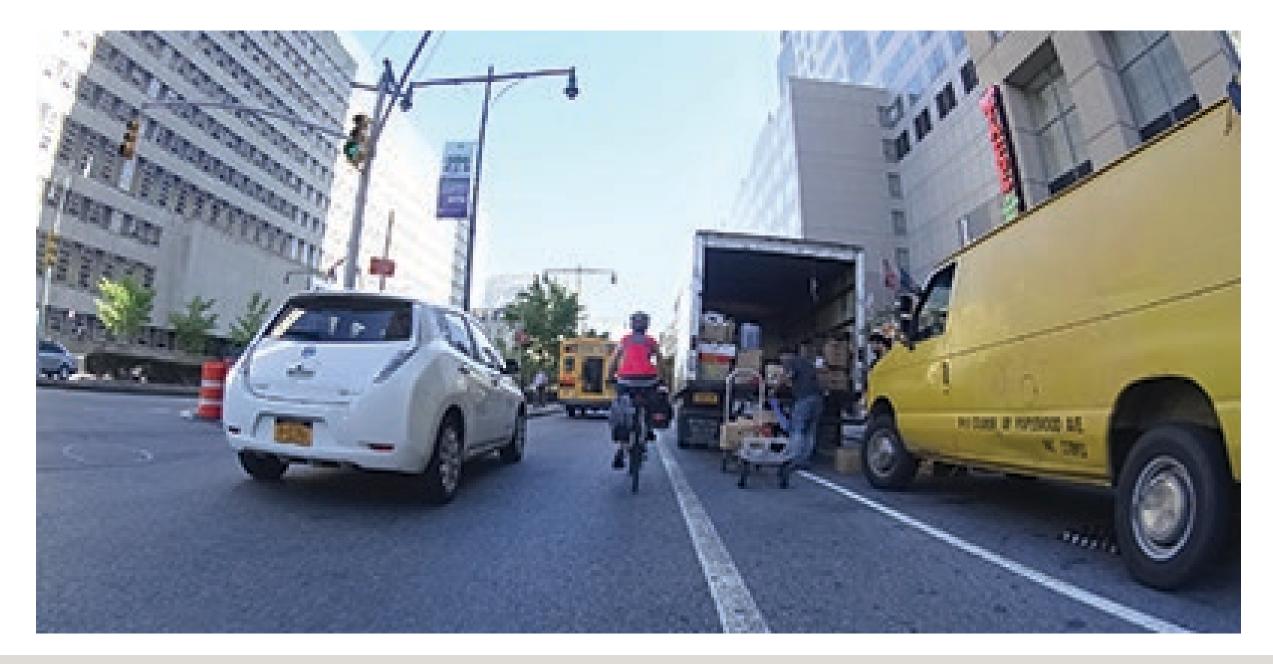


## **ARC Land Use Coordinating Committee**

Frank Morris Vice President UPS Corporate Public Affairs

February 28, 2019





Proprietary and Confidential: This presentation may not be used or disclosed to other than employees or customers, unless expressly authorized by UPS. © 2017 United Parcel Service of America, Inc. UPS, the UPS brandmark, the color brown and photos are trademarks of United Parcel Service of America, Inc. All rights reserved. By 2050, nearly 70 percent of the world's population will live in cities.

How will those residents get around, get to work, get to school and get the things they need?



In this new paradigm, it's essential to understand that freight and e-commerce delivery services facilitate quality of life.

In fact, they are essential to the neighborhoods of tomorrow.



## **Quality of life:**

reduced congestion and personal automobile use

better air quality and lowered environmental impact

walkable and bikeable

robust retail and local business growth

sense of place



## But the key will be how cities and companies can work together to solve mutual challenges:

- REDUCING PERSONAL AUTOMOBILE USE THE TRUE DRIVER OF CONGESTION
- NEW TECHNOLOGIES, NEW VEHICLES AND NEW APPROACHES TO URBAN DELIVERY
- BETTER INTEGRATION OF ALL MODES TRULY COMPLETE STREETS
- CURBSIDE MANAGEMENT AND LOADING ZONE CHALLENGES - BOTH FOR DELIVERY COMPANIES AND UBER/LYFT MODELS
- PROACTIVE PLANNING APPROACHES FOR NEW TECHNOLOGIES - FROM AUTONOMOUS VEHICLES TO DRONES TO E-TRIKES TO SMART SENSORS
- BIG DATA AND HOW TO LEVERAGE PRIVATE SECTOR BEST PRACTICES



## There's no silverbullet solution to urban delivery

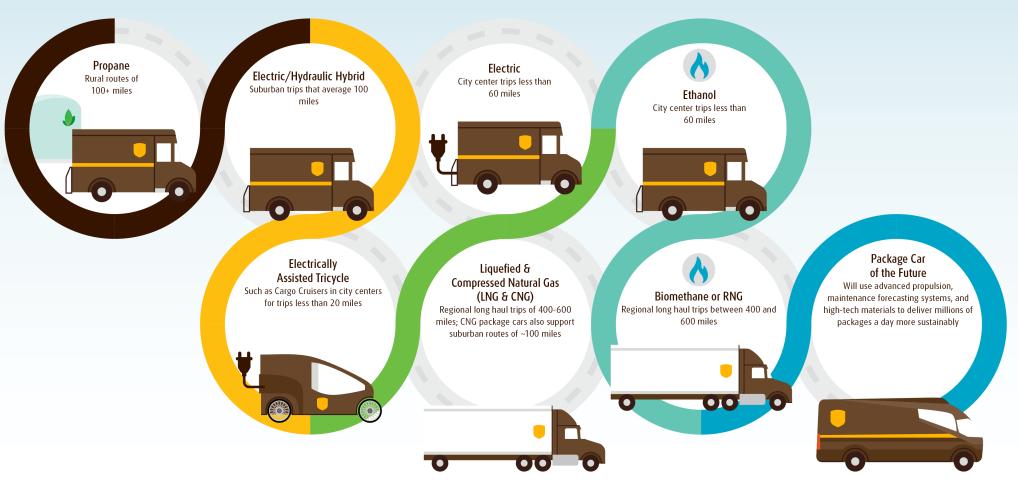
- OUR GOAL IS TO DEVELOP BEST PRACTICES IN THE APPLICATION OF TECHNOLOGY, OPERATION, LONG-TERM PLANNING, AND CITY POLICY FOR SUSTAINABLE URBAN DELIVERY - NOT JUST THE LAST MILE, BUT THE LAST 50 FEET, TOO
- WE KNOW A FEW PARTS OF THE TOOLKIT, BUT DON'T HAVE ALL THE ANSWERS YET - NEED FOR TRANSPARENT PARTNERSHIPS WITH CITIES AND ACADEMICS
- HUGE RANGE OF POTENTIAL APPROACHES IT'S NOT JUST E-TRIKES - IT COULD BE ZONING OR BUILDING CODE, LOCKERS / ALTERNATIVE DELIVERY LOCATIONS, PARKING REGULATIONS, ENFORCEMENT, CURB CUTS, INNOVATIONS IN HANDCART DESIGN, DATA SHARING OR EVEN JUST WALKING INSTEAD OF DRIVING
- HUGE POTENTIAL FOR ACADEMIC RESEARCH AND EXPLORING OUTSIDE THE BOX URBAN DELIVERY SOLUTIONS
- HOW CAN WE COLLABORATE TO DELIVER MUTUALLY BENEFICIAL RESULTS?





A diverse fleet of alternative fuel and advanced technology vehicles.

Through our rolling laboratory, we can determine how alternative fuels and advanced technologies perform in real-world operating conditions, quickly deploy viable options at scale, and spur market growth for alternative solutions.





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A drone made by Workhorse Group launched from a Hybrid Electric Package carried a UPS package autonomously to a home then returned to dock with the package while the driver completed a delivery.





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