APPENDIX C

Green Fleet Plan Strategies

1) Right Size the Fleet

Goal: Implement actions to reduce the overall number of vehicles and fuel used by the City's fleet in addition to ensuring all City vehicles are appropriately sized for their required job function.

Actions	Performance Indicator	Responsibility	2021 Status
(a) When a vehicle is due for replacement, WFMA will meet with departments and SOAs to determine whether an existing vehicle actually needs to be replaced to meet operational needs. If the vehicle is not required, it will not be replaced, thus reducing the size of the City's vehicle fleet.	Number of vehicles in City's Fleet.	WFMA in cooperation with departments and SOAs. WPS and WFPS will complete this action within their own departments.	Reviewing utilization rates and service impact with departments, but ultimately not in WFMA's control.
(b) Investigate the feasibility of using bicycles instead of vehicles for relevant applications such as in Parks, Parking authority, some Police patrol staff and City pool vehicles at the discretion of individual departments.	Number of vehicles in City's Fleet.	WFMA in cooperation with departments and SOAs. WPS and WFPS will complete this action within their own departments.	WFMA not actively pursuing, but departments may review with Office of Sustainability.
(c) Encourage multi-purpose vehicles, such as outfitting one vehicle with multiple attachments so the vehicle can conduct multiple functions that otherwise would have required two separate vehicles.	Number of vehicles in City's Fleet.	WFMA in cooperation with departments and SOAs. WPS and WFPS will complete this action within their own departments.	Working with departments but not in WFMA's control.
(d) Encourage vehicle sharing amongst departments and SOAs whereby the vehicle is only needed on a seasonal basis for respective Departments and SOAs. The method to implement will include: - WFMA to compile a list of units that are used on a seasonal basis and assess whether an internal rental unit can be used instead of a new vehicle purchase, or whether any other off season vehicle could be shared between Departments.	Number of vehicles in City's Fleet.	WFMA in cooperation with Departments and SOAs.	Collaborate with departments but not in WFMA's control.

2) Purchase the Most Fuel Efficient Vehicles Where Operationally Feasible

Goal: Purchase the most fuel efficient vehicle or equipment, providing it meets operational requirements of the Department or SOA.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Ensure all light duty fleet bid opportunities have evaluation criteria that put a significant weight on fuel efficiency and lowest greenhouse gas emitting vehicles.	Reduction in fuel use.	WFMA in cooperation with departments and SOAs. WPS and WFPS will complete this action within their own departments.	Ongoing.
(b) To aid in the reduction of greenhouse gas emissions, transition light fleet sedan and SUV future purchases to hybrid models unless documented departmental operational criteria dictates otherwise.	Reduction in fuel use.	All Departments and SOAs, with the exception of Police and Fire who will assess the feasibility of this action on a case by case basis.	Ongoing.

3) Replace Older Diesel Engines with Low Emitting Diesel Engines

Goal: Replace older diesel engines with new diesel engines that emit significantly less pollution than older models.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Assess opportunities on a case by case basis for accelerated vehicle replacement of older diesel vehicles not yet due for replacement but that could benefit from a lower emitting diesel engine and whereby WFMA can accommodate the resale of the vehicle in question.	Reduction in emissions.	WFMA in cooperation with departments and SOAs. WPS and WFPS will complete this action within their own departments.	Ongoing but limited by capital budget.
(b) Investigate the fuel efficiency of tier diesel engines available for purchase and source those that provide better fuel efficiency and improved life cycle costs.	Reduction in emissions.	WFMA in cooperation with Departments and SOAs.	Ongoing.

4) Evaluate and Use Alternative Fuels

Goal: Use Alternative Fuels in City vehicles when they are either mandated or have been evaluated and proven to meet operational and economic needs for the City and whereby environmental benefits are demonstrated.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Investigate the feasibility of using higher level blends of biodiesel such as B5.	Reduction in emissions.	WFMA in cooperation with Materials Management and all departments and SOAs.	Not actively pursuing. Province has mandated use of B10.
(b) Investigate the feasibility of using other alternative fuels such as propane, natural gas, and electric.	Reduction in emissions.	WFMA in cooperation with Departments and SOAs.	Investigating the feasibility of electric vehicles.

5) Implement and Enforce a Corporate Anti-idling Policy and Install Idle Reduction Technologies

Goal: Implement and enforce a City wide anti-idling policy that limits the amount of time a City vehicle or piece of equipment can idle and install idle reduction technologies on City vehicles that idle significantly at job sites.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Implement and enforce a City wide anti-idling policy that limits the amount of time a City vehicle or piece of equipment can idle, with an aim to reduce City idling by 50% by 2019.	Reduction in idling and reduction in emissions.	All departments and Special Operating Agencies. Police and Fire will aim to reduce idling by 5% by 2019 due to the nature of their operations.	Not in WFMA's control. Corporate Safety developing Administration Standard.
(b) Install auxiliary power units in vehicles where the vehicle application would benefit to provide battery power, heating and cooling functions.	Reduction in idling and reduction in emissions.	All departments and Special Operating Agencies.	Working with departments but not in WFMA's control. APUs used by WFPS and Forestry.
(c) Explore opportunities for improving fuel efficiency in the existing fleet by way of investigating the feasibility of programming existing fleet for automatic vehicle shut off tie that could be deployed to reduce idling time in existing City vehicles.	Reduction in idling and reduction in emissions.	WFMA. WPS and WFPS will complete this action within their own departments.	Ongoing. Included in all tenders.
(d) Prior to purchasing new vehicles, establish a time limit with the user group for the engine to be automatically shut off to reduce idling and improve fuel efficiency then ensure the vehicle is purchased with this automatic shut off enabled.	Reduction in idling and reduction in emissions.	WFMA in cooperation with departments and SOAs. WPS and WFPS will complete this action within their own departments.	Ongoing. Included in all tenders.
(e) Pre-program transmissions to maximize fuel economy performance in the existing and new fleet purchases and identifying	Reduction in idling and reduction in emissions.	WFMA in cooperation with departments and SOAs. WPS and WFPS will complete	Ongoing.

other transmission and engine technologies that could provide fuel or emissions reductions.		this action within their own departments.	

6) Evaluating New Advanced Vehicles and Technologies

Goal: Evaluate advanced vehicles and technologies that offer the potential to reduce fuel use and emissions in City vehicles and equipment, where pre-established data exist to demonstrate its benefits to reduce fuel use and emissions. The evaluation results will be assessed to consider the adoption of the vehicle or technology fleet wide where appropriate.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Investigate the feasibility of evaluating a large set of all electric vehicles in cooperation with other local public entities.	Public partners approached and feasibility of the project assessed.	WFMA in cooperation with other interested local public entities.	Not actively pursuing. Pending review of electric vehicle feasibility.
(b) Evaluate a plug in hybrid gas electric vehicle conversion that is part of a project sponsored by the Province of Manitoba. The project includes the conversion of 10 Toyota Prius' to become plug in hybrid gas electric models.	Plug in hybrid evaluation complete and report submitted.	Plug in hybrid evaluation complete and report submitted.	Not actively pursuing.
(c) Evaluate new hybrid gas electric vehicle models, such as hybrid pick up trucks, as they become available to assess the actual fuel consumption gains and operational functionality. Report on progress.	Number of hybrid evaluations and associated reports completed.	Number of hybrid evaluations and associated reports completed.	Ongoing.
(d) Identify funding opportunities for the purchase and or evaluation of new and advanced technologies that would lower GHG emissions compared to conventional units.	Funding received for evaluation of new and advanced technologies.	WFMA.	Ongoing.

7) Investigate Maintenance and Management Practices to Reduce Fuel Use

Goal: Investigate opportunities where maintenance or management practices can be modified to reduce fuel use, reduce unnecessary kilometres traveled and/or reduce vehicular emissions.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Ensure tires are always properly inflated to levels prescribed by the owners' manual to ensure optimal fuel efficiency. Departments to measure the tire	Feasibility studies completed by WFMA and departments	All departments and Special Operating Agencies.	Responsibility of the user. WFMA and Operator Training supports through education.

inflation levels of their vehicles at a minimum of once per month.	measuring tire inflation.		
(b) Investigate the opportunity to use wide base tires in applicable instances within the fleet. The practice is used in other vicinities and can reduce fuel use in vehicles and equipment.	Feasibility study on wide base tires complete.	WFMA. WPS and WFPS will assess the feasibility of this action on a case by case basis.	Investigation determined not applicable to city use. Will continue to monitor for changes.
(c) Investigate and implement technologies that eliminate the need for operator inputted meter readings at City's controlled fuel sites or yards to ensure higher accuracy of odometer reading for fuel efficiency data analysis.	Feasibility study on automated inputted meter readings complete.	WFMA.	Ongoing.
(d) Initiating efforts to maximize efficient route planning to reduce overall kilometres travelled.	Reduction in kilometres traveled.	All departments and Special Operating Agencies.	Not actively pursuing. Responsibility of the departments to pursue.

8) Inclusion of Personal Vehicle Use, Rental Vehicles and Outsourced Work

Goal: Apply the strategies of the Green Fleet Plan to all outsourced work involving vehicles and equipment, after a reasonable amount of consultation has taken place with the private sector bidding on City work.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Identify the GHG impact associated with personal vehicles used for City business and identify any opportunities to decrease the GHG from these vehicles, such as making a fuel efficient City pool vehicle available for Departments or SOAs.	Report on personal vehicle use GHG impact.	WFMA.	Not actively pursuing.
(b) Continue requiring adherence to the City's anti-idling directive in all outsourced tenders' bid opportunity templates.	Include the statement in tenders.	WFMA in cooperation with Departments and SOAs.	Not in WFMA's control.
(c) Explore the opportunity to prioritize low-emitting engines in call-out lists for outsourced work in City tenders. Consultation with the private sector would be a part of this exploration.	Decision on whether or not to include the call out list in tenders.	WFMA in cooperation with Departments and SOAs.	Not in WFMA's control.
(d) Investigate the feasibility of applying the strategies of the green fleet plan to all pieces of equipment	Decision on whether to apply the Green Fleet	WFMA in cooperation with Departments and SOAs.	Ongoing.

rented by the City for delivery of City services.	Plan strategies to rental units.		

9) Transportation Demand Management

Goal: Explore opportunities for deploying Transportation Demand Management to the corporate and employee environment with the aim of reducing unnecessary vehicle kilometres traveled during the work day and for work commutes.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Develop a working group to investigate transportation demand management strategies that could be deployed to reduce the amount of unnecessary vehicle kilometers traveled by City employees for work commutes such as exploring the development of a carpooling program for City employees, installing bike racks at all City facilities, encouraging the use of transit, and developing informational materials for City employees promoting sustainable transportation options available for work commutes.	Working group initiated and report provided on opportunities for TDM for the work commutes.	Environmental Coordinator.	Not actively pursuing. For consideration by Office of Sustainability for inclusion in Climate Action Plan.

10) Communication and Outreach

Goal: Support internal and external communication and outreach on sustainable transportation.

Actions	Performance Indicator	Responsibility	2021 Status
(a) Undertake a City wide communication strategy to explain the components of the Green Fleet Plan to all relevant Departmental representatives including as many operators of City vehicles and equipment as is feasible.	Communication strategy completed.	WFMA.	Ongoing.
(b) Communicate the efforts of the Green Fleet Plan through the City of Winnipeg's sustainability webpage.	Number of activities posted on the City's sustainability webpage.	WFMA.	Not actively pursuing.

(c) Initiate a quarterly fuel usage report to Departmental Directors and Chief Operating Officers of the Special Operating Agencies to flag any fuel use increases. Any increases over 10% within a quarter will require a written summary to the Agency explaining the rational for the increase so that potential reduction measures can be identified and deployed, and so that factors increasing fuel usage can be documented for future reporting.	Fuel usage report completed.	WFMA.	Ongoing.