# Connected and Automated Vehicles Policies

**Connected and automated vehicles priorities and outcomes**: Prioritize connected and automated vehicles that are fleet/shared ownership, fully automated, electric and, for passenger vehicles, shared by multiple passengers (known by the acronym FAVES). Develop and implement strategies for each following topic. (Transportation System Plan Policy 9.68)

**a:** Ensure that all levels of automated vehicles advance Vision Zero by operating safely for all users, especially for vulnerable road users. Require adequate insurance coverage for operators, customers, and the public at-large by providers of connected and autonomous vehicles. (Transportation System Plan Policy 9.68.a)

**b.** Ensure that connected and automated vehicles improve travel time reliability and system efficiency by:

1. maintaining or reducing the number of vehicle trips during peak congestion periods;
2. reducing low occupancy vehicle trips during peak congestion periods;
3. paying for use of, and impact on, Portland's transportation system including factors such as congestion level, vehicle miles traveled, vehicle occupancy, and vehicle energy efficiency.
4. Supporting and encouraging use of public transportation (Transportation System Plan Policy Policy 9.68.b)

**c.** Cut vehicle carbon pollution by reducing low occupancy "empty miles" traveled by passenger vehicles with zero or one passengers. Prioritize electric and other zero direct emission vehicles operated by fleets and carrying multiple passengers. (Transportation System Plan Policy Policy 9.68.c)

**d.** Make the benefits of automated mobility available on an equitable basis to all segments of the community while ensuring traditionally disadvantaged communities are not disproportionately hurt by connected and autonomous vehicle use. This includes people with disabilities, as well as communities of color, women, and geographically underserved communities. (Transportation System Plan Policy Policy 9.68.d)

**e**. Identify, prevent, identify, and mitigate potential adverse impacts from connected and automated vehicles. (Transportation System Plan Policy Policy 9.68.e)

**Connected and automated vehicles tools:** Use a full range of tools to ensure that connected and automated vehicles and private data communications devices installed in the City right of way contribute to achieving Comprehensive Plan and Transportation System Plan goals and policies. (Transportation System PlanPolicy 9.69)

**a:** Maintain City authority to identify and develop appropriate data sharing requirements to inform and support safe, efficient, and effective management of the transportation

system. Ensure that when connected and automated vehicles use City rights-of-way or when vehicles connect with smart infrastructure within the City they share information including, but not limited to, vehicle type, occupancy, speed, travel routes, and travel times, with appropriate privacy controls. Ensure that private data communications devices installed in the City right of way are required to share anonymized transportation data. (Transportation System Plan Policy 9.69.a)

**b:** Design and manage the mobility zone, curb zone, and traffic control devices, e.g. to limit speeds to increase safety, to minimize cut-through traffic, evaluate future demand for pick-up and drop-off zones, and to prioritize automated electric vehicles carrying more passengers in congested times and locations. (Transportation System Plan Policy 9.69.b)

**c:** Evaluate the public cost and benefit of investments in wayside communication systems serving connected and automated vehicles. Develop a criteria-driven automated vehicle wayside infrastructure investment plan. (Transportation System Plan Policy 9.69.c)

**d.** Develop sustainable user-pays funding mechanisms to support connected and automated vehicle infrastructure and service investments, transportation system maintenance, and efficient system management. (Transportation System Plan Policy 9.69.d)

**e.** Ensure that automated vehicles and vehicles that connect to smart City infrastructure, and private data communications devices installed in the City right of way, help pay for infrastructure and service investments, and support system reliability and efficiency. Develop a tiered pricing structure that reflects vehicle impacts on the transportation system, including factors such as congestion level, vehicle miles traveled, vehicle occupancy, and vehicle energy efficiency. (Transportation System Plan Policy 9.69.e)