

Trends and BEST Practices in Transportation Management

San Joaquin CLM Roundtable Meeting

May 8, 2003

Presented by

Jon DeCesare
WCL Consulting

Agenda

1. Trends in Transportation Expenditures and Modal Use
2. BEST Practices Examples
3. Toyota's Approach to BEST Practices
4. Automotive OEM Supply Chain Management Benchmarking Study
5. Q & A

Trends in Transportation Expenditures and Modal Use

Giants of Shipping Survey

Logistics Management magazine

University of Tennessee

Georgia Southern University

CAP Gemini Ernst & Young

Trends in Transportation Expenditures and Modal Use

1. Supply Chain visibility is a top priority
 - Advance shipment notification, tracking, exception alerts.
2. Purchasing Departments and Executive Management are very active on supply chain issues with heavy focus on cost.
 - Lead times and inventories have dropped
3. Given the emphasis on supply chain visibility, the ability to provide and exchange that information remains more primitive than might be expected.
 - More than half the communications are still manual or through phone calls.

Trends in Transportation Expenditures and Modal Use

4. With issues like cutting costs and managing inventory better, companies are taking a closer look at domestic transportation.
5. There has been shift toward truckload carriage and private fleets clearly has come at expense of national LTL carriers.
6. Moving away from express services toward cheaper surface shipments.
7. Spending on air freight is down fairly sharply.
8. Expenditures on rail and intermodal shipments remain relatively stable compared to last year.

Trends in Transportation Expenditures and Modal Use

- Carrier Performance Metrics include:
 - Billing Error Rate
 - Equipment Availability
 - On-Time Delivery
 - Turndown Ratio

Where does your freight dollar go?

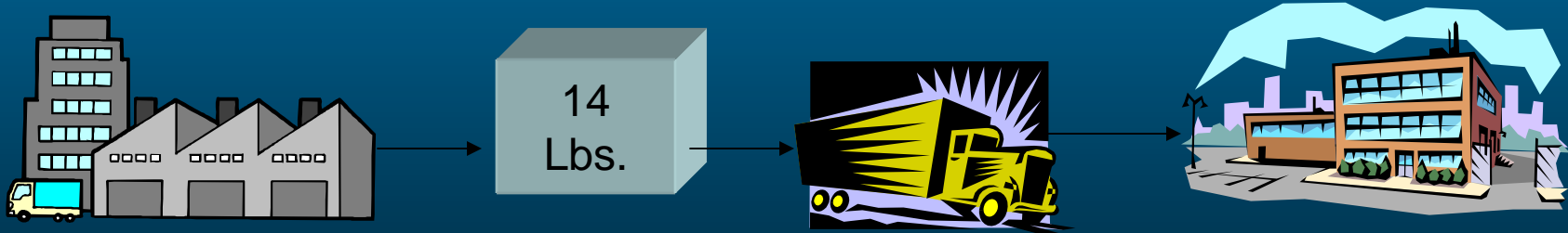
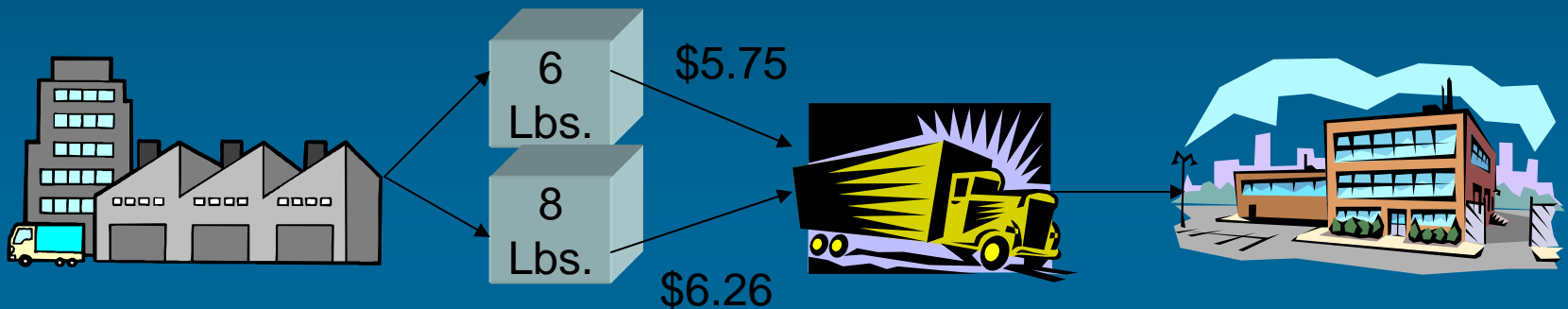
- Private Fleet 15.2%
- Truckload 32.2%
- National LTL 10.9%
- Regional LTL 12.8%
- Intermodal 2.3%
- Rail 6.9%
- Small Parcel 5.3%
- Air Freight 3.1%

10 BEST Practices

		Targeted Mode					
Best Practice	Objective	Parcel/ Min Charge Freight	Small Mark LTL Freight	Medium Mark LTL Freight	Large Mark LTL Freight	Less- than-full Capacity TL Freight	Full Capacity TL Freight
Parcel Case Strapping	build larger loads	•					
Parcel/LTL Min Charge Analysis	mode shift	•					
Parcel Zone Jumping	mode shift	•					
Cross-dock/Pooling	mode shift	•	•				
Cross-dock/Merge-in-transit	mode shift	•	•				
Pooling	mode shift	•	•				
Aggregation	build larger loads	•	•	•	•		
Consolidation	mode shift			•	•	•	
Co-loading	mode shift			•	•	•	
Continuous Move Routing (from TL to tour mode)	mode shift					•	•

1. Parcel Case Strapping

Shipped individually, non-discounted UPS costs are:



2. Parcel / LTL Min Charge Analysis

The premise is that parcel shipping costs up to the weight break specified are less than alternative LTL minimum charges. The inherent fallacy in this “static” parcel/LTL routing policy is that it is based upon corporate-wide averages – an average corporate LTL min. charge, an average corporate case weight, and an average corporate ship-to parcel zone.



Four-Case, 140 lb. Order

Non-discounted UPS charge for zone 7 =

(35lb. Avg. case weight)

\$77.84



LTL Minimum charge =

\$65.00

Lost savings: \$12.84



Six-Case, 162 lb. Order

LTL minimum charge =

\$58.00



Non-discounted UPS charge for zone 3 =

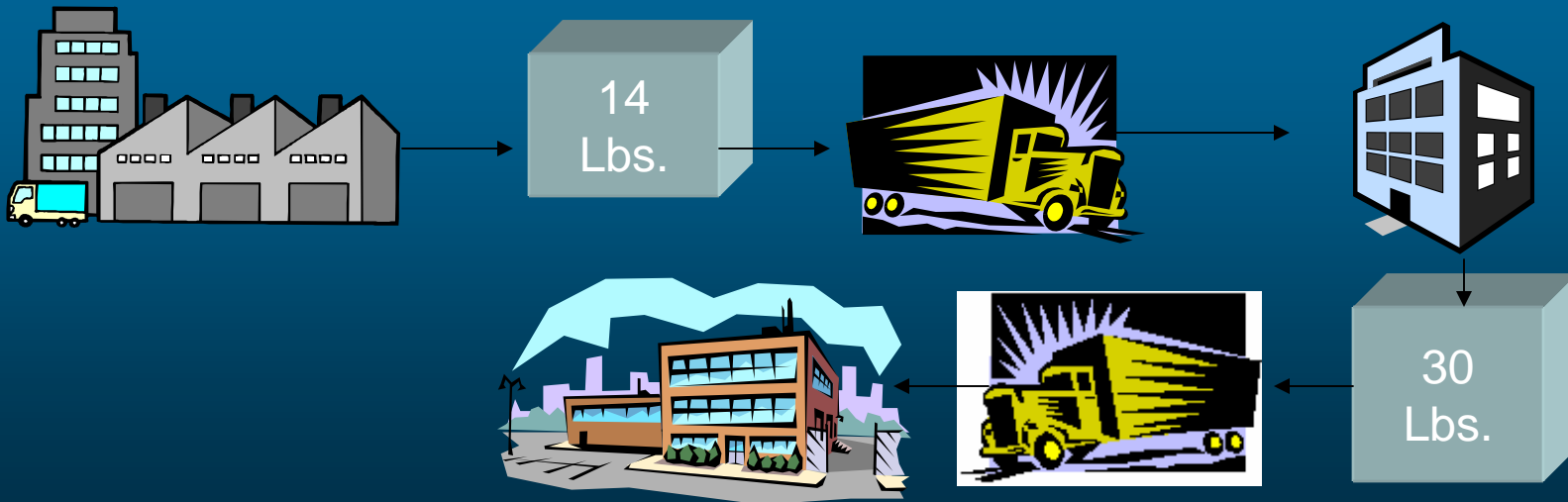
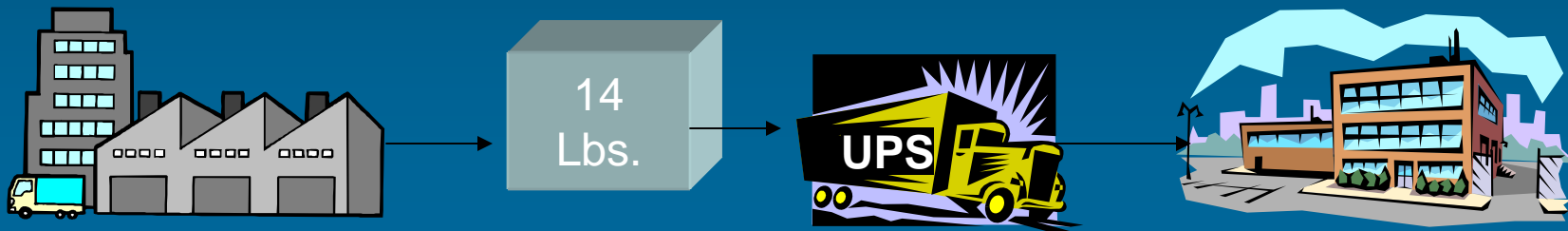
\$47.16

(27lb. Avg. case weight)

Lost savings: \$10.84

3. Parcel Zone Jumping

Shipped individually, non-discounted UPS costs are:



4. Cross Dock / Pooling

When small and medium mark LTL freight is predominantly long haul in nature, a cross dock / pool distribution network is a viable BEST practice. LTL freight tends to be long haul under four scenarios.

Outbound Freight

Scenario #1: The shippers' customer base is national in scope and its outbound logistics network is a non-DC network. The traditional DC "mixing-center" role – combining multi-plant products to complete a single customer order is not applicable. Since each plant manufactures, fills, and ships complete orders direct to any national customer, freight is by definition long haul.

Scenario #2: The shippers' customer base is national in scope and its outbound logistics network is a "mega-DC" network. There are only one or several "mega-DCs" serving as plant product mixing centers for subsequent customer shipment. Since DCs are generally not within close proximity of the customer base, DC-to-Customer freight is long haul in nature.

4. Cross Dock / Pooling

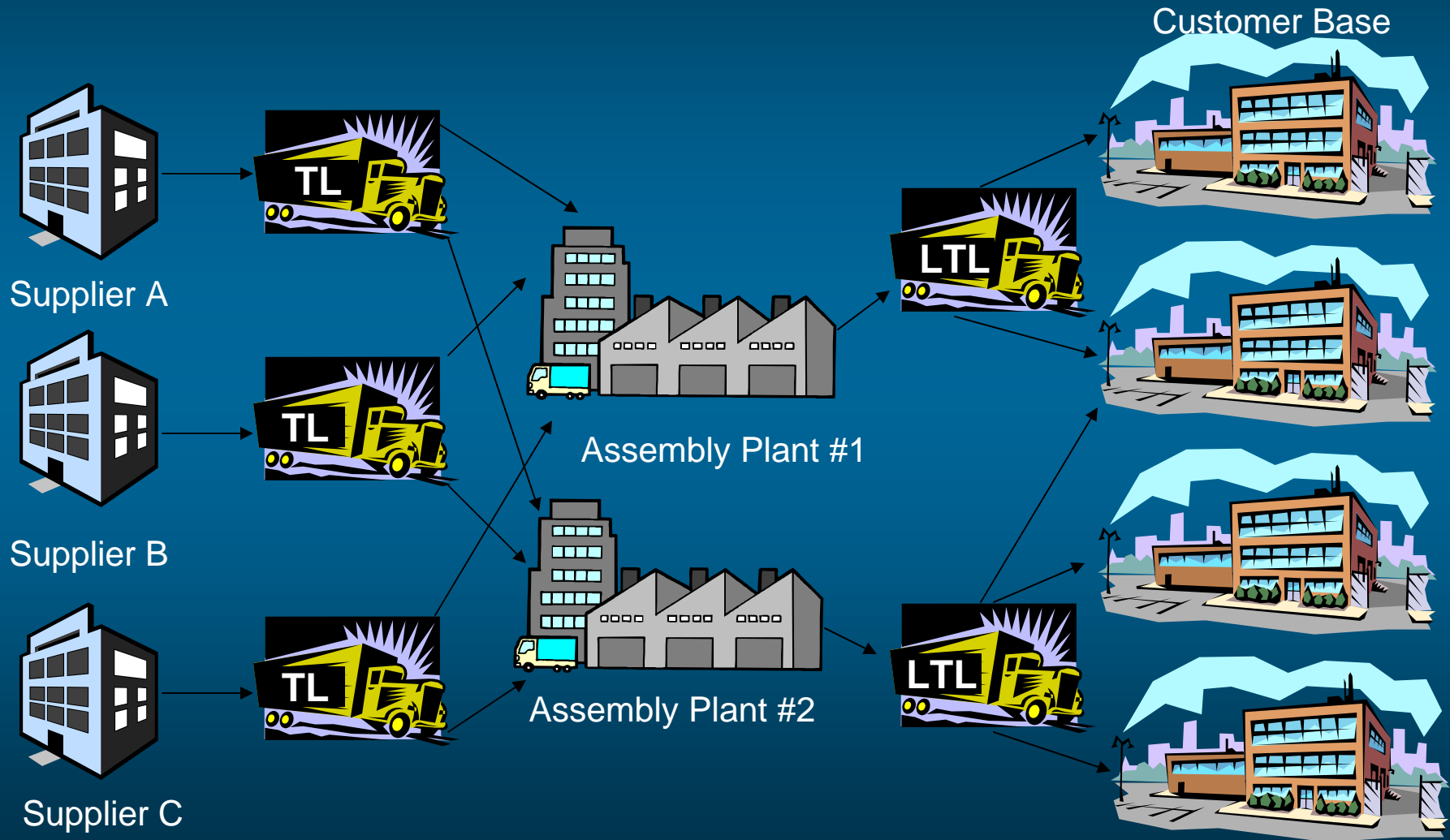
When small and medium mark LTL freight is predominantly long haul in nature, a cross dock / pool distribution network is a viable BEST practice. LTL freight tends to be long haul under four scenarios.

Inbound Freight

Scenario #3: The receivers' supplier base is national in scope and its inbound logistics network is a non-DC network. Suppliers ship direct to receivers plants or facilities. Since each receiving facility accepts shipments from any national supplier freight is by definition long haul.

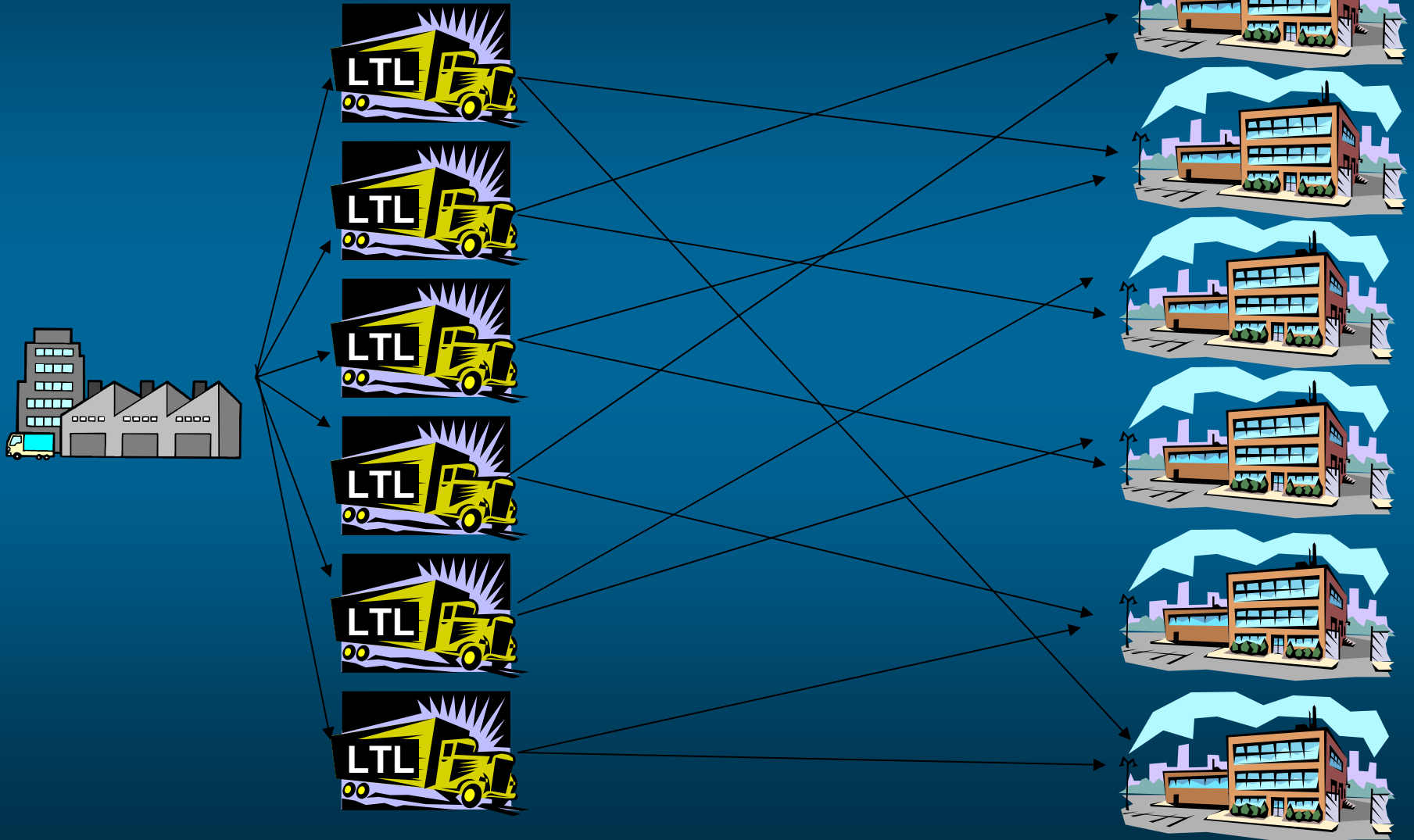
Scenario #4: The receivers' supplier base is national in scope and its inbound logistics network is a "mega-DC" network. There are only one or several "mega-DCs" serving a supplier product mixing centers for subsequent receiver (e.g., store) delivery. Since DCs are generally not within close proximity within the supplier base, supplier-to-DC freight is long haul in nature.

5. Cross Dock / Merge-In-Transit



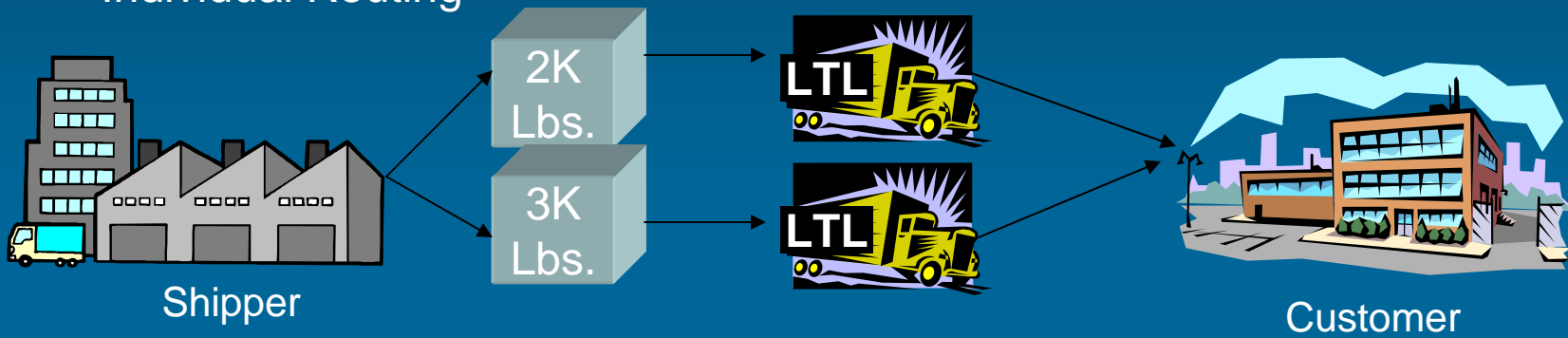
6. Pooling

Plant or DC to Customer LTL Orders

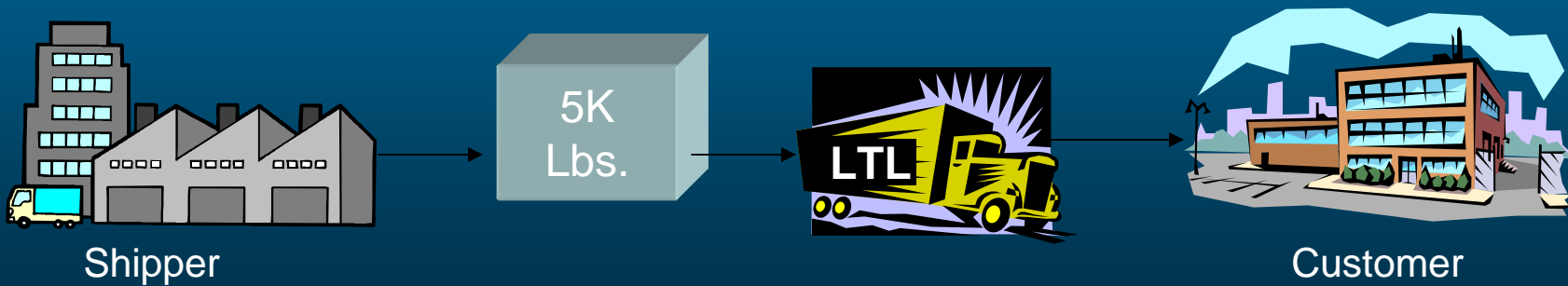


7. Aggregation

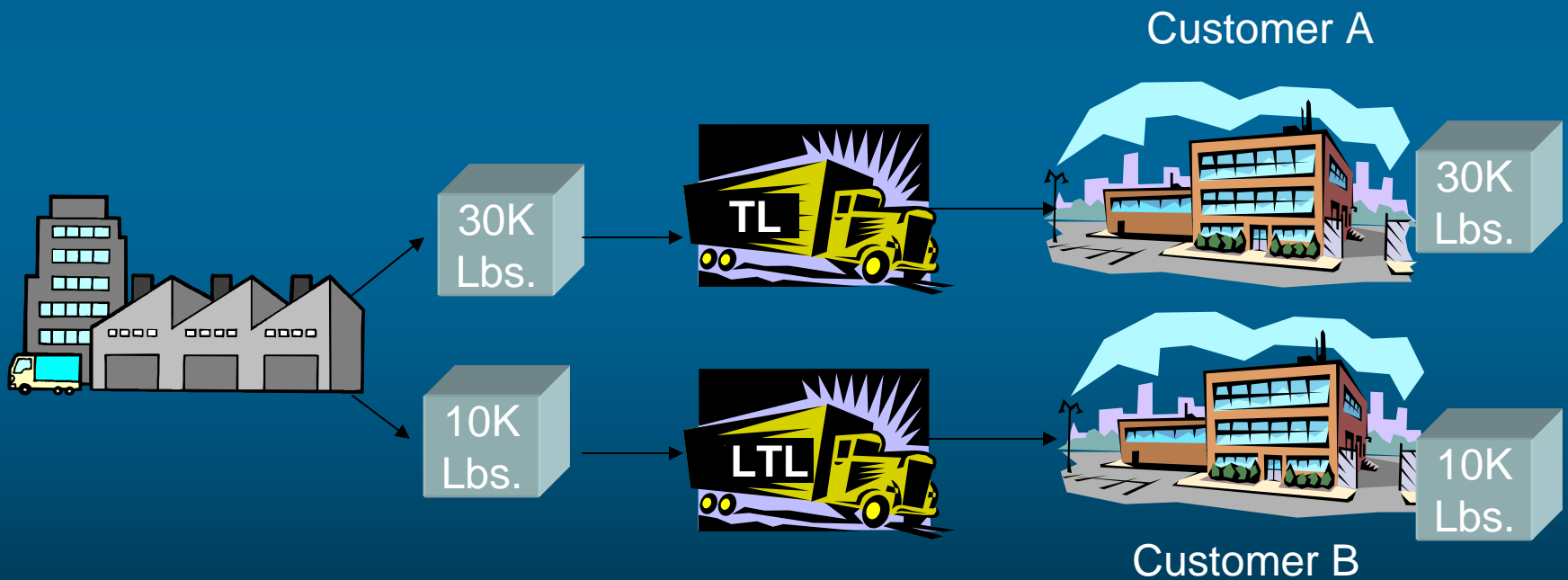
Individual Routing



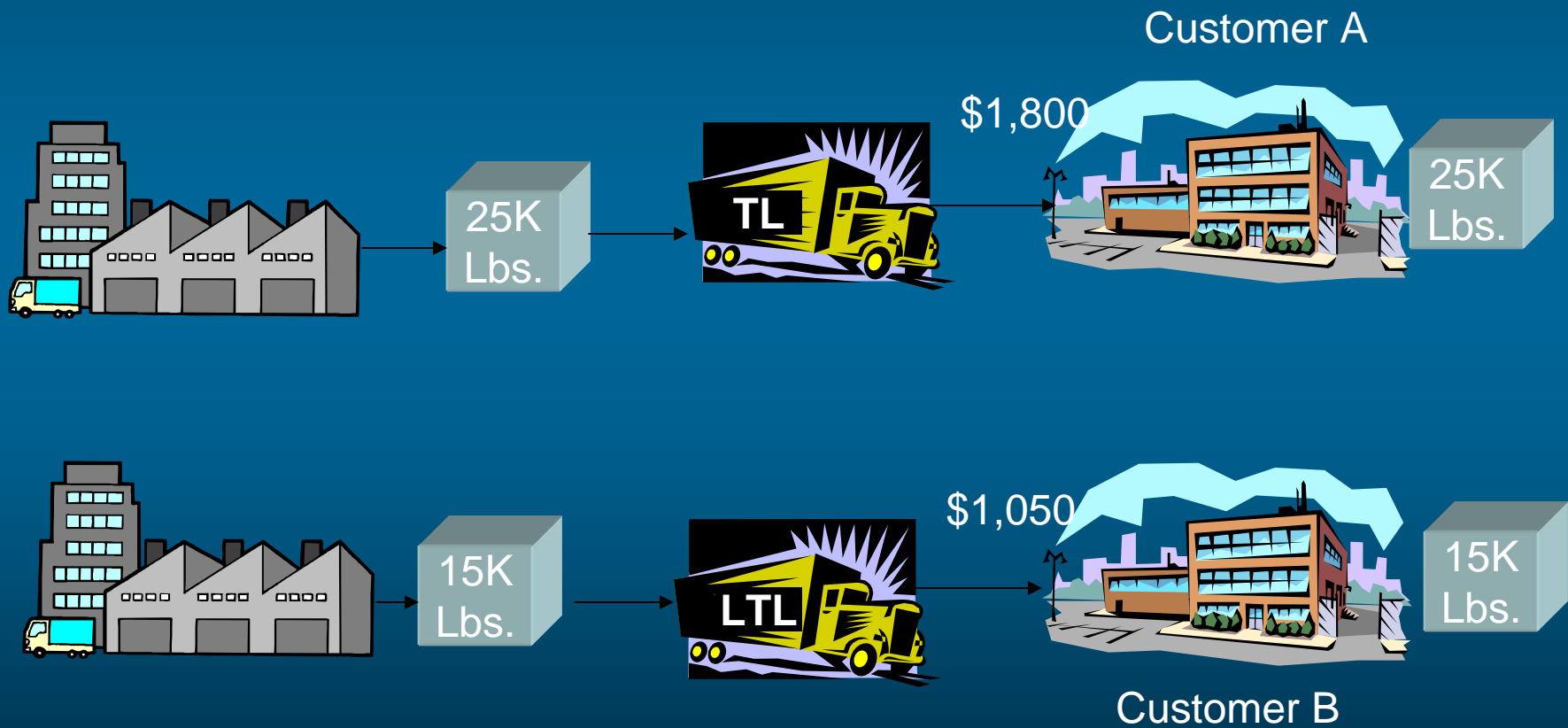
Aggregation



8. Consolidation Routing



9. Co-loading



10. Continuous Move Routing





Toyota Parts Division

Transportation Management BEST Practices

- Pick carriers who are stable and committed to providing excellent customer service.
- Place a lot of emphasis on Win/Win Partnerships
- Work on long-term basis with carriers on continuous improvement.
- Partnership effort to relentlessly focus on reducing costs and eliminating waste.

BEST Practices Initiatives..

- Moved local overnight shipments from Express to ground service.
- Process for shipping international orders same day request.
- Implemented EDI billing / file exchange
- Enhance claims program processes.
- Improved effectiveness of vendor consolidation program.
- Utilized carrier web site services/information.
- Conducted assessment of Routing Strategy
- Strengthened Transportation Partnership Program.

Source: Automotive OEM BEST Practices Study



Innovations Any One?

Gaining a Competitive Edge



