

## IVTT MOTIVATION

The **Department of Defense** (DOD) and the **Department of Transportation** (DOT) are both supporting the development of what are known as *intelligent vehicles*. The **DOD** intends to deploy a variety of autonomous intelligent vehicles (robots) to **reduce human casualties** on the battlefield and **increase the global combat efficiency and effectiveness** of the U.S. military against conventional and unconventional forces. The **DOT** supports intelligent vehicle technology to **reduce human casualties** on the nation's highways and increase the **efficiency and effectiveness of the U.S. transportation system**. The military's rapid progress in intelligent vehicle technology can directly benefit the commercial development of intelligent cars, trucks, and buses, reducing time and expense for the automotive industry. Conversely, technology transferred from the commercial sector to DOD, and its industry contractors, will reduce the cost and increase the availability of commercial-off-the-shelf (COTS) intelligent vehicle systems and components for military services. Society as a whole will benefit from the **mutual technology transfer** between the military and commercial sectors. A **formal process** for sharing – and leveraging – intelligent vehicle technology between DOD (and its stakeholders) and DOT (and its stakeholders) will facilitate the advent of intelligent vehicles, a **quickly emerging technology**, which offers enormous potential benefits for the military and civil sectors alike in the 21<sup>st</sup> century. **Additional agencies** involved with robotic vehicles will participate in the IVTT, including the **Department of Energy** (DOE) and the **National Aeronautics and Space Administration** (NASA) and their stakeholders.