



What is DARPA?

The Defense Advanced Research Projects Agency is the central R&D arm of the Department of Defense with the primary responsibility to conceive, explore, and demonstrate breakthrough system concepts and the most advanced technologies.





Urban Challenge

City Driving

- Obey traffic laws
- Safe entry into traffic flow
- Safe passage through busy intersections
- Safe following or passage of moving vehicles
- Safe passage of a stopped vehicle
- Drive an alternate route when the primary route is blocked
- Safe U-turn





Program Objective

Safe autonomous driving in traffic

- **Safe**
No collisions
- **Capable**
Turns, stops, intersection, passing, merging, parking, following
- **Robust**
Blocked roads, erratic drivers, sparse waypoints, GPS outage





Program Scope

YES

- **Passing moving vehicles**
- **Merging into traffic**
- **Dirt roads, potholed roads**

NO

- **Speeds greater than 30 mph**
- **Highway driving**
- **Traffic signals or yield signs**
- **Difficult terrain**