



# 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

