

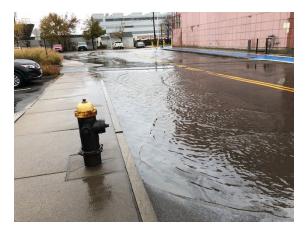
## Progress Report - 2017 Q4 Summary

## Summary

To date, four of our approved vehicles have driven over 340 miles on the autonomous testing-approved roads in the Marine Park. Environmental operating conditions remain unchanged from previous reports. We have no incidents to report.

While operating in autonomous mode during this round of testing, several opportunities have arisen to improve driving safety and ride quality. Obstacles, including unannounced construction sites, require our vehicle to perform complicated maneuvers like crossing double yellow lines into oncoming traffic to overtake a stationary vehicle. Encountering tractor trailers, which take wide turns into oncoming traffic, has also provided information that enhances our vehicle's performance.

Varying road conditions in the Marine Park, from potholes to storm drainage overflow, have also proven useful for testing. Even in light rain, large puddles form and obscure lane markings. Some examples are shown below:









## **Research Achievements**

This round of testing has led to significant achievements to our autonomous operations. We are now better able to identify the vehicle's location in severe weather conditions, like heavy rain, and continue operating closer to the general 25 MPH speed limit for the City of Boston. A more effective storage solution enables us to digest the data we collect, expediting the learning and testing process. We have also strengthened our network security to accommodate our growing fleet. Overall, as our vehicles accumulate more self-driving miles, we improve and expand our vehicle's ability to encounter new situations to improve driving safety and ride quality.