

Instructor Fact Sheet:

Technical Excursions in Mobility & Logistics

1. Objective of the Excursion

- Bridging Theory and Practice: Observe the physical scale of infrastructure and the complexity of real-time operations
- Stakeholder Interaction: Engage with professionals (port masters, logistics managers, air traffic controllers)
- Problem Identification: Identify "bottlenecks" or inefficiencies in real-world settings that were discussed in lectures

2. Potential Sites for Excursions

Depending on the lecture topic, the following facilities are highly recommended:

- Railway, Public Transport: Central stations (passenger flow), intermodal terminals (container crane operations), or maintenance depots
- Air Transport: Cargo terminals, airport security zones, or ground handling areas
- Water Transport: Container ports, inland river ports, or lock systems
- Logistics: Distribution centers (e.g., e-commerce fulfillment), cold storage facilities (important for food/pharma), or customs bonded warehouses

3. Planning Checklist for Instructors

- Safety First: Ensure all students have PPE (High-visibility vests, closed shoes, helmets if required)
- Permits: Logistics sites are often high-security areas (ISPS code for ports). Request access at least 4–6 weeks in advance.
- Group Size: Large groups (30+) are difficult in active operation zones. Split the group or ensure a megaphone/headset system is available.
- Briefing: Provide students with a "site map" and a list of key terms beforehand.

4. Guiding the Observation (What to look for)

Instructors should prompt students to observe:

- Interface Points: How does the cargo/passenger move from one mode to another? (e.g., truck to ship)
- Technology: Which drive systems or digital tracking tools (RFID, ERP systems) are visible?
- Bottlenecks: Where is the flow stopping? Why?
- Accessibility: Is the facility inclusive (e.g., for disabled passengers or different cargo types)?

Student Task: "The Logistics Detective"

This task is to be completed during/after the excursion and presented in the following session.

Task Description:

"Observe the facility today not as a passenger or visitor, but as a Transport Consultant. Your goal is to analyze the operational flow and identify one major challenge and one potential solution."

Required Deliverables for the Next Session:

1. Flow Diagram: Sketch the movement of a single unit (one passenger or one container) through the facility.
2. Quality Assessment: Rate the facility based on the "Quality Criteria" from the lecture (Punctuality, Safety, Capacity, Accessibility).
3. The 'Context' Reflection:
 - a. How does this facility connect to regional or international trade?
 - b. What specific local challenges (climate, energy supply, urban congestion) did you observe affecting operations?
4. One Innovation Idea: Suggest one small-scale improvement (digital or physical) that could increase efficiency at this site.

Sources for Best Practices:

- Source: <https://www.itf-oecd.org/tags/transport-infrastructure>
- Source: <https://lpi.worldbank.org/>