The Quality and Future of Freight Jobs
Key Points

- Deregulation and technology have transformed freight jobs
- That transformation disempowered and deskilled labor
- Equally important changes are coming from Ecommerce

The main concern is not whether we will have jobs but the location and quality of those jobs
Today’s trucking industry

Job quality and problems vary

- **Full truckload driver**
  Average earnings: $47,000 – $54,000

- **Parcel driver**
  Average earnings: $60,000

- **Delivery driver**
  Average earnings: $36,000

- **Port driver**
  Average earnings: $29,000 – $35,000

- **Less-than-truckload driver**
  Average earnings: $69,000
A robot apocalypse?
Fears of massive job loss

1.8 million American truck drivers could lose their jobs to robots. What then?

Self-Driving Trucks Are Going to Hit Us Like a Human-Driven Truck

GOLDMAN SACHS: Self-driving trucks will kill 300,000 jobs per year
Self-driving Truck Research

Method:

1. Understand the technology
2. Develop possible scenarios of adoption
3. Overlay those scenarios on the existing industry to estimate potential labor impacts
4. Identify alternative adoption scenarios and policy responses
6 potential adoption scenarios

Human-human platooning

Human-drone platooning

Highway automation + drone operation

Autopilot

Highway exit-to-exit automation

Facility-to-facility automation
A likely adoption scenario
<table>
<thead>
<tr>
<th>Key segments of the trucking industry</th>
<th>Average annual wage</th>
<th>Number of drivers</th>
<th>Independent contractors</th>
<th>Potential impact of autonomous trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LONG DISTANCE DRIVING</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Full truckload</td>
<td>$46,641 – $53,690</td>
<td>211,000</td>
<td>Common</td>
<td>Significant job loss</td>
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<tr>
<td>Less-than-truckload</td>
<td>$69,208</td>
<td>51,000</td>
<td>Uncommon</td>
<td>Significant job loss</td>
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<tr>
<td>Parcel</td>
<td>$59,660</td>
<td>32,000</td>
<td>Uncommon</td>
<td>Significant job loss</td>
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<td><strong>LOCAL DRIVING</strong></td>
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<tr>
<td>Ports</td>
<td>$28,783 (contractors)</td>
<td>75,000</td>
<td>Predominant</td>
<td>Uncertain</td>
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<td></td>
<td>$35,000 (employees)</td>
<td></td>
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<td>Pickup and delivery</td>
<td>$35,610</td>
<td>877,670</td>
<td>Mixed, potential to shift towards contractors</td>
<td>Strong job growth</td>
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<tr>
<td><strong>POTENTIAL NEW SEGMENT (PROJECTED)</strong></td>
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<tr>
<td>Autonomous truck ports</td>
<td>?</td>
<td>100,000+</td>
<td>?</td>
<td>Strong job growth</td>
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</table>
The Bigger Picture

We are in a period of tremendous change

1. Ecommerce
2. Regulatory and legal contests
3. Digitization of freight
4. Climate and clean air policies
5. Autonomy

Even without self-driving trucks, freight jobs will look very different in 10-20 years.

The goal shouldn’t be to predict outcomes, but to shape them with smart policies.
Ecommerce + Technology = ?!
What Will Last-mile Delivery Jobs Look Like?

Audra Pankrez recently loaded her Kia Soul with 22 Amazon packages for deliveries while 10-year-old son Shane rode along.

– The Kansas City Star
Public policy framework for trucking industry efficiency

Recognizes that:
1. Freight movement is work done on public infrastructure and that we all have an interest in the outcomes.
2. Good jobs incentivize efficient outcomes.
3. The market will not produce optimal outcomes without policy interventions.

Thank You