Fleet, Fuels, Materials, Supplies & Equipment

Delivering services across Oregon's 36 counties requires a suite of tools including vehicles and equipment, fuel, and materials and supplies. When armed with a full toolbox, our crews can maintain our transportation assets effectively, efficiently and safely.

<u>Fleet</u>

We maintain nearly 7,000 pieces of equipment with an estimated replacement value of \$728 million. Our fleet includes all the vehicles and equipment the agency uses to deliver services across all business lines. It includes passenger cars, heavy-duty trucks, construction equipment and power tools as follows:

- Light-duty Vehicles: 946 (13%)
- Medium-duty Vehicles: 542 (8%)
- Heavy-duty Vehicles: 622 (9%)
- Off Road & Construction Vehicles: 758 (11%)
- Non-self-propelled Equipment: 4,111 (59%)

Light-duty vehicles include passenger sedans, vans and small trucks. Of these, 70% are subject to the legislative directive for zero emission vehicles (ZEV). Currently 1% of these vehicles are either all-electric or plug-in hybrid electric vehicles. From July 2023 to June 2024, ODOT drove 9 million miles in light fleet vehicles.

Medium-duty vehicles include mid-size trucks, like incident response vehicles.

Heavy-duty vehicles are the backbone of our maintenance crews. This class of equipment includes 10-yard trucks which we use to plow snow in winter and haul debris in summer. From July 2023 to June 2024, we logged nearly 4.4 million miles with our 10-yard fleet.

Off road and construction vehicles includes heavy-duty construction equipment, like loaders and graders.

Non-self-propelled equipment includes all the supporting equipment used to improve worker safety like variable message signs, automated flagger devices and attenuators, as well as miscellaneous equipment like air compressors and generators.

Challenges

Nearly 38% of ODOT's fleet is operating beyond the recommended service life. The industry target is to operate less than 10% of a fleet beyond recommended service like. With no investment in fleet

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planned for the 25-27 biennium, the amount of fleet beyond service life will increase from 38% to 49%. Historic investments in fleet acquisition have been inadequate, leading to a backlog of aged equipment and vehicles. As the age of our equipment pool increases, the condition decreases, resulting in higher repair costs and lower reliability impacting our ability to deliver maintenance services.

We must comply with the legislative mandate to replace gas-fueled light fleet with zero emission electric or plug-in hybrid vehicles. EVs cost 30-60% more than their fossil fuel counterparts, depending on the make and model.

<u>Fuels</u>

ODOT's fuel program is essential to our agency operations, helping ensure we deliver the services Oregonians depend on; everything from plowing snow and striping pavement to incident response. From July 2023 to June 2024, ODOT used 3.1 million gallons of fuel at a total cost of \$10.9 million.

ODOT uses multiple sources for fueling fleet, including commercial cardlocks, retail fuel stations, the DAS fuel station in Salem, along with EV charging stations. The largest percentage of fueling occurs at 53 ODOT-owned bulk fuel sites. These bulk fueling sites offer significant benefits, including:

- Low-cost fuel available to our crews 24/7 for faster response in critical high impact areas.
- Improved statewide resiliency, especially during emergencies and natural disasters. We are not reliant on third-party vendors' ability to dispense fuel.
- Control over the type of fuel used. Thirty-seven of the 53 locations dispense R99 renewable biodiesel, the best alternative fuel for our fleet.

ODOT has been working diligently to expand the use of alternative fuel sources to aid in reducing our carbon footprint and reaching our sustainability goals. Since 2019 we have almost doubled our use of bio and renewable diesel.

Challenges

As we replace our light fleet with zero emission electric or plug-in hybrid vehicles, we must also establish robust charging infrastructure to support efficient and effective operations. We have installed 35 charging ports at 14 ODOT-owned facilities using grant funding. Based on projects to date, the cost per port is \$23,000. The total number of charging ports required is unknown at this time, but initial research by California indicates the possibility of needing at least one port per ZEV, which could mean we will eventually need more than 600. The charging infrastructure will also require future maintenance services and funding.

Materials & Supplies

Every maintenance activity requires materials and supplies to complete the job: paint for pavement striping; salt, deicer, and sand to treat snow and ice; asphalt for patching potholes; and chainsaws to limb overhanging and fallen branches.

Pavement Striping

Keeping up with striping needs is an ongoing effort. Every year, the combined effects of tires, weather, snowplows, and time wear down lines and legends on every road. Our five pavement crews generally stripe pavement May to October (weather dependent). Using our crews helps manage costs and shorten timelines. From the start of this biennium though October 2024, our crews striped nearly 24,000 line-miles of pavement using over 404,000 gallons of paint.

Challenges

Every material we put on the road has a lifespan that is dependent on conditions, material type, and traffic volumes. While longer life-span products are available, they have a higher up-front cost. In the case of striping, due to the tight budget, we are often limited to cheaper products, tying us into a repetitive cycle of repainting, with long-term impacts to driver and worker safety. When we use contractors, our costs significantly increase. Outsourced material costs are up to three times higher, and we also pay more for labor, project management and inspection services.