General Economic Themes

1. Economy is quite fragmented, which translates into a uneven trucking volumes. Probability of a recession has increased (25% chance over next six months), but remains fairly low.

2. Current inventory correction is significant and taking longer than anticipated.


4. Solid job growth, modest acceleration in wages, and drop in gasoline prices will support consumer spending in 2016.

5. Housing is one of the better sectors of the economy, supported by household formation.

6. Bottom line: GDP growth remains the same in 2016 (2.4%) as in 2015, then accelerates slightly in 2017 (2.8%) on strength in consumer spending and housing.
Quarterly Real GDP & Forecasts

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1 2014</th>
<th>Q1 2015</th>
<th>Q1 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>-0.9%</td>
<td>4.6%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2015</td>
<td>0.6%</td>
<td>4.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>2016</td>
<td>0.7%</td>
<td>3.9%</td>
<td>2.0%</td>
</tr>
<tr>
<td>2017</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Sources: BEA & ATA

2014 | 2015 | 2016 | 2017
-----|------|------|------
2.4% | 2.4% | 2.4% | 2.8%
Real Personal Disposable Income Growth

Sources: BEA & ATA
Retail Sales
(Q1 2000 = 100)

Source: Census Bureau
Retail Sales

Source: Census Bureau

- **2000**
  - Brick & Mortar: 99%
  - E-Commerce: 1%

- **2015**
  - Brick & Mortar: 93%
  - E-Commerce: 7%
Household Formation will Support Further Gains in Housing Starts

Housing Starts
(Monthly; Annualized Rate; Millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.S.</td>
<td>1 Mil</td>
<td>1.11 M</td>
<td>1.23 M</td>
</tr>
</tbody>
</table>

Sources: Census, IHS & ATA
ISM Indexes
(Manufacturing vs Service Sector)

Through January 2016

Source: Institute for Supply Chain Management
The ISM index has predicted all 10 recessions since 1950, plus 14 more.

Source: Institute for Supply Chain Management
Total Business Inventory-to-Sales Ratio

(Data adjusted for seasonal, holiday, and trading-day differences, but not price changes)
US Crude Oil Data

Sources: Baker Hughes & EIA
U.S. Energy Revolution

U.S. crude oil production
million barrels per day

U.S. maximum production level of
9.6 million barrels per day in 1970

Projection – Reference Case

1990  2000  2010  2020  2030  2040

Tight oil
Lower 48 offshore
Other lower 48 onshore
Alaska

Source: EIA, Annual Energy Outlook 2015 Reference Case
General Trucking Themes

1. Truck freight volumes weakened considerably through 2015. Growth this year will remain uneven by sector.
2. The industry is now adding a little OTR capacity (mainly small TLs and LTLs), but tractor counts remain well below all-time highs. Fleets are adding trailers to boost trailer to tractor ratio. Expect capacity to tighten through 2016 and into 2017 as volumes improve and ELD mandate gets closer.
3. Revenue per mile continues to grow for contract freight, but weakening. Spot market is very soft.
4. Driver shortage is remains bad, but combination of pay hikes and oil field weakness helped.
5. Fleets continue to see rising costs x fuel. Fleets using fuel savings to pay drivers more and replace trucks.
6. Many small fleets were thrown 2 life lines in 2014: Drop in fuel prices and surge in spot market rates, which means they can pay drivers more and replace tractors. However, this group will come under pressure from ELDs and weaker spot market.
Uneven Economy = Uneven Truck Freight Volumes
Growth in Various Trucking Volume Measures
(Year-over-Year Percent Change)

Source: ATA's Trucking Activity Report
For-Hire TL Volumes

(All data is a 3-month moving average; Includes all types of TL freight)

Source: ATA's Trucking Activity Report
For-Hire Dry Van TL Volumes

(All data is a 3-month moving average)

Source: ATA’s Trucking Activity Report
For-Hire Refrigerated TL Volumes

(All data is a 3-month moving average)

Source: ATA’s Trucking Activity Report
TL Loads and LTL Tonnage Growth

Source: ATA's Trucking Activity Report
Truck Capacity Trends
Tractor Count Changes

Truckload
- 3.1%
- 0.7%
- 1%
- 2%
- 3%
- 4%
- 5%
- 6%
- 7%

2014 2015

LTL
- 4.0%
- 5.6%
- 6%
- 7%

Source: ATA’s Trucking Activity Report
2015 will be the peak: total retail Class 8 truck sales are projected to decline 13% in 2016, with tractor sales falling slightly more: -15.4%.
US Trailer Sales

Dry Vans

Source: ATA & ACT Research

Reefer Vans

+15.6%

+20.4%
Revenue Trends
Pricing Proxy Changes by Carrier Type

Includes contract freight and spot market loads; excludes FSC

Source: ATA’s Trucking Activity Report
Cost Trends
Operational per Mile Costs of Trucking: 2014

According to ACT Research, Class 8 tractor prices have increased 30% over the last 10 years.

After aggressively increasing pay over the last two years, many TL fleets are still compelled to raise driver pay in 2016.

Source: ATRI's Analysis of the Operational Cost of Trucking
# Diesel Fuel Price

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel</td>
<td>$3.83</td>
<td>$2.71</td>
<td>$2.22</td>
<td>$2.58</td>
</tr>
<tr>
<td>Crude (WTI)</td>
<td>$93.17</td>
<td>$48.67</td>
<td>$37.59</td>
<td>$50.00</td>
</tr>
</tbody>
</table>

## Diesel and Crude (WTI) Price Trends

- Diesel Fuel Prices:
  - 2014: $3.83
  - 2015: $2.71
  - 2016: $2.22
  - 2017: $2.58

- Crude (WTI) Prices:
  - 2014: $93.17
  - 2015: $48.67
  - 2016: $37.59
  - 2017: $50.00

**Source:** EIA
Drivers
Annualized Line-haul Driver Turnover Rates

2015 is for the first three quarters of the year.
Source: ATA’s Trucking Activity Report
The Driver Shortage

Shortage was 48,000 in 2015. At current trends, it would balloon to 175,000 in 2024.

Source: ATA's Truck Driver Shortage Analysis 2015
New Drivers Needed by Reason 2015-2024

- Drivers Leaving Before Retirement
- Drivers Pushed Out of the Industry
- Industry Growth
- Retirements

Source: ATA's Truck Driver Shortage Analysis 2015
For more information, see ATA’s recent study at:

www.trucking.org
Driver Shortage: Causes

1. Demographics
   • Age
   • Women
2. Lifestyle
3. More alternatives today with equal or more pay and home every night
4. Regulations
5. It’s a big responsibility and some people don’t want it
6. Overall – many, many reasons – So no one solution
Driver Shortage: Solutions/Market Reactions

1. Pay is increasing
   1. Base pay
   2. Many fleets are changing pay models where possible
   3. Sign-on bonuses
   4. Benefits

2. Everyone needs to treat drivers better
   1. Don’t hold up drivers at docks
   2. Shippers: delivery windows are better than appointments
   3. Shippers need to work with their customers
Driver Shortage: Solutions/Market Reactions

3. Lower interstate driving age/graduated CDL
4. More at-home time where possible
5. Fix congestion/infrastructure – Yes, it adds to the problem as drivers are sick of sitting in traffic
6. Improved driver image: TMAF
7. Former Military – Hiring Our Heroes
8. Autonomous trucks?
Driver Shortage: ELDs

1. Rough estimate: only 20% of tractors are equipped with ELDs today.
2. TL fleets that have already adopted are generally larger and more sophisticated than most of those that haven’t. So, productivity impact could be larger than fleets have seen so far.
3. What if just 1% to 3% of drivers leave the market for a host of reasons, including cheaters, anti-technology, anti-big government, or just don’t want to change?
4. Some carriers are likely to exit the industry.
Refrigerated Truck Freight Market Analysis

AMERICAN TRUCKING ASSOCIATIONS

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