2018 PA Automated Vehicle Summit

Session 2b. Goods Movement, Logistics, and Automated Freight

FedEx Ground Overview

Ted Dengel, Managing Director, Operations Technology

April 09, 2018
ECommerce is driving many changes in the shipping and logistics industry

Unprecedented growth

New channels of distribution

Common locations – land use concerns

Impact on labor is driving automation
  • Inside the operation
  • Over the road (in addition to the already trending shortage)

Package and shipment characteristics
  • Size
  • Quantity
  • Rural delivery locations
Automated vehicle technology is evolving at a rapid pace, but there will be a long adoption curve.

There will be a progression of technology:
- In-building autonomous vehicles
- In-yard autonomous vehicles
- On highway platooning
- On highway point to point
- On and off highway
- In city / neighborhood

Ground-based vs. Air-based (drone)
While there are benefits to adopting automated vehicles, significant challenges must still be addressed.

**Benefits**
- Safety
- Labor (only if truly realized)
- Opportunity to provide infrastructure data

**Over The Highway Challenges**
- Integration with contracted workforce models
- Dynamic environments

**Last Mile Delivery Challenges**
- Variability
- Security
- Efficiency