Urban Freight Planning: A Trucking Perspective 2019 I-NUF

Jeffrey Short
Vice President
American Transportation
Research Institute



ATRI

Trucking industry's not-for-profit research organization

- Safety
- Mobility
- Economic Analysis
- Technology
- Environment

www.TruckingResearch.org



Board of Directors





















Freight











Research Advisory Committee











WE KEEP AMERICA MOVING































COMMERCIAL VEHICLE

























2019 Top Industry Issues

- 1. Driver Shortage
- 2. Hours-of-Service
- 3. Driver Compensation
- 4. Delay at Customer Facilities
- 5. Truck Parking
- **6.** Driver Retention
- 7. ELD Mandate
- 8. CSA
- 9. Infrastructure/Congestion
- 10. Economy

CRITICAL ISSUES IN THE TRUCKING INDUSTRY - 2019



Presented to the American Trucking Associations

Prepared by

The American Transportation Research Institute
October 2019



950 North Glebe Road Arlington, VA 22203 (703)838-1966 ATRI@trucking.org TruckingResearch.org



Driver is Central

Retention

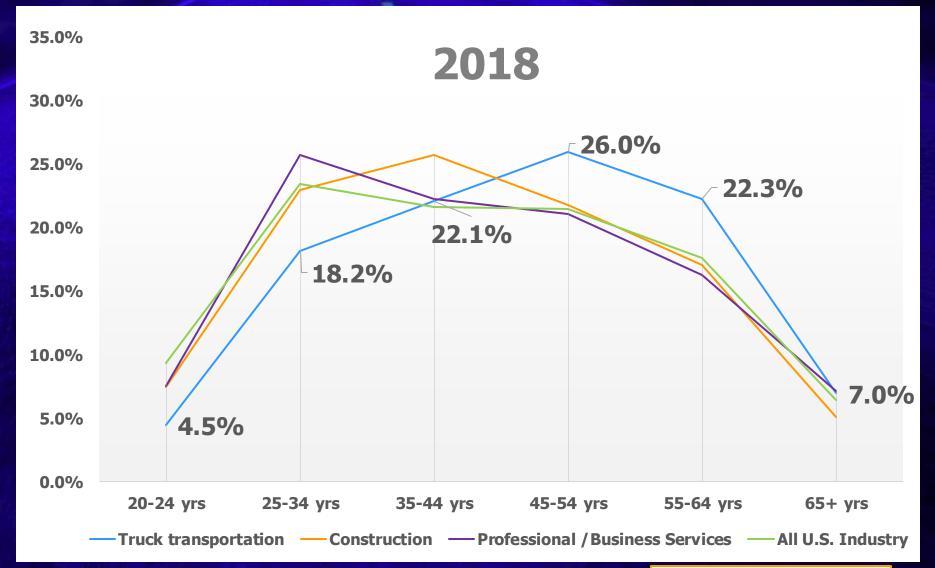
Shortage

Compensation

TRUCK DRIVER

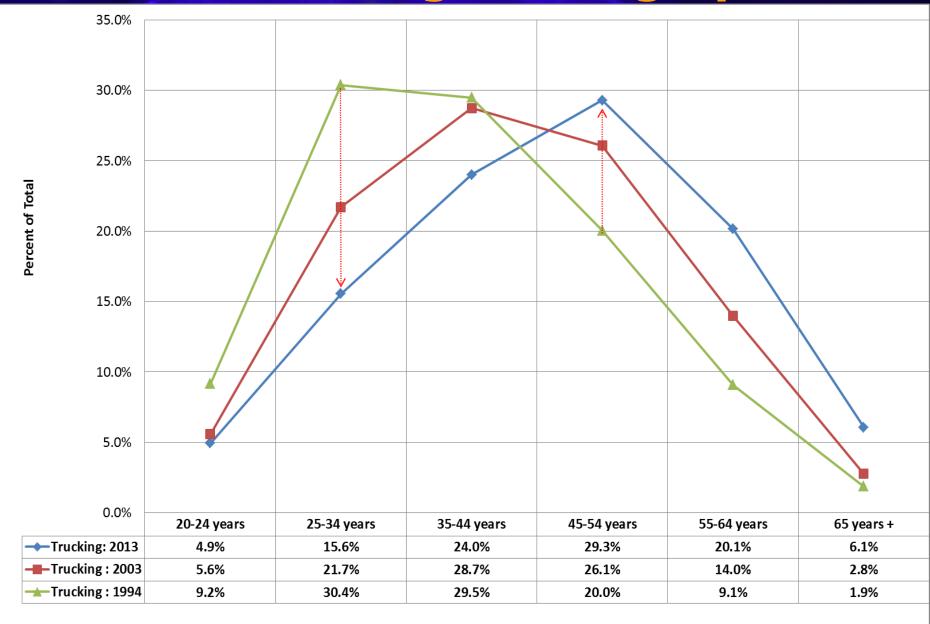


Truck Driver Age Demographics





Truck Driver Age Demographics



Impact of the Urban Freight Environment

Parking (Staging) Delivery Issues Parking (Rest) (Detention) **TRUCK DRIVER SATISFACTION HOS** Issues Congestion



Urban Freight



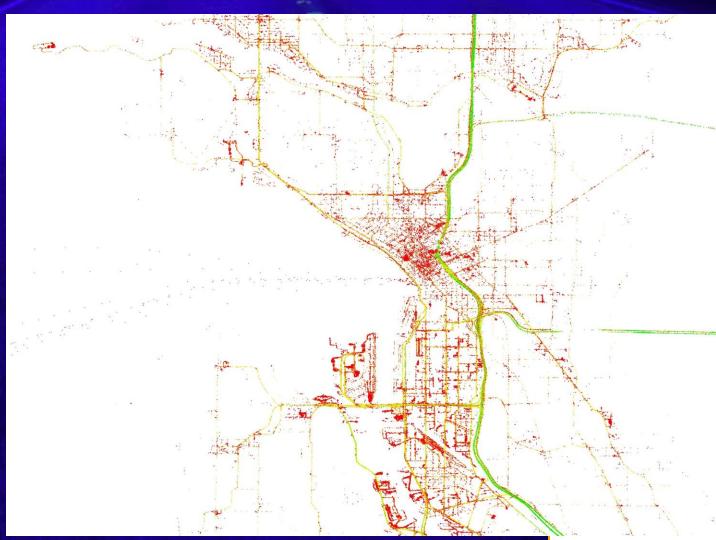


Urban Freight





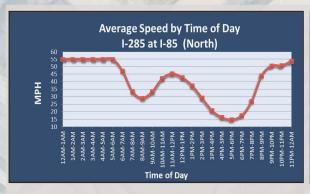
Urban Freight





Urban Freight - Operational Inefficiencies

Atlanta, GA: I-285 at I-85 (North)



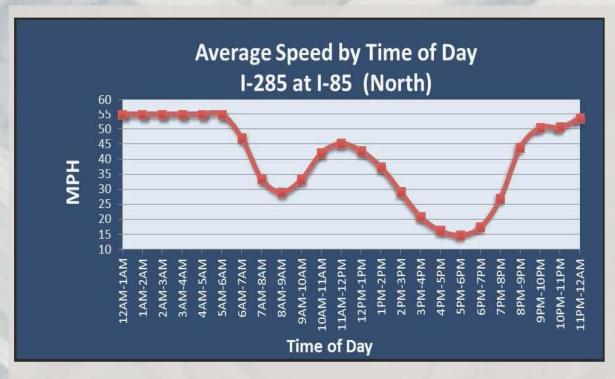
Summary	
National Ranking by Congestion Index	2
Average Speed	34.8
Peak Average Speed	22.9
Nonpeak Average Speed	40.6
Nonpeak/Peak Ratio	1.77
Peak Average Speed Percent Change 2018 - 2019	-7.35%







Atlanta, GA: I-285 at I-85 (North)

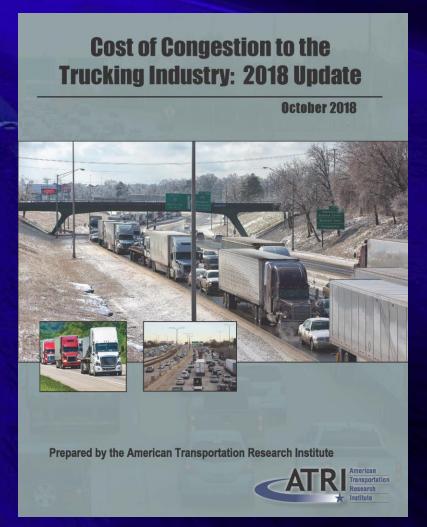


Summary	
National Ranking by Congestion Index	2
Average Speed	34.8
Peak Average Speed	22.9
Nonpeak Average Speed	40.6
Nonpeak/Peak Ratio	1.77
Peak Average Speed Percent Change 2018 - 2019	-7.35%



Cost of Congestion

- Congestion on U.S. NHS cost trucking industry \$74.5B in 2016
- Lost productivity = 1.2 billion hours
 - Equates to 425,533 commercial drivers sitting idle for entire year





Congestion Costs the Economy

ATRI research findings:



\$74.5 billion

Annual cost to the trucking industry as a result of congestion on the nation's highways



1.2 billion

Lost hours of trucking industry productivity due to congestion



425,533

Equivalent number of truck drivers sitting idle for an entire year





The Nation's Top Truck

BOTTLENECKS

2019

locations dropped by nearly 9% States with Most Bottlenecks

Year-over-year average truck speeds at the top 10

TX......13 GA.......6 CA......7 WA.......6 CT......6 MD/DC...5

MN......5 NY.....5 PA.....5

IL4 IN4 TN4

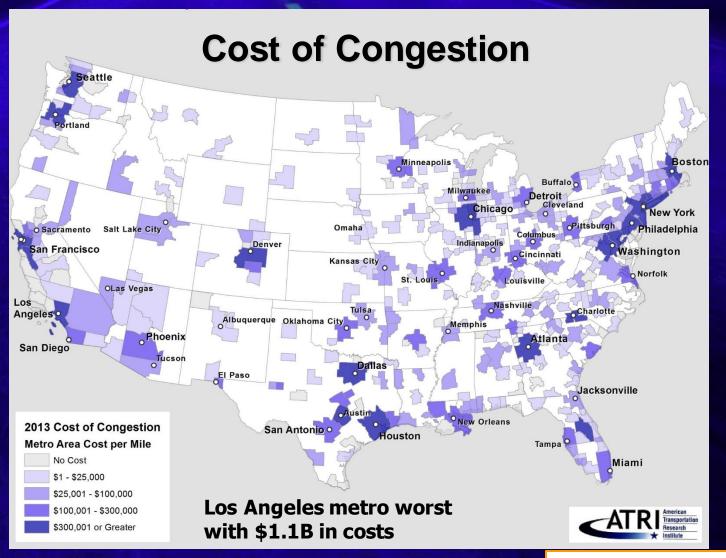


To view the top 100 list of truck bottlenecks along with detailed profiles for each location, please visit ATRI's website:

TruckingResearch.org







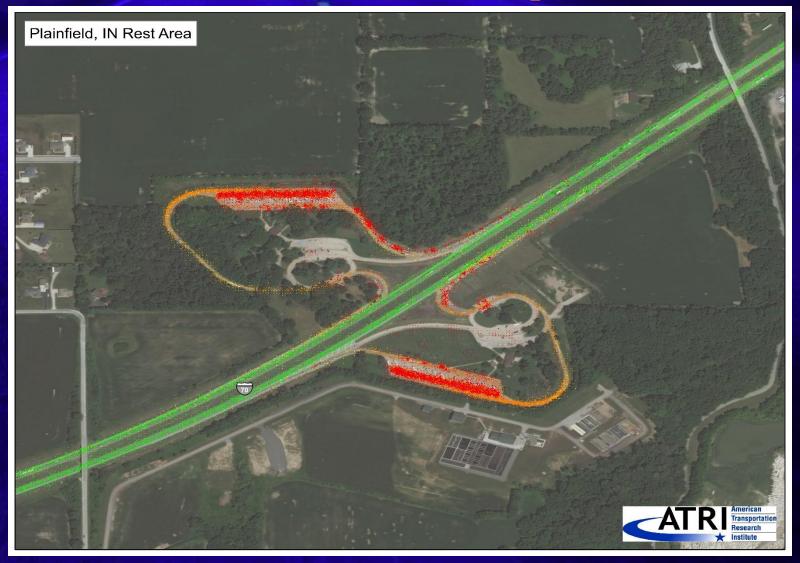


Impact of the Urban Freight Environment

Parking (Staging) Delivery Issues Parking (Rest) (Detention) **TRUCK DRIVER SATISFACTION HOS** Issues Congestion

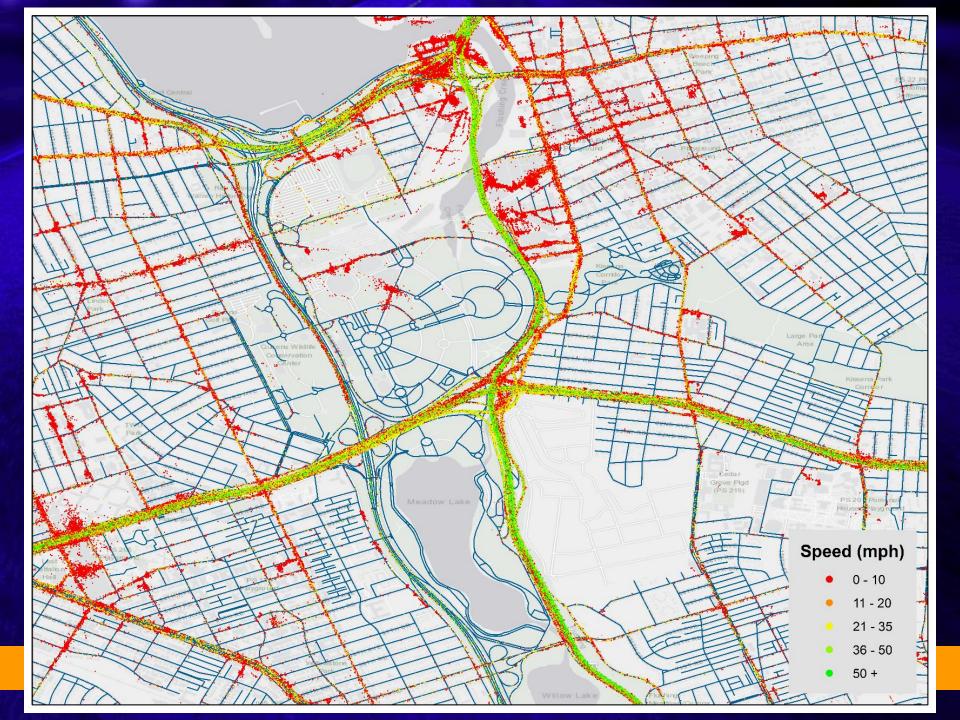


No Vacancy











Impact of the Urban Freight Environment

Parking (Staging) Delivery Issues Parking (Rest) (Detention) **TRUCK DRIVER SATISFACTION HOS** Issues Congestion



Detention Time Impacts

- Multi-year analysis of detention impacts on industry safety and productivity
- Based on over 1,900 driver and motor carrier surveys collected in 2014 and 2018



September 2019

Erin Speltz Research Analyst American Transportation Research Institute Minneapolis, MN

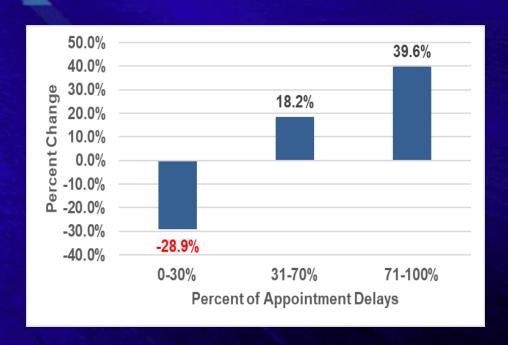
Dan Murray Senior Vice President American Transportation Research Institute Minneapolis, MN





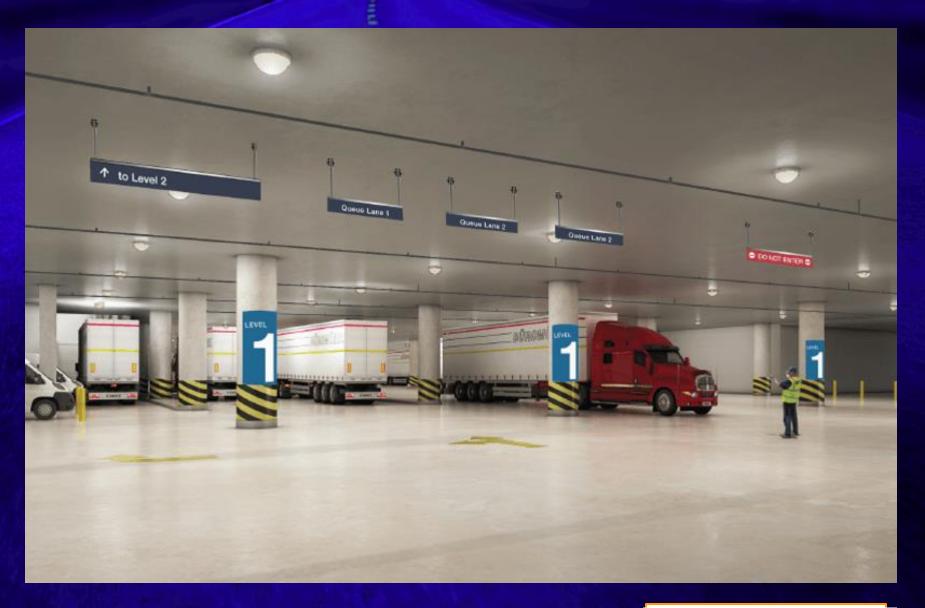
Detention Getting Worse

- Between 2014 and 2018, drivers reported 27.4% increase in delays of 6+ hours
- Nearly 40% increase in drivers reporting majority of appointments delayed due to customer actions











Impact of the Urban Freight Environment

Parking (Staging) Delivery Issues Parking (Rest) (Detention) **TRUCK DRIVER SATISFACTION HOS** Issues Congestion



Hours of Service

- On Duty Limit 14 hours
- Drive Time Limit 11 hours
- Rest Break 10 hours
 - 30 Minute Rest Break after 8 hr on duty







Urban Planning Solutions

- Trucks are Essential to Urban Regions
 - Therefore:
 - Include a Trucking Component in Urban Planning
 - Focus on the Key Issues
 - Efficient Access to the Urban Environment
 - Adequate Infrastructure
 - Choke Points
 - Parking
 - Delivery

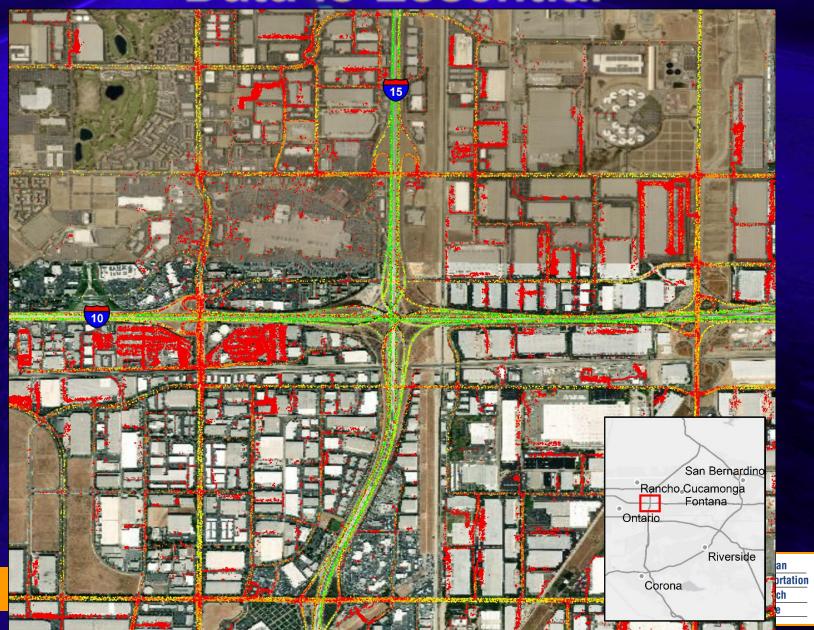


Urban Planning Understand the Driver

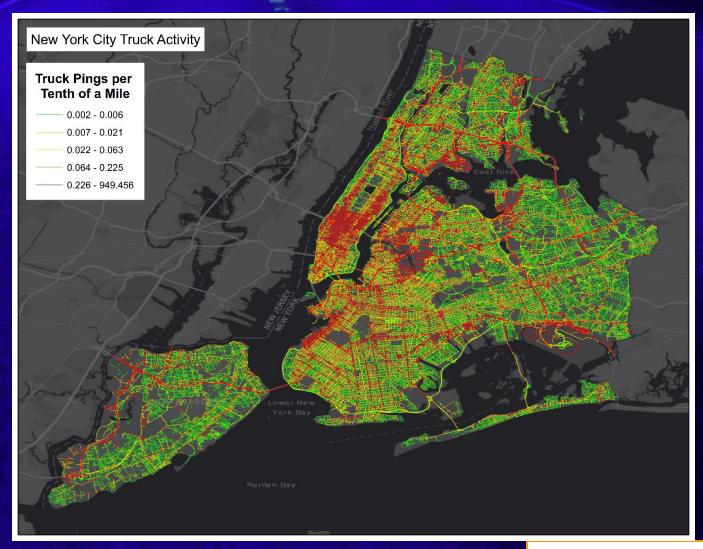
- Planning and Policy from the Perspective of the Driver
 - Who is the driver delivering to?
 - What is the driver delivering?
 - Why is the driver in your city?
 - Where with the driver travel, and to what destination?
 - When does the driver need to be there?



Data is Essential



Data is Essential





Questions?

Jeffrey Short
jshort@trucking.org
770-432-0628
www.TruckingResearch.org

