To: Interstate Bridge Replacement Committee From: Sam Churchill, Hayden Island Re: High Speed Charging for Commercial Vehicles Date: June 11, 2021

Dear Committee Members:

TriMet recently purchased five Gillig electric buses from a \$2.29 million grant, using FTA's Low or No Emission (Low-No) Grant Program. Vancouver's C-Tran also bought eight of the same model to replace their fleet's oldest diesel models.



https://www.transit.dot.gov/funding/grants/lowno

https://youtu.be/JzYtpcrIFa8

Tri-Met also ordered five *New Flyer* **electric buses with a \$3.4 million federal grant.** New Flyer (45%) and Gillig (31%) are the two largest transit bus manufacturers in North America.

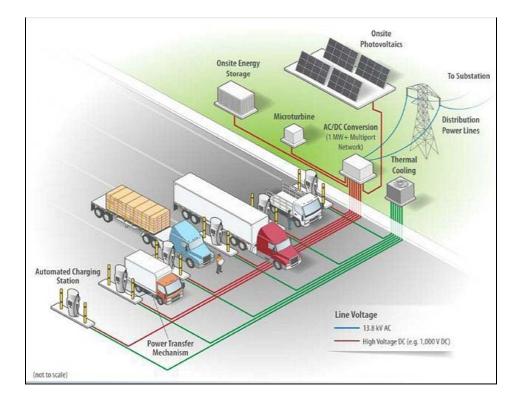
A Megawatt charge station (for trucks and buses) could tap into millions in "free" federal grants. Hayden Island and Daimler seem perfectly positioned.

Daimler's facility on Swan Island is PIONEERING megawatt charging systems for trucks and buses. An 80% charge takes less time than grabbing a Denny's special.



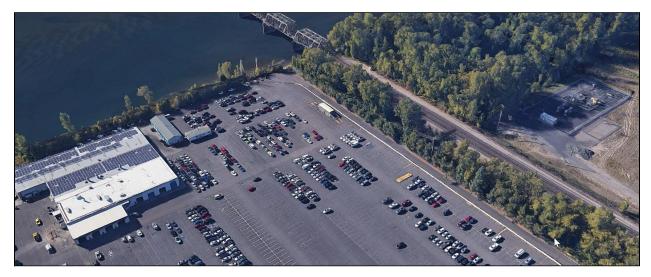
Amazon NEEDS Megawatt charge stations. ALL truckers will need them soon. Freightliner's eM2 truck has 315-kw/hr battery with a 230 mile range. It might be charged every 100 miles or so.

Daimler Trucks of North America, is headquartered on Swan Island. They built the first publicly accessible fast-charging station for electric semis, school buses, and heavy-duty trucks. It's ready to go. It provides an order of magnitude greater power and speed than today's passenger-vehicle fast-charging stations.



Is there a \$3-5 million grant waiting for a Megawatt electric truck/bus charger? Sure. The <u>West Coast Clean Transit Corridor Initiative</u> recommends technology, electric service partners and where to locate charging infrastructure.

Manheim on the far west side of Hayden Island, might be a good location. They ALREADY HAVE 200 Kilowatts of solar installed on their roof. Do they REALLY want to fight five years of bridge construction? I think not.



The world's first 200 KW, solar-assisted Megawatt bus and truck charger could be ours.

- Any electrified VW microbus can get you around town or deliver a package.
- Both Republicans and Democrats may increase the gas tax as they try to strike a bipartisan infrastructure deal this month.
- Washington State's "Clean Cars 2030" bill will allow ONLY vehicles driven solely by electric motors to be sold after 2030.

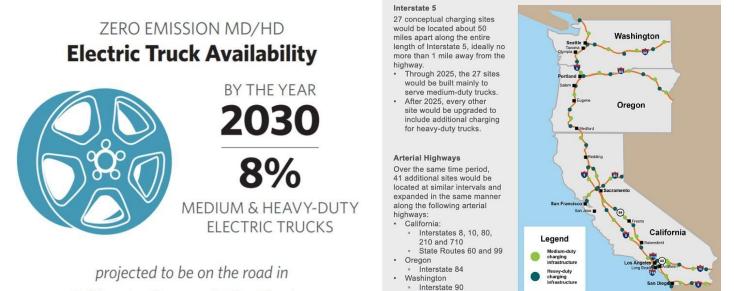
Let's electrify trucks and buses. Right here. Right now.

Sam Churchill 1503 North Hayden Island Drive, #868 Portland, OR 97217

Here are some related links:

https://trimet.org/electricbuses https://en.wikipedia.org/wiki/C-Tran_(Washington) https://en.wikipedia.org/wiki/New_Flyer_Xcelsior

https://en.wikipedia.org/wiki/Gillig



California, Oregon & Washington

https://www.gillig.com/post/trimet-brings-new-type-of-electric-bus-to-the-road-toward-a-clea n-energy-bus-fleet https://blog.trimet.org/2021/03/18/electric-buses-update-lots-of-progress-some-challenges/ https://www.columbian.com/news/2021/jun/10/c-tran-charges-ahead-with-electric-buses/

https://www.greencarreports.com/news/1132019_first-charging-station-electric-semis-mega watt-fast-charging https://www.hdrinc.com/portfolio/west-coast-clean-transit-corridor-initiative

https://cleancities.energy.gov/files/u/news_events/document/document_url/525/ANL_Clean Cities_MW_plus_WhatsAhead_Jan7_2020.pdf https://busmag.com/wp-content/uploads/2018/05/Electric-April.pdf https://hayden-island.net/wp-content/uploads/2015/12/microgrid_proposal.pdf