

A banner image showing a white semi-truck with a trailer, set against a blue sky background. The truck is slightly out of focus, suggesting motion.

NATIONAL SUMMIT ON  
**Ag and Food Truck Transport**  
FOR THE FUTURE

## **A CHS Perspective**

Product Effects of Renewable/Alternative fuels and Related  
Commodities

Lack of Qualified Drivers Entering the Industry

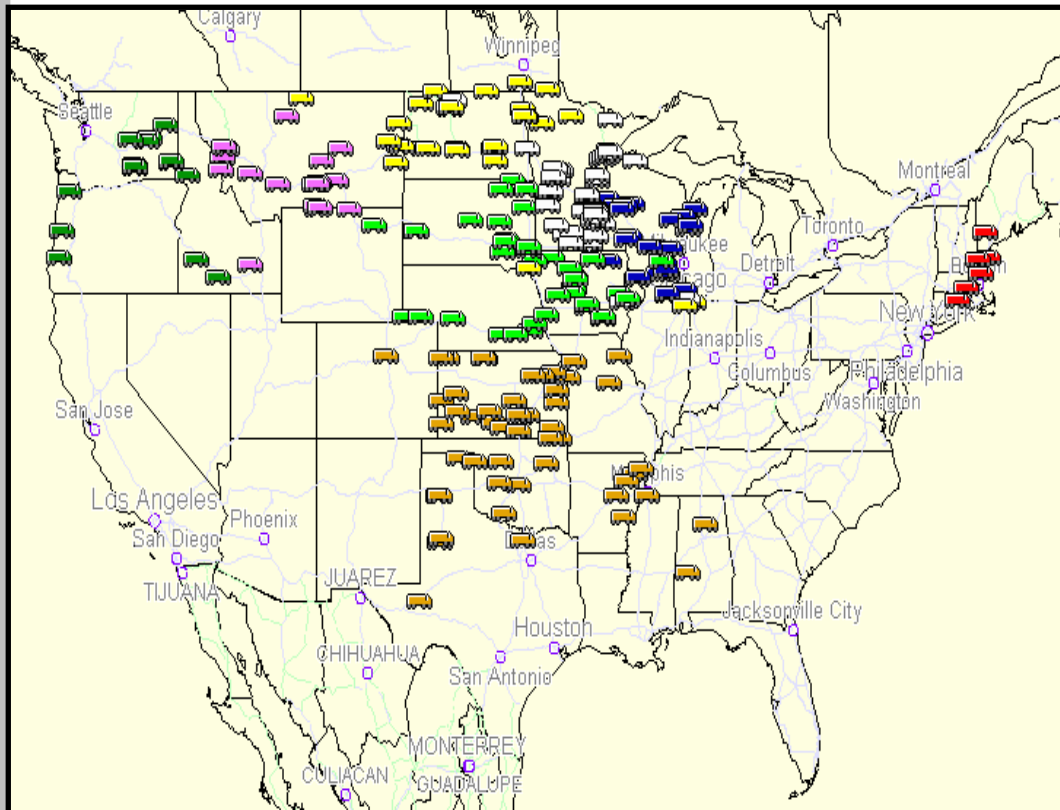
Cost of Doing Business

Summary of Implications

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# CHS Inc. Transportation Division



## Equipment

Tractors	320
Trailers	870
Owner Operators	150

## Annual miles

28,407,000

## Annual product quantities

Refined Fuels	850,000,000 gal
Propane	300,000,000 gal
Anhydrous Ammonia	325,000 ton



## Renewable/Alternative Fuels

- Growing at rapid pace.
- Use of cellulosic materials.
- At times outpacing available transportation.
- Carriers may prefer renewable/alternative fuels business over normal refined fuels business.



## Renewable/Alternative Fuels (cont'd)

- Could put pressure on serving traditional refined fuels business.
- Trailer manufacturers are out 18 – 24 months.
- Long term contracts may become necessary with carriers in order for them to make investments for a particular area.
- New business will require new trucks and trailers.
- Not that much excess capacity is available.

## Anhydrous Ammonia (NH<sub>3</sub>)

- Estimated increase in corn acres between 6 – 9 million acres.
- Higher corn prices and more corn acres will promote higher rates of nitrogen use and increased sales of nitrogen tons.
- Anticipate NH<sub>3</sub> business will grow in the near future; however plant genetics and possible switch to cellulosic materials may reduce nitrogen requirements in the distant future.
- There is not as much equipment available after a five year downturn in business.



## Anhydrous Ammonia (NH<sub>3</sub>) (cont'd)

- In most cases carriers have “right sized” trailer counts.
- Some carriers have exited or severely reduced tank counts.
- Delivery window continues to shrink.
- Seasonal owner operators are harder to find and not as willing to leave home area.

## Liquid Propane Gas (LPG)

- Supply and storage will continue to be a huge issue for propane.
  - There has been no substantial change in infrastructure. Expect continued spot outages and having to travel longer distances to find supply for both corn drying and home heating.
- Hybrid genetics may continue to take moisture out of corn; however, Fall crossover from corn drying to Fall applications of  $\text{NH}_3$  will continue to tighten with more corn acres going into production.



## Liquid Propane Gas (LPG) (cont'd)

- Vendors and manufacturers may contract services and guarantee weekly revenues to transporters in order to guarantee distribution to the country.
  - As an example, we currently move about 30 units from the Dakotas into Oklahoma, Kansas, and Nebraska to help with demand and lack of assets.
- Equipment and drivers will be in demand and, in turn, will demand a premium for these specialized services.



## Grain

- Many of our seasonal drivers are committing to local hauls of grains and fertilizers. As this business grows, so will the need for more trucks and drivers which will lead to less driver availability for the  $\text{NH}_3$  and LPG industry seasonal demands.
- Where the dried distillers grains (DDG's) go will also determine amount of trucks required; not only to feed the refinery's needs, but to deliver or move the DDG's to their final destinations.

## Grain (cont'd)

- The majority of this market is currently tied to local farmers and truckers who live in and around processing plants. This market is also very competitive and favors local residents.
- New renewable/alternative fuels production and capacity will add to truck and driver shortages.
- As more plants are constructed the need for local cartage of beans, corn and cellulosic materials will grow.



## Shortage of Qualified Drivers

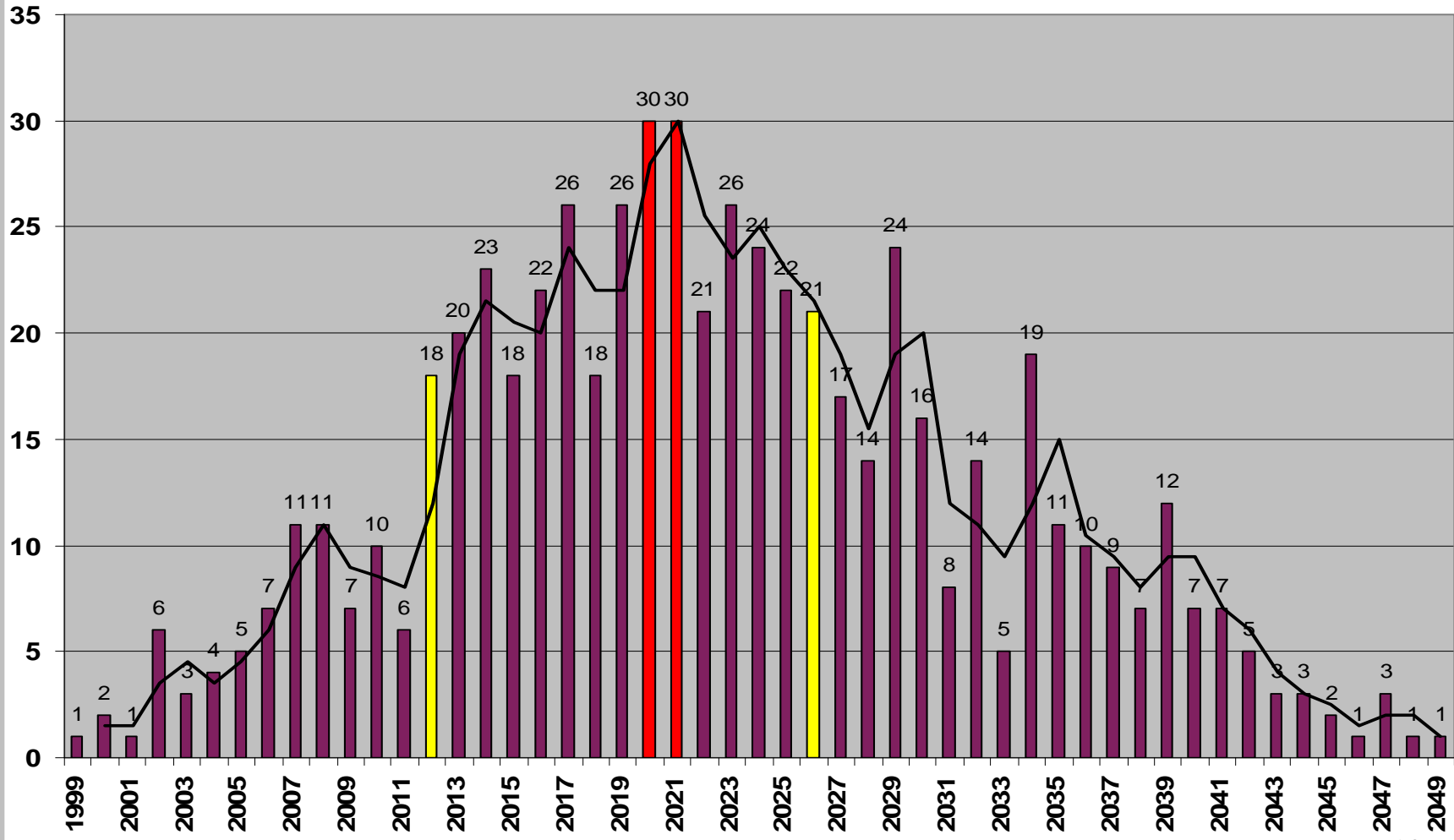
- Current shortfall of drivers is estimated to be >30,000.
- Aging work force.
- By 2012, an increased shortage of qualified drivers due to numerous drivers starting to retire.
- American Trucking Associations estimate the cost of replacing a driver is between \$8,000 and \$25,000.

# Shortage of Qualified Drivers (cont'd)

- Drivers are not entering the ag or hazmat field.
  - Drivers required to have hazmat endorsements and go through background checks (drivers giving up endorsement).
  - Undesirable work schedules.
  - Pricing volatility.
  - Hassle of crossing borders, small carriers do not want to deal with it and the waiting times.
  - Owner operators will continue to be very difficult to find for seasonal work (LPG/NH<sub>3</sub>). They want year around work, higher insurance costs, power take offs (PTOs) and required endorsements.



**All Drivers Retiring Each Year at Age 65**  
**345 (56%) of our 617 drivers will retire between 2012 and 2026!!**





## Cost of Doing Business

- Driver pay and recruitment.
- Parts cost increase >25% in three years.
- Trucks \$83,000 in 2004; \$97,000 in 2006. Will be >\$111,000 in 2008.
- Trailers \$72,000 in 2004; \$83,000 in 2006. Will be >\$95,000 in 2008.
- Overall inflation 2 – 3% annually.
- Expect future rates to increase by a minimum of 3 – 5% per year as driver shortage and freight over capacity grows.
  - Drivers will demand better schedules and higher pay, specifically in handling hazardous materials.

## Future Implications

- Transportation companies may have more to do with delivery schedules and inventory management than vendors.
- Seasonal business will continue to be harder to handle and service (i.e. LPG and NH<sub>3</sub>).
- Carriers could reallocate assets and migrate toward more steady, dependable work and away from seasonal, highly demanding freight.
- Current and future refined fuels equipment is adequate if normal supply points and refineries are active; unless carriers migrate to more reliable business such as renewable/alternative fuels.

## Future Implications (cont'd)

- Continual shortage of drivers.
- Shortage of equipment.
- Inventory problems.
- Increasing costs of distribution.
- Contracting of services to assure transportation of products.
- Rapid growth.
- Finding dependable transportation partner/partners is key.





## From Our Perspective

- There is a continued and rising need for agricultural exemptions.
- Continue to research increased payloads; even a 5% increase would reduce congestion, fuel consumption and the need for additional services and drivers.
- Consider reducing the minimum age requirement if specific and designed training programs are developed.
- There is a need to invest in our highways; however, we should carefully monitor the future privatization of our highway systems.
  - We believe privatization will only lead to more incurred costs, delayed deliveries and shortened available hours of drivers.