Autonomous vehicles (AV) do not need to be connected to independently navigate, however, connected vehicle technologies make AVs safer and more efficient by providing advanced information about roadway conditions or potentially dangerous situations.

**IMPROVED SAFETY**
- Driver error is a factor in 94% of accidents.
- Self-driving cars are predicted to significantly reduce vehicle accidents and increase bike and pedestrian safety.

**REDUCED CONGESTION**
- Vehicles will be able to drive closer together.
- Reduced vehicle collisions will result in fewer back-ups and optimized speeds.

**RELIABLE TRAVEL TIMES**
- At optimal speeds, commutes can be predicted in real-time.

**IMPROVED MOBILITY**
- Seniors, disabled, transit dependent populations, and those not able to drive a vehicle will have greater personal mobility with AVs and CVs.

**INCREASED PRODUCTIVITY**
- Lost productivity from commuting is estimated at $160 billion* per year in the US.
- People can make productive use of time that would have been spent driving.

**POSITIVE ENVIRONMENTAL IMPACTS**
- AVs and CVs could reduce energy consumption through:
  - more efficient driving
  - efficient infrastructure
- Fewer traffic jams will result in less idling and reduced greenhouse gases.

**REDUCED INFRASTRUCTURE NEEDS**
- Parking concerns are a major factor that limit urban development.
- Self-driving technology can reduce the need to expand roadways and build parking structures.

**MULTIMODAL CONNECTIVITY**
- AVs provide the greatest benefit when they are connected.
- Transit can operate more reliably.
- People walking and biking are safer when vehicles can communicate with them through smartphones or other devices.

*Estimate from the Texas Transportation Institute.