CONNECTION

Activity #2 is the final activity within Unit 1: Defining the Freight System, which introduces students to the components and characteristics of the freight system. The information provided in Unit 1 is the building block for a greater understanding of freight transportation within our transportation system.

In Activity #2, students examine the movement of commodities from origin to destinations, and explore how they fit within the freight transportation system. This is how this activity fits into the unit.

ACTIVITY OVERVIEW

Activity #2 consists of both a pre-class (1a) and in-class (1b) component. In the pre-class activity students are asked to pick a commodity and write a one to two-page overview about the commodity’s origins, where it goes, and how it is carried as freight. Students are also asked to come prepared to briefly and verbally discuss their findings with the class.

The following direction is provided to the students to guide the assignment:

- Discuss the mode(s) that commodity is carried on.
- What type of freight is it?
- Is it high value or time sensitive?
- Is it a bulk good?
• Does it need special handling or is fragile?
• Does have any unusual transportation characteristics?
• Give some geographic idea of where this commodity flows.

Additionally, students are given some examples of previously selected commodities and suggestions for sources of information.

During the in-class activity students not only share their findings, but also answer a set of questions to synthesize mode information presented in lectures with commodity flows presented by fellow students. This ensures that students are actively listening to the presentations given by others. The assignment is short enough that students should be able to complete it within five or ten minutes, near the end of class.

The **learning objectives** for Activity #2 include:

• Understand how a given commodity moves through the freight transportation system.
• Relate concepts introduced in previous lectures and discussions to a specific commodity.
• Understand why certain commodities often travel via specific modes.
• Identify these typical modes based on commodity characteristics.
• Highlight features of the supply chain of a commodity which result in mode choice.
• To do independent research and report findings to the class.

**Required Resources**

• Activity #2a and #2b text

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**DURING CLASS**

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<th>Instructor Notes</th>
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<td>Review with the students to show them what tasks will be completed during class and the approximate time for each task.</td>
<td>Use this to remind you of the information that you need to remember and the sequence that you will follow during class.</td>
<td>Keep these in mind! They are what students have asked about this activity in the past.</td>
<td>Keep these in mind for possible use during class or to update the activity in the future</td>
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**AGENDA**

**Pre-class activity (#2a)**

• Assignment should be self-explanatory after a brief introduction (what, how, and when) to the assignment.

**In-class activity (#2b)**

• Students should be given copies of Activity #2b to complete during class (and told to write their name on the activity sheet).
• One at a time, students should stand and present a two or three minute overview of their commodity findings. There should be time for questions from the class, but if the discussion escalates to over a few minutes, the instructor should move the class along to the next student presentation.
• Students should be given five to ten minutes at the end of the presentations to complete the questions on the activity sheet.
**Post-class**

- If for any reason students do not complete the activity sheet in class, they should finish out of class and submit before the next class meeting.

**INSTRUCTOR NOTES**

The instructor is to hand out student activity sheets, introduce the activity, and facilitate the flow of student presentations, making sure students adhere to time limits. The instructor should give students five to ten minutes at the end of class to finish the in-class assignment.

The instructor should clarify the following:

- Students should read over the activity sheets before the presentations begin so they are aware what they should pay attention to during the presentations.
- The commodities listed in question 2 are not intended to correspond with student presentations but there may be some overlap.
- If students have not finished the assignment by the end of the class period, they should finish it (and hand in) before the start of the next class period.

**COMMON QUESTIONS/CONCERNS**

Because the students have free reign to choose any commodity, some may need reassurance that the commodity they have selected is appropriate. As long as the student is able to find a suitable amount of relevant information regarding the commodity flow, any commodity choice is acceptable.

Students may be confused by question 2 if a fellow student happens to present on one of the commodities listed here. If this is the case, the instructor should clarify that the commodities listed in the question do not refer to the presentations and any overlap is coincidental.

**DISCUSSION NOTES/IDEAS**

Additional questions which could be asked during the activity session include:

- Why is that mode of transport expected (or unexpected)?
- What characteristics of the commodity influence mode of transport?

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**AFTER CLASS**

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<th>Activity Assessment</th>
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<td>Use the information here to help you evaluate student performance.</td>
<td>Use this space to take notes regarding the implementation and facilitation of the activity which can be used to make any necessary adjustments to the activity.</td>
<td>This is a reminder of what comes next, including any homework or preparation that students need to complete for the next class or activity.</td>
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**ANSWERS AND NOTES**

**Critical Thinking Questions (with answers):**

1. Select two commodities presented (not your own) which travel via different primary modes. Why is each commodity best suited for its primary mode of transport? Why would each commodity be less...
likely to travel via the primary mode of the other commodity? (Note: your choice of commodities can strengthen your answer)

*Student responses to this question will vary. Mode selection will depend on cost, volume, weight, time-sensitivity, and packaging, among other commodity characteristics.*

2. For each of the following commodities, explain which mode of travel they primarily use. (Note: there may be more than “correct” answer; defend your answer(s).)
   a. potatoes
   - *Train or truck – potatoes are not time-sensitive, low-value, and have a relatively high weight to volume ratio.*
   b. woodchips
   - *Train or truck – woodchips are not time-sensitive, low-value, moved in bulk, and potentially “dirty”*
   c. iPhones
   - *Ship and/or truck – while we may think of iPhones as high value, they are more realistically mid-value products and probably are not moved by plane*
   d. running shoes
   - *Ship and/or truck – running shoes are low value and lightweight goods, which are not time-sensitive*
   e. Boeing 787 wing sections
   - *While one would expect that these would travel via ship and/or train, a plane was designed specifically to transport the wing sections.*

3. List two interesting or unexpected things you learned from today’s presentations.
   *Student responses to this question will vary.*

**ACTIVITY ASSESSMENT**

**NEXT STEPS**

This activity is the final activity in Unit 1. Unit #2 follows.