

# Transshipment and Assignment Models

Management 560: Management Science

March 31, 2009

- Learn how to formulate transportation models with intermediate points.
- Learn how to use the transportation model framework for finding optimal assignments.
- Continue to perfect our linear programming skills!

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- Example: Goods are often transported from manufacturing plants to distribution centers or warehouses, then finally to stores.
- Constraints involving sources and destinations are similar:
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- **Assignment models** are like transportation models, except you decide whether or to assign a source to a destination (or employee to a task).
- Decision variables are **binary**.
- Suppose you have 3 employees and 3 tasks. How many different possible assignments are there?
- Constraints:
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- Case problem, “Burlingham Textile Company” , page 267
- Case problem, “The Graphic Palette” , page 268.
- Do not do these problems by hand! Figure out the problems using Excel, and type up your conclusions, along with an explanation. Print out your Excel sheet and answers.
- Read for next time: Network flow models, Chapter 7.