# News

## GXV-T Imagines Future Armored Ground Vehicles that Could Increase Survivability through Improved Situational Awareness

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One of the key goals of DARPA's Ground X-Vehicle Technologies (GXV-T) (http://www.darpa.mil/NewsEvents/Releases/2014/08/18.aspx) program is improving the survivability of ground-based armored fighting vehicles through crew augmentation. Crew augmentation involves improved physical and electronically assisted situational awareness for crew and passengers. It also involves semi-autonomous driver assistance and automation of key crew functions similar to capabilities found in modern commercial airplane cockpits to reduce onboard crew and training requirements.

This concept video illustrates five of many potential approaches:

- A closed cockpit that would use visualization technologies to provide high-definition, wide-angle visibility of external conditions
- Path planning that would display optimal routes
- Sensors that would use a variety of technologies to visualize surroundings and identify and track allies and adversaries
- Terrain classification that would evaluate surroundings for optimal travel surfaces
- Autopilot capabilities that would automate routine driving tasks to enable drivers to focus on more strategic activities

Ground-based armored fighting vehicles and their occupants have traditionally relied on armor and maneuverability for protection. The amount of armor needed for today's threat environments, however, is becoming increasingly burdensome and ineffective against ever-improving weaponry. GXV-T seeks to develop revolutionary technologies to enable a layered approach to protection that would use less armor more strategically and improve vehicles' ability to avoid detection, engagement and hits by adversaries. Such capabilities would enable smaller, faster vehicles in the future to more efficiently and cost-effectively tackle varied and unpredictable combat situations.

DARPA is particularly interested in engaging nontraditional contributors to pursue fundamental research and development of groundbreaking future capabilities. The DARPA Broad Agency Announcement (BAA) with full technical details on GXV-T technology development is available at http://go.usa.gov/dwxe (http://go.usa.gov/dwxe) . For more information, please email DARPA-BAA-14-50@darpa.mil.

More information about GXV-T is available at http://go.usa.gov/dGuB (http://go.usa.gov/dGuB) .

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