

# Avoidance or Mitigation of Common Crash Scenarios

Crash Avoidance Category	Example Test Scenario
<p><b>Rear-end</b> Demonstrate ability to avoid or mitigate crashes with lead vehicles.</p>	Fully self-driving vehicle approaches stopped lead vehicle
	Fully self-driving vehicle approaches disabled vehicle
	Fully self-driving vehicle approaches lead vehicle traveling at lower constant speed
	Fully self-driving vehicle approaches lead vehicle traveling at slower speed and initiating strong braking
	Fully self-driving vehicle approaches lead vehicle accelerating
	Fully self-driving vehicle following a lead vehicle making a maneuver (e.g. cutting into lane or pulling out of driveway)
	Fully self-driving vehicle approaches lead vehicle decelerating
	Fully self-driving vehicle approaches other vehicle(s) reversing
	Fully self-driving vehicle approaches other vehicle(s) parking
<p><b>Intersection</b> Demonstrate ability to detect vehicle entering path at perpendicular angle and apply brakes.</p>	Fully self-driving vehicle approaches protected intersection, Vehicle A approaches from right
	Fully self-driving vehicle approaches protected intersection, Vehicle A approaches from left
	Fully self-driving vehicle prepares to turn across unprotected intersection, oncoming Vehicle A approaches
	Crossing path collisions - other vehicle running red light
	Crossing path collisions - other vehicle running stop sign
<p><b>Lane Change</b> Demonstrate ability to avoid or mitigate crash when other vehicles make lane changes or merge.</p>	Lane changes - other vehicles turning same direction
	Lane changes - other vehicles parking same direction
	Lane changes - other vehicles changing lanes same direction
	Lane changes - other vehicles drifting same direction
	Lane merges

Crash Avoidance Category (continued)	Example Test Scenario (continued)
<p><b>Road Departure</b>            Demonstrate ability to steer clear of roadway edge and stay within lane.</p>	Fully self-driving vehicle travels down straight road (with or without prior vehicle maneuver)
	Fully self-driving vehicle travels down curved road (with or without prior vehicle maneuver)
	Fully self-driving vehicle travels down straight road with visible lane marking
	Fully self-driving vehicle travels down straight road with faded or missing lane marking
	Fully self-driving vehicle travels down curved road with visible lane marking
	Fully self-driving vehicle travels down curved road with faded or missing lane marking
	Fully self-driving vehicle travels down wet road with lane marking
	Fully self-driving vehicle approaches other vehicle(s) reversing
	Fully self-driving vehicle travels down wet road with faded or missing lane marking