# REGULAR MEETING NOTICE/AGENDA OF THE SPOKANE CITY COUNCIL

### MEETING OF THURSDAY, FEBRUARY 3, 2022 11:00 A.M. – STREAMED ONLINE

A regular meeting of the Spokane City Council will be held at **11:00 A.M. on Thursday, February 3, 2022.** Council Members will be attending virtually and the meeting will be aired on CityCable5 and streamed live at <a href="https://www.facebook.com/spokanecitycouncil">www.facebook.com/spokanecitycouncil</a> and <a href="mailto:my.spokanecity.org/citycable5/live">my.spokanecity.org/citycable5/live</a>.

The meeting will be conducted in a study session format. The physical meeting will not be open to the public and no public testimony will be taken. Discussion will be limited to appropriate officials, presenters and staff. The public is encouraged to tune in via the options above or by calling 408-418-9388 and using access code 2480 676 7327.

### Agenda:

Arts Commission Interview - Dylan Le (5 min.)

Green Fleet Implementation Plan - Rick Giddings (25 min.)

6-year Street Program - Inland Empire Way - Katherine Miller (30 min)

### **Executive Session**

At any time during or after the regular Study Session Agenda, the City Council may choose to adjourn into Executive Session for the purpose of discussing privileged legal matters. This portion of the meeting would be closed to the public pursuant to RCW 42.30.110.

# Briefing Paper Public Infrastructure, Environment & Sustainability

Division & Department:	Finance and Fleet Services			
Subject:	Submission of Green Fleet Implementation Plan			
Date:	01/24/2021			
Contact (email & phone):	Rick Giddings - 509-625-7706 – rgiddings@spokanecity.org			
City Council Sponsor:	CP Beggs			
Executive Sponsor:	Tonya Wallace			
Committee(s) Impacted:	Public Infrastructure, Environment & Sustainability Committee			
Type of Agenda item:	☐ Consent ☐ Discussion ☒ Strategic Initiative			
Alignment: (link agenda item to guiding document – i.e., Master Plan, Budget, Comp Plan, Policy, Charter, Strategic Plan)	Ordinance C36036			
Strategic Initiative:	Sustainable Practices - Sustainability			
Deadline:				
Outcome: (deliverables, delivery duties, milestones to meet)	The presentation will explain functionality and allow discussion for the Green Fleet Implementation Plan that was submitted on December 13.			
<u>Background/History:</u> In order to reach the City of Spokane's goal that 100% of our fleet be fueled by electricity or other clean fuel by 2030, Fleet Services contracted with Frontier Energy to assist in the development of our Green Fleet Implementation Plan. Frontier has analyzed our Fleet, Facilities, and vehicle parking locations and have created a long-term plan that the City can use as a guide for the procurement of electric and clean fuel vehicles, and charging/fueling infrastructure for the foreseeable future. This briefing will allow for explanation and discussion of the Plan.				
Executive Summary: Fleet Services and Frontier Energy are presenting a more detailed presentation and explanation of the Green Fleet Implementation Plan that was submitted on December 13. The link to the plan was supplied to City Council members at a prior meeting to encourage familiarization with the plan, to develop questions, and to allow newly elected City Council Members to be present.				
Budget Impact: Approved in current year budget?				
Specify changes required: Known challenges/barriers:				



# **GREEN FLEET RECOMMENDATIONS**

# **+Switch to Renewable Diesel and Renewable Natural Gas in 2023**

Reduces carbon footprint as a bridge until FCEVs or M/HD BEVs are more affordable.

# **+All new vehicle purchases should be ZEVs**

Vehicle replacements, including those on the Exclusions list, should be ZEVs if possible, otherwise choose diesel or natural gas (avoid gasoline).

\$4.7M

Average Annual Vehicle
Acquisition Budget 2022-2025

# **♦Install (4) dual-port 180 kW DCFC & non-networked L2s as needed**

To incentivize EV use, install EVSE in favored parking spaces. Prioritize installations where power/circuits are available and where minimal trenching/conduit runs would be required (e.g., adjacent to walls).

# **★Re-evaluate fleet electrification in 2025**

Many more BEVs and FCEVs should be commercially available by then.

\$1.3M EVSE CapEx

### Fuel CNG Diesel

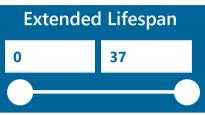
# **EV DEPLOYMENTS**

**✓** Gasoline Propane

2022-2024

2025-2029

2030



\$14M

Vehicle Capex

Vehicle Capex

\$5M

**Annual Opex Savings** 

340

Vehicles Deployed

1	
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Vehicles Deployed

(\$10,775)	\$46,524

**Annual OpEx Savings** (All vehicles)

\$1.3M

Vehicle Type  ▼	Avg. Green Premium	Avg. Extended Lifespan	^
Van Fuel	0.85	7.57	
Utility Fuel	0.66	2.32	
Police Motorcycle	0.86	5.00	
Pickup	0.79	7.21	
Passenger Truck	0.80	4.75	
Passenger SUV	0.62	6.33	
Passenger Car	0.87	4.00	
Forklift	1.04	9.00	
City Delivery Van	0.88	20.00	
Auto Hybrid Elec/Gas	0.97	9.00	
Auto Fuel	0.83	8.28	_
Total	0.77	6.05	·

Vehicle Type  ▼	Avg. Green Premium	Avg. Extended Lifespan
Van Fuel	0.81	9.23
Utility Hybrid Elec/Gas	0.64	1.00
Utility Fuel	0.64	1.52
Small Tractor	1.02	14.50
Police Motorcycle	0.86	1.80
Pickup	0.87	6.56
Passenger Van	0.64	13.33
Passenger Truck	0.76	1.50
Passenger SUV	0.65	0.50
Meter Patrol Scooter	1.12	10.00
Forklift	1.01	9.67
Total	0.78	4.82

\$15M

Vehicle Capex

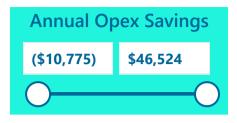
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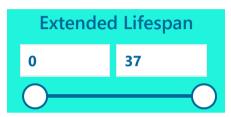
Vehicles Deployed

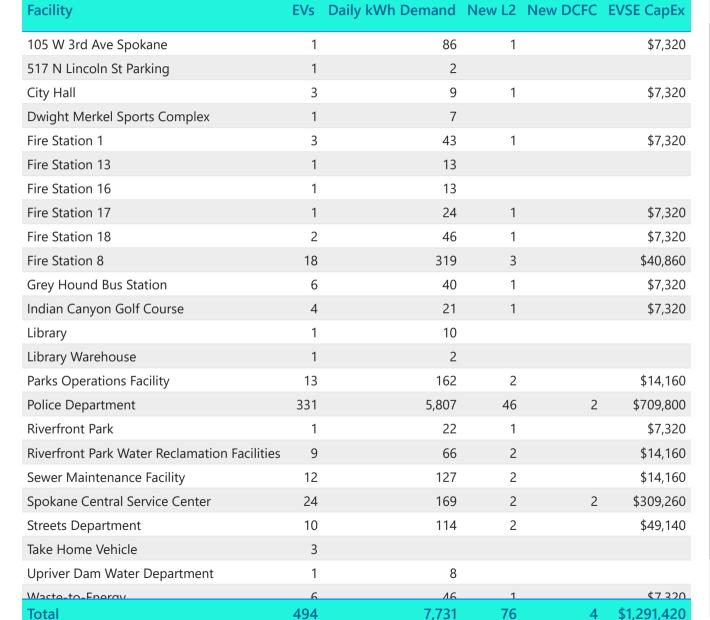
Vehicle Type ▲	Avg. Green Premium	Avg. Extended Lifespan
15+ Passenger Van	2.18	12.33
All Terrain Vehicle	1.14	3.00
Auto Fuel	0.73	12.63
Auto Hybrid Elec/Gas	1.03	18.00
Boat	1.07	30.00
City Delivery Van	0.40	12.00
Dump Truck	3.13	9.50
Heavy Truck	2.27	8.72
Passenger SUV	0.56	1.50
Passenger Truck	0.87	8.29
Pickup	0.93	9.20
Total	1.15	8.85



# **EVSE INSTALLATIONS BY 2025**







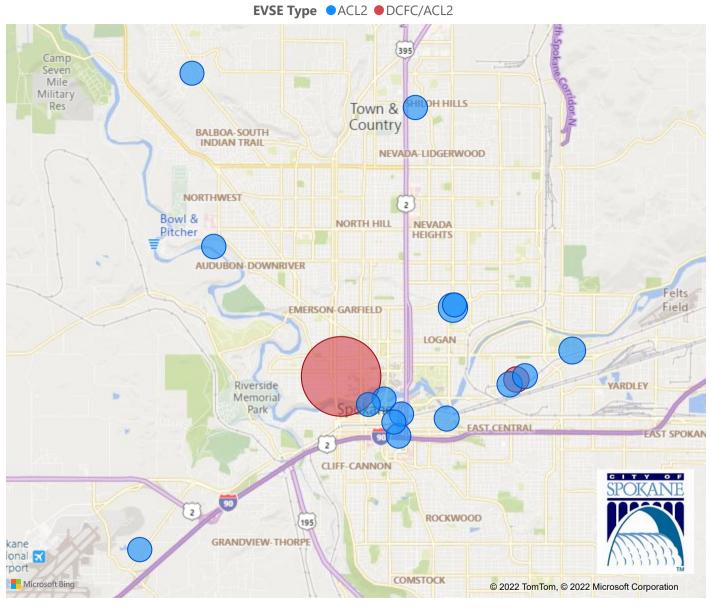
Vehicle Type	EVs
15+ Passenger Van	7
All Terrain Vehicle	3
ATV	3
Auto Fuel	143
Auto Hybrid Elec/Gas	4
City Delivery Van	2
Forklift	12
Meter Patrol Scooter	7
Passenger Car	1
Passenger SUV	14
Passenger Truck	6
Passenger Van	3
Pickup	65
Police Motorcycle	14
Small Tractor	2
Utility Fuel	174
Utility Hybrid Elec/Gas	14
Van Fuel	20
Total	494



**Total** 

### **Average Daily kWh Demand by EVSE in 2025**

Facility	EVs	ACL2	DCFC	Daily kWh Demand
105 W 3rd Ave Spokane	1	1		86
517 N Lincoln St Parking	1			2
City Hall	3	1		9
Dwight Merkel Sports Complex	1			7
Fire Station 1	3	1		43
Fire Station 13	1			13
Fire Station 16	1			13
Fire Station 17	1	1		24
Fire Station 18	2	1		46
Fire Station 8	18	3		319
Grey Hound Bus Station	6	1		40
Indian Canyon Golf Course	4	1		21
Library	1			10
Library Warehouse	1			2
Parks Operations Facility	13	2		162
Police Department	331	46	2	5,807
Riverfront Park	1	1		22
Riverfront Park Water Reclamation Facilities	9	2		66
Sewer Maintenance Facility	12	2		127
Spokane Central Service Center	24	2	2	169
Streets Department	10	2		114
Take Home Vehicle	3			
Upriver Dam Water Department	1			8
Waste-to-Energy	6	1		46
Water Department at Foothills	40	8		577
Total	494	76	4	7,731

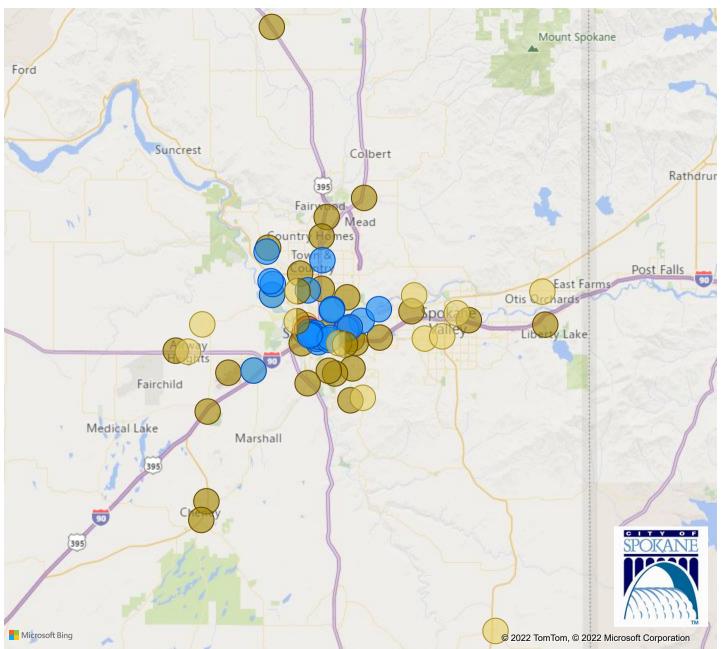


The bubble size indicates relative kWh demand by vehicles domiciled at that location.

Facility	EVs	ACI 2	DCEC	Daily kWh Demand
racility	EVS	ACLZ	DCFC	Daily KWII Demailu
105 W 3rd Ave Spokane	1	1		86
517 N Lincoln St Parking	1			2
City Hall	3	1		9
Dwight Merkel Sports Complex	1			7
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Fire Station 13	1			13
Fire Station 16	1			13
Fire Station 17	1	1		24
Fire Station 18	2	1		46
Fire Station 8	18	3		319
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Total	494	76	4	7,731

## **Existing and Proposed EVSE Installations**

● AVISTA-DCFC ● AVISTA-L2 ● SP-DCFC ● SP-L2



# **EXCLUSIONS**

### Year Due for Replacement

- ✓ Select all
- **1810**
- **1815**
- ✓ 1992
- **1996**
- **1998**
- **1999**
- **2**001
- **2004**
- **2**005
- **2006**
- **2**007
- **2009**
- **2**010
- **2**012
- **2**013
- **2**014
- **2**016
- **2**017
- **2**018
- **2**019
- **2**020
- **2**021
- **2**022
- **2**023
- **2**024
- **2**025
- **2**026
- **2**027
- **2**028
- **2**029
- 2020



### Reason for Exclusion

- ✓ Select all
- ✓ CNG/RNG
- Destroyed
- ✓ Electric
- ✓ Incomplete Data
- ✓ Non-Motorized
- ✓ Not Road Worthy
- Replaced after 2030
- ✓ Sold
- ✓ Specialty Vehicle
- ✓ Will not be replaced (wrecker)

### Fuel

- ✓ Select all
- ✓ CNG
- ✓ Diesel
- ✓ Electric
- ✓ Flex
- ✓ Gasoline
- ✓ Hybrid
- Propane

Make	Model	Reason for Exclusion	Category Class	Qty
PETERBILT	320	CNG/RNG	CNG HEAVY TRUCK	3
FORD	ESCAPE	Destroyed		1
BIG FOOT 3000	BI-030-4B	Electric	ATV	2
CROWN	30RCTT FORKLIFT, ELECTRIC	Electric	LIFT	1
CUSHMAN	LSV800 SCOOTER ATV ELECTRIC	Electric	ATV	1
ELECTRIC SCISSOR LIFT	2636	Electric		1
NISSAN	LEAF ELEC	Electric	AUTO ELECTRIC	1
POLARIS	RGR500	Electric	ATV	1
SCISORLIFT	0	Electric	LIFT	1
SCISORLIFT	324ES	Electric	LIFT	2
SKYJACK	ES3226SCISSO	Electric	SMALL EQUIPMENT	1
TAYLOR DUNN	0	Electric	SMALL EQUIPMENT	3
TESLA	MODEL Y	Electric	AUTO ELECTRIC	2
WANCO	ARROWBOARD	Electric	TRAILER	2
WANCO	TRAFFIC DIR	Electric	TRAILER	14
YALE	0	Electric	LIFT	1
FORD	TRACTOR	Incomplete Data	HEAVY TRUCK	1
AEP NORTH AMERICA	OS300 TRAILER, RADAR	Non-Motorized	0	2
AIRMAN	PDS185S TRLR COMPRESSOR	Non-Motorized	COMPRESSOR	2
AIRMAN	SDG100S TRLR GENERATOR	Non-Motorized	TRAILER	1
ALLOY	ATCT-48-3	Non-Motorized	TRAILER	2
ALUMA	7814ST	Non-Motorized		1
AMER	033 TRAILER, FLATBED	Non-Motorized	TRAILER	1
ARO-LITE	15570	Non-Motorized	TRAILER	1
ARO-LITE	3/4D BTY	Non-Motorized	TRAILER	2
ASPHALT ZIPPER	AZ-480 MILLING MACHINE	Non-Motorized	SMALL EQUIPMENT	1
ASPHALT ZIPPER	CRACK REPAIR/GRINDER	Non-Motorized	SMALL EQUIPMENT	1
BIG BUBBA	TRAILER, UTILITY	Non-Motorized	TRAILER	2
BIG TEX	BIG TEX TRAILER	Non-Motorized	TRAILER	1
BIG TOW	B-12	Non-Motorized	TRAILER	2
BOBCAT	T650 LOADER GRAPPLE	Non-Motorized	TRACTOR	1
BUTLER	LT1014 TRAILER, FLATBED	Non-Motorized	TRAILER	1
BUTLER	LT1214 TRAILER, EQUIP	Non-Motorized	TRAILER	1
Total				698

### **TRANSITION PLANNER by Vehicle**

### Facility Name ✓ Select all ✓ 105 W 3rd Ave Spokane WA 99201 City Hall

- **✓** Dwight Merkel Sports Complex
- Fire Station 1 ✓ Fire Station 13
- ✓ Fire Station 17
- Fire Station 18
- ✓ Library
- ✓ Library Warehouse
- ✓ Park Operations Facility
- **✓** Police Department
- Riverfront Park
- ✓ Riverfront Park Water Reclamation Facilit...

### Department

- ✓ Select all
- ✓ (blank)
- ADMIN
- ASSET MANAGEMENT
- ✓ CODE ENFORCEMENT A GENERAL SVCS
- COMMUNITY HOUSING HUMAN SVS.
- ✓ ELECTRONIC SERVICE CENTER
- **✓ ENGINEERING SERVICES**
- **▼ FLEET SERVICES**
- ✓ FLEET SVS MOTOR POOL
- ✓ INFORMATION TECHNOLOGY
- **✓ LIBRARY**
- ✓ MAINT
- PARK OPERATIONS
- PARKING ENFORCEMENT
- PARKS/RECREATION
- **✓ PLANNING & BUILDING SVS**
- POLICE DEPARTMENT

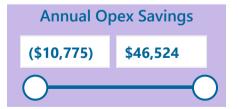


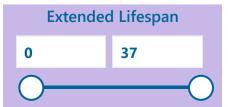
### Fuel

- Select all
- CNG
- Diesel
- **✓** Gasoline
- Propane

### Replacement Batch

- Select all
- **2022**
- **2025**
- 2030





Unit #	Department	Replace Year	EV CapEx	Annual opex savings
424026	(blank)	2022	\$33,995	\$2,476
176	ADMIN	2022	\$60,000	\$2,588
189	ADMIN	2022	\$39,974	\$987
190	ADMIN	2022	\$27,400	\$581
209	ADMIN	2022	\$33,995	\$1,623
424930	CODE ENFORCEMENT A GENERAL SVCS	2022	\$33,470	\$1,501
428893	COMMUNITY HOUSING HUMAN SVS.	2022	\$47,185	\$1,767
422266	ELECTRONIC SERVICE CENTER	2022		\$596
426936	ELECTRONIC SERVICE CENTER	2022	\$39,974	\$1,354
422363	ENGINEERING SERVICES	2022	\$60,000	\$1,016
422366	ENGINEERING SERVICES	2022	\$27,400	\$621
425612	ENGINEERING SERVICES	2022	\$39,974	\$1,492
428334	ENGINEERING SERVICES	2022	\$39,974	\$860
422417	FLEET SERVICES	2022	\$39,974	\$631
425138	FLEET SERVICES	2022		\$1,091
427980	FLEET SERVICES	2022		\$874
425479	FLEET SVS MOTOR POOL	2022	\$27,400	\$490
426573	FLEET SVS MOTOR POOL	2022	\$39,974	\$1,378
426804	FLEET SVS MOTOR POOL	2022	\$27,400	\$1,197
427341	FLEET SVS MOTOR POOL	2022	\$33,470	\$843
425574	INFORMATION TECHNOLOGY	2022	\$39,974	\$434
426992	LIBRARY	2022	\$27,400	\$168
168	MAINT	2022		\$301
170	MAINT	2022	\$33,995	\$1,812
171	MAINT	2022	\$39,974	\$1,211
422779	MAINT	2022	\$33,995	\$1,812
422780	MAINT	2022	\$33,995	\$1,812
424950	MAINT	2022	\$33,995	\$1,812
401897	PARK OPERATIONS	2022	\$39,974	\$1,771
420527	PARK OPERATIONS	2022	\$39,974	\$882
423424	PARK OPERATIONS	2022	\$39,974	\$1,196
423563	PARK OPFRATIONS	2022	\$47 185	\$1,605
Total			\$18,940,015	\$1,050,147

\$1.1M Annual opex savings

\$19M **EV** CapEx

\$1.3M **EVSE CapEx** 

Vehicle Type	EVs
15+ Passenger Van	7
All Terrain Vehicle	3
ATV	3
Auto Fuel	143
Auto Hybrid Elec/Gas	4
City Delivery Van	2
Forklift	12
Meter Patrol Scooter	7
Passenger Car	1
Passenger SUV	14
Passenger Truck	6
Passenger Van	3
Pickup	65
Police Motorcycle	14
Small Tractor	2
Utility Fuel	174
Utility Hybrid Elec/Gas	14
Van Fuel	20
Total	494

**GHG Emission Reductions** 

2,338

MTCO2e

### TRANSITION PLANNER by FACILITY

# Facility Name Select all 105 W 3rd Ave Spokane WA 99201 City Hall Dwight Merkel Sports Complex Fire Station 1 Fire Station 13 Fire Station 17 Fire Station 18 Library Library Library Warehouse Park Operations Facility Police Department Riverfront Park

✓ Riverfront Park Water Reclamation Facilit...

### Department

- ✓ Select all
- ✓ (blank)
- ✓ ADMIN
- ASSET MANAGEMENT
- ✓ CODE ENFORCEMENT A GENERAL SVCS
- ✓ COMMUNITY HOUSING HUMAN SVS.
- ✓ ELECTRONIC SERVICE CENTER
- **✓ ENGINEERING SERVICES**
- **▼** FLEET SERVICES
- FLEET SVS MOTOR POOL
- **✓** INFORMATION TECHNOLOGY
- **✓ LIBRARY**
- **✓** MAINT
- PARK OPERATIONS
- **✓ PARKING ENFORCEMENT**
- ✓ PARKS/RECREATION
- **✓ PLANNING & BUILDING SVS**
- ✓ POLICE DEPARTMENT

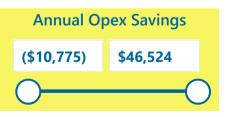
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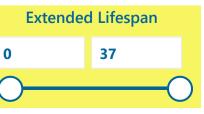
- Select all
- CNG
- Diesel
- **✓** Gasoline
- Propane

### Replacement Batch

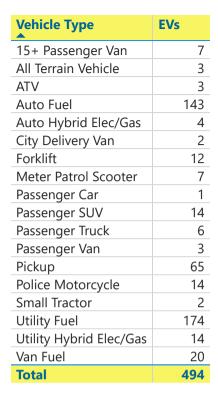
- Select all
- **2022**
- **2025**
- 2030







Facility Name	EVs	Avg. Repl. Yr	EV CapEx
Police Department	331	2023	\$13,644,556
Water Department at Foothills	40	2023	\$1,411,946
Spokane Central Service Center	24	2024	\$502,665
Park Operations Facility	13	2022	\$489,328
Sewer Maintenance Facility	12	2022	\$397,752
Streets Department	10	2024	\$336,574
Riverfront Park Water Reclamation Facilities	9	2023	\$303,034
Waste-to-Energy	6	2024	\$100,935
105 W 3rd Ave Spokane WA 99201	5	2023	\$200,957
City Hall	3	2022	\$94,774
Fire Station 1	3	2023	\$99,725
Fire Station 18	2	2022	\$79,948
Dwight Merkel Sports Complex	1	2022	\$39,974
Fire Station 13	1	2022	\$39,974
Fire Station 17	1	2022	\$60,000
Library	1	2025	\$43,306
Library Warehouse	1	2022	\$27,400
Riverfront Park	1	2022	\$39,974
Upriver Dam Water Department	1	2025	
Total	494	2023	\$18,940,015



\$1.1M
Annual opex savings

**\$19M**EV CapEx

\$1.3M EVSE CapEx **GHG Emission Reductions** 

2,338

MTCO2e

### **TRANSITION PLANNER by Department**

# Facility Name Select all 105 W 3rd Ave Spokane WA 99201 City Hall Dwight Merkel Sports Complex Fire Station 1 Fire Station 13 Fire Station 17 Library Library Warehouse

	/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	Fuel
ouse ns Facility nent k	■ Select all □ CNG □ Diesel ☑ Gasoline ☑ Propane
k Water Reclamation Facilit	

### Park Operation **✓** Police Departm Riverfront Park Riverfront Park Department ✓ Select all ✓ (blank) ADMIN ASSET MANAGEMENT ✓ ASSET/GENERAL CAPITAL FUNDS ✓ CODE ENFORCEMENT A GENERAL SVCS ✓ CODE ENFORCEMENT B LITTER CONTRO COMMUNITY HOUSING HUMAN SVS. ✓ ELECTRONIC SERVICE CENTER ENGINEERING SERVICES ✓ FLEET REPLACEMENT FUNDS ✓ FLEET SERVICES **▼ FLEET SVS MOTOR POOL** ✓ INFORMATION TECHNOLOGY **✓ LIBRARY ✓** MAINT ✓ OPSD PARK OPERATIONS

L CN	IG		
☐ Diesel			
✓ Gasoline			
✓ Pro	✓ Propane		
	opune		
Replac	ement Batch		
Select all			
✓ 2022			
✓ 20 ✓ 20			
20	30		
Annual O	pex Savings		
Annual O (\$10,775)	pex Savings \$46,524		
(\$10,775)	\$46,524		
(\$10,775)			
(\$10,775) Extende	\$46,524		
(\$10,775)	\$46,524		
(\$10,775) Extende	\$46,524		

USING DEPARTMENT	EVs	Avg. Repl. Yr	EV CapEx
(blank)	1	2022	\$33,995
ADMIN	4	2022	\$161,369
ASSET MANAGEMENT	1	2025	\$43,306
CODE ENFORCEMENT A GENERAL SVCS	6	2025	\$195,226
COMMUNITY HOUSING HUMAN SVS.	1	2022	\$47,185
ELECTRONIC SERVICE CENTER	2	2022	\$39,974
ENGINEERING SERVICES	4	2022	\$167,348
FLEET SERVICES	4	2023	\$39,974
FLEET SVS MOTOR POOL	6	2023	\$191,698
INFORMATION TECHNOLOGY	1	2022	\$39,974
LIBRARY	2	2024	\$70,706
MAINT	9	2023	\$284,959
PARK OPERATIONS	10	2023	\$359,354
PARKING ENFORCEMENT	8	2025	\$27,400
PARKS/RECREATION	4	2022	\$169,948
PLANNING & BUILDING SVS	4	2022	\$147,322
POLICE DEPARTMENT	305	2023	\$12,617,439
POLICE, OTHER	26	2023	\$1,054,228
PROBATION SERVICES	1	2022	\$27,400
RIVERFRONT PARK	1	2022	\$39,974
SFD	1	2022	\$33,995
SIGNS & MARKERS	1	2025	\$37,066
SOLID WASTE DISPOSAL-WTE	6	2024	\$106,914
ST1	1	2022	\$39,974
ST13	1	2022	\$39,974
ST17	1	2022	\$60,000
STREET MAINTENANCE	11	2023	\$366,449
SW COLLECTION-RECYCLING	1	2022	\$39,974
TRAIN	10	2024	\$377,630
WASTEWATER MAINT	12	2022	\$397,752
WATER	41	2023	\$1.451.920
Total	494	2023	\$18,940,015

Vehicle Type ▼	EVs
Van Fuel	20
Utility Hybrid	14
Elec/Gas	
Utility Fuel	174
Small Tractor	2
Police Motorcycle	14
Pickup	65
Passenger Van	3
Passenger Truck	6
Passenger SUV	14
Passenger Car	1
Meter Patrol Scooter	7
Forklift	12
City Delivery Van	2
Auto Hybrid Elec/Gas	4
Auto Fuel	143
ATV	3
All Terrain Vehicle	3
15+ Passenger Van	7
Total	494

\$1.1M
Annual opex savings

\$19M EV CapEx \$1.3M EVSE CapEx **GHG Emission Reductions** 

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MTCO2e