# KOVING FORWARD

The last time we met, KWRL presented developments regarding state and federal clean energy mandates and the local decisions we must soon make. KWRL also shared current electrification grant opportunities that may help KWRL navigate these future mandates.



## Why and when are districts losing their access to diesel powered school buses?



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- Manufacturers will stockpile 2025 motors through 2025
- Manufacturers will build 2026 buses with 2025 motors until that stockpile is depleted.
- Manufacturers will stop taking orders for buses with 2025 motors in 1st or 2nd quarter of 2025
- Manufacturer will deliver buses with 2025 motors through 2026 until depleted.
- Manufacturers are not going to provide a quote to OSPI for a diesel powered school for the 2025/2026 school year

#### What is driving the push to electrify school bus fleets?



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#### Medium Duty On-Highway



### Transportation Vehicle Fund (TVF)

- Washington State School bus purchase and replacement program
- Funded by the State of Washington through OSPI
- TVF fund is regulated for school buses only per RCW 28A.160.130
- Dispersed to districts over scheduled payments each August
- Replacement schedule is based on class of bus purchased
- Districts can make contributions to prepare for district growth

#### Forecast TVF balance with electric but with \$200,000 EPA rebate

VM/DL 10 Voor TV/E Enrocast

KWKL IU Teal TVF FUlecast										
2024 Purchase Prices & Quantity Detail					May 2024 Balance	Income <u>By</u> Source			May 2024 Balance	
	\$150,690	\$153,787	\$203,747	\$206,000	\$3,854,000.00				\$2,000	\$3,854,000.00
Red = already ordered or delivered / With EPA Rebate					August Deposit					
Year	Type A	Type C	Type D	Electric	Expenditures	Dep Income	<u>Coop</u> Deposit	Avg Interest	<u>Trade</u> Income	Sep 1st Annual Balance Estimate
2023/2024	4	4	0	0	\$1,217,908.00	\$1,487,727.26	\$350,000	\$50,000.00	\$18,000	\$4,541,819.26
2024/2025	1	5	4	0	\$1,803,997.52	\$2,070,094.48	\$350,000	\$50,000.00	\$20,000	\$5,227,916.22
2025/2026	1	2	0	14	\$3,475,954.56	\$1,652,290.18	\$350,000	\$50,000.00	\$6,000	\$3,810,251.84
2026/2027	1	2	6	0	\$1,815,205.68	\$2,422,103.43	\$350,000	\$50,000.00	\$18,000	\$4,835,149.59
2027/2028	1	2	6 🗸	0	\$1,882,435.52	\$2,025,887.16	\$350,000	\$50,000.00	\$18,000	\$5,396,601.23
2028/2029	1	2	6	0	\$1,949,665.36	\$1,885,289.34	\$350,000	\$50,000.00	\$18,000	\$5,750,225.21
2029/2030	1	2	6	0	\$2,016,895.20	\$2,020,255.00	\$350,000	\$50,000.00	\$18,000	\$6,171,585.01
2030/2031	1	2	6	0	\$2,084,125.04	\$2,127,573.92	\$350,000	\$50,000.00	\$18,000	\$6,633,033.89
2031/2032	1	2	6	0	\$2,151,354.88	\$2,028,819.47	\$350,000	\$50,000.00	\$18,000	\$6,928,498.48
2032/2033	1	2	6	0	\$2,218,584.72	\$2,004,709.61	\$350,000	\$50,000.00	\$18,000	\$7,132,623.37
2033/2034	1	2	6	0	\$2,285,814.56	\$2,169,738.80	\$350,000	\$50,000.00	\$18,000	\$7,434,547.61
4% Market Increase Applied Each Year										
Variables/Multipliers				\$22,901,941.04	\$21,894,488.65	\$3,850,000	\$550,000.00	\$188,000	\$7,434,547.61	
				\$20,828,050.88	\$26,482,488.65				2034 Balance	

#### What has KWRL learned since we last met?



- Acquired financial assistance from PUD
- Researched and developed actual costs
- Interviewed experienced reference districts
- Reviewed NHTSA safety records
- Acquired funding commitments from P.U.D.
- Confirmed EPA grant critical path timeline
- Applied for additional grants to stack/compliment
- Developed site plans for both facilities
- Negotiated preliminary contract proposal
- Confirmed facts and funding with OSPI
- Consulted with legal counsel
- Consulted with Washington State Legislators
- Consulted with each of the KWRL Superintendents



#### EPA grant for school bus electrification / Partnering with Highland Electric Fleets

Project Benefits	<u>Highland</u>	<u>Time Lines</u>
\$1.38 million TVF gain	Grant acquisition, process and compliance expertise	EPA Round 3 award May 2024
Funded Infrastructure	Material procurement expertise	KWRL decision to accept Oct 2024
\$200k TVF annual district savings	Permitting and construction management	Accept EPA Round 3 Nov 2024
\$560k IRS 45-W	Sourcewell purchasing approved	EPA Heavy Duty awards Nov 2024
\$60k Avg carbon credit revenue	Charge system expertise and 24 hour management	Dept. of Ecology awards Nov 2024
\$112k annual diesel reduction	Warranty and risk protection	EPA Round 4 application Jan 2025
\$78k consumables reduction	Fixed electricity covered by Highland	Buses arrive July 2025
\$2.8 million in new buses	Highland cost = \$218,000 per year	Project complete Aug 2025(goal)

## We have a choice to make!

ACCEPT THE GRANT \$2.8 million funding Funded infrastructure Fixed energy costs Mitigate the risks Enhanced opportunities Subsidy dollars! DECLINE THE GRANT No TVF growth opportunity Wait for State to "fully fund" Volatile energy costs Assume the risks Diminished opportunities Local dollars?





#### **DECLINE GRANT**



#### \$2.8 Million New Bus Funding

Unknown

**OSPI** funding

operational savings

Unknown

alternative

bus power

\$203k waved tax becomes \$203k applied tax

Electrification without acquiring and leveraging outside funding

#### \$1,38 Million TVF Fund Increase

Unknown Infrastructure Costs

\$560,000 IRS 45-W Credit

> Unknown Energy Costs

grants or subsidies, is not a financially responsible option
Districts reassume full \$350k annual TVF liability contribution to maintain healthy TVF balance
Reassume current cost of fuel and consumables
Remain dependent upon volatile energy market

- Hope that Federal CARB Act is repealed or delayed
- Await development of alternate school bus power option that will be CARB Act compliant and hopefully ready by 2026
- Modify current infrastructure to accommodate new alternative bus power source will likely require some local dollars
   Hope that future mandates/solutions are "*Fully Funded*"

\$200,000 TVF Savings to Districts \$2.8m grant becomes \$2.8m cost \$60,000 annual carbon revenue

energy market pealed or delay

#### **Director's Conclusions**

- Washington State's decision to opt into the CARB Act prematurely hinders many aspects of student transportation for school districts in SW Washington.
- The State of Washington is putting the CARB Act ahead of their obligation to fully fund the infrastructure their decision to opt into the CARB Act creates.
- Electric buses are a valued and efficient tool that will help diversify a good fleet if electrification can be done cost neutral or better for the member districts.
- The grants and funding opportunities currently available make electrification a beneficial and viable option for KWRL.
- It is foolish to think that we must go fully electric and eliminate diesel options before electric school buses are fully funded and supported.
- It is foolish to think that electric school buses do not have a place, and cannot provide superior efficiency in many aspects of student transportation.
- Electrification of school buses is a reality in Washington State. KWRL should take advantage of practical opportunities to capture available funding resources while they are available and before competition for those resources decreases access.



#### Frequently asked electrification questions

Frequently shared concerns	Here are the facts					
Electric School Buses will cost the district far more money and that is a waste of local levy dollars	KWRL is not considering any electric bus purchases unless the product is more affordable or is cost neutral as compared to diesel options. Electric is a viable option due to pending CARB Act legislation restricting diesel. School bus transportation operations are funded by OSPI through the 1026A allocation and the Transportation Vehicle Fund (TVF) and not through local levy dollars. Transportation Cooperatives are authorized and regulated in Washington State by WAC 392-141-310.					
It takes 24 hours or more to fully charge an electric school bus	A Thomas electric bus has a 140 mile range. The average KWRL route is about 50 to 60 miles per day. Average charge time will be 3 to 4 hours using a 30kW level 3 DC fast charger.					
Electric school buses are very susceptible to dangerous fires	Thomas Bus Co. has built thousands of electric buses and uses passive propagation resistance(PPR) technology designed to the highest safety standards. To date, Thomas Bus Co. has zero electric bus fires.					
KWRL is pushing green energy and environmentalist ideology	KWRL does not consider any environmental or political variables when considering school bus electrification. KWRL only assess regulatory compliance and the efficiency of fiscal and logistical factors of electrification options. KWRL has lobbied legislators to delay, limit or repeal pending diesel restrictions because KWRL still needs a strong diesel option as part of an effective, efficient and diversified fleet.					
Electric buses just don't last	Electric school buses have 90% fewer moving parts. KWRL is negotiating the contract with Highland to cover the battery and all charge systems for the full 13 year life of the bus to mitigate possible financial risks.					
There is not enough cost savings between diesel and electricity	The electrification model that KWRL is considering would be fixed energy costs negotiated with local PUD's that would be the financial responsibility of Highland as owner of the charge system.					
Our climate is too cold for electric buses and they need indoor storage	Our climate does not require indoor storage. Total daily range of an electric bus would see minimal reduction of range during periods of hard freeze. Our projected route miles per day would not be limited or impaired.					