

Examining Driver Turnover and Retention in the Trucking Industry

Prepared for:
Center for Intermodal Freight Transportation Studies,
The University of Memphis, Memphis, Tennessee and
Vanderbilt University, Nashville, Tennessee



Prepared by:
Haskel D. Harrison,
Research Associate Professor
Julianne Pierce,
Graduate Research Assistant
Sparks Bureau of Business and Economic Research
Fogelman College of Business and Economics
The University of Memphis
Memphis, Tennessee

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Executive Summary: Examining Driver Turnover and Retention in the Trucking Industry

Section 1. Introduction

Nearly every good consumed by households and business in the United States was, at some point, transported on a truck (Bureau of Labor Statistics, 2007). While trucking is intertwined with virtually every sector of the U.S. economy, it is easy to underestimate the importance of this industry. The vast majority of communities in this country rely on trucks to routinely deliver all of the essential products necessary for basic existence, and 2.3 percent of the American workforce is involved in the trucking industry as drivers or as sales workers associated with the industry. The trucking industry is one of the key components of the U. S. economy and as such has a major impact on the health and well being of the overall economy.

In order for the trucking industry to operate at such a large capacity, it is necessary for carriers to find, recruit, and retain qualified drivers for each truck on the road. Unfortunately, driver turnover and retention problems have been such a dilemma for so many years that the condition has almost become an accepted obstacle and expense in the trucking industry.

For at least the past three decades, turnover among truck drivers and the problems associated with low truck driver retention rates have been studied continuously (FMCSA, 2003). The purpose of the current research project was:

- To review carrier turnover and retention and report the origins and evolution of driver turnover and retention research;

- To evaluate the nature of turnover and retention and define the problem by critically examining published results from evaluations and analyses of the trucking industry and other high turnover industries. Specifically, results were to include those found in academic investigations and policy studies, in publicly available proprietary reports, trade publications and government documents, and in U.S. Department of Transportation, U.S. Department of Labor, and U.S. Census Bureau databases;
- To present alternative strategies that promote truck driver retention in areas identified by the trucking industry and in other high turnover industries;
- To survey trucking industry representatives to explore the nature of and the magnitude of the situation and present how the industry has responded;
- To interpret and organize survey response data to identify current turnover and retention problems, concerns, and solution strategies;
- To examine turnover and retention strategies from other industries and to examine comparable organizational approaches that address common retention issues that may have applications in the motor carrier industry.

Limitations

Much of the information on turnover, retention and the motor carrier labor market is anecdotal and has been provided by the industry itself or by industry consultants. The trucking industry is highly competitive and basically opaque, where independent investigations are uncommon, independent surveys are rare, and academic studies are forced to rely on limited industry data and publications. Much of the data on trucking are proprietary and the industry has a history of providing information primarily for influence

or for public relations. Therefore conclusions about the industry should be guided by an awareness of source information.

Data Collection

Findings and conclusions in this study were derived from four secondary and primary sources:

1. Published results from evaluations and analyses of the trucking industry and other high turnover industries found in academic investigations and policy studies;
2. Publicly available proprietary reports, trade publications, and government documents;
3. U.S. Department of Transportation, U.S. Department of Labor, and U.S. Census Bureau databases, and;
4. Responses from a short transportation survey sent primarily to managers, directors, and supervisors in human resources, operations, and safety positions as well as to trucking association representatives in five states with the highest concentration of workers in the motor carrier industry.

Respondents

Respondents for the turnover and retention survey were selected from industry associations and representatives from Arkansas, Nebraska, Iowa, Wyoming, and Tennessee, the five states with the highest concentration of workers in this industry.

Contact information was secured for state trucking associations representing 3,675 members in those states. Representatives were reached by telephone and by email and were asked to assist in promoting the research project to their membership and to

facilitate the dissemination of mail surveys and information concerning the online version of the instrument. All state associations agreed to assist.

The survey was mailed to 276 Tennessee-based trucking firms and 129 of the 144 members of the Arkansas Trucking Association. An Internet-based version of the survey was sent via an online newsletter to 925 members of the Nebraska Trucking Association and Safety Council Members. The Iowa Trucking Association also sent an online link to its 1,500 members once a week for a total of four weeks. In addition, 30 Wyoming Trucking Association board members received survey information at an association meeting and 800 association members received the survey information and the web-page link in a mailed newsletter.

The transportation survey was comprised of 5 items to indicate company size and turnover rates and 12 short-answer items concerning strategies used to address retention and turnover in the organization. The survey is included in Appendix 1. Surveys were sent primarily to managers, directors, and supervisors in human resource, operations, and safety positions. Surveys and notices about on-line surveys were available in the 830 newsletters and 2,425 online newsletters and were handled by individual association representatives or carrier agencies. Of the 405 mailed surveys, 49 mailings were returned due to a change in address or other incorrect contact information. Follow-up emails and telephone call reminders occurred routinely throughout the survey process.

Section 2. The Impact of Competition and Evolving Driver Turnover and Retention Issues in the Trucking Industry

The passage of the *Motor Carrier Act of 1980* (MCA) promoted competitive rate setting, abolished carrier commodity restrictions, eliminated routing and geographic requirements, and promoted pricing competition. The impact of these conditions on

industry employment and wages benefited consumers, but the changes occurred at the expense of truck driver earnings, service requirements, and union membership. Reports of the dramatic impact of deregulation on the trucking industry began almost immediately after the passage of the MCA. Intense competition soon led to company failures and anecdotal reports of high driver turnover became routine and continues today. In terms of the basic conditions that foster turnover, the literature suggests that little has changed regarding driver turnover in the years since deregulation was enacted. Conditions that influence truck driver turnover and retention are well known and have become part of the fabric of the industry. The most widespread driver concerns typically include: a lack of communication, a lack of respect for drivers and drivers feeling undervalued; requirements to be away from home for long periods of time; insecurity toward top-management; and pay and benefit issues. In general, industry management has failed to respond to driver needs and has outsourced training programs that have attracted secondary drivers. These factors, in addition to the industry's inability to address dissatisfaction over salaries and benefits has ultimately contributed to and promoted churning or job-hopping.

Addressing the trucking industry's shortfall in capacity and maintaining a strong workforce will require measures to attract drivers who will work in spite of the sometimes sparse amenities associated with the working environment. Although elements that promote retention have remained essentially unchanged for the past two decades, specific alternatives that address those retention concerns have not been identified or evaluated.

In conclusion, one of the earliest independent evaluations of the trucking industry—and still one of the few—was conducted in 1996 by the Mack-Blackwell Rural

Transportation Study Center located at the University of Arkansas for the U.S.

Department of Transportation. The study, *Motor Carrier Effectiveness* (Gupta, Jenkins, and Delery, 1996), obtained questionnaire responses from 379 “top managers of trucking companies.” The findings supported much of the commonly accepted and often repeated industry information but findings also contradicted a number of assumptions about the industry. The study reported that:

- Although reports of astronomical turnover rates and critical driver shortages were common, among the respondents in this study the average quit rate was 27 percent with a median of 10 percent.
- Compensation and benefits were the primary reasons drivers quit;
- Innovative compensation efforts and the use of pay to offset turnover is rare among companies;
- Unionized companies have better pay, lower quit rates and poorer financial performance than non-union carriers;
- The higher the pay for drivers, the lower the quit rate;
- Larger and younger companies had higher quit rates;
- Frequent home-routings meant lower quit rates.
- Most interesting, and contrasting with industry conventional wisdom, was that the majority of the 379 “top managers of trucking companies” said that driver turnover “made no difference” among major factors affecting company effectiveness.

Section 3. Conditions and Alternatives in High Turnover Work Environments

Other high-turnover industries have tried alternative solutions to turnover and retention problems that may also have an application in the trucking industry. Sixteen industries or sectors were examined in the current study. They included the military, Wal-Mart hourly positions, emergency medical technician, law enforcement, teaching and special education professions, nursing, firefighter, bank teller, and hotels. Compared to the amount of interest and concern, few solutions have been offered or implemented in those fields. No one industry has led the way by creating a new environment or culture when it comes to retention and turnover, so the acceptance of the problem often increases while the hope and energy put into finding a solution fades.

Section 4. Alternative Strategies to Address Driver Turnover and Retention

Many of the trucking companies that have attempted solutions to turnover and retention problems have focused primarily on driver pay and benefits. Other research, however, suggests that a multitude of factors identified from the perspective of the industry or the driver affect turnover and retention, and only by addressing these issues in a more comprehensive fashion will driver attitudes and retention rates be positively influenced. These factors included dispatcher effectiveness, recruitment, company support, and Realistic Job Previews discussed below.

Dispatcher Effectiveness

In terms of dispatcher effectiveness, research suggests that dispatchers are more important in a company's ability to retain drivers than is often realized. Companies whose dispatchers respond more successfully to driver concerns are more likely to

experience lower rates of voluntary driver turnover than companies whose dispatchers are not responsive. Expecting high performance from dispatchers requires appropriate training, tools, and working conditions. Identifying and keeping effective dispatchers requires:

- Job- and company-specific realistic job preview for dispatch at training and that are available to current and future employees;
- Personality assessments to pinpoint potential dispatch/driver problems and to specify employee training needs; and
- Promoting and treating dispatch as a success area—as an aspiration instead of a “stepping stone.”

Recruitment

Successful recruitment efforts for the trucking industry included the industry’s need to:

- Focus appropriate recruitment strategies to those candidates most likely to stay with the organization;
- Develop company-specific driver Realistic Job Preview to allow applicants to select out before taking a position or to help new and future drivers adapt to the position;
- Ensure that applicants understand and meet the mental and physical requirements of the position to prevent future turnover and promote driver safety.

Company Support

Company support becomes evident when firms effectively communicate new regulations to drivers, when carriers provide and encourage an accessible career path for

drivers, when they recognize differing skill and education levels, and when firms listen to drivers' needs regarding employment conditions and management culture. In trucking, as in any other work setting, honesty and consistency promote and maintain the level of trust necessary to improve organizational climate.

Realistic Job Previews

In terms of recruiting and retaining qualified truck drivers and dispatchers, it has been suggested that carriers develop a Realistic Job Preview (RJP) specific to each position. Through RJP, applicants get a glimpse into what their future job would be if they complete the selection process and are hired by the organization to fill the position. Realistic information provided to applicants allows them to make an informed decision about whether or not they should continue with the selection process or self-select out.

Conclusion

The current study reviewed alternative strategies that have been recommended and applied over the past 25 years in an attempt to solve turnover and retention problems in the trucking industry. Most of these tactics appear to be obvious and necessary components of any successful business—especially if the techniques are applied uniformly, seriously, and widely. However, there is little evidence of the successful application of any of these strategies in the trucking industry, particularly in terms of producing a lasting and meaningful impact on turnover rates. Knowledge of successful strategies, without their application, suggests the trucking industry can tolerate the condition. As no trucking company has successfully demonstrated that the costs associated with attacking turnover can be offset by profits gained from increased

retention, the assumption could be made that the level of turnover and retention is appropriate for the prevailing business climate in the motor carrier industry.

Section 5. Survey Results

The return on the current survey, with 24 carriers representing 10,500 drivers is characteristic of many surveys conducted over the years in the trucking industry. Perhaps the most well known study of turnover and retention relied on 25 carriers representing 800 drivers (Gallup, 1997). The current survey response rate, however, was a disappointment and seemed suggestive of how opaque, competitive, internally focused, or even secretive, the motor carrier industry may have become in the three decades since deregulation. The lack of response says more about the industry than the information provided below. The results should **not** be viewed as representative and no generalizations or conclusions should be assumed. A total of 15 complete and two incomplete surveys were returned by mail; nine completed online surveys were submitted for a total of 24 completed surveys representing over 10,500 drivers. Most of the firms represented smaller carriers employing between 1 and 100 drivers (82%). Carriers employing between 200 and 300 drivers and 301 to 400 drivers accounted for 4.5 percent respectively. One carrier employed over 1200 drivers and one had nearly 8000 drivers.

For the 22 firms that reported current turnover rates, 13 had turnover at or below 30 percent. Six firms reported turnover between 31 and 75 percent, while the remaining three companies had turnover rates of 95 percent or higher. The 8 smallest carriers (fewer than 35 drivers) as well as the largest carrier said acceptable turnover rates would be 10 percent or lower, 7 firms said 20 percent to 50 percent would be acceptable and 6 firms said more than 70 percent but less than 100 percent was acceptable. Most reported

their ideal rate consistent with their current rate indicating that turnover for this group was not an issue. Responses to two open-ended questions are summarized.

Section 6. Summary and Conclusions

A 1996 study of *Motor Carrier Effectiveness* obtained questionnaire responses from 379 “top managers of trucking companies” to provide industry leaders with data as a guide to decision-making to offset guesses, anecdotes, and conventional wisdom. Perhaps a clue to the reality of the problem was that the majority of those top managers said that driver turnover “made no difference” among major factors affecting company effectiveness. The trucking industry appears to be very much like the hotel industry where a two-year study by The Center on Wisconsin Strategy found that the “most common response” to retention issues in the hotel industry was “essentially no response” (Bernhardt, Dresser, & Hatton, 2003).

In the current study, little evidence could be found to demonstrate the successful application of turnover and retention strategies in the trucking industry. Knowledge of successful strategies, without their application, suggests the trucking industry can tolerate the condition. As no trucking company has successfully demonstrated that the costs associated with attacking turnover can be offset by profits gained from increased retention, the assumption could be made that the level of turnover and retention is appropriate for the prevailing business climate in the motor carrier industry.

The industry tends to throw many “quick fixes” at the problem of turnover, but one solution is not enough and turnover is an issue that requires long-term planning and even more importantly, strong support from the industry leaders, high-level managers and

supervisors. Only this support will pave the way for a new culture to arise that values retention and works daily to address and reverse rising turnover.

Examining Driver Turnover and Retention in the Trucking Industry

Section 1. Introduction

Nearly every good consumed by households and businesses in the United States was, at some point, transported on a truck (Bureau of Labor Statistics, 2007). In fact, trucks carry 61 percent of the total weight of U.S. freight shipments, more than the weight of air, water, pipeline, and rail shipments combined (National Surface Transportation Policy and Revenue Study Commission, 2007). Trucks also surpass other transportation modes in terms of transported value, carrying 65 percent of the total value of shipments across the nation (NSTPRSC, 2007).

The trucking industry is one of the key components of the U. S. economy and as such has a major impact on the health and well being of the overall economy. As the costs of purchasing and maintaining vehicles, fuel, labor, and highway maintenance fluctuate, the price of raw materials and products carried by the trucking industry rise and fall accordingly and ripple through the entire economy. Given that trucking is intertwined with virtually every sector of the economy, it is easy to underestimate the importance of this industry. The vast majority of communities in this country rely on trucks to routinely deliver all of the essential products necessary for basic existence and 2.3 percent of the American workforce is involved in the trucking industry as drivers or as sales workers associated with the industry. The industry likes to say “if you bought it, a truck brought it.” Figure 1 provides an overview of the trucking industry including revenue, size, growth and major trends in the sector. Figure 2 reviews truck driver jobs and workers including the workforce, wages, ethnicity, and extent of unionization.

Figure 1.

The Trucking Industry at a Glance	
Revenue	<ul style="list-style-type: none"> ▪ Nearly \$200 billion annually
Size	<ul style="list-style-type: none"> ▪ The truck transportation and warehousing industry provided 2.1 million wage and salary jobs in 2006 ▪ Truck drivers held about 45 percent of all salaried jobs, 924,000, in the industry.
Growth	<ul style="list-style-type: none"> ▪ Overall employment of truck drivers is expected to increase by 8 percent over the 2006-2016 decade, which is about as fast as the average for all occupations. ▪ Because it is such a large occupation, truck drivers will have a very large number of new jobs arise, over 258,000 between 2006-2016.
Major Trends	<ul style="list-style-type: none"> ▪ 1980s: The Motor Carrier Act of 1980 partly deregulated the trucking industry. Ten years later, one third of the 100 largest trucking companies were out of business, casualties of the fierce competition. ▪ The Surface Transportation Act of 1982 set uniform size and weight limits for the trucking industry nationwide. ▪ 1990s: North American Free Trade Agreement (NAFTA) passed and resulted in explosive trade with Mexico. ▪ Deregulation essentially was completed with the enactment of additional legislation. ▪ The Federal Motor Carrier Safety Administration was established ▪ Used Truck Price Crisis began in 1999, leading into 2000 ▪ 2000s: Sky-rocketing fuel prices, protests and blockades by independent operators, battles over US taxes, and plummeting new truck sales all played a role in casting uncertainty over the market. ▪ Eventually trucking business shows signs of better health after a painful two-year slump that put hundreds of thousands of drivers out of work. ▪ Collapse of the largest carrier ever to declare bankruptcy was announced on Labor Day. It cost the Teamsters more than 15,000 jobs. ▪ New driver hours of service rules took effect in 2004, effectively reducing on-duty time for drivers and increasing the time a driver must take off between shifts, causing a drop in productivity for some truck drivers. ▪ The Transportation Worker identification Card (TWIC) was created to incorporate biometric data, criminal background checks, and threat assessment procedures.

Source:

Revenue

Hoovers (2008)
http://www.hoovers.com/trucking/--ID__28--/free-ind-fr-profile-basic.xhtml

Size

Bureau of Labor Statistics. Career Guide to Industries (2008-09 Edition)
<http://www.bls.gov/oco/cg/cgs021.htm>

Growth

Occupational Outlook Handbook (2008-09 Edition)
<http://www.bls.gov/oco/ocos246.htm#outlook>

Major Trends

Internal Revenue Service: Trucking Industry Overview - History of Trucking
<http://www.irs.gov/businesses/article/0,,id=170623,00.html>

Figure 2.

Truck Driver Jobs and Workers at a Glance	
Workers	<ul style="list-style-type: none"> ▪ Truck drivers and driver/sales workers held about 3.4 million jobs in 2006. Of these workers, 445,000 were driver/sales workers and 2.9 million were truck drivers. ▪ Overall job opportunities should be favorable for truck drivers, although opportunities may vary greatly in terms of earnings, weekly work hours, number of nights spent on the road, and quality of equipment. ▪ The truck transportation industry employed 26 percent of all truck drivers and driver/sales workers in the United States. Another 25 percent worked for companies engaged in wholesale or retail trade. ▪ Around 9 percent of all truck drivers and driver/sales workers were self-employed.
Wages	<ul style="list-style-type: none"> ▪ Because of increased competition, some larger companies are luring experienced drivers with higher wages, signing bonuses, and preferred assignments. ▪ The median hourly earnings of heavy truck and tractor-trailer drivers was \$17.41. The median annual earnings was \$36,220. ▪ The middle 50 percent earned between \$13.79 and \$21.81 an hour. The middle 50 percent earned between \$28,690 and \$45,370 annually. ▪ The lowest 10 percent earned less than \$11.24 hourly and less than \$23,380 annually. The highest 10 percent earned more than \$26.24 an hour, and over \$54,570 annually.
Race/Ethnicity	<ul style="list-style-type: none"> ▪ Industrial truck and tractor operators: 72% White; 23% African American; 1.5% Asian; 23.8% Hispanic ▪ Industrial truck and tractor operators: 5.9% female
Union Coverage	<ul style="list-style-type: none"> ▪ The major union in the truck transportation and warehousing industry is the International Brotherhood of Teamsters. ▪ About 12 percent of trucking and warehousing workers are union members or are covered by union contracts, compared with approximately 13 percent of workers in all industries combined. ▪ Since union drivers tend to make more than nonunion drivers, some trucking companies employ union as well as nonunion operating divisions in an attempt to lower labor costs.

Source:

Workers	Wages
Bureau of Labor Statistics. 2006 Occupational Employment Statistics (OES) Survey: http://www.bls.gov/oco/ocos246.htm#emply	Bureau of Labor Statistics. 2006 Employment and Wages: http://www.bls.gov/oco/ocos246.htm#earnings
Race/Ethnicity	Union Coverage
Bureau of Labor Statistics. Labor Force Characteristics by Race and Ethnicity, 2007: http://www.bls.gov/cps/cpsrace2007.pdf	Bureau of Labor Statistics. Career Guide to Industries: Truck Transportation and Warehousing: http://www.bls.gov/oco/cg/cgs021.htm
Bureau of Labor Statistics. 2007 Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity: http://www.bls.gov/cps/cpsaat11.pdf	

In order for the trucking industry to operate at such a large capacity, it is necessary for carriers to find, recruit, and retain qualified drivers for each truck on the road.

Unfortunately, driver turnover and retention problems have been such a large dilemma for so many years that the condition has almost become an accepted obstacle and expense

in the trucking industry. In fact, it has been estimated that losing and replacing one driver in a trucking company costs an organization between \$5,000 and \$8,500 (Frost & Sullivan, 2006), and even up to \$15,000 depending on the industry (PacLease Truck Rental and Leasing, 2004). This average cost per driver quickly multiplies when the rate of turnover in the trucking industry is considered.

The passage of the *Motor Carrier Act of 1980* deregulated the trucking industry resulting in a proliferation of trucking companies, widespread de-unionization, and thus, lower wages, fewer benefits, and declining working conditions (Moore, T., 2008). Since that time, retention and turnover have been identified as a primary and significant problem in the trucking industry. These issues were noted initially in both the industry and the popular mind through a widely disseminated public relations report regarding a survey conducted by the Gallup organization in 1997. Results of the survey of over 800 drivers in 20 fleets reported by the American Transportation Association Foundation (1997) identified elements that promote driver retention as company support, non-driving activities, work and family considerations, and work rewards.

In the popular press, labor market challenges faced by the carrier industry culminated in a report by Global Insight Inc. published in 2005 on the truck driver shortage—again commissioned by the American Trucking Associations. Further, the American Trucking Associations reported anecdotally that the largest carriers in the U. S. had reached a crisis point with reported turnover rates of 136 percent in the 4th quarter of 2005—a widely quoted figure bolstered by the annual publication of the *Trucking Activity Report* a document that is no longer available to the public because of homeland security concerns (Paz-Frankel, 2006).

Turnover rates in the trucking industry have typically averaged anywhere between 16 percent among private fleets to 130 percent in large, for-hire carriers depending on the source document (Leavitt, 2006). Again, according to the American Trucking Association, during one quarter in 2006 turnover rates reached 114 percent for small truckload carriers and 121 percent for large truckload carriers (Economic & Statistics Group, 2006). And while high levels of turnover in the industry persist, the demand for long-haul heavy-duty truck drivers continues to increase. In 2005, an industry consultant reported that this shortage amounted to about 20,000 drivers and was projected to increase to 111,000 by 2014 (Global Insight, 2005).

For at least the past three decades, turnover among truck drivers and the problems associated with low truck driver retention rates have been studied continuously (FMCSA, 2003). Today, drivers have numerous job options and as a result high turnover in the industry continues. In general, the purpose of the current research project was:

- To review carrier turnover and retention;
- To evaluate the nature of the problem and to define the problem;
- To present effective alternative strategies that promote truck driver retention in areas identified by the trucking industry and in other high turnover industries;
- To survey trucking industry representatives to explore the nature of and the magnitude of the situation and present how the industry has responded;
- To examine alternative turnover/retention solutions in the trucking industry presented in the literature;
- To examine turnover and retention strategies from other industries and,
- To observe applications in the trucking industry.

The expected benefits from this examination of evaluations of problems associated with driver turnover and retention in the trucking industry will result in identifying practical, realistic approaches that may be applied. Potential benefits resulting from this research may include:

- Economic benefits to an industry that sees the possibility of future labor shortages and a widening gap between the needs of the industry and the needs of the workforce.
- Cost savings associated with maximizing workforce stability and minimizing replacement training.
- Benefits associated with recognizing the characteristics of a problem that may affect current and future economic realities.
- Regulatory advantages associated with a stable workforce in an interstate industry requiring high security and safety standards.
- Observation of applications in the trucking industry and in other high turnover industries.

Methodology

The project was organized to:

- Review and report the origins and evolution of the discussion of driver turnover and retention research related to the motor carrier industry;
- Critically examine published results from evaluations and analyses of the trucking industry and other high turnover industries found in academic investigations and policy studies, in publicly available

proprietary reports, trade publications, and government documents, and in U.S. Department of Transportation, U.S. Department of Labor, and U.S. Census Bureau databases;

- Review current research environment to identify alternative projects that operationally address truck driver turnover and retention issues;
- Develop an industry specific “Turnover and Retention Survey” and administer it to industry representatives;
- Conduct a mail survey and provide a secure on-line survey site promoted through telephone calls to association and industry representatives, through conference presentations and association newsletters;
- Review projects to determine implementation, operation and maintenance efforts that address one or more retention issues of company support; dispatcher effectiveness, company support, and working conditions;
- Interpret and organize survey response data to identify current turnover and retention problems, concerns, and solution strategies;
- Provide information on models that specifically address one or more retention issues of company support, dispatcher effectiveness, rewards and incentives, and working conditions.
- Identify alternative practices in implementation, operations and outcome indicators for each of the retention issue areas.
- Examine comparable organizational approaches that address common retention issues that may have applications in the motor carrier industry

and recommend internal and external optimal models to address retention issues.

Limitations

Much of the information on turnover and retention and the behavior of the motor carrier labor market is anecdotal and has been provided by the industry itself or by studies guided by consulting relationships. Much of the data on trucking are proprietary and since the business is highly competitive access has been limited to information that provides influence or public relations. Therefore, conclusions about the industry should be guided by an awareness of source information.

Anecdotal evidence includes reports or accounts made by non-scientific observers. Anecdotal explanations have poor or no statistical reliability and should not “carry the weight of authority” (Mesher, 1999). While the information may be compelling, anecdotal evidence is weak due to in large part to a lack of control in each situation and even the “fallibility” of memory (Novella, 2008). Anecdotes are not considered hard evidence because they are not factual, verifiable, statistically reliable, or beyond dispute (Mesher, 1999).

Unfortunately, non-scientific observations are sometimes so powerful that they lead people who hear the accounts to ignore evidence to the contrary (Shermer, 2008). Focusing on anecdotal evidence and ignoring scientific evidence may prevent organizations from diagnosing problems correctly, thereby perpetuating in this case issues such as turnover and retention instead of investing in an effective solution.

Finally, since the trucking industry is highly competitive, and basically opaque, independent investigations are uncommon and academic studies are forced to rely on

industry data and publications. Independent surveys are rare in the industry and response rates for the current survey could be anticipated to be low, which is consistent with the literature, and responses may be viewed with caution.

Data Collection

Findings and conclusions in this study were derived from four secondary and primary sources:

1. Published results from evaluations and analyses of the trucking industry and other high turnover industries found in academic investigations and policy studies;
2. Publicly available proprietary reports, trade publications, and government documents;
3. U.S. Department of Transportation, U.S. Department of Labor, and U.S. Census Bureau databases, and;
4. Responses to a short transportation survey sent primarily to managers, directors, and supervisors in human resources, operations, and safety positions as well as to trucking association representatives in the five states with the highest concentration of workers in the motor carrier industry.

Respondents

Respondents to the turnover and retention survey were selected from industry associations and representatives from the five states with the highest concentration of workers in this industry. They included:

- Arkansas with 37,710 employees representing 3.215 % of state employment.
- Nebraska with 27,850 employees representing 3.045 % of state employment.
- Iowa with 37,890 employees representing 2.546 % of state employment.

- Wyoming with 6,450 employees representing 2.361 % of state employment, and;
- Tennessee with 60,730 employees representing 2.217 % of state employment (Bureau of Labor Statistics, 2008).

Contact information was secured for state trucking associations representing 3,675 members in Arkansas, Nebraska, Iowa, Wyoming and Tennessee. Representatives were reached by telephone and by email and were asked to assist in promoting the research project to their membership and to facilitate the dissemination of mail surveys and information concerning the online version of the instrument. All state associations agreed to assist.

The survey was mailed to 276 Tennessee-based trucking firms and 129 of the 144 members of the Arkansas Trucking Association. An Internet-based version of the survey was sent via an online newsletter to 925 members of the Nebraska Trucking Association and Safety Council Members. The Iowa Trucking Association also sent an online link to its 1,500 members once a week for a total of four weeks. In addition, 30 Wyoming Trucking Association board members received survey information at an association meeting and 800 association members received the survey information and the web-page link in a mailed newsletter.

The transportation survey was comprised of 5 items to indicate company size and turnover rates and 12 short-answer items concerning strategies used to address retention and turnover in the organization. Surveys were sent primarily to managers, directors, and supervisors in human resource, operations, and safety positions. Surveys and notices about on-line surveys were available in the 830 newsletters and 2,425 online newsletters

and were handled by individual association representatives or carrier agencies. Of the 405 mailed surveys, 49 mailings were returned due to a change in address or other incorrect contact information. Follow-up emails and telephone call reminders occurred routinely throughout the survey process.

Section 2. The Impact of Competition and Evolving Driver Turnover and Retention Issues in the Trucking Industry

The Impact of Increased Competition

The Passage of the *Motor Carrier Act of 1980* (Motor Carrier Regulatory Reform and Modernization Act, MCA) was the product of over a decade of efforts by successive Republican and Democratic administrations to deregulate the trucking industry.

Throughout the period between 1940 and 1980 the federal government and state governments maintained an increasingly complex system of regulation of the commercial carrier industry resulting in a virtual monopoly enjoyed by a relative handful of large shippers and characterized by price controls, entry requirements, and collective price setting. The MCA was signed into law by President Jimmy Carter who proclaimed that the removal of inflationary government restrictions would reduce consumer costs, conserve fuel, and promote efficiency—thereby providing new opportunities for shippers and for the carrier labor market.

The MCA promoted competitive rate setting, abolished carrier commodity restrictions, eliminated routing and geographic requirements, and promoted pricing competition. Thomas Moore, a fellow with the Hoover Institute in 1990, and a conservative republican economist who served in the Regan Administration between 1985 and 1989, has written extensively on the impact of deregulation on the motor carrier industry. He argued that regulation resulted in costs and rates that were significantly higher than a free market would tolerate. Moore said that opposition from the Teamsters Union and the American Trucking Associations in the two decades prior to the passage of the MCA prevented complete deregulation. His 1992 overview of beneficial outcomes resulting from trucking deregulation included:

- Significant declines in truckload rates;
- Declines in truckload revenues;
- New price and service options;
- Improved service quality;
- Improved coverage for small markets;
- Significant declines in unionized drivers;
- Dramatic growth in the number of new firms;
- Lower industry wages; and
- Reductions in inventory holdings.

Writing in the *Monthly Labor Review* in 1998, Cynthia Engel presented a view of deregulation that provides a more complete picture of the period following 1980. She examined the impact of intense competition on industry employment and wages. Benefits to consumers, she writes, occurred at the expense of truck drivers whose earnings fell by 40 percent between 1978 and 1996, while the demand for their services increased correspondingly. In addition, she reports that in 1973, 62 percent of truckers were unionized, in 1984 30 percent were, and by 1996 only 23 percent were union members, thus enabling non-union carriers to compete aggressively because of declining labor costs. Engel cites driver turnover ranging between 15 percent for less than truckload operations to between 80 and 100 percent for the large truckload carriers with average reported as being 38 percent. Her conclusion was that “wage premiums for unionized truckers have been bid down, and union representation has fallen dramatically. Increasing workloads and less attractive pay have led to high labor turnover and persistent driver shortages”(Engel, 1998).

Reports of the dramatic impact of deregulation on the trucking industry began almost immediately after the passage of the MCA. Intense competition soon led to company failures and anecdotal reports from the trucking industry of high driver turnover became routine—continuing today. By 1988, academic studies on truck driver turnover, labor shortages, and retention had become common (Corsi and Fanara, 1988; Southern, Rakowski, and Godwin, 1989). These early studies surmised that high rates of reported driver turnover resulted from:

- Failure of management to recognize the importance of driver needs;
- Poor training programs that attracted secondary drivers;
- “Churning”—moving from job to job and not viewing driving as an occupation;
- Dissatisfaction over salaries and benefits.

In 1993 LeMay, Taylor, and Turner published findings from a survey of 650 CEO’s from member firms of the American Trucking Associations regarding driver turnover and management policy (LeMay, Taylor, and Turner, 1993). Of the 190 self-reports received from carriers:

- Over half reported turnover rates above 30 percent and a quarter reported turnover rates above 75 percent. In contrast, the average for all other industries at the time was 12 percent;
- Larger firms had higher turnover;
- Higher mileage trips promoted turnover;
- Time at home—when drivers do not earn—was positively associated with turnover; and
- Aging equipment encourages turnover.

In a slightly different approach from earlier studies, the previously mentioned Gallup study only surveyed drivers that had been employed 5 years or more. Focusing on the factors that provided primary satisfaction to longer term drivers Gallup identified the top 3 as being good pay, steady work, and good equipment followed by time at home, good benefits and company atmosphere (The Gallup Organization, 1997). Most of these findings were to be reiterated by carriers for the subsequent 15 years.

The Impact of the Motor Carrier Work Environment

As noted, conditions that influence truck driver turnover and retention are well known and have been part of the fabric of the industry's lore for several decades. Some of the most widespread driver concerns include: a lack of communication, a lack of driver respect and feeling undervalued (Swain, 2005); requirements to be away from home for long periods of time (Global Insight, 2005); attitudes toward top-management (Richard et al., 1994); and pay and benefit issues (Lockridge, 1997). Although companies such as J.B. Hunt have seen success after increasing driver pay (Lockridge, 1997), many believe that the importance of salary issues is exaggerated and that for the majority of drivers, issues of respect and communication are more pressing when it comes to job commitment (Arkoubi, Bishop, & Scott, 2007; France, 2005; Swain, 2005).

In a series of 200 informal interviews by a former truck driver, Keith Hamblin, 41 percent of those interviewed claimed that "honesty, or rather dishonesty" on the part of the employer had played a large part in the driver's decision to seek out other job options (Hamblin, 1998). In similar interviews by Lockridge (1997), honesty was also listed as a "core value" that, if not upheld, would cause drivers to "bail out".

Drivers have routinely identified company support, non-driving and work rewards as broad, important elements in decisions to leave or stay with a carrier. Company support includes support while on the road, friendly managers, acceptable schedules, fair managers, driver appreciation and recognition, dispatcher assignments and effectiveness, and training (Stewart, 1999; Keller & Ozment, 1999). Non-driving activities may include the amount of physical loading and unloading, non-driving work, friendliness of customers, hours of service recording and time lost waiting at customer locations (Stewart, 1999). The Gallup Poll (1997) also revealed that drivers were only moderately satisfied with the length of time on the road and the time spent away from family. Finally, work-rewards, such as steadiness of work, benefits, and friendliness of other drivers (Stewart, 1999) may be underutilized by companies. In fact, finding appropriate rewards and incentives may encourage more than driver loyalty. If drivers understand the company's "ultimate goal, whether it's safety, productivity, fuel economy, customer service" or another organizational concern, incentives may enhance creativity and teamwork, and ultimately allow organizations to meet company-wide goals (Huff, 2001). Figure 3 summarizes an adaptation of if-then scenarios associated with carrier environmental factors.

Figure 3. A Summary of Organizational Variables and Expected Driver Turnover

Turnover rate likely to range from 1% to 10%	Turnover rate likely to range from 11% to 50%	Turnover rate likely to range from 51% to 100%
If a trucking firm has 1 to 49 full-time drivers (very small) and is in Illinois, Missouri, or Ohio	If a trucking firm has 50 to 499 full time drivers (small or medium size)	If a trucking firm has 500 or more full-time drivers (large)
... driver has stayed with the same firm for 11+ years and has been associated with a very small trucking firm (1 - 49 drivers)	... trucking firm has 1 to 49 full-time drivers (very small) and is in Tennessee	... driver has stayed with same firm for less than 6 years and has been associated with a trucking firm with a large percentage of part-time drivers (50%+)
... driver has stayed with same firm for less than 6 years and has been associated with a trucking firm in Tennessee with a very small percentage (10% or less) of part-time drivers and has more than 10 years of driving experience	... driver has stayed with the same firm for 6 + years and has been associated with a small or medium-sized trucking firm (50 - 499 drivers)	... driver has stayed with the same firm for less than 6 years and has been associated with a trucking firm in Tennessee with a very small percentage (10% or less) of part-time drivers and has less than 6 years driving experience
... driver has stayed with same firm for 6 to 10 years and works for a unionized small trucking firm with less than 50 full-time drivers	... driver has stayed with the same firm for less than 6 years and has been associated with a firm located in Tennessee with a very small percentage (10% or less) of part-time drivers and has 6 to 10 years of driving experience	... driver has stayed with the same trucking firm for less than 6 years and has 1 to 5 years driving experience
... driver is hired by a very small firm with less than 50 full-time drivers and less than 10% are part-time drivers and is 46 years or older and is offered annual starting salary of more than \$45,000	... driver is hired by a very small firm with less than 50 full-time drivers and less than 10% are part-time drivers and is 46 years or older and is offered salary ranging from \$25,000 to \$44,000	... driver is hired by a very small trucking firm with less than 50 full-time drivers and less than 10% are part-time drivers and is 46 years or older and is offered less than \$25,000

...driver has stayed with the same firm for less than 6 years and has been associated with a small trucking firm with 50 to 99 full-time drivers and is in the age group ranging from 26-30 years or more than 46 years	... driver has stayed with the same firm for less than 6 years and has been associated with a small trucking firm with 50 to 99 full-time drivers and is in the age group ranging from 21-25 years, 31-35 years, or 41-45 years	... driver has stayed with the same firm for less than 6 years and has been associated with a small trucking firm with 50 to 99 full-time truck drivers and is in the age group from 36-40 years
... driver is hired by a medium sized firm located in Ohio or Tennessee with 100 to 499 full-time drivers and is offered an annual starting salary ranging from \$25,000 to \$34,999	... driver is hired by a medium sized firm with 100 to 499 full-time drivers and is offered an annual starting salary above \$35,000	... driver is hired by a medium sized firm with 100 to 499 full-time drivers and is offered an annual starting salary of less than \$25,000

*Adapted from Min & Emam, 2003

Addressing the trucking industry’s shortfall in capacity and maintaining a strong workforce will require measures to attract drivers that will work in spite of the sparse amenities associated with the working environment. More importantly, current economic conditions may force the industry to focus more resources on retaining qualified drivers than it has in the past. Although elements that promote retention have remained essentially unchanged for the past two decades, specific alternatives that address those retention concerns have not been identified or evaluated.

Churning, Itinerancy, and Labor Shortages

Churning

Most recently, the practice of “churning,” or job-hopping within the industry, as well as the prospect of increased labor force shortages fostered by the baby boom retirement bubble, have raised cries of alarm in the industry (Global Insight, 2005).

Frequently, trucking firms point to driver shortages and “churning” to justify hiring unqualified drivers before allowing trucks to remain idle and orders to be unfilled. Background checks that uncover felony or drug convictions also weaken the applicant pool. Strict regulations, age limits, declining applicant work experience, and safety issues also foster concerns about time lost due to accidents and higher insurance rates (Global Insight, 2005; Richard, LeMay, Taylor, & Turner, 1994).

Itinerancy

One intriguing notion that may explain the churning effect that so many motor carriers seem to experience was first described by Ghiselli in 1974, in rather unflattering terms, as the hobo syndrome. According to Ghiselli (1974) this “syndrome” could be described as a “periodic itch” that caused workers to move from job to job or to a different organization. While this syndrome may not be relevant for every worker, some individuals are more disposed to move than others. Ghiselli’s work was supported in a later study, which used ten years of data and over 12,500 records to show that past turnover behavior predicts present turnover for workers (Judge & Watanabe, 1995). So, hiring a candidate with a high turnover background increases the likelihood that he will leave the organization in the future.

Recently, researchers have worked to expand upon Ghiselli’s (1974) original work. One study suggested that increased cognitive ability and certain personality characteristics increase the frequency of job searching behavior (Boudreau, Boswell, Judge, & Bretz, 2001) although job searching behavior does not necessarily mean the worker plans to leave his or her job. Other job search motivators include a desire to

obtain job leverage, the chance to find alternatives to compare with his or her current position, or to establish networks in the field (Boudreau et al., 2001).

A similar study by Hartman and Yrle (1996) focused on the hospitality industry to test whether hotel industry turnover was influenced by the hobo phenomenon. Results suggested that “perceptions about promotions” played a key role in determining employee turnover (Hartman & Yrle, 1996). Specifically, it was important that employees felt that they had adequate promotion opportunities. Employees also desired more training or they would be tempted to leave the career completely (Hartman & Yrle, 1996). So, even when job satisfaction is stable, it seems that employees may choose to leave a job based on perceptions of the organization and not necessarily dissatisfaction, especially in an industry in which other jobs are readily available.

Although numerous conditions of the job environment and various characteristics of the worker help explain turnover as assorted alternatives converging, it may be as simple as the fact that certain workers who are attracted to particular industries such as truck driving, entertainment, and hospitality move from job to job because they can. Hartman and Yrle (1996) note that Hulin and others (1985), concluded that some employees do not require nor do they necessarily want stable careers and lifestyles. They change jobs because the current one is no longer interesting, or they want to experience a new setting or geographic area. Although these employees may seem satisfied as measured by traditional indicators of satisfaction, they would leave nonetheless (Hulin, Roznowski, and Hachiya, 1985). Consequently, many employers who are faced with high turnover see their workforce as being unreliable and too risky for additional training, promotions, or increased pay (Bernhardt, Dresser, and Hatton, 2003).

Labor Shortages

Throughout the late 1990s and early 2000s reports of growing high turnover, labor shortages and retention problems in the trucking industry continued to be reported in the academic, trade, and popular literature culminating in a bell-weather report in 2005 prepared by Global Insight for the American Trucking Associations. This document *The U. S. Truck Driver Shortage: Analysis and Forecasts* predicted a crisis in the in the supply of drivers necessary to maintain the industry by 2015.

To make the case for high levels of driver turnover and labor shortages, this study relied on labor market projections published by the Bureau of Labor Statistics (BLS), and two proprietary documents reporting that the trucking industry needed 400,000 drivers annually between 1994 and 2005. However, the authors acknowledge that 80 percent of that demand resulted from intra-industry churning and only 8 percent from industry growth—not an indicator of an impending labor shortage. Using the 2004 cohort of long-haul truck drivers as the baseline and primary data available from the 2000 Census, Bureau of Labor Statistics projections, and labor market information provided through the Civilian Population Survey, the report presents an alarming description of the future supply of truckers. Their analysis found that:

- Demographic trends will hurt the industry;
- Growth in the overall labor market will continue to slow;
- Yet, 55,000 new drivers will be needed each year of the upcoming decade to account for economic growth—excluding churning;
- The gap between supply and demand will continue to widen unless the industry increases the relative position of truck driver wages to 1990 levels; and

- Quality-of-life issues for drivers must be reconciled (Global Insight, 2005).

Although Global Insight consultants presented convincing arguments about turnover and predicted growth, is there a looming labor shortage crisis facing the motor carrier industry?

Look for a definition of a labor shortage and one finds a variety of descriptions that are similar yet lack consistency in terms of methodology. Methods that have been promoted to determine if conditions exist that define a labor shortage in a particular industry are more often philosophically different and complex. Some definitions have become entangled in political rhetoric amid allegations of industry manipulation to justify controversial business practices such as the widespread use of immigrant labor or outsourcing. According to Veneri (1999), the absence of methodological specificity results from the fact that there are no sources of data that can provide a measure of shortages—noting that no “single measure of labor shortages exists.” She maintains that reported occupational shortages result from analysts’ attempts to corroborate anecdotal reports from industry.

Commonly, a labor shortage is said to occur when the demand for workers appears greater than the supply of individuals who are qualified, available and will work in a job at the prevailing wage. However, many conditions that are reportedly labor shortages may be, in fact, driven by conditions that disqualify it as an actual shortage. For example, though the number of workers may be plentiful, an industry may drive away available workers through artificial barriers such as non-competitive wages, desired rather than necessary qualifications, or difficult working environments. Vernri’s valuable study uses employment and earnings data to develop a usable model that establishes the

characteristics and conditions that define a labor shortage. Tracing antecedents to her model from Blank and Stigler (1957) and Arrow and Capron (1959) the variety of shortage definitions emerged. They included the following conditions:

1. The social demand model in which demand is established by what is generally believed necessary to reach a social goal;
2. Demand that cannot be met at the currently prevailing wage;
3. Supply that increases more slowly than demand for labor at wages in the recent past;
4. Demand that always outpaces supply in a nuanced dynamic market.

Veneri, an economist with the Office of Employment Projections, Bureau of Labor Statistics, demonstrated how occupational labor shortages could be identified using available data. Reviewing several decades of employment and earnings studies and analyzing CPS wage and salary data for 1991 through 1998, Veneri identified three characteristics of a data-based labor shortage for an occupation: 1) strong employment growth, 2) relative wage increases, and 3) low or declining unemployment rates. The guidelines that the author set to eliminate marginal cases were conservative and included the following necessary conditions to define a labor shortage:

- Employment growth 50 % stronger than average, where average was the total for all workers at the time;
- A wage increase at least 30% above average for the timeframe under consideration; and
- An unemployment rate 30% below average for the timeframe under consideration.

Using these conditions to examine 68 of the occupations included in the OES-National Occupation Employment Matrix for 1992-1997 the author identified 7 industries that could be defined as labor shortage occupations. However, none of these occupations matched occupations where anecdotal evidence suggested shortages would occur in the years between 1992 and 1997. This finding indicates that anecdotal evidence of impending labor shortages should be viewed with caution. Occupations reporting anticipated shortages through anecdotal reports were not confirmed in this study. Veneri concludes that neither labor market statistics nor anecdotal reports alone are adequate to define a labor shortage.

How do anticipated truck driver shortages for the next several years look using this model? During the decade between 2006 and 2016 the BLS projects 30 occupations to experience large job growth—including heavy and tractor-trailer truck drivers. The rate of employment growth for truck drivers at 10.4% mirrors the anticipated growth for all occupations (BLS, 2007a). In terms of wage growth as measured by median weekly earnings for the years between 2000 and 2005, all occupations saw growth at 13.02%, while truck driver wages grew by 12.88% (U.S Census Bureau, 2006). In terms of unemployment, rather than being 30% below the national average, truck drivers had an unemployment rate for the years 2000 through 2007 ranging from a low of 1.1% above the national average to 2.2 % above (BLS, 2008b). Accordingly, in contrast to Global Insight arguments, Veneri's analysis would note that a labor shortage among truck drivers might not be a serious concern at this point.

A Never Ending Problem

Responding to continuing reports from the industry concerning churning and retention, Delery (2007)—who had been studying motor carrier effectiveness as an academic researcher for over a decade—called it a “never-ending problem.” In the summary of *Motor Carrier Effectiveness Projects* conducted by the Transportation Study Center at The University of Arkansas, researchers repeatedly acknowledged the need for competitive wages for motor carriers to accomplish a preferred level of retention. In terms of labor shortages, researchers remind the trucking industry that labor supply is a function of good pay and high-quality working conditions as much as an absence of available people in the labor market. For example, the Federal Reserve, in the January 2006 *Beige Book*, reported that although motor carriers in the Cleveland District said they experienced difficulty finding and retaining truck drivers, few planned to increase wages (Federal Reserve, 2006). Trucking trade publications like *Heavy Duty Trucking: Delivering the World of Trucks* (which reports nearly 130,000 subscribers among fleet owners and suppliers) produce at least one feature article each year on driver turnover and retention. Between 2005 and 2008, the following articles appeared in *Heavy Duty Trucking*:

- “Ten Ways to Reduce Driver Turnover” (Smith, 2005), an article based on the incredibly high turnover rates of 136 percent and 121 percent reported by the ATA in the last two quarters of 2004;
- “Improving Driver Retention”(Smith, 2006), in which 2 industry consultants and operations managers from a national carrier suggest ways to reduce driver turnover;

- “The Driver Debacle” (Lockridge, 2007), in which methods of coping with labor shortages predicted by industry consultants are presented;
- “Top 10 Reasons Drivers Leave” (Lockridge, 2008), a review of the findings of exit interviews with 22,000 truck drivers conducted by Strategic Programs Inc.—a turnover-consulting firm.

In terms of the basic conditions that foster turnover, the literature suggests that little has changed regarding driver turnover in the nearly three decades since deregulation was enacted. As Engel indicated a decade ago, the reportedly high turnover rate is characteristic of an occupation with wage compression that is . . . “easy to enter (highly labor-elastic) but difficult to perform over an extended time.” (Engel, 1998).

However, and conversely, as early as 1991 Harrington said truck fleets average turnover between 5 and 10 percent annually (Harrington, 1991) and the National Private Truck Council (NTPC) reported a rate of only 14 percent in 1996 (NTCP, 1996). So—is there a turnover and retention problem in the trucking industry or is it a turnover and retention condition in the trucking industry where the problem is tolerated as a part of the business environment that is too costly or too much trouble to solve? Thirty years without a general solution suggests that the latter situation may be the case.

In conclusion, one of the earliest independent evaluations of the trucking industry—and still one of the few—was conducted in 1996 by the Mack-Blackwell Rural Transportation Study Center located at the University of Arkansas for the U.S. Department of Transportation. The study, *Motor Carrier Effectiveness* (Gupta, Jenkins, and Delery, 1996), obtained questionnaire responses from 379 “top managers of trucking companies.” The purpose of the study was to provide top professionals in the industry

with “data rather than hunches, anecdotes, and conventional wisdom to guide their human resource decisions.” Some of their major findings supported commonly accepted and often repeated industry information but findings also contradicted industry-wide assumptions. The study reported that:

- Although throughout the mid-1990s reports of astronomical turnover rates and critical driver shortages were common, among the respondents in this study the average quit rate was 27 percent with a median of 10 percent.
- Compensation and benefits were the primary reasons drivers quit;
- Innovative compensation efforts and the use of pay to offset turnover is rare among companies;
- Unionized companies have better pay, lower quit rates and poorer financial performance than non-union carriers;
- The higher the pay for drivers, the lower the quit rate;
- Larger and younger companies had higher quit rates;
- Frequent home-routings meant lower quit rates.
- Most interesting, and contrasting with industry conventional wisdom, was that the majority of the 379 “top managers of trucking companies” said that driver turnover “made no difference” among major factors affecting company effectiveness.

More recent reports on critical issues in the trucking industry mirror many of those earlier findings. A 2003 non-proprietary study conducted by ICF Consulting for the U. S. Federal Highway Administration relied on information from a panel of industry experts—trucking company executives. This evaluation ranked the primary challenges of

the industry as rising insurance costs, hours of service rules changes, and fuel price volatility (IFC Consulting, 2003). Of the 14 main issues, driver turnover ranked 9th and driver retention was not mentioned in the report. In 2005, 2006, and 2007, the American Transportation Research Institute sponsored by the American Trucking Associations reported on top or critical issues identified by ATA staff and members, as well as a representative sample of carriers, drivers, and other industry participants. In 2005 the top 3 issues identified by industry representatives were fuel costs (78%), driver shortage (69%), and insurance costs (35%), (American Transportation Research Institute, 2005). In 2006, only months after the release of the Global Insight report, the top 3 issues identified by industry representatives were driver shortage (57%), fuel issues (54%), and driver retention (43%), (American Transportation Research Institute, 2006). In 2007 the top 3 issues identified by industry representatives were hours of service (60.1%), driver shortage (58.8%), and fuel issues (47.1%), (American Transportation Research Institute, 2007). In January 2008, some of the results from exit interviews with 22,000 truck drivers conducted by Strategic programs, Inc., a turnover consulting firm, were published by *Heavy Duty Trucking: Delivering the World of Trucks*. The top 3 reasons drivers said they left a job were dissatisfaction with pay, home time (too infrequent and unpredictable), and their supervisor (Lockridge, 2008).

Section 3. Conditions and Alternatives in High Turnover Work Environments

In 2007, the average separation rate, or turnover, for U.S. industries was 39.7 percent. For the “trade, transportation, and utility” industry, this rate reached 44.6 percent (Bureau of Labor Statistics, 2008). To put this rate in perspective and to view transportation workers relative to other high-turnover organizations, it is important to review useful responses to turnover that have been applied in a variety of settings. Other high-turnover industries have tried alternative solutions to turnover and retention problems that may also have an application in efforts to decrease truck driver turnover.

Military

Family concerns and low morale are just two factors that increase turnover in the military and decrease reenlistment rates (Becker, 2001). Military personnel also consider unmet expectations and disappointments when making the decision to leave (Sumer, 2004). It is also common for men and women in the military to experience poor person-job fit. Personality factors, mental health, and psychological stamina all become important attributes in these often physically and mentally demanding positions and personnel lacking strength or stamina are likely to change positions or leave the military.

Wal-Mart

Many retailers sacrifice competitive wages and benefit packages in order to keep prices low for the consumer. For Wal-Mart and other retail stores though, keeping costs low by sacrificing employee benefits may ultimately create more loss for the organization through employee turnover (Cascio, 2006). Retention is also difficult for retail stores that frequently employ high school or college students. Increased training requirements and

other unique issues arise when students are limited by or return to school (Marquez, 2005).

Emergency Medical Technician (EMT)

The ability of an EMT to work quickly and under high stress conditions is essential. Turnover in the field is often linked to “unusual work hours” and the strain EMTs experience from working in a high pressure, stressful, and sometimes tragic environment on a daily basis (California Employment Development Department, 1995). A study by Patterson et al. (2005) revealed that, for many EMTs, the field was not a “primary career path”. Instead, the position was often a temporary replacement for a nursing, military medic, or other health care career.

Job requirements for EMT personnel also negatively impacted their personal lives, although the job itself was rewarding. Conclusions suggested that job-related stress attributed to multiple factors is a large contributor to poor retention in the field (Patterson, Probst, Leith, Corwin, and Powell, 2005).

Law Enforcement

Law enforcement officers typically work 40 hours a week although schedules seldom align with a standard workweek and may include several working holidays, travel days, undercover work, on-call hours, and overtime (California Employment Development Department, 2003). Research suggests that in small agencies, retention was especially a problem where “two-thirds of departing officers” had served less than a five year term. This percentage was decreased to 21 percent for officers serving 15 years or longer (California Commission on Peace Officer Standards and Training, 2006). Larger

agencies showed a similar pattern, with one-third of officers leaving after fewer than 5 years, while 46 percent of those officers stayed 15 years or more (CPOST, 2006).

The most common reasons that officers give for leaving a law enforcement job include low salaries, too much time between advancement tests thereby delaying opportunities to earn promotions, career mobility issues and bureaucratic frustrations. In the opinion of co-workers, officers leave due to money issues, a lack of career mobility, more money or incentives, and a bureaucracy that stifled officer creativity (CPOST, 2006).

Education

Teacher turnover is costly for every state, but the cost to students is much greater. Generally, researchers and educators agree that the quality of a student's teacher significantly impacts the performance of that student (Alliance for Excellent Education, 2005). A key to improvements in the nation's education system is state efforts to retain high-quality teachers and to decrease turnover due to job dissatisfaction or the pursuit of other jobs (AEE, 2005).

According to the Alliance for Excellent Education, the total cost to replace teachers that leave the profession is \$2.2 billion per year. If the cost of teachers that change jobs within the field is considered, this estimate increases to \$4.9 billion (2005). Larger states such as Texas particularly feel this burden, with nearly half a billion dollars spent each year. For teachers who transferred between schools, a lack of planning time, student behavior problems, too heavy a workload, and a lack of influence over school policy were common sources of frustration (AEE, 2005; Futernick, 2007).

Overall, the most serious consequence of high teacher turnover is the "loss of

continuity, experience and expertise,” which ultimately impacts the “educational experience” of students across the country (Futernick, 2007). It is important for states to address factors that reduce turnover for teachers. Nearly one-third of the teachers who left California schools reported that they would return if improvements were made to the “teaching and learning environment” (Futernick, 2007). And while compensation is often the focus of efforts to retain teachers, “monetary incentives alone” would not encourage these teachers to return to their positions.

Special Educator

Special education is similar to other teaching programs, but comes with a unique set of responsibilities and problems in terms of recruitment and retention. The problem begins with the fact that the available workforce is shrinking while demand continues to increase (Billingsley, 2003; Cooly & Yoyanoff, 1996). Although factors in the work environment such as workload, stress, and paperwork are often cited as primary predictors of job satisfaction in the field (Cooly & Yoyanoff, 1996), the age of the teacher is also related to tenure in the field. Younger special educators leave the position at nearly twice the rate of mature educators (Billingsley, 2003).

Some of the most common reasons for special educator attrition include:

- External factors (societal, economic or institutional)
- Employment factors (training, work conditions, qualifications)
- Personal factors (family needs, demographic variables, individual interests/personality)
- Historical influences (quality of preparations)
- Teacher characteristics (similar to demographics)

- Increasing caseloads
- Low salaries
- Lack of administrative support
- Collegial isolation
- Role conflict or ambiguity

(Adapted from Billingsley, 2003)

Nursing

High turnover in the health industry, especially within the nursing field, increases healthcare costs and ultimately jeopardizes patient care. On average, it costs \$42,000 to replace a medical-surgical nurse and that number increases to \$64,000 when replacing a specialty nurse (Strachota et al., 2003). In terms of patient care, high turnover contributes to a novice workforce that may lack “the commitment...or the ability, intuition, and confidence” of more experienced workers (Strachota et al., 2003).

According to a nine-month study by Strachota et al. (2003), retention of nursing staff is highly related to job satisfaction. While several factors influence job satisfaction, the most common reason given by nurses for changing positions was hours worked. Many nurses endure long shifts, weekends, overtime, and holiday schedules which may bring nurses to consider changing or leaving a position, especially if he or she experiences low levels of autonomy on the job.

Other reasons given by nurses for leaving a job included dissatisfaction with staffing levels, poor management support, stress, and high variability in scheduled hours. A combination of these factors frustrated nurses who felt understaffing and

overworking nurses creates an environment with “substandard” patient care (Strachota et al., 2003).

In a similar study by Cline, Reilly, and Moore (2003), “management” was the top reason for voluntary nurse turnover. Specifically, nurses were dissatisfied with management’s failure to listen to or to act on their concerns, a lack of management support, and ineffective measures to deal with problem situations (Cline, Reilly, & Moore, 2003) and, similar to the Strachota et al. (2003) study, the second most common reason for leaving involved inadequate staffing (Cline, Reilly, & Moore, 2003).

Comparable reports from the North Carolina Center for Nursing (2005) suggest that turnover is often triggered by a dislike for shift work, an increased workload, non-competitive salaries, or burnout. To make matters worse, one hospital reported that recruitment was difficult because of declining enrollments in nursing schools, the increasing intensity and complexity of nursing jobs, and the fact that the position must be staffed around the clock every day of the year.

To address the issues noted above and to ensure growth in the nursing field, the American Organization of Nurse Executives (2000) collected recommendations for retaining qualified nurses from a survey of human resource employees, hospital administrators, and clinical nurse executives representing 693 different acute care hospitals. Nurse executives were asked to provide information on budgeted staff levels, actual staffing levels, terminations and hires, and other data for specific RN categories, for the calendar year 2000. These data were used to calculate the vacancy and turnover rates described in this report. They suggested a specific need for:

- Competitive and personal methods of recruitment

- Competitive compensation and flexible benefits
- Respect and recognition
- Outstanding communication between management and staff
- Adequate and flexible staffing protocols
- Participation in decision-making
- Professional development
- Strategic planning for the future

Firefighter

In addition to rigorous training requirements, problems with leadership and time constraints due to family responsibilities, firefighters face additional issues on and off the job including health and medical problems, loss of interest, lack of camaraderie, too much training, and a lack of time to volunteer (National Volunteer Fire Council, 2005). A study by the Center for Rural Pennsylvania (2006) also notes a decline in available volunteers due to an aging population, increased housing costs, leadership problems, and changes in the “nature of the business” of firefighting. Research suggests that, as in any high pressure job, recognition and incentives are particularly useful motivators. Creating press releases, distributing local and national awards, offering housing assistance, and providing competitive insurance are just a few ways to recruit new firefighters and maintain a strong workforce (NVFC, 2005).

Bank Teller

Tellers serve multiple roles at bank windows including transaction processing, customer service, and even business referral work (DePaula, 2005). As the importance of this role has increased, the annual turnover rate of 30 percent to 40 percent (Busby, 2005;

DePaula, 2005) and up to 100 percent at some branches (Grasing, 2003) becomes more of an issue for the banking industry. While compensation is an important factor in teller retention, attrition can also be addressed by allowing flexible work schedules, adding health benefits for part-time employees, and “simply showing some respect” (DePaula, 2005). Branches that have lower rates of turnover typically have methods of rewarding tellers for high performance. Recognition programs and effective worker recruitment help these financial organizations keep tellers in their positions longer (Grasing, 2003).

Hotel Industry

According to a two-year study by The Center on Wisconsin Strategy, the “most common response” to retention issues in the hotel industry is “essentially no response” (Bernhardt, Dresser, & Hatton, 2003). Results from over 150 in-depth interviews revealed retention strategies that were ineffective such as subcontracting operations and misguided cross-training and others that were successful such as employee referral programs, pay incentives, investing in training and expanding the recruitment pool were not used consistently.

The study concluded that in order for the hotel industry to retain frontline workers, more importance must be placed on improving individual positions with increased benefits, pay, and opportunities to improve basic skills. To encourage workers to grow into upper-level positions, the organizations must create and promote paths for career mobility and advancement by offering, for example, skill training during working hours or English as a Second Language (ESL) courses. In an industry that requires long hours and flexible schedules, increasing job security and ensuring workers are given a reasonable workload will create more flexibility in what workers are willing to do to help

the company. Finally, workers are less likely to file grievances or have problems with co-workers when they are given respect from management and asked to contribute to the company's decision-making process.

High turnover in several industries is so pervasive that it has become an accepted condition of those organizations. Research in the 1970s began to focus on job satisfaction and its impact on employee retention. Specific studies of the time addressed turnover issues in nursing, the police force, and the retail industry, especially as shopping malls began to outnumber small, privately owned businesses. Research in the military prior to this point was abundant when it came to selection and performance; however, high turnover became a more central topic into the 1980s and 1990s. During this time, volunteer firefighters and teachers also became topics of interest as researchers began to seek solutions to retaining employees in these important positions. For all of these industries, as well as the trucking industry, researchers and employers have looked at the causes and consequences of poor employee retention for decades. However, compared to the amount of interest and concern, few solutions have been offered or implemented in the fields. No one industry has led the way by creating a new environment or culture when it comes to retention and turnover, so the acceptance of the problem often increases while the hope and energy put into finding a solution fades.

Figure 4. Retention Solutions in High Turnover Industries

	Offering Competitive Compensation	Signing or Retention Bonus	Career Development, Educational or Growth Opportunities	Performance Based Recognition and Incentives	Focusing on Schedule Flexibility	Making Work More Meaningful	Rewarding Tenure	Communication/Decision Making Opportunities
1	•	•	•			•	•	
2			•	•				
3	•		•			•		•
4	•	•	•	•				•
5			•			•	•	•
6						•		•
7								
a	•	•	•	•	•			
b	•	•	•	•				•
c	•		•		•			
d	•	•	•	•	•		•	•
e	•	•	•	•	•	•		
8			•	•	•	•		•
9	•		•	•	•			
10	•		•	•				•

Section 4. Alternative Strategies to Address Driver Turnover and Retention

Many trucking companies that have attempted solutions to turnover and retention problems as well as studies of factors that address those conditions have focused primarily on driver pay and benefits. Other research, however, suggests that a multitude of factors identified from the perspective of the industry or the driver affect turnover and retention, and only by addressing these issues in a more comprehensive fashion will driver attitudes and retention rates be positively influenced. Factors identified as affecting retention generally fall into four categories: dispatcher effectiveness, recruitment, company support, and Realistic Job Previews (described below). Figures 5, 6, 7, 8 and 9 summarize these categories.

Figure 5. **Factors Commonly Identified by Drivers that Promote Retention**

Company Support	<ul style="list-style-type: none"> • Support on the road • Friendly managers • Acceptable schedules • Fair managers 	<ul style="list-style-type: none"> • Training • Driver appreciation and recognition • Dispatcher assignments • Dispatcher effectiveness
Non-Driving Activities	<ul style="list-style-type: none"> • Amount of physical loading/unloading • Non-driving work • Friendliness of customers 	<ul style="list-style-type: none"> • Hours of service recording • Time lost waiting at customer locations
Work Rewards	<ul style="list-style-type: none"> • Steadiness of work • Benefits 	<ul style="list-style-type: none"> • Friendliness of other drivers

Figure 6. Perspectives that Provide Constructive Solutions in the Trucking Industry

Employers Need	Workers Need	Programs that Meet Both	Long-term Advantages
Increased Driver Retention	<ul style="list-style-type: none"> ▪ Competitive pay and benefits ▪ Respect and appreciation 	<ul style="list-style-type: none"> ▪ Realistic job previews ▪ Recognitions and reward programs 	Higher retention and committed drivers
Safe and Competent Drivers	<ul style="list-style-type: none"> ▪ Career advancement opportunities ▪ New, well-maintained equipment 	<ul style="list-style-type: none"> ▪ Thorough training programs ▪ Clearly communicated paths to advancement 	Well-trained and safe drivers
Loyal Drivers	<ul style="list-style-type: none"> ▪ Trusting and honest supervisors ▪ Open communication with dispatchers, managers 	<ul style="list-style-type: none"> ▪ Cross-training ▪ Creating schedules with driver input 	Honest and satisfied drivers
Meet Delivery Goals and Deadlines	<ul style="list-style-type: none"> ▪ Equipment that is in good working order ▪ Reasonable schedules 	<ul style="list-style-type: none"> ▪ Company expectations are made clear in written and spoken instruction ▪ Programs that respond to driver issues and provide feedback 	Drivers that share company goals and feel a part of the "team"

Figure 7. **Effective Driver Retention Strategies**

Leadership Support	Senior leadership of the organization must be involved with drivers and show interest in their concerns. Companies must also show support for the personal needs and lives of drivers.
Open-Door Policy	The driver may enter each department with no locked doors or glass during business hours. If you must lock the driver out you are doing something wrong.
Ownership and Cooperation	The company as a whole is responsible for retention. From Safety making sure things are compliant, the dispatcher getting the driver home when requested, payroll be accurate.
Incentives	Hiring bonus, safety bonuses, making benefits available from date of hire, profit sharing, monthly giveaways, breakfast once every couple months, water or Gatorade available during warm months.
Recognition	Recognition and awards for safety performance, good fuel economy, driver tenure, and accident free and citation free driving
Respect	Listen to the individual needs of each of drivers. Be sure to get drivers home when they need to go home and give sufficient time off to avoid driver burnout. Drivers must feel respected by dispatchers and management.
Honesty	Company is an open, honest in all our dealings with all

	associates including drivers.
Troubleshooting	Monitor turnover on weekly basis and also have a driver relations department, which is separate from operations department.
Involvement	Encourage the drivers visit with terminal managers, safety director, and the president of the company. Listen to driver needs and concerns and involve drivers in various committees.
Equipment	As much as possible, provide late model, well-maintained equipment. Poor trucks will chase drivers away

Figure 8. **Common Non-Monetary Factors that Impact Retention**

Home time
Drivers are not required to load or unload freight
Regular schedule (same days off each week)
Respect: listening to drivers, showing them value for the work they do. Treat them as you or one of your family members would want to be treated in this job.
Communication between drivers and office workers
Taking the time to listen.
Healthy work environment
Recognition: years of service, safe-driving record, outstanding customer service, driver of the month and driver of the year, miles driven, appreciation week, and years of service
Thinking of the driver and his family on holidays by making sure if at all possible he/she is with them.
Helping drivers when they have problems.
Listening to and acting on feedback from drivers. Making them feel like they are part of the team.

Figure 9. **Retention Obstacles**

Waiting on loads at home facilities.
Retirement
Working on weekends
The time sensitive loads when hauling food products
Other companies trying to offer more money to drivers if they leave—then don't follow through with their promises.
Competitive pay
The price of fuel and the fuel surcharge.
When business principles aren't followed.
Drivers do not stick with a company through bad times because they can get a job very easily they switch companies if they have a problem
Fuel prices cutting into available funds for pay raises
Not having enough work to keep drivers busy
Newer drivers moving from job to job

Dispatcher Effectiveness

In terms of dispatcher effectiveness, research suggests that dispatchers are more important to a company's ability to retain drivers than has been realized in the past (Keller & Ozment, 1999). Companies with dispatchers who "respond more effectively to driver concerns" are more likely to experience lower rates of voluntary driver turnover than firms having dispatchers who fail to respond effectively. One way to address differing levels of responsiveness is by administering psychological or personality questionnaires. While this would not jeopardize dispatcher jobs, it would allow organizations to pinpoint employees that need more training or increased supervision (Keller & Ozment, 1999).

Keller and Ozment (1999) proposed that dispatcher training include "driver problem identification and diagnosis, information channeling, solution identification... and driver feedback solicitation". While written or situational interviews may be effective for dispatcher selection, realistic job previews that include driver problems and solutions may be an effective training tool for future dispatchers. The value of realistic job previews and issues to be included will be discussed in a following section. Whether through training or experience, it is important for dispatchers to learn the importance of responding to "all driver concerns, no matter how small" (Keller & Ozment, 1999).

Lower turnover rates also appear to be associated with younger dispatchers, possibly because of an eagerness to please drivers. Also, not surprisingly, lower rates of turnover are associated with the duration of current employment for dispatchers (Ozment & Keller, 1999). So, both neophyte and seasoned dispatchers have been shown to have a beneficial influence on retention.

Another issue addressed in the literature is that being a more successful dispatcher is associated with lower levels of education. It is suggested that new graduates hired into entry-level positions are trained and then seek quick promotion instead of remaining in the position of dispatcher. For this reason, organizations are encouraged to create and market a better image for dispatch. The job should be one “for which to aspire rather than from which to step” (Ozment & Keller, 1999). Surveying drivers about ways to increase dispatch support is another way to uncover organization-specific issues between drivers and dispatchers. In any case, expecting high performance from dispatchers requires appropriate training, tools, and working conditions. In conclusion, identifying and keeping effective dispatchers requires:

- Job- and company-specific realistic job previews for dispatch at training and that are available to current and future employees
- Personality questionnaire to pinpoint potential dispatch/driver problems and to specify employee training needs
- Promoting and treating dispatch as a success area—as an aspiration instead of a “stepping stone.”

Recruitment

Oliver et al. (2003) suggest targeted recruitment so that long-term retention might be increased. The researchers presented basic personal attributes that should be sought when making driver selection decisions, but these guidelines may also be useful when creating a realistic job preview or training new drivers. Truck drivers should have a number of personal attributes that will enable them to acquire the necessary knowledge and skills to work successfully within the industry. Without these personal attributes new

entrants into the industry may experience difficulties that limit success in the longer term.

Recommended attributes include both physical and psychological elements:

- A truck driver must be physically fit and carrying no injuries that could affect their on the job performance. This is particularly relevant to freedom from injuries to the back, legs, (especially knees), and arms.
- They must also be able to pass the medical fitness check as required by the Land Transport Safety Authority to obtain a heavy vehicle drivers license.
- They must not engage in regular use or have a dependence on drugs and/or alcohol.

Since driving a truck is often stressful because of the size and weight of the vehicle, transporting hazardous materials, challenging road conditions, loneliness and feelings of isolation, and growing congestion, individuals should have an attitude of flexibility that enables them to:

- Accept the rights of others to use the road;
- Display courteousness, in spite of routine pressures, to other road users, law enforcement officers and fellow workers;
- Maintain calmness when faced with an emergency or required to work under pressure. Have the ability to learn and apply the learning in a practical environment;
- Sustain performance under arduous working conditions and in pressurized situations.

In addition to the physical and mental requirements, it is important for carriers to focus recruitment efforts and funds toward applicants who would be likely to be high

performers who might be prone to stay with the organization. In summary, successful recruitment efforts for the trucking industry included the industry's need to:

- Focus appropriate recruitment strategies to those candidates most likely to stay with the organization;
- Develop company-specific driver realistic job preview to allow applicants to select out before taking a position or to help new and future drivers adapt to position;
- Ensure that applicants understand and meet the mental and physical requirements of the position to prevent future turnover and promote driver safety.

Company Support

Company support of drivers and their needs seems like an obvious and common factor that would promote retention. Another obviously important characteristic of company support is driver maintenance both at work and in consideration of the driver's family. In surveys of drivers, this aspect was identified as an important retention tool in the organizations' overall support framework along with the need to address issues and improve relationships between drivers and dispatch.

Maintaining a safe atmosphere and encouraging driver safety not only shows worker support but decreases accidents and increases retention—often through safety incentive and rewards programs. The company shows driver support by improving truck maintenance so drivers avoid using illegal or poorly maintained equipment (Oliver et al., 2003). Similarly, employers can increase retention by disallowing: driving in “breach of

the regulations,” —a practice that obviously puts pressure on drivers and by prohibiting illegal loads and assigning tasks that are impossible to perform without bending the rules (Oliver et al., 2003).

One strong argument for increasing company support is the fact that it can occur with minimal or no cost to the organization, to its managers, or for the dispatchers. Drivers consider friendliness and fairness from managers as supportive company characteristics. Maintaining realistic expectations about drivers’ schedules, recognizing performance, and providing adequate training also increase favorable perceptions of company support and as a result retain workers (Stewart, 1999). Company support also becomes more evident when organizations effectively communicate new regulations to drivers, when carriers provide and encourage an accessible career path for drivers, when they recognize differing skill and education levels, and when firms listen to drivers’ needs regarding employment conditions and management culture. In trucking, as in any other work setting, honesty and consistency promote and maintain the level of trust necessary to improve an organizational climate.

Realistic Job Previews

In terms of recruiting and retaining qualified truck drivers and dispatchers, it has been suggested that carriers develop a realistic job preview (RJP) specific to each position. RJP include any programs, materials, and/or presentations that provide applicants with realistic and balanced (positive and negative) information about a job (Barber, 1994). The goal of an RJP is to present job applicants with a balanced and truthful view of a position without emphasizing or deemphasizing any part(s) of the job.

Through RJPs, applicants get a glimpse into what their future job would be if they complete the selection process and are hired by the organization to fill the position.

Realistic information provided to applicants allows them to make an informed decision about whether or not they should continue with the selection process or self-select out (Brezz & Judge, 1998). Despite some claims that RJPs cause individuals to discontinue the hiring process, because negative features of the job might be portrayed, a review of literature by Meglino, Ravlin, and DeNisi (1997) did not find this effect. In fact, results of the Meglino et al. review showed that individuals perceived the negative information in a positive way because it allowed them to make a decision using realistic information about the job.

RJPs have also been hypothesized to improve role clarity, (Wanous, 1980), lead to higher job satisfaction, performance and commitment (Reilly et al., 1981), and lower voluntary turnover through self-selection (Dugoni & Ilgen, 1981; Breugh, 1983). Research suggests that informing drivers or dispatchers about the position would benefit organizations most effectively by potentially decreasing turnover across the organization. In a study specific to the trucking industry, truck driver applicants were presented with a written RJP, which presented a realistic and balanced description of the position (Taylor, 1994). Twelve months after the RJP program was implemented, researchers returned to find that turnover had decreased by 28 percent (Taylor, 1994).

This section reviews alternative strategies that have been recommended and applied over the past 25 years in an attempt to solve turnover and retention problems in the trucking industry. Most of these tactics appear to be obvious and necessary components of any successful business—especially if the techniques are applied

uniformly, seriously, and widely. However, there is little evidence of the successful application of any of these strategies in the trucking industry, particularly in terms of producing a lasting and meaningful impact on turnover rates. Knowledge of successful strategies, without their application, suggests the trucking industry can tolerate the condition. As no trucking company has successfully demonstrated that the costs associated with attacking turnover can be offset by profits gained from increased retention, the assumption could be made that the level of turnover and retention is appropriate for the prevailing business climate in the motor carrier industry.

Section 5. Survey Results

The return on the current survey, with 24 carriers representing 10,500 drivers is characteristic of many surveys conducted over the years in the trucking industry. Perhaps the most well known study of turnover and retention relied on 25 carriers representing 800 drivers (Gallup, 1997). The current survey response rate, however, was a disappointment and might be suggestive of how opaque, competitive, internally focused, or secretive, the motor carrier industry may have become in the three decades since deregulation. The lack of response says more about the industry than the information provided below. The results should **not** be viewed as representative and no generalizations or conclusions should be assumed. A total of 15 complete and two incomplete surveys were returned by mail; 9 completed online surveys were submitted for a total of 24 completed surveys representing over 10,500 drivers. Most of the firms represented smaller carriers employing between 1 and 100 drivers (82%). Carriers employing between 200 and 300 drivers and 301 to 400 drivers accounted for 4.5 percent respectively. One carrier employed over 1200 drivers and one had nearly 8000 drivers.

For the 22 firms that reported current turnover rates, 13 had turnover at or below 30 percent. Six firms reported turnover between 31 and 75 percent, while the remaining three companies had turnover rates of 95 percent or higher. The 8 smallest carriers (fewer than 35 drivers) as well as the largest carrier said acceptable turnover rates would be 10 percent or lower, 7 firms said 20 percent to 50 percent would be acceptable and 6 firms said more than 70 percent but less than 100 percent was acceptable. Most reported their ideal rate consistent with their current rate indicating that turnover for this group

was not an issue. Responses to the 2 open-ended questions are summarized in Figures 10 and 11.

Figure 10. **In your opinion, can the problem of high truck driver turnover in the trucking industry be solved or improved?**

Solution	“Yes, the problem can be solved or improved.”	
	How?	
Home time	Companies must stabilize the drivers' home time issues	
Relationships	Bonding with immediate supervisor	
	Better treatment of drivers by management and customers	
	Good drivers are priceless and should be treated as valuable	
Image	The entire industry needs to work to improve the image of truck drivers, and to treat drivers as people and not numbers	
Pay	Freight rates should be increased so salary increases can follow	
	Drivers everywhere need better pay and benefits	
	Companies must plan ahead in terms of funding and being proactive and not reactive	
Demand	The driver market will soon experience a large shortage and the demand for quality drivers with experience will drive the pay up throughout the industry as fewer young people fill vacancies left by older retiring drivers	
No-compete Contract	Forcing drivers to sign a 3 month no-compete contract encourages drivers to stay with a company. Companies must also meet the contractual agreement and not hire new drivers until the 3 month period has expired	
Benefits	Organizations need to change the hours of service rules	
	Companies must increase health insurance benefits offered to drivers	
Selection and Training	The larger companies who train student drivers must screen for a higher caliber, more qualified candidate	
	Companies must concentrate on recruiting better drivers	
	New hires should be groomed by companies over a long period of time in order to acclimate drivers to the rigors of the job	
Realistic Job Preview	When a new driver leaves orientation, he or she realizes that what was said by the recruiter is not true so turnover is high in the first few months of the job	
	New drivers coming into the industry are not properly trained from the beginning and have unrealistic expectations of the job	
	Companies must be honest with the new hires about what they can expect when they come to work for them	
	Companies are far more likely to over emphasize the positive and completely skip over the negative aspects of the job	

	Recruiters cannot be held responsible. In most cases performance is based on the number of applicants brought into the company
	Driver positions may have higher than average pay, but drivers must understand what is required to earn this higher wage

Figure 11. **In your opinion, can the problem of high truck driver turnover in the trucking industry be solved or improved?**

“No, the problem cannot be solved or improved.”

Obstacle	Why Not?
Competition	As long as trucking companies can advertise the different pay packages and benefits they offer, drivers will think it is "greener on the other side of the fence"
Job Availability	Drivers know that there are plenty of job openings for drivers
	As long as there is a demand for drivers, drivers will churn
	Unless organizations find loyal drivers, employees will leave if anything doesn't go their way
Cost/Pay	Fuel costs prevent companies from increasing driver pay
	Low-cost labor from other countries keeps pay scales down for U.S. companies too low to compete

Section 6. Summary and Conclusions

For at least the past three decades, turnover among truck drivers and the problems associated with low truck driver retention rates have been studied continuously (FMCSA, 2003). Today, drivers have numerous job options and as a result high turnover in the industry continues. The purpose of the current research project was:

- To review carrier turnover and retention and report the origins and evolution of driver turnover and retention research;
- To evaluate the nature of turnover and retention and define the problem by critically examining published results from evaluations and analyses of the trucking industry and other high turnover industries. Specifically, results include those found in academic investigations and policy studies, in publicly available proprietary reports, trade publications, and government documents, and in U.S. Department of Transportation, U.S. Department of Labor, and U.S. Census Bureau databases;
- To present alternative strategies that promote truck driver retention in areas identified by the trucking industry and in other high turnover industries;
- To survey trucking industry representatives to explore the nature of and the magnitude of the situation and present how the industry has responded;
- To interpret and organize survey response data to identify current turnover and retention problems, concerns, and solution strategies;
- To examine turnover and retention strategies from other industries and to examine comparable organizational approaches that address common retention issues that may have applications in the motor carrier industry.

Most of the information on turnover, retention and the motor carrier labor market is anecdotal and has been provided by the industry itself or by industry consultants. The trucking industry is highly competitive and basically opaque, where independent investigations are uncommon, independent surveys are rare, and academic studies are forced to rely on limited industry data and publications. Much of the data on trucking are proprietary and the industry has a history of providing information primarily for influence or for public relations. Therefore conclusions about the industry should be guided by an awareness of source information.

The passage of the *Motor Carrier Act of 1980* (MCA) promoted competitive rate setting, abolished carrier commodity restrictions, eliminated routing and geographic requirements, and promoted pricing competition. The impact of these conditions on industry employment and wages, benefited consumers, but the changes occurred at the expense of truck driver earnings, service requirements, and union membership. Reports of the dramatic impact of deregulation on the trucking industry began almost immediately after the passage of the MCA. Intense competition soon led to company failures and anecdotal reports of high driver turnover became routine and continues today. In terms of the basic conditions that foster turnover, the literature suggests that little has changed regarding driver turnover in the years since deregulation was enacted. Conditions that influence truck driver turnover and retention are well known and have become part of the fabric of the industry for several decades. The most widespread driver concerns typically include: a lack of communication, a lack of respect for drivers and drivers feeling unvalued; requirements to be away from home for long periods of time; insecurity toward top-management; and pay and benefit issues. In general, industry management has failed

to respond to driver needs and has outsourced training programs that attracted secondary drivers. These factors, in addition to the industry's inability to address dissatisfaction over salaries and benefits has ultimately contributed to and promoted job-hopping or churning.

Throughout the late 1990s and the early 2000s reports of growing turnover, labor shortages and retention problems in the trucking industry continued in the academic, trade, and popular literature. This culminated in a document for the American Trucking Associations by Global Insight entitled *The U. S. Truck Driver Shortage: Analysis and Forecasts* predicting a crisis in the in the supply of drivers necessary to maintain the industry by 2015. Continued industry reports of churning and retention led Delery (2007)—who had been studying motor carrier effectiveness as an academic researcher for over a decade—to call the situation a “never-ending problem.”

So—is there a turnover and retention problem in the trucking industry or is there a turnover and retention condition in the trucking industry where the problem is tolerated as a part of the business environment because it is too costly or too much trouble to solve? Thirty years without a general solution suggests that the latter situation may be the case.

A 1996 study of *Motor Carrier Effectiveness* obtained questionnaire responses from 379 “top managers of trucking companies” to provide industry leaders with data as a guide to decision-making to offset guesses, anecdotes, and conventional wisdom. Perhaps a clue to the reality of the problem was that the majority of those 379 “top managers of trucking companies” said that driver turnover “made no difference” among major factors affecting company effectiveness. The trucking industry appears to be very much like the

hotel industry where a two-year study by The Center on Wisconsin Strategy found that the “most common response” to retention issues in the hotel industry was “essentially no response” (Bernhardt, Dresser, & Hatton, 2003).

Compared to the amount of interest and concern, few solutions have been offered or implemented in high turnover low retention industries. No one industry has led the way by creating a new environment or culture when it comes to retention and turnover. High turnover in several industries—including trucking—is so pervasive that it has become an accepted condition of those organizations.

Alternative strategies have been recommended and applied haphazardly over the past 25 years in an attempt to solve turnover and retention problems in the trucking industry. Those tactics are obvious and necessary components of any successful business—especially if applied uniformly, seriously, and widely. However, little evidence could be found to demonstrate the successful application of these strategies in the trucking industry, particularly in terms of producing a lasting and meaningful impact on turnover rates. Knowledge of successful strategies, without their application, suggests the trucking industry can tolerate the condition. As no trucking company has successfully demonstrated that the costs associated with attacking turnover can be offset by profits gained from increased retention, the assumption could be made that the level of turnover and retention is appropriate for the prevailing business climate in the motor carrier industry.

In conclusion, some business leaders have pointed out that decreasing retention and increasing turnover improves the company’s profitability explaining that long-term employees are not necessarily more productive than new hires, but they are more costly

to the company (Chambers 2005). It could be that many motor carriers are utilizing the same model. In high turnover, low retention industries, including the trucking industry, have not changed the conditions fostering their public complaints regarding turnover and retention, perhaps their choice is rational.

Moreover, inconsistency among managers, supervisors, and within and between organizations creates a culture that accepts turnover. If an organization does not believe a solution is possible, no efforts will be made to address the difficult task of controlling turnover. For supervisors and trucking companies that believe turnover can be decreased, solutions given are often vague and broad, making the task seem unattainable. For example, “hiring better drivers” or “increasing pay” are solutions that are difficult to define and implement. The industry tends to throw many “quick fixes” at the problem of turnover, but one solution is not enough and turnover is an issue that requires long-term planning and even more importantly, strong support from the industry leaders, high-level managers and supervisors. Only this support will pave the way for a new culture to arise that values retention and works daily to address and reverse rising turnover.

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Appendix 1.

Driver Turnover and Retention Survey – Summer 2008

Name: _____

Company:

Current number of full-time truck drivers: _____ Number of part-time drivers: _____

What is your organization's current average rate of turnover? _____%

What is an "acceptable" rate of turnover for your organization? _____%

What would be an *ideal* or goal rate of driver turnover in the industry? _____%

In your opinion, can the problem of high truck driver turnover in the trucking industry be solved or improved? How or why not?

Would you be willing to be contacted for a few follow up questions regarding this survey once data has been collected? _____ YES _____ NO

Would you prefer to be contacted via: _____ PHONE _____ EMAIL

EMAIL: _____

PHONE: _____