Urban Freight Transportation in 2035

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Our Goal ("The Why")

- Efficient, safe and sustainable urban freight (and people) movement…
- …because it is vital for the economic prosperity of any region, and…
- …is critical to manufacturing, agriculture, retail and industry.

What We Know (Are Experiencing)

- Rapid worldwide urban population growth
- Strain on infrastructure / cities
- Competition for space
- Connectedness expectation
- Expectation of “immediate” products and services
- Rapid technological advances
- Politicized environments
- Limited resources
- Accountability / transparency
- Data / information needs

This Climate Causes…

- A complex urban ecosystem
- “Last mile” (and shorter) challenges
- Competition for parking (curb space & “suburban”)
- Congestion, unreliability
- Inefficiencies and unsustainable, unsafe practices
- Frustration and impatience

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…but These Opportunities

- Applied technological innovation
  - Connected, automated, shared, electric (CASE) “vehicles”
  - Delivery robots
  - Drones
- Stakeholder engagement
- Freight importance / consideration
  - Funding, federal performance requirements, state freight plans
- Education and training

What to Expect (and What to Do)

- Continued misunderstanding/ignorance unless…
  - …we craft/deliver our urban freight transportation story
  - …we communicate why stakeholders should care (ROI, environ., etc.)
- Shifting/different objectives (political climate)
  - Consider your message through varied lenses
- Find your seat at (all) the tables
  - Engage, inform all stakeholders (throughout supply chains)
  - FACs, MPOs, industry events, etc.
- Changes to educational programs
  - Multidisciplinary
  - Soft skills
  - Make it as exciting (as it really is!)

What to Expect (and What to Do) (cont.)

- Continued connected expectation (and consumer impatience)
  - To the next level!
- Continued innovation/technology
  - Stay informed
  - Constant change and opportunity
  - For example: fulfillment centers on trains (Amazon) (?), CASE, delivery drones, robots, “the next big thing”
- Look for “supply-side” and “demand-side” freight solutions
  - Multidisciplinary teams
  - Curb management innovation, automation, regulatory opportunities (building codes), design (of vehicles, systems), behavioral changes

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What to Expect (and What to Do) (cont.)

- (Data) to better understand system usage…
  - Internet of Things to inform
  - Blockchain opportunity (for supply chain intel)
  - Mine V2I and/or V2V
  - Bills of lading, business transactions (B2B)
- …to better understand
  - Where, when, how and why do users desire to travel/ship goods?
  - What multi-modal system do they need?

What to Expect (and What to Do) (cont.)

- Data scientist needs (and freight education)
  - Tie to educational programs (professional development)
  - Incentivize (to keep) in public sector
- Peer exchanges & share experiences
  - VREF
  - I-NUF
  - EC-FHWA
  - TRB (growing interest/size)

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