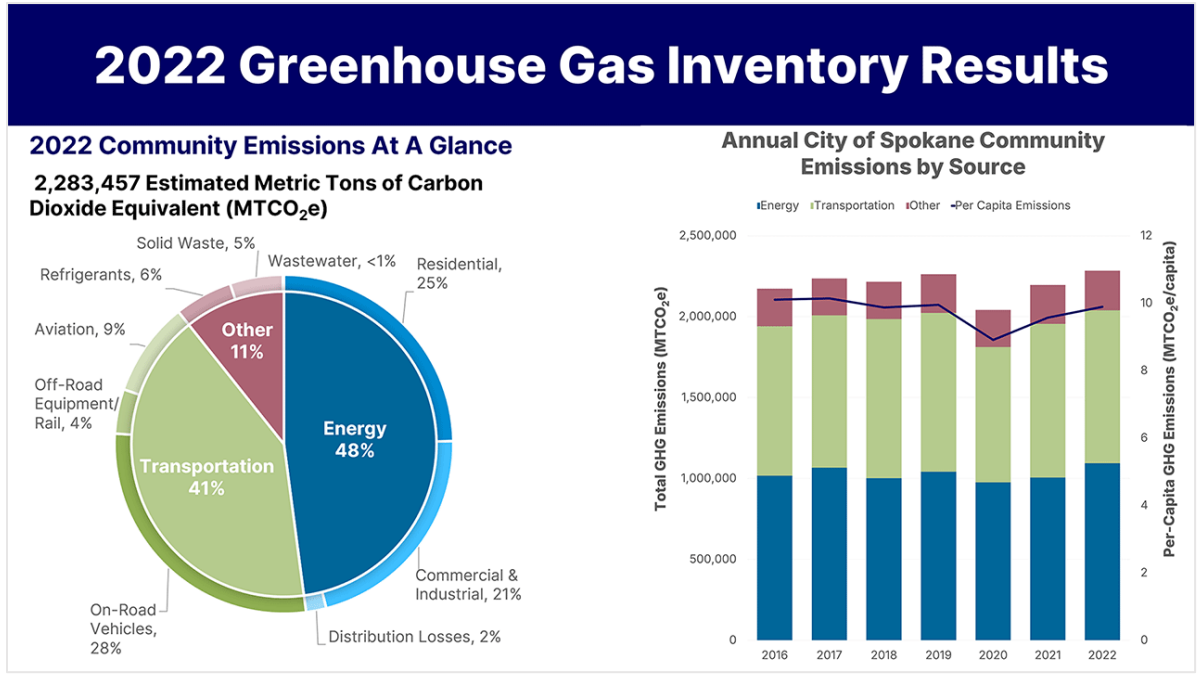
Public Transit as a Climate Strategy

Emily Poole

Chief Planning and Development Officer, STA

Transportation and GHG Emissions



City of Spokane

- United States
  - 29% of GHG emissions in 2022 (EPA)
- Washington State
  - 39.7% of GHG emissions 2020-2021 (WA Dept. of Ecology)
- Spokane
  - 41% of GHG emissions in 2022 (City of Spokane)
  - On-Road vehicles account for 28% of total GHG emissions

Transit Provides Efficiency

- Spokane Transit – 10.4 million passenger trips in 2025
  - Based on national average personal vehicle occupancy of 1.5 persons, this could replace roughly 7 million car trips
- STA Performance Standard – Equivalent Energy Consumption
  - *Connect Spokane*: A bus route should at minimum perform equally to the private automobile in terms of energy consumed per mile traveled for each passenger.
- Average bus needs ~5 riders at any given time to be as efficient as an average private automobile per passenger mile

Electrification and Zero-Emission Fleet

- STA currently operates 40 Battery Electric Buses (BEBs)
  - 25% of STA's fleet
- City Line
  - All-electric Bus Rapid Transit (BRT)
- Route 4
  - Fully electric with 10 dedicated BEB's
- Division Street BRT
  - Planned zero-emission bus service in 2030
- R99 Diesel fuel – renewable diesel

Transit Extends Pedestrian Range

- **High Performance Transit (HPT) – core lines that are all-day, two-way, frequent, and easy to use**
  - Typically stops are approximately 0.25 miles 0.5 miles apart
  - Studies show that beyond 0.5 miles most people will choose another mode of travel besides walking
  - More than half of all trips in the U.S. are less than five miles (NACTO)
  - The HPT network supports the pedestrian's mobility beyond normal walking ranges

Transit-Oriented Development (TOD)

- Dense, mixed-use development within ½ mile of HPT lines
- Development that supports transit and multi-modal travel
- Provides shorter trips and more access
- STA TOD Pilot

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Questions?