



A Magic School Bus Primer

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Summary

What kind of journey would it take to retire some aging school buses with electric ones? Fairfax Co, VA formed a Joint Environmental Task Force with stakeholders. 8th largest fleet in US, 140k riders. Focused on health problems. Applied to utility, Dominion, awarded Thomas Bilt buses @\$130k for \$376k actuals. Used settlement funding from VW + Dominion paid for charging infrastructure = 16 buses. Mothers Out Front engaged the power of parents to drive decisions, net 0 goal setting.

Results

- ✓ Locating a budget-challenged school with pre-2010 diesel buses isn't too difficult, but one with vision & a fleet manager champion?
- ✓ Students & Parents are all in.
- ✓ Drivers & Operations love the lack of diesel-soaked clothes, no gear changing, quick acceleration & quiet rides.
- ✓ Finding grants, partnering helps financial transition.
- ✓ Remember to make the school board look good with PR.



Conclusions

- ✓ Federal Infrastructure Bill = \$5B/5 years for replacement & infrastructure needs, these buses can be 3-4X more expensive
- ✓ Must scrap replaced buses = displace with regenerative brakes + lower maint costs (x85%) + cost of diesel fuel – health damages
- ✓ Apply now – May to August 2022 lottery application system
- ✓ Must have System of Award Mgmt (SAM.gov) & help is at Federal Service Desk (FSD.gov), Prioritized for high need, tribal, rural, low income, underserved
- ✓ Bus manufacturers, utilities will help with route plans, fin plans with or without Federal funding, seat belt equipped!
- ✓ Bonus Points – idle buses can charge the school or V2G + a solar array combo can reduce dependence on fossils