Transportation

Design Intent

Oh the places you'll go! But first... how will you get there? Will you take a train? Drive a car? Maybe you'll ride your bicycle. Or fly in an airplane. Possibly you'll take off in a hot air balloon. Or even pedal a unicycle. Maybe you'll ride a horse. Or saddle up an elephant. What about a boat ride? The options are endless in the world of *Transportation*. So by all means, explore the world but don't forget to enjoy the journey!

Technology Components

N/A

Mural Features

- Commercial Airplane-A commercial airplane transports passengers and cargo between airports. They are operated by an airline and follow a specific schedule. The two major manufacturers in the commercial aircraft market are Boeing and Airbus. The number of commercial flights in the U.S. is estimated to be around 12,857 a day with each plane making 3-4 flights.
- Personal Airplane-Personal airplane or private aircraft are designed for individual or small group travel. They have long-range capabilities, allowing for transatlantic and intercontinental flights. Private aircraft are used by businesses for travel and productivity.
- Tunnel-Tunnels in transportation networks link different parts of a city across challenging terrain or bodies of water. They also reduce congestion, noise, and air pollution while increasing efficiency.
- Motorhome-A motorhome is a self-contained vehicle that combines transportation and living space, often used for travel and camping. It typically includes sleeping areas, a small kitchen, a bathroom, and seating.
- School Bus-A school bus is a large vehicle specifically designed to transport students to and from school and school-related activities. In the United States, more than 25 million students ride school buses each day. School buses are yellow for safety and visibility.
- Hot Air Balloon-Hot Air Balloon-A hot air balloon is made up of three main components: the envelope, the basket, and the burner system. When the air inside the envelope is heated, its molecules move faster and spread apart, making the air less dense than the cooler air outside. As a result, the balloon rises. The Montgolfier brothers (France) first demonstrated an unmanned hot air balloon in 1783.

Mural Features

- Train-Trains have been used for more than 200 years and have played an important role in building cities and connecting communities. In the early 1800s, the invention of steam-powered locomotives made it faster and easier to move people, food, and materials across long distances. In the United States, the Transcontinental Railroad, completed in 1869, stretched nearly 1,900 miles and connected the East and West, transforming travel and trade. Over time, trains evolved from steam to diesel and electric power, and today some high-speed trains can travel at speeds of over 200 miles per hour.
- Drone-Drones are pilotless aircraft used for recreation, military, and commercial purposes such as photography, mapping, agriculture, and delivery. The first drone was invented in 1989 by Nikola Tesla. Drones operative either by remote control or autonomously and use GPS and sensors for navigation. They can range in size from tiny, gram-sized devices to much larger models capable of delivering heavy cargo.
- Dallas Fort Worth International Airport-Dallas Fort Worth International Airport covers 27 square miles, making it the second-largest in the United States by land area. It features five terminals, seven runways, and the Skylink train for easy travel between terminals. DFW Airport provides service to 269 destinations through 29 passenger airlines and serves more than 189,000 passengers daily. It was the first airport in North America to become carbon-neutral.
- Shipping Containers- Shipping containers are standardized, reusable metal boxes, typically made of steel, designed to securely transport goods across different modes of transportation without unloading the cargo. They commonly come in lengths of 20 and 40 feet, and their uniform design allows for efficient stacking and handling using cranes and forklifts. Shipping containers revolutionized global trade in the mid-20th century by reducing loading time and costs, and today more than 90% of the world's good are transported by sea using containers.

Themes to Explore

- Modes of Transportation (Land, Air, and Water)
- Transportation Safety
- How and Why People Move Around
- Force and Motion
- Wheels and Tires
- Community and Transportation
- Travel and Journeys
- Transportation Around the World

Mounted Artifacts

- Shipping Container (Reading Nook)-Shipping containers transport and store large goods and are usually made of steel or aluminum. They can be used to transport goods by land or sea.
- Freight Train- A freight train is a long, powerful train designed to transport goods such as food, vehicles, fuel, and raw materials across long distances. A single freight train can be over a mile long and pull more than 100 railcars, carrying thousands of tons of cargo at once. Freight trains are one of the most fuel-efficient ways to move goods, able to move one ton of freight more than 450 miles on just one gallon of fuel. In the United States, freight trains move about 40% of the nation's long-distance goods, making them essential to everyday life.

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- Flatbed Truck-Flatbed trucks are commonly used to transport heavy or oversized cargo, including machinery, construction materials, and equipment. Their open trailer design allows for easy loading and unloading. These trucks are also referred to as open deck trailers.

To Find Out More

- American Public Transportation Association
- World Travel Guide-Destination Guides and Stories