Verizon 5G Edge with AWS Wavelength enhances connected-vehicle experiences.

**5G Edge with AWS Wavelength** helps transform connected-vehicle use cases by delivering on-demand access to AWS services at the edge of the Verizon 5G Ultra Wideband network.

### New use cases enabled by 5G Edge with AWS Wavelength

#### Improved safety and convenience features with advanced artificial intelligence (AI) and machine learning (ML) services

- **Near real-time situational awareness with C-V2X**
- **Improved safety and convenience features with advanced AI and ML services**

### 5G Edge with AWS Wavelength can provide:

- **Over-the air (OTA) upgrade capabilities**
- **Upstream critical sensor and performance information**

#### How does 5G Edge with AWS Wavelength help transform connected- and autonomous vehicles?

5G Edge with AWS Wavelength can help:

- **Enable mobility as a service (MaaS) using autonomous driving capabilities**
- **Make ride-sharing and vehicle-sharing mainstream**

### Key benefits of 5G Edge with AWS Wavelength

- **Low-latency access to 5G Edge computing infrastructure** enables hosting for safety and security applications without consuming more space, weight or power on the vehicles.
- **Seamlessly shift workloads to AWS Regions as needed**.
- **Process data on the mobile edge as part of the mobile device and application servers**.
- **Reduce variability and packet loss**.
- **Reduce congestion and avoid backhauling vast amounts of data**.

### 5G Edge with AWS Wavelength helps bring to reality the many possibilities of autonomous vehicles:

**1. Connected vehicles**

- Reports show that the number of autonomous vehicles expected to be sold worldwide by 2030 is 1.3 million. The potential market size for autonomous cars and “robotaxis” by 2040, largely made up of autonomous cars and “robotaxis”.

**2. Autonomous driving and safety**

- The average 5G speed by 2023 is expected to be 58 M 575 Mbps (25%).

**3. Sharing and autonoization**

- The number of autonomous vehicles in the U.S. in 2019 is 4.2 million.

### 5G Edge with AWS Wavelength is more than a cloud connection:

- **Provides the best lanes** to stay in and update the best routes.
- **Helps inform drivers about road conditions** can help optimize traffic flow.
- **Improved routing** can avoid traffic jams.
- **Collaborative lane change assistance**.

### Information

- **58 M**: 2.5 trillion
- **36,120**: 94%
- **575 Mbps**: 25%

### References

1. Level 5 autonomy framework from SAE International.
3. 5G Ultra Wideband available only in part of select cities. Global claim from May 2020, based on Opensignal independent analysis of mobile measurements recorded during the period January 31–April 30, 2020.
4. Verizon 5G: The average 5G speed by 2023 is expected to be 58 M 575 Mbps (25%).
5. Lower latency for real-time responses.
6. Reliable and consistent network connectivity.