to maximize alternative light vehicle choices that match priorities in terms of options, efficiency and right-fit vehicle alternatives. The City is under no obligation to purchase a set amount of vehicles as part of this contract. The City maintains flexibility for decisions related to models and option choices, replacement cycles and the number of purchases.

Fleet Services completes vehicle replacement assessments at the end of the optimum lifecycle to explore the possibly of extending the lifecycle, ensuring the right fit vehicle for the purpose, reviewing utilization patterns and also implementing green fleet alternatives. Fleet Services is also in discussions with GeoTab, the City's current GPS automated vehicle locator (AVL) system provider, to launch an internal pilot program to test the viability of an automated Fleet vehicle reservation system. The system is smart phone "app" based and allows users to book a fleet vehicle on a specific day for a selected amount of time. Similar programs have been implemented in other municipalities and successes include higher utilization rates of current fleet vehicles and reduction of fleet size which reduces capital investment.

### **Overview of Green Fleet Review Process**

The Green Fleet Review process has been in place since 2009 and in the last five years has seen increased activity. The process is used to improve Fleet services and the City's use of fleet and equipment in 4 areas:

1. GHG Emissions Reductions
2. Environmental Considerations
3. Operational Considerations
4. Financial Considerations

Each of these areas is supported through technical analysis including literature research, interviews, site visits, financial reviews and risk assessment.

### **GHG Emissions Reductions and Environmental Considerations**

For the purpose of this exercise, the focus was looking for vehicle replacements that would generate greater fuel efficiency, the ability to switch to electric where possible, and have increased emission control. Using the inventory list of vehicles requiring replacements, target replacements vehicles over the contract where period were identified (Table B-1). Based on the results of the RFP, it estimated that this would reduce GHG emissions from the City fleet by 23 tonnes per year, about 0.3% of the annual emissions from fleet vehicles. Between 2022 and 2025 the GHG decreases will be larger for light duty vehicles based on further Green Fleet Reviews (in 2020 and 2021) and subsequent replacements.

**Table B1: Forecasted Replacement schedule**

<b>Light Vehicles Up for Replacement 2020 and 2021</b>	<b>Targeted Replacements pending CEET Assessment and Available Support Funding</b>
10 Gasoline Compact Cars	Hybrid, PHEV, or Electric Compact Cars
4 Hybrid Compact Cars	Hybrid, PHEV, or Electric Compact Cars
1 Plug in Electric Car	Plug in Electric Car
11 Gasoline SUV's	Hybrid SUVs
1 Hybrid SUV	Hybrid SUV
6 Gasoline Passenger and Cargo Vans	Right sized Gasoline Passenger and Cargo Vans
13 Gasoline ½ ton ¾ ton Pick-ups	Right sized Gasoline ½ ton ¾ ton Pick-ups
3 Diesel Heavy and Super Duty Work Trucks	Right sized diesel Heavy and Super duty trucks with auto shut down if available and emission control systems (SCR)

Based on the proposed vehicles from the RFP, a comparison of fuel economy of current fleet vehicles against the stated fuel economy of the recommended vehicles is identified in Table B-2

**Table B-2: Fuel Economy Comparison (Assuming Hybrid Light-Duty Vehicles)**

<b>Existing Fleet Vehicle</b>	<b>Fuel Economy NRCan City Rating (L/100km)</b>	<b>2020-2021 Replacement</b>	<b>Fuel Economy NRCan City Rating (L/100km)</b>	<b>Estimated Fuel Savings (per 100 km)</b>
Dodge Ram 1500	16.3	Ford F150	12.3	25%
Ford C-Max Hybrid	5.5	Toyota Corolla Hybrid	4.4	20%
Ford E250	18.3	Ram Promaster	14.3	22%
Ford Escape	10.4	Toyota RAV4 Hybrid	5.7	45%
Ford Escape Hybrid	6.9	Toyota RAV4 Hybrid	5.7	17%
Ford Escape XLT	11.4	Toyota RAV4 Hybrid	5.7	50%
Ford F150	14.5	Ford F150	12.3	15%
Ford F250 4x4	22.1	Ford F250	22.1	0%
Ford F350	24.3	Ford F350	24.3	0%
Ford Focus Electric	n/a	Toyota Prius Prime	n/a	n/a
Ford Focus	10.2	Toyota Corolla Hybrid	4.4	57%
Ford Transit Connect	10.6	Ram Promaster City	11.2	-6%
Honda Civic Hybrid	5.8	Toyota Corolla Hybrid	4.4	24%

### **Operational and Financial Considerations**

City staff are familiar with the vehicles that are being proposed for this contract. None of the vehicles pose operational challenges.

The financial impacts and benefits of these changes are identified in the main report. The overall improvement in fuel economy of the new vehicles is also expected to reduce Operating Budgets by about \$18,000 per year once the vehicles acquired in 2020 and 2021 are in service.