

Driverless Technology Advances With Partnership Between Toyota Research Institute and GoMentum Station

October 30, 2017

WALNUT CREEK, Calif. – Oct. 30, 2017 –Toyota Research Institute (TRI) has signed an agreement with GoMentum Station to test autonomous vehicle technology at the 5,000 acre autonomous vehicle proving grounds located in Concord, California. Managed by the Contra Costa Transportation Authority (CCTA), this partnership enables TRI to expand closed course testing of its two-prong approach to vehicle automation – Guardian and Chauffeur.

Established in 2015, TRI has made rapid advancements in its research into automated driving and recently demonstrated Platform 2.1, its new advanced safety research vehicle that allows for [testing of both Guardian and Chauffeur in a single vehicle](#). In the Guardian approach, the human driver maintains vehicle control, and the automated driving system operates in the background, monitoring for potential crash situations. It can intervene to protect vehicle occupants when needed. Chauffeur is TRI's version of full vehicle autonomy where all occupants are passengers as the car drives itself. Both approaches use the same technology stack of sensors and cameras. TRI's vision is to offer drivers a choice by making vehicles safer and driving both more fun and convenient.

TRI will use GoMentum Station for further testing of Platform 2.1, which includes a new high-fidelity LIDAR system that provides a longer sensing range, a much denser point cloud to better detect positions of three-dimensional objects, and a field of view that is dynamically configurable. With proximity to TRI research headquarters located in Los Altos, Calif., GoMentum Station augments TRI's public road testing with testing of extreme driving events that are unsafe to conduct on public roads. GoMentum's varied terrain, and real-life infrastructure including roads, bridges, tunnels, intersections and parking lots provide the environment needed to accelerate testing of the "difficult miles" needed to advance both Guardian and Chauffeur.

"The addition of GoMentum Station to TRI's arsenal of automated vehicle test locations allows us to create hazardous driving scenarios for advancing capabilities of both Guardian and Chauffeur and further develop our technology," said Ryan Eustice, TRI vice president of autonomous driving.

The next generation of transportation technology has found its birthplace in the Bay Area with GoMentum Station. Like all cutting edge research efforts, however, great facilities are not enough. Collaboration is critical to fostering innovation. TRI's work at GoMentum Station will advance research that can drastically improve lives in Contra Costa County and worldwide.

"The benefits of driverless technology are many, but the most important one is increased safety. TRI's work in the artificial intelligence arena is vital to advancing autonomous vehicle technology," states Randy Iwasaki, Executive Director of CCTA. "The statistics are clear: lives will be saved by reducing a vehicle's reliance on human drivers, and we are excited to see the progress TRI will make to perfect driverless and driver-aided technology at GoMentum Station."

"The city of Concord is very excited to welcome Toyota Research Institute and its autonomous technology to

GoMentum Station,” said Laura Hoffmeister, mayor of the city of Concord. “The city continues to serve the region as an autonomous technology hub, and we believe this partnership will continue to support economic growth and spur excitement for high-tech jobs in our community.”