#### Standard

• 3.5-9-12.F Evaluate a technological innovation that arose from a specific society's unique need or want.

Key Learning	Unit Essential Question
<ul> <li>(LTTG) Students will be able to acquire, analyze, and evaluate information to reach an informed conclusion, using logic and reasoning skills.</li> </ul>	<ul> <li>How can I acquire, analyze, and evaluate information to reach an informed conclusion, using logic and reasoning skills?</li> </ul>

### **Essential Question**

• How does technology and engineering address the needs and wants of society?

### **Key Vocabulary**

• Innovation, Need, Want, and Society

### Learning Experience

- Students who demonstrate understanding can evaluate a technological innovation that arose from a specific society's unique need or want.
- Clarifying Statement: As engineers modify technological systems, materials are often chosen based on local environmental factors, locally available materials, and cost. Modes of transportation differ depending upon population density, availability, safety, speed, geography, and cost. Energy sources are chosen based on considerations such as proximity to source, cost-effectiveness, and environmental impact.

# (Big Idea) Technology & Engineering Curriculum Framework Big Ideas

• The needs and wants of society often shape technology and engineering developments.

### (SEP) Science and Engineering Practices

• Obtaining, Evaluating, and Communicating Information - Compare, integrate and evaluate sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a scientific question or solve a problem.

# (DCI) Disciplinary Core Ideas

• NAEP T.12.1 - The decision to develop a new technology is influenced by societal opinions and demands. These driving forces differ from culture to culture.

# (TEP) Technology and Engineering Practices

• Optimism - Shows persistence in addressing technological problems and finding solutions to those problems.

- (ETS) Engineering, Technology, and Applications of Science Standards applicable across the Science, Environmental Literacy & Sustainability, and Technology & Engineering content areas.
- (LTTG) PDE Technology & Engineering Long Term Transfer Goals
- (Learning Experience) A learning experience refers to any interaction, activity, or other experience in which students acquire new understanding, knowledge, behaviors, or skills.
- (Big Idea #) PDE Technology & Engineering Curriculum Framework Big Ideas
- (SEP) PDE Science and Engineering Practices
- (DCI) PDE Disciplinary Core Ideas
- (TEP) PDE Technology and Engineering Practices