

# Washington State Strategic Highway Safety Plan 2019: Cooperative Automated Transportation (CAT)/Automated Vehicles(AVs) Learn More - Page 183 of the Plan

Challenge: It is important that we provide stewardship and guide the implementation to advance the positive impacts and minimize possible negative impacts of CAT, including AVs.

Advances in vehicle automation, connectivity, electrification, and shared mobility are transforming transportation. There are many potential benefits and opportunities associated with the implementation of connected and automated transportation:

- reduced crashes
- efficient use of existing infrastructures and systems
- reduced need for new infrastructure
- improved energy efficiency
- improved access for people unable to hold a driver license

## **VEHICLES WITH AUTOMATION**

| LEVEL            | O<br>None  | <b>1</b><br>Assistance                           | <b>2</b><br>Partial                               | <b>3</b><br>Conditional                    | <b>4</b><br>High                                     | <b>5</b><br>Full |
|------------------|------------|--|---|--|--|------------------|
| What car does    | Nothing    | Assists;<br>Accelerate,<br>brake <u>or</u> steer | Assists;<br>Accelerate,<br>brake <u>and</u> steer | Everything for short periods of time       | Everything<br>restricted<br>operating<br>environment | Everything       |
| What driver does | Everything | Everything with some assistance                  | Everything with more assistance                   | Remain alert<br>ready to<br>resume control | Nothing<br>restricted<br>operating<br>environment    | Nothing          |

Source: Johanna Zmud, Texas A&M Transportation Institute

According to the National Highway Traffic Safety Administration (NHTSA), human error is a contributing factor in 94 percent of crashes. As the role of the human driver is reduced, crashes should decrease. AVs will provide support to impaired, distracted, drowsy, and inexperienced drivers on our roads. Although not all crashes can be prevented through the use of automation, this technology can help Washington State move significantly closer to Target Zero.

#### **Strategies and Objectives for Positive Change:**

There is currently a gap in the public understanding of automation functions and limitations: how they should be used and how they can benefit drivers. This information gap needs to be addressed to ensure the anticipated safety benefits are achieved.



# Other proactive steps include:

- Developing the regulatory landscape
- Examining anticipated public health and equity impacts
- Addressing data and security concerns

## What You Can Do:

- Coordinate programs to educate owners and operators of Level 1-3 vehicles regarding the capabilities and limitations of the vehicles they drive and their responsibilities when operating those vehicles – see page 190
- Educate the public on how and where Level 4 and 5 AVs will be deployed, how they operate, and what to expect from AVs
- Engage with citizens