**LA 1 Article of the Week #10 Week of 12/7-12/11**

Google Offers a Career Less Traveled: Driving a Driverless Car

By Associated Press, adapted by Newsela staff on 10.13.15

MOUNTAIN VIEW, Calif. — After Brian Torcellini joined a secret Google project six years ago, he found himself spending a lot of time on the road, but not doing much driving. Torcellini now works as a driver in a driverless car. Thirty-one-year-old Torcellini leads a crew of test, or "safety," drivers who are legally required to ride in Google's fleet of 48 robot cars. They take control only in emergencies. Otherwise, they make observations that help the Internet company's engineers program the cars to navigate the roads without human assistance. "A lot of people go to work and sit in a cubicle," Torcellini says. "Our cube just happens to move around the roads. And if we are successful, we are going to put ourselves out of a job.

**Test Drivers Go 2 Million Miles So Far**

The driverless cars already have logged more than 2 million miles in six years of testing on private tracks, highways and city streets, mostly in California. The vehicles have traveled more than half that distance in automated mode, with one test driver in place to take control of the car if the technology fails or if a potentially dangerous situation arises. Meanwhile, another driver sits in the front passenger seat typing notes. He or she is responsible for cataloging problems that need to be fixed and traffic scenarios that need to be studied. "I don't want to compare myself to an astronaut, but it kind of feels like that sometimes," says Google test driver Ryan Espinosa.

**2020 Is Goal For Driverless Cars**

If the technology advances as Google envisions, the only people sitting in driverless cars by 2020 will be passengers looking for an easier way to get around. By that point, driverless cars will have become completely self-operating, Google says. There will no longer be any need for the vehicles to be equipped with steering wheels or brake pedals. Everything will be controlled through a combination of sensors, lasers, software and intricate maps. Of course, all that means Google's test drivers may have to start looking for a new line of work sometime soon.

**Test Drivers Must Be Adventurous**

Right now, the job requires a sense of adventure, something Torcellini acquired when he began to surf in high school. His other passions include spear fishing and scuba diving. Torcellini says he is sometimes reminded of scuba diving when he climbs into one of Google's self-driving cars and pushes the button that activates the vehicle's robotic controls. "When you go scuba diving and take a moment to really think about it, you realize you are doing something that isn't supposed to be humanly possible — you are breathing underwater," Torcellini says. "It's the same kind of feeling you get in one of these cars. It's not supposed to be humanly possible." While the engineers who are programming the robot cars have technical backgrounds, most of the test drivers do not. Torcellini worked in a drugstore warehouse while getting his degree in political science at San Diego State University. He dreamed of pursuing a career writing about surfing. He ended up at Google in 2009 after a friend who worked for the company suggested he interview for an opening on a then-secret project.

**Workers Have Perfect Driving Records**

Espinosa, 27, was working in a bicycle shop before he was hired as a test driver two and one-half years ago. Stephanie Villegas, 28, was a swim instructor, knife sharpener and bond trader before becoming a test driver. Other test drivers have varied backgrounds, including time in the military, but all share at least one thing in common: spotless driving records. Before they are entrusted with the cars, Google's test drivers must complete three-week training courses. The drivers are taught to take control of the robot car whenever there is any moment of doubt or danger. Google says it employs "dozens" of test drivers but will not reveal the precise number. Most likely there are about 100 because California law requires two test drivers per vehicle, and Google's fleet currently consists of 25 pod-like cars and 23 Lexuses.

**Accidents Blamed On Careless Motorists**

Besides clean driving records, Google's test drivers say the job requires a combination of good judgment, patience and fearlessness. From May 2010 through August of this year the self-driving cars have been involved in 16 accidents, and accidents are becoming more frequent as the vehicles spend more time on public roads. Half of the collisions have happened since February — a stretch when the self-driving cars were traveling an average of about 10,000 miles per week on public streets in self-driving mode. Fortunately, there have been no major injuries reported so far. The self-driving technology itself has not been to blame for any of the accidents, according to Google, though it says one collision was caused by an employee who was steering a robot car while running a personal errand. In all but three of the accidents, Google's self-driving cars have been hit from behind by other cars. Google believes that trend has to do with the large number of motorists who are texting, talking on the phone or otherwise doing something besides paying attention to the roads and their surroundings. "There are tons of situations where we see people who just aren't very good at driving out there," Torcellini says. "It's up to us to teach the (robot) cars to be better than those drivers, and even better than the best drivers, too."

**Friday’s Writing Prompt:**

**Referencing the article, respond to the following prompt in 2 paragraphs.**

* **Make sure to provide textual evidence to support your claim**
* **Be sure to correctly embed your quote!**

***Do you believe that driverless cars would be beneficial? Explain.***