

### **Exploratory Tasks:**

Where will your journey take you?

# TRANSPORTATION, DISTRIBUTION & LOGISTICS

Do planes, trains or automobiles capture your attention? Are you an expert at planning or managing information? If so, you may want to consider a career in one of the many Transportation, Distribution & Logistics pathways. These specialists focus on the movement of people, materials and goods in a variety of supporting occupations.

### TRANSPORTATION OPERATIONS PATHWAY

Specialists in this pathway are always on the move! These are the people that drive or pilot the vehicles that transport people and freight safely, securely, and on time.

**EXPLORATORY TASK:** What is the best way to transport cargo? Compare the *5* modes of transportation – railways, roadways, airways, waterways and pipelines. Create a comparison graphic to show the benefits, limitations, costs, etc.



Moving products from their source to the consumer often requires several modes of transportation across thousands of miles. These specialists create plans to ensure that cargo arrives at the right location, on time and in the safest, most economical manner.

**EXPLORATORY TASK:** How do you ship a dog to Hawaii? Your brother Bob recently moved to Hawaii and wants you to ship his German shepherd to live with him there. Use the internet to find the cost, amount of time and requirements such as vaccinations and quarantines. Write an email to let him know what you have learned.

#### **WAREHOUSEING & DISTRIBUTION CENTER PATHWAY**

These specialists work in distribution facilities including ports, terminals and warehouses. All cargo must be tracked, sorted, labeled and loaded accurately and safely. Timing is important, since loads must stay on a schedule in order to meet customer needs.

**EXPLORATORY TASK:** *Transportation and storage of hazardous materials* is highly regulated by federal agencies. Research information to create a hazardous materials handbook to inform employees about the dangers of these materials. Be sure to include the classes of materials, their descriptions and identifying symbols.

#### **FACILITY & MOBILE EQUIPMENT MAINTENANCE PATHWAY**

All transportation requires equipment that must function as intended and whenever needed. Specialists in this pathway work to maintain, repair and service vehicles and transportation facilities.



#### What Is a Career Cluster?

Career Clusters are a way to organize career options. There are **16 Career Clusters** in the National Career Cluster Framework. They are further divided into specific pathways that can lead you to a successful future.

#### What Are Career Pathways?

Each of the 16 Career Clusters are divided into approximately 80 Career Pathways. The pathways are further divided into specific careers that share similar skills.

A Career Pathway offers a range of entry options, from entry-level positions that require a high school diploma or industry certificate to those that require a professional degree.

**EXPLORATORY TASK:** How do you keep a vehicle running smoothly? Research the *recommended maintenance for cars and trucks*. Create maintenance guide that explains:

- What needs to be checked or replaced and when
- Function of each part
- Reason for checking or replacing

#### TRANSPORTATION SYSTEMS PATHWAY

Careers in the Transportation Systems/Infrastructure Planning, Management and Regulation pathway deal with the design and operation of our public transportation systems – road, air, sea and rail. Maintaining these systems is critical to keeping society moving.

**EXPLORATORY TASK:** How do people get to work? Some areas have public transportation to meet those needs, but many others do not. A *Transportation Needs Analysis* can identify customer needs in order to plan future projects. Create a survey to determine how most people in your area get to work, e.g., their personal vehicle, share a ride, take a bus, walk, etc. Additional information may include:

- Does reliable transportation keep them from working?
- What services are needed, e.g., bus/van, rideshare, etc.
- In areas with public transportation, are there areas for improvement, e.g., routes, schedules, fees, condition of vehicles, etc.

Use the information to write a transportation needs analysis report.

#### **HEALTH, SAFETY & ENVIRONMENTAL PATHWAY**

Professionals in this pathway assess and manage risks associated with safety and environmental issues. The people employed in this pathway research, plan and carry out activities to make our environment safer and cleaner.

**EXPLORATORY TASK:** Are electric cars better for the environment? Write an investigative report to identify the pros and cons of electric cars.

#### **SALES & SERVICE PATHWAY**

Individuals in this pathway work to market, sell or rent vehicles. Transportation businesses move passengers and freight to meet customer needs and demands. Others make reservations and travel plans, sell tickets and attend to customer needs.

**EXPLORATORY TASK:** Customer satisfaction is key to the success of any business. One bad customer review can cost a business a great deal of money. To prevent this, service managers frequently hold training sessions to update the skills of their employees. Research *common customer service* issues. Use the information to create a training manual to share with co-workers.

## How Can I use Career Pathways?

Career Pathways are planning tools to help you prepare for your future career goal. They provide a map of required courses at both the high school and college level.

A pathway also lists opportunities to earn college credit, industry certificates or gain real-world experience while in high school.

# What Is an Industry Certificate?

Industry certifications are credentials recognized by business and industry that demonstrate mastery of necessary knowledge and/or skills.

#### Discover More

Choose a career in one of the pathways to discover:

- Demand for this career
- Location of jobs
- Starting wage
- Education requirements
- High school pathway
  - Classes
  - Dual/articulated credit
  - Industry certificates
  - Work-based learning
- Related careers