



Urban Congestion Challenges & Solutions

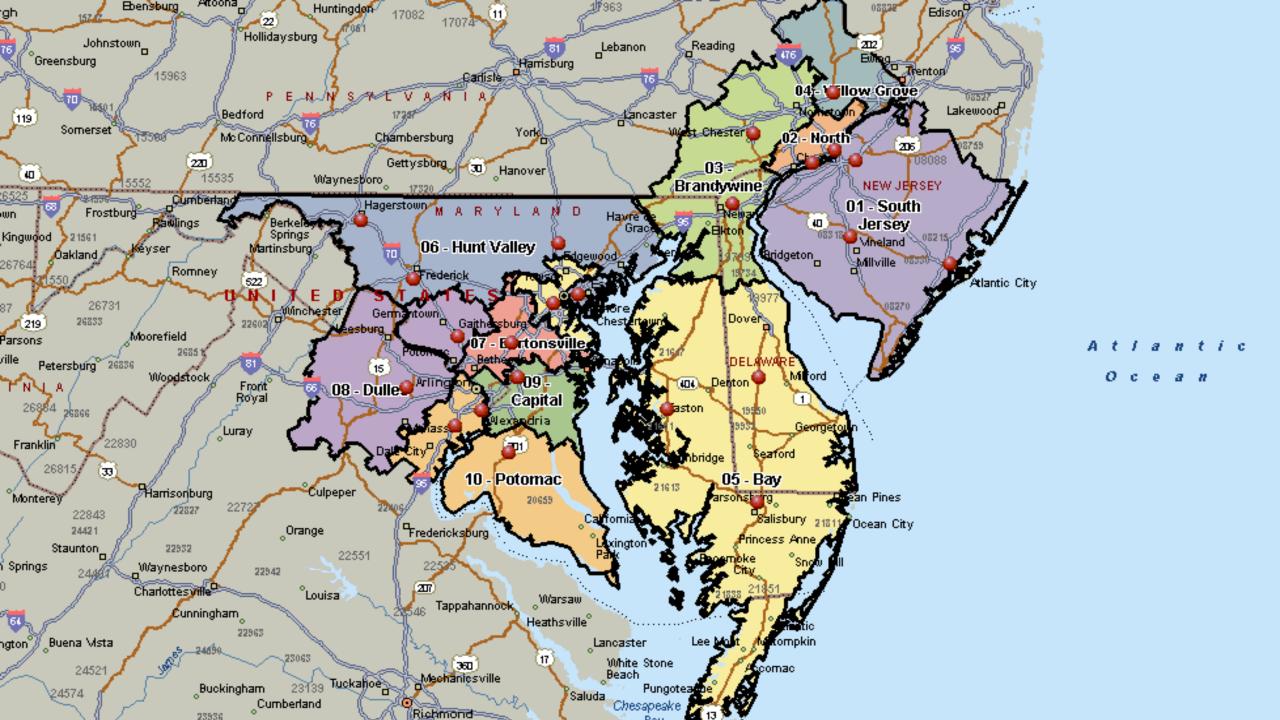


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UPS Global Public Affairs



- UPS's Mid-Atlantic Footprint
- Delivery Challenges & Solutions
- Sustainability Overview and Freight Facilitation



Urban Delivery: Challenges & Opportunities

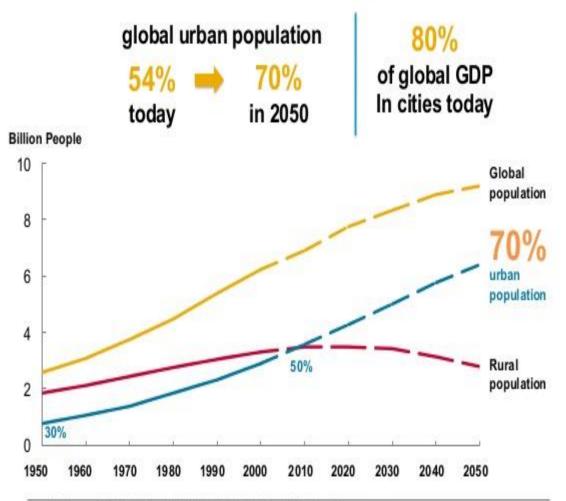
- Population growth to urban areas, causing increased traffic
- More traffic requires us to put more trucks on the road for on-time deliveries
- Parking and ticketing
- Explosive growth of e-Commerce



Over half the world's population now lives in cities and urban areas. In 30 years, 2 billion more people expected.

- Necessarily means increased urban movement of goods and people – essential for economic growth
- Likely to result in greater traffic congestion and air pollution, including greenhouse gases

CITIES ARE THE FUTURE OF THE PLANET



Sources (1) Population curver. USE Cities and Oxford Economic absence on United Nations World Untercention Prospects, 2007 Revision and Oxford Economics City 170 detailess. See Ploater, G., Rock, R. Richet, A. Morrandy, C., Hoomes, D., Standaress, R. and Godfan, Nr., 2014 Birthooning), Cities world the New Climate Economy: the Control Economics and Political Economics and Political Economics.



II. Cities Resist: Rise of the "Smart City"

- Cities here and abroad counter urban congestion/pollution, to create more livable, walkable, bikable areas.
- For the first time in 60 years, walkable urban places in all of the 30 largest U.S. metros are gaining market share over their drivable suburban competition, and showing higher rental premiums.
- Cities compete on quality of urban life to attract new businesses, and millennials, to improve the health of their populations, and enhance the tax base.
- Cities were built around the automobile over the last century. Smart cities to remake urban infrastructure around people, not vehicles -- massive shift in asphalt and concrete to more open, green spaces, large investments, shared transport, and jobs
- The problem: <u>too many personal vehicles and double-parked cars and trucks</u>





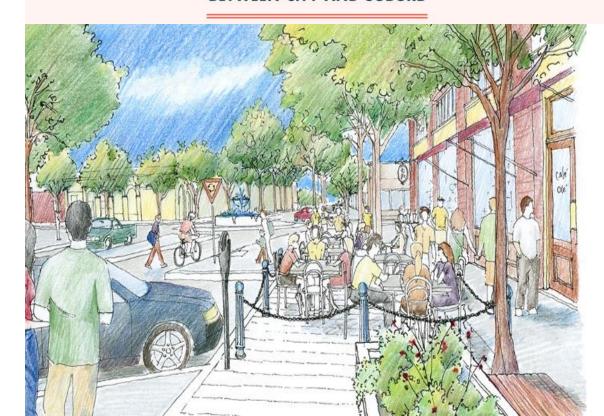
What Do Urban Planners See As The Fix For Urban Congestion?

Shared Urban Mobility for People

- Ride-sharing services (Uber, Lyft, etc.) to counter 1 person, 1 vehicle
- Autonomous vehicles, especially electric
- Shared mobility expansion, especially bus and metro
- Walkable, transit-oriented development and bike lanes
- E-commerce delivery is rarely included in discussions on urban congestion mitigation.



MERGING THE GAP
BETWEEN CITY AND SUBURB



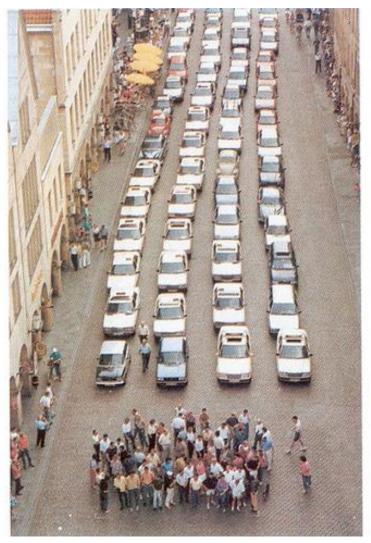
III. Role of E-Commerce in the Smart City: Shared Urban Mobility For Packages and Freight

- Growing at double-digit rates annually
- Changing the face of global commerce, brick and mortar retail, B to C sales.
- Becoming a requirement, not an option in today's society
- Is what helps make alternative transportation modes and walkable urbanism a viable choice.
- Making e-commerce work for packages and freight is *essential* to the smart cities of the future.
- Unfortunately, e-commerce and freight delivery are often missing entirely from the urban planning conversation.



What does this have to do with UPS? Everything

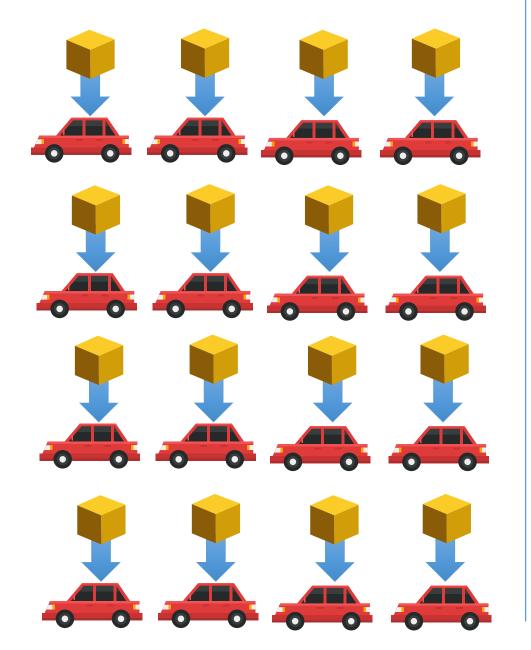


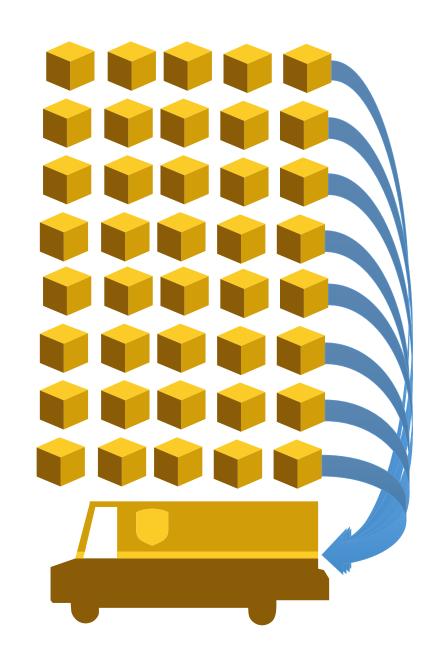




A World Without E-Commerce

A World With E-Commerce









Access

Point"

Conveniently pick up and

drop off packages here.

ME

Hello.







Global Sustainability Solutions

Supporting Investments in Alternative Fuels, Infrastructure and Technology

- 7,200 alternative fuel vehicles on the road
- Across the globe, we drive more than 1 million alternative fuel and advanced technology miles each business day.
- UPS's alternative fuel fleet has driven more than 1 billion miles since 2000.

