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Motor Carrier Industry Profile:

An Update

2004-2005

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Introduction

This report updates the **Motor Carrier Industry Profile: 2001-2003¹** and **Stock Market Performance of Publicly Traded Trucking Sector Stocks by Industry Segment, 2000-2004²** to reflect more recent developments of particular significance to the industry and its various segments. The **Motor Carrier Industry Profile: 2001-2003** relied heavily on Motor Carrier Annual Reports from over two thousand of the largest for-hire motor carriers for calendar years 2001, 2002, and 2003. However, there is a significant lag in the publication of annual report data. In fact, the 2004 calendar year data will not be available until late in 2005 or early in 2006. As a result, this report will fill in the gaps as best is possible without the benefit of the detailed annual report data. This report's objective will be to identify trends and major events that have impacted the trucking industry during 2004 and 2005. It is based on available reports, trade journal articles, roundtable discussions, etc. The report will also update the stock market information included in **Stock Market Performance of Publicly Traded Trucking Sector Stocks by Industry Segment, 2000-2004** to reflect stock market performance in the second half of 2004 and first half of 2005.

This new report, entitled **Motor Carrier Industry Profile: An Update, 2004-2005** is one of a series of reports analyzing various aspects of the motor carrier industry. Other reports in the series focus on the safety performance of the industry and its major

¹ Thomas M. Corsi, Garrick Infanger, and John Jansen, **Motor Carrier Industry Profile: 2001-2003**, Supply Chain Management Center, Robert H. Smith School of Business, University of Maryland, July 2005, Prepared for the Federal Motor Carrier Safety Administration, Washington, D.C.

² Thomas M. Corsi and John Jansen, **Motor Carrier Industry Profile Study: Stock Market Performance of Publicly Traded Trucking Sector Stocks by Industry Segment, 2000-2004**, Supply Chain Management Center, Robert H. Smith School of Business, University of Maryland, July 2005, Prepared for the Federal Motor Carrier Safety Administration, Washington, D.C.

segments³ and on the linkage between safety performance and operating performance overall and in each of the major segments⁴.

The year 2003 constituted a transition year for the motor carrier industry. After a rather sustained period of post-deregulation operating challenges and weak financial results, beginning in 2003 the profit environment started to become more favorable overall for the industry and for many of its individual segments. There were four principal factors contributing to this shift: continued bankruptcies and the removal of capacity, especially among less-than-truckload carriers, mergers and acquisitions and the resultant further rationalization of capacity, driver shortages, and improvements in the national economic picture. The combination of these factors reduced industry capacity and created an environment in which modest rate increases were sustained, since shippers had fewer service options and were trying to meet an increased demand level. Clearly, sustained modest rate increases had a positive impact on industry profitability.

This report will examine continuing developments during 2004 and 2005 in the principal factors contributing to the shift in profitability for the industry and the resultant impact on industry profitability overall and in the various industry segments. The report will also examine an array of other events and factors with direct and indirect impact on the motor carrier industry and its segments. The discussion will also reflect an updated industry perspective by financial analysts and investors based on the market performance of industry stocks in the second half of 2004 and the first half of 2005.

³ Thomas M. Corsi and Marius Stefan, **Motor Carrier Industry Safety Performance Profile: 2000-2003**, Supply Chain Management Center, Robert H. Smith School of Business, University of Maryland, February 2004, prepared for the Federal Motor Carrier Safety Administration, Washington, D.C.

⁴ Thomas M. Corsi, **Linkages Between Financial and Safety Performance Among Carriers in Major Industry Segments-2003**, Supply Chain Management Center, Robert H. Smith School of Business, University of Maryland, November 2004, prepared for the Federal Motor Carrier Safety Administration, Washington, D.C.

The report is divided into the following major sections: LTL and Mega Package/Small Parcel Carriers, Truckload Carriers, and Future Issues—2006 and Beyond.

LTL and Mega Package/Small Parcel Carriers

In the past, the discussion of the motor carrier industry and its segments would involve the identification of a separate less-than-truckload carrier segment and a package/small parcel segment. Recognized industry leaders in the LTL segment traditionally have been: Yellow Freight, Roadway Express, and Consolidated Freightways—the Big Three. Recognized leaders in the parcel/small package segment traditionally have been: United Parcel Service and Federal Express.

However, a series of recent developments have brought about a fusion of these segments into a single large and very powerful industry segment. This section of the report will discuss the following topics: rationalization of capacity in the LTL segment through bankruptcies and mergers and acquisitions; decline of Teamster carriers; fusion of package/small parcel segment into LTL segment through acquisitions by package/small parcel carriers; improved LTL carrier commitment to service as part of integrated supply chain solutions; improved traffic growth among LTL carriers, especially among regional LTL carriers; sustained rate increases and better operating margins; and mixed stock market performance in 2005, after excellent growth in 2000-2004 time period.

Capacity Rationalization through Bankruptcies and Mergers and Acquisitions

The less-than-truckload carrier segment experienced a series of bankruptcies and business failures in the late 1990s that have continued up to the present time. Table 1 lists these failures and their dates.

Table 1: Recent LTL Bankruptcies/Business Failures

<i>Bankrupt/Failed Company</i>	<i>Date of Bankruptcy/Failure</i>
USF Dugan	July, 2005
Guaranteed Overnight Delivery	November, 2004
USF Red Star	May, 2004
Consolidated Freightways	September, 2002
APA Transport	February, 2002
Preston Trucking	July, 1999
Nation's Way	May, 1999
ANR Advance	December, 1998

Source: William Fisher and Buck Horne, Raymond James & Associates, Inc., **LTL: Key Secular Trends Driving Regional Carriers**, October 13, 2004, p. 9 with update to reflect 2005 LTL bankruptcy of USF Dugan and 2004 bankruptcy of Guaranteed Overnight Delivery.

The largest bankruptcy on this list involved that of Consolidated Freightways, one of the three largest less-than-truckload carriers in 2002. It is quite significant to note that all of the carriers included in Table 1 were Teamster-organized carriers. In fact, in the middle of 2005, the unionized portion of the LTL package/small parcel segment consisted of just the following set of carriers; Yellow-Roadway⁵, Arkansas Best Freightways, and United Parcel System. The next sub-section will discuss the rationale for the demise of the Teamster carriers.

In addition to the significant bankruptcies of less-than-truckload carriers listed in Table 1, the LTL segment has experienced a series of mergers and acquisitions as well. These mergers and acquisitions have brought about a further rationalization of the segment's capacity. The largest merger, of course, involved Yellow Freight and

⁵ Note that the unionized USF carriers are included in the Yellow-Roadway designation to reflect the acquisition of USF by Yellow-Roadway in May of 2005.

Roadway Express in December of 2003. Their merger resulted in the creation of the largest LTL carrier in the nation. The newly-merged carrier, Yellow Roadway, itself, launched a major purchase in May of 2005 by acquiring the consolidated group of regional LTL carriers known as USF Corp. USF Corp. consisted of the following set of regional LTL carriers, which USF, itself, had fashioned together as a set of independent operating units within its overall corporate structure: USF Holland, USF Bestway, USF Reddaway, and USF Dugan. Yellow Roadway subsequently shut down operations at USF Dugan in July of 2005. Yellow Roadway's acquisition of USF Corp. represented its effort to expand into regional LTL services as a supplement to the national and, increasingly, international focus of its operations.

Through these bankruptcies and mergers and acquisitions, there has been a definite reduction in the capacity of this industry segment. Operations have been rationalized and duplicate services removed. Fisher and Horne, Raymond James & Associates, estimate that the combination of bankruptcies and mergers and acquisitions has reduced industry capacity by 15 percent.⁶

Decline of Teamster LTL Carriers

As noted, the recent bankruptcies in the LTL segment have all involved unionized carriers whose workers belonged to the International Brotherhood of Teamsters. The primary reason for the bankruptcies of these carriers involved the higher union wages and benefits and lack of union work rules flexibility, according to analysts Fisher and Horne.⁷

⁶ William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 9

⁷ William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 17

Indeed, the Teamster employees average “\$73,800 per year compared to \$55,700 per year for non-union counterparts” in the LTL segment in wages and benefits per employee on an annual basis.⁸ According to Fisher and Horne, the additional wages for the unionized LTL carriers in comparison to the non-unionized carriers averages 15% per employee on an annual basis, while the benefit differences are 45% greater per employee on an annual basis among the unionized LTL carriers versus the non-unionized carriers.⁹ These differences are quite significant and have placed the unionized carriers at a significant disadvantage. Indeed, many unionized LTL carriers have not been able to overcome this disparity as evidenced by the string of unionized LTL carrier bankruptcies.

In addition to the significant wage disadvantage, the unionized LTL carriers have inflexible work rules that limit their productivity and create significant competitive disadvantages for them. According to Fisher and Horne, “importantly, workers for unionized LTLs are given designated job titles and responsibilities, and there is very little deviation from those specific tasks. Meaning, a driver for a union LTL usually only drives and a dockworker will often only load/unload freight, even if there is an obvious lack of one or the other at a given time and help is needed to move freight. With non-union LTLs, drivers will often get out of their trucks at the end of a run and start helping on the dock to load/unload freight.”¹⁰

Furthermore, the non-union carriers have greater flexibility in assigning shifts to their workers in comparison with the rigidity of the union carriers. Fisher and Horne

⁸ William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 18

⁹ William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 19

¹⁰ William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 20

state that “another aspect of the union/non-union flexibility issue is the ability to change worker shifts and hours to meet demand. Unionized workers are often guaranteed a minimum number of hours per week...and are not easily moved from shift to shift. Non-union LTLs, on the other hand, often employ a number of part-time workers who can be called in on an as needed basis to supplement various shifts.”¹¹

Clearly, the combination of higher wages and fringe benefits coupled with the work rules inflexibility are major factors in the decline of the union LTL carriers. The non-union carriers, especially the regional non-union LTL carriers, have made substantial inroads into a market, once dominated by national LTL unionized carriers.

Fusion of Package/Small Parcel Segment into LTL Segment

Another significant development with an important impact on the LTL segment involves the expansion of the package/small parcel carriers into the traditional LTL carrier segment. Indeed, for many years the package/small parcel carriers focused on shipments under 100 lbs., while the LTL carriers handled shipments from 100 lbs. all the way to under 10,000 lbs. The two segments were quite distinct with minimal overlaps. The LTL carriers focused on company to company deliveries. The package/small parcel carriers directed primary emphasis on business to consumer deliveries.

However, Federal Express initiated a significant break in this pattern by purchasing several regional, traditional LTL carriers. In 1998, they purchased Viking Freight and in 2001 they purchased American Freightways, both of which were regional LTL carriers. In May 2005, UPS offered to buy Overnite Corp, a major regional LTL carrier, in part as a competitive response to the establishment of Fed Ex Freight (the name

¹¹William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 21

given by Federal Express to its merged operation of Viking Express and American Freightways). Thus, the two major package/small parcel giants will have major traditional LTL operations sometime in 2005 if the UPS acquisition of Overnite takes effect.

The result, of course, is a very strong and powerful industry segment consisting of several very large carriers, including: Yellow Roadway, UPS, and Federal Express. This powerful and rationalized industry segment has experienced some significant gains in the 04/05 time period.

Improved LTL Service as part of Integrated Supply Chain Solutions

Increasingly, major corporations in the United States and throughout the world are moving their supply chains into a real-time environment. This type of transformational paradigm involves a major commitment of time and resources, but offers the firms the prospect of significant savings in time and substantial improvements in business efficiency. In fact, there is a strong argument that companies failing to shift to the new real-time environment will not survive in the intensely competitive global economy.¹²

Shifting supply chains to a real-time environment requires the corporate entity to adopt a single enterprise-wide data base for transactions, i.e. an enterprise resource planning system. With this foundation in place, application layers can be added to accomplish supply chain planning, procurement management/supplier relationship management systems, demand planning systems, inventory optimization systems, and customer relationship management systems. Many companies rely on secured Internet

¹² Sandor Boyson, Lisa Harrington, and Thomas Corsi, **In Real Time: Managing the New Supply Chain**, Praeger Press, 2004, p. 25.

portals to move data across applications and to share it with extended enterprise partners, i.e. suppliers, wholesalers, and retailers.

These types of real-time supply chain environments rely on data exchanges to track all transactions and physical flows of components and finished goods in either real-time or near real time. Long gone are the days when shippers hand over the freight to carriers with the promise that it will be delivered in from five to seven days from New York to Los Angeles. This type of imprecision is no longer acceptable. The globally-competitive firm needs real time knowledge of its assets and movements in order to facilitate planning and financial management. Firms without such information are doomed to failure in our high-tech world.

The traditional LTL carriers, however, set up their hub-and-spoke terminal structure to maximize efficient operations and with only a secondary focus on service. Thus, trucks would not be dispatched between terminals until trailers were full, even if there were delays in dispatching and, ultimately, in delivery of freight. Thus, shippers were often quoted time windows of several days for freight deliveries. However, in the real-time supply chain world, this type of imprecision is no longer the norm. Instead, the emphasis is on complete tracking of shipments, knowledge of how the freight moves through the carrier's system, and precise service commitments.

The package/small parcel carriers took the lead in adopting new technologies to provide very accurate tracking and tracing of shipments. According to Mark Davis, a senior analyst with FTN Midwest Research Securities Corp, "UPS is currently in the lead when it comes to the race for supply chain management supremacy as they leverage their

small package experiences in order to create visibility for their customers across the entire global supply chain.”¹³

Following this lead, the traditional LTL firms, in particular the regional LTL carriers have been rushing to provide service commitments to their customers as part of an overall effort to improve service. As noted by Fisher and Horne: “...improving transit times has been a major focus of some regionals over the past two years as a means of taking market share from union carriers without sacrificing any pricing. Five day service was often cut to three, and three-day service was knocked down to two, all while next-day service was expanded to reach the 500-600 mile length of bandwidth. Regionals, to their credit, have fine-tuned their networks such that certain carriers now offer money-back guarantees, which would have been unheard of just a few years ago.”¹⁴

Further improvements in service by the LTL carriers, regionals as well as remaining nationals, will require substantial investments in technologies, which are now available and offer significant opportunities for the carriers. According to Fisher and Horne, “By most accounts, there are a number of new technologies available that can meaningfully improve LTL operations—systems such as Dock Yard Management (DYM), wireless handheld data units, sophisticated software packages (for routing, e-billing, Web-tracking, etc), and Radio Frequency I.D. tags (RFID).”¹⁵

LTL carriers are increasingly recognizing that the global economy has forced shippers to improve supply chain efficiency. There is a direct link between supply chain

¹³ Mark Davis, FTN Midwest Research Securities Corp., **Transportation and Logistics: Roundtable Forum**, Wall Street Transcript, 67 Wall Street, NY, NY, June 13, 2005, p. 17.

¹⁴ William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 23.

¹⁵ William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 27

efficiency and real-time data and the tracking and tracing of shipments flowing through a carrier's system. LTL carriers have made some significant improvements in their level of service in response to these changes. Although still behind the mega parcel/small package giants, i.e. UPS and Fed Ex, the regional LTL carriers, and the national carriers as well, recognize the need to continue improving their service commitments and recognize the role of technology in achieving improved service and efficiency.

Improved Traffic Growth

The LTL carriers, in particular, the regional LTL carriers, have experienced significant growth in traffic volumes as a result of improved service levels (as discussed above), a generally improving national economic picture, and changes in the hours-of-service regulations.

Table 2 provides information on the traffic growth volumes experienced by both the national and regional LTL carriers during the first half of 2004 in comparison to the first half of 2003.

Table 2: Growth in Tonnage Volume: LTL National and Regional Carriers

Company	1 st Half 2004 Tonnage Growth from 1 st Half 2003
National LTL	
<i>Yellow Roadway</i>	4.8%
<i>ABF Freight System</i>	6.1%
<i>Weighted Average</i>	5.9%
Regional LTL	
<i>Fed Ex Freight</i>	15.2%
<i>Con-Way Group</i>	13.8%
<i>USF Corp. Group</i>	9.1%
<i>Overnite Transportation</i>	13.2%
<i>Old Dominion Freight Lines</i>	19.3%
<i>Saia Motor</i>	18.6%
<i>New Penn</i>	13.4%
<i>Weighted Average</i>	13.7%

William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 8.

As shown, the weighted average tonnage growth during the first half of 2004 in comparison to the first half of 2003 for the national LTL carriers was 5.9%. However, the comparable weighted average growth for the regional LTL carriers was more than double the growth rate for the national LTL carriers. Several regional LTL carriers (Old Dominion Freight Lines and Saia Motor) had growth rates that tripled the average rates achieved by the national LTL carriers.

The LTL carriers also benefited from the changes in the hours-of-service laws that took effect in January 2004. Although these new laws are still subject to review and re-examination by the Federal Motor Carrier Safety Administration, they have remained in effect until that review is completed. The new hours-of-service laws extend from ten to eleven the consecutive driving hours allowed, but do not allow drivers to “stop” their clocks during their work shift (maximum of fourteen hours). This prohibition against stopping the clock during a work shift is quite significant. Truckload carriers, in particular, had used this ability to allow drivers to “stop” their clocks when they reached a shipper’s dock and were waiting to unload their trailer. With no penalty associated with these delays, the truckload carriers could seek multiple-stop loads involving shipments that combined would constitute a full truckload, but separately would involve three large LTL shipments.¹⁶ However, since the truckload carriers can no longer “stop” the clock of their drivers while waiting at shipper terminals, the multiple-stop trips are far less desirable.

¹⁶ The notion that the hours of service change had a positive impact on the tonnage of LTL carriers is discussed by William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 11. They note that under the new regulations, multiple-stop trips by truckload carriers are negatively impacted.

Table 3 from Fisher and Horne demonstrates the growth during the second quarter of 2004 from the second quarter of 2003 in shipments handled by LTL carriers in excess of 10,000 lbs.

Table 3: Growth in Truckload Tonnage Volume: LTL National and Regional Carriers

Company	2 nd Quarter 2004 Tonnage Growth from 2 nd Quarter 2003
National LTL	
<i>Yellow</i>	29.2%
<i>Roadway</i>	8.7%
<i>ABF Freight System</i>	10.9%
<i>Weighted Average</i>	17.6%
Regional LTL	
<i>Fed Ex Freight</i>	13.9%
<i>Con-Way Group</i>	28.6%
<i>USF Corp. Group</i>	21.7%
<i>Overnite Transportation</i>	27.2%
<i>Old Dominion Freight Lines</i>	26.7%
<i>Saia Motor</i>	15.8%
<i>New Penn</i>	29.0%
<i>Weighted Average</i>	24.0%

Truckload tonnage only (shipments more than 10,000). William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 12.

As shown in Table 3, both the national LTL and the regional LTL carriers have had significant increases in their large LTL shipments since the introduction of the new hours-of-service regulations at the beginning of 2004. The ability to sustain this pattern will be determined in large part by the final outcome of the hours-of-service review by the Federal Motor Carrier Safety Administration.

Sustained Rate Increases and Improved Operating Margins

As a consequence of the factors discussed in the previous sections, the LTL carriers have been successful in the 2004-2005 period of sustaining announced rate

increases. Specifically, the capacity rationalization in the LTL sector due to bankruptcies and mergers and acquisition in combination with the growth in the economy has served to create a very favorable demand-supply situation for the LTL carriers. Added to this favorable situation, the driver shortage problems have a particularly strong negative impact on the availability of truckload capacity (to be discussed in detailed in a subsequent part of this report). In light of these factors, shippers have examined the capabilities of LTL carriers to handle large less-than-truckload shipments, which they might have switched to truckload carriers offering multiple stop services.

On May 10, 2005, the investment firm of Morgan Stanley called “2004 LTL rate increases ‘stellar.’”¹⁷ Although rate increases have slowed during the first half of 2005, the overall situation of sustained rate increases has had favorable impacts on the operating performance of the LTL carriers, both national and regional. Table 4 provides the specific operating ratios of both national and regional LTL carriers for the 2nd quarter of 2004. As shown, the weighted average operating ratio for the LTL carriers during the 2nd quarter of 2004 stood at 94.7%, while the weighted average ratio for the regional carriers was only 90.2%. These quarterly operating ratios represent substantial improvements over the annual operating ratios reported by the LTL national and regional carriers for the entire calendar year 2003.

In this environment of high fuel prices, it is important to note that the LTL carriers have in place fuel surcharge agreements that protect them in most cases from the impacts of fuel price volatility. It should also be emphasized that for the large LTL carriers, in particular, fuel costs represent a very small portion of total operating

¹⁷ Jonathan S. Reiskin, “LTL Rate Hikes Average 3% as Longhaul Fleets Improve,” **Transport Topics**, May 16, 2005, p. 1.

revenues. According to Fisher and Horne, “using Overnite and Old Dominion as examples, those companies’ net fuel expense as a percentage of operating revenues typically runs between 1.0% and 1.5%.”¹⁸

Table 4: Operating Ratios: LTL National and Regional Carriers

Company	2 nd Quarter 2004 Operating Ratio
National LTL	
<i>Yellow Roadway</i>	94.7%
<i>ABF Freight System</i>	91.6%
<i>Weighted Average</i>	94.1%
Regional LTL	
<i>Fed Ex Freight</i>	87.2%
<i>Con-Way Group</i>	89.8%
<i>USF Corp. Group</i>	92.4%
<i>Overnite Transportation</i>	93.0%
<i>Old Dominion Freight Lines</i>	90.6%
<i>Saia Motor</i>	93.8%
<i>New Penn</i>	85.8%
<i>Weighted Average</i>	90.2%

William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 8.

Stock Market Performance 2004-2005

As shown in Table 5, the LTL stocks have performed quite well during the 2000-2005 time-period. Between the end of the first quarter in 2000 and the end of the year in 2004, the seven companies represented in Table 5 had an average increase in stock price of 210%. It should be noted that for SCS Transport, the analysis time-period covered from the end of the first quarter in 2003 to the end of the year in 2004. For Overnite, the analysis time period covered from the end of the first quarter in 2004 to the end of the year in 2004. The average increase in stock price from the end of the first quarter in 2000 to the close of the market on August 3 fell to 176%. Again, there is a difference in time

¹⁸William H. Fisher and Buck Horne, **Less than Truckload: Key Secular Trends Driving Regional Carriers**, Raymond James & Associates, Inc., October 13, 2004, p. 41

period coverage for SCS Transport and Overnite. Five of the seven companies (Arkansas Best, Forward Air Corp., Old Dominion Freight Line, SCS Transport, and Yellow Roadway) had a decline in stock price from the end of the year in 2004 to the close of the stock markets on August 3, 2005. In contrast, two LTL companies (Overnite and CNF, Inc.) experienced an increase in stock price during this time-period.

Clearly, the results in Table 5 suggest that the LTL stocks have fared quite well in the 2000-2005 time-period, although 2005, thus far, has not been as strong a year for LTL stocks as was 2004. This most likely reflects investor concerns that some of the driver shortage problems faced by truckload carriers may filter their way into the LTL sector as the shortages deepen.

Table 5: Stock Market Performance: LTL National and Regional Carriers, 2000-2005, Closing Stock Price in Dollars

Company	3/31/2000	3/30/2001	3/28/2002	3/31/2003	3/31/2004	12/31/2004	8/3/2005	% Change 2000-2004	% Change 2000-2005
Arkansas Best	10.5	15.75	27.79	25.42	26.65	44.89	30.25	327.52%	188.10%
CNF Inc.	27.75	28.89	32.99	30.45	33.6	50.1	51.77	80.54%	86.56%
Forward Air Corp.	23.68	32.68	31.65	21.76	32.87	44.7	34.82	88.77%	47.04%
Old Dominion Freight	5.43	4.44	6.25	14	22.53	34.8	33.25	540.88%	512.34%
Overnite Corp.					23	37.24	43.17	61.91%	87.70%
SCS Transport				10.58	21.8	23.37	18.24	120.89%	72.40%
Yellow Roadway Corp.	16.03	14.84	22.95	24.1	33.7	55.71	54.65	247.54%	240.92%
Average								209.72%	176.44%

Sourced: Author's Calculations

Truckload Carriers

Parallel to the situation of the LTL carriers, the TL carriers have faced many challenges during the 2004-2005-time period. Like the LTL carriers, the TL carriers have, on the whole, benefited from the improvements in the economy in the 2004-2005-time period. They have translated capacity shortages into sustained rate increases and

improved profitability. This section focuses on the following major themes for the TL industry sector: driver shortages and the responses by TL carriers; intermodalism and potential for rail-truck coordination; mega-TL carriers: expanded services and new technologies; TL rate increases and overall profitability; and investment perceptions of the TL carriers, 2004-2005.

Driver Shortages and Responses by TL Carriers

As the general economy improved during 2004, the motor carrier industry and, in particular, the TL carrier segment faced an intensifying driver shortage problem. This shortage most clearly manifested itself in overbooking situations among the TL carriers. In fact, Michael LaTronica, Managing Director of the Excalibur Group, estimated that on any given day in 2004, TL carriers were overbooked 10 to 15%. In fact, during the peak-shipping season in 2004, this overbooking figure rose to 25%, according to LaTronica.¹⁹

The causes of the driver shortage problem are complex and multi-dimensional. Clearly, there has been a significant effort to monitor the driving performance record of truck drivers as part of an overall campaign to improve truck safety. The commercial driving license program and the efforts to have states share driver performance records and to eliminate the problem of drivers' having licenses in multiple states has resulted in the elimination of some drivers with unsafe records from the pool of eligible drivers. Furthermore, required drug testing of drivers by carriers has further pruned the pool of eligible drivers. There is also the post 9-11 security environment that has intensified the level of background checks needed to qualify individual drivers prior to employment.

¹⁹ La Tronica is quoted by Tiffany Wlazlowski, "Surging Volume, Tight Capacity Pushed Carrier Profits," **Transport Topics**, January 3, 2005, p. 1.

Clearly, the combination of the commercial drivers license program, drug testing, and the intensified post 9-11 security environment have negative (although, it could be argued, desirable) consequences for the pool of available drivers.

In May of 2005, the American Trucking Associations released a report by Global Insight, Inc. on the severity and long-term implications of the truck driver shortage problem.²⁰ Global Insight estimated that at the present time, there is a shortage of 20,000 over-the-road truck drivers, or a 1.5% shortage. They projected that “in the absence of substantial market adjustments, this driver shortfall—projected demand less projected supply—would rise to 110,000 in 2014.”²¹

Global Insight’s estimated shortfall is based on a combination of factors. First, economic growth will give rise “to a need for a 2.2% average annual increase in the number of long-haul heavy-duty truck drivers, or an additional 320,000 jobs overall” over the next 10 years.²² In addition, over the same time period, Global Insight estimated that “another 219,000 new truck drivers must be found to replace drivers currently of ages 55 and older who will retire over the next 10 years and to replace those in younger groups who will leave the occupation.”²³ Hiring as consequence of these two factors alone represents an average of 54,000 annually over the next ten years. However, according to Global Insight, actual hiring needs will be substantially greater. Global Insight’s notes: “The 54,000 per year total is a net figure. It reflects the hiring of new truck drivers to offset drivers exiting the occupation only on a net basis, and it does not include the

²⁰ Global Insight, Inc., **The U.S. Truck Driver Shortage: Analysis and Forecasts**, Prepared for the American Trucking Associations, Alexandria, VA, May 2005.

²¹ Global Insight, Inc., **The U.S. Truck Driver Shortage: Analysis and Forecasts**, Prepared for the American Trucking Associations, Alexandria, VA, May 2005, p. 2.

²² Global Insight, Inc., **The U.S. Truck Driver Shortage: Analysis and Forecasts**, Prepared for the American Trucking Associations, Alexandria, VA, May 2005, p. 1.

²³ Global Insight, Inc., **The U.S. Truck Driver Shortage: Analysis and Forecasts**, Prepared for the American Trucking Associations, Alexandria, VA, May 2005, p. 1

substantial amount of hiring that trucking companies must do each year as a result of job switching (churning) within the industry.”²⁴ The combination of these factors leads to the projected shortfall noted above of 110,000 drivers in 2014, an increase from the current shortfall of 20,000 drivers.

The driver shortage problem has significant implications for the motor carrier industry, in particular, for TL carriers. First, the inability to employ a sufficient number of drivers represents lost revenue opportunities for carriers, in many instances. If shipments, rather than being lost, are delayed, customer satisfaction with a carrier’s performance, at the very least, is compromised. Second, driver shortages lead to higher driver turnover rates as the existing pool of qualified drivers takes advantage of the supply shortages by shifting carriers. It is estimated that driver re-training costs run from \$4,000-\$7,000 per driver.²⁵ Indeed, driver turnover rates have jumped significantly in the 2004-2005 time-period as a reflection of the significant driver shortages documented above. As noted in a recent **Transport Topics** article, “Driver turnover rates for large and small truckload companies hit record highs in the fourth quarter of 2004, with the rate for large carriers—those with more than \$30 million annual revenue—jumping to 136% from 121% in the third quarter, American Trucking Associations said. The rate for small carriers...increased even more dramatically to 102% from 79% in the third quarter.”²⁶

The industry recognized the problem and is addressing it on multiple fronts. First, carriers have increased driver pay and compensation packages, particularly for TL

²⁴ Global Insight, Inc., **The U.S. Truck Driver Shortage: Analysis and Forecasts**, Prepared for the American Trucking Associations, Alexandria, VA, May 2005, p. 1.

²⁵ Bob Costello quoted in Daniel W. Guido, “Driver Churn Sets Record,” **Transport Topics**, April 4, 2005, p. 26.

²⁶ Daniel W. Guido, “Driver Churn Sets Record,” **Transport Topics**, April 4, 2005, p.1.

drivers. Indeed, **Transport Topics** reported that TL carriers increased driver pay 5 to 7% in the spring of 2004 in an attempt to address this problem.²⁷ Second, many carriers have examined their operating strategies and dispatching policies in order to increase the number of times drivers return to home base and the amount of time they spend at home.

While important, significant improvements in TL driver pay and working conditions are intended to change long-term perceptions about the occupation of a truck driver. While these aggressive actions are likely to continue, they will not in the short-term overcome the documented driver shortage problem.

In short, the driver shortage problem in the TL industry segment has an impact similar to the impact of bankruptcies and mergers and acquisitions in the LTL segment. In both industry segments, the 2004-2005 time-period represented a tightening of capacity at the very time that demand was growing with an improved economy. In both instances, this capacity mismatch with demand has created an environment that allowed the carriers to sustain modest rate increases in a way that has been uncharacteristic of the post deregulation period.

Intermodalism: Potential for Rail-Truck Coordination

Transport economists have long been intrigued with the economic benefits and potential advantages of rail-truck intermodal movements for long-haul shipments. Rail has the appeal of great economies of density and the ability to move hundreds of containers/trailers with a minimum labor commitment. Motor carriers have the inherent flexibility and ubiquity to provide efficient short-haul distribution requirements. In the

²⁷ Tiffany Wlazlowski, "Surviving Volume, Tight Capacity Pushed Carrier Profits," **Transport Topics**, January 3, 2005, p. 1.

transport economist's mind, there is a perfect match between railroads and motor carriers for these long-haul shipments.

Indeed, there has been significant growth in intermodal traffic as a reflection of its economic advantage. According to *Transport Topics*: "In 2004, railroads moved 10.2 million containers and 2.6 million trailers for a total rail intermodal volume of almost 12.9 million units, up substantially from the 10.3 million moved in 2000, according to the Intermodal Association of North America. Last year alone, intermodal traffic was up 8.6%."²⁸ Much of this growth has resulted from the increasing reliance by US companies on components and finished goods being manufactured in China and Asia, shipped to West Coast ports, and transported in intermodal containers from the West Coast to the Midwest, with final distribution via TL carriers.

With the significant driver shortage problem, cooperation between railroad and TL carriers on intermodal movements is increasingly more frequent. J.B. Hunt's landmark agreement with the Sante Fe Railroad (now the BNSF Railroad) in 1989 led the way for intermodal cooperation between the modes. According to Bill Matheson, general manager of intermodal services at Schneider National, "nearly all of the long-term trends favor intermodal vs. pure over-the-road trucking service. Compared to a while ago, the main thing is our intermodal product is becoming a surrogate for the over-the-road service product. Thirty years, or even ten years ago, that would have never been the case."²⁹

²⁸ John D. Schulz, "Intermodal Freight Surges from Humble Beginnings," *Transport Topics*, May 30, 2005, p. 1.

²⁹ Bill Matheson quoted by John D. Schulz, "Intermodal Freight Surges from Humble Beginnings," *Transport Topics*, May 30, 2005, p. 12.

The major current impediment to additional expansion of this intermodal service, however, is a railroad service problem. It is clear that the growth in intermodal traffic has challenged the railroads from a service perspective. In a presentation by Ron Widdows, Chief Executive Officer, American President Lines, to the U.S. Department of Transportation on February 25, 2005, he noted that there is now a 2-3 day delay in rail transit times from the West Coast on average, with a 4-6 day delay now a common occurrence.³⁰ These types of service delays present huge problems in an environment of real-time supply chain management placing a great emphasis on timely delivery and real-time visibility of shipments.

Thus, while intermodal shipments have gained prominence in an environment of truck driver shortages and major traffic flows from factories, particularly in China, they are not a panacea for the capacity issues in the TL sector. There is no question that intermodal traffic will grow and its growth will depend, in large part, on the ability of the railroads to improve service. There is no question that the TL carriers stand able and willing to move the long-distance shipments to intermodal and achieve synergies, long ago only contemplated by transport economists. Yet, in the short term, intermodalism does not remove the tremendous capacity issues facing the TL carriers.

Mega-TL Carriers: Expanded Services and New Technologies

In the LTL section of this report, there was a discussion of the fundamental shift to a shipping environment in which companies rely on a secured Internet portal to share applications and data across their own enterprise and with their extended enterprise partners in real time. This shift has been driven by the requirements of globalization with

³⁰ Power Point presentation of Ron Widdows, American President Lines, to the U.S. Department of Transportation, Washington, D.C., February 25, 2005.

an increasing amount of production occurring in Asia and the increasing need to ship internationally in a very security sensitive world. Along with globalization and international production and distribution is the requirement to exchange information about production and shipping schedules in real time. Manufacturers, distributors, transportation providers, wholesalers, retailers, and customers want 24/7 information on the location of their shipments.

This type of very sophisticated, real-time environment puts a premium on large carriers with information technology resources to support the new business model. These large carriers must integrate seamlessly with the supply chain systems of both shippers and receivers. Small and medium-sized TL carriers will have difficulties transitioning to this new model. The new environment clearly favors the large integrated TL carriers—both asset-based and non-asset-based or third-party logistics providers or third-party brokers.

According to Jon Langenfeld, Senior Vice-President and Equity Research Analyst with Robert W. Baird & Company, at a recent roundtable forum: “Looking at the regulatory and security issues from a slightly different perspective, these requirements should provide yet another catalyst for further industry consolidation among transportation and logistics providers in favor of the larger, more sophisticated companies. Security, for any shipper comes down to the credibility of your suppliers and credibility of your supply chain. The need for credibility clearly favors the more sophisticated global transport providers with competent IT systems and diversified global offerings to service global customers.”³¹ At the same roundtable discussion, Mr. David

Jon Langenfeld, Robert W. Baird & Company, **Transportation and Logistics: Roundtable Forum**, Wall Street Transcript, 67 Wall Street, NY, NY, June 13, 2005, p. 11.

Campbell, a security analyst with Thompson, Davis & Company, made a similar observation regarding the advantage of the large, sophisticated TL carrier: “There is a need for shippers to have substantial information technology and infrastructure to support their shipments and identify and do customs work on those shipments prior to or at the time of embarkation from foreign ports. That type of information is available from sophisticated and large logistics providers. It just drives more business to them and away from smaller providers or away from some of the asset-based companies that may not have all that infrastructure and connections.”³²

One very excellent example of the TL carrier making significant shifts to adapt to this new environment is Schneider National. Schneider has expanded its technology investment and its scope of operation to provide a variety of capabilities and services to match the needs of shippers in a real-time supply chain environment. A recent review of their operations concludes: “Schneider National, the largest truckload carrier in North America with annual revenues in excess of \$1.2 billion has the following set of trademarked services: One-way Van Truckload, Dedicated, TruckRail/InterModal, Brokerage, and Expedited. While some these services are self-explanatory, it should be noted that Dedicated Services assign equipment and drivers exclusively to specific customers as a supplement to or replacement for private carriers. The InterModal services are integrated with rail operations to facilitate intermodal shipments. The Expedited Services division of Schneider National provides time definite deliveries by team or solo drivers, depending upon the distances involved.”³³ Clearly, the resource and

³²David Campbell, Thompson, Davis & Company., **Transportation and Logistics: Roundtable Forum**, Wall Street Transcript, 67 Wall Street, NY, NY, June 13, 2005, p. 11.

³³ Thomas M. Corsi, “The Truckload Carrier Industry Segment,” **Trucking in the Age of Information**, Dale Belman, editor, Ashgate Publishing, forthcoming, 2005.

technology demands of the real-time supply chain environment dictate a growing importance for the larger TL carriers.

There should also be recognition that the new environment has spurred the growth of third party logistics providers or transport brokers/intermediaries. These providers make substantial technology, IT investments to link to manufacturers and shippers as part of the real-time supply chains. However, many are non-asset based and rely on smaller independent TL carriers and/or owner-operators to provide the transport assets. This model has seemed to work well. According to Mark Davis, Senior Analyst with FTN Midwest Research Securities Corp., “we continue to like C.H. Robinson due to the company’s position as the largest player in the U.S. domestic truck brokerage market and its best-in-class IT system. We believe C.H. Robinson continue to perform extremely well as trucking rates remain high, capacity continues to enter the market in the form of owner operators, and truckers increasingly rely on brokers to find loads, cut deadhead miles, and more effectively manage their cash flows.”³⁴ There is one note of caution in the non-asset based model. While the logistics/broker has sophisticated IT technology to link with real-time supply chains, there is some question about the IT sophistication of the asset based small TL/owner-operator providing the physical transportation. Often times, there is a mismatch that has the potential for breaking the communication/real-time links that are vital to the success of the overall supply chain system.

TL Rate Increases and Overall Profitability

Given the combination of capacity constraints (due primarily to driver shortages) and enhanced demand as a result of national economic growth, TL carriers, like their

³⁴ Mark Davis, FTN Midwest Research Securities Corp., **Transportation and Logistics: Roundtable Forum**, Wall Street Transcript, 67 Wall Street, NY, NY, June 13, 2005, p. 16.

LTL counterparts, have been able to introduce and sustain modest rate increases in the 2004-2005 time-period. These rate increases are in addition to the fuel surcharges due to rapidly increasing oil prices.

Indeed, the rate increases put in place by the TL sector during the first quarter of 2005 (exclusive of fuel surcharges) have been significant. According to a recent **Transport Topics** article: “A **Transport Topics** survey of 13 leading truckload companies showed revenue per loaded mile before fuel surcharges—the industry standard for measuring pricing—increased by 7.9% from the first quarter of 2004 through the January to March period of this year... ‘These are the strongest results on exhibit in, say, two decades—and it’s going on throughout the industry, with smaller carriers too. There’s a severe capacity imbalance for this level of demand,’ said stock analyst Donald Broughton, who follows transportation companies for A.G. Edwards & Sons in St. Louis.”³⁵

³⁵ Jonathan S. Reiskin, “Truckload Rates Soared in 1Q, but Higher Expenses Hit Profits,” **Transport Topics**, May 9, 2005, p. 1.

Table 6: Major TL Carriers: Change in Revenues and Net-Incomes-2003 to 2004

Carrier Name	Revenue (\$) (000)	% Change	Net Income (\$) (000)	% Change
Swift Transportation	2,826,201	17.9	103,482	30.4
J.B. Hunt	2,786,200	14.5	146,300	53.2
Landstar	2,019,936	26.5	71,872	41.8
Uni Group (United Van Lines, Mayflower Transit)	1,994,783	10.3	20,507	22.9
Werner Enterprises	1,678,043	15.1	87,310	18.4
US Xpress Enterprise	1,105,656	18.8	16,426	114.9
Covenant Transport	603,622	3.6	3,376	- 72.2
Prime, Inc.	587,208	5.0	62,076	25.0
C.R. England, Inc.	508,659	1.8	29,065	36.5
Heartland Express	457,086	12.8	62,447	9.1
Knight Transport	442,288	30.1	47,860	35.0

Source: Daniel Bearth, "TT 100 For-Hire Carriers Changed, Grew in 2004," **Transport Topics**, July 25, 2005, pp. 8-16. This list includes the TL carriers among the top 50 carriers with reported revenue and net income change between 2003 and 2004. It excludes all the LTL carriers among the top 50 as well as any TL carriers with no reports of revenue and income change between 2003 and 2004.

Table 6 reports on the changing revenue and net income picture for major TL carriers between 2003 (annual) and 2004 (annual). It demonstrates that the major TL carriers have been successful in translating their sustained rate increases into growth in both annual revenues as well as net income. Among the twelve TL carriers listed in Table 6, only one, Covenant Transport, reported a decline in net income between 2003 and 2004. The remaining carriers all had increases in net income between the two years. The percentage growth in net income for the eleven carriers ranged from a low value of 9.1% for Heartland Express to a high value of 114.9% for US Xpress Enterprise. Based on Table 6, the largest TL carriers, i.e., Swift Transport and J.B. Hunt, reported gains in net income of 30.4% and 53.2%, respectively. It should be emphasized that some of the largest TL carriers, e.g. Schneider National had not stated net incomes at the time of publication of the **Transport Topics** article.

The conclusion of Table 6 is that the largest TL carriers have been successful in translating their sustained rate increases into improved profitability. This is not to minimize the increased costs associated with the very concerted effort by carriers to raise driver pay and improve driver working conditions in order to reduce driver turnover. Clearly, these initiatives have increased carrier costs. Furthermore, the sharp increases in fuel prices, while often passed through to the shipper with surcharges, are a growing concern for all motor carriers.

Stock Market Performance 2004-2005

As shown in Table 7, the TL stocks have performed well during the 2000-2005 time-period. Between the end of the first quarter in 2000 and the end of the year in 2004, the fifteen companies listed in Table 7 had an average increase in stock price of 199%.— just slightly below the 210% increase in stock price achieved on average by the LTL carriers during the same time period. However, in a fashion similar to the experience of the LTL carriers, the average increase in stock price for the TL carriers from the end of the first quarter in 2000 to the close of the market on August 3, 2005 fell to 149%. There were four TL carriers who experienced an increase in stock price between the end of 2004 and the close of the market on August 3, 2005. While Marten Transport experienced a 257.4% increase in stock price from the end of the first quarter in 2000 until the end of the year in 2004, their stock price went up 300.8% from the end of the first quarter of 2000 until the close of the stock market on August 3, 2005. In a similar fashion, Patriot Transport Holdings had increase in stock price from 111.7% to 184.2 % during the comparable time periods. Swift Transport had an increase of 4.8% in stock price during the first period and an increase of 7.0 percent during the second period,

while USA Truck had an increase of 134.5% in the first period, but 303.9 percent in the second period at the close of the stock market on August 3, 2005.

Results in Table 7 suggest that the TL stocks, like the LTL stocks, have fared quite well in the 2000-2005 time-period, although 2005, thus far, has not been as strong a year for TL or LTL stocks as was 2004. This most likely reflects investor concerns about the driver shortage problems faced by truckload carriers. However, the pessimism expressed by the market to date does not seem entirely warranted in view of the rate increase and profitability trends discussed earlier.

Table 7: Stock Market Performance: TL Carriers, 2000-2005, Closing Stock Price in Dollars

Company	3/31/2000	3/30/2001	3/28/2002	3/31/2003	3/31/2004	12/31/2004	8/3/2005	% Change 2000-2004	% Change 2000-2005
Covenant Transport	15.87	13.62	14.66	16.99	18.03	20.82	13.98	31.19%	-11.91%
Frozen Food Express Industries	3.37	2.07	2.47	2.51	6.9	12.9	10.7	282.79%	217.51%
Heartland Express	4.75	8.54	13.31	12.78	15.19	22.47	20.43	373.05%	330.11%
J.B. Hunt Transport Services	6.84	7.81	14.21	13.46	28.16	44.85	19.8	555.70%	189.47%
Knight Transportation	5.18	7.22	14.09	13.12	15.92	24.8	24.1	378.76%	365.25%
Landstar System	13.68	16.94	23.2	28.75	40.95	73.64	33.16	438.30%	142.40%
Marten Transport	6.36	6.44	8.05	8.03	19	22.73	25.49	257.39%	300.79%
P.A.M. Transportation Services	10.12	7	25.3	21.88	17.16	18.61	17	83.89%	67.98%
Patriot Transportation Holding	21.25	21.5	32	22.28	36.61	44.98	60.4	111.67%	184.24%
Smithway Motor Xpress Corp.	3.5	3.25	1.9	0.91	3.01	7.19	7.1	105.43%	102.86%
Swift Transportation Co.	20.5	18.5	21.92	16	17.29	21.48	21.93	4.78%	6.98%
Transport Corp. of America	4.87	5.31	6.55	5.05	7.1	8.4	6.95	72.48%	42.71%
USA Truck	7.25	7.75	12.9	7.13	9.66	17	29.28	134.48%	303.86%
U.S. Xpress Enterprises	8.81	6.12	12.1	7.72	14.37	29.3	13.44	232.58%	52.55%
Werner Enterprises	10.2	10.27	16.76	15.4	18.95	22.64	19.37	121.96%	89.90%
Average								199.03%	149.04%

Source: Author's Calculations

Future Issues—2006 and Beyond

This report has demonstrated that during the 2004-2005 time-period, the motor carrier industry, in both the LTL and the TL segments, sustained the turnaround begun in 2003. Both the LTL and the TL segments transformed a tight supply market into an opportunity to initiate and sustain freight rate increases. In the LTL segment, capacity issues emerged as a result of a series of bankruptcies, coupled with significant merger and acquisition activity. In the TL segment, capacity constraints stemmed from the

rapidly intensifying driver shortage problem. Although TL carriers, in particular, faced significant cost challenges as they ramped up their driver compensation in response to shortages, the rate increases provided for most TL and LTL carriers to improve operating margins and net incomes in 2004 and into 2005.

Yet, there are no shortage of continuing challenges that TL and LTL carriers will face in the last quarter of 2005 and into 2006 and beyond. First, there will be some final resolution of the hours-of-service regulations with the new set of regulations determined at last. Whether the new regulations will continue to assist the LTL carriers in winning back some large-sized LTL shipments from TL Carriers, who had tried to combine the large LTL shipments into multiple-stop truckloads, is an open question. Clearly, there will be some restrictions on driver hours and there will be some counting of loading/unloading and wait time as work time. These restrictions will definitely have a greater operating impact/cost impact on TL carriers than they will on LTL carriers.

Combining the hours-of-service regulations with basic demographics suggests a continuing and significantly worsening driver shortage crisis. TL carriers, in particular, will need to continue efforts to improve the working conditions and pay for truck drivers in order to make the occupation more attractive to targeted age groups. The recently finished American Trucking Associations report provides an excellent framework for understanding the driver shortage issue and for estimating the magnitude of its impact.

The trend toward the adoption of real-time supply chain management by major manufacturing and distribution companies will favor larger-sized LTL and TL companies. The new environment is technology-intensive. The technology requirements for TL and LTL carriers will continue to grow as the transportation providers must

integrate their services with the technology infrastructure of their customers who manage their supply chains in real-time.

In addition to favoring larger-sized carriers, the new environment puts a premium on the services of third party logistics providers/brokers. Increasingly, these non-asset providers link transportation carriers to available loads/supply chain networks in a way that minimizes empty dead heads and maximizes equipment and driver utilization. In fact, if small-sized TL companies, in particular, have any hope to survive into the next decade they might have to link their services to these third party logistics providers/brokers. The Hub Group and C.H. Robinson are two representative large-scale third party, non asset based brokers.

There must also be a clear recognition that increasing reliance by US manufacturers on Asia and China, in particular, as a source of production will change the basic freight flows in the United States. The growth in container traffic from West Coast ports to the mid-section of the United States was documented in an earlier section of this report. Increasing reliance on Asian production will intensify these movements and further alter freight flows in the United States. The impact of this fundamental shift on the U.S. transportation industries has not been fully investigated. Clearly, movement patterns and customer-bases will be disrupted and new ones will emerge. There will be winners and losers in this process. Yet, there are many questions to be resolved especially in view of the inability of the railroads to demonstrate a capacity to handle additional container movements and still meet precise schedules, required by the new supply chain environment.

A discussion of events in 2006 and beyond would be remiss if security and safety issues were neglected. The post 9/11 environment is security-dominated. Growing intermodal shipments from Asian production locations will intensify requirements on carriers to adopt new security-conscious technologies and approaches. Coupled with increasing security requirements will be increasing demands for motor carriers to guarantee safer operations. The trucking industry seems to be on the verge of a whole range of technologies to monitor driver and vehicle performance in ways that will provide alerts and interventions to avoid truck crashes. There is no question that security and safety issues will require carriers to make significant cash investments. Clearly, the advantage will be with carriers who have the financial resources to make these investments.

Thus, while the post-MCA environment broke down many entry barriers, the realities of the post 9/11 environment and the real-time supply chain movement are that larger carriers with significant technology investment capabilities will increasingly dominate the motor carrier industry market with increasing disadvantage to the smaller-sized carriers.

The year 2005 is coming to a close with unprecedented fuel price increases and significant driver shortages. While carriers have been doing better, in general, in terms of operating margins and net incomes, there are many uncertainties clouding the future and peaking the attention of motor carrier executives. There will be no let-up in the need for motor carrier executives to respond to driver shortages and to security issues into the future. Successful motor carriers will be the ones with the vision to adapt new technologies and to integrate with their customers in a real-time supply chain

environment. Successful carriers will also be the ones with innovative driver compensation and working condition packages that will lower their overall driver turnover rates.