TRENDS FOR FIRST AND LAST MILE FREIGHT IN MINNESOTA

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COVERING THE FIRST AND LAST MILES

E-Commerce and Related Developments:
- Is it Available?
- How Soon Can I Get It?
- Clothing
- Groceries
- Cars
- Services

IS THIS A PROBLEM?
- “Last Mile” Final Leg to the End User’s Door
- Traditionally Covered by the End Users
  - Themselves, now becoming responsibility of the Shipper and Carrier
  - Amazon leading the way (FAA Application to Use Drones . . . )
- 25 Billion Parcels Expected to Ship in 2025
- Many Generated by E-Commerce Orders
- Increasing Numbers of Customers Expecting Expedited (Same Day or “Instant”) Delivery
- Launch Point is the Warehouse

“Online customers expect speedy delivery of their purchases for little or no cost, as well as transparency and the ability to return products. But at the end of the day, they don’t care about the complex logistics planning and execution needed to make that possible.”

ADAPTATIONS
- Ways to Cover the Last Mile Are Proliferating
  - In-store pick-up
  - Lockers, kiosks
  - 3D Printing

YOUR RATE OF CHANGE MAY VARY . . .
- Highly automated commercial vehicles
  - with a remote (human) backup
  - will cover 60 to 70 percent of all miles driven in the United States
  - by the first half of the 2020s
MEANWHILE, BACK AT THE WAREHOUSE

- Technology also improving times to sort, ship and track
- IoT sensors on packages provide real-time data for customer response and in-house analysis
- 3rd party vendors also providing this service
- Large companies developing or purchasing for in-house
- Humans control the work, rather than doing it

MESSAGES FOR MINNESOTA

- Advances in "last mile" delivery will allow Minnesotans to receive goods and services more rapidly
- Use of MnPASS (or other Priority) Lanes
- Platooning
- Many Minnesota-based companies are positioned to lower cost and improve service
- Some already focus on rapid delivery of customized orders
- Others seeking to leverage these innovations (e.g., Target)

But these benefits are at risk:
- While change will not occur so rapidly as to immediately threaten existing successful techniques and operation
- Innovation will not occur uniformly across the state
- Improvements may favor areas where greatest wealth currently exists

To maximize the long-term benefit of these innovations, need continued investment in:
- Broadband
- Highways
- Especially in rural areas

SO, TO CONCLUDE

- Technologies and practices are still developing
- Ultimate impact unclear on industry
- Urban form, and Minnesota's transportation system
- Continued need to monitor trends
- Communicate issues
- Long-term coordination with public and private partners will lead to most successful implementation

THANK YOU - QUESTIONS!

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