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^ Industry White Paper



Perceived Variables Expected to Impact the Industry

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## Perceived Variables Expected to Impact the Industry



The purpose of this document is to address those issues facing the transportation industry currently and in the foreseeable future. It is important to consider the impact of these issues and proactively develop strategic plans as a means of progressing forward and mitigating risk to our operations.

In the following sections, we will discuss perceived risks to our industry within three distinct areas of interest: the economic environment, industry trends and government regulations. Drawing from current research, industry and economic data and more than 81 years of transportation management experience, we offer our perspective on the transportation landscape over the next several years.





## SIGNIFICANT RISKS: ECONOMIC ENVIRONMENT

### GROSS DOMESTIC PRODUCT

After several quarters of devastating Gross Domestic Product (GDP)—the output of goods and services produced by labor and property located in the United States—levels during the recession, the annualized rate of GDP growth in 2010 was 3 percent, according to the Bureau of Economic Activity (BEA).<sup>1</sup> But in 2011, the annualized growth rate was a disappointing 1.7 percent, and while the GDP grew in 2011, it decelerated, most likely due to downturns in private inventory investment, federal government spending and export growth.<sup>2</sup> In 2012, GDP grew at an annualized rate of 2.2 percent, according to the BEA, only a slight increase over 2011. The Federal Reserve anticipates that GDP growth in 2013 could range anywhere from 2.0 to 3.2 percent. However, 2013 first quarter GDP growth (1.1 percent) and second quarter growth (1.7 percent) are well below those estimates, according to the BEA.

Sources of GDP improvement come largely from the manufacturing and retail sectors. Throughout 2011 and much of 2012, the industrial sector showed tremendous improvement. The National Association of Manufacturers estimates that growth in 2012 was 3.7 percent.<sup>3</sup> Manufacturing may continue to grow in 2013, though perhaps more slowly than in 2011 and 2012. While retail sales also saw improvement through 2011, sales in 2012 did not live up to expectations. After a disappointing holiday sales season, the National Retail Federation reported retail growth for 2012 was 4.2 percent; in 2011, the retail sector swelled 5.6 percent, according to CNBC.com.<sup>4</sup>

While the improved annualized GDP is a positive sign, the country faces several long-term concerns. Government debt is approximately 75 percent of GDP, according to the *New York Times*, and by 2020, U.S. debt could equal nearly 90 percent of GDP.<sup>5</sup> The ever-present debt ceiling and budget debates in Congress affect the ratio, and the current Congress seems set to continue to increase the debt limit and budget while securing more revenue—either from spending cuts or tax increases. In addition to higher interest rates and inflation, this ratio could catapult the U.S. into a crisis similar to the situation facing several European nations. In 2020, mandatory spending, including Social Security, Medicare, Medicaid and debt interest payments, could consume all of America's tax revenue, leaving little money for defense, transportation and education.<sup>6</sup>

### UNEMPLOYMENT

Since the U.S. unemployment rate swelled to a 26-year high of 10 percent in October 2009 after the end of the recession, it has continued to fall, according to the Bureau of Labor Statistics.<sup>7</sup> In October 2011, the unemployment rate was 8.9 percent, and by July of 2013, unemployment had fallen to 7.4 percent, with 11.5 million unemployed individuals.<sup>8</sup> There were an additional 988,000 discouraged workers who were not included in the official unemployment rate because they were not actively searching for

work, according to the Bureau of Labor Statistics. Among the growing employment sectors in July 2013 were retail trade, food services and drinking places, financial activities and wholesale trade.

The positive 2012 unemployment rate was somewhat unexpected by economists, but it does indicate that the economy slowly is gaining momentum and traction. In late 2011, the Congressional Budget Office predicted that the average 2012 unemployment rate would be 8.9 percent, and the Federal Reserve estimated it would land between 8.2 and 8.5 percent; through 2012, the average unemployment rate was around 7.9 percent, much lower than expected, according to the *Washington Post*, and it has continued to fall through the first half of 2013.<sup>9</sup> Many economists caution, however, that the good news could be the result of more and more people leaving the workforce or discontinuing the search for employment.

There are several potential issues on the horizon that could derail the unemployment outlook. The economic downturn in Europe, which could lead to a European recession, a spike in oil prices and continued uncertainly and gridlock in Washington, DC, could slow the nation's momentum.<sup>10</sup> Also, business confidence may remain stagnant after the Bush tax cuts were allowed to expire the end of 2012, and as CEOs await additional rules on health care. While the nation's GDP currently exceeds the pre-recession levels, total unemployment numbers are lagging behind the pre-recession level, indicating that there is still much more room for improvement in the economy.<sup>11</sup>

### INTEREST RATES AND INFLATION

In early 2012, the Federal Reserve announced bond-buying stimulus plans and an objective to keep interest rates near zero through 2014 to further spur economic growth and improve the employment rate.<sup>12</sup> Currently, the Fed is buying \$85 million a month in Treasury bonds and mortgage securities to keep long-term interest rates down and spur home and car purchases. However, due to continued solid GDP and unemployment numbers, the Fed indicated at its July 2013 meeting that it may begin to scale back its bond-buying stimulus this fall and finish by mid-2014, according to *USA Today*.<sup>13</sup> The Fed's objective is to keep interest rates near zero until unemployment falls to 6.5 percent and the inflation outlook remains below 2.5 percent.<sup>14</sup>

While inflation was relatively non-existent in 2010, inflationary pressures have continued to increase since 2011. The percent change in the Consumer Price Index (CPI), which measures the average price of consumer goods and services purchased by households, estimates inflation. In January 2012, it was up a modest 0.2 percent from the previous month, with a 3.4 percent increase over the last 12 months.<sup>15</sup> By July 2013, CPI was 2 percent higher than in July 2012. This is consistent with the Fed's January 2012 first annual inflation target of 2 percent.<sup>16</sup>

The likely cause of modest inflation is rising energy, shelter, apparel and food costs, and if their prices continue to increase, inflation may become a more immediate concern. High energy prices caused by turmoil in the Middle East, and the subsequent rise in the price of



items that are created or transported with fuel, are a major threat, according to the *Washington Post*.<sup>17</sup> At this point, inflation is being driven largely by commodity prices. Overall inflation may not rise quickly since wage inflation is unlikely, as many individuals are still unemployed and wages are not being driven up.<sup>18</sup>

## CONSUMERS / SAVINGS RATES

U.S. consumers, whether by choice, unemployment or lack of affordable credit, shifted toward increased savings and a reduction of personal debt in 2009 and 2010, and the U.S. savings rate hit 5.7 percent in April 2009, the highest level in 14 years. In January 2012, the personal savings rate, or personal savings as a percentage of disposable income, was 4.7 percent, up from 3.4 percent in September 2011.<sup>19</sup> By July 2013, the personal savings rate had increased to 4.5 percent, according to the Bureau of Economic Analysis.<sup>20</sup>

Real disposable personal income, or personal income adjusted for taxes and inflation, rose 3.4 percent in the second quarter of 2013 after falling 8.2 percent in the first quarter.<sup>21</sup> The strong GDP and employment numbers—and the economic recovery they indicate—may continue to loosen the squeeze on consumers, allowing them to increase both spending and saving.

Fortunately, consumer confidence has been rising gradually overall since the recession. And in July 2013, the Thomson Reuters/University of Michigan confidence index reached a six-year high of 85.1, though August 2013 saw a four-month low at 80.<sup>22</sup> Long term, however, consumer confidence is on the rise.

## FUEL

The rollercoaster of fuel prices continued throughout 2012 with the average cost of regular grade gas approaching \$3.89 per gallon, and diesel nearing \$4.16 in the second half of March.<sup>23</sup> According to *Transport Topics*, 2012 marked the first time diesel rose above \$4 per gallon in February, a time when consumers generally enjoy some of the lowest fuel prices of the year.<sup>24</sup> But, in the first 10 weeks of 2012, gasoline prices swelled almost \$.50 per gallon, and diesel reached its highest price since May 2011.<sup>25</sup> After dropping slightly in July 2012, diesel prices swelled to \$4.15 in mid-October in part because of the crippling drought in the U.S. Prices dropped to \$3.96 in mid-April 2013 and \$3.56 in August.

At one point in 2008, diesel prices were almost \$5 per gallon, and they shrank to nearly \$2 per gallon in early 2009 during the recession. While retail diesel prices averaged \$2.46 per gallon in 2009, they averaged \$2.99 per gallon in 2010 and reached an average of \$3.85 in 2011, according to *Heavy Duty Trucking*.<sup>26</sup> Diesel averaged \$3.97 per gallon in 2012, and the Energy Information Administration expects to see an average of \$3.96 per gallon in 2013.<sup>27</sup> Alternative fuel use is expected to continue to grow in popularity as oil prices remain high, even for heavy-duty trucks.

Republicans often blame President Barack Obama for the high prices because he has not given oil companies more range to drill in the United States, which could reduce the country's dependence on foreign oil.<sup>28</sup> They also criticize his effort to thwart the Keystone Pipeline. Others, however, attribute the volatility to sanctions the U.S. and other nations have placed on oil-rich Middle Eastern countries. Some democrats have frequently called on Obama to protect consumers by tapping into the Strategic Petroleum Reserve like he did in 2011 during the turmoil in Libya, which many argue had a limited effect on oil prices, according to the *Washington Post*.<sup>29</sup>

## HOUSING MARKET

For many quarters, the housing market was unable to recover like some other sectors of the economy after the recession ended in 2009. New housing starts are well below the normal rate of 1.5 million per year.<sup>30</sup> But in much of 2012 and earlier this year, the existing housing market was revitalized. A drought of home listings forced prices higher.<sup>31</sup> However, in August 2013, the housing market began to slow again with rising mortgage rates and more houses on the market—at lower prices.<sup>32</sup>

The housing market could remain somewhat unstable as young people are waiting to marry and start families because of economic uncertainty. Until they feel more comfortable with their job statuses and finances, this trend may continue. Since so many other industries, including transportation, depend on construction, the housing industry has the potential to limit how much the economy is able to recover.

Inarguably, the economic environment has had, and will continue to have, a significant impact on the transportation industry. In the following section, we address the industry trends that are expected to affect the transportation landscape and supply chain management in general.

## SIGNIFICANT RISKS: INDUSTRY TRENDS

### DEMAND

The trucking industry shrank significantly during the recession due to decreased demand for freight services since consumers were not purchasing as many of the items trucks carry, and it is still recovering. Combined revenue for the 50 largest U.S. carriers dropped 17.2 percent in 2009—from \$94.9 billion in 2008 to \$78.5 billion in 2009—the *Journal of Commerce* reported in April 2010.<sup>33</sup> But the 50 largest trucking companies are only a fraction of the 227,000 companies in the for-hire industry, and many of them were forced out of business in the recession. Overall, the ATA estimates that demand fell 24 percent.<sup>34</sup>

Fortunately, demand continues to rise—both in the trucking industry and relevant vertical industries. In April 2011, the *Journal of Commerce* reported that the top 50 carriers collectively saw revenue rise 9.4 percent over 2010.<sup>35</sup> Then in 2012, the *Journal of Commerce* reported that the joint revenue rose 6.2 percent, which was an industry revenue



record.<sup>36</sup> And, truck tonnage continues to increase, albeit gradually. In addition, trucking as a form of freight transportation continues to beat all other modes. In 2012, the trucking industry hauled 68.5 percent of all the tons of freight transported in the U.S., which represented 80.7 percent of all transportation revenue, according to the ATA.<sup>37</sup> The ATA expects total freight tonnage to grow 21 percent in the next nine years.

In 2013, experts expect demand to continue to increase, thus potentially raising driver and carrier profits. The supply-demand equilibrium will stabilize further as regulatory and driver shortage issues take capacity out of the market.<sup>38</sup> With fewer drivers to haul the same amount of—or more—goods, freight prices should appreciate against the past few years. According to *Logistics Management*, the demand for trucking services is expected to increase 4 to 5 percent annually for at least the next year.<sup>39</sup>

## DRIVER CAPACITY

Thousands of truck drivers lost their jobs in the recession.<sup>40</sup> And, because of decreased demand for freight services, many carriers that remained in business reduced their fleets by parking trucks and cutting pay and benefits across the board. Now that demand is increasing, trucking companies are struggling with capacity restraints.

The ATA estimates that the trucking industry is short between 20,000 and 30,000 drivers, and that number is expected to increase as demand picks up.<sup>41</sup> And, the Council of Supply Chain Management Professionals (CSCMP) estimates that one in six drivers is at least 55 years old and approaching retirement, and few young people are entering the industry that often requires long hours away from home.<sup>42</sup>

The FMCSA's safety initiative, Compliance, Safety, Accountability (CSA), is putting unfit drivers out of service, contributing to the driver shortage. Even some carriers with deficient CSA scores are exiting the industry, further tightening capacity. As carriers lose unfit drivers, drivers with positive CSA scores are in high demand—and for a high price. The limited driver capacity will force carriers to pay higher driver wages, and the increase will likely be passed on to shippers.<sup>43</sup> In addition, the lack of drivers could tighten the supply end of trucking, costing carriers more to operate in general. Changes to the federal hours-of-service (HOS) rules could increase driver demand as well because drivers will be unable to spend as many hours a day on the road due to required breaks.

## EQUIPMENT CAPACITY

During the recession, many trucks were domiciled because of decreased freight demand, and three years later, the industry has yet to catch up now that demand has increased. *Fleet Owner* reported in June 2010 that the “nation's freight pool contracted by 12.5 percent in 2009, and heavy truck utilization is currently at about 75 percent.”<sup>44</sup> Some of those tractors and trailers have re-entered active fleets, but the driver shortage and maintenance issues may hinder the number of trucks that can hit the road or enter the marketplace. New truck sales are expected to remain below 2006 peak periods for several

years, though they are picking up due to the need to replace aging equipment. According to the ATA, the current Class 8 fleet is the oldest since 1980 with an average age of seven years.<sup>45</sup>

According to *Logistics Management*, even though the demand for freight is up substantially since the recession, the number of trucks on the road has remained relatively flat.<sup>46</sup> The total U.S. Class 8 fleet even fell 2.1 percent in the fourth quarter of 2011 compared to the fourth quarter of 2010. The decline may be attributed to carriers removing their oldest trucks from fleets to align truck capacity with the amount of available loads.<sup>47</sup>

As a result, capacity is close to equilibrium, and as equipment continues to age and the demand for freight services increases, carriers may face capacity restraints. It is estimated that capacity dropped approximately 15 percent from its peak before the recession as major carriers reduced fleets by tens of thousands of units. Additionally, the recession forced some owner-operators to park their trucks permanently. Capacity is not expected to reach its 2006 peak again for a few years.<sup>48</sup> Fortunately, the time period will allow carriers to cautiously acquire new equipment, which is expensive due to new engines that comply with the latest Environmental Protection Agency (EPA) emissions rules. Maintaining aging equipment is expensive as well, so for the time being, carriers are mainly replacing old equipment—and very gradually adding new capacity. A recent survey of carriers by Transport Capital Partners found that while 65 percent of respondents are planning to add capacity, more than three-quarters are planning to add little (1 to 5 percent) or no capacity in the next year.<sup>49</sup>

## INSURANCE

As veteran drivers retire and the driver shortage worsens, less experienced drivers could be hired, potentially driving up collisions, which ultimately result in higher insurance rates. Trucking companies with weakened financial positions are prone to having higher premiums as insurance companies include the policyholders' ability to pay current and future claims in rating decisions.

Currently, the Federal Motor Carrier Safety Administration (FMCSA) and other agencies are studying the industry's minimum insurance requirement. The current insurance minimum for carriers of \$750,000 was established by Congress in 1980, and it has not increased since then. In July 2013, a bill was introduced in the House of Representatives that would increase the required insurance minimum to \$4.422 million and tie future requirements to the cost of medical care inflation.<sup>50</sup> Rep. Matt Cartwright, who introduced the bill, said in a statement that it takes more than \$4.4 million to provide the equivalent coverage of \$750,000 in the past, according to *Heavy Duty Trucking*. As required by the 2012 federal highway bill, the FMCSA is analyzing the insurance minimum and will likely publish its findings and suggestions by the end of the year.<sup>51</sup>



## TRUCKLOAD CARRIER MARKETPLACE

As the recovery continues and demand increases, areas of growth for truckload carriers will continue to be direct store deliveries, customized dedicated contract carriage, drayage and short-haul regional moves.<sup>52</sup> Lengths of haul are shrinking due to supply chain redesign and warehouse relocation. Dedicated contract carriage allows for customized solutions and provides guaranteed capacity to shippers at known rates, which is important as a modest economic recovery and driver shortage may result in increases in truckload spot rates. Intermodal traffic is also increasing; the ATA expects rail intermodal to expand 6.2 percent each year through 2017 due to capacity and driver restraints, as well as high diesel prices.<sup>53</sup>

## URBAN GROWTH

In its Truck 2020 report, IBM Institute predicts that over the next several years, city populations will swell and, in turn, constrain urban infrastructures and increase congestion.<sup>54</sup> With urbanization, additional regulations regarding the movement of goods and people could be implemented, thus affecting the entire transportation industry. Urban growth will lead to greater variation between regions, “as metropolitan areas create new regulations on noise, multi-modal and restricted usage of heavy vehicles, restrictions on delivery times and routing, tolling and road charges and limitations on vehicle sizes in various cities.”<sup>55</sup> Through 2020, urbanization is expected to have an increasingly significant impact on the trucking industry—driving up costs and reducing efficiency.

## INFRASTRUCTURE

Several studies indicate that America’s freight system is in trouble. Decreased funding for highways, railroads, ports, waterways and airports has caused a “near-term infrastructure crisis,” according to the American Association of State Highway and Transportation Officials (AASHTO).<sup>56</sup> The amount of available funding, AASHTO reports, is well below the level needed to maintain—let alone improve—the freight system. AASHTO estimates that freight demand will double to 30 billion tons by 2050 because the population is expected to grow from 308 million in 2010 to 420 million in 40 years, thus increasing the amount of food, clothing and other goods that need to be shipped. Already between 1980 and 2006, Interstate Highway System traffic swelled by 150 percent, while capacity only grew 15 percent, according to AASHTO.<sup>57</sup>

The U.S. Chamber of Commerce releases an index annually that supports AASHTO’s findings. The Transportation Performance Indexes show that the performance of the “transportation system is not keeping pace with the demands on that system.”<sup>58</sup> The U.S. government is tasked with funding infrastructure spending. After previously extending the last highway bill nine times for three-month periods, at the end of June 2012, Congress passed the Moving Ahead for Progress in the 21 Century bill, which funds transportation programs through September 2014.<sup>59</sup> The bill

maintained previous transportation funding levels at \$101.3 billion for highways and transit systems for 27 months.

The bill consolidates or eliminates nearly 70 federal programs and cuts red tape for infrastructure projects. It also lays the framework for a national freight policy, mandates electronic on-board recorders in trucks and calls for a study of the 34-hour restart provision included in the recently changed hours-of-service rules, according to *Heavy Duty Trucking*.<sup>60</sup> It also authorizes a study of truck size and weight limits.

## SUSTAINABILITY

In a survey of leaders across the entire truck value chain, IBM Institute found that technological progress is the second most important external force affecting the industry, according to its Truck 2020 report.<sup>61</sup> As sustainability and environmental concerns continue to rise, they will go hand-in-hand with technological progress. In the years ahead, tractor and trailer manufacturers will move to telematics, alternative fuels and hybridization, making them function in completely different ways than today’s vehicles.

Heavy-duty trucks are becoming more sustainable as well because of EPA 2010 diesel requirements, which require ultra-low emissions levels from all 2010 and beyond engines.<sup>62</sup> But, “going green” and meeting these compliance regulations is easier for some carriers than others. Some private fleets and large for-hire carriers are better suited to implement green practices and reduce their carbon footprint than smaller carriers with 150 trucks or less. The EPA requirements have substantially increased the price of tractors, making their implementation in all fleets more difficult.

Many fleets are implementing other sustainability techniques as well. Most carriers limit the amount of time a truck may sit idle, thus reducing the amount of diesel emissions released while parked. Many states have laws limiting engine idle time; for instance, Oregon recently enacted a five-minute idle time.<sup>63</sup> Therefore, many carriers install auxiliary power units (APUs) that use batteries as a power source instead of diesel to run heating, air-conditioning and other devices while a truck is turned off. This allows drivers to use these amenities while on a break without running the engine. Side skirts are another sustainability tool for trucks. Trailers are outfitted with the devices between the axles, and by making the trailer more aerodynamic, trucks with side skirts consume less fuel.

## TECHNOLOGY

As on-board transportation technology continually increases in functionality and decreases in price, the cost of collecting more detailed electronic data that is customized to specific shipper processes will also decrease. This trend will be driven primarily by hand-held devices (i.e., mobile phones and electronic on-board recorders), which have experienced rapid advancements in functionality in recent years. These advancements will ultimately allow shippers to receive a larger amount of data faster than ever before,



at more reasonable prices. Shippers often get automatic updates when their load leaves the dock, when and where it stops and when it arrives at its destination. The use of electronic on-board recorders, which will eventually be mandated for all trucks, will continue to increase transparency of shipments and accountability of drivers.

New technologies are sweeping across all U.S. industries, and the trucking industry is no different. Brokerage departments at some carriers are using new technology formats—including social media and smart phones—to find freight that needs to be shipped in an effort to simplify and speed up the process, according to *Transport Topics*.<sup>64</sup> Carriers using the technology say it is effective because capacity is tight and there are more available loads. Smart phones may also be outfitted with a variety of applications relevant to the transportation industry. Increasingly, carriers are using apps that handle compliance, hours of service, dispatching, EOBRs and fleet management.<sup>65</sup> Several apps are also useful for finding the cheapest diesel prices along a route. As more consumers begin to understand the convenience of portable devices like smart phones, their use in daily business operations will likely grow.

## SECURITY

### CONTINUED INCREASES IN FOOD CARGO SAFETY

The trucking industry is combating temperature abuse and improper humidity levels—which can promote unhealthy bacteria, accelerate contamination and degrade nutrients—by implementing new technologies developed to ensure food safety during transport.

A host of technological advancements have improved food cargo safety. First, new air circulation methods elevate and separate foods to allow cold air to rush past and around them, and the air is distributed evenly during travel.<sup>66</sup> Second, recently developed microprocessors and monitors strategically placed around the interior of trailers identify and alert shippers of refrigeration problems nearly as soon as they occur.<sup>67</sup> Third, multi-temperature trailers allow different foods to be stored at specific temperatures in the same trailer for optimal safety and freshness.<sup>68</sup> Fourth, humidity controls keep the air in a properly insulated trailer at a constant level conducive to the food cargo's safety. Additionally, the rapid pre-cooling of vegetables after harvesting, which removes their respiration heat, keeps them fresher during transport.<sup>69</sup> Finally, non-mechanical cryogenic refrigeration is cold enough to transport foods to most sites in the U.S. without the risk of thawing.<sup>70</sup> Shippers are also switching from wooden to plastic or aluminum pallets to prevent cross-contamination.

### CONTINUED INCREASES IN FOOD CARGO SECURITY

After September 11, 2001, maintaining the security and integrity of the national food supply became a priority. Trucks with food cargo are an obvious target for terrorists looking to disturb the country using biological forces.

One method to improve safety is an advanced system of driver screenings complete with thorough background checks. Furthermore, other guidelines and protocols to safeguard against terrorism have been developed. A federal mandate ensures that every trailer is sealed before leaving a loading facility.<sup>71</sup> If a seal is broken when the truck reaches its destination, by law, the product is not accepted. There are also a host of other technological tools that indicate whether a product or truckload has been tampered. Satellite tracking, for instance, traces a truck and records route deviations or suspiciously long stops; the driver is immediately contacted for an explanation if questions arise.<sup>72</sup> EOBRs also add to the accountability of driver detours and stops.

## BUSINESS CONTINGENCIES

A Business Continuity Plan (BCP) is a plan that outlines how an organization will recover and restore interrupted functions along a given timeline to protect the interest of citizens, customers and shareholders in the event of a disaster—natural or otherwise. Companies generally develop a procedure for maintaining business operations in the event of a disaster and then implement it should the plan become necessary. Given the volatility of our global environment, it is prudent for all businesses to develop a realistic and executable BCP.

### Each plan should:

- + Minimize the interruption of services to customers
- + Limit the severity and magnitude of incident on business-critical operations
- + Provide guidance about decision-making during a crisis
- + Establish a process for continuous review and maintenance of procedures

At Ruan, we perceive the aforementioned trends as areas where continued focus and proactive planning are required. Recruiting and maintaining a strong and skilled professional driver force, implementing new technologies for both efficiency and security, utilizing best practices for environmental impact reduction and other critical issues are of the utmost importance as Ruan executes its five-year strategic plan.



## SIGNIFICANT RISKS: REGULATIONS

In the following section, we address current and pending government regulations that could impact the transportation industry. Of particular interest and importance are: (1) Compliance, Safety, Accountability; (2) Hours of Service; (3) Fuel Standards; (4) California Air Resources Board; (5) Fighting Distracted Driving; (6) Electronic On-board Recorders; (7) Drug/Alcohol Clearinghouse; (8) Weight Limits; (9) Labor Relations; (10) and Electronic Stability Control and Speed Limiters.

### COMPLIANCE, SAFETY, ACCOUNTABILITY

In 2011, the FMCSA implemented Compliance, Safety, Accountability (CSA), formerly Comprehensive Safety Analysis 2010 (CSA 2010), designed to reduce the number of highway crashes, injuries and fatalities. CSA re-engineered the previous enforcement and compliance framework in an effort to offer a better view into how well large commercial motor vehicle carriers and drivers are complying with safety rules, and to intervene earlier with those who are not, according to the Department of Transportation (DOT).<sup>73</sup> By and large, CSA is effective in removing unsafe drivers and carriers from the road, and it is supported by most in the transportation industry.

FMCSA conducts inspections and reviews crash reports and then measures the results using the Safety Measurement System (SMS), which replaced the former industry tracking system SafeStat. Each month, SMS measures a carrier's previous two years of violations and crash data to calculate a score in seven safety behavior areas called BASICS: unsafe driving, hours-of-service compliance, driver fitness, controlled substances and alcohol, vehicle maintenance, hazardous materials compliance and crash indicator.<sup>74</sup> Violations that happen most recently or highly correlate with crashes are weighed more heavily. Following the measurement process, CSA makes a safety fitness determination based on a carrier's SMS score. This could result in intervention (e.g., warnings, on- and off-site investigations, etc.) or suspended operations for carriers that are severely out of compliance, according to the DOT.

The CSA investigators assess why safety problems are occurring within a carrier's operations, recommend solutions, encourage remedial actions and invoke penalties. Individual drivers also have their own CSA numbers, and incidents stay with them for up to three years. If a driver's score remains low, a carrier may be forced to terminate him or her, and that driver could find it difficult to secure employment elsewhere.

While most carriers and associations support CSA, the regulation could result in penalties, suspended operations and loss of drivers. Vehicles must be well-maintained, carriers must extensively pre-screen potential drivers, and drivers may have to go through additional training to avoid compliance issues. CSA is also causing some carriers to increase driver pay to keep qualified drivers as others are forced to leave the industry as a result of violations that did not previously disqualify them from service.<sup>75</sup> CSA, therefore, enhances the already existing driver shortage.

### HOURS OF SERVICE

In December 2011, the FMCSA published its final new hours-of-service rules that are designed to alleviate driver fatigue. The HOS rules, which went into effect July 1, 2013, drew lawsuits from the trucking industry and safety advocates that lingered in courts for months.

Advocates of the new rules say they will reduce driver fatigue and, therefore, improve safety. The transportation industry, however, argues that the rules are a solution in search of a problem. The last change to HOS rules, adopted in 2004, had a positive impact on reducing accidents, and opponents argue that the new rules will do little to further improve safety. Instead, they could limit productivity, boost costs, cause congestion to swell and increase the demand for qualified drivers, who are already in short supply.<sup>76</sup>

Out of the 11 rules that were originally proposed in December 2010, five were adopted.<sup>77</sup> The most controversial proposed change—reducing the 11-hour daily driving limit to 10 hours—was not included in the final rulemaking. The FMCSA did, however, indicate it would continue to conduct research and analysis about any risks associated with the 11-hour drive time.<sup>78</sup>

The new rules include a provision that truck drivers must take at least two nights' rest between 1 a.m. and 5 a.m. during their 34-hour restart period, which allows them to restart the clock on their work week by taking 34 consecutive hours off, according to the FMCSA. The restart may only be used once during a seven-day period. The trucking industry was and is opposed to this rule, which could cost drivers who primarily work at night hours and pay.<sup>79</sup> The rules also mandate that long-haul drivers may not drive more than eight hours without taking an off-duty break of at least 30 minutes. With the mandatory 30-minute break, the maximum on-duty period is 13.5 hours, though the official driving window remains unchanged at 14 hours.<sup>80</sup> Proponents argue that this provision will allow drivers to take a brief nap, hopefully reducing fatigue.

The FMCSA began revising the rules after safety advocate groups filed repeated lawsuits against the current regulations, according to *Heavy Duty Trucking*.<sup>81</sup> A deal was reached with the FMCSA that it would develop new rules no later than the end of 2011, and under the agreement, the safety groups have the right to return to court if they do not approve of the rules. The trucking industry filed a lawsuit arguing that claimed benefits of the new rules were overstated, and the safety advocates filed because they claim the rules do not do enough to reduce fatigue.<sup>82</sup> The court ruled in favor of the FMCSA.

Companies and drivers who commit "egregious" violations will be heavily fined; for instance, companies that allow drivers to exceed the 11-hour drive time by three or more hours will pay \$11,000, and drivers could pay up to \$2,750 for each offense, according to the FMCSA.<sup>83</sup>

### FUEL STANDARDS

In August 2011, President Barack Obama announced the first-ever heavy-duty truck fuel efficiency standards, which were met largely



with praise by the transportation industry. The fuel standards, which are overseen by the EPA and the DOT, are expected to reduce fuel consumption and greenhouse gas emissions from heavy-duty trucks by as much as 23 percent, according to *Transport Topics*.<sup>84</sup>

Additionally, the standards are expected to save truck drivers up to four gallons of diesel for every 100 miles they travel, which could save 530 million barrels of oil between 2014 and 2018.<sup>85</sup> The fuel standards differ among three targeted major truck categories, including combination tractors, heavy-duty pickups and vans, and vehicles like buses and refuse trucks. While the estimated increase in the cost of trucks is approximately \$6,220, the investment is expected to pay off within the first year thanks to reduced fuel costs, according to *Transport Topics*.<sup>86</sup> And later this year, Obama is expected to announce standards for the next generation of trucks.

Some states—namely California—are also keen on low-carbon fuel standards. A recent study indicates that such endeavors can be expensive. According to the study by Consumer Energy Alliance, a nationwide low-carbon fuel standard would “increase the retail cost of motor fuel by as much as 170 percent over a 10-year period.”<sup>87</sup> While specific diesel projections were not included in the study, such standards would likely increase the cost of it as well. The alliance anticipates that the increase would come from more expensive alternative fuels and a reduction in the amount of petroleum that could be used to make fuels. As climate change lingers on the national agenda, such low-carbon fuel standards may be introduced. Standards were already discussed as part of the climate legislation that was drafted in Congress in 2010, according to *Transport Topics*.<sup>88</sup> For now, climate change legislation is on hold in Congress due to lack of support and more pressing issues.

## CALIFORNIA AIR RESOURCES BOARD

California has implemented some of the most stringent environmental standards for diesel vehicles operating within the state, even if the trucks are based out of state. California Air Resources Board (CARB) limits idling time to no longer than five minutes, requires trucks to have proof that their engines meet emissions requirements at least as stringent as U.S. federal standards for the engine model year, and indicates that trucks are subject to random vehicle inspections regarding smoke emission.<sup>89</sup> CARB further dictates a timeline of reducing emissions based on tractor equipment. For example, January 1, 2013, was the first deadline to phase in 2010 model year engines, and by 2023, all trucks are required to have 2010 engines. Other regulations include SmartWay-certified tractors and trailers.

While the motivation behind reducing emissions and improving efficiency is clear, many companies are having trouble financing the required changes even though funding is available for small carriers. To help carriers, CARB has proposed some amendments to the rules, namely pushing back compliance deadlines by up to one year, according to *Transport Topics*.<sup>90</sup> Regardless, companies that conduct business in California will need to make significant changes and investments over the next 10 years to meet the compliance standards.

## FIGHTING DISTRACTED DRIVING

In November 2011, the DOT announced a rule banning truck drivers from using hand-held cell phones while operating their vehicles.<sup>91</sup> Now, drivers must pull over in a safe and legal location before texting or making or receiving a phone call. Failure to adhere to the rule could cost drivers and carriers serious fines. Drivers may have to pay up to \$2,750 for each offense, and carriers who allow drivers to use phones while driving could face an \$11,000 penalty.<sup>92</sup>

In addition, more than half of the states have passed their own laws banning texting while driving in an effort to curb distracted driving and enhance safety. While many trucking companies forbid the use of cell phones while driving, such laws will further limit use. In the future, all cell phone use for all U.S. drivers could be banned if the National Transportation Safety Board (NTSB) has its way.<sup>93</sup> The independent board, which makes recommendations to the U.S. government, wants to make it illegal for all U.S. drivers to send text messages or talk on cell phones—even if they are hands-free. So far, this proposal has not gained much traction in the government.

## ELECTRONIC ON-BOARD RECORDERS

The highway bill passed in June 2012 included a section requiring the FMCSA to issue a final rule mandating EOBRs for heavy-duty trucks by October 1, 2013, to go into effect in January 2014.<sup>94</sup> Prior to the highway bill obligation, the FMCSA had tried more than once to mandate EOBRs, first for carriers that frequently violated hours-of-service rules and then for all carriers.<sup>95</sup> But, due to technological requirement issues and a lawsuit claiming that EOBRs could be used by fleets to harass drivers, those rules did not come to fruition. The FMCSA essentially must start from scratch on the new proposed rules, which will address the harassment issue and update technical specifications for EOBRs.<sup>96</sup>

The agency initially said it would release proposed rules in March 2013. That deadline was not met, therefore delaying the effective date for requiring EOBRs. These rules would go into effect two to five years after they are made final, allowing carriers to prepare for installation and stagger implementation costs among their fleets, and also giving technical providers time to comply with specifications.<sup>97</sup> EOBRs in all vehicles would help to ensure compliance with HOS rules.

## DRUG/ALCOHOL CLEARINGHOUSE

The FMCSA could propose a rule creating a clearinghouse of drug- and alcohol-related violations for those with a commercial driver's license.<sup>98</sup> The central database would house verified positive drug and alcohol tests, as well as names of drivers who refuse to be tested.<sup>99</sup> Carriers would be required to report positive test results and refusals to test into the database.<sup>100</sup> Employers would be able to access this database when looking to hire potential drivers. The clearinghouse would likely have the positive consequence of removing drugged and drunk drivers from the industry.



## WEIGHT LIMITS

In part due to driver and equipment capacity shortages and environmental concerns, there is a push from trucking companies and agricultural organizations to increase interstate highway weight limits so freight continues to move efficiently. The Safe and Efficient Transportation Act, introduced in the House of Representatives' Committee on Agriculture in 2009, would allow heavier—but not larger—trucks to operate on interstates by giving states the option to increase their vehicle weight limits from 80,000 pounds to 97,000 pounds for six-axle trucks.<sup>101</sup>

Proponents argue that higher weight limits would cut the number of trucks leaving docks half full and, in effect, reduce the environmental impact, easing the flow of goods and improving safety. Additionally, more goods could be hauled on fewer trucks, limiting congestion. According to the legislation, the additional axle would maintain current braking capacity and weight-per-tire distribution and minimize pavement wear. A user fee would be imposed to fund bridge repair. The act was reintroduced in Congress in February 2011 as part of a highway reauthorization bill, but it was not passed.<sup>102</sup> The June 2012 highway bill includes authorization for a study of truck weights and sizes.<sup>103</sup>

## LABOR RELATIONS

The Employee Free Choice Act (EFCA), commonly referred to as the card check bill, was introduced in the U.S. Congress in March 2009. It is a proposed law that would change how unions can organize workers in the United States. Union membership is declining, and the proposed law would reverse that trend, according to union supporters, such as AFL-CIO, SEIU and the Change to Win Coalition.<sup>104</sup> Opponents argue that the card check law would strip workers of their right to a private and secret ballot when voting for the formation of a union. Such a law, they argue, could lead to coercion and intimidation in the workplace.<sup>105</sup>

Despite the present lack of support for the current version of EFCA in Congress, labor reform has been identified as a priority of the current administration, and some form of EFCA will likely continue to be pursued. In August 2010, President Obama vowed to the AFL-CIO that he would continue to fight to pass the card check bill.<sup>106</sup>

Another pro-union regulation was issued in December 2011 by the National Labor Relations Board (NLRB), which changes the rules governing union-representation elections. The rule shortens the time—by at least half—during which employers can respond to representation petitions.<sup>107</sup> The previous time lapse was 42 days, but this rulemaking cuts it to as few as 10 days. Opponents argue that “the ambush rule allows union bosses to spring elections on employers and workers before either has a fair chance to learn their rights,” according to the *Washington Times*.<sup>108</sup> The NLRB argues that the rule will limit unnecessary litigation in representation cases.<sup>109</sup>

Members of both chambers in Congress are working to pass laws

to counteract the NLRB's rulemaking. In November 2011, the House passed the Workforce Democracy and Fairness Act, which would, among other things, allow employers at least 14 days to prepare their case.<sup>110</sup>

## ELECTRONIC STABILITY CONTROL AND SPEED LIMITERS

The NHTSA recently released proposed rules that would mandate electronic stability control technology on new commercial vehicles.<sup>111</sup> The proposed electronic stability rule would help to curb rollovers and accidents involving loss of control, according to *Transport Topics*.<sup>112</sup> The agency says it thoroughly evaluated new technologies, conducted a cost and benefit analysis and reviewed manufacturers' production plans before releasing the proposed rules. Another proposed rule would require all trucks to be outfitted with speed limiters, eliminating a truck's ability to go above a set speed. The ATA supports the use of speed limiters, and the NHTSA insists that the devices would be of minimal cost of carriers.<sup>113</sup>

## THE RUAN APPROACH

There have been significant challenges facing the transportation industry over the past few years. However, the Ruan team remains proactive and is very well positioned for continued success in the years to come.

Ruan's Dedicated Contract Carriage (DCC) solution allows the company to become an extension of, and advocate for, its clients. Professional drivers run the same regional routes and work with the same clients daily, allowing them to fully understand the client's business and needs and make suggestions to improve the customer's bottom line.

Ruan has extensive inbound, outbound, cross dock and warehouse management experience. The Integrated Solutions service combines Ruan's capabilities in non-asset and asset-based solutions; optimal technology, including industry-leading supply chain event management and workflow; a sophisticated transportation planning engine to efficiently build shipments while reducing costs; and rich analytics and KPI reporting.

Ruan is taking proactive measures during the current period of limited driver capacity to address the quality and quantity of its driver pool. Ruan's recruitment program is superior, primarily due to aggressive measures including marketing, online job applications, a database of 50,000 top drivers, an intensive pre-employment screening program and a driver referral incentive program. This sophisticated system allows Ruan to find, qualify, hire and retain the best professional drivers.

Ruan is recognized as an employer of choice, providing attractive hours within a dedicated fleet environment. The company combines this with competitive pay, excellent benefits and communication with the workforce to encourage a healthy lifestyle and work-life balance.



This has allowed Ruan to maintain a driver retention rate that is five times the industry average. In an industry where driver turnover is close to 100 percent, that is a key differentiator.

Ruan is a leader in environmental initiatives. The company's environmental program provides guidelines and measures for limiting fuel consumption, reducing or eliminating materials for disposal, preventing pollution and effectively addressing unauthorized releases. Ruan is continuously examining new technologies and current processes to ensure that it minimizes its impact on the environment while achieving efficiency, responsiveness and cost savings for customers. Ruan is also using sustainable compressed natural gas (CNG) in some locations.

Ruan is an official SmartWay Partner and received the highest score in its SmartWay application review. In 2012, Ruan was one of 40 companies—representing fewer than 1 percent of SmartWay's partners—to be honored with a SmartWay Excellence Award as a true industry leader in freight supply chain environmental performance and energy efficiency. Ruan is also a part of the SmartWay Next Generation Council.

In addition to ensuring compliance with all government regulations, Ruan works within industry and professional associations to stay abreast of current and potential future changes. This allows Ruan to behave proactively to minimize the impact of changes. Ruan's Chairman John Ruan III is past chairman of the Board of Directors of the U.S. Chamber of Commerce and remains committed to representing the interests of the transportation industry.

Ruan has consistently won awards for safety performance and takes every opportunity to enforce its safety culture company-wide. Ruan's proprietary Megasafe Safety Program is making Ruan the safest fleet on the road.

Ruan utilizes the most effective technology to ensure compliance with government regulations. Ruan is proactively in the process of outfitting all of its trucks with PeopleNet electronic on-board recorders in an effort to further improve safety and DOT regulatory compliance. The company opted to do this even before it was federally mandated.

Ruan also utilizes RTMS2.0, a customized transportation management system that combines software from two of the leading TMS providers, other best-in-class logistics tools, including several load planning tools and a warehouse management application, and Ruan's custom intellectual property.

Ruan provides many specialized dedicated carriage solutions, including those requiring additional driver training and ongoing technical certification. Programs are in place to ensure that the greatest potential training and compliance results are met.

Ruan's continuous improvement approach is to engage the organization and clients to continually evaluate the way it operates in the distribution network. The company's quality department engages all of its clients in a collaborative manner to realize any and all opportunities that exist across client boundaries. Ruan's objective is to find the optimal way to control the cost and maximize the efficiency of a client's entire supply chain.

While the current environment provides many challenges, it also offers tremendous opportunity. Carriers that act proactively and strategically will gain a competitive advantage in the marketplace. Strong carriers, like Ruan, are leading the way in the 21st century.

# **RUAN**

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