

Green Transportation

February 2023

Introduction

Transportation is a vital part of the economy and essential for many everyday activities. It is also a significant source of greenhouse gas emissions (GHGs), which contribute to climate change. In 2020, the transportation sector accounted for about 27% of the total U.S. GHG emissions, making it the largest single contributor to overall emissions.

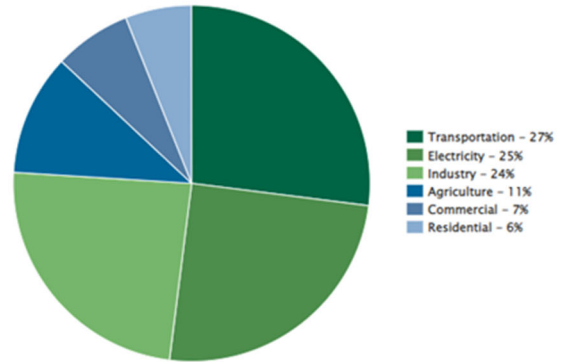
Discussion around climate change and goals to limit GHG emissions have become commonplace in transportation planning documents. From local jurisdictions to state and federal Departments of Transportation (DOTs), there is growing recognition of the role that transportation policies and investments play in combating climate change.

Traditionally, policy efforts to "green" the transportation sector have focused on the adoption of more sustainable forms of transportation, such as public transportation and bike/pedestrian facilities. Increasingly, and in step with advances in technology, policy has sought to support low and zero emission vehicles (LEV, ZEV) that produce no or low tailpipe emissions. EVs are not without their challenges:

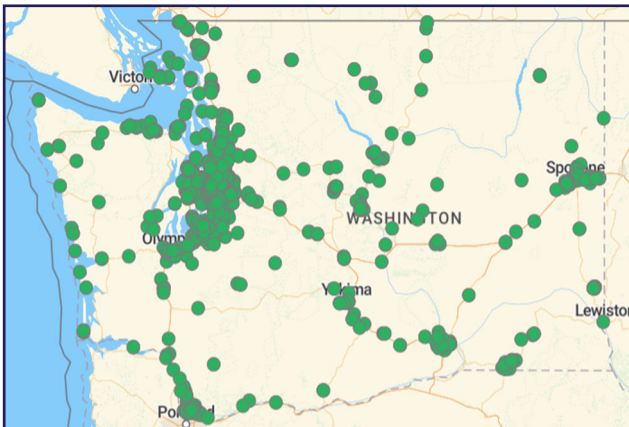
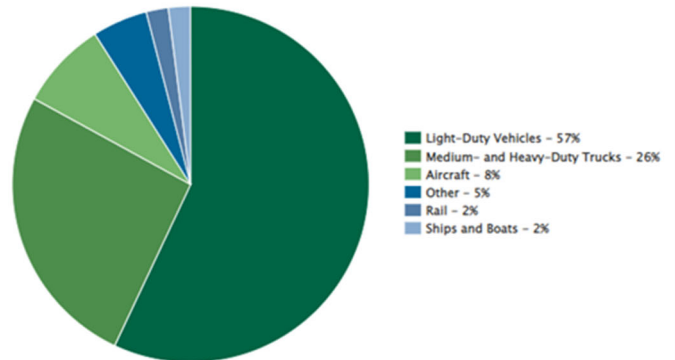
- ⇒ EVs are currently more expensive than traditional gasoline-powered vehicles, both in terms of the upfront cost of the vehicle and the cost of the batteries.
- ⇒ A lack of charging infrastructure is a major barrier to EV adoption.
- ⇒ Many consumers are still unfamiliar with EVs and their benefits.

The sections that follow aim to detail how these challenges are being overcome and how SW Washington RTC can support this.

2020 U.S. GHG Emissions by Sector



2020 U.S. Transportation Sector GHG Emissions by Source



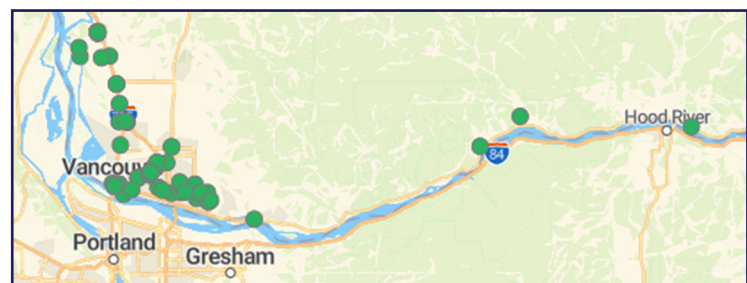
Locations of charging stations in Washington State

In Washington State there are:

1,772 Public Charging Station Locations

4,333 Public EVSE (Electric Vehicle Supply Equipment) Ports

Source: U.S. Department of Energy [Alternative Fuels Data Center](#), 1/19/2023



Locations of charging stations in Clark, Skamania, and Klickitat counties

Federal Guidance

On the heels of several executive orders issued by the Biden Administration, the U.S. Department of Transportation's (DOT) Federal Highway Administration (FHWA) made funding available to states to strategically deploy EV charging infrastructure and to establish an interconnected network to facilitate data collection, access, and reliability.

The **National Electric Vehicle Infrastructure (NEVI)** formula program aims to accelerate the adoption of EV's through a network of 500,000 EV chargers, especially along the national highway system, called **Alternative Fuel Corridors (AFC)**.

Washington's allocated portion of NEVI is \$71 M total over five years, including \$10.5 million for the first year. The nationally designed AFCs in Washington include:

- US 101
- I-90
- I-82/I-182
- I-5
- US 395 (south of Spokane)
- US 195



Washington State Policy

During the 2019 legislative session, the WA State Legislature passed [SHB 1512](#) that was subsequently signed into law by Governor Inslee. That bill became [RCW 54.16.430](#), which allows both investor- and consumer-owned utilities to voluntarily develop Transportation Electrification (TE) Plans and related electric vehicle-related incentive programs, as long as the costs of the TE Plan and the programs do not increase costs to rate payers in excess of one quarter of 1 percent.

Local Efforts

Reflected by a rapid and increasing adoption of EVs in recent years, with a year-over-year growth trend averaging nearly 50 percent, Clark County has seen a growing number of plans and policy measures to guide the adoption of green transportation alternatives. In 2021 the *Clark Public Utilities Board of Commissioners* adopted the utilities **Transportation Electrification Plan (TE)** to ensure the continued supply of electricity to a community increasingly reliant upon it.

In 2022 the City of Vancouver released their **Climate Action Framework (CAF)** to outline strategies and actions that reduce Greenhouse Gas (GHG) emissions from City operations and community activities. The CAF includes eight action items centered around Active, Electrified Transportation, and Connected Neighborhoods. Additionally, C-TRAN has embarked on a **Zero Emissions Bus (ZEB)** transition plan to convert its diesel bus fleet to entirely zero emissions by 2040. Each of these plans includes considerations around building public understanding and providing opportunities for the vulnerable and limited income population.

Conclusion

In an effort to educate the public and incentivize adoption of EVs, federal, state and local agencies are directing money and resources into plans, policies, and infrastructure. Metropolitan Planning Organizations (MPOs) can support this process by incentivizing the purchase of EVs through financial incentives and by investing in EV charging infrastructure. MPOs have a responsibility to consider the environmental impacts of transportation and to promote the use of sustainable transportation options.

