

**King County Metro Transit
Future Fleet Planning**

Appendix A: 2040 Electrification Fleet Plan

Color Key

OLDEST - Retirable Fleet
CURRENT - Fleet under FTA requirement
COMMITTED - Planned/Incoming Purchases
PROJECTED - Uncommitted Future Purchases

Major Fleet Assumptions:

- * 20% Spare Ratio as ongoing target
- * 55% Artic Target
- * Seattle CMC Svc/Fleet ends in 2020/21
- * Madison/G Line, 13 hybrid coaches, 2023

- * 20 60' & 20 40' Extended Range Battery Buses in 2022
- * RapidRide Program Continues to grow and adds 40' Fleet
- * The fleet is very old in '24 in anticipation of major reductions in '25-'26
- * NO Service Growth 2027-2040

- * 30 new 60' Trolley Coaches in '29
- * All Procurements in 2025 or later are ZEV (Battery & Trolley)
- * 60 35' Battery Bus replace 35' Hybrid Fleet in '30-'31 (North, Bellevue, South)
- * 100% ZEV in 2040

Fleet Name	Fleet #	Fall 2019	Spr 2020	Fall 2020	Spr 2021	Fall 2021	Spr 2022	Fall 2022	Fall 2023	Fall 2024	Fall 2025	Fall 2026	Fall 2027	Fall 2028	Fall 2029	Fall 2030	Fall 2031	Fall 2032	Fall 2033	Fall 2034	Fall 2035	Fall 2036	Fall 2037	Fall 2038	Fall 2039	Fall 2040	
Small (<40') Fleet																											
30' Diesel Gillig	1100	4	4	-																							
35' Hybrid New Flyer	3700	60	60	60	60	60	60	60	60	60	60	60	60	60	60	30	-										
40' Diesel New Flyer	3600	31	-																								
40' Hybrid Daimler-Orion	7000	199	199	199	199	199	199	199	199	179	50	20	20	-													
40' Hybrid New Flyer	7200	60	60	60	60	60	60	60	60	60	60	60	60	41	26	21	20	-									
40' Hybrid Gillig	7300	177	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	134	103	103	47	42	38	-			
Artic (60') Hybrid Fleet																											
60' Hybrid New Flyer	2600	188	158	7	7	7	7	-																			
60' Hybrid New Flyer	6800	187	187	187	187	187	187	154	146	146	35	17	17	-													
60' Hybrid New Flyer (ODOT)	8000	85	85	85	85	85	85	85	85	85	85	85	85	72	35	8	-										
60' Hybrid New Flyer (WSDOT, 2 Door)	8100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	15	5	-									
60' Hybrid New Flyer (WSDOT, 3 Door)	8200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	21	17	17	-						
Electric Fleet (Trolley & Battery)																											
40' Proterra Fast Charge (2016)	4600	11	11	11	11	11	11	11	11	11	11	11	11	11	11	8	5										
40' Trolley New Flyer	4300	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	-									
60' Trolley New Flyer	4500	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	-									
60' Battery	4800							20	20	20	20	20	20	20	20	20	20	20	20	20	20	14	13	4	1	-	
40' Battery	4900							20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	15	14	12	-	
60' Future Trolley	100														30	30	30	30	30	30	30	30	30	30	30	30	
40' Future Battery	1000										10	10	10	45	45	55	55	55	55	55	55	55	55	55	55	10	
60' Future Battery	5000										65	65	65	95	95	200	200	200	200	200	200	200	185	174	115	105	
35' Future Battery	1200															30	60	60	60	60	60	60	60	60	60	60	
60' Future Battery	5200																	80	90	90	125	140	140	165	185	185	
40' Future Battery	1300																	90	90	90	110	120	120	180	180	200	
40' RapidRide Battery Replacement+Growth	6500									30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	24	-	
60' RapidRide Battery Replacement+Growth	6600													90	90	90	90	90	90	90	90	90	90	90	87	-	
60' RapidRide Battery Replacement + Growth	6700														10	15	40	40	40	65	80	80	115	115	145	250	
40' RapidRide Battery Replacement + Growth	6800														20	20	20	20	20	45	45	80	85	100	130	130	
METRO TOTAL FOR 2017/2018 BUDGET		1,552	1,516	1,361	1,361	1,361	1,361	1,361	1,366	1,346	1,211	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	1,144	
Sound Transit																											
40' Sound Transit LF	90/91	5	5	3	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
40' Hybrid Sound Transit LF	9200	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
60' Diesel Sound Transit LF	9500	53	53	53	53	53	53	53	31	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
60' Hybrid Sound Transit LF	9600	60	60	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	
ST TOTAL		119	119	125	125	125	125	125	100	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
ST Peak Signout		100	100	105	105	105	105	105	84	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	
TOTAL METRO OPERATED		1,671	1,635	1,486	1,486	1,486	1,486	1,486	1,466	1,426	1,291	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	1,224	
Metro Peak Signout		1,231	1,228	1,000	1,080	1,135	1,135	1,135	1,139	1,122	1,009	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	
Metro Spare Ratio		26.1%	23.5%	36.1%	26.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	
Metro Artic Ratio		58%	58%	53%	53%	53%	53%	52%	52%	53%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	
Metro Retireable Fleet Ratio		14%	11%	1%	1%	14%	14%	24%	23%	33%	16%	17%	18%	20%	15%	16%	15%	19%	14%	10%	9%	9%	13%	10%	0%		
% Electric (Battery + Trolley)		12%	12%	14%	14%	14%	14%	17%	16%	17%	25%	26%	26%	32%	37%	50%	55%	69%	74%	74%	83%	83%	85%	88%	90%	100%	
Battery Buses		11	11	11	11	11	11	51	51	51	156	156	156	311	341	488	540	705	765	765	863	868	887	925	940	940	