



OIKONOMIA
SUPPLY CHAIN CONSULTING

U.S. Transportation Industry Overview

Sample

Oikonomia, Inc.

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Disclaimer

This document was created for Oikonomia clients. Significant data exists about transportation statistics, however, it is generally tracked at the mode level. As an example, the American Trucking Association (ATA) tracks statistics on For Hire carriers, the National Private Truck Counsel (NPTC) tracks statistics on Private Fleets and the Association of American Railroads (AAR) tracks statistics on the Railroad Industry. Practitioners, therefore, have difficulty finding a single document that gives a comprehensive view of domestic transportation revenues and issues covering the major modes of transportation.

This document is presented with the intent of providing that cross mode representation. It is our hope and desire that from the transportation novice to the seasoned practitioner, all can find material of value to their needs.

Note: Due to different reporting requirements and the many sources needed to compile this document, the numbers do not always tie. The intent is not to create a statistically accurate document, but one that is “directionally correct” and highlights relative size differences and issues and statistics that would be useful to practitioners.

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Industry Overview

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In general, there are a number of factors that affect transportation industry health.

While the US government is forced to cutback on spending, other countries are focusing more on expanding and improving transportation networks. US spends only 1.7% of its GDP on transportation infrastructure, while Canada spends 4% and China spends 9%. Today, we are seeing increasing emphasis on cost cutting, risk mitigation, and achievement of environmental sustainability.

- **Uncertainty about the economy**: Economic slowdown has led to shedding of assets and people. Existing players are reluctant to scale up, while potential new entrants are reconsidering/delaying entry
- **Increasing costs**: Transportation costs continue to rise owing to increase in fuel prices and supply chain complexity. The two largest cost categories for most transportation modes are wages (including benefits) and fuel.
 - Aging operator population demands higher wages. Estimates of wages as % of revenues: LTL-49%, TL-29%, Rail-33% in 2010
 - Government regulations on operators (restricted work-duration, stricter driving records) adds wage cost
 - Fuel cost varies by mode: Trucking-24% and Rail-14% in 2010
- **Shortage of qualified drivers**: Increased demand is expected to create a shortage of qualified drivers, which will raise prices for shipping services. Significant number of drivers are nearing retirement age, but younger people are not seeing truck driving as an attractive career option
- **Shift from diesel to other fuels**: Alternative fuels are becoming increasingly attractive to many trucking companies. Trucks that run on CNG can cost a bit more upfront and some models may also have reduced freight space, but these are offset by savings in fuel costs over the life of the engine
- **Changes in rail industry**: Market slowing due to economy and regulations. Coal, although still the largest segment, is losing market share. Free runner rail cars are converting to private owned cars. Rail and intermodal gained due to lower cost
- **Rebounding trucking industry**: Industry proved sensitive to economic downturn. Rebound in construction industry as well as the increasing trend of companies to outsource non-core functions including transportation are helping the trucking industry
- **Increasing availability of credit**: Credit is once again becoming available helping trucking companies to invest once more in fleet upgrades
- **Movement towards leaner, more efficient operations**: Many of the inefficient firms went out of business during 2007-2011, and firms today are increasingly using trucking management software as an aid to operational efficiency.

Did you know?...

The safest mode of transportation is an elevator

Over 9% of all civilian jobs are in transportation and related industries

A major airline purchased an oil refinery to produce their own jet fuel

9.2 Billion tons of freight was transported by truck in 2011

Railroads have been steadily decreasing their fleet of "free runner" cars at a time when shippers are increasing the number of cars in their fleets

Revenues generated by private fleets is almost equal to that of for hire carriers

90% of all licensed trucking companies have fewer than 5 drivers and 95% have fewer than 20 drivers

There are more Private Trucking entities than For Hire Carriers

There are more than 1.4 million registered trucking companies in the U.S.

The fastest growing rail segment is Intermodal

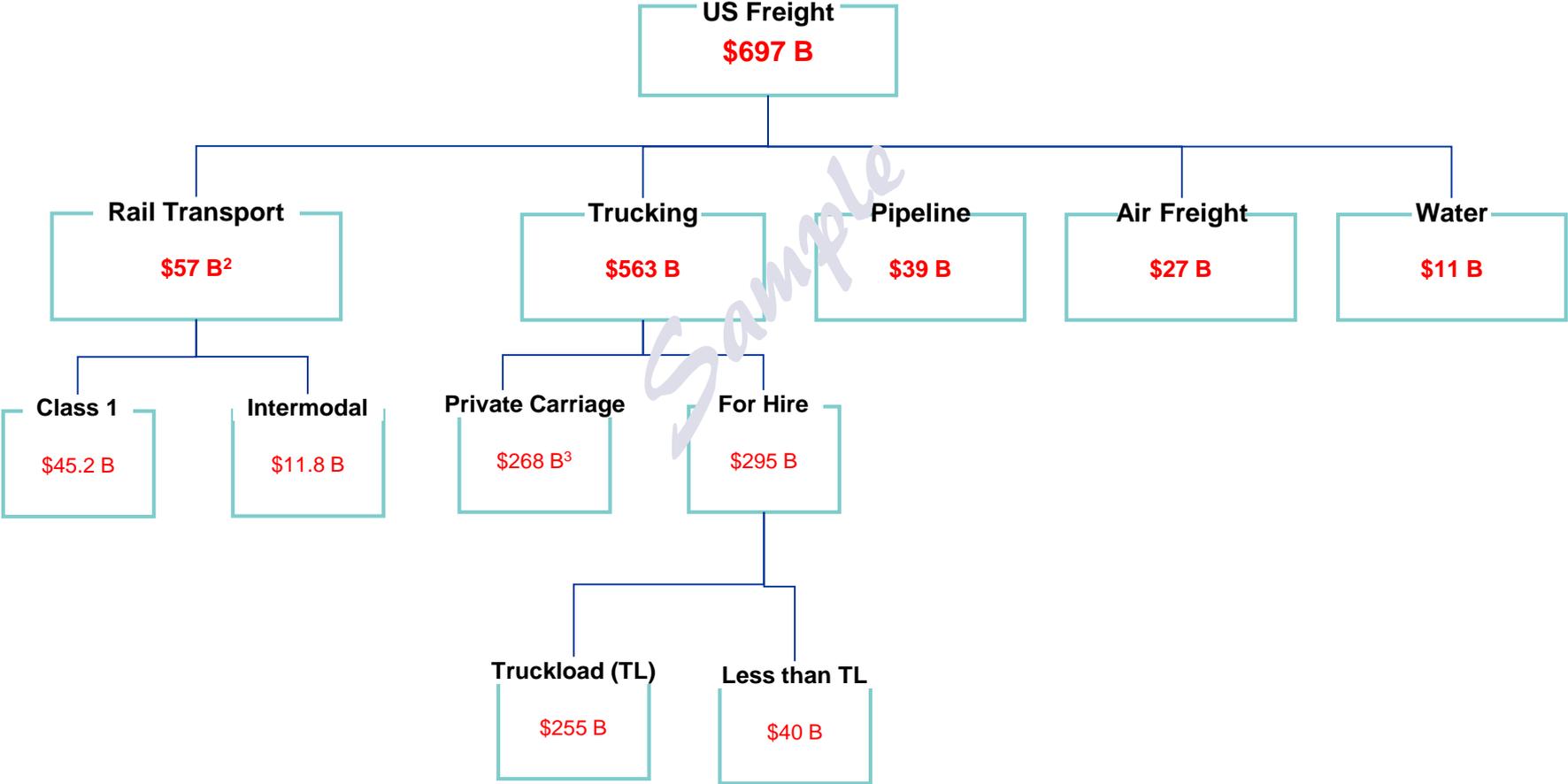
On a % basis, gas-pipeline has seen the greatest infrastructure growth over the past twenty years

Railroads have the highest profit margins of the major modes of transportation

The pipeline transmission system, the "Interstate Highway" for natural gas, consists of 220,000 miles of high strength steel pipe, 20" – 42" in diameter

As of 2010, the US Commercial Freight Transportation is estimated at \$697 billion. ¹

2010 US Commercial Freight Transportation Industry Revenue



Source: IBIS industry report 2010 by sector and others

¹ Most current information across all modes

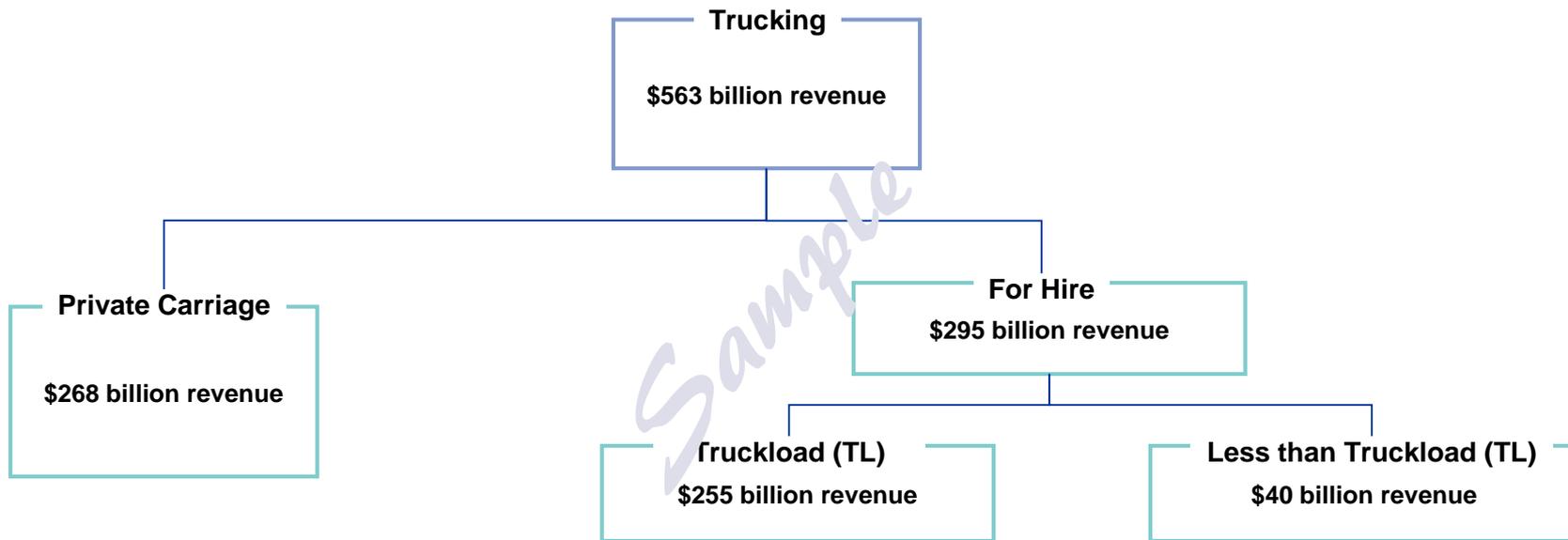
² Note this figure includes only Freight revenue attributed to US. Adjustments made for revenues accrued in Canada and Mexico. Source: Standard and Poor's 2012 Transportation Report

³ According to American Trucking Association estimates in 2010

Motor Transportation

The US Trucking Industry can be grouped into Private and For Hire segments with almost equal split by revenue.

US Trucking Industry in 2010



Criteria: Companies who operate private fleet for their own transport requirements

- Private fleets operate more than 2 million trucks and account for almost 56% of all freight-tonnage carried
- PepsiCo, Coca-Cola and Sysco are the industry's top three private carriers based on the number of trucks owned

Criteria: Defined as truck shipments with more than 10,000 lbs. in load

- Truckload (TL) comprises of almost 86% of the for-hire trucking revenue
- The top 3 leading TL carriers are J.B. Hunt, Swift and Landstar – who together account for about only 4% of the TL markets

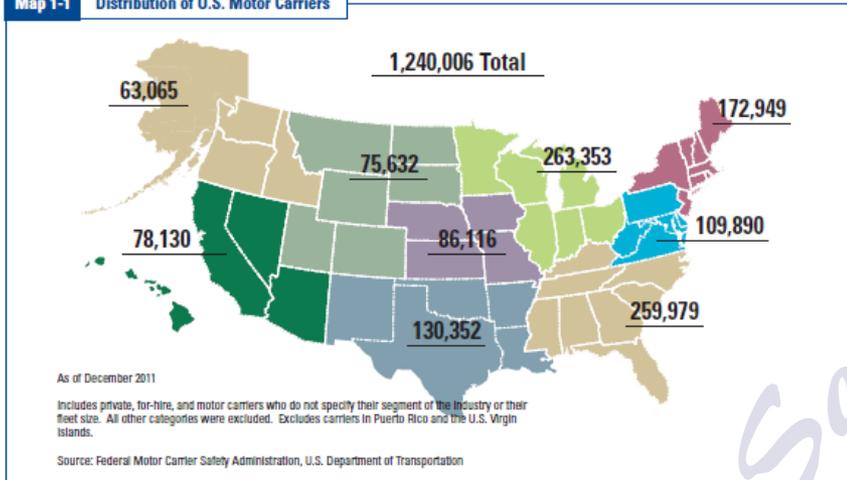
Criteria: Defined as truck shipments with less than 10,000 lbs. in load

- The Less than Truckload (LTL) comprises of almost 14% of the for-hire trucking segment
- The regional LTL segment accounted for about 55% of the total, while the national segment accounted for the remaining

Size of the Motor Freight Industry.

Fleet Size of Motor Carriers

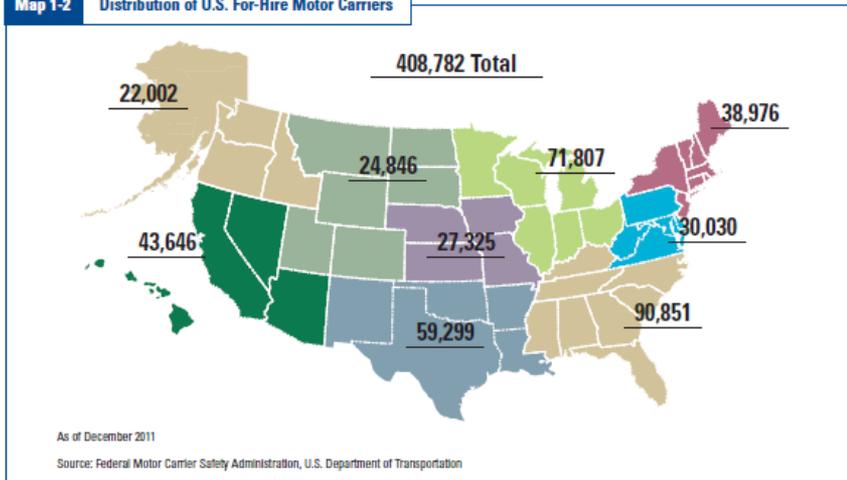
Map 1-1 Distribution of U.S. Motor Carriers



Number and Type of Motor Carriers

- According to the U.S. Department of Transportation (DOT), there were more than 1.2 million U.S. interstate motor carriers in the United States in December 2011.
 - Maps include all U.S. companies with authority to haul interstate commercial freight, including for-hire (both truckload and less-than-truckload), private carriers, and owner-operators.
 - The number of for-hire carriers on file with the Federal Motor Carrier Safety Administration totaled 408,782 (33% of total) and the number of private carriers totaled 662,544 (53% of total) (there were also 168,680 (13.6%) interstate motor carriers that did not specify their segment or checked multiple segments.)

Map 1-2 Distribution of U.S. For-Hire Motor Carriers



Fleet Size of Motor Carriers

- There are a handful of billion-dollar carriers operating in the U.S.; however, the industry is primarily comprised of small carriers.
 - 90% of carriers operate six or fewer trucks.
 - Furthermore, 97% of carriers operate fleets of 20 or fewer trucks.

State of the Motor Freight Industry.

The motor freight industry experienced a bounce back after hitting historic recessionary lows in 2009. Trucks hauled 67% of all the tons of freight transported in the United States in 2011 equating to 9.2 billion tons. The trucking industry totaled \$604 billion dollars, representing 80.9% of the nation's freight bill, meaning trucking collected 80.9 cents of every dollar spent on freight transportation.

Industry Indicator	Summary
Revenue	<ul style="list-style-type: none">▪ \$603.9 billion in gross freight revenues (primary shipments only) from trucking, representing 80.9% of the nation's freight bill in 2011.
Number of Trucks	<ul style="list-style-type: none">▪ 26.4 million trucks registered and used for business purposes (excluding government and farm) in 2009, representing 24.4% of all trucks registered.▪ 2.4 million Class 8 trucks used for business purposes (excluding government and farm) in 2009. (2.3 million in 2010)▪ 5.7 million commercial trailers registered in 2009.
Tonnage	<ul style="list-style-type: none">▪ 9.2 billion tons of freight (primary shipments only) transported by trucks in 2011, representing 67.0% of total domestic tonnage shipped.
Mileage	<ul style="list-style-type: none">▪ 397.8 billion miles logged by all trucks used for business purposes (excluding government and farm) in 2010.<ul style="list-style-type: none">▪ 29.8% of all miles traveled by trucks.▪ 13.4% of all motor vehicle miles traveled.▪ 131.2 billion miles logged by all Class 6 - 8 trucks used for business purposes (excluding government and farm) in 2010.▪ 99.2 billion miles logged by Class 8 trucks used for business purposes (excluding government and farm) in 2010

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Industry Indicator	Summary
Employment	<ul style="list-style-type: none">▪ 6.8 million people employed throughout the economy in jobs that relate to trucking activity in 2010, excluding self-employed.▪ 3 million truck drivers employed in 2010.
Taxes	<ul style="list-style-type: none">▪ \$33.1 billion paid by commercial trucks in federal and state highway-user taxes in 2009.▪ Commercial trucks make up 10.9% of all registered vehicles, and paid \$14.3 billion in federal highway-user taxes and \$18.7 billion in state highway-user taxes, in 2009.▪ 24.4¢ in federal fuel tax paid for each gallon of diesel fuel as of August, 2011, 18.4¢ for each gallon of gasoline▪ 22.6¢ paid on average in state fuel tax for each gallon of diesel fuel as of July, 2011, 21.8¢ for each gallon of gasoline
Fuel Consumption	<ul style="list-style-type: none">▪ 52.3 billion gallons of fuel consumed by those trucks used for business purposes in 2011.<ul style="list-style-type: none">▪ 37.2 billion gallons of diesel fuel.▪ 14.8 billion gallons of gasoline.
International Trucking	<ul style="list-style-type: none">▪ Trucks transported 56.6% of the value of trade between the U.S. and Canada in 2010.▪ Trucks transported 66.2% of the value of trade between the U.S. and Mexico in 2010.▪ In 2010, the value of truck-transported trade 25.5% to \$260.1 billion with Mexico; increased truck-transported trade with Canada grew 19.9% to \$296.8 billion in 2010.