











Table 1: Guiding Principles		Factors suggesting positive impacts	Factors suggesting negative impacts
	<b>Preserve and Maintain the Existing System</b>	<ul style="list-style-type: none"> <li>• Use of drones for bridge inspections</li> <li>• Instrumentation of highways to monitor conditions</li> <li>• Pavements that can repair themselves, melt snow, and provide lighted lane striping</li> </ul>	<ul style="list-style-type: none"> <li>• Decline in traditional transportation funding sources through fuel taxes and vehicle registration fees</li> </ul>
	<b>Support Public Transportation</b>	<ul style="list-style-type: none"> <li>• Improved transit signal priority, fare collection, and service enhancements</li> <li>• Potential for greater integration with on-demand services that provide first-mile, last-mile connections</li> </ul>	<ul style="list-style-type: none"> <li>• Potential for autonomous vehicles, transportation network companies, and other service providers to reduce transit market share</li> </ul>
	<b>Support Neighborhoods and Communities Throughout the Region</b>	<ul style="list-style-type: none"> <li>• May provide more access to opportunities for people without access to a private vehicle, as well as disabled and elderly populations</li> </ul>	<ul style="list-style-type: none"> <li>• Technology such as AVs might be primarily for those who can afford it</li> <li>• Potential negative implications of e-commerce on community businesses</li> </ul>
	<b>Foster a Vibrant Downtown</b>	<ul style="list-style-type: none"> <li>• Increased shared mobility options could enhance the demand for urban living and working environments</li> <li>• Reduced vehicle and parking demands could provide more space to lower housing cost, add bike lanes, parks, or other amenities</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced time burden of driving due to AVs could encourage more longer commute times</li> <li>• Electronic access to health care, education, etc. could reduce benefits of being in the urban core</li> </ul>
	<b>Provide More Transportation Choices</b>	<ul style="list-style-type: none"> <li>• Technology enhances alternatives to personal auto use, including bicycle sharing, microtransit, carsharing, and ridesourcing</li> </ul>	—
	<b>Promote Safety and Security</b>	<ul style="list-style-type: none"> <li>• CV and AV technology reduces driver error; technologies are designed to reduce crashes, injuries, and fatalities</li> </ul>	<ul style="list-style-type: none"> <li>• Potential concerns about cyber-security in relation to CV and AV technology</li> </ul>
	<b>Support a Diverse Economy with a Reliable System</b>	<ul style="list-style-type: none"> <li>• Improvements in monitoring roadway conditions, as well as safety improvements, should directly result in fewer vehicle incidents, which would improve reliability</li> <li>• Better traveler information in vehicles enables travelers to re-route to minimize time stuck in congestion</li> <li>• More vehicle throughput within the existing transportation system that should help to reduce traffic congestion</li> </ul>	<ul style="list-style-type: none"> <li>• Increased VMT could offset some of these benefits</li> </ul>
	<b>Support Quality Job Development</b>	<ul style="list-style-type: none"> <li>• Connectivity has the potential to reduce barriers to travel and facilitate market interaction and overall economic growth</li> <li>• Opportunities for quality job development in emerging fields, including advanced logistics and data analytics, as well as in the development of innovative technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>• Vehicle automation could reduce direct employment in the transportation sector, as jobs related to driving (everything from truck drivers to taxi and transit service drivers) could be displaced</li> </ul>
	<b>Strengthen Intermodal Connections</b>	<ul style="list-style-type: none"> <li>• Opportunities to optimize the supply chain through improved logistics and data sharing are anticipated, resulting in travel time savings</li> <li>• Improvements in passenger connections between modes and services are expected</li> </ul>	—
	<b>Protect Air Quality and Environmental Assets</b>	<ul style="list-style-type: none"> <li>• Potential for significant air pollutant and greenhouse gas emissions reductions from shifts to EVs</li> <li>• Potential for clean energy generation throughout roadways, including solar and kinetic energy</li> </ul>	<ul style="list-style-type: none"> <li>• Increased VMT could offset some gains</li> </ul>