

**2018-2023 SBP Update
Gap Action Plan Template**

Action Plan Title: Green Fleet Initiative (#12)	Action Plan Owner: Walter Vining
Focus Area: Protecting Environment and Public Health	Action Plan Sponsor: Sherri Crawford

1. Short summary of the project/program (suitable for using with Customer Review Panel and other members of the public, plus additional specifics required for clarity of action).

This action plan will fund the infrastructure needed to implement a green fleet as well as capture data on vehicle use to decrease idle time and manage fuel use. This is in response to the City's Drive Clean Seattle Fleet initiative enacted in December 2016 by Executive Order 2016-09.

2. What outcome will this action achieve? What problem does it solve? What are the benefits?

There are two City goals this action will achieve:

1. A 50% reduction in municipal fleet emission by 2025.
2. A 82% reduction in transportation greenhouse gas emissions by 2030.

The transportation sector accounts for 60% of Seattle's core greenhouse gas emissions, which are the main drivers of climate change. This increase will invest in the following items to decrease greenhouse gas emissions.

- Install electric vehicle charging stations at SPU's facilities. This includes upgrading some of the electrical panels that currently exist to be compatible with new technologies.
- Install a fleet telematics system in existing and new fleets. A telematics system tracks data such as idle time performance, vehicle usage, engine hours, fuel consumption and daily vehicle pre/post trip inspections. This data will be useful in changing SPU's behaviors in how we use our fleet as well as identify areas we can continue to improve to reduce our resource use.
- Install an idle reduction system in light and heavy vehicles. This system installs an electric generator that turns on during idle times switching from using gas to electric energy sources.
- Install electric power outlets at SPU's various facilities near equipment parking stalls. These electric outlets will be used to re-charge the electrical generators on the vehicles during equipment downtime.

SPU will replace existing equipment or vehicles with green fleet as the technologies become available and our existing fleet is no longer operable. The costs for the replacement vehicles is included in the baseline CIP projections.

3. Short description of activities already in the baseline, incremental work.

In 2016, SPU's Operations Control Center received two new electric vehicle chargers in the west parking lot and moved forward with quotes and action plans to install additional chargers at Cedar Falls, Lake Youngs and the Operations Control Center's East lot. Installation will begin early first quarter 2017.

4. Implementation plan and timeline.

SPU will begin with building out the infrastructure needed to support these vehicles and adding on the idle reduction systems to certain vehicles in 2018. All of the electric charging stations at SPU’s facilities will be complete by 2022. SPU will begin to switch out vehicles on their normal replacement cycle. SPU anticipates implementing the telematics in 2020.

5. Implications for budget and FTE (if any)

A project management resource will be needed for this project, and will likely come from internal SPU or Finance and Administrative Services, the City Department in charge of the City program.

Changes (relative to baseline)

	2018	2019	2020	2021	2022	2023
O&M (Non- Labor) Budget Change						
CIP Budget Change	664,126	665,528	2,646,959	767,418	693,076	1,067,423
FTE Change						

6. Alternatives considered for varying options/levels of effort.

Alternatives that could show greenhouse gas (GHG) emissions reductions include exploring other alternative fuels such as propane, compressed natural gas and hydrogen. These have been investigated and proven to be impractical due to high cost in technology, fuel transportation, infrastructure upgrades and fewer places in the city to refuel.

7. Is there lower-priority work underway whose resources could be directed to this effort? Please describe.

None are known at this time.

8. Identify and describe any significant external constraints affecting this action plan.

Market availability, support and delivery times are the primary concerns with any new product and those obstacles are currently being vetted. Electricity consumption for electronic vehicles will also need to be evaluated.

9. Identify possible race and social justice implications for implementation of this plan. How will it impact service equity and how will you resolve this impact?

Primary dispatch centers are predominantly located in vulnerable environmental and socioeconomic areas. Reducing fossil fuel emissions from the fleet will support better community health and the impact SPU has on the residents of Seattle.

10. Describe your plan for evaluating success or progress of this plan. Include any metrics you have.

- By 2025 reduce SPU fuel usage by 4.2% annually. Target = 4.2% reduction
- By 2018, a change management team will be resourced for this initiative
- By 2023, TBD% fleet replaced by electric vehicles. Target = TBD