Transportation

Logistics and transportation

In **this career video** (**grownextgen.org/career-videos/video/logistics-and-transportation/**), Rusty Orben, Resident Vice President for CSX Transportation, and Jim Wellman, President of Wellman Seeds and Wellman Farms, talk about the wide range of career opportunities related to logistics and transportation.

As you watch, answer the following questions:

1. What is Ohio's ranking for logistics and infrastructure?

   2nd

2. What is Ohio's rank for soybean exports?

   6th

3. Name two of the countries that are customers of Mr. Wellman.

   Could include: Japan, Taiwan, Singapore, Malaysia, Indonesia

4. Where does CSX have rail lines?

   NW Ohio, Columbus, Cincinnati, Cleveland

5. Rail provides an efficient and direct route for soybeans to travel overseas.
   - ○ True
   - ● False

6. Transport of crops overseas will sometimes involve more than one mode of transportation.
   - ● True
   - ○ False

7. What percent growth is predicted for jobs in the rail industry?

   22%

8. List 3 of the degrees recommended at the end of the video that are related to this career video.

   Could include: Transportation, Management, Engineering, Logistics, Civil Engineering, Business Logistics, Business Management, Environmental Engineering

Once you have completed the video, choose one of the careers listed in the video to research. Find out the demand for that job, the education requirements, the location of those types of jobs, and other interesting facts about what a person with that job does on the job day-to-day. Present your information using video or a powerpoint.

- train operator
- track maintenances
- engineer
- bridge engineers
- accountant
- lawyer
- farm supply
- agronomists
- truck drivers
- commodity buyer/shipper
- environmental engineer
- logistics coordinator
- warehouse manager
- shipping clerk
- supply chain procurement manager

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Here is the rubric with which your instructor will score your assignment:

	4	3	2	1
Required elements for career poster	The presentation includes all required elements as well as additional information.	All required elements are included on the presentation.	All but 1 of the required elements are included on the presentation.	Several required elements were missing.
Labels	All items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Almost all items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Many items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Labels are too small to view *or* no important views were labeled.
Graphics: relevance	All graphics are related to the topic and make it easier to understand. All borrowed graphics have a source citation.	All graphics are related to the topic and most make it easier to understand.	All graphics relate to the topic. One or two borrowed graphics have a source citation.	Graphics do not relate to the topic *or* several borrowed graphics do not have a source citation.
Attractiveness	The poster is exceptionally attractive in terms of design, layout, and neatness.	The poster is attractive in terms of design, layout, and neatness.	The poster is acceptably attractive though it may be a bit messy.	The poster is distractingly messy or very poorly designed. It is not attractive.
Grammar	There are no grammatical/ mechanical mistakes on the poster.	There are 1–2 grammatical/ mechanical mistakes on the poster.	There are 3–4 grammatical/ mechanical mistakes on the poster.	There are more than 4 grammatical/mechanical mistakes on the poster.

Activity 4: Determine the trends in commodities movements

Use the report (pages 3.6) listed below to answer the questions about the modal shares of grain movement both domestically and internationally. The values that are used for this analysis span the years of 1978.2013.

*Sparger, Adam, and Nick Marathon. Transportation of U.S. Grains: A Modal Share Analysis, June 2015. U.S. Dept. of Agriculture, Agricultural Marketing Service. Web. <***http://dx.doi.org/10.9752/TS049.06-2015***>*

1. Using Figure 2, What is the overall trend of grain movements for the years 1978–2013?

   The trend is increasing overall (total). Exports tend to remain fairly equal, while domestic movement of grains has steadily increased.

2. What does this trend indicate?

   There is more demand for moving domestic grains.

3. Using Figure 3, which commodity appears to be having the most steadily increasing increase in shipping?

   Soybeans

   The percentage change is calculated using the following equation:

   $$\left(\frac{final\ value - initial\ value}{initial\ value}\right) x\ 100 = \%\ Change$$

4. What is the percentage change of the total of all grains in Table 1 between the years 1998 and 2013?

   [(480,799 – 376,692) / 376,692] × 100 = 27.6% or 28%

5. List the commodities in order of which exported the most to the least.

   Corn = 85954; Soybeans = 25401; Wheat = 1731; Barley = –2692; Sorghum = –6286

6. Which Commodity saw the largest percent change from the years 1998–2013 in total tonnages transported?

Corn	Wheat	Soybeans	Sorghum	Barley
+41%	***+2.5%***	***+33%***	***–45%***	***-36%***

(Corn increased the most; Sorghum decreased the most.)

7. Which commodity showed the biggest growth either domestically or internationally?

	Corn	Wheat	Soybeans	Sorghum	Barley
Export	***–***	***+21%***	***+105%***	***–***	***–***
Domestic	***+63%***	***–***	***+0.3%***	***–***	***–***

(Soybeans increased most for export. Corn increased most for domestic transports.)

8. Using Figure 5, what mode of transportation is seeing the increase in use to transport grains?

Trucks

9. What do you think could be the reason for this change? (Use Figure 5, Table 2, and knowledge you may have from other subjects.)

Expense of rail and loss of rail lines. Other answers may vary.